



After Action Report

Millstone Power Station

Radiological Emergency Preparedness Program

Exercise Date: June 8-9, 2021

Published September 3, 2021



FEMA

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Executive Summary

On June 8-9, 2021 the Federal Emergency Management Agency (FEMA) Region I evaluated an exercise in the plume exposure pathway and ingestion exposure pathway emergency planning zones around the Millstone Power Station. The purpose of the exercise was to demonstrate and assess the level of state and local preparedness in responding to a radiological emergency. This exercise was held in accordance with FEMA's policies and guidance concerning the exercise of state and local radiological emergency response plans and procedures.

Prior exercises at this site were most recently conducted on March 20, 2018 (plume exposure pathway), August 16, 2016 (plume exposure pathway) and September 9, 2014 (plume exposure pathway with a hostile action-based scenario). The qualifying emergency preparedness exercise was conducted in 1982.

FEMA wishes to acknowledge the efforts of the many individuals who participated in this exercise. The various agencies, organizations, and units of government from the state and local jurisdictions within the States of Connecticut, Rhode Island and New York who participated in this exercise are listed elsewhere in this report.

Protecting the public's health and safety is the full-time job of some of the exercise participants and an additional assigned responsibility for others. Others have willingly sought this responsibility by volunteering to provide vital emergency services to their communities. The state and local organizations successfully demonstrated knowledge of their emergency response plans and procedures.

There were no Level 1 or Level 2 Findings, nor planning issues as a result of the June 8-9, 2021 evaluated exercise. There were no prior open Findings or planning issues.

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Section 1: Exercise Overview

1.1 Exercise Details

Exercise Name

Dominion Energy Nuclear Connecticut, Millstone Power Station

Type of Exercise

Modified Full Scale

Exercise Dates

June 8, 2021 - June 9, 2021

Program

United States Department of Homeland Security, Federal Emergency Management Agency, Radiological Emergency Preparedness Program

Scenario Type

Plume/Ingestion Pathway

Locations

See Sections 1.3, 3.2; Appendices A, B, C

Mission

Response

1.2 Exercise Planning Team Leadership

State of Connecticut

Department of Emergency Services and Public Protection

Division of Emergency Management and Homeland Security

Michael Caplet
Region 4 Coordinator
Acting Radiological Emergency Preparedness (REP) Program Supervisor

Gary Ruggerio
Master Exercise Practitioner

Leonard Nelson
Emergency Management Program Specialist, REP Planner

Gemma Fabris
Emergency Management Program Specialist, REP GIS, Equipment, Logistics

Melissa Conway
Emergency Management Program Specialist, REP Planner

State of Connecticut

Department of Energy and Environmental Protection

Jeffrey Semancik, Director
Radiation Division

Gary McCahill
Radiation Control Specialist

Michael Firsick
Radiation Control Specialist

State of Rhode Island

Emergency Management Agency

David Schnell
Preparedness Branch Chief

Patrick Fitzgerald
Exercise Coordinator

Bryan Greenwood
Radiological Technician

Christopher McGrath
Operations Support Branch Chief

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

Morris Sanders
Nuclear Emergency Preparedness Specialist IV

Daniel Casey
Nuclear Emergency Preparedness Specialist IV

Department of Homeland Security
Federal Emergency Management Agency, Region I

Ingrid Pierce
Regional Assistance Committee Chairperson

Helen LaForge
Technological Hazards Program Specialist

Taneeka Hollins
Technological Hazards Program Specialist

1.3 Participating Organizations

State Jurisdictions

State of Connecticut

State of Connecticut Department of Emergency Services and Public Protection
Division of Emergency Management Homeland Security
Connecticut State Police
State of Connecticut Department of Energy and Environmental Protection
Radiation Division
State of Connecticut Department of Public Health Laboratory
State of Connecticut Department of Transportation
State of Connecticut Department of Public Health
State of Connecticut Governor's Office

State of Rhode Island

Rhode Island Emergency Management Agency
Rhode Island Department of Environmental Management
Rhode Island National Guard 13th Civil Support Team
Rhode Island Department of Health
Rhode Island State Police
Rhode Island Governor's Office
Rhode Island Nuclear Science Center

Risk Jurisdictions

City of Groton

City of Groton Mayor
City of Groton Mayor's Office
City of Groton Police Department
City of Groton Fire Department
City of Groton Emergency Management
City of Groton Finance
City of Groton Public Works
City of Groton Business Administration
City of Groton Information Technology
City of Groton Parks and Recreation
City of Groton Utilities

City of New London

City of New London Public Works
City of New London Emergency Management
City of New London Fire Department
City of New London Information Technology Department
City of New London Office of the Mayor
City of New London Police Department
City of New London School Superintendent's Office
City of New London Senior Citizens Center

Hamlet of Fishers Island, NY

Fishers Island Emergency Management
Fishers Island Chief Executive Officer
Fishers Island Constables
Fishers Island Volunteer Fire Department
Fishers Island Emergency Medical Team
Fishers Island Communications Department
Fishers Island Radiological Department
Fishers Island School District
Fishers Island Utility Company
Fishers Island Ferry District
Fishers Island Volunteers

Southold Town Board
Southold Town Constables

Town of East Lyme

Town of East Lyme Emergency Management
Town of East Lyme Selectman
Town of East Lyme 911 Dispatcher
Town of East Lyme Health Department
Town of East Lyme Senior Services Department
Town of East Lyme Public Works
Town of East Lyme Board of Education
Town of East Lyme Fire Department
Town of East Lyme Police Department
Town of East Lyme Fire Department

Town of Groton

Town of Groton Emergency Management
Town of Groton Schools
Town of Groton Town Manager
Town of Groton Police
Town of Groton Police Department
Town of Groton Public Works
Town of Groton Parks and Recreation
Town of Groton Long Point Police Department
Town of Groton Long Point Volunteer Fire Department
Mystic Fire Department
Noank Fire District

Town of Ledyard

Town of Ledyard Emergency Management
Town of Ledyard Health Department
Town of Ledyard Human Services
Town of Ledyard Police Department
Town of Ledyard Public Works
Town of Ledyard Mayor
Town of Ledyard Public Schools
Town of Ledyard Fire Department
Town of Ledyard Communications
Gales Ferry Fire Department

Town of Lyme

Town of Lyme Emergency Management
Town of Lyme Fire Company
Town of Lyme Ambulance Association
Town of Lyme Public Works
Town of Lyme Selectman's Office
Town of Lyme Regional School District 18

Town of Montville

Town of Montville Mayor
Town of Montville Emergency Management
Town of Montville Police Department
Resident State Police, Montville Troop E

Town of Old Lyme

Town of Old Lyme Emergency Management
Town of Old Lyme Office of Fire Marshall
Town of Old Lyme Emergency Medical Services
Town of Old Lyme Chief Executive Officer/First Selectmen
Town of Old Lyme Volunteer Fire Department
Town of Old Lyme Radiological
Town of Old Lyme Volunteers

Town of Waterford

Town of Waterford Emergency Management
Town of Waterford Police Department
Town of Waterford Senior Services
Town of Waterford Public Safety
Town of Waterford Fire Department
Town of Waterford Fire Marshall's Office
Town of Waterford First Selectmen
Town of Waterford Recreation and Parks
Town of Waterford Public Works
Town of Waterford 911 Dispatch/Communications
Town of Waterford RACES
Town of Waterford Day Cares

Support Jurisdictions (CT)

Town of Stonington

Town of Stonington Emergency Management

Support Jurisdictions (RI)

Hopkins Hill Fire Department
Kingston Fire District

Private Organizations

Amateur Radio Emergency Service (ARES)
Dominion Energy Nuclear Connecticut, Millstone Power Station
General Dynamics, Electric Boat Division
2-1-1 United Way

Federal Jurisdictions

Federal Emergency Management Agency
Nuclear Regulatory Commission
Radio Amateur Civil Emergency Service
United States Coast Guard
Radiological Operations Support Specialist Team: Vermont Department of Health, Iowa Department of Public Health, Lahey Hospital and Medical Center
Federal Radiological Monitor and Assessment Center
Advisory Team (A-Team) on Environmental Health: A-Team: Food and Drug Administration, Center for Disease Control, Environmental Protection Agency, United States Department of Agriculture

Section 2: Exercise Design Summary**2.1 Exercise Purpose and Design**

The purpose of this report is to present the results and findings on the performance of the offsite response organizations (ORO) during a simulated radiological emergency. FEMA Region I evaluated the June 8-9, 2021 exercise to assess the capabilities of state and local emergency preparedness organizations in implementing their Radiological Emergency Response Plans (RERPs) and procedures to protect the public health and safety during a radiological emergency involving Millstone Power Station.

2.2 Exercise Objectives, Capabilities and Activities

The exercise objectives, capabilities, and activities are noted in the extent of play agreement, included in Appendix D, Exercise Plan

2.3 Exercise Scenario

The exercise scenario was developed to evaluate the exercise participants' response to a radiological emergency.

Section 3: Analysis of Capabilities**3.1 Exercise Evaluation and Results**

This section contains the results and findings of the evaluation of all jurisdictions and functional entities that participated in the June 8-9, 2021, Millstone Power Station evaluated exercise.

Each jurisdiction and functional entity was evaluated based on the demonstration of core capabilities, capability targets, critical tasks, and the underlying Radiological Emergency Preparedness criteria as delineated in the Federal Emergency Management Agency

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

- Met (M): No Findings assessed and no unresolved Findings from prior exercises.
- Level 1 (L1) Finding: An observed or identified inadequacy of organizational performance in an exercise that could cause a determination that offsite emergency preparedness is not adequate to provide reasonable assurance that appropriate protective measures can be taken in the event of a radiological emergency to protect the health and safety of the public living in the vicinity of a Nuclear Power Plant (NPP).
- Level 2 (L2) Finding: An observed or identified inadequacy of organizational performance in an exercise that is not considered, by itself, to adversely impact public health and safety.
- Plan (P) Issue: An observed or identified inadequacy in the offsite response organizations' (ORO's) emergency plan/implementing procedures, rather than that of the ORO's performance.
- N: Not demonstrated

Note: Blank fields indicate criteria not evaluated at that location during the June 8-9, 2021 exercise dates.

3.2 Summary Results of Exercise Evaluation

The matrix presented in the tables on the following pages presents the status of all exercise evaluation area criteria that were scheduled for demonstration during the exercise.

DATE: 06/08/2021 SITE: Millstone Power Station - CT M: Met, L1: Level 1 Issue, L2: Level 2 Issue, P: Plan Issue, N: Not Demonstrated					
	Mobilization	Facilities	Direction and Control	Communications Equipment	Equipment and Supplies to Support Operations
Emergency Operations Management	1a1	1b1	1c1	1d1	1e1
State of Rhode Island Forward Operations Center (FOC)		M			
State of Rhode Island Field Sampling Team #1 - Field Sampling Team	M			M	
State of Rhode Island Field Sampling Team #2 - Field Sampling Team	M			M	
East Lyme, Local EOC			M		
Groton City, Local EOC			M		
Groton Town, Local EOC			M		

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Hamlet of Fishers Island, Local EOC			M		
Ledyard, Local EOC			M		
Lyme, Local EOC			M		
Montville, Local EOC			M		
New London, Local EOC			M		
Old Lyme, Local EOC			M		
Waterford, Local EOC			M		
Stonington, Support Community EOC			M		

<div>DATE: 06/08/2021</div> <div>SITE: Millstone Power Station - CT</div> <div>M: Met, L1: Level 1 Issue, L2: Level 2 Issue, P: Plan Issue, N: Not Demonstrated</div>	Emergency Worker Exposure Control	Dose Assessment & PARs & PADs for the Emergency Event		PADs for the Protection of persons with disabilities and access/functional needs	Radiological Assessment and Decision-making for the Ingestion Exposure Pathway	Radiological Assessment & Decision-making Concerning Post-Plume Phase Relocation, Reentry, and Return
Protective Action Decision-Making	2a1	2b1	2b2	2c1	2d1	2e1
State of Connecticut, State EOC				M		
State of Rhode Island, State EOC					M	

DATE: 06/08/2021 SITE: Millstone Power Station - CT M: Met, L1: Level 1 Issue, L2: Level 2 Issue, P: Plan Issue, N: Not Demonstrated	Implementation of Emergency Worker Exposure Control	Implementation of KI Decision for Institutionalized Individuals and the Public	Implementation of Protective Actions for persons with disabilities and access/functional needs		Implementation of Traffic and Access Control		Implementation of Ingestion Exposure Pathway Decisions		Implementation of Post-Plume Phase Relocation, Reentry, and Return Decisions
Protective Action Implementation	3a1	3b1	3c1	3c2	3d1	3d2	3e1	3e2	3f1
State of Connecticut Department of Transportation	M								
State of Connecticut State Police	M								
State of Rhode Island Emergency Management Agency					M		M		
State of Rhode Island Field Sampling Team #1	M								
State of Rhode Island Field Sampling Team #2	M								
East Lyme, Local EOC	M				M	M			
Groton City, Local EOC	M				M	M			
Groton Town, Local EOC	M				M	M			
Hamlet of Fishers Island, Local EOC	M				M	M			
Ledyard, Local EOC	M				M	M			
Lyme, Local EOC	M				M	M			
Montville, Local EOC	M				M	M			
New London, Local EOC	M				M	M			
Old Lyme, Local EOC	M				M	M			
Waterford, Local EOC	M				M	M			

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<p style="text-align: center;">DATE: 06/08/2021 SITE: Millstone Power Station - CT</p> <p style="text-align: center;">M: Met, L1: Level 1 Issue, L2: Level 2 Issue, P: Plan Issue, N: Not Demonstrated</p>	Plume Phase Field Measurement and Analyses			Post Plume Phase Field Measurements and Sampling		Laboratory Operations
Field Measurements and Analyses						
	4a1	4a2	4a3	4b1	4c1	
State of Rhode Island Field Sampling Team #1				M		
State of Rhode Island Field Sampling Team #2				M		

<p style="text-align: center;">DATE: 06/08/2021 SITE: Millstone Power Station - CT</p> <p style="text-align: center;">M: Met, L1: Level 1 Issue, L2: Level 2 Issue, P: Plan Issue, N: Not Demonstrated</p>	Activation of the Prompt Alert and Notification System				Emergency Information and Instructions for the Public and the Media
Emergency Notification and Public Information					
	5a1	5a2	5a3	5a4	5b1
East Lyme, Local EOC					M
Groton City, Local EOC			M		M
Groton Town, Local EOC					M
Hamlet of Fishers Island, Local EOC					M
Ledyard, Local EOC					M
Lyme, Local EOC					M
Montville, Local EOC			M		M
New London, Local EOC					M
Old Lyme, Local EOC					M
Waterford, Local EOC			M		M

<p style="text-align: center;">DATE: 06/08/2021 SITE: Millstone Power Station - CT</p> <p style="text-align: center;">M: Met, L1: Level 1 Issue, L2: Level 2 Issue, P: Plan Issue, N: Not Demonstrated</p>	Monitoring, Decontamination, and Registration of Evacuees	Monitoring and Decontamination of Emergency Workers and their Equipment and Vehicles	Temporary Care of Evacuees	Transportation and Treatment of Contaminated Injured Individuals
Emergency Notification and Public Information				
	6a1	6b1	6c1	6d1
State of Rhode Island Nuclear Science Center		M		

3.3 Criteria Evaluation Summaries

3.3.1 State of Connecticut Jurisdictions

3.3.1.1 State Emergency Operations Center

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

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

3.3.1.2 State Police Montville Troop E

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

- a. MET: 3.a.1
- b. LEVEL 1 FINDING: None
- c. LEVEL 2 FINDING: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.1.3 Department of Transportation

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

- a. MET: 3.a.1
- b. LEVEL 1 FINDING: None
- c. LEVEL 2 FINDING: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.1 State of Rhode Island Jurisdictions

3.3.1.1 State Emergency Operations Center

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

- a. MET: 2.d.1, 3.d.1, 3.e.1
- b. LEVEL 1 FINDING: None
- c. LEVEL 2 FINDING: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PLAN ISSUES: None

3.3.1.2 Department of Health

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

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

3.3.1.3 Field Sampling Team 1

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

- a. MET: 1.a.1, 1.d.1, 3.a.1, 4.b.1
- b. LEVEL 1 FINDING: None
- c. LEVEL 2 FINDING: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PLAN ISSUES: None

3.3.1.4 Field Sampling Team 2

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

- a. MET: 1.a.1, 1.d.1, 3.a.1, 4.b.1

- b. LEVEL 1 FINDING: None
- c. LEVEL 2 FINDING: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PLAN ISSUES: None

