



# Millstone Power Station Exercise

## After Action Report

Radiological Emergency Preparedness (REP) Program

Exercise Date: June 4, 2024

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**FEMA**

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## Executive Summary

The June 4, 2024 Millstone Power Station Hostile-Action Based (HAB) Exercise involved stakeholders from the State of Connecticut, the State of New York, the State of Rhode Island, local communities, and private and volunteer organizations. The exercise provided stakeholders a critical opportunity to demonstrate the core capabilities required to protect the public during a radiological emergency involving a nuclear power plant (NPP).

The Millstone Power Station Exercise After-Action Report (AAR) is a compilation of the feedback from Federal Emergency Management Agency (FEMA) evaluators. It helps stakeholders recognize and share their best practices and supports continuous radiological emergency preparedness (REP) program improvement by identifying areas for growth.

The following strengths were noted during the Millstone Power Station HAB Exercise:

- Exercise participants overcame adversity during a face-paced scenario and collaborated as a team to solve problems throughout the exercise.
- Direction and control of the multiagency response to the simulated HAB incident was exceptional.
- It was evident that a substantial amount of effort and planning was put into exercise preparation.
- All locations displayed dedication and commitment to public health and safety. Players demonstrated excellent communication, teamwork, and professionalism.

As a result of the exercise, there were three Level 2 Findings and two Planning Issues identified.

This AAR provides additional background, summary details, and information based on evaluation strengths and opportunities for improvement. FEMA appreciates the time, efforts, and planning completed by all involved to make this exercise a success.

## Section 1: Exercise Overview

Exercise Name	Millstone Power Station Hostile-Action (HAB) Based Exercise
Exercise Dates	June 4, 2024
Scope	The purpose of the exercise was to assess the level of preparedness of offsite response organizations from the States to respond to a simulated radiological emergency.
Mission Area(s)	Prevention, Protection, and Response.
Objectives & Core Capabilities	Emergency Operations Management, Exposure Control, Alert and Notification, Detect, Measure, Sample, Analyze, and Assess, and Operate.
Threat or Hazard	Technological/Radiological Release
Scenario	Radiological Emergency
Exercise Planning Team	State of Connecticut Department of Emergency Services and Public Protection, Division of Emergency Management and Homeland Security; Connecticut Department of Energy and Environmental Protection; New York State Division of Homeland Security and Emergency Services; Dominion Energy Nuclear Connecticut Millstone Power Station; Federal Emergency Management Agency Region I
Program	Department of Homeland Security/FEMA Radiological Emergency Preparedness (REP) Program

## **1.1 Exercise Planning Team Leadership**

### **State of Connecticut Department of Emergency Services and Public Protection, Division of Emergency Management and Homeland Security**

Stephen Henrick  
Emergency Management Program Supervisor

James Belanger  
Emergency Management Program Specialist

Leonard Nelson  
Emergency Management Program Specialist

### **Connecticut Department of Energy and Environmental Protection**

Jeffrey Semancik  
Director, Radiation Division

Michael Firsick  
Radiation Control Specialist

### **New York State Division of Homeland Security and Emergency Services**

Gary Machina  
Radiological Emergency Preparedness Program Chief

### **Dominion Energy Nuclear Connecticut Millstone Power Station**

Thomas Rigney  
Nuclear Emergency Preparedness Supervisor

Daniel Casey  
Nuclear Emergency Preparedness Specialist IV

Gerald Cloutier  
Emergency Preparedness Specialist IV

### **Department of Homeland Security Federal Emergency Management Agency, Region I**

Ingrid Pierce  
Regional Assistance Committee Chairperson

Taneeka Hollins  
Senior Technological Hazards Program Specialist

Helen LaForge  
Technological Hazards Program Specialist

## **1.2 Participating Organizations**

Agencies and organizations from the following jurisdictions participated in the Millstone Power Station exercise:

### **1.0 State of Connecticut**

- American Red Cross
- Department of Energy and Environmental Protection (DEEP), Bureau of Air Management, Radiation Division
- Connecticut Department of Environmental Conservation (ENCON) Police
- Connecticut National Guard
- Connecticut State Police
- Department of Agriculture
- Department of Consumer Protection
- Department of Corrections
- Department of Developmental Services
- Division of Emergency Management and Homeland Security (DEMHS)/  
Department of Emergency Services and Public Protection (DESPP)
- Department of Public Health
- Department of Social Services
- Department of Transportation
- Governor's Office
- United States Coast Guard
- CT 211/United Way

### **1.1 City of Groton**

- City of Groton Finance
- City of Groton Fire Department
- City of Groton Highway Department
- City of Groton Information Technology Support
- City of Groton Mayor's Office
- City of Groton Office of Emergency Management
- City of Groton Parks and Recreation Department
- City of Groton Police Department
- City of Groton Public Works Department
- City of Groton Utilities
- City of Groton Zoning and Building Department

### **1.2 City of New London**

- City of New London Administrative Office
- City of New London Building Officials
- City of New London Department of Recreation
- City of New London Fire Department
- City of New London Mayor's Office
- City of New London Office of Emergency Management
- City of New London Police Department
- City of New London Public Works

- City of New London School Operations Office
- City of New London Senior Citizen Program Office
- City of New London Water Health & Safety (VEOLIA) Department
- New London Finance Director
- New London Health Department
- American Red Cross
- The Salvation Army

### **1.3 Town of Ledyard**

- Town of Ledyard Board of Education
- Town of Ledyard Dispatch
- Town of Ledyard Emergency Management Department
- Town of Ledyard Fire Department
- Town of Ledyard Parks & Recreation
- Town of Ledyard Police Department
- Town of Ledyard Public Works
- Town of Ledyard Senior Services

### **1.4 Town of Montville**

- Town of Montville Emergency Management Department
- Town of Montville Fire Company
- Town of Montville Fire Marshal's Office
- Town of Montville Office of the Mayor
- Town of Montville Police Department

### **1.5 Town of Old Lyme**

- Town of Old Lyme Administrative Services Department
- Town of Old Lyme Chief Executive Office
- Town of Old Lyme Emergency Management Department
- Town of Old Lyme Emergency Medical Services Department
- Town of Old Lyme Fire Department
- Town of Old Lyme Health Department
- Town of Old Lyme Information Technology Department
- Town of Old Lyme Police Department
- Town of Old Lyme Public Schools
- Town of Old Lyme Public Works

### **1.6 Town of East Lyme**

- Town of East Lyme Communications and Warning Center
- Town of East Lyme Emergency Management Department
- Town of East Lyme Police Department
- Town of East Lyme Public Schools
- Town of East Lyme Public Works
- Flanders Fire Department



- Niantic Fire Department
- Town of East Lyme Board of Selectmen
- Town of East Lyme Emergency Management Department

#### **1.7 Town of Groton**

- Groton Long Point Fire District
- Poquonnock Bridge Fire Department
- Town of Groton Department of Public Works
- Town of Groton Emergency Management Department
- Town of Groton Parks and Recreation Department
- Town of Groton Police Department
- Town of Groton Public Schools
- Town of Groton Town Manager

#### **1.8 Town of Lyme**

- Town of Lyme Board of Selectmen
- Town of Lyme Emergency Management Department
- Town of Lyme Fire Company
- Town of Lyme Public Safety
- Town of Lyme Public Works
- Town of Lyme Schools
- Town of Lyme Social Services

#### **1.9 Town of Waterford**

- Southeastern Connecticut Special Response Team (SRT)
- Town of Waterford Ambulance Service
- Town of Waterford Board of Selectman
- Town of Waterford Emergency Management Department
- Town of Waterford Fire Services
- Town of Waterford Police Department
- Town of Waterford Public Schools
- Town of Waterford Recreation and Parks
- Town of Waterford Utility Commission

#### **1.10 Town of Stonington- Support Jurisdiction**

- Town of Stonington Emergency Management Department

### **2.0 State of New York**

- New York State Division of Homeland Security and Emergency Services

#### **2.1 Fishers Island**

- Fishers Island Emergency Management Office
- Fishers Island Ferry Company
- Fishers Island Ferry District
- Fishers Island School District
- Fishers Island Volunteer Fire Department

- Town of Southold Constables
- Town of Southold Police Department

### **3.0 State of Rhode Island**

- Rhode Island Emergency Management Agency

### **4.0 Private/Volunteer Organizations**

- Amateur Radio Emergency Service
- Dominion Energy Nuclear Connecticut, Inc. Millstone Power Station
- General Dynamics Electric Boat
- Middlesex Hospital
- Pfizer
- CT 211/United Way

### **5.0 Federal Jurisdictions**

- Federal Bureau of Investigations (FBI)
- Federal Emergency Management Agency (FEMA)
- U.S. Coast Guard
- U.S. Nuclear Regulatory Commission (NRC)

## Section 2: Analysis of Capabilities

### Summary Results of Assessment

Each jurisdiction or functional entity was evaluated based on the demonstration of core capabilities and capability targets. The demonstration status of capability targets is indicated using the following terms:

- **Met (M):** The jurisdiction or functional entity performed all activities under the objective/capability target to the level required per the work plan and/or the extent-of-play agreement, with no Level 1 or Level 2 Findings evaluated under that objective/capability target during the current activity and no unresolved prior Level 2 Finding(s).
- **Level 1 Finding (L1):** An observed or identified inadequacy of organizational performance during an assessment activity that could cause a determination that offsite emergency preparedness is not adequate to provide reasonable assurance that appropriate protective measures can be taken in the event of a radiological emergency to protect the health and safety of the public living in the vicinity of an NPP.
- **Level 2 Finding (L2):** An observed or identified inadequacy of organizational performance during an assessment activity that is not considered, by itself, to adversely impact public health and safety.
- **Plan Issue (P):** An observed or identified inadequacy in the ORO's emergency plan/implementing procedures rather than in that of the ORO's performance.
- **Not Demonstrated (N):** For a justifiable reason, the jurisdiction or functional entity did not perform assessment activities under the objective/capability target as specified in the extent-of-play agreement.
- **Not Applicable (N/A):** The objective/capability target does not apply to the jurisdiction.

Table 1 on the following page includes the assessment activity objectives, capability targets, selected core capabilities, and status of each capability target evaluated during the Millstone Power Station Exercise.

## Exercise Objectives and Core Capabilities

Capability Target	Core Capability
<b>Objective 1: Emergency Operations Management</b>	
1.1 Mobilization	Operational Coordination; Planning
1.2 Direction and Control	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
1.3 Protective Action Recommendations	Operational Coordination; Environmental Response/Health and Safety; Situational Assessment; Planning
1.4 Protective Action Decisions for the Plume Phase	Operational Coordination; Environmental Response/Health and Safety; Situational Assessment; Critical Transportation; Planning
1.5 Protective Action Decision Implementation for the Plume Phase	Operational Coordination; Public Information and Warning; Environmental Response/Health and Safety; Critical Transportation; Health and Social Services; Housing; Natural and Cultural Resources; Planning
<b>Objective 2: Exposure Control</b>	
2.1 Emergency Worker Exposure Control Decision-Making Process	Operational Coordination; Environmental Response/Health and Safety; Situational Assessment; Planning
2.2 Emergency Worker Exposure Control Management	Operational Coordination; Environmental Response/Health and Safety; Planning
<b>Objective 3: Alert and Notification</b>	
3.1 Communications	Operational Communications; Operational Coordination; Situational Awareness; Planning
3.2 Alert and Notification of the Public	Public Information and Warning; Planning
3.3 Emergency Information and Instructions for the Public and News Media	Public Information and Warning; Planning
<b>Objective 4: Detect, Measure, Sample, Analyze, and Assess</b>	
4.1 Field Monitoring Teams Management	Operational Coordination; Environmental Response/Health and Safety; Planning
4.2 Plume Phase Measurements and Sampling	Environmental Response/Health and Safety; Planning

Capability Target	Core Capability
4.5 Plume Phase Analysis and Dose Assessment	Environmental Response/Health and Safety; Planning
<b>Objective 5: Operate</b>	
5.2 Monitoring and Decontamination of Emergency Workers, Equipment, and Vehicles	Operational Coordination; Environmental Response/Health and Safety; Planning
5.4 Traffic and Access Control	Critical Transportation; Access Control/Identity Verification; Environmental Response/Health and Safety; On-Scene Security, Protection, and Law Enforcement; Operational Coordination; Planning; Situational Assessment

**Table 1: Summary Results of Capability Targets**

Date: June 4, 2024	Connecticut State Emergency Operations Center	Connecticut Dept. of Energy and Environmental Protection	Connecticut Joint Information Center	Connecticut 211/United Way	Connecticut DEMHS Region 4	Field Monitoring Team A	Field Monitoring Team B	HAB Forward Command & Dosimetry Issue	Millstone Power Station (Dome)
Site: Millstone Power Station									
M: Met, L1: Level 1 Finding, L2: Level 2 Finding, P: Plan Issue, N: Not Demonstrated									
OBJECTIVE 1: EMERGENCY OPERATIONS MANAGEMENT									
Capability Target 1.1: Mobilization	M	M	M		M	M	M	M	M
Capability Target 1.2: Direction and Control	M	M	M	M	M	M	M	M	M

