Beaver Valley Power Station
Shippingport, Pennsylvania
After Action Report/Improvement Plan
State of West Virginia
Exercise Date – June 11, 2024
Radiological Emergency Preparedness (REP) Program

FEMA

Published August 22, 2024

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Beaver Valley Power Station

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EXECUTIVE SUMMARY 5

SECTION 1: EXERCISE OVERVIEW 7
1.1 Exercise Details 7
1.2 Exercise Planning Team Leadership 7
1.3 Participating Organizations 8

SECTION 2: EXERCISE DESIGN SUMMARY 10
2.1 Exercise Purpose and Design 10
2.2 Exercise Objectives, Capabilities and Activities 12
2.3 Scenario Summary 13

SECTION 3: ANALYSIS OF CAPABILITIES 15
3.1 Exercise Evaluation and Results 15
3.2 Summary Results of Exercise Evaluation 15
3.3 Criteria Evaluation Summaries 24
3.3.1.1 State of West Virginia Jurisdictions 24
3.3.2 West Virginia Risk Jurisdictions 27

SECTION 4: DEMONSTRATED STRENGTHS 30

SECTION 5: CONCLUSION 31

APPENDIX A: EXERCISE TIMELINE 32

APPENDIX B: EXERCISE EVALUATORS AND TEAM LEADERS 33

APPENDIX C: ACRONYMS AND ABBREVIATIONS 35

APPENDIX D: EXTENT OF PLAY AGREEMENT 38

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EXECUTIVE SUMMARY

On June 11, 2024, a full participation Plume Exposure Pathway exercise was conducted and evaluated for the 10-Mile Emergency Planning Zone (EPZ) around the Beaver Valley Power Station (BVPS) by the U.S. Department of Homeland Security (DHS) Federal Emergency Management Agency (FEMA), Region 3. The previous full-participation plume exercise at this site was evaluated on June 7, 2022.

Out-of-Sequence demonstrations were conducted on May 13 and 15, 2024. The purpose of the Exercise and Out-of-Sequence demonstrations was to assess the capabilities of State, counties, and local jurisdictions to implement Radiological Emergency Response Plans (RERP) and Procedures to protect the property and lives of residents and transients in the event of an emergency at the Beaver Valley Power Station. The findings in this report are based on the evaluations of the Federal evaluation team, with final determinations made by the FEMA, Region 3 Regional Assistance Committee (RAC) Chairperson, and approved by FEMA Headquarters. These reports are provided to the Nuclear Regulatory Commission (NRC) and participating States. State and local governments utilize the findings contained in these reports for the purposes of planning, training, and improving emergency preparedness.

The Findings in this report cover only the participation of the State of West Virginia. The Findings for the Commonwealth of Pennsylvania, who also participated in this exercise, are covered under a separate after-action report (AAR).

The evaluation of this exercise determined that there were no Level 1 Findings, two Level 2 Findings, and two Plan Issues. The Level 2 Finding assessed to the Hancock County Emergency Operations Center, Public Information was re-demonstrated during the exercise and closed. The Level 2 Finding, assessed to the West Virginia Emergency Operations Center, Public Information remains open. The two Plan Issues were closed prior to publishing of this report after FEMA received revised procedures and determined that the revisions were adequate.

Redemonstration of the State of West Virginia Level 2 Finding is being coordinated between FEMA, the State of West Virginia, and Hancock County.

A Level 1 Finding is defined by the FEMA Radiological Emergency Preparedness Program Manual as follows: "An observed or identified inadequacy of organizational performance in an assessment activity that could cause a determination that offsite emergency preparedness is not adequate to provide reasonable assurance that appropriate protective measures can be taken in the event of a radiological emergency to protect the health and safety of the public living in the vicinity of a Nuclear Power Plant (NPP)."

A Level 2 Finding is defined as: "An observed or identified inadequacy of organizational performance in an assessment activity that is not considered, by itself, to adversely impact public health and safety."

Finally, a Plan Issue is: "An observed or identified inadequacy in the offsite response organization's (ORO) emergency plan/implementing procedures, rather than that of the ORO's performance."

FEMA wishes to acknowledge the efforts of the many individuals in the State of West Virginia and Hancock County. Protecting the public health and safety is the full-time job of some of the exercise participants and an additional assigned responsibility for others. Still others have willingly sought this responsibility by volunteering to provide vital emergency services to their communities. Cooperation and teamwork of all the participants were evident during the exercise.

Section 1 of this report entitled "Exercise Overview" presents the "Exercise Planning Team" and the "Participating Organizations."

Section 2 of this report entitled "Exercise Design Summary" includes the "Exercise Purpose and Design", "Exercise Objectives, Capabilities and Activities", and the "Scenario Summary".

Section 3 of this report entitled "Analysis of Capabilities" presents detailed "Exercise Evaluation and Results" information on the demonstration for each jurisdiction or functional entity evaluated in a jurisdiction-based, issue-only format (Criteria Evaluation Summaries).

Section 4 of this report entitled "Demonstrated Strengths" includes exemplary performances that were demonstrated during the exercise and information on best practices that were observed.

Section 5 of this report entitled "Conclusion" presents a summary of the findings and performance of the evaluated agencies.

The appendices, present supplementary information that is relevant to the exercise:

- Appendix A – Exercise Timeline. A table that depicts the times when an event or notifications were noted at participating agencies and locations.
- Appendix B – Exercise Evaluators and Team leaders. A table listing the evaluator names, organizations, and responsibilities of the evaluators and management.
- Appendix C – Acronyms and Abbreviations. An alphabetized table defining the formal names used in this report.
- Appendix D – Extent of Play Agreement

SECTION 1: EXERCISE OVERVIEW

1.1 Exercise Details

Exercise Name
Beaver Valley Power Station Plume Exercise

Type of Exercise
Plume

Exercise Date
June 11, 2024

Program
Department of Homeland Security/FEMA Radiological Emergency Preparedness Program

Scenario Type
No/Minimal Release of Radioactive Materials

1.2 Exercise Planning Team Leadership

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1.3 Participating Organizations

Agencies and organizations of the following jurisdictions participated in the Beaver Valley Power Station (BVPS) exercise:

State Jurisdiction

State of West Virginia

- West Virginia Department of Environmental Protection
- West Virginia Department of Health and Human Resources
- West Virginia Emergency Management Division
- West Virginia Department of Environmental Protection (DEP)
- West Virginia Department of Environmental Protection HAZMAT
- West Virginia Department of Health and Human Resources (DHHR)
- West Virginia DHHR, Office of Environmental Health Resources (OEHR)
- West Virginia DHHR, Bureau for Public Health (BPH)

Joint Public Information Center (JPIC)

- VISTRA Corporation/BVPS
- Ohio Emergency Management Agency (Virtual)
- Pennsylvania Emergency Management Agency
- West Virginia Department of Emergency Management

Risk Jurisdiction

Hancock County

- Lucas County Emergency Management Agency
- VISTRA Corporation/BVPS
- Hancock County Sheriff
- Hancock County 911 Communications Center
- Hancock County Division of Homeland Security and Emergency Management
- Monongalia County Health Department
- American Red Cross
- Radio Amateur Civil Emergency Service
- West Virginia Emergency Management Division

School/School Districts

- Hancock County School Administration
- Allison Elementary School

Host School

- Weir High School

Private/Volunteer Organizations

- VISTRA Corporation/BVPS
- American Red Cross
- New Cumberland Volunteer Fire Department
- Weirton Fire Department

Federal Organizations

- Federal Emergency Management Agency
- Nuclear Regulatory Commission

SECTION 2: EXERCISE DESIGN SUMMARY

2.1 Exercise Purpose and Design

On December 7, 1979, the President directed the Federal Emergency Management Agency (FEMA) to assume the lead responsibility for all off-site nuclear planning and response. FEMA's activities were conducted pursuant to 44 Code of Federal Regulations (CFR) Parts 350, 351 and 352. These regulations are a key element in the Radiological Emergency Preparedness (REP) Program that was established following the Three Mile Island Nuclear Generating Station accident in March 1979.

44 CFR 350 establishes the policies and procedures for FEMA's initial and continued approval of State and local governments' radiological emergency planning and preparedness for commercial nuclear power plants. This approval is contingent, in part, on State and local government participation in joint exercises with licensees. FEMA's responsibilities in radiological emergency planning for fixed nuclear facilities include the following:

A. 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.

B. Determining whether such plans and procedures can be implemented based on observation and evaluation of exercises conducted by State and local governments.

C. 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. 81, No. 57, March 24, 2016); and

D. Coordinating the activities of the following Federal agencies with responsibilities in the radiological emergency planning process:
- U.S. Department of Commerce
- U.S. Nuclear Regulatory Commission
- U.S. Environmental Protection Agency
- U.S. Department of Energy
- U.S. Department of Health and Human Services
- U.S. Department of Transportation
- U.S. Department of Agriculture
- U.S. Department of the Interior
- U.S. Food and Drug Administration

Representatives of these agencies serve on the Region 3 Regional Assistance Committee (RAC), which is Chaired by FEMA. A Radiological Emergency Preparedness (REP) Plume Exposure Pathway Exercise was conducted during the week of June 11, 2024, to assess the capabilities of State and local emergency preparedness organizations in implementing their RERPs and procedures to protect the public health and safety during a radiological emergency involving the Beaver Valley Power Station (BVPS). The purpose of this exercise report is to present the exercise results and findings on the performance of the OROs during a simulated radiological emergency. The findings presented in this report are based on the

evaluations of the Federal evaluation team, with final determinations made by the FEMA Region 3 RAC Chairperson and approved by FEMA Headquarters.

These reports are provided to the NRC and participating States. State and local governments utilize the findings contained in these reports for the purposes of planning, training, and improving emergency response capabilities.

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

- NUREG-0654/FEMA-REP-1, Rev. 2, December 2019
- Radiological Emergency Preparedness Program Manual, January 2019

Emergency Planning Zone Description:

Beaver Valley Power Station (BVPS) is located in western Pennsylvania on the southern bank of the Ohio River in Beaver County, Pennsylvania. The site is located near Shippingport Borough, about 1.5 miles from Midland, Pennsylvania, on 501 acres of fairly level terrace owned by the Energy Harbor. The latitude for the site is 40°37'18" north; the longitude is 80°26'02" west. Two pressurized water reactors are located on the 17 acres of the parcel occupied by the power station. The operating licenses for the facility were granted in July 1976 (Unit 1) and August 1987 (Unit 2); commercial operations began at the site during October 1976 (Unit 1) and November 1987 (Unit 2). Unit 1 generates an output of 954 megawatts (MW); the Unit 2 output is 978 MW. Sixty-six sirens cover the plume emergency planning zone; there are 52 sirens in Beaver County, 6 sirens in Columbiana County and 8 sirens in Hancock County.

Steep slopes that contributed to the development of river mill towns, where most of the industry and residences are located, characterize the general topography of the region. The region is part of the large industrial complex centered around Pittsburgh, Pennsylvania. The terrain rises from the Ohio River to a maximum elevation of 1,160 feet above mean sea level (MSL). Drainage is predominantly toward the river. The soils in the area are made up of alluvial sands and gravel. The bedrock geology consists of sedimentary formations composed of shale and sandstone. No faults are located under or near the facility. The Ohio River is about 664 feet above MSL, and the plant grade is 735 feet above MSL.

The climate is a humid continental type. The average annual temperature for the area is about 50°F. Annual precipitation is approximately 36 inches. The area around the plant is mostly agricultural or undeveloped. The nearest community is Shippingport Borough, Pennsylvania, which is the parent borough for the site and has a population of 237. The nearest major population center of more than 25,000 people is Pittsburgh, which has an estimated population of 305,841 and lies 22 miles to the southeast. The maximum population distribution, including residents and transients, is 112,445 in the 10-mile EPZ.

Four major industries employ a total of 8,000 persons within 10 miles of the plant. One small airfield (Herron Airport) is also in the 10-mile EPZ. The runway at the airport is oriented so that the extensions do not pass over the plant. No major thoroughfares exist in the immediate vicinity. The main line of the Norfolk

Southern Railroad runs parallel to the plant along the north bank of the Ohio River.

2.2 Exercise Objectives, Capabilities and Activities

The objectives of the 2024 Beaver Valley Power Station (BVPS) Plume Exercise were to demonstrate the capabilities of State and local emergency management agencies to mobilize emergency management and emergency response personnel, to activate emergency operations centers and support facilities, and to protect the health, lives, and property of the citizens residing within the 10-mile Emergency Planning Zone (EPZ).

Core capabilities-based planning allowed the exercise planning team to develop the objective and observe associated outcomes through a framework of specific action items. Additionally, the objective and capability target assessed met Radiological Emergency Preparedness Program Manual guidance.

The core capabilities demonstrated during this exercise were:

A. Operational Coordination
B. Planning
C. Environmental Response/Health and Safety
D. Public Information and Warning
E. Mass Care Services
F. Public Health
G. Healthcare and Emergency Medical Services
H. Situational Assessment
I. Critical Transportation
J. Operational Communications
K. Access Control/Identity Verification
L. On-Scene Security
M. Protection
N. Law Enforcement

To demonstrate the ability to communicate between multiple levels of government and provide timely, accurate, and sufficiently detailed information to the public, the emergency management agencies use a variety of resources, including radios, telephones, the Internet, the media, the Emergency Alert System (EAS), and the utility Alert and Notification System (ANS) Sirens, and the FEMA Integrated Public Alert and Warning System (IPAWS). All these communication resources were employed and evaluated. The EAS and ANS were simulated, and media information was prepared, but not actually released.

An essential capability of the Radiological Emergency Preparedness Program (REPP) is to evacuate, monitor and decontaminate, if necessary, and provide temporary care and shelter to displaced residents from the EPZ. The ability of the risk/support counties to mobilize personnel and resources to establish reception, monitoring and decontamination, and mass care centers was demonstrated.

The protection of school children is also a vital mission of the REPP. School districts and selected schools demonstrated the capability to communicate and coordinate the collection, evacuation, transportation, and shelter of students attending schools within the EPZ.

Provisions for students who live within the EPZ but attend school outside were also evaluated.

2.3 Scenario Summary

The scenario for this exercise involved the no/minimal release of radioactive materials scenario variable. This scenario element involves no radiological release or an unplanned minimal radiological release that requires the site to declare a Site Area Emergency (SAE) - Emergency Classification Level (ECL) but does not require the declaration of a General Emergency (GE) ECL. Utilizing this scenario element helps avoid anticipatory responses. Licensees are required to use this variable at least once during each eight-year exercise cycle. Off-site response organizations (OROs) are encouraged, but not required, to participate in this exercise with the Licensee. Due to the impact on ORO resources, the Licensee and appropriate OROs must agree on the use of the "no/minimal release" option as part of the overall scenario development process. If OROs elect to participate in a joint exercise with a no/minimal radiological release scenario, part of the planning for the exercise will include identifying capabilities and other activities/processes that may not be evaluated under such a scenario and determining appropriate alternative demonstration and evaluation venues, so that the OROs have appropriate opportunities to meet their assessment requirements.