3.3.1.5 Forward Operations Center

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

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

3.3.1.6 Nuclear Science Center

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

- a. MET: 6.b.1
- b. LEVEL 1 FINDING: None
- c. LEVEL 2 FINDING: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PLAN ISSUES: None

3.3.2 Risk Jurisdictions

3.3.3.1 East Lyme Local EOC

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

- a. MET: 1.c.1, 3.a.1, 3.d.1, 3.d.2, 5.b.1
- b. LEVEL 1 FINDING: None
- c. LEVEL 2 FINDING: None
- d. PLAN ISSUES: None

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

3.3.3.2 Hamlet of Fishers Island, NY Local EOC

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

- a. MET: 1.c.1, 3.a.1, 3.d.1, 3.d.2, 5.b.1
- b. LEVEL 1 FINDING: None
- c. LEVEL 2 FINDING: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.3.3 City of Groton Local EOC

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

- a. MET: 1.c.1, 3.a.1, 3.d.1, 3.d.2, 5.a.3, 5.b.1
- b. LEVEL 1 FINDING: None
- c. LEVEL 2 FINDING: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.3.4 Town of Groton Local EOC

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

- a. MET: 1.c.1, 3.a.1, 3.d.1, 3.d.2, 5.b.1
- b. LEVEL 1 FINDING: None
- c. LEVEL 2 FINDING: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.3.5 Ledyard Local EOC

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

- a. MET: 1.c.1, 3.a.1, 3.d.1, 3.d.2, 5.b.1
- b. LEVEL 1 FINDING: None
- c. LEVEL 2 FINDING: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.3.6 Lyme Local EOC

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

- a. MET: 1.c.1, 3.a.1, 3.d.1, 3.d.2, 5.b.1
- b. LEVEL 1 FINDING: None
- c. LEVEL 2 FINDING: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.3.7 Montville Local EOC

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

- a. MET: 1.c.1, 3.a.1, 3.d.1, 3.d.2, 5.a.3, 5.b.1
- b. LEVEL 1 FINDING: None
- c. LEVEL 2 FINDING: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.3.8 New London Local EOC

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

- a. MET: 1.c.1, 3.a.1, 3.d.1, 3.d.2, 5.b.1
- b. LEVEL 1 FINDING: None
- c. LEVEL 2 FINDING: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None

- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.3.9 Old Lyme Local EOC

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

- a. MET: 1.c.1, 3.a.1, 3.d.1, 3.d.2, 5.b.1
- b. LEVEL 1 FINDING: None
- c. LEVEL 2 FINDING: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.3.10 Waterford Local EOC

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

- a. MET: 1.c.1, 3.a.1, 3.d.1, 3.d.2, 5.a.3, 5.b.1
- b. LEVEL 1 FINDING: None
- c. LEVEL 2 FINDING: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.4 Support Jurisdictions

3.3.4.1 Stonington Support EOC

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

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

Section 4: Conclusion

The State and local organizations demonstrated knowledge of their emergency response plans and procedures and adequately implemented them.

There were no Level 1 or Level 2 Findings or planning issues as a result of the June 8-9, 2021 evaluated exercise. There were no open Findings or planning issues.

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Appendix A: Exercise Timeline

Emergency Classification Level or Event	Time Utility Declared	Time That Notification was Received or Action Was Taken									
		East Lyme	Fishers Island	Groton City	Groton Town	Ledyard	Lyme	Montville	New London	Old Lyme	Waterford
Unusual Event	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Alert	0820	0825	0820	0827	0825	0825	0826	0828	0829	0829	0824
Site Area Emergency	0910	0915	0915	0918	0915	0915	0915	0922	0914	0921	0914
General Emergency	0950	0956	0955	0957	0955	0955	0956	0955	0954	0959	0954
Simulated Rad. Release Started	0914	0915	0915	0957	0915	0915	0910	1030	0954	0921	0914
Simulated Rad. Release Terminated	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Facility Declared Operational		0930	0838	0856	0854	0847	0835	0857	0910	0830	0840
Governor Declared State of Emergency		0957	0965	0950	0952	0958	0939	0958	0939	0951	0958
Exercise Terminated		1210	1200	1201	1201	1207	1202	1211	1201	1210	1208
Early Precautionary Actions:											
Close parks, school activities, camps, day cares, early dismissal		0957	0955	0922	0955	0950	0955	0957	0847	0955	0954
Restrict rail traffic		0957	0955	0922	0955	0950	0955	0957	0950	1040	0954

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Restrict air space	0957	0955	0922	0955	0950	0955	0957	0950	1040	0954
Shelter livestock, stored feed & water, implement traffic plan	0957	0955	0957	0955	0950	0955	0957	0950	0955	0954
Siren "Heads-up" Decision	0958	0955	0957	0955	0950	0957	1000	0957	1004	0954
Siren "Heads-up" Activation	1004	1010	1004	0955	1008	1002	1009	1004	1005	1002
1 st A&N Decision	1049	1100	1058	1053	1052	1045	1035	1058	1045	1048
Siren Activation	1055	1115	1104	1101	1058	1055	1045	1104	1055	1055
1 st EAS Message	1058	1118	1107	1104	1101	1058	1048	1107	1108	1101
2 nd A&N Decision*	1200	-	1147	-	-	1147	-	1147	1145	-
Siren Activation*	n/a	n/a	1156	1200	n/a	1159	n/a	n/a	n/a	n/a
2 nd EAS Message *	-	-	1157	-	-	-	-	-	-	-
KI Administration Decision: EW advised to take KI	1040	1030	1045	1045	1030	1045	1040	1045	1040	1048
General Public advised to take KI	1040	1030	1045	1045	1030	1045	1040	1045	1040	1048
EW advised NOT to take KI	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
General Public advised NOT to take KI	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
* Some locations did not receive 2 nd A&N decision/siren/EAS due to end of exercise.										

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Appendix B: Exercise Key Leaders and Evaluators

Regional Assistance Committee (RAC) Chair: Ingrid Pierce

Site Specialist: Helen LaForge, Team Lead (CT), Taneeka Hollins, Team Lead (RI)

Location	Evaluator	Criteria*
State of Connecticut (CT)		
CT State EOC	Taneeka Hollins	2.c.1
CT 2-1-1 United Way	Ingrid Pierce	5.b.1
CT Dept of Transportation	Helen LaForge	3.a.1
CT State Police	Helen LaForge	3.a.1
Risk Communities (CT)		
East Lyme, Local EOC	John Rice	1.c.1, 3.a.1, 3.d.1, 3.d.2, 5.b.1
Groton City, Local EOC	Lisa Rink	1.c.1, 3.a.1, 3.d.1, 3.d.2, 5.a.3, 5.b.1
Groton Town, Local EOC	Bradley Dekorte	1.c.1, 3.a.1, 3.d.1, 3.d.2, 5.b.1
Hamlet of Fishers Island, Local EOC	Miriam Weston	1.c.1, 3.a.1, 3.d.1, 3.d.2, 5.b.1
Ledyard, Local EOC	Michele Sturman	1.c.1, 3.a.1, 3.d.1, 3.d.2, 5.a.3, 5.b.1
Lyme, Local EOC	Brian Kennedy	1.c.1, 3.a.1, 3.d.1, 3.d.2, 5.b.1
Montville Local EOC	Andrew Chancellor	1.c.1, 3.a.1, 3.d.1, 3.d.2, 5.b.1
New London, Local EOC	Linda Gee	1.c.1, 3.a.1, 3.d.1, 3.d.2, 5.b.1
Old Lyme, Local EOC	Barbara Thomas	1.c.1, 3.a.1, 3.d.1, 3.d.2, 5.b.1
Waterford, Local EOC	Brian Hasemann	1.c.1, 3.a.1, 3.d.1, 3.d.2, 5.a.3, 5.b.1
Stonington Support Community EOC	Helen LaForge	1.c.1
State of Rhode Island (RI)		
RI State EOC	Michael Howe Taneeka Hollins	2.d.1, 3.e.1 3.d.1
RI Department of Health	Michael Howe	2.d.1
RI Nuclear Science Center	Kent Tosch Reginald Rodgerrs	6.b.1 6.b.1
RI Forward Operations Center	Kent Tosch	1.b.1
RI Field Sampling Team 1	Kent Tosch	1.a.1, 1.d.1, 3.a.1, 4.b.1
RI Field Sampling Team 2	Reginald Rodgers	1.a.1, 1.d.1, 3.a.1, 4.b.1

* Criteria descriptions noted in the Extent of Play - Appendix D

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Appendix C: Additional Criteria Demonstrated during the Exercise Cycle

The criteria in this section were successfully demonstrated via alternate assessment during the exercise cycle through the following activities: CT Millstone Ingestion Pathway Rehearsal Drill and TTX(October 9-10, 2019), Rhode Island Emergency Management Agency TTX (October 24, 2019), virtual Out of Sequence evaluation, Annual Letters of Certification, Staff Assistance Visits, real- world COVID-19 Response, training, and supporting documentation.

Radiological Emergency Preparedness Program

After Action Report

Millstone Power Station - CT

Location	Criteria*
State of Connecticut (CT)	
State EOC	1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.2, 2.d.1, 2.e.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 3.e.1, 3.e.2, 3.f.1
CT DEMHS Region 4	1.a.1, 1.c.1, 1.d.1, 1.e.1, 3.c.1, 3.c.2, 5.a.1
CT Joint Information Center	1.a.1, 1.c.1, 1.d.1, 5.a.1
CT DEEP	1.a.1, 1.b.1, 1.d.1, 1.e.1, 2.a.1, 2.b.1, 4.a.2, 4.b.1
CT Department of Transportation	1.a.1, 1.d.1, 1.e.1
CT State Police	1.a.1, 1.d.1, 1.e.1
Millstone Emergency Operation Center (DEEP Liaison)	1.d.1, 1.e.1, 2.b.1
CT DEEP Field Teams Alpha	1.a.1, 1.d.1, 1.e.1, 3.a.1, 4.a.3
CT DEEP Field Teams Bravo	1.a.1, 1.d.1, 1.e.1, 3.a.1, 4.a.3
CT DEEP Field Sampling Team 1	1.a.1, 1.d.1, 1.e.1, 3.a.1, 4.b.1
CT DEEP Field Sampling Team 2	1.a.1, 1.d.1, 1.e.1, 3.a.1, 4.b.1
CT Department of Agriculture (DOA) Field Sampling Team 1	1.a.1, 1.d.1, 1.e.1, 3.a.1, 4.b.1
DOA Field Sampling Team 2	1.a.1, 1.d.1, 1.e.1, 3.a.1, 4.b.1
Department of Public Health (DPH) Field Sampling Team 3	1.a.1, 1.d.1, 1.e.1, 3.a.1, 4.b.1
DPH Field Sampling Team 4	1.a.1, 1.d.1, 1.e.1, 3.a.1, 4.b.1
CT Department of Consumer Protection Sampling Team 5	1.a.1, 1.d.1, 1.e.1, 3.a.1, 4.b.1
Risk Communities (CT)	
East Lyme, Local EOC	1.a.1, 1.d.1, 1.e.1, 3.c.1, 3.c.2
Groton City, Local EOC	1.a.1, 1.d.1, 1.e.1, 3.c.1, 3.c.2
Groton Town, Local EOC	1.a.1, 1.d.1, 1.e.1, 3.c.1, 3.c.2
Hamlet of Fishers Island, Local EOC	1.a.1, 1.d.1, 1.e.1, 3.c.1, 3.c.2
Ledyard, Local EOC	1.a.1, 1.d.1, 1.e.1, 3.c.1, 3.c.2
Lyme, Local EOC	1.a.1, 1.d.1, 1.e.1, 3.c.1, 3.c.2
Montville Local EOC	1.a.1, 1.d.1, 1.e.1, 3.c.1, 3.c.2
New London, Local EOC	1.a.1, 1.d.1, 1.e.1, 3.c.1, 3.c.2
Old Lyme, Local EOC	1.a.1, 1.d.1, 1.e.1, 3.c.1, 3.c.2
Waterford, Local EOC	1.a.1, 1.d.1, 1.e.1, 3.c.1, 3.c.2
Stonington Support Community EOC	1.a.1, 1.d.1, 1.e.1
Fishers Island Schools	3.c.2
Groton Town Long Term Care Facilities	3.c.1
Groton Town Schools	3.c.2
Montville Schools	3.c.2
Waterford Childcare Facilities	3.c.2

State of Rhode Island (RI)	
RI State EOC	1.a.1, 1.b.1, 1.c.1, 1.e.1, 3.e.2
RI Department of Health, DOC	1.b.1
RI Forward Operations Center	1.e.1
RI Field Sampling Teams 1 and 2	1.e.1

* Criteria descriptions noted in the Extent of Play - Appendix D

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Appendix D: Extent of Play Agreements

- **State of Connecticut Extent of Play Agreement**
- **State of Rhode Island Extent of Play Agreement**

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APPENDIX B: Extent of Play Agreement - Assessment Areas

ASSESSMENT AREA 1: EMERGENCY OPERATIONS MANAGEMENT Sub-element 1.a – Mobilization

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have the capability to alert, notify, and mobilize emergency personnel, and activate and staff emergency facilities.

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

Core Capabilities Crosswalk: Operational Communications

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a biennial exercise, an actual event, out of sequence evaluation, or by means of drills conducted at any time.

Responsible OROs must demonstrate the capability to receive notification of an incident from the licensee; verify the notification, contact, alert, and mobilize key emergency personnel in a timely manner and demonstrate the ability to maintain and staff 24-hour operations. 24-hour operations can be demonstrated during the exercise via rosters or shift changes or otherwise in an actual activation. Local and/or Tribal responders must demonstrate the ability to receive and/or initiate notification to the licensees or other respective emergency management organizations of an incident in a timely manner when they receive information from the licensee or alternate sources. Responsible OROs must demonstrate the activation of facilities for immediate use by mobilized personnel upon their arrival. Activation of facilities and staff, including those associated with the ICS, must be completed in accordance with ORO plans/procedures. The location and contact information for facilities included in the incident command must be available to all appropriate responding agencies and the NPP after these facilities have been activated.

Pre-positioning of emergency personnel is appropriate, in accordance with the Extent-of-Play Agreement, at those facilities located beyond a normal commuting distance from the individual's duty location or residence. This includes the staggered release of resources from an assembly area. Additionally, pre-positioning of staff for out-of-sequence demonstrations may be used in accordance with the Extent-of-Play Agreement.

The REP program does not evaluate Incident Command Post tactical operations (e.g., Law Enforcement hostile action suppressions techniques), only coordination among the incident command, the utility, and all appropriate OROs, pursuant to plans/procedures. Initial law enforcement, fire service, HAZMAT, and emergency medical response to the NPP site may impact the ability to staff REP functions. The ability to identify and request additional resources or identify compensatory measures must be demonstrated. Exercises must also address the role of mutual aid in the incident, as appropriate. An integral part of the response to an HAB scenario at an NPP may also be within the auspices of the Federal Government (e.g., FBI, NRC, or DHS). Protocols for requesting Federal, State, local, and Tribal law enforcement support must be demonstrated, as appropriate. Any resources must be on the ORO's mobilization list so they can be contacted during an incident, if needed. All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

Connecticut Radiological Emergency Preparedness Program
Division of Emergency Management and Homeland Security
State of Connecticut Department of Emergency Services and Public Protection

Exercise Plan

Millstone Station 2021 Ingestion Pathway Exercise

Sub-element 1.a – Mobilization (Continued)

Exercise Specific Extent of Play:

1. *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 air sampling.*
2. *24-hour staffing capability: a 24-hour roster of the SEOC will be shown to an evaluator.*
3. *Demonstration of Fishers Island evacuation support took place on October 27, 2015.*
4. *Supporting agencies may be pre-staged to reduce the response time during the rehearsal, but there will be no pre-staging during the evaluated exercise and personnel will respond as notified.*
5. *Transportation Staging Area was demonstrated out of sequence on April 6, 2018.*

This criterion was successfully demonstrated and documented via alternate assessment which included the following activities: CT Millstone Ingestion Pathway Rehearsal Drill and TTX (October 9-10, 2019), RIEMA TTX (October 24, 2019), Annual Letters of Certification, Staff Assistance Visits, COVID-19 Response, training, and supporting documentation.

Exercise Plan

Millstone Station 2021 Ingestion Pathway Exercise

Sub-element 1.b – Facilities

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have facilities to support the emergency response.

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

Core Capabilities Crosswalk: NA

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a biennial exercise, an actual event, SAVs, or by out-of-sequence evaluations.