Capability Target 1.3: Protective Action Recommendations		M							
Capability Target 1.4: Protective Action Decisions for the Plume Phase	M	M							
Capability Target 1.5: Protective Action Decision Implementation for the Plume Phase	M				M				
<b>Objective 2: Exposure Control</b>									
Capability Target 2.1: Emergency Worker Exposure Control Decision- Making Process	M	M							M
Capability Target 2.2: Emergency Worker Exposure Control Management		M				M	M	M	
<b>Objective 3: Alert and Notification</b>									
Capability Target 3.1: Communications	M	M	M	M	M	M	M	M	M
Capability Target 3.2: Alert and	M		M		M				

Notification of the Public									
Capability Target 3.3: Emergency Information and Instructions for the Public and News Media	L2		M	M					
<b>Objective 4: Detect, Measure, Sample, Analyze, and Assess</b>									
Capability Target 4.1: Field Monitoring Teams Management		M							
Capability Target 4.2: Plume Phase Measurements and Sampling						M	M		
Capability Target 4.5: Plume Phase Analysis and Dose Assessment		M							
<b>Objective 5: Operate</b>									
Capability Target 5.2: Monitoring and Decontamination of Emergency Workers, Equipment, and Vehicles									

Capability Target 5.4: Traffic and Access Control	M							M	M
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<b>Date: June 4, 2024</b>  <b>Site: Millstone Power Station</b>  <b>M: Met, L1: Level 1 Finding, L2: Level 2 Finding, P: Plan Issue, N: Not Demonstrated</b>	<b>Waterford Emergency Operations Center</b>	<b>HAB Incident Command (IC)/ Unified Command</b>	<b>East Lyme Emergency Operations Center</b>	<b>Fishers Island Emergency Operations Center</b>	<b>Groton City Emergency Operations Center</b>	<b>Groton Town Emergency Operations Center</b>	<b>Ledyard Emergency Operations Center</b>	<b>Lyme Emergency Operations Center</b>	<b>Montville Emergency Operations Center</b>
<b>OBJECTIVE 1: EMERGENCY OPERATIONS MANAGEMENT</b>									
Capability Target 1.1: Mobilization	M	M	M	M	M	M	M	M	M
Capability Target 1.2: Direction and Control	M	M	M	M	M	L2	M	M	M
Capability Target 1.3: Protective Action Recommendations									
Capability Target 1.4: Protective Action Decisions for the Plume Phase									



Capability Target 1.5: Protective Action Decision Implementation for the Plume Phase	M		M	M	M	M	M	M	M
<b>Objective 2: Exposure Control</b>									
Capability Target 2.1: Emergency Worker Exposure Control Decision- Making Process									
Capability Target 2.2: Emergency Worker Exposure Control Management	M	M	M	M	M	M	M	M	M
<b>Objective 3: Alert and Notification</b>									
Capability Target 3.1: Communications	M	M	M	M	M	M	M	M	M
Capability Target 3.2: Alert and Notification of the Public	M		M	P	M	M	M	M	M
Capability Target 3.3: Emergency Information and Instructions for the Public and News Media	M		M	M	M	M	M	M	M
<b>Objective 4: Detect, Measure, Sample, Analyze, and Assess</b>									

Capability Target 4.1: Field Monitoring Teams Management									
Capability Target 4.2: Plume Phase Measurements and Sampling									
Capability Target 4.5: Plume Phase Analysis and Dose Assessment									
<b>Objective 5: Operate</b>									
Capability Target 5.2: Monitoring and Decontamination of Emergency Workers, Equipment, and Vehicles	M		L2	M	M	P	M	M	M
Capability Target 5.4: Traffic and Access Control	M		M	M	M	M	M	M	M

Date: June 4, 2024	New London Emergency Operations Center	Old Lyme Emergency Operations Center	Stonington Emergency Operations Center						
Site: Millstone Power Station									
M: Met, L1: Level 1 Finding, L2: Level 2 Finding, P: Plan Issue, N: Not Demonstrated									
OBJECTIVE 1: EMERGENCY OPERATIONS MANAGEMENT									
Capability Target 1.1: Mobilization	M	M	M						
Capability Target 1.2: Direction and Control	M	M	M						
Capability Target 1.3: Protective Action Recommendations									
Capability Target 1.4: Protective Action Decisions for the Plume Phase									
Capability Target 1.5: Protective Action Decision Implementation for the Plume Phase	M	M							
Objective 2: Exposure Control									
Capability Target 2.1: Emergency Worker Exposure Control Decision-Making Process									
Capability Target 2.2: Emergency Worker Exposure Control Management	M	M							
Objective 3: Alert and Notification									

Capability Target 3.1: Communications	M	M	M						
Capability Target 3.2: Alert and Notification of the Public	M	M							
Capability Target 3.3: Emergency Information and Instructions for the Public and News Media	M	M							
<b>Objective 4: Detect, Measure, Sample, Analyze, and Assess</b>									
Capability Target 4.1: Field Monitoring Teams Management									
Capability Target 4.2: Plume Phase Measurements and Sampling									
Capability Target 4.5: Plume Phase Analysis and Dose Assessment									
<b>Objective 5: Operate</b>									
Capability Target 5.2: Monitoring and Decontamination of Emergency Workers, Equipment, and Vehicles	M	M							
Capability Target 5.4: Traffic and Access Control	M	M							

## Detailed Exercise Evaluation Results

The following section provides narrative descriptions for each venue, detailing the results of the evaluation per objective, capability target, and core capability.

### CONNECTICUT STATE EMERGENCY OPERATIONS CENTER

In summary, the status of DHS/FEMA capability targets for this location is as follows:

- a. MET: 1.1, 1.2, 1.4, 1.5, 2.1, 3.1, 3.2, 5.4
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: 3.3
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

Performance Issue Number: 38-24-3.3-L2-01	Issue for Capability Target 3.3
<p><b>CONDITION:</b> Some written instructions to the public did not match the verbal decisions made by the Unified Command Group at the Connecticut State Emergency Operations Center. For example, Emergency Alert System (EAS) message #1 recommended a shelter-in-place for New London, Waterford, and East Lyme. The leadership decision had been to shelter-in-place zones A1 and A2, which includes portions of those towns. In addition, Press Release #3 included both a line indicating that all residents should shelter-in-place, and a line indicating zone A1 and A2 should shelter-in-place.</p>	
<p><b>POSSIBLE CAUSE:</b> The use of zones in precautionary/protective action decisions may cause confusion when translating them into clear messaging for the public or those without prior knowledge of what towns correspond to what zones. The fast-paced scenario may also have restricted the amount of time available for reviewing messages in order for errors to be caught.</p>	
<p><b>REFERENCES:</b> The State of Connecticut, Emergency Operations Center, Emergency Alert System (EAS) Templated with Protective Actions (PADs)</p>	
<p><b>EFFECT:</b> Later EAS messages reflected the correct messaging. In this scenario, the effect was to have a larger geographic area shelter, leading to minimal risk for the public. However, in another situation a message to the public that does not accurately reflect leadership's intent could cause confusion or even put the public at risk if precautionary or protective actions are not communicated correctly.</p>	

**RECOMMENDATION:** Consider re-examining how geographic areas are communicated to the public. If zones are continued to be used, ensure that the geographic boundaries of zones are clearly described and easy to understand for both the public and everyone within the SEOC. Ensure there is a process for all EAS messages to be carefully reviewed and correctly reflect leadership's decisions.

### **CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION**

In summary, the status of DHS/FEMA capability targets for this location is as follows:

- a. MET: 1.1, 1.2, 1.3, 1.4, 2.1, 2.2, 3.1, 4.1, 4.5
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

### **CONNECTICUT JOINT INFORMATION CENTER**

In summary, the status of DHS/FEMA capability targets for this location is as follows:

- a. MET: 1.1, 1.2, 3.1, 3.2, 3.3
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

### **CONNECTICUT 211/UNITED WAY**

In summary, the status of DHS/FEMA capability targets for this location is as follows:

- a. MET: 1.2, 3.1, 3.3
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

## **CONNECTICUT DIVISION OF EMERGENCY MANAGEMENT AND HOMELAND SECURITY REGION 4**

In summary, the status of DHS/FEMA capability targets for this location is as follows:

- a. MET: 1.1, 1.2, 1.5, 3.1, 3.2
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

### **CT FIELD MONITORING TEAM A**

In summary, the status of DHS/FEMA capability targets for this location is as follows:

- a. MET: 1.1, 1.2, 2.2, 3.1, 4.2
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

### **CT FIELD MONITORING TEAM B**

In summary, the status of DHS/FEMA capability targets for this location is as follows:

- a. MET: 1.1, 1.2, 2.2, 3.1, 4.2
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

### **HAB FORWARD COMMAND & DOSIMETRY ISSUE**

In summary, the status of DHS/FEMA capability targets for this location is as follows:

- 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. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

## **DOME (SIMULATED ONSITE LOCATION)**

In summary, the status of DHS/FEMA capability targets for this location is as follows:

- a. MET: 1.1, 1.2, 2.1, 3.1, 5.4
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

## **EAST LYME EMERGENCY OPERATIONS CENTER**

In summary, the status of DHS/FEMA capability targets for this location is as follows:

- a. MET: 1.1, 1.2, 1.5, 2.2, 3.1, 3.1, 3.3, 5.4
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: 5.2
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

Performance Issue Number: 38-24-5.2-L2-02	Issue for Capability Target 5.2
<b>CONDITION:</b> The capability to monitor emergency workers was not adequately demonstrated at the East Lyme Emergency Operations Center (EOC). Personnel responsible for monitoring emergency workers were unfamiliar with the survey meter and monitoring procedures, how to set up the monitoring area, and the location of the Host Community Reception Center (CRC).	
<b>POSSIBLE CAUSE:</b> Inadequate training and procedures could have been the possible cause.	
<b>REFERENCES:</b> The Connecticut Agency Plan/Local Community Procedure, Connecticut Radiological Emergency Response Plan, CTAP-LCP 4.3.a (Rev. 03/16); FEMA Radiological Emergency Preparedness (REP) Program Evaluator Preparation Guide (EPG), 2022, Objective 5: Operate; NUREG-0654/FEMA-REP-1, Rev. 2 (K.4 and O.1).	
<b>EFFECT:</b> It is possible that a contaminated Emergency Worker could have entered the East Lyme EOC, thus spreading contamination in the facility and to other workers.	
<b>RECOMMENDATION:</b> Provide additional training and clear procedures to staff who are responsible for monitoring of workers coming into the East Lyme EOC from the field. Staff should be proficient in their position procedures. It is also recommended that additional staff are trained to ensure backup coverage and 24-hour staffing of this key position.	



## FISHERS ISLAND EMERGENCY OPERATIONS CENTER

In summary, the status of DHS/FEMA capability targets for this location is as follows:

- a. MET: 1.1, 1.2, 1.5, 2.2, 3.1, 3.2, 3.3, 5.2, 5.4
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: 3.2
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

Planning Issue Number: 38-24-3.2-P-01		Issue for Capability Target 3.2
<b>CONDITION:</b> Backup route alerting was not completed within a reasonable amount of time (recommended goal of 45 minutes) in the area covered by Fisher's Island Siren F5. It took approximately one hour and 10 minutes to drive the route.		
<b>POSSIBLE CAUSE:</b> Plans are written under the assumption that one vehicle can safely conduct the backup route alerting mission within a reasonable amount of time for the entire area covered by Siren F5.		
<b>REFERENCES:</b> NUREG-0654/FEMA-REP-1, Rev. 2: (E.2, E.4, E.5, F.3 and O.1); Fisher's Island Siren Maps		
<b>EFFECT:</b> In the event that Siren F5 fails to sound successfully, alert and notification of the public located within the area covered by Siren F5 will not be completed within a reasonable amount of time.		
<b>RECOMMENDATION:</b> Modify plans to split the current F5 route into two routes (F5 A and B) to ensure that the mission can be completed more quickly and effectively. It is also recommended that the current F1 siren be split into three sections (F1 A, B, C) to ensure it also can be completed in a timely manner.		

## GROTON CITY EMERGENCY OPERATIONS CENTER

In summary, the status of DHS/FEMA capability targets for this location is as follows:

- a. MET: 1.1, 1.2, 1.5, 2.2, 3.1, 3.2, 3.3, 5.2, 5.4
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

## GROTON TOWN EMERGENCY OPERATIONS CENTER

In summary, the status of DHS/FEMA capability targets for this location is as follows:

- a. MET: 1.1, 1.5, 2.2, 3.1, 3.2, 3.3, 5.2, 5.4
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: 1.2
- d. PLAN ISSUES: One
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

Planning Issue Number: 38-24-5.2-P-02		Issue for Capability Target 5.2
<b>CONDITION:</b> This issue was identified at the Town of Groton but is applicable to all local EOCs. The “Survey Meter Equipment Procedure” dated Rev 02-2024 did not provide sufficient guidance for adequately setting up the personnel monitoring process. This procedure was general in instructions on setting up the survey meter and personnel monitoring process.		
<b>POSSIBLE CAUSE:</b> The available procedure did not provide clear guidance on setting up the monitoring station or handling an emergency worker who is identified as having contamination.		
<b>REFERENCES:</b> NUREG-0654/FEMA-REP-1, Rev. 2 (K.4 and O.1); Survey Meter Equipment Procedure dated Rev 02-2024.		
<b>EFFECT:</b> Limited guidance on personnel monitoring/screening can impact the ability of the screener to properly identify contamination for emergency workers entering the EOC. In turn, this could place a potentially contaminated emergency worker at further risk and/or lead to cross-contamination of additional emergency workers.		

