



**FEMA**

DEC 13 2010

NRC Headquarters Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

To Whom It May Concern:

Enclosed is one copy of the Final Report for the August 24, 2010, Radiological Emergency Preparedness (REP) Full Participation Plume Exposure Pathway Exercise for the Prairie Island Nuclear Generating Plant (PINGP). The State of Minnesota Dakota and Goodhue Counties, the State of Wisconsin and Pierce County, and the utility owner/operator, Exelon Nuclear, participated in this exercise.

No Deficiencies were identified for the State of Minnesota or for Dakota and Goodhue Counties during this exercise. No Areas Requiring Corrective Action (ARCAs) were identified for the State of Minnesota or the Counties of Goodhue and Dakota during this exercise. There was one Planning Issue identified for the State of Minnesota and one Planning Issue identified for Dakota County. One ARCA for the State of Minnesota from a prior exercise was successfully re-demonstrated.

The ARCA that was resolved for the State of Minnesota was identified under Criterion 5.b.1 – OROs provide accurate emergency information and instructions to the public.

The Planning Issue for the State of Minnesota was identified under Equipment and Supplies to Support Operations, Criterion 1.e.1- Equipment, Maps, displays, dosimetry, potassium iodide (KI), and other supplies are sufficient to support emergency operations, whereby the Emergency Medical Crew were provided a 0-200mR Direct-Reading Dosimeter (DRD). This DRD is not able to read turn-back values of 1 R or total exposure limits of 3 R in accordance with current State of Minnesota Plans and Procedures.

The Planning Issue for Dakota County was identified under Equipment and Supplies to Support Operations, Criterion 1.e.1- Equipment, Maps, displays, dosimetry, potassium iodide (KI), and other supplies are sufficient to support emergency operations, whereby the Radiological Officer had 26 (Model 622, 0-20 R) DRDs, 13 of which were expired requiring recertification in 2008.

There were also three DRDs that had stickers marked "failed" on them. The inventory of DRDs was not checked by the RO upon delivery, or prior to being packaged for distribution to Emergency Workers.

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To Whom It May Concern

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No Deficiencies were identified for the State of Wisconsin or for Pierce County during this exercise. There was one Area Requiring Corrective Action (ARCA) identified for the State of Wisconsin. There was one ARCA from a previous exercise that was successfully re-demonstrated. One Planning Issue was identified for the State of Wisconsin. One ARCA was not demonstrated from a previous exercise. This ARCA (number 33-09-1c1-A-01) will be demonstrated during the Point Beach REP Exercise in October 2010, in accordance with the extent-of-play agreement. No ARCAs were identified for Pierce County during this exercise.

The ARCA that was resolved for the State of Wisconsin was identified under Criterion 5.b.1 – OROs provide accurate emergency information and instructions to the public.

The ARCA for the State of Wisconsin was identified under Implementation of Emergency Worker Control, Criterion 3.a.1- The Offsite Response Organizations (ORO) issue appropriate dosimetry and procedures and managed radiological exposure to emergency workers in accordance with the plans and procedures, whereby emergency workers were not briefed of their correct exposure limits nor did they know what their correct exposure limits were when they were interviewed.

The Planning Issue for the State of Wisconsin was identified under Criterion 2.b.2 - A decision-making process involving consideration of appropriate factors and necessary coordination is used to make protective action decisions for the general public (including the recommendation for the use of KI, if ORO policy), whereby various State of Wisconsin staff used inaccurate procedures to provide Pierce County with protective action recommendations based on their "home rule" status.

A detailed discussion of these issues can be found in Part IV of the Final Report.

Based on the results of the August 24, 2010, exercise, the offsite radiological emergency response plans and preparedness for the States of Minnesota and Wisconsin and affected local jurisdictions, site-specific to the PINGP, can be implemented and are adequate to provide reasonable assurance that appropriate measures can be taken offsite to protect the health and safety of the public in the event of a radiological emergency at the site.

Therefore, the Title 44 CFR, Part 350, approval of the offsite radiological emergency response plans and preparedness for the States of Minnesota and Wisconsin site-specific to the PINGP, granted on December 4, 1981, remains in effect.

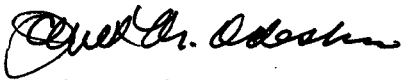
Copies of this report have been provided to the DHS/FEMA National Office, Nuclear Regulatory Commission (NRC) Region III and the States of Minnesota and Wisconsin.

To Whom It May Concern

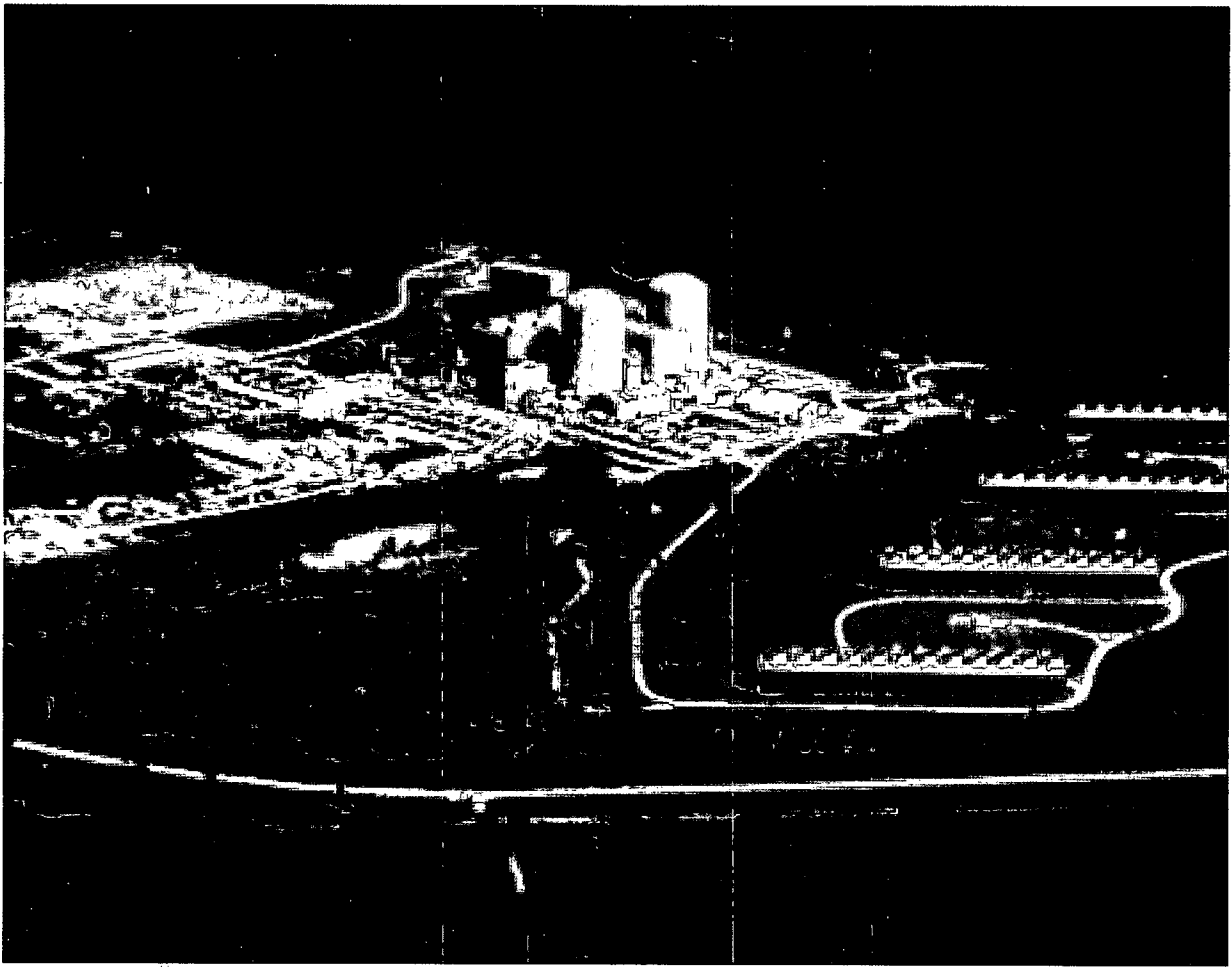
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If you have any questions, please contact William E. King, Chairman, Regional Assistance Committee, DHS/FEMA, Region V, at (312) 408-5575.

Sincerely,

  
Andrew Velasquez  
Regional Administrator

Enclosure (1)



Prairie Island Nuclear Generating Plant

# After Action Report/ Improvement Plan

Exercise Date - August 24, 2010

Radiological Emergency Preparedness (REP) Program



**FEMA**

*Published December 13, 2010*

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# Prairie Island Nuclear Generating Plant After Action Report/Improvement Plan

*Published December 13, 2010*

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## EXECUTIVE SUMMARY

On August 24, 2010, a Radiological Emergency Preparedness (REP) Full Participation Plume Exposure Pathway Exercise evaluation was conducted by the U.S. Department of Homeland Security (DHS)/Federal Emergency Management Agency (FEMA) for the 10-mile Emergency Planning Zone (EPZ) around the Prairie Island Nuclear Generating Plant (PINGP). The purpose of the exercise was to assess the level of State and local preparedness in responding to a radiological emergency. This exercise was held in accordance with DHS/FEMA's policies and guidance concerning the exercise of State and local Radiological Emergency Response Plans (RERPs) and procedures.

The most recent exercise at this site was conducted on July 22, 2008. The qualifying emergency preparedness exercise was conducted on December 8, 1981.

DHS/FEMA wishes to acknowledge the efforts of the many individuals who participated in this exercise. In the State of Minnesota, the risk counties of Goodhue and Dakota participated along with State Government and the Prairie Island Indian Community. In the State of Wisconsin, the risk county of Pierce participated along with State Government.

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 on the part of all the participants were evident during this exercise.

This Final Report contains the evaluation of the biennial exercise and the evaluation of the following out-of-sequence interviews and activities:

### State of Minnesota

- Medical Services Transportation and Hospital evaluation at Regions Hospital

### Goodhue County

- There were no out-of-sequence activities

#### Dakota County

- Emergency Worker Monitoring and Decontamination at the Hastings Fire Department
- Emergency Worker Vehicle Monitoring and Decontamination at the Hastings Fire Department

#### Wright County

- Protective Actions for Schools (EV-2) for the Kaleidoscope Charter School

#### State of Wisconsin

- Medical Services Hospital evaluation at Sacred Heart Hospital
- Monitoring and Decontamination of Evacuees and Emergency Workers at the Elmwood School
- Monitoring and Decontamination of Emergency Worker's equipment

#### Pierce County

- Protective Actions for Schools (EV-2) for the Lindgren Learning Center
- Public Registration at the Elmwood School
- Medical Services Transportation at Elmwood School
- Medical Services Transportation evaluation for the Ellsworth Area Ambulance Service

Except where noted in this report, the State and local organizations demonstrated knowledge of and adequately implemented their emergency response plans and procedures.

No Deficiencies were identified for the State of Minnesota or for Dakota and Goodhue Counties during this exercise. No Areas Requiring Corrective Action (ARCAs) were identified for the State of Minnesota or the Counties of Goodhue and Dakota during this exercise. There was one Planning Issue identified for the State of Minnesota and one Planning Issue identified for Dakota County. One ARCA for the State of Minnesota from a prior exercise was successfully re-demonstrated.

The ARCA that was resolved for the State of Minnesota was identified under Criterion 5.b.1 – OROs provide accurate emergency information and instructions to the public.

The Planning Issue for the State of Minnesota was identified under Equipment and Supplies to Support Operations, Criterion 1.e.1- Equipment, Maps, displays, dosimetry, potassium iodide (KI), and other supplies are sufficient to support emergency operations, whereby the Emergency

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Medical Crew were provided a 0-200mR direct-reading dosimeter (DRD). This DRD is not able to read turn-back values of 1 R or total exposure limits of 3 R in accordance with current State of Minnesota Plans and Procedures.

The Planning Issue for Dakota County was identified under Equipment and Supplies to Support Operations, Criterion 1.e.1- Equipment, Maps, displays, dosimetry, potassium iodide (KI), and other supplies are sufficient to support emergency operations, whereby the Radiological Officer (RO) had 26 (Model 622, 0-20 R) DRDS, 13 of which were expired requiring recertification in 2008. There were also three DRDs that had stickers marked "failed" on them. The inventory of DRDs was not checked by the RO upon delivery, or prior to being packaged for distribution to Emergency Workers.

No Deficiencies were identified for the State of Wisconsin or for Pierce County during this exercise. There was one Area Requiring Corrective Action (ARCA) identified for the State of Wisconsin. There was one ARCA from a previous exercise that was successfully re-demonstrated. No ARCAs were identified for Pierce County during this exercise. One ARCA was not demonstrated from a previous exercise. This ARCA (number 33-09-1c1-A-01) will be demonstrated during the Point Beach REP Exercise in October 2010, in accordance with the extent-of-play agreement.

The ARCA that was resolved for the State of Wisconsin was identified under Criterion 5.b.1 – OROs provide accurate emergency information and instructions to the public.

The ARCA for the State of Wisconsin was identified under Implementation of Emergency Worker Control, Criterion 3.a.1- The Offsite Response Organizations (ORO) issue appropriate dosimetry and procedures and managed radiological exposure to emergency workers in accordance with the plans and procedures, whereby emergency workers were not briefed of their correct exposure limits nor did they know what their correct exposure limits were when they were interviewed.

The Planning Issue for the State of Wisconsin was identified under Criterion 2.b.2, A decision-making process involving consideration of appropriate factors and necessary coordination is used to make protective action decisions (PAD) for the general public(including the recommendation for the use of KI, if ORO policy), whereby various State of Wisconsin staff used inaccurate procedures to provide Pierce County with Protective Action Recommendations based on their

"home rule" status.

Section 3 of this report, entitled "Analysis of Capabilities" presents detailed information on the ARCAs and Planning Issues.

## INTRODUCTION - EXERCISE BASIS

On December 7, 1979, the President directed FEMA to assume the lead responsibility for all offsite nuclear planning and response. DHS/FEMA's activities are conducted pursuant to 44 Code of Federal Regulations (CFR) Parts 350 "Review and Approval of State and Local Radiological Emergency Plans and Preparedness", 351 "Radiological Emergency Planning and Preparedness" and 352 "Commercial Nuclear Power Plants: Emergency Preparedness Planning." These regulations are a key element in the Radiological Emergency Preparedness (REP) Program that was established following the Three Mile Island Nuclear Station accident in March 1979.

The FEMA Rule 44 CFR 350 establishes the policies and procedures for DHS/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 governments' participation in joint exercises with licensees.

DHS/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 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 Federal agencies with responsibilities in the radiological emergency planning process:
  - U.S. Department of Agriculture;
  - U.S. Department of Commerce;
  - U.S. Department of Energy;

- 
- U.S. Department of Health and Human Services;
  - U.S. Department of the Interior;
  - U.S. Department of Transportation;
  - U.S. Environmental Protection Agency;
  - U.S. Food and Drug Administration; and
  - U.S. Nuclear Regulatory Commission.

Representatives of these agencies serve on the DHS/FEMA Region V Regional Assistance Committee (RAC), which is chaired by DHS/FEMA.

Formal submission of the RERPs for the Prairie Island Nuclear Generating Plant to FEMA Region V by the State of Minnesota and involved local jurisdictions occurred on March 12, 1981, and the State of Wisconsin and involved local jurisdictions on April 6, 1981. Formal approval of these RERPs was granted by FEMA to the State of Minnesota during September 1985 and to the State of Wisconsin during May 1985, under 44 CFR 350.

A REP Full Participation Plume Exposure Pathway Exercise was conducted on August 24, 2010, and evaluated by DHS/FEMA to assess the capabilities of State and local offsite emergency preparedness organizations in implementing their RERPs and procedures to protect the public health and safety during a radiological emergency involving the Prairie Island Nuclear Generating Plant. The purpose of this exercise report is to present the exercise results and findings on the performance of the Offsite Response Organizations (ORO) during a simulated radiological emergency.

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

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

- 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-14, "Radiological Emergency Preparedness Exercise Manual," September 1991;

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and

- FEMA "Radiological Emergency Preparedness: Exercise Evaluation Methodology; Notice" as published in the Federal Register Notice, Vol. 67, No. 80, dated April 25, 2002.

Section 1 of this report, entitled "Exercise Overview", presents information pertaining to the team that planned and coordinated the exercise. This section also provides listing of all participating jurisdictions and functional entities that were evaluated.

Section 2 of this report, entitled "Exercise Design Summary", contains the purpose and design of the exercise, a description of the plume pathway EPZ and presents basic information and data relevant to the exercise scenario.

Section 3 of this report, entitled "Analysis of Capabilities," presents detailed information on the demonstration of applicable exercise criteria at each jurisdiction or functional entity evaluated in a jurisdiction-based, issues-only format. This section also contains: (1) descriptions of all Deficiencies and ARCAs (if any) assessed during this exercise, recommended corrective actions, and the State and local governments' schedule of corrective actions, if applicable, for each identified exercise issue; and (2) descriptions of unresolved ARCAs assessed during previous exercises and the status of the OROs efforts to resolve them.

Section 4 of this report, entitled "Conclusion" presents the DHS/FEMA summary of overall exercise conduct and results as evaluated against the requirements of 44 CFR 350.

#### EMERGENCY PLANNING ZONE (EPZ) DESCRIPTION

The Xcel Energy Corporation owns and operates the PINGP. The plant consists of two pressurized water reactors (Units 1 and 2); both rated at 560 megawatts (MW). The operating licenses for the facility were granted in August 1973 (Unit 1) and October 1974 (Unit 2). Commercial operations began at the site during December 1973 (Unit 1) and December 1974 (Unit 2). The plant site consists of approximately 560 acres located in the City of Red Wing (2010 population: 16,116) on the west bank of the Mississippi River in Goodhue County, Minnesota. The latitude of the site is 44° 37'3" north and the longitude is 92° 37'9" west. The property is level to slightly rolling. The site elevation ranges from 675 to 706 feet above mean sea level (msl). The Mississippi River flows from northeast to southwest through the 10-mile

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EPZ. The Vermillion River flows northwest to southeast. Steep bluffs surround the river, rising to more than 1,000 feet above msl about 1½ miles northeast and southwest of the site. The following Sub-Areas are included within the 10-mile EPZ: Sub-Areas 2, 5N, 5E, 5S, 5W, 10N, 10NE, 10E, 10SE, 10SW, 10W and 10NW.

The total plume pathway EPZ population is 29,241 (2003 Xcel data). The nearest large population centers are St. Paul, Minnesota (2000 population 287,151), 26 miles northwest of the site; seven counties Minneapolis St. Paul, Minnesota (2,642,056), 26 miles northwest of the site; Rochester, Minnesota (80,168), 41 miles south; and Eau Claire, Wisconsin (51,000), 55 miles east-northeast. Goodhue County, in which the site is located, and the adjacent counties (Dakota in Minnesota and Pierce in Wisconsin) are predominately rural. Located within two miles of the site, however, is a Native-American-owned gambling casino, the Treasure Island Casino, which is situated on the Prairie Island reservation, which has an average daily attendance of 23,000 persons per day. The remaining land within a 10-mile radius of the site is almost exclusively agricultural.



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## SECTION 1: EXERCISE OVERVIEW

### 1.1 Exercise Details

**Exercise Name**

Prairie Island Nuclear Generating Plant

**Type of Exercise**

Plume

**Exercise Date**

August 24, 2010

**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 Prairie Island Nuclear Generating Plant exercise:

### State Jurisdictions

- Minnesota Department of Natural Resources
- Minnesota Department of Transportation
- Minnesota National Guard
- Minnesota State Patrol
- Prairie Island Indian Community
- Minnesota Homeland Security and Emergency Management
- Wisconsin Department of AG Consumer Protection
- Minnesota Department of Human Services
- Wisconsin Department of Corrections
- Wisconsin Department of Health Services
- Wisconsin Department of Justice
- Wisconsin Department of Natural Resources
- Wisconsin Department of Transportation
- Wisconsin Division of Police Services
- Wisconsin Emergency Management
- Wisconsin National Guard
- Wisconsin Office of the Governor
- Wisconsin Public Information Office
- Wisconsin State Patrol

### Risk Jurisdictions

- Dakota County Board of Commissioners
- Dakota County Communications Department
- Dakota County Community Services Department
- Dakota County Emergency Preparedness
- Dakota County Environmental Management
- Dakota County Health Department
- Dakota County Public Information Officer
- Dakota County Sheriff's Department
- Goodhue County PIO Unit

Goodhue County Public Works  
Goodhue County Radiation Safety  
Goodhue County Sheriff's Department  
Goodhue County Sheriff's Department Communications Center  
Goodhue County/City of Red Wing Emergency Management  
City of Red Wing Police Department  
City of Red Wing Mayor  
City of Red Wing Emergency Management  
City of Red Wing Administrator  
Red Wing City Council  
City of Red Wing Public Works Department  
Amature Radio Emergency Corps  
City of Red Wing Fire Department  
Radio Amateur Civil Emergency Services  
Wisconsin Public Information Office  
Wisconsin RACES

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## **SECTION 2: EXERCISE DESIGN SUMMARY**

### **2.1 Exercise Purpose and Design**

The DHS/FEMA Region V Office evaluated the Prairie Island Nuclear Generating Plant Radiological Emergency Preparedness (REP) Full Participation Plume Exposure Pathway Exercise conducted on August 24, 2010, to assess the capabilities of local emergency preparedness organizations in implementing their Radiological Emergency Response Plans (RERP) and procedures to protect the public health and safety during a radiological emergency involving the Prairie Island Nuclear Generating Plant. The purpose of this report is to present the results and findings on the performance of the Offsite Response Organizations (OROs) during a simulated radiological emergency.

### **2.2 Exercise Objectives, Capabilities and Activities**

Exercise objectives and identified Capabilities/REP Criteria selected to be demonstrated are discussed in Appendix F "Exercise Plan."

### **2.3 Scenario Summary**

Appendix F "Exercise Plan," contains a summary of the Exercise Scenario, a simulated sequence of events that was used as the basis for invoking emergency response actions by Offsite Response Organizations (OROs) in the Prairie Island Nuclear Generating Plant REP Full Participation Plume Exposure Pathway exercise on August 24, 2010.

This exercise scenario was submitted by the State of Minnesota, the State of Wisconsin and Xcel Energy and accepted by DHS/FEMA Region V on June 28, 2010.

During the exercise, in addition to information and data provided through the Prairie Island Nuclear Generating Plant onsite scenario, controllers from the State of Minnesota and the State of Wisconsin provided "inject messages" containing scenario events and/or relevant data to those persons or locations who would normally receive notification of such events. These inject messages were the method used for invoking additional specific response actions by OROs.

The details of the scenario are included in Appendix F "Exercise Plan."

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## **SECTION 3: ANALYSIS OF CAPABILITIES**

### **3.1 Exercise Evaluation and Results**

Contained in this section are the results and findings of the evaluation of all jurisdictions and functional entities that participated in the August 24, 2010, REP Full Participation Plume Exposure Pathway Exercise to test the off-site emergency response capabilities of State and local governments in the 10-mile EPZ surrounding the PINGP.

Each jurisdiction and functional entity was evaluated based on its demonstration of exercise criteria delineated in Federal Register Notice/Vol. 67, No. 80, dated April 25, 2002. Detailed information on the exercise criteria and the extent-of-play agreement used in this exercise are found in Appendix 3 of this report.

### **3.2 Summary Results of Exercise Evaluation**

The matrix presented in Table 2, on the following page(s), presents the status of all exercise criteria from Federal Register Notice/Vol. 67, No. 80, dated April 25, 2002, which were scheduled for demonstration during this exercise by all participating jurisdictions and functional entities. Exercise criteria are listed by number and the demonstration status of those criteria are indicated by the use of the following letters:

M – Met (No Deficiency or ARCAs assessed and no unresolved ARCAs from prior exercises)

D – Deficiency/(ies) assessed

A – ARCA(s) assessed or unresolved ARCA(s) from prior exercise(s)

N – Not Demonstrated (reason explained in Section 4.2)

Blank – Not scheduled for demonstration



Table 3.1 - Summary of Exercise Evaluation (4 pages)

DATE: 2010-08-24 SITE: Prairie Island Nuclear Generating Plant, MN M: Met, A: ARCA, D: Deficiency, P: Plan Issue, N: Not Demonstrated		MN-BCA--IWP-	MN-EOC---	MN-EOC-PAC--	MN-EOC--JIC-	MN-EOC--PI-HC-	MN--RADTC Van--	MN--RADT#1--	MN--RADT#2--	MN-EOC DAK--Heli-Warm CR	MN-EOC GDH-StateCoord--	MN-EOC GDH-MNSP-TACPT-	MN-EOC GDH-MNSP-DCO B-	MN-EOC DAK-StateCoord--
<b>Emergency Operations Management</b>														
Mobilization	1a1	M	M		M		M	M	M	M				M
Facilities	1b1													
Direction and Control	1c1		M	M	M									
Communications Equipment	1d1	M	M		M	M	M	M	M	M		M	M	
Equip & Supplies to support operations	1e1		M	M	M		M	M	M	M	M	M	M	M
<b>Protective Action Decision-Making</b>														
Emergency Worker Exposure Control	2a1		M	M										
Radiological Assessment and PARs	2b1		M	M							M			M
Decisions for the Plume Phase -PADs	2b2		M	M							M			M
PADs for protection of special populations	2c1		M											
Rad Assessment and Decision making for Ingestion Pathway	2d1													
Rad Assess/Decision making concerning Relocation, Reentry, and Return	2e1													
<b>Protective Action Implementation</b>														
Implementation of emergency worker exposure control	3a1						M	M	M	M		M	M	
Implementation of KI decision	3b1		M				M	M	M	M		M	M	
Implementation of protective actions for special populations - EOCs	3c1													
Implementation of protective actions for Schools	3c2		M											
Implementation of traffic and access control	3d1		M									M	M	
Impediments to evacuation are identified and resolved	3d2		M									M		
Implementation of ingestion pathway decisions - availability/use of info	3e1													
Materials for Ingestion Pathway PADs are available	3e2													
Implementation of relocation, re-entry, and return decisions	3f1													
<b>Field Measurement and Analysis</b>														
Adequate Equipment for Plume Phase Field Measurements	4a1							M	M					
Field Teams obtain sufficient information	4a2			M			M							
Field Teams Manage Sample Collection Appropriately	4a3							M	M					
Post plume phase field measurements and sampling	4b1													
Laboratory operations	4c1													
<b>Emergency Notification and Public Info</b>														
Activation of the prompt alert and notification system	5a1		M							M	M			M
Activation of the prompt alert and notification system - Fast Breaker	5a2													
Activation of the prompt alert and notification system - Exception areas	5a3													
Emergency information and instructions for the public and the media	5b1				M	M					M			M
<b>Support Operations/Facilities</b>														
Mon/Decon of evacuees and EWs, and registration of evacuees	6a1													
Mon/Decon of EW worker equipment	6b1													
Temporary care of evacuees	6c1													
Transportation and treatment of contaminated injured individuals	6d1													

Table 3.1 - Summary of Exercise Evaluation (Continued, page 2/4)