Responsible OROs must demonstrate, no less than every eight years, the availability of facilities to support accomplishment of emergency operations. This includes all alternative and backup facilities. Evaluations are typically performed for EOCs and JICs, as well as other facilities such as reception/relocation centers. Some of the areas evaluated within the facilities are adequate space, furnishings, lighting, restrooms, ventilation, access to backup power, and/or alternate facility, if required to support operations. Radio stations, laboratories, initial warning points and hospitals are not evaluated under 1.b.1.

In addition, facilities will be evaluated for this criterion during the first biennial exercise after any new or substantial changes in structure, equipment, or mission that affect key capabilities, as outlined in respective emergency plans/procedures. A substantial change is one that has a direct effect or impact on emergency response operations performed in those facilities. Examples of substantial changes include modifying the size or configuration of an emergency operations center, adding more function to a center, or changing the equipment available for use in a center.

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

Exercise Specific Extent of Play

1. *State Emergency Operations Center Dose Assessment Area (2020).*
2. *Brainard Field (269 Maxim Rd, Hartford CT. 06114) Field Team Staging Area.*
3. *Any significant updates to ORO Facilities.*
4. *DPH lab upgrades if appropriate.*

This criterion was successfully demonstrated and documented via alternate assessment which included the following activities: CT Millstone Ingestion Pathway Rehearsal Drill and TTX (October 9-10, 2019), RIEMA TTX (October 24, 2019), Annual Letters of Certification, Staff Assistance Visits, COVID-19 Response, training, and supporting documentation.

Exercise Plan

Millstone Station 2021 Ingestion Pathway Exercise

Sub-element 1.c – Direction and Control

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have the capability to control their overall response to an emergency.

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

Core Capabilities Crosswalk: Operational Communications, Operational Coordination, Situational Assessment

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished in a biennial or tabletop exercise.

Leadership personnel must demonstrate the ability to carry out the essential management functions of the response effort (e.g., keeping staff informed through periodic briefings and/or other means, coordinating with other OROs, and ensuring completion of requirements and requests.) Leadership must demonstrate the ability to prioritize resource tasking and replace/supplement resources (e.g., through MOUs or other agreements) when faced with competing demands for finite resources. Any resources identified through LOA/MOUs must be on the ORO's mobilization list so they may be contacted during an incident if needed.

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

Exercise Specific Extent of Play

1. *During exercise, DEMHS will follow the State Response Framework (SRF) (rev. July 2019) for position titles, and the revised checklists within the REP plan (Rev September 2019).*

Exercise Plan

Millstone Station 2021 Ingestion Pathway Exercise

Sub-element 1.d – Communications Equipment

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs establish and operate reliable primary and backup communication systems to ensure communications with key emergency personnel at locations such as contiguous governments within the EPZ, Federal emergency response organizations, the licensee and its facilities, EOCs, Incident Command Posts, and FMTs.

Criterion 1.d.1: At least two communication systems are available, at least one operates properly, and communication links are established and maintained with appropriate locations.

Communications capabilities are managed in support of emergency operations. (NUREG-0654/FEMA-REP-1, F.1, 2)

Core Capabilities Crosswalk: Operational Communications

Assessment/Extent of Play

Assessment of this Demonstration Criterion is accomplished initially in a baseline evaluation and subsequently in periodic testing and drills. System familiarity and use must be demonstrated as applicable in biennial or tabletop exercises, or if their use would be required, during an actual event.

ORO must demonstrate that a primary system and at least one backup system are fully functional at all times. Communications systems are maintained and tested on a recurring basis throughout the assessment period and system status is available to all operators. Periodic test results and corrective actions are maintained on a real time basis. If a communications system or systems are not functional, but exercise performance is not affected, no exercise issue will be assessed.

Communications equipment and procedures for facilities and field units are used as needed for transmission and receipt of exercise messages. All facilities, FMTs, and incident command must have the capability to access at least one communication system that is independent of the commercial telephone system. Responsible OROs must demonstrate the capability to manage the communication systems and ensure that all message traffic is handled without delays that might disrupt emergency operations. OROs must ensure that a coordinated communication link for fixed and mobile medical support facilities exists. Exercise scenarios may require the failure of a communication system and use of an alternate system, as negotiated in the Extent-of-Play Agreement.

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

Exercise Specific Extent of Play

1. *WebEOC 8.6 is a new version of WebEOC. This version allows for more communication and coordination that will be utilized and is incorporated into the State Response Framework, specifically the REP plans and procedures. WebEOC will be utilized during the rehearsal and exercise and subject to evaluation.*

This criterion was successfully demonstrated and documented via alternate assessment which included the following activities: CT Millstone Ingestion Pathway Rehearsal Drill and BTTX (October 9-10, 2019), RIEMA BTTX (October 24, 2019), Annual Letters of Certification, Staff Assistance Visits, COVID-19 Response, training, and supporting documentation.

Exercise Plan

Millstone Station 2021 Ingestion Pathway Exercise

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

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have emergency equipment and supplies adequate to support the emergency response.

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

Core Capabilities Crosswalk: Environmental Response/Health and Safety, Mass Care Services, Public and Private Services and Resources, and Public Health and Medical Services

Assessment/Extent of Play

Assessment of this Demonstration Criterion is accomplished primarily through a baseline evaluation and subsequent periodic inspections.

A particular facility's equipment and supplies must be sufficient and consistent with that facility's assigned role in the ORO's emergency operations plans. Use of maps and other displays is encouraged. For non-facility-based operations, the equipment and supplies must be sufficient and consistent with the assigned operational role. At locations where traffic and access control personnel are deployed, appropriate equipment (e.g., vehicles, barriers, traffic cones, and signs) must be available, or their availability described.

Specific equipment and supplies that must be demonstrated under this criterion include KI inventories, dosimetry, and monitoring equipment, as follows:

KI: Responsible OROs must demonstrate the capability to maintain inventories of KI sufficient for use by: (1) emergency workers; (2) institutionalized individuals, as indicated in capacity lists for facilities; and (3) where stipulated by the plans/procedures, members of the general public (including transients) within the plume pathway EPZ. In addition, OROs must demonstrate provisions to make KI available to specialized response teams (e.g., civil support team, Special Weapons and Tactics Teams, urban search and rescue, bomb squads, HAZMAT, or other ancillary groups) as identified in plans/procedures. The plans/procedures must include the forms to be used for documenting emergency worker ingestion of KI, as well as a mechanism for identifying emergency workers that have declined KI in advance. Consider carefully the placement of emergency workers that have declined KI in advance. RO quantities of dosimetry and KI available and storage locations(s) will be confirmed by physical inspection at the storage location(s) or through documentation of current inventory submitted during the exercise, provided in the ALC submission, and/or verified during an SAV. Available supplies of KI must be within the expiration date indicated on KI bottles or blister packs. As an alternative, the ORO may produce a letter from a certified private or state laboratory indicating that the KI supply remains potent, in accordance with U.S. Pharmacopoeia standards.

Dosimetry: Sufficient quantities of appropriate direct-reading and permanent record dosimetry and dosimeter chargers must be available for issuance to all emergency workers who will be dispatched to perform an ORO mission. In addition, OROs must demonstrate provisions to make dosimetry available to specialized response teams (e.g., Civil Support Team, Special Weapons and Tactics Teams, urban search and rescue, bomb squads, HAZMAT, or other ancillary groups) as identified in plans/procedures. Appropriate direct-reading dosimetry must allow an individual(s) to read the administrative reporting limits and maximum exposure limits contained in the ORO's plans/procedures. Direct-reading dosimeters must be zeroed or operationally checked prior to issuance. The dosimeters must be inspected for electrical leakage at least annually and replaced when necessary. Civil Defense Victoreen Model 138s (CD V-138s) (0-200 mR), due to their documented history of electrical leakage problems, must be inspected for electrical leakage at least quarterly and replaced when necessary.

Exercise Plan

Millstone Station 2021 Ingestion Pathway Exercise

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

This leakage testing will be verified during the exercise, through documentation submitted in the ALC and/or through an SAV. Operational checks and testing of electronic dosimeters must be in accordance with the manufacturer's instructions and be verified during the exercise, through documentation submitted in the ALC and/or through an SAV.

Monitoring Instruments: All instruments must be inspected, inventoried, and operationally checked before each use. Instruments must be calibrated in accordance with the manufacturer's recommendations. Unmodified CDV-700 series instruments and other instruments without a manufacturer's recommendation must be calibrated annually. Modified CDV-700 instruments must be calibrated in accordance with the recommendation of the modification manufacturer. A label indicating such calibration must be on each instrument or calibrated frequency can be verified by other means. In addition, instruments being used to measure activity must have a sticker-affixed to their sides indicating the effective range of the readings. The range of readings documentation specifies the acceptable range of readings that the meter should indicate when it is response-checked using a standard test source.

For FMTs, the instruments must be capable of measuring gamma exposure rates and detecting beta radiation. These instruments must be capable of measuring a range of activity and exposure, including radiological protection/exposure control of team members and detection of activity on air sample collection media, consistent with the intended use of the instrument and the ORO's plans/procedures. An appropriate radioactive check source must be used to verify proper operational response for each low-range radiation measurement instrument (less than 1R/hr) and for high-range instruments when available.

If a source is not available for a high-range instrument, a procedure must exist to operationally test the instrument before entering an area where only a high-range instrument can make useful readings. In areas where portal monitors are used, the OROs must set up and operationally check the monitor(s). The monitor(s) must conform to the standards set forth in the *Contamination Monitoring Standard for a Portal Monitor Used for Emergency Response*, FEMA-REP-21 (March 1995) or in accordance with the manufacturer's recommendations.

Mutual Aid Resources: If the incoming resources arrive with their own equipment (i.e., monitors and/or dosimetry), they will be evaluated by REP Program Standards. FEMA will not inventory equipment that is not part of the REP Program. If an agency has a defined role in the REP Plan, they are subject to the planning process and standards, as well as the guidance of this manual. All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

Exercise Specific Extent of Play:

1. DEEP field team kits are inventoried quarterly. FEMA will observe this quarterly inventory out of sequence of the exercise, date (60 days before to 30 days after exercise) to be determined between DEEP, DEMHS and FEMA.
2. KI will be inventoried during the plume phase.
3. Teletrex kits will be inventoried out of sequence during service checks

**This criterion had been approved for re-demonstration of performance only; actual equipment cannot be re-demonstrated.*

This criterion was successfully demonstrated and documented via alternate assessment which included the following activities: CT Millstone Ingestion Pathway Rehearsal Drill and TTX (October 9-10, 2019), RIEMA TTX (October 24, 2019), Annual Letters of Certification, Staff Assistance Visits, COVID-19 Response, training, and supporting documentation.

ASSESSMENT AREA 2: PROTECTIVE ACTION DECISION-MAKING

Sub-element 2.a – Emergency Worker Exposure Control

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have the capability to assess and control the radiation exposure received by emergency workers and have a decision chain in place, as specified in the ORO's plans/procedures, to authorize emergency worker exposure limits to be exceeded for specific missions. Radiation exposure limits for emergency workers are the recommended accumulated dose limits or exposure rates that emergency workers may be permitted to incur during an emergency. These limits include any pre-established administrative reporting limits (that take into consideration TEDE or organ-specific limits) identified in the ORO's plans/procedures.

Criterion 2.a.1: OROs use a decision-making process, considering relevant factors and appropriate coordination, to ensure that an exposure control system, including the use of KI, is in place for emergency workers, including provisions to authorize radiation exposure in excess of administrative limits or protective action guides. (NUREG-0654/FEMA-REP-1, C.6; f; K.3.a; K.4)

Core Capabilities Crosswalk: Environmental Response/Health Safety, Situational Awareness, and Operational Coordination

Assessment/Extent of Play

Assessment of this Demonstration Criterion must be assessed concurrently with a licensee exercise and may be demonstrated in a biennial or tabletop exercise.

ORO's authorized to send emergency workers into the plume exposure pathway EPZ must demonstrate a capability to comply with emergency worker exposure limits based on their emergency plans/procedures. Participating OROs must also demonstrate the capability to make decisions concerning authorization of exposure levels in excess of pre-authorized levels and the number of emergency workers receiving radiation doses above pre-authorized levels. This would include providing KI and dosimetry in a timely manner to emergency workers dispatched onsite to support plant incident assessment and mitigating actions, in accordance with respective plans/procedures.

As appropriate, OROs must demonstrate the capability to make decisions on the distribution and administration of KI as a protective measure for emergency workers, based on their plans/procedures or projected thyroid dose compared with the established PAGs for KI administration.

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

Exercise Specific Extent of Play

- 1. If scenario conditions do not require dose extension or KI administration, discussion may be facilitated by controller inject/evaluation interview.*

This criterion was successfully demonstrated and documented via alternate assessment which included the following activities: CT Millstone Ingestion Pathway Rehearsal Drill and TTX (October 9-10, 2019), RIEMA TTX (October 24, 2019), Annual Letters of Certification, Staff Assistance Visits, COVID-19 Response, training, and supporting documentation.

Exercise Plan

Millstone Station 2021 Ingestion Pathway Exercise

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

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have the capability to independently project integrated dose from projected or actual dose rates and compare these estimates to the PAGs. OROs must have the capability to choose, among a range of protective actions, those most appropriate in a given emergency. OROs base these choices on PAGs from their plans/procedures or EPA's *Manual of Protective Action Guides and Protective Actions for Nuclear Incidents* and other criteria, such as plant conditions, licensee PARs, coordination of precautionary and/or protective action decisions with other political jurisdictions (e.g., other affected OROs and incident command), availability of in-place shelter, weather conditions, and situations. This includes HAB incidents, the threat posed by the specific hostile action, the affiliated response, and the effect of an evacuation on the threat response effort that create higher than normal risk from general population evacuation.

Criterion 2.b.1: Appropriate protective action recommendations (PARs) are based on available information on plant conditions, field monitoring data, and licensee and ORO dose projections, as well as knowledge of onsite and offsite environmental conditions. (NUREG-0654/FEMA-REP-1, I.10 and Supplement 3)

Core Capabilities Crosswalk: Environmental Response/Health Safety, Operational Communications, Situational Awareness, Operational Coordination, and Intelligence and Information Sharing

Assessment/Extent of Play

Assessment of this Demonstration Criterion must be accomplished concurrently with a licensee exercise and may be demonstrated in biennial or tabletop exercise.

During the initial stage of the emergency response, following notification of plant conditions that may warrant offsite protective actions, the ORO must demonstrate the capability to use appropriate means, described in the plans/procedures, to develop PARs for decision-makers based on available information and recommendations provided by the licensee, as well as field monitoring data, if available. The ORO must also consider any release and meteorological data provided by the licensee.

The ORO must demonstrate a reliable capability and independently validate dose projections. The types of calculations to be demonstrated depend on the data available and the need for assessments to support the PARs must be appropriate to the scenario. In all cases, calculation of projected dose must be demonstrated. Projected doses must be related to quantities and units of the PAG to which they will be compared. PARs must be promptly transmitted to decision-makers in a pre-arranged format.

When the licensee and ORO projected doses differ by more than a factor of 10, the ORO and licensee must determine the source of the difference by discussing input data and assumptions, using different models, or exploring possible reasons. Resolution of these differences must be incorporated into the PARs if timely and appropriate. The ORO must demonstrate the capability to use any additional data to refine projected doses and exposure rates and revise the associated PARs.

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

Exercise Specific Extent of Play

1. *Until a Governor's State of Emergency is declared, local officials may make protective and precautionary recommendations within their communities independently.*
2. *The State will use the new PAG, dtd 2017.*

This criterion was successfully demonstrated and documented via alternate assessment which included the following activities: CT Millstone Ingestion Pathway Rehearsal Drill and TTX (October 9-10, 2019), RIEMA TTX (October 24, 2019), Annual Letters of Certification, Staff Assistance Visits, COVID-19 Response, training, and supporting documentation.

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**Sub-element 2.b. – Radiological Assessment, Protective Action Recommendations, and
Precautionary and/or Protective Action Decisions for the Plume Phase of the Emergency
(Continued)**

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

Core Capabilities Crosswalk: Environmental Response/Health Safety, Operational Communications, and Situational Awareness

Assessment/Extent of Play

Assessment of this Demonstration Criterion must be accomplished concurrently with a licensee exercise and may be demonstrated in a biennial or tabletop exercise.

OROs must have the capability to make both initial and subsequent precautionary and/or protective action decisions. OROs must demonstrate the capability to make initial precautionary and/or protective action decisions in a timely manner appropriate to the incident, based on information from the licensee, assessment of plant status and potential or actual releases, other available information related to the incident, input from appropriate ORO authorities (e.g., incident command), and PARs from the utility and ORO staff. In addition, a subsequent or alternate precautionary and/or protective action decision may be appropriate if various conditions (e.g., an HAB incident, weather, release timing and magnitude) pose undue risk to an evacuation or if evacuation may disrupt the efforts to respond to a hostile action.

