After Action Report/ Improvement Plan

Seabrook Station

Radiological Emergency Preparedness (REP) Program

Exercise Date: April 6, 2022

Published Date: June 28, 2022

FEMA

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EXECUTIVE SUMMARY

On April 6, 2022, the U.S. Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA) Region I, Radiological Emergency Preparedness (REP) Program conducted an exercise in the 10-mile plume exposure pathway emergency planning zone around the Seabrook Station nuclear power plant. The purpose of the exercise and associated out-of-sequence activities was to 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 (RERP) and procedures. Interviews and out-of-sequence demonstrations for schools and other special facilities are also outlined in this report.

FEMA wishes to acknowledge the efforts of the many individuals in the State of New Hampshire and the Commonwealth of Massachusetts, local communities, and private and volunteer organizations that participated in this exercise.

Protecting the public health and safety is the full-time job of some of the exercise participants and an additional assigned responsibility for others. Still others have willingly sought this responsibility by volunteering to provide vital emergency services to their communities. Cooperation and teamwork of all participants were evident during this exercise.

This report contains the final evaluation of the biennial exercise and the out-of-sequence activities. The participants adequately demonstrated knowledge of their emergency response plans and procedures. There were no Level 1 Findings, one Level 2 Finding that was re-demonstrated and closed during the exercise, and three Planning Issues identified as a result of this exercise.

SECTION 1: EXERCISE OVERVIEW

1.1 Exercise Details

Exercise Name	Seabrook Station
Exercise Dates	April 6, 2022
Type of Exercise	Plume
Program	Department of Homeland Security/FEMA Radiological Emergency Preparedness Program
Scenario	Radiological Emergency

1.2 Exercise Planning Team Leadership

New Hampshire Department of Safety, Division of Homeland Security and Emergency Management

David Vaillancourt
Chief, Field Services

Kimberly A Castle
Assistant Chief, Field Services

Commonwealth of Massachusetts
Massachusetts Emergency Management Agency

John Viveiros
Technical Hazards Unit Supervisor

Massachusetts Department of Public Health

Mario Iannaccone
Planning/Monitoring/Accelerator/Industrial/NIR/Laser Supvr./Radiation Control Officer

NextEra Energy Seabrook Station Seabrook, New Hampshire

David Currier
Regulatory Affairs Project Manager

Department of Homeland Security
Federal Emergency Management Agency, Region I

Ingrid Pierce
Regional Assistance Committee Chairperson

John Rice
Senior Technological Hazards Program Specialist

Barbara Thomas
Technological Hazards Program Specialist

1.3 Participating Organizations

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

1.0 State of New Hampshire

1.1 Brentwood EOC

- Radio Amateur Civil Emergency Service
- Town of Brentwood Emergency Management
- Town of Brentwood Fire Department
- Town of Brentwood Highway Department
- Town of Brentwood Police Department

1.2 East Kingston

- Radio Amateur Civil Emergency Service
- East Kingston Emergency Management
- East Kingston Fire Department
- East Kingston Police Department
- East Kingston Statesman

1.3 Exeter EOC

- Radio Amateur Civil Emergency Services
- Town of Exeter Department of Public Works
- Town of Exeter Dispatch
- Town of Exeter Emergency Management
- Town of Exeter Emergency Medical Services
- Town of Exeter Fire Department
- Town of Exeter Health Department
- Town of Exeter Hospital
- Town of Exeter Information Technology
- Town of Exeter Manager and Public Affairs (PIO)
- Town of Exeter Police Department
- Town of Exeter Public Affairs
- Town of Exeter Schools: SAU 16 and Philips Exeter Academy

1.4 FMT #1

- New Hampshire State Police Bomb Squad

1.5 FMT #2

- New Hampshire State Patrol

1.6 Greenland EOC

- Greenland Building Inspector
- Greenland Emergency Management Agency
- Greenland Fire Department
- Greenland Police Department
- Greenland Public Works
- Greenland Town Administration
- Greenland Town Clerk/Tax Collector Office
- Radio Amateur Civil Emergency Service

1.7 Hampton EOC

- New Hampshire Homeland Security and Emergency Management
- Town of Hampton Department of Health
- Town of Hampton Emergency Management
- Town of Hampton Emergency Medical Services
- Town of Hampton Fire Department
- Town of Hampton Police Department
- Town of Hampton Public Works Department

1.8 Hampton Falls EOC

- Hampton Falls Building Inspection
- Hampton Falls Fire Department
- Hampton Falls Health Officer
- Hampton Falls Highway/Road Agent
- Hampton Falls Police Department
- Hampton Falls Selectperson's
- Hampton Falls Town Administration

1.9 IFO Portsmouth

- New Hampshire Homeland Security and Emergency Management

1.10 Kensington EOC

- Kensington Police Department
- Kensington Emergency Management
- Kensington Fire Department
- Kensington Elementary School
- Kensington Transportation

1.11 Kingston EOC

- Radio Amateur Civil Emergency Service
- Sanborn Regional School District
- Town of Kingston Fire Department
- Town of Kingston Police Department
- Town of Kingston Highway Department

- Town of Kingston Board of Selectmen
- Town of Kingston Town Clerk

1.12 New Castle EOC

- Radio Amateur Civil Emergency Service
- Town of New Castle Board of Selectmen
- Town of New Castle Building Inspector
- Town of New Castle Emergency Management
- Town of New Castle Fire Department
- Town of New Castle Police Department

1.13 New Hampshire EOF

- New Hampshire Homeland Security and Emergency Management
- New Hampshire Department of Health and Human Services, Division of Public Health Services, Radiological Health Section
- New Hampshire State Police Explosive Disposal Unit

1.14 New Hampshire JIC

- New Hampshire Department of Safety
- New Hampshire Homeland Security and Emergency Management
- NextEra Entergy

1.15 Newfields EOC

- Newfields Emergency Management
- Newfields Fire Department
- Newfields Police Department
- Rockingham County Amateur Radio Emergency Services
- Newmarket Police Dispatch

1.16 Newton EOC

- Radio Amateur Civil Emergency Service
- Sanborn Regional School District
- Seacoast Collaborative
- Town of Newton Emergency Management
- Town of Newton Fire Department
- Town of Newton Highway Department
- Town of Newton Police Department

1.17 North Hampton EOC

- North Hampton Department of Public Works
- North Hampton Fire Department
- North Hampton Police Department
- Radio Amateur Civil Emergency Service

1.18 Portsmouth EOC

- City of Portsmouth Administration
- City of Portsmouth Fire Department
- City of Portsmouth Public Works Department
- City of Portsmouth Police Department
- City of Portsmouth Police Dispatch Center

1.19 Rockingham County Dispatch Center

- Rockingham County Sheriff's Department

1.20 Rye EOC

- Rye Fire Department
- Rye Police Department
- Town of Rye Department of Public Works
- Town of Rye Emergency Management
- Town of Rye Office of Selectman

1.21 Seabrook EOC

- Town of Seabrook
- Town of Seabrook Department of Public Works
- Town of Seabrook Emergency Management
- Town of Seabrook Fire Department
- Town of Seabrook Health Department
- Town of Seabrook Highway Department
- Town of Seabrook Police Department
- Town of Seabrook Water Department

1.22 SEOC

- New Hampshire Department of Administrative Services
- New Hampshire Department of Agriculture
- New Hampshire Department of Education
- New Hampshire Department of Environmental Services
- New Hampshire Department of Fire Academy and Emergency Medical Services
- New Hampshire Department of Fish and Game
- New Hampshire Department of Health and Human Services
- New Hampshire Department of Information Technology
- New Hampshire Department of Safety, Division of Fire Safety
- New Hampshire Department of Transportation
- New Hampshire Homeland Security and Emergency Management
- New Hampshire National Guard – 127th Civil Support Team
- New Hampshire State Police
- Seabrook Station
- Federal Emergency Management Agency
- New Hampshire Emergency Services and Communications

1.23 South Hampton EOC

- Eastern Rockingham Amateur Radio Emergency Services
- South Hampton Police Department
- South Hampton Fire Department
- Town of South Hampton

1.24 Stratham EOC

- Stratham Fire Department
- Stratham Health Department
- Stratham Highway Department

- Stratham Office of Emergency Management
- Stratham Police Department

1.25 State Police Warning Point

- New Hampshire State Police

2.0 Commonwealth of Massachusetts

2.1 Amesbury EOC

- Amesbury Communications
- Amesbury Department of Public Works
- Amesbury Emergency Management Agency
- Amesbury Fire Department
- Amesbury Police Department
- Amesbury Transportation Coordinator
- Amesbury Radiological Officer
- North Shore Regional 911

2.2 FMT #1

- Massachusetts Department of Public Health's Radiation Control Program

2.3 FMT #2

- Massachusetts Department of Public Health's Radiation Control Program

2.4 Massachusetts 211 Call Center

- N/A

2.5 Massachusetts EOF

- Massachusetts Department of Public Health
- Massachusetts Emergency Management Agency

2.6 Massachusetts JIC

- Massachusetts Emergency Management Agency, Public Information Office
- New Hampshire Homeland Security and Emergency Management
- NextEra Energy

2.7 MEMA Region 1

- N/A

2.8 Merrimac EOC

- Massachusetts Emergency Management Agency
- Merrimac Emergency Management
- Merrimac Fire Department
- Merrimac Police Department
- Merrimac Public Works Department

2.9 Newbury EOC

- Newbury Council on Aging
- Newbury Emergency Communications
- Newbury Emergency Management Agency
- Newbury Fire Department
- Newbury Police Department
- Town of Newbury Public Works / Highway Department

2.10.Newburyport EOC

- Newburyport Emergency Management
- Newburyport Fire Department
- Newburyport Harbor Master
- Newburyport Police Department
- Newburyport Public Works
- Newburyport Schools

2.11 Salisbury EOC

- Massachusetts Emergency Management Agency
- Salisbury Department of Public Works
- Salisbury Emergency Management Agency
- Salisbury Fire Department
- Salisbury Police Department

2.12 SEOC

- Massachusetts Department of Mental Health
- Massachusetts Department of Public Health
- Massachusetts Department of Transportation
- Massachusetts Emergency Management Agency
- Massachusetts Executive Office of Public Safety and Security
- Massachusetts National Guard
- Massachusetts Office of the General Council
- Massachusetts State Police
- Seabrook Station Nuclear Power Plant

2.13 West Newbury EOC

- Town of West Newbury Bureau of Health
- Town of West Newbury Communications Officer
- Town of West Newbury Council on Aging
- Town of West Newbury Department of Public Works
- Town of West Newbury Emergency Management Agency
- Town of West Newbury Fire Department
- Town of West Newbury Highway Department
- Town of West Newbury Municipal Official
- Town of West Newbury Police Department
- Town of West Newbury Special Needs Officer
- Town of West Newbury Transportation

SECTION 2: EXERCISE DESIGN SUMMARY

2.1 Exercise Purpose and Design

The FEMA Region I office evaluated the exercise on April 6, 2022, to assess the capabilities of 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 the Seabrook Station (SS). The purpose of this report is to present the results and findings on the performance of the offsite response organizations (OROs) during a simulated radiological emergency in the HSEEP format.

2.2 Exercise Objectives, Capabilities and Activities

Exercise objectives and identified Capabilities/REP Criteria selected to be exercised are discussed in the Exercise Plan (EXPLAN).

2.3 Scenario Summary

The exercise scenario was developed to evaluate the response of the exercise participants 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 April 6, 2022, Seabrook Station evaluated exercise.

Each jurisdiction and functional entity were evaluated on its demonstration of criteria contained in the exercise evaluation areas as outlined in the 20161 REP Program Manual. Detailed information on the exercise evaluation area criteria and the extent-of-play agreements for the exercise are included as appendices to this report.