For this exercise, the OROs and Licensee agreed on the use of the no/minimal release scenario variable. The Licensee provided exercise injects to continue the exercise beyond the SAE and through the GE and injects that involved a radiological release that prompted protective actions from the OROs and the ability for OROs to meet the exercise requirements as specified in 44 CFR 350.9.

The weather forecast for the afternoon was 62° Fahrenheit with winds 8 miles per hour (mph) from the northeast. The forecast for the evening was for high winds and heavy rain.

An operations crew will be in the Unit 1 Simulator, all drill data for the emergency response facilities will be provided by controllers or by the simulator.

At 1600 the exercise begins. For the postulated event, the effected unit is Unit #1.

Unit #1 is operating at 100% power; Unit #2 is operating at 100% power.

An Alert ECL is declared by 1615. The BVPS Emergency Response Organization is activated.

By 1700 a SAE ECL will be declared based on Loss or Potential Loss of two barriers.

At approximately 1900 the 2024 BVPS and NRC Evaluated Exercise will be terminated for BVPS.

A simulation cell scenario continuation of play packet was provided by the Licensee. A GE ECL was declared by 1930. A radiological release was in progress. A plant based Protective Action Recommendation (PAR) is issued as evacuate 2 Mile 360° radius and 10 Miles downwind Sectors J, K, L, M, N, and all others monitor and prepare. Potassium iodide (KI) recommended for the general public.

Field Monitoring Teams perform actions to locate the release plume and obtain dose readings. Decision makers consider the Licensee PAR, other factors, and OROs make protective actions based on plans and procedures.

At 2000 the exercise is terminated.

SECTION 3: ANALYSIS OF CAPABILITIES

3.1 Exercise Evaluation and Results

Contained in this section are the results and findings of the evaluations of all jurisdictions and locations that participated in the June 11, 2024, Biennial Plume Exposure Pathway 10-mile Emergency Planning Zone (EPZ) Radiological Emergency Preparedness (REP) Exercise and Out-of-Sequence demonstrations which were conducted on May 13 and 15, 2024. These exercises were conducted to demonstrate the ability of the Offsite Response Organizations of State and local government to protect the health and safety of the public in the 10-mile EPZ surrounding the Beaver Valley Power Station.

Each jurisdiction and functional entity were evaluated based on its demonstration of the Exercise Evaluation Area Criteria contained in the REP Exercise Evaluation Methodology. Detailed information on the exercise evaluation area criteria and the Extent of Play Agreement can be found in the Exercise Plan.

3.2 Summary Results of Exercise Evaluation

The matrix presented in Table 3.1, on the following pages, presents the status of the exercise evaluation area criteria from the REP Program Manual that was scheduled for demonstration during this exercise by all participating jurisdictions and functional entities. Exercise evaluation area criteria are listed by number and the demonstration status of the criteria is indicated using the following letters:

- (D) Demonstrated Strength: an observed action, behavior, procedure, and/or practice that is worthy of special notice and positive recognition, note: this is already a common practice that many Regions employ when identifying demonstrated strengths.
- (L1) Level 1 Finding: an observed or identified inadequacy or organizational performance in an assessment activity that could cause a determination that offsite emergency preparedness is not adequate to provide reasonable assurance that appropriate protective measures can be taken in event of a radiological emergency to protect the health and safety of the public living near a Nuclear Power Plant (NPP).
- (L2) Level 2 Finding: an observed or identified inadequacy of organizational performance in an assessment activity that is not considered, by itself, to adversely impact public health and safety.
- (P) Plan Issue: an observed or identified inadequacy in the offsite response organizations' (OROs) emergency plan/implementation procedures, rather than that of the ORO's performance.
- (N) Not Demonstrated: term applied to the status of a REP exercise Evaluation Area Criterion indicating that the ORO, for a justifiable reason, did not demonstrate the Evaluation Area Criterion, as required in the extent-of-play agreement or at the two-year or eight-year interval required in the FEMA REP Program Manual.
- (M) Met: The jurisdiction or functional entity performed all activities under the Demonstration Criterion to the level required in the Extent-of-Play Agreement, with no Level 1 or Level 2 Findings assessed under that criterion in the current exercise and no unresolved prior Level 2 Findings.

Tables 3.1 - Summary of Exercise Evaluation

Table 3.1a Exercise Evaluation Findings and Issues by Classification

Location	Capability Target	Capability Target Description	Status
State of West Virginia -Joint Information Center	3.3	Emergency Information and Instructions for the Public and News Media.	L2- Open
State of West Virginia -Joint Information Center	3.3	Emergency Information and Instructions for the Public and News Media.	P-Closed
State of West Virginia – State Field Monitoring Team	4.2	Plume Phase Measurements and Sampling	P- Closed
State of West Virginia – Hancock County Emergency Operations Center (EOC)	3.3	Emergency Information and Instructions for the Public and News Media	L2-Closed

Table 3.1b Exercise Evaluation Assessments Met

Venue	Capability Target	Capability Target Description	Status
Objective 1 : Emergency Operations Management			
Traffic and Access Control - Traffic and Access Control Point (TCP/ACP)	1.1	Mobilization	M
Emergency Worker Monitoring and Decontamination Station at New Cumberland Fire Department - Monitoring and Decontamination Station	1.1	Mobilization	M
Reception Center Monitoring/Decontamination - Weir High School Complex - Reception Center	1.1	Mobilization	M
Weir High School Complex/Mass Care - Mass Care Center	1.1	Mobilization	M
Joint Public Information Center (JPIC) - PA & WV - Joint Information Center	1.1	Mobilization	M

West Virginia EOC - Emergency Operations Center, State	1.1	Mobilization	M
WV Joint Information Center (JIC) - Joint Information Center	1.1	Mobilization	M
WV State Field Monitoring Team A - State Field Monitoring Team	1.1	Mobilization	M
WV Accident Assessment Center - State Accident Assessment Center	1.1	Mobilization	M
WV State Field Monitoring Team B - State Field Monitoring Team	1.1	Mobilization	M
West Virginia Field Team Management - Field Team Management	1.1	Mobilization	M
Hancock County Emergency Operations Center - Emergency Operations Center, County, Risk	1.1	Mobilization	M
Hancock County Evacuee Monitoring and Decontamination Station Weir High School - Monitoring and Decontamination Station, General Public	1.1	Mobilization	M
Traffic and Access Control - Traffic and Access Control Point (TCP/ACP)	1.2	Direction and Control	M
Emergency Worker Monitoring and Decontamination Station at New Cumberland Fire Department - Monitoring and Decontamination Station	1.2	Direction and Control	M

Reception Center Monitoring/Decontamination - Weir High School Complex - Reception Center	1.2	Direction and Control	M
Weir High School Complex/Mass Care - Mass Care Center	1.2	Direction and Control	M
Joint Public Information Center (JPIC) - PA & WV - Joint Information Center	1.2	Direction and Control	M
West Virginia EOC - Emergency Operations Center, State	1.2	Direction and Control	M
WV Joint Information Center (JIC) - Joint Information Center	1.2	Direction and Control	M
WV State Field Monitoring Team A - State Field Monitoring Team	1.2	Direction and Control	M
WV Accident Assessment Center - State Accident Assessment Center	1.2	Direction and Control	M
WV State Field Monitoring Team B - State Field Monitoring Team	1.2	Direction and Control	M
West Virginia Field Team Management - Field Team Management	1.2	Direction and Control	M
Hancock County Emergency Operations Center - Emergency Operations Center, County, Risk	1.2	Direction and Control	M
Hancock County Evacuee Monitoring and Decontamination Station Weir High School - Monitoring and Decontamination Station, General Public	1.2	Direction and Control	M

WV Accident Assessment Center - State Accident Assessment Center	1.3	Protective Action Recommendations	M
West Virginia EOC - Emergency Operations Center, State	1.4	Protective Action Decisions for the Plume Phase	M
WV Accident Assessment Center - State Accident Assessment Center	1.4	Protective Action Decisions for the Plume Phase	M
WV Accident Assessment Center - State Accident Assessment Center	1.4	Protective Action Decisions for the Plume Phase	M
Hancock County Emergency Operations Center - Emergency Operations Center, County, Risk	1.4	Protective Action Decisions for the Plume Phase	M
Allison Elementary School - School	1.5	Protective Action Decision Implementation for the Plume Phase	M
West Virginia EOC - Emergency Operations Center, State	1.5	Protective Action Decision Implementation for the Plume Phase	M
Hancock County Emergency Operations Center - Emergency Operations Center, County, Risk	1.5	Protective Action Decision Implementation for the Plume Phase	M
Hancock County School District - School District	1.5	Protective Action Decision Implementation for the Plume Phase	M
Objective 2 : Exposure Control			
WV Accident Assessment Center - State Accident Assessment Center	2.1	Emergency Worker Exposure Control Decision-Making Process	M
Emergency Worker Monitoring and Decontamination Station at New Cumberland Fire Department - Monitoring and Decontamination Station	2.2	Emergency Worker Exposure Control Management	M

Reception Center Monitoring/Decontamination - Weir High School Complex - Reception Center	2.2	Emergency Worker Exposure Control Management	M
West Virginia EOC - Emergency Operations Center, State	2.2	Emergency Worker Exposure Control Management	M
WV State Field Monitoring Team A - State Field Monitoring Team	2.2	Emergency Worker Exposure Control Management	M
WV State Field Monitoring Team B - State Field Monitoring Team	2.2	Emergency Worker Exposure Control Management	M
West Virginia Field Team Management - Field Team Management	2.2	Emergency Worker Exposure Control Management	M
Hancock County Emergency Operations Center - Emergency Operations Center, County, Risk	2.2	Emergency Worker Exposure Control Management	M
Hancock County Evacuee Monitoring and Decontamination Station Weir HS - Monitoring and Decontamination Station, General Public	2.2	Emergency Worker Exposure Control Management	M
Objective 3 : Alert and Notification			
Joint Public Information Center (JPIC) - PA & WV - Joint Information Center	3.1	Communications	M
Weir High School Complex/Mass Care - Mass Care Center	3.1	Communications	M
Reception Center Monitoring/Decontamination - Weir High School Complex - Reception Center	3.1	Communications	M

Emergency Worker Monitoring and Decontamination Station at New Cumberland Fire Department - Monitoring and Decontamination Station	3.1	Communications	M
Hancock County Evacuee Monitoring and Decontamination Station Weir HIGH SCHOOL - Monitoring and Decontamination Station, General Public	3.1	Communications	M
Hancock County Emergency Operations Center - Emergency Operations Center, County, Risk	3.1	Communications	M
West Virginia Field Team Management - Field Team Management	3.1	Communications	M
WV State Field Monitoring Team B - State Field Monitoring Team	3.1	Communications	M
WV Accident Assessment Center - State Accident Assessment Center	3.1	Communications	M
WV State Field Monitoring Team A - State Field Monitoring Team	3.1	Communications	M
WV Joint Information Center (JIC) - Joint Information Center	3.1	Communications	M
West Virginia EOC - Emergency Operations Center, State	3.1	Communications	M
Hancock County Emergency Operations Center - Emergency Operations Center, County, Risk	3.2	Alert and Notification to the Public	M

Hancock County Emergency Operations Center - Emergency Operations Center, County, Risk	3.3	Emergency Information and Instructions for the Public and News Media	L2
Joint Public Information Center (JPIC) - PA & WV - Joint Information Center	3.3	Emergency Information and Instructions for the Public and News Media	M
Objective 4 : Detect, Measure, Sample, Analyze, and Assess			
West Virginia Field Team Management - Field Team Management	4.1	Field Monitoring Teams Management	M
WV State Field Monitoring Team B - State Field Monitoring Team	4.2	Plume Phase Measurements and Sampling	M
WV Accident Assessment Center - State Accident Assessment Center	4.5	Plume Phase Analysis and Dose Assessment	M
Objective 5 : Operate			
Reception Center Monitoring/Decontamination - Weir High School Complex - Reception Center	5.1	Monitoring, Decontamination, Sheltering, and Registration of Evacuees	M
Weir High School Complex/Mass Care - Mass Care Center	5.1	Monitoring, Decontamination, Sheltering, and Registration of Evacuees	M
Hancock County Evacuee Monitoring and Decontamination Station Weir High School - Monitoring and Decontamination Station, General Public	5.1	Monitoring, Decontamination, Sheltering, and Registration of Evacuees	M
Emergency Worker Monitoring and Decontamination Station at New Cumberland Fire Department - Monitoring and Decontamination Station	5.2	Monitoring and Decontamination of Emergency Workers, Equipment, and Vehicles	M

West Virginia EOC - Emergency Operations Center, State	5.4	Traffic and Access Control	M
Hancock County Emergency Operations Center - Emergency Operations Center, County, Risk	5.4	Traffic and Access Control	M

3.3 Criteria Evaluation Summaries

3.3.1 State Jurisdictions

In summary, the status of DHS/FEMA criteria for the State jurisdictions are as follows:

3.3.1.1 State of West Virginia

3.3.1.1.1 State of West Virginia Emergency Operations Center (EOC)

a. Met: 1.1, 1.2, 1.4, 1.5, 2.2, 3.1, 3.2, 5.4
b. Level 1 Findings: NONE
c. Level 2 Findings: NONE
d. Plan Issues: NONE
e. Prior Issues – Resolved: NONE
f. Prior Issues - Unresolved: NONE

3.3.1.1.2 State of West Virginia Joint Information Center

a. Met: 1.1, 1.2, 3.1
b. Level 1 Findings: NONE
c. Level 2 Findings: ONE
d. Plan Issues: ONE

ISSUE NO: 24-24-L2-3.3-003

CAPABILITY TARGET: 3.3 Emergency Information and Instructions for the Public and News Media

DESCRIPTION: The State of West Virginia Public Information Officer (PIO) failed to develop or disseminate accurate press releases.

CONDITION: The PIO created press release #3 that contained information on precautionary measures to farmers. The PIO then later amended Press Release #3 adding in more information. In this amended press release, information stated, “to evacuate the area along with the general population” The time written on Press Release #3 Amended was 1925, Protective Action Decisions and EAS messages were not issued to the public until 2018. Press Release #5 notice to evacuate and take potassium iodide (KI) did not include the jurisdiction of Chester in its release to the public at 2115.

POSSIBLE CAUSE: Press releases and information to the public were not accurately reviewed prior to being released to the public.

REFERENCE: NUREG-0654/FEMA-REP-1, Rev. 2: (A.4, C.2.a, G.1, J.11, J.11a, J.11.b, J.11.c, J.11.d, J.11.e, J.11.g, J.13, J.13.f and O.1),
• State of West Virginia Emergency Management Division, REP Public Information Standard Operating Procedure.

EFFECT: The public and news media would receive inaccurate information.

RECOMMENDATIONS: Checklists or procedure should be created to ensure protective action recommendations and/or decisions made with in the SEOC are captured by the PIO to develop or disseminate an accurate press release. Confirm information in press releases from the State Emergency Operations Center is accurate and has been reviewed by leadership prior to release to the public. Conduct a remedial exercise as soon as practicable.