OROs must demonstrate the ability to obtain supplemental resources (e.g., mutual aid) necessary to implement a precautionary and/or protective action decision if local law enforcement, fire service, HAZMAT, and emergency medical resources are used to augment response to the NPP site or other key infrastructure.

Dose assessment personnel may provide additional PARs based on the subsequent dose projections, field monitoring data, or information on plant conditions. In addition, incident command must provide input regarding considerations for subsequent PARs based on the magnitude of the ongoing threat, the response, and/or site conditions. The decision-makers must demonstrate the capability to change protective actions based on the combination of all these factors.

If the ORO has determined that KI will be used as a protective measure for the public under offsite plans/procedures, then it must demonstrate the capability to make decisions on the distribution and administration of KI to supplement sheltering and evacuation. This decision must be based on the ORO's plans/procedures or projected thyroid dose compared with the established PAG for KI administration. The KI decision-making process must involve close coordination with appropriate assessment and decision-making staff.

If more than one ORO is involved in decision making, all appropriate OROs must communicate and coordinate precautionary and/or protective action decisions with each other. In addition, decisions must be coordinated/communicated with incident command. OROs must demonstrate the capability to communicate the results of decisions to all the affected locations.

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

Exercise Specific Extent of Play

1. *Until a Governor's State of Emergency is declared, local officials may make protective and precautionary recommendations within their communities independently.*
2. *State Protective Action Recommendations include overwater PARs as of 2018.*

This criterion was successfully demonstrated and documented via alternate assessment which included the following activities: CT Millstone Ingestion Pathway Rehearsal Drill and TTX (October 9-10, 2019), RIEMA TTX (October 24, 2019), Annual Letters of Certification, Staff Assistance Visits, COVID-19 Response, training, and supporting documentation.

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Sub-element 2.c – Precautionary and/or Protective Action Decision Consideration for the Protection of Persons with Disabilities and Access/Functional Needs

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have the capability to determine precautionary and/or protective action decisions, including evacuation, sheltering, and use of KI, if applicable, for groups of persons with disabilities and access/functional needs (e.g., hospitals, nursing homes, correctional facilities, schools, licensed daycares, mobility-impaired individuals, and transportation-dependent individuals). The focus is on those groups of persons with disabilities and access/functional needs that are or potentially will be affected by a radiological release from an NPP.

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

Core Capabilities Crosswalk: Operational Communications, and Situational Assessment, Operational Coordination, Intelligence and Information Sharing

Assessment/Extent of Play

Assessment of this Demonstration Criterion must be accomplished concurrently with a licensee exercise and may be demonstrated in a biennial or tabletop exercise that would include the use of plant conditions transmitted from the licensee.

Usually it is appropriate to implement evacuation in areas where doses are projected to exceed the lower end of the range of PAGs, except for incidents where there is a high-risk environmental condition or where high-risk groups (e.g., the immobile or infirm) are involved. In these cases, factors that must be considered include weather conditions, shelter availability, availability of transportation assets, risk of evacuation versus risk from the avoided dose, and precautionary school evacuations. In addition, decisions must be coordinated/communicated with the incident command. In situations where an institutionalized population cannot be evacuated, the ORO must consider use of KI.

Applicable OROs must demonstrate the capability to alert and notify all public school systems/districts of emergency conditions that are expected to or may necessitate protective actions for students. Demonstration requires that the OROs actually contact public school systems/districts during the exercise.

The OROs must demonstrate how the decisions-making process take those with disabilities and access/functional needs (e.g., nursing homes, correctional facilities, licensed day cares, mobility-impaired individuals, and transportation-dependent individuals) into account.

In accordance with plans/procedures, OROs and/or officials of public school systems/districts must demonstrate the capability to make prompt decisions on protective actions for students. The decision-making process, including any preplanned strategies for protective actions for that ECL, must consider the location of students at the time (e.g., whether the students are still at home, en route to school, or at school).

Since other agencies place requirements on hospitals to prepare for contaminated patients, the REP Program has no need to evaluate hospitals in the EPZ that need to evacuate, or the facilities that are receiving these evacuees, nor does the ORO have the responsibility to provide training or dosimetry to these hospitals/facilities. Additionally, hospital evacuation plans do not need to be reviewed or tested by the REP Program. All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

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Sub-element 2.c – Precautionary and/or Protective Action Decision Consideration for the Protection of Persons with Disabilities and Access/Functional Needs (Cont.)

Exercise Specific Extent of Play

1. *OROs will consider Early Dismissal as a precautionary action, in addition to a Precautionary School Transfer, based on scenario conditions.*
2. *OROs will also consider a “lock-down” or “shelter-in-place” PAD based on current conditions.*

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

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have the means to assess the radiological consequences for the ingestion exposure pathway, relate them to the appropriate PAGs, and make timely, appropriate PADs to mitigate exposure from the pathway.

During an incident at an NPP, a release of radioactive material may contaminate water supplies and agricultural products in the surrounding areas. Any such contamination would likely occur during the plume phase of the incident and, depending on the nature of the release, could affect the ingestion exposure pathway for weeks or years.

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

Core Capabilities Crosswalk: Operational Coordination, Environmental Response/Health Safety, and Situational Assessment

Assessment/Extent of Play

Assessment of this Demonstration Criterion must be accomplished concurrently with a licensee exercise and may be demonstrated in a biennial or tabletop exercise that would include the use of plant conditions transmitted from the licensee.

OROs are expected to take precautionary actions to protect food and water supplies, or to minimize exposure to potentially contaminated water and food, in accordance with their respective plans/procedures. Often OROs initiate such actions based on criteria related to the facility's ECLs. Such actions may include recommendations to place milk animals on stored feed and use protected water supplies.

The ORO must use its procedures to assess the radiological consequences of a release on the food and water supplies, and include the development of a sampling plan. The ORO's assessment must include evaluation of the radiological analyses of representative samples of water, food, and other ingestible substances of local interest from potentially impacted areas; characterization of the releases from the facility; and the extent of areas potentially impacted by the release. During this assessment, OROs must consider use of agricultural and watershed data within the 50-mile EPZ. The radiological impacts on the food and water must then be compared to the appropriate ingestion PAGs contained in the ORO's plans/procedures. The plans/procedures contain PAGs based on specific dose commitment criteria or on criteria as recommended by current Food and Drug Administration (FDA) guidance. Timely and appropriate recommendations must be provided to the ORO decision-making group for implementation decisions. OROs may also include a comparison of taking or not taking a given action on the resultant ingestion exposure pathway dose commitments.

The ORO must demonstrate timely decisions to minimize radiological impacts from the ingestion exposure pathway, based on the given assessments and other information. Any such decisions must be communicated and, to the extent practical, coordinated with neighboring OROs. These decisions include tracking agricultural products entering and leaving the EPX. Demonstration of plans and procedures, which use access control points to track agricultural products entering and leaving the EPZ, may be conducted through interview. OROs will use Federal resources, as identified in the Nuclear/Radiological Incident Annex of the NRF and other resources (e.g., compacts or nuclear insurers), as necessary. Evaluation of this criterion will take into consideration the level of Federal and other participating resources. All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

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

Exercise Specific Extent of Play:

1. *This sub-element will be evaluated on the second half of day one and as a facilitated tabletop exercise on day two.*
2. *The State Unified Command will demonstrate timely decisions to minimize radiological impacts from the ingestion exposure pathway, based on the given assessments and other information and communicate decisions to local, state, contiguous state and federal partners.*
3. *An ingestion-sampling plan will be developed and implemented to define the consequences of the release of a radioactive plume to the environment. This sampling plan will serve to prioritize ingestion samples based on plume and meteorological information. Sampling plan development will be conducted on the afternoon of day one following the Plume phase*
4. *The Department of Energy and Environmental Protection (DEEP), Department of Health (DPH), Department of Consumer Protection (DCP) and Department of Agriculture (DoAG) will be evaluated on ingestion sampling procedures out of sequence (ISP-1 and ISP-2).*
5. ***On day One (Updated 1 Oct 2019)**, of the exercise the Field Sample Team Coordinator will coordinate field team deployment, sampling and delivery to the DPH lab. Sampling teams will draw field kits, appropriate communications equipment and deploy from 269 Maxim Road, Hartford CT 06114.*
6. ***On day One (Updated 1 Oct 19)**, the DPH Laboratory, in Rocky Hill CT will provide sample analysis results to DEEP RD/ exercise controllers. Chain of custody will be evaluated out of sequence.*
7. *The Department of Agriculture will evaluate whether it is necessary to impose agricultural holds/ embargos within the affected area. Agricultural hold/embargo decisions will be shared amongst the affected areas with the EPZ and Ingestion Pathway.*
8. *Connecticut will notify and coordinate with Rhode Island of necessary information and impact to its communities with the ingestion pathway.*

**This criterion has been approved for re-demonstration during the exercise.*

This criterion was successfully demonstrated and documented via alternate assessment which included the following activities: CT Millstone Ingestion Pathway Rehearsal Drill and TTX (October 9-10, 2019), RIEMA TTX (October 24, 2019), Annual Letters of Certification, Staff Assistance Visits, COVID-19 Response, training, and supporting documentation. Response, training, and supporting documentation.

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

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have the capability to make decisions on post-plume phase *relocation*, *reentry*, and *return* of the public. These decisions are essential for protection of the public from direct long-term exposure to deposited radioactive materials from a severe incident at an NPP.

Criterion 2.e.1: *Timely post-plume phase relocation, reentry, and return decisions are made and coordinated as appropriate, based on assessments of the radiological conditions and criteria in the ORO's plan and/or procedures. (NUREG-0654/FEMA-REP-1, I.10; J.9; K.3.a; M.1)*

Core Capabilities Crosswalk: *Operational Coordination, Environmental Response/Health Safety, Situational Assessment, Economic Recovery, Health and Social Services, Housing, and Natural and Cultural Resources*

Assessment/Extent of Play

Assessment of this Demonstration Criterion must be accomplished concurrently with a licensee exercise and may be demonstrated in a biennial or tabletop exercise that would include the use of plant conditions transmitted from the licensee.

Relocation: OROs must demonstrate the capability to estimate integrated dose in contaminated areas and compare these estimates with PAGs; apply decision criteria for relocation of those individuals in the general public who have not been evacuated, but where actual or projected doses are in excess of relocation PAGs; and control access to evacuated and restricted areas. OROs will make decisions for relocating members of the evacuated public who lived in areas that now have residual radiation levels in excess of the PAGs. Determination of areas to be restricted must be based on factors such as the mix of radionuclides in deposited materials, calculated exposure rates versus the PAGs, and analyses of vegetation and soil field samples.

Reentry: Decisions must be made on location of control points and policies regarding access and exposure control for emergency workers and members of the public who need to temporarily enter the evacuated area to perform specific tasks or missions.

Examples of control procedures are the assignment of, or checking for, direct-reading and permanent record dosimetry for emergency workers; questions regarding an individual's objectives, locations expected to be visited, and associated timeframes; availability of maps and plots of radiation exposure rates; and advice on areas to avoid. Control procedures also include monitoring of individuals, vehicles, and equipment; the implementation of decision criteria regarding decontamination; and proper disposition of emergency worker dosimetry and maintenance of emergency worker radiation exposure records.

Responsible OROs must demonstrate the capability to develop a strategy for authorized reentry of individuals into the restricted zone(s), based on established decision criteria. OROs must demonstrate the capability to modify those policies for security purposes (e.g., police patrols), maintenance of essential services (e.g., fire protection and utilities), and other critical functions. They must demonstrate the capability to use decision-making criteria in allowing access to the restricted zone by the public for various reasons, such as to maintain property (e.g., to care for farm animals or secure machinery for storage) or retrieve important possessions. Coordinated policies for access and exposure control must be developed among all agencies with roles to perform in the restricted zone(s). OROs must demonstrate the capability to establish policies for provision of dosimetry to all individuals allowed to reenter the restricted zone(s). The extent to which OROs need to develop policies on reentry will be determined by scenario events.

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

Return: OROs must demonstrate the capability to implement policies concerning return of members of the public to areas that were evacuated during the plume phase (i.e., permitting populations that were previously evacuated to reoccupy their homes and businesses on an unrestricted basis). OROs must base decisions on environmental data and political boundaries or physical/ geological features, which allow identification of the boundaries of areas to which members of the public may return. Return is permitted to the boundary of the restricted area(s) that is based on the relocation PAG.

Other factors that the ORO must consider in decision-making include conditions that permit cancellation of the ECL and relaxation of associated restrictive measures. OROs must base return recommendations on measurements of radiation from ground deposition. OROs must have the capability to identify services and facilities that require restoration within a few days and to identify the procedures and resources for their restoration. Examples of these services and facilities are medical and social services, utilities, roads, schools, and intermediate-term housing for relocated persons.

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

Exercise Specific Extent of Play

1. *Connecticut State agencies along with local, state, contagious state and federal partners will participate in planning and decision-making during the facilitated tabletop.*
2. *All final decisions are made through unified command.*

**This criterion has been approved for re-demonstration during the exercise.*

This criterion was successfully demonstrated and documented via alternate assessment which included the following activities: CT Millstone Ingestion Pathway Rehearsal Drill and TTX (October 9-10, 2019), RIEMA TTX (October 24, 2019), Annual Letters of Certification, Staff Assistance Visits, COVID-19 Response, training, and supporting documentation.

ASSESSMENT AREA 3: PROTECTIVE ACTION IMPLEMENTATION
Sub-element 3.a – Implementation of Emergency Worker Exposure Control

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have the capability to provide for the following: distribution, use, collection, and processing of direct-reading dosimetry and permanent record dosimetry; reading of direct-reading dosimetry by emergency workers at appropriate frequencies, maintaining a radiation dose record for each emergency worker and establishing a decision chain or authorization procedure for emergency workers to incur radiation exposures in excess of the PAGs. This also includes the capability to provide KI for emergency workers, always applying the “as low as is reasonably achievable” principle as appropriate.

Criterion 3.a.1: The OROs issue appropriate dosimetry, KI, and procedures, and manage radiological exposure to emergency workers in accordance with the plans/procedures. Emergency workers periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. OROs maintain appropriate record-keeping of the administration of KI to emergency workers. (NUREG-0654/FEMA-REP-1, K.3.a, b; K.4)

Core Capabilities Crosswalk: Operational Coordination and Environmental Response/Health Safety

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a biennial or tabletop exercise. Other means may include drills, seminars or training activities that would fully demonstrate technical proficiency.

ORO must demonstrate the capability to provide emergency workers (including supplemental resources) with the appropriate direct-reading and permanent record dosimetry, dosimeter chargers, KI, and instructions on the use of these items. For evaluation purposes, appropriate direct-reading dosimetry is defined as dosimetry that allows an individual(s) to read the administrative reporting limits that are pre-established at a level low enough to consider subsequent calculation of TEDE and maximum exposure limits, for those emergency workers involved in lifesaving activities, contained in the ORO's plans/procedures.

Each emergency worker must have basic knowledge of radiation exposure limits as specified in the ORO's plans/procedures. If supplemental resources are used, they must be provided with just-in-time training to ensure basic knowledge of radiation exposure control. Emergency workers must demonstrate procedures to monitor and record dosimeter readings and manage radiological exposure control.

During a plume phase exercise, emergency workers must demonstrate the procedures to be followed when administrative exposure limits and turn-back values are reached. The emergency worker must report accumulated exposures during the exercise as indicated in the plans/procedures. OROs must demonstrate the actions described in the plans/procedures by determining whether to replace the worker, authorize the worker to incur additional exposures, or take other actions. If exercise play does not require emergency workers to seek authorizations for additional exposure, evaluators must interview at least two workers to determine their knowledge of whom to contact in case authorization is needed, and at what exposure levels. Workers may use any available resources (e.g., written procedures and/or coworkers) in providing responses.

Although it is desirable for all emergency workers to each have a direct-reading dosimeter, there may be situations where team members will be in close proximity to each other during the entire mission. In such cases, adequate control of exposure can be achieved for all team members using one direct-reading dosimeter worn by the team leader. Emergency workers assigned to low-exposure rate fixed facilities

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

(e.g., EOCs and communications center within the EPZ, reception centers, and counting laboratories) may have individual direct-reading dosimeters or they may be monitored using group dosimetry (i.e., direct-reading dosimeters strategically placed in the work area). Each team member must still have his or her own permanent record dosimetry. Individuals authorized by the ORO to reenter an evacuated area during the plume (emergency) phase, must be limited to the lowest radiological exposure commensurate with completing their missions.