3.2 Summary Results of Exercise Evaluation

The matrix presented in the Table 3.1 on the following pages, represents the status of all exercise evaluation area criteria that were scheduled for demonstration during this exercise by all participating jurisdictions and functional entities. Exercise criteria are listed by number and the demonstration status of those criteria are indicated by the use of the following letters:

M - Met

L1 – Level 1 Finding

L2 – Level 2 Finding

P – Planning Issue

N – Not Demonstrated

N/A – Not Applicable

Table 3.1: Summary of Exercise Evaluation

DATE: 2022-04-06 SITE: Seabrook Station, NH M: Met, L1: Level 1 Finding, L2: Level 2 Finding, P: Plan Issue, N: Not Demonstrated		NH SEOC	NH SS EOF	NH SS FMT-1	NH SS FMT-2	NH SS IFO	NH SS JIC	State Police Warning	Rockingham Dispatch	Brentwood EOC	East Kingston EOC
Emergency Operations Management											
Mobilization	1a1	M	M	M	M	M	M	M	M	M	M
Facilities	1b1										
Direction and Control	1c1	M	M			M	M			M	M
Communications Equipment	1d1	M	M	M	M	M	M	M	M	M	M
Equipment and Supplies to Support Operations	1e1	M	M	M	M	M	M	M	M	M	M
Protective Action Decision Making											
Emergency Worker Exposure Control	2a1	M	M								
Dose Assessment & PARs & PADs for the Emergency Event	2b1	M	M								
Dose Assessment & PARs & PADs for the Emergency Event	2b2	M	M								
PADs for the Protection of persons with disabilities and access/functional needs	2c1	M									
Radiological Assessment and Decision-making for the Ingestion Exposure Pathway	2d1										
Radiological Assessment & Decision-making Concerning Post-Plume Phase Relocation, Reentry, and Return	2e1										
Protective Action Implementation											
Implementation of Emergency Worker Exposure Control	3a1		M	M	M					M	M
Implementation of KI Decision for Institutionalized Individuals and the Public	3b1									M	M
Implementation of Protective Actions for persons with disabilities and access/functional needs	3c1									M	M
Implementation of Protective Actions for persons with disabilities and access/functional needs	3c2					M				M	M
Implementation of Traffic and Access Control	3d1	M								M	M
Implementation of Traffic and Access Control	3d2	M								M	M
Implementation of Ingestion Pathway Decisions	3e1										
Implementation of Ingestion Pathway	3e2										

DATE: 2022-04-06 SITE: Seabrook Station, NH M: Met, L1: Level 1 Finding, L2: Level 2 Finding, P: Plan Issue, N: Not Demonstrated		NH SEOC	NH SS EOF	NH SS FMT-1	NH SS FMT-2	NH SS IFO	NH SS JIC	State Police Warning	Rockingham Dispatch	Brentwood EOC	East Kingston EOC
Decisions											
Implementation of Post-Plume Phase Relocation, Reentry, and Return Decisions	3f1										
Field Measurement and Analysis											
RESERVED	4a1										
Plume Phase Field Measurement and Analyses	4a2		M								
Plume Phase Field Measurement and Analyses	4a3			M	M						
Post Plume Phase Field Measurements and Sampling	4b1										
Laboratory Operations	4c1										
Emergency Notification and Public Info											
Activation of the Prompt Alert and Notification System	5a1	M							M		
RESERVED	5a2										
Activation of the Prompt Alert and Notification System	5a3										
Activation of the Prompt Alert and Notification System	5a4										
Emergency Information and Instructions for the Public and the Media	5b1	M				M	M			M	M
Support Operations/Facilities											
Monitoring, Decontamination, and Registration of Evacuees	6a1										
Monitoring and Decontamination of Emergency Workers and their Equipment and Vehicles	6b1									M	M
Temporary Care of Evacuees	6c1										
Transportation and Treatment of Contaminated Injured Individuals	6d1										

Table 3.1: Summary of Exercise Evaluation

DATE: 2022-04-06 SITE: Seabrook Station, NH M: Met, L1: Level 1 Finding, L2: Level 2 Finding, P: Plan Issue, N: Not Demonstrated		Exeter EOC	Greenland EOC	Hampton EOC	Hampton Falls EOC	Kensington EOC	Kingston EOC	New Castle EOC	Newfields EOC	Newton EOC	North Hampton EOC	Portsmouth EOC
Emergency Operations Management												
Mobilization	1a1	M	M	M	M	M	M	M	M	M	M	M
Facilities	1b1					M						
Direction and Control	1c1	M	M	M	M	M	M	M	M	M	M	M
Communications Equipment	1d1	M	M	M	M	M	M	M	M	M	M	M
Equipment and Supplies to Support Operations	1e1	M	M	M	M	M	M	M	M	M	M	M
Protective Action Decision Making												
Emergency Worker Exposure Control	2a1											
Dose Assessment & PARs & PADs for the Emergency Event	2b1											
Dose Assessment & PARs & PADs for the Emergency Event	2b2											
PADs for the Protection of persons with disabilities and access/functional needs	2c1											
Radiological Assessment and Decision-making for the Ingestion Exposure Pathway	2d1											
Radiological Assessment & Decision-making Concerning Post-Plume Phase Relocation, Reentry, and Return	2e1											
Protective Action Implementation												
Implementation of Emergency Worker Exposure Control	3a1	M	M	M	M	M	M	M	M	M	M	P
Implementation of KI Decision for Institutionalized Individuals and the Public	3b1	M	M	M	M	M	M	M	M	M	M	M
Implementation of Protective Actions for persons with disabilities and access/functional needs	3c1	M	M	M	M	M	M	M	M	M	M	M
Implementation of Protective Actions for persons with disabilities and access/functional needs	3c2	M	M	M	M	M	M	M	M	M	M	M
Implementation of Traffic and Access Control	3d1	M	M	M	M	M	M	M	M	M	M	M
Implementation of Traffic and Access Control	3d2	M	M	M	M	M	M	M	M	M	M	M
Implementation of Ingestion Pathway Decisions	3e1											
Implementation of Ingestion Pathway Decisions	3e2											
Implementation of Post-Plume Phase Relocation, Reentry, and Return Decisions	3f1											
Field Measurement and Analysis												
RESERVED	4a1											
Plume Phase Field Measurement and	4a2											

DATE: 2022-04-06 SITE: Seabrook Station, NH M: Met, L1: Level 1 Finding, L2: Level 2 Finding, P: Plan Issue, N: Not Demonstrated		Exeter EOC	Greenland EOC	Hampton EOC	Hampton Falls EOC	Kensington EOC	Kingston EOC	New Castle EOC	Newfields EOC	Newton EOC	North Hampton EOC	Portsmouth EOC
Analyses												
Plume Phase Field Measurement and Analyses	4a3											
Post Plume Phase Field Measurements and Sampling	4b1											
Laboratory Operations	4c1											
Emergency Notification and Public Info												
Activation of the Prompt Alert and Notification System	5a1											
RESERVED	5a2											
Activation of the Prompt Alert and Notification System	5a3											
Activation of the Prompt Alert and Notification System	5a4											
Emergency Information and Instructions for the Public and the Media	5b1	M	M	M	M	M	M	M	M	M	M	M
Support Operations/Facilities												
Monitoring, Decontamination, and Registration of Evacuees	6a1											
Monitoring and Decontamination of Emergency Workers and their Equipment and Vehicles	6b1	M	M	M	M	M	L2	M	M	M	M	P
Temporary Care of Evacuees	6c1											
Transportation and Treatment of Contaminated Injured Individuals	6d1											

Table 3.1: Summary of Exercise Evaluation

DATE: 2022-04-06 SITE: Seabrook Station, NH M: Met, L1: Level 1 Finding, L2: Level 2 Finding, P: Plan Issue, N: Not Demonstrated		Rye EOC	Seabrook EOC	South Hampton EOC	Stratham EOC					MA SEOC	MA R1 EOC	MA EOF
Emergency Operations Management												
Mobilization	1a1	M	M	M	M					M	M	M
Facilities	1b1											
Direction and Control	1c1	M	M	M	M					M	M	M
Communications Equipment	1d1	M	M	M	M					M	M	M
Equipment and Supplies to Support Operations	1e1	M	M	M	M					M	M	M
Protective Action Decision Making												
Emergency Worker Exposure Control	2a1									M		M
Dose Assessment & PARs & PADs for the Emergency Event	2b1									M		M
Dose Assessment & PARs & PADs for the Emergency Event	2b2									M		M
PADs for the Protection of persons with disabilities and access/functional needs	2c1									M		
Radiological Assessment and Decision-making for the Ingestion Exposure Pathway	2d1											
Radiological Assessment & Decision-making Concerning Post-Plume Phase Relocation, Reentry, and Return	2d2											
Protective Action Implementation												
Implementation of Emergency Worker Exposure Control	3a1	M	M	M	M							M
Implementation of KI Decision for Institutionalized Individuals and the Public	3b1	M	M	M	M							
Implementation of Protective Actions for persons with disabilities and access/functional needs	3c1	M	M	M	M						M	
Implementation of Protective Actions for persons with disabilities and access/functional needs	3c2	M	M	M	M						M	
Implementation of Traffic and Access Control	3d1	M	M	M	M						M	
Implementation of Traffic and Access Control	3d2	M	M	M	M						M	
Implementation of Ingestion Pathway Decisions	3e1											
Implementation of Ingestion Pathway Decisions	3e2											
Implementation of Post-Plume Phase Relocation, Reentry, and Return Decisions	3f1											

DATE: 2022-04-06 SITE: Seabrook Station, NH M: Met, L1: Level 1 Finding, L2: Level 2 Finding, P: Plan Issue, N: Not Demonstrated		Rye EOC	Seabrook EOC	South Hampton EOC	Stratham EOC					MA SEOC	MA R1 EOC	MA EOF
Field Measurement and Analysis												
RESERVED	4a1											
Plume Phase Field Measurement and Analyses	4a2											M
Plume Phase Field Measurement and Analyses	4a3											
Post Plume Phase Field Measurements and Sampling	4b1											
Laboratory Operations	4c1											
Emergency Notification and Public Info												
Activation of the Prompt Alert and Notification System	5a1									M		
RESERVED	5a2											
Activation of the Prompt Alert and Notification System	5a3											
Activation of the Prompt Alert and Notification System	5a4											
Emergency Information and Instructions for the Public and the Media	5b1	M	M	M	M					M		
Support Operations/Facilities												
Monitoring, Decontamination, and Registration of Evacuees	6a1											
Monitoring and Decontamination of Emergency Workers and their Equipment and Vehicles	6b1	M	M	M	M							
Temporary Care of Evacuees	6c1											
Transportation and Treatment of Contaminated Injured Individuals	6d1											

Table 3.1: Summary of Exercise Evaluation

DATE: 2022-04-06 SITE: Seabrook Station, NH M: Met, L1: Level 1 Finding, L2: Level 2 Finding, P: Plan Issue, N: Not Demonstrated		MA SS JIC	MA SS FMT-1	MA SS FMT-2	MA SS 211	Amesbury EOC	Merrimac EOC	Newbury EOC	Newburyport EOC	Salisbury EOC	West Newbury EOC
Emergency Operations Management											
Mobilization	1a1	M	M	M		M	M	M	M	M	M
Facilities	1b1							M			
Direction and Control	1c1	M				M	M	M	M	M	M
Communications Equipment	1d1	M	M	M	M	M	M	M	M	M	M
Equipment and Supplies to Support Operations	1e1	M	M	M	M	M	M	M	M	M	M
Protective Action Decision Making											
Emergency Worker Exposure Control	2a1										
Dose Assessment & PARs & PADs for the Emergency Event	2b1										
Dose Assessment & PARs & PADs for the Emergency Event	2b2										
PADs for the Protection of persons with disabilities and access/functional needs	2c1										
Radiological Assessment and Decision-making for the Ingestion Exposure Pathway	2d1										
Radiological Assessment & Decision-making Concerning Post-Plume Phase Relocation, Reentry, and Return	2e1										
Protective Action Implementation											
Implementation of Emergency Worker Exposure Control	3a1		M	M		P	M	M	M	M	M
Implementation of KI Decision for Institutionalized Individuals and the Public	3b1					M		M	M	M	M
Implementation of Protective Actions for persons with disabilities and access/functional needs	3c1					M	M	M	M	M	M
Implementation of Protective Actions for persons with disabilities and access/functional needs	3c2					M	M	M	M	M	M
Implementation of Traffic and Access Control	3d1					M	M	M	M	M	M
Implementation of Traffic and Access Control	3d2					M	M	M	M	M	M
Implementation of Ingestion Pathway Decisions	3e1										
Implementation of Ingestion Pathway Decisions	3e2										
Implementation of Post-Plume Phase Relocation, Reentry, and Return Decisions	3f1										
Field Measurement and Analysis											
RESERVED	4a1										
Plume Phase Field Measurement and Analyses	4a2										