**RECOMMENDATION:** Develop a Personnel Screening procedure for the emergency operation center reentry monitoring station which details the equipment needed, station setup instructions, and disposition of contaminated emergency workers.

**Performance Issue Number:** 38-24-1.2-L2-03

**Issue for Capability Target 1.2**

**CONDITION:** Throughout the exercise, the use of plans and procedures outlining offsite response actions was not adequately demonstrated. Although the procedures were available, they were not utilized by all staff. For example, staff was not aware of the procedure to refer media to the state Joint Information Center (JIC), and personnel assigned the traffic access control were unaware of the Traffic Management Plan (TMP), and, once provided, it was not the most current version.

**POSSIBLE CAUSE:** The EOC staff were not reminded of the availability and need to use plans, procedures, and checklists available to staff for reference throughout the exercise.

**REFERENCES:** EMD Local Community Procedure (LCP) 3.2, page 8; EOC Activation Procedure LCP 4.1, page 3.

**EFFECT:** Not following plans and procedures could lead to staff taking inappropriate response actions that could potentially impact the health and safety of the general public and emergency workers.

**RECOMMENDATION:** Ensure procedures are available and utilized while the EOC is activated. Staff should be reminded to follow their procedures and complete their checklists throughout the event. Train staff to ensure they are familiar with their procedures.

## LEDYARD EMERGENCY OPERATIONS CENTER

In summary, the status of DHS/FEMA capability targets for this location is as follows:

- a. MET: 1.1, 1.2, 1.5, 2.2, 3.1, 3.2, 3.3, 5.2, 5.4
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

### **LYME EMERGENCY OPERATIONS CENTER**

In summary, the status of DHS/FEMA capability targets for this location is as follows:

- a. MET: 1.1, 1.2, 1.5, 2.2, 3.1, 3.2, 3.3, 5.2, 5.4
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

### **MONTVILLE EMERGENCY OPERATIONS CENTER**

In summary, the status of DHS/FEMA capability targets for this location is as follows:

- a. MET: 1.1, 1.2, 1.5, 2.2, 3.1, 3.2, 3.3, 5.2, 5.4
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

### **NEW LONDON EMERGENCY OPERATIONS CENTER**

In summary, the status of DHS/FEMA capability targets for this location is as follows:

- a. MET: 1.1, 1.2, 1.5, 2.2, 3.1, 3.2, 3.3, 5.2, 5.4
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

### **OLD LYME EMERGENCY OPERATIONS CENTER**

In summary, the status of DHS/FEMA capability targets for this location is as follows:

- a. MET: 1.1, 1.2, 1.5, 2.2, 3.1, 3.2, 3.3, 5.2, 5.4
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

## **STONINGTON EMERGENCY OPERATIONS CENTER**

In summary, the status of DHS/FEMA capability targets for this location is as follows:

- a. MET: 1.1, 1.2, 3.1
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

## **WATERFORD EMERGENCY OPERATIONS CENTER**

In summary, the status of DHS/FEMA capability targets for this location is as follows:

- a. MET: 1.1, 1.2, 1.5, 2.2, 3.1, 3.2, 3.3, 5.2, 5.4
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

## **WATERFORD HAB UNIFIED COMMAND**

In summary, the status of DHS/FEMA capability targets for this location is as follows:

- 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. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

## **Connecticut Out of Sequence Events in 2024**

### **Schools:**

- Bennie Dover Jackson Multi-Magnet Middle School (New London)
- C.B. Jennings International Elementary Magnet School (New London)
- Clark Lane Middle School (Waterford)
- Great Neck Elementary School (Waterford)
- ISAAC School (New London)
- Lighthouse Voc-Ed (New London)
- Nathan Hale Arts Elementary Magnet School (New London)
- New London High School
- Oswegatchie Elementary School (Waterford)

- Quaker Hill Elementary School (Waterford)
- Regional Multicultural Magnet School (New London)
- Science and Arts Magnet High School of SE CT (New London)
- St. Joseph's School (New London)
- The Friendship School (Waterford)
- The Williams School (New London)
- Waterford High School (Waterford)
- Winthrop STEM Elementary School (New London)

In summary, the status of DHS/FEMA capability targets for the evaluated locations is as follows:

- a. MET: 1.5
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

**Licensed Child Care Facilities:**

- Ballestrini's Child Care (East Lyme)
- Bright and Early Children's Learning Center (East Lyme)
- Carelot Children's Center (East Lyme)
- Grasshopper Green Preschool (Lyme)
- Niantic Community Church Children's Center (East Lyme/Niantic)
- Old Lyme Children's Learning Center (Old Lyme)

In summary, the status of DHS/FEMA capability targets for the evaluated locations is as follows:

- a. MET: 1.5
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

**Long-term Care Facilities:**

- Bride Brook Health & Rehabilitation Center (Niantic)
- Crescent Point (East Lyme)

In summary, the status of DHS/FEMA capability targets for this location is as follows:

- a. MET: 1.5
- b. LEVEL 1 FINDINGS: None

- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES – UNRESOLVED: None

**Connecticut Department of Transportation:**

In summary, the status of DHS/FEMA capability targets for this location is as follows:

- a. MET: 2.2, 5.4
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES – UNRESOLVED: None

**Connecticut State Police Troop E:**

In summary, the status of DHS/FEMA capability targets for this location is as follows:

- a. MET: 2.2, 5.4
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES – UNRESOLVED: None

## Appendix A: Exercise Timeline

Emergency Classification Level, Event, or Action	Time Utility Declared	Time that Notification was Received, or Action was Taken						
		All times are Eastern Daylight Time (EDT)						
		CT SEOC	CT JIC	CT 211	CT REGION 4	NEW LONDON	FISHERS ISLAND	CITY OF GROTON
Unusual Event	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Alert	07:45	07:52	07:52	N/A	08:06	08:05	07:45	07:54
Site Area Emergency	08:37	08:45	08:45	09:32	08:44	08:43	08:43	08:43
General Emergency	10:04	10:08	10:08	10:27	10:10	10:10	10:09	10:10
Simulated Radioactivity Release Began	08:56	09:08	09:08	10:29	09:24	09:21	09:21	09:21
Simulated Radioactivity Release Terminated	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Facility Declared Operational		08:20	08:20	N/A	08:34	08:19	08:12	08:31
Governor's Declaration of State of Emergency		09:00	09:00	10:00	09:00	09:00	09:22	09:19
Exercise Terminated		12:23	12:23	12:18	12:20	12:18	11:59	12:15
Early Precautionary Action Recommendations:		08:47	08:47	10:20	09:19	09:33	09:22	09:15
Water Restrictions (boating, fishing, etc.)		08:47	08:47	10:20	09:19	09:33	09:22	09:21
Air Restrictions		08:47	08:47	10:20	09:19	09:33	09:22	09:21
Rail Restrictions		08:47	08:47	10:20	09:19	09:33	09:22	09:21
Close Parks		08:47	08:47	10:20	09:19	09:33	09:22	09:21
Livestock Advisory		08:47	08:47	10:20	09:19	09:33	09:22	09:21
1st A&N Decision		08:45	08:45	10:00	08:45	08:45	09:33	09:30
1 <sup>st</sup> Siren Activation:		09:44	09:44	N/A	09:30	09:36	09:34	09:34
1 <sup>st</sup> EAS/EBS Message:		09:22	09:22	N/A	09:33	09:33	09:39	09:39
2nd A&N Decision		10:29	10:29	10:39	10:35	10:40	10:40	10:40
2 <sup>nd</sup> Siren Activation:		10:45	10:45	N/A	10:40	10:43	10:44	10:42
2 <sup>nd</sup> EAS/EBS Message:		10:51	10:51	N/A	10:51	10:47	10:51	10:51
3 <sup>RD</sup> A&N Decision:		12:08	12:08	N/A	12:08	12:08	N/A	12:08



3 <sup>rd</sup> Siren Activation:		12:19	12:19	N/A	12:08	12:13	N/A	12:13
KI Administration Decision (Emergency Workers):		11:20	11:20	11:49	11:19	11:51	N/A	11:50
KI Administration Decision (General Public):		10:29	10:29	10:39	10:23	10:47	10:40	10:49
Emergency Classification Level, Event, or Action	Time Utility Declared	Time that Notification was Received, or Action was Taken						
		All times are Eastern Daylight Time (EDT)						
		MONTVILLE	OLD LYME	EAST LYME	TOWN OF GROTON	LYME	WATERFORD	LEDYARD
Unusual Event	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Alert	07:45	07:43	07:51	07:51	07:54	07:51	07:53	07:51
Site Area Emergency	08:37	08:42	08:47	08:42	08:44	08:42	08:47	08:43
General Emergency	10:04	10:08	10:09	10:09	10:04	10:08	10:09	10:09
Simulated Radioactivity Release Began	08:56	09:21	09:21	09:21	09:21	09:21	09:21	09:21
Simulated Radioactivity Release Terminated	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Facility Declared Operational		08:15	08:22	08:27	08:24	08:04	08:11	07:50
Governor’s Declaration of State of Emergency		09:00	09:00	09:26	09:01	09:00	09:24	09:26
Exercise Terminated		12:20	12:20	12:15	12:20	12:15	12:15	12:15
Early Precautionary Action Recommendations:		09:20	09:15	09:20	09:00	09:06	09:20	07:55
Water Restrictions (boating, fishing, etc.)		09:20	09:15	09:20	09:23	09:06	09:20	09:10
Air Restrictions		09:20	09:15	09:20	09:23	09:06	09:20	09:10
Rail Restrictions		09:20	09:15	09:20	09:23	09:06	09:20	09:10
Close Parks		09:20	09:15	09:20	09:23	09:06	09:20	09:10
Livestock Advisory		09:20	09:15	09:20	09:23	09:06	09:20	09:10
1st A&N Decision		08:45	09:15	09:34	09:20	08:45	08:45	09:25
1 <sup>st</sup> Siren Activation:		09:41	09:30	09:35	09:41	09:33	09:33	09:37

1 <sup>st</sup> EAS/EBS Message:	09:33	09:33	10:13	09:33	09:33	09:18	09:37
2nd A&N Decision:	10:40	10:48	10:35	10:40	10:35	10:40	10:44
2 <sup>nd</sup> Siren Activation:	10:46	10:50	10:40	10:45	10:40	10:41	10:54
2 <sup>nd</sup> EAS/EBS Message:	10:51	10:51	11:06	10:47	10:47	10:51	10:54
3 <sup>rd</sup> A&N Decision:	12:08	12:08	12:08	12:08	12:08	12:08	12:08
3 <sup>rd</sup> Siren Activation:	12:10	12:13	12:12	12:12	12:12	12:12	12:12
KI Administration Decision (Emergency Workers):	11:52	11:50	11:51	12:04	11:53	11:35	11:54
KI Administration Decision (General Public):	10:49	10:48	10:49	10:49	10:50	10:50	10:49
Emergency Classification Level, Event, or Action	Time Utility Declared	Time that Notification was Received, or Action was Taken					
		All times are Eastern Daylight Time (EDT)					
		FWD COMMAND					
Unusual Event	N/A	N/A					
Alert	07:45	07:45					
Site Area Emergency	08:37	08:47					
General Emergency	10:04	10:04					
Simulated Radioactivity Release Began	08:56	09:21					
Simulated Radioactivity Release Terminated	12:08	N/A					
Facility Declared Operational	08:02						
Governor's Declaration of State of Emergency	09:29						
Exercise Terminated	12:15						
Early Precautionary Action Recommendations:	N/A						
Water Restrictions (boating, fishing, etc.)	N/A						
Air Restrictions	N/A						
Rail Restrictions	N/A						

Close Parks	N/A						
Livestock Advisory	N/A						
1st A&N Decision:	08:45						
1 <sup>st</sup> Siren Activation:	N/A						
1 <sup>st</sup> EAS/EBS Message:	09:33						
2nd A&N Decision:	N/A						
2 <sup>nd</sup> Siren Activation:	N/A						
2 <sup>nd</sup> EAS/EBS Message:	N/A						
3 <sup>rd</sup> A&N Decision:	N/A						
3 <sup>rd</sup> Siren Activation:	N/A						
KI Administration Decision (Emergency Workers):	11:36						
KI Administration Decision (General Public):	N/A						

## Appendix B: Additional Information

## Evaluation Team

Name	Organization
Larry Broockerd	Headquarters, FEMA
Andrew Chancellor	Region VII, FEMA
Michael Howe	Headquarters, FEMA
Bart Ray	Contractor
Barbara Thomas	Region I, FEMA
Paul Nied	Contractor
John Wills	Contractor
Gerald McLemore	Region IV, FEMA
Carol Shepherd	Contractor
Kenneth Wierman	Headquarters, FEMA
Michael DeBonis	Region II, FEMA
Kevin Robinson	Region II, FEMA
Steven Candurra	Region II, FEMA
Kerris (Darren) Bates	Headquarters, FEMA
Reginald Rodgers	Contractor
Lee Torres	Region III, FEMA
Deborah Blunt	Contractor
Nathan Nienhius	Region IV, FEMA
Kevin Malone	Region II, FEMA
Rebecca Thomson	Contractor
Brian Hasemann	Region II, FEMA
Taylor Griffiths	Region III, FEMA
Brian Kennedy	Region I, FEMA
Joseph Suders	Region III, FEMA
Kevin Reed	Contractor
Ryan Jones	US DOT