DATE: 2010-08-24 SITE: Prairie Island Nuclear Generating Plant, MN M: Met, A: ARCA, D: Deficiency, P: Plan Issue, N: Not Demonstrated		MN-EOC	DAK-MNSP-TACPt-	MN-EOC	DAK-MNSP-DCO B-	MN-S. WashCity--MSIT-	MN-Regions Hosp--MSIF-	WRI-Kalid. ChS--EV2-	DAK-IWP---	DAK-EOC---	DAK-JIC--PIO-	DAK--Sheriff-TACPt-	GDH-IWP---	GDH-EOC---	GDH-JIC--PIO-	
<b>Emergency Operations Management</b>																
Mobilization	1a1								M	M	M		M	M	M	
Facilities	1b1															
Direction and Control	1c1								M					M		
Communications Equipment	1d1	M	M	M	M	M	M	M	M	M	M	M	M	M	M	
Equip & Supplies to support operations	1e1	M	M	P	M	M			P	M	M			M	M	
<b>Protective Action Decision Making</b>																
Emergency Worker Exposure Control	2a1								M					M		
Radiological Assessment and PARs	2b1															
Decisions for the Plume Phase -PADs	2b2								M					M		
PADs for protection of special populations	2c1								M					M		
Rad Assessment and Decision making for Ingestion Pathway	2d1															
Rad Assess/Decision making concerning Relocation, Reentry, and Return	2e1															
<b>Protective Action Implementation</b>																
Implementation of emergency worker exposure control	3a1	M	M	M	M				M		M			M		
Implementation of KI decision	3b1	M	M						M		M			M		
Implementation of protective actions for special populations - EOCs	3c1								M					M		
Implementation of protective actions for Schools	3c2						M		M					M		
Implementation of traffic and access control	3d1	M	M						M		M			M		
Impediments to evacuation are identified and resolved	3d2	M							M					M		
Implementation of ingestion pathway decisions - availability/use of info	3e1															
Materials for Ingestion Pathway PADs are available	3e2															
Implementation of relocation, re-entry, and return decisions	3f1															
<b>Field Measurement and Analysis</b>																
Adequate Equipment for Plume Phase Field Measurements	4a1															
Field Teams obtain sufficient information	4a2															
Field Teams Manage Sample Collection Appropriately	4a3															
Post plume phase field measurements and sampling	4b1															
Laboratory operations	4c1															
<b>Emergency Notification and Public Info.</b>																
Activation of the prompt alert and notification system	5a1								M	M				M		
Activation of the prompt alert and notification system - Fast Breaker	5a2															
Activation of the prompt alert and notification system - Exception areas	5a3															
Emergency information and instructions for the public and the media	5b1								M	M				M	M	
<b>Support Operations/Facilities</b>																
Mon/Decon of evacuees and EWs, and registration of evacuees	6a1															
Mon/Decon of EW worker equipment	6b1															
Temporary care of evacuees	6c1															
Transportation and treatment of contaminated injured individuals	6d1			M	M											

Table 3.1 - Summary of Exercise Evaluation (Continued, page 3/4)

DATE: 2010-08-24 SITE: Prairie Island Nuclear Generating Plant, MN  M: Met, A: ARCA, D: Deficiency, P: Plan Issue, N: Not Demonstrated		GDH-EOC--TACPt-	GDH--Sheriff-Route Alert-	GDH--Hastings FD-EvMDV-	GDH--Hastings FD-EvWMDR-	WI-SWC#2-IWP-	WI-SEOC---	WI-SEOC--RadCord-	WI-SEOC-JIC-PIO--	WI-PI-HC--JIC BU-	WI-Elmwood HS--EvWM-	WI-Elmwood HS--EVD-	WI-Elmwood HS--EvMDV-
<b>Emergency Operations Management</b>													
Mobilization	1a1		M			M	M	M	M	M			
Facilities	1b1												
Direction and Control	1c1						M	A			M	M	M
Communications Equipment	1d1	M	M	M	M	M	M	M			M	M	M
Equip & Supplies to support operations	1e1	M	M	M	M		M	M			M	M	M
<b>Protective Action Decision-Making</b>													
Emergency Worker Exposure Control	2a1							M					
Radiological Assessment and PARs	2b1						M	M					
Decisions for the Plume Phase -PADs	2b2						P	M					
PADs for protection of special populations	2c1							M					
Rad Assessment and Decision making for Ingestion Pathway	2d1												
Rad Assess/Decision making concerning Relocation, Reentry, and Return	2e1												
<b>Protective Action Implementation</b>													
Implementation of emergency worker exposure control	3a1	M	M	M	M						M	M	A
Implementation of KI decision	3b1	M	M	M	M		M	M					
Implementation of protective actions for special populations - EOCs	3c1												
Implementation of protective actions for Schools	3c2												
Implementation of traffic and access control	3d1	M											
Impediments to evacuation are identified and resolved	3d2												
Implementation of ingestion pathway decisions - availability/use of info	3e1												
Materials for Ingestion Pathway PADs are available	3e2												
Implementation of relocation, re-entry, and return decisions	3f1												
<b>Field Measurement and Analysis</b>													
Adequate Equipment for Plume Phase Field Measurements	4a1												
Field Teams obtain sufficient information	4a2												
Field Teams Manage Sample Collection Appropriately	4a3												
Post plume phase field measurements and sampling	4b1												
Laboratory operations	4c1												
<b>Emergency Notification and Public Info</b>													
Activation of the prompt alert and notification system	5a1						M	M					
Activation of the prompt alert and notification system - Fast Breaker	5a2												
Activation of the prompt alert and notification system - Exception areas	5a3		M										
Emergency information and instructions for the public and the media	5b1						M	M	M				
<b>Support Operations/Facilities</b>													
Mon/Decon of evacuees and EWs, and registration of evacuees	6a1				M						M	M	M
Mon/Decon of EW worker equipment	6b1			M									
Temporary care of evacuees	6c1												
Transportation and treatment of contaminated injured individuals	6d1												

Table 3.1 - Summary of Exercise Evaluation (Continued, page 4/4)

DATE: 2010-08-24 SITE: Prairie Island Nuclear Generating Plant, MN M: Met, A: ARCA, D: Deficiency, P: Plan Issue, N: Not Demonstrated		WI-Elmwood HS--EWMDEq	WI-Sacred Heart H--MSIF-	WI-EOC PIE--StLia-	PIE-SDC-IWP--	PIE-EOC---	PIE-EOC--TACP-	WI-PIE EOC--RO-	PIE--JIC--PIO-	PIE-Elmwood HS--CCC-	WI--Elmwood AmbS-MSIT-	PIE-Lingren Learning Cir--	PIE--Ellsworth AmbS-MSIT-
<b>Emergency Operations Management</b>													
Mobilization	1a1			M	M	M			M				
Facilities	1b1												
Direction and Control	1c1	M		M		M							
Communications Equipment	1d1	M	M		M	M	M			M	M	M	M
Equip & Supplies to support operations	1e1	M	M			M	M				M	M	M
<b>Protective Action Decision Making</b>													
Emergency Worker Exposure Control	2a1			M		M		M					
Radiological Assessment and PARs	2b1												
Decisions for the Plume Phase -PADs	2b2			M		M							
PADs for protection of special populations	2c1			M		M		M					
Rad Assessment and Decision making for Ingestion Pathway	2d1					M							
Rad Assess/Decision making concerning Relocation, Reentry, and Return	2e1					M							
<b>Protective Action Implementation</b>													
Implementation of emergency worker exposure control	3a1	M	M			M	M			M		M	M
Implementation of KI decision	3b1						M	M				M	
Implementation of protective actions for special populations - EOCs	3c1					M							
Implementation of protective actions for Schools	3c2					M						M	
Implementation of traffic and access control	3d1						M						
Impediments to evacuation are identified and resolved	3d2					M							
Implementation of ingestion pathway decisions - availability/use of info	3e1					M							
Materials for Ingestion Pathway PADs are available	3e2					M							
Implementation of relocation, re-entry, and return decisions	3f1					M							
<b>Field Measurement and Analysis</b>													
Adequate Equipment for Plume Phase Field Measurements	4a1												
Field Teams obtain sufficient information	4a2												
Field Teams Manage Sample Collection Appropriately	4a3												
Post plume phase field measurements and sampling	4b1												
Laboratory operations	4c1												
<b>Emergency Notification and Public Info</b>													
Activation of the prompt alert and notification system	5a1			M		M			M				
Activation of the prompt alert and notification system - Fast Breaker	5a2												
Activation of the prompt alert and notification system - Exception areas	5a3												
Emergency information and instructions for the public and the media	5b1					M			M				
<b>Support Operations/Facilities</b>													
Mon/Decon of evacuees and EWs, and registration of evacuees	6a1												
Mon/Decon of EW worker equipment	6b1	M											
Temporary care of evacuees	6c1									M			
Transportation and treatment of contaminated injured individuals	6d1		M								M		M



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## 3.3 Criteria Evaluation Summaries

### 3.3.1 Minnesota Jurisdictions

#### 3.3.1.1 State of Minnesota - Bureau of Criminal Apprehension - Initial Warning Point

- a. MET: 1.a.1, 1.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

#### 3.3.1.2 State of Minnesota - Emergency Operations Center

- a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.1, 2.b.2, 2.c.1, 3.b.1, 3.c.2, 3.d.1, 3.d.2, 5.a.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

#### 3.3.1.3 State of Minnesota - Emergency Operations Center - Planning and Assessment Center

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

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**3.3.1.4 State of Minnesota - Emergency Operations Center - Joint Information Center**

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

**3.3.1.5 State of Minnesota - Emergency Operations Center - Public Inquiry Hotline Center**

- 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: 5.b.1.

ISSUE NO.: 50-08-5b1-A-01

ISSUE: Misinformation was posted on the Hotline Status Board and given to callers telephoning into the Public Inquiry Hotline. The misinformation involved subject areas associated with emergency classification levels, radiological release information, and evacuation instructions with the need to take potassium iodide (KI.)

CORRECTIVE ACTION DEMONSTRATED: Hotline staff received 110 calls during the PINGP exercise. Callers were provided with correct information during the exercise relating to protective action decisions, evacuation route recommendations, reception center locations, treatment of animals and information relating to school children. Supervisory staff attended briefings in the State EOC and provided updates to Hotline staff in a timely manner. Rumors were noted and forwarded to PIOs for incorporation in media briefings and news releases.

- g. PRIOR ISSUES - UNRESOLVED: None

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**3.3.1.6 State of Minnesota - Radiological Accident Deployment Team Command Van**

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

**3.3.1.7 State of Minnesota - Radiological Accident Deployment Team #1**

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

**3.3.1.8 State of Minnesota - Radiological Accident Deployment Team #2**

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

**3.3.1.9 State of Minnesota - Dakota County Emergency Operations Center - State Helicopter - Warning County Recreationalists**

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



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- g. PRIOR ISSUES - UNRESOLVED: None

**3.3.1.10 State of Minnesota - Goodhue County Emergency Operations Center - State Coordinator**

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

**3.3.1.11 State of Minnesota - Goodhue County Emergency Operations Center - Minnesota State Police - Traffic and Access Control Point**

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

**3.3.1.12 State of Minnesota - Goodhue County Emergency Operations Center - Minnesota State Police - DCO Briefing**

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

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**3.3.1.13 State of Minnesota - Dakota County Emergency Operations Center - State Coordinator**

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

**3.3.1.14 State of Minnesota - Dakota County Emergency Operations Center - Minnesota State Police - Traffic and Access Control Point**

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

**3.3.1.15 State of Minnesota - Dakota County Emergency Operations Center - Minnesota State Police - DCO Briefing**

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

**3.3.1.16 State of Minnesota - City of South Washington - Medical Service - Transportation**

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

ISSUE NO.: 50-10-1e1-P-04

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

CONDITION: Each member of the Cottage Grove EMS crew was issued an Arrowtech 138 Direct-Reading Dosimeter (DRD) and a Mirion Technologies Thermoluminescent Dosimeter (TLD). During the dosimeter briefing prior to transport of a potentially contaminated, injured individual, the EMS crew was informed of their turn-back limit of 1 R (1,000 mR) and total exposure limit of 3 R (3,000 mR). The Minnesota Emergency Operations Plan (Annex F), the Radiological Emergency Preparedness (REP) Emergency Worker Handbook, and the Minnesota REP Program Emergency Worker Exposure Log also indicated a turn-back limit of 1 R (1,000 mR) and total exposure limit of 3 R (3,000 mR). The upper limit of the Arrowtech 138 is 200 mR and is not appropriate to indicate either the turn-back limit or total exposure limit as stated in the plans and procedures. The ambulance crew was not issued a dosimeter charger to re-zero the DRD upon reaching the upper range, nor was the Minnesota REP Program Emergency Worker Exposure Log designed to accommodate recording a running total following re-zeroing of the DRD.

POSSIBLE CAUSE: Planners were unaware of the requirement to issue DRDs capable of indicating dosimeter administrative limits.

REFERENCE: • NUREG-0654, criteria K.3.a.

- FEMA REP Program Manual, page III-66
- FEMA REP 14, page D5-5
- FEMA REP 2, page 5-6, 5-10, 5-12

EFFECT: Upon reaching the 200 mR upper limit of the Arrowtech 138 DRD, and lacking a dosimeter charger to re-zero the DRD, and an appropriate running total entry on the Minnesota REP Program Emergency Worker Exposure Log, 200 mR effectively becomes the turn-back and exposure limit for the EMS crew, removing a valuable and scarce resource from duty.

RECOMMENDATION: Issue EMS units with an additional DRD in the 0-20 R range, or issue a dosimeter charger and redesign the Minnesota REP Program Emergency Worker Exposure Log to accommodate a running total entry following DRD re-zeroing.

SCHEDULE OF CORRECTIVE ACTIONS:

The State of Minnesota will be updating the emergency worker green cards with a statement that if you are outside the 10-mile emergency planning zone you do not have or need a turn-back limit or exposure limit. The State of Minnesota Emergency Operation Plan and the standard operating guidelines will be updated to state the turn-back limit and exposure limit are only to be used while in the 10-mile emergency planning zone. The green emergency worker cards will also be updated to state there is no turn-back or exposure limits for emergency workers outside of the 10-mile EPZ, the cards will also state if they get any readings on their DRD's they are to contact their supervisor immediately. This will be a point of emphasis in our field training for the emergency workers.

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

**3.3.1.17 State of Minnesota - Regions Hospital - Medical Service - Facility**

- a. MET: 1.d.1, 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

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### 3.3.2 Risk Jurisdictions

#### 3.3.2.1 Wright County - Kaleidoscope Charter School - Evacuation School

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

#### 3.3.2.2 Dakota County - Initial Warning Point

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

#### 3.3.2.3 Dakota County - Emergency Operations Center

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

ISSUE NO.: 50-10-1e1-P-03

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

CONDITION: The RO packaged the expired DRD's with the other items maintained in the Dosimetry/KI kits to be distributed to the emergency workers at the Dakota County EOC. The supply of 26, Model 622, 0-20 R DRD's maintained at the Dakota County EOC contained 13 units that were expired, requiring recertification in 2008.

There were also 3 units that had stickers marked failed on them. The Radiological Officer (RO) failed to check the expiration dates on the Dosimetry Corporation Model 622, 0-20 R, direct-reading dosimetry (DRD). The inventory of DRD's were not checked upon delivery, or prior to being packaged for distribution to Emergency Workers.

POSSIBLE CAUSE: The Radiological Officer was unaware of the expiration dates on the DRD and therefore did not observe the dates on the units prior to packaging them as part of the Dosimetry/KI kits. The calibration logs did not match the supply of DRD delivered to Dakota County by the State Dosimetry Control Officer.

REFERENCE: NUREG-0654, K.3.a, 3.b

EFFECT: The Emergency Workers issued these Dosimetry/KI kits, could have resulted in them improperly reading exposure levels if in a contaminated area.

RECOMMENDATION: The Radiological Officer should be provided additional training as well as review the plan to adequately examine all DRD's for valid expiration date. The procedure for delivery of dosimetry to the Dakota County Dosimetry Control Officer should include a check of DRDs to the inventory control sheet. The procedure for assembling Emergency Worker Exposure Kits should include a check of the dosimetry calibration due dates.

#### SCHEDULE OF CORRECTIVE ACTIONS:

Dakota County will be updating the standard operation guidelines (SOGs) for the Radiological Officer (RO) to ensure all DRDs have current calibration dates properly marked on the device before issuing to emergency workers. Furthermore, the operations chief will ensure that all DRDs that are due for calibration are gathered and sent to the State for their annual calibration.

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

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### **3.3.2.4 Dakota County - Joint Information Center - Public Information Officer**

- a. MET: 1.a.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

### **3.3.2.5 Dakota County - Sheriffs Department -Traffic and Access Control Point**

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

### **3.3.2.6 Goodhue County - Initial Warning Point**

- a. MET: 1.a.1, 1.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

### **3.3.2.7 Goodhue County - Emergency Operations Center**

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

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- g. PRIOR ISSUES - UNRESOLVED: None

**3.3.2.8 Goodhue County - Joint Information Center - Public Information Officer**

- a. MET: 1.a.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

**3.3.2.9 Goodhue County - Emergency Operations Center - Traffic and Access Control Point**

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

**3.3.2.10 Goodhue County - Sheriffs Department - Route Alerting**

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

**3.3.2.11 Goodhue County - Hastings Fire Department - Evacuee Monitoring and Decontamination of Vehicles**

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

**3.3.2.12 Goodhue County - Hastings Fire Station - Hastings Fire Department - Evacuee/Emergency Worker Monitoring and Decontamination, Registration of Evacuees**

- a. MET: 1.d.1, 1.e.1, 3.a.1, 3.b.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 Wisconsin Jurisdictions**

**3.3.3.1 State of Wisconsin - State Warning Center #2 - Initial Warning Point**

- a. MET: 1.a.1, 1.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

**3.3.3.2 State of Wisconsin - Emergency Operations Center**

- a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.b.1, 3.b.1, 5.a.1, 5.b.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: 2.b.2.

ISSUE NO.: 50-10-2b2-P-01

CRITERION: A decision-making process involving consideration of appropriate factors and necessary coordination is used to make PADs for the general public

including KI if ORO policy.

CONDITION: During the Prairie Island Nuclear Generating Plant (PINGP) Radiological Emergency Preparedness Exercise on Tuesday, August 24, 2010, the Officer-in-Charge (OIC) and the Operations Manager and staff for the State of Wisconsin used a checklist to guide their actions during a General Emergency which did not reflect the processes or steps required for a Protective Action Recommendation (PAR) to become a Protective Action Decision (PAD) in a "home rule" state.

The State and its resources support County decision making by providing a PAR (for evacuations, sheltering in place) based on information received from PINGP, the efforts of field monitoring teams, and associated projections (see Criterion 2.b.1). The County then makes a decision (PAD) based on the PAR provided by the State. In the checklist entitled, "OIC/Operations Actions, General Emergency", after concurrence is reached on the substance of protective action and "counties agree on a time to sound sirens", the OIC is to "request approval of the PAR from the Governor or Governor's Representative, and the PAR becomes a PAD."

Contrary to the (sequence of) steps in the checklist, the PAR does not become a PAD upon the Governor Representative's approval. The PAR becomes a PAD upon the acceptance of the PAR by Pierce County, as perhaps modified by them to account for local considerations. The Governor or Governor's Representative certainly can approve a PAR, but in a "home rule" state, they are not in the role of approving the County's actions in this regard. As a "home rule" state, Pierce County is responsible for the overall decision to make a protective action (e.g., evacuation, shelter-in-place). Also, the language in the checklist did not entirely reflect the coordination processes anticipated by the State, e.g., the coordination with the State of Minnesota, a "decision" rather than "concurrence" from Pierce County, coordination and communication of a KI PAD with Minnesota and Pierce County.

Note: The decision to recommend KI to the general public is seen as an independent protective action. Therefore, the State via the State Radiological Coordinator (SRC) authorizes and directs "the timely and appropriate dispensing of KI" to emergency workers, and recommends its voluntary use by immobile populations and the general

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public. This is in accordance with the Wisconsin Department of Health Service's Radiological Incident Response Plan (RIRP), Version 2.1, Volume 1, dated August 16, 2010, and the Wisconsin Emergency Response Plan (WERP), Radiological Nuclear Incident Annex, II.D.2. The Pierce County Emergency Operations Procedure (EOP) further states that per state policy, dispensation of KI is approved by the Governor (or designee) and DHFS (Division of Health) who directs the County Health Director to authorize KI dispensation.

POSSIBLE CAUSE: The use of language and documents provided by the State of Minnesota. Without taking under consideration of the "Home Rule" Decision Making process.

REFERENCE: NUREG 0654, J.9, J.10

DHS Radiological Incident Response Plan (RIRP) Volume 1, Section 2.1.1, 2.3.5; 4.6; Appendices B & C

Wisconsin Emergency Response Plan (WERP), Radiological Nuclear Incident Annex, I.C, II.D.2, III.C.2,

Pierce County Emergency Operations Procedure (EOP)

EFFECT: The situation as reflected on the checklist and in the Protective Action Manual has the potential to cause confusion about who is responsible for protective action decision making, and, in particular, the approval(s) required for a Protective Action Recommendation (PAR) to become a Protective Action Decision (PAD).

RECOMMENDATION: Standard Operating Procedure (SOP) checklists should be reviewed and revised to ensure steps are included in the proper sequence for appropriate coordination, approval, and decision-making with regard to protective action recommendations and decisions. These checklists should be cross-checked against the Pierce County Emergency Plan and the Wisconsin Emergency Response Plan (WERP) to ensure consistency. Also, the State of Wisconsin's SOP and its associated checklists need to be revised and further clarified to accurately reflect the coordination process and the respective decision making responsibilities of the State and County with regard to both types of protective actions, e.g., evacuations, ingestion of KI. In addition, the copies of the Minnesota State Emergency Operations Center (SEOC) SOP for Planning Protective Action Process, as well as

the State of Minnesota PAD and EAS Approval Form, should be removed from the Protective Action Manual located in the Wisconsin SEOC, and replaced with documents specific to the State of Wisconsin.

**SCHEDULE OF CORRECTIVE ACTIONS:**

After the preliminary results were presented to the State of Wisconsin on August 27, 2010, WEM thoroughly reviewed the checklists in the EOC binders and revised them to reflect the proper chain of events to form a PAD. References to the State of Minnesota's PAD process found in the EOC binders have been removed.

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

**3.3.3.3 State of Wisconsin - State Emergency Operations Center - Radiological Coordinator**

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

ISSUE NO.: 33-09-1c1-A-01

ISSUE: A lack of adequate direction and control resulted in team performance being less than optimal. There were no team briefings and no opportunities were taken to have a group discussion of key issues at hand.

REASON UNRESOLVED: This ARCA (#33-09-1.c.1-A-01) will be re-demonstrated at the October 2010 Point Beach Exercise.

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### 3.3.3.4 State of Wisconsin - State Emergency Operations Center/Joint Information Center - Public Information Officer

- a. MET: 1.a.1, 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

### 3.3.3.5 State of Wisconsin - Public Inquiry Hotline Center - Joint Information Backup

- a. MET: 1.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: 5.b.1.

ISSUE NO.: 50-08-5b1-A-06

ISSUE: Misinformation was posted on the Hotline Status Board and given to callers telephoning into the Public Inquiry Hotline. The misinformation involved subject areas associated with emergency classification levels, radiological release information, and evacuation instructions with the need to take potassium iodide (KI.)

CORRECTIVE ACTION DEMONSTRATED: The supervisors communicated with Public Information staff on a regular basis per Standard Operating Guidelines (SOG) Hotline Supervisor-REP. Limited information was maintained on the board and did not include scheduled press briefings, precautionary actions, and road closures. The Hotline staff discovered some information while scrolling through the SEOC electronic logs. However, not having this information did not impact the calls being received by the call-takers since no questions were asked of the call-takers pertaining to these subjects.

- g. PRIOR ISSUES - UNRESOLVED: None

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### 3.3.3.6 State of Wisconsin - Elmwood High School - Evacuee/Emergency Worker

#### Monitoring

- a. MET: 1.c.1, 1.d.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

### 3.3.3.7 State of Wisconsin - Elmwood High School - Evacuee/Emergency Worker

#### Decontamination

- a. MET: 1.c.1, 1.d.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

### 3.3.3.8 State of Wisconsin - Elmwood High School - Evacuee Monitoring and

#### Decontamination of Vehicles

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

ISSUE NO.: 50-10-3a1-A-02

CRITERION: OROs issue appropriate dosimetry and procedures, and manage radiological exposure to emergency workers IAW plans and procedures. Emergency workers periodically and at the end of each mission read and record dosimeter reading. (NUREG-0654, K.3)

CONDITION: Approximately 22 firefighters were assigned to four monitoring and decontamination teams at the ESRC. The four teams were the Evacuee and Emergency Worker Monitoring Team (EEWMT), the Evacuee and Emergency Worker Decontamination Team (EEWDT, the Evacuee and Emergency Vehicle

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Monitoring Team, (EEVMT), and the Evacuee and Emergency Vehicle Decontamination Team (EEVDT).

At 1920 hours, the four teams reported to the Dosimetry Station in the ESRC for a briefing on and issuance of a dosimetry kit. The Pierce County Radiological Officer and an Assistant conducted the briefings and issuances. The dosimetry kit provided to each firefighter contained one 0-200 mR Direct-Reading Dosimeter (DRD), one Thermoluminescent Dosimeter (TLD), one Dosimeter Record Card, and one Dosimeter Information Card.

Individual briefings were given. The use of a briefing checklist was not observed. The briefing on dosimetry included zeroing DRDs, reading the Dosimetry Information Card, checking the DRD every 30 minutes, recording DRD readings on the Dosimeter Record Card, the exposure limit of 3 rem, the wearing of the DRD and TLD on the outside of the outer garment at chest level, and returning the dosimetry and forms to the Dosimetry Station upon completion of the mission or until directed to do otherwise. The briefings and issuances were completed by 1950 hours.

In the course of the demonstration, two to four members from each of the four teams were questioned regarding their understanding of dosimetry. With one exception, those questioned had a basic knowledge of the purpose, use and disposition of their dosimetry. The exception was that no member of three of the four teams (the EEWMT, the EEVMT, and the EEVDT) questioned knew his or her exposure limit.

The extent-of-play agreement for criterion 6.a.1 stated that all Pierce County monitoring and decontamination workers would work under the direction of State staff and should be evaluated as part of the State of Wisconsin's response. As such, and in accordance with paragraph 2.3.2 on page 9 of Volume 4 of the Wisconsin Department of Health Services (DHS) Radiological Incident Response Plan (RIRP), Version 2.1, January 10, 2010, the State exposure limit is 150 mR for persons wearing only a TLD and a 0-200 mR DRD.

Not only were the monitoring and decontamination workers incorrectly briefed on an exposure limit of 3 rem, and the Dosimetry Information Card issued listed the exposure limit as 3 rem, their 0-200R DRD was not capable of reading 3 Rem. The

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instrument can only read Roentgens.

Approaching the end of the demonstration, one worker radioed the Dosimetry Station and asked what the exposure limit was. The response given, 2 rem that can be increased to 3 rem, was incorrect.

POSSIBLE CAUSE: The Pierce County (PC) Radiological Officer (RO) may not have known that Pierce County workers serving on monitoring and decontamination teams at the ESRC were considered under the direction of the State staff and, therefore, came under the provisions of the Volume 4 to the Wisconsin DHS RIRP. Furthermore, the Wisconsin DHS may not have verified that the PC RO was in possession of that information and a copy of Volume 4 of the Wisconsin DHS RIRP.

REFERENCE: NUREG 0645: K.3.a, 3.b

EFFECT: Harmful radiation exposure could affect those briefed to accept higher levels, unable to read those levels on their instrument, not aware of a much lower exposure limit, unable to read rem on a DRD, and, any combination thereof.