ISSUE NO: 24-24-P-3.3-003

CAPABILITY TARGET: 3.3 Emergency Information and Instructions for the Public and News Media

DESCRIPTION: The State of West Virginia REP Public Information Standard Operating Procedure does not include a step to produce a press release for the closure of the West Virginia Tomlinson State Park.

CONDITION: A press release for the recommendation to close the Tomlinson State Park was not developed or disseminated.

POSSIBLE CAUSE: Planners from the West Virginia Emergency Management Division did not include the requirement to issue a media release regarding closing the West Virginia Tomlinson State Park in the State of West Virginia Emergency Management Division, REP Public Information Standard Operating Procedure.

REFERENCE: NUREG-0654/FEMA-REP-1, Rev. 2: (A.4, C.2.a, G.1, J.11, J.11a, J.11.b, J.11.c, J.11.d, J.11.e, J.11.g, J.13, J.13.f and O.1), State of West Virginia Emergency Management Division, REP Public Information Standard Operating Procedure.

EFFECT: The public and news media would not receive required information.

CORRECTIVE ACTION: Checklists or procedure should be created ensure protective action recommendations and/or decisions made with in the SEOC are captured by the PIO to develop or disseminate a press release. Add a template into the current REP Public Information Standard Operating Procedure. FEMA received the plan revision on June 25, 2024, and a subsequent review determined it to be adequate and resolves the plan issue.

e. Prior Issues – Resolved: NONE
f. Prior Issues - Unresolved: NONE

3.3.1.1.3 West Virginia Accident Assessment Center at the EOC

a. Met: 1.1, 1.2, 1.3, 1.4, 2.1, 3.1, 4.5,
b. Level 1 Findings: NONE
c. Level 2 Findings: NONE
d. Plan Issues: NONE
e. Prior Issues -Resolved: NONE

f. Prior Issues - Unresolved: NONE

3.3.1.1.4 Joint Public Information Center

a. Met: 1.1, 1.2, 3.1, 3.3
b. Level 1 Findings: NONE
c. Level 2 Findings: NONE
d. Plan Issues: NONE
e. Prior Issues – Resolved: NONE
f. Prior Issues - Unresolved: NONE

3.3.1.1.5 West Virginia State Field Monitoring Management

a. Met: 1.1, 1.2, 2.2, 3.1, 4.1
b. Level 1 Findings: NONE
c. Level 2 Findings: NONE
d. Plan Issues: NONE
e. Prior Issues – Resolved: NONE
f. Prior Issues - Unresolved: NONE

3.3.1.1.6 West Virginia State Field Monitoring Team A

a. Met: 1.1, 1.2, 2.2, 3.1
b. Level 1 Findings: NONE
c. Level 2 Findings: NONE
d. Plan Issues: ONE

ISSUE NO: 24-24-P-4.2-004

CAPABILITY TARGET: Plume Phase Measurements and Sampling

DESCRIPTION: During the exercise, FMT-A improperly oriented the air sampler equipment in such a manner that the effectiveness of the device was reduced.

CONDITION: During the air sampling procedure, FMT-A positioned the air sample intake such that it was approximately 60 degrees counterclockwise to the direction of the release, which was from 42 degrees. Therefore, the effectiveness of capturing particulates and iodine was reduced.

POSSIBLE CAUSE: A possible cause for this action is there is no guidance provided in the State of West Virginia Field Monitoring Team Standard Operating Procedure (SOP), 2024 Rev 1, for which direction the air sample intake should be directed. Additionally, the Field Monitoring Team members did not seem to know how to determine which direction was 42 degrees, as they did not use a compass to determine the correct direction of 42 degrees.

REFERENCE: Federal Radiological Monitoring and Assessment Center Monitoring Manual Volume 2, Radiation Monitoring and Sampling, page 88-91.

EFFECT: Directing the air sample intake away from the given direction of the release can result in a reduced particulate settlement on the filter paper and a

reduced iodine concentration in the silver zeolite cartridge, providing a false low indication of airborne radioactive material. This could also lead to overexposure of the public to radiation due to not evacuating the public in a sector that should be evacuated based on airborne radiation levels.

CORRECTIVE ACTION: Provide guidance in the State of West Virginia Field Monitoring Team Standard Operating Procedure (SOP), 2024 Rev 1, that directs the Field Monitoring Team to position the air sample intake into the direction of the release. FEMA received the plan revision on June 18, 2024, and a subsequent review determined it to be adequate and resolves the plan issue.

e. Prior Issues – Resolved: NONE
f. Prior Issues - Unresolved: NONE

3.3.1.1.7 West Virginia State Field Monitoring Team B

a. Met: 1.1, 1.2, 2.2, 3.1
b. Level 1 Findings: NONE
c. Level 2 Findings: NONE
d. Plan Issues: NONE
e. Prior Issues – Resolved: NONE
f. Prior Issues - Unresolved: NONE

3.3.1.1.8 West Virginia Chester Police Traffic/Access Control

a. Met: 1.1, 1.2, 2.2, 3.1, 5.4
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 Risk Jurisdictions

In summary, the status of DHS/FEMA criteria for the Risk jurisdictions are as follows:

3.3.2.1 Hancock County Emergency Operations Center

a. Met: 1.1, 1.2, 1.4,1.5, 2.2, 3.1, 3.2, 5.4
b. Level 1 Findings: NONE
c. Level 2 Findings: ONE
d. Plan Issues: NONE

ISSUE NO: 24-24-L2-3.3-002

CAPABILITY TARGET 3.3; Emergency Information and Instructions for the Public and News Media.

CONDITION: The Hancock County Division of Homeland Security and Emergency Management (DHSEM) Director issued conflicting emergency information and instructions to the general public regarding the use of potassium iodide (KI) during the General Emergency (GE). Message #11, (EAS Message G) instructed the public in specified emergency response planning areas (EPRA's) to evacuate

and take potassium iodide. However, Message #12 (GE Special News Bulletin Message 1) stated that residents should "*locate but do not take your potassium iodide (KI) tablets*".

POSSIBLE CAUSE: A delay in issuing Message #12 (GE Special News Bulletin Message #1) resulted in confusion and the subsequent release of the incorrect message.

REFERENCE: NUREG-0654/FEMA-REP-1, Rev. 2 (E.2, E.3, E.4, E.5, G.1, G.2, G.3, G.3.a, G.4, G.5) Hancock County Emergency Plan, Annex P- Public Warning, Issue 14 Revision 2023

EFFECTS: The general public could be confused on whether or not to ingest potassium iodide potentially leaving them unprotected during a radiological release.

CORRECTIVE ACTION: The error in the timing and delivery of messages was identified during the exercise and a corrected message disseminated. Consider revising the pre-scripted SNB message template to ensure the language provides clear and concise instructions on taking KI. FEMA received the plan revision on June 25, 2024, and a subsequent review determined it to be adequate and resolves the plan issue.

e. Prior Issues – Resolved: NONE
f. Prior Issues - Unresolved: NONE

3.3.2.2 Hancock County Emergency Worker Monitoring/Decontamination Station - New Cumberland Fire Department

a. Met: 1.1, 1.2, 2.2, 3.1, 5.1
b. Level 1 Findings: NONE
c. Level 2 Findings: NONE
d. Plan Issues: NONE
e. Prior Issues – Resolved: NONE
f. Prior Issues - Unresolved: NONE

3.3.2.3 Hancock County- Evacuee Monitoring/Decontamination Station - Weir High School

a. Met: 1.1, 1.2, 2.2, 3.1, 5.1
b. Level 1 Findings: NONE
c. Level 2 Findings: NONE
d. Plan Issues: NONE
e. Prior Issues – Resolved: NONE
f. Prior Issues - Unresolved: NONE

3.3.2.3 Hancock County- Reception Center - Weir High School

a. Met: 1.1, 1.2, 2.2, 3.1, 5.1
b. Level 1 Findings: NONE
c. Level 2 Findings: NONE

d. Plan Issues: NONE
e. Prior Issues – Resolved: NONE
f. Prior Issues - Unresolved: NONE

3.3.2.2 3 Hancock County- Mass Care Center - Weir High School

a. Met: 1.1, 1.2, 1.5, 2.2, 3.1, 5.1
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 Hancock County Risk Schools

In summary, the status of DHS/FEMA capability targets for the risk schools are as follows:

3.3.3.1 Hancock County School Administration

a. Met: 1.5
b. Level 1 Findings: NONE
c. Level 2 Findings: NONE
d. Plan Issues: NONE
e. Prior Issues – Resolved: NONE
f. Prior Issues - Unresolved: NONE

3.3.2.2 Hancock County – Allison Elementary School

a. Met: 1.5
b. Level 1 Findings: NONE
c. Level 2 Findings: NONE
d. Plan Issues: NONE
e. Prior Issues - Resolved: NONE
f. Prior Issues - Unresolved: NONE

SECTION 4: DEMONSTRATED STRENGTHS

3.3.1.1.4 Joint Public Information Center

The VISTRA Corporation staff utilized summer interns to fill the role of mock media during the two press briefings. This not only provided an opportunity for the interns to be involved in the exercise process, but also provided more realism to the media briefings.

3.3.2.1 Hancock County Emergency Operations Center

A last-minute change occurred when a designated observer for the exercise had to assume the role of the Hancock County Health Department Representative. Just in time training was provided, and the plan and checklist were easily managed by someone unfamiliar with the response protocols for an incident at BVPS.

SECTION 5: CONCLUSION

The State of West Virginia and local jurisdictions, except where noted in this report, demonstrated knowledge of their Radiological Emergency Response Plans (RERP); and procedures were adequately implemented during the Beaver Valley Power Station Plume Exercise evaluated on June 11, 2024, and the Out-of-Sequence demonstrations conducted May 13 and 15, 2024.

FEMA assesses offsite planning and preparedness for communities within the plume and/or ingestion exposure pathway EPZs of commercial NPPs through an established set of objectives and capability targets that reflect the intent of the planning standards of 44 CFR 350 and the evaluation criteria of NUREG-0654/FEMA-REP-1, Rev 2, December 2019. Thus, FEMA considers these objectives/capability targets to be the benchmarks for FEMA's validation of reasonable assurance.

Each of these objectives/capability targets apply to all aspects of FEMA's assessment and are reported out in terms of core capabilities in the Biennial Preparedness Report. There are five overarching objectives, each of which have a unique set of capability targets that support the accomplishment of the objective. The capability targets are associated with one or more core capabilities, as agreed to by the OROs and RAC Chairs. This assessment strategy supports FEMA's regulatory responsibilities and successfully aligns REP evaluation methodology with the doctrine of the NPS.

Federal Emergency Management Agency (FEMA) evaluators assessed total of 294 (PA & WV) Capability Targets in five Objectives:

- Objective 1: Emergency Operations Management
- Objective 2: Exposure Control
- Objective 3: Alert and Notification
- Objective 4: Detect, Measure, Sample, Analyze, and Assess
- Objective 5: Operate

The evaluation of this exercise determined that there were no Level 1 Findings, two Level 2 Findings, and two Plan Issues. The Level 2 Finding assessed to the Hancock County Emergency Operations Center, Public Information was re-demonstrated during the exercise and closed. The Level 2 Finding, assessed to the West Virginia Emergency Operations Center, Public Information remains open. The two Plan Issues were closed prior to publishing of this report after FEMA received revised procedures and determined that the revisions were adequate.

Redemonstration of the State of West Virginia Level 2 Finding is being coordinated between FEMA, the State of West Virginia, and Hancock County.

Based on the results of the exercise and a review of the offsite radiological emergency response plans and procedures submitted, FEMA Region 3 has determined they are adequate (meet the planning and preparedness standards of NUREG-0654/FEMA-REP-1, Revision 2, December 2019, as referenced in 44 CFR 350.5) and there is reasonable assurance they can be implemented, as demonstrated during this exercise.

APPENDIX A: BVPS Timeline

Emergency Classification Level or Event	Time Utility Declared	State of West Virginia			
		West Virginia EOC	WV JIC	WV Accident Assessment Center	Hancock County EOC
Unusual Event	N/A	N/A	N/A	N/A	N/A
Alert	1622	1635	1635	1630	1630
Site Area Emergency	1754	1800	1800	1757	1803
General Emergency	1930	1936	1936	1935	1937
Simulated Radiation Release Started	1930	1936	1936	1925	1937
Simulated Radiation Release Ended	N/A	N/A	N/A	N/A	N/A
Facility Declared Operational		1810	1810	1630	1630
Governor's Declaration of State of Emergency		1813	1813	1813	1813
Declaration of Local Emergency		-	-	-	1703
Notice of a Hostile Action Event		-	-	-	-
Precautionary Actions		-	-	-	-
Law Enforcement Actions (Shelter in-place)		-	-	-	-
Close Parks		1935	1935	-	1812
Restrict Water Traffic		1811	1811	-	1812
Restrict Rail Traffic		1811	1811	-	1812
Restrict Airspace		1811	1811	-	1812
Shelter Livestock / Stored Feed & Water		1811	1811	-	1812
School Activities Canceled		1811	1811	-	1809
Relocate Risk School		1811	1811	-	1809
1st PAD Decision (0-2 miles Restricted Area/Stay Indoors)		1832	1832	1947	1949
1st Siren Activation		1828	1828	1948	1828
1st EAS		1831	1831	-	1831
2nd PAD Decision (0-10 miles all zones Shelter in Place)		1947	1947	-	-
2nd Siren Activation		2015	2015	-	2015
2nd EAS		2018	2018	-	2018
3rd PAD Decision (0-10 miles evac all zones and ingest KI)		-	-	-	-
3rd Siren Activation		N/A	N/A	N/A	N/A
3rd EAS		N/A	N/A	N/A	N/A
Notification to Shelter Message is:		-	-	-	-
Notification to Evacuate Message is: 10 mi/360 degrees		1947	1947	-	1949
KI Administration Decision: EWs advised to take KI		1947	1947	1947	1949
General Public/Institutionalized advised to take KI		1947	1947	-	1949
Exercise Terminated		2119	2119	2119	2102

APPENDIX B: EXERCISE EVALUATORS AND TEAM LEADERS

The following is the list of Evaluators and Team Leaders for the Beaver Valley Power Station Radiological Emergency Preparedness Plume Pathway Exercise that was evaluated on June 11, 2024, for State of West Virginia. Out-of-Sequence demonstrations were evaluated on May 13 and 15, 2024. The following constitutes the managing staff for the Exercise Evaluation:

- Thomas Scardino, DHS/FEMA, Regional Assistance Committee (RAC) Chairman
- Tina Thomas, DHS/FEMA, Project Officer, and Site Specialist

