



# Monticello Nuclear Generating Plant After Action Report/ Improvement Plan

Exercise Date – August 29, 2017  
Radiological Emergency Preparedness Program



**FEMA**

*Published November 13, 2017*

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

This page intentionally left blank.

# Monticello Nuclear Generating Plant

# After Action Report/Improvement Plan

*Published November 13, 2017*

## Contents

CONTENTS .....	iii
EXECUTIVE SUMMARY .....	1
SECTION 1: INTRODUCTION .....	5
1.1 Exercise Basis .....	5
1.2 Emergency Planning Zone (EPZ) Description.....	7
SECTION 2: EXERCISE OVERVIEW .....	9
2.1 Exercise Details .....	9
2.2 Exercise Planning Team .....	9
2.3 Participating Organizations.....	13
2.3.1 State of Minnesota.....	13
2.3.2 Sherburne County.....	14
2.3.3 Wright County.....	14
SECTION 3: EXERCISE DESIGN SUMMARY .....	16
3.1 Exercise Purpose and Design.....	17
3.2 Exercise Objectives, Capabilities, and Activities.....	17
3.3 Scenario Summary .....	17
SECTION 4: ANALYSIS OF CAPABILITIES .....	19
4.1 Exercise Evaluation and Results .....	19
4.2 Summary Results of Exercise Evaluation.....	20
Table 4.2.1 – Summary of Exercise Evaluation – State of Minnesota.....	23
Table 4.2.2 – Summary of Exercise Evaluation – Sherburne County.....	24
Table 4.2.3 – Summary of Exercise Evaluation – Wright County .....	25
4.3 Criteria Evaluation Summaries .....	26
4.3.1 Risk Jurisdiction – State of Minnesota.....	27
4.3.1.1 State Command Van – Maple Grove .....	27
4.3.1.2 State Radiological Accident Deployment Field Team #1 – Maple Grove.....	27
4.3.1.3 State Radiological Accident Deployment Field Team #2 – Maple Grove.....	27

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

4.3.1.4 Integrated Public Alert Warning System (IPAWS) .....	28
4.3.1.5 MS-1 Transportation – North Memorial Medical Ambulance Service .....	28
4.3.1.6 MS-1 Facility – North Memorial Medical Center .....	28
4.3.1.7 MS-1 Transportation – North Memorial Medical Ambulance Service Fairview Northland Medical Center.....	29
4.3.1.8 MS-1 Facility – Fairview Northland Medical Center .....	29
4.3.1.8 MS-1 Transportation – Gold Cross Ambulance Service – CentraCare St. Cloud Hospital.....	29
4.3.1.9 MS-1 Facility – CentraCare St. Cloud Hospital .....	30
4.3.1.10 Reception Center – Rogers High School.....	30
4.3.1.11 Evacuee Monitoring/Decontamination/Registration – Rogers High School....	30
4.3.1.12 Dosimetry Control Officer (Briefing) – Rogers High School .....	30
4.3.1.13 Dosimetry (Interview) – Rogers High School .....	31
4.3.1.14 Congregate Care Center – Rogers High School .....	31
4.3.1.15 Evacuee Vehicle Monitoring – Rogers High School .....	31
4.3.1.16 Evacuee Vehicle Decontamination – Rogers High School .....	32
4.3.2 Risk Jurisdiction – Sherburne County .....	32
4.3.2.1 Initial Warning Point (IWP) .....	32
4.3.2.2 Public Information Officer (PIO) at the State Joint Information Center (JIC)...	32
4.3.2.3 Emergency Operations Center (EOC).....	33
4.3.2.4 Traffic and Access Control Point (Briefing) .....	33
4.3.2.5 Traffic and Access Control Point (Interview) .....	33
4.3.2.6 Emergency Worker Decontamination – Zimmerman Fire Department.....	34
4.3.3 Risk Jurisdiction – Wright County.....	34
4.3.3.1 IWP .....	34
4.3.3.2 PIO at the State JIC.....	34
4.3.3.3 EOC.....	35
4.3.3.4 Traffic and Access Control Point (Briefing) .....	35
4.3.3.5 Traffic and Access Control Point (Interview) .....	35
4.3.3.6 EV-2 – Schools – St. Michael-Albertville #885 School District.....	35
4.3.3.7 EV-2 – Schools – Buffalo Area #877 School District .....	36
SECTION 5: CONCLUSION.....	37
APPENDIX A: EXERCISE TIMELINE .....	39
APPENDIX B: EXERCISE EVALUATION TEAM.....	41

---

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

APPENDIX C: ACRONYMS AND ABBREVIATIONS .....	45
APPENDIX D: EXERCISE PLAN .....	49
APPENDIX E: SCENARIO TIMELINES.....	85
On-site Scenario Timeline .....	87
Off-site Scenario Timeline .....	92

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

This page intentionally left blank.

## **EXECUTIVE SUMMARY**

On August 29, 2017, a Radiological Emergency Preparedness (REP), Partial Participation, Plume Exposure Pathway Exercise was conducted in the 10-mile Emergency Planning Zone (EPZ) around the Monticello Nuclear Generating Plant (MNGP) by the U.S. Department of Homeland Security/Federal Emergency Management Agency (DHS/FEMA), Region V. The purpose of the exercise was to assess the level of preparedness of State and local jurisdictions in responding to a radiological emergency. This exercise was held in accordance with DHS/FEMA policies and guidance concerning the exercise of State and local Radiological Emergency Response Plans (RERPs) and procedures.

The previous exercise at this site was conducted on August 18, 2015. The qualifying emergency preparedness exercise was conducted on January 7, 1981.

DHS/FEMA wishes to acknowledge the efforts of the many individuals who participated in this exercise. The State of Minnesota, the Counties of Sherburne and Wright, local municipalities, non-government entities, and volunteers all contributed to the success of the exercise.

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

This Final After Action Report/Improvement Plan contains the evaluation of the biennial exercise and the evaluation of the following in-sequence and out-of-sequence activities:

### **In-Sequence Activities**

State of Minnesota:

- Initial Warning Point (IWP) – St. Paul
- State Emergency Operations Center (EOC) – St. Paul
- Planning Assessment Center (PAC) – St. Paul
- State Command Van – Maple Grove
- State Radiological Accident Deployment (RAD) Field Teams – Maple Grove
- Integrated Public Awareness Warning System (IPAWS)

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

**Sherburne County:**

- Sherburne County IWP
- Sherburne County Public Information Officer (PIO) – State Joint Information Center (JIC)
- Sherburne County EOC
- Sherburne County Traffic and Access Control Point (TACP) (Briefing)
- Sherburne County TACP (Interview)

**Wright County:**

- Wright County IWP
- Wright County PIO at the State JIC
- Wright County EOC
- Wright County TACP (Briefing)
- Wright County TACP (Interview)

**Out-of-Sequence Activities**

**State of Minnesota:**

- North Memorial Medical Service Ambulance – Medical Services Drill – Transportation
- North Memorial Medical Center – Medical Services Drill – Facility
- North Memorial Health Ambulance Service – Medical Services Drill – Transportation
- Fairview Northland Medical Center – Medical Services Drill – Facility
- Gold Cross Ambulance Service – Medical Services Drill – Transportation
- CentraCare St. Cloud Hospital – Medical Services Drill – Facility
- Reception Center – Rogers High School
- Reception Center – Evacuee Monitoring and Decontamination – Rogers High School
- Reception Center – DC Briefing/Dosimetry Distribution – Rogers High School
- Reception Center – Evacuee Vehicle Monitoring and Decontamination – Rogers High School



**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

- Reception Center – Evacuee Vehicle Monitoring and Decontamination – Rogers High School
- Congregate Care Center – American Red Cross – Rogers High School

Sherburne County:

- Zimmerman Fire Department – Emergency Worker Decontamination

Wright County:

- St. Michael-Albertville #885 School District – EV-2 Evacuation of Schools – Interview
- Buffalo Area #877 School District – EV-2 Evacuation of Schools – Interview

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

The exercise resulted in no Level 1 Findings, no Level 2 Findings, and no Plan Issues for the State of Minnesota and the Counties of Sherburne and Wright.