RECOMMENDATION: The Pierce County Radiological Officer should obtain Volume 4 to the Wisconsin DHS RIRP, Version 2.1, January 10, 2010. That portion of paragraph 2.3.2 on page 9 pertaining to the State exposure limit of 150 mR for persons wearing only a TLD and a 0-200 mR DRD should be incorporated into dosimetry briefings prepared for and given to County monitoring and decontamination workers. The Pierce Radiological Officer should develop and use a dosimetry briefing checklist for use when training emergency workers and when issuing dosimetry. The Pierce County Radiological Officer should present group briefings on the purpose and use of dosimetry to ensure consistency of message and increase efficiency. The Wisconsin DHS should assist the PC RO in these matters matter.

#### SCHEDULE OF CORRECTIVE ACTIONS:

The State of Wisconsin will conduct training for each risk county's radiological officer as well as ensure compatibility in plans and procedures between the State and



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County plans. A checklist will be developed for use by County radiological officers to ensure a thorough and consistent briefing of reception center staff and emergency workers. The State of Wisconsin will redemonstrate this criterion during the next Prairie Island exercise, which is scheduled to be held on July 10, 2012.

- 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 State of Wisconsin - Elmwood High School - Emergency Worker Monitoring and Decontamination of Equipment**

- a. MET: 1.c.1, 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

**3.3.3.10 State of Wisconsin - Sacred Heart Hospital - Medical Service - Facility**

- a. MET: 1.d.1, 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

**3.3.3.11 State of Wisconsin - Pierce County Emergency Operations Center - State Liaison**

- a. MET: 1.a.1, 1.c.1, 2.a.1, 2.b.2, 2.c.1, 5.a.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None

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

### **3.3.4 Risk Jurisdictions**

#### **3.3.4.1 Pierce County - Sheriffs Dispatch Center - Initial Warning Point**

- a. MET: 1.a.1, 1.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

#### **3.3.4.2 Pierce County - Emergency Operations Center**

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

#### **3.3.4.3 Pierce County - Emergency Operations Center - Traffic and Access Control Post**

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

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**3.3.4.4 State of Wisconsin - Pierce County Emergency Operations Center - Radiological Officer**

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

**3.3.4.5 Pierce County - Joint Information Center - Public Information Officer**

- a. MET: 1.a.1, 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

**3.3.4.6 Pierce County - Elmwood High School - Congregate Care Center**

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

**3.3.4.7 State of Wisconsin - Elmwood Ambulance Service - Medical Service - Transportation**

- a. MET: 1.d.1, 1.e.1, 6.d.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None

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

**3.3.4.8 Pierce County - Lindgren Learning Center - Evacuation School**

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

**3.3.4.9 Pierce County - Ellsworth Ambulance Service - Medical Service - Transportation**

- a. MET: 1.d.1, 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

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## SECTION 4: CONCLUSION

No Deficiencies were identified for the State of Minnesota or for Dakota and Goodhue Counties during this exercise. No Areas Requiring Corrective Action (ARCAs) were identified for the State of Minnesota or the Counties of Goodhue and Dakota during this exercise. There was one Planning Issue identified for the State of Minnesota and one Planning Issue identified for Dakota County. One ARCA for the State of Minnesota from a prior exercise was successfully re-demonstrated.

The ARCA that was resolved for the State of Minnesota was identified under Criterion 5.b.1 – OROs provide accurate emergency information and instructions to the public.

The Planning Issue for the State of Minnesota was identified under Equipment and Supplies to Support Operations, Criterion 1.e.1- Equipment, Maps, displays, dosimetry, potassium iodide (KI), and other supplies are sufficient to support emergency operations, whereby the Emergency Medical Crew were provided a 0-200mR direct-reading dosimeter (DRD). This DRD is not able to read turn-back values of 1 R or total exposure limits of 3 R in accordance with current State of Minnesota Plans and Procedures.

The Planning Issue for Dakota County was identified under Equipment and Supplies to Support Operations, Criterion 1.e.1- Equipment, Maps, displays, dosimetry, potassium iodide (KI), and other supplies are sufficient to support emergency operations, whereby the Radiological Officer (RO) had 26 (Model 622, 0-20 R) DRDS, 13 of which were expired requiring recertification in 2008. There were also three DRDs that had stickers marked “failed” on them. The inventory of DRDs was not checked by the RO upon delivery and prior to being packaged for distribution to Emergency Workers.

No Deficiencies were identified for the State of Wisconsin or for Pierce County during this exercise. There was one Area Requiring Corrective Action (ARCA) identified for the State of Wisconsin. There was one ARCA from a previous exercise that was successfully re-demonstrated. No ARCAs were identified for Pierce County during this exercise. One ARCA was not demonstrated from a previous exercise. This ARCA (number 33-09-1c1-A-01) will be demonstrated during the Point Beach REP Exercise in October 2010, in accordance with the extent-of-play agreement.

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The ARCA that was resolved for the State of Wisconsin was identified under Criterion 5.b.1 – OROs provide accurate emergency information and instructions to the public.

The ARCA for the State of Wisconsin was identified under Implementation of Emergency Worker Control, Criterion 3.a.1- The Offsite Response Organizations (ORO) issue appropriate dosimetry and procedures and managed radiological exposure to emergency workers in accordance with the plans and procedures, whereby emergency workers were not briefed of their correct exposure limits nor did they know what their correct exposure limits were when they were interviewed.

The Planning Issue for the State of Wisconsin was identified under Criterion 2.b.2, A decision-making process involving consideration of appropriate factors and necessary coordination is used to make protective action decisions (PAD) for the general public (including the recommendation for the use of KI, if ORO policy), whereby various State of Wisconsin staff used inaccurate procedures to provide the Counties of Kewaunee and Manitowoc with Protective Action Recommendations based on their "home rule" status.

## APPENDIX A: IMPROVEMENT PLAN

<b>Issue Number: 50-10-1e1-P-03</b>		<b>Criterion: 1e1</b>	
<p><b>ISSUE:</b> The RO packaged the expired DRD's with the other items maintained in the Dosimetry/KI kits to be distributed to the emergency workers at the Dakota County EOC. The supply of 26, Model 622, 0-20 R DRD's maintained at the Dakota County EOC contained 13 units that were expired, requiring recertification in 2008. There were also 3 units that had stickers marked failed on them. The Radiological Officer (RO) failed to check the expiration dates on the Dosimetry Corporation Model 622, 0-20 R, direct-reading dosimetry (DRD). The inventory of DRD's were not checked upon delivery, or prior to being packaged for distribution to Emergency Workers.</p>			
<p><b>RECOMMENDATION:</b> The Radiological Officer should be provided additional training as well as review the plan to adequately examine all DRD's for valid expiration date. The procedure for delivery of dosimetry to the Dakota County Dosimetry Control Officer should include a check of DRDs to the inventory control sheet. The procedure for assembling Emergency Worker Exposure Kits should include a check of the dosimetry calibration due dates.</p>			
<p><b>SCHEDULE OF CORRECTIVE ACTIONS:</b></p> <p>Dakota County will be updating the standard operation guidelines (SOGs) for the Radiological Officer (RO) to ensure all DRDs have current calibration dates properly marked on the device before issuing to emergency workers. Furthermore, the operations chief will ensure that all DRDs that are due for calibration are gathered and sent to the State for their annual calibration.</p>			
<p><b>CORRECTIVE ACTION DESCRIPTION:</b></p>			
<b>CAPABILITY:</b>		<b>PRIMARY RESPONSIBLE AGENCY:</b>	
<b>CAPABILITY ELEMENT:</b>		<b>START DATE:</b>	
<b>AGENCY POC:</b>		<b>ESTIMATED COMPLETION DATE:</b>	

<b>Issue Number: 50-10-1e1-P-04</b>		<b>Criterion: 1e1</b>	
<p><b>ISSUE:</b> Each member of the Cottage Grove EMS crew was issued an Arrowtech 138 Direct-Reading Dosimeter (DRD) and a Mirion Technologies Thermoluminescent Dosimeter (TLD). During the dosimeter briefing prior to transport of a potentially contaminated, injured individual, the EMS crew was informed of their turn-back limit of 1 R (1,000 mR) and total exposure limit of 3 R (3,000 mR). The Minnesota Emergency Operations Plan (Annex F), the Radiological Emergency Preparedness (REP) Emergency Worker Handbook, and the Minnesota REP Program Emergency Worker Exposure Log also indicated a turn-back limit of 1 R (1,000 mR) and total exposure limit of 3 R (3,000 mR). The upper limit of the Arrowtech 138 is 200 mR and is not appropriate to indicate either the turn-back limit or total exposure limit as stated in the plans and procedures. The ambulance crew was not issued a dosimeter charger to re-zero the DRD upon reaching the upper range, nor was the Minnesota REP Program Emergency Worker Exposure Log designed to accommodate recording a running total following re-zeroing of the DRD.</p>			
<p><b>RECOMMENDATION:</b> Issue EMS units with an additional DRD in the 0-20 R range, or issue a dosimeter charger and redesign the Minnesota REP Program Emergency Worker Exposure Log to accommodate a running total entry following DRD re-zeroing.</p>			
<p><b>SCHEDULE OF CORRECTIVE ACTIONS:</b></p> <p>The State of Minnesota will be updating the emergency worker green cards with a statement that if you are outside the 10-mile emergency planning zone you do not have or need a turn-back limit or exposure limit. The State of Minnesota Emergency Operation Plan and the standard operating guidelines will be updated to state the turn-back limit and exposure limit are only to be used while in the 10-mile emergency planning zone. The green emergency worker cards will also be updated to state there is no turn-back or exposure limits for emergency workers outside of the 10-mile EPZ, the cards will also state if they get any readings on their DRD's they are to contact their supervisor immediately. This will be a point of emphasis in our field training for the emergency workers.</p>			
<p><b>CORRECTIVE ACTION DESCRIPTION:</b></p>			
<b>CAPABILITY:</b>		<b>PRIMARY RESPONSIBLE AGENCY:</b>	
<b>CAPABILITY ELEMENT:</b>		<b>START DATE:</b>	
<b>AGENCY POC:</b>		<b>ESTIMATED COMPLETION DATE:</b>	



<b>Issue Number: 50-10-3a1-A-02</b>	<b>Criterion: 3a1</b>
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**ISSUE:** Approximately 22 firefighters were assigned to four monitoring and decontamination teams at the ESRC: The four teams were the Evacuee and Emergency Worker Monitoring Team (EEWMT), the Evacuee and Emergency Worker Decontamination Team (EEWDT, the Evacuee and Emergency Vehicle Monitoring Team, (EEVMT), and the Evacuee and Emergency Vehicle Decontamination Team (EEVDT).

At 1920 hours, the four teams reported to the Dosimetry Station in the ESRC for a briefing on and issuance of a dosimetry kit. The Pierce County Radiological Officer and an Assistant conducted the briefings and issuances. The dosimetry kit provided to each firefighter contained one 0-200 mR Direct-Reading Dosimeter (DRD), one Thermoluminescent Dosimeter (TLD), one Dosimeter Record Card, and one Dosimeter Information Card.

Individual briefings were given. The use of a briefing checklist was not observed. The briefing on dosimetry included zeroing DRDs, reading the Dosimetry Information Card, checking the DRD every 30 minutes, recording DRD readings on the Dosimeter Record Card, the exposure limit of 3 rem, the wearing of the DRD and TLD on the outside of the outer garment at chest level, and returning the dosimetry and forms to the Dosimetry Station upon completion of the mission or until directed to do otherwise. The briefings and issuances were completed by 1950 hours.

In the course of the demonstration, two to four members from each of the four teams were questioned regarding their understanding of dosimetry. With one exception, those questioned had a basic knowledge of the purpose, use and disposition of their dosimetry. The exception was that no member of three of the four teams (the EEWMT, the EEVMT, and the EEVDT) questioned knew his or her exposure limit.

The extent-of-play agreement for criterion 6.a.1 stated that all Pierce County monitoring and decontamination workers would work under the direction of State staff and should be evaluated as part of the State of Wisconsin's response. As such, and in accordance with paragraph 2.3.2 on page 9 of Volume 4 of the Wisconsin Department of Health Services (DHS) Radiological Incident Response Plan (RIRP), Version 2.1, January 10, 2010, the State exposure limit is 150 mR for persons wearing only a TLD and a 0-200 mR DRD.

Not only were the monitoring and decontamination workers incorrectly briefed on an exposure limit of 3 rem, and the Dosimetry Information Card issued listed the exposure limit as 3 rem, their 0-200R DRD was not capable of reading 3 Rem. The instrument can only read Roentgens.

Approaching the end of the demonstration, one worker radioed the Dosimetry Station and asked what the exposure limit was. The response given, 2 rem that can be increased to 3 rem, was incorrect.

**RECOMMENDATION:** The Pierce County Radiological Officer should obtain Volume 4 to the Wisconsin DHS RIRP, Version 2.1, January 10, 2010. That portion of paragraph 2.3.2 on page 9 pertaining to the State exposure limit of 150 mR for persons wearing only a TLD and a 0-200 mR DRD should be incorporated into dosimetry briefings prepared for and given to County monitoring and decontamination workers. The Pierce Radiological Officer should develop and use and a dosimetry briefing checklist for use when training emergency workers and when issuing dosimetry. The Pierce County Radiological Officer should present group briefings on the purpose and use of dosimetry to ensure consistency of message and increase efficiency. The Wisconsin DHS should assist the PC RO in these matters matter.

**SCHEDULE OF CORRECTIVE ACTIONS:**

The State of Wisconsin will conduct training for each risk county's radiological officer as well as ensure compatibility in plans and procedures between the State and County plans. A checklist will be developed for use by County radiological officers to ensure a thorough and consistent briefing of reception center staff and emergency workers. The State of Wisconsin will redemonstrate this criterion during the next Prairie Island exercise, which is scheduled to be held on July 10, 2012.

**CORRECTIVE ACTION DESCRIPTION:**

<b>CAPABILITY:</b>	<b>PRIMARY RESPONSIBLE AGENCY:</b>
<b>CAPABILITY ELEMENT:</b>	<b>START DATE:</b>
<b>AGENCY POC:</b>	<b>ESTIMATED COMPLETION DATE:</b>

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## APPENDIX B: BEST PRACTICES

### 1. Computer Aided Dispatch (CAD) System with GPS mapping

**Summary:** The CAD system provides MN State Police with a reliable communications device that has a wide selection of features to support a rapid response to an emergency.

**Description:** The State Patrol has issued rugged laptop computers to all of their Troopers. The laptops fit into a docking station installed in the vehicles and can be easily removed for use in EOCs when necessary. The laptops are used to access CAD. Troopers use the system as much if not more so than the 800 MHz radios to communicate back and forth via internal email. This is not only timely but produces a log of the information communicated. When a State Police Trooper is supporting a response in a County EOC he/she can use the CAD system to see where all available Troopers are located inclusive of having the capability to communicate with field personnel and access to many other system tools like reference materials, etc.

## APPENDIX C: EXERCISE TIMELINE

Table 1, on the following pages, presents the times at which key events and activities occurred during the PINGP Full Participation Plume Exposure Pathway Exercise on August 24, 2010. Also included are times that notifications were made to the participating jurisdictions/functional entities.

Table 1 - Exercise Timeline

DATE: 2010-08-24, SITE: Prairie Island Nuclear Generating Plant, MN

Emergency Classification Level or Event	Time Utility Declared	MN-EOC---	MN-EOC-PAC---	MN-EOC-IIC---	DAK-EOC---	GDH-EOC---	WI-SEOC---
Unusual Event	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Alert	0745	0758	0756	N/A	0802	0759	0805
Site Area Emergency	0915	0925	0924	0925	0923	0927	0929
General Emergency	1058	1115	1104	1115	1115	1112	1113
Simulated Rad. Release Started	0937	0937	0937	0937	0937	0937	0937
Simulated Rad. Release Terminated	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Facility Declared Operational		0834	0834	0846	0840	0815	0950
Declaration of State of Emergency		0944	0950	0944	0944	1031	0955
Exercise Terminated		1319	1319	1319	1319	1319	1315
1st Early Precautionary Actions: MN: Agriculture Advisory (Livestock on Stored Feed and Water / WI: School Evacuation		0936	N/A	N/A	N/A	N/A	0940
2nd Early Precautionary Decision: MN: School Evacuation/ WI: Agriculture Advisory (Livestock on Stored Feed and Water		0946	N/A	0946	N/A	N/A	1000
1st Protective Action Decision: Sub-Areas: 2, 5N, 5E, 5W		1125	1113	1125	N/A	N/A	1126
1st Siren Activation		N/A	N/A	1135	1135	1135	N/A
1st EAS Message		1137	1137	1137	N/A	N/A	N/A
2nd Protective Action Decision: Sub-Areas: 2, 5N, 5E, 5S, 5W, 10NW, 10N, 10NE, 10W		1234	1225	1234	N/A	N/A	1233
2nd Siren Activation		N/A	N/A	1243	1243	1243	N/A
2nd EAS Message		1245	1245	1245	N/A	N/A	N/A
KI Administration Decision for Minnesota Emergency Workers		0937	0937	N/A	N/A	N/A	N/A
KI Administration Decision for the Minnesota Public		1125	1113	N/A	N/A	N/A	N/A
KI Administration Decision for Wisconsin		N/A	N/A	N/A	N/A	N/A	1115

**Table 1 - Exercise Timeline**  
**DATE: 2010-08-24, SITE: Prairie Island Nuclear**  
**Generating Plant, MN**

Emergency Classification Level or Event	Time Utility Declared	WI-SEOC--RadCord-	PIE-EOC---
Unusual Event	N/A	N/A	N/A
Alert	0745	0805	0805
Site Area Emergency	0915	0925	0927
General Emergency	1058	1110	1112
Simulated Rad. Release Started	0937	0937	0937
Simulated Rad. Release Terminated	N/A	N/A	N/A
Facility Declared Operational		0911	0826
Declaration of State of Emergency		1022	0949
Exercise Terminated		1315	1315
1st Early Precautionary Actions: MN: Agriculture Advisory (Livestock on Stored Feed and Water / WI: School Evacuation		0939	N/A
2nd Early Precautionary Decision: MN: School Evacuation/ WI: Agriculture Advisory (Livestock on Stored Feed and Water		N/A	0948
1st Protective Action Decision: Sub-Areas: 2, 5N, 5E, 5W		1110	1128
1st Siren Activation		N/A	1135
1st EAS Message		N/A	N/A
2nd Protective Action Decision: Sub-Areas: 2, 5N, 5E, 5S, 5W, 10NW, 10N, 10NE, 10W		1221	1234
2nd Siren Activation		N/A	1243
2nd EAS Message		N/A	N/A
KI Administration Decision for Minnesota Emergency Workers		N/A	N/A
KI Administration Decision for the Minnesota Public		N/A	N/A
KI Administration Decision for Wisconsin		1115	N/A

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## APPENDIX D: EXERCISE EVALUATORS AND TEAM LEADERS

The following is a list of the evaluation team leadership followed by the team that evaluated the Prairie Island Nuclear Generating Plant REP Full Participation Plume Exposure Pathway Exercise on August 24, 2010.

William King, Radiological Assistance Committee, DHS/FEMA Region V

Gary Naskrent, Exercise Director, DHS/FEMA Region V

Stephen Tulley, Exercise Officer, DHS/FEMA Region V

Edward Golinski, Site Specialist (Minnesota), DHS/FEMA Region V

Karl Rabenhorst, Site Specialist (Wisconsin), DHS/FEMA Region V

Edward Diaz, Team Leader, State of Minnesota, DHS/FEMA Region V

Delwyn Kinsley, Team Leader, Dakota County, DHS/FEMA Region V

Deborah Fulk, Team Leader, Goodhue County, DHS/FEMA Region V

James King, Team Leader, State of Wisconsin, DHS/FEMA Region V

Todd Gemskie, Team Leader, State of Wisconsin, DHS/FEMA Region V

ICF Consulting

**DATE: 2010-08-24, SITE: Prairie Island Nuclear Generating Plant, MN**

LOCATION	EVALUATOR	AGENCY
State of Minnesota - Bureau of Criminal Apprehension - Initial Warning Point	John Wills	ICF
State of Minnesota - Emergency Operations Center	Wes Ryals Clayton Spangenberg	ICF ICF
State of Minnesota - Emergency Operations Center - Planning and Assessment Center	Amy Lynn	ICF
State of Minnesota - Emergency Operations Center - Joint Information Center	Paul Nied John Wills	ICF ICF
State of Minnesota - Emergency Operations Center - Public Inquiry Hotline Center	Wendy Swygert	ICF
State of Minnesota - Radiological Accident Deployment Team Command Van	Steve Denson	ICF
State of Minnesota - Radiological Accident Deployment Team #1	Eugene Jablonowski	U.S. EPA Region 5 Emergency Response
State of Minnesota - Radiological Accident Deployment Team #2	Bart Ray	ICF
State of Minnesota - Dakota County Emergency Operations Center - State Helicopter - Warning County Recreationalists	Mark E. Dalton	ICF
State of Minnesota - Goodhue County Emergency Operations Center - State Coordinator	Deborah Fulk	DHS/FEMA
State of Minnesota - Goodhue County Emergency Operations Center - Minnesota State Police - Traffic and Access Control Point	Clark Duffy	ICF
State of Minnesota - Goodhue County Emergency Operations Center - Minnesota State Police - DCO Briefing	Clark Duffy	ICF
State of Minnesota - Dakota County Emergency Operations Center - State Coordinator	Delwyn Kinsley	DHS/FEMA
State of Minnesota - Dakota County Emergency Operations Center - Minnesota State Police - Traffic and Access Control Point	Nathalie Valley	ICF
State of Minnesota - Dakota County Emergency Operations Center - Minnesota State Police - DCO Briefing	Nathalie Valley	ICF
State of Minnesota - City of South Washington - Medical Service - Transportation	John Wills	ICF
State of Minnesota - Regions Hospital - Medical Service - Facility	Richard Grundstrom	ICF
State of Wisconsin - State Warning Center #2 - Initial Warning Point	Debra Schneck	ICF
State of Wisconsin - Emergency Operations Center	Christopher Bellone Debra Schneck	DHS/FEMA ICF
State of Wisconsin - State Emergency Operations Center - Radiological Coordinator	Thomas Essig	ICF
State of Wisconsin - State Emergency Operations Center/Joint Information Center - Public Information Officer	Paul Nied	ICF
State of Wisconsin - Public Inquiry Hotline Center - Joint Information Backup	Wendy Swygert	ICF
State of Wisconsin - Elmwood High School - Evacuee/Emergency Worker Monitoring	Deborah Bell	ICF
State of Wisconsin - Elmwood High School - Evacuee/Emergency Worker Decontamination	Bruce Swiren	ICF
State of Wisconsin - Elmwood High School - Evacuee Monitoring and Decontamination of Vehicles	David Petta Dave Petullo	ICF ICF

Unclassified  
Radiological Emergency Preparedness Program (REP)

After Action Report/Improvement Plan

Prairie Island Nuclear Generating Plant

State of Wisconsin - Elmwood High School - Emergency Worker Monitoring and Decontamination of Equipment	Carl Bebrich	DHS/FEMA
State of Wisconsin - Sacred Heart Hospital - Medical Service - Facility	Deborah Bell	ICF
State of Wisconsin - Pierce County Emergency Operations Center - State Liaison	Bruce Swiren	ICF
Wright County - Kaleidoscope Charter School - Evacuation School	Carl Bebrich	DHS/FEMA
Dakota County - Initial Warning Point	Michael Petullo	ICF
Dakota County - Emergency Operations Center	Douglas Lawson Richard Smith	DHS/FEMA ICF
Dakota County - Joint Information Center - Public Information Officer	Paul Nied	ICF
Dakota County - Sheriffs Department - Traffic and Access Control Point	Michael Petullo	ICF
Goodhue County - Initial Warning Point	Kara Scott	DHS/FEMA
Goodhue County - Emergency Operations Center	Edward Golinski James Greer Kara Scott Robert Vork	DHS/FEMA ICF DHS/FEMA ICF
Goodhue County - Joint Information Center - Public Information Officer	Paul Nied	ICF
Goodhue County - Emergency Operations Center - Traffic and Access Control Point	Clinton Crackel	DHS/FEMA
Goodhue County - Sheriffs Department - Route Alerting	James Greer	ICF
Goodhue County - Hastings Fire Department - Evacuee Monitoring and Decontamination of Vehicles	Bart Ray	ICF
Goodhue County - Hastings Fire Station - Hastings Fire Department - Evacuee/Emergency Worker Monitoring and Decontamination, Registration of Evacuees	Wendy Swygert	ICF
Pierce County - Sheriffs Dispatch Center - Initial Warning Point	Earl Shollenberger	ICF
Pierce County - Emergency Operations Center	Carl Bebrich Gary Bolender Thomas Gahan Karl Rabenhorst Bruce Swiren	DHS/FEMA ICF ICF DHS/FEMA ICF
Pierce County - Emergency Operations Center - Traffic and Access Control Post	Earl Shollenberger	ICF
State of Wisconsin - Pierce County Emergency Operations Center - Radiological Officer	David Petta	ICF
Pierce County - Joint Information Center - Public Information Officer	Wendy Swygert	ICF
Pierce County - Elmwood High School - Congregate Care Center	James Greer	ICF
State of Wisconsin - Elmwood Ambulance Service - Medical Service - Transportation	Carolyn Sturghill	DHS/FEMA
Pierce County - Lindgren Learning Center - Evacuation School	Thomas Gahan	ICF
Pierce County - Ellsworth Ambulance Service - Medical Service - Transportation	Carolyn Sturghill	DHS/FEMA
* Team Leader		

## APPENDIX E: ACRONYMS AND ABBREVIATIONS

Acronym	Meaning
ALS	Advanced Life Support
ARC	American Red Cross
ARCA	Area Requiring Corrective Action
BLS	Basic Life Support
CBM	County Board Member
CCC	Congregate Care Center
CIS	Computer Information Services
CST	Civil Support Team
DCC	Dakota Communications Center
DCGC	Dakota County Government Center
DO	Duty Officer
DRD	Direct-Reading Dosimeter
DRL	Derived Response Level
DT	Decontamination Team
EAS	Emergency Alert System
ECL	Emergency Classification Level
ECSD	Ellsworth Community School District
ED	Emergency Department
EMA	Emergency Management Agency
EMAC	Emergency Management Assistance Compact
EMD	Emergency Management Director
EMS	Emergency Medical Services
EMSRB	Emergency Medical Service Regulatory Board
EMT	Emergency Medical Technician
EOC	Emergency Operations Center
EOF	Emergency Operations Facility
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
EPC	Emergency Preparedness Coordinator
EPS	Emergency Police Services
EPZ	Emergency Planning Zone
ER	Emergency Room
ERDS	Emergency Response Data System
ERP	Emergency Response Plan



ESRC	Elmwood School Reception Center
EVDT	Evacuee Vehicle Decontamination Team
EVMT	Evacuee Vehicle Monitoring Team
EW	Emergency Workers
FEMA	Federal Emergency Management Agency
FMTC	Field Monitoring Team Coordinator
FOC	Forward Operations Center
FTC	Field Team Coordinator
GAR	Governors Authorized Representative
GE	General Emergency
GIS	Geographic Information System
GPS	Global Positioning System
HS	Human Services
HTL	Health Team Leader
IC	Incident Commander
IP	Ingestion Pathway
IT	Information Technology
JIC	Joint Information Center
LE	Law Enforcement
LLC	Lindgren Learning Center
MDO	Minnesota Duty Officer
MDT	Mobile Data Terminal
MGFS	Maple Grove Fire Station
MGGC	Maple Grove Government Center
MHP	Minnesota Highway Patrol
MNGP	Monticello Nuclear Generating Plant
MRCC	Medical Response Communications Center
MRL	Mobile Radiological Laboratory
MSP	Minnesota State Patrol
MT	Monitoring Team
NARS	Nuclear Accident Reporting System
NRC	Nuclear Regulatory Commission
OC	Operations Chief
ORO	Offsite Response Organizations
PA	Public Address
PAD	Protective Action Decision
PAR	Protective Action Recommendation
PC	Pierce County
PHN	Public Health Nurse
PINGP	Prairie Island Nuclear Generating Plant

PIO	Public Information Officer
PM	Portal Monitors
PP	Personal Protective
PPE	Personal Protection Equipment
PWR	Pressurized Water Reactor
RAC	Regional Assistance Committee
RACES	Radio Amateur Civil Emergency Services
RAD	Radiological Accident Deployment
RAP	Radiological Assistance Program
RCA	Radiological Control Area
REA	Radiation Emergency Area
REP	Radiological Emergency Preparedness
RIRP	Radiological Incident Response Plan
RO	Radiation Officer
RSO	Radiation Safety Officer
RT	Radiation Technician
RWPD	Red Wing Police Department
SAE	Site Area Emergency
SAV	Staff Assistance Visit
SEC	Shift Emergency Communicator
SEOC	State Emergency Operations Center
SIM	State Incident Manager
SNB	Special News Bulletin
SOG	Standard Operating Guidelines
SOP	Standard Operating Procedure
SP	Sampling Point
SRC	State Radiological Coordinator
TACP	Traffic Access Control Point
TEDE	Total Effective Dose Equivalent
TLD	Thermoluminescent Dosimeter
TSC	Technical Support Center
UPS	Uninterruptible Power Supply
VDT	Vehicle Decontamination Team
VHF	Very High Frequency
VMT	Vehicle Monitoring Team
WEM	Wisconsin Emergency Management
WEMD	Wisconsin Emergency Management Division
WERP	Wisconsin Emergency Response Plan

## **APPENDIX F: EXERCISE PLAN**

The following documents are included in the Exercise Plan:

State of Minnesota Extent-of-Play

Medical Drill Scenario Cottage Grove EMS Ambulance

Medical Drill Scenario Regions Hospital

State of Wisconsin Extent-of-Play

Reception Center Drill Scenario, Elmwood Reception Center

Medical Drill Scenario Ellsworth Area Ambulance Service

Medical Drill Scenario Elmwood Area Ambulance Service

Medical Drill Scenario Sacred Heart Hospital

**2010  
Prairie Island Nuclear Generating Plant Exercise  
Extent of Play Agreement  
State of Minnesota/Goodhue County and Dakota County**

The exercise will take place on August 23 and 24 of 2010. This exercise will involve out-of-sequence demonstrations (MS-1 on August 23 and Emergency Worker Decontamination on August 24). The full scale Plume Phase exercise demonstration will be on August 24, 2010 and will include state and county EOC activations as well as the Joint Information Center (JIC).

