



FEMA

November 21, 2012

Document Control Desk
US Nuclear Regulatory Commission
Washington, DC 20555-0001

To Whom It May Concern:

Enclosed is the final After Action Report from the August 21, 2012 Millstone Power Station graded exercise. The State of Connecticut and local emergency response organizations successfully demonstrated their capabilities to implement off-site radiological emergency response plans based on a federal team's evaluation of the exercise.

State and local preparedness remains adequate to protect the health and safety of the public living in the vicinity of Millstone Power Station and provides reasonable assurance that appropriate measures can be taken off-site in the event of a radiological emergency.

If you have any questions, please contact Steve Colman, Regional Assistance Committee Chairperson, at (617) 832-4731.

Sincerely,

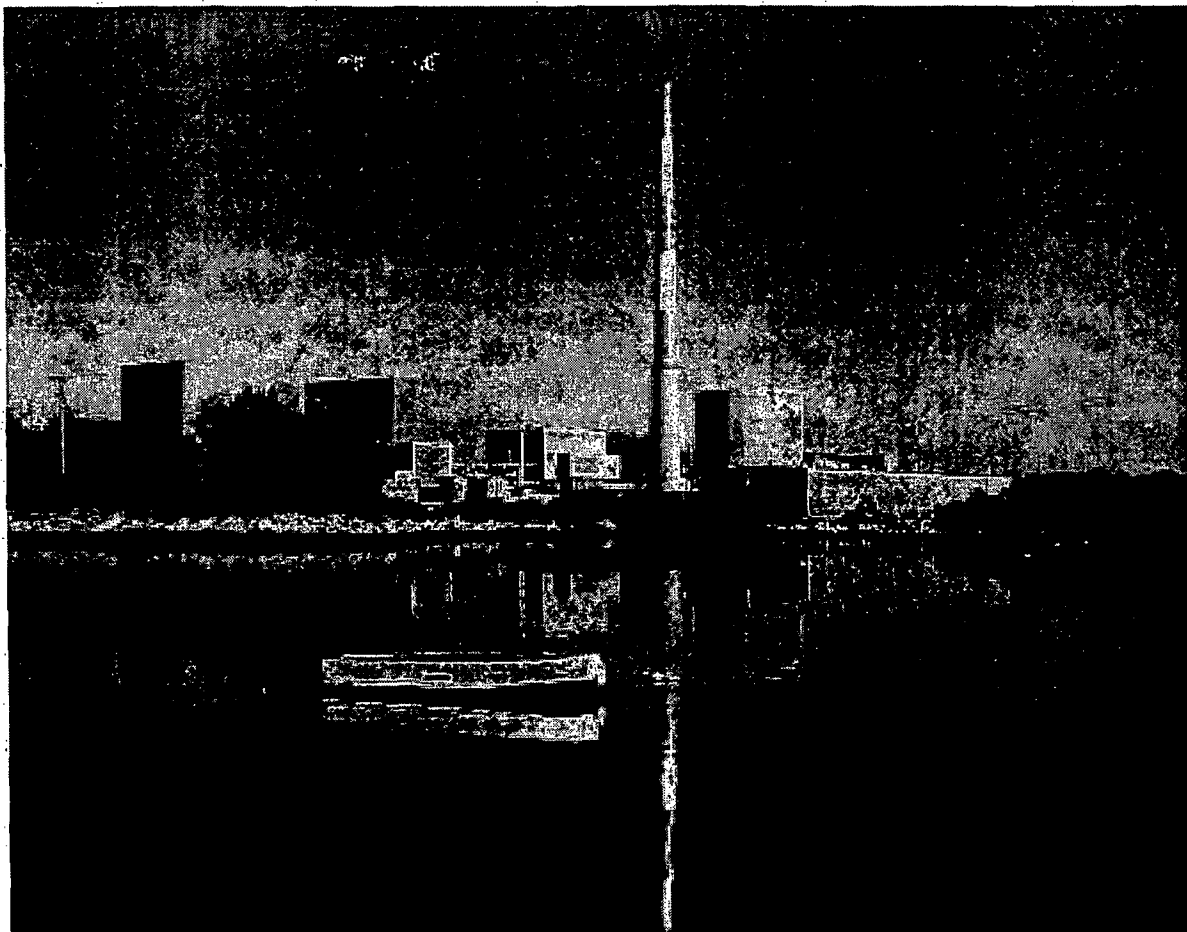
for [Signature]

Paul F. Ford
Acting Regional Administrator
FEMA, Region I

PFF:ib

Enclosure

AX45
NAR



Millstone Power Station

After Action Report/ Improvement Plan

Exercise Date - August 21, 2012

Radiological Emergency Preparedness (REP) Program



FEMA

Published November 21, 2012

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Millstone Power Station After Action Report/Improvement Plan

Published November 21, 2012

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EXECUTIVE SUMMARY

The purpose of this report is to provide a summary of the findings and recommendations of the After Action Review (AAR) conducted following the Millstone Power Station (MPS) emergency drill on August 11, 2011. The AAR was conducted by the Millstone Power Station (MPS) and the Connecticut Department of Energy and Environmental Protection (DEEP). The AAR was conducted to identify areas for improvement and to ensure that the MPS is prepared to respond to a radiological emergency.

The AAR was conducted on August 11, 2011, at the Millstone Power Station. The AAR was conducted by the Millstone Power Station (MPS) and the Connecticut Department of Energy and Environmental Protection (DEEP). The AAR was conducted to identify areas for improvement and to ensure that the MPS is prepared to respond to a radiological emergency.

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EXECUTIVE SUMMARY

On August 21, 2012, the Federal Emergency Management Agency (FEMA), Region I, evaluated an exercise in the plume exposure pathway Emergency Planning Zone (EPZ) around the Millstone Power Station. The purpose of the exercise was to assess the level of state and local preparedness in responding to a radiological emergency. The 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.

Prior exercises at this site were most recently conducted on October 19-20, 2010 (plume and post plume exposure pathway) and March 18, 2008 (plume exposure pathway). The qualifying emergency preparedness exercise was conducted in 1982.

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

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

The state and local organizations, except where noted in this report, demonstrated knowledge of their emergency response plans and procedures and adequately implemented them.

There were no Deficiencies. There were four Areas Requiring Corrective Action (ARCA), two of which were redemonstrated during the exercise and closed. There was one planning issue, which was addressed and closed. One prior ARCA and one prior planning issue from the 2010 plume and post plume exercise were resolved during the 2012 plume exercise.

SECTION 1: EXERCISE OVERVIEW

1.1 Exercise Details

Exercise Name

Millstone Power Station

Type of Exercise

Plume

Exercise Date

August 21, 2012

Program

Department of Homeland Security/FEMA Radiological Emergency Preparedness Program

Scenario Type

Radiological Emergency

1.2 Exercise Planning Team Leadership

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1.3 Participating Organizations

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

State Jurisdictions

Connecticut Department of Agriculture
Connecticut Department of Consumer Protection
Connecticut Department of Correction

Connecticut Department of Developmental Services
Connecticut Department of Emergency Management and Homeland Security
Region IV
Connecticut Department of Emergency Services & Public Protection
Connecticut Department of Energy and Environmental Protection
Connecticut Department of Energy and Environmental Protection, Division of
Radiation
Connecticut Department of Public Health
Connecticut Department of Public Safety
Connecticut Department of Transportation
Connecticut Governor's Office
Connecticut Intelligence Center
Connecticut National Guard
Connecticut Network
Connecticut State Fire Administration
Connecticut State Police
New York Bureau of Radiation Health
New York Office of Emergency Management
New York State Emergency Management Office
New York State Police

Risk Jurisdictions

East Lyme Dispatch
East Lyme Emergency Management
East Lyme First Selectman
East Lyme Parks and Recreation
East Lyme Police Department
East Lyme Public Schools
East Lyme Public Works
East Lyme Resident State Trooper
Fishers Island Emergency Management Office
Fishers Island School District
Fishers Island Volunteer Fire Dept.
Gale's Ferry Fire Department
Groton City Department of Utilities

Groton City Emergency Management
Groton City Fire Department
Groton City Office of the Mayor
Groton City Police Department
Groton City Public Works Department
Ledgelight Health District
Ledyard Emergency Management
Ledyard Fire Marshall
Ledyard Police
Ledyard Public Schools
Ledyard Public Works
Ledyard Town Council
Ledyard Visiting Nurses
Ledyard Volunteer Ambulance
Lyme Ambulance Association
Lyme Emergency Medical Services
Lyme Fire Company
Lyme Selectman
Montville Emergency Management Department
Montville Fire Department
Montville Mayor's Office
Montville Police Department
Mystic Fire Department
New London City Planner
New London Emergency Management Department
New London Finance Officer
New London Fire Dept
New London Mayor
New London Police
New London Public Works
Old Lyme Emergency Medical Services
Old Lyme Fire Department
Old Lyme First and Second Selectwomen
Old Lyme Office of Emergency Management

Old Lyme Public Information Officer
Southold Town Council
Town of Groton Board of Education
Town of Groton Department of Administrative Services
Town of Groton Department of Parks and Recreation
Town of Groton Police Department
Town of Groton Town Manager's Office
Town of Waterford Board of Education
Town of Waterford Emergency Management
Town of Waterford Fire Dept
Town of Waterford First Selectman's Office
Town of Waterford Parks and Recreation
Town of Waterford Police Dept
Town of Waterford School Superintendent's Office
Town of Waterford Senior Services
Town of Waterford Public Works
Town of Waterford Tax Collector's Office

Private Organizations

Amateur Radio Emergency Service
American Red Cross, Connecticut Region
Dominion Nuclear Connecticut, Millstone Power Station
Electric Boat Division of General Dynamics
Ham Radio Operators
First Student Bus Company
United Way 211

Federal Jurisdictions

Federal Emergency Management Agency
United States Coast Guard

SECTION 2: EXERCISE DESIGN SUMMARY

2.1 Exercise Purpose and Design

The purpose of this report is to present the results and findings on the performance of the offsite response organizations (OROs) during a simulated radiological emergency.