DATE: 2022-04-06 SITE: Seabrook Station, NH M: Met, L1: Level 1 Finding, L2: Level 2 Finding, P: Plan Issue, N: Not Demonstrated		MA SS JIC	MA SS FMT-1	MA SS FMT-2	MA SS 211	Amesbury EOC	Merrimac EOC	Newbury EOC	Newburyport EOC	Salisbury EOC	West Newbury EOC
Plume Phase Field Measurement and Analyses	4a3		M	M							
Post Plume Phase Field Measurements and Sampling	4b1										
Laboratory Operations	4c1										
Emergency Notification and Public Info											
Activation of the Prompt Alert and Notification System	5a1										
RESERVED	5a2										
Activation of the Prompt Alert and Notification System	5a3										
Activation of the Prompt Alert and Notification System	5a4										
Emergency Information and Instructions for the Public and the Media	5b1	M			M	M	M	M	M	M	M
Support Operations/Facilities											
Monitoring, Decontamination, and Registration of Evacuees	6a1										
Monitoring, Decontamination, and Registration of Evacuees	6a1										
Monitoring and Decontamination of Emergency Workers and their Equipment and Vehicles	6b1										
Temporary Care of Evacuees	6c1										

3.3 Criteria Evaluation Summaries

3.3.1 Commonwealth of Massachusetts Jurisdictions

3.3.1.1 Massachusetts State Emergency Operations Center

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

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

3.3.1.2 MA Region I EOC

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

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

3.3.1.3 MA (SS) Joint Information Center

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

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

3.3.1.4 MA (SS) Emergency Operations Facility

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

a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.1, 2.b.2, 3.a.1, 4.a.2
b. LEVEL 1 FINDINGS: None

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

3.3.1.5 MA (SS) Field Monitoring Team-1

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

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

3.3.1.6 MA (SS) Field Monitoring Team-2

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

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

3.3.1.7 MA 211

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

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

3.3.2 Risk Jurisdictions

3.3.2.1 Amesbury Local EOC

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

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

Planning Issue Number: 57-22-3a1-P-01	**Criterion 3a1**
CONDITION: The Amesbury Emergency Operations Center (EOC) plans were unclear as to when the EOC staff should begin reading their Direct Reading Dosimeters (DRDs) at 15-minute intervals.	
POSSIBLE CAUSE: The Amesbury plan (AM-06, Amesbury Radiological Officer, pages 5-6, 5.0 Site Area Emergency/General Emergency Actions) states, "*When instructed, remind EOC staff to read their dosimeters every 15 minutes*". It does not state who would provide that instruction. It also directs the Radiological Officer (RO) to instruct staff to read their DRDs every 15 minutes at the Emergency Classification Levels (ECL) of Site Area Emergency (SAE)/General Emergency (GE) *"if there is a radioactive release from the plant"*. The Emergency Worker Briefing Sheet states, "*Once directed, read dosimetry every 15 minutes*". Depending on the situation, these instructions could be interpreted as contradictory and confusing. At the SAE ECL during the exercise, a question arose over whether to begin reading DRDs every 15 minutes since the radiological release did not go past the Seabrook Station site boundary. This issue applies to all local Emergency Planning Zone (EPZ) communities.	
REFERENCE: NUREG-0654/FEMA-REP-1, Rev. 1, (K.3.a, b; K.4); Amesbury SOP, Section 6, Rev. 14, July 2014.	
EFFECT: If emergency workers did not check and report the readings on their DRDs every 15 minutes, they could be unaware of how much radiation they were receiving during the event, causing them further risk than necessary.	
RECOMMENDATION: Clarify the process in the plans so there is no ambiguity about the conditions under which Emergency Workers should read their dosimetry at 15-minute intervals. Ensure that plans and procedures at the state and local level provide consistent instructions on this topic for all locations.	

3.3.2.2 Merrimac Local EOC

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

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

3.3.2.3 Newbury Local EOC

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

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

3.3.2.4 Newburyport Local EOC

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

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

3.3.2.5 Salisbury Local EOC

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

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

3.3.2.6 West Newbury Local EOC

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

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

***The following demonstrations were conducted out of sequence during September 27-30, 2021.**

3.3.2.7 Amesbury Country Daycare

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

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

3.3.2.8 Brigham Manor

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

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

3.3.2.9 Bright Horizons

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

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

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

3.3.2.10 Children's Castle

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

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

3.3.2.11 Griffin House

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

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

3.3.2.12 Hillside Rest Home

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

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

3.3.2.13 Kinder Care Learning Center

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

a. MET: 1.a.1, 3.b.1, 3.c.2.
b. LEVEL 1 FINDINGS: None
c. LEVEL 2 FINDINGS: None

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

3.3.2.14 Knoll Edge Nursery

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

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

3.3.2.15 Little Sprouts Day Care

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

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

3.3.2.16 Molin School

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

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

3.3.2.17 Mrs. Murray's Nursery

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

a. MET: 1.a.1, 3.b.1, 3.c.2

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

3.3.2.18 Port Healthcare Center

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

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

3.3.2.19 Windmill Country Daycare

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

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

3.3.2.20 YMCA Children's Center

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

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

3.3.3 State of New Hampshire Jurisdictions

3.3.3.1 NH State Emergency Operations Center

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

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

Planning Issue Number: 57-22-3a1-P-02	**Criterion 3a1**
CONDITION: During the Seabrook Station evaluated exercise on April 6, 2022, it was observed that multiple town emergency operations centers (EOCs) within the 10-Mile Emergency Planning Zone (EPZ) were not aware of the purpose of or handling of the control Permanent Record Dosimeters (PRDs).	
POSSIBLE CAUSE: The procedures do not include a process for handling a control PRD.	
REFERENCE: NUREG-0654/FEMA-REP-1, H-10; K.3.a. REP Program Manual, January 2015, Criterion 3.a.1.	
EFFECT: If control PRDs are exposed to the same incident environment as individual emergency worker PRDs, they become useless. The purpose of the control PRD is to expose it background radiation only, but not the incident-specific gamma exposure from a radiological release so that the background can be subtracted from the total dose recorded for each individual emergency worker PRD. If a reliable background cannot be determined, then all of the dose recorded on individual emergency worker PRDs must be applied to the wearer for the incident. This would result in higher assigned emergency worker doses than actually occurred.	
RECOMMENDATION: The State of New Hampshire should establish a process for use of control PRDs, incorporate the process into their written procedures, and ensure the communities within the 10-mile EPZ understand and implement these procedures. Potential approaches to this process include the following: In lieu of using a control PRD, establish a valid background history and subtract this value from emergency worker PRDs, or Remove control PRDs from the EPZ to a known background location at the start of an incident so that they are not exposed to the radiological release, or Effectively shield control PRDs at the start of an incident within a viable lead shield so that exposure to the radiological release is minimal, or Document an equally effective procedure, or Determine that the background on the control dosimeters is insignificant and not worth the resources necessary to account for it; hence, including background dose in the assigned emergency worker dose.	

**** Note: "Although 3.a.1 was not evaluated at the NH SEOC, it is the State's responsibility to implement this corrective action and update the local plans accordingly."**

3.3.3.2 NH (SS) Emergency Operations Facility

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

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

3.3.3.3 NH (SS) Field Monitoring Team-1

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

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

3.3.3.4 NH (SS) Field Monitoring Team-2

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

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

3.3.3.5 NH Incident Field Office (SS)

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

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

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

3.3.3.6 NH (SS) Joint Information Center

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

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

3.3.3.8 NH State Police Communications Center, NH State Warning Point

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

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

3.3.3.9 Rockingham County Dispatch Center

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

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

3.3.4 Risk Jurisdictions

3.3.4.1 Brentwood Local EOC

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

a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 5.b.1., 6.b.1.
b. LEVEL 1 FINDINGS: None
c. LEVEL 2 FINDINGS None
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

3.3.4.2 East Kingston Local EOC

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

a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 5.b.1., 6.b.1
b. LEVEL 1 FINDINGS: None
c. LEVEL 2 FINDINGS: None
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

3.3.4.3 Exeter Local EOC

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

a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 5.b.1., 6.b.1
b. LEVEL 1 FINDINGS: None
c. LEVEL 2 FINDINGS: None
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

3.3.4.4 Greenland Local EOC

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

a. MET: 1.a.1, 1.c. 1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 5.b.1., 6.b.1.
b. LEVEL 1 FINDINGS: None
c. LEVEL 2 FINDINGS: None
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

3.3.4.5 Hampton Local EOC

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

a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 5.b.1., 6.b.1.
b. LEVEL 1 FINDINGS: None
c. LEVEL 2 FINDINGS: None
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

3.3.4.6 Hampton Falls Local EOC

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

a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 5.b.1., 6.b.1.
b. LEVEL 1 FINDINGS: None
c. LEVEL 2 FINDINGS: None
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

3.3.4.7 Kensington Local EOC

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

a. MET: 1.a.1, 1.b.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 5.b.1., 6.b.1.
b. LEVEL 1 FINDINGS: None
c. LEVEL 2 FINDINGS: None
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

3.3.4.8 Kingston NH Local EOC

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

a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 5.b.1., 6.b.1.
b. LEVEL 1 FINDINGS: None
c. LEVEL 2 FINDINGS: One
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

Planning Issue Number: 57-22-6b1-L2-01	Criterion 6b1
CONDITION: The Emergency Worker (EW) screener conducted the radiological screening with the CDV-700 with pancake probe at a rate of speed too high to adequately detect radiological contamination.	
POSSIBLE CAUSE: Screening of EW at the EOC is a new standard practice, so personnel may have not had a lot of experience in conducting radiological screening to establish good practices in the speed of the probe movement over the body. Notably, the movement of the pancake probe head in relationship to the area being covering over a specific period of seconds.	
REFERENCE: Criterion 6.b.1; Kingston local plan; REPP standard training practices	
EFFECT: Rapid movement of the pancake probe does not allow the electronics of the survey meter enough time to register the radioactivity and display it accurately (if at all) on the dial.	
RECOMMENDATION: Screening personnel statewide should receive training on conducting whole-body screening with a survey meter and pancake probe, including proper timing, probe movement and course of travel over the body. Sufficient practice and periodic refresher time every year should be included in training, in order to perfect the skills and retain them, since these are perishable skills. ****NOTE: This Level 2 Finding was successfully re-demonstrated and closed during the exercise.**	

3.3.4.9 New Castle Local EOC

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

a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 5.b.1., 6.b.1.
b. LEVEL 1 FINDINGS: None
c. LEVEL 2 FINDINGS: None
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

3.3.4.10 Newfields Local EOC

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

a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 5.b.1, 6.b.1.
b. LEVEL 1 FINDINGS: None
c. LEVEL 2 FINDINGS: None
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

3.3.4.11 Newton Local EOC

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

a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 5.b.1, 6.b.1.
b. LEVEL 1 FINDINGS: None
c. LEVEL 2 FINDINGS None
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

3.3.4.12 North Hampton Local EOC

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

a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 5.b.1., 6.b.1.
b. LEVEL 1 FINDINGS: None
c. LEVEL 2 FINDINGS None
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

3.3.4.13 Portsmouth Local EOC

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

a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 5.b.1, 6.b.1.
b. LEVEL 1 FINDINGS: None
c. LEVEL 2 FINDINGS: None
d. PLAN ISSUES: Two (3.a.1 under NH SEOC)
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

Planning Issue Number: 57-22-6b1-P-03	**Criterion 6b1**
CONDITION: Current calibration stickers on the CD V-700P provide a single Source Reading instead of an acceptable range of readings.	

POSSIBLE CAUSE: Homeland Security Emergency Management/New Hampshire Department of Safety document EPZ Communities – 05.2021, "CD V-700P: Geiger Muller Survey Instrument Used For Contamination Detection," provides insufficient detail for the user to determine operability of the CD V-700P based on the source check reading. The user's operational check requires a source check, then states that, "The reading should fall close to this Source Reading. This indicates the instrument is operating properly." The statement, "close to the Source Reading," is open to interpretation by each individual operator and, hence, only provides a qualitative, not a quantitative verification of equipment operation, and is inconsistent with the Program Manual Radiological Emergency Preparedness FEMA P-1028 / January 2016.