Name	Organization
LaShawn Halsey	Headquarters, FEMA
James Fumbanks	Headquarters, FEMA
DeShun Lowery	Region IV, FEMA
Roy Smith	Contractor
Cody McKnown	Region VII, FEMA
Sam Williams	Region VI, FEMA
Miriam Weston-Haas	Region II, FEMA
Linda Gee	Region VII, FEMA
Robert O'Sullivan	Region I, FEMA
Bruce Swiren	Contractor
Jennifer Keegan	Region I, FEMA
Helen LaForge	Region I, FEMA
Taneeka Hollins	Region I, FEMA

## Appendix C: Acronyms and Abbreviations

Acronym	Description
AAR	After Action Report
DHS	Department of Homeland Security
EAS	Emergency Alert System
EBS	Emergency Broadcast System
EOC	Emergency Operations Center
FEMA	Federal Emergency Management Agency
ICS	Incident Command System
IP	Improvement Plan
JIC	Joint Information Center
PAD	Protective Action Decision
PAR	Protective Action Recommendation
REP	Radiological Emergency Preparedness
REPP	Radiological Emergency Preparedness Program
RPM	REP Program Manual
SLTT	state, local, tribal, and territorial
THD	Technological Hazards Division

## **Appendix D: Extent of Play Agreement**

For the State of Connecticut



## APPENDIX B: EXTENT OF PLAY

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### OBJECTIVE 1: EMERGENCY OPERATIONS MANAGEMENT

#### Capability Target 1.1 - Mobilization

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*Individuals with roles in support of emergency operations are identified, alerted, and mobilized in a timely manner.*

***Intent:** The capability to alert, notify, and mobilize OROs to staff facilities in support of emergency operations.*

***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)*

***Core Capabilities:** Operational Coordination; Planning*

#### ASSESSMENT – DEMONSTRATION AND EVALUATION GUIDANCE

By observing the OROs' capability to address the appropriate bullet points below and while considering the overall capability being assessed, the following key points of review and associated questions should be considered and will support an evaluation of this capability target.

ORO demonstrate the capability to:

**Alert, notify, and mobilize key personnel, to include a 24-hour staffing roster, and activate facilities in a timely manner.**

- What time was staff notified? What time did they arrive at the facility?
- Did the ORO demonstrate the activation of facilities for immediate use by mobilized personnel upon their arrival?
- Was activation of facilities/locations completed in accordance with plans/procedures?
- Were key emergency personnel contacted, alerted, and mobilized in a timely manner?
- Did the ORO demonstrate the ability to staff and maintain 24-hour operations?
- Were position staff trained and in place for facility activation?

**Receive and verify notifications.**

- Who notified the ORO? Licensee or other?
- For reverse notification, how was the licensee notified?
- Was the notification/information verified? How?
- What was the initial ECL? Were changes to ECLs communicated in the same manner?

**Identify and request additional resources, as needed.**

- Was the ability to identify and request additional resources demonstrated? If not, was the ability to identify compensatory measures demonstrated?
- Were MOUs and LOAs available for review?

**Determine a facility is operational.**

- What time was the facility declared operational?
- What criteria was used to determine if the facility was operational?
- What was the time difference between notifications of personnel and when the facility was declared operational?

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**Capability Target 1.1 – Mobilization (Continued)**

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### **Exercise Specific Extent of Play:**

1. *24 hour staffing capability will be demonstrated via rosters.*
2. *DEENS will be demonstrated by the licensee to notify the 14 required and additional courtesy recipients.*
3. *Supporting agencies may be pre-staged to reduce the response time during the rehearsal, but pre-staging during the evaluated exercise will be limited to:*
  - a. *State Department of Energy and Environmental Protection (DEEP) Field Teams will be pre-staged at the Millstone EOF Norwich, CT in conjunction with the exercise to perform field surveys.*
  - b. *DEEP Field Team Coordinators.*
  - c. *Any Radiological Operations Support Specialist (ROSS) asset may be pre-staged.*
  - d. *Law Enforcement assets used to support the exercise may be pre-staged for the rehearsal and exercise, to include the Region 4 Coordinator.*
4. *Out of Sequence Demonstrations include:*
  - a. *Stonington (support community) – participates through communications (radio, telephone, etc.) through the Region 4 office.*
  - b. *CT State Police Troop E will be evaluated and CT DOT Norwich will be evaluated.*
  - c. *Host Community / Reception Center activities – out of Sequence facilities to be demonstrated in within the current 8-year exercise cycle:*
    - i. *West Hartford demonstrated OOS 13 May 2023*
    - ii. *New Haven will be demonstrated OOS in 2025*
  - d. *Schools, Daycares, Congregate Care Facilities - out of sequence facilities to be demonstrated by interview in 2024 include:*
    - i. *Schools – New London, Waterford*
    - ii. *Daycares – East Lyme, Old Lyme, Lyme*  
*Congregate Care – East Lyme*
5. *Simulated Protected Area: To prevent interference with normal plant operations and security, actual response into the protected area will be simulated outside the protected area in an area by the Beyond Design Dome for scenario play if required.*

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## Capability Target 1.2 – Direction and Control.

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*Individuals in leadership roles provide direction and control to the portion of the overall response effort for which they are responsible.*

***Intent:** The capability to provide overall direction and control of response efforts, commensurate with the responsibilities of leadership, as detailed in plans/procedures.*

***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)*

***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*

### ASSESSMENT – DEMONSTRATION AND EVALUATION GUIDANCE

By observing the OROs' capability to address the appropriate bullet points below and while considering the overall capability being assessed, the following key points of review and associated questions should be considered and will support an evaluation of this capability target.

ORO demonstrate the capability to:

#### **Support protective action decision-making.**

- Who, by title and position, was in charge?
- Who was authorized to make any PADs prior to an official PAR from the licensee?
- Did decision-makers obtain input from their support staff?

#### **Conduct briefings in a timely manner.**

- Were briefings conducted in a timely manner?
- What information was provided?
- How frequently were briefings held?
- Who gave the briefing?

#### **Maintain situational awareness.**

- Did the ORO maintain situational awareness? How?

#### **Coordinate response activities with other organizations.**

- Were response activities coordinated with other organizations? How?

#### **Obtain resources to support emergency operations.**

- Were resources obtained to support emergency operations (e.g., through MOUs or other agreements)?
- Was just-in-time training provided, as necessary?

#### **Provide and maintain adequate facilities and equipment to support the emergency response.**

- Were facilities and equipment adequate to support operations? How so?
- Was the facility evacuated during the plume?

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### Capability Target 1.2 – Direction and Control (Continued)

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- What means of monitoring and decontamination were used?

#### **Exercise Specific Extent of Play**

1. *The Waterford EOC will function as the unified command location for law enforcement agency coordination and response.*
2. *Traffic control will be staged on the access road leading into the Millstone Power Station.*
3. *Incident command for responder briefings and dosimetry issue will be established within the Millstone Fire Training facility.*
4. *With the start of the new 8-year cycle in 2022, all EOCs were evaluated during the 2022 Plume rehearsal and evaluated exercise.*

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#### **Capability Target 1.3 – Protective Action Recommendations**

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*Appropriate PARs are selected based on available information and other factors.*

***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.*

**Planning reference:** NUREG-0654/FEMA-REP-1, Rev. 2 (D.4, J.7, J.8, J.8.b, J.9, and O.1)

**Core Capabilities:** Operational Coordination; Environmental Response/Health and Safety; Situational Assessment; Planning

## **ASSESSMENT – DEMONSTRATION AND EVALUATION GUIDANCE**

By observing the OROs' capability to address the appropriate bullet points below and while considering the overall capability being assessed, the following key points of review and associated questions should be considered and will support an evaluation of this capability target.

ORO demonstrate the capability to:

### **PLUME**

#### **Select and implement pre-planned precautionary protective actions.**

- Who, by title/position and organization, made decisions to implement any preplanned precautionary protective actions outlined within plans/procedures?
- What precautionary protective actions were taken? Why?

**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.**

- Were differences in dose projection greater than a factor of ten discussed with the licensee? If so, were the differences resolved, and timely and appropriately incorporated into the PAR?

#### **Develop PARs.**

- Who, by title/position and organization, developed each PAR?
- What information (e.g., from the licensee, field monitoring data, release data, meteorological data, etc.) was used to develop each PAR?
- Were PARs based on the ECL?
- Were ETEs considered?
- Were EPA and FDA PAGs considered when making PARs? Was any other criteria, guidance, and/or methodologies used?
- Were recommendations for KI made and on what were they based?
- What populations or groups were included in the KI PAR (e.g. general public, institutionalized)?

#### **Transmit PARs in a timely manner.**

- Who, by title/position and organization, transmitted each PAR to the decision-makers?
- Who was the PAR provided to?

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### **Capability Target 1.3 – Protective Action Recommendations (Continued)**

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### **POST-PLUME**

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

- Who had the authority to make PARs for the ingestion pathway?

- Were precautionary actions (e.g., placing animals on stored feed and water) were considered to protect the ingestion pathway?
- Did the ORO coordinate on PARs developed for ingestion pathway?
- What boundaries were recommended for the restricted area? Did this include a recommendation for a buffer zone?
- Were projected doses considered in developing recommendations for relocation? Were they compared to the EPA PAGs?
- Were FDA PAGs (DILs as a surrogate) considered when recommending holds or embargos?
- Were recommendations made for exposure and dose limitations for those temporarily reentering the restricted area?
- Were recommendations developed to assist decision-makers on relaxing protective actions to allow for return?

### **Exercise Specific Extent of Play**

1. *Post Plume PAR Capabilities will not be evaluated.*
2. *Until a Governor's State of Emergency is declared, local officials may make protective and precautionary decisions within their communities independently.*
3. *If the scenario has no/limited release, and for communities outside the impacted area this demonstration will be evaluated by interview.*
4. *The role of the Governor of the State of Connecticut in the SEOC including making Protective Action Decisions (PADs) may be simulated by a role player.*
5. *OROs will consider Early Dismissal as a precautionary action, in addition to a Precautionary School Transfer, based on scenario conditions.*
6. *OROs may also consider a "lock-down" or "shelter-in-place" PAD based on current conditions.*

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### **Capability Target 1.4 – Protective Action Decisions for the Plume Phase**

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*Appropriate PADs are based on available information for the plume phase.*

***Intent:*** *The capability to utilize appropriate factors and necessary coordination in the decision-making process used to make PADs for the public.*

***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)*

*Core Capabilities: Operational Coordination; Environmental Response/Health and Safety; Situational Assessment; Critical Transportation; Plan*

## **ASSESSMENT – DEMONSTRATION AND EVALUATION GUIDANCE**

By observing the OROs' capability to address the appropriate bullet points below and while considering the overall capability being assessed, the following key points of review and associated questions should be considered and will support an evaluation of this capability target.

ORO demonstrate the capability to:

### **Coordinate and make PADs for members of the general public.**

- Who, by title and organization, made PADs?
- Did PADs need to be coordinated with other jurisdictions?
- Did all appropriate OROs communicate and coordinate precautionary protective actions and/or PADs amongst each other? Who was involved?
- What applicable Federal guidelines were utilized when making PADs?
- Were precautionary protective actions and/or initial PADs made in a timely manner based on the scenario?
- What were PADs based on (e.g., ETEs, predetermined actions, information/PARs from the licensee, protective action strategy, ORO assessment of plant status, weather conditions, and/or radiological releases, other incident information, input from appropriate ORO authorities, overall risk assessment of evacuation vs. shelter-in-place, considerations for those with access and functional needs, etc.)?
- Are any supplemental resources necessary to implement a PAD (e.g., law enforcement, fire service, HAZMAT, and medical resources)? If so, who can request Federal support?
- Were PADs coordinated with the ICP, if applicable?
- Were all decisions communicated with all affected locations in a timely manner?

### **Coordinate and make PADs for those with access and functional needs.**

- What factors were considered for PADs made for those with access and functional needs?
- Were there specific PADs for those with access and functional needs?
- What was the basis of the PADs for those with access and functional needs?

### **Coordinate and make PADs for students at schools.**

- How did the ORO alert and notify all school systems/districts of emergency conditions?
- What were protective actions for schools based on?
- What PADs were made?
- How were the PADs coordinated?

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## **Capability Target 1.4 – Protective Action Decisions for the Plume Phase (Continued)**

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### **Coordinate and make subsequent or alternate PADs.**

- Were subsequent or alternate PADs made? What were they? On what were they based (e.g., changing metrological conditions, field data, updated dose projections, changes in plant conditions)?
- Was the process for making PADs during a rapidly escalating situation different?
- What were subsequent/alternate PADs based on?