On August 21, 2012, FEMA Region I evaluated the August 21, 2012, exercise 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 Millstone Power Station.

2.2 Exercise Objectives, Capabilities and Activities

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

2.3 Scenario Summary

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

The scenario is included in Appendix D, Exercise Plan.

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 August 21, 2012, Plume Exercise, conducted to test the offsite emergency response capabilities of State and local governments in the Millstone Power Station 10-mile Emergency Planning Zone (EPZ).

Each jurisdiction and functional entity was evaluated on its demonstration of criteria contained in the exercise evaluation areas as outlined in the FEMA Radiological Emergency Preparedness Program Manual, April 2012. Detailed information on the 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 on the following pages presents the status of all exercise evaluation area criteria that were scheduled for demonstration during the 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 (No Deficiency or ARCAs assessed and no unresolved ARCAs from prior exercise)

A - ARCAs assessed or unresolved ARCAs from previous exercises

D - Deficiency assessed

P - Plan Issues

N - Not Demonstrated

Note: Blank fields indicate criterion was not evaluated at that location.

Table 3.1 - Summary of Exercise Evaluation (3 pages)

DATE: 2012-08-21 SITE: Millstone Power Station, CT M: Met, A: ARCA, D: Deficiency, P: Plan Issue, N: Not Demonstrated		CT SEOC	State 211	CT DEEP	CT EOF	CT FMT-A	CT FMT-B	CT DPH	CT JIC	CT R4	CT SP Montville	CT DoT
Emergency Operations Management												
Mobilization	1a1	M		M	M	M	M	M	M	M		
Facilities	1b1											
Direction and Control	1c1	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	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		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	M
Implementation of KI Decision for Institutionalized Individuals and the Public	3b1											
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		
Implementation of Traffic and Access Control	3d1	M								M	M	
Implementation of Traffic and Access Control	3d2	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			M		M	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		
Support Operations/Facilities												
Monitoring, Decontamination, and Registration of Evacuees	6a1											
Monitoring and Decontamination of Emergency Workers and their Equipment and Vehicles	6b1											

Table 3.1 - Summary of Exercise Evaluation (Continued, page 2/3)

DATE: 2012-08-21 SITE: Millstone Power Station, CT		CT STSA - Rocky Hill	E Lyme EOC	Ft EOC	Groton CEOC	Groton TEOC	Ledyard EOC	Lyme EOC	Montville EOC	New London EOC	Old Lyme EOC	Waterford EOC
M: Met, A: ARCA, D: Deficiency, P: Plan Issue, N: Not Demonstrated												
Emergency Operations Management												
Mobilization	1a1	M	M	M	M	M	M	M	M	M	M	M
Facilities	1b1				M					M		
Direction and Control	1c1	M	M	M	M	M	M	M	M	A	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	M
Implementation of KI Decision for Institutionalized Individuals and the Public	3b1	M										
Implementation of Protective Actions for persons with disabilities and access/functional needs	3c1		M	M	M	M	M	M	M	A	M	M
Implementation of Protective Actions for persons with disabilities and access/functional needs	3c2		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
Implementation of Traffic and Access Control	3d2		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 Analyses	4a2											
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	M	M	M	M	M	M	M	M	M
RESERVED	5a2											
Activation of the Prompt Alert and Notification System	5a3				M							M
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
Support Operations/Facilities												
Monitoring, Decontamination, and Registration of Evacuees	6a1											

Millstone Power Station

DATE: 2012-08-21
SITE: Millstone Power Station, CT

M: Met, A: ARCA, D: Deficiency, P: Plan Issue, N: Not Demonstrated

[illegible]

3.3 Criteria Evaluation Summaries

3.3.1 Connecticut Jurisdictions

3.3.1.1 CT 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
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: 1.e.1.

ISSUE NO.: 38-12-1e1-P-01

CRITERION: Equipment, maps, displays, dosimetry, KI, and other supplies are sufficient to support emergency operations.

CONDITION: This issue was observed at the Old Lyme Emergency Operations Center (EOC) but falls under the responsibility of the State of Connecticut. The Old Lyme plan calls for 40 dosimetry packets. There were only 20 packets available at the Old Lyme EOC.

POSSIBLE CAUSE: The State of Connecticut may not have provided enough packets to Old Lyme when they swapped out the packets for recalibration of the direct reading dosimeters, or the plan may not have been updated to reflect an intentional reduction in the number of packets needed.

REFERENCE: NUREG-0654 K3.a, Old Lyme Local Procedure 5.0 page 1.

EFFECT: A shortage of dosimetry could cause delay in personnel deploying to the field. Inconsistencies in the plan could cause confusion during a response.

CORRECTIVE ACTION DEMONSTRATED: The State of Connecticut recounted the dosimetry packets at the Old Lyme EOC and updated the plan as of September 22, 2012 to reflect the current number of 20 packets.

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

3.3.1.2 CT 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. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.1.3 CT Department of Energy and Environmental Protection

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.a.1, 4.a.2.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: 4.a.2.

ISSUE NO.: 38-10-4a2-P-01

ISSUE: At 1133 the Department of Environmental Protection (DEP) Field Monitoring Team Coordinator (FMTC) was notified of the General Emergency declaration. He briefed Field Monitoring Team B (FMT-B) but failed to notify Field Monitoring Team A (FMT-A). He corrected this omission at 1330.

CORRECTIVE ACTION DEMONSTRATED: The outstanding issue, 38-10-4a2-P-01, indicates that procedure CTAP-3.3, DEEP-RD-3, Rev. 8/11/2010, Attachment 1, step 17, states "NOTIFY FMTs of changing plant conditions." Revision 2 of this

procedure, dated 7/3/2012, was changed to state, "NOTIFY FMTs of changing plant conditions if they could impact the team's mission in the field." During this exercise, the FMTC or the Assistant FMTC promptly informed the FMTs of changing plant conditions that could affect them in the field, such as the start of the radiological release, changes in wind direction, and utility FMT results. In consideration of the procedure clarification, and pertinent information provided to the FMTs, this issue is recommended as closed.

- g. PRIOR ISSUES - UNRESOLVED: None

3.3.1.4 CT Emergency Operations Facility

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, 2.b.1
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.1.5 CT Field Monitoring Team - Alpha

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.2, 4.a.3
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.1.6 CT Field Monitoring Team - Bravo

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.2, 4.a.3.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.1.7 CT Dept of Public Health

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

- a. MET: 1.a.1, 1.d.1, 3.c.1, 3.c.2.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.1.8 CT 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. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.1.9 CT DEMHS Region 4

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, 5.a.1
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: 5.a.1, 5.b.1, 5.c.1, 5.d.1, 5.e.1, 5.f.1, 5.g.1, 5.h.1, 5.i.1, 5.j.1, 5.k.1, 5.l.1, 5.m.1, 5.n.1, 5.o.1, 5.p.1, 5.q.1, 5.r.1, 5.s.1, 5.t.1, 5.u.1, 5.v.1, 5.w.1, 5.x.1, 5.y.1, 5.z.1

ISSUE NO.: 38-10-5a1-A-01

ISSUE: During the post exercise evaluator meeting the evaluators for the Towns of Groton, Montville and Ledyard discussed with the evaluators who were assigned to Department of Emergency Management and Homeland Security (DEMHS) Region 4 that there was a miscommunication during the reading of the message for the first siren activation sequence. The Communications Officer at DEMHS Region 4 Office communicated that for the Towns of Groton, Ledyard and Montville the message was for "notification only". All other towns were instructed to simulate siren activation. The conference call with the State Emergency Operations Center, held at 1015, indicated that all towns were to simulate siren activation. The Emergency Management Director from Groton Town radioed DEMHS Region 4 to clarify the intent of the message. DEMHS Region 4's reply was that Groton Town should simulate activating the sirens, which was accomplished at 1107. The town of Ledyard overheard Groton Town's radio communication with Region 4 and simulated activating the sirens at 1109. The town of Montville did not simulate the sirens during the first siren activation sequence.

CORRECTIVE ACTION DEMONSTRATED: During the SAE and GE ECLs, the State Emergency Operations Center (SEOC) directed that Region IV notify the EPZ communities to sound sirens at a predetermined time. The Region IV radio operator announced the siren message and then directed that sirens be sounded sequentially starting with the town of Waterford and ending with the town of Montville. Each town responded back to the Region IV operator that sirens were sounded before operator called the next town. Region IV successfully performed this task of

complete EPZ town notification twice: once at the SAE and then at the GE. This correct action corrects the previous issue of ISSUE number 38-10-5a1-A-01.

g. PRIOR ISSUES - UNRESOLVED: None

3.3.1.10 CT State Police Montville Troop E

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

- a. MET: 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.d.1, 3.d.2.
- b. AREAS REQUIRING CORRECTIVE ACTION: 3.a.1.

ISSUE NO.: 38-12-3a1-A-02

CRITERION: 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. Appropriate record-keeping of the administration of KI for emergency workers is maintained.

CONDITION: CSP Troop E Montville did not brief emergency workers on initial reporting values of 400mR as directed in plans and procedures.

CSP Troop E Montville did not brief emergency workers of the 25R exposure limit for life saving activities.

CSP Troop E Montville did not brief on when to take KI, who can authorize taking KI, and what was the proper KI dosage.

POSSIBLE CAUSE: Lack of training in dosimetry, dosimetry issue and KI use.

REFERENCE: NUREG K.3a, 3.b, REP 5-1 & 5-2, CT RERP 2010 Vol 4 Traffic Management Plan, Sec 2.0 Roles & Responsibilities, sub-section 2.1 State Responsibilities.

EFFECT: Troopers may not have reported back that exposure levels were rising until

their Turn Back Value was reached causing them to possibly receive a higher radiation dose than necessary or force them to suddenly leave a TACP post un-staffed until a replacement Trooper could be dispatched.

Troopers may have been unsure what maximum exposure level was allowed in life saving missions so that they may have exceeded 25R exposure dose.

