

Three Mile Island Nuclear Generating Station

After Action Report/ Improvement Plan

Exercise Date - April 16, 2013

Radiological Emergency Preparedness (REP) Program



Published July 09, 2013

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After Action Report/Improvement Plan

EXECUTIVE SUMMARY

On April 16, 2013, a full-scale plume exercise was conducted in the 10-mile plume exposure pathway, emergency planning zone (EPZ) around the Three Mile Island Nuclear Generating Station (TMI) by the Federal Emergency Management Agency (FEMA), Region III. Out-of-sequence demonstrations were conducted on April 16th and 17th, 2013. The purpose of the exercise and the out-of-sequence demonstrations was to assess the level of State and local preparedness in responding to a radiological emergency. The exercise and out-of-sequence demonstrations were held in accordance with FEMA's policies and guidance concerning the exercise of State and local radiological emergency response plans (RERP) and procedures.

The most recent prior full-scale exercise at this site was conducted on April 12, 2011.

No Deficiencies were assessed in the evaluation of this exercise. One (1) Area Requiring Corrective Action (ARCA) and Three (3) Planning Issues (PI) were identified as a result of this exercise. The ARCA was successfully re-demonstrated on May 30, 2013. Two Planning Issues were resolved on April 18, 2013. One Planning Issue was resolved on May 30, 2013. There were no ARCAs or Planning Issues from previous exercises that required resolution.

FEMA wishes to acknowledge the efforts of the many individuals in the Commonwealth of Pennsylvania, the risk counties of Cumberland, Dauphin, Lancaster, Lebanon, and York; and the support counties of Adams, Franklin, and Schuylkill who were evaluated at this exercise.

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

This report contains the final evaluation of the biennial exercise and the evaluation of the following out-of-sequence activities:

•Reception Center/Monitoring and Decontamination and Mass Care: Conducted on April 17, 2013 in Adams, Cumberland, Dauphin, Franklin, Lancaster, Lebanon, Schuylkill, and York Counties.

•Emergency Worker Monitoring and Decontamination: Conducted on April 17, 2013 in Cumberland, Lancaster, Lebanon, and York Counties.

•Traffic/Access Control and Incident Command Post Radiological Exposure Control: Conducted on April 17, 2013 at the Harrisburg State Police Barracks.

•Schools: Conducted on April 16, 2013 in Dauphin, Lancaster, Lebanon, and York Counties.

•Medical Services Drill: Conducted on April 4, 2013 in Lebanon County at Good Samaritan Hospital and First Aid Patrol ambulance.

SECTION 1: EXERCISE OVERVIEW

1.1 Exercise Details

Exercise Name

Three Mile Island Nuclear Generating Station

Type of Exercise

Plume

Exercise Date

April 16, 2013

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 Three Mile Island Nuclear Generating Station exercise:

State Jurisdictions

Pennsylvania Auxiliary Communications Services Program

Pennsylvania Department of Agriculture

Pennsylvania Department of Commerce

Pennsylvania Department of Corrections

Pennsylvania Department of Energy

Pennsylvania Department of Environmental Protection

Pennsylvania Department of Environmental Protection, Bureau of Radiation Protection

Pennsylvania Department of Environmental Protection, Hazardous Materials

Pennsylvania Department of Health

Pennsylvania Department of Natural Resources

Pennsylvania Department of Public Works

Pennsylvania Department of Revenue

Pennsylvania Department of Transportation

Pennsylvania Emergency Management Agency

Pennsylvania Game Commission

Pennsylvania Liquor Control Board

Pennsylvania Office of Administration

Pennsylvania Public Utility Commission

Pennsylvania South Central Task Force

Pennsylvania State Police

Pennsylvania State Police, Harrisburg Barracks

Pennsylvania State System of Higher Education

Pennsylvania Turnpike Commission

Risk Jurisdictions

Bainbridge Fire Department

Capital Area Intermediate Unit CAIU

Central Dauphin School District

Central Dauphin School District, Lawton Elementary School

Central Dauphin School District, Paxtang Elementary School

Central York School District

Central York School District, Central York High School

Citizens Volunteer Fire Company

Strinestown Community Fire Company

Conewago Township Emergency Management Agency

Conoy Township Supervisors

Cumberland County Commissioner

Cumberland County Public Safety

Cumberland County Sheriff's Department

Dauphin County 911 Dispatch

Dauphin County Emergency Management Agency Dauphin County Safety and Security Dauphin County Hazardous Materials Dauphin County District Attorney Dauphin County Mental Health and Intellectual Disabilities Dauphin County Information Technology Dauphin County Cooperative Extension Dauphin County, Central Dauphin School District, Southside Elementary School Derry Township School District, Early Childhood Center Derry Township School District **Derry Township Public Works** Derry Township Police Department Derry Township Emergency Management Agency Hershey Fire Company Penn State Hershey Medical Center The Hershey Company Hershey Entertainment and Resorts Derry Township School District, South Side Elementary School Community Life Team Emergency Medical Services **Dillsburg Banner Newspaper** Dillsburg Emergency Management Agency Donegal Area School District Donegal Area School District, Donegal Kindergarten Donegal Area School District, Riverside Elementary School Dover Area Ambulance Dover Borough, Union Fire & Hose Co. #1 **Dover Area School District** Dover Area School District, North Salem High School Eastern School District Eastern School District, Eastern Middle School Elizabethtown Area School District Elizabethtown Area School District, Bainbridge Elementary School Franklintown Community Fire Company Goodwill Fire Company

Grantley Emergency Medical Services Halifax Fire Department Harrisburg School District Harrisburg School District, Marshall School Lancaster County Commissioners Lancaster County Emergency Management Agency Lancaster County Police Department Lancaster County Public Safety Lancaster Medial Services Lawn Emergency Medical Services Lawn Fire Department Lebanon County 911 Communications Lebanon County Agricultural Extension Agency Lebanon County Board of Commissioners Lebanon County Emergency Management Agency Lebanon County Hazardous Materials Lebanon County Public Affairs Office Lebanon County Sheriff's Office Lebanon Emergency Medical Services Life Lion Emergency Medical Services Lower Allen Township Emergency Management Lower Allen Township Fire Department Lower Allen Township Fire Station #1 Lower Allen Township Police Lower Allen Township Public Safety Lower Allen Township Public Works Lower Dauphin School District Lower Dauphin School District, Conewago Elementary School Lower Dauphin School District, Nye Elementary School Lower Swatara Township Lower Swatara Township Board of Commissioners Lower Swatara Township Emergency Management Agency Lower Swatara Township Fire Department Lower Swatara Township Police Department

Londonderry Township Fire Company Middletown Area School District Middletown Area School District, John C. Kunkle Elementary School Middletown Fire Department Milton Hershey Area School District Milton Hershey Area School District, Milton Hershey Senior High School Monahan Township Emergency Management Agency Neversink Fire Company Northeastern School District Northeastern School District, Conewago Elementary School Northeastern School District, Mount Wolf Early Learning Center Northern Area School District Northern Area School District, Northern Area High School Northern York County Regional Police Northern York Emergency Management Agency Northwest Emergency Medical Services Palmyra Area School District Palmyra Area School District, Palmyra Middle School Palmyra Fire Department **Royalton Emergency Management Royalton Police Department** South Annville Emergency Management Agency South Londonderry Township Police Department Springettsbury Township Emergency Management Agency Springettsbury Township Emergency Medical Services Springettsbury Township Police Department Steelton Borough Community Volunteers Steelton Borough Council Steelton Borough Fire Department Steelton Borough Mayor Steelton Borough Police Department Steelton-Highspire School District, Steelton-Highspire High School Steelton-Highspire School District Susquehanna Regional Police Department

Swatara Township Fire Police Swatara Township Emergency Management Agency Swatara Township Emergency Medical Service Warrington Township Emergency Management Agency Warrington Township West Shore School District West Shore School District, Cross Road Middle School West Shore School District, Fairview Elementary School West Shore School District, Hillside Elementary School Western Lebanon County Regional Emergency Management Agency Williamstown Emergency Management Agency Williamstown Emergency Medical Service Williamstown Fire Department Williams Valley School District York Amateur Radio Emergency Service York Area United Fire and Rescue Company York County, Penn State Agricultural Extension York County Mental Health York County Office of Emergency Management York County Housing Authority York County Hazardous Materials Response Team York County Parks Department York County Sheriff's Department Support Jurisdictions Adams County Attorney Adams County Commissioners Adams County Department of Agriculture Adams County Department of Emergency Services Adams County Fire and Rescue Services Chambersburg Fire Department Franklin County Animal Response Team Franklin County Commissioners Franklin County Community Emergency Response Team Franklin County Department of Emergency Services

Franklin County Jail Department Franklin County Mental Health Department Franklin County Sheriff's Department Schuylkill County Emergency Management Agency Schuylkill County Fire Chief's Association Schuylkill County Planning Department Schuylkill County Schools Schuylkill County Sheriff's Department Schuylkill County Transportation Southampton Township Private Organizations American Red Cross, Cumberland Valley Chapter American Red Cross, Franklin County Chapter American Red Cross, Lebanon County Chapter American Red Cross, Schuylkill County Chapter American Red Cross, York-Adams Chapter American Red Cross, Susquehanna Valley Chapter Associate Sign Language Exelon Nuclear Peach Bottom Atomic Power Station Radio Amateur Civil Emergency Service South Mountain Radio Club Federal Jurisdictions Department of Justice, Bureau of Alcohol, Tobacco, Firearms, and Explosives

Department of Agriculture

Department of Homeland Security, Federal Emergency Management Agency Nuclear Regulatory Commission

SECTION 2: EXERCISE DESIGN SUMMARY 2.1 Exercise Purpose and Design

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

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

FEMA's responsibilities in radiological emergency planning for fixed nuclear facilities include the following:

Taking the lead in offsite emergency planning and in the review and evaluation of Radiological Emergency Response Plans (RERPs) and procedures developed by State and local governments;

Determining whether such plans and procedures can be implemented on the basis of observation and evaluation of exercises of the plans and procedures conducted by State and local governments;

Responding to requests by the U.S. Nuclear Regulatory Commission (NRC) pursuant to the Memorandum of Understanding between the NRC and FEMA dated June 17, 1993 (Federal Register, Vol. 58, No. 176, September 14, 1993; and

Coordinating the activities of the following Federal agencies with responsibilities in the radiological emergency planning process:

-U.S. Department of Commerce,

- -U.S. Nuclear Regulatory Commission,
- -U.S. Environmental Protection Agency,

- -U.S. Department of Energy,
- -U.S. Department of Health and Human Services,
- -U.S. Department of Transportation,
- -U.S. Department of Agriculture,
- -U.S. Department of the Interior, and
- -U.S. Food and Drug Administration.

Representatives of these agencies serve on the FEMA Region III Radiological Assistance Committee (RAC), which is chaired by FEMA.

A REP exercise and a Medical Services Drill was conducted on April 4th, 16th, and 17th, 2013 to assess the capabilities of State and local emergency preparedness organizations in implementing their RERPs and procedures to protect the public health and safety during a radiological emergency involving Three Mile Island Nuclear Generating Station (TMI). The purpose of this exercise report is to present the exercise results and findings on the performance of the off-site response organizations (OROs) during a simulated radiological emergency.

The findings presented in this report are based on the evaluations of the Federal evaluator team, with final determinations made by the FEMA Region III RAC Chairperson and approved by FEMA Headquarters.

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

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

NUREG-0654/FEMA-REP-1, Rev. 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," November 1980;

FEMA REP Program Manual, April 2012

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

Section 2, titled "Exercise Design Summary," includes the "Purpose and Design," "Exercise Objectives, Capabilities, and Activities," and the "Scenario Summary."

Section 3 of this report, entitled "Analysis of Capabilities," presents detailed information on the demonstration of applicable exercise evaluation areas at each jurisdiction or functional entity evaluated in a jurisdiction-based, issues-only format. This section also contains: (1) descriptions of all Deficiencies and Areas Requiring Corrective Action (ARCAs) and Planning Issues assessed during this exercise, recommended corrective actions, and the State and local governments' schedule of corrective actions for each identified exercise issue and (2) descriptions of ARCAs assessed during previous exercises and resolved at this exercise, including the corrective action demonstrated, as well as ARCAs assessed during previous exercises and scheduled for demonstration at this exercise which remain unresolved.

Section 4, "Conclusion," is a description of the Region's overall assessment of the capabilities of the participating organizations.

The evaluation of the 2013 TMI Hostile Action Based Plume Exercise resulted in the assessment of one (1) Area Requiring Corrective Action (ARCA) and three (3) Planning Issues. The ARCA and the Planning Issues were all re-demonstrated or resolved prior to publication of this report; therefore, an Improvement Plan Appendix is unnecessary.

Appendix A - Exercise Time Line: A table that depicts the times that events and notifications were noted at participating agencies and locations.

Appendix B - Exercise Evaluators and Team Leaders: A table listing the names, organizations, and evaluation responsibilities of the evaluators and management.

Appendix C - Acronyms and Abbreviations: An alphabetized table defining the acronyms and abbreviations used in this report.

Appendix D - Exercise Plan: A narrative description of information developed to implement the exercise, including the Extent of Play Agreement, with a detailed description of the exercise criteria and the participants' expected responses to the exercise scenario.

Appendix E - MS-1 Drill Exercise Plan: In conjunction with the Hostile Action Based Plume Exercise, the Pennsylvania Emergency Management Agency sponsored a drill to assess the capability of a hospital and ambulance company to evaluate, prepare, transport, decontaminate, and treat a patient with possible radioactive contamination in addition to injuries.

EPZ Description:

The TMI Nuclear Generating Station (40° 9' 12" N/76° 43' 25" W) is a nuclear power plant operated by Exelon Nuclear. The site consists of two pressurized water-type units. Unit One is an 819¬megawatt (MW) reactor, and Unit Two is a 906-MW reactor. Unit 1 received its license in June 1974 and began commercial operation in September 1974. Unit 2 began commercial operation in February 1978; it was damaged in March 1979 and has been shut down and placed in a monitored storage mode.

The minimum exclusion distance specified for the TMI plant is 2,000 feet. Included within the 2,000-foot radius are a portion of Three Mile Island, a portion of Shelly Island, and a portion of the Susquehanna River. Exelon Nuclear owns all the land within the exclusion area.

The TMI plant is located in south-central Pennsylvania in Londonderry Township, Dauphin County. The site is part of an 814-acre tract consisting of several adjacent islands in the Susquehanna River. The power plant is located on Three Mile Island, which is one of the largest islands of the group. The site is at an elevation of 300 feet above mean sea level (msl), relatively flat, and wooded on the periphery and the southern portion. Of the 470 acres that make up the island, the plant occupies approximately 200 acres in the northern portion.

Soils on the island are of the Duncannon-Chavies-Tioga Association, which is comprised of deposits of alluvial sand, silt, and clay. Underlying bedrock is red sandstone and shale.

The normal pool elevation of the Susquehanna River in this area is 277 feet above msl. Hills on both sides of the river in this vicinity rise to elevations of over 500 feet. The plant grade is 300 feet above msl.

An access bridge for plant personnel connects State Route 441 with the north end of the island. A wooden bridge connects the southern portion of the island with State Route 441. Norfolk Souther rail lines are located on both sides of the river; the closest is a one-track line adjacent and parallel

to Route 441 on the east shore.

The area within 10 miles of the TMI Nuclear Generating Station is located in south-central Pennsylvania, and includes portions of Cumberland, Dauphin, Lancaster, Lebanon, and York counties. The site is surrounded mostly by farmland within a 10-mile radius. The nearest community is Goldsboro Borough, on the west shore of the Susquehanna River, 1 mile from the plant. The nearest major population center with more than 25,000 people is Harrisburg (population 53,624), which lies just over 10 miles to the north.

Twenty-three industrial firms are located within a 5-mile radius; they employ approximately 2,400 people. The Harrisburg International Airport is located 2 miles northwest of the TMI plant. An NRC estimate of aircraft risk to TMI Units One and Two indicates an acceptably low risk for either unit, provided fewer than 2,400 operations per year are by aircraft in excess of 200,000 pounds. The NRC requires Exelon to continue periodic monitoring and reporting of airport usage and will reevaluate the adequacy of plant protection if aircraft traffic is reliably projected to exceed 2,400 operations per year. The major railroads operating in the EPZ include Amtrak, Blue Mountain and Ridge, Chessie System, Conrail, and the Maryland and Pennsylvania Railroad.

The climate of the five-county risk EPZ is mild and humid. Weather is variable because the prevailing westerly winds bring both high- and low-pressure systems through the area every few days. Average annual precipitation for the southern portion of the EPZ is about 38 inches and the average annual temperature is 52° F.

On the basis of the 2010 census, the total population of the 10-mile EPZ is 226,160. There are 97 sirens used to provide coverage of the plume exposure pathway EPZ. Each county operates its respective sirens.

2.2 Exercise Objectives, Capabilities and Activities

The objective of the TMI 2013 Plume Exercise was to demonstrate the capabilities of State and local emergency management agencies to mobilize emergency management and emergency response personnel, to activate emergency operations centers and support facilities, and to protect the health, lives, and property of the citizens residing within the 10-mile Emergency Planning Zone (EPZ).

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

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

The protection of school children is also a vital mission of the REPP. School districts and selected schools demonstrated the capability to communicate and coordinate the collection, evacuation, transportation and shelter of students attending schools within the EPZ. Provisions for students who live within the EPZ, but attend school outside, were also evaluated.

2.3 Scenario Summary

This exercise is a Hostile Action Based (HAB) scenario, which also includes the aspects of a Rapidly Escalating scenario and a No/Minimal Radiological Release scenario.

This HAB exercise starts with a declaration of a Site Area Emergency (1605) with hostile actions within the protected area and rapidly escalates to a General Emergency (1637) due to a Prolonged Loss of all Offsite Power and Prolonged Loss of all Onsite AC Power to Essential Busses.

There is no release offsite associated with this Hostile Based Exercise scenario. There will be no exposure to offsite personnel, Emergency Workers or the General Public. Protective Action Recommendations and Decisions will be based on plant conditions. The injects are sufficient to drive additional exercise play.

Any dose projections performed by the licensee or PA Bureau of Radiation Protection will be

only "what if" type projections and can vary widely based on potential plant conditions used. They would not be expected to be within a factor of 10. The scenario does reach the declaration of a General Emergency which will drive the demonstration of Protective Action Recommendations and Protective Action Decisions. Meteorological conditions are: Wind from the North East at 8 mph, temperature is 72 degrees and a stability class of D or E.

Since this HAB exercise does not have a radiological release any demonstrations that require a radiological "trigger" level in accordance with ORO plans and procedures (Field Team/Air Sampling) have been negotiated in the extent of play.

The exercise termination is not until 2015 allowing for adequate time for demonstration of the criteria identified in the Exercise Plan/Extent Of Play.

SECTION 3: ANALYSIS OF CAPABILITIES 3.1 Exercise Evaluation and Results

Contained in this section are the results and findings of the evaluations of all jurisdictions and locations that participated in the April 16 and 17, 2013, biennial Radiological Emergency Preparedness (REP) Exercise and the April 4, 2013 Medical Services Drill.

Each jurisdiction and functional entity was evaluated on the basis of its demonstration of the Exercise Evaluation Area Criteria contained in the REP Manual. Detailed information on the Exercise Evaluation Area Criteria and the Extent-of-Play Agreements used in this exercise are found in Appendices D and E.

3.2 Summary Results of Exercise Evaluation

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 and one Area Requiring Corrective Action (ARCA) identified and successfully re-demonstrated as a result of this exercise. Three new Planning Issues were identified and have been resolved.

Table 3.1 -Summary of Exercise Eval	uatic	on (13	pag	ges))						
DATE: 2013-04-16 SITE: Three Mile Island Nuclear Generating Station, PA M: Met, A: ARCA, D: Deficiency, P: Plan Issue, N: Not Demonstrated		PA EOC	PA JIC/RumCon	PAAACSEOCBRP	BRP R3V	SFMT A SCR	SFMT B SCR	PA TACP SPBH	PSP TMI ICP	CuCo EOC	CuCoEMDWSFS2	CuCo RC SU
Emergency Operations Management												
Mobilization	1a1	М		Μ	М	Μ	М		Μ	Μ		
Facilities	1b1									Μ		
Direction and Control	1c1	Μ		М	М				Μ	Μ		
Communications Equipment	1d1	М	М	М	М	Μ	М	М	М	Μ	Μ	
Equipment and Supplies to Support Operations	1e1	Μ		Μ	М	Μ	М	Μ	М	Μ	Μ	М
Protective Action Decision Making												
Emergency Worker Exposure Control	2a1			М								
Dose Assessment & PARs & PADs for the Emergency Event	2b1			М								
Dose Assessment & PARs & PADs for the Emergency Event	2b2	М		Μ					М			
PADs for disabilities & access/functional needs people	2c1	М										
Radiological Assessment & Decision-making for Ingestion Pathway	2d1											
Radiological Assessment & Decision-making for Relocation/Reentry/Return	2e1											
Protective Action Implementation												
Implementation of Emergency Worker Exposure Control	3a1				М	Μ	М	М	М	Μ	Μ	
Implementation of KI PAD for Institutionalized Individuals/Public	3b1	М								Μ		
Implementation of PADs for disabilities & access/functional needs people	3c1									Μ		
Implementation of PADs for Schools	3c2									Μ		
Implementation of Traffic & Access Control	3d1	М						М		Μ		
Impediments to Evacuation	3d2	М								Μ		
Availability & use of Commodity & Resource Information	3e1											
Preprinted Materials for Implementing PADs for Commodities & Resources	3e2											
Implementation of Relocation/Reentry/Return Decisions	3f1											
Field Measurement and Analysis												
RESERVED	4a1											
Field Team Management	4a2				М							
Plume Phase Field Measurement, Handling, & Analyses	4a3					М	М					
Post Plume Phase Field Measurements & Sampling	4b1											
Laboratory Operations	4c1											
Emergency Notification and Public Info												
Activation of the Prompt Alert & Notification System	5a1	М								Μ		
RESERVED	5a2											
Activation of the Back-up ANS	5a3											
Activation of the Exception Area ANS	5a4											
Emergency Information & Instructions for the Public/Media	5b1	М	М							М		
Support Operations/Facilities												
Monitoring, Decontamination, & Registration of Evacuees	6a1											Μ
Monitoring/Decontamination of Emergency Workers/Equipment/Vehicles	6b1										Μ	
Temporary Care of Evacuees	6c1											
Transportation/Treatment of Contaminated Injured Individuals	6d1											

Table 3.1 - Summary of Exercise Evaluation (Continued. page 2/13)												
DATE: 2013-04-16 SITE: Three Mile Island Nuclear Generating Station, PA M: Met, A: ARCA, D: Deficiency, P: Plan Issue, N: Not Demonstrated		CuCo MDC SU	CuCo MCC SU	CuCoMCCCSHS	CuCoMCCCSHSB	CuCoMCCCMCW	CuCoLATEOC	CuCoLATBuRA	CuCoLATwpTACP	DaCo EOC	DaCoRCWVHS	DaCoMCCWVHS
Emergency Operations Management												
Mobilization	1a1						М	Μ		Μ		
Facilities	1b1			Μ	М	Μ	М					
Direction and Control	1c1						М			Μ		
Communications Equipment	1d1						М	Μ	М	Μ		
Equipment and Supplies to Support Operations	1e1	М	М				М	Μ	М	М	М	Μ
Protective Action Decision Making												
Emergency Worker Exposure Control	2a1									Μ		
Dose Assessment & PARs & PADs for the Emergency Event	2b1											
Dose Assessment & PARs & PADs for the Emergency Event	2b2											
PADs for disabilities & access/functional needs people	2c1											
Radiological Assessment & Decision-making for Ingestion Pathway	2d1			-								
Radiological Assessment & Decision-making for Relocation/Reentry/Return	2e1											
Protective Action Implementation												
Implementation of Emergency Worker Exposure Control	3a1	М					М	М	М	Μ		
Implementation of KI PAD for Institutionalized Individuals/Public	3b1						М			Μ		
Implementation of PADs for disabilities & access/functional needs people	3c1						М			М		
Implementation of PADs for Schools	3c2									Μ		
Implementation of Traffic & Access Control	3d1						М		М	М		
Impediments to Evacuation	3d2						М		М	М		
Availability & use of Commodity & Resource Information	3e1											
Preprinted Materials for Implementing PADs for Commodities & Resources	3e2											
Implementation of Relocation/Reentry/Return Decisions	3f1											
Field Measurement and Analysis												
RESERVED	4a1											
Field Team Management	4a2											
Plume Phase Field Measurement, Handling, & Analyses	4a3											
Post Plume Phase Field Measurements & Sampling	4h1											
Laboratory Operations	4c1											
Emergency Notification and Public Info												
Activation of the Prompt Alert & Notification System	5a1									М		
RESERVED	5a2											
Activation of the Back-up ANS	5a3						м	м				
Activation of the Exception Area ANS	5a4						1.1	1.1				
Emergency Information & Instructions for the Public/Media	5b1									М		
Support Operations/Facilities	001											
Monitoring, Decontamination, & Registration of Evacuees	6a1	м									М	
Monitoring/Decontamination of Emergency Workers/Equipment/Vehicles	6b1									\square		
Temporary Care of Evacuees	6c1		м	М	м	м						М
Transportation/Treatment of Contaminated Injured Individuals	6d1			-								<u> </u>

Table 3.1 - Summary of Exercise Evaluation (Continued. page 3/13)												
DATE: 2013-04-16 SITE: Three Mile Island Nuclear Generating Station, PA M: Met, A: ARCA, D: Deficiency, P: Plan Issue, N: Not Demonstrated		DaCoMDCWVHS	DaCoDryTEOC	DaCoLStaTEOC	DaCo RBEOC	DaCoStlBrEOC	DaCoSBBuRA	DaCoTACPStBr	DaCoSwTwpEOC	LaCoEOC	LaCoEMDPFC1	LaCoMDCHHS
Emergency Operations Management												
Mobilization	1a1		М	М	М	М	М		М	Μ		
Facilities	1b1		М	Μ	Μ	Μ			Μ			Μ
Direction and Control	1c1		М	Μ	Μ	Μ			М	Μ		
Communications Equipment	1d1		М	М	М	М	М	М	М	Μ		
Equipment and Supplies to Support Operations	1e1	М	М	Μ	Μ	Μ	Μ	М	Μ	Μ	Μ	Μ
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 disabilities & access/functional needs people	2c1											
Radiological Assessment & Decision-making for Ingestion Pathway	2d1											
Radiological Assessment & Decision-making for Relocation/Reentry/Return	2e1											
Protective Action Implementation												
Implementation of Emergency Worker Exposure Control	3a1	М	М	Μ	М	Μ	М	Μ	М	Μ	Μ	Μ
Implementation of KI PAD for Institutionalized Individuals/Public	3b1		М	Μ	М	Μ			М	Μ		
Implementation of PADs for disabilities & access/functional needs people	3c1		М	Μ	М	М			М	Μ		
Implementation of PADs for Schools	3c2									Μ		
Implementation of Traffic & Access Control	3d1		Μ	Μ	Μ	М		Μ	Μ	Μ		
Impediments to Evacuation	3d2		М	Μ	М	Μ		Μ	Μ	Μ		
Availability & use of Commodity & Resource Information	3e1											
Preprinted Materials for Implementing PADs for Commodities & Resources	3e2											
Implementation of Relocation/Reentry/Return Decisions	3f1											
Field Measurement and Analysis												
RESERVED	4a1											
Field Team Management	4a2											
Plume Phase Field Measurement, Handling, & Analyses	4a3											
Post Plume Phase Field Measurements & Sampling	4b1											
Laboratory Operations	4c1											
Emergency Notification and Public Info												
Activation of the Prompt Alert & Notification System	5a1									Μ		
RESERVED	5a2											
Activation of the Back-up ANS	5a3					Μ	Μ			Μ		
Activation of the Exception Area ANS	5a4											
Emergency Information & Instructions for the Public/Media	5b1									Μ		
Support Operations/Facilities												
Monitoring, Decontamination, & Registration of Evacuees	6a1	Μ									\square	Μ
Monitoring/Decontamination of Emergency Workers/Equipment/Vehicles	6b1										Μ	
Temporary Care of Evacuees	6c1										\square	
Transportation/Treatment of Contaminated Injured Individuals	6d1											

After Action Report/Improvement Plan

Table 3.1 - Summary of Exercise Evaluation (Continued. page 4/13)												
DATE: 2013-04-16 SITE: Three Mile Island Nuclear Generating Station, PA M: Met, A: ARCA, D: Deficiency, P: Plan Issue, N: Not Demonstrated		LaCoMCCHHS	LaCoRCPCtyMI	LaCoCyTEOC	LaCoCyTBuRA	LeCo EOC	LeCo EWMDS AUHFD	LeCo RC LCCTC	LeCo MDC LCCTC	LeCo SLTwp EOC	LeCo SLTwp BuRA	LeCo SLTwp TACP
Emergency Operations Management												
Mobilization	1a1			Μ		М				Μ		
Facilities	1b1			Μ						Μ		
Direction and Control	1c1			Μ		М				Μ		
Communications Equipment	1d1			М	Μ	М	М			Μ	Μ	Μ
Equipment and Supplies to Support Operations	1e1	Μ	М	М	М	М	М	Μ	М	Μ	Μ	Μ
Protective Action Decision Making												
Emergency Worker Exposure Control	2a1					М						
Dose Assessment & PARs & PADs for the Emergency Event	2b1											
Dose Assessment & PARs & PADs for the Emergency Event	2b2											
PADs for disabilities & access/functional needs people	2c1											
Radiological Assessment & Decision-making for Ingestion Pathway	2d1											
Radiological Assessment & Decision-making for Relocation/Reentry/Return	2e1											
Protective Action Implementation												
Implementation of Emergency Worker Exposure Control	3a1			М	М	М	М		М	Μ	Μ	Μ
Implementation of KI PAD for Institutionalized Individuals/Public	3b1			М		М				Μ		
Implementation of PADs for disabilities & access/functional needs people	3c1			М		М				Μ		
Implementation of PADs for Schools	3c2					М						
Implementation of Traffic & Access Control	3d1			М		М				Μ		Μ
Impediments to Evacuation	3d2			М		М				Μ		Μ
Availability & use of Commodity & Resource Information	3e1											
Preprinted Materials for Implementing PADs for Commodities & Resources	3e2											
Implementation of Relocation/Reentry/Return Decisions	3f1											
Field Measurement and Analysis												
RESERVED	4a1											
Field Team Management	4a2											
Plume Phase Field Measurement, Handling, & Analyses	4a3											
Post Plume Phase Field Measurements & Sampling	4b1											
Laboratory Operations	4c1											
Emergency Notification and Public Info												
Activation of the Prompt Alert & Notification System	5a1					М						
RESERVED	5a2											
Activation of the Back-up ANS	5a3				М						М	
Activation of the Exception Area ANS	5a4											
Emergency Information & Instructions for the Public/Media	5b1					М				Μ		
Support Operations/Facilities												
Monitoring, Decontamination, & Registration of Evacuees	6a1							М	М			
Monitoring/Decontamination of Emergency Workers/Equipment/Vehicles	6b1						Μ					
Temporary Care of Evacuees	6c1											
Transportation/Treatment of Contaminated Injured Individuals	6d1											

Table 2 fГ 4/12 C • $\overline{}$. • • .