### **Coordinate and make decisions on the administration of KI (where applicable) for the public and institutionalized members of the population.**

- What was the KI decision-making process?
- Did the decision require coordination with assessment and decision-making staff? Was it based on projected thyroid dose compared with the established PAGs?
- Was there coordination among OROs involved in the decision-making process for KI administration?
- Was the message content clear on KI instructions?
- How was KI information provided to those who needed to take it?

### **Exercise Specific Extent of Play**

1. *Until a Governor's State of Emergency is declared, local officials may make protective and precautionary decisions within their communities independently.*
2. *The role of the Governor of the State of Connecticut in the SEOC including making Protective Action Decisions (PADs) may be simulated by a role player.*
3. *For a Hostile Action, it is likely the local authority will implement a precautionary action prior to the State of Emergency and prior to declaration of a General Emergency classification.*
4. *Other than immediate actions taken in a Hostile Action, this will only be demonstrated at the SEOC if the Governor has declared a State of Emergency prior to a General Emergency classification.*
5. *New London and Waterford schools will discuss the ability and resources necessary to implement protective actions for their school children. The designated school officials will choose the specific schools to be surveyed. Such interviews will be conducted with School Superintendents or designee out of sequence in 2024. During the rehearsal and exercise this capability target will be evaluated at each EPZ EOC through demonstration or interview (per scenario).*
6. *Day Care facilities will discuss the ability and resources necessary to implement protective actions for their location, and interviews will be scheduled with operating facilities in East Lyme, Old Lyme, and Lyme out of sequence in 2024.*
7. *KI is pre-distributed / made available to the public in the plume EPZ. KI is not distributed to the public in the EPZ during emergency response but is available in the Host Community Reception Centers. The backup distribution of KI at reception centers will be demonstrated out of sequence at scheduled Host Community exercises.*
8. *EPZ towns will demonstrate this objective through interview, including:*
  - a. *Identification of Functional Needs populations*
  - b. *Identifying and securing transportation requirements*
9. *Long Term Care facilities will discuss the ability and resources necessary to implement protective actions for their location, and interviews will be scheduled with operating facilities in East Lyme out of sequence in 2024.*



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## Capability Target 1.5 – Protective Action Decision Implementation for the Plume Phase

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*Implement decisions for those populations and areas subject to plume phase protective actions.*

**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.*

**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)*

**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*

### ASSESSMENT – DEMONSTRATION AND EVALUATION GUIDANCE

By observing the OROs' capability to address the appropriate bullet points below and while considering the overall capability being assessed, the following key points of review and associated questions should be considered and will support an evaluation of this capability target.

ORO demonstrate the capability to:

#### **Implement PADs, ensuring communication and coordination with all appropriate jurisdictions.**

- Were resources identified and utilized effectively?
- Did OROs communicate and work together in an effective manner?
- What type of coordination occurred on the implementation of protective actions?
- Was the public kept informed and was the information provided relevant?
- Were PADs implemented as directed?
- What types of populations are in the plume exposure pathway EPZ (e.g., institutionalized, access and functional needs, non-English speaking, etc.)? Who is responsible for notifying each, and at what point during the incident?
- Were there any gaps in resources identified? If so, how were they addressed?

#### **Assist those with access and functional needs during the implementation of PADs.**

- What time was the order received for those with access and functional needs?
- Were the facility/facilities receiving those with access and functional needs listed in the plans?
- How were individuals with services animals addressed?

#### **Communicate, coordinate, and implement protective actions for schools.**

- What school districts are located within the plume exposure pathway EPZ?
- Who notifies school districts? How?
- What was the protective action that the school took?
- With regard to processing students, faculty, and staff, what sort of PADs were made?
- At which ECL were the school districts notified?
- If students were moved, which reclamation centers were they sent to? Which is the host school?
- How were parents and/or guardians notified?
- Are there schools located outside the plume exposure pathway EPZ that have students living within the EPZ? What arrangements are made for those students?
- What type of transportation was provided to the students (e.g., bus, etc.)?

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## Capability Target 1.5 – Protective Action Decision Implementation for the Plume Phase (Continued)

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- Who notifies the bus drivers?
- Were there adequate buses available? And how do they communicate with the school?
- Do the bus drivers know where to take the students? Are they trained on what to do?
- Was the school evacuated during the plume? What means of monitoring and decontamination were used?

**Communicate with transportation officials.**

- What transportation needs or resources were required?
- Was a list of the transportation providers available?
- Were transportation providers contacted?
- How were needs for transportation-dependent individuals met?
- Were designated pick-up points used?

**Identify evacuation routes for the general public.**

- What evacuation routes were selected?
- Were the direction of the wind/plume and/or other hazardous conditions considered in determining which evacuation routes were used?
- How was this information communicated to the media and the public?
- How were alterations to the pre-designated routes communicated to the media and the public?
- Was the facility evacuated during the plume?

**Make KI available to both institutionalized persons and the general public, in accordance with plans and procedures.**

- How was the decision to take KI disseminated to the public and institutionalized persons?
- Did the ORO provide KI to the general public and institutionalized persons? If so, how was it distributed?
- What quantities of KI are available?
- Where is KI stored?
- What dosages of KI are available?
- What is the expiration date of KI? If there is an extended policy, where is the letter certifying the extension?
- Did the ORO ensure that the KI is stored in a temperature-controlled facility?
- What information was provided to the general public with regard to KI?
- What instructions were provided for the use of KI?
- Did the instructions include dosages and frequency to take KI?
- Did the instructions include contradictions and side effects of using KI? How was it explained?
- How was KI ingestion documented for institutionalized persons?
- Did staff maintain lists of the institutionalized individual who ingested KI?

**Exercise Specific Extent of Play**

1. *Until a Governor's State of Emergency is declared, local officials may make protective and precautionary action decisions within their communities independently.*
2. *The role of the Governor of the State of Connecticut in the SEOC including making Protective Action Decisions (PADs) may be simulated by a role player.*
3. *Except for Fishers Island, per the plan, KI will not be administered to the general public within the plume EPZ during a declared emergency.*
4. *If the scenario does not involve a release this can be demonstrated through interview.*
5. *One transportation provider will be contacted, all other calls will be simulated.*
6. *All simulated contacts will be logged.*

7. *For the purpose of the exercise, schools are in session.*
8. *Transportation of school children, if necessary, will be simulated.*
9. *EPZ Towns will demonstrate this objective through interview, including*
  - a. *Identification of functional needs population*
  - b. *Identifying and securing transportation requirements*
  - c. *Personal details contained within documents related to persons with access and functional needs will not be shared and related documents may not leave the EOCs.*

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#### **Capability Target 1.6 – Protective Action Decisions for the Post-Plume Phase**

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This Capability Target will not be demonstrated in the 2024 exercise.

Post plume activities (Ingestion, Relocation, Reentry, Return) were demonstrated in 2021.

Demonstration in 2022 was limited to the precautionary decisions associated with the plume phase.

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#### **Capability Target 1.7 – Protective Action Decision Implementation for the Post-Plume Phase**

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This Capability Target will not be demonstrated in the 2024 exercise.

Post plume activities (Ingestion, Relocation, Reentry, Return) were demonstrated in 2021.

Demonstration in 2022 was limited to the precautionary decisions associated with the plume phase.

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### **OBJECTIVE 2: EXPOSURE CONTROL**

#### **Capability Target 2.1 – Emergency Worker Exposure Control Decision-Making Process**

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*A decision-making process involving consideration of appropriate factors and necessary coordination is used to ensure that an exposure control system is in place for emergency workers, and includes the use of radioprotective drugs and procedures to authorize emergency exposures in excess of the PAGs.*

**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.

**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)

**Core Capabilities:** Operational Coordination; Environmental Response/Health and Safety; Situational Assessment; Planning

## **ASSESSMENT – DEMONSTRATION AND EVALUATION GUIDANCE**

By observing the OROs' capability to address the appropriate bullet points below and while considering the overall capability being assessed, the following key points of review and associated questions should be considered and will support an evaluation of this capability target.

ORO demonstrate the capability to:

### **Control emergency workers' exposure and dose, including offsite workers performing duties onsite.**

- Who was responsible for managing emergency workers' exposure and dose?
- Were projected doses and likely exposure rate patterns considered before dispatching workers?
- Were any of the following considered: alternate entry and exit routes; potential changes to meet conditions; area or roads to avoid; what to do in the event of equipment or vehicle failure; and previous doses?
- Were safety issues, supplemental to radiation, considered for the locations of field teams, the ICP, and other appropriate personnel?
- How did incoming mutual aid, including Federal or private resources, obtain dosimetry, radioprotective drugs, and subsequent just-in-time training?
- Who briefed emergency workers? Did the briefing include the following:
  - + Ensuring dosimetry are zeroed or initial reading is recorded.
  - + Frequency to read and record dosimeters.
  - + The process of reporting exposures.
  - + Proper placement of dosimeters.
  - + Proper use of PRDs.
  - + Ingestion and documentation of radioprotective drugs.
  - + Potential adverse effects of radioprotective drugs.
  - + The location to report to for monitoring and decontamination.

### **Maintain record of dose as a result of exposure.**

- How were exposures and subsequent doses reported from the field documented?

### **Authorize exposures and dose in excess of identified limits.**

- Who authorized emergency workers to receive exposure in excess of identified limits?
- What were the identified limits?

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## **Capability Target 2.1 – Emergency Worker Exposure Control Decision-Making Process (Continued)**

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- How was this authorization documented?

### **Process for considering occupational exposures and to authorize individuals to receive doses in excess of occupational dose limits.**

- Was occupational exposure considered for those working during the emergency, in both the intermediate

and late phases of a NPP accident?

- Who authorized occupational doses in excess of Federal limits?

**Determine a correction factor for DRD-based isotopic release mixture.**

- What approach was used to correct DRD readings to TED (e.g., dosimeter corrections factors)?

**Control exposure and dose for temporary reentry of emergency workers, or members of the public, to restricted areas.**

- What provisions were available for controlling exposure and dose rates for temporary reentry to restricted areas?
- How were controlled exposure and doses documented for those reentering restricted areas?

**Determine the need to authorize radioprotective drugs using projected thyroid doses and field measurements. Projections are compared to previously established PAGs.**

- Who authorized emergency workers to take radioprotective drugs?
- When was the decision made to authorize emergency workers to take radioprotective drugs?
- Was the decision to use radioprotective drugs based on projected thyroid doses?
- Were projected thyroid doses compared to establish PAGs?
- Did the decision-making process for use of radioprotective drugs include close coordination with assessment and decision-making staff?
- How was the decision to authorize radioprotective drugs communicated to emergency workers?

**Adequately protect members of the public from radiological exposure and control dose for those who are authorized to temporarily reenter a restricted area.**

- What provisions were there for dosimetry and contamination control for emergency workers and members of the public temporarily reentering a restricted area?
- What exposure rates or limits were established for emergency workers and members of the public temporarily reentering a restricted area?
- How were exposure and doses documented and controlled for emergency workers and members of the public temporarily reentering restricted areas?
- What was the process for decontamination, collection of dosimetry, and recording exposures for emergency workers or members of the public exiting the restricted area following temporary reentry?
- How was contamination monitoring and decontamination conducted for those exiting a restricted area?

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**Capability Target 2.1 – Emergency Worker Exposure Control Decision-Making Process  
(Continued)**

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**Exercise Specific Extent of Play**

1. *If scenario conditions do not result in increased dose to workers:*
  - a. *Response to increased readings on Self Reading Dosimeter (SRD) will be performed by interview.*
2. *If scenario conditions do not require dose extension, discussion may be facilitated by controller “what if” inject / evaluation interview.*
3. *Determination of any dose correction factor is limited to the SEOC.*

4. *Exposure control for reentry, return, and relocation will be demonstrated as a post plume activity on the eight-year schedule, but not in the biennial plume exercise.*

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### **Capability Target 2.2 – Emergency Worker Exposure Control Management**

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*Emergency workers manage radiological exposure and dose in accordance with the plans/procedures.*

***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.*

***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)*

***Core Capabilities:*** *Operational Coordination; Environmental Response/Health and Safety; Planning*

### **ASSESSMENT – DEMONSTRATION AND EVALUATION GUIDANCE**

By observing the OROs' capability to address the appropriate bullet points below and while considering the overall capability being assessed, the following key points of review and associated questions should be considered and will support an evaluation of this capability target.

ORO demonstrate the capability to:

**Maintain an appropriate inventory of DRDs that are leak-tested or current in calibration.**

- What types of DRDs were used?
- Were they consistent with the plans?
- Were they current in calibration or leak test?

**Maintain an appropriate inventory of PRDs.**

- What type of PRDs were used?
- Was the inventory of available PRDs sufficient for the number of workers?
- How many PRDs were available?

**Retain an adequate supply of radioprotective drugs.**

- Was there an adequate supply of radioprotective drugs?
- How many doses of radioprotective drugs were available?
- Was the quantity of radioprotective drugs available sufficient for the number of individuals needing to take it?

**Adequately distribute appropriate DRDs and PRDs.**

- Was dosimetry distributed in a timely manner?
- Was dosimetry distributed appropriately to read identified exposure limits?
- Did workers receive personal dosimetry or group dosimetry?

**Adequately distribute radioprotective drugs to emergency workers.**

- Were radioprotective drugs distributed in a timely manner?