Troopers may have taken KI without proper authorization and may have accidentally taken both KI tablets issued at the same time.

CORRECTIVE ACTION DEMONSTRATED: Re-training was conducted and an on-the-spot correction was made in accordance with the Connecticut Extent of Play.

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

3.3.1.11 CT Dept of Transportation

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

- a. MET: 1.e.1, 3.a.1
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.1.12 CT State TSA - Rocky Hill Veterans Home

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
- b. AREAS REQUIRING CORRECTIVE ACTION: None

- c. DEFICIENCY: 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 East Lyme 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.a.1, 5.b.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.2.2 Fishers Island, NY 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.a.1, 5.b.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.2.3 City of Groton 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.c.1, 3.d.1, 3.d.2, 5.a.1, 5.a.3, 5.b.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None

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

3.3.2.4 Town of Groton 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.a.1, 5.b.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: 3.a.1.

ISSUE NO.: 38-12-3a1-A-03

CRITERION: 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. Appropriate record-keeping of the administration of KI for emergency workers is maintained.

CONDITION: During the Millstone Power Station (MPS) Radiological Emergency Preparedness Plume Exercise, the emergency workers at the Town of Groton Emergency Operations Center failed to demonstrate that they could successfully identify the scale of direct reading dosimeters (DRDs) issued. Therefore, emergency workers were not able to accurately read potential exposure levels. Emergency workers said they had a 0-200 mR DRD and a 0-5 R DRD. In actuality emergency workers had a 0-5 R DRD and a 0-200 R DRD.

POSSIBLE CAUSE: A possible cause for this may be a lack of appropriate training. The Radiation Officer that conducted the just-in-time training for Emergency Operations Center (EOC) staff had not yet received current radiation safety training from the Town, State, or utility. He conducted the just-in-time training to EOC staff based on his prior knowledge of radiation safety from his prior employment working at MPS and the plans and procedures.

REFERENCE: NUREG-0654/FEMA-REP-1, J.10.e; K.3.a, b; K.4

EFFECT: Not properly identifying the scale of the 0-200 R DRD could lead to confusion when reading the dosimeters and/or the emergency workers exceeding exposure limits if they needed to rely on the 0-200 R DRD, thinking that it was a 0-200 mR DRD.

CORRECTIVE ACTION DEMONSTRATED: Following additional training and a redemonstration of reading the DRDs, the emergency workers correctly identified the appropriate 0-200 R DRD, understood the scale of the DRD and how to read it.

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

3.3.2.5 Ledyard 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.a.1, 5.b.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.2.6 Lyme 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.a.1, 5.b.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None

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

3.3.2.7 Montville 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.a.1, 5.b.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.2.8 New London 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.d.1, 1.e.1, 3.a.1, 3.c.2, 3.d.1, 3.d.2, 5.a.1, 5.b.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: 1.c.1, 3.c.1.

ISSUE NO.: 38-12-1c1-A-04

CRITERION: 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.

CONDITION: The leadership in the City of New London did not follow some of the procedures contained in the city's plan during the exercise. For example, LCP-3.2

Rev. 07/2010 Page 7-8 of 20, states, "Assist the CEO to ensure the following.... EOC staff consults procedures".

The leadership did not encourage staff to review and follow specific procedures related to their role in the EOC. Some staff members present were not assigned specific duties and were not provided copies of plans or procedures.

POSSIBLE CAUSE: Interpretation of the reference documents listed in the next section.

REFERENCE: NUREG - 0654/FEMA - REP-1, A.1.d;A.2.a,b;A.3;C.4,6

August 21, 2012 Millstone Extent of Play, page 2

Local Community Procedure - New London , LCP-3.2 (07/2010)

EFFECT: If EOC staff members do not have immediate access to plans and procedures, they may not be able to take key actions in a timely manner. If the EMD or his designee are not available, the EOC staff may not be able to accomplish their duties and responsibilities, bringing the safety and health of the public into question. There were several new staff in the EOC who would be particularly affected in this situation.

RECOMMENDATION: All EOC staff should have plans and procedures at their work stations. All staff should be trained on and follow the plan.

ISSUE NO.: 38-12-3c1-A-05

CRITERION: PADs are implemented for people with disabilities and those with access/functional needs other than schools within areas subject to protective actions.

CONDITION: At 1051 the Governor declared a State of Emergency and directed the evacuation of Special Needs Populations. At that time, there was no list of Persons with Disabilities and Access/Functional Needs (PDAFN) in the EOC. Although the staff mentioned PDAFN early in the exercise, it was not until 1300 that a staff member went to the dispatch center to get the PDAFN information cards, where they were stored. Once they arrived at the EOC, there was not an organized method in place to ensure transportation needs were tracked. Local Community Procedure, Attachment 2, Transportation Requirements Assessment Worksheet, was not completed.

POSSIBLE CAUSE: The New London Local Community Procedures calls for a Special Needs Representative, however there was not one present in the EOC.

REFERENCE: NUREG-0654/FEMA REP-1, J.10.c.d.e.g.; August 21, 2012, Millstone Extent of Play; Local Community Procedures - New London, LCP-4.5, Special Needs; Page 3 of 8; Number 1, "IF evacuation is directed, ENSURE special needs facilities and transportation dependent individuals have been contacted".

EFFECT: The delay in and disorganization with notifying the PDAFN population could delay evacuation of these individuals, thus putting them at risk in an actual event.

RECOMMENDATION: Ensure that the New London Emergency Operation Center has a Special Needs Representative present in the EOC, as indicated in the New London Local Community Procedures.

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

3.3.2.9 Old Lyme 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.a.1, 5.b.1
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.2.10 Waterford 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.a.1, 5.a.3, 5.b.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.2.11 Fairview Nursing 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.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.2.12 Groton Regency 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.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.2.13 Mystic Healthcare and Rehabilitation 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.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.2.14 Great Neck 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. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.2.15 A Learned Mission-New London

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

- a. MET: 3.b.1, 3.c.2.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.2.16 Children's Gathering

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

- a. MET: 3.b.1, 3.c.2.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.2.17 Christ Lutheran Preschool

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

- a. MET: 3.b.1, 3.c.2.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.2.18 CT College Children's Program

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

- a. MET: 3.b.1, 3.c.2.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.2.19 Grasshopper Green Preschool

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

- a. MET: 3.b.1, 3.c.2.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.2.20 Groton Multicultural Montessori

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

- a. MET: 3.b.1, 3.c.2.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

3.3.3 Support Jurisdictions

3.3.3.1 Stonington EOC

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

- a. MET: 1.a.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: 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, except where noted in this report, demonstrated knowledge of their emergency response plans and procedures and adequately implemented them.

There were no Deficiencies. There were four Areas Requiring Corrective Action (ARCA), two of which were redemonstrated during the exercise and closed. There was one planning issue, which was addressed and closed. One prior ARCA and one prior planning issue from the 2010 plume and post plume exercise were resolved during the 2012 plume exercise.

APPENDIX A: IMPROVEMENT PLAN

Issue Number: 38-12-1c1-A-04		Criterion: 1c1
ISSUE: The leadership in the City of New London did not follow some of the procedures contained in the city's plan during the exercise. For example, LCP-3.2 Rev. 07/2010 Page 7-8 of 20, states, "Assist the CEO to ensure the following:... EOC staff consults procedures" The leadership did not encourage staff to review and follow specific procedures related to their role in the EOC. Some staff members present were not assigned specific duties and were not provided copies of plans or procedures. RECOMMENDATION: All EOC staff should have plans and procedures at their work stations. All staff should be trained on and follow the plan.		
CORRECTIVE ACTION DESCRIPTION:		
CAPABILITY:	PRIMARY RESPONSIBLE AGENCY:	
CAPABILITY ELEMENT:	START DATE:	
AGENCY POC:	ESTIMATED COMPLETION DATE:	

Issue Number: 38-12-3c1-A-05		Criterion: 3c1
ISSUE: At 1051 the Governor declared a State of Emergency and directed the evacuation of Special Needs Populations. At that time, there was no list of Persons with Disabilities and Access/Functional Needs (PDAFN) in the EOC. Although the staff mentioned PDAFN early in the exercise, it was not until 1300 that a staff member went to the dispatch center to get the PDAFN information cards, where they were stored. Once they arrived at the EOC, there was not an organized method in place to ensure transportation needs were tracked. Local Community Procedure, Attachment 2, Transportation Requirements Assessment Worksheet, was not completed. RECOMMENDATION: Ensure that the New London Emergency Operation Center has a Special Needs Representative present in the EOC, as indicated in the New London Local Community Procedures		
CORRECTIVE ACTION DESCRIPTION:		
CAPABILITY:	PRIMARY RESPONSIBLE AGENCY:	
CAPABILITY ELEMENT:	START DATE:	
AGENCY POC:	ESTIMATED COMPLETION DATE:	

APPENDIX B: EXERCISE TIMELINE

Table 1 - Exercise Timeline

DATE: 2012-08-21, SITE: Millstone Power Station, CT

Emergency Classification Level or Event	Time Utility Declared	CT SEOC	CT EOC	CT JC	CT R4	E Lyme EOC	FI EOC
Unusual Event	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Alert	0817	0827	0825	0827	0822	0836	0832
Site Area Emergency	1015	1027	1017	1027	1030	1023	1028
General Emergency	1116	1122	1116	1122	1128	1134	1129
Simulated Rad. Release Started		1023	0911	1023	1030	1045	1129
Simulated Rad. Release Terminated		N/A			N/A	N/A	
Facility Declared Operational		0915	0903	0915	0835	0850	0850
Declaration of State of Emergency		1051	1051	1051	1051	1051	1105
Exercise Terminated							
Early Precautionary Actions:		1051		1051	1058	1045	1057
1st Protective Action Decision:		1212		1212	1210	1210	1105
1st Siren Activation		1123		1123	1115	1120	1115
1st EAS or EBS Message		1126		1126		1125	1123
2nd Protective Action Decision:						N/A	1213
2nd Siren Activation		1227		1227	1158	1205	1220
2nd EAS or EBS Message		1229		1229			1226
3rd Protective Action Decision:							
3rd Siren Activation							
3rd EAS or EBS Message							
KI Administration Decision:		1212		1212	1210	1210	1213