Table 3.1 - Summary of Exercise Evaluation (Continued. page 5/13)												
DATE: 2013-04-16 SITE: Three Mile Island Nuclear Generating Station, PA M: Met, A: ARCA, D: Deficiency, P: Plan Issue, N: Not Demonstrated		YC EOC	YCEWMDS UFHC	YCMCCSSC	YCMCCSES	YCRC NHS	YCMDC NHS	YCMCCNHS	YCMCCNMS	YCMCCNES	YCMCCNSLC	YCMCC FES
Emergency Operations Management												
Mobilization	1a1	М										
Facilities	1b1				М				М	М	М	Μ
Direction and Control	1c1	М										
Communications Equipment	1d1	М										
Equipment and Supplies to Support Operations	1e1	М	М			М	М					
Protective Action Decision Making												
Emergency Worker Exposure Control	2a1	М										
Dose Assessment & PARs & PADs for the Emergency Event	2b1											
Dose Assessment & PARs & PADs for the Emergency Event	2h2											
PADs for disabilities & access/functional needs neonle	202											
Radiological Assessment & Decision making for Ingestion Pathway	2d1											
Radiological Assessment & Decision making for Palaestion/Reentry/Paturn	201											
Protective Action Implementation	201											
Implementation of Emergency Worker Exposure Control	201	м	м				м					
Implementation of Ellegency worker Exposure Control	21.1	M	IVI				IVI					
Implementation of KI PAD for Institutionalized Individuals/Public	301	M										
Implementation of PADs for disabilities & access/functional needs people	3c1	M										
Implementation of PADs for Schools	3c2	M										
Implementation of Traffic & Access Control	3d1	M										
Impediments to Evacuation	3d2	Μ										
Availability & use of Commodity & Resource Information	3e1											
Preprinted Materials for Implementing PADs for Commodities & Resources	3e2											
Implementation of Relocation/Reentry/Return Decisions	3f1											
Field Measurement and Analysis												
RESERVED	4a1											
Field Team Management	4a2											
Plume Phase Field Measurement, Handling, & Analyses	4a3											
Post Plume Phase Field Measurements & Sampling	4b1											
Laboratory Operations	4c1											
Emergency Notification and Public Info												
Activation of the Prompt Alert & Notification System	5a1	М										
RESERVED	5a2											
Activation of the Back-up ANS	5a3											
Activation of the Exception Area ANS	5a4											
Emergency Information & Instructions for the Public/Media	5b1	м										
Support Operations/Facilities	501	111										
Monitoring Decontamination & Registration of Evacuees	6a1					м	м					
Monitoring/Decontamination of Emergency Workers/Equipment/Vahioles	6h1		м			1/1	1/1					\vdash
Temporary Care of Evacuess	6c1		141		м			м	м	м	м	м
Transportation/Treatment of Contaminated Injured Individuals	6d1				141			141	141	141	141	141

Table 3.1 - Summary of Exercise Evaluation (Continued. page 6/13)												
DATE: 2013-04-16 SITE: Three Mile Island Nuclear Generating Station, PA M: Met, A: ARCA, D: Deficiency, P: Plan Issue, N: Not Demonstrated		YCMCCHAYMCA	YCMCCHHS	YCMCCHMS	YCMCCKDHS	YCMCCSEMSE	YCMCCSMSW	YCMCC WES	YCMCCYCST	YCCTEOC	YCCTBuRA	YCSTEOC
Emergency Operations Management												
Mobilization	1a1									М		Μ
Facilities	1b1	М	М	М	М	М	М	М	М	М		М
Direction and Control	1c1									М		М
Communications Equipment	1d1									М	М	М
Equipment and Supplies to Support Operations	1e1									M	M	M
Protective Action Decision Making	101									1.1		111
Emergency Worker Exposure Control	2a1											
Dose Assessment & PARs & PADs for the Emergency Event	2h1											
Dose Assessment & PARs & PADs for the Emergency Event	201 2h2											
PADs for disabilities & access/functional needs neonla	202											
Padialogical Assessment & Desirion making for Insection Dethusy	201										\vdash	
Radiological Assessment & Decision-making for Ingestion Pathway	201										┢──┦	
Radiological Assessment & Decision-making for Relocation/Reentry/Return	201										\vdash	
Protective Action Implementation	2-1									м	м	м
	381									M	M	M
Implementation of KI PAD for Institutionalized Individuals/Public	301									M	┝─┤	M
Implementation of PADs for disabilities & access/functional needs people	301									Μ	\vdash	M
Implementation of PADs for Schools	3c2										\vdash	
Implementation of Traffic & Access Control	3d1									Μ	\vdash	Μ
Impediments to Evacuation	3d2									Μ	\square	Μ
Availability & use of Commodity & Resource Information	3e1											
Preprinted Materials for Implementing PADs for Commodities & Resources	3e2											
Implementation of Relocation/Reentry/Return Decisions	3f1											
Field Measurement and Analysis												
RESERVED	4a1											
Field Team Management	4a2											
Plume Phase Field Measurement, Handling, & Analyses	4a3											
Post Plume Phase Field Measurements & Sampling	4b1											
Laboratory Operations	4c1											
Emergency Notification and Public Info												
Activation of the Prompt Alert & Notification System	5a1											
RESERVED	5a2										\square	
Activation of the Back-up ANS	5a3									М	М	
Activation of the Exception Area ANS	5a4											
Emergency Information & Instructions for the Public/Media	5b1											
Support Operations/Facilities												
Monitoring, Decontamination, & Registration of Evacuees	6a1											
Monitoring/Decontamination of Emergency Workers/Fauinment/Vehicles	6h1											
Temporary Care of Evacuees	6c1	м	м	м	м	м	м	м	м		$ \square$	\square
Transportation/Treatment of Contaminated Injured Individuals	6d1	1/1	1/1	1/1	1/1	1/1	1/1	111	1/1			

Table 3.1 - Summary of Exercise Evaluation (Continued. page 7/13)												
DATE: 2013-04-16 SITE: Three Mile Island Nuclear Generating Station, PA		TTACP	VTEOC	OC(S)	CGHS	1DCGHS	ACCGHS	1 CCGMS	ACCAIS	ACCBSES	ACCBSHS	1 CCBSMS
M: Met, A: ARCA, D: Deficiency, P: Plan Issue, N: Not Demonstrated		YCS	ΥCV	ACE	ACR	ACN	ACIV	ACN	ACN	ACIV	ACIV	ACIV
Emergency Operations Management												
Mobilization	1a1		Μ	Μ								
Facilities	1b1		М					М	Μ	Μ	Μ	Μ
Direction and Control	1c1		М	М								
Communications Equipment	1d1	Μ	М	Μ								
Equipment and Supplies to Support Operations	1e1	М	М	Μ	Μ	Μ	Μ					
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 disabilities & access/functional needs people	2c1											
Radiological Assessment & Decision-making for Ingestion Pathway	2d1											
Radiological Assessment & Decision-making for Relocation/Reentry/Return	2e1											
Protective Action Implementation												
Implementation of Emergency Worker Exposure Control	3a1	Μ	М			Μ						
Implementation of KI PAD for Institutionalized Individuals/Public	3b1		М			Μ						
Implementation of PADs for disabilities & access/functional needs people	3c1		М									
Implementation of PADs for Schools	3c2											
Implementation of Traffic & Access Control	3d1	Μ	М									
Impediments to Evacuation	3d2	М	М									
Availability & use of Commodity & Resource Information	3e1											
Preprinted Materials for Implementing PADs for Commodities & Resources	3e2											
Implementation of Relocation/Reentry/Return Decisions	3f1											
Field Measurement and Analysis												
RESERVED	4a1											
Field Team Management	4a2											
Plume Phase Field Measurement, Handling, & Analyses	4a3											
Post Plume Phase Field Measurements & Sampling	4b1											
Laboratory Operations	4c1											
Emergency Notification and Public Info												
Activation of the Prompt Alert & Notification System	5a1											
RESERVED	5a2											
Activation of the Back-up ANS	5a3											
Activation of the Exception Area ANS	5a4			-								
Emergency Information & Instructions for the Public/Media	5b1			Μ								
Support Operations/Facilities												
Monitoring, Decontamination, & Registration of Evacuees	6a1				Μ	Μ				\square		\square
Monitoring/Decontamination of Emergency Workers/Equipment/Vehicles	6b1									\square		Ш
Temporary Care of Evacuees	6c1						Μ	Μ	М	Μ	Μ	Μ
Transportation/Treatment of Contaminated Injured Individuals	6d1											
Table 3.1 - Summary of Exercise Evaluation (Continued. page 8/13)												
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DATE: 2013-04-16 SITE: Three Mile Island Nuclear Generating Station, PA M: Met, A: ARCA, D: Deficiency, P: Plan Issue, N: Not Demonstrated		CMCCBHS	CMCC CVI	CMCCDCHS	CMCCFFCo	CMCCFHMS	CMCCLHS	CMCCMAMS	CMCCNOES	CMCCNOHMS	CMCCRAES	
		A	A	A	A	A	A	A	A	A	4	
Emergency Operations Management	1.1											
	1111	1	M	м	M		M	м	м	м	м	
Facilities	101	M	M	M	M	M	M	M	M	М	М	
Direction and Control												
Communications Equipment	ldl										-	
Equipment and Supplies to Support Operations	lel											
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 disabilities & access/functional needs people	2c1											
Radiological Assessment & Decision-making for Ingestion Pathway	2d1											
Radiological Assessment & Decision-making for Relocation/Reentry/Return	2e1											
Protective Action Implementation												
Implementation of Emergency Worker Exposure Control	3a1											
Implementation of KI PAD for Institutionalized Individuals/Public	3b1											
Implementation of PADs for disabilities & access/functional needs people	3c1											
Implementation of PADs for Schools	3c2											
Implementation of Traffic & Access Control	3d1											
Impediments to Evacuation	3d2											
Availability & use of Commodity & Resource Information	3e1											
Preprinted Materials for Implementing PADs for Commodities & Resources	3e2											
Implementation of Relocation/Reentry/Return Decisions	3f1											
Field Measurement and Analysis												
RESERVED	4a1											
Field Team Management	4a2											
Plume Phase Field Measurement, Handling, & Analyses	4a3											
Post Plume Phase Field Measurements & Sampling	4b1											
Laboratory Operations	4c1											
Emergency Notification and Public Info												
Activation of the Prompt Alert & Notification System	5a1											
RESERVED	5a2											
Activation of the Back-up ANS	5a3											
Activation of the Exception Area ANS	5a4											
Emergency Information & Instructions for the Public/Media	5b1											
Support Operations/Facilities												
Monitoring, Decontamination, & Registration of Evacuees	6a1											
Monitoring/Decontamination of Emergency Workers/Equipment/Vehicles	6b1											
Temporary Care of Evacuees	6c1	M	Μ	Μ	Μ	Μ	М	М	М	М	М	
Transportation/Treatment of Contaminated Injured Individuals	6d1											

Table 3.1 - Summary of Exercise Evaluation (Conti	nue	ed.	pag	ge 9	0/13	3)				
DATE: 2013-04-16 SITE: Three Mile Island Nuclear Generating Station, PA M: Met, A: ARCA, D: Deficiency, P: Plan Issue, N: Not Demonstrated		FrCo EOC (S)	FrCo RC FJHS	FrCo MDC FJHS	FrCo MCC FJHS	ScCo EOC (S)	ScCo RC BMHS	ScCo MDC BMHS	ScCo MCC BMHS	DaCoCAIU	DaCoCDSD
Emergency Operations Management											
Mobilization	1a1	M				Μ					
Facilities	1b1		М	М				Μ			
Direction and Control	1c1	Μ				Μ					
Communications Equipment	1d1	M				Μ					
Equipment and Supplies to Support Operations	1e1	Μ	М	М	М	Μ	М	Μ	Μ		
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 disabilities & access/functional needs people	2c1										
Radiological Assessment & Decision-making for Ingestion Pathway	2d1										
Radiological Assessment & Decision-making for Relocation/Reentry/Return	2e1										
Protective Action Implementation											
Implementation of Emergency Worker Exposure Control	3a1			М				Μ			
Implementation of KI PAD for Institutionalized Individuals/Public	3b1										
Implementation of PADs for disabilities & access/functional needs people	3c1										
Implementation of PADs for Schools	3c2									Μ	Μ
Implementation of Traffic & Access Control	3d1										
Impediments to Evacuation	3d2										
Availability & use of Commodity & Resource Information	3e1										
Preprinted Materials for Implementing PADs for Commodities & Resources	3e2										
Implementation of Relocation/Reentry/Return Decisions	3f1										
Field Measurement and Analysis											
RESERVED	4a1										
Field Team Management	4a2										
Plume Phase Field Measurement, Handling, & Analyses	4a3										
Post Plume Phase Field Measurements & Sampling	4b1										
Laboratory Operations	4c1										
Emergency Notification and Public Info											
Activation of the Prompt Alert & Notification System	5a1										
RESERVED	5a2										
Activation of the Back-up ANS	5a3										
Activation of the Exception Area ANS	5a4										
Emergency Information & Instructions for the Public/Media	5b1	Μ				Μ					
Support Operations/Facilities											
Monitoring, Decontamination, & Registration of Evacuees	6a1		Μ	Μ			Μ	Μ			
Monitoring/Decontamination of Emergency Workers/Equipment/Vehicles	6b1										
Temporary Care of Evacuees	6c1				Μ				Μ		
Transportation/Treatment of Contaminated Injured Individuals	6d1]

Table 3.1 - Summary of Exercise Evaluation (Continued. page 10/13)											
DATE: 2013-04-16 SITE: Three Mile Island Nuclear Generating Station, PA M: Met, A: ARCA, D: Deficiency, P: Plan Issue, N: Not Demonstrated		DaCoCDSDLE	DaCoCDSDPxE	DaCoCDSDSSE	DaCoDTSD	DaCoDTSDECHC	DaCoHSD	DaCoHSDMSc	DaCoLDSD	DaCoLDSDNES	DaCoLDSDCE
Emergency Operations Management											
Mobilization	1a1										
Facilities	1b1										
Direction and Control	1c1										
Communications Equipment	1d1										
Equipment and Supplies to Support Operations	1e1										
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 disabilities & access/functional needs people	2c1										
Radiological Assessment & Decision-making for Ingestion Pathway	2d1										
Radiological Assessment & Decision-making for Relocation/Reentry/Return	2e1										
Protective Action Implementation											
Implementation of Emergency Worker Exposure Control	3a1										
Implementation of KI PAD for Institutionalized Individuals/Public	3b1										
Implementation of PADs for disabilities & access/functional needs people	3c1										
Implementation of PADs for Schools	3c2	M	М	М	М	М	М	М	Μ	Μ	Μ
Implementation of Traffic & Access Control	3d1										
Impediments to Evacuation	3d2										
Availability & use of Commodity & Resource Information	3e1										
Preprinted Materials for Implementing PADs for Commodities & Resources	3e2										
Implementation of Relocation/Reentry/Return Decisions	3f1										
Field Measurement and Analysis											
RESERVED	4a1										
Field Team Management	4a2										
Plume Phase Field Measurement, Handling, & Analyses	4a3										
Post Plume Phase Field Measurements & Sampling	4b1										
Laboratory Operations	4c1										
Emergency Notification and Public Info											
Activation of the Prompt Alert & Notification System	5a1										
RESERVED	5a2										
Activation of the Back-up ANS	5a3										
Activation of the Exception Area ANS	5a4										
Emergency Information & Instructions for the Public/Media	5b1										
Support Operations/Facilities											
Monitoring, Decontamination, & Registration of Evacuees	6a1										
Monitoring/Decontamination of Emergency Workers/Equipment/Vehicles	6b1										
Temporary Care of Evacuees	6c1										
Transportation/Treatment of Contaminated Injured Individuals	6d1										

Table 3.1 - Summary of Exercise Evaluation (Continued. page 11/13)											
DATE: 2013-04-16 SITE: Three Mile Island Nuclear Generating Station, PA M: Met, A: ARCA, D: Deficiency, P: Plan Issue, N: Not		CoMASD	CoMASDKES	CoMHS	CoSHSD	CoSHSDSHE	Co DSD	CoDSDDPS	Co DSD SDIS	CoEASD	Co EASD BES
Demonstrated		Da(Da(Da(Da(Da(La(La(La(La(La(
Emergency Operations Management											
Mobilization	1a1										
Facilities	1b1										
Direction and Control	1c1										
Communications Equipment	1d1										
Equipment and Supplies to Support Operations	1e1										
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 disabilities & access/functional needs people	2c1										
Radiological Assessment & Decision-making for Ingestion Pathway	2d1										
Radiological Assessment & Decision-making for Relocation/Reentry/Return	2e1										
Protective Action Implementation											
Implementation of Emergency Worker Exposure Control	3a1										
Implementation of KI PAD for Institutionalized Individuals/Public	3b1										
Implementation of PADs for disabilities & access/functional needs people	3c1										
Implementation of PADs for Schools	3c2	Μ	М	М	М	M	М	М	М	Μ	М
Implementation of Traffic & Access Control	3d1										
Impediments to Evacuation	3d2										
Availability & use of Commodity & Resource Information	3e1										
Preprinted Materials for Implementing PADs for Commodities & Resources	3e2										
Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions	3e2 3f1										
Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis	3e2 3f1										
Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED	3e2 3f1 4a1										
Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management	3e2 3f1 4a1 4a2										
Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses	3e2 3f1 4a1 4a2 4a3										
Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses Post Plume Phase Field Measurements & Sampling	3e2 3f1 4a1 4a2 4a3 4b1										
Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses Post Plume Phase Field Measurements & Sampling Laboratory Operations	3e2 3f1 4a1 4a2 4a3 4b1 4c1										
Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses Post Plume Phase Field Measurements & Sampling Laboratory Operations Emergency Notification and Public Info	3e2 3f1 4a1 4a2 4a3 4b1 4c1										
Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses Post Plume Phase Field Measurements & Sampling Laboratory Operations Emergency Notification and Public Info Activation of the Prompt Alert & Notification System	3e2 3f1 4a1 4a2 4a3 4b1 4c1 5a1										
Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses Post Plume Phase Field Measurements & Sampling Laboratory Operations Emergency Notification and Public Info Activation of the Prompt Alert & Notification System RESERVED	3e2 3f1 4a1 4a2 4a3 4b1 4c1 5a1 5a2										
Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses Post Plume Phase Field Measurements & Sampling Laboratory Operations Emergency Notification and Public Info Activation of the Prompt Alert & Notification System RESERVED Activation of the Back-up ANS	3e2 3f1 4a1 4a2 4a3 4b1 4c1 5a1 5a2 5a3										
Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses Post Plume Phase Field Measurements & Sampling Laboratory Operations Emergency Notification and Public Info Activation of the Prompt Alert & Notification System RESERVED Activation of the Back-up ANS Activation of the Exception Area ANS	3e2 3f1 4a1 4a2 4a3 4b1 4c1 5a1 5a2 5a3 5a4										
Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses Post Plume Phase Field Measurements & Sampling Laboratory Operations Emergency Notification and Public Info Activation of the Prompt Alert & Notification System RESERVED Activation of the Back-up ANS Activation of the Exception Area ANS Emergency Information & Instructions for the Public/Media	3e2 3f1 4a1 4a2 4a3 4b1 4c1 5a1 5a2 5a3 5a4 5b1										
Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses Post Plume Phase Field Measurements & Sampling Laboratory Operations Emergency Notification and Public Info Activation of the Prompt Alert & Notification System RESERVED Activation of the Back-up ANS Activation of the Exception Area ANS Emergency Information & Instructions for the Public/Media Support Operations/Facilities	3e2 3f1 4a1 4a2 4a3 4b1 4c1 5a1 5a2 5a3 5a4 5b1										
Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses Post Plume Phase Field Measurements & Sampling Laboratory Operations Emergency Notification and Public Info Activation of the Prompt Alert & Notification System RESERVED Activation of the Back-up ANS Activation of the Back-up ANS Emergency Information & Instructions for the Public/Media Support Operations/Facilities Monitoring, Decontamination, & Registration of Evacuees	3e2 3f1 4a1 4a2 4a3 4b1 4c1 5a1 5a2 5a3 5a4 5b1 6a1										
Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses Post Plume Phase Field Measurements & Sampling Laboratory Operations Emergency Notification and Public Info Activation of the Prompt Alert & Notification System RESERVED Activation of the Back-up ANS Activation of the Exception Area ANS Emergency Information & Instructions for the Public/Media Support Operations/Facilities Monitoring, Decontamination, & Registration of Evacuees Monitoring/Decontamination of Emergency Workers/Equipment/Vehicles	3e2 3f1 4a1 4a2 4a3 4b1 4c1 5a1 5a2 5a3 5a4 5b1 6a1 6b1										
Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses Post Plume Phase Field Measurements & Sampling Laboratory Operations Emergency Notification and Public Info Activation of the Prompt Alert & Notification System RESERVED Activation of the Back-up ANS Activation of the Exception Area ANS Emergency Information & Instructions for the Public/Media Support Operations/Facilities Monitoring, Decontamination, & Registration of Evacuees Monitoring/Decontamination of Emergency Workers/Equipment/Vehicles Temporary Care of Evacuees	3e2 3f1 4a1 4a2 4a3 4b1 4c1 5a1 5a2 5a3 5a4 5b1 6a1 6b1 6c1										