REFERENCES:

- NUREG-0654 K5.a, b
- Homeland Security Emergency Management New Hampshire Department of Safety document EPZ Communities – 05.2021, "CD V-700P: Geiger Muller Survey Instrument Used For Contamination Detection
- Program Manual Radiological Emergency Preparedness FEMA P-1028 / January 2016, page 73, NUREG Criterion H.10.c, "Radiological Survey Instruments."
    - This document indicates that, "Instruments being used to measure activity have accompanying documentation and/or a sticker affixed to the instrument indicating the effective range of readings. The range of readings documentation indicates the acceptable range of readings that the meter should indicate when it is response-checked using a standard test source."
- The RPM guidance is also consistent with IEEE/ANSI N323AB-2013 American National Standard For Radiation Protection Instrumentation Test and Calibration, Portable Survey Instruments.

EFFECT: The current process is not sufficient to confirm whether the instrument is operating properly.

RECOMMENDATION: Provide an acceptable range of readings on the calibration stickers affixed to the device instead of just a single point reading or provide the range of readings on accompanying device paperwork.

Change Homeland Security Emergency Management New Hampshire Department of Safety document EPZ Communities – 05.2021, "CD V-700P: Geiger Muller Survey Instrument Used For Contamination Detection, step 10 of the Operational Check" section to indicate that the source check reading must fall within the acceptable range of readings on the meter calibration sticker or accompanying paperwork to be considered "operating properly."

Provide training to potential operators of the CD V-700P on these procedural changes.

3.3.4.214 Rye Local EOC

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

a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 5.b.1, 6.b.1.
b. LEVEL 1 FINDINGS: None
c. LEVEL 2 FINDINGS: None
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None

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

3.3.4.15 Seabrook Local EOC

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

a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 5.b.1, 6.b.1.
b. LEVEL 1 FINDINGS: None
c. LEVEL 2 FINDINGS: None
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

3.3.4.7 South Hampton Local EOC

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

a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 5.b.1, 6.b.1.
b. LEVEL 1 FINDINGS: None
c. LEVEL 2 FINDINGS: None
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

3.3.4.17 Stratham Local EOC

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

a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 5.b.1, 6.b.1.
h. LEVEL 1 FINDINGS: None
i. LEVEL 2 FINDINGS: None
j. PLAN ISSUES: None
k. NOT DEMONSTRATED: None
l. PRIOR ISSUES - RESOLVED: None
m. PRIOR ISSUES - UNRESOLVED: None

<u>*The following demonstrations were conducted Out of Sequence October 12- 14 and 18- 20 2021.</u>

3.3.4.18 Amesbury Seventh Day Elementary

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

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

3.3.4.19 Birchtree Center

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

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

3.3.4.20 Cornerstone School

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

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

3.3.4.21 Camp Tricklin Falls

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

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

3.3.4.22 Edgewood Centre

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

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

3.3.4.23 Exeter High School

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

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

3.3.4.24 Hampton Academy

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

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

3.3.4.25 Heronfield Academy

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

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

g. PRIOR ISSUES - UNRESOLVED: None

3.3.4.26 Learning Skills Academy

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

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

3.3.4.27 Lincoln Akerman School

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

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

3.3.4.28 Lincoln Street School

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

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

3.3.4.29 Newton Memorial Elementary

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

a. MET: 1.a.1, 3.b.1, 3.c.2.
b. LEVEL 1 FINDINGS: None

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

3.3.4.30 Philips Exeter Academy

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

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

3.3.4.31 Richie McFarland Child Center

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

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

3.3.4.32 Seabrook Elementary

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

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

3.3.4.33 Seabrook Middle School

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

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

3.3.4.34 Seacoast School of Technology

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

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

3.3.4.35 Winnacunnet Regional High School

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

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

SECTION 4: CONCLUSION

The State and local organizations identified in this report all demonstrated knowledge of their emergency response plans and procedures and adequately implemented them. There were no Level 1 Findings, one Level 2 Finding that was re-demonstrated and closed during the exercise, and three Planning Issues identified as a result of the 2022 Seabrook Station evaluated exercise.

APPENDIX A: IMPROVEMENT PLAN

Please see Section 3 for identification and explanation of any Findings or Planning Issues.

APPENDIX B: EXERCISE TIMELINE

DATE: April 6, 2022 SITE: Seabrook

Emergency Classification Level or Event	Time Utility Declared	NH SEOC	NH EOF	NH IFO	NH State Police	Rockingham Dispatch	NH JIC
Unusual Event	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Alert	0803	0812	0803	0831	0812	0821	0847
Site Area Emergency	0952	0957	0952	1006	N/A	1015	0954
General Emergency	1152	1200	1152	1210	N/A	1211	1152
Simulated Rad. Release Started	0954	0952	0954	1006	N/A	1031	1037
Simulated Rad. Release Terminated	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Facility Declared Operational		0848	0854	0843	N/A	N/A	0930
Governor's Declaration of State Emergency		1025	N/A	1031	N/A	N/A	1025
Declaration of Local Emergency		N/A	N/A	N/A	N/A	N/A	N/A
Exercise Terminated		1336	1236	1338	N/A	1338	1200
Early Precautionary Actions: Beaches and Parks Closed		1025	1035	1031	N/A	N/A	0928
Early Precautionary Actions: Traffic and Access Control Points (water and rail)		1025	N/A	0924/1031	N/A	N/A	0928
Early Precautionary Actions: Animals on Stored Feed		1025	1035	0924	N/A	N/A	0928
Early Precautionary Actions: School Transfer/Release		N/A	N/A	0924	N/A	N/A	0928
Early Precautionary Actions: Restrict Airspace		1025	N/A	0924	N/A	N/A	0928
1st Protective Action Decision:		1025	N/A	1031	N/A	N/A	1029
1st Siren Activation		1034	N/A	1037	N/A	1037	1037
1st EAS Message		1040	N/A	1040	N/A	1040	1040
2nd Protective Action Decision:		1228	N/A	1233	N/A	N/A	1233
2nd Siren Activation		1240	1234	1240	N/A	1240	1240
2nd EAS Message		1243	N/A	1243	N/A	1243	1243

3rd Protective Action Decision:	N/A	N/A	N/A	N/A	N/A	N/A
3rd Siren Activation	N/A	N/A	N/A	N/A	N/A	N/A
3rd EAS Message	N/A	N/A	N/A	N/A	N/A	N/A
KI Administration Decision: EWs advised to take KI	1025	1019	1031	N/A	N/A	1031
KI Administration Decision: General Public advised to take KI	1228	N/A	1233	N/A	N/A	1240

Emergency Classification Level or Event	Time Utility Declared	Brentwood EOC	East Kingston EOC	Exeter EOC	Greenland EOC	Hampton EOC	Hampton Falls EOC
Unusual Event	N/A	N/A	N/A	N/A	N/A	N/A	0824
Alert	0803	0832	0822	0832	0834	0836	0837
Site Area Emergency	0952	1005	1007	1007	1010	1002	1000
General Emergency	1152	1210	1212	1210	1210	1210	1209
Simulated Rad. Release Started	0954	1210	1031	1032	10333	1031	1029
Simulated Rad. Release Terminated	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Facility Declared Operational		0850	0845	0842	0909	0854	0839
Governor's Declaration of State Emergency		1034	1025	1032	1031	1035	1033
Declaration of Local Emergency		N/A	N/A	N/A	N/A	N/A	N/A
Exercise Terminated		1338	1338	1342	1341	1340	1337
Early Precautionary Actions: Beaches and Parks Closed		1034	1031	1032	1031	1015	0927
Early Precautionary Actions: Traffic and Access Control Points (water and rail)		1034	0924/1031	0934/1032	0924/1031	0925/ 1031	0927
Early Precautionary Actions: Animals on Stored Feed		0930	0924	0934	0924	0925	0927
Early Precautionary Actions: School Transfer/Release		N/A	N/A	N/A	N/A	0919	N/A
Early Precautionary Actions: Restrict Airspace		1034	0924	0934	0924	0925	0927
1st Protective Action Decision:		1034	1031	1032	1033	1033	1033
1st Siren Activation		1037	1037	1037	1037	1037	1047
1st EAS Message		1040	1040	1040	1030	1040	N/A
2nd Protective Action Decision:		1235	1233	1235	1233	1233	1230

2nd Siren Activation	1240	1240	1240	1240	1240	1243
2nd EAS Message	1243	1243	1243	1243	1243	N/A
3rd Protective Action Decision:	N/A	N/A	N/A	N/A	N/A	N/A
3rd Siren Activation	N/A	N/A	N/A	N/A	N/A	N/A
3rd EAS Message	N/A	N/A	N/A	N/A	N/A	N/A
KI Administration Decision: EWs advised to take KI	1110	1031	1032	1033	1040	1029
KI Administration Decision: General Public advised to take KI	1235	1233	1235	1233	1240	N/A

Emergency Classification Level or Event	Time Utility Declared	Kensington EOC	Kingston NH EOC	New Castle EOC	Newfields EOC	Newton EOC	North Hampton EOC
Unusual Event	N/A	N/A	N/A	N/A	0826	N/A	N/A
Alert	0803	0823	0824	0825	0832	0822	0825
Site Area Emergency	0952	1009	1031	1005	1006	1007	1006
General Emergency	1152	1212	1233	1228	1210	1210	1212
Simulated Rad. Release Started	0954	0952	1031	1035	1032	1032	1031
Simulated Rad. Release Terminated	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Facility Declared Operational		0924	0852	0855	0854	0900	0853
Governor's Declaration of State Emergency		0952	1031	1035	1032	1031	1031
Declaration of Local Emergency		N/A	0924	N/A	N/A	N/A	N/A
Exercise Terminated		1340	1340	1340	1338	1339	1340
Early Precautionary Actions: Beaches and Parks Closed		0923	0928	0927	1032	1031	1031
Early Precautionary Actions: Traffic and Access Control Points (water and rail)		0923/1030	0928	N/A	0925/1032	0924/ 1031	1031
Early Precautionary Actions: Animals on Stored Feed		0923	0928	N/A	0925	0924	0925
Early Precautionary Actions: School Transfer/Release		N/A	N/A	0927	N/A	N/A	N/A
Early Precautionary Actions: Restrict Airspace		0923	0928	N/A	0925	0924	0925

Emergency Classification Level or Event	Time Utility Declared	Kensington EOC	Kingston NH EOC	New Castle EOC	Newfields EOC	Newton EOC	North Hampton EOC
1st Protective Action Decision:		N/A	1031	N/A	1032	N/A	1031
1st Siren Activation		1037	1037	1037	1037	1037	1037
1st EAS Message		1040	1040	1040	1040	1040	1040
2nd Protective Action Decision:		N/A	1233	1238	1236	N/A	1235
2nd Siren Activation		1240	1240	1240	1240	1240	1240
2nd EAS Message		1243	1243	1243	1243	1243	1243
3rd Protective Action Decision:		N/A	N/A	N/A	N/A	N/A	N/A
3rd Siren Activation		N/A	N/A	N/A	N/A	N/A	N/A
3rd EAS Message		N/A	N/A	N/A	N/A	N/A	N/A
KI Administration Decision: EWs advised to take KI		1030	1031	1035	1032	1031	1031
KI Administration Decision: General Public advised to take KI		1240	1239	1243	1236	1236	1235