OROs may have administrative limits lower than EPA-400-R-92-001 dose limits for emergency workers performing various services (e.g., lifesaving, protection of valuable property, all activities). OROs must ensure that the process used to seek authorization for exceeding dose limits does not negatively impact the capability to respond to an incident where lifesaving and/or protection of valuable property may require an urgent response.

OROs must demonstrate the capability to accomplish distribution of KI to emergency workers consistent with decisions made. OROs must have the capability to develop and maintain lists of emergency workers who have ingested KI, including documentation of the date(s) and time(s) they did so. Ingestion of KI recommended by the designated ORO health official is voluntary. For evaluation purposes, the actual ingestion of KI shall not be performed. OROs must demonstrate the capability to formulate and disseminate instructions on using KI for those advised to take it. Emergency workers must demonstrate basic knowledge of procedures for using KI whether or not the scenario drives the implementation of KI use. This can be accomplished by an interview with the evaluator.

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

Exercise Specific Extent of Play

1. *Dosimetry and KI will be issued to a minimum of two emergency workers within the local EOCs. However, KI will not be ingested at any time during the exercise. **Because of COVID restrictions that may affect the number of people present in any EOC, the "recycling" of people may be allowed to meet this minimum number if two people are not present.***
2. *Donning of PPE, **except for infection control for COVID**, will be notional, as emergency workers will not wear Protective Clothing or Equipment while in view of the public.*
3. *Field Team emergency workers will read dosimetry at regular intervals, OR AS DIRECTED/INSTRUCTED. Field Team emergency workers carrying properly operating meters will not be required to perform additional personal dosimetry checks prior to increase of dose rates. If scenario does not contain a rise of dose rates, use of SRD will be performed by interview.*
4. ***FEMA evaluators will evaluate dosimetry issue briefings given at EPZ EOCs on June 8, 2021, and for OOS Demonstrations (CSP/DOT-Norwich) on scheduled dates (TBD).***

**This criterion has been approved for re-demonstration during the exercise.*

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

Intent

This Sub element is derived from NUREG 0654/FEMA REP-1, which requires that OROs have the capability to provide KI for institutionalized individuals, and, if in the plans/procedures, to the public for whom immediate evacuation may not be feasible, very difficult, or significantly delayed. While it is necessary for OROs to have the capability to provide KI to institutionalized individuals, providing KI to the public is an ORO option and must be reflected as such in ORO plans/procedures. Provisions must include the availability of adequate quantities, storage, and means of distributing KI.

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

Core Capabilities Crosswalk: Public Information and Warning Operational Coordination, Environmental Response/Health Safety, and Public and Private Services

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a biennial or tabletop exercise. Other means may include drills, seminars or training activities that would fully demonstrate technical proficiency.

ORO's must demonstrate the capability to make KI available to institutionalized individuals, and, where provided for in their plans/procedures, to members of the public. ORO's must demonstrate the capability to accomplish distribution of KI consistent with decisions made. ORO's must have the capability to develop and maintain lists of institutionalized individuals who have ingested KI, including documentation of the date(s) and time(s) they were instructed to ingest KI. Ingestion of KI recommended by the designated ORO health official is voluntary. For evaluation purposes, the actual ingestion of KI shall not be performed. ORO's must demonstrate the capability to formulate and disseminate instructions on using KI for those advised to take it. If a recommendation is made for the general public to take KI, appropriate information must be provided to the public by the means of notification specified in the ORO's plans/procedures.

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

Exercise Specific Extent of Play

1. *This criterion will be evaluated out of sequence in 2020 at long-term care facility evaluations and reception center exercises.*

**This criterion has been approved for re-demonstration during exercises.*

This criterion was successfully demonstrated and documented via alternate assessment which included the following activities: CT Millstone Ingestion Pathway Rehearsal Drill and TTX (October 9-10, 2019), RIEMA TTX (October 24, 2019), Annual Letters of Certification, Staff Assistance Visits, COVID-19 Response, training, and supporting documentation.

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

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have the capability to implement precautionary and/or protective action decisions, including evacuation and/or sheltering, for all persons with disabilities and access/functional needs. The focus is on those persons with disabilities and access/functional needs that are (or potentially will be) affected by a radiological release from an NPP.

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

Core Capabilities Crosswalk: Public Information and Warning, Operational Coordination, Critical Transportation, Environmental Response/Health Safety, and Public and Private Services and Resources

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a biennial exercise, an actual event, or by means of drills conducted at any time.

Applicable OROs must demonstrate the capability to alert and notify (i.e., provide PARs and emergency information and instructions to) persons with disabilities and access/functional needs, including hospitals/medical facilities, licensed day cares, nursing homes, correctional facilities, and mobility-impaired and transportation-dependent individuals. OROs must demonstrate the capability to provide for persons with disabilities and access/functional needs in accordance with plans/procedures. Contact with persons with disabilities and access/functional needs and reception facilities may be actual or simulated, as agreed to in the extent of play. Some contacts with transportation providers must be actually contacted, as negotiated in the extent of play. All actual and simulated contacts must be logged. Since other agencies place requirements on hospitals to prepare for contaminated patients, the REP Program has no need to evaluate hospitals in the EPZ that need to evacuate, or facilities that are receiving these evacuees, nor does the ORO have the responsibility to provide training or dosimetry to these hospitals/facilities. Additionally, hospital evacuation plans do not need to be reviewed or tested by the REP Program.

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

Exercise Specific Extent of Play

1. *EPZ towns will demonstrate this objective through interview, including:*
 - a. *Identification of Functional Needs populations.*
 - b. *Identifying and securing transportation requirements.*
2. *Long Term Care Facilities will be surveyed by FEMA with a DEMHS representative to discuss their emergency procedures. Long-term care facilities to be interviewed in 2020 are in Groton, CT and will be scheduled out of sequence.*

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

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

Core Capabilities Crosswalk: Operational Coordination, Critical Transportation, and Environmental Response/Health Safety

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a biennial, or tabletop exercise, an actual event, staff assistance visit, or by means of drills conducted at any time.

School systems/districts (these include public and private schools, kindergartens, and preschools) must demonstrate the ability to implement precautionary and/or protective actions for students. The demonstration must be made as follows: Each school system/district within the 10 mile EPZ must demonstrate implementation of protective actions.

At least one school per affected system/district must participate in the demonstration. Canceling the school day, dismissing early, or sheltering in place must be simulated by describing to evaluators the procedures that would be followed. If evacuation is the implemented protective action, all activities to coordinate and complete the evacuation of students to reception centers, congregate care centers, or host schools may actually be demonstrated or accomplished through an interview process.

If accomplished through an interview, appropriate school personnel including decision-making officials (e.g., schools 'superintendent/principals and transportation director/bus dispatchers) and at least one bus driver (and the bus driver's escort, if applicable) must be available to demonstrate knowledge of their role(s) in the evacuation of school children. Communications capabilities between school officials and the buses, if required by the plans/procedures, must be verified.

Officials of the school system(s) must demonstrate the capability to develop and provide timely information to OROs for use in messages to parents, the general public, and the media on the status of protective actions for schools.

If a school facility has emergency plans as a condition of licensing, those plans may be submitted to FEMA review in place of demonstration or interview pursuant to the OROs plans/procedures as negotiated in the Extent-of-Play Agreement.

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

Exercise Specific Extent of Play

1. Groton, Montville and Fishers Island schools will discuss the ability and resources necessary to implement protective actions for their schoolchildren. The designated school officials will choose the specific schools to be surveyed. Such interviews will be conducted with School Superintendents out of sequence in 2020.
2. Day Care site visits will be scheduled with operating facilities in Waterford, CT out of sequence in 2020.
3. The above criteria is discussed with leadership at local emergency operations prior to out of sequence interviews.

Criterion 3.c.1 was successfully demonstrated and documented via OOS Interviews with Schools, Long-Term Care Facilities, and Day Care Facilities conducted between October and December, 2020.

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

Intent

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

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

Core Capabilities Crosswalk: Operational Coordination, Critical Transportation, and on scene Security and Protection

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a biennial exercise, an actual event, staff assistance visit, or by means of drills conducted at any time.

OROs must demonstrate the capability to select, establish, and staff appropriate traffic and access control points consistent with current conditions and PADs (e.g., evacuating, sheltering, and relocation) in a timely manner. OROs must demonstrate the capability to provide instructions to traffic and access control staff on actions to take when modifications in protective action strategies necessitate changes in evacuation patterns or in the area(s) where access is controlled.

Traffic and access control staff must demonstrate accurate knowledge of their roles and responsibilities, including verifying emergency worker identification and access authorization to the affected areas, as per the Extent-of-Play Agreement. These capabilities may be demonstrated by actual deployment or by interview, in accordance with the Extent-of-Play Agreement.

In instances where OROs lack authority necessary to control access by certain types of traffic (e.g., rail, water, and air traffic), they must demonstrate the capability to contact the State or Federal agencies that have the needed authority, as agreed upon in the Extent-of-Play Agreement.

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

Exercise 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).*

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

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

Core Capabilities Crosswalk: Operational Coordination, Critical Transportation, and Infrastructure Systems

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a biennial exercise, an actual event, staff assistance visit, or by means of drills conducted at any time.

OROs must demonstrate the capability to identify and take appropriate actions concerning impediments to evacuations. In demonstrating this capability, the impediment must remain in place during the evacuation long enough that re-routing of traffic is required and must also result in demonstration of decision-making and coordination with the JIC to communicate the alternate route to evacuees. When, due to specifics of the scenario or jurisdiction, the impediment cannot be located on an evacuation route, it must be located so as to impact evacuation. When not possible, actual dispatch of resources need not to be physically demonstrated; however, all contacts, actual or simulated, must be logged. All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

Exercise Specific Extent of Play

1. *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, criteria will be met through evaluator interviews at that specific location.*
2. *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).*
3. *Decisions on traffic re-routing will be coordinated with the JIC for communicating alternate routes to evacuees (this may be demonstrated procedurally if the JIC is notional.)*

**This criterion has been approved for re-demonstration during the exercise.*

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

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have the capability to implement protective actions, based on criteria recommended by current FDA guidance, for the ingestion exposure pathway EPZ (i.e., the area within an approximate 50-mile radius of the NPP). This Sub-element focuses on those actions required for implementation of protective actions.

Criterion 3.e.1: The ORO demonstrates the availability and appropriate use of adequate information regarding water, food supplies, milk, and agricultural production within the ingestion exposure pathway emergency planning zone for implementation of protective actions. (NUREG-0654/FEMA-REP-1, A.3; C.1, 4; J.11)

Core Capabilities Crosswalk: Operational Coordination

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a biennial exercise, an actual event, or by means of drills conducted at any time.

Applicable OROs must demonstrate the capability to secure and use current information on the locations of dairy farms, meat and poultry producers, fisheries, fruit growers, vegetable growers, grain producers, food processing plants, and water supply intake points to implement protective actions within the EPZ.

ORO's use Federal resources as identified in the NRF Nuclear/Radiological Incident Annex and other resources (e.g., compacts, nuclear insurers) if available. Evaluation of this criterion will take into consideration the level of Federal and other resources participating in the exercise.

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

Exercise Specific Extent of Play (*Facilitated Tabletop*)

- 1. Recommendations in regards to protective actions will be by using controller data based on simulated laboratory analysis of ingestion samples during the TTX on day two.*
- 2. Data regarding water, food supplies, milk, and agricultural products will be utilized for implementation of protective actions. Any additional information and data generated from federal partners will also be used as appropriate for implementing protective action recommendations.*

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Sub-element 3.e – Implementation of Ingestion Exposure Pathway Decisions (Continued)

Criterion 3.e.2: Appropriate measures, strategies, and pre-printed instructional material are developed for implementing protective action decisions for contaminated water, food products, milk, and agricultural production. (NUREG-0654/FEMA-REP-1, G.1, J.9, 11)

Core Capabilities Crosswalk: Public Information and Warning and Operational Coordination

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a biennial exercise, an actual event, or by means of drills conducted at any time.

OROs must demonstrate the development of measures and strategies for implementation of ingestion exposure pathway EPZ protective actions by formulating protective action information for the general public and food producers and processors. Demonstration of this criterion includes either pre-distributed public information material in the ingestion exposure pathway EPZ or the capability for rapid reproduction and distribution of appropriate reproduction-ready information and instructions to pre-determined individuals and businesses.

OROs must also demonstrate the capability to control, restrict, or prevent distribution of contaminated food by commercial sectors. Exercise play must include demonstration of communications and coordination among organizations to implement protective actions. Field play of implementation activities may be simulated. For example, communications and coordination with agencies responsible for enforcing food controls within the ingestion exposure pathway EPZ must be demonstrated, but actual communications with food producers and processors may be simulated.

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

Exercise Specific Extent of Play: *(Facilitated Tabletop)*

- 1. Demonstration of this will occur during facilitated discussions during the TTX on June 24, 2019.*
- 2. Connecticut will demonstrate, through discussion, action, or document review, the capability to coordinate and implement protective actions for the ingestion exposure pathway and to distribute ingestion information to members of the public during the TTX.*
- 3. The printing and distribution of radiological emergency Information will be simulated.*

This criterion was successfully demonstrated and documented via alternate assessment which included the following activities: CT Millstone Ingestion Pathway Rehearsal Drill and TTX (October 9-10, 2019), RIEMA TTX (October 24, 2019), Annual Letters of Certification, Staff Assistance Visits, COVID-19 Response, training, and supporting documentation. Response, training, and supporting documentation.

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

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have the capability to implement plans, procedures, and decisions for post-plume phase *relocation*, *reentry*, and *return*. Implementation of these decisions is essential for protecting the public from direct long-term exposure to deposited radioactive materials from a severe incident at a commercial NPP.

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

Core Capabilities Crosswalk: Operational Coordination and Critical Transportation

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a biennial, or tabletop exercise, or by means of drills conducted at any time.

Relocation: OROs must demonstrate the capability to coordinate and implement decisions concerning relocation of individuals located in radiologically contaminated areas who were not previously evacuated. Such individuals must be relocated to an area(s) where radiological contamination will not expose the general public to doses that exceed the relocation PAGs.

OROs must also demonstrate the capability to provide for short- or long-term relocation of evacuees who lived in an area(s) that has residual radiation levels above the (first-, second-, and 50-year) PAGs. Areas of consideration must include the capability of OROs to communicate with other OROs regarding timing of actions, notification of the population of procedures for relocation, and notification of, and advice for, evacuated individuals who will be converted to relocation status in situations where they will not be able to return to their homes due to high levels of contamination. OROs must also demonstrate the capability to communicate instructions to the public regarding relocation decisions and intermediate-term housing for relocated persons.

Reentry: OROs must demonstrate the capability to control reentry and exit of individuals who are authorized by the ORO to temporarily reenter the restricted area during the post-plume (i.e., intermediate or late) phase to protect them from unnecessary radiation exposure. OROs must also demonstrate the capability to control exit of vehicles and other equipment to control the spread of contamination outside the restricted area(s). Individuals without specific radiological response missions, such as farmers for animal care, essential utility service personnel, or other members of the public who must reenter an evacuated area during the post-emergency phase must be limited to the lowest radiological exposure commensurate with completing their missions. Monitoring and decontamination facilities will be established as appropriate.

Examples of control procedures are:

- (1) Assignment of, or checking for, direct-reading and permanent record dosimetry for emergency workers
- (2) Questions regarding the individuals' objective(s), location(s) expected to be visited and associated timeframes.
- (3) Maps and plots of radiation exposure rates.
- (4) Advice on areas to avoid.
- (5) Procedures for exit, including monitoring of individuals, vehicles, and equipment.
- (6) Decision criteria regarding contamination.
- (7) Proper disposition of emergency worker dosimetry.
- (8) Maintenance of emergency worker radiation exposure records.

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

Return: OROs must demonstrate the capability to implement policies concerning return of members of the public to areas that were evacuated during the plume phase. OROs must demonstrate the capability to identify and prioritize services and facilities that require restoration within a few days, and to identify procedures and resources for their restoration. Examples of these services and facilities are medical and social services, utilities, roads, and schools. Communication among OROs for relocation, reentry, and return may be simulated. All simulated or actual contacts must be documented. These discussions may be accomplished in a group setting.

OROs must use Federal resources as identified in the NRF Nuclear/Radiological Incident Annex and other resources (e.g., compacts or nuclear insurers) as necessary and if available. Evaluation of this criterion will take into consideration the level of Federal and other resources participating in the exercise.