Table 3.1 - Summary of Exercise Evaluation (Continued. page 12/13)											
DATE: 2013-04-16 SITE: Three Mile Island Nuclear Generating Station, PA M: Met. A: APCA, D: Deficiency, P: Plan Issue, N: Not		PASD	PASDPAM	VSD	YSDCYH	ASD	ASDNSE	YSD	YSDEYM	YCSD	YCSDNH
Demonstrated		LeCc	LeCo	YCC	YCC	YCD	YCD	YCE	YCE	YCN	YCN
Emergency Operations Management											
Mobilization	1a1										
Facilities	1b1										
Direction and Control	1c1										
Communications Equipment	1d1										
Equipment and Supplies to Support Operations	1e1										
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 disabilities & access/functional needs people	2c1										
Radiological Assessment & Decision-making for Ingestion Pathway	2d1										
Radiological Assessment & Decision-making for Relocation/Reentry/Return	2e1										
Protective Action Implementation											
Implementation of Emergency Worker Exposure Control	3a1										
Implementation of KI PAD for Institutionalized Individuals/Public	3b1										
Implementation of PADs for disabilities & access/functional needs people	3c1										
· ·											
Implementation of PADs for Schools	3c2	M	Μ	Μ	Μ	Μ	Μ	Μ	Μ	M	M
Implementation of PADs for Schools Implementation of Traffic & Access Control	3c2 3d1	M	М	М	М	М	M	М	M	M	M
Implementation of PADs for Schools Implementation of Traffic & Access Control Impediments to Evacuation	3c2 3d1 3d2	M	M	M	M	M	M	M	M	M	M
Implementation of PADs for Schools Implementation of Traffic & Access Control Impediments to Evacuation Availability & use of Commodity & Resource Information	3c2 3d1 3d2 3e1	M	M	M	M	M	M	M	M	<u>M</u>	M
Implementation of PADs for Schools Implementation of Traffic & Access Control Impediments to Evacuation Availability & use of Commodity & Resource Information Preprinted Materials for Implementing PADs for Commodities & Resources	3c2 3d1 3d2 3e1 3e2	M	M	<u>M</u>	<u>M</u>	<u>M</u>	M	M	<u>M</u>		M
Implementation of PADs for Schools Implementation of Traffic & Access Control Impediments to Evacuation Availability & use of Commodity & Resource Information Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions	3c2 3d1 3d2 3e1 3e2 3f1	M	M	M	<u>M</u>	<u>M</u>	M	<u>M</u>	<u>M</u>		M
Implementation of PADs for Schools Implementation of Traffic & Access Control Impediments to Evacuation Availability & use of Commodity & Resource Information Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis	3c2 3d1 3d2 3e1 3e2 3f1	M	M	M	<u>M</u>	<u>M</u>	M	M			M
Implementation of PADs for Schools Implementation of Traffic & Access Control Impediments to Evacuation Availability & use of Commodity & Resource Information Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED	3c2 3d1 3d2 3e1 3e2 3f1 4a1	M	M	M	M	M	M	M		<u>M</u>	M
Implementation of PADs for Schools Implementation of Traffic & Access Control Impediments to Evacuation Availability & use of Commodity & Resource Information Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management	3c2 3d1 3d2 3e1 3e2 3f1 4a1 4a2	M	M	M	M	M	M	M	<u>M</u>		M
Implementation of PADs for Schools Implementation of Traffic & Access Control Impediments to Evacuation Availability & use of Commodity & Resource Information Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses	3c2 3d1 3d2 3e1 3e2 3f1 4a1 4a2 4a3	M	M	M	M		M	M	M		
Implementation of PADs for Schools Implementation of Traffic & Access Control Impediments to Evacuation Availability & use of Commodity & Resource Information Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses Post Plume Phase Field Measurements & Sampling	3c2 3d1 3d2 3e1 3e2 3f1 4a1 4a2 4a3 4b1	M	M	M	M	M	M	M		M	
Implementation of PADs for Schools Implementation of Traffic & Access Control Impediments to Evacuation Availability & use of Commodity & Resource Information Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses Post Plume Phase Field Measurements & Sampling Laboratory Operations	3c2 3d1 3d2 3e1 3e2 3f1 4a1 4a2 4a3 4b1 4c1	M	M	M	M	<u>M</u>	M	<u>M</u>	<u>M</u>	M	M
Implementation of PADs for Schools Implementation of Traffic & Access Control Impediments to Evacuation Availability & use of Commodity & Resource Information Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses Post Plume Phase Field Measurements & Sampling Laboratory Operations Emergency Notification and Public Info	3c2 3d1 3d2 3e1 3e2 3f1 4a1 4a2 4a3 4b1 4c1	M	M 	M 			M	M	M	M	M
Implementation of PADs for Schools Implementation of Traffic & Access Control Impediments to Evacuation Availability & use of Commodity & Resource Information Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses Post Plume Phase Field Measurements & Sampling Laboratory Operations Emergency Notification and Public Info Activation of the Prompt Alert & Notification System	3c2 3d1 3d2 3e1 3e2 3f1 4a1 4a2 4a3 4b1 4c1 5a1	M 	M			M 	M				M
Implementation of PADs for Schools Implementation of Traffic & Access Control Impediments to Evacuation Availability & use of Commodity & Resource Information Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses Post Plume Phase Field Measurements & Sampling Laboratory Operations Emergency Notification and Public Info Activation of the Prompt Alert & Notification System RESERVED	3c2 3d1 3d2 3e1 3e2 3f1 4a1 4a2 4a3 4b1 4c1 5a1 5a2	M	M			M	M		M		
Implementation of PADs for Schools Implementation of Traffic & Access Control Impediments to Evacuation Availability & use of Commodity & Resource Information Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses Post Plume Phase Field Measurements & Sampling Laboratory Operations Emergency Notification and Public Info Activation of the Prompt Alert & Notification System RESERVED Activation of the Back-up ANS	3c2 3d1 3d2 3e1 3e2 3f1 4a1 4a2 4a3 4b1 4c1 5a1 5a2 5a3	M	M			M			M		
Implementation of PADs for Schools Implementation of Traffic & Access Control Impediments to Evacuation Availability & use of Commodity & Resource Information Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses Post Plume Phase Field Measurements & Sampling Laboratory Operations Emergency Notification and Public Info Activation of the Prompt Alert & Notification System RESERVED Activation of the Back-up ANS Activation of the Exception Area ANS	3c2 3d1 3d2 3e1 3e2 3f1 4a1 4a2 4a3 4b1 4c1 5a1 5a2 5a3 5a4	M	M		M	M	M				
Implementation of PADs for Schools Implementation of Traffic & Access Control Impediments to Evacuation Availability & use of Commodity & Resource Information Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses Post Plume Phase Field Measurements & Sampling Laboratory Operations Emergency Notification and Public Info Activation of the Prompt Alert & Notification System RESERVED Activation of the Back-up ANS Activation of the Exception Area ANS Emergency Information & Instructions for the Public/Media	3c2 3d1 3d2 3e1 3e2 3f1 4a1 4a2 4a3 4b1 4c1 5a1 5a2 5a3 5a4 5b1	M	M			M					
Implementation of PADs for Schools Implementation of Traffic & Access Control Impediments to Evacuation Availability & use of Commodity & Resource Information Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses Post Plume Phase Field Measurements & Sampling Laboratory Operations Emergency Notification and Public Info Activation of the Prompt Alert & Notification System RESERVED Activation of the Back-up ANS Activation of the Exception Area ANS Emergency Information & Instructions for the Public/Media Support Operations/Facilities	3c2 3d1 3d2 3e1 3e2 3f1 4a1 4a2 4a3 4b1 4c1 5a1 5a2 5a3 5a4 5b1	M									
Implementation of PADs for Schools Implementation of Traffic & Access Control Impediments to Evacuation Availability & use of Commodity & Resource Information Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses Post Plume Phase Field Measurements & Sampling Laboratory Operations Emergency Notification and Public Info Activation of the Prompt Alert & Notification System RESERVED Activation of the Back-up ANS Activation of the Exception Area ANS Emergency Information & Instructions for the Public/Media Support Operations/Facilities Monitoring, Decontamination, & Registration of Evacuees	3c2 3d1 3d2 3e1 3e2 3f1 4a1 4a2 4a3 4b1 4c1 5a1 5a2 5a3 5a4 5b1 6a1	M									
Implementation of PADs for Schools Implementation of Traffic & Access Control Impediments to Evacuation Availability & use of Commodity & Resource Information Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses Post Plume Phase Field Measurements & Sampling Laboratory Operations Emergency Notification and Public Info Activation of the Prompt Alert & Notification System RESERVED Activation of the Back-up ANS Activation of the Exception Area ANS Emergency Information & Instructions for the Public/Media Support Operations/Facilities Monitoring, Decontamination, & Registration of Evacuees Monitoring/Decontamination of Emergency Workers/Equipment/Vehicles	3c2 3d1 3d2 3e1 3e2 3f1 4a1 4a2 4a3 4b1 4c1 5a1 5a2 5a3 5a4 5b1 6a1 6b1	M									
Implementation of PADs for Schools Implementation of Traffic & Access Control Impediments to Evacuation Availability & use of Commodity & Resource Information Preprinted Materials for Implementing PADs for Commodities & Resources Implementation of Relocation/Reentry/Return Decisions Field Measurement and Analysis RESERVED Field Team Management Plume Phase Field Measurement, Handling, & Analyses Post Plume Phase Field Measurements & Sampling Laboratory Operations Emergency Notification and Public Info Activation of the Prompt Alert & Notification System RESERVED Activation of the Back-up ANS Activation of the Exception Area ANS Emergency Information & Instructions for the Public/Media Support Operations/Facilities Monitoring, Decontamination, & Registration of Evacuees Monitoring/Decontamination of Emergency Workers/Equipment/Vehicles Temporary Care of Evacuees	3c2 3d1 3d2 3e1 3e2 3f1 4a1 4a2 4a3 4b1 4c1 5a1 5a2 5a3 5a4 5b1 6a1 6b1 6c1										

Table 3.1 - Summary of Exercise Evaluation (Continued. page 13/13)											
DATE: 2013-04-16 SITE: Three Mile Island Nuclear Generating Station, PA M: Met, A: ARCA, D: Deficiency, P: Plan Issue, N: Not Demonstrated		YCNSD	YCNESDCE	YCNSDMWELC	YCWSSD	YCWSSDCMS	YC WSSD FES	YCWSSDHE	LeCo MCC ELCHS	LeCoGSHCS	LeCoFASP
Emergency Operations Management											
Mobilization	1a1										
Facilities	1b1										
Direction and Control	1c1										
Communications Equipment	1d1										
Equipment and Supplies to Support Operations	1e1								М	Μ	М
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 disabilities & access/functional needs people	2c1										
Radiological Assessment & Decision-making for Ingestion Pathway	2d1										
Radiological Assessment & Decision-making for Relocation/Reentry/Return	2e1										
Protective Action Implementation											
Implementation of Emergency Worker Exposure Control	3a1									Μ	М
Implementation of KI PAD for Institutionalized Individuals/Public	3b1										
Implementation of PADs for disabilities & access/functional needs people	3c1										
Implementation of PADs for Schools	3c2	М	М	М	М	м	М	М			
Implementation of Traffic & Access Control	3d1										
Impediments to Evacuation	3d2										
Availability & use of Commodity & Resource Information	3e1										
Preprinted Materials for Implementing PADs for Commodities & Resources	3e2										
Implementation of Relocation/Reentry/Return Decisions	3f1										
Field Measurement and Analysis	511										
RESERVED	4a1										
Field Team Management	4a2										
Plume Phase Field Measurement Handling & Analyses	4a3										
Post Plume Phase Field Measurements & Sampling	4b1										
Laboratory Operations	4c1										
Emergency Notification and Public Info											
Activation of the Prompt Alert & Notification System	5a1										
RESERVED	5a2										
Activation of the Back-up ANS	5a3										
Activation of the Excention Area ANS	5a4										
Emergency Information & Instructions for the Public/Media	5b1										
Support Operations/Facilities	001										
Monitoring, Decontamination, & Registration of Evacuees	6a1										
Monitoring/Decontamination of Emergency Workers/Equipment/Vehicles	6b1										
Temporary Care of Evacuees	6c1								М		
Transportation/Treatment of Contaminated Injured Individuals	6d1									Μ	М

3.3 Criteria Evaluation Summaries

3.3.1 Pennsylvania Jurisdictions

3.3.1.1 Pennsylvania 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.b.2, 2.c.1, 3.b.1, 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

3.3.1.2 Pennsylvania Joint Information Center/Rumor Control

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

- a. MET: 1.d.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 Pennsylvania Accident Assessment Center, State Emergency Operations Center-Bureau of Radiation Protection

- a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.1, 2.b.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

3.3.1.4 Pennsylvania Bureau of Radiation Protection, Radiological Rapid Response Vehicle

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, 4.a.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

3.3.1.5 PA State Field Monitoring Team A, South Central Region

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

- a. MET: 1.a.1, 1.d.1, 1.e.1, 3.a.1, 4.a.3.
- b. 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 PA State Field Monitoring Team B, South Central Region

- a. MET: 1.a.1, 1.d.1, 1.e.1, 3.a.1, 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 Pennsylvania State Traffic and Access Control Points, State Police Barracks Harrisburg

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

- a. MET: 1.d.1, 1.e.1, 3.a.1, 3.d.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

3.3.1.8 Pennsylvania State Police TMI Incident Command Post

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.b.2, 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

3.3.2 Risk Jurisdictions

3.3.2.1 Cumberland County Emergency Operations Center

- a. MET: 1.a.1, 1.b.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 5.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 Cumberland County Emergency Worker Monitoring and Decontamination Station, West Shore Fire Station #2, Lemoyne

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

- a. MET: 1.d.1, 1.e.1, 3.a.1, 6.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 Cumberland County Mass Care Center, Shippensburg University

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

- a. MET: 1.e.1, 6.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

3.3.2.4 Cumberland County Mass Care Center Carlisle Senior High School (Fowler Bldg)

- a. MET: 1.b.1, 6.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

3.3.2.5 Cumberland County Mass Care Center, Carlisle Senior High School Sports Building

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

- a. MET: 1.b.1, 6.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

3.3.2.6 Cumberland County Mass Care Center, Carlisle Middle School (Wilson)

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

- a. MET: 1.b.1, 6.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

3.3.2.7 Cumberland County, Lower Allen Township Emergency Operations Center

- a. MET: 1.a.1, 1.b.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.d.1, 3.d.2, 5.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

3.3.2.8 Cumberland County, Lower Allen Township, Back-up Route Alerting

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, 5.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

3.3.2.9 Cumberland County, Lower Allen Township Traffic and Access Control

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

- a. MET: 1.d.1, 1.e.1, 3.a.1, 3.d.1, 3.d.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

3.3.2.10 Dauphin County Emergency Operations Center

- a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 3.a.1, 3.b.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

3.3.2.11 Dauphin County Reception Center, Williams Valley High School

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

- a. MET: 1.e.1, 6.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

3.3.2.12 Dauphin County Mass Care Center, Williams Valley High School

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

- a. MET: 1.e.1, 6.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 Dauphin County Monitoring and Decontamination Center, Williams Valley High School

- a. MET: 1.e.1, 3.a.1, 6.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

3.3.2.14 Dauphin County, Derry Township Emergency Operations Center

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

- a. MET: 1.a.1, 1.b.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.d.1, 3.d.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 Dauphin County, Lower Swatara Township Emergency Operations Center

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

- a. MET: 1.a.1, 1.b.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.d.1, 3.d.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 Dauphin County, Royalton Borough Emergency Operations Center

- a. MET: 1.a.1, 1.b.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.d.1, 3.d.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 Dauphin County, Steelton Borough Emergency Operations Center

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

- a. MET: 1.a.1, 1.b.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.d.1, 3.d.2, 5.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

3.3.2.18 Dauphin County, Steelton Borough Backup Route Alerting

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, 5.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

3.3.2.19 Dauphin County Traffic and Access Control, Steelton Borough

- a. MET: 1.d.1, 1.e.1, 3.a.1, 3.d.1, 3.d.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 Dauphin County, Swatara Township Emergency Operations Center

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

- a. MET: 1.a.1, 1.b.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.d.1, 3.d.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

3.3.2.21 Lancaster County 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, 3.a.1, 3.b.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

3.3.2.22 Lancaster County Emergency Worker Monitoring and Decontamination Station, Pioneer Fire Company #1

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

- a. MET: 1.e.1, 3.a.1, 6.b.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. **PLAN ISSUES:** 6.b.1.

ISSUE NO.: 64-13-6b1-P-01

CRITERION: The facility/ORO has adequate procedures and resources to accomplish monitoring and decontamination of emergency workers and their equipment and vehicles.

CONDITION: The action level used to determine a contaminated individual was 300 cpm above background. However, In the Lancaster County RERP Basic Plan dated November 2012 on page 39 there is a statement that BRP has set the action level for determining whether individuals or equipment are contaminated as follows: a. pancake probe – greater than 300 cpm above background

Note: if background is 100 cpm or greater with a pancake probe, move to an alternate location.

In the procedures section of the plan on page on Page XX, it states that BRP has set the action level as follows:

1. GM tube probe - greater than 300 cpm including background

2. GM pancake probe – greater than 1000 cpm including background

Note: if background becomes 60 cpm or greater with a GM tube probe or 150 cpm with a GM pancake probe, move to an alternate location.

On page E-5-17 of the BRP plan it states in part that action levels for determining contamination apply for individuals or equipment:

GM tube probe - greater than 300 cpm including background

GM pancake probe – greater than 1000 cpm including background.

POSSIBLE CAUSE: Failure to review various citations for consistency.

REFERENCE: NUREG-0654/FEMA REP-1, K.5.a,b

EFFECT: Possible confusion and lack of a uniform level of contamination allowed to be released.

CORRECTIVE ACTION DEMONSTRATED: Uniform action levels for the determination of contamination were revised in all response documents.

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

3.3.2.23 Lancaster County Monitoring and Decontamination Center, Hempfield High School

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

- a. MET: 1.b.1, 1.e.1, 3.a.1, 6.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

3.3.2.24 Lancaster County Mass Care Center, Hempfield High School

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

- a. MET: 1.e.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

3.3.2.25 Lancaster County Reception Center, Park City Mall

- a. MET: 1.e.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

3.3.2.26 Lancaster County, Conoy Township Emergency Operations Center

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

- a. MET: 1.a.1, 1.b.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.d.1, 3.d.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

3.3.2.27 Lancaster County, Conoy Township Back-Up Route Alerting

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

- a. MET: 1.d.1, 1.e.1, 3.a.1, 5.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

3.3.2.28 Lebanon County Emergency Operations Center

- a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 3.a.1, 3.b.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

3.3.2.29 Lebanon County Emergency Worker Monitoring and Decontamination Station, Annville Union Hose Fire Department

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

- a. MET: 1.d.1, 1.e.1, 3.a.1, 6.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

3.3.2.30 Lebanon County Reception Center, Lebanon County Career and Technological Center

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

- a. MET: 1.e.1, 6.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

3.3.2.31 Lebanon County Monitoring and Decontamination Center, Lebanon County Career and Technological Center

- a. MET: 1.e.1, 3.a.1, 6.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

3.3.2.32 Lebanon County, South Londonderry Township Emergency Operations Center

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

- a. MET: 1.a.1, 1.b.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.d.1, 3.d.2, 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

3.3.2.33 Lebanon County, South Londonderry Township, Back-Up Route Alerting

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

- a. MET: 1.d.1, 1.e.1, 3.a.1, 5.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

3.3.2.34 Lebanon County, South Londonderry Township Traffic and Access Control

- a. MET: 1.d.1, 1.e.1, 3.a.1, 3.d.1, 3.d.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

3.3.2.35 York County, 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, 3.a.1, 3.b.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

3.3.2.36 York County Emergency Worker Monitoring and Decontamination Station, Union Fire & Hose Company #1, Dover

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

- a. MET: 1.e.1, 3.a.1, 6.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

3.3.2.37 York County Mass Care Center, Southern School Complex

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

3.3.2.38 York County Mass Care Center, Southern Elementary School

- a. MET: 1.b.1, 6.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

3.3.2.39 York County Reception Center, Northern High School

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

- a. MET: 1.e.1, 6.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

3.3.2.40 York County Monitoring and Decontamination Center, Northern High School

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

- a. MET: 1.e.1, 3.a.1, 6.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

3.3.2.41 York County Mass Care Center, Northern High School

- a. MET: 6.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

3.3.2.42 York County Mass Care Center, Northern Middle School

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

- a. MET: 1.b.1, 6.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

3.3.2.43 York County Mass Care Center, Northern Elementary School

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

- a. MET: 1.b.1, 6.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

3.3.2.44 York County Mass Care Center, Northern Sports and Learning Center

- a. MET: 1.b.1, 6.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

3.3.2.45 York County Mass Care Center, Fawn Elementary School

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

- a. MET: 1.b.1, 6.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

3.3.2.46 York County Mass Care Center, Hanover Area YMCA

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

- a. MET: 1.b.1, 6.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

3.3.2.47 York County Mass Care Center, Hanover High School

- a. MET: 1.b.1, 6.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

3.3.2.48 York County Mass Care Center, Hanover Middle School

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

- a. MET: 1.b.1, 6.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

3.3.2.49 York County Mass Care Center, Kennard-Dale High School

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

- a. MET: 1.b.1, 6.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

3.3.2.50 York County Mass Care Center, Southeastern Middle School East

- a. MET: 1.b.1, 6.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

3.3.2.51 York County Mass Care Center, Southeastern Middle School West

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

- a. MET: 1.b.1, 6.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

3.3.2.52 York County Mass Care Center, Washington Elementary School

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

- a. MET: 1.b.1, 6.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

3.3.2.53 York County Mass Care Center, York County School of Technology

- a. MET: 1.b.1, 6.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

3.3.2.54 York County, Conewago Township Emergency Operations Center

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

- a. MET: 1.a.1, 1.b.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.d.1, 3.d.2, 5.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

3.3.2.55 York County, Conewago Township Backup Route Alerting

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

- a. MET: 1.d.1, 1.e.1, 3.a.1, 5.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

3.3.2.56 York County, Springettsbury Township Emergency Operations Center

- a. MET: 1.a.1, 1.b.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.d.1, 3.d.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

3.3.2.57 York County, Springettsbury Township Traffic and Access Control

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

- a. MET: 1.d.1, 1.e.1, 3.a.1, 3.d.1, 3.d.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

3.3.2.58 York County, Warrington Township Emergency Operations Center

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

- a. MET: 1.a.1, 1.b.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.c.1, 3.d.1, 3.d.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

3.3.2.59 Franklin County Mass Care Center, Faust Junior High School

- a. MET: 1.e.1, 6.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

3.3.2.60 Dauphin County, Capital Area Intermediate Unit, Administration Building

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

- a. MET: 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

3.3.2.61 Dauphin County, Central Dauphin School District

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

- a. MET: 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

3.3.2.62 Dauphin County, Central Dauphin School District, Lawnton Elementary School

- a. MET: 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

3.3.2.63 Dauphin County, Central Dauphin School District, Paxtang Elementary School

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

- a. MET: 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

3.3.2.64 Dauphin County, Central Dauphin School District, South Side Elementary School

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

- a. MET: 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

3.3.2.65 Dauphin County, Derry Township School District

- a. MET: 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

3.3.2.66 Dauphin County, Derry Township School District, Early Childhood Center

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

- a. MET: 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

3.3.2.67 Dauphin County, Harrisburg School District

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

- a. MET: 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

3.3.2.68 Dauphin County, Harrisburg School District, Marshall School

- a. MET: 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

3.3.2.69 Dauphin County, Lower Dauphin School District

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

- a. MET: 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

3.3.2.70 Dauphin County, Lower Dauphin School District, Nye Elementary School

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

- a. MET: 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

3.3.2.71 Dauphin County, Lower Dauphin School District, Conewago Elementary School

- a. MET: 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

3.3.2.72 Dauphin County, Middletown Area School District

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

- a. MET: 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

3.3.2.73 Dauphin County, Middletown Area School District, John C Kunkel Elementary School

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

- a. MET: 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

3.3.2.74 Dauphin County, Milton Hershey School

- a. MET: 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

3.3.2.75 Dauphin County, Steelton-Highspire School District

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

- a. MET: 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

3.3.2.76 Dauphin County, Steelton-Highspire School District, Steelton-Highspire Elementary School

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

- a. MET: 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

3.3.2.77 Lancaster County, Donegal School District

- a. MET: 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

3.3.2.78 Lancaster County, Donegal School District, Donegal Primary School

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

- a. MET: 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

3.3.2.79 Lancaster County, Donegal School District, Donegal Intermediate School

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

- a. MET: 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

3.3.2.80 Lancaster County, Elizabethtown Area School District

- a. MET: 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
3.3.2.81 Lancaster County, Elizabethtown Area School District, Bainbridge Elementary School

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

- a. MET: 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

3.3.2.82 Lebanon County, Palmyra Area School District

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

- a. MET: 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

3.3.2.83 Lebanon County, Palmyra Area School District, Palmyra Area Middle School

- a. MET: 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

3.3.2.84 York County, Central York School District

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

- a. MET: 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

3.3.2.85 York County, Central York School District, Central York High School

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

- a. MET: 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

3.3.2.86 York County, Dover Area School District

- a. MET: 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

3.3.2.87 York County, Dover Area School District, North Salem Elementary School

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

- a. MET: 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

3.3.2.88 York County, Eastern York School District

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

- a. MET: 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

3.3.2.89 York County, Eastern York School District, Eastern York Middle School

- a. MET: 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

3.3.2.90 York County, Northern York County School District

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

- a. MET: 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

3.3.2.91 York County, Northern York County School District, Northern High School

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

- a. MET: 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

3.3.2.92 York County, Northeastern School District

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

- a. MET: 3.c.2.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: 3.c.2.

ISSUE NO.: 64-13-3c2-P-02

CRITERION: OROs/school officials implement protective actions for schools.

CONDITION: The host school listed in the York County Emergency Operations Plan differs from the host school utilized by Northeastern School District risk schools; specifically it references the Southern York Middle School instead of the Southern York High School.

POSSIBLE CAUSE: The York County and Northeastern School District plans have not been reviewed for consistency.

REFERENCE: NUREG-0654 P. 4; York County Emergency Operations Plan, Appendix 14, Attachment B, Northeastern School District Emergency Operations Plan

EFFECT: Because the host school listed in the York County Emergency Operations Plan differs from the host school utilized by Northeastern School District risk schools, in an actual emergency, this could result in some confusion about the location of any evacuated Northeastern School District students.

CORRECTIVE ACTION DEMONSTRATED: The York County Emergency Operations Plan was corrected, and now properly refers to the Southern York School Complex.

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

3.3.2.93 York County, Northeastern School District, Conewago Elementary School

- a. MET: 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

3.3.2.94 York County, Northeastern School District, Mount Wolf Early Learning Center

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

- a. MET: 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

3.3.2.95 York County, West Shore School District

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

- a. MET: 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

3.3.2.96 York County, West Shore School District, Crossroads Middle School

- a. MET: 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

3.3.2.97 York County, West Shore School District, Fairview Elementary School

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

- a. MET: 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

3.3.2.98 York County, West Shore School District, Hillside Elementary School

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

- a. MET: 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

3.3.2.99 Lebanon County Mass Care Center, Eastern Lebanon High School Complex

- a. MET: 1.e.1, 6.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

3.3.2.100 Lebanon County, Good Samaritan Health Care System

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

- a. MET: 1.e.1, 3.a.1, 6.d.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

3.3.2.101 Lebanon County, First Aid and Safety Patrol

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

- a. MET: 1.e.1, 3.a.1, 6.d.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

3.3.3 Support Jurisdictions

3.3.3.1 Cumberland County Reception Center, Shippensburg University

- a. MET: 1.e.1, 6.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

3.3.3.2 Cumberland County Monitoring and Decontamination Center, Shippensburg University

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

- a. MET: 1.e.1, 3.a.1, 6.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

3.3.3.3 Adams County 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, 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

3.3.3.4 Adams County Reception Center, Gettysburg High School

- a. MET: 1.e.1, 6.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

3.3.3.5 Adams County Monitoring and Decontamination Center, Gettysburg High School

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

- a. MET: 1.e.1, 3.a.1, 3.b.1, 6.a.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: 1.e.1.

ISSUE NO.: 64-13-1e1-A-01

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

CONDITION: Reception center personnel were unable to perform a response check on their radiation detection instruments.

POSSIBLE CAUSE: Labels indicating a range of readings were not affixed to the side of any of the instruments, nor was this information available in any of the documentation included with the instrumentation.

REFERENCE: NUREG-0654/FEMA-REP-1, H.10, Ludlum 2241-2 and 2241-3 & 3i Technical Manuals

EFFECT: Reception center personnel were unable to determine whether or not the readings obtained with the Ludlum instruments were accurate.

CORRECTIVE ACTION DEMONSTRATED: On May 30, 2013, an inspection of all Ludlum 2241-3 and 2241-2 survey instruments was conducted at Adams County Emergency Management Agency, which included instruments used during the Gettysburg High School Reception Center Out of Sequence Exercise conducted on April 17, 2013. An affixed range of reading sticker was included on all instrumentation and included a current calibration date. In addition, an operational check was successfully demonstrated by the Adams County Radiological Officer.

- c. DEFICIENCY: None
- d. PLAN ISSUES: 6.a.1.

ISSUE NO.: 64-13-6a1-P-03

CRITERION: The reception center facility has appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, and registration of evacuees.

CONDITION: Conflicting information about the evacuees designated to be processed at the Gettysburg High School Reception Center is contained within the Adams County Incident Action Plan.

POSSIBLE CAUSE: The information included in Annex E, Appendix 1, Attachment A differs from Annex E, Page 1-1 and the York County Emergency Operations Plan, Annex E, Appendix 12

REFERENCE: NUREG-0654/FEMA-REP-1, A.3, Adams County Incident Action Plan, York County Emergency Operations Plan

EFFECT: Because of the conflicting information within the Adams County plan about the evacuees designated to be processed at the Gettysburg High School Reception Center in an actual emergency, this could result in inaccurate information about the number of evacuees to be expected at the reception center.

CORRECTIVE ACTION DEMONSTRATED: On June 18, 2013 Pennsylvania Emergency Management Agency provided a corrected Appendix 1 to Annex E of the Adams County Radiological Emergency Response Plan listing the names of municipalities whose residents will be evacuated to Gettysburg High School in agreement with the York County Plan.