Section 1 describes the exercise basis and the State of Minnesota portion of the 10-mile Emergency Planning Zone around the Monticello Nuclear Generating Plant. Section 2 provides an overview of the exercise, including details, the exercise planning team, and participating organizations. Section 3 summarizes the exercise design, including purpose, objectives, capabilities and activities, and criteria-based evaluation summaries. Sections 4 and 5 of this report provide detailed information regarding the Criteria Evaluation Summaries and Conclusion.

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

This page intentionally left blank.

## **SECTION 1: INTRODUCTION**

### **1.1 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) Part 350 "Review and Approval of State and Local Radiological Emergency Plans and Preparedness", Part 351 "Radiological Emergency Planning and Preparedness" and Part 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 the RERP's 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 December 7, 2015 (Federal Register, Vol. 82, No. 88, May 9, 2017); 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

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

- 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 the DHS/FEMA.

Formal submission of the RERP's for the MNGP to the FEMA Region V by the State of Minnesota and involved local jurisdictions occurred on February 1, 1983. Formal approval of these RERP's was granted by the FEMA on May 16, 1985, under 44 CFR 350.

A REP Partial Participation Plume Exposure Pathway Exercise was conducted on August 29, 2017, and evaluated by the DHS/FEMA to assess the capabilities of State and local offsite emergency preparedness organizations in implementing their RERPs and procedures to protect the public's health and safety during a radiological emergency involving the MNGP. The purpose of this exercise report is to present the exercise results and findings on the performance of the Offsite Response Organizations (OROs) 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; and
- FEMA P-1028 REP Program Manual, dated January 2016.

Section 1 of this report, entitled "Introduction", describes the exercise basis and the State of Minnesota portion of the 10-Mile and 50-mile Emergency Planning Zones around the Monticello Nuclear Generating Plant.

Section 2 of this report, entitled "Exercise Overview", presents information pertaining to the team that planned and coordinated the exercise. This section also provides a listing of all participating jurisdictions and functional entities that were evaluated.

Section 3 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 4 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. The exercise resulted in no Level 1 Findings, no Level 2 Findings, no unresolved Level 2 Findings assessed during previous exercises, and no Plan Issues for the State of Minnesota and the Counties of Sherburne and Wright.

Section 5 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.

## **1.2 Emergency Planning Zone (EPZ) Description**

The MNGP is located within the city limits of Monticello, Minnesota. The plant consists of approximately 1,500 acres of land. The northwest and southwest sectors were mainly agricultural. The northeast and southeast sectors were urban and manufacturing. Part of this property is on the north bank of the Mississippi River in Sherburne County and part is on the south bank of Wright County. The northwestern suburbs of Minneapolis are about 30 miles southeast of the MNGP.

The 10-mile EPZ for the MNGP consists of a circle with the utility at the center point. The EPZ extends 10-miles outward in all directions from the plant for the plume exposure pathway planning zone and 50 miles outward for the Ingestion Pathway Zone (IPZ). In the event of a serious accident, the plume exposure planning zone will be in the area in which intensive efforts will be made to notify and protect residents and transient populations from exposure to radiation. The population in the MNGP 10-mile EPZ is 71,713 according to the 2012 Evacuation Time Estimate. This figure represents the permanent population in the municipalities and unincorporated areas located in the 10-mile EPZ.

There are numerous lakes, park and dune areas within the 10-mile EPZ that are used for recreational purposes, including parts of Lake Saint Marie Park, Dunes State Park, and the Game Refuge. The only navigable river that flow through the 10-mile EPZ is the Mississippi River. Non-navigable waterways and watersheds include the Crow, Elk, and Saint Francis Rivers and their watersheds. The three major highways that pass through the area are Interstate 94, U.S. 10, and State Highway 25. Two railways, the Burlington Northern and NorthStar Railways, pass through the 10-mile EPZ. There are no major airports in the 10-mile EPZ.

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

The following Sub-Areas are included within the 10-mile EPZ: 2, 5N, 5E, 5S, 5W, 10N, 10E, 10SE, 10S, 10SW, 10W, and 10NW.

The 50-mile IPZ for the MNGP has an estimated population of approximately 3,591,108 as of the year 2008. Approximately 90% reside in the Minneapolis-St. Paul metropolitan area. There are 22 counties in the 50-mile EPZ. They are: Anoka, Benton, Carver, Chisago, Dakota, Hennepin, Isanti, Kanabec, Kandiyohi, McLeod, Meeker, Mille Lacs, Morrison, Pine, Ramsey, Renville, Scott, Sherburne, Sibley, Stearns, Washington, and Wright.

## **SECTION 2: EXERCISE OVERVIEW**

### **2.1 Exercise Details**

**Exercise Name**

Monticello Nuclear Generating Plant

**Type of Exercise**

Plume Exposure Pathway

**Exercise Date**

August 29, 2017

**Program**

Department of Homeland Security (DHS)/Federal Emergency Management Agency (FEMA) Radiological Emergency Preparedness (REP) Program

**Scenario Type**

Radiological Emergency

### **2.2 Exercise Planning Team**

Sean O’Leary

Regional Assistance Committee (RAC) Chair

DHS/FEMA Region V

536 South Clark Street, 7<sup>th</sup> Floor

Chicago, IL 60605

312-408-5389

[Sean.Oleary@fema.dhs.gov](mailto:Sean.Oleary@fema.dhs.gov)

Edward Golinski

Exercise Director

DHS/FEMA Region V

536 South Clark Street, 7<sup>th</sup> Floor

Chicago, IL 60605

312-408-5353

[Edward.Golinski@fema.dhs.gov](mailto:Edward.Golinski@fema.dhs.gov)

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

Stephen Tulley  
Deputy Exercise Director  
DHS/FEMA Region V  
Supervisory Team Leader  
536 South Clark Street, 7<sup>th</sup> Floor  
Chicago, IL 60605  
312-408-4425  
[Stephen.Tulley@fema.dhs.gov](mailto:Stephen.Tulley@fema.dhs.gov)

Edward Diaz  
State of Minnesota Site Specialist  
DHS/FEMA Region V  
536 South Clark Street, 7th Floor  
Chicago, IL 60605  
312-408-5585  
[Edward.Diaz@fema.dhs.gov](mailto:Edward.Diaz@fema.dhs.gov)

Don Daniel  
State of Minnesota Team Lead  
DHS/FEMA Region V  
536 South Clark Street, 7th Floor  
Chicago, IL 60605  
312-408-5334  
[Don.Daniel2@fema.dhs.gov](mailto:Don.Daniel2@fema.dhs.gov)

David Ortman  
Sherburne County Team Lead  
DHS/FEMA Region V  
536 South Clark Street, 7th Floor  
Chicago, IL 60605  
312-408-4429  
[David.Ortman@fema.dhs.gov](mailto:David.Ortman@fema.dhs.gov)



**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

Todd Lawson  
Wright County Team Lead  
DHS/FEMA Region V  
536 South Clark Street, 7th Floor  
Chicago, IL 60605  
312-408-4482  
[Todd.Lawson@fema.dhs.gov](mailto:Todd.Lawson@fema.dhs.gov)

Kevin Leuer  
Director, Preparedness Branch  
Division of Homeland Security & Emergency Management  
445 Minnesota Street - Suite 223  
St. Paul, MN 55101  
651-201-7406  
[Kevin.Leuer@state.mn.us](mailto:Kevin.Leuer@state.mn.us)

Patrick McLaughlin  
REP Exercise Coordinator  
Division of Homeland Security & Emergency Management  
REP Administrator  
445 Minnesota Street - Suite 223  
St. Paul, MN 55101  
651-201-7434  
[Patrick.McLaughlin@state.mn.us](mailto:Patrick.McLaughlin@state.mn.us)