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

Exercise Specific Extent of Play (*Facilitated Tabletop*)

1. *Connecticut will demonstrate the capability to develop, coordinate and implement controlled re-entry of emergency workers to the evacuated area and the return and any necessary relocation of the public during facilitated tabletop discussion on June 24, 2019.*
2. *Connecticut will address short and long-term relocation and coordinate delivery of instructions to the public, which will be disseminated via a press release(s) during facilitated tabletop discussion on June 24, 2019.*

This criterion was successfully demonstrated and documented via alternate assessment which included the following activities: CT Millstone Ingestion Pathway Rehearsal Drill and TTX (October 9-10, 2019), RIEMA TTX (October 24, 2019), Annual Letters of Certification, Staff Assistance Visits, COVID-19 Response, training, and supporting documentation.

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ASSESSMENT AREA 4: FIELD MEASUREMENTS AND ANALYSES
Sub-element 4.a – Plume Phase Field Measurements and Analyses

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have the capability to deploy FMTs with the equipment, methods, and expertise necessary to determine the location of airborne radiation and particulate deposition on the ground from an airborne plume. In addition, NUREG-0654/FEMA-REP-1 indicates that OROs must have the capability to use FMTs within the plume exposure pathway EPZ to detect airborne radioiodine in the presence of noble gases and radioactive particulate material in the airborne plume. In an incident at an NPP, the possible release of radioactive material may pose a risk to the nearby population and environment. Although incident assessment methods are available to project the extent and magnitude of a release, these methods are subject to large uncertainties. During an incident it is important to collect field radiological data to help characterize any radiological release. Adequate equipment and procedures are essential to such field measurement efforts.

Criterion 4.a.1: [RESERVED]

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

Core Capabilities Crosswalk: Operational Coordination and Situational Assessment

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a biennial exercise. Other means may include drills that would fully demonstrate technical proficiency.

Responsible OROs must demonstrate the capability to brief FMTs on predicted plume location and direction, plume travel speed, and exposure control procedures before deployment. During an HAB incident, the Field Team management must keep the incident command informed of the field monitoring team's activities and location. Coordination with FMTs and field monitoring may be demonstrated as out-of-sequence demonstrations, as negotiated in the Extent-of-Play Agreement.

Field measurements are needed to help characterize the release and support the adequacy of implemented protective actions, or to be a factor in modifying protective actions. Teams must be directed to take measurements at such locations and times as necessary to provide sufficient information to characterize the plume and its impacts. If the responsibility for obtaining peak measurements in the plume has been accepted by licensee field monitoring teams, with concurrence from OROs, there is no requirement for these measurements to be repeated by ORO monitoring teams. If the licensee FMTs do not obtain peak measurements in the plume, it is the ORO's decision as to whether peak measurements are necessary to sufficiently characterize the plume. The sharing and coordination of plume measurement information among all FMTs (licensee, Federal, and ORO) is essential.

ORO's will use Federal resources as identified in the NRF Nuclear/Radiological Incident Annex and other resources (e.g., compacts or the licensee) as necessary. Evaluation of this criterion will take into consideration the level of Federal and other resources participating in the exercise. All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

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

Criterion 4.a.3: *Ambient radiation measurements are made and recorded at appropriate locations, and radioiodine and particulate samples are collected. Teams will move to an appropriate low background location to determine whether any significant (as specified in the plan and/or procedures) amount of radioactivity has been collected on the sampling media. (NUREG-0654/FEMA-REP-1, C.1; H.12: I.8, 9; J.10.a)*

Core Capabilities Crosswalk: NA

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a biennial exercise. Other means may include drills that would fully demonstrate technical proficiency.

Two or more FMTs must demonstrate the capability to make and report measurements of ambient radiation to the field team coordinator, dose assessment team, or other appropriate authority. FMTs must also demonstrate the capability to obtain an air sample for measurement of airborne radioiodine and particulates, and to provide the appropriate authority with field data pertaining to measurement. If samples have radioactivity significantly above background, the authority must consider the need for expedited laboratory analyses of these samples. Coordination concerning transfer of samples, including a chain-of-custody form(s), to a radiological laboratory(ies) must be demonstrated.

ORO's must share data in a timely manner with all other appropriate ORO's. All methodology, including contamination control, instrumentation, preparation of samples, and a chain-of-custody form(s) for transfer to a laboratory(ies), will be in accordance with the ORO's plans/procedures.

ORO's will use Federal resources as identified in the NRF Nuclear/Radiological Incident Annex and other resources (e.g., compacts or the licensee) as needed. Evaluation of this criterion will take into consideration the level of Federal and other resources participating in the exercise.

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

Exercise Specific Extent of Play

1. *Based upon the compressed timeframe of the plume exercise DEEP field air 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 Controller (FTC). The FTC will direct that air samples (one particulate and one iodine) be taken at a minimum of one location for each field team. Locations to be determined, considering safety and remaining out of view of the public.*
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. All sampling measurements will be taken at the pier.*

**This criterion has been approved for re-demonstration during the exercise.*

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State of Connecticut Department of Emergency Services and Public Protection

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

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. The inventory of air sample cartridges to be used in an actual emergency are located at DEEP in Windsor, CT. The actual inventory list will be made available upon request to FEMA, if available at Millstone EOF. Otherwise, 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.*

**This criterion has been approved for re demonstration during the exercise.*

This criterion was successfully demonstrated and documented via alternate assessment which included the following activities: CT Millstone Ingestion Pathway Rehearsal Drill and TTX (October 9-10, 2019), RIEMA TTX (October 24, 2019), Annual Letters of Certification, Staff Assistance Visits, COVID-19 Response, training, and supporting documentation.

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

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have the capability to assess the actual or potential magnitude and locations of radiological hazards to determine the ingestion exposure pathway EPZ and to support relocation, reentry, and return decisions. This Sub-element focuses on collecting environmental samples for laboratory analyses that are essential for decisions on protecting the public from contaminated food and water and direct radiation from deposited materials.

Criterion 4.b.1: The field teams (2 or more) demonstrate the capability to make appropriate measurements and to collect appropriate samples (e.g., food crops, milk, water, vegetation, and soil) to support adequate assessments and protective action decision making. (NUREG-0654/FEMA-REP-1, C.1; I.8; J.11)

Core Capabilities Crosswalk: NA

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a biennial or tabletop exercise. Other means may include drills, seminars or training activities that would fully demonstrate technical proficiency.

The ORO's FMTs must demonstrate the capability to take measurements and samples at such times and locations as directed to enable an adequate assessment of the ingestion exposure pathway and to support reentry, relocation, and return decisions. When resources are available, use of aerial surveys and in-situ gamma measurement is appropriate. All methodology, including contamination control, instrumentation, preparation of samples, and chain-of-custody form(s) for transfer to a laboratory(ies), will be in accordance with the ORO's plans/procedures.

FMTs and/or other sampling personnel must secure ingestion exposure pathway samples from agricultural products and water. Samples in support of relocation and return must be secured from soil, vegetation, and other surfaces in areas that received radioactive ground deposition.

ORO's will use Federal resources as identified in the NRF Nuclear/Radiological Incident Annex and other resources (e.g., compacts, the licensee, or nuclear insurers) as needed. Evaluation of this criterion will take into consideration the level of Federal and other resources participating in the exercise.

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

Exercise Specific Extent of Play (Day 2)

1. *On day two of the exercise, Ingestion Field Teams from DPH, DoAG, and DCP will demonstrate ingestion-sampling procedures for ingestion samples, which may include any of the following: ground and surface water, vegetation, freshly packaged food, milk, and soil.*
2. *All three teams will take at least one full set of samples. Chain of custody for samples will be demonstrated in accordance with sampling procedures.*

This criterion was successfully demonstrated and documented via alternate assessment which included the following activities: CT Millstone Ingestion Pathway Rehearsal Drill and TTX (October 9-10, 2019), RIEMA TTX (October 24, 2019), Annual Letters of Certification, Staff Assistance Visits, COVID-19 Response, training, and supporting documentation.

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Sub-element 4.c – Laboratory Operations

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have the capability to perform laboratory analyses of radioactivity in air, liquid, and environmental samples to support protective action decision making.

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

Core Capabilities Crosswalk: Environmental Response/Health Safety

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a biennial, tabletop exercise, or and actual event. Other means may include drills, seminars or training activities that would fully demonstrate technical proficiency.

The laboratory staff must demonstrate the capability to follow appropriate procedures for receiving samples, including logging information, preventing contamination of the laboratory(ies), preventing buildup of background radiation due to stored samples, preventing cross contamination of samples, preserving samples that may spoil (e.g., milk), and keeping track of sample identity. In addition, the laboratory staff must demonstrate the capability to prepare samples for conducting measurements.

The laboratory(ies) must be appropriately equipped to provide, upon request, timely analyses of media of sufficient quality and sensitivity to support assessments and decisions anticipated in the ORO's plans/procedures. The laboratory instrument calibrations must be traceable to standards provided by the National Institute of Standards and Technology. Laboratory methods used to analyze typical radionuclides released in a reactor incident must be as described in the plans/procedures. New or revised methods may be used to analyze atypical radionuclide releases (e.g., transuranic or as a result of a terrorist incident) or if warranted by incident circumstances. Analysis may require resources beyond those of the ORO.

The laboratory staff must be qualified in radio analytical techniques and contamination control procedures.

ORO's will use Federal resources as identified in the NRF Nuclear/Radiological Incident Annex and other resources (e.g., compacts, the licensee, or nuclear insurers) as needed. Evaluation of this criterion will take into consideration the level of Federal and other resources participating in the exercise. All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

Exercise Specific:

The Connecticut State Laboratory successfully demonstrated all 4.c criteria during an OOS Demonstration on February 16, 2021.

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ASSESSMENT AREA 5: EMERGENCY NOTIFICATION AND PUBLIC INFORMATION
Sub-element 5.a- Activation of the Prompt Alert and Notification System

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have the capability to provide prompt instructions to the public within the plume exposure pathway EPZ. Specific provisions addressed in this Sub-element are further discussed in Section V, Part A of this Manual, Alert and Notification Systems.

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

Core Capabilities Crosswalk: Public Information and Warning and Operational Communications

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a biennial exercise, drills, or operational testing of equipment that would fully demonstrate capability.

Responsible OROs must demonstrate the capability to sequentially provide an alert signal followed by an initial instructional message to populated areas (permanent resident and transient) throughout the 10-mile plume exposure pathway EPZ. Following the decision to activate the alert and notification system, OROs must complete system activation for primary alert/notification and disseminate the information/instructions in a timely manner. For exercise purposes, timely is defined as "with a sense of urgency and without undue delay." If message dissemination is identified as not having been accomplished in a timely manner, the evaluator(s) will document a specific delay or cause as to why a message was not considered timely. Procedures to broadcast the message must be fully demonstrated as they would in an actual emergency up to the point of transmission. Broadcast of the message(s) or test message(s) is not required. The procedures must be demonstrated up to the point of actual activation. The alert signal activation should be simulated, not performed. Evaluations of EAS broadcast stations may also be accomplished through SAVs.

The capability of the primary notification system to broadcast an instructional message on a 24-hour basis must be verified during an interview with appropriate personnel from the primary notification system, including verification of provisions for backup power or an alternate station.

The initial message must include at a minimum the following elements:

- (1) Identification of the ORO responsible and the official with authority for providing the alert signal 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 information in telephone books) for use by the general public during an emergency; and
- (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.

If route alerting is demonstrated as a primary method of alert and notification, it must be done in accordance with the ORO's plans/procedures and the Extent-of Play Agreement. OROs must demonstrate the capability to accomplish the primary route alerting in a timely manner (not subject to specific time requirements). At least one route needs to be demonstrated and evaluated. The selected route(s) must vary from exercise to exercise. However, the most difficult route(s) must be demonstrated no less than once every eight years. All alert and notification activities along the route(s) must be simulated (i.e., the message that would actually be used is read for the evaluator, but not actually broadcast) as negotiated in the extent of play. Actual testing of the mobile public address system will be conducted at an agreed-upon location.

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Millstone Station 2021 Ingestion Pathway Exercise

Sub-element 5.a- Activation of the Prompt Alert and Notification System (Continued)

Criterion 5.a.2: [RESERVED]

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

Core Capabilities Crosswalk: Public Information and Warning and Operational Communications

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a biennial exercise, drills, or operational testing of equipment that would fully demonstrate capability.

If the exercise scenario calls for failure of any portion of the primary system(s) or if any portion of the primary system(s) actually fails to function during the exercise, OROs must demonstrate backup means of alert and notification. Backup means of alert and notification will differ from facility to facility.

Backup alert and notification procedures that would be implemented in multiple stages must be structured such that the population closest to the plant (e.g., within 2 miles) is alerted and notified first. The populations farther away and downwind of any potential radiological release would be covered sequentially (e.g., 2 to 5 miles, followed by downwind 5 to 10 miles, and finally the remaining population as directed by authorities).

Topography, population density, existing ORO resources, and timing will be considered in judging the acceptability of backup means of alert and notification. Although circumstances may not allow this for all situations, FEMA and the NRC recommend that OROs and operators attempt to establish backup means that will reach those in the plume exposure pathway EPZ within a reasonable time of failure of the primary alert and notification system, with a recommended goal of 45 minutes. The backup alert message must, at a minimum, include (1) a statement that an emergency exists at the plant and (2) instructions regarding where to obtain additional information. When backup route alerting is demonstrated, regardless of routes being scheduled **only one route needs to be selected and demonstrated** for exercise purposes.

All alert and notification activities along the route(s) must be simulated (i.e., the message that would actually be used is read for the evaluator, but not actually broadcast), as negotiated in the extent of play. Actual testing of the mobile public address system will be conducted at an agreed-upon location.

ORO may demonstrate any means of backup alert and notification included in their plans/procedures as negotiated in the Extent-of-Play Agreement.

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

Exercise Specific Extent of Play

1. Backup alert routes and Route Alerting will be completed after all other criteria for the towns of Waterford, Montville, and Groton City have been demonstrated on June 8, 2021. FEMA will follow designated emergency vehicle(s) driving prescribed routes and notionally broadcasting messages to the public related to the exercise scenario.

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

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have the capability to disseminate appropriate emergency information and instructions, including any recommended protective actions, to the public. In addition, NUREG-0654/FEMA-REP-1 requires OROs to ensure that the capability exists for providing information to the media. This includes the availability of a physical location for use by the media during an emergency. NUREG-0654/FEMA-REP-1 also provides that a system must be available for dealing with rumors. This system will hereafter be known as the “public inquiry hotline.”

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

Core Capabilities Crosswalk: Public Information and Warning and Operational Communications

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a biennial exercise, or drills.

The responsible ORO personnel/representatives must demonstrate actions to provide emergency information and instructions to the public and media in a timely manner following the initial alert and notification (not subject to specific time requirements). For exercise purposes, timely is defined as “with a sense of urgency and without undue delay.” If message dissemination is identified as not having been accomplished in a timely manner, the evaluator(s) will document a specific delay or cause as to why a message was not considered timely.

Message elements: The ORO must ensure that emergency information and instructions are consistent with PADs made by appropriate officials. The emergency information must contain 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 disabilities and access/functional needs, and public inquiry hotline telephone number) to assist the public in carrying out the PADs provided. The ORO must also be prepared to disclose and explain the ECL of the incident. At a minimum, this information must be included in media briefings and/or media releases. OROs must demonstrate the capability to use language that is clear and understandable to the public within both the plume and ingestion exposure pathway EPZs. This includes demonstration of the capability to use familiar landmarks and boundaries to describe protective action areas.

The emergency information must be all-inclusive by including the four items specified under exercise Demonstration Criterion 5.a.1 and previously identified protective action areas that are still valid, as well as new areas. Information about any rerouting of evacuation routes due to impediments should also be included. The OROs must demonstrate the capability to ensure that emergency information that is no longer valid is rescinded and not repeated by broadcast media. In addition, the OROs must demonstrate the capability to ensure that current emergency information is repeated at pre-established intervals in accordance with the plans/procedures. OROs must demonstrate the capability to develop emergency information in a non-English language when required by the plans/procedures.

If ingestion exposure pathway measures are exercised, OROs must demonstrate that a system exists for rapid dissemination of ingestion exposure pathway information to predetermined individuals and businesses in accordance with the ORO's plans/procedures.

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Millstone Station 2021 Ingestion Pathway Exercise

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

Media information: OROs must demonstrate the capability to provide timely, accurate, concise, and coordinated information to the news media for subsequent dissemination to the public. This would include demonstration of the capability to conduct timely and pertinent media briefings and distribute media releases as the incident warrants. The OROs must demonstrate the capability to respond appropriately to inquiries from the news media. All information presented in media briefings and releases must be consistent with PADs and other emergency information provided to the public. Copies of pertinent emergency information (e.g., EAS messages and media releases) and media information kits must be available for dissemination to the media.