Beaver Valley Power Station

LOCATION	TEAM LEADER	AGENCY
West Virginia State Emergency Operations Center (EOC), Joint Information Center, Joint Public Information Center (JPIC), Hancock County School Administration, Allison Elementary School	Lee Torres	FEMA Region 3
West Virginia (WV) State Field Monitoring Team Management, WV State Field Monitoring Team A, WV State Field Monitoring Team B	Ken Wierman	FEMA HQ
Hancock County Emergency Operations Center (EOC)	Zachary Corle	FEMA Region 3
Traffic and Access Control at Chester Police Department, Emergency Worker Monitoring and Decontamination Station at New Cumberland Fire Department	Alex Hazard	FEMA Region 3
West Virginia Evacuee Monitoring/Decontamination, Reception Center, Mass Care Center at Weir High School Complex	Tom Essig	REP Support Team
LOCATION	**EVALUATOR**	**AGENCY**
West Virginia State Operations Center (EOC)	Lee Torres	FEMA Region 3
West Virginia State Operations Center (EOC)	Tom Reynolds	FEMA Region 3
Joint Information Center	Taylor Griffiths	FEMA Region 3

WV Accident Assessment Center	Ken Wierman	FEMA HQ
WV Accident Assessment Center	Narvaez Stinson	FEMA HQ
Joint Public Information Center	Matt Welshans	FEMA HQ
WV State Field Monitoring Team Management	Tim Harris	FEMA HQ
WV State Field Monitoring Team A	Narvaez L. Stinson	FEMA HQ
WV State Field Monitoring Team B	Mike DeBonis	FEMA Region 2
State Traffic/Access Control	Taylor Griffiths	FEMA Region 3
Emergency Worker Monitoring and Decontamination Station at New Cumberland Fire Department	Alex Hazards	FEMA Region 3
Emergency Worker Monitoring and Decontamination Station at New Cumberland Fire Department	Tom Geer	REP Support Team
Hancock County EOC	Zachary Corle	FEMA Region 3
Hancock County EOC	Taneeka Hollins	FEMA Region 1
Hancock County EOC	Barbara Thomas	FEMA Region 1
Hancock County School Administration	Lee Torres	FEMA Region 3
Hancock County Allison Elementary School	Chris Nemcheck	FEMA Region 3
West Virginia Evacuee Monitoring/Decontamination	Chery Weaver	REP Support Team
West Virginia Reception Center - Weir High School Complex	Tom Essig	REP Support Team
West Virginia Mass Care Center - Weir High School Complex	Paul Nied	REP Support Team

APPENDIX C: ACRONYMS AND ABBREVIATIONS

Acronym	Meaning
ACP	Access Control Point
ALC	Annual Letter of Certification
ANS	Alert and Notification System
ARC	American Red Cross
ARES	Amateur Radio Emergency Services
BRP	Bureau of Radiological Protection
BuRA	Back-up Route Alerting
CERT	Community Emergency Response Team
CFR	Code of Federal Regulations
CERC	Corporate Emergency Response Center
CNS	Commonwealth Notification System
CPM	Counts per Minute
CRCC	Commonwealth Response Coordination Center
DAD	Digital Alarming Dosimeter
DHS	Department of Homeland Security
DOT	Department of Transportation
EAL	Emergency Action Level
EAS	Emergency Alert System
ECL	Emergency Classification Level
EMC	Emergency Management Coordinator
EMD	Emergency Management Director
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EOP	Extent of Play
EPT	Exercise Planning Team
EPZ	Emergency Planning Zone
ESF	Emergency Support Function
EW	Emergency Workers
EWMDS	Emergency Worker Mon/Decon Station
FD	Fire Department
FEMA	Federal Emergency Management Agency
FMT	Field Monitoring Team
FRMAC	Federal Radiological Monitoring Assessment Center
FPE	Full Participation Exercise
FST	Field Sampling Team
FTC	Field Team Coordinator
GE	General Emergency

GIS	Geographic Information Systems
HazMat	Hazardous Materials
IPAWS	Integrated Public Alert & Warning System
IPX	Ingestion Pathway Zone
JIC	Joint Information Center
KI	Potassium Iodide
LOA	Letter of Agreement
MCC	Mass Care Center
MOC	Media Operations Center
MOU	Memorandum of Understanding
MSEL	Master Scenario Events List
NPP	Nuclear Power Plant
NRC	Nuclear Regulatory Commission
OOS	Out of Sequence
ORH	Office of Radiological Health
ORO	Offsite Response Organization
OSD	Optically Stimulated Dosimeter
PAD	Protective Action Decision
PAG	Protective Action Guide
PAR	Protective Action Recommendation
PARA	Primary Area Route Alerting
BVPS	Beaver Valley Power Station
PDAFN	Persons with Disabilities/Access Functional Needs
PEMA	Pennsylvania Emergency Management Agency
PIO	Public Information Officer
PPE	Personal Protective Equipment
PRD	Permanent Record Dosimeter
RAC	Regional Assistance Committee
RACES	Radio Amateur Civil Emergency Services
RC	Reception Center
REA	Radiation Emergency Area
REPP	Radiological Emergency Preparedness Program
RERP	Radiological Emergency Response Plan
RO	Radiological Officer
SAC	Staging Area Coordinator
SAE	Site Area Emergency
SAV	Staff Assistance Visit
SEOC	State Emergency Operations Center
SEVAN	State Emergency Voice Activation Network
TCP	Traffic Control Point

TRNSDEP	Transportation Dependent
VHF	Very High Frequency
WEA	Wireless Emergency Alerts

APPENDIX D: EXTENT OF PLAY AGREEMENT

The 2024 Beaver Valley Power Station Plume Exercise Extent-of-Play (EOP) Agreement is a document created by the State of West Virginia Emergency Management Agency that sets the parameters for exercise demonstration. The EOP agreement was signed by the FEMA Region 3 and State of West Virginia Emergency Management Agency planning team members.

Extent of Play

OBJECTIVE 1 – Emergency Operations Management

Capability Target 1.1: Mobilization *(Vice Sub-Element 1.a.1)*
Core Capability: Operational Coordination; Planning
Recommended Evaluation Frequencies: At every assessment activity
Recommended Assessment Activities: Exercise; Drill
Planning Reference: NUREG-0654/FEMA-REP-1, Rev. 2 (A.1, A.1.a, A.1.b, A.3, A.4, A.5, C.1, C.2, C.2.a, C.2.b, C.3, E.1, E.1.a, E.3, F.1.c, H.6, and O.1)
Intent: The capability to alert, notify, and mobilize OROs to staff facilities in support of emergency operations.

Demonstration and Evaluation Guidance:

1. Alert, notify, and mobilize key personnel, to include a 24-hour staffing roster, and activate facilities in a timely manner.
2. Receive and verify notifications.
3. Identify and request additional resources, as needed.
4. Determine a facility operational.

All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

State Negotiated Extent of Play:
• Demonstrate the capability to receive and verify notification of an emergency from the licensee. Contact, alert, and simulate mobilization of key emergency personnel. (WV EOC will simulate notification/activation of the key state agencies deemed necessary, but not physically represented in the EOC during the exercise.) • Demonstrate the activation of facilities for immediate use by personnel in attendance for the exercise when they arrive. • Activation procedures (simulated or actual) will not start until an Alert is declared. • Simulation of activation of facilities will be completed in accordance with the plan and/or procedures. • Personnel will be pre-positioned. This pre-positioning will be for all locations, to include EOC, field locations and any out-of–sequence demonstrations. • The state EOC may be staffed both physically with key decision makers and staff as well as virtually with the remaining stakeholders, if appropriate, to maintain current health concerns or protective actions. • EOC Twenty-four (24) Hour Staffing will be demonstrated by roster.

Risk Jurisdictions Negotiated Extent of Play:
• Demonstrate the capability to receive and verify notification of an emergency from the licensee. Contact, alert, and simulate mobilization of key emergency personnel. (Hancock County EOC will simulate notification/activation of the key agencies deemed necessary, but not physically represented in the EOC during the exercise.) • Demonstrate the activation of facilities for immediate use by personnel in attendance for the exercise when they arrive. • Activation procedures (simulated or actual) will not start until an Alert is declared. • Simulation of activation of facilities will be completed in accordance with the plan and/or procedures. • Personnel will be pre-positioned. This pre-positioning will be for all locations, to include EOC, field locations and any out-of–sequence demonstrations. • The county EOC may be staffed both physically with key decision makers and staff as well as virtually with the remaining stakeholders, if appropriate, to maintain current concerns or protective actions. • EOC Twenty-four (24) Hour Staffing will be demonstrated by roster.
Support Jurisdictions Negotiated Extent of Play:
N/A
Outstanding Issues:
None

Capability Target 1.2: Direction and Control *(Vice Sub-Element 1.b.1, 1.c.1, 1.e.1)*
Core Capabilities: Operational Coordination; Environmental Response/Health and Safety; Public Information and Warning; Mass Care Services; Public Health, Healthcare, and Emergency Medical Services; Situational Assessment; Critical Transportation; Planning
Recommended Evaluation Frequencies: At every assessment activity
Recommended Assessment Activities: Exercise; Drill
Planning Reference: NUREG-0654/FEMA-REP-1, Rev. 2 (A.1, A.1.a, A.1.b, A.1.c, A.2, A.3, A.5, C.2, C.2.a, C.2.b, C.3, D.4, E.1, H.6, and O.1)
Intent: The capability to provide overall direction and control of response efforts, commensurate with the responsibilities of leadership, as detailed in plans/procedures.

Demonstration and Evaluation Guidance:

1. Support protective action decision-making.
2. Conduct briefings in a timely manner.
3. Maintain situational awareness.
4. Coordinate response activities with other organizations.
5. Obtain resources to support emergency operations.
6. Provide and maintain adequate facilities and equipment to support the emergency response.

All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

State Negotiated Extent of Play:

• Designated EOC personnel should 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 completion of requirements and requests.
Risk Jurisdictions Negotiated Extent of Play:
• Leadership personnel should 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 completion of requirements and requests.
Support Jurisdictions Negotiated Extent of Play:
N/A
Outstanding Issues:
None

Capability Target 1.3: Protective Action Recommendations *(Vice Sub-Element 2.b.1; 3.e.1)*
Core Capabilities: Operational Coordination; Environmental Response/Health and Safety; Situational Assessment; Planning
Recommended Evaluation Frequencies: Biennially
Recommended Assessment Activities: Biennial exercise only
Planning Reference: NUREG-0654/FEMA-REP-1, Rev. 2 (D.4, J.7, J.8, J.8.b, J.9, and O.1)
Intent: The capability to use dose assessment and field data, compare this data to the PAGs, and choose among a range of protective actions those most appropriate in a given emergency.

Demonstration and Evaluation Guidance:

Plume

1. Select and implement pre-planned precautionary protective actions.
2. Utilize the methodology in plans/procedures to select among a range of protective actions most appropriate in a given emergency. This could also include the use of preplanned precautionary protective actions contained in plans/procedures.
3. Develop PARs.
4. Transmit PARs in a timely manner.

Post Plume

1. Assess radiological consequences and provide appropriate PARs for the ingestion exposure pathway.

All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

State Negotiated Extent of Play:
• Protective Action Recommendations will be developed in accordance with Plans and/or Procedures. • If the scenario does not involve a release, this can be demonstrated by interview.

• If adequate data becomes available, accident assessment will be performed, and PARs developed.
Risk Jurisdictions Negotiated Extent of Play:
N/A
Support Jurisdictions Negotiated Extent of Play:
N/A
Outstanding Issues:
None

Capability Target 1.4: Protective Action Decisions for the Plume Phase *(Vice Sub-Element 2.b.2; 2.c.1)*
Core Capabilities: Operational Coordination; Environmental Response/Health and Safety; Situational Assessment; Critical Transportation; Planning
Recommended Evaluation Frequencies: Biennially
Recommended Assessment Activities: Biennial exercise only
Planning Reference: NUREG-0654/FEMA-REP-1, Rev. 2 (D.1.b, D.4, J.6, J.7, J.8, J.8.b, J.10, J.10.a, J.10.b, J.11.c-g, and O.1)
Intent: The capability to utilize appropriate factors and necessary coordination in the decision-making process used to make PADs for the public.

Demonstration and Evaluation Guidance:

2. Coordinate and make PADs for members of the general public.
3. Coordinate and make PADs for those with access and functional needs.
4. Coordinate and make PADs for students at schools.
5. Coordinate and make subsequent or alternate PADs.
6. Coordinate and make decisions on the administration of KI (where applicable) for the public and institutionalized members of the population.

All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

State Negotiated Extent of Play:
• The State will demonstrate the capability to make both initial and subsequent PARs. However, based on the recommendation by the State, the final decision will be made by county administration.
Risk Jurisdictions Negotiated Extent of Play:
• Demonstrate the ability to make initial PADs in a timely manner. • The dose assessment personnel may provide additional PARs based on the subsequent dose projections, field monitoring data, or information on plant conditions. The decision-makers should demonstrate the capability to change protective actions as appropriate based on these projections, if appropriate.

- The PAD should be coordinated between the 3 States and risk counties. A coordinated PAD does not necessarily mean the same PAD.
- The PAD will be coordinated between the State of West Virginia and Hancock County.
- At least one PAD / PAR will be demonstrated.
- In Hancock County, KI is available to the public to pick up at the local health department and is pre-distributed to the Public.
- If the scenario does not involve a release this can be demonstrated through an interview.
- Schools will be demonstrated out of sequence at 0900 on May 15, 2024.
- Access and functional needs populations will be demonstrated through interviews with appropriate EOC staff.

Support Jurisdictions Negotiated Extent of Play:
N/A
Outstanding Issues:
None

Capability Target 1.5: Protective Action Decision Implementation for the Plume Phase *(Vice Sub-Element 3.b.1; 3.c.1; 3.c.2)*
Core Capabilities: Operational Coordination; Public Information and Warning; Environmental Response/Health and Safety; Critical Transportation; Health and Social Services; Housing; Natural and Cultural Resources; Planning
Recommended Evaluation Frequencies: Biennially
Recommended Assessment Activities: Exercise; Drill
Planning Reference: NUREG-0654/FEMA-REP-1, Rev. 2 (A.4, C.2.a, G.1, J.11, J.11.a, J.11.b, J.11.c, J.11.e, J.11.g, and O.1)
Intent: The capability to implement precautionary protective action and/or PADs, including evacuation and/or sheltering, for all populations within the plume and ingestion exposure pathway EPZs. The populations include those with access and functional needs, students, and institutionalized individuals.

Demonstration and Evaluation Guidance:

7. Implement PADs, ensuring communication and coordination with all appropriate jurisdictions.
8. Assist those with access and functional needs during the implementation of PADs.
9. Communicate, coordinate, and implement protective actions for schools.
10. Communicate with transportation officials.
11. Identify evacuation routes for the general public.
12. Make KI available to both institutionalized persons and the general public, in accordance with plans and procedures.

All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

State Negotiated Extent of Play:
• The State should demonstrate the capability to formulate and disseminate appropriate instructions on the use of KI for those advised to take it.

- A decision not to take KI is an acceptable decision.