Robert Hines  
REP Exercise Coordinator  
Division of Homeland Security & Emergency Management  
REP Exercise Coordinator  
445 Minnesota Street - Suite 223  
St. Paul, MN 55101  
651-201-7415  
[Robert.Hines@state.mn.us](mailto:Robert.Hines@state.mn.us)

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

Jennifer Ostlund  
Exercise Coordination  
Division of Homeland Security & Emergency Management  
REP Exercise & Training Planner  
445 Minnesota Street - Suite 223  
St. Paul, MN 55101  
651-201-7458  
[Jennifer.Ostlund@state.mn.us](mailto:Jennifer.Ostlund@state.mn.us)

Amy Hass  
Offsite Coordination/Controller  
Monticello Nuclear Generating Plant - Xcel Energy  
Corporate Emergency Planning Coordinator  
414 Nicollet Mall (MP4)  
Minneapolis, MN 55401  
612-330-5768  
[Amy.Hass@xenuclear.com](mailto:Amy.Hass@xenuclear.com)

Nathan Sisk  
Scenario Developer  
Xcel Energy - Monticello Nuclear Generating Plant  
Emergency Planning Coordinator  
2807 West County Road 75  
Monticello, MN 55362  
763-271-5836  
[Nathan.Sisk@xenuclear.com](mailto:Nathan.Sisk@xenuclear.com)

John Wills  
Scenario Reviewer  
ICF International  
Regional Coordinator  
3325 Narrows Road  
Perry, OH 44081  
440-477-3053  
[Radiationguy@windstream.net](mailto:Radiationguy@windstream.net)

## **2.3 Participating Organizations**

Agencies and organizations of the following jurisdictions participated in the MNGP REP, Partial Participation, Plume Exposure Pathway Exercise on August 29, 2017, and/or an out-of-sequence demonstrations on August 1, 2, and 3, 2017. Approximately 290 people participated in this exercise.

### **2.3.1 State of Minnesota**

- American Red Cross
- CentraCare St. Cloud Hospital Staff
- Eden Prairie Fire Department
- Emergency Medical Services Regulatory Board
- Excelsior Fire Department
- Fairview Northland Medical Center
- Gold Cross Ambulance Service
- Golden Valley Fire Department
- Minnesota Bureau of Crime Apprehension
- Minnesota Department of Agriculture
- Minnesota Department of Commerce
- Minnesota Department of Education
- Minnesota Department of Health
- Minnesota Department of Human Services
- Minnesota Department of Natural Resources
- Minnesota Department of Public Safety
- Minnesota Department of Transportation
- Minnesota Fire Marshall
- Minnesota Geospatial Information System
- Minnesota Homeland Security Emergency Management

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

- Minnesota Military Affairs
- Minnesota Office of Pipeline Safety
- Minnesota Pollution Control Agency
- Minnesota State Patrol
- Minnesota Voluntary Organizations Active in Disasters
- Mounds Fire Department
- North Memorial Medical Ambulance Service
- North Memorial Center Hospital
- Radio Amateur Civil Emergency Service (RACES)
- Richfield Fire Department
- Rogers Fire Department
- St. Louis Park Fire Department
- University of Minnesota
- West Metro Fire Department
- Xcel Energy

**2.3.2 Sherburne County**

- Sherburne County Commissioners
- Sherburne County Department of Education
- Sherburne County Department of Health and Human Services
- Sherburne County Emergency Management
- Sherburne County Public Works Department
- Sherburne County RACES
- Sherburne County Radiological Defense Officer
- Sherburne County Sheriff's Office

**2.3.2 Wright County**

- Wright County Commissioners

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

- Wright County Department of Education
- Wright County Department of Health and Human Services
- Wright County Emergency Management
- Wright County Public Works Department
- Wright County RACES
- Wright County Radiological Defense Officer
- Wright County Sheriff's Office

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

This page intentionally left blank.

## **SECTION 3: EXERCISE DESIGN SUMMARY**

### **3.1 Exercise Purpose and Design**

The purpose of this exercise was to evaluate Player actions against current emergency response plans, procedures, and performance capabilities for a Nuclear Power Plant (NPP) related incident and to comply with the requirements of 44 CFR 350 and the guidelines of NUREG 0654/FEMA-REP-1. Exercise Planners utilized the FEMA P-1028 Radiological Emergency Preparedness (REP) Program Manual (January, 2016) to develop this exercise.

The objective of the exercise was to demonstrate reasonable assurance that the public can be protected during a NPP emergency.

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

Exercise objectives and identified Capabilities/REP Criteria selected for demonstration during the exercise are provided in Appendix D "Exercise Plan".

The Exercise Planning Team selected objectives that focus on evaluation of emergency response procedures, identifying areas for improvement, and achieving a collaborative attitude. This exercise focused on Offsite Response Organizations (OROs) effectively demonstrating the following objectives:

- Emergency Operations Center Management,
- Protective Action Decision-Making,
- Protective Action Implementation,
- Emergency Notification and Public Information,
- Support Operations and Facilities, and
- Field Measurement and Analysis.

### **3.3 Scenario Summary**

Results of a technical review of the Plume Phase Scenario, submitted by the State of Minnesota and Xcel Nuclear Operating Company on June 28, 2017, indicated that the scenario was adequate to support demonstration of DHS/FEMA requirements.

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

In addition, the extent-of-play agreements submitted by the State and County offsite response organizations, as revised June 2, 2017 for the State of Minnesota and Sherburne and Wright Counties indicate that the criteria selected for the August 29, 2017, REP Partial Participation Biennial Plume Exposure Pathway Exercise are adequate and are therefore approved.

Appendix E "Scenario Timeline" contains a summary of the Exercise Scenario, which presents a simulated sequence of events that was used as the basis for invoking emergency response actions by DHS/FEMA Region V OROs in the MNGP REP, Partial Participation Plume Exposure Pathway Exercise conducted on August 29, 2017.

During the exercise, in addition to information and data provided through the MNGP onsite scenario, controllers for the State of Minnesota provided "inject messages" containing scenario events and/or relevant data to those positions 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.



## **SECTION 4: ANALYSIS OF CAPABILITIES**

### **4.1 Exercise Evaluation and Results**

This section presents an overview of the results and findings of the evaluation of all State of Minnesota and Sherburne, and Wright County offsite response organizations that participated in the August 29, 2017, Monticello Nuclear Generating Plant REP, Partial Participation, Plume Exposure Pathway Exercise. The exercise was conducted jointly by DHS/FEMA Regions V, the State of Minnesota, and the Risk Counties of Sherburne and Wright.

Each jurisdiction and functional entity was evaluated based on the demonstration of exercise criteria delineated in the FEMA P-1028 REP Program Manual, dated January 2016. Detailed information on the exercise criteria and the extent-of-play agreement used in this exercise can be found in Appendix D: Exercise Plan.

Definitions of the terms used in this report concerning criteria demonstration status are as follows:

- **M – Met:** The status of a REP exercise Evaluation Area Criterion indicating that the participating ORO demonstrated all demonstration criteria for the Evaluation Area Criterion to the level required in the extent-of-play agreement with no Level 1 Findings, Level 2 Findings or Plan Issues assessed in the current exercise and no unresolved prior Level 2 Findings.
- **L1 – Level 1 Finding:** An observed or identified inadequacy of organizational performance in an exercise that could cause a finding that offsite emergency preparedness is not adequate to provide reasonable assurance that appropriate protective measures can be taken in the event of a radiological emergency to protect the health and safety of the public living in the vicinity of a nuclear power plant.
- **L2 – Level 2 Finding:** An observed or identified inadequacy of organizational performance in an exercise that is not considered, by itself, to adversely impact public health and safety. Listing of the demonstrated exercise criteria under which a Level 2 Finding was assessed during the current exercise or Level 2 Finding assessed during prior exercises remain unresolved. Included is a description of any Level 2 Findings assessed during this exercise and the recommended corrective action to be demonstrated before or during the next biennial exercise.