The State of Minnesota, Goodhue and Dakota Counties, St. Paul Regions Hospital (MS-1), Cottage Grove EMS Ambulance (MS-1) and the City of Hastings (EWD) are the off-site response organizations (OROs) for this exercise.

Criteria that can be re-demonstrated immediately for credit, at the decision of the evaluator, include the following: 3.a.1, 3.b.1, 3.d.1, 3.d.2, 4.a.3, 4.b.1, 6.a.1, 6.b.1, 6.c.1 and 6.d.1. Criteria that may be re-demonstrated, as approved on a case-by-case basis by the Chairperson of the Regional Assistance Committee, include the following: 2.a.1, 2.b.1, 2.b.2, 5.a.1 and 5.b.1. It is the desire of the State of Minnesota to re-demonstrate (as needed) any areas of concern during the week of the exercise as possible.

<b>Monday August 23<sup>rd</sup></b>		
<b>MS-1 Evaluations</b>		
Cottage Grove EMS Ambulance	6:30 AM	Regions Hospital 640 Jackson Street St. Paul, MN 55101
Regions Hospital	7:00 AM	Regions Hospital 640 Jackson Street St. Paul, MN 55101
Pre-Exercise Briefing Entrance Meeting	2:00 PM	Country Inn & Suites 300 33rd St W Hastings, MN 55033

<b>Tuesday August 24<sup>th</sup></b>		
<b>Full scale Plume Phase Exercise</b>		
Evaluator Briefing	7:00 AM	State Emergency Operations Center 444 Cedar Street. Suite 223 St. Paul MN 55101
State Duty Officer	-	Bureau of Criminal Apprehension 1430 Maryland Ave E St Paul, MN 55106
Hennepin County Sheriff's Dispatch Center	-	9401 83 <sup>rd</sup> Ave. North Brooklyn Park MN 55443

<b>Tuesday August 24<sup>th</sup></b>		
Dakota Communications Center (DCC)	-	2860 160th West Street Rosemount MN 55068
State EOC & PAC	-	Town Square 444 Cedar St Suite 223 St. Paul MN 55101
JIC	-	Town Square 444 Cedar St Suite 223 St. Paul MN 55101
Media Briefing Room	-	Town Square 444 Cedar St Suite 100 St. Paul MN 55101
Goodhue County EOC	-	430 W. 6 <sup>th</sup> St, Red Wing, MN 55066
Dakota County EOC	-	Judicial Center 1580 Hwy 55 Hasting, MN 55033
Minnesota State Patrol Helicopter Notification Demonstration (Out of Sequence)	8:00 AM	Dakota County EOC 1580 Hwy 55 Hasting, MN 55033
State Field Teams & Command Van	7:00 AM	Plymouth Fire Station #1 13205 County Road 6 Plymouth, MN 55441
	8:00 AM	Hastings Armory 3050 Red Wing Blvd. Hastings, MN 55033
<b>Emergency Worker Monitoring &amp; Decontamination</b>		
Hastings Public Works	7:00 PM	1221 Progress Drive Hastings MN 55033
<b>Wednesday August 25<sup>th</sup></b>		
EV-2  <i>NOTE: This EV-2 Evaluation is within the 10 mile EPZ of the Monticello Nuclear Generating Plant and will not count towards the Prairie Island Nuclear Generating Plant Evaluation.</i>	9:00 AM	Kaleidoscope Charter School 7525 Kalland Avenue Otsego MN 55301
<b>Friday August 27<sup>th</sup></b>		

FEMA players debriefing	9:00 AM	Goodhue County EOC 430 W. 6 <sup>th</sup> St, Red Wing, MN 55066
FEMA media out briefing  <i>NOTE: The State of MN will provide the notification to the media for the FEMA out brief</i>	10:00 AM	Goodhue County EOC 430 W. 6 <sup>th</sup> St, Red Wing, MN 55066

**Additional Exercise Notes**

- Minnesota is NOT a Homerule State – decision-making for radiological events rests with the State not the Counties.
- The call to Target to stop KI distribution at the ALERT ECL will be simulated.
- The initial notification to FRMAC at the ALERT ECL and subsequent updates will be simulated.
- The Governor’s Office is not directly participating in the exercise and the faxing and e-mailing of emergency executive orders to the Governor and the Secretary of State will be simulated.
- Minnesota will be conducting a concurrent EMAC exercise to request additional radiological resources during the Plume Phase exercise. The EMAC exercise will not be evaluated.

**PREVIOUS EXERCISE FINDINGS AND PLANNING ISSUES**

**State of Minnesota**

There were two unresolved Areas Requiring Corrective Action (ARCAs) identified for the State of Minnesota during the 2009 intermediate/ingestion phase exercise with the Monticello Nuclear Generating Plant and one unresolved ARCA from the previous Prairie Island Nuclear Generating Plant exercise in 2008.

The State of Minnesota has one outstanding Area Requiring Corrective Action from the July 2008 Prairie Island exercise (50-08-5b1-A-01) in which the state did not convey timely information to some callers telephoning into the hotline. The state has enhanced its training to the hotline operators and has connected a speaker system into the hotline room to enable the operators to hear the SEOC briefings. This will be re-demonstrated during the Prairie Island Exercise in 2010.

**Dakota and Goodhue Counties**

There are no unresolved ARCAs for Dakota and Goodhue counties.

**EVALUATION AREA 1 – EMERGENCY OPERATIONS MANAGEMENT**

SUB-ELEMENT 1.a - Mobilization

**Criterion 1.a.1: OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner.**

**State of Minnesota**

Minnesota State Emergency Operations Center (SEOC)

The Plume Phase Exercise will take place on August 24, 2010. The SEOC will be activated at an ALERT Emergency Classification Level (ECL). The Minnesota Duty Officer (MDO) at the BCA Communications Center will take the initial call and make notifications by telephone and pager. The SEOC is located at 444 Cedar Street, Suite 223, St. Paul, MN. The State Regional Program Coordinators (RPCs) will act as liaisons to the counties and will be pre-positioned in the area of the Goodhue and Dakota County EOCs due to long travel time. The RPCs will wait an

appropriate amount of time before interacting with other county responders. The BCA Communications Center (Duty Officer) at the Bureau of Criminal Apprehension 1430 Maryland Avenue East St. Paul, MN 55106 will take the initial call on August 24, 2010 from the Prairie Island Nuclear Generating Plant. The BCA Communications Center will then demonstrate the call-out of staff and transfer of communications from the call center to SEOC in a timely manner.

#### State Radiological Accident Deployment (RAD) Teams

RAD teams (emergency phase field monitoring and sampling teams) will be mobilized at the ALERT classification. Notification will occur through the Minnesota Duty Officer to the Hennepin County Sheriff's Dispatch Center at 9401 83<sup>rd</sup> Ave. North, Brooklyn Park, who will in turn page team members. RAD Teams will be pre-positioned at the Hastings Armory parking Lot, 3050 Red Wing Blvd., in Hastings. The Maple Grove Fire Command Van will serve as a mobile field command post and will relocate as determined by the scenario. The command van will relay field measurements taken by the field teams to the Planning and Assessment Center in the SEOC.

#### Joint Information Center (JIC)

The JIC will be activated at the ALERT Emergency Classification Level (ECL). Once activated, it will be maintained until the termination of the exercise. The work area for the JIC is located in the SEOC. The JIC's media briefing room is located in the lower level of the Department of Public Safety's office in Suite 100 of the Town Square building. Both Goodhue and Dakota County PIO liaisons will be pre-positioned in the area of the SEOC and will wait the appropriate amount of time before interacting.

#### 24-hour Staffing

Sufficient 24-hour staffing capability of key personnel for the EOC's will be presented to FEMA from the state and the counties at the exercise entrance meeting on August 23 at the pre-exercise briefing.

#### **Goodhue County**

The initial call will be received in the Sheriff's dispatch office of the Goodhue County Law Enforcement Center. The Goodhue County Law Enforcement Center and the County EOC are located at 430 W. 6<sup>th</sup> St, Red Wing, MN.

Initial calls to activate EOC staff will begin in the dispatch office. Goodhue County will fully activate their EOC at an Alert ECL. A Goodhue County PIO liaison will be pre-positioned in St. Paul and wait until notified to respond to the SEOC during plume phase exercise.

A sufficient 24-hour staffing roster of key personnel will be presented at the exercise entrance meeting on August 23 at the pre-exercise briefing.

Recommendations from the State Operations Chief will be communicated and coordinated with the County EOC Incident Commander (previously County Operations Chief) via telephone.

#### **Dakota County**

The initial call will be received at the Dakota Communications Center (DCC) located at 2860 160<sup>th</sup> West Street in Rosemount and the County EOC which is located at Judicial Center 1580 Hwy 55, Hasting, MN.

Initial calls to activate EOC staff will begin in the dispatch office. Dakota County will fully activate their EOC at the Alert ECL. A Dakota County PIO liaison will be pre-positioned in St. Paul and wait until notified to respond to the SEOC during plume phase exercise.

**Note:** Due to the distance between the Dakota Communications Center and the Dakota County EOC, controllers shall be stationed at both the DCC as well as the Dakota County EOC.

A sufficient 24-hour staffing roster of key personnel will be presented at the exercise entrance meeting on August 23 at the pre-exercise briefing.

Recommendations from the State Operations Chief will be communicated and coordinated with the County Operations Chief via telephone.

A DNR conservation officer may be present in the Dakota County EOC, but will not be evaluated.

#### SUB-ELEMENT 1.b - Facilities

##### **Criterion 1.b.1: Facilities are sufficient to support the emergency response.**

State of Minnesota, Goodhue County, Dakota County

This criterion has been previously evaluated and is therefore not selected for evaluation in this exercise.

#### SUB-ELEMENT 1.c - Direction and Control

##### **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.**

###### **State of Minnesota**

The Minnesota Governor's Authorized Representative (GAR) will establish communications with the Wisconsin GAR early into the incident and ensure open and coordinated communications and maintain contact as appropriate.

The Minnesota Governor's Authorized Representative (GAR) will establish communications with the Prairie Island Indian Community early into the incident and ensure open and coordinated communications and maintain contact as appropriate. This will be a simulated call to the Prairie Island Indian Community Tribal Chair and the Prairie Island Indian Community may have a representative in the SEOC during the exercise for direct coordination with the State Incident Manager (SIM).

The Minnesota State Incident Manager (SIM) will establish communications with the Wisconsin Officer-in-Charge early into the incident to ensure open and coordinated communications. The SIM will coordinate with the Wisconsin Officer-in-Charge on the PAR and gain concurrence in a timely manner for approval of a PAD.

The MN SEOC Operations Chief, Goodhue County Incident Commander and Dakota County Operations Chief will coordinate decision making and emergency response activities.

The Minnesota Planning Chief will coordinate and validate the PAR information from the utility with the Wisconsin State Radiological Coordinator. The Minnesota Planning Chief will coordinate the development of a PAD with the Wisconsin State Radiological Coordinator as appropriate.



The Governor will not be participating in this exercise, so the direct communications and faxing of document to be signed by the Governor and the Secretary of State will be simulated.

RAD Field Teams will receive their direction from the RAD Team Captain (located in the Command Van).

**Goodhue County**

The Goodhue County Incident Commander will provide direction and control including coordinating emergency activities within the county. Activities will be coordinated with the state, Goodhue County EOC, and field staff as necessary.

**Dakota County**

The Dakota County Operations Chief will coordinate decisions and emergency activities within the county. Activities will be coordinated with the state, Dakota County EOC, and field staff as necessary.

SUB-ELEMENT 1.d - Communications Equipment

**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.**

**State of Minnesota**

The state will demonstrate the primary means of communication between the counties, the State RAD Teams and the Prairie Island Nuclear Generating Plant. The state will also demonstrate one additional (either secondary, tertiary or alternative) means of communication during the exercise.

Line of Communication	Primary	Secondary	Tertiary	Alternative
SEOC to County EOC				
Dakota	Private Branch Exchange number (PBX)	Commercial telephone/FAX machine	Public Safety Radio VHF/800 MHz ARMER system	RACES
Goodhue	Private Branch Exchange number (PBX)	Commercial telephone/FAX machine	Public Safety Radio VHF/800 MHz ARMER system	Satellite telephone
Sherburne	Private Branch Exchange number (PBX)	Commercial telephone/FAX machine	Public Safety Radio VHF/800 MHz ARMER system	Satellite telephone
Wright	Private Branch Exchange number (PBX)	Commercial telephone/FAX machine	Public Safety Radio VHF/800 MHz ARMER system	Satellite telephone
SEOC to Ingestion Counties	Commercial telephone/FAX machine	Public Safety Radio VHF/800 MHz ARMER system	Satellite telephone	

Line of Communication	Primary	Secondary	Tertiary	Alternative
SEOC to Monticello and Prairie Island Nuclear Generating Plants	Auto-Ring (dedicated) Hotline: SEOC to Technical Support Center (TSC) and EOF	Commercial telephone/FAX machine	800 MHz NSPM	
SEOC to Federal Response Organizations (FEMA, NRC, DOE, and Corps of Engineers)	Commercial telephone/FAX machine	Satellite telephone	National Warning System (NAWAS)	Amateur Radio
SEOC to Field Monitoring Teams	Commercial telephone/Cell phone	800 MHz ARMER	Satellite telephone	Amateur Radio
Minnesota SEOC to Wisconsin SEOC	Commercial telephone/FAX machine	National Warning System (NAWAS)	Satellite telephone	Amateur Radio
SEOC to Fixed Medical Support Facility (primary and backup hospitals)	Commercial telephone/FAX Machine	Satellite Phone	Public Safety Radio VHF/800 MHz ARMER system	
SEOC to Mobile Medical Support	Commercial telephone to primary/backup hospital	Public Safety Radio VHF/800 MHz ARMER system	Amateur Radio	

On August 24, 2010 the State of Minnesota will demonstrate the primary means of communication between the State EOC and the risk counties of Goodhue and Dakota, the State of Wisconsin, and the Prairie Island Nuclear Generating Plant.

Line of Communication	Primary	Secondary	Tertiary	Alternative
MDO to Risk County EOC/Dispatcher	Commercial telephone/FAX Machine	Public Safety Radio VHF/800 MHz ARMER system	Satellite Phone	
MDO to Monticello Nuclear Generating Plants	Dedicated telephone line	Commercial telephone/FAX Machine	800 MHz NSPM	Cell Phones
MDO to Prairie Island Nuclear Generating Plants	Dedicated telephone line	Commercial telephone/FAX Machine	800 MHz NSPM	Cell Phones
MDO to SEOC	Commercial telephone/FAX Machine	Public Safety Radio VHF/800 MHz ARMER system	National Warning System (NAWAS)	Satellite Phone

**Goodhue County**

The Goodhue County EOC's primary communication links are a Private Branch Exchange number (PBX) to the SEOC, Dakota County, Pierce County and the Prairie Island Nuclear Generating Plant.

The first back-up communication method is commercial telephone. Facsimile machines provide hard copy capability.

Public Safety Radio VHF/800 MHz ARMER system provides a secondary back up. Goodhue County EOC staff will demonstrate functionality of the primary means of communication and one back up method of communication.

**Dakota County**

The Dakota County EOC's primary communication links are a Private Branch Exchange number (PBX) to the SEOC, Goodhue County, Pierce County and the Prairie Island Nuclear Generating Plant.

The first back-up communication method is commercial telephone. Facsimile machines provide hard copy capability.

Public Safety Radio VHF/800 MHz ARMER system provides a secondary back up. Each agency with radios will check the first four (4) channels. RACES will also conduct a radio test.

SUB-ELEMENT 1.e - Equipment and Supplies to Support Operations

**Criterion 1.e.1: Equipment, maps, displays, dosimetry, potassium iodide (KI), and other supplies are sufficient to support emergency operations.**

State of Minnesota

Equipment, Maps and Displays:

The state will demonstrate the use of equipment, maps, and displays at the SEOC, JIC, media briefing room, command van as necessary to support emergency operations.

Dosimetry:

Emergency workers will use pocket dosimeters and TLDs and control exposure as follows:

Emergency Worker	Dosimeter Range		Pick-up Location	
State RAD Teams	0-200 mR	0-20 R	TLD	Maple Grove Fire Station #2 and Plymouth Fire Station #1
DNR Field Teams (Not demonstrated this exercise)	0-200 mR		TLD	Command van
<u>MDA FIELD TEAMS</u> (Not demonstrated this exercise)	0-200 mR		<u>TLD</u>	<u>MDA DOC</u>
State Patrol Helicopter Crew (alert and notification)		0-20 R	TLD	Dakota County EOC, weather permitting
State Patrol & MnDOT (Goodhue County)	0-200 mR	0-20 R	TLD	Goodhue County EOC

State Patrol & MnDOT (Dakota County)		0-20 R	TLD	Dakota County EOC
<u>AMBULANCE CREW (DOESN'T TAKE KI) (COTTAGE GROVE EMS AMBULANCE)</u>	0-200 mR		<u>TLD</u>	<u>RECEPTION CENTER</u>

**Note:** HSEM staff will be providing the initial briefing and dosimetry to the ambulance personnel in the parking lot just before the demonstration.

Potassium Iodide (KI):

Packets of KI are a part of the State RAD Teams response kits. State RAD Team members will simulate taking KI when directed by the State RAD Team Captain. The shelf life of Minnesota's current supply of KI is approved until July 2015.

Per the State of Minnesota Emergency Operations Plan, emergency workers located at the reception center do not take KI, however, emergency workers placing barricades, manning traffic control points or performing route alerting within the Emergency Planning Zone (EPZ) do take KI as directed.

Helicopter Crews performing transient population alerting in recreation areas within the 10 mile EPZ are considered emergency workers and will take KI when authorized.

Equipment Maintenance:

All routine equipment checks and maintenance are documented in the current PR-1 report, which will be provided at the entrance meeting. Calibration of radiological detection equipment by the field monitoring teams will be reviewed on August 23, by FEMA. All radiation monitoring equipment will be operationally checked prior to use to verify proper functioning within a specified operational range.

Traffic Control Points

Traffic control equipment is permanently deployed at the area truck stations for use at the designated Trunk Highway Traffic Control Points (TCP) in the area surrounding the Prairie Island Nuclear Generating Plant. The equipment is to be used to close access into the 10 mile Emergency Planning Zone (EPZ) in conjunction with State Patrol staffing. The equipment is deployed at the Site Area Emergency ECL in coordination with the state and the county. The Minnesota Department of Transportation personnel will simulate setting up the barricades and the department also has additional daily use equipment deployed throughout the districts which could be used to supplement if needed.

The barricades are deployed as follows:

Truck Station	Location	# of Barricades
Red Wing Truck Station/Red Wing Sub-Area	3890 Pepin Avenue Red Wing, MN 55066	33
Hastings Truck Station/Hastings Sub-Area	951 East 21 <sup>st</sup> Street Hastings, MN 55033	13

**Goodhue County**

Equipment, Maps and Displays:

Goodhue County will demonstrate the use of equipment, maps, and displays at the County EOC as necessary to support emergency operations. All radiation monitoring equipment will undergo a response check prior to use to verify that the equipment responds to a radioactive check source. All City/County decontamination equipment is stored at the Red Wing Fire Department located at 420 Plum Street, Red Wing.

Dosimetry:

Normal Direct Reading Pocket Ion Chamber (PIC) dosimetry packets are located in strategic areas of the building and TLDs will be worn by participants in the County Emergency Operations Center. County emergency workers will wear pocket dosimeters and TLDs as follows:

Emergency Worker	Dosimeter Range			Pick-up Location
Field Staff (route alerting, etc.)	0-200 mR	0-20 R	TLD	Goodhue Co. EOC
Decontamination Staff*	0-200 mR	0-20 R	TLD	Red Wing FD

\*Decontamination staff do not take KI.

Potassium Iodide (KI):

KI for emergency workers is stored at the County EOC. The shelf life of Minnesota's current supply of KI has been approved and expires on July 2015.

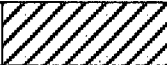
**Dakota County**

Equipment, Maps and Displays:

Dakota County will demonstrate the use of equipment, maps, and displays at the County EOC as necessary to support emergency operations. All radiation monitoring equipment will undergo a response check prior to use to verify that the equipment responds to a radioactive check source. Ludlum Model 3s are located at Hastings Fire 115 5th Street West, while all other County decontamination equipment is stored at the Hastings Public Works Facility located at 1221 Progress Drive, Hastings.

Dosimetry:

All county emergency workers will wear TLDs to monitor and control exposure.

Emergency Worker	Dosimeter Range			Pick-up Location
Field Staff (route alerting, etc.)		0-20 R	TLD	Dakota Co. EOC

Potassium Iodide (KI):

KI for emergency workers is stored at the Dakota County EOC in the Emergency Preparedness Coordinators office. The shelf life of Minnesota's current supply of KI has been approved and expires on July 2015.

Equipment maintenance:

All routine equipment checks and maintenance will be documented in the current PR-1 report, which will be provided at the entrance meeting.

## **EVALUATION AREA 2 - PROTECTIVE ACTION DECISION-MAKING**

### **SUB-ELEMENT 2.a – Emergency Worker Exposure Control**

**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.**

#### **State of Minnesota**

All emergency workers have a radiation exposure limit of 3 R with a turn back limit of 1 R as read on a DRD. The withdraw limit for State RAD Teams is 100 mR/hr. The Planning Chief may authorize radiation exposure to emergency workers in excess of the administrative limit in accordance with standard operating guidelines. If the scenario does not require an authorization of exposure above the administrative limit, the process for doing so can be discussed with the evaluator.

When the decision to administer KI to Emergency Workers in the Emergency Planning Zone (EPZ) is made (or controller data is injected), the Planning Chief will recommend to the State Incident Manager (SIM) and the Operation Chief that field operations staff take KI (simulated). KI for State RAD Team members is included in sampling kits. State Patrol personnel receive their kits at county EOCs per procedure. State emergency workers that will simulate KI administration are:

- State Patrol Helicopter crew, weather permitting (helicopter crew-alerting the public, if in the air)
- State RAD Team members (field monitoring and sampling)
- State Patrol (Highway traffic control points)

#### **Goodhue County, Dakota County**

The Goodhue and Dakota County Radiological Officers will instruct county emergency workers to take KI after the recommendation is made by the SEOC (Planning and Assessment Center).

All emergency workers have a radiation exposure limit of 3 R. The County Radiological Officer, after authorization from the Planning Chief in the SEOC, can allow radiation exposures of county emergency workers in excess of the administrative limit. If a dose extension is not demonstrated through the scenario, the County Radiological Officer will discuss with the evaluator their knowledge of the dose extension procedures/guidelines.

### **SUB-ELEMENT 2.b – Radiological Assessment and Protective Action Recommendations and Decisions for the Plume Phase of the Emergency**

**Criterion 2.b.1: Appropriate protective action recommendations 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.**

**State of Minnesota**

The Planning Chief will evaluate the Prairie Island Nuclear Generating Plant information and complete independent dose projections based on the information and simulated field-monitoring data provided by the State RAD Team Captain, via telephone from the Command Van.

The Planning Chief will make an independent evaluation of the data in the utilities' PAR and after coordinating with the State of Wisconsin SRC will develop a Protective Action Recommendation to be approved by the Governor or Governor's Authorized Representative (GAR). (Note: The coordination for the final PAD decision is coordinated between the Wisconsin Officer-In-Charge and the Minnesota SIM.)

**Goodhue County, Dakota County**

The counties will not demonstrate this criterion.

**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).**

**State of Minnesota**

The Governor's Authorized Representative (GAR) will demonstrate the ability to make appropriate protective action decisions based on recommendations from the State Incident Manager and the Planning Chief. Decision-making for incidents at the Prairie Island Nuclear Generating Plant is the responsibility of the Governor or GAR as outlined in Governor's Executive Order and the Minnesota Emergency Operations Plan.

KI is pre-distributed on a voluntary basis to members of the general public living in the Prairie Island Nuclear Generating Plant 10-mile EPZ. A standing order from the Minnesota Department of Health authorizes the secondary protective action of taking KI when directed to evacuate or shelter-in-place at the General Emergency ECL.

**Goodhue County, Dakota County**

Goodhue and Dakota Counties participate in the protective action decision process in accordance with the state's PAD process. This includes concurrence and coordination between the Minnesota SEOC, Goodhue, Pierce and Dakota counties and the State of Wisconsin.

**SUB-ELEMENT 2.c – Protective Action Decision Consideration for the Protection of Special Populations**

**Criterion 2.c.1: Protective action decisions are made, as appropriate, for special population groups.**

**State of Minnesota**

It is the responsibility of the counties to implement protective actions for special populations; the state of Minnesota is responsible for establishing facilities and providing resources such as reception centers and relocation centers to be made available for the special population groups. Resources that are available can be discussed with the evaluator.