Public inquiry: OROs must demonstrate that an effective system is in place for dealing with calls received via the public inquiry hotline. Hotline staff must demonstrate the capability to provide or obtain accurate information for callers or refer them to an appropriate information source. Information from the hotline staff, including information that corrects false or inaccurate information when trends are noted, must be included, as appropriate, in emergency information provided to the public, media briefings, and/or media releases.

HAB considerations: The dissemination of information dealing with specific aspects of NPP security capabilities, actual or perceived adversarial (terrorist) force or threat, and tactical law enforcement response must be coordinated/communicated with appropriate security authorities (e.g., law enforcement and NPP security agencies) in accordance with ORO plans/procedures.

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

Exercise Specific Extent of Play

1. *Social media simulation products, if used, will be for demonstration purposes only.*
2. *The role of the 2-1-1 Message Center is to answer calls pertaining to the incident and assist with rumor control.*
3. *Traffic impediments will be coordinated with the JIC (which may be notional).*

** 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.*

Note: the State PIO/JIC and 211 conducted a successful evaluated OOS demonstration of 5.b criteria on February 16, 2021.

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ASSESSMENT AREA 6: SUPPORT OPERATIONS/FACILITIES

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

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have the capability to implement radiological monitoring and decontamination of evacuees, while minimizing contamination of the facility. OROs must also have the capability to identify and register evacuees at reception centers.

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

Core Capabilities Crosswalk: Environmental Response/Health and Safety and Mass Care Services

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a biennial exercise, an actual event, or SAV.

Radiological monitoring, decontamination, and registration facilities for evacuees must be set up and demonstrated as they would be in an actual emergency or as indicated in the Extent-of-Play Agreement. OROs conducting this demonstration must have one-third of the resources (e.g., monitoring teams/instrumentation/portal monitors) available at the facility(ies) as necessary to monitor 20 percent of the population within a 12-hour period. This would include adequate space for evacuees' vehicles. Availability of resources can be demonstrated with valid documentation (e.g., MOU/LOA, etc.) reflecting how necessary equipment would be procured for the location. Plans/procedures must indicate provisions for service animals.

Before using monitoring instrument(s), the monitor(s) must demonstrate the process of checking the instrument(s) for proper operation. Staff responsible for the radiological monitoring of evacuees must demonstrate the capability to attain and sustain, within about 12 hours, a monitoring productivity rate per hour needed to monitor the 20 percent EPZ population planning base. The monitoring productivity rate per hour is the number of evacuees that can be monitored, per hour, by the total complement of monitors using an appropriate procedure. For demonstration of monitoring, decontamination, and registration capabilities, a minimum of six evacuees must be monitored per station using equipment and procedures specified in the plans/procedures. The monitoring sequences for the first six simulated evacuees per monitoring team will be timed by the evaluators to determine whether the 12-hour requirement can be met.

ORO must demonstrate the capability to register evacuees upon completion of the monitoring and decontamination activities. The activities for recording radiological monitoring and, if necessary, decontamination must include establishing a registration record consisting of the evacuee's name, address, results of monitoring, and time of decontamination (if any), or as otherwise designated in the plan and/or procedures. Audio recorders, camcorders, or written records are all acceptable means for registration.

Monitoring activities shall not be simulated. Monitoring personnel must explain use of trigger/action levels for determining the need for decontamination. They must also explain the procedures for referring any evacuees who cannot be adequately decontaminated for assessment and follow-up in accordance with the ORO's plans/procedures. Contamination of the evacuee(s) will be determined by controller inject and not simulated with any low-level radiation source. All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

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Millstone Station 2021 Ingestion Pathway Exercise

**Sub-element 6.a- Monitoring, Decontamination, and Registration of Evacuees
(Continued)**

Decontamination of evacuees may be simulated and conducted by interview. Provisions for separate showering and same-sex monitoring must be demonstrated or explained. The staff must demonstrate provisions for limiting the spread of contamination. Provisions could include floor coverings, signs, and appropriate means (e.g., partitions, roped-off areas) to separate uncontaminated from potentially contaminated areas. Provisions must also exist to separate contaminated and uncontaminated evacuees, provide changes of clothing for those with contaminated clothing and personal belonging to prevent further contamination of evacuee and facilities. In addition, for any evacuee found to be contaminated, procedures must be discussed concerning handling of potential contamination of vehicles and personal belongings.

Waste water from decontamination operations does not need to be collected. Individuals who have completed monitoring (and decontamination, if needed) must have means (e.g., hand stamp, sticker, bracelet, form, etc.) indicating that they, and their service animals and vehicles, where applicable, have been monitored, cleared, and found to have no contamination or contamination below the trigger/action level.

In accordance with plans/procedures, individuals found to be clean after monitoring do not need to have their vehicle monitored. These individuals do not require confirmation that their vehicle is free from contamination prior to entering the congregate care areas.

However, those individuals who are found to be contaminated and are then decontaminated will have their vehicles held in a secure area or monitored and decontaminated (if applicable) and do require confirmation that their vehicle is free from contamination prior to entering the congregate care areas.

Exercise Specific Extent of Play

N/A

Demonstrated out of sequence during June 2019 UConn/Mansfield Host Community/Reception Center exercise.

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

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have the capability to implement radiological monitoring and decontamination of emergency workers and their equipment, inclusive of vehicles.

Criterion 6.b.1: The facility/ORO has adequate procedures and resources to accomplish monitoring and decontamination of emergency workers and their equipment and vehicles. (NUREG-0654/FEMA-REP-1, K.5.a, b)

Core Capabilities Crosswalk: Environmental Response/Health and Safety

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a biennial exercise, an actual event, or SAV.

The monitoring staff must demonstrate the capability to monitor emergency worker personnel and their equipment and vehicles for contamination in accordance with the ORO's plans/procedures. Specific attention must be given to equipment, including any vehicles that were in contact with contamination. The monitoring staff must demonstrate the capability to make decisions on the need for decontamination of personnel, equipment, and vehicles based on trigger/action levels and procedures stated in the ORO plans/procedures. Monitoring of emergency workers does not have to meet the 12-hour requirement. However, appropriate monitoring procedures must be demonstrated for a minimum of two emergency workers and their equipment and vehicles. Before using monitoring instrument(s), the monitor(s) must demonstrate the process of checking the instrument(s) for proper operation.

The area to be used for monitoring and decontamination must be set up as it would be in an actual emergency, with all route markings, instrumentation, record keeping, and contamination control measures in place. Monitoring procedures must be demonstrated for a minimum of one vehicle. It is generally not necessary to monitor the entire surface of vehicles. However, the capability to monitor areas such as radiator grills, bumpers, wheel wells, tires, and door handles must be demonstrated. Interior surfaces of vehicles that were in contact with contaminated individuals must also be checked.

Decontamination of emergency workers may be simulated and conducted via interview. Provisions for separate showering and same-sex monitoring must be demonstrated or explained. The staff must demonstrate provisions for limiting the spread of contamination. Provisions could include floor coverings, signs, and appropriate means (e.g., partitions, roped-off areas) to separate uncontaminated from potentially contaminated areas. Provisions must also exist to separate contaminated and uncontaminated individuals where applicable, provide changes of clothing for those with contaminated clothing, and store contaminated clothing and personal belongings to prevent further contamination of emergency workers or facilities.

ORO's must demonstrate the capability to register emergency workers upon completion of the monitoring and decontamination activities. The activities for recording radiological monitoring and if necessary, decontamination must include establishing a registration record consisting of the emergency worker's name, address, results of the monitoring, and time of decontamination (if any), or as otherwise designated in the plans/procedures. Audio recorders, camcorders, or written records are all acceptable means for registration. Monitoring activities shall not be simulated. Monitoring personnel must explain use of trigger/action levels for determining the need for decontamination. They must also explain the procedures for referring any emergency workers who cannot be adequately decontaminated for assessment and follow-up in accordance with the ORO's plans/procedures.

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

Decontamination capabilities and provisions for vehicles and equipment that cannot be successfully decontaminated may be simulated and conducted by interview. Wastewater from decontamination operations does not need to be collected.

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

Exercise Specific Extent of Play: N/A

Demonstrated out of sequence during June 2019 UConn/Mansfield Host Community/Reception Center exercise.

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Sub-element 6.c – Temporary Care of Evacuees

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires OROs to have the capability to establish relocation centers in host/support jurisdictions. The American Red Cross normally provides congregate care in support of OROs under existing letters of agreement.

Criterion 6.c.1: Managers of congregate care facilities demonstrate that the centers have resources to provide services and accommodations consistent with American Red Cross planning guidelines. Managers demonstrate the procedures to assure that evacuees have been monitored for contamination and have been decontaminated as appropriate prior to entering congregate care facilities. (NUREG-0654/FEMA-REP-1, J.10.h, J.12)

Core Capabilities Crosswalk: Operational Coordination and Mass Care Services

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a biennial exercise, drills, an actual event, or SAV.

The evaluator must conduct a walk through of the center to determine, through observation and inquiries, that the services and accommodations are consistent with applicable guidance.

For planning purposes, OROs must plan for a sufficient number of congregate care centers in host/support jurisdictions based on their all-hazard sheltering experience and what is historically relevant for that particular area. In this simulation, it is not necessary to set up operations as they would be in an actual emergency. Alternatively, capabilities may be demonstrated by setting up stations for various services and providing those services to simulated evacuees. Given the substantial differences between demonstration and simulation of this criterion, exercise demonstration expectations must be clearly specified in Extent-of-Play Agreements. Congregate care staff must also demonstrate the capability to ensure that evacuees, service animals, and vehicles have been monitored for contamination, decontaminated as appropriate, and registered before entering the facility.

Individuals arriving at congregate care facilities must have means (e.g., hand stamp, sticker, bracelet, form, etc.) indicating that they, and their service animals and vehicles, where applicable, have been placed in a secure area or monitored, cleared, and found to have no contamination or contamination below the trigger/action level.

In accordance with plans/procedures, individuals found to be clean after monitoring do not need to have their vehicle monitored. These individuals do not need confirmation that their vehicle is free from contamination prior to entering the congregate care areas. However, those individuals who are found to be contaminated and are then decontaminated will have their vehicles held in a secure area until they can be monitored and decontaminated (if applicable) and do need confirmation that their vehicle is being held in a secure area or free from contamination prior to entering the congregate care areas. This capability may be determined through an interview process.

If operations at the center are demonstrated, material that would be difficult or expensive to transport (e.g., cots, blankets, sundries, and large-scale food supplies) need not be physically available at the facility(ies). However, availability of such items must be verified by providing the evaluator a list of sources with locations and estimates of quantities.

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**Sub-element 6.c – Temporary Care of Evacuees
(Continued)**

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

Exercise Specific Extent of Play:

Demonstrated out of sequence during June 2019 UConn/Mansfield Host Community/Reception Center exercise.

This criterion was successfully demonstrated and documented via alternate assessment which included the following activities: CT Millstone Ingestion Pathway Rehearsal Drill and TTX (October 9-10, 2019), RIEMA TTX (October 24, 2019), Annual Letters of Certification, Staff Assistance Visits, COVID-19 Response, training, and supporting documentation.

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

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have the capability to transport contaminated injured individuals to medical facilities with the capability to provide medical services.

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

Core Capabilities Crosswalk: Operational Coordination, Environmental Response/Health and Safety, and Public Health and Medical Services

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a biennial exercise, an actual event, or drills. FEMA has determined that these capabilities have been enhanced and consistently demonstrated as adequate; therefore, offsite medical service drills need be only evaluated biennially. FEMA will, at the request of the ORO, continue to evaluate the drills on an annual basis. All hospitals listed in the plan as medical services hospitals must be evaluated, with a transportation provider, every 2 years. Additional transportation providers will be rotated through the drills in the 8-year exercise cycle. For ambulance providers who do not participate in an evaluated drill during the two year cycle, training will be provided. This training will be documented in the ALC.

Monitoring, decontamination, and contamination control efforts must not delay urgent medical care for the victim.

ORO must demonstrate the capability to monitor/decontaminate and transport contaminated, injured individuals to medical facilities. An ambulance must be used for response to the victim. However, to avoid taking an ambulance out of service for an extended time, OROs may use any vehicle (e.g., car, truck, or van) to transport the victim to the medical facility. It is allowable for an ambulance to demonstrate up to the point of departure for the medical facility and then have a non-specialized vehicle transport the "victim(s)" to the medical facility. This option is used in areas where removing an ambulance from service to drive a great distance (over an hour) for a drill would not be in the best interests of the community. Normal communications between the ambulance/dispatcher and the receiving medical facility must be demonstrated. If a substitute vehicle is used for transport to the medical facility, this communication must occur before releasing the ambulance from the drill. This communication would include reporting radiation monitoring results, if available. In addition, the ambulance crew must demonstrate, by interview, knowledge of where the ambulance and crew would be monitored and decontaminated, if required, or whom to contact for such information.

Monitoring of the victim may be performed before transport or enroute, or may be deferred to the medical facility. Contaminated injured individuals transported to medical facilities are monitored as soon as possible to assure that everyone (ambulance and medical facility) is aware of the medical and radiological status of the individual(s). However, if an ambulance crew presumes that the patient(s) is contaminated and demonstrates appropriate contamination controls until the patient is monitored. Before using monitoring instruments, the monitor(s) must demonstrate the process of checking the instrument(s) for proper operation. All monitoring activities must be completed as they would be in an actual emergency. Appropriate contamination control measures must be demonstrated before and during transport and at the receiving medical facility.

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**Sub-element 6.d – Transportation and Treatment of Contaminated Injured Individuals
(Continued)**

The medical facility must demonstrate the capability to activate and set up a radiological emergency area for treatment. Medical facilities are expected to have at least one trained physician and one trained nurse to perform and supervise treatment of contaminated injured individuals. Equipment and supplies must be available for treatment of contaminated injured individuals.

The medical facility must demonstrate the capability to make decisions upon the need for decontamination of the individual, follow appropriate decontamination procedures, and maintain records of all survey measurements and samples taken. All procedures for collection and analysis of samples and decontamination of the individual must be demonstrated or described to the evaluator. Wastewater from decontamination operations must be handled according to facility plans/procedures.

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

Exercise Specific Extent of Play

Evaluations/Observations to take place during the MS-1 Exercises:

- October 23, 2019 – Lawrence Memorial Hospital
- November 13, 2019 - Middlesex Hospital

Portions of this criterion was successfully demonstrated and documented via alternate assessment which included the following activities: CT Millstone Ingestion Pathway Rehearsal Drill and TTX (October 9-10, 2019), RIEMA TTX (October 24, 2019), Annual Letters of Certification, Staff Assistance Visits, COVID-19 Response, training, and supporting documentation.

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Exercise Specific Extent of Play: (Day 2)

Connecticut DEMHS and other OROs will have demonstrated all outstanding criteria at the close of Day 1 of the exercise (June 8, 2021). Unevaluated limited participation of select departments/agencies may occur if requested to assist in driving play for Rhode Island's Post-plume component of their IPX scheduled on Day 2 (June 9, 2021).

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RI Extent of Play Agreement

For the Rhode Island/Millstone Power Ingestion Pathways 2021 FSE June 7 - 9, 2021

Purpose

This Extent of Play Agreement (XPA) identifies the conditions that will be used to develop, conduct, control, and evaluate the Rhode Island/Millstone Power Ingestion Pathways 2021 FSE, as agreed to by The Federal Emergency Management Agency (FEMA) Region 1 – Boston, and the Exercise Director for Rhode Island Emergency Management Agency.

Executive Summary

The Rhode Island/Millstone Power Ingestion Pathways Exercise of 2021 is a Full-Scale Exercise (FSE) coordinated by the Rhode Island Emergency Management Agency and Dominion Energy's Millstone Power Station. This FEMA Evaluated Exercise scheduled for June 7 - 9, 2021. This exercise will be evaluated by the Federal Emergency Management Agency (FEMA) to include all off-site response organizations (local and state agencies).

The purpose of this exercise is to evaluate player actions against current response plans and capabilities for a nuclear power plant-related incident, and to comply with the evaluation criteria of 44 CFR 350 and the guidelines of NUREG 0654/FEMA-REP-1. Exercise planners utilized the elements described in the Radiological Emergency Preparedness (REP) Program Manual (January 2016) to develop this exercise. See Appendix D.

The overall objective of the exercise for Offsite Response Organizations (OROs) is to demonstrate reasonable assurance that the health and safety of emergency workers and the public can be protected during a nuclear power plant emergency.