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

3.3.3.6 Adams County Mass Care Center, Gettysburg High School

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

- a. MET: 1.e.1, 6.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

3.3.3.7 Adams County Mass Care Center, Gettysburg Middle School

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

- a. MET: 1.b.1, 6.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

3.3.3.8 Adams County Mass Care Center, Alloway Creek Intermediate School

- a. MET: 1.b.1, 6.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

3.3.3.9 Adams County Mass Care Center, Bermudian Springs Elementary School

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

- a. MET: 1.b.1, 6.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

3.3.3.10 Adams County Mass Care Center, Bermudian Springs High School

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

- a. MET: 1.b.1, 6.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

3.3.3.11 Adams County Mass Care Center, Bermudian Springs Middle School

- a. MET: 1.b.1, 6.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

3.3.3.12 Adams County Mass Care Center, Biglerville High School

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

- a. MET: 1.b.1, 6.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

3.3.3.13 Adams County Mass Care Center, Conewago Valley Intermediate School

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

- a. MET: 1.b.1, 6.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

3.3.3.14 Adams County Mass Care Center, Delone Catholic High School

- a. MET: 1.b.1, 6.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

3.3.3.15 Adams County Mass Care Center, Fairfield Fire Company

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

- a. MET: 1.b.1, 6.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

3.3.3.16 Adams County Mass Care Center, Fairfield High/Middle School

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

- a. MET: 1.b.1, 6.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

3.3.3.17 Adams County Mass Care Center, Littlestown High School

- a. MET: 1.b.1, 6.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

3.3.3.18 Adams County Mass Care Center, Maple Avenue Middle School

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

- a. MET: 1.b.1, 6.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

3.3.3.19 Adams County Mass Care Center, New Oxford Elementary School

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

- a. MET: 1.b.1, 6.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

3.3.3.20 Adams County Mass Care Center, New Oxford High and Middle School

- a. MET: 1.b.1, 6.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

3.3.3.21 Adams County Mass Care Center, Rolling Acres Elementary School

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

- a. MET: 1.b.1, 6.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

3.3.3.22 Franklin County 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, 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

3.3.3.23 Franklin County Reception Center, Faust Junior High School

- a. MET: 1.b.1, 1.e.1, 6.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

3.3.3.24 Franklin County Monitoring and Decontamination Center, Faust Junior High School

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

- a. MET: 1.b.1, 1.e.1, 3.a.1, 6.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

3.3.3.25 Schuylkill County 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, 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

3.3.3.26 Schuylkill County Reception Center, Blue Mountain High School

- a. MET: 1.e.1, 6.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

3.3.3.27 Schuylkill County Monitoring and Decontamination Center, Blue Mountain High School

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

- a. MET: 1.b.1, 1.e.1, 3.a.1, 6.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

3.3.3.28 Schuylkill County Mass Care Center, Blue Mountain High School

- a. MET: 1.e.1, 6.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

SECTION 4: CONCLUSION

Based on the review of the offsite radiological emergency response plans and procedures submitted, FEMA Region III has determined they are adequate and there is a reasonable assurance they can be implemented, as demonstrated during the 2013 Three Mile Island Plume/Hostile Action Exercise.

APPENDIX A: EXERCISE TIMELINE

The tables on the following pages present the times at which key events and activities occured during the TMI exercise on April 16, 2013. Also included are times notifications were made to the participating jurisdictions and functional entities.

Table 1 - Exercise Timeline
DATE: 2013-04-16, SITE: Three Mile Island Nuclear Generating Station, PA

Emergency Classification Level or Event	Time Utility Declared	PA EOC	PSP TMI ICP	CuCo EOC	CuCoLATEOC	DaCo EOC	DaCoDryTEOC
Unusual Event	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Alert	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Site Area Emergency	1554	1613	1600	1623	1626	1616	1616
General Emergency	1633	1640	1711	1657	1716	1644	1650
Simulated Rad. Release Started	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Simulated Rad. Release Terminated	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Facility Declared Operational		1624	1600	1625	1627	1621	1626
Declaration of State of Emergency		1635	1710	1635	1717	1636	N/A
Exercise Terminated		1924	2015	1949	1941	1848	1848
Early Precautionary Actions:		1628	1628	1739	N/A	N/A	N/A
1st Protective Action Decision:		1628	1710	1628	1636	1702	1706
1st Siren Activation		1638	N/A	1638	N/A	1628	N/A
1st EAS or EBS Message		1641	N/A	N/A	N/A	N/A	N/A
2nd Protective Action Decision:		1658	N/A	1658	1704	1658	N/A
2nd Siren Activation		1708	N/A	1708	N/A	1708	N/A
2nd EAS or EBS Message		1711	N/A	N/A	N/A	N/A	N/A
KI Administration Decision:		1658	1715	1658	1704	1658	1717

Table 1 - Exercise TimelineDATE: 2013-04-16, SITE: Three Mile Island Nuclear Generating Station, PA

Emergency Classification Level or Event	Time Utility Declared	DaCoLStaTEOC	DaCo RBEOC	DaCoStlBrEOC	DaCoSwTwpEOC	LaCoEOC	LaCoCyTEOC
Unusual Event	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Alert	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Site Area Emergency	1554	1616	1616	1626	1616	1609	1612
General Emergency	1633	1652	1710	1640	1647	1649	1706
Simulated Rad. Release Started	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Simulated Rad. Release Terminated	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Facility Declared Operational		1629	1620	1628	1618	1609	1612
Declaration of State of Emergency		N/A	N/A	N/A	N/A	1639	1724
Exercise Terminated		1845	1849	1925	1732	1945	1842
Early Precautionary Actions:		N/A	N/A	N/A	N/A	N/A	1638
1st Protective Action Decision:		1706	1710	1655	1640	1638	1711
1st Siren Activation		N/A	N/A	N/A	N/A	1638	N/A
1st EAS or EBS Message		N/A	N/A	N/A	N/A	N/A	N/A
2nd Protective Action Decision:		1717	N/A	N/A	N/A	1658	N/A
2nd Siren Activation		N/A	N/A	N/A	N/A	1708	N/A
2nd EAS or EBS Message		N/A	N/A	N/A	N/A	N/A	N/A
KI Administration Decision:		1718	1710	1710	1714	1658	1707

Table 1 - Exercise TimelineDATE: 2013-04-16, SITE: Three Mile Island Nuclear Generating Station, PA

Emergency Classification Level or Event	Time Utility Declared	LeCo EOC	LeCo SLTwp EOC	YC EOC	YCCTEOC	YCSTEOC	YCWTEOC
Unusual Event	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Alert	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Site Area Emergency	1554	1612	1612	1621	1624	1624	1626
General Emergency	1633	1706	1706	1649	1650	1650	1650
Simulated Rad. Release Started	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Simulated Rad. Release Terminated	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Facility Declared Operational		1615	1615	1625	1650	1722	1643
Declaration of State of Emergency		1640	1747	1642	1650	1641	1650
Exercise Terminated		1840	1840	1900	1900	1859	1900
Early Precautionary Actions:		1638	1638	1638	1638	1638	1630
1st Protective Action Decision:		N/A	N/A	1636	1640	1638	1630
1st Siren Activation		1638	N/A	1638	N/A	N/A	N/A
1st EAS or EBS Message		N/A	N/A	N/A	N/A	N/A	N/A
2nd Protective Action Decision:		N/A	N/A	1658	1705	1705	1705
2nd Siren Activation		1708	N/A	1708	N/A	N/A	N/A
2nd EAS or EBS Message		N/A	N/A	N/A	N/A	N/A	N/A
KI Administration Decision:		1659	1710	1658	1714	1714	1714

Table 1 - Exercise Timeline DATE: 2013-04-16, SITE: Three Mile Island Nuclear Generating Station, PA

Emergency Classification Level or	y Declared		(S)	(S)
Event	Time Utilit	ACEOC(S)	FrCo EOC	ScCo EOC
Unusual Event	N/A	N/A	N/A	N/A
Alert	N/A	N/A	N/A	N/A
Site Area Emergency	1554	1628	1625	1620
General Emergency	1633	1656	1653	1648
Simulated Rad. Release Started	N/A	N/A	N/A	N/A
Simulated Rad. Release Terminated	N/A	N/A	N/A	N/A
Facility Declared Operational		1635	1635	1630
Declaration of State of Emergency		1700	1637	1636
Exercise Terminated		N/A	1839	1841
Early Precautionary Actions:		1630	1634	1634
1st Protective Action Decision:		1624	1634	1625
1st Siren Activation		N/A	N/A	N/A
1st EAS or EBS Message		N/A	N/A	N/A
2nd Protective Action Decision:		1702	1702	1702
2nd Siren Activation		N/A	N/A	N/A
2nd EAS or EBS Message		N/A	N/A	N/A
KI Administration Decision:		1658	1658	1658

APPENDIX B: EXERCISE EVALUATORS AND

TEAM LEADERS

The following is the list of Evaluators and Team Leaders for the TMI 2013 Hostile Action Based Plume Exercise evaluated on April 16 and 17, 2013. The following constitutes the managing staff for the Exercise Evaluation:

Richard Kinard, FEMA RIII, Acting Regional Assistance Committee Chairman Matthew Wiedemer, FEMA RIII, Exercise Evaluation Program Manager and Site Specialist John Price, FEMA RIII, Team Leader, Pennsylvania Emergency Operations Center Lee Torres, FEMA RIII, Team Leader, Dauphin County Emergency Operations Center Martin Vyenielo, FEMA RIII, Team Leader, Techinical Evaluations Robert Neff, FEMA RIII, Team Leader, Lancaster County Emergency Operations Center and Adams County Emergency Operations Center Barton Freeman, FEMA RIII, Team Leader, Lebanon County Emergency Operations Center and Schuylkill County Emergency Operations Center Dan Lerch, FEMA RIII, Team Leader, Cumberland County Emergency Operations Center Joseph Suders, FEMA RIII, Team Leader, York County Emergency Operations Center and Franklin County Emergency Operations Center Michael Shuler, FEMA RIII, Team Leader, Adams County Emergency Operations Center Tina Thomas, DHS, Team Leader, School Evaluations

Additional evaluation assistance was provided by FEMA Regions by providing the following Radiological Emergency Preparedness Program personnel:

Brad DeKorte, FEMA RVI Johanna Berkey, FEMA RIX Korkean Dulgerian, FEMA RII Kenneth Wierman, FEMA HQ Michael Howe, FEMA HQ Bridget Ahlgrim, FEMA HQ Taneeka Hollins, FEMA RI Chris Cammarata, FEMA RII Barbara Thomas, FEMA RI Linga Gee, FEMA RVI Brian Hasemann, FEMA RII John Rice, FEMA RI Bonnie Sheffield, FEMA RVIII Helen LaForge, FEMA R I Ryan Jones, FEMA RI Kevin Reed, FEMA RII Patricia Mason, FEMA RII Timothy Pflieger, FEMA RVI Bill Webb, FEMA RX Larry Brookerd, FEMA HQ Elsa Lopez, FEMA RVI

LOCATION	EVALUATOR	AGENCY
Pennsylvania Emergency Operations Center	Kerris Bates Brad DeKorte *John Price Michael Shuler	FEMA HQ FEMA RVI FEMA RIII FEMA RIII
Pennsylvania Joint Information Center/Rumor Control	Paul Nied	ICFI
Pennsylvania Accident Assessment Center, State Emergency Operations Center-Bureau of Radiation Protection	Johanna Berkey *Martin Vyenielo	FEMA RIX FEMA RIII
Pennsylvania Bureau of Radiation Protection, Radiological Rapid Response Vehicle	Korkean Dulgerian	FEMA RII
PA State Field Monitoring Team A, South Central Region	Kenneth Wierman	FEMA HQ
PA State Field Monitoring Team B, South Central Region	Michael Howe	FEMA HQ
Pennsylvania State Traffic and Access Control Points, State Police Barracks Harrisburg	Brad DeKorte	FEMA RVI
Pennsylvania State Police TMI Incident Command Post	*Bridget Ahlgrim Chris Cammarata	FEMA HQ FEMA RII
Cumberland County Emergency Operations Center	Taneeka Hollins Tina Lai-Thomas *Daniel Lerch Barbara Thomas	FEMA RI FEMA RIII FEMA RIII FEMA RI
Cumberland County Emergency Worker Monitoring and Decontamination Station, West Shore Fire Station #2, Lemoyne	Ronald Bonner	ICFI
Cumberland County Mass Care Center, Shippensburg University	Richard Smith	ICF
Cumberland County Mass Care Center Carlisle Senior High School (Fowler Bldg)	*Michael Shuler	FEMA RIII
Cumberland County Mass Care Center, Carlisle Senior High School Sports Building	*Michael Shuler	FEMA RIII
Cumberland County Mass Care Center, Carlisle Middle School (Wilson)	*Michael Shuler	FEMA RIII
Cumberland County, Lower Allen Township Emergency Operations Center	Robert Black Gary Bolender	ICFI ICFI
Cumberland County, Lower Allen Township, Back-up Route Alerting	Gary Bolender	ICFI
Cumberland County, Lower Allen Township Traffic and Access Control	Robert Black	ICFI
Dauphin County Emergency Operations Center	Linda Gee Brian Hasemann John Rice *Lee Torres	FEMA RVI FEMA RII FEMA RI FEMA RIII
Dauphin County Reception Center, Williams Valley High School	Meg Swearingen	ICFI
Dauphin County Mass Care Center, Williams Valley High School	Carl Wentzell	ICFI
Dauphin County Monitoring and Decontamination Center, Williams Valley High School	Marcy Campbell	ICFI
Dauphin County, Derry Township Emergency Operations Center	Bonnie Sheffield *Lee Torres Matthew Wiedemer	FEMA RVIII FEMA RIII FEMA RIII
Dauphin County, Lower Swatara Township Emergency Operations Center	Roger Jobe	ICFI
Dauphin County, Royalton Borough Emergency Operations Center	Mark Dalton	ICFI
Dauphin County, Steelton Borough Emergency Operations Center	Alan Bevan Helen LaForge	ICFI FEMA RI
Dauphin County, Steelton Borough Backup Route Alerting	Alan Bevan	ICFI

DATE: 2013-04-16, SITE: Three Mile Island Nuclear Generating Station, PA

Dauphin County Traffic and Access Control, Steelton Borough	Alan Bevan	ICFI
Dauphin County, Swatara Township Emergency Operations Center	Richard Fournier James Greer	ICFI ICFI
Lancaster County Emergency Operations Center	Ryan Jones *Robert Neff Kevin Reed	FEMA - RI FEMA RIII FEMA RII
Lancaster County Emergency Worker Monitoring and Decontamination Station, Pioneer Fire Company #1	Joseph Keller	ICFI
Lancaster County Monitoring and Decontamination Center, Hempfield High School	James Hickey	ICFI
Lancaster County Mass Care Center, Hempfield High School	James Hickey	ICFI
Lancaster County Reception Center, Park City Mall	Thomas Hegele	ICFI
Lancaster County, Conoy Township Emergency Operations Center	Robert Lemeshka Danny Loomis	ICFI ICFI
Lancaster County, Conoy Township Back-Up Route Alerting	Danny Loomis	ICFI
Lebanon County Emergency Operations Center	*Barton Freeman Patricia Mason Timothy Pflieger Bill Webb	FEMA RIII FEMA RII FEMA RVI FEMA RX
Lebanon County Emergency Worker Monitoring and Decontamination Station, Annville Union Hose Fire Department	Reggie Rodgers	ICFI
Lebanon County Reception Center, Lebanon County Career and Technological Center	Samuel Nelson	ICFI
Lebanon County Monitoring and Decontamination Center, Lebanon County Career and Technological Center	Samuel Nelson	ICFI
Lebanon County, South Londonderry Township Emergency Operations Center	Robert Noecker William Palmer	ICFI ICF
Lebanon County, South Londonderry Township, Back-Up Route Alerting	William Palmer	ICF
Lebanon County, South Londonderry Township Traffic and Access Control	Robert Noecker	ICFI
York County, Emergency Operations Center	Larry Broockerd Elsa Lopez *Joseph Suders	FEMA HQ FEMA RVI FEMA RIII
York County Emergency Worker Monitoring and Decontamination Station, Union Fire & Hose Company #1, Dover	Daryl Thome	ICFI
York County Mass Care Center, Southern School Complex		
York County Mass Care Center, Southern Elementary School	*Michael Shuler	FEMA RIII
York County Reception Center, Northern High School	Wes Ryals	ICFI
York County Monitoring and Decontamination Center, Northern High School	Wes Ryals	ICFI
York County Mass Care Center, Northern High School	Wes Ryals	ICFI
York County Mass Care Center, Northern Middle School	*Michael Shuler	FEMA RIII
York County Mass Care Center, Northern Elementary School	*Michael Shuler	FEMA RIII
York County Mass Care Center, Northern Sports and Learning Center	*Michael Shuler	FEMA RIII
York County Mass Care Center, Fawn Elementary School	*Joseph Suders	FEMA RIII
York County Mass Care Center, Hanover Area YMCA	*Joseph Suders	FEMA RIII
York County Mass Care Center, Hanover High School	*Joseph Suders	FEMA RIII
York County Mass Care Center, Hanover Middle School	*Joseph Suders	FEMA RIII
York County Mass Care Center, Kennard-Dale High School	*Joseph Suders	FEMA RIII
York County Mass Care Center, Southeastern Middle School East	*Joseph Suders	FEMA RIII

York County Mass Care Center, Southeastern Middle School West	*Joseph Suders	FEMA RIII
York County Mass Care Center, Washington Elementary School	*Joseph Suders	FEMA RIII
York County Mass Care Center, York County School of Technology	*Joseph Suders	FEMA RIII
York County, Conewago Township Emergency Operations Center	Michael Petullo Brenda Rembert	ICFI
York County, Conewago Township Backup Route Alerting	Michael Petullo	ICFI
York County, Springettsbury Township Emergency Operations Center	David Petta Thomas Reynolds	ICFI ICFI
York County, Springettsbury Township Traffic and Access Control	David Petta	ICFI
York County, Warrington Township Emergency Operations Center	Rosemary Samsel	ICFI
Franklin County Mass Care Center, Faust Junior High School	Robert Walker	ICFI
Dauphin County, Capital Area Intermediate Unit, Administration Building	James Greer	ICFI
Dauphin County, Central Dauphin School District	Ronald Biernacki	ICFI
Dauphin County, Central Dauphin School District, Lawnton Elementary School	Ronald Bonner	ICFI
Dauphin County, Central Dauphin School District, Paxtang Elementary School	Marcy Campbell	ICFI
Dauphin County, Central Dauphin School District, South Side Elementary School	Debra Schneck	ICFI
Dauphin County, Derry Township School District	Richard Smith	ICF
Dauphin County, Derry Township School District, Early Childhood Center	Meg Swearingen	ICFI
Dauphin County, Harrisburg School District	Carl Wentzell	ICFI
Dauphin County, Harrisburg School District, Marshall School	Robert Duggleby	ICFI
Dauphin County, Lower Dauphin School District	Thomas Gahan	ICFI
Dauphin County, Lower Dauphin School District, Nye Elementary School	Robert Black	ICFI
Dauphin County, Lower Dauphin School District, Conewago Elementary School	David Petta	ICFI
Dauphin County, Middletown Area School District	Gary Bolender	ICFI
Dauphin County, Middletown Area School District, John C Kunkel Elementary School	John Zeidler	ICFI
Dauphin County, Milton Hershey School	Roger Jobe	ICFI
Dauphin County, Steelton-Highspire School District	Mark Dalton	ICFI
Dauphin County, Steelton-Highspire School District, Steelton- Highspire Elementary School	Mark Dalton	ICFI
Lancaster County, Donegal School District	James Hickey	ICFI
Lancaster County, Donegal School District, Donegal Primary School	Thomas Hegele	ICFI
Lancaster County, Donegal School District, Donegal Intermediate School	Joseph Keller	ICFI
Lancaster County, Elizabethtown Area School District	Richard Fournier	ICFI
Lancaster County, Elizabethtown Area School District, Bainbridge Elementary School	Robert Walker	ICFI
Lebanon County, Palmyra Area School District	Samuel Nelson	ICFI
Lebanon County, Palmyra Area School District, Palmyra Area Middle School	Reggie Rodgers	ICFI
York County, Central York School District	Wes Ryals	ICFI
York County, Central York School District, Central York High School	Daryl Thome	ICFI
York County, Dover Area School District	Robert Lemeshka	ICFI

York County, Dover Area School District, North Salem Elementary School	Danny Loomis	ICFI
York County, Eastern York School District	Robert Noecker	ICFI
York County, Eastern York School District, Eastern York Middle School	William Palmer	ICF
York County, Northern York County School District	Michael Meshenberg	ICFI
York County, Northern York County School District, Northern High School	Michael Meshenberg	ICFI
York County, Northeastern School District	Cheryl Weaver	ICFI
York County, Northeastern School District, Conewago Elementary School	Cheryl Weaver	ICFI
York County, Northeastern School District, Mount Wolf Early Learning Center	John Wills	ICFI
York County, West Shore School District	Michael Petullo	ICFI
York County, West Shore School District, Crossroads Middle School	Michael Petullo	ICFI
York County, West Shore School District, Fairview Elementary School	Brenda Rembert	
York County, West Shore School District, Hillside Elementary School	Thomas Reynolds	ICFI
Lebanon County Mass Care Center, Eastern Lebanon High School Complex	Michael Meshenberg	ICFI
Lebanon County, Good Samaritan Health Care System	Joseph Suders	FEMA RIII
Lebanon County, First Aid and Safety Patrol	*Matthew Wiedemer	FEMA RIII
Cumberland County Reception Center, Shippensburg University	Debra Schneck	ICFI
Cumberland County Monitoring and Decontamination Center, Shippensburg University	Ronald Biernacki	ICFI
Adams County Emergency Operations Center	Henry Christiansen	ICFI
Adams County Energency Operations Center	field y Christiansen	1011
Adams County Reception Center, Gettysburg High School	Robert Duggleby	ICFI
Adams County Energency Operations Center Adams County Reception Center, Gettysburg High School Adams County Monitoring and Decontamination Center, Gettysburg High School	Robert Duggleby Cheryl Weaver	ICFI ICFI ICFI
Adams County Reception Center, Gettysburg High School Adams County Monitoring and Decontamination Center, Gettysburg High School Adams County Mass Care Center, Gettysburg High School	Robert Duggleby Cheryl Weaver Thomas Gahan	ICFI ICFI ICFI
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Franklin County Reception Center, Faust Junior High School	Robert Walker	ICFI
Franklin County Monitoring and Decontamination Center, Faust Junior High School	John Wills	ICFI
Schuylkill County Emergency Operations Center	Jon Christiansen	ICFI
Schuylkill County Reception Center, Blue Mountain High School	John Zeidler	ICFI
Schuylkill County Monitoring and Decontamination Center, Blue Mountain High School	John Zeidler	ICFI
Schuylkill County Mass Care Center, Blue Mountain High School	John Zeidler	ICFI
* Team Leader		

APPENDIX C: ACRONYMS AND ABBREVIATIONS

Acronym	Meaning
AAC	Accident Assessment Center
ACP	Access Control Point
AED	Automated External Defibrillator
ALARA	As Low As Reasonably Achieved
ARC	American Red Cross
ARDS	Automatic Ring Down System
ARES	Amateur Radio Emergency Service
BMC	Building Maintenance Chief
CAA	Capital Area Adventures
CAD	Computer Assisted Dispatch
CAOLA	Capital Area Online Learning Association
CART	County Animal Response Team
CAS	Central Alarm Station
CD	Central Dauphin
CDSD	Central Dauphin School District
CES	Conewaga Elemtentary School
СРМ	Capital Project Manager
DCEOC	Dauphin County Emergency Operations Center
DEMC	Deputy Emergency Management Coordinator
DRD	Direct Reading Dosimeter
EAS	Emergency Alert System
EASD	Elizabethtown Area School District
ECC	Early Childhood Center
ECL	Emergency Classification Level
EDACS	Emergency Direct Access Communications System
ELCHS	Eastern Lebanon County High School
EM	Emergency Manager
EMA	Emergency Management Agency
EMC	Emergency Management Coordinator
EMD	Emergency Management Director
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EOF	Emergency Operations Facility
EOP	Emergency Operations Plan

EPRO	Emergency Preparedness Response Officer
EPZ	Emergency Planning Zone
ERO	Emergency Response Organization
ESF	Emergency Support Functional
EW	Emergency Workers
EYMS	Eastern York Middle School
EYSD	Eastern York School District
FEMA	Federal Emergency Management Agency
FTC	Field Team Coordinator
GE	General Emergency
GHS	Gettysburg High School
GIS	Geographical Information System
GM	Geiger Muller
GPS	Global Positioning System
HAB	Hostile Action Based
HABD	Hostile Action Based Drill
HES	Hillside Elementary School
HSD	Harrisburg School District
HSDS	Harrisburg School District Superintendent
HVFD	Hempfield Volunteer Fire Department
IC	Incident Commander
ICP	Incident Command Post
ICS	Incident Command System
IMAT	Incident Management Assistance Team
INF	Initial Notification Form
IRT	Incident Response Team
IST	Instructional Support Team
JIC	Joint Information Center
LCEMA	Lebanon County Emergency Management Agency
LCEOC	Lebanon County Emergency Operations Center
LDSD	Lower Dauphin School District
LES	Lawnton Elementary School
MASD	Middletown Area School District
MCC	Mass Care Center
MHS	Milton Hershey School
MI	Media Interview
MOC	Media Operations Center
NARS	Nuclear Accident Reporting System
NGS	Nuclear Generating Station
NIMS	National Incident Management System

NRC	Nuclear Regulatory Commission
NYCSD	Northern York County School District
OD	Operations Director
ORO	Offsite Response Organizations
PAD	Protective Action Decision
PAR	Protective Action Recommendations
PASD	Palmyra Area School District
PD	Police Department
PEIRS	Pennsylvania Emergency Incident Reporting System
PEMA	Pennsylvania Emergency Management Agency
PGMS	Pine Grove Middle School
PIO	Public Information Officer
PPE	Personal Protective Equipment
PRD	Permanent Record Dosimetry
PSO	Police Services Officer
PSP	Pennsylvania State Police
RACES	Radio Amateur Civil Emergency Services
RAD	Radiological Assessment Director
RAM	Radiological Assessment Manager
RAT	Route Alerting Team
RC	Reception Center
RCRS	Road Condition Reporting System
REA	Radiation Emergency Area
REM	Roentgen Equivalent Man
REP	Radiological Emergency Preparedness
REPP	Radiological Emergency Preparedness Program
RERP	Radiological Emergency Response Plan
RIRP	Radiological Incident Response Plan
RO	Radiological Officer
RPD	Royalton Police Department
RSO	Radiation Safety Officer
SAE	Site Area Emergency
SBVFD	Steelton Borough Volunteer Fire Department
SCEMA	Schuykill County Emergency Management Agency
SCEMC	Schuykill County Emergency Management Coordinator
SCEOC	Schuykill County Emergency Operations Center
SD	School District
SEOC	State Emergency Operations Center
SEVAN	State Emergency Voice Activated Network
SLTEOC	South Londonderry Township Emergency Operations Center

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SO	Safety Officer
SOG	Standard Operating Guidelines
SOP	Standard Operating Procedure
SSO	Senior State Official
ТСР	Traffic Control Point
TEDE	Total Effective Dose Equivalent
TLD	Thermal Luminescent Dosimeter
TMI	Three Mile Island
TMINGS	Three Mile Island Nuclear Generating Station
VOIP	Voice Over Internet Phone
WRLEMA	Western Region Lebanon Emergency Management Agency
WSSD	West Shore School District
YC	York County

APPENDIX D: EXERCISE PLAN

The enclosed Exercise Plan was created as an overall tool for facilitation and implementation of the TMI 2013 Plume Exercise and to integrate the concepts and policies of the Homeland Security Exercise Evaluation Program with the Radiological Emergency Preparedness Program Exercise Methodology. The Exercise Plan was originally drafted and published by the Pennsylvania Emergency Agency (PEMA) as an independent document and is annexed here.

Exercise Plan

NATIONAL EXERCISE PROGRAM

2013 Three Mile Island FEMA Evaluated Hostile Action Based REP Exercise

U.S. Department of Homeland Security



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After Action Report/Improvement Plan

Radiological Emergency Preparedness (REP)/ Homeland Security Exercise and Evaluation Program (HSEEP)

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PREFACE

The Three Mile Island Hostile-Action Based REP Evaluated Full Scale Exercise (FSE) is sponsored by the Federal Emergency Management Agency and the Pennsylvania Emergency Management Agency. This Exercise Plan (ExPlan) was produced with input, advice, and assistance from the Exercise Planning Team (EPT), which followed the guidance set forth in the Federal Emergency Management Agency (FEMA), Homeland Security Exercise and Evaluation Program (HSEEP).

The ExPlan gives officials, observers, media personnel, and players from participating organizations the information necessary to observe or participate in a nuclear power plant accident response exercise focusing on participants' emergency response plans, policies, and procedures as they pertain to this type of event. The information in this document is current as of the date of publication and is subject to change as dictated by the EPT.