Risk Jurisdictions Negotiated Extent of Play:

- KI and appropriate instructions are available if a recommendation to administer the use of KI is made. Appropriate record-keeping of the administration of KI for institutionalized individuals is maintained.
- In Hancock County, KI is available to the public to pick up at the local health department and is pre-distributed to the Public.
- Demonstrate the capability to alert and notify access and functional populations (hospitals, nursing homes, prisons, mobility-impaired individuals, transportation dependent, etc.).
- Demonstrate the capability to provide for the needs of access and functional populations in accordance with plans and procedures.
- Contact with access and functional populations and reception facilities will be simulated.
- Telephone calls will not be made.
- One transportation provider will be contacted; all other calls will be simulated.
- All simulated contacts should be logged.
- Route Alerting will not be conducted or evaluated.
- Notification of access and functional needs people will be simulated by EOC staff.
- Notification of access and functional needs populations will be procedurally explained.
- The list identifying access and functional needs population will be available to evaluators , but may not leave the EOC. Due to the nature of protected personnel information the list will be a scrubbed list.
- Demonstrate the capability to alert and notify the Hancock County School District of emergency conditions that are expected to or may necessitate protective actions for students.
- Contact with the public-school district will be demonstrated during the out-of-sequence school play.
- The Hancock County HSEM and/or officials of the Hancock County School District will demonstrate the capability to make prompt decisions on protective actions for students.
- School Officials will demonstrate the decision-making process for protective actions.
- Allison Elementary will participate in out–of–Sequence at 0900 on May 15, 2024.
- Transportation of school children, if necessary, will be simulated.
- One Bus Driver will be available, at the participating school, for an interview.
- The bus will not run the route to the Host School but will explain the procedure.
- The implementation of canceling the school day, dismissing early, or sheltering will be simulated by describing to evaluators the procedures that would be followed. If evacuation is an implemented protective action, all activities to coordinate and complete the evacuation of students to the host school will be accomplished through an interview process.
- Communications will be verified by the Bus Driver by interview.
- Officials of the school will demonstrate the capability to develop and provide timely information to the HCEOC for use in messages to parents, the public, and the media on the status of protective actions for schools.

Support Jurisdictions Negotiated Extent of Play:

N/A

Outstanding Issues:

None

Capability Target 1.6: Protective Action Decisions for the Post-Plume Phase *(Vice Sub-Element 2.d.1, 2.e.1)*
Core Capabilities: Operational Coordination; Environmental Response/Health and Safety; Situational Assessment; Critical Transportation; Housing; Planning
Recommended Evaluation Frequencies: At least once every 8-years
Recommended Assessment Activities: Exercise; Drill
Planning Reference: NUREG-0654/FEMA-REP-1, Rev. 2 (J.12, J.14, J.14.a-f, M.1, M.1.b, M.4, M.5, M.6, M.7, M.8, and O.1)
Intent: The capability to assess the radiological consequences for the ingestion exposure pathway and post-plume phase, relate them to the appropriate PAGs, and make and coordinate timely, appropriate PADs to mitigate exposure.

Demonstration and Evaluation Guidance:

13. Make post-plume phase decisions in a timely manner.
14. Make relocation decisions for the post-plume phase in a timely manner.
15. Make reentry decisions for the post-plume phase in a timely manner.
16. Make return decisions for the post-plume phase in a timely manner.
17. Make re-occupancy decisions for the post-plume phase in a timely manner.
18. Coordinate PADs as appropriate.

All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

State Negotiated Extent of Play:
Risk Jurisdictions Negotiated Extent of Play:
Support Jurisdictions Negotiated Extent of Play:
Outstanding Issues:

Capability Target 1.7: Protective Action Decision Implementation for the Post-Plume Phase *(Vice Sub-Element: 3.a.1, 3.d.1, 3.e.1, 3.e.2, 3.f.1, 5.b.1)*
Core Capabilities: Operational Coordination; Public Information and Warning; Environmental Response/Health and Safety; Critical Transportation; Health and Social Services; Housing; Natural and Cultural Resources; Planning
Recommended Evaluation Frequencies: Biennially
Recommended Assessment Activities: Exercise; Drill
Planning Reference: NUREG-0654/FEMA-REP-1, Rev. 2 (C.2, J.12, J.14, J.14.a-f, M.1, M.1.b, M.4, M.5, M.6, M.7, M.8, and O.1)
Intent: The capability to implement and coordinate PADs to mitigate exposure and address long-term radiological consequences.

Demonstration and Evaluation Guidance:

19. Communicate and implement protective actions for agribusinesses, such as dairy farms, meat and poultry producers, fisheries, fruit growers, vegetable growers, grain producers, food processing plants, and water supply intake points.
20. Formulate protective action information (e.g., brochures, email, text message, etc.) for the general public and food producers and processors.
21. Control, restrict, or prevent distribution of contaminated food by commercial sectors, ensuring communication and coordination with agencies responsible for enforcing food controls.
22. Communicate instructions to the public regarding relocation decisions and intermediate-term housing for relocated persons.
23. Coordinate and implement decisions concerning relocation, including short- and/or long-term relocation of evacuees.
24. Control reentry and exit of individuals who are authorized by the ORO to temporarily reenter the restricted area.
25. Implement policies concerning return of members of the public to areas that were evacuated during the plume phase.

All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

State Negotiated Extent of Play:
Risk Jurisdictions Negotiated Extent of Play:
Support Jurisdictions Negotiated Extent of Play:
Outstanding Issues:

OBJECTIVE 2 - Exposure Control

Capability Target 2.1: Emergency Worker Exposure Control Decision-Making Process *(Vice Sub-Element: 2.a.1)*
Core Capabilities: Operational Coordination; Environmental Response/Health and Safety; Situational Assessment; Planning
Recommended Evaluation Frequencies: Biennially
Recommended Assessment Activities: Exercise; Drill
Planning Reference: NUREG-0654/FEMA-REP-1, Rev. 2 (C.2.c, H.11, K.2, K.2.b, K.3, K.3.a, M.1.b, M.8, and O.1)
Intent: The capability to assess and control the radiation exposure and dose received by emergency workers and utilize a decision-making chain to authorize emergency worker exposure limits to be exceeded for specific missions.

Demonstration and Evaluation Guidance:

1. Control emergency workers' exposure and dose, including offsite workers performing duties onsite.
2. Maintain record of dose as a result of exposure.
3. Authorize exposures and dose in excess of identified limits.
4. Process for considering occupational exposures and to authorize individuals to receive doses in excess of occupational dose limits.
5. Determine a correction factor for DRD-based isotopic release mixture.
6. Control exposure and dose for temporary reentry of emergency workers, or members of the public, to restricted areas.
7. Determine the need to authorize radioprotective drugs using projected thyroid doses and field measurements. Projections are compared to previously established PAGs.
8. Adequately protect members of the public from radiological exposure and control dose for those who are authorized to temporarily reenter a restricted area.

All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

State Negotiated Extent of Play:
• As appropriate, demonstrate the capability to make decisions on the administration of KI as a protective measure for emergency workers. This may be demonstrated by interview. • The decision for KI can be "not to administer" KI. • The State EOC is outside of the 10-mile and 50-mile EPZ so issuing of personal dosimetry and a radiological briefing is not necessary.
Risk Jurisdictions Negotiated Extent of Play:
• Demonstrate the capability to make decisions concerning the authorization of exposure levels more than pre-authorized levels and to the number of emergency workers receiving radiation dose above pre-authorized levels. This will be done by interview. • The decision-making process for KI can be demonstrated through interviews.

• The County EOC is outside of the 10-mile EPZ so issuing of personal dosimetry and a radiological briefing is not necessary.
Support Jurisdictions Negotiated Extent of Play:
None
Outstanding Issues:
N/A

Capability Target 2.2: Emergency Worker Exposure Control Management *(VICE Sub-Element 3.a.1)*
Core Capabilities: Operational Coordination; Environmental Response/Health and Safety; Planning
Recommended Evaluation Frequencies: Biennially
Recommended Assessment Activities: Exercise; Drill
Planning Reference: NUREG-0654/FEMA-REP-1, Rev. 2 (C.2.c, H.11, H.11.b, K.2.b, K.3, K.3.a, M.1.b, and O.1)
Intent: The capability of emergency workers to manage dose and exposure, use equipment (e.g., dosimetry, radio protective drugs), and identify procedures to monitor their exposure and dose, including following procedures to obtain authorization to receive emergency exposures in excess of the PAGs.

Demonstration and Evaluation Guidance:

1. Maintain an appropriate inventory of DRDs that are leak-tested or current in calibration.
2. Maintain an appropriate inventory of PRDs.
3. Retain an adequate supply of radioprotective drugs.
4. Adequately distribute appropriate DRDs and PRDs.
5. Adequately distribute radioprotective drugs to emergency workers.
6. Record and report exposures in the field.
7. Implement decisions to administer radioprotective drugs.
8. Report to individual responsible for managing exposure and dose when limits are reached.
9. Implement exposure control decisions to members of the public from radiological exposure and control dose for those who are authorized to temporarily reenter a restricted area.

All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

State Negotiated Extent of Play:
N/A
Risk Jurisdictions Negotiated Extent of Play:
• Emergency Workers who are assigned dosimetry will demonstrate the procedures to monitor and record dosimetry readings. The workers may be interviewed by the evaluator

to determine their knowledge of radiological exposure control, radiation exposure limits, turnback values and whom to contact in the event authorization is needed to exceed their limits.

- OROs should demonstrate the actions described in the plan and/or procedures by determining whether to replace the worker, to authorize the worker to incur additional exposures or to take other actions. If scenario events do not require emergency workers to seek authorizations for additional exposure, evaluators may interview an emergency worker, to determine their knowledge of whom to contact in the event authorization is needed.
- Emergency workers may use any available resources (e.g., written procedures and/or co-workers) in providing responses.
- Dosimetry "Training Kits with simulated TLD's" will be available at the field locations to demonstrate the use of dosimetry. Area monitoring kits may be utilized.
- The supply of DRDs, TLD's and KI will be available in the Hancock County EOC and reviewed during the EOC evaluation on June 11, 2024.
- If the scenario does not involve a release, this can be done by interview.
- Demonstrate through interview with County Director (or designee) how KI would be distributed to EPZ Emergency Worker

Support Jurisdictions Negotiated Extent of Play:

N/A

Outstanding Issues:

None

OBJECTIVE 3 - Alert and Notification

Capability Target 3.1: Communications *(Vice Sub-Element: 1.d.1)*
Core Capabilities: Operational Communications; Operational Coordination; Situational Awareness; Planning
Recommended Evaluation Frequencies: At every assessment activity
Recommended Assessment Activities: Exercise; Communication Drill (N.4.e)
Planning Reference: NUREG-0654/FEMA-REP-1, Rev. 2 (E.1.a, E.3, F.1, F.1.a, F.1.b, F.1.c, F.3, and O.1)
Intent: The capability to provide and maintain reliable communications with emergency personnel.

Demonstration and Evaluation Guidance:

- Utilize communication systems that are fully functional, continuously available, and redundant.
- Maintain periodic test results and corrective actions on a real time basis.
- Access at least one communication system that is independent of the commercial telephone system.
- Manage the communication systems and ensure that all message traffic is handled without delays that might disrupt emergency operations.
- Identify and address any failures of the systems.
- Transmit, receive, and understand messages (i.e., "content check").

All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

State Negotiated Extent of Play:
• Telephone communications will be available for the demonstration. At least one other communication system utilized by the EOC staff will be explained. • If a communications system is not functional, and exercise performance is not affected, no exercise issue will be assessed. • Demonstrate the capability to manage communication systems and ensure that all message traffic is handled without delays that might disrupt the conduct of emergency operations.

Risk Jurisdictions Negotiated Extent of Play:
• A telephone and at least one additional communications system will be available for the demonstration. • If a communications system is not functional, and exercise performance is not affected, no exercise issue will be assessed. • Demonstrate the capability to manage communication systems and ensure that all message traffic is handled without delays that might disrupt the conduct of emergency operations. • Out-of-sequence demonstrations will have communications available but not necessarily demonstrate them.

• Communications associated with medical support facilities were demonstrated during the March 31, 2023, MS-1 Federal Evaluated Exercise.
Support Jurisdictions Negotiated Extent of Play:
N/A
Outstanding Issues:
None

Capability Target 3.2: Alert and Notification of the Public *(Vice Sub-Element: 5.a.1; 5.a.3; 5.a.4)*
Core Capabilities: Public Information and Warning; Planning
Recommended Evaluation Frequencies: Biennially
Recommended Assessment Activities: Biennial exercise only
Planning Reference: NUREG-0654/FEMA-REP-1, Rev. 2 (E.2, E.4, E.5, F.3, and O.1)
Intent: The capability to provide instructions to the public.

Demonstration and Evaluation Guidance:

Alert and Notification System

5. Sequentially provide an alert signal followed by an initial instructional message to populated areas.
6. Alert and notify the general public.
7. Identify and address any failures of the system(s) or portion of a system(s).
8. Actual testing of the mobile public address system will be conducted at an agreed upon location.

EAS

26. Identify the process to activate the EAS.
27. Ensure that updated emergency information is disseminated in a timely manner.
28. Ensure that current emergency information is repeated at pre-established intervals.
29. Identify the process to activate the EAS, to include the process to receive and then broadcast updated information/ messages and verification of the message, if applicable.
30. EAS/NWS Station.
31. Broadcast the message on a 24-hour basis.

Route/Alternate Alerting

- Complete route alerting, whether because of failure for system/portion of a system or for exception areas, as needed to demonstrate all routes are capable of being run in allotted time. Emphasis on the most challenging routes and demonstration of these routes will be varied from assessment activity to assessment activity. Challenging routes are defined as those that may be difficult to accomplish, such as those that are lengthy or with conditions (physical or otherwise) that may affect the speed and

accuracy with which the route can be completed (e.g., traffic patterns and/or capacity, road conditions, etc.).

All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

State Negotiated Extent of Play:
N/A
Risk Jurisdictions Negotiated Extent of Play:
• The County will demonstrate the capability to sequentially provide an alert signal followed by an initial instructional message to populated areas (permanent resident and transient) throughout the 10-mile plume pathway EPZ. Following the decision to activate the alert and notification system, in accordance with the County plan and/or procedures, completion of system activation should be accomplished in a timely manner (will not be subject to specific time requirements) for primary alerting/notification. The initial message should include the elements required by current FEMA REP guidance. • Siren activation will be explained. Sirens will not be sounded. • Procedures to broadcast the message should be fully demonstrated as they would in an actual emergency up to the point of transmission. Broadcast of the message(s) or test messages will not be demonstrated. The alert signal activation will be simulated. The procedures will be demonstrated up to the point of actual activation. • In Hancock County, the EAS Station will not be activated. EAS activation will be explained according to plans and procedures. • The capability of the primary notification system to broadcast an instructional message on a 24-hour basis should be verified during an interview with the HC HSEM Director or designee. • Hancock County participates annually in late August/early September in a "live activation" of sirens and WEA notifications via IPAWS with confirmation through the PBS alerting page. • Route Alerting is a tertiary system and will not be demonstrated or evaluated. • Backup/alternate alerting will be demonstrated by using an electronic mass notification system to send an alert message to a predetermined list of FEMA evaluators and a test message to the IPAWS test lab.
Support Jurisdictions Negotiated Extent of Play:
N/A
Outstanding Issues:
None

Capability Target 3.3: Emergency Information and Instructions for the Public and News Media *(Vice Sub-Element: 5.b.1; 3.e.2)*
Core Capabilities: Public Information and Warning; Planning
Recommended Evaluation Frequencies: Biennially
Recommended Assessment Activities: Biennial exercise only
Planning Reference: NUREG-0654/FEMA-REP-1, Rev. 2 (E.2, E.4, E.5, G.1, G.2, G.3, G.3.a, G.4, G.5, and O.1)
Intent: The capability to disseminate emergency information and instructions to the public during all phases of an incident.