Emergency Classification Level or Event	Time Utility Declared	Portsmouth EOC	Rye EOC	Seabrook EOC	South Hampton EOC	Stratham EOC	MA SEOC
Unusual Event	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Alert	0803	0828	0822	0829	0824	0822	0822
Site Area Emergency	0952	1032	0952	1007	1038	1026	0959
General Emergency	1152	1212	1215	1211	1237	1151	1158
Simulated Rad. Release Started	0954	1032	1031	1032	1038	1031	0959
Simulated Rad. Release Terminated	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Emergency Classification Level or Event	Time Utility Declared	Portsmouth EOC	Rye EOC	Seabrook EOC	South Hampton EOC	Stratham EOC	MA SEOC
Facility Declared Operational		0912	0903	0912	0840	0900	0843
Governor's Declaration of State Emergency		1032	1036	1032	1038	1031	1033
Declaration of Local Emergency		N/A	N/A	N/A	1055	N/A	N/A
Exercise Terminated		1240	1339	1337	1338	1307	1300
Early Precautionary Actions: Beaches and Parks Closed		1032	0917	1009	1038	0924	1005
Early Precautionary Actions: Traffic and Access Control Points (water and rail)		0928/1032	0940	N/A	1038	0924	0920/1005
Early Precautionary Actions: Animals on Stored Feed		0928	0940	0931	1038	0924	1005
Early Precautionary Actions: School Transfer/Release		N/A	N/A	N/A	N/A	N/A	N/A
Early Precautionary Actions: Restrict Airspace		0928	0940	N/A	1038	N/A	0920
1st Protective Action Decision:		1032	1036	1032	1038	1036	1025
1st Siren Activation		1032	1037	1037	1037	1037	1037
1st EAS Message		1032	1040	1040	1040	1040	1040
2nd Protective Action Decision:		1233	1238	1234	1237	1236	1228
2nd Siren Activation		1233	1240	1240	1240	1240	1240
2nd EAS Message		1233	1243	1243	1243	1243	1243
3rd Protective Action Decision:		N/A	N/A	N/A	N/A	N/A	N/A
3rd Siren Activation		N/A	N/A	N/A	N/A	N/A	N/A
3rd EAS Message		N/A	N/A	N/A	N/A	N/A	N/A
KI Administration Decision: EWs advised to take KI		1032	1040	1007	1038	1031	1025
KI Administration Decision: General Public advised to take KI		1233	1238	1234	1237	1236	1228

Emergency Classification Level or Event	Time Utility Declared	MA SS EOF	MA 211	MA R1 EOC	MA JIC	Amesbury EOC	Merrimac EOC	Newbury EOC	Newburyport EOC
Unusual Event	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Alert	0803	0849	0830	0803	0847	0822	0823	0820	0826
Site Area Emergency	0952	0958	1006	0952	0954	1008	1007	1010	1005
General Emergency	1152	1152	12134	1151	1152	1210	1212	1211	1210
Simulated Rad. Release Started	0954	0958	1103	0952	0954	1024	1028	0952	0952
Simulated Rad. Release Terminated	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Facility Declared Operational		0852	0821	0846	0930	0846	0835	0851	0833
Governor's Declaration of State Emergency		N/A	1059	1033	1037	1033	1050	1033	1047
Declaration of Local Emergency		N/A	N/A	N/A	N/A	N/A	1055	1130	1049
Exercise Terminated		1236	1304	1258	1340	1258	1254	1253	1253
Early Precautionary Actions: Beaches and Parks Closed		N/A	1103	1029	1037	1029	1040	1034	N/A
Early Precautionary Actions: Traffic and Access Control Points (water and rail)		N/A	0940/1103	1029	0941/1037	1029	0930	0932	0936
Early Precautionary Actions: Animals on Stored Feed		N/A	1021	1029	1037	1029	1040	1034	N/A
Early Precautionary Actions: School Transfer/Release		1015	N/A	N/A	1037	N/A	N/A	1005	N/A
Early Precautionary Actions: Restrict Airspace		N/A	1103	1029	1037	1029	N/A	N/A	N/A
1st Protective Action Decision:		N/A	1035	1025	1037	1035	N/A	1034	1029

Emergency Classification Level or Event	Time Utility Declared	MA SS EOF	MA 211	MA R1 EOC	MA JIC	Amesbury EOC	Merrimac EOC	Newbury EOC	Newburyport EOC
1st Siren Activation		N/A	1035	1037	1040	1037	1037	1037	1037
1st EAS Message		N/A	1049	1040	N/A	1040	1040	1040	1040
2nd Protective Action Decision:		N/A	1241	N/A	1240	1235	N/A	1238	1238
2nd Siren Activation		N/A	1241	1240	1243	1240	1240	1240	1240
2nd EAS Message		N/A	1241	1243	N/A	1243	1243	1243	1243
3rd Protective Action Decision:		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3rd Siren Activation		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3rd EAS Message		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
KI Administration Decision: EWs advised to take KI		1046	N/A	1029	1037	1035	1040	1048	1039
KI Administration Decision: General Public advised to take KI		N/A	1259	N/A	1258	1235	1239	1238	1240

Emergency Classification Level or Event	Time Utility Declared	Salisbury EOC	West Newbury EOC
Unusual Event	N/A	N/A	N/A
Alert	0803	0823	0821
Site Area Emergency	0952	1009	1008
General Emergency	1152	N/A	1208
Simulated Rad. Release Started	0954	1024	0931
Simulated Rad. Release Terminated	N/A	N/A	N/A

Facility Declared Operational	0845	0843
Governor's Declaration of State Emergency	1048	1033
Declaration of Local Emergency	1051	1048
Exercise Terminated	1201	1254
Early Precautionary Actions: Beaches and Parks Closed	1029	1037
Early Precautionary Actions: Traffic and Access Control Points (water and rail)	0935	1037
Early Precautionary Actions: Animals on Stored Feed	1029	1037
Early Precautionary Actions: School Transfer/Release	1020	1005
Early Precautionary Actions: Restrict Airspace		N/A
1st Protective Action Decision:	1029	1034
1st Siren Activation	1029	1037
1st EAS Message	1029	1040
2nd Protective Action Decision:	N/A	1234
2nd Siren Activation	N/A	1240
2nd EAS Message	N/A	1243
3rd Protective Action Decision:	N/A	N/A
3rd Siren Activation	N/A	N/A
3rd EAS Message	N/A	N/A
KI Administration Decision: EWs advised to take KI	1029	1037
KI Administration Decision: General Public advised to take KI	1029	1234

APPENDIX C: EXERCISE EVALUATORS AND TEAM LEADERS

LOCATION	TEAM LEADER	AGENCY
Amesbury Local EOC	Rahuel Preciado	FEMA Region 03
Brentwood Local EOC	Taylor Griffiths	FEMA Region 03
East Kingston Local EOC	Vince Karlson	FEMA Region 09
Exeter Local EOC	Helen LaForge	FEMA Region 01
Greenland Local EOC	John Wills	ICFI
Hampton Falls Local EOC	Alberto Sifuentes	FEMA Region 09
Hampton Local EOC	Tina Lai Thomas	FEMA Region 03
Kensington Local EOC	Chris Nemcheck	FEMA Region 03
Kingston NH Local EOC	Bill Webb	ICFI
MA (SS) Emergency Operations Facility	Johanna Johnson	FEMA Region 09
MA (SS) Emergency Operations Facility	Rick Watts	ICFI
MA (SS) Field Monitoring Team-1	Michael DeBonis	FEMA Region 02
MA (SS) Field Monitoring Team-2	Carol Shepard	ICFI
MA (SS) Joint Information Center	Lisa Rink	FEMA Headquarters
MA 211	Bob Princic	ICFI
MA Region I EOC	Rufus Mobley, III	FEMA Headquarters
Massachusetts State Emergency Operations Center	Larry Broockerd	FEMA Headquarters
Merrimac Local EOC	Zachary Corle	FEMA Region 03
New Castle Local EOC	Joseph Suders	FEMA Region 03
Newbury Local EOC	Dan Rose	FEMA Region 03
Newburyport Local EOC	Jim Greer	ICFI
Newfields Local EOC	Bart Ray	ICFI
Newton Local EOC	Lee Torres	FEMA Region 03
NH (SS) Emergency Operations Facility	Michael Howe	FEMA Headquarters
NH (SS) Emergency Operations Facility	Narvaez Stinson	FEMA Headquarters
NH (SS) Field Monitoring Team-1	Timothy Pflieger	FEMA Region 06
NH (SS) Field Monitoring Team-2	Kevin Robinson	FEMA Region 02
NH (SS) Joint Information Center	Linda Gee	FEMA Region 06
NH Incident Field Office (SS)	Taneeka Hollins	FEMA Region 01
NH State Emergency Operations Center	Darren Bates	FEMA Headquarters
NH State Police Communications Center, NH State Warning Point	Denise Solomon	ICFI
North Hampton Local EOC	Rebecca Thomson	ICFI
Portsmouth Local EOC	Doc Burris	ICFI

LOCATION	TEAM LEADER	AGENCY
Rockingham County Dispatch Center	John McGough	FEMA Region 01
Rye Local EOC	Brian Hasemann	FEMA Region 02
Salisbury Local EOC	Cheryl Weaver	ICFI
Seabrook Local EOC	Kevin Malone	FEMA Region 02
South Hampton Local EOC	Roy Smith	ICFI
Stratham Local EOC	Gary Goldberg	ICFI
West Newbury Local EOC	Mario Vigliani	ICFI

LOCATION	EVALUATOR	AGENCY
Amesbury Local EOC	Paul Ringheiser	ICFI
Brentwood Local EOC	Deb Blunt	ICFI
East Kingston Local EOC	Matthew Welshans	FEMA Headquarters
Exeter Local EOC	LaShawn Halsey	FEMA Headquarters
Greenland Local EOC	Richard Smith	ICFI
Hampton Falls Local EOC	Kevin Reed	ICFI
Hampton Local EOC	Marynette Herndon	ICFI
Kensington Local EOC	Bridget Ahlgrim	ICFI
Kingston NH Local EOC	Rosemary Samsel	ICFI
MA (SS) Emergency Operations Facility	N/A	N/A
MA (SS) Field Monitoring Team-1	N/A	N/A
MA (SS) Field Monitoring Team-2	N/A	N/A
MA (SS) Joint Information Center	N/A	N/A
MA 211	N/A	N/A
MA Region I EOC	Steve Watts	ICFI
Massachusetts State Emergency Operations Center	Gary Bolender	ICFI
Massachusetts State Emergency Operations Center	Brad McRee	ICFI
Merrimac Local EOC	Terry Blackmon	ICFI
New Castle Local EOC	Brad DeKorte	FEMA Region 06
Newbury Local EOC	Bruce Swiren	ICFI
Newburyport Local EOC	Mike Meshenberg	ICFI
Newfields Local EOC	Mark Dalton	ICFI
Newton Local EOC	Michelle Sturman	FEMA Region 02
NH (SS) Emergency Operations Facility	N/A	N/A
NH (SS) Emergency Operations Facility	N/A	N/A
NH (SS) Field Monitoring Team-1	N/A	N/A
NH (SS) Field Monitoring Team-2	N/A	N/A
NH (SS) Joint Information Center	N/A	N/A

NH Incident Field Office (SS)	N/A	N/A
NH State Emergency Operations Center	Tom Reynolds	ICFI
NH State Emergency Operations Center	Reggie Rodgers	ICFI
NH State Police Communications Center, NH State Warning Point	N/A	N/A
North Hampton Local EOC	Bonnie Sheffield	ICFI
Portsmouth Local EOC	Clay Spangenberg	ICFI
Rockingham County Dispatch Center	N/A	N/A
Rye Local EOC	Dave Kayen	ICFI
Salisbury Local EOC	Meg Swearingen	ICFI
Seabrook Local EOC	Barbara Thomas	FEMA Region 01
South Hampton Local EOC	Henry Christiansen	ICFI
Stratham Local EOC	Clark Duffy	ICFI
West Newbury Local EOC	Lynn Steffensen	ICFI

APPENDIX D: EXTENT OF PLAY AGREEMENTS

- State of New Hampshire Extent of Play
- Commonwealth of Massachusetts Extent of Play

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Extent of Play (Exercise Plan)Seabrook Station Plume Exercise 2022

HOMELAND SECURITY
EMERGENCY MANAGEMENT
NEW HAMPSHIRE DEPARTMENT OF SAFETY

Graded Exercise April 6, 2022

Final

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Appendix B: Extent of Play

NOTE: If during the exercise a participant demonstrates a sub-element unsatisfactorily, the FEMA Evaluator will inform the participant and the Controller. After an on-the spot re-training by the state or local organization, the FEMA Evaluator will provide the participant another opportunity to re-demonstrate the activity. This is applicable to all 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.

New Hampshire Extent of Play:

The notification process for the state and local responders will be completed and call down rosters will be available to the FEMA Evaluators upon request.

State Emergency Operations Center (SEOC): New Hampshire Homeland Security and Emergency Management (HSEM) SEOC emergency staff, the Unified Command (Division of Public Health/Radiological Health Section (RadHealth) and HSEM), the Emergency Support Function (ESF) Agencies’ staff, the State Public Information Line staff, FEMA and the Seabrook Station Liaison will be activated upon notification per procedures.