Table 1 - Exercise Timeline
DATE: 2012-08-21, SITE: Millstone Power Station, CT

Emergency Classification Level or Event	Time Utility Declared	Groton CEOC	Groton TEOC	Ledyard EOC	Lyme EOC	Montville EOC	New London EOC
Unusual Event	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Alert	0817	0826	0827	0835	0844	0833	0845
Site Area Emergency	1015	1026	1023	1033	1023	1033	1035
General Emergency	1116	1124	1128	1132	1125	1135	1138
Simulated Rad. Release Started		1026	1023		1037		1138
Simulated Rad. Release Terminated		1340	N/A				1342
Facility Declared Operational		0926	0845	0918	0858	0854	0854
Declaration of State of Emergency		1051	1115	1106	1101	1051	1051
Exercise Terminated					1335		
Early Precautionary Actions:		1058	0908	1100	1101	0936	
1st Protective Action Decision:		1214	1210	1115	1211	1051	1214
1st Siren Activation		1140	1119	1124	1124	1123	1123
1st EAS or EBS Message		1126	1146	1127	1126	1126	1148
2nd Protective Action Decision:		1228		1210			
2nd Siren Activation		1227		1226	1224	1225	1227
2nd EAS or EBS Message		1254	1237	1229			
3rd Protective Action Decision:		1213					
3rd Siren Activation		1227					
3rd EAS or EBS Message		1254					
KI Administration Decision:		1213	1210	1215	1211	1210	1214

Table 1 - Exercise Timeline
DATE: 2012-08-21, SITE: Millstone Power Station, CT

Emergency Classification Level or Event	Time Utility Declared	Old Lyme EOC	Waterford EOC
Unusual Event	N/A	N/A	N/A
Alert	0817	0822	0828
Site Area Emergency	1015	1024	1023
General Emergency	1116	1125	1124
Simulated Rad. Release Started		1059	1023
Simulated Rad. Release Terminated			
Facility Declared Operational		0844	0825
Declaration of State of Emergency		1051	1051
Exercise Terminated			
Early Precautionary Actions:		1051	1116
1st Protective Action Decision:		1036	1116
1st Siren Activation		1110	1119
1st EAS or EBS Message		1119	1125
2nd Protective Action Decision:		1159	1213
2nd Siren Activation		1222	1222
2nd EAS or EBS Message			1228
3rd Protective Action Decision:			
3rd Siren Activation			
3rd EAS or EBS Message		1242	
KI Administration Decision:		1222	1213

DATE: 2012-08-21, SITE: Millstone Power Station, CT

LOCATION	EVALUATOR	AGENCY
CT State Emergency Operations Center	Malcolm Edwards Roy Smith Barbara Thomas	FEMA HQ/IMAT- Red ICFI FEMA RI
CT 211	*Betsy Snell	FEMA - RI
CT Department of Energy and Environmental Protection	Michael Howe *Brad McRee	FEMA HQ ICF
CT Emergency Operations Facility	*Timothy Pflieger	FEMA RVI
CT Field Monitoring Team - Alpha	*Anthony Honnellio	EPA
CT Field Monitoring Team - Bravo	Paul Cormier	ICFI
CT Dept of Public Health	*Bridget Ahlgrim	FEMA HQ
CT Joint Information Center	*Barbara Thomas	FEMA RI
CT DEMHS Region 4	Jesse King *Robert Swartz	FEMA RI
CT State Police Montville Troop E	*Don Carlton	FEMA RI
CT Dept of Transportation	*Wanda Gaudet	FEMA - RI
CT State TSA - Rocky Hill Veterans Home	*Helen LaForge	FEMA RI
East Lyme Local EOC	*Brad DeKorte Nulise Francois Mabel Santiago	FEMA RVI FEMA
Fishers Island, NY EOC	*Brian Hasemann Miriam Weston	FEMA RII FEMA RII
City of Groton Local EOC	*Linda Gee Ryan Jones	FEMA RVI FEMA - RI
Town of Groton Local EOC	*Chris Cammarata Elsa Lopez	FEMA RII FEMA RVI
Ledyard Local EOC	William Cullen *Patricia Foster	FEMA R II FEMA RI
Lyme Local EOC	*Tina Lai-Thomas David Petta	FEMA RIII ICFI
Montville Local EOC	*George Allen Cheryl Weaver	US FDA ICF
New London Local EOC	*John Rice Lee Torres	FEMA RI FEMA RIII
Old Lyme Local EOC	Samuel Nelson *Robert O'Sullivan	ICFI FEMA - RI
Waterford Local EOC	*Taneeka Hollins Quirino Iannazzo	FEMA RI ICFI
Fairview Nursing Home	*Helen LaForge	FEMA RI
Groton Regency Center	*Helen LaForge	FEMA RI
Mystic Healthcare and Rehabilitation Center	*Helen LaForge	FEMA RI
Great Neck School	*Helen LaForge	FEMA RI
A Learned Mission-New London	*Helen LaForge	FEMA RI
Children's Gathering	*Helen LaForge	FEMA RI
Christ Lutheran Preschool	*Helen LaForge	FEMA RI
CT College Children's Program	*Helen LaForge	FEMA RI
Grasshopper Green Preschool	*Helen LaForge	FEMA RI

Unclassified
Radiological Emergency Preparedness Program (REP)

After Action Report/Improvement Plan

Millstone Power Station

Groton Multicultural Montessori	*Helen LaForge	FEMA RI
Stonington EOC	*Helen LaForge	FEMA RI
* Team Leader		

APPENDIX D: EXERCISE PLAN

Extent of Play

State of Connecticut & Millstone Station

FEMA Evaluated Plume Exercise- August 21, 2012

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)

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a full-scale or functional exercise, an actual event, 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; and contact, alert, and mobilize key emergency personnel in a timely manner and demonstrate the ability to maintain and staff 24-hour operations. Twenty-four-hour operations can be demonstrated during the exercise via rosters or shift changes or otherwise in an actual activation. Local 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 Incident Command System, 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.

The REP program does not evaluate Incident Command System tactical operations, only coordination among the incident command, the utility, and all appropriate OROs, pursuant to plans/procedures.

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.

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 identified through LOA/MOUs must be on the ORO's mobilization list so they can be contacted during an incident, if needed.

Exercise Specific Extent of Play:

45

1. State Department of Energy and Environmental Protection (DEEP) Field Teams will be pre-staged at Connecticut State Police Troop E in Montville in conjunction with the exercise.
2. 24 hour staffing capability: a 24 hour roster of SEOC will be shown to an evaluator.

Extent of Play

State of Connecticut & Millstone Station FEMA Evaluated Plume Exercise- August 21, 2012

3. *Stonington (support community) – participate through communications (radio, telephone, etc) through Region 4 office. Demonstration of Fishers Island evacuation support last performed 4/16/2009.*
4. *Transportation Staging Area – demonstrated out of sequence (oos) within 60 days before the exercise. CT will obtain 1 bus and driver and FEMA evaluator will go through one route. Demonstrate rad briefing, dosimetry issue, setup of stations/staging area.*

Extent of Play

State of Connecticut & Millstone Station
FEMA Evaluated Plume Exercise- August 21, 2012

Assessment/Evaluation Area 1 – Emergency Operations Management**Sub-element 1.b – Facilities.**

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

Intent

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

Assessment/Extent of Play

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

Responsible OROs must demonstrate, at least once in a baseline evaluation, the availability of fixed facilities that support accomplishment of emergency operations. Baseline evaluations are performed for EOCs and JICs, as well as other fixed facilities such as reception/relocation centers. Some of the areas evaluated within the facilities are adequate space, furnishings, lighting, restrooms, ventilation, backup power, and/or alternate facility, if required to support operations.

After a baseline evaluation has been established, facilities will only be evaluated for this criterion if they are new or have substantial changes in structure, equipment, or mission that affect key capabilities, as outlined in respective emergency plans/procedures. A substantial change is one that has a direct effect or impact on emergency response operations performed in those facilities. Examples of substantial changes include: modifying the size or configuration of an emergency operations center, adding more function to a center, or changing the equipment available for use in a center.

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

Exercise Specific Extent of Play

1. CTDPH Public Health Laboratory has a new facility on West Street in Rocky Hill that if open and operational within 60 days before and 30 days after the exercise, will be evaluated by FEMA.

Extent of Play

State of Connecticut & Millstone Station
FEMA-Evaluated Plume Exercise-August 21, 2012

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)

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished in a full scale, functional, or tabletop exercise.

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

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

Exercise Specific Extent of Play

1. *During exercise, DEMHS will follow the State Response Framework (SRF) for position titles, but will accomplish the checklists within the current REP plan for Operations Chief, etc. – as long as the tasks are accomplished titles shouldn't matter. Have not revised the REP plan since development of ICS/NIMS-centric SRF organizational pattern. However, have used the SRF staffing pattern for last two large emergencies.*

Extent of Play

State of Connecticut & Millstone Station FEMA Evaluated Plume Exercise- August 21, 2012

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)

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 full scale, functional and 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 for fixed facilities, is fully functional at all times. Communications systems are maintained and tested on a recurring basis throughout the assessment period and system status is available to all operators. Periodic test results and corrective actions are maintained on a real time basis. If a communications system or systems are not functional, but exercise performance is not affected, no exercise issue will be assessed.

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

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

Exercise Specific Extent of Play

****This criterion has been approved for re-demonstration of performance only, actual equipment cannot be redemonstrated.***

Extent of Play

State of Connecticut & Millstone Station
FEMA Evaluated Plume Exercise- August 21, 2012

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)

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 location(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.

Extent of Play

State of Connecticut & Millstone Station FEMA Evaluated Plume Exercise- August 21, 2012

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 and 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

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

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.