**Record and report exposures in the field.**

- Did workers read and record dosimetry on a regular basis?

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**Capability Target 2.2 – Emergency Worker Exposure Control Management (Continued)**

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- At what frequency were readings recorded?
- To who were the readings reported?

**Who briefed emergency workers? Did the briefing include the following:**

- Ensuring dosimetry are zeroed or initial reading is recorded.
- Frequency to read and record dosimeters.
- The process of reporting exposures.
- Proper placement of dosimeters.
- Proper use of PRDs.
- Ingestion and documentation of radioprotective drugs.
- Potential adverse effects of radioprotective drugs.
- The location to report to for monitoring and decontamination.

### **Implement decisions to administer radioprotective drugs.**

- What was the quantity of the inventory of radioprotective drugs and the expiration date?
- Was the available quantity of radioprotective drugs sufficient to support the number of emergency workers?
- Was the supply of radioprotective drugs stored according to manufacturer recommendations?
- How was the ingestion of radioprotective drugs documented?
- Did emergency workers have a basic knowledge of procedures for ingesting and recording the use of radioprotective drugs, even if the scenario did not drive its use?
- How were records of exposure and ingestion of radioprotective drugs maintained?
- Did plans/procedures include a mechanism for identifying an emergency worker who has declined to take radioprotective drugs in advance? If so, how was this documented?

### **Report to individual responsible for managing exposure and dose when limits are reached.**

- What was the identified exposure limit?
- What was the dosimeter correction factor and how was it communicated to emergency workers?
- What is the process for receiving approval for exceeding exposure limits and dose limits?
- Who authorized emergency workers to exceed limits or replace a worker who has reached exposure limits?
- Who coordinated with offsite emergency workers who were performing duties onsite?

### **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.**

- What exposure control decisions were implemented to members of the public? What was the control dose for those who were authorized to temporarily reenter a restricted area?

### **Exercise Specific Extent of Play**

1. *Dosimetry and KI will be issued to a minimum of three individuals within the local EOCs. However, KI will not be ingested at any time during the exercise.*
2. *Donning of PPE will be notional as emergency workers will not wear Protective Clothing or Equipment while in view of the public.*
3. *Emergency workers will read dosimetry at regular intervals, OR AS DIRECTED / INSTRUCTED.*

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### **Capability Target 2.2 – Emergency Worker Exposure Control Management (Continued)**

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4. *FEMA evaluator will evaluate a dosimetry briefing and issue in the following facilities:*
  - a. *DEEP field teams at Millstone EOF in Norwich.*
  - b. *Local EOCs*
  - c. *Forward Command located at Millstone Fire Training Facility*
  - d. *CT State Police Troop E out of sequence*
  - e. *CT DOT Norwich out of sequence*
  - f. *Transportation Staging Area out of sequence within 8-year exercise cycle*
  - g. *Host Community / Reception Center out of sequence within 8-year exercise cycle*
  - h. *Post Plume Sampling Teams out of sequence within 8-year exercise cycle*
5. *FEMA evaluator will evaluate worker understanding of dosimetry brief by interview – worker will be allowed to use any available resources to respond to this interview.*
6. *The State of CT is replacing older electronic and tube style DRDs with newer electronic dosimeters. Electronic dosimetry will be utilized for this exercise.*



7. *Electronic dosimetry will be issued to responders at the Forward Command location within the Fire Training facility on Millstone Power Station property.*
8. *Special response teams (state and local law enforcement/fire department/EMS) will receive KI in advance or at the same time as dosimetry issue at the Forward Command Post.*

*\*This capability target has been approved for re-demonstration during the exercise.*

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### **OBJECTIVE 3: ALERT AND NOTIFICATION**

#### **Capability Target 3.1 – Communications**

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*Communication processes, systems, and equipment are sufficient to support emergency operations.*

***Intent:** The capability to provide and maintain reliable communications with emergency personnel.*

***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)*

***Core Capabilities:** Operational Communications; Operational Coordination; Situational Awareness; Planning*

### **ASSESSMENT – DEMONSTRATION AND EVALUATION GUIDANCE**

By observing the OROs' capability to address the appropriate bullet points below and while considering the overall capability being assessed, the following key points of review and associated questions should be considered and will support an evaluation of this capability target.

OROs demonstrate the capability to:

**Utilize communication systems that are fully functional, continuously available, and redundant.**

- What types of communications system(s) and method(s) were available? Which were demonstrated?
- Was the communication system(s) fully functional?
- Did personnel demonstrate familiarity of use with each system/method?
- Was a communications check with other jurisdictions, field teams, and/or other support organizations required and completed?

**Maintain periodic test results and corrective actions on a real time basis.**

- How were test results and corrective actions tracked in real time?
- Was documentation of the test results and/or corrective actions made available?

**Access at least one communication system that is independent of the commercial telephone system.**

- Which communication system(s) available was independent of commercial telephone?
- Was it able to be accessed/utilized?

**Manage the communication systems and ensure that all message traffic is handled without delays that might disrupt emergency operations.**

- Were there any delays in message traffic that disrupted emergency operations? If so, how were the delays addressed/mitigated?

**Identify and address any failures of the systems.**

- Were there any communication failures? If so, how was the failure identified?
- What actions were taken to correct the failure and/or how was the failure overcome?
- Did the failure affect overall performance?

**Transmit, receive, and understand messages (i.e., “content check”).**

- Were the messages transmitted/received understood by personnel?
- What was the message?

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**Capability Target 3.1 – Communications (Continued)**

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- Was a “content check” (i.e., informational message that could be received during an actual radiological emergency) performed?

**Exercise Specific Extent of Play**

1. *Interoperable communications will be utilized for communicating between the various law enforcement agencies.*
  - a. *Waterford Dispatch will utilize hotline notification to CSP, FBI, Coast Guard, New London, East Lyme, and possibly DEMHS for notification via local PSAPs.*
  - b. *DEEP-RD will communicate with DEEP Encon Police via internal communication capabilities.*
  - c. *FBI can communicate with CSP via State Police Network.*
  - d. *CT LMRN can activate talk group for interoperability.*
  - e. *EPZ EMDs have an encrypted talk group for command and control between towns.*
  - f. *Waterford PD/FD will utilize a FD/PD operations training channel for the rehearsal and exercise that New London is able to communicate on. If Waterford EMS radios do not have this channel, they will designate a channel to communicate with PD/FD that does not interfere with normal operations.*
  - g. *Coast Guard will utilize 112 channel and VHF 22A channel to coordinate assets. The VHF channel is not secure.*
  - h. *The FBI will utilize an internal channel that is encrypted.*

- i. CSP ESU will monitor and use internal tactical and triband radios.
  - j. 8TAC channel can be activated by State Police Message Center although not encrypted and is analog not providing the best connectivity.
2. Communications between Millstone Security and responding law enforcement will be coordinated.
3. Injects will prompt demonstration/discussion of backup communication systems.
4. The use of cell phones for relaying messages and data transmission will be utilized via the First Net network. Responders will not implement First Net override of regular cell phone users.
5. Review of periodic communication test results may be reviewed out of sequence.

*\*This capability target has been approved for re-demonstration of performance only, actual equipment cannot be re-demonstrated.*

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### **Capability Target 3.2 – Alert and Notification of the Public**

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*Alert and notification of the public is completed in a timely manner.*

***Intent:*** The capability to provide instructions to the public.

***Planning reference:*** NUREG-0654/FEMA-REP-1, Rev. 2 (E.2, E.4, E.5, F.3, and O.1)

***Core Capabilities:*** Public Information and Warning; Planning

#### **ASSESSMENT – DEMONSTRATION AND EVALUATION GUIDANCE**

By observing the OROs' capability to address the appropriate bullet points below and while considering the overall capability being assessed, the following key points of review and associated questions should be considered and will support an evaluation of this capability target.

OROs demonstrate the capability to:

#### **ALERT AND NOTIFICATION SYSTEM**

**Sequentially provide an alert signal followed by an initial instructional message to populated areas.**

- Who has releasing authority of initial EAS or other notification method messaging?
- Who made the decision to activate the alert and notification system?

- What process is followed to activate the system?
- Who activated the system?
- What alert method(s) was used (siren-system, tone-alert radio, route alerting, telephone, Telecommunication Device for the Deaf/TeleType [TDD/TTY], etc.)?

**Alert and notify the general public.**

- Was the same method used for approving and releasing subsequent alert and notification as the initial alert/ notification?
- What alert method(s) was used (siren-system, tone-alert radio, route alerting, telephone, TDD/TTY, etc.)?
- What message was sent out? Was it pre-scripted?
- How often were messages repeated?
- Conduct initial messaging with, at a minimum, the following four essential elements in the message:
  1. Identification of the ORO responsible and the official with authority for providing the alert and instructional message;
  2. Identification of the commercial NPP and a statement that an emergency exists there;
  3. Reference to REP-specific emergency information (e.g., brochures, calendars, and/or online information) for use by the general public during an emergency;
  4. A closing statement asking that the affected and potentially affected population stay tuned for additional information, or that the population tune to another station for additional information.

**Identify and address any failures of the system(s) or portion of a system(s).**

- Were there any failures of the system or a portion(s) of the system?
- How were any failures of the system or a portion(s) of the system identified?
- Was the failure attributed to a specific portion of the plume and/or ingestion exposure pathway EPZ or segment of the population? How?

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**Capability Target 3.2 – Alert and Notification of the Public (Continued)**

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- What alternate means of alert and notification (e.g., simultaneous or concurrent failure models have overlapping systems which will seamlessly address failures; activation of additional system(s); route alerting; etc.) was utilized for the area of the plume and/or ingestion exposure pathway EPZ or segment of the population affected by the failure(s)? How were the alerts/notifications provided? What was the message?
- Once the failure was identified, what actions were taken?
- If message dissemination is identified as not being accomplished in a timely manner, what was the specific delay? What caused the message to not be provided in a timely manner?

**Actual testing of the mobile public address system will be conducted at an agreed-upon location.**

- What notification methods were tested?
- How does the notification system deliver messages (e.g., via phone call, text message, and email based on a database of contact information associated with physical addresses)?
- How, and how often, is the system tested?

**EAS**

**Identify the process to activate the EAS.**

- What protocol or system was used to activate the EAS? (i.e., software, NWS, radio station, IPAWS)
- How long did the process take to activate the system?
- If NWS or radio station was used, was there verification between the ORO and the broadcast station of the EAS message prior to broadcast?

**Ensure that updated emergency information is disseminated in a timely manner.**

- Were messages updated to relay the most current information concerning the incident?

**Ensure that current emergency information is repeated at pre-established intervals.**

- What are the pre-established intervals?
- How often was information repeated?

#### **EAS/NWS STATION**

**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.**

- Did the station have a copy of current plans, procedures, and messages?
- Did station staff demonstrate the process to broadcast messages?
- If required, did the EAS station verify who the message came from and that it is the correct message?
- Was the EAS station kept updated with new information and messages? How?

**Broadcast the message on a 24-hour basis.**

- What is the 24-hour capability of this location?
- Is there back-up power supply or is an alternate station used?

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### **Capability Target 3.2 – Alert and Notification of the Public (Continued)**

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#### **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.).**

- Why was route/alternate alerting initiated?
- Was this a FEMA-approved exception area?
- What organization(s) are responsible for providing route/alternate alerting?
- Under what conditions was route/alternate alerting initiated?
- Who notified the resources to begin route/alternate alerting? How were they notified?
- What resources provided route/alternate alerting?
- How long did it take to complete the route/alternate alerting?
- How was the message announced? What was the content of the message?
- For exception area notification, was it completed within 45 minutes of the initial decision by authorized offsite emergency officials to notify the public of an incident?
- What system was used for exception areas?
- Who approves the use of the system for alerting exception areas?
- Who deployed the system for alerting exception areas and what was the process?
- Can individual sub-areas be activated using the system to alert FEMA approved exception areas?
- Was a test done or was a previous tests report used as confirmation of operation in alerting exception areas?

### Exercise Specific Extent of Play

1. *Activation of the Emergency Alert System (EAS), public alerting sirens, Social Media, Everbridge (ENS), and other means of alerting the public may be simulated.*
2. *Route Alerting to be demonstrated in 2024 out of sequence, immediately following the exercise, in Groton Town, New London, and on Fishers Island.*
3. *Towns not demonstrating route alerting in 2024 will be provided an inject to describe route alerting for one faulted siren.*
4. *Procedures to broadcast the EAS message should be demonstrated as they would in an actual emergency up to the point of transmission.*
5. *Activation of IPAWS and EAS via Everbridge will be demonstrated from the SEOC although it will not be evaluated. Designated FEMA Evaluators will be notified of the message via WEA. If requested, a report of the message will be provided to FEMA.*

*\*This capability target has been approved for re-demonstration of performance only, actual equipment cannot be re-demonstrated.*

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### Capability Target 3.3 – Emergency Information and Instructions for the Public and News Media

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*Accurate emergency information and instructions are provided to the public and the news media in a timely manner.*

***Intent:** The capability to disseminate emergency information and instructions to the public during all phases of an incident.*

***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)*

***Core Capabilities:** Public Information and Warning; Planning*

### ASSESSMENT – DEMONSTRATION AND EVALUATION GUIDANCE

By observing the OROs' capability to address the appropriate bullet points below and while considering the overall capability being assessed, the following key points of review and associated questions should be considered and will support an evaluation of this capability target.