State Warning Point (SWP): remains activated on a 24-hour basis.

Incident Field Office (IFO): For this exercise cycle, the Local Liaisons will be located at the IFO on Pease Tradeport. Pre-staging will occur (10 mins./1 hour).

Emergency Operations Facility (EOF): HSEM and RadHealth may pre-stage (10 mins./1 hour). Dose assessment personnel will also be located at the EOF.

Joint Information Center (JIC): The N.H./Seabrook Station JIC may be pre-staged. (10 mins./1 hour). A JIC at the SEOC may also be opened.

Field Monitoring Team (FMT) Personnel: Field Monitoring Teams will deploy to a designated staging area (Epping Safety Complex) where they will contact the FMT Coordinator (MTC) and report readiness and location. They will receive a complete situation and mission brief. FMT personnel will use a compressed time (10 mins./1hr.) of normal travel response time.

Rockingham County Dispatch Center (RCDC): remains activated on a 24-hour basis.

Emergency Planning Zone (EPZ) and Host EOCs: Municipalities will activate their personnel for exercises per procedures. One person from each EOC may be pre-staged in order to open the facilities for the Controllers and Evaluators.

Transportation Providers: Initial calls will be simulated to three (3) transportation providers to verify the contact information and resources (drivers and vehicles) under the Letters of Agreement (LOAs). Information obtained will be available for review at the ESF#1 (Transportation) and ESF#7 (Logistics). Procedures within community's EOC will provide input to the Local Liaisons and on the WebEOC board as to potential transportation needs. ESF#1 will be responsible to activate the State Transportation Staging Area (STSA) per procedures (simulated). No vehicles or personnel will be mobilized during the 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.

New Hampshire Extent of Play

State Emergency Operations Center, Joint Information Center, Emergency Operations Facility and Incident Field Office: During the exercise, HSEM will follow the REP *Implementing Procedures for State Agencies*, for position titles, and the revised checklists within the REP plan.

Local EOCs: During the exercise**,** local EOCs will follow the *REP Implementing Procedures for EPZ Communities and Implementing Procedures for Host Communities* for position titles and checklists. If any communities are directed to evacuate, EOC personnel will demonstrate continuity of government and operations through a discussion of logistics. Closing of the EOC and relocation to a facility outside the EPZ will be simulated through discussion.

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.

OROs 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.

New Hampshire Extent of Play

Contact with any locations not playing will be simulated. Demonstration of operating communication systems will be provided, as appropriate. The SEOC will complete a communications check with a Host and Local EOCs during the exercise. Radio and WebEOC communications will be demonstrated among facilities and Field Monitoring Teams.

Redemonstration Criteria

- Any assessment activity that is unsatisfactorily demonstrated may be re-demonstrated by the participants during the exercise, provided the FEMA evaluators approve and it does not

  negatively interfere with the exercise. That portion of the criterion that deals with performance only may be re-demonstrated. Actual equipment cannot be re-demonstrated

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.

ORO 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. 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.

New Hampshire Extent of Play:

Participating facilities will show that equipment, maps, displays, dosimetry, KI and other supplies are adequate and sufficient to support the emergency response. Documentation of dosimetry inspection, dosimetry inventory and KI inventory will be available for review, inventory is also maintained at local EOCs.

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.

OROs 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.

New Hampshire Extent of Play

The NH exposure control system for emergency workers is described in applicable plans and procedures. Protective action decisions for emergency workers are demonstrated at the SEOC by the Unified Command (HSEM, RadHealth) based upon information provided from the EOF. Dose Assessment staff located at the EOF will analyze utility, field team and meteorological data provided at the EOF to make a recommendation to the

SEOC for their consideration in making the protective action decisions. Radiological briefings will be provided to address exposure limits, procedures to replace those personnel approaching exposure limits and how permission to exceed limits is obtained.

Emergency workers will also be briefed on usage and administration KI. Distribution of KI to emergency workers will be simulated. RadHealth will authorize use of KI for emergency workers when radiological or plant conditions warrant its use in accordance with plans and procedures.

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, to include 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 to 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.

New Hampshire Extent of Play

Protective action recommendations for the public are developed and submitted to the State by the utility. RadHealth Dose Assessment staff located at the EOF will evaluate the utility recommendations and analyze plant data, meteorological data, and field monitoring team results to make protective action recommendations to the SEOC for their consideration in making the protection action decisions.

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 general 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.

New Hampshire Extent of Play

Protective action decisions are demonstrated at the SEOC based upon utility protective action recommendations and further evaluation and subsequent recommendations from the RadHealth Dose Assessment staff in the EOF.

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.

New Hampshire Extent of Play

Protective action decisions including those for individuals with disabilities and access/functional needs population groups, are demonstrated at the SEOC based upon information provided by the RadHealth Dose Assessment Program staff at the EOF. HSEM and RadHealth staff will analyze utility, field monitoring team and meteorological data provided at the EOF to make recommendations to the SEOC for consideration and implementation in making protective action decisions. Information on protective/precautionary actions is passed on to special facilities (simulated) from the EPZ EOCs through the Local Liaisons.

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; establishing a decision chain or authorization procedure for emergency workers to incur radiation exposures in excess of the PAGs, and 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.

OROs 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 (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.

New Hampshire Extent of Play

EPZ EOCs: Dosimetry packets will be issued to a minimum of two individuals who will be working inside each EPZ EOC by the local RADEF Officer. Actual distribution and ingestion of KI will not occur. Knowledge of the use of dosimetry through the Plume Phase and New Hampshire policies on dosimetry will be demonstrated through an interview and only with individuals issued dosimetry.

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 general 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 general 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.

OROs must demonstrate the capability to make KI available to institutionalized individuals, and, where provided for in their plans/procedures, to members of the general public. OROs must demonstrate the capability to accomplish distribution of KI consistent with decisions made. OROs 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. OROs 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.

New Hampshire Extent of Play

EPZ EOCs: Actual distribution and ingestion of KI will not occur. Empty KI containers (small zip-lock bags) will be included in the dosimetry packets for emergency workers. As part of the demonstration by the RADEF Officer or individual charged by the facility to implement a KI Plan for the facility, the FEMA Controller will be briefed as if they were the recipient of the KI. The observer/controller will check the availability of adequate quantities, storage, and means of KI distribution, and include forms and equipment to be used. Inventory is also maintained at RadHealth and RIMC.

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.

New Hampshire Extent of Play

All actual and simulated contacts must be logged. EPZ EOCs: Calls will be simulated from local EOCs to special facilities and/or persons with disabilities or access/functional needs within their jurisdiction. The information is confidential and copies will not be provided to the observer. Local Transportation Staging Areas (LTSA) procedures will be evaluated through interview. Estimates on transportation needs will be made based upon enrollment or capacity figures on file and/or individuals who have self-identified transportation needs. ESF#1 will simulate a call to the STSA at request of Unified Command at the SEOC to arrange for transportation assets. Requests may also come through Local Liaisons at the IFO. No vehicles will be mobilized. A board developed on WebEOC will simulate tracking of the transportation assets. The STSA will be evaluated out-of-sequence. Public Inquiry staff will demonstrate the capability to correctly operate the TTY through the 800 number provided.

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.

New Hampshire Extent of Play

Calls to schools within the EPZ will be simulated and logged. Contact will be made through the EOCs. EPZ EOCs: Initial notification will be simulated to all school, health care facilities and day care centers. Long-term care facilities' administrators make decisions for their residents after notification based upon health and safety considerations of their patients. Most schools and day cares have indicated an early release process to avoid evacuation decision-making.

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.

New Hampshire Extent of Play

EPZ EOCs: EPZ EOCs will demonstrate the ability to direct and monitor traffic control operations within their jurisdictions through discussions and communications with the observer. At the EOCs, public works representative and the local police representative will participate in a discussion of procedures and resources available for traffic control. No personnel or equipment will be deployed to field locations. Each EPZ EOC will discuss impediment strategies through interview with Observers/Controllers. ESFs #1 and #13: The traffic and access control personnel will not be deployed.

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.

New Hampshire Extent of Play

Each EPZ EOC will demonstrate decision-making regarding rerouting of traffic following a traffic impediment by a controller inject or through an interview with the FEMA Observer. No personnel or equipment will be dispatched to the simulated accident scene. The implementation of an alternate evacuation route for the length of the scenario event will be covered by South Hampton. If the scenario does not lead to evacuation, the criteria shall be deemed complete if the ORO can describe to the Observer the actions they would take to overcome a major traffic impediment during an evacuation and how such actions would be communicated to the public and affected OROs.

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.

OROs 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.

New Hampshire Extent of Play

Field Monitoring Teams (FMT) are managed by the MTC who is located at the Epping Safety Complex. He will brief and dispatch a minimum of two teams to sampling locations as dictated by scenario play. Each Field Monitoring Team will collect two complete sample sets each consisting of an ambient radiation measurement and an air sample. RadHealth FMT personnel will prepare sample media, survey forms, and chain of custody documents as if they were being transferred to the lab for analysis. Actual transport of samples will be simulated. Controller injects will be specifically prepared, as appropriate, to allow Field Teams to be evaluated. Equipment checks will be conducted by a FEMA representative for the two (2) FMTs the day prior at 29 Hazen Drive in Concord.

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.

OROs must share data in a timely manner with all other appropriate OROs. 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.

OROs 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.

New Hampshire Specific Extent of Play

A minimum of two Field Monitoring Teams (made up of a maximum of three people) will each pick up a minimum of two complete sample sets each consisting of an ambient radiation measurement and an air sample. Charcoal filter cartridges may simulate use of silver zeolite filter media. Simulated cartridges will be prepared for transportation to the lab for analysis.

Re-demonstration Criteria

- Any assessment activity that is unsatisfactorily demonstrated may be re-demonstrated by the participants during the exercise, provided the FEMA evaluators approve and it does not negatively interfere with the exercise. That portion of the evaluation element that demonstrates one complete sample may not be re-demonstrated.

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:

- Identification of the ORO responsible and the official with authority for providing the alert signal and instructional message;
- Identification of the commercial NPP and a statement that an emergency exists there;
- 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
- 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.

OROs may demonstrate any means of primary 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.

New Hampshire Extent of Play

Actions to demonstrate performance of initial notification of the public will be performed up to the point of actual transmission of the Emergency Alert System (EAS) message. The EAS message will be prepared by the PIO in the SEOC and transmitted/encoded by ESF#2.

The State Primary EAS Station will be contacted only once and notified that activation of the EAS will be handled out of the SEOC. Actual activation of the EAS will be simulated by SEOC staff. Rockingham County Dispatch will demonstrate the actions necessary to perform the siren activation up to the point of actually sounding the sirens. Siren sounding will be simulated.

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.

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.

New Hampshire Extent of Play

Joint Information Center: Rumors and trends generated as a result of public inquiry calls to the Public Information Line will be included in news briefings by the PIO. A NH JIC may be opened and coordinated at the SEOC. This JIC will be connected to and directly communicate with the NPP's JIC and partner states through electronic means.

SEOC: Simcell personnel will make calls simulating members of the public to the Public Information Line. This process will commence after the initial siren activation. Information on rumor trends recognized at the Public Information Line will be forwarded to the PIO at the SEOC.

Public Information Center: Staff assigned to the Public Inquiry Office will demonstrate the ability to handle inquiry calls. Handling at least two rumor trends will be demonstrated.

EPZ Towns: Simcell personnel will make at least one call to the EOCs simulating members of the public with inquiries. Each EOC will demonstrate the ability to properly handle these inquiries.

Subsequent emergency information and instructions should be provided to the public and the media in a timely manner. This will NOT be subject to specific time requirements.

Re-demonstration Criteria

- Any assessment activity that is unsatisfactorily demonstrated may be re-demonstrated by the participants during the exercise, provided the FEMA evaluators approve and it does not negatively interfere with the exercise. 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.

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.b.1: The facility/ORO had adequate procedures and resources to accomplish monitoring and decontamination of emergency workers and their equipment and vehicles. (NUREG-0654/FEMAREP-1, K5.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.

OROs 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 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.