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

Exercise Specific Extent of Play:

1. DEEP field team kits, if sealed, shall be considered inventoried and a demonstration of taking an inventory shall not be required during the exercise.
2. DEEP field team kits are inventoried quarterly. FEMA will observe this quarterly inventory cut of sequence of the exercise, date (60 days before to 30 days after exercise) to be determined between DEEP and FEMA.

Extent of Play

State of Connecticut & Millstone Station FEMA Evaluated Plume Exercise- August 21, 2012

**This criterion has been approved for re-demonstration of performance only, actual equipment cannot be redemonstrated.*

Extent of Play

State of Connecticut & Millstone Station
FEMA Evaluated Plume Exercise- August 21, 2012

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; J.10. e, f; K.4)

Assessment/Extent of Play

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

ORO's authorized to send emergency workers into the plume exposure pathway EPZ must demonstrate a capability to comply with emergency worker exposure limits based on their emergency plans/procedures.

Participating OROs must also demonstrate the capability to make decisions concerning authorization of exposure levels in excess of pre-authorized levels and the number of emergency workers receiving radiation doses above pre-authorized levels. This would include providing KI and dosimetry in a timely manner to emergency workers dispatched onsite to support plant incident assessment and mitigating actions, in accordance with respective plans/procedures.

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

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

Exercise Specific Extent of Play

1. Discussion of dose extension will be facilitated by controller inject:

Extent of Play

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Sub-element 2.b. – Radiological Assessment and Protective Action Recommendations and 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.

ORO 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 PADs 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)

Assessment/Extent of Play

Assessment of this Demonstration Criterion must be accomplished concurrently with a licensee exercise and may be demonstrated in a full-scale, functional 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.

Exercise Specific Extent of Play

1. This is primarily a state objective. However,⁵⁴ until a Governor's State of Emergency is declared, local officials may make protective and precautionary recommendations within their communities.

FEMA Evaluated Plume Exercise- August 21, 2012

(Based on FEMA REP Manual - October 2011)

Extent of Play

State of Connecticut & Millstone Station FEMA Evaluated Plume Exercise- August 21, 2012

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

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

Exercise Specific Extent of Play

1. This is primarily a state objective. However, until a Governor's State of Emergency is declared, local officials may make protective and precautionary recommendations within their communities.

Extent of Play

State of Connecticut & Millstone Station
FEMA Evaluated Plume Exercise- August 21, 2012

Sub-element 2.c – PAD 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 PADs, 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 daycare centers, 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: 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)

Assessment/Extent of Play

Assessment of this Demonstration Criterion must be accomplished concurrently with a licensee exercise and may be demonstrated in a full-scale, functional 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.

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).

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

Exercise Specific Extent of Play

None

Extent of Play

State of Connecticut & Millstone Station
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Sub-element 2.d. – Radiological Assessment and Decision Making for the Ingestion Exposure Pathway

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have the means to assess the radiological consequences for the ingestion exposure pathway, relate them to the appropriate PAGs, and make timely, appropriate PADs to mitigate exposure from the pathway. During an incident at an NPP, a release of radioactive material may contaminate water supplies and agricultural products in the surrounding areas. Any such contamination would likely occur during the plume phase of the incident and, depending on the nature of the release, could 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)

Assessment/Extent of Play

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

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

The ORO must use its procedures to assess the radiological consequences of a release on the food and water supplies, such as the development of a sampling plan. The ORO's assessment must include evaluation of the radiological analyses of representative samples of water, food, and other ingestible substances of local interest from potentially impacted areas, characterization of the releases from the facility; and the extent of areas potentially impacted by the release. During this assessment, OROs must consider use of agricultural and watershed data within the 50-mile EPZ. The radiological impacts on the food and water must then be compared to the appropriate ingestion PAGs contained in the ORO's plans/procedures. The plans/procedures contain PAGs based on specific dose commitment criteria or on criteria as recommended by current Food and Drug Administration (FDA) guidance. Timely and appropriate recommendations must be provided to the ORO decision-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 OROs.

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

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

Exercise Specific Extent of Play

N/A

Extent of Play

State of Connecticut & Millstone Station FEMA Evaluated Plume Exercise- August 21, 2012

The purpose of this exercise was to evaluate the effectiveness of the State of Connecticut's Radiological Emergency Preparedness Program (REP) in response to a potential radiological release from the Millstone Power Station. The exercise was conducted on August 21, 2012, and involved a plume exercise that simulated a release of radioactive material from the Millstone Power Station. The exercise was designed to test the State's ability to detect, assess, and respond to a radiological release, and to evaluate the effectiveness of the State's communication and coordination efforts with the Federal Emergency Management Agency (FEMA) and other federal, state, and local agencies.

The exercise was conducted in accordance with the State of Connecticut's Radiological Emergency Preparedness Program (REP) and the Federal Emergency Management Agency (FEMA) Radiological Emergency Preparedness Program (REP). The exercise was designed to test the State's ability to detect, assess, and respond to a radiological release, and to evaluate the effectiveness of the State's communication and coordination efforts with the Federal Emergency Management Agency (FEMA) and other federal, state, and local agencies. The exercise was conducted in a realistic manner, and the results of the exercise were used to identify areas for improvement in the State's Radiological Emergency Preparedness Program (REP).

The exercise was conducted in accordance with the State of Connecticut's Radiological Emergency Preparedness Program (REP) and the Federal Emergency Management Agency (FEMA) Radiological Emergency Preparedness Program (REP). The exercise was designed to test the State's ability to detect, assess, and respond to a radiological release, and to evaluate the effectiveness of the State's communication and coordination efforts with the Federal Emergency Management Agency (FEMA) and other federal, state, and local agencies. The exercise was conducted in a realistic manner, and the results of the exercise were used to identify areas for improvement in the State's Radiological Emergency Preparedness Program (REP).

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

Intent

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

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

Assessment/Extent of Play

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

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

Reentry: Decisions must be made on location of control points and policies regarding access and exposure control for emergency workers and members of the 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 an individual's objectives, locations expected to be visited, and associated timeframes; availability of maps and plots of radiation exposure rates; and advice on areas to avoid. Control procedures also include monitoring of individuals, vehicles, and equipment; the implementation of decision criteria regarding decontamination; and proper disposition of emergency worker dosimetry and maintenance of emergency worker radiation exposure records. Responsible OROs must demonstrate the capability to develop a strategy for authorized reentry of individuals into the restricted zone(s), based on established decision criteria. OROs must demonstrate the capability to modify those policies for security purposes (e.g., police patrols), maintenance of essential services (e.g., fire protection and utilities), and other critical functions. They must demonstrate the capability to use decision-making criteria in allowing access to the restricted zone by the public for various reasons, such as to maintain property (e.g., to care for farm animals or secure machinery for storage) or retrieve important possessions. Coordinated policies for access and exposure control must be developed among all agencies with roles to perform in the restricted zone(s). OROs must demonstrate the capability to establish policies for provision of dosimetry to all individuals allowed to reenter the restricted zone(s). The extent to which OROs need to develop policies on reentry will be determined by scenario events.

Extent of Play

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

Return: OROs must demonstrate the capability to implement policies concerning return of members of the public to areas that were evacuated during the plume phase (i.e., permitting populations that were previously evacuated to reoccupy their homes and businesses on an unrestricted basis). OROs must base decisions on environmental data and political boundaries or physical/ geological features, which allow identification of the boundaries of areas to which members of the 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 cancellation of the ECL and relaxation of associated restrictive measures. OROs must base return recommendations on measurements of radiation from ground deposition. OROs must have the capability to identify services and facilities that require restoration within a few days and to identify the procedures and resources for their restoration. Examples of these services and facilities are medical and social services, utilities, roads, schools, and intermediate-term housing for relocated persons.

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

Exercise Specific Extent of Play

N/A

Extent of Play

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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, J.10.e; K.3.a, b; K.4)

Assessment/Extent of Play

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

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

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

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

Although it is desirable for all emergency workers to each have a direct-reading dosimeter, there may be situations where team members will be in close proximity to each other during the entire mission. In such cases, adequate control of exposure can be achieved for all team members using one direct-reading dosimeter worn by the team leader. Emergency workers assigned to low-exposure rate fixed facilities (e.g., EOCs and communications center within the EPZ, reception centers, and counting laboratories)

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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., life saving, 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 life saving and/or protection of valuable property may require an urgent response.

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

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

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

Exercise Specific Extent of Play

1. Dosimetry and KI will be issued to a minimum of five individuals within the local EOCs.
2. Emergency workers will not wear Protective Clothing or Equipment while in view of the public.
3. Field Team emergency workers will read dosimetry at regular intervals, OR AS DIRECTED/INSTRUCTED. Field Team emergency workers carrying properly operating meters will not be required to perform personal dosimetry checks prior to increase of dose rates (through inject). SRDs will be demonstrated through inject of an increased dose rate.
4. FEMA evaluator will evaluate a dosimetry briefing and issue to DEEP field team at Troop E in Montville.

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

Extent of Play

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

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have the capability to provide KI for institutionalized individuals, and, if in the plans/procedures, to the 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 and the general public is maintained. (NUREG-0654/FEMA-REP-1, J.10.e, f)

Assessment/Extent of Play

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

ORO 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.

Exercise Specific Extent of Play

N/A

1. *This criterion will be evaluated out of sequence at nursing home evaluations and reception center exercises.*

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

Extent of Play

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Sub-element 3.c – Implementation of 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 PADs, 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: 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)

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a full-scale or functional 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, 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 actual, as negotiated in the extent of play. All actual and simulated contacts must be logged.