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Evaluation Areas	Sub-element & Criterion	RI Extent of Play	RI Play Locations
EVALUATION AREA 1: EMERGENCY OPERATIONS MANAGEMENT	Sub-element 1.a – Mobilization Criterion 1.a.1: OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner. (NUREG-0654, A.4, D.3, 4, E.1, 2, H.4)	Formal mobilization of emergency personnel will be simulated. Many EOC personnel work at EOC full time. 24hr shift change roster will be shown to evaluator. Field Sample Teams will pre-stage at RIEMA Warehouse to inventory their team equipment. CST R.I. National Guard are full time ARNG personnel. There is no need to mobilize during regular work hours.	<i>Conducted prior to the exercise</i> State EOC 645 New London Ave, Cranston Warehouse 277 Danielson Pike, North Scituate
	Sub-element 1.b – Facilities Criterion 1.b.1: Facilities are sufficient to support the emergency response. (NUREG-0654/FEMA-REP-1, G.3.a; H.3; J.10.h; J.12; K.5.b)	The RIEMA SEOC will be evaluated. The RIEMA JIC will be evaluated The RIDOH DOC will be evaluated (FEMA requesting to view RIDOH DOC, can be done OOS, Facetime, etc.)	<i>Conducted prior to the exercise</i> State EOC / JIC 645 New London Ave, Cranston Warehouse 277 Danielson Pike, North Scituate RIDOH DOC 3 Capitol Hill, Providence RI

	<p>Sub-element 1.c - Direction and Control</p> <p>Criterion 1.c.1: Key personnel with leadership roles for the ORO provide direction and control to that part of the overall response effort for which they are responsible.</p> <p>(NUREG-0654/FEMA-REP-1, A.1.d; A.2.a, b; A.3; C.4, 6)</p>	<p>During exercise, RIEMA will follow the Comprehensive Emergency Management Plan (CEMP) as well as elements contained within the REP Plan.</p>	<p>All exercise locations</p>
<p>EVALUATION AREA 1:</p> <p>EMERGENCY OPERATIONS MANAGEMENT</p>	<p>Sub-element 1.d – Communications Equipment</p> <p>Criterion 1.d.1: At least two communication systems are available, at least one operates properly, and communication links are established and maintained with appropriate locations. Communications capabilities are managed in support of emergency operations.</p> <p>(NUREG-0654/FEMA-REP-1, F.1, 2)</p>	<p>Communications will be demonstrated between CT- EOC and RI – EOC via WebEOC with a backup of 800Mhz radio system</p> <p>Communications capabilities will be demonstrated between SEOC, RIEMA Warehouse, Field Teams via 800Mhz Radio systems and WebEOC with a backup of VHF radio and cellular telephones</p>	<p>State EOC / JIC 645 New London Ave, Cranston</p> <p>Warehouse 277 Danielson Pike, North Scituate</p>

	<p>Sub-element 1.e – Equipment and Supplies to Support Operations</p> <p>Criterion 1.e.1: Equipment, maps, displays, monitoring instruments, dosimetry, potassium iodide (KI) and other supplies are sufficient to support emergency operations</p> <p>(NUREG-0654/FEMA-REP-1, H.7, 10; I.7, 8, 9; J.10.a, b, e; J.11, 12; K.3.a; K.5.b)</p>	<p>KI: No KI in Rhode Island.</p> <p>Dosimetry: TLD's and PPE are available for Field Teams</p> <p>Monitoring Instruments: Survey meters, DRD's TLD's and PPE are available for Field Teams.</p>	<p><i>Conducted prior to the exercise</i></p> <p>Warehouse 277 Danielson Pike, North Scituate</p>
<p>EVALUATION AREA 2:</p> <p>PROTECTIVE ACTION DECISION-MAKING</p>	<p>Sub-element 2.a – Emergency Worker Exposure Control</p> <p>Criterion 2.a.1</p>	<p>Not applicable for Ingestion Only</p>	
	<p>Sub-element 2.b - Radiological Assessment, Protective Action Recommendations, and Precautionary and/or Protective Action Decisions for the Plume Phase of the Emergency</p> <p>Criterion 2.b.1 Criterion 2.b.2</p>		
	<p>Sub-element 2.c - Precautionary and/or Protective Action Decision Consideration for the Protection of Persons with Disabilities and Access/Functional Needs</p> <p>Criterion 2.c.1</p>		

	<p>Sub-element 2.d - Radiological Assessment and Decision Making for the Ingestion Exposure Pathway</p> <p>Criterion 2.d.1:</p> <p>Radiological consequences for the ingestion pathway are assessed and appropriate protective action decisions are made based on the ORO's planning criteria.</p> <p>(NUREG-0654/FEMA-REP-1, A.3; C.1, 4; D.4; J.9, 11)</p> <p><i>*This criterion has been approved for re-demonstration during the exercise.</i></p>	<p><i>This sub-element will be evaluated on the second half of day one and as a facilitated tabletop exercise on day two.</i></p> <p>Field Sample Team Coordinator will coordinate field team deployment, sampling and delivery to the lab. Sampling teams will draw field kits, appropriate communications equipment and deploy from 279 Danielson Pike, N. Scituate RI 02857.</p> <p>An ingestion-sampling plan will be developed and implemented to define the consequences of the release of a radioactive plume to the environment. This sampling plan will serve to prioritize ingestion samples based on plume and meteorological information. Sampling plan development will be conducted on the afternoon of day one following the Plume phase</p> <p>The State Unified Command will demonstrate timely decisions to minimize radiological impacts from the ingestion exposure pathway, based on the given assessments and other information and communicate decisions to local, state, contagious state and federal partners.</p> <p>The Department of Health will evaluate whether it is necessary to impose agricultural holds/embargos within the affected area. Agricultural hold/embargo decisions will be shared amongst the affected areas with the EPZ and Ingestion Pathway</p> <p>Rhode Island will coordinate with Connecticut regarding necessary information and impact to its communities with the ingestion pathway.</p>
	<p>Sub-element 2.e - Radiological Assessment and Decision Making Concerning Post-Plume Phase Relocation, Reentry, and Return</p> <p>Criterion 2.e.1</p>	<p>Not applicable for Ingestion Only</p>

EVALUATION AREA 3: PROTECTIVE ACTION IMPLEMENTATION	Sub-element 3.1 - Implementation of Emergency Worker Exposure Control Criterion 3.a.1: The OROs issue appropriate dosimetry, KI, and procedures, and manage radiological exposure to emergency workers in accordance with the plans/procedures. Emergency workers periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. OROs maintain appropriate record-keeping of the administration of KI to emergency workers. (NUREG-0654/FEMA-REP-1, K.3.a, b; K.4)	Dosimetry will be issued to Field Sample Team personnel at the RIEMA Building. Based upon weather conditions, one person in each team will don full PPE dress and remaining team members will don booties and appropriate gloves	RIEMA Warehouse: 279 Danielson Pike, N Scituate RI
	Criterion 3.b.1 Criterion 3.c.1 Criterion 3.c.2	Not applicable for Ingestion Only	
	Sub-element 3.d – Implementation of Traffic and Access Control Criterion 3.d.1: Appropriate traffic and access control are established. Accurate instructions are provided to traffic and access control personnel. (NUREG-0654/FEMA-REP-1, A.3; C.1, 4; J.10.g, j)	The establishing of checkpoints for food embargo control will be conducted at the State EOC by responsible agencies through tabletop discussion. Rhode Island State Police should coordinate with MA and CT State Police for traffic and access control. (This portion of the drill can be conducted O.O.S. via a videoconference with RISP)	Demonstrated via day two discussion

	Criterion 3.d.2	Not applicable for Ingestion Only	
	<p>Sub-element 3.e – Implementation of Ingestion Exposure Pathway Decisions</p> <p>Criterion 3.e.1:</p> <p>The ORO demonstrates the availability and appropriate use of adequate information regarding water, food supplies, milk, and agricultural production within the ingestion exposure pathway emergency planning zone for implementation of protective actions.</p> <p>(NUREG-0654/FEMA-REP-1, A.3; C.1, 4; J.11)</p>	<p>Recommendations regarding protective actions will be by using controller data based on simulated laboratory analysis of ingestion samples during the TTX on day two.</p> <p>Data regarding water, food supplies, milk, and agricultural products will be utilized for implementation of protective actions. Any additional information and data generated from federal partners will also be used as appropriate for implementing protective action recommendations.</p>	<p>Demonstrated via day two discussion</p>
<p>EVALUATION AREA 3:</p> <p>PROTECTIVE ACTION IMPLEMENTATION</p>	<p>Criterion 3.e.2:</p> <p>Appropriate measures, strategies, and pre-printed instructional material are developed for implementing protective action decisions for contaminated water, food products, milk, and agricultural production.</p> <p>(NUREG-0654/FEMA-REP-1, G.1, J.9, 11)</p>	<p>Rhode Island will demonstrate, through discussion, action, or document review, the capability to coordinate and implement protective actions for the ingestion exposure pathway and to distribute ingestion information to members of the public during the TTX.</p> <p>The printing and distribution of radiological emergency Information will be simulated</p> <p>A Representative from RIEMA will be provided to assist with coordination of information and communications between Connecticut and Rhode Island.</p>	<p>Demonstrated via day two discussion</p>
	<p>Sub-element 3.f – Implementation of Post-Plume Phase Relocation, Reentry and Return Decisions</p> <p>Criterion 3.f.1</p>	Not applicable for Ingestion Only	

EVALUATION AREA 4: FIELD MEASUREMENT AND ANALYSIS	Sub-element 4.a – Plume Phase Field Measurements and Analyses Criterion 4.a.1 Criterion 4.a.2 Criterion 4.a.3	Not applicable for Ingestion Only	
	Sub-element 4.b – Post-Plume Phase Field Measurements and Sampling Criterion 4.b.1: The field teams (2 or more) demonstrate the capability to make appropriate measurements and to collect appropriate samples (e.g., food crops, milk, water, vegetation, and soil) to support adequate assessments and protective action decision making. (NUREG-0654/FEMA-REP-1, C.1; I.8; J.11)	Logistics and resources to support the federal response will be simulated. Rhode Island will assemble and direct two (2) Field Sampling Teams. Field Sampling Teams will demonstrate ingestion-sampling procedures for ingestion samples, which may include any of the following: ground and surface water, freshly packaged food, and milk. All teams will take at least one full set of samples. Chain of custody for samples will be demonstrated in accordance with sampling procedures.	Sampling locations to be determined Field Teams deploy from RIEMA Warehouse, 279 Danielson Pike, N. Scituate RI
	Sub-element 4.c – Laboratory Operations Criterion 4.c.1	Not applicable for Ingestion Only *RI has no local State lab resources and utilizes the FDA WEAC Lab for this function	
EVALUATION AREA 5: EMERGENCY NOTIFICATION &	Sub-element 5.a – Activation of the Prompt Alert and Notification System Criterion 5.a.1 Criterion 5.a.2 Criterion 5.a.3	Not applicable for Ingestion Only	

<p>PUBLIC INFORMATION</p>	<p>Sub-element 5.b - Subsequent Emergency Information and Instructions for the Public and the Media</p> <p>Criterion 5.b.1:</p> <p>OROs provide accurate subsequent emergency information and instructions to the public and the news media in a timely manner.</p> <p>(NUREG-0654/FEMA-REP-1, E.5, 7; G.3.a, G.4.a, c)</p>	<p>A representative from Rhode Island will be sent to the CT TTX to coordinate and communicate with the RIEOC to ensure that news briefings and conferences are timely and in concert with information released from CT.</p> <p>A Public Information/Rumor Control Line will be established by RIEMA and will field 2-5 phone calls.</p> <p>A minimum of two News Releases will be prepared for the Director's approval.</p>	<p>Demonstrated via day two discussion</p>
<p>EVALUATION AREA 6:</p> <p>SUPPORT OPERATION/FACILITIES</p>	<p>Sub-element 6.a – Monitoring, Decontamination, and Registration of Evacuees</p> <p>Criterion 6.a.1</p>	<p>Not applicable for Ingestion Only</p>	
	<p>Sub-element 6.b - Monitoring and Decontamination of Emergency Workers and their Equipment and Vehicles</p> <p>Criterion 6.b.1:</p> <p>The facility/ORO has adequate procedures and resources to accomplish monitoring and decontamination of emergency workers and their equipment and vehicles.</p> <p>(NUREG-0654/FEMA-REP-1, K.5.a, b)</p>	<p>Monitoring and Decontamination is for the Field Sample Teams (Emergency Workers), this is performed by the state regional decontamination teams.</p> <p>Monitoring and Decontamination will be performed in the RI Nuclear Science Center parking lot area.</p> <p>Only one vehicle will be monitored and/or decontaminated, outside only.</p> <p>Wash water will not be contained, per their procedures.</p>	<p>Rhode Island Nuclear Science Center: 16 Reactor Rd, Narragansett, RI 02882</p>
	<p>Sub-element 6.c – Temporary Care of Evacuees</p> <p>Criterion 6.c.1</p>	<p>Not applicable for Ingestion Only</p>	

	Sub-element 6.d – Transportation and Treatment of Contaminated Injured Individuals Criterion 6.d.1	Not applicable for Ingestion Only
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Standards & References

The Rhode Island Emergency Management Agency will use the following references, plans, and procedures during exercise play:

Program Manual, Radiological Emergency Preparedness, FEMA P-1028, January 2016

Radiological Emergency Preparedness Ingestion Pathway Base Plan, February 2021
(Draft)

Other related Rhode Island Emergency Management Agency Plans

Day 1 Exercise Parameters

The day 1 scenario will begin with the incident at the Millstone Plant and the notification and activation process driven by notifications from the Millstone plant to the State of Connecticut. Rhode Island will have limited play on day 1 but will be available to assist with Connecticut play if needed. Rhode Island anticipates receiving plume data from FRMAC and determining the next day's course of action.

Day 2 Exercise Parameters

The day 2 exercise will be a facilitator driven discussion/operations-based exercise which will take place at a location to be determined. The scenario will pick-up that the plume has ended, sample teams have already been deployed and lab confirmed results have been received. RI decision makers will be required to make protective action decisions.

Morning of Day 2: RI will conduct operations from the FOC located at the RIEMA Scituate facility and deploy two field sample teams to pre-selected locations to take actual samples. Safety briefings and equipment checks will be performed prior to deploying.

Afternoon of Day 2: The second half of Day 2 will consist of the samples being transported to the Nuclear Science Center located at the URI Bay Campus where they will be received, screened and sent to the laboratory for analysis. Vehicle decontamination will be conducted by the Regional Decontamination Teams.

Day 1 Exercise Participants – Full Scale RI Exercise

Participant	Exercise Role	Expected Level of Play
RIEMA	Duty Officer	Player - SEOC
RIEMA	Operations Officer	Player - SEOC
RIEMA	Public Information	Player - SEOC
RIEMA	Alert & Warning Officer	Player – SEOC

Day 2 Exercise Participants – Full Scale RI Exercise

Participant	Exercise Role	Expected Level of Play
RIEMA	Field Team Coordinator	Player - Scituate
RIEMA	Duty Officer	Player - SEOC
RIEMA	Operations Officer	Player - SEOC
RIEMA	Liaison	Travel to Connecticut
RIEMA	Public Information	Travel to Connecticut
RIEMA	Alert & Warning Officer	Player – SEOC
RIDEM	GIS	Player – Scituate
RIDOH	Food Protection Staff – Foodstuffs	Player – Sample Teams
RIDOH	Food Protection Staff – Milk	Player – Sample Teams
RIDEM	Division of Agriculture	Player – Sample Teams
RIDEM	Division of HazMat	Player – Sample Teams and Decon
RINSC	Sample Receipt	Player – Sample Collection
13 th CST	Sampling	Player – Sample Teams
Hopkins Hill Fire Dept	Decontamination	Player – Decontamination
Kingston Fire Dept	Decontamination	Player - Decontamination
RISP	Transportation	Player – Sample Transport

Day 2 Exercise Participants (Continued)

Participant	Exercise Role	Expected Level of Play
Governor's Office	State Executive	Day 2 Participant
Governor's Office	Public Information	Day 2 Participant
RIEMA	SEOC Manager	Day 2 Participant
RIEMA	Public Information	Day 2 Participant
RIEMA	Recovery	Day 2 Participant
RIEMA	Radiological Program	Day 2 Participant
RIEMA	Radiological Program	Day 2 Participant
RIEMA	Liaison to Connecticut	Day 2 Participant
RIDOH	ESF 8 Representative	Day 2 Participant
RIDOH	Center for Food Protection	Day 2 Participant
RIDOH	Center for Drinking Water	Day 2 Participant
RIDOH	Center for Public Health Communications	Day 2 Participant
RIDOH	Graphic Information Systems	Day 1 & 2 Participant
RIDEM	Agriculture	Day 2 Participant
RIDEM	State Vet	Day 2 Participant
RIDEM	Public Information	Day 2 Participant
RIDEM	Graphic Information Systems	Day 1 & 2 Participant
RISP	ESF 13 Representative	Day 2 Participant