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

New Hampshire Extent of Play

Monitoring (screening) stations will be set up and demonstrated at the EPZ EOCs and RCDC. Two individuals representing emergency workers will go through monitoring with controller injects establishing the number of individuals presenting themselves as contaminated and simulating proceeding to a reception center for secondary monitoring and decontamination. No decon will be conducted at the local EPZs or RCDC where the purpose of the screening is to prevent contamination of the local EPZ and to identify contaminated workers. During these activities, monitoring and instruments, record keeping, and routing will be demonstrated appropriately.

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Annie Ropeik/NHPR / Aerial Support By Lighthawk

Seabrook Station

Massachusetts Emergency Management Agency (MEMA)
Exercise Plan/Extent of Play
2022

APPENDIX C:EXTENT OF PLAY

NOTE: If during the exercise a participant demonstrates a sub-element unsatisfactorily, the FEMA Evaluator will inform the participant and the Controller. After an on-the spot re-training by the state or local organization, the FEMA Evaluator will provide the participant another opportunity to redemonstrate the activity. This is applicable to all 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.

Massachusetts Extent of Play

State EOC—Massachusetts Emergency Management (MEMA) SEOC emergency staff, including the Emergency Support Function (ESF) Team staff (Massachusetts Department of Public Health (MDPH), Massachusetts Department of Transportation (MassDOT), Massachusetts Department of Mental Health (MDMH), Massachusetts State Police (MSP), Massachusetts Army National Guard (MANG), and American Red Cross (ARC), the State Public Information Line (Mass 211) staff, the Federal Emergency Management Agency (FEMA), and the Seabrook Nuclear Power Station Liaison will be pre-positioned at TBD in the SEOC cafeteria, and upon notification, will report to the EOC, using a ten-minute per hour travel time. The notification process will be completed, and call down rosters will be shown to the FEMA Evaluator.

The MASS 211 Call Center will be activated for an event at Seabrook Station.

Region I EOC—MEMA Region I EOC staff and emergency volunteer staff will pre-positioned at TBD outside the Region I EOC, and upon notification, will report to the Region I EOC, using a ten-minute per hour travel time (note: MEMA Region I staff who report prior to TBD will report at their normal reporting time). The notification process will be completed and call down rosters will be shown to the FEMA Evaluator.

Emergency Operations Facility (EOF)—MEMA and MDPH personnel will be pre-positioned in the area of the EOF, using a ten minute per hour travel time.

Joint Information Center (JIC)—MEMA personnel will be pre-positioned in the area of the JIC, using a ten minute per hour travel time.

NIAT Field Monitoring Team Personnel—Field Team personnel will be pre-positioned in the area of the Rowley Fire Department. Upon notification, the Field Team will report to the Rowley Fire Department (muster location to pick up equipment and then dispatching into field via EOF instructions), using a ten-minute per hour travel time.

Local EOCs—Local EOC emergency response staff will be pre-positioned at TBD outside the local EOC and upon notification, will report to the EOC, using a ten-minute per hour travel time.

Areas Requiring Corrective Action (ARCA): N/A

Sub-element 1.b – Facilities

Intent
This sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that Offsite Response Organizations (ORO) have facilities to support the emergency response.

Criterion 1.b.1: Facilities are sufficient to support the emergency response. (NUREG0654/FEMA-REP-1, G.3.a; H.3; J.10.h; J.12; K.5.b)

Extent of Play

Responsible OROs must demonstrate, no less than once every 8 years, the availability of facilities to support accomplishment of emergency operations (this includes all alternate 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.

Massachusetts Extent of Play

There is 1 new facility in the EPZ. Newbury's EOC will be inside the newly built Newbury Police Department at 7 Morgan Avenue.

Areas Requiring Corrective Action (ARCA): N/A

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.

Massachusetts Extent of Play

If a community is directed to evacuate, EOC personnel will demonstrate continuity of government through a discussion of logistics with the FEMA Evaluator. Closing of the local EOC and relocation will be simulated.

Areas Requiring Corrective Action (ARCA): N/A

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.

OROs 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.

Massachusetts Extent of Play

Contact with locations not playing will be simulated.
- Masconomet Reception Center
- Staging Area
- Daycares
- Schools beyond initial call to the Superintendent's office
- Special Needs

Areas Requiring Corrective Action (ARCA): N/A

Note: If, during the exercise, a participant demonstrates this sub-element unsatisfactorily, the FEMA Evaluator will inform the MEMA Controller. After an "on the spot" training by the local or State representative, the FEMA Evaluator will provide another opportunity to re-demonstrate the activity that day.

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.

ORO 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. 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.

Massachusetts Extent of Play

Participating facilities will demonstrate that equipment, maps, displays, dosimetry, KI and other supplies are adequate and sufficient to support the emergency response. FEMA will provide copies of the Annual Letter of Certification to evaluators as documentation of quarterly inventory and operational checks.

Areas Requiring Corrective Action (ARCA): N/A

Note: If, during the exercise, a participant demonstrates this sub-element unsatisfactorily, the FEMA Evaluator will inform the MEMA Controller. After an "on the spot" training by the local or State representative, the FEMA Evaluator will provide another opportunity to re-demonstrate the activity that day.

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.

OROs 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.

Massachusetts Extent of Play

Protective action decisions are demonstrated at the Massachusetts State EOC based upon information provided from the EOF.

MDPH Radiation Control Program EOF staff will analyze utility, field team and meteorological data provided at the EOF to make a recommendation to the State EOC for their consideration in making protective action decisions.

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, to include 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 to 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.

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 general 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.

Massachusetts Extent of Play

Demonstration will be in accordance with the NIAT Handbook. The MDPH Dose Assessment Coordinator at the EOF will independently verify dose projections performed by the Utility.

The State EOC decision-making team will evaluate the protective action recommendations from the EOF or directly from the Utility and develop appropriate protective action decisions.

Protective action recommendations will be made in accordance with the MARERP and NIAT Handbook.
Areas Requiring Corrective Action (ARCA): N/A

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.

Massachusetts Extent of Play

Protective action decisions, including those for groups of persons with disabilities and access/functional needs, are demonstrated at the Massachusetts State EOC based upon information provided by the EOF or directly from the Utility. Additionally, MDPH Radiation Control Program staff will analyze Utility, field team and meteorological data provided at the EOF to make a recommendation to the State EOC for their consideration in making protection action decisions.

Areas Requiring Corrective Action (ARCA): N/A

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 Offsite Response Organizations (ORO) have the means to assess the radiological consequences for the ingestion exposure pathway, relate them to the appropriate PAGs, and make timely, appropriate protective action decisions to mitigate exposure from the ingestion pathway. During an accident at a nuclear power plant, 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 accident and, depending on the nature of the release, could impact the ingestion 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)

Extent of Play

Offsite Response Organizations (ORO) 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 Emergency Classification Levels (ECL). Such actions may include recommendations to place milk animals on stored feed and to use protected water supplies.

The ORO must use its procedures to assess the radiological consequences of a release on the food and water supplies, such as the development of a sampling plan. The ORO's assessment should include the 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 the 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 plan/procedures. The plans/ procedures contain PAGs based on specific dose commitment criteria or on criteria as recommended by current Food and Drug Administration guidance. Timely and appropriate recommendations must be provided to the ORO decision-makers group for implementation decisions. OROs may also include a comparison of taking or not taking a given action on the resultant ingestion pathway dose commitments.

The ORO must demonstrate timely decisions to minimize radiological impacts from the ingestion pathway, based on the given assessments and other information. Any such decisions must be communicated and, to the extent practical, coordinated with neighboring and local OROs. These decisions include tracking agricultural products entering and leaving the EPZ. Demonstration of plans and procedures which use traffic

access control points to track agricultural products entering and leaving the EPZ may be conducted through interview. OROs should use Federal resources, as identified in the Nuclear/Radiological Incident Annex of the NRF and other resources (e.g., compacts, nuclear insurers), as necessary. Evaluation of this criterion will take into consideration the level of Federal and other resources participating.

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.

Massachusetts Extent of Play

This sub-element will not be demonstrated during this exercise.
Sub-element 2.e. – Radiological Assessment and Decision Making Concerning Post-Plume Phase Relocation, Re-entry, and Return

Intent
This sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that Offsite Response Organizations (ORO) have the capability to make decisions on post-plume relocation, re-entry, and return of the general public. These decisions are essential for the protection of the public from the direct long-term exposure to deposited radioactive materials from a severe accident at a nuclear power plant.

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

Extent of Play

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 vs. the PAGs, and analyses of vegetation and soil field samples.

Re-entry: Decisions must be made on the location of control points and policies regarding access and exposure control for emergency workers and members of the general 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 the individual's objectives, locations expected to be visited and associated time frames; availability of maps and plots of radiation exposure rates; and advice on areas to avoid. Control procedures also included 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 re-entry 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 re-enter the restricted zone(s). The extent that OROs need to develop policies on re-entry will be determined by scenario events.

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 their decisions on environmental data and political boundaries or physical/geological features, which allow identification of the boundaries of areas to which members of the general 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 the cancellation of the Emergency Classification Level and the 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.

Massachusetts Extent of Play

This sub-element will not be demonstrated during this exercise.

Areas Requiring Corrective Action (ARCA): N/A

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; establishing a decision chain or authorization procedure for emergency workers to incur radiation exposures in excess of the PAGs, and 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.

OROs 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 (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.

Massachusetts Extent of Play

EPZ EOCs: Dosimetry packets will be issued to two emergency workers in each EPZ EOC. Actual distribution and ingestion of KI will not occur. Empty KI tablet containers (small zip-lock bags) will be included in the dosimetry packets for emergency workers. Knowledge of the use of dosimetry and KI will be demonstrated through an interview of these two individuals by the FEMA Evaluator.

Areas Requiring Corrective Action (ARCA): N/A

Note: If, during the exercise, a participant demonstrates this sub-element unsatisfactorily, the FEMA Evaluator will inform the MEMA Controller. After an "on the spot" training by the local or State representative, the FEMA Evaluator will provide another opportunity to re-demonstrate the activity that day.

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 general 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 general 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. OROs must demonstrate the capability to make KI available to institutionalized individuals, and, where provided for in their plans/procedures, to members of the general public. OROs must demonstrate the capability to accomplish distribution of KI consistent with decisions made. OROs 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. OROs 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.

Massachusetts Extent of Play

Schools, day cares, and special facility staff who administer KI will be interviewed out-of-sequence by the FEMA Evaluator. The FEMA Evaluator will check the availability of adequate quantities, storage, and means of KI distribution.

Areas Requiring Corrective Action (ARCA): N/A

Note: If, during the exercise, a participant demonstrates this sub-element unsatisfactorily, the FEMA Evaluator will inform the MEMA Controller. After an "on the spot" training by the local or State representative, the FEMA Evaluator will provide another opportunity to re-demonstrate the activity that day.

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.

Massachusetts Extent of Play

Region I: Initial calls to Transportation Providers will be made to verify telephone number and contact person. Default numbers from the Resource Manual will be used to determine transportation requirements. No vehicles or personnel will be mobilized. A list of the Transportation Providers from the Resource Manual will be provided to the FEMA Evaluator.

Region I Special Needs Coordinator and staff will demonstrate all appropriate communications with EPZ community EOC staff and coordination of bed space assignment for evacuating nursing home patients and hospital patients, although actual evacuation of special facilities will not occur. Default numbers from the Resource Manual will be used.

EPZ EOCs: All special facilities (including Day Cares) will receive initial contact only to verify telephone number. Default numbers will be used from the Resource Manual for exercise play. Follow-up calls will be simulated and logged. Participating special facilities will be interviewed out of sequence by a FEMA Evaluator.

Day Care Centers: Participating facilities were visited out of sequence by a FEMA Evaluator, who interviewed key players (and if the site's plan calls for KI, responsible staff). See page 2 of Extent of Play for list.
Local Transportation Coordinators will report to Region I the number of additional beds needed to accommodate patients from each participating facility that may be directed to evacuate; however, no patients will actually be moved or be impacted in any way. Default numbers from the Resource Manual will be used to determine number of beds needed.

The list of persons with disabilities and access/functional needs will be shown to the FEMA evaluator; however, the information is confidential and copies will not be provided to the evaluator. All calls will be simulated and logged. If the list has a request for TTY notification, then the TTY will be demonstrated by contacting the Region I EOC, who will simulate making the TTY notification for the community.

Areas Requiring Corrective Action (ARCA): N/A

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.