**Goodhue County, Dakota County**

Staff at the Goodhue County and Dakota County EOCs will demonstrate this criterion according to their guidelines. Counties are responsible for initiating and the notification for evacuation, and identifying needed transportation for special population groups. Resources that are available will be discussed with the evaluator.

SUB-ELEMENT 2.d – Radiological Assessment and Decision-Making for the Ingestion Exposure Pathway

**Criterion 2.d.1: Radiological consequences for the ingestion pathway are assessed and appropriate protective action decisions are made based on the ORO planning criteria.**

**State of Minnesota**

This criterion is not selected for evaluation.

**Goodhue County**

This criterion is not selected for evaluation.

**Dakota County**

This criterion is not selected for evaluation.

SUB-ELEMENT 2.e – Radiological Assessment and Decision-Making Concerning Relocation, Re-entry, and Return

**Criterion 2.e.1: Timely relocation, re-entry, 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.**

**State of Minnesota**

This criterion is not selected for evaluation.

**Goodhue County**

This criterion is not selected for evaluation.

**Dakota County**

This criterion is not selected for evaluation.

**EVALUATION AREA 3 - PROTECTIVE ACTION IMPLEMENTATION**

SUB-ELEMENT 3.a – Implementation of Emergency Worker Exposure Control

**Criterion 3.a.1: The OROs issues appropriate dosimetry and procedures, and manages radiological exposure to emergency workers in accordance with the plan 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.**



### State of Minnesota

All emergency workers that are issued dosimetry will demonstrate appropriate use of that dosimetry and record keeping in accordance with their established procedures/guidelines. The emergency workers will demonstrate their knowledge of the turn-back exposure rate and administrative limits. Participants may be observed or interviewed by the evaluator in these areas.

*Note: HSEM staff will be providing the initial briefing and dosimetry to the ambulance personnel in the parking lot just before the demonstration.*

### Goodhue County

All emergency workers that are issued dosimetry will demonstrate appropriate use of the dosimeter, turn back limits and record keeping in accordance with their established procedures/guidelines.

As driven by the scenario, field personnel (i.e. Sheriff's Deputies), will be called in to the EOC (all will be simulated except for 1 Deputy) to pick up dosimetry, receive a briefing and their emergency assignment.

### Dakota County

All emergency workers that are issued dosimetry will demonstrate appropriate use of the dosimeter, turn back limits and record keeping in accordance with their established procedures/guidelines.

As driven by the scenario, field personnel (i.e. Sheriff's deputies), will be called in to the EOC (all will be simulated except for 1 Deputy) to pick up dosimetry, receive a briefing and their emergency assignment. Dakota County will give the dosimetry brief to the helicopter personnel.

## SUB-ELEMENT 3.b – Implementation of KI Decision

**Criterion 3.b.1: KI and appropriate instructions are made available should a decision to recommend use of KI be made. Appropriate record keeping of the administration of KI for emergency workers and institutionalized individuals (not the general public) is maintained.**

### State of Minnesota

All emergency workers that are directed to take KI will demonstrate the availability of KI, appropriate instructions, and record keeping in accordance with their procedures/guidelines. KI ingestion will be simulated

### Goodhue and Dakota County

All emergency workers that are directed to take KI will demonstrate the availability of KI, appropriate instructions, and record keeping in accordance with their procedures/guidelines. KI administration instructions to county emergency workers disseminate from the Goodhue County and Dakota County EOCs. The evaluator will discuss KI administration with the deputy sheriff of Goodhue County while demonstrating route alerting and traffic control, the deputy sheriff of

Dakota County while simulating traffic control and the Helicopter personnel in Dakota County. KI ingestion will be simulated.

**SUB-ELEMENT 3.c – Implementation of Protective Actions for Special Populations**

**Criterion 3.c.1: Protective action decisions are implemented for special populations other than schools within areas subject to protective actions.**

**State of Minnesota**

This is a county responsibility and will not be demonstrated by the state.

**Goodhue County**

Goodhue County will demonstrate this criterion by an interview process between EOC staff and the evaluators. It is the intent of Goodhue County to evacuate all special populations at the Site Area Emergency ECL. All special population calls will be simulated and contacts logged. All Goodhue County transportation providers in the plan will be contacted.

**Dakota County**

Dakota County will demonstrate this criterion by an interview process with EOC staff. It is the intent of Dakota County to evacuate all special populations at the Site Area Emergency ECL. All special population calls will be simulated and contacts logged. All transportation providers will be contacted.

**Criterion 3.c.2: OROs/School officials decide upon and implement protective actions for schools.**

**State of Minnesota**

The closure of schools and notification to send students to their sister schools will be conducted at the SEOC during the Site Area Emergency ECL (simulated). It is also the responsibility of the State to notify schools outside the EPZ that have children which live within the EPZ to not send students home. This notification will also be conducted at the SEOC during the Site Area Emergency ECL (simulated).

No EV-2 evaluations will be conducted within the 10 mile Prairie Island Emergency Planning Zone (EPZ) during this exercise; however, the Kaleidoscope Charter School within the 10 mile Monticello Nuclear Generating Plant EPZ located at 7525 Kalland Avenue, Otsego MN 55301 will be conducting an EV-2 Evaluation on Wednesday, August 25<sup>th</sup> at 9:00 AM. Evaluation will be through interview of the necessary school and transportation officials that may include but are not limited to: the Director, one teacher, one nurse, one transportation provider and one bus driver.

**Goodhue County**

This criterion is not selected for this exercise.

**Dakota County**

This criterion is not selected for this exercise.

**SUB-ELEMENT 3.d – Implementation of Traffic and Access Control**

**Criterion 3.d.1: Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel.**

### **State of Minnesota**

The State will coordinate if air, rail or waterway transportation requires control. MnDOT performs the notification for river, rail and air traffic restrictions from the SEOC. This will be demonstrated through simulated calls at the SEOC during the exercise.

The State Highway Patrol will demonstrate traffic control as coordinated through the Dakota County EOC. State Patrol and MnDOT personnel other than those in the SEOC will receive their briefing and pick up dosimetry from the county in which the traffic control point is established. MnDOT personnel will participate by interview and simulating barrier material for the traffic control points. The evaluator will meet the responding State Patrol Officer and MnDOT personnel at the Dakota County EOC then precede to the parking lot for the interview.

A State Trooper will simulate proceeding to a conveniently located, pre-determined roadblock location. No barricades will actually be placed on the roadside. An evaluator will conduct a procedural interview outside of the EOC in the parking lot.

### **Goodhue County**

The Goodhue County EOC staff will select, establish, and coordinate staffing of traffic and access control points consistent with the protective action decisions for evacuation, relocation or re-entry to restricted areas. This criterion will be demonstrated by simulation and staff interview.

A deputy will simulate proceeding to a conveniently located, pre-determined roadblock location. No barricades will actually be placed on the roadside. An evaluator will conduct a procedural interview outside of the EOC in the parking lot.

***Note:** Treasure Island Security and the Prairie Island Police will not be demonstrating traffic and access control points during the exercise.*

### **Dakota County**

The Dakota County EOC staff will select, establish, and coordinate staffing of traffic and access control points consistent with the protective action decisions for evacuation, relocation or re-entry to restricted areas. This criterion will be demonstrated by simulation and staff interview.

A deputy will simulate proceeding to a conveniently located, pre-determined roadblock location. No barricade will actually be placed on the roadside. An evaluator will conduct a procedural interview outside of the EOC in the parking lot.

## **Criterion 3.d.2: Impediments to evacuation are identified and resolved.**

### **State of Minnesota**

The State is responsible for state highways and waterways within the EPZ used for route evacuations and for manning traffic control points on these state highways and waterways. The state will demonstrate the necessary actions to remove impediments to evacuation on state highways or waterways. A controller inject will be used to simulate a traffic impediment on one of the evacuation routes.

### **Goodhue County and Dakota County**

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A controller message(s) will be used to create a simulated evacuation impediment. Each county will demonstrate appropriate corrective actions. Actual deployment of assets will be simulated, but all actual or simulated contacts made should be logged.

**SUB-ELEMENT 3.e – Implementation of Ingestion Pathway Decisions**

**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.**

**State of Minnesota**

This criterion was not selected for this exercise.

**Goodhue County**

This criterion was not selected for this exercise.

**Dakota County**

This criterion was not selected for this exercise.

**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.**

**State of Minnesota**

This criterion was not selected for this exercise.

**Goodhue County**

This criterion was not selected for this exercise.

**Dakota County**

This criterion was not selected for this exercise.

**SUB-ELEMENT 3.f – Implementation of Relocation, Re-entry, and Return Decisions**

**Criterion 3.f.1: Decisions regarding controlled re-entry of emergency workers and relocation and return of the public are coordinated with appropriate organizations and implemented.**

**State of Minnesota**

This criterion was not selected for this exercise.

**Goodhue County**

This criterion was not selected for this exercise.

**Dakota County**

This criterion was not selected for this exercise.

**EVALUATION AREA 4 - FIELD MEASUREMENT AND ANALYSIS**

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SUB-ELEMENT 4.a – Plume Phase Field Measurement and Analyses

**Criterion 4.a.1: The field teams are equipped to perform field measurements of direct radiation exposure (cloud and ground shine) and to sample airborne radioiodine and particulates.**

**State of Minnesota**

Two state RAD Teams, equipped with the necessary supplies and instrumentation, will demonstrate this criterion. The Ludlum 2241 Response Kit and/or Canberra MCB-2 contamination meter are used for determining field measurements. The Ludlum 2241 with 44-2 probe is used for measuring surface contamination (counts per minute). The Ludlum 2241 with 44-6 Beta-Gamma probe is used for measuring both beta and gamma exposure rates (mR/hr) and surface contamination (counts per minute). The MCB2 contamination detector can measure surface contamination (kilocounts per minute). These will be operationally checked to verify the proper functioning of the monitoring equipment within a specified range prior to deployment from Plymouth Fire Station #1, 13205 County Road 6, Plymouth, MN. FEMA evaluators should meet the Field Team at 0700 on the day of the exercise at Plymouth Fire Station.

Airborne sampling will be demonstrated by the State RAD Teams in the field using RADECO air samplers to obtain at least a ten minute or approximately ten cubic foot air sample. The air samplers are tested quarterly and will be operationally checked prior to deployment from the Plymouth Fire Station #1, 13205 County Road 6, Plymouth, MN.

State RAD Team members will conduct gross particulate and iodine field analysis using the MCB-2 (auto-ranging) and/or Ludlum 2241 Response Kits in accordance with their standard operating procedures/guidelines.

Equipment maintenance:

All routine equipment checks and maintenance will be documented in a current PR-1 report, which will be provided at the entrance meeting.

**Goodhue County, Dakota County**

This is a state function and will not be demonstrated by the counties.

**Criterion 4.a.2: Field teams are managed to obtain sufficient information to help characterize the release and to control radiation exposure.**

**State of Minnesota**

The State RAD Team Captain, operating from the command van will manage the activities of the two State RAD Teams including giving the teams a pre-deployment briefing. The State RAD Teams will perform field measurements to characterize the plume in accordance with their procedures/guidelines. The command van controller will provide data from one phantom team. The Prairie Island Nuclear Generating Plant is responsible for obtaining "peak" plume airborne measurements.

**Goodhue County, Dakota County**

This is a state function and will not be demonstrated by the counties.

**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.**

**State of Minnesota**

The State RAD Teams will demonstrate this criterion and perform ambient radiation measurements in accordance with their procedure/guideline. Airborne sampling will be demonstrated by the State RAD Teams in the field using air samplers to obtain at least a representative air sample. The State RAD Team members will conduct gross particulate and iodine field analysis. Purging the sampler head is not a part of State RAD Team's procedures/guidelines.

Field measurement data will be communicated to the command van and then relayed to the PAC. Plume phase samples will be packaged for transport by the State RAD Teams. Chain of custody will be documented on sample custody forms. Samples will be picked up by a sample runner and taken to the Command Van.

**Goodhue County, Dakota County**

This is a state function and will not be demonstrated by the counties.

**SUB-ELEMENT 4.b – Post Plume Phase Field Measurements and Sampling**

**Criterion 4.b.1: The field teams 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.**

**State of Minnesota**

This criterion was not selected for this exercise.

**Goodhue County, Dakota County**

This is a state function and will not be demonstrated by the counties.

**SUB-ELEMENT 4.c – Laboratory Operations**

**Criterion 4.c.1: The laboratory is capable of performing required radiological analyses to support protective action decisions.**

**State of Minnesota**

This criterion was not selected for this exercise.

**Goodhue County, Dakota County**

This is a state function and will not be demonstrated by the counties.

**EVALUATION AREA 5 – EMERGENCY NOTIFICATION AND PUBLIC INFORMATION**

**SUB-ELEMENT AREA 5.a – Activation of the Prompt Alert and Notification System**

**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 FEMA REP guidance.**

### State of Minnesota

The development and dissemination of an Emergency Alert System (EAS) message will be demonstrated in the SEOC. The EAS is activated only when there is a protective action (i.e., evacuation or sheltering) for people. The State EAS plan states that the code for a nuclear generating plant incident is monitored by all relay stations and is set to automatically transmit the message from the State EOC.

### The following is a summary of the PAD and EAS process:

1. The Planning and Assessment Center (PAC) receives a recommendation from the utility.
2. The PAC makes an independent assessment of the data and develops its recommendation.
3. The EAS Message and corresponding Special News Bulletins are selected by the Planning Chief and communicated to the Operations Chief.
4. The Operations Chief gets concurrence on the Protective Action Recommendation (PAR) from the Minnesota risk counties.
5. The PAR is communicated to the Minnesota State Incident Manager (SIM)
6. The SIM gets concurrence from the State of Wisconsin Officer in Charge (OIC).
7. The PAR is communicated to the Governor's Authorized Representative (GAR) where once approved, it becomes a Protective Action Decision (PAD).
  
8. The time that the sirens are sounded and the time the EAS is activated is determined by the SIM after the PAD has been approved by the Minnesota GAR.
9. The SIM notifies the Wisconsin Officer in Charge of the siren sounding time and the time after the sirens sound that the EAS message will be transmitted. The Wisconsin OIC is ultimately responsible for relaying this message and any subsequent messages to Pierce County.
10. A copy of the approved PAD goes to the Operations Chief to coordinate these times with Dakota and Goodhue counties via a conference call – the EAS message is the State's responsibility.
11. The sirens are sounded (simulated).
12. The EAS message is transmitted (simulated).
13. Special News Bulletins are sent out.
14. Media Briefings occur.

The Wisconsin Officer in Charge is responsible for all communications with Pierce County. The State of Minnesota has no direct communication with Pierce County.

**Note:** *The first PAD is pre-approved and the SIM is authorized to give an approval.*

An EAS Transmitter (located in the SEOC) will directly broadcast by radio transmission an EAS message using an encoder/decoder, which is automatically monitored by encoders/decoders by major relay stations. In addition, the EAS Writer has the capability to send a message directly over NOAA weather alert radios and weather utilizing a link to the National Weather Service headquarters in Chanhassen, Minnesota. EAS messages will contain basic information regarding the event. Additional information will be disseminated through the JIC using special news bulletins and media releases.

Weather permitting, a State Patrol helicopter, equipped with a public address system, will warn recreational area individuals and/or groups. The State patrol helicopter will operate from the Dakota County Judicial Center: 1580 Hwy 55, Hasting MN.

Activation of sirens, weather radios, and the broadcast of media messages will all be simulated.

The State of Minnesota will be using various social media services (Twitter, Facebook etc.) to notify the public, but these will not be evaluated.

**Goodhue County and Dakota County**

All EAS messages are developed and disseminated by the SEOC. After each PAR becomes a PAD, siren sounding will be simulated once. Goodhue County has the lead for siren activation coordination with Dakota and Pierce County. The coordination of alert and notification implementation will be demonstrated in the Goodhue and Dakota County EOCs (siren activation will be simulated).

Dakota County has a reverse phone system that will be used and demonstrated, but will not be evaluated.

**Criterion 5.a.2: [RESERVED]**

**Criterion 5.a.3: Activities associated with CNPPD approved exception areas (where applicable) are completed within 45 minutes following the initial decision by authorized offsite emergency officials to notify the public of an emergency situation. Backup alert and notification of the public is completed within 45 minutes following the detection by the ORO of a failure of the primary alert and notification system.**

**State of Minnesota**

This criterion is the responsibility of the counties and will not be demonstrated by the State.

**Goodhue County**

Goodhue County does not have FEMA approved 100% siren coverage within the 10-mile EPZ and will demonstrate route alerting. As determined by the scenario, a deputy will be called into the county EOC, and receive a short briefing and be provided with dosimetry and KI. They will pick up an evaluator at the EOC at that time and will demonstrate route alerting in exception areas. The route will be selected by the Goodhue County Incident Commander. Actual testing of the mobile public address may be conducted at any agreed-upon location by the evaluator and Goodhue County.

**Note:** Sirens have been installed in Goodhue County and are pending FEMA approval for 100% coverage. If FEMA approves 100% coverage prior to the exercise, this will not be demonstrated.

**Dakota County**

Primary alert and notification of exception areas:

Dakota County has 100% siren coverage and does not demonstrate route alerting.

Backup alert and notification:

This criterion is not selected for demonstration.

**SUB-ELEMENT 5.b – Emergency Information and Instructions for the Public and the Media**

**Criterion 5.b.1: OROs provide accurate emergency information and instructions to the public and the news media in a timely manner.**



### **State of Minnesota**

After the SIM has approval of the PAD from the GAR, pre-scripted EAS messages communicating emergency information and instructions are released to the public. Initiating the release of pre-scripted EAS messages is the responsibility of the SEOC Planning Chief. Special news bulletins will be pre-scripted and modified as needed and coordinated with all applicable agencies. The public will be told to remain tuned to their radio and television stations for further information. Special news broadcasts will be announced in the JIC media briefing room.

The Lead PIO and other organizational PIOs will work together in the JIC work area (located in the SEOC). They will determine what information is released to the general public. Media briefings will be demonstrated in the media briefing room.

PIOs will simulate distributing news releases and advisories via e-mail and log the distribution, recording what they would have actually sent out. A list of the media organizations will be provided to the evaluator. The Lead PIO will coordinate all information released to the media.

An Information Hotline (public inquiry) will be operated from the SEOC. Controllers using pre-scripted controller messages will make incoming calls. During this exercise, controllers from the staff of HSEM will make calls into the information hotline for both Minnesota and Wisconsin. Information Hotline staff will answer phones and communicate any rumor trends to the Operations Chief or Asst. Operations Chief through the Hotline Supervisor for action. Televisions used to monitor media broadcasts are located in the Information Hotline and PIO work areas. For the exercise the televisions may not be turned on.

### **Goodhue County**

Emergency information released to the public and the news media are the responsibility of the SEOC and the JIC. The Goodhue County Public Information Officer (PIO) Liaison, located in the SEOC and in accordance with JIC activities, will demonstrate the coordination of Goodhue County public information. The Goodhue County PIO Liaison will be pre-positioned in the area of the SEOC and will wait an appropriate amount of time before interacting with other responders.

Goodhue County will not be demonstrating any local briefings.

### **Dakota County**

Emergency information released to the public and the news media are the responsibility of the SEOC and the JIC. The Dakota County Public Information Officer (PIO) Liaison, located in the SEOC, in accordance with JIC activities, will demonstrate the coordination of Dakota County public information. The Dakota County PIO Liaison will be pre-positioned in the area of the SEOC and will wait an appropriate amount of time before interacting with other responders.

Dakota County will not be demonstrating any local briefings.

## **EVALUATION AREA 6 – SUPPORT OPERATION/FACILITIES**

SUB-ELEMENT 6.a – Monitoring and Decontamination of Evacuees and Emergency Workers and Registration of Evacuees

**Criterion 6.a.1: The reception center/emergency worker facility has appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, and registration of evacuees and/or emergency workers.**

**State of Minnesota**

The Cottage Grove Reception Center which includes vehicle and general population monitoring and decontamination is not selected for evaluation during this exercise.

**Goodhue County**

This criterion is not selected during this exercise.

**Dakota County**

Two emergency workers will go through the Emergency Worker Decontamination monitoring, decontamination and registration process. One emergency worker will be required to undergo decontamination. The decontamination process will be demonstrated by interview with Emergency Worker Decontamination Center staff. Emergency Worker Monitoring and Decontamination will be demonstrated at Hastings Public Works located at 1221 Progress Drive, Hastings MN.

Controllers will provide contamination and monitoring levels along with decontamination results.

SUB-ELEMENT 6.b – Monitoring and Decontamination of Emergency Worker Equipment

**Criterion 6.b.1: The facility/ORO has adequate procedures and resources for the accomplishment of monitoring and decontamination of emergency worker equipment, including vehicles.**

**State of Minnesota**

This is a county responsibility and will not be demonstrated by the state.

**Goodhue County**

This criterion was not selected during this exercise.

**Dakota County**

Monitoring and decontamination of emergency worker equipment and vehicles will be demonstrated at the Hastings Emergency Worker Decontamination Center located Hastings Public Works, 1221 Progress Drive Hastings on August 24, 2010 at 7:00 pm. One emergency worker vehicle will be monitored, with one vehicle requiring decontamination. In an actual event, the helicopter would go through the decontamination process here, but helicopter decontamination will not be demonstrated during this exercise.

The vehicle decontamination process will be demonstrated by an interview with the Hastings Emergency Worker Decontamination Center staff.

Hand held survey instruments (Ludlum Model 3s) will be used by Hastings Emergency Worker Decontamination Center staff to monitor emergency workers. A check source is used to ensure that the instruments respond. Hand held instruments are calibrated annually.

Controllers will provide contamination and monitoring levels along with decontamination results.

SUB-ELEMENT 6.c – Temporary Care of Evacuees

**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**

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planning guidelines (Found in MASS CARE – Preparedness Operations, ARC 3031). 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.

**State of Minnesota**

This criterion was not selected during this exercise.

*Note: Congregate Care Facilities are designated and operated by the Red Cross.*

**Goodhue County, Dakota County**

This is a state function and will not be demonstrated by the counties.

SUB-ELEMENT 6.d – Transportation and Treatment of Contaminated Injured Individuals

**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.**

**State of Minnesota**

Reception Center MS-1 transportation demonstration

Cottage Grove EMS Ambulance will demonstrate this objective in the parking lot outside Regions Hospital (simulating the reception center) at 6:30 am Monday, August 23, 2010. A controller will provide an inject for a contaminated person being injured at the reception center. The ambulance crew will respond and assess the patient's medical condition. The ambulance crew will wrap the patient up, remove the victim and transport them to the hospital. Communications between the Ambulance and the Hospital will be demonstrated at this time. Ambulance contamination monitoring will be demonstrated by Regions Hospital in St. Paul.

Regions Hospital MS1 hospital demonstration

Regions Hospital (640 Jackson Street, St. Paul MN) will demonstrate this objective at 7:00 am on Monday, August 23, 2010. Upon notification, the hospital personnel will prepare the emergency room area for arrival of a contaminated patient, including appropriate contamination control measures.

Hand held survey instruments will be used by the hospital personnel to monitor the victim. A check source will be used to ensure that the instruments respond. Hand held instruments are calibrated annually.

A contaminated injured evacuee will be delivered by Cottage Grove EMS Ambulance. Hospital radiation specialists will conduct radiological monitoring as necessary. Appropriate equipment and supplies will be available. The setting of priorities between medical treatment and contamination controls will be demonstrated. Samples will be collected and decontamination procedures will be demonstrated. The screening of the ambulance for contamination will be demonstrated at this time.

**Goodhue County and Dakota County**

This is a state function and will not be demonstrated by the counties.

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## Medical Drill Scenario (MS-1) Cottage Grove EMS Ambulance

### I. PROPOSED SCHEDULE

Injury: Right radius compound open fracture with cuts/abrasions to right elbow and shoulder

Date: Monday, August 23, 2010

Time: 6:30 AM start time

Location: Regions Hospital, St. Paul, MN

### II. PURPOSE

This simulated medical emergency of a contaminated patient is being conducted in order to exercise and test the emergency medical response and transport by Cottage Grove EMS Ambulance Service to St. Paul Regions Hospital.

### III. CRITERION OF THE EXERCISE

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

Criterion 6.d.1: The facility/ORO (Offsite Response Organization) has the appropriate space, adequate resources, and trained personnel to provide transport, monitoring, decontamination, and medical services to contaminated injured individuals.

### IV. SCENARIO/BACKGROUND

#### Background

The exercise will begin at approximately 6:30 am when the Cottage Grove EMS Ambulance is staged in the Regions Hospital parking lot (Controller inject message #1).

#### Ambulance

(Controller inject message #2A and #2B) Cottage Grove EMS will assess, treat and transport the patient while taking into account medical and contamination issues.

#### Scenario

An individual evacuating from the Prairie Island 10-mile EPZ comes to the general public reception center. This patient had been near the Prairie Island Nuclear Power Plant to get a better look at what was happening as the sirens were sounding. He walked through some tall grass near the fence boundary without being spotted by any responders or field team members. The patient got scared and left after he saw the field team members in suits near where he had been. He then got back to his vehicle and went to the general public reception center to get checked out. Upon arriving, his vehicle was flagged as contaminated. As he exited his vehicle, he slipped and fell injuring his right lower arm. In addition, the victim has various minor cuts and scratches and pain in his right shoulder and elbow. The patient is confused and experiencing intense pain to his right lower arm (the level of pain is about 8 or 9 out of 10 with 10 being the highest). The person has contamination on the feet, hands, forehead, leg and clothing from his proximity to the Nuclear Generating plant during the General Emergency.

**\*\*Any real emergency takes precedence over scenario play. Inform lead controller of any event that comes up during play. Scenario play will be stopped until the real emergency has been taken care of.\*\***

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## CONTROLLER MESSAGE #1

Issued To: Ambulance

Issued From: Controller

\*\*\*\*\*

**THIS IS A DRILL**

*Do not take any action that will adversely affect normal operations.*

\*\*\*\*\*

Location: St. Paul Regions Hospital parking lot (Simulated)

Message: Initial Conditions

**6:30 am**

**THIS IS A DRILL** This is the Cottage Grove reception center Incident Commander, requesting Cottage Grove EMS to respond onsite to the general population reception center at Cottage Grove for a patient with a possible broken arm and radiological contamination. **THIS IS A DRILL.**

## CONTROLLER MESSAGE #2A

Issued To: Ambulance Crew

Issued From: Controller

\*\*\*\*\*

### THIS IS A DRILL

*Do not take any action that will adversely affect normal operations.*

\*\*\*\*\*

Note: Do not give this sheet to participants. Give accident information as necessary. **Make them work for the numbers.**

Location: St. Paul Regions Hospital parking lot (Simulated)

Message: Patient Status

### Vital Signs

Pulse: 110

Respiration: 22

Blood pressure: 160/96

Skin: pale, cool, diaphoretic

### Other

Male

Age 38

Pain is 8 out of 10 (10 being the worst)

Right radius compound open fracture

Cuts/abrasions to right elbow and shoulder

Adequate neural muscular function

Patient Chief Complaint: Pain and swelling.

Physical: Edema, ecchymosis, and point tenderness. Gross deformities noted. Neurovascular deficits are not present.

---

**CONTROLLER MESSAGE #3**

Issued To: MS-1 Participants

Issued From: Controller

\*\*\*\*\*

**THIS IS A DRILL**

*Do not take any action that will adversely affect normal operations.*

\*\*\*\*\*

Location: St. Paul Regions Hospital parking lot (Simulated)

Message: Controller terminates MS-1 when all criterions have been met.