The Three Mile Island Evaluated Full Scale Exercise is an *unclassified exercise*. The control of information is based more on public sensitivity regarding the nature of the exercise than on the actual exercise content. Some exercise material is intended for the exclusive use of exercise planners, Controllers, and Evaluators, but Players may view other materials deemed necessary to their performance. The ExPlan may be viewed by all exercise participants, *but the Controller and Evaluator (C/E) Handbook is a restricted document intended for Controllers and Evaluators only*.

All exercise participants should use appropriate guidelines to ensure the proper control of information within their areas of expertise and to protect this material in accordance with current jurisdictional directives. Public release of exercise materials to third parties is at the discretion of DHS and the EPT.

After Action Report/Improvement Plan

Radiological Emergency Preparedness (REP)/ Homeland Security Exercise and Evaluation Program (HSEEP)

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HANDLING INSTRUCTIONS

- 1. The title of this document Three Mile Island Evaluated Full Scale Exercise (FSE *Exercise Plan (ExPlan)*.
- 2. The information gathered in this ExPlan should be handled as sensitive information not to be disclosed. This document should be safeguarded, handled, transmitted, and stored in accordance with appropriate security directives. Reproduction of this document, in whole or in part, without prior approval from FEMA and PEMA is prohibited.
- 3. At a minimum, the attached materials will be disseminated only on a need-to-know basis and when unattended, stored in an area offering sufficient protection against theft, compromise, inadvertent access, and unauthorized disclosure.
- 4. For more information, please consult the following points of contact (POCs):

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CHAPTER 1: GENERAL INFORMATION

Introduction

The Three Mile Island Hostile-Action Based REP Exercise is a full-scale exercise (FSE) designed to establish a learning environment for players to exercise emergency response plans, policies, and procedures as they pertain to Nuclear Power Plant accidents. An FSE is a complex event that requires detailed planning. To conduct an effective exercise, subject matter experts (SMEs) and local representatives from numerous agencies have taken part in the planning process and will take part in exercise conduct and evaluation.

This Exercise Plan (ExPlan) was produced at the direction of FEMA and PEMA with the input, advice, and assistance of the EPT. The Three Mile Island Hostile-Action Based REP Exercise evidence of the growing partnership between State and local jurisdictions for response to the threats our Nation and communities face.

Confidentiality

The Three Mile Island Hostile-Action Based REP Exercise is an *unclassified exercise*. The control of information is based more on public sensitivity regarding the nature of the exercise than on the actual exercise content. Some exercise material is intended for the exclusive use of exercise planners, controllers, and evaluators, but players may view other materials deemed necessary to their performance. This ExPlan may be viewed by all exercise participants, *but the Controller and Evaluator (C/E) Handbook is a restricted document intended for controllers and evaluators only*.

All exercise participants should use appropriate guidelines to ensure the proper control of information within their areas of expertise and protect this material in accordance with current FEMA and PEMA directives.

Public release of exercise materials to third parties is at the discretion of the Federal Emergency Management Agency (FEMA), PEMA, and the EPT.

Purpose

The purpose of this exercise is to evaluate player actions against current response plans and capabilities for a nuclear power plant-related incident, and to comply with the requirements of 44 CFR 350 and the guidelines of NUREG 0654/FEMA-REP-1. Exercise planners utilized the elements described in the Radiological Emergency Preparedness (REP) Program Manual (October 2011) to develop this exercise.

The objective of FEMA, PEMA, and the local Offsite Response Organizations (ORO) is to demonstrate reasonable assurance that the public can be protected during a nuclear power plant emergency.

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Core Capabilities

The establishment of the National Preparedness Priorities have steered the focus of homeland security toward a capabilities-based planning approach. Capabilities-based planning focuses on planning under uncertainty, since the next danger or disaster can never be forecast with complete accuracy. Therefore, capabilities-based planning takes an all-hazards approach to planning and preparation which builds capabilities that can be applied to a wide variety of incidents. States and Urban Areas use capabilities-based planning to identify a baseline assessment of their homeland security efforts by comparing their current capabilities against the Core Capabilities List (CCL) and the critical tasks of the Universal Task List (UTL). This approach identifies gaps in current capabilities and focuses efforts on identifying and developing priority capabilities and tasks for the jurisdiction. These priority capabilities are articulated in the jurisdiction's homeland security strategy and Multi-Year Training and Exercise Plan (TEP), of which this exercise is a component.

The capabilities listed below have been selected by the EPT planning team from the priority capabilities identified in Pennsylvania Multi-Year TEP. These capabilities provide the foundation for development of the exercise objectives and scenario, as the purpose of this exercise is to measure and validate performance of these capabilities and their associated critical tasks.

- Operational Communications
- Public Health and Medical Services
- Critical Transportation
- Public and Private Services and Resources
- Operational Coordination
- Public Information and Warning
- On-scene Security and Protection
- Environmental Response/Health and Safety
- Mass Care Services
- Supply Chain Integrity and Security
- Economic Recovery

Outstanding Issues

There ARE 0 Areas Requiring Corrective Action (ARCAs) as a result of the FEMA-evaluated plume-phase exercise at Three Mile Island in 2011.

See Appendix C for additional details on these outstanding issues.

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CHAPTER 2: EXERCISE LOGISTICS

Exercise Summary

General

The Three Mile Island Hostile-Action Based REP Exercise is designed to establish a learning environment for players to exercise their plans and procedures for responding to an incident at a Nuclear Power Plant. The Three Mile Island Hostile-Action Based REP Exercise will be conducted on the evening of April 16, 2013. Exercise play is scheduled for approximately 6 hours or until FEMA determines that the exercise objectives have been met at each venue.

Assumptions

Assumptions constitute the implied factual foundation for the exercise and, hence, are assumed to be present before the start of the exercise. The following general assumptions apply to the Three Mile Island Hostile-Action Based REP Exercise

- The exercise will be graded against the REP criteria. Elements outside the scope of the REP criteria will not be graded.
- This exercise will be conducted in a no-fault learning environment wherein systems and processes, not individuals, will be evaluated.
- Exercise simulation will be realistic and plausible, containing sufficient detail from which to respond.
- Exercise players will react to the information and situations as they are presented, in the same manner as if this had been a real event.

Constructs and Constraints

Constructs are exercise devices designed to enhance or improve exercise realism. Alternatively, constraints are exercise limitations that may detract from exercise realism. Constraints may be the inadvertent result of a faulty construct or may pertain to financial and staffing issues. Although there are a number of constructs and constraints (also know as exercise artificialities) for any exercise, the EPT recognizes and accepts the following as necessary:

- Exercise communication and coordination will be limited to the participating exercise venues and the Simulation Cell (SimCell).
- Only those communication methods listed in the Communication Directory will be available for players to use during the exercise.
- Out-of-Sequence play is allowed.

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• Certain simulations are allowed.

The participating agencies may need to balance exercise play with real-world emergencies. It is understood that real-world emergencies will take priority.

Exercise Participants

The following are the categories of participants involved in this exercise; note that the term "participant" refers to all categories listed below, not just those playing in the exercise:

- *Players*. Players are agency personnel who have an active role in responding to the simulated emergency and perform their regular roles and responsibilities during the exercise. Players initiate actions that will respond to and mitigate the simulated emergency. Players will consist of personnel from State, County, and local offsite response organizations, select federal agencies, and Utility personnel.
- *Controllers*. Controllers set up and operate the exercise site; plan and manage exercise play; act in the roles of response individuals and agencies not playing in the exercise. Controllers direct the pace of exercise play and routinely include members from the exercise planning team. They provide key data to players and may or initiate certain player actions to ensure exercise continuity. Controllers will consist of Utility personnel and a State Controller from the Commonwealth.
- *Simulators*. Simulators are control staff personnel who role-play as nonparticipating organizations or individuals. They most often operate out of the SimCell, but may occasionally have face-to-face contact with players. Simulators function semi-independently under the supervision of SimCell controllers, enacting roles (e.g., as media reporters or next of kin) in accordance with instructions provided in the Master Scenario Events List (MSEL). All simulators are ultimately accountable to the Exercise Director and/or the Senior Controller. Select PEMA personnel will serve as Simulators to represent public inquiry to State and County ORO's.
- *Evaluators*. Evaluators are chosen to evaluate and provide feedback on a designated functional area of the exercise. They are chosen based on their expertise in the functional area(s) they have been assigned to review during the exercise and their familiarity with local emergency response procedures. Evaluators assess and document participants' performance against established emergency plans and exercise evaluation criteria, in accordance with HSEEP standards and within the bounds of REP Program guidance and regulations. They are typically chosen from amongst planning committee members or the agencies/organizations that are participating in the exercise. FEMA Evaluators will not serve as Controllers.
- *Actors.* Actors are exercise participants who act or simulate specific roles during exercise play. They are typically volunteers who have been recruited to play the role of victims or other bystanders.

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- *Observers.* Observers visit or view selected segments of the exercise. Observers do not play in the exercise, and do not perform any control or evaluation functions. Observers
- will view the exercise from a designated observation area and will be asked to remain
- within the observation area during the exercise. VIPs are a type of observer, but are frequently grouped separately. A dedicated group of exercise Controllers should be assigned to manage these groups. PEMA will provide Observers to risk municipalities to observe and document activity at evaluated and non-evaluated ORO's.
- *Media Personnel.* Some media personnel may be present as observers pending approval by the appropriate EMA personnel and exercise support team members. Media interaction may also be simulated by the SimCell to enhance realism and meet related exercise objectives. A dedicated group of exercise controllers should be assigned to manage these groups.
- *Support Staff.* Exercise support staff includes individuals who are assigned administrative and logistical support tasks during the exercise (i.e. registration, catering, etc.)

Exercise Tools

Controller Handbook

A standard Controller Handbooks will not be used for the Three Mile Island Hostile-Action Based REP Exercise. Individual controllers may elect to develop their own books for assistance during the exercise.

Master Scenario Events List

The MSEL outlines benchmarks, as well as injects that drive exercise play. It also details realistic input to the exercise players as well as information expected to emanate from simulated organizations (i.e., those nonparticipating organizations, agencies, and individuals who would usually respond to the situation). An inject will include several items of information, such as inject time, intended recipient, responsible controller, inject type, a short description of the event, and the expected player action.

Exercise Implementation

Exercise Play

Exercise play will begin in the afternoon of April 16, 2013 with a situation update going to each participating venue. Play will proceed according to the events outlined in the MSEL, in accordance with established plans and procedures. The exercise will conclude upon the completion of operations and attainment of the exercise objectives, as determined by FEMA.

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Exercise Rules

The following are the general rules that govern exercise play:

- Real-world emergency actions take priority over exercise actions.
- Exercise participants will comply with real-world response procedures, unless otherwise directed by control staff.
- All communications (written, radio, telephone, etc.) made during the exercise will begin and end with the phrase, "*This is an exercise*."

Exercise participants placing telephone calls or initiating radio communication with the SimCell must identify the organization, agency, office, and/or individual with whom they wish to speak.

Safety Requirements

General

Exercise participant safety takes priority over exercise events. Although the organizations involved in the Three Mile Island Hostile-Action Based REP Exercise come from various response agencies, they share the basic responsibility for ensuring a safe environment for all personnel involved in the exercise. In addition, aspects of an emergency response are dangerous. Professional health and safety ethics should guide all participants to operate in their assigned roles in the safest manner possible. The following general requirements apply to the exercise:

- All exercise controllers, evaluators, and staff will serve as safety observers while the exercise activities are underway. Any safety concerns must be immediately reported to the Lead Controller.
- Participants will be responsible for their own and each other's safety during the exercise. It is the responsibility of all persons associated with the exercise to stop play if, in their opinion, a real safety problem exists. Once the problem is corrected, exercise play can be restarted.
- All organizations will comply with their respective environmental, health, and safety plans and procedures, as well as the appropriate Federal, State, and local environmental health and safety regulations.

Exercise Setup

Exercise setup involves the pre-staging and dispersal of exercise materials; including registration materials, documentation, signage, and other equipment as appropriate.

Accident Reporting and Real Emergencies

• Anyone observing a participant who is seriously ill or injured will first advise the nearest

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- controller, then if possible, renders aid, provided the aid does not exceed his or her training.
- The controller who is made aware of a real emergency will initiate the broadcast "*Real-World Emergency*" on the controller radio network, providing the following information to the Senior Controller and Exercise Director:
 - Venue/function
 - Location within the venue/function
 - Condition
 - o Requirements
- The SimCell will be notified as soon as possible if a real emergency occurs.
- If the nature of the emergency requires a suspension of the exercise at the venue/function, all exercise activities at that facility will immediately cease. Exercise play may resume at that venue/function once the "Real-World Emergency" situation has been addressed.
- Exercise play at other venue/functions should not cease if one venue/function has declared a "Real-World Emergency" unless they are reliant on the affected venue.
- If a real emergency occurs that affects the entire exercise, the exercise may be suspended or terminated at the discretion of the Exercise Director and Senior Controller. The notification will be made from the SimCell.

Site Access

Observer Coordination

Each organization with observers will coordinate with the PEMA Lead Controller for access to the exercise site. Observers will be escorted to an observation area for orientation and conduct of the exercise. All observers will be asked to remain within the designated observation area during the exercise.

Exercise Identification

Exercise participants will utilize their official Agency issued identification during the exercise.

Communications Plan

Exercise Start, Suspension, and Termination Instructions

The exercise is scheduled to run for approximately 6 hours] or until FEMA determines that the exercise objectives have been met. The State Emergency Operations Center will announce the exercise suspension or termination through their standard methods of communication.

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Player Communication

Players will use routine, in-place agency communication systems. Additional communication assets may be made available as the exercise progresses. The need to maintain capability for a real-world response may preclude the use of certain communication channels or systems that would usually be available for an actual emergency incident. In no instance will exercise communication interfere with real-world emergency communications. Each venue will coordinate its own internal communication networks and channels.

The primary means of communication among the SimCell, Controllers, and the venues will be telephone.

Player Briefing

Controllers/Evaluators may be required to read specific scenario details to the participants to begin exercise play. They may also have technical handouts or other materials to give to players in order to better orient them to the exercise environment.

Public Affairs

This exercise enables Players to demonstrate an increased readiness to deal with a nuclear power plant incident. Any nuclear power plant exercise may be a newsworthy event. Special attention must be given to the needs of the media, allowing them to get as complete and accurate a story as possible while ensuring their activities do not compromise the exercise realism, safety, or objectives.

Exelon, FEMA, PEMA, and involved counties are responsible for disseminating public information in advance of the exercise.

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CHAPTER 3: PLAYER GUIDELINES

Exercise Staff

Exercise Director

The Exercise Director has the overall responsibility for planning, coordinating, and overseeing all exercise functions. He/she manages the exercise activities and maintains a close dialogue with the Controllers regarding the status of play and the achievement of the exercise design objectives.

Lead Controller

The Lead Controller is responsible for the overall organization of the Three Mile Island Hostile-Action Based REP Exercise. The Lead Controller monitors exercise progress and coordinates decisions regarding deviations or significant changes to the scenario caused by unexpected developments during play. The Lead Controller monitors actions by individual Controllers and ensures they implement all designated and modified actions at the appropriate time. The Lead Controller debriefs the Controllers after the exercise and oversees the setup and takedown of the exercise.

For the Three Mile Island Hostile-Action Based REP Exercise, Exelon will utilize a Lead Controller for Utility portions of the exercise and PEMA will utilize a Lead Controller for ORO portions of the exercise.

Controllers

At least one controller will be onsite at the power plant, Utility EOF, Incident Command Post, State Emergency Operations Center, with field teams participating in the exercise, and at each out-of-sequence interview. The Lead Facility Controller at each location will coordinate any changes that impact the scenario or affect other areas of play through the Lead Controller. The individual controllers issue exercise materials to players as required and monitor the exercise timeline. Controllers also provide injects to the players as described in the MSEL.

Lead Evaluator

The Lead Evaluator is responsible for the overall evaluation of the Three Mile Island Hostile-Action Based REP Exercise. The Lead Evaluator monitors exercise progress and stays in contact with the Lead Controller regarding changes to the exercise during play. The Lead Evaluator monitors actions of individual Evaluators and ensures they are tracking progress of the players in accordance with the Extent of Play. The Lead Evaluator debriefs the evaluators after the exercise and oversees the entire evaluation and After Action process.

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Evaluators

Evaluators work under the direction of the Lead Evaluator, and as a team with Controllers. Evaluators are SMEs who record events that take place during the exercise and assess/submit documentation for review and inclusion in the After Action Report (AAR).

Player Instructions

Before the Exercise

- Review the appropriate emergency plans, procedures, and exercise support documents.
- Be at the appropriate site at least 30 minutes before the start of the exercise. Wear appropriate uniform/identification badge.
- If you gain knowledge of the scenario before the exercise, notify a controller so that appropriate actions can be taken to ensure a valid evaluation.
- Read your Player Information Handout, which includes information on exercise safety.
- Please sign in.

During the Exercise

- Respond to the exercise events and information as if the emergency were real, unless otherwise directed by an exercise controller.
- Controllers will only give you information they are specifically directed to disseminate. You are expected to obtain other necessary information through existing emergency information channels.
- Do not engage in personal conversations with controllers, evaluators, observers, or media personnel while the exercise is in progress. If you are asked an exercise-related question, give a short, concise answer. If you are busy and cannot immediately respond, indicate so, but report back with an answer at the earliest time possible.
- If you do not understand the scope of the exercise or if you are uncertain about an organization's or agency's participation in an exercise, ask a controller.
- Parts of the scenario may seem implausible. Recognize that the exercise has objectives to satisfy and may require the incorporation of unrealistic aspects. Note that every effort has been made by the trusted agents to balance realism with safety and the creation of an effective learning and evaluation environment.
- All exercise communication will begin and end with the phrase "This is an exercise." This is a precaution taken so anyone overhearing the conversation will not mistake the exercise play for a real-world emergency.

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- When communicating with the SimCell, identify the organization, agency, office, and/or individual with which you want to speak.
- Verbalize out loud when taking an action. This will ensure that evaluators are made aware of critical actions as they occur.
- Maintain a log of your activities. Many times, this log may include documentation of activities missed by a controller or evaluator.

Following the Exercise

- At the end of the exercise at your facility, participate in the brief critique with the controllers and evaluators.
- Complete the Participant Feedback Form. This form allows you to comment candidly on emergency response activities and effectiveness of the exercise. Please provide the completed form to a controller or evaluator.
- Provide any notes or materials generated from the exercise to your controller or evaluator for review and inclusion in the AAR.

Simulation Guidelines

If a real emergency occurs during the exercise, the exercise at your respective venue may be suspended or terminated at the discretion of the controller(s) at each venue. If a real emergency occurs, say "Real-World Emergency" and notify the nearest Controller and Evaluator.

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CHAPTER 4: EVALUATION AND POST-EXERCISE ACTIVITIES

Exercise Documentation

The goal of the Three Mile Island Hostile-Action Based REP Exercise is to comprehensively exercise and evaluate the OROs' plans and capabilities as they pertain to a potential nuclear power plant incident. After the exercise, data collected by Controllers, Evaluators, the SimCell, and Players will be used to identify strengths and areas for improvement in the context of the exercise design objectives.

Exercise Evaluation Guides

DHS has developed Exercise Evaluation Guides (EEGs) that identify expected activities for evaluation, provide consistency across exercises, and link individual tasks to disciplines and expected outcomes.

The Federal Emergency Management Agency (FEMA) Region III has decided not to use EEG's as part of Exercise Documentation process.

Players Critique

Immediately following the completion of exercise play, Controllers will facilitate a critique with Players from their assigned location. The critique is an opportunity for Players to voice their opinions on the exercise and their own performance. At this time, Controllers can also seek clarification on certain actions and what prompted Players to take them. The critique should not last more than 30 minutes. Controllers should take notes during the critique and include these observations in their analysis.

Hotwash

Prior to the Participants and Public /Media Briefing, The Federal Emergency Management Agency (FEMA) will facilitate a Hotwash with the State, Risk and Support Counties, local jurisdictions and agencies participating in the exercise. The Hotwash is an opportunity for evaluators and participants to voice preliminary performance concerns, demonstrated strengths, and thank those who played. At this time, Evaluators can also seek clarification on certain actions and what prompted Players to take them. Evaluators should take notes during the Hotwash and include these observations in their analysis, if necessary. The Hotwash will be held at April 18th at 3:00 pm. at Hilton Garden Inn in Harrisburg, PA.

Controller and Evaluator Debriefing

Controllers, Evaluators, and selected exercise participants will attend a facilitated Controller and Evaluator Debriefing following the exercise. During the debriefing these individuals will discuss

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their observations of the exercise in an open environment to clarify actions taken during the exercise.

Participants and Public/Media Briefings

The Participants Briefing will be conducted on April 19th at 10:00 a.m. at the Hilton Garden Inn in Harrisburg, PA. The Public/Media Briefing will be conducted immediately after at 11:00 a.m.

After Action Report

The AAR is the culmination of the exercise. It is a written report outlining the strengths and areas for improvement identified during the exercise. The AAR will include the timeline, executive summary, scenario description, performance issues, planning issues, deficiencies, and capability analysis. The AAR will be drafted by a core group of individuals from the exercise planning team.

After Action Conference and Improvement Plan

The improvement process represents the comprehensive, continuing preparedness effort of which the 2013 Three Mile Island Hostile-Action Based REP Exercise is a part. The lessons learned and recommendations from the AAR will be incorporated into the Improvement Plan (IP).

After Action Conference

The After Action Conference (AAC), which will be scheduled to take place approximately 90 days following the exercise, is a forum for jurisdiction officials to hear the results of the evaluation analysis, validate the findings and recommendations in the draft AAR, and begin development of the IP.

Improvement Plan

The IP identifies how recommendations will be addressed, including what actions will be taken, who is responsible, and the timeline for completion. It is created by key stakeholders from participating agency officials during the After Action Conference.

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APPENDIX A: EXERCISE SCHEDULE

 Table A.1 2013 Three Mile Island Hostile-Action Based REP Exercise Schedule

Time (Tentative)	Personnel	Activity		
April 16, 2013				
09:00 – 11:00 a.m.	Risk County Schools	School Exercise		
	Risk Counties			
Evening	Risk and Support Counties	Plume Exercise		
	Risk Municipalities			
	State			
	Utility			
APRIL 17, 2013				
10:00 a.m. – 12:00 p.m.	PSP Harrisburg Barracks	Traffic and Access Control		
		Points		
07:00 p.m. – 09:30 p.m.	Risk and Support Counties	Reception Centers		
07:00 p.m. – 09:30 p.m.	Risk and Support Counties	Mon/Decon Centers		
07:00 p.m. – 09:30 p.m.	Risk and Support Counties	Mass Care Centers		
07:00 p.m. – 09:30 p.m.	Risk and Support Counties	Emergency Worker		
		Mon/Decon Centers		
October 25 th , 2012				
03:00 p.m. – 05:00 p.m.	State, Risk and Support Counties	Exercise Hotwash		
October 26 th , 2012				
09:00 a.m. – 10:00 a.m.	All Exercise participants	Exercise Participants		
10:00 a.m. – 11:00 a.m.	Public/Media	Public/Media Briefing		

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APPENDIX B: METHOD OF OPERATION AND EXTENT OF PLAY

EVALUATION 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

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.

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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.

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.

PEMA Negotiated Extent of Play:

Pre-positioning of state emergency personnel (Liaison Officers) at the Emergency Operations Facility (EOF), the Utility Joint Information Center (JIC) and Risk and Support Counties is appropriate due to the commuting distance from the individual's duty location or residence. Risk counties / municipalities and support counties will conduct call-outs to demonstrate the mobilization of key personnel. The utility JIC will be evaluated for this drill.

Actual calls (or pager notifications) will be made to the county / municipal EOC personnel for the Plume Phase exercise, April 16 2013 per plans and procedures.

In all instances, the demonstration of a shift change is **NOT** required. 24-hour staffing will be demonstrated by means of a roster or staffing chart.

All out-of-sequence players will be pre-positioned and equipment will be demonstrated or shown to be in inventory (School District personnel, Pennsylvania State Police TCP/ACP, Reception Centers, Emergency Worker Monitoring and Decontamination Stations Mass Care / Sheltering Centers and Monitoring and Decontamination Centers).

Individuals working in state facilities and county EOCs may be prepositioned for the plume phase.

During Hostile Action Based Exercises near site Command Post and Unified Command (at PEMA) staff may pre-position for the plume phase. Due to time constraints Municipalities may pre-position their personnel for HAB exercises. Evaluator will conduct an interview of how the municipality would activate.

Sub-element 1.b – Facilities

INTENT

This sub-element derives from NUREG–0654, which provides that Offsite Response Organizations (ORO) have facilities to support the emergency response.

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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)

Assessment / Extent of Play

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

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.

PEMA Negotiated Extent of Play:

Municipalities will demonstrate this criteria during each federal evaluation they receive (generally once per 8 year cycle) and counties will demonstrate this criteria once in each 8 year cycle unless new or substantial improvements occur.

During Hostile Action Based Exercise the evaluation of the near site Command Post may occur at an alternate location/facility (using similar communications paths) and actual communications may be evaluated during an out of sequence evaluation. The near site Command Post may be a temporary field location and may not meet all the standards of a fixed facility.

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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.

PEMA Negotiated Extent of Play:

The near site Command Post may utilize an "Exercise Planning Package" which utilizes the same aspects as the actual plan but is different for operational security purposes.

Sub-element 1.d – Communications Equipment – N/A

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.

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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.

PEMA Negotiated Extent of Play:

The plant will communicate to the risk counties and State EOC utilizing the Dedicated Automatic Ring Down Telephone System (ARD) (Primary) and the commercial telephone system (Secondary). Risk and Support Counties will intercommunicate with the State EOC via the commercial telephone system (Primary), SEVAN (Secondary) and other systems. In the event that the plant is unable to contact the state EOC via the Dedicated Automatic Ring Down Telephone, the Power Plant will contact the State EOC via the commercial telephone system. If the plant cannot contact the State EOC, the Power Plant will contact the Dauphin County EOC and Dauphin County EOC fulfill the role of primary contact until such time as communications with the State EOC can be made.

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Risk counties will communicate with their risk municipalities via public safety radio frequencies (EMA Radio), commercial telephone, fax, or Amateur Radio Communications (ARES/RACES) or other available means.

Bureau of Radiation Protection Field Teams will demonstrate two or more forms of communications.

The near site Command Post may demonstrate communications capabilities at an Out of Sequence opportunity and utilize similar alternate communications paths during the Plume Phase evaluation. (ex. a mobile communications truck could demonstrate the use of phone, satellite, radio, or other communications that would be used for an actual event and then during the plume phase portion the Command Post could use the phones of the facility in which they are being evaluated). The communications assets for the near site Command Post will demonstrate out of sequence during the PSP ACP / TCP evaluation on April 17, 2013. Sub-element 1.e – Equipment and Supplies to Support Operations

INTENT

This sub-element derives from NUREG-0654/FEMA-REP-1, which provides that Offsite Response Organizations (ORO) 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:

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KI: Responsible OROs must demonstrate the capability to maintain inventories of KI sufficient for use by: (1) emergency workers; (2) institutionalized individuals, as indicated in capacity lists for facilities; and (3) where stipulated by the plans / procedures, members of the general public (including transients) within the plume pathway EPZ. In addition, OROs must demonstrate provisions to make KI available to specialized response teams (e.g., civil support team, Special Weapons and Tactics Teams, urban search and rescue, bomb squads, HAZMAT, or other ancillary groups) as identified in plans / procedures). The plans / procedures must include the forms to be used for documenting emergency worker ingestion of KI, as well as a mechanism for identifying emergency workers that have declined KI in advance. Consider carefully the placement of emergency workers that have declined KI in advance.

ORO quantities of dosimetry and KI available and storage locations(s) will be confirmed by physical inspection at the storage location(s) or through documentation of current inventory submitted during the exercise, provided in the ALC submission, and/or verified during an SAV. Available supplies of KI must be within the expiration date indicated on KI bottles or blister packs. As an alternative, the ORO may produce a letter from a certified private or state laboratory indicating that the KI supply remains potent, in accordance with U.S. Pharmacopoeia standards.