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

Exercise Specific Extent of Play

1. *EPZ towns will demonstrate this objective through Tabletop discussion, including:*
 - a. *Identification of Functional Needs populations*
 - b. *Identifying and securing transportation requirements*
2. *Nursing Home Facilities will be surveyed by FEMA with a DEMHS representative to discuss their emergency procedures. In 2012, the nursing homes to be surveyed are in Groton City and include: Fairview, Groton Regency, Beechwood, and Nutmeg Pavilion. Tentative Dates: July 2012*

Extent of Play

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

Intent

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

Criterion 3.d.1: Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel. (NUREG-0654/FEMA-REP-1, A.3; C.1.4; J.10.g, j)

Assessment/Extent of Play

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

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

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

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

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

Exercise Specific Extent of Play

1. *Traffic and access control will be demonstrated through discussion with State and Local Law Enforcement at the State Emergency Operations Center (SEOC) and Local Emergency Operations Centers (LEOCs).*
2. *At Troop E in Montville, State Police will demonstrate, through interview, at least one traffic control point, demonstrate where signage is stored and discuss how it would be brought to control points.*

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

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

Assessment/Extent of Play

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

OROs must demonstrate the capability, as required by the scenario, to identify and take appropriate actions concerning impediments to evacuation. Actual dispatch of resources to deal with impediments, such as wreckers, need not be demonstrated; however, all contacts, actual or simulated, must be logged. The impediment must occur during the evacuation and be on an evacuation route such that re-routing of traffic is required, triggering decision-making and coordination with the JIC to communicate the alternate route to evacuees leaving the area.

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

Exercise Specific Extent of Play

1. This criterion is demonstrated locally and at the SEOC through interview and discussion.

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

Extent of Play

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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 FDA guidance, for the ingestion exposure pathway EPZ (i.e., the area within an approximate 50-mile radius of the NPP). This Sub-element focuses on those actions required for implementation of protective actions.

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

Assessment/Extent of Play

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

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

Exercise Specific Extent of Play

N/A

Extent of Play

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

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)

Assessment/Extent of Play

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

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

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

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

Exercise Specific Extent of Play

N/A

Extent of Play

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

Intent

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

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

Assessment/Extent of Play

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

Relocation: OROs must demonstrate the capability to coordinate and implement decisions concerning relocation of individuals located in radiologically contaminated areas who were not previously evacuated. Such individuals must be relocated to an area(s) where radiological contamination will not expose the general public to doses that exceed the relocation PAGs. OROs must also demonstrate the capability to provide for short- or long-term relocation of evacuees who lived in an area(s) that has residual radiation levels above the (first-, second-, and 50-year) PAGs.

Areas of consideration must include the capability of OROs to communicate with other OROs regarding timing of actions, notification of the population of procedures for relocation, and notification of, and advice for, evacuated individuals who will be converted to relocation status in situations where they will not be able to return to their homes due to high levels of contamination. OROs must also demonstrate the capability to communicate instructions to the public regarding relocation decisions and intermediate-term housing for relocated persons.

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

Examples of control procedures are: (1) assignment of, or checking for, direct-reading and permanent record dosimetry for emergency workers; (2) questions regarding the individuals' objective(s), location(s) expected to be visited, and associated timeframes; (3) maps and plots of radiation exposure rates; (4) advice on areas to avoid; (5) procedures for exit, including monitoring of individuals, vehicles, and equipment; (6) decision criteria regarding contamination; (7) proper disposition of emergency worker dosimetry, 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 procedures and resources for their restoration. Examples of these services and facilities are medical and social services, utilities, roads, and schools.

Extent of Play

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Communication among OROs for relocation, reentry, and return may be simulated. All simulated or actual contacts must be documented. These discussions may be accomplished in a group setting. OROs must use Federal resources as identified in the NRF Nuclear/Radiological Incident Annex, and other resources (e.g., compacts or nuclear insurers), if available. Evaluation of this criterion will take into consideration the level of Federal and other resources participating in the exercise. All activities must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

Exercise Specific Extent of Play

N/A

Extent of Play

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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)

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a full-scale, functional, or tabletop exercise. Other means may include drills, seminars or training activities 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 field monitoring teams' 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. Coordination concerning transfer of samples, including a chain-of-custody form(s), to a radiological laboratory(ies) must be demonstrated.

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

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

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1. *Air sample cartridges used during the exercise have been specifically designated for drill or exercise use only. These cartridges may be used more than once during the exercise. The inventory of air sample cartridges to be used in an actual emergency is located at the DEEP in Hartford, at the Millstone Power Station and at the Montville State Police barracks. The actual inventory list will be made available upon request to FEMA, if available at Montville State Police Barracks. Otherwise, the inventory will be provided out of sequence of the exercise.*
2. *Enough PPE for each emergency worker should be available for observation by evaluator. Proper use of PPE will be demonstrated through interview and discussion.*

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

Extent of Play

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

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)

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a full-scale, functional, or tabletop exercise. Other means may include drills, seminars or training activities 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.

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

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

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

Exercise Specific Extent of Play

- 1. Based upon the compressed timeframe of the plume exercise DEEP field air monitoring teams will be pre-staged and dispatched from State Police Troop E (Montville) barracks.*
- 2. DEEP will deploy 2 field teams who will determine plume characteristics by field measurements.*
- 3. Each DEEP Field Monitoring Team will be dispatched to a minimum of two sampling points where they will take radiation (exposure) measurements and report them to their Field Team Controller (FTC). The FTC will direct that air samples (one particulate and one iodine) be taken at a minimum of 1 location for each field team. Locations to be determined, considering safety and remaining out of view of the public.*

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

Extent of Play

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

Intent

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

Criterion 4.b.1: The field teams (2 or more) demonstrate the capability to make appropriate measurements and to collect appropriate samples (e.g., food crops, milk, water, vegetation, and soil) to support adequate assessments and protective action decision making. (NUREG-0654/FEMA-REP-1, C.1.1.8; J.11)

Assessment/Extent of Play

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

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

The FMTs 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.

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

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

Exercise Specific Extent of Play

N/A

Extent of Play

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Sub-element 4.c – Laboratory Operations

Intent

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

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

Assessment/Extent of Play

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

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

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

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

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

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

Exercise Specific Extent of Play

N/A

Extent of Play

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ASSESSMENT AREA 5: EMERGENCY NOTIFICATION AND PUBLIC INFORMATION

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

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have the capability to provide prompt instructions to the public within the plume exposure pathway EPZ. Specific provisions addressed in this Sub-element are derived from the *Guide for the Evaluation of Alert and Notification Systems for Nuclear Power Plants*, FEMA-REP-10 (November 1985) CHART.

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)

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a full-scale or functional 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 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 8 years. All alert and notification activities along the route(s) must be simulated

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(that is, 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.

Exercise Specific Extent of Play

1. *Activation of the Emergency Alert System (EAS), and Public Alerting Systems (PAS) (sirens) will be simulated.*

OPEN ARCA: 38-10-5a1-A-01 - DEMHS Region IV Colchester - Region IV Office did not clearly communicate to towns to simulate siren sounding.

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

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a full-scale or functional 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 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. If backup route alerting is demonstrated, only one route needs to be selected and demonstrated. All alert and notification activities along the route(s) must be simulated (that is, 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.

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

Exercise Specific Extent of Play

1. *One backup alert route in one or two locations (according to past practice) is to be completed out of sequence; immediately following the exercise.*

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

Assessment/Extent of Play

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

ORO's with FEMA-approved exception areas (identified in the approved *Alert and Notification System Design Report*), 5 to 10 miles from the NPP, must demonstrate the capability to accomplish primary alerting and notification of the exception area(s). FEMA and the NRC recommend that ORO's and operators establish means that will reach those in approved exception areas in a timely manner, with a recommended goal of 45 minutes, once the initial decision is made by authorized offsite emergency officials to notify the public of an incident. The exception area 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.

For exception area alerting, at least one route must 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 8 years. All alert and notification activities along the route(s) must be simulated (that is, the message that would actually be used is read for the evaluator, but not actually broadcasted) as negotiated in the extent of play. Actual testing of the mobile public address system will be conducted at an agreed-upon location. For exception areas alerted by aircraft, actual flights will be negotiated in the extent of play, but must be demonstrated no less than once every 8 years.

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

Exercise Specific Extent of Play

N/A

Extent of Play

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

Intent

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

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

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a full-scale or functional 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. 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 pathway measures are exercised, OROs must demonstrate that a system exists for rapid dissemination of ingestion pathway information to pre-determined 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

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media releases as the incident warrants. The OROs must demonstrate the capability to respond appropriately to inquiries from the news media. All information presented in media briefings and releases must be consistent with PADs and other emergency information provided to the public. Copies of pertinent emergency information (e.g., EAS messages and media releases) and media information kits must be available for dissemination to the media.

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

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

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

Exercise Specific Extent of Play

None

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

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ASSESSMENT AREA 6: SUPPORT OPERATIONS/FACILITIES

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

Intent

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

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

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a full-scale or functional exercise, drills, or SAV.

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

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

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

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

Extent of Play

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Decontamination of evacuees may be simulated and conducted by interview. Provisions for separate showering and same-sex monitoring must be demonstrated or explained. The staff must demonstrate provisions for limiting the spread of contamination. Provisions could include floor coverings, signs, and appropriate means (e.g., partitions, roped-off areas) to separate uncontaminated from potentially contaminated areas. Provisions must also exist to separate contaminated and uncontaminated evacuees, provide changes of clothing for those with contaminated clothing; and store contaminated clothing and personal belongings to prevent further contamination of evacuees or facilities. In addition, for any evacuee found to be contaminated, procedures must be discussed concerning handling of potential contamination of vehicles and personal belongings. Waste water from decontamination operations does not need to be collected.

Individuals who have completed monitoring (and decontamination, if needed) must have means (e.g., hand stamp, sticker, bracelet, form, etc) indicating that they, and their service animals and vehicles, where applicable, have been monitored, cleared, and found to have no contamination or contamination below the trigger/action level.

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

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

Exercise Specific Extent of Play

N/A

Demonstrated annually during Host Community/Reception Center exercises.

Extent of Play

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

Intent

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

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

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a full-scale or functional exercise, drills, or SAV.