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## Medical Drill Scenario (MS-1) Regions Hospital

### I. PROPOSED SCHEDULE

Injury: Right radius compound fracture with  
cuts/abrasions to right elbow and shoulder

Date: Monday, August 23, 2010

Time: 7:00 AM start time

Location: Regions Hospital, St. Paul MN

### V. PURPOSE

This simulated medical emergency of a contaminated patient is being conducted in order to exercise and test the hospital's evaluation and treatment of a contaminated injured patient.

### VI. CRITERION OF THE EXERCISE

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

Criterion 6.d.1: The facility/ORO (Offsite Response Organization) has the appropriate space, adequate resources, and trained personnel to provide transport, monitoring, decontamination, and medical services to contaminated injured individuals.

### VII. SCENARIO/BACKGROUND

#### Background

A controller, acting as the SEOC Planning and Assessment center, will initiate the exercise (controller message #1) at approximately 7:00am by calling Regional Hospital. Transport will be provided by Cottage Grove EMS Ambulance.

#### Hospital

Regions Hospital will initiate their callout and procedures at approximately 7:00 AM August 23, 2010 after receiving the call from the State Emergency Operations Center (controller will simulate the role of the SEOC). The ambulance personnel will provide communications to the hospital per normal SOPs (may be

simulated using controller message #2). Radiological monitoring will be conducted by staff from the hospital (determined in accordance with their procedures). Appropriate equipment and supplies will be available. Radiation Protection Technicians (RPTs) will survey the patient (controller message #3B-3E) and the ambulance survey will be conducted by an interview. The exercise will terminate once all criteria are met (controller messages #4 and #5).

Scenario

An individual evacuating from the Prairie Island 10-mile EPZ comes to the general public reception center. This patient had been near the Prairie Island Nuclear Power Plant to get a better look at what was happening as the sirens were sounding. He walked through some tall grass near the fence boundary without being spotted by any responders or field team members. The patient got scared and left after he saw the field team members in suits near where he had been. He then got back to his vehicle and went to the general public reception center to get checked out. Upon arriving, his vehicle was flagged as contaminated. As he exited his vehicle, he slipped and fell injuring his right lower arm. In addition, the victim has various minor cuts and scratches and pain in his right shoulder and elbow. The patient is confused and experiencing intense pain to his right lower arm (the level of pain is about 8 or 9 out of 10 with 10 being the highest). The person has contamination on the feet, hands, forehead, legs and clothing from his proximity to the Nuclear Generating plant during the General Emergency.

**\*\*Any real emergency takes precedence over scenario play. Inform lead controller of any event that comes up during play. Scenario play will be stopped until the real emergency has been taken care of\*\***

Additional: Open fractures require antibiotics and an emergent orthopedic consultation. If orthopedic consultation/transfer is immediately called for, controller will inject consultation/transfer to occur in 30-60 minutes.

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## CONTROLLER MESSAGE #1

Issued To: MS-1 Participants Initial call for Hospital and EMS  
(651-254-2990)

Issued From: Controller

.....

**THIS IS A DRILL**

*Do not take any action that will adversely affect normal operations.*

.....

Location: Regions Hospital – St. Paul MN.

Message: Initial Conditions

**7:00 AM – For Hospital**

**THIS IS A DRILL** – This is the MN State Emergency Operations Center, due to a General Emergency at the Prairie Island Nuclear Plant, please get ready to potentially receive contaminated injured individuals shortly. There is a release in progress at the plant and there may be contaminated injured victims as early as the next half-hour. The public is being evacuated and the (simulated) reception center is open for evacuees.

**THIS IS A DRILL.**

\*\* (Controller will thoroughly explain that this is a drill).

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## **CONTROLLER MESSAGE #2**

Issued To: Hospital Emergency Room  
Issued From: Controller – Acting as the Ambulance Personnel

.....  
**THIS IS A DRILL**

*Do not take any action that will adversely affect normal operations.*

.....  
7:20 AM

**\*\*\*THIS IS A DRILL\*\*\*** This is the Cottage Grove EMS Ambulance; we are in route from the Cottage Grove Reception center with a potentially contaminated individual complaining of severe pain in their right lower arm with a compound fracture of the radius. The patient is alert and responsive their vitals are:

Pulse	106
Respirations	22
Blood Pressure	138/88
Skin	Pale, Cool, Diaphoretic
Other	Distal pulse present

Our ETA is about 10 minutes **\*\*\*THIS IS A DRILL\*\*\***

## CONTROLLER MESSAGE #3A

Issued To: Hospital's Radiation Protection Technician (RPT)  
Issued From: Controller

.....  
**THIS IS A DRILL**

*Do not take any action that will adversely affect normal operations.*

.....  
Note: Do not give this sheet to the Hospital's RPT. Give accident information as necessary. Make them work for the numbers.

Message: Radiation Survey Results and Physical Condition (Also see diagram)

### Physical Condition

	Arrival at Hospital	After Completing Decon
Pulse	104	80
Respirations	20	18
Blood Pressure	135/88	114/76
Skin	Pale, Cool, Diaphoretic	Normal
Other	Distal pulse present, good neural muscular function	OR Consultation

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## CONTROLLER MESSAGE #4

Issued To: Radiation Protection Technician (RPT)

Issued From: Controller

\*\*\*\*\*

### **THIS IS A DRILL**

*Do not take any action that will adversely affect normal operations.*

\*\*\*\*\*

Note: Do not give this sheet to radiation protection technician. Give accident information as necessary. Make them work for the numbers.

Location: Radiation Emergency Area

Message: Exit Survey

All areas of patient: Background

All areas of hospital staff that have been in the contaminated area (REA): Background

Gurney: Background

## CONTROLLER MESSAGE #5

Issued To: MS-1 Participants

Issued From: Controller

\*\*\*\*\*

**THIS IS A DRILL**

*Do not take any action that will adversely affect normal operations.*

\*\*\*\*\*

Location: Regions Hospital, St. Paul MN

Message: Controller terminates MS-1 when all criterions have been met.

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## **Prairie Island Nuclear Generating Plant Exercise Extent of Play Agreement State of Wisconsin / Pierce County**

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**Exercise Date: August 24, 2010**

Locations: The State of Wisconsin Emergency Operations Center (EOC) in Madison, and the Pierce County EOC in Ellsworth. The Joint Information Center (JIC) is located in the Minnesota EOC and will be staffed by personnel from both states.

This is a partial participation plume exposure pathway exercise which will last one day. Pierce County will be demonstrating criteria involving Re-entry, Relocation and Return upon the termination of the plume portion of the exercise. Exercise participants will be given a 30 minute break between the plume phase and the post-plume portion of the exercise. The participating Off-site Response Organizations (OROs) will be the State of Wisconsin, and Pierce County. Any participation by an ingestion county is for learning purposes and shall not be evaluated.

Criteria that can be re-demonstrated immediately for credit, at the discretion of the evaluator, include the following: 3.a.1, 3.b.1, 3.d.1, 3.d.2, 6.a.1, 6.b.1, 6.c.1 and 6.d.1. Criteria that may be re-demonstrated, as approved on a case-by-case basis by the Chairperson of the Regional Assistance Committee (RAC), include the following: 2.a.1, 2.b.1, 2.b.2, 5.a.1 and 5.b.1. The State of Wisconsin and Pierce County wish to re-demonstrate any areas of concern during the week of the exercise, if possible.

### **PRIOR AREAS REQUIRING CORRECTIVE ACTION (ARCA), 50-08-5b1-A-06:**

#### **State of Wisconsin**

During the Prairie Island Nuclear Generating Plant exercise held on July 22, 2008 an Area Requiring Corrective Action was assessed to the State of Wisconsin under Criterion 5.b.1, *Emergency Information and Instructions for the Public and the Media*. Incorrect information was posted on the Hotline Status Board, and given to callers phoning into the Public Inquiry Hotline. The incorrect information involved subject areas associated with emergency classification levels, radiological release information and evacuation instructions with the need to take potassium iodide (KI).



**Overview of Exercise Schedule and Sites (arranged chronologically):**

<b>Activity</b>	<b>Date</b>	<b>Time</b>	<b>Location</b>	<b>Sequence</b>
Pre-Exercise Meeting (MN / WI)	23 Aug 10	1400	Country Inns & Suites 300 33rd St W., Hastings, MN	N/A
Pre-Exercise Meeting (WI - only)	23 Aug 10	1400	State of Wisconsin EOC 2400 Wright St., Madison, WI	N/A
Emergency Worker and Evacuee Monitoring and Decontamination	23 Aug 10	1900	Elmwood School Reception Center 213 S. Scott St., Elmwood, WI	Out-of-Sequence
Emergency Worker and Evacuee Vehicle Decontamination	23 Aug 10	1900	Elmwood School Reception Center 213 S. Scott St., Elmwood, WI	Out-of-Sequence
MS-1 Evaluation (Transportation)	23 Aug 10	1900	Elmwood School Reception Center 213 S. Scott St., Elmwood, WI	Out-of-Sequence
Congregate Care Center Interview	23 Aug 10	1900	Elmwood School Reception Center 213 S. Scott St., Elmwood, WI	Out-of-Sequence
Partial Participation Plume Exercise, Wisconsin State EOC	24 Aug 10	refer to scenario	State of Wisconsin EOC 2400 Wright St., Madison, WI	In-Sequence
Full Participation Plume Exercise, Pierce County EOC	24 Aug 10	refer to scenario	Pierce County EOC 414 W. Main Street, Ellsworth, WI	In-Sequence
Full Participation Plume Exercise, Minnesota Joint Information Center	24 Aug 10	refer to scenario	State of Minnesota EOC 444 Cedar St. (Suite 223), St. Paul, MN	In-Sequence
Ingestion, Re-entry, Relocation, and Return decision making and implementation, Pierce County EOC	24 Aug 10	30 min. after plume ex. termination	Pierce County EOC 414 W. Main Street, Ellsworth, WI	In-Sequence
MS-1 Evaluation (Hospital)	24 Aug 10	0900	Sacred Heart Hospital 900 W. Clairemont Ave., Eau Claire, WI	Out-of-Sequence
Emergency Worker Exposure Control	24 Aug 10	1100	Pierce County EOC (Sheriff's Conf. Room) 414 W. Main St., Ellsworth, WI	Out-of-Sequence
Traffic Access Control	24 Aug 10	1100	Pierce County EOC (Sheriff's Conf. Room) 414 W. Main St., Ellsworth, WI	Out-of-Sequence
MS-1 Evaluation (Transportation)	24 Aug 10	1900	Ellsworth Area Ambulance Service 151 S. Plum St., Ellsworth, WI	Out-of-Sequence
Protective Action for Schools	25 Aug 10	1000	Lindgren Early Learning Center N3470 U.S. Highway 63, Hagar City, WI	Out-of-Sequence

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## **EVALUATION AREA 1 – EMERGENCY OPERATIONS MANAGEMENT**

**Criterion 1.a.1: Mobilization:** *OROs use effective procedures to alert, notify and mobilize emergency personnel and activate facilities in a timely manner.*

### **State of Wisconsin**

This is a partial-participation plume pathway exercise. Most activities, including decision making and radiological control/dose assessment, will occur at the State Emergency Operations Center (SEOC) and the State Radiological Coordinator (SRC) Room (Room 105), both located at 2400 Wright Street, Madison, Wisconsin. The Joint Information Center (JIC), located in the Minnesota EOC at 444 Cedar Street, St. Paul, MN, will be staffed by both Minnesota and Wisconsin personnel.

The initial notification will occur via a faxed NARS form from Prairie Island Nuclear Generating Plant (PINGP) to both the State Patrol Headquarters (Warning Center 1) and Wisconsin Emergency Management (Warning Center 2). If the initial notification occurs prior to 7:45 a.m., State Patrol will contact the WEM Duty Officer (DO) via a pager. If the initial notification occurs after 7:45 a.m., the fax will be received by WEM front desk staff. The fax will be followed by a phone call from the Prairie Island Nuclear Generating Plant (PINGP) through the "City Watch" system. City Watch is a dedicated phone system which rings simultaneously to State Patrol Headquarters, WEM Front Desk Receptionist, SEOC, the Communications Room located within WEM, and at the Sheriff's dispatch center in Pierce County. Both State Patrol and the WEM front desk staff will contact the WEM DO and either give them the NARS form or verbally relay the information received on the NARS form.

Based upon the WEM standard operating procedure, the DO will call the SRC. The SRC will then call the PINGP at the "call-back" number listed on the NARS form, to verify authenticity as well as to obtain additional information.

The DO will use the WEM Standard Operating Procedure for activation of the EOC. As per the Wisconsin Emergency Operations Plan, the EOC is activated at the 'ALERT' classification for nuclear power plants that have a 10-mile EPZ within Wisconsin. The SRC will respond in real-time (in sequence) and will report to 2400 Wright Street, Room 105, Madison, once a call back has been made to the plant. EOC security will be demonstrated; exercise participants, observers, controllers and evaluators will be asked to wear ID badges.

The DO or his/her designee will employ the use of the EOC software, "E-Sponder" for alerting staff both internally as well as external Wisconsin state agencies to report to the EOC. The software sends a pre-scripted message to office phones, cellular phones, and e-mail accounts simultaneously. Recipients of the notification must respond as to their

status (i.e. "press 1 if you plan to report to the EOC," "press 2 if you cannot report to the EOC..."). The DO or his/her designee will monitor the responses by staff. In the event that E-Sponder cannot successfully perform its alerting function, or if an individual fails to respond, the DO or his/her designee will make the staff notifications via a telephone "calling tree."

A 24-hour EOC Staffing Roster will be presented from the State to FEMA at the pre-exercise meeting to be held on August 23, 2010.

Due to lengthy travel times, some staff will be pre-positioned. As per the EOC Activation SOP, these individuals will also be notified via E-Sponder alerting:

- The State Emergency Police Services (EPS) Director may be pre-positioned in the general vicinity of the Pierce County EOC at 414 W. Main Street, Ellsworth, WI but will not start exercise play until 20 minutes after EOC activation.
- A Wisconsin Emergency Management Regional Director will be pre-positioned in the Pierce County EOC building, but will not be allowed to start play until 20 minutes after EOC activation.
- State Joint Information Center (JIC) staff, including Public Inquiry Hotline staff, will be pre-positioned in close proximity to the JIC in St. Paul. They will not be allowed to start play until 20 minutes has elapsed from the time of the ALERT declaration.
- The MS-1 hospital drill will be conducted at Sacred Heart Hospital, 900 W. Clairemont Avenue, Eau Claire, WI out of sequence at 0900 on August 24, 2010.

### **Pierce County**

Pierce County will fully activate its Emergency Operations Center (EOC) located at 414 W. Main Street, Ellsworth, WI and will carry out warning and staff call-up procedures as outlined in the Pierce County Plan, EOC security will be demonstrated; exercise participants, observers and evaluators will be asked to wear ID badges.

Initial notification will be received by the Sheriff's Dispatchers via conference call on the City Watch telephone system, from the Prairie Island Nuclear Generating Plant. The Sheriff's Dispatch Center is located at 432 West Main Street. The dispatchers will then activate the EOC staff using the City Watch notification feature. In the event that City Watch cannot successfully perform its notification, or if an individual fails to respond, the dispatcher will make the staff notifications via telephone calls.

The PIO representing the County at the JIC will be pre-positioned in the vicinity of the JIC. The PIO will not interact in play until contacted by the City Watch notification feature (or Pierce County Dispatch) and will wait 15 minutes after the call before beginning play.

**Criterion 1.b.1: Facilities:** *Facilities are sufficient to support the emergency response.*

**State of Wisconsin**

The base line criterion has been previously evaluated and will not be demonstrated during this exercise.

**Pierce County**

The base line criterion has been previously evaluated and will not be demonstrated during this exercise.

**Criterion 1.c.1: Direction and Control** *Key personnel with leadership roles for the Offsite Response Organization (ORO) provide direction and control to that part of the overall response effort for which they are responsible.*

**State of Wisconsin**

The State will demonstrate decision-making capabilities and coordination between the SEOC, the JIC, the Pierce County EOC, the State of Minnesota SEOC, PINGP, and other appropriate off-site response organizations.

**Pierce County**

The County EOC will direct and control emergency operations within the county and will coordinate decisions and emergency activities with the State of Wisconsin, Goodhue and Dakota Counties in Minnesota and the Joint Information Center.

Criterion 1.c.1 received an ARCA during the Kewaunee Exercise in June 2009. This criterion was scheduled to be re-demonstrated during the August 2010 Prairie Island Nuclear Generating Plant Exercise, but has been approved by the Region V RAC Chair to be re-demonstrated during the October 2010 Point Beach REP Exercise.

**Criterion 1.d.1: Communications Equipment** *At least two communication systems are available and operate properly and communication links are established with appropriate locations. Communications capabilities are managed in support of emergency operations.*

**State of Wisconsin**

The primary communication link between the SEOC and PINGP is the City Watch telephone; for all other locations, the primary means of communication is by commercial telephone.

Traditional phone, fax, and paper systems will be used as primary means of communication; with electronic mail to communicate with others in the State EOC and the JIC, as a secondary means of communication. E-Sponder, WEM's EOC software,

will be used for event logging and briefing forms; however, EOC staff are also permitted to handwrite their logs and forms.

Backup communications for the State include a variety of other communication systems (e.g., NAWAS, cellular phone, radio, TDD, facsimile and satellite telephone), which are used to communicate with Pierce County, the State of Minnesota, the utility and other locations. RACES operators will utilize amateur radio VHF communications between the SEOC and Pierce County. For the State of Wisconsin, RACES operators will be located in the "Radio Room" which is adjacent to the SEOC.

The Forward Operations Center/Mobile Radiological Laboratory (FOC/MRL) will conduct testing of its communications ability to the SRC room. Any actual communications between the SRC room and the FOC/MRL are not to be evaluated. Communications may be in the form of cellular or VOIP telephone calls and a private E-sponder site (separate from the exercise site). Participants may include the Radiological Officer Liaison in the SRC room and the Field Team Coordinator at the FOC/MRL.

#### **Pierce County**

Pierce County's primary means of communication is commercial telephone; however, notifications from PINGP are done using a dedicated phone system (City Watch). Backup communications include a variety of communications systems (e.g. cellular phone, radio, TDD, facsimile). To communicate with the State of Wisconsin via amateur radio, RACES operators will be located in the Communications Room, which is located adjacent to the EOC.

**Criterion 1.e.1: Equipment and Supplies to Support Operations** *Equipment, maps, displays, dosimetry, potassium iodide (KI) and other supplies are sufficient to support emergency operations.*

#### **State of Wisconsin**

The State will demonstrate the use of equipment, maps and displays to support emergency operations in the SEOC, Room 105 (the SRC Room) and the JIC. The state will use its EOC software, E-Sponder, in conjunction with its GIS applications.

The state will demonstrate the availability of dosimetry and potassium iodide (KI). Documentation of the KI expiration date (February 2014), current instrument inventory and calibration records will be verified during a site visit prior to the exercise by the Wisconsin Site Specialist of FEMA Region V.

#### **Pierce County**

Pierce County will demonstrate the ability to support operations through the use of equipment, maps, status boards and other displays within the EOC as appropriate.

Monitoring equipment, dosimetry and complete "county emergency worker dosimetry kits" are stored at the County EOC. Each county emergency worker dosimetry kit contains: potassium iodide (KI), a TLD, a high-level and low-level DRD, instructions, and a form for recording dosimetry readings. Additional KI for emergency workers and immobile populations is also kept at the same location. The expiration date for Pierce County's supply of KI is April 2012.

## **EVALUATION AREA 2 – PROTECTIVE ACTION DECISION MAKING**

**Criterion 2.a.1: Emergency Worker Exposure Control** *OROs use a decision-making process, considering relevant factors and appropriate coordination, to insure 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.*

### **State of Wisconsin**

The SRC, based on his/her technical evaluation of the available data, will make recommendations for emergency worker exposure control to the State Field Team Coordinator (FTC) at the FOC/MRL. Actual contact from the SRC to the FTC will be simulated. The SRC will issue a recommendation for the ingestion of KI that will be made to Pierce County. The recommendation is passed on to the counties through the State EOC OIC or Operations staff. The County RO and County OIC then decide whether or not to implement this recommendation.

Emergency workers, including the field teams, have a dose limit of 3 rem whole body (Deep Dose Equivalent). The exposure rate turn-back value for emergency workers is 200mR/hr closed window reading. For an emergency worker who only has access to a DRD, an exposure value of 150 mR will be used as the turn back value. By procedure, the SRC can authorize a radiation exposure in excess of the administrative limit for emergency workers.

### **Pierce County**

Pierce County's Radiological Officer (RO) will receive recommendations for the ingestion of KI from the SRC and will make his/her recommendation to the Officer-in-Charge (OIC) of the County. At this point the OIC advises all agencies to recommend the ingestion of KI. The County RO will also evaluate requests from county public safety officials who request an exception to worker exposure limits. The County RO will confer with the SRC for exceptions to exposure limits and make a recommendation to the County OIC.

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**Criterion 2.b.1: Radiological Assessment and Protective Action Recommendations and Decisions** *Appropriate protective action recommendations are based on available information on plant conditions, field monitoring data and licensee and ORO dose projections, as well as knowledge of on-site and off-site environmental conditions.*

**State of Wisconsin**

The SRC staff will evaluate information provided by the licensee on plant conditions and perform independent dose projections. These projections are based on plant conditions, field-monitoring data, and knowledge of on-site and off-site environmental conditions.

Field monitoring data will be provided via controller inject messages directly to the SRC, as FOC/MRL and field monitoring activities will not be evaluated. The SRC will evaluate the data and make a protective action recommendation to the OIC. Generally, early dose assessments performed by state dose assessment personnel will be based upon plant conditions obtained via telephone or facsimile from the affected plant. Later dose assessments will be developed based upon plant conditions and simulated field sampling results via controller inject.

The State EOC will also use dedicated laptop computers for RASCAL dose assessment and plume modeling. The plume data will be integrated into GIS for display. The SRC will evaluate all available data, and in coordination with the State of Minnesota's Planning Chief, the Officer-in-Charge (OIC) will make protective action recommendations to the Governor or his designee.

**Pierce County**

The county will not demonstrate this criterion. It is a State responsibility.

**Criterion 2.b.2: Decisions for the Plume Phase of the Emergency** *A decision-making process involving consideration of appropriate factors and necessary coordination is used to make protective action decisions for the general public, including the recommendation for the use of KI, if ORO policy.*

**State of Wisconsin**

The Governor or his/her designee will demonstrate the ability to make appropriate protective action decisions based on recommendations from the OIC and the SRC in the SEOC. As a "home rule" state, the Governor or his/her designee makes protective action recommendations (PARs), but implementation decisions ultimately reside with the chief elected official (or his/her designee) in the affected county, who may modify PARs based on local needs or considerations. The OIC, or an Operations designee will contact the Pierce County Officer in Charge and relay the PAR to ensure that the County has no events taking place that will prohibit implementation of the PAR. Upon concurrence between Pierce County and the State of Wisconsin, the recommendation is coordinated

between the Wisconsin OIC and the State of Minnesota's State Incident Manager (SIM). Once a PAR is agreed upon by both states it is presented to the Wisconsin Governor or his/her designee for approval. Upon approval of both Governor's of the states of Wisconsin and Minnesota, the OIC and SIM acknowledge that the PAR is now a Protective Action Decision (PAD) ready for implementation.

Potassium Iodide (KI) is pre-distributed on a voluntary basis to the general public living within the Pierce County 10 mile EPZ. Prior to an ALERT declaration at the Prairie Island Nuclear Generating Plant, members of the public can acquire KI free of charge by using a voucher located in the annual calendar. The annual calendar was distributed by PINGP to residents within the EPZ in December of 2009. The voucher can be redeemed at Target Pharmacies located near the Prairie Island Nuclear Generating Plant. The State of Wisconsin will demonstrate coordination with the State of Minnesota concerning the KI PAR and address concerns from the public (via Hotline calls). Once a PAD has been made for the general public, the State of Minnesota will issue a Special News Bulletin through the JIC stating: "If you live or work in the evacuation area and have potassium iodide, known as KI, readily available, you should take it now..."

#### **Pierce County**

Pierce County's chief elected official (County Board Chair) or his/her designee will evaluate protective action recommendations from the State EOC and determine if those recommendations are appropriate for the local situation. Any change to protective action recommendations will be coordinated with the Wisconsin State EOC.

**Criterion 2.c.1 Protective Action Decision Consideration for the Protection of Special Populations** *Protective action decisions are made, as appropriate, for special population groups.*

#### **State of Wisconsin**

Protective Action Decisions for special populations are determined by the County. The SRC or designee will keep the county updated, through the County RO, on state monitoring activities and environmental conditions to aid their decision-making. The SRC will also discuss this information during EOC briefings.

#### **Pierce County**

The County RO will receive activity and condition updates from the SRC or designee and pass this information onto county decision-makers. A Pierce County Human Services representative will demonstrate the ability and resources to determine appropriate protective actions for special populations according to their plans. Pierce County is responsible for initiating notification for evacuation or sheltering-in-place, and identifying transportation needs for special population groups (day care populations, the elderly and handicapped). Resources will be discussed with the Evaluator. The list of



people will be available for the exercise evaluators to see but cannot be copied and removed from the County EOC due to confidentiality issues. Decisions regarding the simulated distribution of KI to institutionalized individuals will be made when a recommendation is made for emergency workers to ingest KI.

**Criterion 2.d.1: Radiological Assessment and Decision-Making for the Ingestion Exposure**

**Pathway:** *Radiological consequences for the ingestion pathway are assessed and appropriate protective action decisions are made based on the ORO planning criteria.*

**State of Wisconsin**

The State will provide radiological assessment and technical support to Pierce County for ingestion exposure pathway decision-making; however, the State of Wisconsin's activities are not to be evaluated.

**Pierce County**

County EOC staff will participate in planning and decision-making with the State of Wisconsin and Federal counterparts (if available) via conference call. Some recommendations may come into the County EOC to the County Radiological Officer (RO) or the Officer in Charge. Once these recommendations are received, they are discussed among the EOC members. All final decisions are made by the Chief Elected Official.

**Criterion 2.e.1: Radiological Assessment and Decision-Making Concerning Relocation, Re-entry, and Return**

*Timely re-location, re-entry and return decisions are made and coordinated as appropriate, based on assessments of the radiological conditions and criteria in the ORO's plan and/or procedures.*

**State of Wisconsin**

The State will provide radiological assessment and technical support to Pierce County for relocation, re-entry and return decision-making; however, the State of Wisconsin's activities are not to be evaluated.

**Pierce County**

County EOC personnel will review the relocation, re-entry and return recommendations from the state and discuss the resource requirements necessary to accomplish implementation of those recommendations. Resource and coordination issues will be discussed among the county and state Recovery Task Forces. Decision makers from the county will direct that the appropriate recommendations be implemented.

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### **EVALUATION AREA 3 – PROTECTIVE ACTION IMPLEMENTATION**

**Criterion 3.a.1: Implementation of Emergency Worker Exposure Control** *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.*

#### **State of Wisconsin**

The state will demonstrate the use of dosimetry as a part of the Reception Center operations, the MS-1 transportation demonstration, and MS-1 hospital demonstration. The Reception Center and the MS-1 transportation demonstration will be located at Elmwood School, 213 S. Scott St., Elmwood, WI. The MS-1 hospital demonstration will be at Sacred Heart Hospital, 900 W. Clairemont Ave., Eau Claire, WI.