Dosimetry: Sufficient quantities of appropriate direct-reading and permanent record dosimetry and dosimeter chargers must be available for issuance to all emergency workers who will be dispatched to perform an ORO mission. In addition, OROs must demonstrate provisions to make dosimetry available to specialized response teams (e.g., civil support team, Special Weapons and Tactics Teams, urban search and rescue, bomb squads, HAZMAT, or other ancillary groups) as identified in plans / procedures).

Appropriate direct-reading dosimetry must allow an individual(s) to read the administrative reporting limits and maximum exposure limits contained in the ORO's plans / procedures.

Direct-reading dosimeters must be zeroed or operationally checked prior to issuance. The dosimeters must be inspected for electrical leakage at least annually and replaced when necessary. Civil Defense Victoreen Model 138s (CD V-138s) (0-200 mR), due to their documented history of electrical leakage problems, must be inspected for electrical leakage at least quarterly and replaced when necessary. This leakage testing will be verified during the exercise, through documentation submitted in the ALC and/or through an SAV.

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

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

For FMTs, the instruments must be capable of measuring gamma exposure rates and detecting beta radiation. These instruments must be capable of measuring a range of activity and exposure, including radiological protection/exposure control of team members and detection of activity on air sample collection media, consistent with the intended use of the instrument and the ORO's plans / procedures. An appropriate radioactive check source must be used to verify proper operational response for each low-range radiation measurement instrument (less than 1R/hr) and for high-range instruments when available. If a source is not available for a high-range instrument, a procedure must exist to operationally test the instrument before entering an area where only a high-range instrument can make useful readings.

In areas where portal monitors are used, the OROs must set up and operationally check the monitor(s). The monitor(s) must conform to the standards set forth in the *Contamination Monitoring Standard for a Portal Monitor Used for Emergency Response*, FEMA-REP-21 (March 1995) or in accordance with the manufacturer's recommendations.

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.

PEMA Negotiated Extent of Play:

Radiological Survey Instruments are calibrated per manufactures recommendations. Support counties do not have DRDs, or KI, but those responsible for reception centers and/or monitoring and decontamination centers will have PRDs. Neither CDV-700 nor CDV-138 instruments are in use in the area.

Evaluation of KI quantities will be verified using inventory sheets. KI will not be removed from storage locations and boxes / packages will not be opened, however, lot numbers and expiration dates should be visible for inspection. KI questions will be addressed through interviews.

Annual Direct Reading Dosimeter leakage testing verification will be available to the evaluator.

Reception Centers shall be evaluated on their ability to use maps or other documentation to direct evacuating persons to the correct Monitoring/Decontamination Centers and/or Mass Care

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Centers (as Applicable). If Reception Centers are collocated with Monitoring/Decontamination centers and Mass Care Centers the use of maps or documents to provide direction does not apply.

Evaluation of KI for the Incident Command Post will occur during the out of sequence evaluation of Pennsylvania State Police on the morning of April 17th.

EVALUATION 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.

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

Participating OROs must also demonstrate the capability to make decisions concerning authorization of exposure levels in excess of pre-authorized levels and the number of emergency

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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.

PEMA Negotiated Extent of Play:

Radiological briefings (which may be supported by video) will be provided to address exposure limits, procedures to replace those personnel approaching exposure limits and how permission to exceed limits is obtained from the municipality and county. Emergency workers will also be briefed on when to take KI and on whose authority. <u>Distribution of KI to emergency workers</u> <u>will be simulated</u>. The Commonwealth, under direction of the Department of Health, will authorize use of KI when radiological conditions warrant its use. If the scenario has no potential for a radiological release, the decision on the distribution and administration of KI as a protective measure for emergency workers and the authorization process for emergency workers to exceed pre-authorized levels can be addressed through an interview.

The completion of a "Dosimetry-KI Report Form" will be demonstrated.

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.

OROs must have the capability to choose, among a range of protective actions, those most appropriate in a given emergency. OROs base these choices on PAGs from their plans / procedures or EPA's *Manual of Protective Action Guides and Protective Actions for Nuclear Incidents* and other criteria, such as plant conditions, licensee PARs, coordination of 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

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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. *PEMA Negotiated Extent of Play:*

BRP will validate plant dose projections and coordinate resolution of differences if more than a factor of 10. If the scenario has no radiological release, or potential of a radiological release, the decision-making process used to make protective action decisions can be addressed through an interview.

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

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.

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

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

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

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

If more than one ORO is involved in decision making, all appropriate OROs must communicate and coordinate 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.

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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.

PEMA Negotiated Extent of Play:

The Commonwealth, in developing a PAD, will base the decision upon plant recommendation and condition, confirmation and advice of BRP, environmental data, impediments, and other factors that may impact the decision. In a HAB exercise Incident Command will be consulted as part of the decision making process. If the scenario has no radiological release, or potential of a radiological release, the decision-making process used to make protective action decisions can be addressed through an interview.

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.

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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

PEMA Negotiated Extent of Play:

If the scenario has no radiological release, or potential of a radiological release, the decision-making process used to make protective action recommendations can be addressed through an interview.

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)

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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.

PEMA Negotiated Extent of Play:

This sub-element will <u>not</u> be demonstrated or evaluated during this exercise. This element was demonstrated during the Post Plume Exercise conducted during the week of March 7, 2011 for the Commonwealth.

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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.
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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.

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.

PEMA Negotiated Extent of Play:

This sub-element will <u>not</u> be demonstrated or evaluated during this exercise. This element was demonstrated during the Post Plume Exercise conducted during the week of March 7, 2011 for the Commonwealth.

EVALUATION AREA 3

Protective Action Implementation

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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.

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

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

During a plume phase exercise, emergency workers must demonstrate the procedures to be followed when administrative exposure limits and turn-back values are reached. The emergency

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

Although it is desirable for all emergency workers to each have a direct-reading dosimeter, there may be situations where team members will be in close proximity to each other during the entire mission. In such cases, adequate control of exposure can be achieved for all team members using one direct-reading dosimeter worn by the team leader. Emergency workers assigned to low-exposure rate fixed facilities (e.g., EOCs and communications center within the EPZ, reception centers, and counting laboratories) may have individual direct-reading dosimeters or they may be monitored using group dosimetry (i.e., direct-reading dosimeters strategically placed in the work area). Each team member must still have his or her own permanent record dosimetry. Individuals authorized by the ORO to reenter an evacuated area during the plume (emergency) phase, must be limited to the lowest radiological exposure commensurate with completing their missions.

OROs may have administrative limits lower than EPA-400-R-92-001 dose limits for emergency workers performing various services (e.g., 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.

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.

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PEMA Negotiated Extent of Play:

Radiological briefings will be provided to address exposure limits, procedures to replace personnel approaching limits, and how permission to exceed limits is obtained from the municipality and county. Emergency workers will also be briefed on when to take KI and on whose authority. Distribution of KI will be simulated.

OROs should also demonstrate the use of all applicable dosimetry forms. The completion of a "Dosimetry-KI Report Form" will be demonstrated.

At any time, players may ask other players or supervisors to clarify radiological information.

In Pennsylvania, emergency workers outside of the EPZ do not have turn back values.

Evaluation of emergency worker KI quantities will be verified using inventory sheets. KI will not be removed from storage locations and boxes will not be opened. KI questions will be addressed through interviews.

Personnel assigned to operate Monitoring / Decontamination centers and stations are not issued PRDs or KI since the centers/stations are located outside the EPZ. Simulated PRDs with mock serial numbers may be used to simulate issue. KI may be used to simulate issue

Emergency workers who are assigned to low exposure rate areas, e.g., at counting laboratories, emergency operations centers, and communications centers, may have individual permanent

record dosimeters or they may be monitored by dosimeters strategically placed in the work area. In Pennsylvania this will be accomplished through the use of an area kit. The area kit process is explained in State, County and Municipal Plans.

Standard issue of dosimetry and potassium iodide for each category of emergency worker is as follows:

Category A: 1 PRD, 1 DRD, and 1 unit of KI Category B: 1 PRD and 1 unit of KI (Area Kit includes 2 DRDs) Category C: 1 PRD

All locations that have dosimetry equipment indicated within their Radiological Emergency Response Plan (RERP), will make the dosimetry equipment (and KI) available for inspection by the Federal Evaluator. In order to demonstrate an understanding of the use of the dosimetry equipment, KI and associated forms; the location need only remove and distribute / issue a maximum of six (6) units of dosimetry from their inventory. Simulation PRDs with mock serial

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numbers and simulated KI may be issued. The location will demonstrate filling out a minimum of one (1) Dosimetry / KI Report Form.

For HAB exercises the near site Command Post shall be responsible to provide radiological protection and briefings to personnel under its command. In an effort to provide rapid deployment of checkpoints or other key positions, personnel may be given annual radiological training and printed briefing materials which will serve as a radiological briefing until such time as these personnel can receive a normal briefing. Dosimetry may be delivered to their service location at the earliest opportunity.

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.

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

OROs must have the capability to develop and maintain lists of institutionalized individuals who have ingested KI, including documentation of the date(s) and time(s) they were instructed to ingest KI. Ingestion of KI recommended by the designated ORO health official is voluntary. For evaluation purposes, the actual ingestion of KI shall not be performed. OROs must demonstrate the capability to formulate and disseminate instructions on using KI for those advised to take it.

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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.

PEMA Negotiated Extent of Play:

Within Pennsylvania, the Pennsylvania Department of Health is responsible for distribution of KI to the general public located within the EPZ. Pre-distribution is accomplished on an annual basis. Pennsylvania does not distribute KI at reception centers.

Personnel assigned to operate Monitoring / Decontamination centers and stations are not issued PRDs or KI since the centers/stations are located outside the EPZ. Simulated PRDs with mock serial numbers may be used to simulate issue. KI may be used to simulate issue

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.

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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.

PEMA Negotiated Extent of Play:

Lists of Persons with Disabilities and Access/Functional Needs including name, address, contact information, and description of need shall be maintained at their respective municipal EOC (based upon residential jurisdiction). Copies of these lists will not be provided to the evaluators; however, evaluators will be allowed to inspect the lists during the exercise.

Initial contact, by the County, with special populations (hospitals, nursing homes and county correctional facilities) may be actual. All subsequent calls will be simulated. Actual contacts (up to two per Risk County) will be made with transportation providers per the county. All actual and simulated contacts should be logged.

Criterion 3.c.2: OROs/School officials implement protective actions for schools. (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, functional, or tabletop exercise, an actual event, or by means of drills conducted at any time.

Public school systems / districts must demonstrate the ability to implement PADs for students. The demonstration must be made as follows: each school system / district within the 10 mile EPZ must demonstrate implementation of protective actions. At least one school per affected system / district must participate in the demonstration. Canceling the school day, dismissing early, or sheltering in place must be simulated by describing to evaluators the procedures that would be followed. If evacuation is the implemented protective action, all activities to coordinate and complete the evacuation of students to reception centers, congregate care centers, or host schools may actually be demonstrated or accomplished through an interview process.

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

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

The provisions of this criterion also apply to any private schools, private kindergartens, and licensed daycare centers that participate in REP exercises pursuant to the ORO's 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.

PEMA Negotiated Extent of Play:

School Students will not be involved during the exercise. Actions and activities associated with the demonstration of Criterion 3.c.2 will be limited to the School District Administration key personnel and the County. Evacuation of students will be conducted through an interview process with School District personnel or the building principal.

Although a bus driver should be available for interview the role of the bus driver may be conducted through an interview with school or transportation officials (or designee) if a bus driver is not available. Actual demonstration of the bus route is not required and will not be demonstrated. Maps or route descriptions will be available for illustration purposes.

Risk County school plans <u>do not</u> require communications between the school and vehicles. Bus drivers are not considered emergency workers and therefore do not require dosimetry.

Private schools, private kindergartens, and day care centers do not participate in REP exercises. However, OROs will be prepared to show evaluators lists of these facilities that they will contact in the event of an emergency in accordance with plans and procedures. Any simulated contacts will be logged.

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.

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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.

PEMA Negotiated Extent of Play:

Municipal Traffic and Access control will be demonstrated by interview at the applicable EOC of jurisdiction. The traffic / access control personnel will not be deployed to the traffic / access control point(s). If the designated assignment is a location within the EPZ, a radiological briefing will be provided to the assigned individuals.

Control Points for HAB exercises will be demonstrated by interview at the near site Command Post. The traffic / access control personnel will not be deployed. To protect operational security the Command Post may use an Exercise Plan which is similar to, but different, from the actual plan. Due to the need to rapidly deploy Control Points those assigned personnel may receive an annual radiological brief and maintain printed briefing materials until such time as they can receive a regular radiological briefing.

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For HAB exercises the near site Command Post shall be responsible to provide radiological protection and briefings to personnel under its command. In an effort to provide rapid deployment of checkpoints or other key positions, personnel may be given annual radiological training and printed briefing materials which will serve as a radiological briefing until such time as these personnel can receive a normal briefing. Dosimetry may be delivered to their service location at the earliest opportunity.

Reception Centers shall provide a traffic control plan for the location being evaluated.

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.

PEMA Negotiated Extent of Play:

County Emergency Operations Centers will demonstrate the ability to identify and take appropriate actions concerning impediments to evacuation by inject or interview. Actual dispatch of resources to deal with impediments, such as tow trucks, need not be demonstrated; however, simulated contacts will be logged. If the scenario does not lead to evacuation the criteria shall be deemed complete if the ORO can describe to the evaluator the actions they would take to overcome a major traffic impediment during an evacuation and how such actions would be communicated to the public and affected OROs. (Risk counties only)

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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.

PEMA Negotiated Extent of Play:

This sub-element will <u>not</u> be demonstrated or evaluated during this exercise. This element was demonstrated during the Post Plume Exercise conducted during the week of March 7, 2011 for the Commonwealth.

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)

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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.

PEMA Negotiated Extent of Play:

This sub-element will <u>not</u> be demonstrated or evaluated during this exercise. This element was demonstrated during the Post Plume Exercise conducted during the week of March 7, 2011 for the Commonwealth.

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.

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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.j; 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.

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Return: OROs must demonstrate the capability to implement policies concerning return of members of the public to areas that were evacuated during the plume phase. OROs must demonstrate the capability to identify and prioritize services and facilities that require restoration within a few days, and to identify procedures and resources for their restoration. Examples of these services and facilities are medical and social services, utilities, roads, and schools.

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

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

PEMA Negotiated Extent of Play:

This sub-element will <u>not</u> be demonstrated or evaluated during this exercise. This element was demonstrated during the Post Plume Exercise conducted during the week of March 7, 2011 for the Commonwealth.

EVALUATION AREA 4

Field Measurement and Analysis

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.

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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.

OROs 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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PEMA Negotiated Extent of Play:

Field Team Control will be performed near the 10 mile EPZ using the DEP Radiological Rapid Response Vehicle (R3V). Field Team control is expected to initially be out of sequence with the plume timeline. During the exercise the field teams will be directed to take measurements in locations to provide information sufficient to characterize the plume and impacts. In addition to field team measurements, remote detectors will be deployed by the field teams near the expected plume pathway. These detectors will automatically transmit data to the R3V. These detectors will be used to keep field teams dose ALARA. A FEMA Evaluator(s) will meet the R3V and Field Teams at the DEP Bureau of Laboratories Lower Parking Lot for initial equipment checks at 1:30 PM on April 16, 2013. In the event the scenario has no radiological release a report of Background Radiation by the Field Monitoring Team will signify successful demonstration of the criterion.

For scenarios involving Hostile Action based incidents the Field Team Control will coordinate activities with the Incident Command Post and / or operate beyond an established Security Zone.

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.

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

OROs 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.

Unclassified

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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.

PEMA Negotiated Extent of Play:

Measurements will be made by the Department of Environmental Protection (DEP), Bureau of Radiation Protection (BRP), in accordance with the BRP Standard Implementing Procedures (IPs). Two mobile monitoring teams from BRP will demonstrate ambient radiation monitoring and radioiodine and particulate sampling. Field Teams will be equipped with appropriate dosimetry and KI. Both teams will be evaluated by FEMA. Each team will be directed to monitoring location and perform actual radiation measurements at each location. Measurements may consist of truck installed radiation monitor or hand-held radiation instruments. The field team will demonstrate taking an air sample at the first location where a probe would be dropped, regardless of radiation level. The team will explain by interview the procedures they follow for air sampling. Teams will then take additional simulated air samples as directed at additional locations, if conditions are appropriate for radioiodine sampling and relay information to the Radiological Rapid Response Vehicle (R3V). In place of silver zeolite cartridges, charcoal cartridges will be used for the exercise. All measurements will be forwarded to the R3V immediately upon obtaining data. Evaluators will meet the field teams at Lower Parking Lot of the DEP Bureau of Laboratories on April 16, 2013 at 1:30 PM.

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

INTENT

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

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

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.

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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.

OROs 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.

PEMA Negotiated Extent of Play:

This sub-element will <u>not</u> be demonstrated or evaluated during this exercise. This element was demonstrated during the Post Plume Exercise conducted during the week of March 7, 2011 for the Commonwealth.

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.

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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 radio-analytical techniques and contamination control procedures.

OROs 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.

PEMA Negotiated Extent of Play:

This sub-element will <u>not</u> be demonstrated or evaluated during this exercise. This element was demonstrated during the Post Plume Exercise conducted during the week of March 7, 2011 for the Commonwealth.

EVALUATION AREA 5

Emergency Notification and Public Information

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

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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).

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;

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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; $\$

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 (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.

PEMA Negotiated Extent of Play:

The Commonwealth of Pennsylvania has implemented a Statewide EAS Control system in cooperation with the Pennsylvania Association of Broadcasters per the State Emergency Communications Committee and Pennsylvania Emergency Alert System State EAS Plan (September 23, 2010 and revised on November 2, 2011). The State EOC (PEMA) is the initiating point for the activation of the EAS. Risk Counties have the control equipment for activation of sirens. Coordination will occur between the State EOC and the affected counties with respect to the Alert and Notification System (ANS) process as to when the sirens and EAS messages will occur. Sirens will be coordinated and the sounding <u>simulated</u> at the appropriate time with the <u>simulated</u> activation of EAS taking place approximately 3 minutes following the simulated activation of the sirens. Regular Broadcasting will not be interrupted on the EAS Stations. All subsequent actions to broadcast stations will be simulated. Broadcast of the message(s) or test message(s) is **NOT** required and **NOT** requested. Counties may elect to provide Subsequent News Bulletins or County Specific EAS messages to their EAS stations.

Following the decision to activate the alert and notification system, in accordance with the ORO's plan and/or procedures, ANS activation should be accomplished in a timely manner for primary alerting/notification. This action will **NOT** be subject to specific time requirements.

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All actions to broadcast stations will be simulated. Systems that use automatic sending technology may be demonstrated by explanation during an interview.

Each evaluated municipality per risk county will demonstrate, by interview, route alerting of the hearing impaired residents within their jurisdiction. Hearing impaired notification teams will not be deployed.

Criterion 5.a.2: [RESERVED]

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

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

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would actually be used is read for the evaluator, but not actually broadcast), as negotiated in the extent of play. Actual testing of the mobile public address system will be conducted at an agreed-upon location.

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

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

PEMA Negotiated Extent of Play:

Plans specify that route alerting is used as a back up to the sirens. County Liaisons will provide an "inject" to the risk counties that a siren has failed. The county will demonstrate contacting one municipal EOC in regards to the failed siren in that municipality. The municipal EOC will then dispatch one route alert team to cover one route alert sector affected by the failed siren. All other routes will be simulated. Route Alert Teams should finish their route in about 45 minutes from time of siren failure.

For HAB exercises if a siren should fail with affected sectors within the security zone the route alert teams may have access issues due to the control points or it may not be safe. If this is the case, the route alert team should explain the issue to the evaluator and the near site incident commander should be made aware of the situation.

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.

OROs 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 OROs 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.

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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.

PEMA Negotiated Extent of Play:

This sub-element will <u>not</u> be demonstrated or evaluated during this exercise. Pennsylvania has no exception areas.

Sub-element 5.b – 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

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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 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 appropriate information

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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.

PEMA Negotiated Extent of Play:

Subsequent emergency information and instructions should be provided to the public and the media in a timely manner. <u>This will NOT be subject to specific time requirements</u>. One media briefing will be demonstrated in each risk county.

Risk and Support Counties will receive and handle "Public Inquiry" messages via their individual "Public Inquiry" processes (In compliance with NIMS terminology, Rumor Control is now considered to be "Public Inquiry"). Counties will receive approximately ten (10) public inquiry calls from the State Exercise cell assigned this responsibility. Counties will be expected to receive and log the calls, identify any trends and take appropriate actions to include follow-up message development, distributions and/or briefings.

HAB exercises will demonstrate that public information receives approval of law enforcement before release. Each ORO should only be reporting on their areas of operation and not on others such as the law enforcement aspects.

EVALUATION AREA 6

Support Operation / 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.

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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.

OROs 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 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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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 impounded or monitored and decontaminated (if applicable) and do require confirmation that their vehicle is impounded or free from contamination prior to entering the congregate care areas.

PEMA Negotiated Extent of Play:

Radiological monitoring demonstration sites should possess a roster of the monitoring personnel as well as providing a means by which the mass care reception center or others could verify that the person has been monitored and has been deemed uncontaminated. The Radiological Monitoring station(s) should be prepared to monitor 20% of the risk population within a 12 hour period as allocated to that location. In some cases Reception Centers, Monitoring and Decontaminations Centers, and/or Mass Care centers may be collocated.

Water from decontamination activities may go directly to a storm drain or other sewer or drain system or area normally designated for wastewater that has been used for bathing or washing of vehicles and or equipment.

At each <u>reception center</u>, a minimum of three volunteer evacuees will be processed, briefed, issued the appropriate strip map or directions, and instructed to proceed to a mass care center designated for demonstration of monitoring, decontamination, and registration. A sample of the appropriate strip maps or directions will be made available for the demonstration unless

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collocated with mass care and monitoring / decontamination. As negotiated with FEMA, this criterion will be demonstrated but not be evaluated because registration is not done at the reception center.

One mass care center and one mass care monitoring / decontamination center will be demonstrated per support county during the out-of-sequence window. The support counties will provide space at designated mass care centers or reception centers for operation of monitoring / decontamination centers. Schematics of these monitoring /decontamination centers will be available to show the organization within the facility and space management for monitoring and decontamination. Procedures will be demonstrated to evidence the separation of contaminated and non-contaminated (clean) individuals.

At the <u>evacuee monitoring/decontamination center</u>, a minimum of six (6) volunteer evacuees will be monitored (or one volunteer evacuee may be monitored six times). Suitable radiological monitoring instruments will be issued to and demonstrated by the initial monitoring team(s). A monitoring team consists of one monitor and one recorder equipped with one survey instrument. Those individuals found to be free of "contamination", based upon scenario injects, will be directed to the mass care registration point for further processing. Note: Actual radiological sources will not be attached to or hidden upon the volunteer evacuees. Note: If portal monitors are used, the Portal Monitor Extent of Play described below shall be used.

One of the simulated evacuees, based upon controller injects, will not be able to be decontaminated. Discussions concerning the processing of contaminated personnel will include capabilities and written procedures for showering females separate from males. Showering will be simulated, water will not be used. Note: If portal monitors are used, the Portal Monitor Extent of Play described below shall be used.

Portal Monitor Use: Risk and Support counties may, during this exercise, utilize portal monitors to monitor simulated evacuees and/or emergency workers. The monitoring / decontamination team requirements will be based on the portal monitor capabilities as applicable based on the procedure / guidelines, and the recommendations of the manufacturer. **Note:** PEMA guidance shall apply.

Monitoring / decontamination centers are not issued DRDs or KI since the centers and stations are outside the EPZ. Category "C" Dosimetry applies. Personal Record Dosimeters (PRD's) may be simulated.

Radiation readings / contamination data for the evacuees and vehicle will be provided by the controller as appropriate based upon information contained in the scenario package. Set-up of the facility will be performed the same as for an actual emergency with all route markings and contamination control measures in place including step-off pads. Long runs of plastic covered with paper will not be demonstrated, but the materials shall be available and explained. Positioning of a fire apparatus on-site may be simulated if otherwise required.

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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

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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.

PEMA Negotiated Extent of Play:

At the <u>emergency worker</u> <u>monitoring/decontamination stations</u> schematics of these monitoring/decontamination stations will be available to show organization and space management. One emergency worker will be monitored. Discussions concerning processing of contaminated personnel will include capabilities and written procedures for showering females separate from males. Showering will be simulated, water will not be used. Suitable radiological monitoring instruments will be issued to the initial monitoring team. **Note:** If portal monitors are used, the Portal Monitor Extent of Play described below shall be used.

Emergency worker station personnel will consist of a minimum of one monitor and one recorder and sufficient personnel to demonstrate monitoring of at least one vehicle. The evaluator will request that vehicle decontamination procedures be explained after the vehicle (with simulated contamination) has been monitored. One radiological survey meter, will be issued to each vehicle monitoring/decontamination team. One vehicle and/or piece of equipment will not be able to be decontaminated. Simulated radiation contamination data will be included in the scenario package, and injected by a controller. Set-up of the facility will be performed as closely as possible to that for an actual emergency with all route markings in place.

Decontamination capabilities and provisions for vehicles and/or equipment that cannot be decontaminated <u>will</u> be simulated and conducted by interview. Water will NOT be used.

Radiation readings / contamination data for the evacuees and vehicle will be provided by the controller as appropriate based upon information contained in the scenario package. Set-up of

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the facility will be performed the same as for an actual emergency with all route markings and contamination control measures in place including step-off pads. Long runs of plastic covered with paper will not be demonstrated, but the materials shall be available and explained. Positioning of a fire apparatus on-site may be simulated if otherwise required.

Portal Monitor Use: Risk and Support counties may, during this exercise, utilize portal monitors to monitor simulated emergency workers. The monitoring / decontamination team requirements will be based on the portal monitor capabilities as applicable based on the procedure / guidelines, and the recommendations of the manufacturer. **Note:** PEMA guidance shall apply.

Emergency Worker monitoring and decontamination station personnel are not issued DRDs or KI since the centers and stations are outside the EPZ. Category "C" Dosimetry applies. Personal Record Dosimeters (PRD's) may be simulated.

Water from decontamination activities may go directly to a storm drain or other sewer or drain system or area normally designated for wastewater that has been used for bathing or washing of vehicles and or equipment.

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

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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 does 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.

PEMA Negotiated Extent of Play:

Each of the risk or support counties with mass care centers will demonstrate the operation of one mass care center during the out-of-sequence window. Floor plans with flow diagrams of the mass care centers will be available to show organization within the facility and space management during a real emergency. Mass care center locations are listed in the demonstration tables "Demonstration of Mass Care Centers (Attachment A, Section I.B.2)".

Personnel, at a minimum, will consist of one manager and one assistant for each mass care center opened during the out-of-sequence window. The evaluator will expect to see sources and quantities

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of equipment and supplies as well as a staffing chart by job title for 24 hour staffing. Schematics of these mass care centers will be available, during the demonstration window, to show organization within the facility and space allocation for the registration and sheltering the evacuating public.

Necessary signs, directional arrows and forms will be available and used to demonstrate registration, at a minimum, of three evacuees requiring emergency housing. Evacuees will be shown the location where they would be housed in an actual situation. Bedding, cots, food, etc. normally associated with mass care will not be moved to the site, but the sources of those items should be explained to FEMA evaluators.

AMERICAN RED CROSS SUPPORT COUNTY CHAPTERS

For all TMI EPZ risk & support counties except for Schuylkill County:

American Red Cross of Central Pennsylvania 1804 North Sixth Street Harrisburg, Pennsylvania 17102 Chris Weidenhammer, Regional Emergency Services Director, (717) 234-3101 Chris.Weidenhammer@redcross.org

For Schuylkill County:

Schuylkill County Chapter 1402 Laurel Boulevard Pottsville, Pennsylvania 17901 Tim Firestone, Response Specialist, (570) 622-9550 <u>Tim.Firestone@redcross.org</u>

FYI – The Schuylkill County Chapter is in the ARC North East PA region. Adrian Grieve is the Regional Emergency Services Director

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

INTENT

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

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

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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.