ORO demonstrate the capability to:

#### PLUME PHASE

**Deliver coordinated, prompt, reliable, and actionable information in a timely manner.**

- Who approves the message content and authorizes the release of the message?
- Was messaging coordinated with appropriate Federal, state, local, and tribal stakeholders prior to dissemination?
- Were methods consistent with an established JIS?
- How often was emergency information repeated?

**Provide clear, concise, accessible messaging using plain language.**

- Was language clear, concise, accurate, and delivered in a timely manner?
- Was the PAD correctly and appropriately reflected?
- Was the ECL appropriately disclosed and adequately explained?
- When needed, were familiar landmarks and boundaries to describe protective action areas?
- Was there a closing statement included in the messaging? If so, what was it? How was it communicated to affected and/or potentially affected populations?

**Messaging addresses appropriate cultural and linguistic considerations.**

- Is public information required to be available in non-English languages at this location/site? If so, how were messages translated and/or provided?
- How are those with access and/or functional needs provided with messages and actionable information?
- Are there any cultural and/or other linguistic considerations relevant for this area? If so, what are they and how were they implemented?

**Ensure subsequent messaging is consistent with protective actions.**

- Are all necessary and applicable instructions (e.g., evacuation instructions, evacuation routes, reception center locations, what to take when evacuating, shelter-in-place instructions, information concerning protective actions for schools and persons with access and/or functional needs, and public inquiry hotline telephone number) to assist the public in carrying out the PADs provided?

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**Capability Target 3.3 – Emergency Information and Instructions for the Public and News Media  
(Continued)**

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- Was messaging 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.).**

- How often was information on the incident progression updated?
- What new protective action areas were identified?
- How was invalid information rescinded?
- How was invalid information updated to reflect any changes?
- Was follow-up and additional messaging coordinated and delivered? How?

**Respond to media and public inquiries.**

- Were the appropriate PIOs or subject matter experts (SMEs) available?
- How did PIOs or SMEs gather and verify information?
- How did PIOs or SMEs coordinate information with appropriate personnel for approval?
- How was exchange, discussion and coordination of information among PIOs or SMEs conducted?
- Were media briefings conducted? If so, were they frequent, timely, and was information disseminated accurately?
- Were media and public inquiries handled and addressed appropriately?
- Were trends and/or rumors captured and addressed in media releases?

**POST-PLUME PHASE**

**Rapidly disseminate of ingestion exposure pathway information to predetermined individuals and businesses.**

- Where there any delays or reasons why messages were not timely?

**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.**

- What sort of information was provided to the public addressing temporary reentry into a restricted area, permanent relocation of areas not evacuated, and return to formerly restricted areas? How was the information communicated?

**Exercise Specific Extent of Play**

1. *Unless otherwise determined by Unified Command, Media and Press Releases will be managed through the JIS located at the SEOC.*
2. *A minimum of one simulated media brief will be conducted through the JIS.*
3. *Social media simulation products, if used, will be for demonstration purposes only. Public inquiry trends may be injected by simulated social media monitoring injects.*
4. *The role of the 2-1-1 Message Center is to answer calls pertaining to the incident and assist with rumor control. 211 Center is fully participating, call cells will be used to simulate public inquiries*

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**Capability Target 3.3 – Emergency Information and Instructions for the Public and News Media  
(Continued)**

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5. *The role of the media will be simulated by Controllers/Actors in the Joint Media Center.*
6. *Local EOCs will be prompted by inject to refer media inquiries to the state JIS.*
7. *Traffic impediments are addressed in state media messaging.*
8. *Post Plume Capability Targets will not be evaluated during this exercise.*

*\* Approved for re-demonstration: That portion of the evaluation element dealing with “timely manner” and emergency information being all-inclusive. Players should have the opportunity to re-demonstrate the criterion in subsequent messages.*

*\*This capability target has been approved for re-demonstration of performance only, actual equipment cannot be re-demonstrated*



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**OBJECTIVE 4: DETECT, MEASURE, SAMPLE, ANALYZE, and ASSESS**  
**Capability Target 4.1 – Field Monitoring Teams Management**

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*FMTs are managed to obtain information to help characterize the release, locate and track the airborne radiological plume, and control contamination.*

***Intent:** The capability to provide overall management of FMTs to direct movements and measurements to characterize the plume and its impacts.*

***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)*

***Core Capabilities:** Operational Coordination; Environmental Response/Health and Safety; Planning*

**ASSESSMENT – DEMONSTRATION AND EVALUATION GUIDANCE**

By observing the OROs' capability to address the appropriate bullet points below and while considering the overall capability being assessed, the following key points of review and associated questions should be considered and will support an evaluation of this capability target.

ORO demonstrate the capability to:

**Brief FMTs on predicted plume location and direction, plume travel speed, equipment operational checks, background measurement, and exposure control procedures before deployment.**

- What instructions or assignments were given to the FMT?
- Who briefed the FMTs prior to deployment? Was the pre-deployment briefing adequate? Did it address predicted plume location and direction, plume travel speed, and exposure/contamination control procedures before deployment?

**Direct the FMTs to monitoring locations, predesignated points or otherwise, at times and locations sufficient to characterize the plume.**

- Who controlled the FMTs' movement and determination of sample location?
- Were FMTs directed to locations at times sufficient to characterize the plume?
- What approach was used to select appropriate sampling locations, pre-designated sampling points, or plume traverse (while maintaining specified exposure limits)?
- What time were assignments completed?
- During a HAB incident, were there provisions for the field team management to inform Incident

Command of FMT activities and location? Was this activity observed?

**Obtain peak plume measurements from FMTs.**

- Which agency's (i.e., ORO, licensee, or other) FMTs were assigned the responsibility of finding the plume edge, obtaining peak measurements in the plume, and obtaining maximum radiation readings in the downwind areas (e.g., centerline measurements)?

**Direct FMTs to collect air samples at locations and times sufficient to characterize the plume.**

- How were locations at which to collect air samples selected?
- Were the samples taken sufficient to characterize the plume?

**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.**

- How were activities and locations communicated with Incident Command during a HAB incident

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**OBJECTIVE 4: DETECT, MEASURE, SAMPLE, ANALYZE, and ASSESS**  
**Capability Target 4.1 – Field Monitoring Teams Management**

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**Coordinate and share information amongst all FMTs (licensee, Federal, state and local).**

- Did all FMTs (i.e., licensee, Federal, and ORO) share and coordinate plume measurement information?
- Did the ORO coordinate or use any resources from other agencies, e.g., Federal, mutual aid, or compact?

**Coordinate sample analysis from field to those responsible for assessing radiological data.**

- How was field data coordinated with dose assessors or those responsible for assessing radiological data?

**Coordinate transfer of sample media to locations and organizations responsible for assessing radiological data.**

- Did coordination concerning transfer of samples, including a chain-of-custody form(s), to a radiological laboratory or laboratories occur?
- Assist with development and modification of sampling plans, as appropriate. How were sampling plans developed and maintained?

**Exercise Specific Extent of Play**

1. *Based upon the compressed timeframe of the plume exercise DEEP field monitoring teams will be pre-staged and dispatched from the Millstone EOF.*
2. *DEEP will deploy 2 field teams who will determine plume characteristics by field measurements.*
3. *Each DEEP Field Monitoring Team will be dispatched to a minimum of two sampling points where they will take radiation (exposure) measurements and report them to their Field Team Coordinator (FTC). The FTC will direct that air samples (particulate and iodine) be taken at a minimum of 1 location for each field team. Locations to be determined, considering safety. Air sample may be demonstrated out of sequence.*
4. *If DEEP determines over water sampling points are required per exercise play, the Field Team(s) will be dispatched to the location of the boat, but the launching of the boat will be simulated. Overwater surveys will be taken at the pier.*

*\*This capability target has been approved for re-demonstration during the exercise.*

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## Capability Target 4.2 – Plume Phase Measurements and Sampling

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*FMTs make, record, and report measurements of ambient radiation to appropriate authorities; radioiodine and particulate samples are collected.*

***Intent:** The capability to make and report measurements of ambient radiation.*

***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)*

***Core Capabilities:** Environmental Response/Health and Safety; Planning*

### ASSESSMENT – DEMONSTRATION AND EVALUATION GUIDANCE

By observing the OROs' capability to address the appropriate bullet points below and while considering the overall capability being assessed, the following key points of review and associated questions should be considered and will support an evaluation of this capability target.

ORO demonstrate the capability to:

**Maintain emergency equipment including calibration and operational checks according to manufacturer's specifications or per national standards.**

- Did each FMT perform an operational check on each radiation survey instrument, including a source-response check which is compared to a known range of readings to confirm the instrument can properly measure radiation?
- Did each FMT obtain a background radiation measurement with each radiation survey instrument before entering the affected area?

**Maintain inventory for emergency kits.**

- Were kits inventoried prior to deployment?
- Did kits contain supplies and equipment sufficient to support field team operations?

**Operate and monitor radiation survey instruments to detect changes in radiation exposure rate while moving and in stationary positions.**

- Did FMTs operate and monitor survey instruments continuously and in a way that prevented inadvertent exposure to an active plume?

**Use appropriate contamination control and PPE.**

- Did field teams use appropriate contamination control techniques?
- What PPE was used?
- How was instrumentation protected from contamination?

**Be in location(s) at the appropriate time(s) to detect and characterize the active release (plume).**

- What agencies participated as part of the FMT?
- Were field teams moved to potential locations where the plume was predicted to pass?

**Obtain peak plume measurements either directly or from licensee field teams.**

- Were peak plume measurements obtained? If so, from where?

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#### **Capability Target 4.2 – Plume Phase Measurements and Sampling (Continued)**

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**Correctly interpret survey instrument readings to determine submersion in the active plume.**

- What exposure rate did FMTs use to determine the possible edge of the plume?
- Did FMTs compare waist high open-window and closed-window exposure rates to determine submersion in an active plume?
- Did FMTs take samples? What samples were taken?
- Did field team record and report area surveys (ambient exposure rates) at multiple locations?

**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).**

- Was air sampling accomplished at a flow rate between 1.5 cfm and 2 cfm to maintain maximum collection efficiencies of the particulate and iodine sampling media?
- Was the ambient exposure rate monitored to note changes during air sampling? How often was the ambient exposure rate noted (e.g., beginning, mid-sampling, end-of-sampling, or continuously monitored)?

**Handle sample media and equipment to avoid sample cross-contamination, contamination of equipment and personnel contamination.**

- What methods were used to prevent sample cross-contamination?
- How were instruments and equipment used for sample counting handled to prevent spread of contamination?
- How was radiologically contaminated waste handled?

**Determine an appropriate low background location to count sample media.**

- What was the background counting rate in the low background location selected to count the samples in the field?

**Count iodine and particulate media using appropriate and effective instrumentation and counting geometries or have samples analyzed by a supporting laboratory within four hours.**

- What instrument was used to count the media in the field?
- What means were used to ensure an effective, repeatable counting geometry?
- If samples were not counted in the field, what was the dedicated transportation means that ensured samples were analyzed by the supporting laboratory within four hours?

**Report to field monitoring team manager all survey and counting results in format and units suitable for use by the organization's dose assessor.**

- Were results of surveys and, if taken, field results from air samples documented? How were they transmitted?

**Procedures, qualified collection and counting efficiencies, and calculations are capable of detecting airborne radioactive iodine concentrations as low as  $10^{-7}$   $\mu\text{Ci/cc}$ .**

- Were the flow rate, sample volume, counting efficiencies, and appropriate calculations performed to prove the ability to detect concentrations as low as  $10^{-7}$  Ci/cc?

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#### **Capability Target 4.2 – Plume Phase Measurements and Sampling (Continued)**

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**Preparation of packaging, sample identification, and chain-of-custody forms ensures integrity of samples throughout transportation and transfer.**

- Was packaging and handling adequate to prevent cross-contamination?
- Was sample identification and chain-of-custody completed to maintain integrity of the samples?

#### **Exercise Specific Extent of Play**

1. *Air sample cartridges used during the exercise have been specifically designated for drill or exercise use only. These cartridges may be used more than once during the exercise. Deep field team kits are inventoried quarterly. The actual inventory list will be made available upon request to FEMA, the inventory will be provided out of sequence of the exercise.*
2. *Enough PPE for each emergency worker should be available for observation by evaluator. Proper use of PPE will be demonstrated through interview and discussion. PPE will not be worn by field teams deployed to public areas.*
3. *Two field teams will be deployed to a minimum of two survey points and conduct at least two dose rate surveys.*

*\*This capability target has been approved for re-demonstration of performance only, actual equipment cannot be re-demonstrated.*

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#### **Capability Target 4.3 – Post-Plume Phase Measurements and Sampling**

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This Capability Target will not be demonstrated in the 2024 exercise.

Post plume activities (Ingestion, Relocation, Reentry, Return) were demonstrated in 2021.

Demonstration in 2022 was limited to the precautionary decisions associated with the plume phase.

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#### **Capability Target 4.4 – Laboratory Operations**

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This Capability Target will not be demonstrated in the 2024 exercise.