#### **Pierce County**

Emergency worker dosimetry kits will be distributed at the EOC at 414 West Main Street, Ellsworth, WI before assuming shift duties. All radiation monitoring equipment will be operationally checked prior to use. Emergency workers will use DRDs and TLDs to monitor and control their radiation exposure. These kits will be returned to the EOC upon completing shift duties. Reception Center Registration personnel are not classified as emergency workers and will only receive a low range (0 - 200mR) dosimeter and a TLD, as they are located outside the 10-mile EPZ. Bus drivers are not considered emergency workers and would only be issued dosimetry if they were needed to enter a restricted area after a release has occurred.

**Criterion 3.b.1 Implementation of KI Decision:** *KI and appropriate instructions are available should a decision to recommend use of KI be made. Appropriate record keeping of the administration of KI for emergency workers and institutionalized individuals (not the general public) is maintained.*

#### **State of Wisconsin**

The SRC will simulate contacting the Field Team Coordinator at the FOC/MRL to instruct field teams when to take KI based on scenario radiological data or incident classification status provided during the course of the exercise.

Any actual communication between the SRC room and the FOC/MRL is not to be evaluated. Communication may be in the form of cellular or VOIP telephone calls and a private E-sponder website (entirely separate from the exercise site). Participants may include the Radiological Officer Liaison in the SRC room and the Field Team Coordinator at the FOC/MRL.

### **Pierce County**

Upon a recommendation to take KI from the SRC, with the County Radiological Officer's concurrence, Pierce County will demonstrate administration of KI by simulating ingestion by a Pierce County Deputy Sheriff and a Pierce County Highway worker. There will be no demonstration of ingestion of KI by institutionalized individuals; however, County EOC staff will be prepared to discuss with the evaluator plans and procedures regarding implementation of KI decisions for immobile/institutionalized populations. Distribution of KI to the general public is "pre-distributed" before a nuclear power plant event occurs. Once an ALERT (or higher classification) is declared by the utility, distribution of KI by Target Pharmacies ceases. KI is not distributed at the Reception Center.

**Criterion 3.c.1 Implementation of Protective Actions for Special Populations:** *Protective action decisions are implemented for special population groups within areas subject to protective actions.*

### **State of Wisconsin**

The State will not demonstrate this criterion; it is a county responsibility.

### **Pierce County**

Pierce County will demonstrate the ability and resources to implement appropriate protective actions for special populations. The County EOC staff will plan for people with special transportation needs and simulate providing evacuation assistance as dictated by the scenario.

Pierce County has seven transportation providers which are the School Districts of: River Falls, Spring Valley, Elmwood, Plum City, Ellsworth, and Prescott, and the Pierce County Office on Aging. Pierce County EOC staff will make actual calls to three of the seven transportation contacts (River Falls, Spring Valley and Elmwood School Districts). The Pierce County Highway Department will be responsible for assessing the capability and availability of these transportation providers. The demonstration will not require the mobilization of transportation assets to support individuals with special needs, but County EOC staff will be prepared to discuss plans and procedures regarding the implementation of protective actions for special populations. Bus drivers are not considered Emergency Workers.

**Criterion 3.c.2 Implementation of Protective Action for Schools:** *OROs/school officials decide upon and implement protective actions for schools.*

### **State of Wisconsin**

The State will not demonstrate this criterion; it is a county responsibility.

### **Pierce County**

Pierce County will demonstrate this objective through an interview process with the school superintendent, the principal, a teacher, a bus driver and the transportation supervisor, who are responsible for implementation of school evacuation. This interview session will take place at Lindgren Early Learning Center at N3470 U.S. Highway 63., Hager City, WI 54014 on Wednesday, August 25<sup>th</sup>, 2010, beginning at 10:00 a.m. The "host school," Spring Valley High School, will also have a representative (principal or vice principal) available for interview at Lindgren Early Learning Center.

**Criterion 3.d.1 Implementation of Traffic and Access Control:** *Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel.*

### **State of Wisconsin**

The State will not demonstrate this criterion; it is a county responsibility.

Note: The State of Minnesota is responsible for notifying the Federal Aviation Administration, the Army Corps of Engineers (lock and dam system) and the Coast Guard; please refer to Minnesota's plan and extent of play agreement for detailed information.

### **Pierce County**

Pierce County will demonstrate this criterion out of sequence by simulation and interview. The Evaluator will meet with a County Highway Department worker in the EOC. The County Highway Department worker will be given a radiological briefing, will be issued a dosimetry kit and will simulate proceeding to a pre-determined roadblock location which will be determined prior to the beginning of the exercise. The Evaluator will conduct a procedural interview with the worker out of sequence beginning at 11:00 a.m. on August 24, 2010. This interview will be held in the Sheriff's Department Conference Room at the Courthouse Annex building, 414 W. Main St., Ellsworth, WI. Simulated calls to the Burlington Northern-Santa Fe (BNSF) Railroad will be conducted and recorded in sequence.

**Criterion 3.d.2 Impediments to Evacuation are Identified and Resolved:** *Impediments to evacuation are identified and resolved.*

### **State of Wisconsin**

The State will not demonstrate this criterion; it is a county responsibility.

### **Pierce County**

Pierce County will demonstrate in their County EOC the capability to identify and take appropriate actions concerning impediments to evacuation. Actual calls to resources will be made, but the resources will not be dispatched. All actual or simulated contacts made will be logged.

**Criterion 3.e.1 Implementation of Ingestion Pathway Decisions:** *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.*

#### **State of Wisconsin**

The State of Wisconsin will demonstrate the implementation of ingestion pathway decisions in order to support activities taking place in Pierce County; however, this criterion is not to be evaluated. The State of Wisconsin will not demonstrate PIO activities as it relates to the ingestion activities.

GIS data will be shared with Pierce County via postings of maps to Esponder or directly e-mailed to the Pierce County EOC. If there is a communications failure with the e-mail or the Esponder site, hard-copy maps will be provided via controller injects.

The State of Wisconsin will request technical assistance from the Federal agencies that are participating.

The SRC and state radiological assessment staff recommend protective actions to Pierce County by using controller data based on simulated laboratory analysis of ingestion samples. Data regarding water, food supplies, milk, and agricultural products will be utilized for implementation of protective actions and conveyed to Pierce County. Any additional information and data generated from federal play will also be used as appropriate for implementing protective action recommendations.

#### **Pierce County**

The County RO will relay the State's recommendation to the County Recovery Task Force for consideration. The Chief Elected Official will make final decisions.

**Criterion 3.e.2 Materials for Ingestion Pathways PADs Available:** *Appropriate measures, strategies and pre-printed instructional material are developed for implementing protective action decisions for contaminated water, food products, milk, and agricultural production.*

#### **State of Wisconsin**

The State of Wisconsin will support activities taking place in Pierce County; however, this criterion is not to be evaluated.

### **Pierce County**

Pierce County will demonstrate, through discussion, action, or document review, the capability to coordinate with the state to implement protective actions for the ingestion exposure pathway and to distribute ingestion information to members of the general public. Emergency printing of the Agricultural Ingestion Brochure is ordered by the State of Wisconsin at the Site Area Emergency ECL. The brochures are distributed by the Wisconsin State Patrol to the risk and ingestion counties upon completion of the printing. Any additional post-plume protective action decisions that are made will be conveyed from the PIO located in the County EOC to the JIC PIO in the form of a list of bullet points.. Any communication to the JIC will be simulated once the plume-phase portion of the exercise has ended.

**Criterion 3.f.1 Implementation of Relocation, Re-entry and Return Decisions:** *Decisions regarding controlled re-entry of emergency workers and relocation and return of the public are coordinated with appropriate organizations and implemented.*

### **State of Wisconsin**

The State of Wisconsin will support activities taking place in Pierce County; however, this criterion is not to be evaluated.

### **Pierce County**

Pierce County will address relocation and return of the public through coordination with other OROs. Decisions and guidance formulated as a result of this coordination will be conveyed from the PIO located in the County EOC to the JIC PIO in the form of a list of bullet points.. Any communication to the JIC will be simulated once the plume-phase portion of the exercise has ended.

County agencies will demonstrate the capability to coordinate with the state to implement controlled re-entry of emergency workers to the evacuated area, and the return and relocation of the public.

## **EVALUATION AREA 4 – FIELD MEASUREMENT AND ANALYSIS**

**Criterion 4.a.1 Plume Phase Field Measurements and Analyses:** *The field teams are equipped to perform field measurements of direct radiation exposure (cloud and ground shine) and to sample airborne radioiodine and particulates.*

**State of Wisconsin**

State of Wisconsin field teams will be participating in the exercise in sequence for the benefit of training; however, their activities are not to be evaluated. Any incidental communication between the FOC/MRL and staff in the SRC room are for testing purposes only and are not relevant to exercise play.

**Pierce County**

Pierce County will not demonstrate this criterion. It is a state responsibility.

**Criterion 4.a.2 Plume Phase Field Measurements & Analysis** *Field teams are managed to obtain sufficient information to help characterize the release and to control radiation exposure.*

**State of Wisconsin**

The FOC/MRL and field team activities are not to be evaluated, which includes any incidental contact made between the FOC/MRL and staff in the SRC room. State Field Teams are directed by the SRC, through the Field Team Coordinator (FTC) in the FOC/MRL. Any contact to the FTC by the SRC which is necessary to comply with the plans/procedures will be simulated.

**Pierce County**

Pierce County will not demonstrate this criterion. It is a state responsibility.

**Criterion 4.a.3 Plume Phase Field Measurements & Analysis** *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.*

**State of Wisconsin**

This criterion will not be evaluated.

**Pierce County**

Pierce County will not demonstrate this criterion. It is a state responsibility.

**Criterion 4.b.1: Post Plume Phase Field Measurements and Sampling**

This criterion will not be demonstrated.

**Criterion 4.c.1 Laboratory Operations**

This criterion will not be demonstrated.

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## **EVALUATION AREA 5 – EMERGENCY NOTIFICATION AND PUBLIC INFORMATION**

**Criterion 5.a.1 Activation of the Prompt Alert and Notification System:** *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:*

- 1) Identification of the state or local governmental organization and the official with the authority for providing the alert signal and instructional message.*
- 2) Identification of the commercial nuclear power plant and a statement that an emergency situation exists at the plant.*
- 3) Reference to the REP-specific emergency information (e.g. brochures and information in telephone books) for use by the general public during an emergency.*
- 4) A closing statement asking the affected and potentially affected population to stay tuned for additional information.*

### **State of Wisconsin**

After making the protective action decision, The State of Wisconsin, (in coordination with the State of Minnesota and Pierce County), selects the appropriate pre-scripted EAS Message and the Special News Bulletin (SNB), and then conveys the selected message to Pierce County and the JIC. The county reviews the message and content and will approve it "as is," or modify the message to reflect local weather, road construction, or other conditions prior to its release. As part of the coordinated PAR approval process, after approval and agreement on a time to sound the sirens by the Minnesota SIM and the Wisconsin OIC, and concurrence from the counties via conference call, the counties will then activate sirens. Minnesota gives the approved EAS message and SNB to the Minnesota SEOC Communications Officer. The SNB is disseminated through the JIC.

### **Pierce County**

Pierce County will follow the Public Alert Notification System (PANS) procedures in the County plan. The County will simulate activating its sirens upon recommendation from the State of Wisconsin, in coordination with Goodhue and Dakota Counties and in conjunction with the State of Minnesota simulated activation of the PANS systems.

The State will complete the necessary decision-making and recommend appropriate protective actions to Pierce County. Pierce County will coordinate siren sounding (simulated) with Goodhue and Dakota Counties. Goodhue County is the lead county in this coordination.

The Pierce County Public Information Officer and Emergency Management Director will confirm the appropriate EAS Message and Special News Bulletin message with the State and transmit the message to the EOC staff and the JIC. Staff in the Minnesota JIC will simulate the dissemination of media messages, including the Special News Bulletins.



**Criterion 5.a.2 Activation of the Prompt Alert and Notification System (Fast Breaking):**

*Activities associated with primary alerting and notification of the public are completed within 15 minutes of verified notification from the utility of an emergency situation requiring urgent action (fast breaking situation). The initial instructional message to the public must include:*

- 1) Identification of the State or local governmental organization and the official with the authority for providing the alert signal and instructional message;*
- 2) Identification of the commercial nuclear power plant and a statement that an emergency situation exists at the plant;*
- 3) Reference to the REP-specific emergency information (e.g., brochures and information in telephone books) for use by the general public during an emergency;*
- 4) A closing statement asking the affected and potentially affected population to stay tuned for additional information.*

*In addition, the ORO must demonstrate the capability to contact, in a timely manner, an authorized offsite decision maker relative to the nature and the severity of the event, in accordance with plans and procedures.*

This criterion will not be demonstrated in this exercise.

**Criterion 5.a.3 Activation of the Prompt Alert and Notification System (Exception Areas):**

*Activities associated with FEMA approved exception areas (where applicable) are completed within 45 minutes following the initial decision by authorized offsite emergency officials to notify the public of an emergency situation. Backup alert and notification of the public is completed within 45 minutes following the detection by the ORO of a failure of the primary alert and notification system.*

**State of Wisconsin**

The State will not demonstrate this criterion. It is a county responsibility.

**Pierce County**

Pierce County has 100% siren coverage and will not need to demonstrate primary route alerting.

**Criterion 5.b.1 Emergency Information and Instructions for Public and the Media:** *OROs provide accurate emergency information and instructions to the public and news in a timely manner.*

**State of Wisconsin**

The state will demonstrate the ability to coordinate the formulation and dissemination of accurate information and instructions, including Special News Broadcasts, to the news

media. The State of Wisconsin PIOs working at the JIC will coordinate with the Minnesota and Wisconsin State EOC PIOs, as well as with the PIOs from the counties and utility, to brief the media in a clear, accurate and timely manner. Procedures for early notification of the media will be demonstrated in the State EOC prior to the JIC becoming operational. The State of Wisconsin PIOs at the JIC will coordinate Special News Broadcast messages with their counterparts from the State of Minnesota.

Public inquiries will be handled per the State Emergency Operations Plan. The State of Wisconsin will be working jointly with the State of Minnesota phone bank to provide information to the public. Two WEM staff will be assigned to work at the phone bank. The State of Minnesota will provide controllers to perform the role of the "public" calling into the public information hotline.

### **Pierce County**

Pierce County will have a Public Information Officer (PIO) present at the JIC who will work with State, utility and other county PIOs to ensure that the county's interests and concerns are represented in the media briefings. Pierce County will not hold a media briefing in the EOC. Prior to the JIC becoming operational, the Pierce County PIO will coordinate with the State of Wisconsin PIO to issue a "first advisory" media notice. The County Emergency Management Director can describe procedures and facilities for holding a media briefing prior to the JIC becoming operational.

## **EVALUATION AREA 6 – SUPPORT OPERATION/FACILITIES**

**Criterion 6.a.1 Monitoring and Decontamination of Evacuees and Emergency Workers and Registration of Evacuees:** *The reception center/emergency worker facility has appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination and registration of evacuees and/or emergency workers.*

### **State of Wisconsin**

The State will demonstrate, out of sequence, the adequacy of procedures, facilities, equipment and personnel for radiological monitoring and decontamination. Health monitoring teams will demonstrate setup of the monitoring and decontamination stations and radiological monitoring and decontamination of evacuees at the Elmwood School Reception Center, located at 213 S. Scott Street, Elmwood, commencing at 7:00 PM on Monday, August 23, 2010.

The health monitoring teams will include personnel from the DHS-RPS and County Auxiliary Health Monitors. The instruments are calibrated annually by Prairie Island

Nuclear Generating Plant. County personnel will work under the direction of State staff and should be evaluated as part of the State of Wisconsin's response.

Health monitoring teams will set up and operate the monitoring stations using portal and hand-held monitors. Once the Reception Center is operational and monitors have frisked several evacuees to establish flow, at least six evacuees will be monitored and registered with one evacuee requiring decontamination. Two emergency workers will be monitored, with one requiring decontamination. Two evacuee vehicles will be monitored and one will require decontamination to meet this objective. The initial evacuee monitoring station uses portal monitors and will screen at least 6 evacuees to demonstrate the required 12-hour monitoring capability.

**Pierce County**

Pierce County will demonstrate this criterion out of sequence on Monday, August 23, 2010 at 7:00 p.m. at the Elmwood School in Elmwood, Wisconsin. Elmwood School is located at the 213 S. Scott in Elmwood. Pierce County is responsible for registering evacuees and assigning them to appropriate congregate care facilities. Reception Center personnel are not classified as emergency workers and will only receive a low range (0 - 200mR) dosimeter and a TLD, as they are located outside the 10-mile EPZ.

**Criterion 6.b.1 Monitoring and Decontamination of Emergency Worker Equipment:** *The facility/ORO has adequate procedures and resources for the accomplishment of monitoring and decontamination of emergency worker equipment including vehicles.*

**State of Wisconsin**

Health monitoring teams will demonstrate this criterion out of sequence at the Pierce County Reception Center, located at Elmwood School, 213 S. Scott Street, Elmwood, commencing at 7:00 p.m., Monday, August 23, 2010. Reception Center personnel will demonstrate the setup of the monitoring/decontamination station and monitoring of at least two emergency vehicles, one of which will require decontamination.

**Pierce County**

The County will not demonstrate this criterion. It is a state responsibility.

**Criterion 6.c.1 Temporary Care of Evacuees:** *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.*

### **State of Wisconsin**

The State will not demonstrate this criterion; it is a county responsibility.

### **Pierce County**

Pierce County will demonstrate this criterion by opening the Elmwood School Congregate Care Center on Monday, August 23, 2010. Red Cross staff will be available for interview. Congregate Care workers are considered Reception Center workers and are issued a low range (0 - 200mR) dosimeter and a TLD, as they are located outside the 10-mile EPZ. Reception Center demonstration activities, including setup, will start at 7:00 p.m. at Elmwood School Reception Center on August 23, 2010.

**Criterion 6.d.1 Transportation and Treatment of Contaminated Injured Individuals:** *The facility/ORO has the appropriate space, adequate resources and trained personnel to provide transport, monitoring, decontamination and medical services to contaminated injured individuals.*

### **State of Wisconsin**

The MS-1 hospital drill will be conducted at Sacred Heart Hospital, 900 W. Clairemont Avenue, Eau Claire, WI out of sequence on Tuesday, August 24, 2010. Setup will begin at 9:00 a.m., initiated by an inject message simulating the ambulance contacting the hospital. Controller staff will appropriately moulage a person with simulated injury and contamination and prepare the person for transport in the same manner as victim demonstrated during the MS-1 Transportation segment of the drill conducted the previous evening at the Elmwood School reception center in Elmwood, WI. The victim will be loaded into a local ambulance, which will simulate transport from the county reception center. The ambulance will be pre-positioned in the hospital parking lot and will simulate "arriving" at Sacred Heart Hospital at 9:30 a.m. The ambulance crew will be equipped with TLDs and low level DRDs to monitor and control radiation exposure, just as the Elmwood Ambulance Service crew would have been equipped. The Eau Claire ambulance crew is not to be evaluated. Hospital staff will demonstrate setup of the Radiation Emergency Area (REA) and the receipt, treatment, and monitoring/decontamination of the contaminated, injured patient. Once the patient has been decontaminated and transferred outside the REA, the hospital staff will demonstrate doffing of Personal Protective Equipment (PPE) and, by interview, restoration of the REA to normal use.

Hospital staff is also responsible for monitoring of the ambulance crew and ambulance prior to release to normal duty. If the ambulance was determined to be contaminated, or if monitoring the ambulance was not able to be performed by hospital staff, it would return to the vehicle decontamination area located at the Elmwood Reception Center. Staff participating in the exercise will demonstrate monitoring, decontamination, and release of the ambulance if sufficient staff is present. If there is insufficient hospital staff

to demonstrate ambulance monitoring, or if an actual emergency arises that necessitates use of the emergency room and/or ambulance, then the ambulance monitoring evaluation will be conducted via interview of the hospital staff, circumstances permitting. Referral of the ambulance and its equipment for decontamination will be evaluated through interview of the hospital monitoring staff.

The ambulance portion of the exercise, including communications with the hospital, is a county responsibility. It will be demonstrated out-of-sequence on Monday, August 23, 2010 at the Elmwood School Reception Center.

### **Pierce County**

The transportation section of the MS-1 drill will be demonstrated out of sequence by two ambulance services. The first demonstration will be held at the Pierce County Reception Center (Elmwood School) on Monday, August 23, 2010. The setup and demonstration for the MS-1 drill will begin at 7:00 p.m. Elmwood Ambulance Service will prepare a simulated casualty for transportation from the reception center. The second demonstration will be held at the Ellsworth Area Ambulance Service on Tuesday, August 24, 2010. The setup and demonstration for the MS-1 drill will begin at 7:00 p.m. Ellsworth Area Ambulance Service will prepare a potentially contaminated patient for transportation out of the EPZ.

Each ambulance crew will demonstrate the proper care and preparation of an injured contaminated patient for transport to an MS-1 hospital. Due to the distance between the two demonstration locations and the hospital in Eau Claire, actual transportation will not be demonstrated by either crew. Communications with the hospital will be demonstrated in accordance with each Ambulance Service procedures.

The ambulance crew serving the Reception Center (Elmwood Ambulance) will be equipped with TLDs and low level DRDs to monitor and control their radiation exposure. The ambulance crew entering the EPZ (Ellsworth Ambulance Service) will be equipped with the emergency worker kit.

A description of the route will be demonstrated through interviews with the ambulance drivers. Radiation surveys are not performed by ambulance crews; they are performed by the hospital upon patient arrival.

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## RECEPTION CENTER DRILL SCENARIO

### PIERCE COUNTY, WI

### ELMWOOD RECEPTION CENTER

#### I. PROPOSED SCHEDULE

Date: July 21, 2008  
Time: 7:00 pm – 10:00 pm  
Location: Elmwood Reception Center (Elmwood School)  
Elmwood, WI

#### II. PURPOSE

This simulated radiological emergency is being conducted to exercise the setup and operation of the reception center in Pierce County. The basic objective is to assess the ability of county and state personnel to setup and operate Elmwood Reception Center in response to a radiological incident at Prairie Island Nuclear Generating Plant.

#### III. OBJECTIVES OF THE DRILL

- Demonstrate the adequacy of procedures, facilities, equipment, and personnel for the radiological monitoring, decontamination, and registration of evacuees.
- Demonstrate the adequacy of procedures for the monitoring and decontamination of emergency workers, equipment, and vehicles.

#### IV. EXTENT OF PLAY

Pierce County and the State of Wisconsin will demonstrate these objectives between 7:00 pm and 10:00 pm on Monday, July 21, 2008, at Elmwood High School in the Village of Elmwood, WI. Pierce County is responsible for registering evacuees and assigning them to appropriate congregate care facilities. The state is responsible for directing the radiological monitoring and decontamination portions of this objective.

State health monitoring teams will demonstrate radiological monitoring and decontamination of evacuees, emergency workers, and vehicles in accordance with the procedures set forth in WI DHFS RPS *Nuclear Incident Response Plan*. Health monitoring teams will include personnel from the Department of Health and Family Services Radiation Protection Section,

the University of Wisconsin Safety Department, and individuals from the county who have received training as Auxiliary Health Monitors.

The Health teams use a radiation source to ensure that the survey instruments do respond; however, calibrated check sources are not used. The instruments are calibrated annually by a certified calibration facility. Health monitoring personnel from the county will work under the supervision of DHFS-RPS staff, and should be evaluated as part of the State of Wisconsin's response.

Once the reception center is operational and monitors have surveyed several evacuees to establish flow, at least six evacuees will be monitored and registered for evaluation purposes, with one evacuee requiring decontamination. Two emergency workers will be monitored, with one worker requiring decontamination. Two vehicles that are monitored, one evacuee vehicle and one emergency worker vehicle, will require decontamination.

## V. NARRATIVE SCENARIO

Activation of the Elmwood Reception Center will commence at approximately 7:00 pm, Monday, July 21, 2008 in response to notification that a radiological incident has occurred at the Prairie Island Nuclear Generating Plant.

Once the center is operational, processing of evacuees will commence. At least six evacuees will be monitored. Contamination at levels greater than 100 cpm above background will be detected on one evacuee, who will be sent to the decontamination area for decontamination. All evacuees will be registered in accordance with reception center procedures.

One additional evacuee will arrive having been injured while evacuating the EPZ, and will require immediate ambulance care and transport to the MS-1 hospital. This evacuee will be assumed radioactively contaminated and properly cocooned by ambulance personnel at the reception center prior to transport.

At least two emergency workers will arrive at the center for monitoring. One emergency worker will have contamination levels greater than 100 cpm above background on his outer clothing and will be sent to the decontamination area.

Two vehicles will be monitored with one having contamination levels greater than 100 cpm above background detected on the wheel wells. This vehicle will be directed to the vehicle decontamination area for decontamination.

Section VI contains the controller data for contamination levels of the non-injured evacuees and emergency workers, and their vehicles. See the ambulance controller sheet for specific scenario and data on the injured evacuee.

VI. SCENARIO

THIS IS A DRILL

Scenario Phase

Controller Message/Notes

\*\*\*\*\*

Evacuee Monitoring

Sixth evacuee will be contaminated

Contamination levels:

Left forearm 400 cpm >background

Left palm 500 cpm >background

Right palm 300 cpm >background

\*\*\*\*\*

Evacuee Decon

First decontamination

Contamination levels:

Left forearm 200 cpm >background

Left palm <100 cpm above background

Right palm <100 cpm above background

\*\*\*\*\*

Evacuee Decon

Second decontamination

Contamination levels:

Left forearm <100 cpm above background

Left palm <100 cpm above background

Right palm <100 cpm above background

\*\*\*\*\*

Emergency Worker  
Monitoring

Second emergency worker will be contaminated

Contamination levels:

Top of left shoe 800 cpm >background

Left palm 650 cpm >background

\*\*\*\*\*

Emergency Worker  
Decon

First decontamination

Contamination levels:

Top of left shoe <100 cpm above background

Left palm <100 cpm above background

\*\*\*\*\*



**THIS IS A DRILL**

**VI. SCENARIO (continued)**

**THIS IS A DRILL**

<u>Scenario Phase</u>	<u>Controller Message/Notes</u>
*****	
<u>Evacuee Vehicle Monitoring</u>	<u>Second vehicle will be contaminated</u>  <u>Contamination levels:</u> Wheel wells      900 cpm >background
*****	
<u>Evacuee Vehicle Decon</u>	<u>First decontamination</u>  <u>Contamination levels:</u> Wheel wells      <100 cpm above background
*****	
<u>Emergency Worker Vehicle Monitoring</u>	<u>Second vehicle will be contaminated</u>  <u>Contamination levels:</u> Vehicle body      1000 cpm >background Wheel wells      2000 cpm >background
*****	
<u>Emergency Worker Vehicle Decon</u>	<u>First decontamination</u>  <u>Contamination levels:</u> Vehicle body      <100 cpm above background Wheel wells      500 cpm >background
*****	
<u>Emergency Worker Vehicle Decon</u>	<u>Second decontamination</u>  <u>Contamination levels:</u> Vehicle body      <100 cpm above background Wheel wells      <100 cpm above background

\*\*\*\*\*

Termination

Termination Message

Issued when authorized by Exercise Manager

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**END OF DRILL**

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## MS-1 RADIOLOGICAL MEDICAL DRILL SCENARIO

### PIERCE COUNTY, WI

### ELMWOOD AREA AMBULANCE SERVICE

#### I. PROPOSED SCHEDULE

Date: August 23, 2010  
Time: 7:00 pm – 10:00 pm  
Location: Elmwood Reception Center (Elmwood School)  
Elmwood, WI  
Injury/Illness: Open wound to the forehead, possible concussion.