Demonstration and Evaluation Guidance:

Plume Phase

- Deliver coordinated, prompt, reliable, and actionable information in a timely manner.
- Provide clear, concise, accessible messaging using plain language.
- Messaging addresses appropriate cultural and linguistic considerations.
- Ensure subsequent messaging is consistent with protective actions.
- Update information as the incident progresses, to include validating previously identified protective areas and clearly identifying any new protective action areas, any information that is no longer valid, and any changes to previously provided information (e.g., rerouting of evacuation routes due to impediments, etc.).
- Respond to media and public inquiries.

Post-Plume Phase

1. Rapidly disseminate of ingestion exposure pathway information to predetermined individuals and businesses.
2. Provide information to the public that addresses temporary reentry to a restricted area, permanent relocation from areas not evacuated, and return to formerly restricted areas will be communicated.

All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

State Negotiated Extent of Play:
• The State will ensure that emergency information and instructions are consistent with protective action decisions made by appropriate officials. The State should be prepared to disclose and explain the Emergency Classification Level (ECL) of the incident. • Public inquiries will be demonstrated at the EOC. • Trends in rumors will be identified, if applicable. • Subsequent emergency information and instructions from the WV State EOC and/or Hancock County EOC will be provided to the public and the media through the Joint Public Information Center. • One News Briefing will be conducted at the EOC. It can happen any time after the Alert Declaration. Media will be simulated.
Risk Jurisdictions Negotiated Extent of Play:
• The County will ensure that emergency information and instructions are consistent with protective action decisions made by appropriate officials. The County should be prepared to disclose and explain the Emergency Classification Level (ECL) of the incident. • Public inquiries will be demonstrated at the EOC. • Trends in rumors will be identified, if applicable. • Subsequent emergency information and instructions will be provided to the public and the media through the Joint Public Information Center. • News briefs are conducted for the county by the State of WV at the BVPS JPIC.

Support Jurisdictions Negotiated Extent of Play:
N/A
Outstanding Issues:
None

OBJECTIVE 4 - Detect, Measure, Sample, Analyze, and Assess

Capability Target 4.1: Field Monitoring Teams Management *(Vice Sub-Elements: 4.a.2)*
Core Capabilities: Operational Coordination; Environmental Response/Health and Safety; Planning
Recommended Evaluation Frequencies: Biennially
Recommended Assessment Activities: Exercise; Drill
Planning Reference: NUREG-0654/FEMA-REP-1, Rev. 2 (H.11, H.13, I.5, I.6, I.9, I.10, M.7, M.8, and O.1)
Intent: The capability to provide overall management of FMTs to direct movements and measurements to characterize the plume and its impacts.

Demonstration and Evaluation Guidance:

1. Brief FMTs on predicted plume location and direction, plume travel speed, equipment operational checks, background measurement, and exposure control procedures before deployment.
2. Direct the FMTs to monitoring locations, predesignated points or otherwise, at times and locations sufficient to characterize the plume.
3. Obtain peak plume measurements from FMTs.
4. Direct FMTs to collect air samples at locations and times sufficient to characterize the plume.
5. Keep Incident Command informed of FMTs activities and location(s) during a HAB incident or other instances when an ICP or other may be in use.
6. Coordinate and share information amongst all FMTs (licensee, Federal, state, and local).
7. Coordinate sample analysis from field to those responsible for assessing radiological data.
8. Coordinate transfer of sample media to locations and organizations responsible for assessing radiological data.
9. Assist with development and modification of sampling plans, as appropriate.

All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

State Negotiated Extent of Play:
• Field teams should be equipped with instrumentation and supplies necessary to accomplish their mission as identified in the plan and/or procedures. • Two Field Teams will be utilized. • Field Team Equipment will be demonstrated at the first sample location. • Equipment use will be simulated at all other locations. • In-route readings will be taken. Field data will be provided to the field team through controller injects. • The Field Team will be demonstrated Out-of-Sequence at time 1000 on June 11, 2024, at the State EOC in Charleston, WV.

• The Field Team will demonstrate at the Charleston location. The Field teams will discuss Hancock County location specific information such as where to find the FMT points and how they would get there during the demonstration at Charleston. • Responsible Offsite Response Organizations (ORO) will demonstrate the capability to brief teams on predicted plume location and direction, travel speed, and exposure control procedures before deployment. • A controller will provide Field team readings.
Risk Jurisdictions Negotiated Extent of Play:
N/A
Support Jurisdictions Negotiated Extent of Play:
N/A
Outstanding Issues:
None

Capability Target 4.2: Plume Phase Measurements and Sampling *(Vice Sub-Element: 4.a.3)*
Core Capabilities: Environmental Response/Health and Safety; Planning
Recommended Evaluation Frequencies: Biennially
Recommended Assessment Activities: Exercise; Environmental Monitoring Drill (N.4.d)
Planning Reference: NUREG-0654/FEMA-REP-1, Rev. 2 (H.9, H.11, H.11.a, H.11.b, H.12, H.13, I.2, I.5, I.6, I.7, I.8, I.9, I.10, and O.1)
Intent: The capability to make and report measurements of ambient radiation.

Demonstration and Evaluation Guidance:

1. Maintain emergency equipment including calibration and operational checks according to manufacturer's specifications or per national standards.
2. Maintain inventory for emergency kits.
3. Operate and monitor radiation survey instruments to detect changes in radiation exposure rate while moving and in stationary positions.
4. Use appropriate contamination control and PPE.
5. Be in location(s) at the appropriate time(s) to detect and characterize the active release (plume).
6. Obtain peak plume measurements either directly or from licensee field teams.
7. Correctly interpret survey instrument readings to determine submersion in the active plume.
8. Collect representative air samples in the active plume on particulate media (e.g., glass or paper filter) and iodine selective media (e.g., silver zeolite cartridge).
9. Handle sample media and equipment to avoid sample cross-contamination, contamination of equipment and personnel contamination.
10. Determine an appropriate low background location to count sample media.
11. Count iodine and particulate media using appropriate and effective instrumentation and counting geometries or have samples analyzed by a supporting laboratory within four hours.
12. Report to field monitoring team manager all survey and counting results in format and units suitable for use by the organization's dose assessor.

13. Procedures, qualified collection and counting efficiencies, and calculations are capable of detecting airborne radioactive iodine concentrations as low as 10-7 µCi/cc.

All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

State Negotiated Extent of Play:
• Field teams should demonstrate the capability to report measurements and field data pertaining to the measurement of airborne radioiodine and particulates and ambient radiation to the field team coordinator. • Field data should be shared with Ohio and Pennsylvania in a timely manner - simulated. • The request for Federal resources will be simulated by the WVEOC. • A controller will provide Field Team readings. • In the event of a "No/Minimal Release" Scenario than a data set from outside the scenario may be utilized to drive the Field Monitoring Team demonstration only.
Risk Jurisdictions Negotiated Extent of Play:
N/A
Support Jurisdictions Negotiated Extent of Play:
N/A
Outstanding Issues:
None

Capability Target 4.3: Post-Plume Phase Measurements and Sampling *(Vice Sub-Element: 4.b.1)*
Core Capabilities: Environmental Response/Health and Safety; Planning
Recommended Evaluation Frequencies: At least once every 8-years
Recommended Assessment Activities: Exercise; Environmental Monitoring Drill (N.4.d)
Planning Reference: NUREG-0654/FEMA-REP-1, Rev. 2 (H.11, H.11.a, H.11.b, H.12, H.13, I.2, I.5, I.6, I.8, M.7, and O.1)
Intent: The capability to report measurements of ambient radiation and collect environmental, food, and drinking water samples for laboratory analyses that support decision-making.

Demonstration and Evaluation Guidance:

1. Maintain and prepare instruments, equipment, and supplies for use, including performing pre-operational checks of radiation survey instruments.
2. Use appropriate contamination control and PPE.
3. Execute the sampling plan.
4. Collect each type of sample necessary to assess the ingestion exposure pathway and to support reentry, relocation, and return decisions. The types of samples necessary are based on the exercise scenario and may include drinking water, soil, vegetation, milk, crops, or other agriculture samples.
5. Obtain and record ambient radiation measurements at each sample location and at other locations, as directed.

6. Handle sample media to avoid sample cross-contamination and equipment/personnel contamination.
7. Prepare and package samples appropriately (e.g., geometries specific to those used in the processing samples, including sample identification, and chain-of-custody forms) to ensure the integrity of samples throughout transportation and transfer.

All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

State Negotiated Extent of Play:
Risk Jurisdictions Negotiated Extent of Play:
Support Jurisdictions Negotiated Extent of Play:
Outstanding Issues:

Capability Target 4.4: Laboratory Operations *(Vice Sub-Element: 4.c.1)*
Core Capabilities: Environmental Response/Health and Safety; Planning
Recommended Evaluation Frequencies: At least once every 8-years
Recommended Assessment Activities: Laboratory Drill (N.4.c)
Planning Reference: NUREG-0654/FEMA-REP-1, Rev. 2 (C.4, H.11, H.11.b, H.13, I.2, I.6, M.7, and O.1)
Intent: The capability to perform laboratory analyses of radioactivity in environmental, food, and drinking water samples to support decision-making.

Demonstration and Evaluation Guidance:

1. Prepare analytical equipment for use, including performing calibrations, quality control checks, and background counts, as appropriate.
2. Receive and track samples, including completing chain-of-custody records.
3. Prepare and process each type of sample necessary to assess the ingestion plume exposure pathway and to support reentry, relocation, and return decisions. The types of samples necessary are based on the exercise scenario and may include drinking water, soil, vegetation, milk, crops, or other agriculture samples.
4. Analyze samples to determine the concentration of each radionuclide in each sample. Minimum detection limits (MDLs) for various radionuclides must be low enough to support ORO decisions.
5. Provide analysis results to the appropriate organization.
6. If the laboratory is used to count air samples during the early phase of an incident and prepare, process, and analyze air filters and cartridges, provide analysis results in a timely manner to support ORO decisions.

All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

State Negotiated Extent of Play:
• The State of WV does not have a lab and utilizes an MOU with the State of Ohio.
Risk Jurisdictions Negotiated Extent of Play:
N/A
Support Jurisdictions Negotiated Extent of Play:
N/A
Outstanding Issues:
None

Capability Target 4.5: Plume Phase Analysis and Dose Assessment *(Vice Sub-Element: 2.b.1)*
Core Capabilities: Environmental Response/Health and Safety; Planning
Recommended Evaluation Frequencies: Biennially
Recommended Assessment Activities: Exercise; Drill
Planning Reference: NUREG-0654/FEMA-REP-1, Rev. 2 (A.3, H.13, I.6, I.8, I.10, K.3, and O.1)
Intent: The capability to collect data, project doses to members of the public and emergency workers and analyze and communicate the results.

Demonstration and Evaluation Guidance:

1. Obtain adequate data to make dose projections.
2. Use software and/or other methods (e.g., manual calculations) to make dose projections for members of the public (both TED and thyroid dose) based on plant data.
3. Compare dose projections to members of the public to EPA PAGs.
4. Compare dose projections to the public with those of the licensee and discuss differences greater than a factor of ten with the licensee and explain reasons for the difference.
5. Make initial PARs based on recommendations of the licensee, release data, meteorological data, and other pertinent information.
6. Promptly communicate PARs to decision-makers.
7. Receive ambient exposure rates from FMTs and compare to model projections.
8. Calculate iodine and particulate concentrations from FMT air samples.
9. Calculate plume ratios of noble gas, iodine's, and particulates, and compare to model projections.
10. Adjust PARs, as necessary, based on analysis of field data.
11. Calculate an incident-specific correction factor for emergency workers inside the plume exposure pathway EPZ.

All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

State Negotiated Extent of Play:
• Protective Action Recommendations will be developed in accordance with Plans and/or Procedures. • If the scenario does not involve a release, this can be demonstrated by interview. • If adequate data becomes available, accident assessment will be performed, and PARs developed. • Field monitoring team data can be provided via controller inject or through electronic means such as plotted on a map or website (ex. RadResponder).
Risk Jurisdictions Negotiated Extent of Play:
N/A
Support Jurisdictions Negotiated Extent of Play:
N/A
Outstanding Issues:
None

Capability Target 4.6: Post-Plume Phase Sampling Plan Development and Analysis *(Vice Sub-Element: New)*
Core Capabilities: Environmental Response/Health and Safety; Planning
Recommended Evaluation Frequencies: At least once every 8-years
Recommended Assessment Activities: Exercise; Environmental Monitoring Drill (N.4.d)
Planning Reference: NUREG-0654/FEMA-REP-1, Rev. 2 (A.3, H.13, I.2, I.6, I.8, I.10, J.12, J.14.b, J.14.c, K.3, M.7, M.8, and O.1)
Intent: The capability to identify and prioritize sampling, collect data, determine areas where relocation is recommended, identify food that is contaminated above federally approved limits, and analyze and communicate the results.

Demonstration and Evaluation Guidance:

1. Periodically conduct radiological assessment of public exposure.
2. Estimate projected doses in contaminated areas and identify areas where projected doses exceed relocation PAGs.
3. Develop and modify sampling plan to assess the radiological consequences of a release on the food and drinking water supplies.
4. Determine areas to be restricted based on factors such as mix of radionuclides in deposited materials, calculated exposure rates compared to PAGs, and analysis of vegetation and soil samples.
5. Evaluate the radiological analyses of representative samples of drinking water, food, and other ingestible substances of local interest from potentially impacted areas.
6. Compare radiological impacts of analysis on food and water and other representative samples to appropriate ingestion PAGs.

All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

State Negotiated Extent of Play:

Risk Jurisdictions Negotiated Extent of Play:
Support Jurisdictions Negotiated Extent of Play:
Outstanding Issues:

OBJECTIVE 5 - Operate

Capability Target 5.1: Monitoring, Decontamination, Sheltering, and Registration of Evacuees *(Vice Sub-Element: 6.a.1; 6.c.1)*
Core Capabilities: Operational Coordination; Environmental Response/Health and Safety; Mass Care; Planning
Recommended Evaluation Frequencies: Biennially*
Recommended Assessment Activities: Exercise; Drill
Planning Reference: NUREG-0654/FEMA-REP-1, Rev. 2 (J.11.d, J.13, K.4, and O.1)
Intent: The capability to implement radiological monitoring and decontamination of evacuees, and to identify, register, temporarily shelter, and provide congregate care for evacuees at reception centers.