OROs 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.

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PEMA Negotiated Extent of Play:

NOTE: This sub-element will be evaluated at Good Samaritan Hospital, Lebanon County, on April 4, 2013.
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REP MANUAL DEMONSTRATION CRITERIA FREQUENCY MATRIX (10/2011)

Note: This matrix is for full implementation of 10/11 manual some criteria frequency listed are not effective until HAB. (1b1, 5a3, 5a4)

Assessment Area and Sub-elements	NUREG- 0654/ FEMA-REP- 1 Criteria	Minimum Evaluation Frequency ^{ss}	Out-of- Sequence Evaluation	Actual Incident Credit	Staff Ass't Visit
1. EMERGENCY OP	ERATIONS MA	NAGEMENT			
a. Mobilization					
1.a.1: OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner.	A.1.a, e; A.3, 4; C.1, 4, 6; D.4; E.1, 2; H.3, 4	At least biennially	YES	YES	NO
b. Facilities					
1.b.1: Facilities are sufficient to support the emergency response.	H.3; G.3.a; J.10.h, J.12; K.5.b	No less than once every 8 years ⁸⁶	YES	YES	YES
c. Direction and Control					
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.	A.1.d; A.2.a,b; A.3; C.4, 6	At least biennially	NO	NO	NO
d. Communications Equipment					
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.	F.1,2	At least biennially	YES ⁸⁷	NO	NO
e. Equipment and Supplies to Support Operations					
1.e.1: Equipment, maps, displays, dosimetry, KI, and other supplies are sufficient to support emergency operations.	H.7, 10; I.7, 8, 9; J.10.a, b, e; J.11, 12; K.3.a; K.5.b	At least biennially	YES	NO	YES
2. PROTECTIVE ACTION DECISION-MAKING					
a. Emergency Worker Exposure Control					
2.a.1: OROs use a decision-making process, considering relevant factors and appropriate coordination, to ensure that an exposure control system, including use of KI, is in place for emergency workers, including provisions to authorize radiation exposure in excess of administrative limits or PAGs.	C.6; J.10.e, f; K.4	At least biennially	NO	NO	NO

Assessment Area and Sub-elements	NUREG- 0654/ FEMA-REP- 1 Criteria	Minimum Evaluation Frequency ^{s5}	Out-of- Sequence Evaluation	Actual Incident Credit	Staff Ass't Visit
b. Dose Assessment & PARs & PADs for the Emergency Event					
2.b.1: Appropriate PARs are based on available information on plant condition, field monitoring data, and licensee and ORO dose projections, as well as knowledge of onsite and offsite environmental conditions.	I.10; Supp. 3	At least biennially	NO	NO	NO
2.b.2: A decision-making process involving consideration of appropriate factors and necessary coordination is used to make PADs for the general public (including the recommendation for use of KI, if ORO policy).	A.3; C.4, 6; D.4; J.9; J.10.f, m	At least biennially	NO	NO	NO
 c. PADs for the Protection of persons with disabilities and access/functional needs 					
2.c.1: PADs are made, as appropriate, for groups of people with disabilities and those with access/functional needs.	D.4; J.9; J.10.d,e	At least biennially	NO	NO	NO
d. Radiological Assessment and Decision- making for the Ingestion Exposure Pathway ⁸⁸					
2.d.1: Radiological consequences for the ingestion pathway are assessed and appropriate PADs are made based on the ORO planning criteria.	A.3; C.1, 4; D.4; J.9, 11	Every ingestion exercise	NO	NO	NO
e. Radiological Assessment & Decision-making Concerning Post-Plume Phase Relocation, Reentry, and Return					
2.e.1: Timely post-plume phase relocation, reentry, and return decisions are made and coordinated as appropriate, based on assessments of radiological conditions and criteria in the ORO's plan and/or procedures.	I.10; J.9; K.3.a; M.1	No less than once every 8 years	NO	NO	NO
3. PROTECTIVE AC	3. PROTECTIVE ACTION IMPLEMENTATION				
a. Implementation of Emergency Worker Exposure Control					
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. Appropriate record-keeping of the administration of KI for emergency workers is maintained.	J.10.e, K.3.a, b, K.4	At least biennially	YES	NO	NO
 Implementation of KI Decision for Institutionalized Individuals and the Public 					
3.b.1: KI and appropriate instructions are made available in case 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.	J.10.e, f	At least biennially ⁸⁹	YES	NO	NO

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Assessment Area and Sub-elements	NUREG- 0654/ FEMA-REP- 1 Criteria	Minimum Evaluation Frequency ^{s5}	Out-of- Sequence Evaluation	Actual Incident Credit	Staff Ass't Visit
 c. Implementation of Protective Actions for persons with disabilities and access/functional needs 					
3.c.1: PADs are implemented for people with disabilities and those with access/functional needs other than schools within areas subject to protective actions.	J.10.c, d, e, g	No less than once every 8 years	YES	YES	YES
3.c.2: OROs/school officials implement protective actions for schools.	J.10.c, d, e, g	No less than once every 8 years ⁹⁰	YES	YES	YES
d. Implementation of Traffic and Access Control ⁹¹					
3.d.1: Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel.	A.3; C.1, 4; J.10.g, j	At least biennially	YES	YES	YES
3.d.2: Impediments to evacuation are identified and resolved.	J.10.k	At least biennially	YES	YES	YES
e. Implementation of Ingestion Pathway Decisions					
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.	A.3; C.1, 4; J.11	Every ingestion exercise	YES	NO	NO
3.e.2: Appropriate measures, strategies, and pre- printed instructional material are developed for implementing PADs for contaminated water, food products, milk, and agricultural production.	G.1, J.9, 11	Every ingestion exercise	YES	NO	NO
f. Implementation of Post-Plume Phase Relocation, Reentry, and Return Decisions					
3.f.1: Decisions regarding controlled reentry of emergency workers and relocation and return of the public during the post-emergency phase are coordinated with appropriate organizations and implemented.	E.7; J.10.j; J.12; K.5.b; M.1,3	No less than once every 8 years	YES	NO	NO
4. FIELD MEASUREMENT AND ANALYSIS					
a. Plume Phase Field Measurement and Analyses					
4.a.1: [RESERVED]	0.1				
4.a.2: Field teams (two or more) are managed to obtain sufficient information to help characterize the release and to control radiation exposure.	H.12; I.7, 8, 11; J.10.a	Every full participation exercise ⁹²	YES	NO	NO

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Assessment Area and Sub-elements	NUREG- 0654/ FEMA-REP- 1 Criteria	Minimum Evaluation Frequency ^{ss}	Out-of- Sequence Evaluation	Actual Incident Credit	Staff Ass't Visit
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.	C.1; I.8, 9; H.12;J.10.a	Every full participation exercise	YES	NO	NO
b. Post Plume Phase Field Measurements and Sampling					
4.b.1: The field teams (two or more) demonstrate the capability to make appropriate measurements and collect samples (e.g., food crops, milk, water, l.8; ingestion vegetation, and soil) to support adequate J.11 exercise assessments and protective action decision-making.		NO	NO		
c. Laboratory Operations					
4.c.1: The laboratory is capable of performing required radiological analyses to support PADs. C.1; 3; J.11 No less than once every 8 years		YES	YES	NO	
5. EMERGENCY NOTIFICATION AND PUBLIC INFORMATION					
a. Activation of the Prompt Alert and Notification System					
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.	E.5, 6, 7	At least biennially	YES	Ю	NO
5.a.2. [RESERVED] 5.a.3: Backup alert and notification of the public is completed within a reasonable time following detection by the ORO of a failure of the primary alert and notification system.	E.6; Appendix 3.B.2.c	No less than once every 8 years	YES	NO	NO
5.a.4: Activities associated with FEMA approved exception areas (where applicable) are completed within 45 minutes of the initial decision by authorized offsite emergency officials to notify the public of an emergency situation.	E.6; Appendix 3.B.2.c	At least biennially	YES	NO	NO
b. Emergency Information and Instructions for the Public and the Media					
5.b.1: OROs provide accurate emergency information and instructions to the public and news media in a timely manner.	E.5, 7; G.3.a; G.4.a, c	At least biennially	YES	NO	NO
6. Support Operation/Facilities					
a. Monitoring, Decontamination, and Registration of Evacuees					
6.a.1: The reception center facility has appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, and registration of evacuees.	A.3; C.4; J.10.h; J.12	No less than once every 8 years ⁹³	YES	YES	NO

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Assessment Area and Sub-elements	NUREG- 0654/ FEMA-REP- 1 Criteria	Minimum Evaluation Frequency ^{s5}	Out-of- Sequence Evaluation	Actual Incident Credit	Staff Ass't Visit
b. Monitoring and Decontamination of Emergency Workers and their Equipment and Vehicles					
6.b.1: The facility/ORO has adequate procedures and resources to accomplish monitoring and decontamination of emergency workers and their equipment and vehicles.		No less than once every 8 years	YES	YES	NO
c. Temporary Care of Evacuees					
6.c.1: Managers of congregate care facilities demonstrate that the centers have resources to provide services and accommodations consistent with planning guidelines. Managers demonstrate the procedures to assure that evacuees have been monitored for contamination and have been decontaminated as appropriate before entering congregate care facilities.	J.10.h; J.12	No less than once every 8 years⁵⁴	YES	YES	YES
d. Transportation and Treatment of Contaminated Injured Individuals					
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.	F.2; H.10; K.5.a,b; L.1, 4	At least biennially ⁹⁵	YES	YES	NO

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APPENDIX C: OPEN ISSUES

COUNTY	NUMBER	FACILITY EVALUATED
Dauphin	64-11-3c2-P-02	Harrisburg City School District Radiological Protection Plan does not reflect procedures in the Shimmel School Plan.
		NOTE: This school has subsequently been closed. No correction needed.

APPENDIX E: 2013 MEDICAL SERVICES Medical Services Exercise

Exercise Plan

EXERCISE

2013 Three Mile Island Generating Station Medical Services Exercise

EVALUATED MEDICAL SERVICES EXERCISE (MS-1)

GOOD SAMARITAN HOSPITAL

Exercise Date: April 4, 2013



FEMA Date Published: January 4, 2013

Medical Services Exercise

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Medical Services Exercise

PREFACE

The 2013 Three Mile Island Generating Station Medical Services Exercise (MS-1) is sponsored by Pennsylvania Emergency Management Agency (PEMA) and the Federal Emergency Management Agency (FEMA). This Exercise Plan (ExPlan) was produced with input, advice, and assistance from the Exercise Planning Team (EPT), which followed the guidance set forth in the Federal Emergency Management Agency (FEMA), Homeland Security Exercise and Evaluation Program (HSEEP).

The ExPlan gives officials, observers, media personnel, and players from participating organizations the information necessary to observe or participate in a nuclear power plant accident response exercise focusing on participants' emergency response plans, policies, and procedures as they pertain to this type of event. The information in this document is current as of the date of publication and is subject to change as dictated by the EPT.

The 2013 Three Mile Island Generating Station Medical Services Exercise is an *unclassified exercise*. The control of information is based more on public sensitivity regarding the nature of the exercise than on the actual exercise content. Some exercise material is intended for the exclusive use of exercise planners, Controllers, and Evaluators, but Players may view other materials deemed necessary to their performance. The ExPlan may be viewed by all exercise participants, *but the Controller and Evaluator (C/E) Handbook is a restricted document intended for Controllers and Evaluators only*.

All exercise participants should use appropriate guidelines to ensure the proper control of information within their areas of expertise and to protect this material in accordance with current jurisdictional directives. Public release of exercise materials to third parties is at the discretion of PEMA.

Medical Services Exercise

HANDLING INSTRUCTIONS

- 1. The title of this document is 2013 Three Mile Island Generating Station Medical Services *Exercise Plan (ExPlan).*
- 2. The information gathered in this ExPlan is *For Official Use Only (FOUO)* and should be handled as sensitive information not to be disclosed. This document should be safeguarded, handled, transmitted, and stored in accordance with appropriate security directives.
- 3. At a minimum, the attached materials will be disseminated only on a need-to-know basis and when unattended, will be stored in a locked container or area offering sufficient protection against theft, compromise, inadvertent access, and unauthorized disclosure.
- 4. For more information, please consult the following point of contact (POC):

<u>Federal POC(s):</u> Matthew Wiedemer Emergency Management Program Specialist Federal Emergency Management Agency 615 Chestnut Street Philadelphia, PA 19106-4404 215-931-5659 matthew.wiedemer@dhs.gov

<u>State POC(s):</u> Robert L. Meinert, MS-1 Coordinator Pennsylvania Emergency Management Agency 2605 Interstate Drive Harrisburg, Pennsylvania 17110 717-651-2215 rmeinert@pa.gov

Laurin Fleming Emergency Management Specialist Pennsylvania Emergency Management Agency 2605 Interstate Drive Harrisburg, PA 17110 717-651-2119 laufleming@pa.gov

Medical Services Exercise

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Medical Services Exercise

CHAPTER 1: GENERAL INFORMATION

Introduction

The 2013 Three Mile Island Generating Station Medical Services Exercise (MS-1) is a Functional Exercise (FE) designed to establish a learning environment for players to exercise emergency response plans, policies, and procedures as they pertain to Nuclear Power Plant accidents. A Functional Exercise is a complex event that requires detailed planning. To conduct an effective exercise, subject matter experts (SMEs) and local representatives from numerous agencies have taken part in the planning process and will take part in exercise conduct and evaluation.

This Exercise Plan (ExPlan) was produced at the direction of the Federal Emergency Management Agency with the input, advice, and assistance of the Commonwealth of Pennsylvania. The 2013 Three Mile Island Generating Station Medical Services Exercise (MS-1) is evidence of the growing partnership between State and local jurisdictions for response to the threats our Nation and communities face.

Confidentiality

The 2013 Three Mile Island Generating Station Medical Services Exercise is an *unclassified exercise*. The control of information is based more on public sensitivity regarding the nature of the exercise than on the actual exercise content. Some exercise material is intended for the exclusive use of exercise planners, controllers, and evaluators, but players may view other materials deemed necessary to their performance. This Exercise Plan may be viewed by all exercise participants, *but the Controller and Evaluator (C/E) Handbook is a restricted document intended for controllers and evaluators only*.

All exercise participants should use appropriate guidelines to ensure the proper control of information within their areas of expertise and protect this material in accordance with current Federal, State and Local directives.

Public release of exercise materials to third parties is at the discretion of the Pennsylvania Emergency Management Agency (PEMA) and the Exercise Planning Team.

Purpose

The purpose of this exercise is to evaluate player actions against current response plans and capabilities for a nuclear power plant-related incident, and to comply with the requirements of 44 CFR 350 and the guidelines of NUREG 0654/FEMA-REP-1. Exercise planners utilized the elements described in the 67 FR 20580 (April 25, 2002) and Interim Radiological Emergency Preparedness (REP) Program Manual (August 2002) to develop this exercise.

The objective of the Pennsylvania Emergency Management Agency and local jurisdictions is to demonstrate reasonable assurance that the public can be protected during a nuclear power plant emergency. 191

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Target Capabilities

The establishment of the National Preparedness Priorities have steered the focus of homeland security toward a capabilities-based planning approach. Capabilities-based planning focuses on planning under uncertainty, since the next danger or disaster can never be forecast with complete accuracy. Therefore, capabilities-based planning takes an all-hazards approach to planning and preparation which builds capabilities that can be applied to a wide variety of incidents. States and Urban Areas use capabilities-based planning to identify a baseline assessment of their homeland security efforts by comparing their current capabilities against the Target Capabilities List (TCL) and the critical tasks of the Universal Task List (UTL). This approach identifies gaps in current capabilities and focuses efforts on identifying and developing priority capabilities and tasks for the jurisdiction. These priority capabilities are articulated in the jurisdiction's homeland security strategy and Multi-Year Training and Exercise Plan (TEP), of which this exercise is a component of.

The capabilities listed below have been selected by the Exercise Planning Team from the priority capabilities identified in Commonwealth of Pennsylvania Multi-Year TEP and the FEMA Interim Radiological Emergency Preparedness Program Manual (August 2002), Exercise Evaluation Criteria. These capabilities provide the foundation for development of the exercise objectives and scenario, as the purpose of this exercise is to measure and validate performance of these capabilities and their associated critical tasks.

- Planning
- Communications
- Community Preparedness and Participation
- WMD/HazMat Response ad Decontamination
- Emergency Triage and Pre-Hospital Treatment
- Medical Supplies Management and Distribution

Exercise Objectives

The Emergency Preparedness Evaluation Areas – the elements and sub elements – for this exercise are those that are required to be demonstrated in every MS-1 Exercise, per 67 FR 20580 (April 25, 2002) and the Interim Radiological Exercise Preparedness (REP) Program manual (August 2001). **Appendix B, Extent of Play**, Shows the emergency preparedness elements that are required to be demonstrated in the 2013 Three Mile Island Generating Station Medical Services Exercise, along with the level of demonstration that will be displayed in the exercise (i.e, fully demonstrated limited demonstration, simulated, Out Of Sequence interviews, not demonstrated).

The objective of this exercise is to demonstrate reasonable assurance that the health and safety of the public can be protected, through successful demonstration of tasks identified in **Appendix B**.

Medical Services Exercise

Outstanding Issues

There was no Areas Requiring Corrective Action (ARCAs) as a result of the previous FEMAevaluated MS-1 Exercise.

Exercise Plan

Medical Services Exercise

CHAPTER 2: EXERCISE LOGISTICS

Exercise Summary

General

The 2013 Three Mile Island Generating Station Medical Services Exercise is designed to establish a learning environment for players to exercise their plans and procedures for responding to a radiological incident. The 2013 Three Mile Island Generating Station Medical Services Exercise will be conducted on April 4, 2013. Exercise play is scheduled for 0800 for four (4) hours or until the Lead Controller in consultation with FEMA and the Utility representative determines that the exercise objectives have been met at each venue.

Assumptions

Assumptions constitute the implied factual foundation for the exercise and, hence, are assumed to be present before the start of the exercise. The following general assumptions apply to the 2013 Three Mile Island Generating Station Medical Services Exercise:

- The exercise will be graded against the REP criteria. Elements outside the scope of the REP criteria will not be graded.
- This exercise will be conducted in a no-fault learning environment wherein systems and processes, not individuals, will be evaluated.
- Exercise simulation will be realistic and plausible, containing sufficient detail from which to respond.
- Exercise players will react to the information and situations as they are presented, in the same manner as if this had been a real event.

Constructs and Constraints

Constructs are exercise devices designed to enhance or improve exercise realism. Alternatively, constraints are exercise limitations that may detract from exercise realism. Constraints may be the inadvertent result of a faulty construct or may pertain to financial and staffing issues. Although there are a number of constructs and constraints (also known as exercise artificialities) for any exercise, the EPT recognizes and accepts the following as necessary:

- Exercise communication and coordination will be limited to the participating exercise venues.
- Communication methods may include Telephone, Mobile Telephone, radio, and other method made available for players to use during the exercise.
- Out-of-Sequence play is allowed.
- Certain simulations are allowed. 194

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The participating agencies may need to balance exercise play with real-world emergencies. It is understood that real-world emergencies will take priority.

Exercise Participants

The following are the categories of participants involved in this exercise; note that the term "participant" refers to all categories listed below, not just those playing in the exercise:

- *Players*. Players are agency personnel who have an active role in responding to the simulated emergency and perform their regular roles and responsibilities during the exercise. Players initiate actions that will respond to and mitigate the simulated emergency.
- *Controllers.* Controllers set up and operate the exercise site; plan and manage exercise play; act in the roles of response individuals and agencies not playing in the exercise. Controllers direct the pace of exercise play and routinely include members from the exercise planning team. They provide key data to players and may prompt or initiate certain player actions to ensure exercise continuity.
- *Evaluators*. Evaluators are chosen to evaluate and provide feedback on a designated functional area of the exercise. They are chosen based on their expertise in the functional area(s) they have been assigned to review during the exercise and their familiarity with local emergency response procedures. Evaluators assess and document participants' performance against established emergency plans and exercise evaluation criteria, in accordance with HSEEP standards and within the bounds of REP Program guidance and regulations. They are typically chosen from amongst planning committee members or the agencies/organizations that are participating in the exercise. FEMA Evaluators will not serve as Controllers.
- *Actors*. Actors are exercise participants who act or simulate specific roles during exercise play. They are typically volunteers who have been recruited to play the role of victims or other bystanders.
- *Observers*. Observers visit or view selected segments of the exercise. Local Observers do not play in the exercise, and do not perform any control or evaluation functions. Local Observers will view the exercise from a designated observation area and will be asked to remain within the observation area during the exercise. PEMA observers may be present at selected locations as assigned by the Lead Controller. VIPs or other visitors will be handled by each agency or location (Municipal EOC, County EOC, etc.) according to those agencies' policies and procedures.
- *Media Personnel.* Some media personnel may be present as observers pending approval by the Pennsylvania Emergency Management Agency (PEMA).
- *Support Staff.* Exercise support staff includes individuals who are assigned administrative and logistical support tasks during the exercise (i.e. registration, catering, etc.

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Exercise Tools

Controller and Evaluator Handbook

The 2013 Three Mile Island Generating Station Medical Services Exercise C/E Handbook is designed to help exercise Controllers and evaluators conduct and evaluate an effective exercise. This Handbook also enables Controllers and Evaluators to understand their roles and responsibilities in exercise execution and evaluation. It is comprised of the Exercise Scenario, Timeline/Event Sequence List and controller prompts.

Master Scenario Events List

The MSEL outlines benchmarks, as well as injects that drive exercise play. It also details realistic input to the exercise players as well as information expected to emanate from simulated organizations (i.e., those nonparticipating organizations, agencies, and individuals who would usually respond to the situation). An inject will include several items of information, such as inject time, intended recipient, responsible controller, inject type, a short description of the event, and the expected player action.

For the 2013 Three Mile Island Generating Station Medical Services Exercise the MSEL will not be used since the scenario in the C/E Handbook incorporates MSEL elements such as the time, expected action and controller prompts/injects.

Exercise Implementation

Exercise Play

Exercise play will begin at approximately 0800 April 4, 2013 with a situation update going to each participating venue. Play will proceed according to the events outlined in the scenario, in accordance with established plans and procedures. The exercise will conclude upon the completion of operations and attainment of the exercise objectives, as determined by the Lead Controller.

Exercise Rules

The following are the general rules that govern exercise play:

- Real-world emergency actions take priority over exercise actions.
- Exercise participants will comply with real-world response procedures, unless otherwise directed by control staff.
- All communications (written, radio, telephone, etc.) made during the exercise will begin and end with the phrase, *"This is an exercise."*

Exercise participants placing telephone calls or initiating radio communication must identify the organization, agency, office, and/or individual with whom they wish to speak.

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Safety Requirements

General

Exercise participant safety takes priority over exercise events. Although the organizations involved in the 2013 Three Mile Island Generating Station Medical Services Exercise come from various response agencies, they share the basic responsibility for ensuring a safe environment for all personnel involved in the exercise. In addition, aspects of an emergency response are dangerous. Professional health and safety ethics should guide all participants to operate in their assigned roles in the safest manner possible. The following general requirements apply to the exercise:

- An exercise Safety Controller will be identified and be responsible for participant safety.
- All exercise controllers, evaluators, and staff will serve as safety observers while the exercise activities are underway. Any safety concerns must be immediately reported to the Safety Controller.
- Participants will be responsible for their own and each other's safety during the exercise. It is the responsibility of all persons associated with the exercise to stop play if, in their opinion, a real safety problem exists. Once the problem is corrected, exercise play can be restarted.
- All organizations will comply with their respective environmental, health, and safety plans and procedures, as well as the appropriate Federal, State, and local environmental health and safety regulations.

Exercise Setup

Exercise setup involves the pre-staging and dispersal of exercise materials; including registration materials, documentation, signage, and other equipment as appropriate.

Accident Reporting and Real Emergencies

- Anyone observing a participant who is seriously ill or injured will first advise the nearest controller to call 911,and state "*This is not an exercise*" prior to explaining the injury or illness then if possible, renders aid, provided the aid does not exceed his or her training.
- The controller who is made aware of a real emergency will initiate the broadcast "*This Is Not An Exercise*" on the controller radio network or telephone, providing the following information to the Lead Controller and Exercise Director:
 - o Venue/function
 - Location within the venue/function
 - o Condition
 - o Requirements

Exercise Plan

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- If the nature of the emergency requires a suspension of the exercise at the venue/function, all exercise activities at that facility will immediately cease. Exercise play may resume at that venue/function once the "Real-World Emergency" situation has been addressed.
- Exercise play at other venue/functions should not cease if one venue/function has declared a "Real-World Emergency" unless they are reliant on the affected venue.
- If a real emergency occurs that affects the entire exercise, the exercise may be suspended or terminated at the discretion of the Exercise Director and Lead Controller.

Site Access

Security

To prevent confusion and interruption of the exercise, access to the exercise sites will be limited to exercise participants only. Players should advise their venue's controller or evaluator if an unauthorized person is present. Each organization should follow its internal security procedures, augmented as necessary to comply with exercise requirements.

Observer Coordination

Each organization with observers will coordinate with the Lead Controller or Exercise Director for access to the exercise site. Observers will be escorted to an observation area for orientation and conduct of the exercise. All observers will be asked to remain within the designated observation area during the exercise. Exercise Director and/or the Observer Controller will be present to explain the exercise program and answer questions for the observers during the exercise. PEMA will assign Observers and Liaison Officers to each site as deemed necessary. Observers are not players and should refer players to a controller or Liaison. Liaisons are players for specific responsibilities.

Parking and Directions

Parking information and directions to each venue area are available from the Lead Controller.

Restroom Facilities

Restroom facilities will be available at each venue.

Exercise Identification

Players, Controllers and Evaluators will display the agency issued Identification badges while the exercise is in play.

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Communications Plan

Exercise Start, Suspension, and Termination Instructions

The exercise is scheduled to run for four (4) hours or until the Lead Controller after consultation with the Lead Evaluator determines that the exercise objectives have been met. The Lead Controller will announce the exercise suspension or termination.

All spoken and written communication will start and end with the statement, "This is AN EXERCISE."

Player Communication

Players will use routine, in-place agency communication systems. Additional communication assets may be made available as the exercise progresses. The need to maintain capability for a real-world response may preclude the use of certain communication channels or systems that would usually be available for an actual emergency incident. In no instance will exercise communication interfere with real-world emergency communications. Each venue will coordinate its own internal communication networks and channels.

The primary means of communication among, Controllers, and the venues will be telephone.

Player Briefing

Controllers/Evaluators may be required to read specific scenario details to the participants to begin exercise play. They may also have technical handouts or other materials to give to players in order to better orient them to the exercise environment.

External Affairs

Any participation by actual media shall be coordinated through the PEMA Press Office, the Good Samaritan Hospital Public Information Office and the Three Mile Island Public Information Office.

Exercise Plan

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CHAPTER 3: PLAYER GUIDELINES

Exercise Staff

Exercise Director

The Exercise Director has the overall responsibility for planning, coordinating, and overseeing all exercise functions. The Exercise Director for the 2013 Three Mile Island Generating Station Medical Services Exercise is the Lead Controller who will manage the exercise activities and maintain a close dialogue with the Controllers regarding the status of play and the achievement of the exercise design objectives.

Trusted Agents

Trusted agents are exercise planners and participants who are responsible for developing the Scenario and the Master Scenario Events List (MSEL). These documents are restricted and are not available to other members of the Exercise Planning Team, Players, or other Participants. The trusted agents for the 2013 Three Mile Island Generating Station MS-1 Exercise include the Exercise Director, Lead Controller, Exelon Nuclear, and the Lebanon County Emergency Management Agency.