#### II. PURPOSE

This simulated radiation medical emergency is being conducted to exercise the emergency medical response in Pierce County. The basic objective is to assess the ability of the pre-hospital medical service to handle a contaminated and injured patient.

#### III. OBJECTIVES OF THE DRILL

##### Terminal Objective

Demonstrate the adequacy of vehicles, equipment, procedures, and personnel for transporting contaminated, injured, or exposed individuals.

##### Demonstration Objectives

To accomplish the terminal objective, drill participants will adequately:

- Implement appropriate contamination control measures during preparation and transport of individuals from the accident site.
- Determine the identity of the medical facility to which the individual will be transported and transport the individual without undue delay.
- Demonstrate the capability to maintain timely and accurate communications with the

receiving medical facility.

- Demonstrate the capability to follow policies, implement procedures, and use equipment/facilities as delineated in the applicable emergency response plan.

#### IV. EXTENT OF PLAY

This objective will be demonstrated between 7:00 pm and 10:00 pm on Monday, August 23, 2010, at the reception center at Elmwood School in Elmwood, WI. Elmwood Ambulance Service will prepare a simulated contaminated patient for transportation. Due to the distance between Elmwood and Eau Claire, and the resulting time that the ambulance crew would be out of the service area, actual transportation will not be demonstrated. The demonstration of communications with the medical facility will take place according to the SOP for the ambulance service. A description of the route and the selection of a hospital to transport the patient will be demonstrated through an evaluator's interview with the ambulance personnel.

#### V. NARRATIVE SCENARIO

This simulated radiation accident begins as a member of the general public arrives at the reception center in Elmwood. The individual has been evacuated from the area around the Prairie Island Nuclear Generating Plant due to an accident and release of radioactive materials. While driving to the reception center, via a locally known shortcut, the person swerves to avoid a deer in a wooded area and drives off the road. While exiting the car in the ditch the individual trips on a downed tree branch, falling and striking their forehead on a rock resulting in a severe laceration. A short time later, while the victim lay dazed next to their car, another vehicle comes along and stops to help. While assisting the injured person, both are exposed to the passing plume. Eventually they leave, driving the injured person to the reception center.

The driver tells reception center staff that the car and passengers may have been exposed to the radioactive plume resulting in potential contamination of both.

The ambulance crew stationed at the reception center treats the victim, implements contamination control measures, and loads the individual into the ambulance for transport to the hospital. Reception center staff is trained **not** to survey evacuees requiring immediate medical attention, since thorough surveys will be performed at the receiving hospital. If reception center staff does choose to survey the victim, contamination levels are provided in Section VI below.

Due to the long distance to Sacred Heart Hospital in Eau Claire, transport will be simulated. The drill may be terminated when the patient is loaded **and** the notification of the hospital has

been completed. Notification of Sacred Heart Hospital will occur through the Pierce County Sheriff dispatcher.

## VI. SCENARIO

### THIS IS A DRILL

#### DO NOT initiate actions affecting normal operations

#### Scenario Phase

#### Controller Message/Notes

\*\*\*\*\*

- Ambulance staff DRDs read <1 mR throughout the drill
- Yellow herculite will NOT be used inside of the ambulance

\*\*\*\*\*

#### EMS arrival

#### Medical Conditions

Conscious level: alert/disoriented  
Respiration: 24  
Pulse: 100  
Blood pressure: 100/70  
Skin: pale/cool/diaphoretic  
Pupils: equal/reactive to light  
Other: open wound to forehead / minor bleeding / patient experiencing bad headache / light sensitive

#### Radiological Conditions

Victim's clothing: 2000 cpm >background  
Laceration site: 1200 cpm >background  
Victim's palms: 1800 cpm >background

\*\*\*\*\*

#### In ambulance

#### Medical Conditions

Conscious level: alert/disoriented  
Respiration: 20  
Pulse: 100  
Blood pressure: 100/72  
Skin: pale/cool/diaphoretic  
Pupils: equal/reactive to light  
Other: open wound to forehead / minor bleeding / patient experiencing bad headache / light sensitive

#### Radiological Conditions

As above, but victim is cocooned in blankets.

\*\*\*\*\*

Termination

Termination Message

Upon ambulance call to the Pierce Co Sheriff Dispatch, and when authorized by Exercise Manager.

\*\*\*\*\*

**END OF DRILL**

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## MS-1 RADIOLOGICAL MEDICAL DRILL SCENARIO

### PIERCE COUNTY, WI

### SACRED HEART HOSPITAL

### Ambulance Call In / Patient Transfer Component

#### I. PROPOSED SCHEDULE

Date: August 24, 2010  
Time: 9:00 am  
Location: Sacred Heart Hospital  
900 West Clairemont Avenue  
Eau Claire, WI  
Injury/Illness: Open wound to forehead, possible concussion.

#### II. PURPOSE

This simulated radiation medical emergency is being conducted to exercise the emergency medical response component involving the coordination of the patient ambulance transporting personnel and the hospital personnel receiving a potentially radioactively contaminated and injured patient.

#### III. OBJECTIVES OF THE DRILL

##### Ambulance / Medical Facility:

##### Terminal Objective

Demonstrate the necessary communication between the transport ambulance and the receiving hospital so as to allow the hospital to adequately prepare for the receipt of a potentially radioactively contaminated and injured patient.

##### Demonstration Objectives

To accomplish the terminal objective, drill participants will adequately:

- Demonstrate effective and timely communications between the in transit ambulance personnel and the receiving hospital personnel.

- Demonstrate the appropriate receipt and transfer of the potentially radioactively contaminated and injured patient between ambulance and hospital personnel.

- **IV. EXTENT OF PLAY**

Ambulance personnel and hospital medical and security personnel will demonstrate this objective at Sacred Heart Hospital in Eau Claire, WI, on Tuesday, August 24, 2010, at about 9:00 am. A local ambulance service will participate by simulating the transport and transfer of a potentially contaminated patient to the hospital. The hospital will demonstrate radio communications with the ambulance and prepare for proper receipt of the potentially radioactively contaminated patient.

Since area ambulance services may not be familiar with contamination control procedures, hospital personnel will demonstrate the ability to direct the ambulance personnel. Hospital personnel will demonstrate the availability of, and capability to use, instruments for monitoring the transport vehicle and its crew for potential radioactive contamination. Should the ambulance and crew not be able to remain at the hospital due to pressing non-drill service needs, the survey process will be completed by interview of the hospital staff.

## **V. NARRATIVE SCENARIO**

This simulated radiation accident begins as a member of the general public arrives at the reception center in Elmwood. The individual has been evacuated from the area around the Prairie Island Nuclear Generating Plant due to an accident and release of radioactive materials. While driving to the reception center, via a locally known shortcut, the person swerves to avoid a deer in a wooded area and drives off the road. While exiting the car in the ditch the individual trips on a downed tree branch, falling and striking their forehead on a rock resulting in a severe laceration. A short time later, while the victim lay dazed next to their car, another vehicle comes along and stops to help. While assisting the injured person, both are exposed to the passing plume. Eventually they leave, driving the injured person to the reception center.

After arriving at the reception center the potentially radioactively contaminated and injured person is prepared for transport and dispatched by ambulance to the primary MS-1 hospital for treatment. The hospital emergency staff meets the ambulance upon arrival. An initial patient assessment report is received and the patient is transferred to the REA. Surveys of the ambulance crew and vehicle are performed prior to releasing the crew and vehicle back into service.



VI. SCENARIO

THIS IS A DRILL

DO NOT initiate actions affecting normal operations

Scenario Phase

Controller Message

Medical personnel DRDs read <1 mR thru out drill

\*\*\*\*\*

Location: In Transit (Radio call to Hospital 9:05 am; ETA at Hospital ~ 9:30 am)

In Ambulance

(In transit)

Medical Conditions

Conscious level: alert/disoriented

Respiration: 20

Pulse: 100

Blood pressure: 100/72

Skin: pale/cool/diaphoretic

Pupils: equal/reactive to light

Other: open wound to forehead / minor  
bleeding / patient experiencing bad  
headache / light sensitive

Radiological Conditions

Victim cocooned to prevent possible radiological  
contamination from spreading.

\*\*\*\*\*

Location: Hospital

Initial Hospital

(Transfer)

Medical Conditions

Conscious level: alert/disoriented

Respiration: 16

Pulse: 80

Blood pressure: 136/74

Skin: warm/dry/normal color

Pupils: equal/reactive to light

Other: open wound to forehead / minor  
bleeding / patient experiencing bad  
headache / light sensitive

Radiological Conditions

Victim cocooned to prevent possible radiological  
contamination from spreading.

\*\*\*\*\*

**END OF AMBULANCE DRILL COMPONENT**

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**MS-1 RADIOLOGICAL MEDICAL DRILL SCENARIO**  
**PIERCE COUNTY, WI**  
**SACRED HEART HOSPITAL**

**I. PROPOSED SCHEDULE**

Date: August 24, 2010  
Time: 9:00 am  
Location: Sacred Heart Hospital  
900 West Clairemont Avenue  
Eau Claire, WI  
Injury/Illness: Open wound to forehead, possible concussion.

**II. PURPOSE**

This simulated radiation medical emergency is being conducted to exercise the emergency medical response and to assess the ability of the hospital emergency medical service to handle a contaminated and injured patient.

**III. OBJECTIVES OF THE DRILL**

**Medical Facility:**

Terminal Objective

Demonstrate the adequacy of the equipment, procedures, supplies, and personnel of medical facilities responsible for the receipt and treatment of contaminated, injured, or exposed individuals.

Demonstration Objectives

To accomplish the terminal objective, drill participants will adequately:

- Demonstrate the timely availability of appropriate medical facility staff.
- Demonstrate the preparation of the receiving area for a contaminated individual and implement appropriate contamination control measures.
- Determine, by both survey and bioassay sample, the nature and extent of radiological contamination of a contaminated injured individual and demonstrate proper decontamination.
- Implement appropriate contamination control measures during and after treatment of a contaminated individual.
- Demonstrate the capability to follow policies, implement procedures, and use equipment/facilities as delineated in the applicable emergency response plan.

#### IV. EXTENT OF PLAY

Medical staff and security personnel at Sacred Heart Hospital in Eau Claire, WI, will demonstrate this objective on Tuesday, August 24, 2010, at about 9:00 am. A local ambulance service will participate by simulating the transport of a potentially contaminated patient to the hospital. The hospital will demonstrate radio communications with the ambulance and provide the necessary information to prompt the activation of the hospital's Radiation Emergency Area (REA).

Since area ambulance services may not be familiar with contamination control procedures, hospital personnel will demonstrate the ability to direct the ambulance personnel. Hospital personnel will demonstrate the availability of, and capability to use, instruments for monitoring the transport vehicle and its crew.

The hospital personnel use a radiation source to ensure that the instrument does respond; however, calibrated check sources are not used. The instruments are calibrated annually by a certified calibration facility.

#### V. NARRATIVE SCENARIO

This simulated radiation accident begins as a member of the general public arrives at the reception center in Elmwood. The individual has been evacuated from the area around the Prairie Island Nuclear Generating Plant due to an accident and release of radioactive materials. While driving to the reception center, via a locally known shortcut, the person swerves to avoid a deer in a wooded area and drives off the road. While exiting the car in the ditch the individual trips on a downed tree branch, falling and striking their forehead on a rock resulting in a severe laceration. A short time later, while the victim lay dazed next to their car, another vehicle comes along and stops to help. While assisting the injured person, both are exposed to the passing plume. Eventually they leave, driving the injured person to the reception center.

The hospital emergency staff meets the ambulance upon arrival. An initial patient assessment report is received and the patient is transferred to the REA. The hospital staff evaluates the patient medical condition and initiates appropriate treatment. The hospital radiation safety personnel perform a radiological survey of the patient. Bioassay samples are taken from the wound and intact skin areas, as well as both nasal and mouth swab samples. Decontamination efforts are performed on the patient until surveys indicate background readings on previously contaminated areas. Particular attention to the decontamination of the laceration wound should be observed.

The patient is surveyed prior to transfer out of the REA. Appropriate exit procedures for the patient and REA personnel are performed. Surveys of the ambulance crew and vehicle are also performed prior to releasing the crew and vehicle. If the crew must leave, an interview with hospital staff will be done.

**VI. SCENARIO**

**THIS IS A DRILL**

**DO NOT initiate actions affecting normal operations**

Scenario Phase

Controller Message

Hospital staff DRDs read <1 mR throughout drill

\*\*\*\*\*

Location:

In Ambulance  
(Transfer)

Medical Conditions

Conscious level: alert / disoriented

Respiration: 16

Pulse: 80

Blood pressure: 136/74

Skin: warm/dry/normal color

Pupils: equal/reactive to light

Other: open wound to forehead / minor  
bleeding / patient experiencing bad  
headache / light sensitive

Victim cocooned to prevent possible radiological  
contamination from spreading.

\*\*\*\*\*

Location: Hospital

Initial Hospital  
Evaluation

Medical Conditions

Conscious level: alert / disoriented

Respiration: 18

Pulse: 85

Blood pressure: 130/70

Skin: warm/dry/normal color

Pupils: equal/reactive to light

Other: same as above

Radiological Conditions

Victim's clothing: 2000 cpm >background

Laceration site: 1200 cpm >background

Victim's palms: 1800 cpm >background

\*\*\*\*\*

After First Decon

Medical Conditions

Stable / Unchanged

Radiological Conditions

Laceration site: 900 cpm >background

Victim's palms: 950 cpm >background

\*\*\*\*\*

**THIS IS A DRILL**

**DO NOT initiate actions affecting normal operations**

\*\*\*\*\*

After Second Decon

Medical Conditions

Stable / Unchanged

Radiological Conditions

Laceration site: 400 cpm >background

Victim's palms: 300 cpm >background

\*\*\*\*\*

After Third Decon

Medical Conditions

Stable / Unchanged

Radiological Conditions

Laceration site: <100 cpm >background

Victim's palms: <100 cpm >background

\*\*\*\*\*

Location: Hospital

Post Medical Treatment

Medical Conditions

(may be modified at controller's discretion)

Conscious level: unchanged

Respiration: 14

Pulse: 74

Blood pressure: 130/74

Skin: unchanged

Pupils: unchanged

Other: Further post decon treatment  
Scheduled for MRI or CT scan

\*\*\*\*\*

Ambulance and Crew Monitoring

Radiological Conditions

Ambulance and Crew not contaminated.

\*\*\*\*\*

Termination

Termination message

Issued when authorized by Exercise Manager

\*\*\*\*\*

**END OF DRILL**

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## MS-1 RADIOLOGICAL MEDICAL DRILL SCENARIO

### PIERCE COUNTY

### ELLSWORTH AREA AMBULANCE SERVICE

#### I. PROPOSED SCHEDULE

Date: August 24, 2010  
Time: 7:00 pm  
Location: Ellsworth EMS Station  
Ellsworth, WI  
Injury/Illness: Left Leg Fibula Broken

#### II. PURPOSE

This simulated radiation medical emergency is being conducted to exercise the emergency medical response in Pierce County. The basic objective is to assess the ability of the pre-hospital medical (ambulance) service to handle a contaminated and injured patient.

#### III. OBJECTIVES OF THE DRILL

##### Terminal Objective

Demonstrate the adequacy of vehicles, equipment, procedures, and personnel for transporting contaminated, injured, or exposed individuals.

##### Demonstration Objectives

To accomplish the terminal objective, drill participants will adequately:

- Implement appropriate contamination control measures during preparation and transport of individuals from the accident site.
- Determine the identity of the medical facility to which the individual will be transported and transport the individual without undue delay.
- Demonstrate the capability to maintain timely and accurate communications with the receiving medical facility.
- Demonstrate the capability to follow policies, implement procedures, and use equipment/facilities as delineated in the applicable emergency response plan.

#### IV. EXTENT OF PLAY

This objective will be demonstrated between 7:00 pm and 8:00 pm on August 24, 2010, at the Ellsworth EMS station in Ellsworth, WI. The Ellsworth Ambulance Service will prepare a simulated contaminated patient for transportation. Due to the distance between Ellsworth and Eau Claire, and the resulting time that the ambulance crew would be out of the service area, actual transportation will not be demonstrated. The demonstration of communications with the medical facility will take place according to the SOP for the ambulance service. A description of the route and the selection of a hospital to transport the patient will be demonstrated through an evaluator's interview with the transportation personnel.

#### V. NARRATIVE SCENARIO

This drill begins with a simulated radiological release at the Prairie Island Nuclear Generating Plant. A member of the general population experiences a flat tire while attempting to evacuate the area. While changing the tire, the victim's car slips off of the jack and the jack strikes the victim in the left leg breaking the left fibula. While dealing with this situation the victim and their passenger believe they were exposed to the plume.

The passenger finishes changing the tire and drives the victim to Ellsworth to receive medial treatment at the EMS station. The driver informs the ambulance personnel that the they and the car are most likely radioactively contaminated from the plume.

The ambulance crew stationed in Ellsworth treats the victim, implements contamination control measures, and properly loads the individual into the ambulance for transport to the hospital. Ambulance staff are trained **not** to survey evacuees requiring immediate medical attention, since thorough surveys will be performed at the receiving hospital. General medical conditions of the victim can be found in Section V below.

The ambulance crew directs the remaining uninjured passenger to proceed to the reception center in Elmwood where both the car and the passenger can be screened for contamination and decontaminated if necessary.

Due to the long distance to Sacred Heart Hospital in Eau Claire, transport will be simulated. The drill may be terminated when victim is loaded **and** the notification of the hospital has been completed. Notification of Sacred Heart Hospital will occur according to established SOPs.

**VI. SCENARIO**

**THIS IS A DRILL**

**DO NOT initiate actions affecting normal operations**

Scenario Phase

Controller Message/Notes

Ambulance staff DRDs read <1 mR/hr throughout the drill

Yellow herculite will **NOT** be used inside of the ambulance

Victim arrival

Medical Conditions

Conscious level: alert/oriented  
Respiration: 24  
Pulse: 120  
Blood pressure: 100/70  
Skin: pale/cool/diaphoretic  
Pupils: equal/reactive to light  
Other: lower left leg broken fibula / minor bleeding

\*\*\*\*\*

In ambulance

Medical Conditions

Conscious level: unchanged  
Respiration: 20  
Pulse: 120  
Blood pressure: 100/72  
Skin: unchanged  
Pupils: unchanged  
Other: unchanged

\*\*\*\*\*

Termination

Termination message issued when authorized by Exercise Manager

\*\*\*\*\*

**END OF DRILL**



## APPENDIX G: OFFSITE TIMELINE

### Timeline Summary – All Times Are Approximate

Time Condition Met	Classification	EAL	Offsite Notification Time
~0740	ALERT	HA3.1	~0810
~0900	SAE	FS1	~0930
~1055	GE	FG1	~1125
~1205	2 <sup>nd</sup> PAR		~1235

#### 0700 INITIAL CONDITIONS

- Units 1 and 2 have been operating at 100% power for more than 72 hours.
- Security has allowed access of a truck hauling Hydrazine into the Turbine Building.
- Wind is from the South-South West (203 deg) at 5.6 mph.
- Temperature is 85°F.
- Stability Class is "D".
- No Precipitation.

0740 A truck with a delivery of hydrazine parks in Unit 1 Turbine building delivery area. Upon exiting the vehicle workers discover a leaking barrel of hydrazine. Workers leave the area and close the outside roll-up door. The breathing air in the delivery area exceeds the limit for hydrazine fumes.

**ALERT EAL HA3.1 – Report or detection of toxic gases within or contiguous to Table H-1 area is concentrations that may result in an atmosphere IMMEDIATELY DANGEROUS TO LIFE AND HEALTH (IDLH).**

0755 On-site classification of the ALERT ECL complete.

#### **~0810 Notification to off-site for the ALERT ECL should be complete.**

1. Call list notifications take place.
2. Emergency Operating Center (EOC) activation (State of Minnesota, Goodhue and Dakota Counties) occurs.
  - EOC security system initiated
  - Maps, displays set up, messages forms, logs, etc. distributed
  - Communication links established and maintained

## Prairie Island Nuclear Generating Plant Offsite Timeline - Rev. 1 August 24, 2010

### TIME

### EVENT SUMMARY

throughout the exercise

- Assembled EOC personnel briefed, with additional briefings held periodically throughout the exercise

Note: The BCA Duty Officer participation is complete when notifications are completed and they are informed by the Planning and Assessment Center that they have taken over communication with the plant.

3. **(CONTROLLER INJECT - MESSAGE 01)**  
Radiological Accident Deployment (RAD) teams and Team Captain respond to Plymouth fire station. From there, they will be dispatched to affected areas.
4. Department of Natural Resources and Department of Agriculture Department Operations Centers (DOCs) are activated (simulated).
5. Local and state first responders are put on standby.
6. Joint Information Center (JIC) is activated.
  - Public Information Officers (PIOs) notified
  - JIC displays and media information kits arranged.
  - JIC Security and Moderator report to media briefing room
  - Initial JIC Management Team meeting
  - Initial news briefing conducted by HSEM Director
  - Preparation and issue of Public Information Bulletins and news releases will continue until the termination of the exercise.
7. Planning Chief requests additional radiological assets from the 55thCST through Military Affairs. DOE radiological assets are requested through FRMAC.

## Prairie Island Nuclear Generating Plant Offsite Timeline - Rev. 1 August 24, 2010

TIME	EVENT SUMMARY
	RAP Teams
	8. <b>(CONTROLLER INJECT - MESSAGE 02)</b> The Planning and Assessment Center initiates dose assessment
~0825	ERDS should be established during TSC activation.
0845	Unit 1, 12 SG #1B Safety leak. (Approximately 0.5% open and >220 Lb/sec). This is the initiation of the S/G safety valve failure.
~0900	Turnover between TSC and EOF should be complete at the Prairie Island Nuclear Generating plant.
~0900	<b><i>Puff release data so that Station and Pierce, WI can start their field team sampling. This release will have readings &lt; 1mr/hr.</i></b>
~0900	12 Steam Generator tube rupture occurs; Control Room will trip the Reactor manually, Turbine will trip and a manual Safety Injection (SI) activation will occur. <b>SAE EAL FS1 - Loss or Potential Loss of ANY two Fission Product Barriers.</b> <ul style="list-style-type: none"><li>• <b>Containment Loss # 4 SG Secondary Side Release with P-to-S Leakage.</b> (A leak &gt;10gpm and a nonisolable release path to the environment).</li><li>• <b>RCS Loss #3 SG Tube Rupture.</b></li></ul>
~0915	On-site SAE Classification is complete.
<b>~0930</b>	<b>SAE ECL notification is complete to off-site.</b> <ol style="list-style-type: none"><li>1. EOC and field staff are notified of the classification upgrade.<ul style="list-style-type: none"><li>- State EOC, JIC</li><li>- Dakota and Goodhue County EOCs</li><li>- RAD Teams Maple Grove &amp; Plymouth (DNR and Agriculture are simulated)</li><li>- Decontamination Centers (simulated)</li></ul></li></ol>

## Prairie Island Nuclear Generating Plant Offsite Timeline - Rev. 1 August 24, 2010

TIME	EVENT SUMMARY
	<ul style="list-style-type: none"><li>- Reception Centers are activated (simulated)</li><li>3. Congregate Care Center is activated (simulated)</li><li>4. Schools are evacuated to sister schools (simulated).</li><li>5. MDA and DNR field sampling teams put on standby (simulated).</li><li>6. Governor advised of incident status. "State of Emergency" recommended by State Incident Manager.</li><li>7. "State of Emergency" declared by Governor.</li><li>8. Dairy animals placed on covered water and stored feed.</li></ul>
~1020	<b>(CONTROLLER INJECT - MESSAGE 03)</b>
	Interrupt Communications between the PAC and the Field Team Command Van
	<b>(CONTROLLER INJECT - MESSAGE 04)</b>
	Demonstrate backup communications between Goodhue County EOC and the State EOC.
~1030	Communications restored based on redemonstration of an alternate system
	<b>Note: Lead Controller will determine when communications are restored.</b>
~1035	<b>(CONTROLLER INJECT MESSAGES 05 &amp; 06)</b>
	Traffic Impediments

## Prairie Island Nuclear Generating Plant Offsite Timeline - Rev. 1 August 24, 2010

TIME	EVENT SUMMARY
1055	12 SG Safety goes completely open (100%) and a large fuel failure (100% Gap release). Rad monitor 1R-9 increases rapidly to greater than 10 R/hr.
~1055	<p><b>GE EAL FG1 - Loss of ANY two Barriers AND Loss or Potential Loss of Third Barrier.</b></p> <ul style="list-style-type: none"> <li>• <b>Fuel Clad Loss #6 Other Indications (1R-9 &gt; 10 R/hr).</b></li> <li>• <b>RCS Loss #3 SG Tube Rupture.</b></li> <li>• <b>Cnmt Barrier #4 SG Secondary Side Release with P-to-S Leakage. (A leak &gt;10gpm and a nonisolable release path to the environment).</b></li> </ul> <p>The release to the atmosphere begins <math>5.0E^8</math> <math>\mu\text{Ci}/\text{sec}</math> Xe 133 equivalent. No EPA PAGs exceeded past site boundary (0.26 miles).</p>
~1110	On-site GE Classification is complete.

## Prairie Island Nuclear Generating Plant Offsite Timeline - Rev. 1 August 24, 2010

TIME	EVENT SUMMARY
~1125	<p><b>GE notification is complete to off-site.</b> The PAR will be: evacuate all sectors out to 2-miles and sectors RABCD out to 5 miles – Sub Areas 2, 5N, and 5E.</p> <ol style="list-style-type: none"><li>1. EOC and field staff are notified of the classification upgrade.<ul style="list-style-type: none"><li>o State EOC, JIC</li><li>o Goodhue and Dakota County EOCs</li><li>o RAD Teams</li><li>o Decontamination Centers</li></ul></li><li>2. Minnesota's default protective action recommendation (PAR) is to evacuate the 2-mile sub-area and the 5-mile sub-area(s) in the downwind sectors. Sub Areas 2, 5N, and 5E will be recommended by the Planning Chief to the State Incident Manager.</li><li>3. When PADs are approved, the Public Alert and Notification System (PANS) will be implemented. The EAS system will be activated and sirens sounded (simulated).</li><li>4. As PADs are recommended, necessary traffic control points are activated for evacuee traffic flow and to restrict incoming traffic.</li><li>5. RAD teams are in the field monitoring radiation levels and reporting to planning and assessment staff in State EOC.</li><li>6. All emergency response organizations are fully activated.</li><li>7. Radiological response support requested from FEMA</li></ol>
~1205	Wind shifts from 203 degrees to 140 degrees.

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## Prairie Island Nuclear Generating Plant Offsite Timeline - Rev. 1 August 24, 2010

TIME	EVENT SUMMARY
~1220	PAR change occurs based on with a wind shift and increased release to the environment. Release rate increase to $1.2 \text{ E}^9 \mu\text{Ci/sec}$ Xe 133 equivalents.
<b>~1235</b>	<b>PAR change notification is complete to off-site.</b> The PAR will be: evacuate all sectors out to 5 miles and evacuate sectors NPQRA out to 10 miles – Sub Areas 2, 5N, 5E, 5W, 10W, 10NW and 10N. <ol style="list-style-type: none"><li>1. EOC and field staff are notified.</li><li>2. Second PAR is recommended by Planning Chief to State Incident Manager. PAR approval process begins</li><li>3. When PAD is approved, the Public Alert and Notification Systems (PANS) will be implemented. The EAS system will be activated and sirens sounded (simulated).</li></ol>
1330	Release terminates.
~1335	Exercise is terminated after both States and Prairie Island have determined that all exercise objectives have been sufficiently demonstrated.

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