Demonstration and Evaluation Guidance:

1. Set-up operations.
2. Operationally check instruments and equipment.

Monitoring

- Attain and sustain the overall monitoring productivity rate per hour needed to monitor 20 percent of the plume exposure pathway EPZ population, including transients, within a 12-hour period at each facility. The monitoring productivity rate per hour is the number of evacuees that can be monitored, per hour, per location, by the total complement of monitors using an appropriate procedure.
- Monitor evacuees, service animals, pets, vehicles, and possessions.
- Utilize trigger/action levels for determining the need for decontamination.

Decontamination

1. Decontaminate evacuees, and personal belongings, while limiting the spread of contamination.
2. Follow-up with any evacuee(s) who cannot be appropriately decontaminated for assessment; ensure the capability to provide evacuee-referrals.

Vehicles

1. Monitor and decontaminate vehicles.
2. Provide adequate, separate space for both contaminated and non-contaminated vehicles.
3. Monitor emergency worker personnel and their equipment and vehicles for contamination.
4. Decontaminate evacuee vehicles based on trigger/action levels.

Sheltering and Congregate Care

1. Coordinate for incoming evacuees who have been monitored and, if necessary, decontaminated.

2. Establish shelter operations.
3. Congregate care centers and operations in host/support jurisdictions are sufficient to support the expected number of evacuees.

Registration

3. Register evacuees.
4. Ensure the registration area is clean and controlled.

All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

*Exercise participation may be rotated among facilities, but each facility designated in the plan must be evaluated no less than once every eight years.

State Negotiated Extent of Play:
N/A
Risk Jurisdictions Negotiated Extent of Play:
• Reception Center, Monitoring/Decontamination Center will be conducted at 1800 on May 15, 2024, at the Weir High School Complex. • Mass Care Center will be conducted at 1800 on May 15, 2024, at the Weir High School Complex. • Setup of facilities may be done prior to the exercise. • Due to the nature of the decontamination process and in consideration of the modesty of the participants any decontamination beyond the level of washing of hands or removal of an outer layer of clothing provided for exercise purposes may be simulated and conducted by interview. • The availability of provisions for separate showering should be demonstrated or explained. • The staff should demonstrate provisions for limiting the spread of contamination. • Provisions should also exist to separate contaminated and uncontaminated individuals, provide changes of clothing (simulated) for individuals whose clothing is contaminated, and store contaminated clothing and personal belongings to prevent further contamination of evacuees or facilities. • Any individual found to be contaminated, procedures should be discussed concerning the handling of potential contamination of vehicles and personal belongings. • Monitoring personnel should explain the use of action levels for determining the need for decontamination. • Monitoring personnel should also explain the procedures for referring evacuees who cannot be adequately decontaminated for assessment and follow up. • Contamination of the individual may be determined by controller inject given by a controller or simulated with a low-level radiation source. • One monitoring station will be established. • One decontamination area will be established. • A total of six (6) people will be monitored at the Mass Care Center. At least one (1) will be contaminated. • Decontamination of facility personnel / equipment will be explained at all locations. Actual decontamination will be simulated.

- Reception Center staff will demonstrate the capability to ensure that evacuees have been monitored for contamination and have been decontaminated as appropriate. This capability will be determined through an interview process.
- Three (3) of the six (6) that went through monitoring will be processed through registration.
- Material will not be physically available at the facility (facilities). However, availability of such items will be verified by providing the evaluator with a list of sources with locations and estimates of quantities.
- Paper placement will be discussed; paper will not be placed on the floor.
- Due to ongoing construction on the exterior of the building and a concern for safety the doors normally utilized for evacuee entrance will not be used and evacuees will be pre-staged inside the gymnasium.

Support Jurisdictions Negotiated Extent of Play:
N/A
Outstanding Issues:
None

Capability Target 5.2: Monitoring and Decontamination of Emergency Workers, Equipment, and Vehicles *(Vice Sub-Element: 6.b.1*)
Core Capabilities: Operational Coordination; Environmental Response/Health and Safety; Planning
Recommended Evaluation Frequencies: Biennially
Recommended Assessment Activities: Exercise; Drill
Planning Reference: NUREG-0654/FEMA-REP-1, Rev. 2 (K.4 and O.1)
Intent: The capability to implement radiological monitoring and decontamination of emergency workers, equipment, and vehicles.

Demonstration and Evaluation Guidance:

1. Set-up operations.
2. Operationally check instruments and equipment.
3. Monitor emergency worker personnel and their equipment and vehicles for contamination.
4. Decontaminate emergency worker personnel and their equipment and vehicles based on trigger/action levels.
5. Control the spread of contamination.
6. Create and maintain a record of monitoring and decontaminating workers upon completion of monitoring and decontamination activities.
7. Process for prioritizing emergency workers and equipment before the public in facilities where the public and emergency workers are both processed for contamination.

All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

*Exercise participation may be rotated among facilities, but each facility designated in the plan must be evaluated no less than once every eight years.

State Negotiated Extent of Play:

N/A
Risk Jurisdictions Negotiated Extent of Play:
• The Emergency Worker Decontamination Center will be conducted at 1800 on May 13, 2024 at the New Cumberland Fire Department. • Setup of facilities may be done prior to the exercise. • Two Emergency Workers will be monitored for contamination. Discussions on the need for decontamination will be made based on Controller injected radiation levels. • Contamination control and record-keeping procedures will be demonstrated. • Decontamination efforts will be procedurally explained, but due to the nature of the decontamination process and in consideration of the modesty of the participants any decontamination beyond the level of washing of hands or removal of an outer layer of clothing provided for exercise purposes may be simulated and conducted by interview. • The sequence for monitoring/decontamination efforts and the decision to refer individuals who cannot be decontaminated to medical facilities will be demonstrated via inquiries. • One vehicle will be monitored and decisions regarding the need for decontamination will be made as radiation levels are presented via Controller injects by a controller. • Record-keeping procedures will be demonstrated. • No vehicles will be washed, but decontamination procedures will be explained. • Decontamination of facility personnel/equipment will be explained at all locations. Actual decontamination will be simulated. • Paper placement will be discussed; paper will not be placed on the floor.
Support Jurisdictions Negotiated Extent of Play:
N/A
Outstanding Issues:
None

Capability Target 5.3: Transportation and Treatment of Contaminated, Injured Individuals *(Vice Sub-Element: 6.d.1)*
Core Capabilities: Environmental Response/Health and Safety; Public Health, Healthcare, Emergency Medical Services; Planning
Recommended Evaluation Frequencies: Biennially
Recommended Assessment Activities: Medical Services Drill (N.4.b)
Planning Reference: NUREG-0654/FEMA-REP-1, Rev. 2 (C.2.d, F.2, H.11, H.12, J.2, K.3, K.4, L.1, L.3, L.4, and O.1)
Intent: The capability to provide medical transport and treatment services to contaminated, injured individuals.

Demonstration and Evaluation Guidance:

Transportation

- Transport contaminated, injured individuals to medical facilities.
- Maintain communications between the medical transportation provider and the receiving medical facility.

Medical Facility

3. Operationally check instruments and equipment.
4. Set-up, activate, and operate an REA.
5. Monitor and decontaminate the individual, equipment, and other items.

All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

State Negotiated Extent of Play:
N/A
Risk Jurisdictions Negotiated Extent of Play:
• Demonstrated during the Evaluated MS-1 Exercise conducted on March 31, 2023, at the Weirton Medical Center.
Support Jurisdictions Negotiated Extent of Play:
N/A
Outstanding Issues:
None

Capability Target 5.4: Traffic and Access Control *(Vice Sub-Element: 3.d.1; 3.d.2)*
Core Capabilities: Critical Transportation; Access Control/Identity Verification; Environmental Response/Health and Safety; On-Scene Security, Protection, and Law Enforcement; Operational Coordination; Planning; Situational Assessment.
Recommended Evaluation Frequencies: Biennially
Recommended Assessment Activities: Exercise; Drill
Planning Reference: NUREG-0654/FEMA-REP-1, Rev. 2 (H.12, J.8, J.8.b, J.10, J.10.a, J.11.c, J.11.e, J.11.f, J.14.d, J.14.e, M.1.b, and O.1)
Intent: The capability to select, establish, and staff traffic and access control points and removing impediments to the flow of evacuation traffic.

Demonstration and Evaluation Guidance:

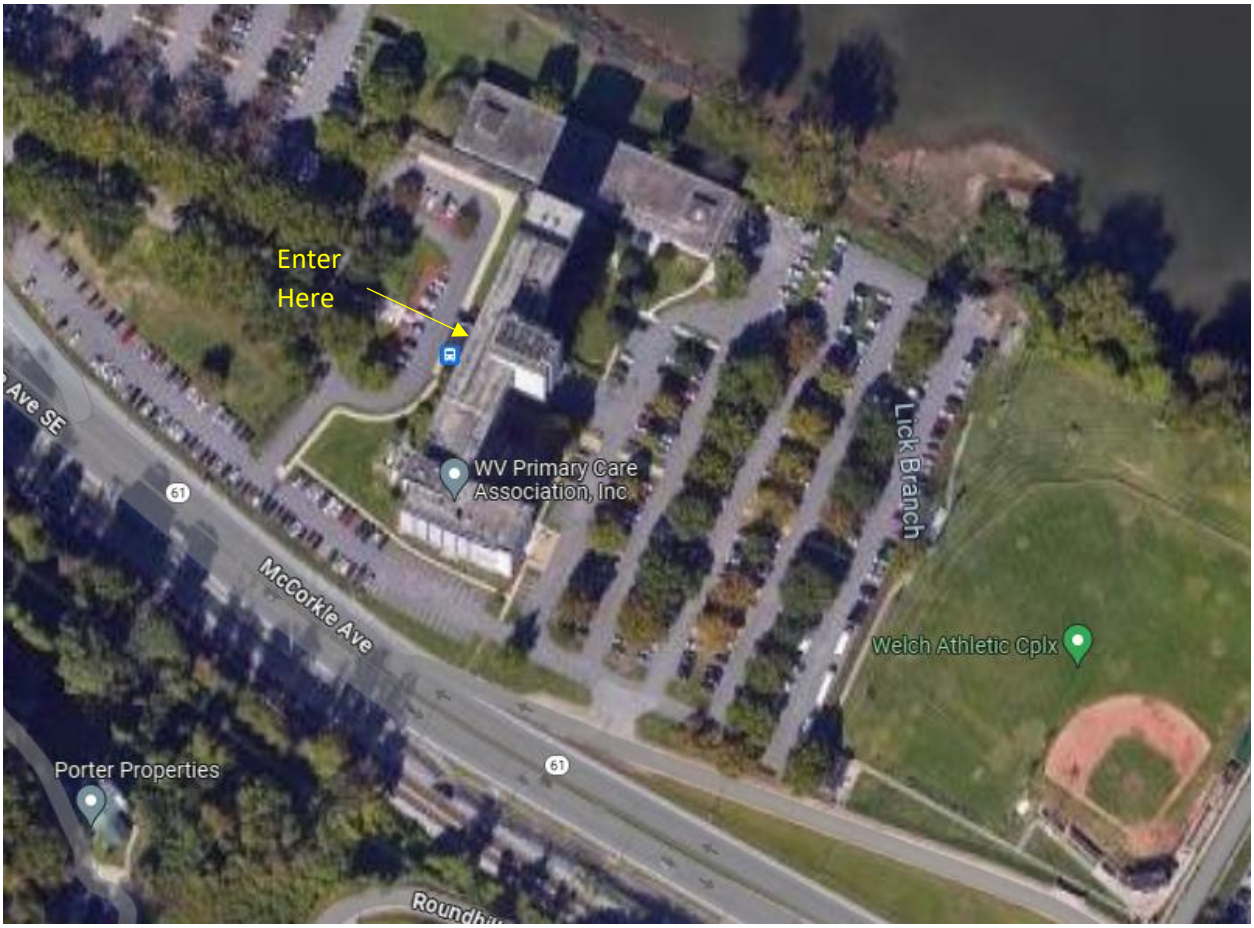
1. Select, establish, and staff appropriate TCP/ACPs, consistent with current conditions and PADs (e.g., evacuating, sheltering, and relocation), in a timely manner.
2. Provide instructions to TAC staff on actions to take, including when modifications in protective action strategies necessitate changes in evacuation patterns or in the area(s) where access is controlled.
3. Contact the state or Federal agencies that have the authority for the different transportation modes (e.g., rail, water, and air traffic).
4. Identify and take appropriate actions concerning impediments that affect the evacuation and evacuation routes.
5. Make the decision to re-route traffic and coordinate with key decision-makers and the JIC to ensure the alternate route information is appropriately communicated to evacuees.
6. Establish procedures to control access to and monitor people and vehicles from the evacuated and restricted areas.
7. Authorize reentry of individuals into the restricted areas.
8. Establish exit procedures.