Lead Controller

The Lead Controller is responsible for the overall organization of the 2013 Three Mile Island Generating Station MS-1 Exercise. The Lead Controller monitors exercise progress and coordinates decisions regarding deviations or significant changes to the scenario caused by unexpected developments during play. The Lead Controller monitors actions by individual Controllers and ensures they implement all designated and modified actions at the appropriate time. The Lead Controller debriefs the Controllers after the exercise and oversees the setup and takedown of the exercise.

Controllers

At least one controller will be onsite with every facility participating in the exercise. The Lead Facility Controller at each location will coordinate any changes that impact the scenario or affect other areas of play through the Lead Controller. The individual controllers issue exercise materials to players as required and monitor the exercise timeline. Controllers also provide injects to the players as described in the scenario.

Lead Evaluator

The Lead Evaluator is responsible for the overall evaluation of the 2013 Three Mile Island Generating Station MS-1 Exercise. The Lead Evaluator monitors exercise progress and stays in contact with the Lead Controller regarding changes to the exercise during play. The Lead

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Evaluator monitors actions of individual Evaluators and ensures they are tracking progress of the players in accordance with the Overview of Play. The Lead Evaluator debriefs the evaluators after the exercise and oversees the entire evaluation and After Action process. The Lead Evaluator will be the PEMA MS-1 Program Coordinator.

Evaluators

Evaluators work under the direction of the Lead Evaluator, and as a team with Controllers. Evaluators are SMEs who record events that take place during the exercise and assess/submit documentation for review and inclusion in the After Action Report (AAR). Evaluators should refrain from any direct interaction with the players during exercise play except with the facilitation of a Controller for clarification of issues or during scheduled interviews.

Player Instructions

Before the Exercise

- Review the appropriate emergency plans, procedures, and exercise support documents.
- Be at the appropriate site at least 30 minutes before the start of the exercise. Wear appropriate uniform/identification badge.
- If you gain knowledge of the scenario before the exercise, notify a controller so that appropriate actions can be taken to ensure a valid evaluation.
- Read your Player Information Handout, which includes information on exercise safety.
- Please sign in.

During the Exercise

- Respond to the exercise events and information as if the emergency were real, unless otherwise directed by an exercise controller.
- Controllers will only give you information they are specifically directed to disseminate. You are expected to obtain other necessary information through existing emergency information channels.
- Do not engage in personal conversations with controllers, evaluators, observers, or media personnel while the exercise is in progress. If you are asked an exercise-related question, give a short, concise answer. If you are busy and cannot immediately respond, indicate so, but report back with an answer at the earliest time possible.
- If you do not understand the scope of the exercise or if you are uncertain about an organization's or agency's participation in an exercise, ask a controller.
- Parts of the scenario may seem implausible. Recognize that the exercise has objectives to satisfy and may require the incorporation of unrealistic aspects. Note that every effort

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has been made by the trusted agents to balance realism with safety and the creation of an effective learning and evaluation environment.

- All exercise communication will begin and end with the phrase "This is an exercise." This is a precaution taken so anyone overhearing the conversation will not mistake the exercise play for a real-world emergency.
- When communicating with any venue, identify the organization, agency, office, and/or individual with which you want to speak.
- Verbalize out loud when taking an action. This will ensure that evaluators are made aware of critical actions as they occur.
- Maintain a log of your activities. Many times, this log may include documentation of activities missed by a controller or evaluator.

Following the Exercise

- At the end of the exercise at your facility, participate in the Hotwash with the controllers and evaluators.
- Provide all rosters, sign in sheets, logs, messages, notes or materials generated from the exercise to your controller or evaluator for review and inclusion in the After Action Report (AAR).

Simulation Guidelines

Because the 2013 Three Mile Island Generating Station MS-1 Exercise is of limited duration and scope, the physical description of what would fully occur at the incident sites and surrounding areas will be relayed to the Players by Simulators or Controllers.

If a real emergency occurs during the exercise, the exercise at your respective venue may be suspended or terminated at the discretion of the controller(s) at each venue. If a real emergency occurs, say "Real-World Emergency" and notify the nearest Controller and Evaluator.

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CHAPTER 4: EVALUATION AND POST-EXERCISE ACTIVITIES

Exercise Documentation

The goal of the 2013 Three Mile Island Generating Station MS-1 Exercise is to comprehensively exercise and evaluate the OROs' plans and capabilities as they pertain to a potential nuclear power plant incident. After the exercise, data collected by Controllers, Evaluators, and Players will be used to identify strengths and areas for improvement in the context of the exercise design objectives.

Exercise Hotwash

A post exercise debriefing or "hotwash" will occur within a half hour after the completion of the exercise. All hospital and EMS players as well as the Observers, Actors, Controllers and Evaluators will meet in a hospital meeting/conference room to review the exercise play, player performance and any issues identified during the progress of the exercise. All attending will be given the opportunity to identify things that went well (strengths) and areas for improvement.

After Action Report

The AAR is the culmination of the exercise. It is a written report outlining the strengths and areas for improvement identified during the exercise. The AAR will include the timeline, executive summary, scenario description, mission outcomes, and capability analysis. The AAR will be drafted by a core group of individuals from the exercise planning team. The FEMA Site Specialist, as the head evaluator and Team Chief, along with his evaluators, will be responsible for developing the draft After Action Report within 30 days of the date of the exercise. This will be followed by a 30 day review period. Following this, the FEMA team will evaluate the input and develop the final After Action Report by 90 days post exercise.

Improvement Plan

The IP identifies how recommendations will be addressed, including what actions will be taken, who is responsible, and the timeline for completion. It is created by key stakeholders from the 2013 Three Mile Island Generating Station MS-1 Exercise participating agency officials.

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APPENDIX A: EXERCISE SCHEDULE

 Table A.1 MS-1 Exercise Schedule

Time (Tentative)	Personnel	Activity
April 4, 2013		
0730	Exercise Staff Assembly	Exercise Briefing
0800	Exercise Participants	Begin Exercise
0815	Hospital Maintenance Staff	Setup REA
1115	Exercise Staff Assembly	Exercise Debriefing/Hotwash

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APPENDIX B: EXTENT OF PLAY INFORMATION

THREE MILE ISLAND GENERATING STATION GOOD SAMARITAN HOSPITAL MEDICAL SERVICES EXERCISE April 4, 2013

Method of Operation

- 1. The power station and its personnel will not play as active role in the facilitation of this exercise. The plant's simulated events, radiation releases, and emergency classifications will be injected by off-site controllers. A pre-approved scenario will be used.
- 2. The Pennsylvania Emergency Management Agency (PEMA), and Central Area Office will not be activated as part of this exercise. The Exercise Coordinator will provide pre-exercise coordination and observe exercise activities.
- 3. Exelon Nuclear will participate as a Controller in this exercise.
- 4. Lebanon County Emergency Management Agency will participate in this exercise providing pre-exercise coordination and observe exercise activities.
- 5. Controllers will be supplied by PEMA. Controllers are not players and will provide injects and information to initiate and stimulate exercise play by providing radiological readings during the monitoring of personnel. Live radioactive sources will only be used to perform operational checks of radiological monitoring instruments.
- 6. PEMA staff and qualified county emergency management personnel will be assigned to key locations for the purpose of observing, noting response actions and conditions, and recording observations for future use. Observers will not take an active part in the proceedings, but will interact with staff members to the extent necessary to fulfill their observer responsibilities. Coaching of players is not permitted, except as appropriate to provide training to participants awaiting a re-demonstration.
- 7. Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA), Radiological Emergency Preparedness Program (REPP) Evaluators: FEMA Evaluators will be present at designated demonstration locations.
- 8. Exercise activities are scheduled to commence on or about 0800, April 4, 2013 and continue until the participants have completed the exercise objectives and demonstrated the Exercise Evaluation Criteria.

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- 9. Participants and agencies will Stand Down when the Controllers have confirmed with the evaluators that all evaluation criteria have been demonstrated and when the State and County Observers are satisfied that the Objectives have been met.
- 10. An emergency plan is drafted to address the generally expected conditions of an emergency. Not everything in the emergency plan may be applicable for a given scenario. The main purpose of an emergency plan is to assemble sufficient expertise and officials so as to properly react to the events as they occur. The responders should not be so tied to a plan that they cannot take actions that are more protective of the public. Therefore, if, by not following the plan, the responders protect the public equally as well as provided in the plan, it should be noted for possible modification of the plan, but not classified as a negative incident. Furthermore, if, by following the plan there is a failure to protect the public health and safety, it should be noted so that the plan can be modified and the appropriate negative assessment corrected.
- 11. During the exercise any activity that is not satisfactorily demonstrated may be redemonstrated by the participants during the exercise, provided it does not negatively interfere with the exercise. Refresher training may be provided by the players, observers, and/or controllers. Re-demonstrations will be negotiated between the players, observers, controllers, and evaluators. It is permissible to extend the demonstration window, within reason, to accommodate the re-demonstration. Activities corrected from a re-demonstration will be so noted.

Objectives

- A. Demonstrate the ability to respond to a radiation medical emergency following the procedures of Lebanon County Emergency Management Agency, Lafayette Ambulance and Rescue Squad and Good Samaritan Hospital.
- B. Demonstrate timely and accurate communications between the hospital and offsite response agencies. (Telephones will be used in lieu of radios whenever possible to limit the potential misinterpretation of the exercise as an actual event.)
- C. Demonstrate correct priorities and appropriate techniques in EMS, transportation of patients and pre-hospital and hospital emergency care of radioactively contaminated patients.
- D. Demonstrate inter-agency cooperation between the Ambulance Company/ EMS and the Hospital.

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Extent of Play

Evaluation Area 1—Emergency Operations Management Sub-Element 1.e—Equipment and Supplies to Support Operations

Intent

This sub-element derives from NUREG–0654, which provides that Offsite Response Organizations (ORO) have emergency equipment and supplies adequate to support the emergency response.

Criterion 1.e.1: Equipment, maps, displays, dosimetry, potassium iodide (KI), and other supplies are sufficient to support emergency operations. (NUREG-0654, H.7,10; J.10.a, b, e, J.11; K.3.a).

Extent of Play

Equipment within the facility (facilities) should be sufficient and consistent with the role assigned to that facility in the ORO's plans and/or procedures in support of emergency operations. Use of maps and displays is encouraged. All instruments should be inspected, inventoried, and operationally checked before each use. Instruments should be calibrated in accordance with the manufacturer's recommendations. Unmodified CDV–700 series instruments and other instruments without a manufacturer's recommendation should be calibrated in accordance with the recommendation of the modification manufacturer. A label indicating such calibration should be on each instrument, or calibrated frequency can be verified by other means. Additionally, instruments being used to measure activity should have a range of readings sticker affixed to the side of the instrument. The above considerations should be included in 4.a.1 for field team equipment; 4.c.1 for radiological laboratory equipment (does not apply to analytical equipment); reception center and emergency worker facilities' equipment under 6.a.1; and ambulance and medical facilities' equipment under 6.d.1.

Sufficient quantities of appropriate direct-reading and permanent record dosimetry and dosimeter chargers should be available for issuance to all categories of emergency workers that could be deployed from that facility. Appropriate direct-reading dosimetry should allow individual(s) to read the administrative reporting limits and maximum exposure limits contained in the ORO's plans and procedures.

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Dosimetry should be inspected for electrical leakage at least annually and replaced, if necessary. CDV–138s, due to their documented history of electrical leakage problems, should be inspected for electrical leakage at least quarterly and replaced if necessary. This leakage testing will be verified during the exercise, through documentation submitted in the Annual Letter of Certification, and/or through a staff assistance visit.

Responsible OROs should demonstrate the capability to maintain inventories of KI sufficient for use by emergency workers, as indicated on rosters; institutionalized individuals, as indicated in capacity lists for facilities; and, where stipulated by the plan and/ or procedures, members of the general public (including transients) within the plume pathway EPZ.

Quantities of dosimetry and KI available and storage locations(s) will be confirmed by physical inspection at storage location(s) or through documentation of current inventory submitted during the exercise, provided in the Annual Letter of Certification submission, and/or verified during a Staff Assistance Visit. Available supplies of KI should 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.

At locations where traffic and access control personnel are deployed, appropriate equipment (for example, vehicles, barriers, traffic cones and signs, etc.) should be available or their availability described.

All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless noted above or otherwise indicated in the extent of play agreement.

State Negotiated Extent of Play:

In accordance with PEMA standard operating procedures ambulance crews operating outside the 10 mile Emergency Planning Zone are considered 'Category C" emergency workers; therefore, they are only required to implement protective measures consistent with protection against blood-borne pathogens; i.e., long sleeved garments, trousers, impermeable gloves, and surgical masks. Ambulance "Category C" emergency workers are not issued dosimetry or KI unless they are tasked to enter the 10 mile EPZ. At that time the county will issue what is needed.

Hospital personnel are also considered "Category C" emergency workers and will conform to PEMA SOP protective measures at minimum. Direct Reading Dosimeters may be issued individually; however, an Area Kit will be established in the Radiation Emergency Area (REA). Individual PRDs will be issued by the hospital. Radiological Survey Instruments are calibrated per manufactures recommendations.

Exercise Plan

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Outstanding Issues:

None

Evaluation Area 3—Protective Action Implementation Sub-Element 3.a—Implementation of Emergency Worker Exposure Control

Intent

This sub-element derives from NUREG–0654, which provides that OROs should have the capability to provide for the following: distribution, use, collection, and processing of direct-reading dosimetry and permanent record dosimetry; the reading of direct-reading dosimetry by emergency workers at appropriate frequencies; maintaining a radiation dose record for each emergency worker; and establishing a decision chain or authorization procedure for emergency workers to incur radiation exposures in excess of protective action guides, always applying the ALARA (As Low As is Reasonably Achievable) principle as appropriate.

Criterion 3.a.1: The OROs issue appropriate dosimetry and procedures, and manage radiological exposure to emergency workers in accordance with the plans and 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. (NUREG– 0654, K.3.a, b).

Extent of Play

OROs should demonstrate the capability to provide appropriate direct-reading and permanent record dosimetry, dosimeter chargers, and instructions on the use of dosimetry to emergency workers. For evaluation purposes, appropriate direct-reading dosimetry is defined as dosimetry that allows individual(s) to read the administrative reporting limits (that are pre-established at a level low enough to consider subsequent calculation of Total Effective Dose Equivalent) and maximum exposure limits (for those emergency workers involved in life saving activities) contained in the ORO's plans and procedures.

Each emergency worker should have the basic knowledge of radiation exposure limits as specified in the ORO's plan and/or procedures. Procedures to monitor and record dosimeter readings and to manage radiological exposure control should be demonstrated.

During a plume phase exercise, emergency workers should demonstrate the procedures to be followed when administrative exposure limits and turn-back values are reached. The emergency worker should report accumulated exposures during the exercise as indicated in the plans and procedures. OROs should demonstrate the actions described in the plan and/or procedures by

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determining whether to replace the worker, to authorize the worker to incur additional exposures or to take other actions. If scenario events do not require emergency workers to seek authorizations for additional exposure, evaluators should interview at least two emergency workers, to determine their knowledge of whom to contact in the event authorization is needed and at what exposure levels. Emergency workers may use any available resources (for example, written procedures and/or co-workers) 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 and adequate control of exposure can be affected for all members of the team by one dosimeter worn by the team leader. Emergency workers who are assigned to low exposure rate areas, for example, at reception centers, counting laboratories, emergency operations centers, and communications centers, may have individual direct-reading dosimeters or they may be monitored by dosimeters strategically placed in the work area. It should be noted that, even in these situations, each team member must still have their own permanent record dosimetry. Individuals without specific radiological response missions, such as farmers for animal care, essential utility service personnel, or other members of the public who must re-enter an evacuated area following or during the plume passage, should be limited to the lowest radiological exposure commensurate with completing their missions.

All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless noted above or otherwise indicated in the extent of play agreement.

State Negotiated Extent of Play:

- Demonstrate appropriate procedures and equipment to manage radiological exposure to *staff*.
- Demonstrate the ability to transport contaminated/injured individuals while using ALARA principles.
- Demonstrate the ability to utilize dosimetry, equipment and procedures to manage radiological exposure to emergency workers as required by plans

Radiological briefings will be provided to address exposure limits and procedures to replace personnel approaching limits and how permission to exceed limits is obtained. At any time, players may ask other players or supervisors to clarify radiological information. In Pennsylvania, emergency workers outside the EPZ do not have turn-back values. Standard issue of dosimetry and potassium iodide for each category of emergency worker is as follows:

Category A: 1 PRD, 1 DRD, and 1 unit of KI Category B: 1 PRD and 1 unit of KI Category C: 1 PRD

Exercise Plan

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All locations that have dosimetry equipment indicated within their Radiological Emergency Response Plan (RERP) will make the dosimetry equipment (and KI, as appropriate) available for inspection by the Federal Evaluator. Simulation PRDs with mock serial numbers may be used.

Outstanding Issues:

None

Evaluation Area 6—Support Operation/ Facilities Sub-Element 6.d—Transportation and Treatment of Contaminated Injured Individuals

Intent

This sub-element derives from NUREG–0654, which provides that Offsite Response Organizations (ORO) should have the capability to transport contaminated injured individuals to medical facilities with the capability to provide medical services.

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

Extent of Play

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

Offsite Response Organizations (ORO) should demonstrate the capability to transport contaminated injured individuals to medical facilities. An ambulance should be used for the response to the victim. However, to avoid taking an ambulance out of service for an extended time, any vehicle (for example, car, truck, or van) may be used to transport the victim to the medical facility. Normal communications between the ambulance/dispatcher and the receiving medical facility should be demonstrated. If a substitute vehicle is used for transport to the medical facility, this communication must occur before releasing the ambulance from the exercise. This communication would include reporting radiation monitoring results, if available. Additionally, the ambulance crew should 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, done en route, or deferred to the medical facility. Before using a monitoring instrument(s), the monitor(s) should demonstrate the

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process of checking the instrument(s) for proper operation. All monitoring activities should be completed as they would be in an actual emergency. Appropriate contamination control measures should be demonstrated before and during transport and at the receiving medical facility.

The medical facility should demonstrate the capability to activate and set up a radiological emergency area for treatment. Equipment and supplies should be available for the treatment of contaminated injured individuals.

The medical facility should demonstrate the capability to make decisions on the need for decontamination of the individual, to follow appropriate decontamination procedures, and to maintain records of all survey measurements and samples taken. All procedures for the collection and analysis of samples and the decontamination of the individual should be demonstrated or described to the evaluator.

All activities associated with this criterion must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless noted above or otherwise indicated in the extent of play agreement.

State Negotiated Extent of Play:

Demonstrate that the facility has the appropriate space, adequate resources and trained personnel to provide monitoring, decontamination and medical services to contaminated/injured individuals.

Demonstrate the ability to transport contaminated/injured individuals while using ALARA principles.

The Ambulance Service will pick-up a pre-staged simulated contaminated/injured victim.

Outstanding Issues:

None

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GOOD SAMARITAN HOSPITAL Medical Services Exercise (MS-1)

April 4, 2013

EXERCISE SUMMARY

The purpose of this exercise is to demonstrate the capabilities of the emergency response organizations in Lebanon County in handling contaminated/injured persons and to satisfy both the hospital's requirement for an emergency/drill and the "Medical Services Guidance Memorandum MS-1".

PARTICIPANTS

Good Samaritan Hospital First Aid & Safety Patrol Lebanon County Emergency Management Agency

CONTROLLERS

Pennsylvania Emergency Management Agency Lebanon County Emergency Management Agency EXELON

EVALUATORS

Department of Homeland Security, Federal Emergency Management Agency

OBSERVERS

Lebanon County Emergency Management Agency Pennsylvania Emergency Management Agency EXELON

Medical Services Exercise

SCHEDULE OF EVENTS

Good Samaritan Hospital

08:00 AM Exercise begins.

08:05 AM Hospital is notified that the emergency at the Three Mile Island (TMI) has escalated to a **Site Area Emergency.**

- 08:15 AM Hospital is notified that the emergency at TMI has escalated to a General Emergency.
- 08:35 AM Hospital is notified that there is a victim injured and potentially contaminated.
- 09:05 AM Victim arrives at the hospital.
- 11:00 AM After the patient is stabilized and decontaminated; clean-up of the area begins (explained). Exercise ends.
- 11:15 AM Critique (Hotwash) at hospital immediately following the exercise.

First Aid & Safety Patrol

- 08:00 AM Exercise begins.
- 08:05 AM Ambulance is notified that the emergency at the Three Mile Island (TMI) has escalated to a **Site Area Emergency.**
- 08:15 AM Ambulance is notified that the emergency at TMI has escalated to a General Emergency.
- 08:25 AM An ambulance is requested to report to the accident site to pick up an injured and potentially contaminated individual.

(Simulated - Staging will be at the HazMat Station Headquarters, 641 Oak Street, Lebanon, PA) (Controller Note: Ambulance to notify the hospital of potentially contaminated injured patient by 08:35. See Controller Prompts)

08:55 AM Ambulance leaves for hospital.
Medical Services Exercise

- 09:05 AM Ambulance arrives at the hospital.
- 09:20 AM Exercise ends for ambulance crew.

NOTE: Ambulance will respond without siren and lights.

11:15 AM Critique (Hotwash) at hospital immediately following the exercise.

SCENARIO

- 08:05 AM Ambulance and the hospital are notified that an emergency at TMI has escalated to a Site Area Emergency.
- 08:15 AM Ambulance and hospital are notified that the TMI incident has escalated to General Emergency.
- 08:25 AM Ambulance is requested to report to the monitoring decontamination center accident scene to pick up an injured and potentially contaminated victim. (*Simulated Staging will be at the HazMat Station Headquarters, 641 Oak Street, Lebanon, PA*)
- 08:35 AM Hospital is notified that an injured, potentially contaminated victim will be brought in for treatment. (*Controller Note: Ambulance to notify the hospital of potentially contaminated injured patient by 08:35. See Controller Prompts*)
- 08:55 AM Ambulance leaves for the hospital.
- 09:05 AM Ambulance arrives at the hospital. Hospital Staff initiates control of ambulance and patient.
- 09:10 AM Hospital staff takes control of the contaminated/injured person. Ambulance and crew are monitored before being released.
- 09:20 AM Exercise ends for ambulance crew
- 11:00 AM After the patient is stabilized and decontaminated; clean-up of the area begins (explained)
- 11:15 AM Exercise ends followed by a critique (hotwash) at the hospital.

OBJECTIVES

A. Demonstrate the ability to respond to a radiation medical emergency following Lebanon County Emergency Management Agency, First Aid & Safety Patrol and Good Samaritan Hospital procedures. After Action Report/Improvement Plan

Exercise Plan

Medical Services Exercise

- B. Demonstrate timely and accurate communications between the hospital and offsite response agencies. (Telephones will be used in lieu of radios whenever possible to limit the potential misinterpretation of the exercise as an actual event.)
- C. Demonstrate correct priorities and appropriate techniques in EMS, transportation of patients and pre-hospital and hospital emergency care of radioactively contaminated patients.
- D. Demonstrate inter-agency cooperation between the Ambulance Service/EMS and the Hospital.

CONTROLLER PROMPTS

- 08:05 AM The <u>county controller</u> notifies the ambulance and the hospital that the plant has declared a <u>Site Area Emergency</u>. Instruct staff to prepare for possible contaminated/injured victim.
- 08:15 AM The <u>county controller</u> notifies the ambulance and the hospital that the plant has declared a General Emergency.
- 08:25 AM The <u>county controller</u> notifies the <u>ambulance</u> to pick up a contaminated/injured victim. (*Simulated staged at the HazMat Station Headquarters, 641 Oak Street, Lebanon, PA*)
- 08:35 AM The <u>county controller</u> ensures that EMS notifies the Hospital that a potentially contaminated injured victim is being brought in. The nature of the injuries and the extent of contamination is unknown at this time.
- 08:35 AM The <u>ambulance</u> notifies the <u>hospital</u> that a contaminated/injured victim is being brought in. The nature of the injuries and the extent of contamination is unknown at this time. (First Aid & Safety Patrol)
- 08:55 AM The <u>county controller</u> release the **ambulance** to leave for the hospital at this time. Controller cautions the driver not to use emergency lights or sirens. All communications should be precede and conclude with "THIS IS AN EXERCISE"

CONTROLLER NOTE: If the ambulance crew does not have monitoring equipment, the patient should be treated as **potentially contaminated** and injuries communicated to the crew as indicated in the attachments. During hospital monitoring of the victim, inform the monitor of the injuries and contamination levels as indicated by the attachments.

After Action Report/Improvement Plan

Three Mile Island Nuclear Generating Station

Exercise Plan

Medical Services Exercise

CONTROLLER ASSIGNMENTS

Communications All other Lebanon County PEMA & EXELON

Begin and end all communications with "THIS IS AN EXERCISE"

Medical Services Exercise

ATTACHMENT 1

INJURED PERSON

Situation: During an incident at Three Mile Island Generating Station (TMI), an evacuee arriving at a Monitoring and Decontamination Station for the TMI10-Mile Emergency Planning Zone fell at the entryway of the facility prior to monitoring, landing hard on his hands and knees. The victim is conscious and complaining of neck pain and some left leg pain around the knee. First Aid & Safety Patrol was dispatched to the scene to provide medical support and transport to the nearest MS-1 Hospital.

Injuries: Victim has a small laceration on the left knee found on survey and is complaining of neck pain and pain in the left knee area.

<u>Contamination:</u> (Initial): Right palm - 1000 cpm, Left palm - 1000 cpm Left Knee area – 1100 cpm

Blood Pressure: 136/78 Pulse: 112 Breathing: 24 Temperature: Normal Nausea: No Vision: Clear, eyes equal and reactive (PEARLA) No Known Allergies. Complaint of neck pain and pain at left knee. Patient will indicate pain upon palpation. Upon inspection, EMS can see minor bleeding at the knee laceration.

Patient may give own responses to all other queries

Medical Services Exercise

ATTACHMENT 2

BODY MAP

Yellow indicates areas of contamination Red indicates injury

- A) Victim is complaining of cervical neck pain and left leg pain (knee).
- B) Contamination is as follows: Left Knee- 1100 cpm (Initial)
 - Right palm 1000 cpm (Initial)

Left palm 1000 cpm (Initial)



Patient pain complaint in the neck is nuisance pain upon movement and limits range of motion. If X-rays are taken, the hospital will find nothing notable. The knee laceration shows minor bleeding when inspected. Gross decontamination should be accomplished at the scene. Controller will give initial and follow on contamination injects at the hospital. Readings will be lowered by controller after successful decontamination demonstration. Evaluator and Controller may ask questions as the exercise progresses.

Medical Services Exercise

MS-1 EXERCISE NOTES

<u>Communications</u> Radio Telephone

Pagers Call back (verification) Relay and accuracy of patient information Inter staff communications

Contamination Control

Glove changes Control of run off & Cross Contamination Control of contaminated waste Remove blankets and backboard from gurney Decontamination of victim/staff Set up of REA

Patient Care

Life threatening injury takes precedence over contamination Treatment of injury Patient reassurance Documentation X-Rays Swabbing i.e. mouth, eyes, nose, collection of dressings, blood, urine, etc. (evidence and lab)

Protective clothing

Seal openings gloves, boots, use face shields, and cover exposed skin **Double glove (Glove Changes)** Decon posters and (Exiting procedures from the REA – Disrobing)

Equipment & Supplies

Survey Meters (calibrated) Dosimeters – DRD's (Leak Tested) PRD's Monitoring Procedures Decontamination Kit & Supplies – Check for expiration dates

OTHER

Security Documentation of readings (forms) After Action Report/Improvement Plan

Exercise Plan

Medical Services Exercise

NOTES:

Medical Services Exercise

THIS IS AN EXERCISE

CONTROLLER/EVALUATOR NOTES

TOPIC	FIRST	AID &	GOOD SAMARITAN
	SAFETY	PATROL	HOSPITAL
Communications			
Contamination Control			
Clean Transfer			
Equipment			
Monitoring Procedures			
Degenteminetien			
Decontalimation			
Porgonal Protogtive Clothing			
reisonal riocective cloching			
Dosimetry			
Patient Care			
Response time			
Radiation Emergency Area			
(REA)Set-Up or Hot Zone			
Control			
Disrobing Procedures			
security			
Clove changes			
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