- P – Plan Issue: An observed or identified inadequacy in the ORO’s emergency plan or implementing procedures, rather than in the ORO’s performance.
- N – Not Demonstrated: Exercise criteria that were not demonstrated as scheduled during this exercise and the reason(s) they were not demonstrated.
- Prior Issues – Resolved: Descriptions of Level 2 Findings assessed during previous exercises that were resolved and the corrective actions demonstrated, in this exercise.
- Prior Issues – Unresolved: Descriptions of Level 2 Findings assessed during prior exercises that were not resolved in this exercise. Included in the descriptions is the reason the Level 2 Finding remains unresolved and the recommended corrective actions to be demonstrated before or during the next exercise.

## **4.2 Summary Results of Exercise Evaluation**

This subsection provides information on the evaluation of each participating jurisdiction and functional entity in a jurisdiction-based, issues-only format.

The matrix presented in Table 4.2.1-4.2.3 on the following page(s), presents the status of all exercise criteria from the FEMA P-1028 REP Program Manual, dated January 2016, which were scheduled for demonstration during this exercise by all participating jurisdictions and functional entities. The Exercise Criterion status box is blank if it was not scheduled for demonstration.

The DHS/FEMA has developed a standardized system for numbering exercise issues. This system is used to achieve consistency in numbering exercise issues among DHS/FEMA Regions and site-specific exercise reports within each Region. It also is used to expedite tracking of exercise issues on a nationwide basis.

The identifying number of Level 1 Findings, Level 2 Findings, and Plan Issues includes the following elements, with each element separated by a hyphen (e.g., 03-16-2b2-P-02):

- Plant Site Identifier – A two-digit number, corresponding to the Utility Billable Plant Site Code (39 for the MNGP).
- Exercise Year – The last two digits of the year the exercise was conducted.
- Demonstration Criterion – The letters and number corresponding to the Demonstration Criterion in the six Exercise Evaluation Areas described in the FEMA P-1028 REP Program Manual, dated January 2016.

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

- Issue Classification Identifier – (L1 = Level 1 Finding; L2 = Level 2 Finding; P = Plan Issue).
- Exercise Issue Identification Number – A separate two or three-digit indexing number assigned to each issue identified in the exercise.

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

This page intentionally left blank.

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

**Table 4.2.1 – Summary of Exercise Evaluation – State of Minnesota**

<p>DATE: August 29, 2017 SITE: Monticello Nuclear Generating Plant</p> <p>M: Met L1: Level 1 Finding L2: Level 2 Finding P: Plan Issue N: Not Demonstrated</p>		State Command Van – Maple Grove	State RAD Field Team #1 – Maple Grove	State RAD Field Team #2 – Maple Grove	IPAWS	MS-1-T – North Memorial Health Ambulance Service – NMMC	MS-1-F – North Memorial Medical Center	MS-1-T – North Memorial Health Ambulance Service – FNNMC	MS-1-F – Fairview Northland Medical Center	MS-1-T – Gold Cross Medical Ambulance Service – CCSICH	MS-1-F – CentraCare St. Cloud Hospital	Reception Center – Rogers High School	Evacuee M/D / Registration – Rogers High School	Dosimetry Control Officer (Briefing) – Rogers High School	Dosimetry (Interview) – Rogers High School	Congregate Care Center – Rogers High School	Evacuee M/D – Rogers High School
Emergency Operations Management																	
Mobilization	1a1	M	M	M													
Facilities	1b1																
Direction and Control	1c1											M					
Communications Equipment	1d1	M	M	M	M							M					
Equipment and Supplies to Support	1e1	M	M	M		M	M	M	M	M	M	M			M		
Protective Action Decision-Making																	
EW Exposure Control Decisions	2a1																
PARs	2b1																
PADs	2b2																
PADs for Disabled/Functional Needs	2c1																
Ingestion PADs	2d1																
RRR Decisions	2e1																
Protective Action Implementation																	
EW Exposure Control Implementation	3a1	M	M	M		M	M	M	M	M	M			M	M		M
KI Public/Institutionalized	3b1																
PAD Implementation Disabled / Functional Needs	3c1																
PAD Implementation Schools	3c2																
TACP Establishment	3d1																
Impediments	3d2																
Implement Ingestion PADs	3e1																
Ingestion Pathway Decisions	3e2																
Implementation of RRR Decisions	3f1																
Field Measurement and Analysis																	
RESERVED	4a1																
Field Team Management	4a2	M															
Field Team Operations	4a3		M	M													
Field Team Sampling	4b1																
Laboratory Operations	4c1																
Emergency Notification and Public																	
Initial Alert & Notification	5a1				M												
RESERVED	5a2																
Backup Alert & Notification	5a3																
Exception Area Alerting	5a4																
Subsequent Information & Instructions	5b1																
Support Operations and Facilities																	
Reception Center Operations	6a1												M				M
EW Monitoring & Decontamination	6b1																
Congregate Care	6c1															M	
Contaminated / Injured Transport & Care	6d1					M	M	M	M	M	M						

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

**Table 4.2.2 – Summary of Exercise Evaluation – Sherburne County**

<p>DATE: August 29, 2017 SITE: Monticello Nuclear Generating Plant</p> <p>M: Met L1: Level 1 Finding L2: Level 2 Finding P: Plan Issue N: Not Demonstrated</p>							
		IWP	Public Information Officer at the State JIC	EOC	Traffic and Access Control Point (Briefing)	Traffic and Access Control Point (Interview)	Emergency Worker Decon
Emergency Operations Management							
Mobilization	1a1	M		M			
Facilities	1b1			M			
Direction and Control	1c1			M			
Communications Equipment	1d1	M		M		M	M
Equipment and Supplies to Support Operations	1e1			M	M	M	M
Protective Action Decision-Making							
EW Exposure Control Decisions	2a1			M			
PARs	2b1						
PADs	2b2			M			
PADs for Disabled/Functional Needs	2c1			M			
Ingestion PADs	2d1						
RRR Decisions	2e1						
Protective Action Implementation							
EW Exposure Control Implementation	3a1			M	M	M	M
KI Public/Institutionalized	3b1			M			
PAD Implementation Disabled/Functional	3c1						
PAD Implementation Schools	3c2			M			
TACP Establishment	3d1			M		M	
Impediments	3d2			M			
Implement Ingestion PADs	3e1						
Ingestion Pathway Decisions	3e2						
Implementation of RRR Decisions	3f1						
Field Measurement and Analysis							
RESERVED	4a1						
Field Team Management	4a2						
Field Team Operations	4a3						
Field Team Sampling	4b1						
Laboratory Operations	4c1						
Emergency Notification and Public Info							
Initial Alert & Notification	5a1			M			
RESERVED	5a2						
Backup Alert & Notification	5a3						
Exception Area Alerting	5a4						
Subsequent Information & Instructions	5b1		M	M			
Support Operations and Facilities							
Reception Center Operations	6a1						
EW Monitoring & Decontamination	6b1						M
Congregate Care	6c1						
Contaminated / Injured Transport & Care	6d1						

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

**Table 4.2.3 – Summary of Exercise Evaluation- Wright County**

DATE: August 29, 2017 SITE: Monticello Nuclear Generating Plant  M: Met L1: Level 1 Finding L2: Level 2 Finding P: Plan Issue N: Not Demonstrated		IWP	PIO at the State JIC	EOC	Traffic and Access Control Point (Briefing)	Traffic and Access Control Point (Interview)	EV-2 Monticello – St. Michael Albertville #885 School District	EV-2 Monticello – Buffalo Area #877 School District
<b>Emergency Operations Management</b>								
Mobilization	1a1	M		M				
Facilities	1b1			M				
Direction and Control	1c1			M				
Communications Equipment	1d1	M		M		M	M	M
Equipment and Supplies to Support Operations	1e1			M	M	M	M	M
<b>Protective Action Decision-Making</b>								
EW Exposure Control Decisions	2a1			M				
PARs	2b1							
PADs	2b2			M				
PADs for Disabled/Functional Needs	2c1			M				
Ingestion PADs	2d1							
RRR Decisions	2e1							
<b>Protective Action Implementation</b>								
EW Exposure Control Implementation	3a1			M	M	M		
KI Public/Institutionalized	3b1			M			M	M
PAD Implementation Disabled/Functional Needs	3c1							
PAD Implementation Schools	3c2			M			M	M
TACP Establishment	3d1			M		M		
Impediments	3d2			M				
Implement Ingestion PADs	3e1							
Ingestion Pathway Decisions	3e2							
Implementation of RRR Decisions	3f1							
<b>Field Measurement and Analysis</b>								
RESERVED	4a1							
Field Team Management	4a2							
Field Team Operations	4a3							
Field Team Sampling	4b1							
Laboratory Operations	4c1							
<b>Emergency Notification and Public Info</b>								
Initial Alert & Notification	5a1			M				
RESERVED	5a2							
Backup Alert & Notification	5a3							
Exception Area Alerting	5a4							
Subsequent Information & Instructions	5b1		M	M				
<b>Support Operations and Facilities</b>								
Reception Center Operations	6a1							
EW Monitoring & Decontamination	6b1							
Congregate Care	6c1							
Contaminated Injured Transport & Care	6d1							

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

This page intentionally left blank.