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

The area to be used for monitoring and decontamination must be set up as it would be in an actual emergency, with all route markings, instrumentation, record keeping, and contamination control measures in place. Monitoring procedures must be demonstrated for a minimum of one vehicle. It is generally not necessary to monitor the entire surface of vehicles. However, the capability to monitor areas such as radiator grills, bumpers, wheel wells, tires, and door handles must be demonstrated. Interior surfaces of vehicles that were in contact with contaminated individuals must also be checked. Decontamination of emergency workers may be simulated and conducted via interview. Provisions for separate showering and same-sex monitoring must be demonstrated or explained. The staff must demonstrate provisions for limiting the spread of contamination. Provisions could include floor coverings, signs, and appropriate means (e.g., partitions, roped-off areas) to separate uncontaminated from potentially contaminated areas. Provisions must also exist to separate contaminated and uncontaminated individuals where applicable; provide changes of clothing for those with contaminated clothing; and store contaminated clothing and personal belongings to prevent further contamination of emergency workers or facilities.

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. Contamination of the individual(s) will be determined by controller inject and not simulated with any low-level radiation source.

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

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Exercise Specific Extent of Play

N/A

Demonstrated annually during Host Community/Reception Center exercises.

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Sub-element 6.c – Temporary Care of Evacuees

Intent

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

Criterion 6.c.1: Managers of congregate care facilities demonstrate that the centers have resources to provide services and accommodations consistent with American Red Cross planning guidelines.

Managers demonstrate the procedures to assure that evacuees have been monitored for contamination and have been decontaminated as appropriate prior to entering congregate care facilities. (NUREG-0654/FEMA-REP-1, J.10.h, J.12)

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a full-scale or functional exercise, drills, or SAV.

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

For planning purposes, OROs must plan for a sufficient number of congregate care centers in host/support jurisdictions to accommodate a minimum of 20 percent of the EPZ population. In this simulation, it is not necessary to set up operations as they would be in an actual emergency.

Alternatively, capabilities may be demonstrated by setting up stations for various services and providing those services to simulated evacuees. Given the substantial differences between demonstration and simulation of this criterion, exercise demonstration expectations must be clearly specified in Extent-of-Play Agreements.

Congregate care staff must also demonstrate the capability to ensure that evacuees, service animals, and vehicles have been monitored for contamination, decontaminated as appropriate, and registered before entering the facility.

Individuals arriving at congregate care facilities must have means (e.g., hand stamp, sticker, bracelet, form, etc.) indicating that they, and their service animals and vehicles, where applicable, have been 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 monitored and decontaminated (if applicable) and do need confirmation that their vehicle is 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 must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

Exercise Specific Extent of Play

N/A

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Demonstrated annually during Host Community/Reception Center exercises.

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

Intent

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have the capability to transport contaminated injured individuals to medical facilities with the capability to provide medical services.⁹⁸

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)

Assessment/Extent of Play

Assessment of this Demonstration Criterion may be accomplished during a full-scale or functional exercise, or drills.

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

ORO must demonstrate the capability to transport contaminated injured individuals to medical facilities.

An ambulance must be used for response to the victim. However, to avoid taking an ambulance out of service for an extended time, OROs may use any vehicle (e.g., car, truck, or van) to transport the victim to the medical facility. 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 en route, or may be deferred to the medical facility. 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. Equipment and supplies must be available for 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 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 must be based on the ORO's plans/procedures and completed as they would be in an actual emergency, unless noted above or otherwise specified in the Extent-of-Play Agreement.

Exercise Specific Extent of Play

N/A

Demonstrated this year June 6, 2012 at Middlesex hospital.

Extent of Play

State of Connecticut & Millstone Station
FEMA Evaluated Plume Exercise- August 21, 2012

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**Millstone – State of Connecticut Exercise
August 21, 2012 Offsite Scenario**

Approx. TIME	ACTIVITY/EVENT	FEMA Evaluation Areas (Obj.)	MSG #	EOP ACTIONS TO BE OBSERVED
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Tuesday 08/21/12 0700	Plant Event			Final preparation for exercise. Lead Controller ensures all changes issued and questions addressed
	Meteorological conditions		1	Wind direction, 140" (from south east) @ 3 mph. It is currently a sunny day with no expected precipitation in the forecast.
0733 - 0736	Plant Event: Fuel pool damage		94	Unit 3 - Alarms received with rising readings on: • 3RMS-36 (Fuel Pool Radiation), • 3RMS-08 (Spent Fuel Pit Radiation), • 3RMS-29 (Spent Fuel Cask Area Radiation) • 3RMS-36 (Fuel Pool Monitor Radiation) • 3HVR-17 (Fuel Building radioactivity). Phone call from Fuel Handling Team states that a fuel bundle was dropped during fuel movement; there appears to be damage to fuel in the pool.

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Millstone – State of Connecticut Exercise August 21, 2012 Offsite Scenario

Approx. TIME	ACTIVITY/EVENT	FEMA Evaluation Areas (Obj.)	MEG #	EOP ACTIONS TO BE OBSERVED
				3HVR-10B (Aux Bldg effluent radioactivity) goes into alert. Increases; levels off. Indicates a release in progress.
0745	Plant Event: Alert Declared			Shift Manager declares ALERT-C1: U3, RA1 - #2, Fuel Handling Accident Causing Damage to Spent Fuel. Indicated by FB Rad Monitor Increases.
By 0800	ALERT Notification			ALERT-C1: U3, RA1. Notification to state, locals, Millstone SERO, SERO likely to be activated
<i>Note: Millstone SERO will activate at an Alert. Activation by the state and locals is optional at the alert.</i>				
0800	Mobilization, activation and operation of the State and local EOCs.	1.a.1, 1.b.1, 1.c.1, 1.d.1 1.e.1	2,3,4	Mobilization of emergency response organizations will be initiated by radio pager message. During activation the Facility (1.b.1), Direction and Control (1.c.1), Communications Equipment (1.d.1) and Supplies (1.e.1) will be demonstrated. Facilities to be activated include: Ct State Emergency Operations Center (SEOC) Joint Media Center (JMC) Emergency Planning Zone EOCs Connecticut State Police, Troop E

This is a Drill **Millstone – State of Connecticut Exercise**
August 21, 2012 Offsite Scenario

Approx. TIME	ACTIVITY/EVENT	FEMA Evaluation Areas (Obj.)	MSG #	EOP ACTIONS TO BE OBSERVED
				- Field Monitoring Teams pre-staged Connecticut DOT, Norwich - DEMHS Region 4 - DPH Command Center - Transportation Staging Area (Out of Sequence)
0820	Plant Event: Loose Parts Monitor 1			U3 loose parts monitor alarm for an event in the Lower Vessel.
0830	Plant Event: Loose Parts Monitor 2			2nd loose parts monitor alarm for multiple events in the Vessel and Steam Generator - C Reactor Coolant Pump D Vibration alarm
0900	Plant Event: SERO in place			Station Emergency Response Organization (SERO) relieves control room of responsibility for classification, notification, PARs, and repair team dispatch. Innsbrook Corporate Support Center (ICSC) activated in Virginia for support and press release responsibility.
0920	Millstone in place at SEOC			SERO in place at State Emergency Operations Center (SEOC)
0945	Plant Event: Tube Rupture, stuck safety		96	• Pressurizer level decreases slowly due to Steam Generator C Tube Rupture • Reactor Trip • Safety Injection • Steam Generator C Safety Valve fails OPEN

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**Millstone – State of Connecticut Exercise
August 21, 2012 Offsite Scenario**

Approx. TIME	ACTIVITY/EVENT	FEMA Evaluation Areas (Obj.)	MSG #	EOP ACTIONS TO BE OBSERVED
				- Feedwater pump 3FWA*P1B – trips - Emergency Diesel Generator B starts then trips - Residual Heat Removal Pump A trips - Reactor Coolant System pressure will drop and require Control Room to trip ALL Reactor Coolant Pumps Team dispatched to gag safety valve
0945	Plant Event: Steam Release		5	A steam release will be seen and heard by personnel on site and the public
0946	Plant Event: Fuel damage			3MSS-RE77(Main Steam Relief Line radioactivity) will increase to ~5 µCi/cc indicating fuel damage, a sample will be requested.
0950	Plant Event: Elevated on site dose rates			Radiation Monitoring Team (RMT) at North Access Point (NAP) reports elevated dose rates
0955	Plant Event: Site Area Emergency Declared			DSEO declares SAE-C2: U3, BS1 – Any 2 Barriers (RCB4/CNB4)
1000	Wind Shift			Wind shift occurs; wind is now 166° (from SSE)
By 1010	SAE Notification			Notification to state, locals, Millstone SERO,
1015	Precautionary Dismissal of School Children		6	EPZ EOCs evaluate need to perform precautionary dismissal of school children

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This is a Drill **Millstone – State of Connecticut Exercise**
August 21, 2012 Offsite Scenario

Approx. TIME	ACTIVITY/EVENT	FEMA Evaluation Areas (Obj.)	MSG #	EOP ACTIONS TO BE OBSERVED
1045	Plant Event: Loose Parts Monitor 3			Loose Parts Monitor for vessel and steam generator
1100	USNRC, FEMA arrives at SEOC			Simulate USNRC personnel arriving at Harford Armory
1100	Plant Event: Increased Fuel damage (3 rd barrier)			3MSS-RE77 (Main Steam Relief Line radioactivity) will increase a sample will be requested
1115	School precautionary dismissal complete		10	Completion of dismissal communicated to Region IV and state EOC
1115	Increased radiation levels at impacted EOCs		12	If levels are high enough, portal monitors fail on high background, increase in background observed on meters, workers exiting building potentially contaminated
1120	Dosimetry issued to workers		7	This may have been accomplished earlier
1130	Plant Event: Third Barrier		98	3MSS-RE77 reads 20 µCi/cc. Chemistry Technician reports RCS sample reading 54 mR/hr/ml at one foot (3rd barrier loss = either 5% fuel clad damage OR chemistry RCS sample >50 mR/hr/ml at one foot)

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**Millstone – State of Connecticut Exercise
August 21, 2012 Offsite Scenario**