Post plume activities (Ingestion, Relocation, Reentry, Return) were demonstrated in 2021.

Demonstration in 2022 was limited to the precautionary decisions associated with the plume phase.

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## Capability Target 4.5 – Plume Phase Analysis and Dose Assessment

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*Dose assessment considers all available information including plant conditions, environmental conditions, field monitoring data, sample analysis results, and dose projection calculations.*

**Intent:** *The capability to collect data, project doses to members of the public and emergency workers, and analyze and communicate the results.*

**Planning reference:** *NUREG-0654/FEMA-REP-1, Rev. 2 (A.3, H.13, I.6, I.8, I.10, K.3, and O.1)*

**Core Capabilities:** *Environmental Response/Health and Safety; Planning*

### ASSESSMENT – DEMONSTRATION AND EVALUATION GUIDANCE

By observing the OROs' capability to address the appropriate bullet points below and while considering the overall capability being assessed, the following key points of review and associated questions should be considered and will support an evaluation of this capability target.

ORO demonstrate the capability to:

**Obtain adequate data to make dose projections.**

- What information was used to make dose projections?
- Did the information include information/recommendations of the licensee, release data, and meteorological data?

**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.**

- What modeling system was used to make dose projections?
- Did the ORO demonstrate the capability to use other methods, such as manual calculations?

**Compare dose projections to members of the public to EPA PAGs.**

- Did the ORO make TED and thyroid dose projections available to members of the public based on information/ recommendations of the licensee, release data, and meteorological data?
- Did the ORO compare dose projections to EPA PAGs and make PARs?

**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.**

- Were differences in dose projection greater than a factor of ten discussed with the licensee? If so, were the differences resolved and considered in the PAR?

**Make initial PARs based on recommendations of the licensee, release data, meteorological data, and other pertinent information.**

- Were initial PARs based on recommendations from the licensee, release data, meteorological data, and

any other pertinent information? If not, what were the initial PARs based on?

**Promptly communicate PARs to decision-makers.**

- How were PARs communicated to decision-makers?
- How quickly were PARs communicated to decision-makers?

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**Capability Target 4.5 – Plume Phase Analysis and Dose Assessment (Continued)**

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**Receive ambient exposure rates from FMTs and compare to model projections.**

- Were ambient exposure rates received from FMTs and compared to modeled exposure rates?

**Calculate iodine and particulate concentrations from FMT air samples.**

- Did the ORO calculate iodine and particulate concentrations from FMT air sample data?

**Calculate plume ratios of noble gas, iodines, and particulates, and compare to model projections.**

- Did the ORO calculate iodine and particulate concentrations from FMT air sample data?

**Adjust PARs, as necessary, based on analysis of field data.**

- Did the ORO adjust PARs based on exposure rates measured by iodine and particulate ratios calculated from air samples collected by FMTs?

**Calculate an incident-specific correction factor for emergency workers inside the plume exposure pathway EPZ.**

- Did the ORO calculate an incident-specific correction factor for emergency workers inside the plume exposure pathway EPZ?
- Was the correction factor adjusted for emergency workers inside the plume exposure pathway EPZ based on air sample data collected by FMTs?
- Was the incident-specific correction factor communicated to emergency workers inside the plume exposure pathway EPZ?

**Exercise Specific Extent of Play**

1. *FEMA will evaluate this capability target at the SEOC and Millstone EOF.*
2. *If exercise is a minimal/no release scenario, injects will be used to allow DEEP to demonstrate this Capability Target.*

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**Capability Target 4.6 – Post-Plume Phase Sampling Plan Development and Analysis**

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This Capability Target will not be demonstrated in the 2024 exercise.

Post plume activities (Ingestion, Relocation, Reentry, Return) were demonstrated in 2021.

Demonstration in 2022 was limited to the precautionary decisions associated with the plume phase.

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## **OBJECTIVE 5: OPERATE**

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### **Capability Target 5.1 – Monitoring, Decontamination, Sheltering, and Registration of Evacuees**

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This Capability Target will not be demonstrated in the 2024 exercise.  
No Host Community Reception Center activities will be demonstrated out of sequence in 2024.  
West Hartford was demonstrated 5/13/2023 and New Haven will be demonstrated in 2025.

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### **Capability Target 5.2 – Monitoring and Decontamination of Emergency Workers, Equipment, and Vehicles**

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*Facilities, equipment, and procedures are in place and utilized to provide monitoring and decontamination of emergency workers and their equipment and vehicles.*

***Intent:** The capability to implement radiological monitoring and decontamination of emergency workers, equipment, and vehicles.*

***Planning reference:** NUREG-0654/FEMA-REP-1, Rev. 2 (K.4 and O.1)*

***Core Capabilities:** Operational Coordination; Environmental Response/Health and Safety; Planning*

## **ASSESSMENT – DEMONSTRATION AND EVALUATION GUIDANCE**

By observing the OROs' capability to address the appropriate bullet points below and while considering the overall capability being assessed, the following key points of review and associated questions should be considered and will support an evaluation of this capability target.

ORO demonstrate the capability to:

### **Set-up operations.**

- Where will monitoring and decontamination of emergency workers occur?
- Where will emergency workers' equipment be monitored and decontaminated?
- Was the facility set up and operational? Did it include route markings, instrumentation, record keeping, and contamination control measures?
- What supplies were available to set up the facility?
- What supplies were available to prevent and control spread of contamination?
- What personal protective supplies were available?
- How was contamination minimized within the facility?
- What contamination control provisions were utilized?

### **Operationally check instruments and equipment.**

- Were the instruments current in calibration?



- Were instruments and equipment operationally checked using an appropriate check source against a known range of reading to verify proper operation?

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**Capability Target 5.2 – Monitoring and Decontamination of Emergency Workers, Equipment, and Vehicles (Continued)**

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- Was an appropriate radioactive check source used to verify proper operational response for each low-range radiation measurement instrument?
- Were background readings taken?
- How were background radiation levels established?

**Monitor emergency worker personnel and their equipment and vehicles for contamination.**

- Was there adequate space for emergency workers at the facility?
- Were there an adequate number of personnel trained to operate monitoring equipment at the facility?
- During vehicle monitoring, were the following monitored: air intake systems, radiator grills, bumpers, wheel wells, tires, and door handles?
- What provisions were in place to ensure privacy?

**Decontaminate emergency worker personnel and their equipment and vehicles based on trigger/action levels.**

- What is the action level for determining the need for decontamination of personnel, equipment, and vehicles?
- What process is used to decontaminate personnel, equipment, and vehicles?
- How was decontamination conducted for small areas of contamination?
- What was done when an emergency worker could not be successfully decontaminated?

**Control the spread of contamination.**

- What procedures are used to minimize contamination within the facility?
- How are contaminated emergency workers separated from non-contaminated emergency workers?
- How are contaminated clothing and other personal belongings addressed? Will clean clothing be provided to emergency workers?
- Were contamination control procedures, including storage of contaminated clothing and possessions followed?

**Create and maintain a record of monitoring and decontaminating workers upon completion of monitoring and decontamination activities.**

- Was a record of monitoring and decontamination (if necessary) kept for each emergency worker?

**Process for prioritizing emergency workers and equipment before the public in facilities where the public and emergency workers are both processed for contamination.**

- What is the process for prioritizing emergency workers and equipment before the public in facilities where the public and emergency workers are both processed for contamination?

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**Capability Target 5.2 – Monitoring and Decontamination of Emergency Workers, Equipment, and Vehicles (Continued)**

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**Exercise Specific Extent of Play**

1. *This objective will be demonstrated for workers entering local EOCs.*
2. *If scenario radiological conditions do not result in contaminated emergency workers, “what if” injects will be used to drive demonstration.*
3. *Decontamination of emergency workers and their equipment are demonstrated at the Host Communities coincident to Capability Target 5.1*
4. *Monitoring of vehicles and prioritization of workers over the public are demonstrated in the Host Communities coincident with Capability Target 5.1.*

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**Capability Target 5.3 – Transportation and Treatment of Contaminated, Injured Individuals**

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This Capability Target will not be demonstrated in the 2024 exercise.

**Exercise Specific Extent of Play**

1. *Middlesex Hospital will be evaluated out of sequence in 2024. L&M Hospital will participate in an off-year drill in 2024.*

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**Capability Target 5.4 – Traffic and Access Control**

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*Appropriate traffic and access control is established; accurate instructions are provided to traffic and access control staff.*

**Intent:** *The capability to select, establish, and staff traffic and access control points and removing impediments to the flow of evacuation traffic.*

**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)*

**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*

## **ASSESSMENT – DEMONSTRATION AND EVALUATION GUIDANCE**

By observing the OROs' capability to address the appropriate bullet points below and while considering the overall capability being assessed, the following key points of review and associated questions should be considered and will support an evaluation of this capability target.

ORO demonstrate the capability to:

**Select, establish, and staff appropriate TCP/ACPs, consistent with current conditions and PADs (e.g., evacuating, sheltering, and relocation), in a timely manner.**

- Were there pre-identified TCPs/ACPs in the plan?
- What was the basis for determining the location of TCPs/ACPs (e.g., evacuation of area, danger in area, etc.)?
- At what ECL were TCPs/ACPs established?
- Who was responsible for establishing traffic routes and/or TCPs/ACPs?
- Who deployed TCP/ACP personnel to the assigned location?
- Were necessary resources available when needed?
- Were there any gaps identified between the TCP/ACP resources needed and the resources available? If so, what alternate resource providers were identified and resources provided?
- Were TCPs/ACPs identified, staffed, and established in timely manner?

**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.**

- Did the TCP/ACP staff receive an emergency worker briefing? If so, what did the briefing include?
- When PADs expanded into the affected area, were TAC personnel relocated?
- Were instructions provided to TCP/ACP staff on the modification of PADs?
- Were TCP/ACP personnel able to provide the following information:
  - \* Location of TCPs/ACPs.
  - \* Location of reception/registration centers.
  - \* Location of emergency worker monitoring and decontamination center.
  - \* Equipment available (e.g., cones) to establish TCPs/ACPs.
  - \* The means used to verify emergency worker identification and access.
  - \* Their roles and responsibilities.
- What plans/procedures were in place for verifying emergency worker identification and access authorization?

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### **Capability Target 5.4 – Traffic and Access Control (Continued)**

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**Contact the state or Federal agencies that have the authority for the different transportation modes (e.g., rail, water, and air traffic).**

- Who notified which agency for control of water, rail, and air traffic?
- Were times and ECLs documented when rail, water, and air traffic access control were notified by the ORO?
- What actions were requested? How were actions coordinated?

**Identify and take appropriate actions concerning impediments that affect the evacuation and evacuation routes.**

- Were there impediments to evacuation? If so, where did the impediment occur on the evacuation route? Was the impediment on the evacuation route left in place for the remainder of the demonstration or was it removed?
- Were appropriate actions for impediments that affected evacuation routes identified?
- How were the resources to remove impediments to evacuation identified and coordinated? Was this done in a timely manner? What organizations assisted in impediment removal?

**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.**

- What key decision-makers were involved in the coordinated effort to re-route traffic?
- Who made the decision to re-route traffic?
- What coordination occurred among various OROs, such as local law enforcement, state law enforcement, National Guard, and/or state and/or local transportation departments?
- What coordination occurred to alert the public of the need to take an alternate route?
- How and when was the public alerted to take an alternate route?
- Were decisions made in coordination with all agencies (both internal and external) involved?
- Was the messaging coordinated and consistent?

**Establish procedures to control access to and monitor people and vehicles from the evacuated and restricted areas.**

- How did the ORO determine location of ACPs?
- How was the area identified (e.g., ropes, fences, gates, etc.)?
- What did the ORO do to control access to the restricted areas?
- Which agencies have the responsibility to establish procedures to control access to evacuated and restricted areas?

**Authorize reentry of individuals into the restricted areas.**

- What was the process to approve individuals to reenter the restricted areas?
- How were individuals authorized to reenter the restricted areas?
- What provisions were made to determine and control their exposure?
- How were these individuals tracked to ensure they returned out of the restricted areas?

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**Capability Target 5.4 – Traffic and Access Control (Continued)**

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**Establish exit procedures.**

- How were individuals, vehicles, and equipment monitored?
- What was the decision-making guidance for decontamination?

- What was the disposition of dosimeters, maintenance of the reentry radiation exposure records of dosimetry, and maintenance of emergency worker radiation exposure records?

#### **Exercise Specific Extent of Play**

1. *Traffic and access control will be demonstrated through interview with State and Local Law Enforcement at the State Emergency Operations Center (SEOC) and Local Emergency Operations Centers (LEOCs).*
2. *Traffic control assets will not be deployed to the field.*
3. *Out of Sequence evaluations with CT DOT-Norwich and CT State Police.*
4. *The exercise scenario will include traffic impediments for select towns within the EPZ. However, if scenario conditions do not cause a traffic impediment within a specific town, capability will be met through evaluator interviews at that specific location.*
5. *Reporting of traffic impediments to the SEOC and coordination with the JIS will be demonstrated-in selected towns and discussed in all others.*
6. *Two-mile perimeter traffic control around Millstone may differ from the Traffic Management Plan.*

*\*This capability target has been approved for re-demonstration during exercises.*