## **4.3 Criteria Evaluation Summaries**

### **4.3.1 Risk Jurisdiction – State of Minnesota**

#### **4.3.1.1 State Command Van – Maple Grove**

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

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

#### **4.3.1.2 State Radiological Accident Deployment (RAD) Field Team #1 – Maple Grove**

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

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

#### **4.3.1.3 State RAD Field Team #2 – Maple Grove**

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

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

#### **4.3.1.4 Integrated Public Alert Warning System (IPAWS)**

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

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

#### **4.3.1.5 MS-1 – Transport – North Memorial Medical Ambulance Service (For the North Memorial Medical Center Facility demonstration)**

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

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

#### **4.3.1.6 MS-1 – Facility – North Memorial Medical Center**

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

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

**4.3.1.7 MS-1 – Transport – North Memorial Medical Ambulance Service  
(For the Fairview Northland Medical Center Facility demonstration)**

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

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

**4.3.1.8 MS-1 – Facility – Fairview Northland Medical Center**

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

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

**4.3.1.9 MS-1 – Transport – Gold Cross Ambulance Service  
(For the CentraCare St. Cloud Hospital Facility demonstration)**

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

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

#### **4.3.1.10 MS-1 – Facility – CentraCare St. Cloud Hospital**

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

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

#### **4.3.1.11 Reception Center – Rogers High School**

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

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

#### **4.3.1.12 Evacuee Monitoring/Decontamination and Registration – Rogers High School**

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

- a. MET: 6.a.1
- b. LEVEL I FINDINGS: None
- c. LEVEL II FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

#### **4.3.1.13 Dosimetry Control Officer (Briefing) – Rogers High School**

---

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

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

#### **4.3.1.14 Dosimetry (Interview) – Rogers High School**

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

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

#### **4.3.1.15 Congregate Care Center – Rogers High School**

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

- a. MET: 6.c.1
- b. LEVEL I FINDINGS: None
- c. LEVEL II FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

#### **4.3.1.16 Evacuee Vehicle Monitoring – Rogers High School**

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

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

#### **4.3.1.17 Evacuee Vehicle Decontamination – Rogers High School**

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

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

#### **4.3.2 Risk Jurisdiction – Sherburne County**

##### **4.3.2.1 Initial Warning Point (IWP)**

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

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

##### **4.3.2.2 Public Information Officer (PIO) at the State Joint Information Center (JIC)**

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

---

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

#### **4.3.2.3 Emergency Operations Center (EOC)**

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

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

#### **4.3.2.4 Traffic and Access Control Point (Briefing)**

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

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

#### **4.3.2.5 Traffic and Access Control Point (Interview)**

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

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

#### **4.3.2.6 Emergency Worker Decontamination – Zimmerman Fire Department**

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

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

#### **4.3.3 Risk Jurisdiction – Wright County**

##### **4.3.3.1 IWP**

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

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

##### **4.3.3.2 PIO at the State JIC**

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

- a. MET: 5.b.1



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

#### **4.3.3.3 EOC**

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

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

#### **4.3.3.4 Traffic and Access Control Point (Briefing)**

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

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

#### **4.3.3.5 Traffic and Access Control Point (Interview)**

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

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

#### **4.3.3.6 EV-2 Monticello – St. Michael-Albertville #885 School District**

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

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

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

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

**4.3.3.7 EV-2 Monticello – Buffalo Area #877 School District**

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

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

## **SECTION 5: CONCLUSION**

This section summarizes the findings from the evaluation of all jurisdictions and functional entities that participated in the August 29, 2017, Monticello Nuclear Generating Plant Radiological Emergency Preparedness, Partial Participation, Plume Exposure Pathway exercise. The purpose of the exercise was to test the offsite emergency response capabilities of State and local governments in the 10-Mile EPZ surrounding the Monticello Nuclear Generating Plant.

The exercise resulted in no Level 1 Findings, no Level 2 Findings, and no Plan Issues for the State of Minnesota and the Counties of Sherburne and Wright.

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

This page intentionally left blank.

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

## APPENDIX A: EXERCISE TIMELINE

This appendix presents a timeline, summarized in Table A-1, of key events and activities that occurred during the Monticello Nuclear Generating Plant Radiological Emergency Preparedness Plume Exposure Pathway Exercise conducted on August 29, 2017. All times are Central Daylight Time (CDT).

**TABLE A-1: Timeline for Monticello Nuclear Generating Plant 2017**

Emergency Classification Level or Event	Time Utility Declared	State of Minnesota	Planning & Assessment Center	Joint Information Center	Wright County	Sherburne County
Alert	0848	0910	N/A	0933	0903	0903
Site Area Emergency	1008	1020	N/A	1037	1030	
General Emergency	1125	1129	N/A	1202	1143	1150
Release of Radioactive Material Started	1125	1129	N/A	N/A	N/A	N/A
Release of Radioactive Material Terminated	N/A	N/A	N/A	N/A	N/A	N/A
Facility Declared Operational		0945	0945	N/A	0934	0920
Declaration of State/Local Emergency		1040	N/A	1049	1052	1030
Exercise Termination		1308	1309	1308	1300	1311
General Information Message: <i>&lt;Public advised of incident at Monticello Nuclear Generating Plant&gt;</i>		0933	N/A	0933	N/A	0947
Early Precautionary Action Decision: Livestock Advisory <i>&lt;All Livestock are to be sheltered and placed on stored feed and water within the 10-mile EPZ.&gt;</i>		1044	1026	1057	1056	1057
Early Precautionary Action Decision: Evacuate Schools/ Special Population: <i>&lt;Evacuate Schools and/or Special Populations&gt;</i>		1047	1026	1051	1050	1102
Early Precautionary Action Decision: KI Administration: <i>&lt;Emergency Workers and Immobile Populations. Decision/Implementation: PAC/Counties&gt;</i>		1036	1031	1101	1051	1043
Early Precautionary Action Decision: Evacuate State Parks/Hunting Areas: <i>&lt;The State issued an order to evacuate State parks and hunting areas.&gt;</i>		1047	1026	1056	1130	1056
Early Precautionary Action Decision: Air, Rail, Water Restrictions: <i>&lt;The State issued an Air, Rail and Water Restriction precautionary decision.&gt;</i>		1047	1026	1103	1130	1048
Protective Action Recommendation: Evacuation / KI General Population		1155	1154	N/A	N/A	N/A
Protective Action Decision: Evacuation of Sub-Areas 2,5N, and 5W		1200	1200	1200	1200	1200
KI Administration General Population		1200	1200	1200	1200	1200
Siren Activation		N/A	N/A	N/A	1211	1211
EAS Message		1214	N/A	N/A	N/A	N/A

**LEGEND:** N/A = ECL/Event/Action Not Applicable at Location

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

This page intentionally left blank.