All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

State Negotiated Extent of Play:
N/A
Risk Jurisdictions Negotiated Extent of Play:
• During the June 11, 2024, exercise, HCEOC will demonstrate by interview the capability to select, establish, and staff appropriate traffic and access control points, consistent with protective actions. • Staffing of Traffic and Access Control Points will be simulated. • The capability to provide instructions to traffic and access control staff will be demonstrated through an interview with the Law Enforcement Officer in the HCEOC during the exercise. • The HCEOC will demonstrate the ability to control access to rail, water, and air traffic, under its control by interview. • Traffic Control/Access Control Points will be demonstrated Out of Sequence by interview at the Chester City Building at 1400 on May 13, 2024. • The HCEOC will demonstrate the capability by interview, as required by the scenario, to identify and take appropriate actions concerning impediments to evacuation during EOC play on June 11, 2024. • Actual dispatch of resources to deal with impediments will be simulated and logged.
Support Jurisdictions Negotiated Extent of Play:
N/A
Outstanding Issues:
None

Appendix A: Participating Agencies and Site Maps

State Jurisdictions
WV EMD
WV Dept of Health
WV DEP
Risk Jurisdictions
Hancock County HSEM
Hancock County Schools
Chester PD
Support Jurisdictions
Brooke County EMA
Private Sector Organizations
Beaver Valley Power Station
Volunteer Organizations/NGO
New Cumberland VFD
Newell VFD
McKinleyville VFD



TC Energy Building

WV State EOC (6th Floor)
EOC Play and Field Monitoring Teams OOS

Hancock County Emergency Services Building

Hancock County EOC

EOC Play

Chester PD

Traffic Access and Control

New Cumberland VFD

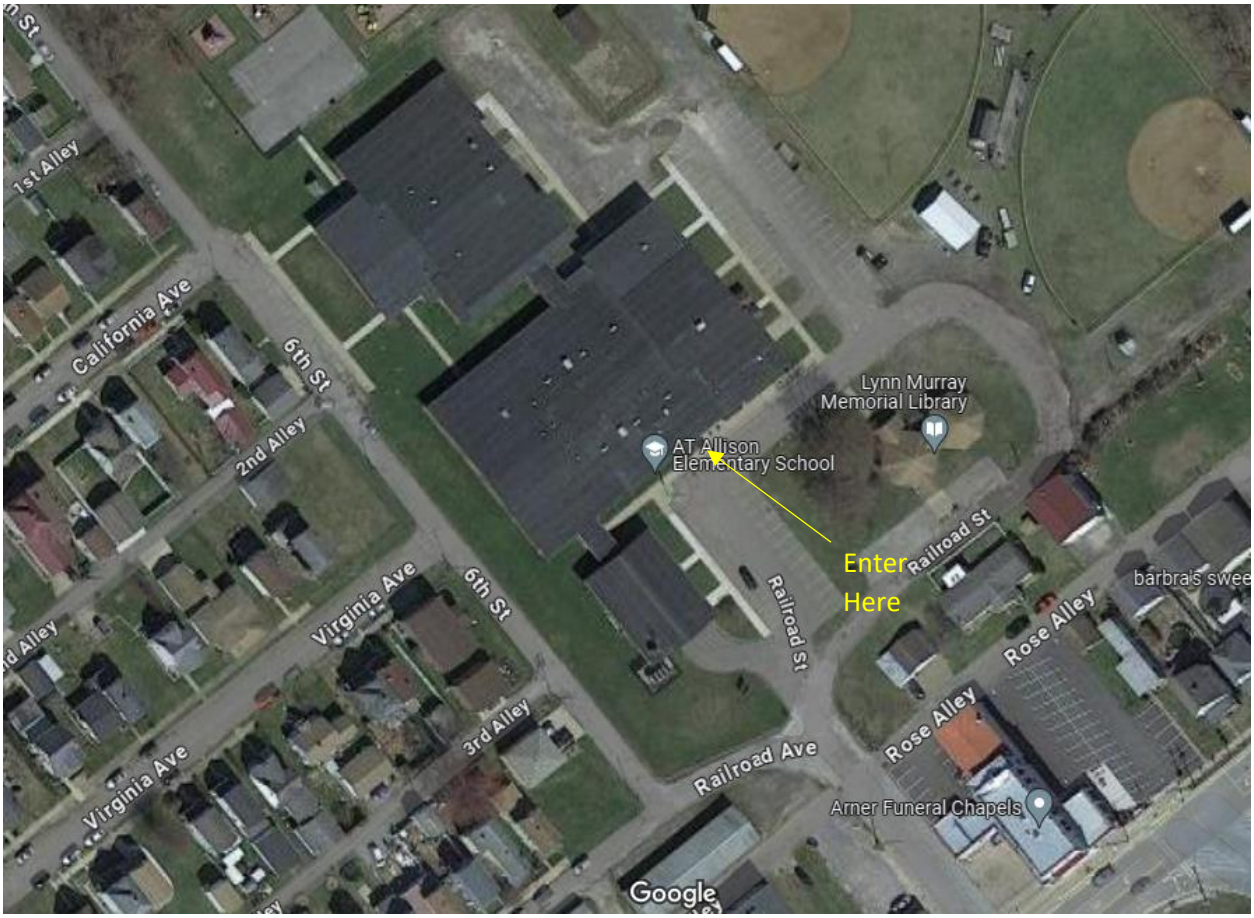
Emergency Worker Decon

Weirton High School

Reception Center/Mass Care

Hancock County School Administration

School System



Allison Elementary

Schools and Transportation

Appendix B: Directions/Addresses

List all Exercise Locations with Addresses

State Locations	
Venue	Address
WV State EOC	1700 MacCorkle Ave SE Floor 6, Charleston, WV 25314

Risk Locations	
Venue	Address
Hancock County EOC	82 Emergency Dr., New Cumberland, WV 26047

Out of Sequence Locations	
Venue	Address
Allison Elementary	605 Railroad St., Chester, WV 26034
Hancock County School Administration	130 Rockefeller Circle, New Cumberland, WV 26047
Weir High School Complex	100 Red Rider Dr., Weirton, WV 26062
Chester PD	600 Indiana Ave., Chester, WV
New Cumberland VFD	301 N. Chester St., New Cumberland, WV 26047
WV EMD	1700 MacCorkle Ave SE Floor 6, Charleston, WV 25314

Appendix C: Open Issues

No Open Issues

Or

Issue Number	Capability Target	Location	Assessment Date	Brief Description

Appendix D: Acronyms

Acronym	Description
AAC	Accident Assessment Center
AAM	After-Action Meeting
AAR	After-Action Report
ACP	Access Control Point
ALARA	As Low As Reasonably Achievable
ALC	Annual Letter of Certification
ANS	Alert and Notification System
ANSI	American National Standards Institute
ARC	American Red Cross
ARES	Amateur Radio Emergency Services
A-Team	Advisory Team for Environment, Food, and Health
BRP	Bureau of Radiation Protection
BURA	Back Up Route Alerting
BVPS	Beaver Valley Power Station
BZ	Buffer Zone
CAD	Computer Aided Display
C/E	Controller and Evaluator
CED	Committed Effective Dose
CC	Core Capabilties
CCC	Congregate Care Center
CDC	U.S. Center for Disease Control and Prevention
CCL	Core Capabilities List
CCNP	Cisco Certified Network Professional
CCNPP	Calvert Cliffs Nuclear Power Plant
C/E	Controller Evaluator
CDE	Committed Dose Equivalent
CDV	Civil Defense Victoreen
CERC	Corporate Emergency Response Center
CERT	Community Emergency Response Team
CFR	Code of Federal Regulations
CNS	Commonwealth Notification System
C&O	Concepts and Objectives Meeting
CO	Communication Officer
COL	Combined Operating License
CPG	Comprehensive Preparedness Guide
CPM	Counts Per Minute
CRCC	Commonwealth Response Coordination Center
CST	Civil Support Team
DAC	Dose Assessment Coordinator
DAD	Digital Alarming Dosimetry
DAS	Director of Auxillary Services
DCPM	Disintegrating Counts Per Minute
DDHS	U.S. Department of Health and Human Services

DEMA	Delaware Emergency Management Agency
DHS	U.S. Department of Homeland Security
DIL	Derived Intervention Level
DIR	Disaster Initiated Review
DOE	U.S. Department of Energy
DOT	U.S. Department of Transportation
DRD	Direct Reading Dosimeter
DRF	Dosimetry Record Form
DRL	Derived Response Level
DSP	Delaware State Police
EA	Exception Area
EA	Exclusion Area
EA	External Affairs
EAC	Evacuation Assembly Center
EAL	Emergency Action Level
EARA	Exception Area Route Alerting
EAS	Emergency Alert System
EC	Emergency Coordinator
EEG	Exercise Evaluation Guide
ECL	Emergency Classification Level
ECO	Exposure Control Officer
EDE	Effective Dose Equivalent
EMC	Emergency Management Coordinator
EMD	Emergency Management Director
EMnet	Emergency Management Network
EMS	Emergency Medical Services
ENS	Emergency Notification System
EOC	Emergency Operations Center
EOF	Emergency Operations Facility
EOP	Extent of Play
EPA	U.S. Environmental Protection Agency
EPT	Exercise Planning Team
EPZ	Emergency Planning Zone
ER	Emergency Room
ERDS	Emergency Response Data System
ERM	Emergency Response Manager
ERO	Emergency Response Organization
ERV	Emergency Response Vehicle
ESC	Emergency Services Coordinator
ESF	Emergency Support Function
ESP	Early Site Permit
ETA	Estimated Time of Arrival
ETE	Evacuation Time Estimate
EW	Emergency Workers
EWMDS	Emergency Worker Monitoring and Decontamination Station
ExPlan	Exercise Plan
FBI	Federal Bureau of Investigation
FCC	U.S. Federal Communications Commission

FD	Fire Department
FDA	U.S. Food and Drug Administration
FE	Functional Exerise
FEMA	Federal Emergency Management Agency
FMT	Field Monitoring Team
FPE	Full Participation Exercise
FPM	Final Planning Meeting
FRMAC	Federal Radiological Monitoring Assessment Center
FRPCC	Federal Radiological Preparedness Coordinating Committee
FSE	Full Scale Exercise
FST	Field Sampling Team
FTC	Field Team Coordinator
GE	General Emergency
GIS	Geographic Information Systems
GM	Guidance Memorandum
G-M	Geiger-Mueller
GPS	Global Positioning System
Gy	Gray
HAB	Hostile Action Based
HAN	Health Alert Network
HHS	U.S. Health and Human Services
HazMat	Hazardous Materials
HF	High Frequency
HP	Health Physicist
HSEEP	Homeland Security Exercise and Evaluation Program
HSPD	Homeland Security Presidential Directive
IC	Incident Commander
ICP	Incident Command Post
ICS	Incident Command System
IP	Improvement Plan
IPAWS	Integrated Public Alert and Warning System
IPM	Initial Planning Meeting
IPZ	Ingestion Pathway Zone
IWP	Initial Warning Point
JIC	Joint Information Center
JIS	Joint Information System
KI	Potassium Iodide
LCD	Liquid Crystal Display
LEOF	Local Emergency Operations Facility
LGS	Limerick Generating Station
LHD	Local Health Department
LOA	Letter of Agreement
MCC	Mass Care Center
MDDT	Mobile Data Display Terminal
MDE	Maryland Department of Environment
MDEM	Maryland Department of Emergency Management
MDT	Mobile Data Terminals

MJOC	Media Joint Operations Center
MHz	Megahertz
MIDAS	Meteorological Information Dose Assessment System
MOU	Memorandum of Understanding
MS-1	Medical Services Hospital
MSEL	Master Scenario Events List
MSP	Maryland State Police
NAPS	North Anna Power Station
NAWAS	National Warning System
NEP	National Exercise Program
NGO	Non-Governmental Organization
NIMS	National Incident Management System
NNSA	National Nuclear Security Administration
NOAA	National Oceanic and Atmospheric Administration
NPD	National Preparedness Directorate
NOUE	Notification of Unusual Event
NPP	Nuclear Power Plant
NPS	National Preparedness System
NRC	U.S. Nuclear Regulatory Commission
NRIA	Nuclear Radiological Incident Annex
NUREG	Nuclear Regulatory
NWS	National Weather Service
OCA	Owner Controlled Area
OJT	On-The-Job Training
OOS	Out of Sequence
ORH	Office of Radiological Health
ORO	Offsite Response Organization
OSC	Operations Support Center
OSD	Optically Stimulated Dosimeter
OSHA	U.S. Occupational Safety and Health Administration
OSLD	Optically Stimulated Luminescence Dosimeter
PA	Public Affairs
PAD	Protective Action Decision
PAG	Protective Action Guideline
PAR	Protective Action Recommendation
PARA	Primary Area Route Alerting
PAZ	Protective Action Zone
PCA	Preliminary Capabilities Assessment
PBAPS	Peach Bottom Atomic Powers Station
PD	Police Department
PDAFN	Persons with Disabilities/Access and Funtional Needs
PED	Personal Electronic Dosimeter
PEMA	Pennsylvania Emergency Management Agency
PII	Personally Identifiable Information
PIO	Public Information Officer
PPD	Presidential Policy Directive
PPE	Personal Protective Equipment
PPP	Post-Plume Phase
PRA	Primary Route Alerting

PRD	Permanent Record Dosimeter
PS	Planning Standard
PSP	Pennsylvania State Police
R	Roentgen
RA	Regional Administrator
R/h	Roentgen per hour
RAC	Regional Assistance Committee
RACES	Radio Amateur Civil Emergency Services
RAD	Radiation Absorbed Dose
RAO	Radiation Assessment Officer
RC	Reception Center or Relocation Center
RDO	Radiation Defense Officer
REA	Radiation Emergency Area
REC	Radiation Exposure Control
REM	Roentgen Equivalent Man (rem)
REP	Radiological Emergency Plan
REPP	Radiological Emergency Preparedness Program
RERP	Radiological Emergency Response Plan
RHP	Radiological Health Program
RML	Radiological Mobile Laboratory
RO	Radiological Officer
ROO	Radiological Operations Officer
RPM	Radiological Emergency Preparedness Program Manual
RSO	Radiation Safety Oficer
RTF	Radiological Task Force
SA	Staging Area
SAC	Staging Area Coordinator
SAE	Site Area Emergency
SAIC	Science Applications International Corporation
SAM	Staging Area Manager
SAV	Staff Assistance Visit
SCBA	Self-Contained Breathing Apparatus
SEOC	State Emergency Operations Center
SERS	State Emergency Radio System
SEVAN	State Emergency Voice Activation Network
SFMT	State Field Monitoring Team
SHC	Salem Hope Creek
SIP	Shelter In Place
SIRS	Statewide Interoperability Radio System
SME	Subject Matter Expert
SO	State Official
SOP	Standard Operating Procedure
SPS	Surry Power Station
SRO	School Resources Officer
SSES	Susquehanna Steam Electric Station
SSO	Social Services Officer
STARS	Statewide Area Radio System
SPS	Surry Power Station

Sv	Sievert (sv)
SWAN	State Warning Alert Notification
TAC	Technical Assistance Center
TACP	Traffic and Access Control Point
TCP	Traffic Control Point
TED	Total Effective Dose (whole body dose)
TEDE	Total Effective Dose Equivalent
TEP	Training and Exercise Plan
TEPW	Training and Exercise Planning Workshop
THD	Technological Hazards Division
THIRA	Threat and Hazard Identification and Risk Assessment
TLD	Thermoluminescent Dosimeter
TMI	Three Mile Island
TO	Transportation Officer
TSC	Technical Support Center
TTD/TTY	Telecommunication Device for the Deaf/TeleType
TTX	Tabletop Exercise
UEM	Utility Emergency Manager
USDA	U.S. Department of Agriculture
UTL	Universal Task List
VDEM	Virginia Department of Emergency Management
VDH	Virginia Department of Health
VDOT	Virginia Department of Transportation
VEOC	Virginia Emergency Operations Center
VERT	Virginia Emergency Response Team
VEST	Virginia Emergency Support Team
VHF	Very High Frequency
VMS	Variable Message Sign
VSP	Virginia State Police
VOAD	Voluntary Organizations Active in Disaster
VOIP	Voice Over Internet Protocol
WEA	Wireless Emergency Alerts
WVDEP	West Virginia Department of Environmental Protection
WVDH	West Virginia Department of Health
WVEMD	West Virginia Emergency Management Division
WVSP	West Virginia State Police

2024 Beaver Valley Plume Exercise

By signing this Extent of Play Agreement, the State of West Virginia and the FEMA Region III exercise planning team confirm that all conditions have been met to satisfy the requirements to drive exercise play and satisfy the demonstration capability target as agreed upon for the June 11, 2024, Beaver Valley Plume Exercise.

Tina Lai Thomas	5/31/2024
FEMA Site Specialist	Date
	6/3/2024
Lead State Planner	Date
joseph a. suders	6/3/2024
FEMA Team Leader	Date