Massachusetts Extent of Play

Region I EOC: The MEMA Region I Special Needs Coordinator, in an interview with the FEMA Evaluator, will provide a list of schools located outside the EPZ with students who reside within the EPZ. Calls to schools outside the EPZ will be simulated and logged.

EPZ EOCs: Initial notification will be made to all school superintendents only who will simulate contact each school per procedure. Default numbers for the Resource Manual will be used for exercise play. Follow-up calls will be simulated and logged.

School Superintendents:
Amesbury School Superintendent
Newburyport School Superintendent
Pentucket School Superintendent
Triton School Superintendent
Schools: Participating facilities were visited out of sequence by a FEMA Evaluator in 2017, who interviewed key players (and if the site's plan calls for KI, responsible staff). See page 2 of Extent of Play for list

Areas Requiring Corrective Action (ARCA): N/A

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.

Massachusetts Extent of Play

<u>EPZ EOCs</u>: EOCs will demonstrate the ability to direct and monitor traffic control operations within their jurisdictions through discussions with the evaluator. The local EOC highway and/or Law Enforcement representative will participate in a discussion of procedures and resources available for traffic control. No personnel or equipment will be deployed to field locations.

Areas Requiring Corrective Action (ARCA): N/A

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.

Massachusetts Extent of Play

Each EPZ Local EOC will demonstrate rerouting of traffic following a traffic impediment through an interview with the FEMA Evaluator. No personnel or equipment will be dispatched to the simulated accident scene. If an impediment is likely to cause lengthy rerouting of traffic along the evacuation route, the Newbury EOC will communicate this information to MEMA Region I in order for this information to be passed to the JIC. MA will demonstrate only one EOC (Newbury) will demonstrate the coordination with the JIC to communicate the alternate route to evacuees.

Areas Requiring Corrective Action (ARCA): N/A

Note: If, during the exercise, a participant demonstrates this sub-element unsatisfactorily, the FEMA Evaluator will inform the MEMA Controller. After an "on the spot" training by the local or State representative, the FEMA Evaluator will provide another opportunity to re-demonstrate the activity that day.

Sub-element 3.e – Implementation of Ingestion 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 Food and Drug Administration guidance, for the ingestion pathway EPZ (i.e., the area within an approximate 50-mile radius of the nuclear power plant). 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)

Extent of Play

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. OROs 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.

Massachusetts Extent of Play

This criterion will not be demonstrated during this exercise.

Areas Requiring Corrective Actions (ARCA): N/A

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

Extent of Play

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 the 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.

Massachusetts Extent of Play

This criterion will not be demonstrated during this exercise.

Areas Requiring Corrective Action (ARCA): N/A

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

Intent
This sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that Offsite Response Organizations (ORO) have the capability to implement plans, procedures, and decisions for post-plume phase relocation, re-entry, and return. Implementation of these decisions is essential for protecting the public from

the direct long-term exposure to deposited radioactive materials from a severe accident at a commercial nuclear power plant.

Criterion 3.f.1: Decisions regarding controlled re-entry, 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)

Extent of Play

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 area(s) that have 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 the 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.

Re-entry: OROs must demonstrate the capability to control re-entry and exit of individuals who are authorized by the ORO to temporarily re-enter 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 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 procedure subjects are: (1) the 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; and (8)maintenance of emergency worker radiation exposure records.

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 the procedures and resources for their restoration. Examples of these services and facilities are medical and social services, utilities, roads, and schools.

Communications among OROs for relocation, re-entry, and return may be simulated. All simulated or actual contacts must be documented. These discussions may be accomplished in a group setting.

OROs should use Federal resources as identified in the NRF Nuclear/Radiological Incident Annex, and other resources (e.g., compacts, nuclear insurers), as necessary, 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.

Massachusetts Extent of Play

This sub-element will not be demonstrated during this exercise.

Areas Requiring Corrective Action (ARCA): N/A

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.

OROs 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.

Massachusetts Extent of Play

NIAT Field Teams are managed by the Field Team Coordinator who is located at the utility EOF. He/she will brief and in conjunction with the utility and other state agencies, dispatch two teams to sampling locations in accordance with the NIAT Handbook, Section D.4, as dictated by scenario play. NIAT Field Team personnel will prepare one sample media and the report survey results on the appropriate survey forms to the Field Team Coordinator.

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.

OROs must share data in a timely manner with all other appropriate OROs. 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.
OROs 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.

Massachusetts Extent of Play

Two MA NIAT Field Teams will be dispatched from the Rowley Fire Department (10 minutes to an hour) in accordance with the NIAT Handbook. Once, dispatched, only disposable gloves will be used for actual exercise play. Charcoal cartridges will be used instead of silver zeolite.

The NIAT Field Teams will collect one complete sample (monitoring and air sample) as specified by the procedures in Section D.4 of the NIAT Handbook.

Areas Requiring Corrective Action (ARCA): N/A

Note: If, during the exercise, a participant demonstrates this sub-element unsatisfactorily, the FEMA Evaluator will inform the MEMA Controller. After an "on the spot" training by the local or State representative, the FEMA Evaluator will provide another opportunity to re-demonstrate the activity that day.

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 should have the capability to assess the actual or potential magnitude and locations of radiological hazards in the ingestion exposure pathway EPZ and to support relocation, re-entry and return decisions. This sub-element focuses on the collecting environmental samples for laboratory analyses that are essential for decisions on protection of 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)

Extent of Play

The ORO's field monitoring teams must demonstrate the capability to take measurements and samples, at such times and locations as directed, to enable an adequate assessment of the ingestion pathway and to support re-entry, 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.

The field monitoring teams and/or other sampling personnel must secure ingestion 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.

OROs 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 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.

Massachusetts Extent of Play

This sub-element will not be demonstrated during this exercise.

Areas Requiring Corrective Action (ARCA): N/A

Note: If, during the exercise, a participant demonstrates this sub-element unsatisfactorily, the FEMA Evaluator will inform the MEMA Controller. After an "on the spot" training by the local or State representative, the FEMA Evaluator will provide another opportunity to re-demonstrate the activity that day.

Sub-element 4.c - Laboratory Operations

Intent
This sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that Offsite Response Organizations (ORO) 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)

Extent of Play

The laboratory staff must demonstrate the capability to follow appropriate procedures for receiving samples, including logging of 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 as anticipated by 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 should be as described in the plans/procedures. New or revised methods may be used to analyze atypical radionuclide releases (e.g., transuranics or as a result of a terrorist event) or if warranted by incident circumstances. Analysis may require resources beyond those of the ORO.

The laboratory staff must be qualified in radioanalytical techniques and contamination control procedures. OROs will use Federal resources as identified in the NRF Nuclear/Radiological Incident Annex and other resources (e.g., compacts, the licensee, 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.

Massachusetts Extent of Play

This sub-element will not demonstrated during this exercise

Areas Requiring Corrective Action (ARCA): N/A

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.

Exhibit III-4: Evaluation Standards for Alert and Notification Systems	*Within 45 Minutes*	*Within a Reasonable Time*
Demonstration Criteria: In a timely Manner		
Primary Alert and Notification		
5.a.1: …covering essentially 100% of the 10-mile EPZ	*x*	
5.a.4: …for FEMA-approved exception areas	*x*	
Backup Alert and Notification for All Incidents		
5.a.3: …covering the 10-mile EPZ	*x*	

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:
Identification of the ORO responsible and the official with authority for providing the alert signal and instructional message;

Identification of the commercial NPP and a statement that an emergency exists there;

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

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.

OROs may demonstrate any means of primary 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.

Massachusetts Extent of Play

The sounding of the sirens and broadcast of EAS/News Releases will be simulated. EAS/News Releases will be formulated and distributed by the Massachusetts State EOC. Activation of the EAS system will be coordinated with New Hampshire officials. Actions to demonstrate performance of initial notification of the public will be performed up to the point of actual transmission of the Emergency Alert System (EAS) message. The EAS message will be prepared/ encoded/issued by MEMA. EAS radio station WBZ (1030 AM) will be initially contacted and faxed a copy of a standard test message. WBZ will return the fax to the Public Affairs Officer to ensure receipt of fax. Broadcast of EAS messages/News Releases will be simulated.

Areas Requiring Corrective Action (ARCA): N/A

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.

OROs 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.

Massachusetts Extent of Play

Code Red is the backup notification system for Seabrook Station EPZ. Per procedure, Code Red will be used following the sounding of the siren. It will be simulated for the exercise.

Areas Requiring Corrective Action (ARCA): N/A

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.

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.

Massachusetts Extent of Play

Joint Information Center: Information generated as a result of incoming calls to the SEOC Public Information Line/MASS 211 Call Center will be included in news briefings. At least two rumor trends will be handled.

State EOC: Control cell personnel will make calls simulating members of the public. The MASS 211 Call Center will demonstrate the ability to handle public inquiry calls. Handling at least two rumor trends (three or more

calls of the same nature) will be demonstrated. Two MASS 211 public information line operators each will respond to calls once the Public Alert and Notification System has been activated at Site Area Emergency or General Emergency at the State EOC.

EPZ Towns: Control cell personnel will make calls to the local EOCs simulating members of the public. Each local EOC will demonstrate the community's emergency response and refer all other questions to MASS 211 Call Center.

Areas Requiring Corrective Action (ARCA): N/A

Note: If, during the exercise, a participant demonstrates this sub-element unsatisfactorily, the FEMA Evaluator will inform the MEMA Controller. After an "on the spot" training by the local or State representative, the FEMA Evaluator will provide another opportunity to re-demonstrate the activity that day.

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.b.1: The facility/ORO had adequate procedures and resources to accomplish monitoring and decontamination of emergency workers and their equipment and vehicles. (NUREG-0654/FEMAREP-1, K5.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.

OROs 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 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

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

Massachusetts Extent of Play

This sub-element will not be demonstrated during this exercise.

Areas Requiring Corrective Action (ARCA): N/A

Note: If, during the exercise, a participant demonstrates this sub-element unsatisfactorily, the FEMA Evaluator will inform the MEMA Controller. After an "on the spot" training by the local or State representative, the FEMA Evaluator will provide another opportunity to re-demonstrate the activity that day.

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 Offsite Response Organizations (ORO) 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)

Extent of Play

The monitoring staff must demonstrate the capability to monitor emergency worker personnel and their equipment and vehicles for contamination in accordance with the Offsite Response Organizations (ORO) plans/procedures.

Specific attention must be given to equipment, including any vehicles that were in contact 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 OROs 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 2 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 decontamination 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 and uncontaminated individuals where applicable; provide changes of clothing for those with contaminated clothing and personal belongings to prevent further contamination of emergency workers or facilities.

OROs 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 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 emergency workers who cannot be adequately decontaminated for assessment and follow-up in accordance with the ORO's plans/procedures.

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

All activities associated with this criterion 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.

Massachusetts Extent of Play

This sub-element will not be demonstrated during this exercise.

Areas Requiring Corrective Action (ARCA): N/A

Note: If, during the exercise, a participant demonstrates this sub-element unsatisfactorily, the FEMA Evaluator will inform the MEMA Controller. After an "on the spot" training by the local or State representative, the FEMA Evaluator will provide another opportunity to re-demonstrate the activity that day.

Sub-element 6.c - Temporary Care of Evacuees

Intent

This sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that Offsite Response Organizations (ORO) 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)

Extent of Play

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 animal and vehicles, where applicable, have been placed in a secured 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 or 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.

All activities associated with this criterion 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.

Massachusetts Extent of Play

This sub-element will not be demonstrated during this exercise.

Areas Requiring Corrective Action (ARCA): N/A

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 Offsite Response Organizations (ORO) 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)

Extent of Play

Monitoring, decontamination, and contamination control efforts must not delay urgent medical care for the victim. FEMA has determined that these capabilities have been enhanced and consistently demonstrated as adequate; therefore, offsite medical services drills need only be evaluated biennially.

Offsite Response Organizations (ORO) must demonstrate the capability to monitor/decontaminate and transport contaminated, injured individuals to medical facilities.

An ambulance must be used for the 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 defers monitoring to the medical facility, then the ambulance crew presumes that the patient(s) is contaminated and demonstrate appropriate contamination controls until the

patient(s) 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.

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 the treatment of contaminated injured individuals.

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

All activities associated with this criterion 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.

Massachusetts Extent of Play

Lowell General Hospital demonstration was completed.

Areas Requiring Corrective Action (ARCA): N/A