## **APPENDIX B: EXERCISE EVALUATION TEAM**

The following table lists the personnel who managed the evaluation process and evaluated the Monticello Nuclear Generating Plant Radiological Emergency Preparedness, Partial Participation, Plume Exposure Pathway Exercise on August 29, 2017. The organizational affiliation of the personnel is indicated by the following abbreviations:

DHS/FEMA    U.S. Department of Homeland Security/Federal Emergency Management Agency

ICFI            ICF International, Inc.

MANAGEMENT TITLE	NAME	ORGANIZATION
Regional Assistance Committee, Chair	Sean O’Leary	DHS/FEMA
Exercise Director	Edward Golinski	DHS/FEMA
Deputy Exercise Director	Stephen Tulley	DHS/FEMA
State of Minnesota Site Specialist	Edward Diaz	DHS/FEMA
State of Minnesota Team Lead	Don Daniel	DHS/FEMA
Sherburne County Team Lead	David Ortman	DHS/FEMA
Wright County Team Lead	Todd Lawson	DHS/FEMA

### **Exercise Evaluators**

LOCATION	EVALUATOR	AGENCY
<b>State of Minnesota</b>		
Initial Warning Point – St. Paul	Karl Rabenhorst (Observer)	DHS/FEMA
State Emergency Operations Center – St. Paul	Edward Diaz (Observer)	DHS/FEMA
State Emergency Operations Center – St. Paul	Karl Rabenhorst (Observer)	DHS/FEMA
State Emergency Operations Center – St. Paul	John Wills (Observer)	ICFI

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

LOCATION	EVALUATOR	AGENCY
State Command Van – Maple Grove	Paul Ward	DHS/FEMA
State RAD Field Team #1 – Maple Grove	Tom Essig	ICFI
State RAD Field Team #2 – Maple Grove	Tom Gahan	ICFI
IPAWS	Karl Rabenhorst	DHS/FEMA
MS-1 Transportation - North Memorial Medical Ambulance Service	Todd Lawson	DHS/FEMA
MS-1 Facility – North Memorial Medical Center	James King	DHS/FEMA
North Memorial Medical Center Ambulance Service	Todd Lawson	DHS/FEMA
MS-1 Facility – Fairview Northland Medical Center	James King	DHS/FEMA
MS-1 Transportation - Gold Cross Ambulance Service	Gary Bolender	ICFI
MS-1 Facility – CentraCare Health St. Cloud Hospital	Roger Jobe	ICFI
Reception Center – Rogers High School	Edward Diaz	DHS/FEMA
Evacuee Monitoring/Decontamination and Registration – Rogers High School	Curtis Williams	DHS/FEMA
Dosimetry Control Officer (Briefing) – Rogers High School	Curtis Williams	DHS/FEMA
Dosimetry (Interview) – Rogers High School	Alvin Blake	DHS/FEMA
Congregate Care Center – Rogers High School	Todd Lawson	DHS/FEMA
Evacuee Vehicle Monitoring – Rogers High School	Edward Diaz	DHS/FEMA
Evacuee Vehicle Decontamination – Rogers High School	Edward Diaz	DHS/FEMA
<b>Sherburne County</b>		
Initial Warning Point	Gary Bolender	ICFI
Public Information Officer at the State JIC	Edward Diaz	DHS/FEMA
Emergency Operations Center	Richard Smith	ICFI
Emergency Operations Center	Kimberly Alahmadi	DHS/FEMA



**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

LOCATION	EVALUATOR	AGENCY
Traffic and Access Control Point (Briefing)	Gary Bolender	ICFI
Traffic and Access Control Point (Interview)	Roger Jobe	ICFI
Emergency Worker Decontamination – Zimmerman Fire Department	Thomas Essig	ICFI
Emergency Worker Decontamination – Zimmerman Fire Department	Thomas Gahan	ICFI
<b>Wright County</b>		
Initial Warning Point	Todd Gemskie	DHS/FEMA
Public Information Officer at the State JIC	Edward Diaz	DHS/FEMA
Emergency Operations Center	Alvin Blake	DHS/FEMA
Emergency Operations Center	Janet Hlavaty-LaPosa	DHS/FEMA
Emergency Operations Center	Katie Boyce	DHS/FEMA
Traffic and Access Control Point (Briefing)	Katie Boyce	DHS/FEMA
Traffic and Access Control Point (Interview)	Todd Gemskie	DHS/FEMA
EV-2 St. Michael-Albertville #885 School District	Alvin Blake	DHS/FEMA
EV-2 Buffalo Area #877 School District	Alvin Blake	DHS/FEMA

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

This page intentionally left blank

.

## **APPENDIX C: ACRONYMS AND ABBREVIATIONS**

The following is a list of the acronyms used in this AAR/IP.

<b>ACRONYM</b>	<b>MEANING</b>
μCi	Micro (10 <sup>-6</sup> ) Curie
μR	Micro (10 <sup>-6</sup> ) R / micro Roentgen
AAR/IP	After Action Report/Improvement Plan
AgZ	Silver Zeolite
ARC	American Red Cross
ARES	Amateur Radios Emergency Service
ARMER	Allied Radio Matrix for Emergency Response
CAP	Communications Alerting Protocol
CDE	Committed Dose Equivalent
CDT	Central Daylight Time
CFR	Code of Federal Regulations
cpm	counts per minute
DAS	Digital Alerting System
DC	Dosimetry Coordinator
DCA	Dosimeter Corporation of America
DD	Dosimetry Distribution
DHS	Department of Homeland Security
DPS	Department of Public Safety
DRD	Direct-Reading Dosimeters
EAS	Emergency Alert System
ECL	Emergency Classification Level
ECN	Emergency Communications Network
ED	Emergency Department
EMA	Emergency Management Agency
EMD	Emergency Management Director
EMS	Emergency Medical Services
ENDEC	EncoderDecoder
EOC	Emergency Operations Center
EPT	Emergency Planning Team
EPZ	Emergency Planning Zone
EV-2	Evacuation of Schools
EW	Emergency Worker
FD	Fire Department
FEMA	Federal Emergency Management Agency

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

ACRONYM	MEANING
FT	Field Team
FTC	Field Team Coordinator
GAR	Governor Authorized Representative
GE	General Emergency
GM	Geiger-Mueller
HERT	Hospital Emergency Response Team
HF	High Frequency
hr	hour
HSEM	Homeland Security and Emergency management
IC	Incident Commander
ICS	Incident Commander System
IPAWS	Integrated Public Alert and Warning System
IPZ	Ingestion Planning Zone
ISD	Independent School District
IWP	Initial Warning Point
JIC	Joint Information Center
KI	potassium iodide
MARCS	Multi-Agency Radio Communications System
MDOT	Minnesota Department of Transportation
MDS	Mobile Digital Service
M/D	Monitoring and Decontamination
Mg	Milligram(s)
MHz	MegaHertz
MNGP	Monticello Nuclear Generating Plant
MPR	Minnesota Public radio
mR	milliRoentgen(s)
MRCC	Medical Response Coordination Center
MS-1	Medical Services (Facility & Transportation Drills)
MTC	Monitoring Team Communicator
NMMC	North Memorial Medical Center
NMT	Nuclear Medical Technologist
NRC	Nuclear Regulatory Commission
NPT	NMMC Radiological Protection Technician
ORO	Offsite Response Organization(s)
PAC	Planning and Assessment Center
PAD	Protective Action Decision
PAR	Protective Action Recommendations
PBX	Private Branch Exchange