Approx. TIME	ACTIVITY/EVENT	FEMA Evaluation Areas (Obj.)	MSG #	EOP ACTIONS TO BE OBSERVED
1135	Plant Event: General Emergency Declared			GE-A: U3, BG1 – Any 3 Barriers (RCB4/CNB4/FCB3)
By 1150	GE Notification	2.b.1,		Notification to state, locals, Millstone SERO, PAR issued to DEEP (Evacuate A/E/C; shelter all other KI is not recommended)
	Primary Alerting/Notificat ion	5.a.1,	9	Two towns demonstrate 1 route each
	Emergency Worker Exposure Control	2.a.1	11.15	DEEP- in coordination with DPH determines Emergency Worker limits.
	PAD made for general populations, including KI.	2.b.2,	16	State EOC determines public protective actions. Conducts Radiological Assessment of plume, makes PADs (Protective Action Decisions).
	PADs made for special populations and schools.	2.c.1, 2.d.1	14	
			99	

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This is a Drill **Millstone – State of Connecticut Exercise**
August 21, 2012 Offsite Scenario

Approx. TIME	ACTIVITY/EVENT	FEMA Evaluation Areas (Obj.)	MSG #	EOP ACTIONS TO BE OBSERVED
	Traffic Management (CSP EOC, Troop F, E)	3.d.1, 3.d.2	13, 18, 19, 20	Accomplished through decision-making at State EOC and in communication with Troop E and local EPZs as applicable.
	Implement Exposure Control for Emergency Workers.	3.a.1,	7, 17, 21	Demonstrated where teams or individuals are deployed outside of their respective EOC's into the field.
	DEP Field Monitoring Teams are managed, equipped to measure release of airborne radioactivity.	4.a.1, 4.a.2, 4.a.3 1.d.1	8	The State DEP Field Team Coordinator will brief, deploy and track two Field Monitoring Teams for monitoring gamma radiation, air sampling and airborne particulate.
	Information and instructions to the public and news media are prepared and	5.b.1, 3.b.1	100	One or more news releases will be drafted, approved and distributed.

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**Millstone – State of Connecticut Exercise
August 21, 2012 Offsite Scenario**

Approx. TIME	ACTIVITY/EVENT	FEMA Evaluation Areas (Obj.)	MSG #	ECP ACTIONS TO BE OBSERVED
	presented.			
1230	Field Team Rad data indicates elevated KI at plant boundary, but will not exceed PAGs at two miles.	2.b.2.		DEP/DPH may determine that KI should be administered.
1230	Evacuees arrive at Reception Center		22	Regions 2 and 3 receive word from New Haven and East Hartford, communicate to SEOC
	CT requests Federal assist and DOE Flyover.			
1330	Plant event		23	Drill termination at Millstone
Post Exercise	Primary Alerting/Notification Backup	5.a.3		Two towns demonstrate 1 route each

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APPENDIX E: STRENGTHS

Millstone Power Station Graded Exercise August 21, 2012 DRAFT Strengths

1. State Emergency Operations Center (SEOC)

The Deputy Commissioner of the Department of Emergency Services and Public Protection (DESPP) and the State Emergency Management Director of the Division of Emergency Management and Homeland Security (DEMHS) closely followed their plans and procedural checklists. They ensured that the Emergency Planning Zone (EPZ) communities and State Emergency Operation Center (SEOC) agencies all had an opportunity to participate in their coordination role to ensure the appropriate protective action decisions were made by the (acting) Governor. The Director was always one step ahead of the emergency situation at Millstone Power Station, making sure that staff quickly analyzed incoming data and the Governor was able to make protective action decisions in a timely manner.

The SEOC demonstrated robust communication redundancy that enhanced their communication capabilities. The SEOC demonstrated having several means of communication equipment to provide reliable communications with emergency response agencies, EPZ Communities and Host Communities.

2. CT Department of Energy and Environmental Protection (DEEP)

The Radiation Division Director provided excellent direction and control. The Dose Assessment staff exhibited great teamwork. The Field Monitoring Team Coordinator (FMTC) directed the teams to collect data to best serve the needs of the Radiation Division Director and Dose Assessment, and the Duty Officer assured that the staff was informed and supported.

3. CT 211

The 211 call specialists were well-versed in their scripts, and did an excellent job providing information to the public. Supervisors were involved with all actions. The 211 information center was proactive in sharing any and all new information with the team.

4. Emergency Operations Facility (EOF)

The DEEP Liaison was well-versed in his duties at the EOF and communicated frequently with his counterparts at the EOF and SEOC. The Liaison was very engaged in questioning the validity of dose projection results and field team data.

5. Field Monitoring Teams Alpha and Bravo

Throughout the course of the exercise both Field Monitoring Teams (FMT) was able to routinely and clearly communicate with the Field Team Coordinator. Multiple backup communication methods existed in case of any failures. The FMT procedure is very well written and user friendly; the attachments in the procedure were easily followed.

6. Joint Information Center (JIC)

The Public Information Officer (PIO), the SEOC/Governor's PIO at the Joint Information Center (JIC) and the State 211 Liaison worked well together to ensure a successful exercise. They were very knowledgeable in their roles, worked well together, and knew their plans and procedures. The PIO and Governor's PIO were proactive in drafting possible news releases based on the current up-to-date information.

7. CT Department of Public Health (Command Center)

The staff at the Emergency Command Center showed dedication to protecting the health and safety of the public. They were well-prepared and well-organized.

8. DESPP/DEMHS Region 4

The Region 4 Coordinator and staff clearly demonstrated their knowledge of plans and procedures. They have shown that they have worked together for a long time which made them a cohesive response team to the EPZ communities.

9. Montville State Police Troop E Access Control Points/Traffic Control Points (ACP/TCP)

Connecticut State Police and Connecticut Department of Transportation (DOT) collaborated well in identifying traffic impediments and planning effective tactics to clear impediments or re-route traffic around impediments.

10. CT Department of Transportation (DOT)

The staff worked well together. They were very professional and well-briefed in all aspects of their jobs. They did their dosimetry briefing as a team; everything was well done and executed.

11. East Lyme Emergency Operations Center (EOC)

The staff utilized visual displays to help communicate administrative limits to emergency workers. The Emergency Management Director demonstrated good direction and control throughout exercise.

12. City of Groton EOC

The Mayor for the City of Groton did an exceptional job with direction and control. There were good discussions and forward planning throughout the exercise. The Radiological Officer also did an exceptional job briefing the emergency workers and ensuring exposure control methods were followed and understood. The employees of the City of Groton proved themselves to be competent and capable of rapidly shifting from normal duties to emergency assignments during this exercise.

13. Town of Groton EOC

The entire team at the Town of Groton was dedicated to protecting the health and safety of the public.

14. Ledyard EOC

The Town of Ledyard EOC was efficient, well-organized, well-prepared, and well-managed. The Emergency Management Director was a strong but inclusive leader with all-hazards experience and obvious dedication to his community. The members of the team were strong contributors to the response decision-making process. Plans were carried out systematically, but pro-active considerations were encouraged, developed, and carried out at the local level as well.

15. Lyme EOC

The Communication Officer was well-versed in the operation of each radio in the Lyme EOC. The Special-Needs team at the Lyme EOC was outstanding in their support of persons with disabilities and access/functional needs. In particular, the team members compiled a comprehensive survey of exactly what support needed to be provided to persons with disabilities or access/functional needs if protective action decision were made. The team continually informed individuals of the Emergency Classification Levels and other situational information. The Town of Lyme Emergency Management Director gave good direction and control.

16. Montville EOC

The EMD was well-organized, and emergency personnel arrived promptly and went right to work without difficulty or confusion. The radiological briefing was done in two groups to avoid disruption to small EOC.

17. City of New London EOC

The New London Police Chief and her staff did an outstanding job. Their knowledge of their duties and responsibilities during an event at Millstone and their professionalism was second to none.

18. Old Lyme EOC

The Old Lyme EOC Special Needs staff maintained a well-organized computerized database of all individuals who registered. This allowed them to quickly determine the number of those needing aid and the assistance needed. The database also enabled them to contact individuals to determine if they are home and need help during any type of emergency.

The Old Lyme EOC Director and staff consistently sought to improve their skills, plans, and procedures. In addition to the initiative cited above, they previously developed an impressive school evacuation plan. Despite requiring a large amount of volunteer time, the Director and staff displayed a dedicated approach to their responsibilities and strong commitment to their community.

19. Waterford EOC

The team at Waterford exhibited excellent teamwork. Direction and control was exemplary.

20. State of Connecticut State Transportation Staging Area (STSA)

The STSA staff went above and beyond at every station of the staging area. The day's event included a briefing by the Director of the Department of Transportation, followed by bus stops at each of the STSA stations that were fully set up. STSA staff were very knowledgeable and detailed in providing information. The demonstration provided a training opportunity to others that may be called to assist with an STSA operation. Excellent job.

21. Schools: City of New London and Town of Waterford

The New London School District staff who were interviewed during an Out of Sequence visit were very engaged in all aspects of their radiological emergency response plan, especially sheltering and evacuation protective actions for their schools. They created a handy flip chart booklet that included critical information from their plans and procedures.

The Waterford School Radiological Emergency Response Plan for the Great Neck School was well maintained. There was an excellent turnout for the interview, including the Town's Emergency Management Director and Associate, the Superintendent of Schools, the First Student Bus Company Manager, and a Bus Driver. The Principal interviewed knew without hesitation the school's plans and procedures.

22. Nursing Homes

Staff at each of the three nursing homes interviewed had their current plans and procedures readily available. Staff at each location answered questions about Potassium Iodide (KI) forms, current KI tablets, transportation needs, protective actions, and communication contacts and roles without delay. Their level of commitment to their residents' safety was impressive.

23. Daycare Centers

Daycare centers interviewed throughout the Emergency Planning Zone (EPZ) Communities during Out of Sequence visits were very proactive and engaged throughout the interview process. Staff at all locations were knowledgeable about their plans and procedures.

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