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

<b>ACRONYM</b>	<b>MEANING</b>
PMO	Program Management Office
REP	Radiological Emergency Preparedness
PIO	Public Information Officer
PPE	Personal Protective Equipment
PRD	Permanent Record Dosimeter
R	Roentgen
RAC	Regional Assistance Committee
RACES	Radio Amateur Civil Emergency Service
RAD	Radiological Accident Deployment
RADEF	Radiological Defense
RC	Radiological Coordinator / Reception Center [context sensitive]
RCT	Radiological Control Technologist
REA	Radiation Emergency Area
REP	Radiological Emergency Preparedness
RERP	Radiological Emergency Response Plan
RO	Radiological Officer
RPC	Regional Planning Coordinator
RPT	Radiological Protection Technician
RSA	Radiological Safety Area
RSO	Radiological Safety Officer
RWT	Required Weekly Test
SA	Staging Area
SAE	Site Area Emergency
SCESD	Sherburne County Emergency Services Director
SCHHS	Sherburne County Health & Human Services
SEOC	State Emergency Operations Center
SIM	State Incident Manager
SIP	Shelter In Place
SNB	Special News Bulletin
SOG	Standard Operating Guideline / Suggested Operational Guidance
SSP	Sampling Screening Point
TACP	Traffic / Access Control Point
TARC	Triangle Amateur Radio Club
TCP	Traffic Control Point
TEDE	Total Effective Dose Equivalent
TLD	Thermoluminescent Dosimeter
TSC	Technical Support Center
TTS	Text To Speech

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

ACRONYM	MEANING
TV	Television
UHF	Ultra High Frequency
VHF	Very high frequency
VTC	Visual Telecommunications Center
WEA	Wireless Emergency Alert

## **APPENDIX D: EXERCISE PLAN**

This Appendix presents the extent-of-play agreement for the State of Minnesota and Counties of Sherburne and Wright and lists the exercise criteria that were scheduled for demonstration in the Monticello Nuclear Generating Plant Radiological Emergency Preparedness, Partial Participation, Plume Exposure Pathway Exercise conducted on August 29, 2017. The extent-of-play agreement was accepted by DHS/FEMA Region V on April 14, 2017.

The exercise criteria, contained in the DHS/FEMA P-1028 REP Program Manual, dated January 2016, represent a functional translation of the planning standards and evaluation criteria set forth in NUREG-0654/FEMA-REP-1, Rev. 1, November 1980, "Criteria for the Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants." Because the exercise criteria are intended for use at all nuclear power plants sites, and because of variations among offsite plans and procedures, an extent-of-play agreement is prepared by the State and accepted by DHS/FEMA to provide evaluators, with guidance on expected actual demonstration of the criteria.

The specific Radiological Emergency Preparedness criteria that were scheduled for demonstration during the exercise are listed in the State of Minnesota, Wright County, and Sherburne County extent-of-play agreement, which follow.

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

This page intentionally left blank.



## **State of Minnesota, Sherburne County, and Wright County**

### **Extent-of-Play Agreement**

The Monticello Nuclear Generating Plant Exercise will take place the week of August 29 2017. The exercise week will involve out-of-sequence and in-sequence demonstrations. The State of Minnesota, Wright County and Sherburne County are the off-site response organizations (ORO's) for the Plume Phase demonstration and will have the exercise demonstration on August 29, 2017. State Field Teams will also demonstrate on August 29, 2017, within the exercise.

An out-of-sequence evaluation will be held for other off-site response organizations during the first week of August beginning the day of August 1st as well as the week of the evaluated exercise August 28<sup>th</sup>. Specific dates for EV-2 out-of-sequence evaluations will take place during the week of August 1<sup>st</sup> to include the schools of St. Michael- Albertville on August 1, 2017 at 10:00 am and Buffalo is scheduled for August 3, 2017 at 10:00 am. The Rogers Reception Center demonstration is August 3, 2017 at 6:00 pm. The MS-1 out-of-sequence evaluation for North Memorial Medical Center and North Memorial Ambulance Service (MS-1) will be demonstrated August 1, 2017 at 8:00 am. Fairview Northland Princeton and North Memorial Ambulance Service (MS-1) is to be demonstrated August 2, 2017 at 8:00 am. The week of August 28<sup>th</sup> out-of-sequence exercise demonstration is to include the State Duty Officer evaluation regarding the addition of IPAWS will be Monday August 29, 2017, at TBD. The Zimmerman Fire Department Emergency Worker Decontamination in Sherburne County exercise demonstration Tuesday August 29, 2017, at 6:00 pm. The MS-1 exercise demonstration for St. Cloud Hospital and Gold Cross Ambulance (MS-1) will be August 30, 2017 at 8:00 am.

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, 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, 3.d.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.

### **OVERVIEW OF EXERCISE SCHEDULE AND SITES**

<b>Tuesday August 1st (OUT-OF-SEQUENCE)</b>		
<b>MS-1</b> North Memorial Medical Center and North Memorial Ambulance	8:00am – 11:00am	North Memorial Medical Center 3300 Oakdale Ave North Robbinsdale, MN 55422
<b>EV-2</b> St. Michael-Albertville #885 – Wright County	10:00am – 12:00 pm	District office – West side of High School 11343 50 <sup>th</sup> St. NE Albertville, MN 55301

### **Wednesday August 2nd (OUT-OF-SEQUENCE)**

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

<b>MS-1</b> Fairview Northland Medical Center and North Memorial Ambulance Service	8:00 am – 11:00 am	Fairview Northland Medical Center 911 Northland Drive Princeton, MN 55371
--	--------------------------	---

**Thursday August 3rd (OUT-OF-SEQUENCE)**

<b>EV-2</b> Buffalo Area School District #877 – Wright County	10:00 am – 12:00 pm	District Office 214 N.E. 1st Ave Buffalo, MN 55313
Rogers Reception Center	6:00 pm – 10:00 pm	Rogers High School 21000 141st Ave N Rogers, MN 55374

**Monday August 28th**

State Duty Officer – IPAWS Equipment and set-up	10:00 am	Bureau of Criminal Apprehension 1430 Maryland Ave E St Paul, MN 55106
Pre-Exercise Briefing Entrance Meeting	2:00 pm	Best Western Chelsea Inn & Suites 89 Chelsea Rd Monticello, MN 55362

**Tuesday August 29th**

<b>Plume Phase Exercise</b>		
Evaluator Briefing	7:00 am	State Emergency Operations Center 445 Minnesota Street, Suite 223 St. Paul, MN 55101
State EOC : Communication Backup Demonstration – in support of the Wright County and Sherburne County	7:30 am	Town Square 445 Minnesota Street, Suite 223 St. Paul, MN 55101
Wright County EOC: Communication Backup Demonstration	7:30 am	Wright County Gov't Center 10 2nd St NW Buffalo, MN 55313
Sherburne County EOC: Communication Backup Demonstration	7:30 am	Sherburne County Gov't Center 13880 Business Center Drive Elk River, MN 55330
Hennepin County Sheriff's Dispatch Center	-	911 Emergency Communications Facility 1245 Shenandoah Lane N Plymouth, MN 55447

**Tuesday August 29<sup>th</sup>**

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

State EOC & PAC	-	Town Square 445 Minnesota Street, Suite 223 St. Paul MN 55101
JIC	-	Town Square 445 Minnesota Street, Suite 223 St. Paul MN 55101
JIC Media Briefing Room	-	Town Square 445 Minnesota St Suite 100 St. Paul MN 55101
Wright County EOC	-	Wright County Gov't Center 10 2nd St NW Buffalo, MN 55313
Sherburne County EOC	-	Sherburne County Gov't Center 13880 Business Center Drive Elk River, MN 55330
Wright County Dispatch Center and Jail	-	Wright County Dispatch and Jail 3800 Braddock Av NE Buffalo MN 55313
Zimmerman Fire Department EWD	6:00 pm – 9:00 pm	13028 Fremont Avenue Zimmerman, MN 55398

**Wednesday August 30<sup>th</sup> (OUT-OF-SEQUENCE)**

MS-1 CentraCare St. Cloud Hospital and Gold Cross Ambulance Service	8:00 am - 12:00 pm	CentraCare St. Cloud Hospital 1406 Sixth Avenue North St. Cloud, MN 56303
--	--------------------------	---

**Friday September 1<sup>st</sup>**

FEMA players debriefing	9:00 am	Wright County Gov't Center 10 2nd St NW Buffalo, MN 55313
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	Wright County Gov't Center 10 2nd St NW Buffalo, MN 55313

**Additional Exercise Notes**

Minnesota is NOT a Home Rule State – decision-making for radiological events rests with the State, not the Counties.

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

The call to the pharmacies located within Target stores to stop KI distribution at the Alert ECL will be simulated.

All request for radiation assistance requests and subsequent updates will be simulated.

The Governor's Office is not directly participating in the exercise and phone calls, faxing and e-mailing of emergency executive orders to the Governor and the Secretary of State will be simulated.

The Minnesota Duty Officer, in notifying HSEM, may call the Director Joe Kelly for the exercise demonstration for the August 29, 2017, exercise.

Send Word Now will be used in the notification but will not be evaluated.

Wright and Sherburne County PIOs will be pre-positioned near the SEOC but will not engage before they are notified and will wait an appropriate length of time before beginning play.

Public information dissemination may use social media but that aspect will not be evaluated.

Media briefings and news conferences may be live streamed into the SEOC and County EOCs but the streaming will not be evaluated.

Emergency Worker Handbooks containing the Emergency Worker briefing will be available as part of the briefing packet for emergency workers to obtain their briefing. Emergency Workers may read and sign to substitute for a spoken briefing or may use the video in the Minnesota REP Emergency Worker Handbook App.

Radiological briefings will be demonstrated in Wright County and Sherburne County for emergency workers (Deputy, Public Works and State Patrol)

Communication systems will be demonstrated with an interruption to backup methods. This will be demonstrated with an out-of-sequence demonstration between the SEOC and the Wright and Sherburne County EOCs August 29, 2017, at 7:30 am. This is not selected for evaluation by the state but the state is to play for demonstration support for the counties.

Wright County may be using Everbridge and Sherburne County may be using Code Red for notifications during exercise demonstration but is not to be evaluated.

The Hotline is not selected for evaluation and will not be demonstrated during the exercise.

National Guard Liaisons for Wright and Sherburne County may participate; they will be prepositioned near the respective County EOC but will wait an appropriate length of time before beginning play once notified. This will not be evaluated.

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

The Regional Planning Coordinator (RPC) for Wright and Sherburne County are participating for each respective county but are not evaluated.

Schools will be simulated as in session for the August 29, 2017, exercise.

Precautionary Measures may be implemented at the Alert or Site Area Emergency depending on the scenario and coordinated with Wright and Sherburne Counties; examples include school evacuations and river and rail restrictions.

The SEOC will be simulating calls to the Ingestion Counties.

The current Evacuation Routes – Downwind Centerline Sector Maps for Monticello are dated 2015 and are the most current maps.

All Logs used for contacts within all EOCs are to remain and will not be removed from the respective EOC facility.

The PAD process will be done; however it is not selected for evaluation by the State. The State will play for the evaluation of PAD concurrence between the SEOC with Wright and Sherburne counties.

Minnesota State RAD Teams may use RadResponder but it will not be evaluated.

IPAWS will be used during exercise demonstration for initial use and future implementation.

The call to hospitals during the General Emergency will be simulated during exercise demonstration.

The demonstrations of the Roger Reception Center and MS-1 evaluations, persons will be using mock TLDs for demonstration purposes. The actual TLDs will be available for review by evaluators would be on hand for use.

MS-1 exercise demonstrations will have the use of HSEM controllers to act as Radiological Officers for the Emergency Worker Briefing.

North Memorial Medical Center and North Memorial Ambulance Service (MS-1) will exercise 8:00 am Tuesday August 1, 2017.

Fairview Northland Medical Center and North Memorial Ambulance Service (MS-1) will exercise 8:00 am Wednesday August 2, 2017.

St. Cloud CentraCare Hospital and Gold Cross Ambulance (MS-1) will exercise at 8:00 am Wednesday August 30, 2017.

Rogers Reception Center scheduled demonstration of Thursday August 3, 2017

6:00 pm at the Rogers High School located at 21000 141st Ave N Rogers, MN 55374.

## **PREVIOUS EXERCISE FINDINGS AND PLANNING ISSUES**

### **State of Minnesota**

There are no unresolved findings for the State of Minnesota.

### **Wright County**

There are no unresolved findings for Wright County.

### **Sherburne County**

There are no unresolved findings for Sherburne County.

## **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**

This criterion is not selected for evaluation by the State but will play in support of the counties demonstration needs.

- Minnesota State Emergency Operations Center (SEOC)

The Plume Phase Exercise will take place on August 29, 2017. The Minnesota Duty Officer (MDO) at the BCA Communications Center will take the initial call and make notifications.

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 from the Monticello Nuclear Generating Plant.

The SEOC is located at 445 Minnesota 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 Wright and Sherburne County EOCs due to long travel time. The RPCs will wait an appropriate amount of time before interacting with other county responders.

- Radiological Accident Deployment (RAD) Field Teams

The State RAD Teams will exercise this criterion in an in-sequence demonstration August 29, 2017. The RAD teams will be notified through the Minnesota Duty Officer to the 911 Emergency Communications Facility 1245 Shenandoah Lane North Plymouth, MN 55447 who will in turn page team members. RAD Teams will pre-position at 8:30 am the Maple Grove Fire Logistics Building 11480 89th Ave Maple Grove, MN 55369. 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)

This criterion is not selected for evaluation by the State but will play in support of the counties demonstration needs.

The work area for the JIC is located in the SEOC. Both Wright and Sherburne County PIOs will be pre-positioned near the SEOC. They will not engage before they are notified and will wait the appropriate length of time before beginning play.

### **Wright County**

The initial call to classify the event will be received in the Sheriff's dispatch office of the Wright County Dispatch Center located at 3800 Braddock Av NE, Buffalo MN 55313.

Initial calls to activate EOC staff will then begin in the dispatch center. Wright County will fully activate their EOC. A Wright County PIO will be pre-positioned near the SEOC and wait until notified to respond to the SEOC during the Plume phase exercise.

Recommendations from the State Operations Chief will be communicated and coordinated with the County Emergency Manager/ EOC Ops Chief via telephone.

Sufficient 24-hour staffing capability of key personnel will be presented at the exercise entrance meeting on August 28, 2017.

### **Sherburne County**

The initial call to classify the event will be received in the Sheriff's dispatch office of the Sherburne County Law Enforcement Center. The Sherburne County Government Center and the County EOC are located at 13880 Business Center Drive, Elk River, MN.

Initial calls to activate EOC staff will begin in the dispatch office. Sherburne County will fully activate their EOC and a PIO will be pre-positioned near the SEOC and wait until notified to respond to the SEOC during the Plume phase exercise.

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

Sufficient 24-hour staffing capability of key personnel will be presented at the exercise entrance meeting on August 28, 2017.

## **SUB-ELEMENT 1.b – Facilities**

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

### **State of Minnesota**

This criterion has not been selected for demonstration.

**Wright County**

Wright County will be conducting the exercise at their EOC facility located at the Wright County Gov't Center 10 2nd St NW Buffalo, MN 55313. The areas evaluated will include adequate space, furnishings, lighting, restrooms, ventilation and backup power as required to support operations.

**Sherburne County**

Sherburne County will be conducting the exercise at their EOC facility located at the Sherburne County Gov't Center 13880 Business Center Drive Elk River, MN 55330. The areas evaluated will include adequate space, furnishings, lighting, restrooms, ventilation and backup power as required to support operations.

**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**

This criterion is not selected for evaluation by the State but will play in support of the counties demonstration needs.

**Wright County**

The Wright County Emergency Manager as the county operations chief will coordinate decisions and emergency activities within the county. Activities will be coordinated with the State, Sherburne County EOC and field staff as necessary.

**Sherburne County**

The Sherburne County Emergency Services Director as the county operations chief will provide direction and control including coordinating emergency activities within the county. Activities will be coordinated with the State, Wright 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**

This criterion is not selected for evaluation by the State but will play in support of the counties demonstration needs.

The state will aid to demonstrate the primary means of communication between the counties and Monticello Nuclear Generating Plant. The state will also aid in the demonstration of one additional (secondary, tertiary or alternative) means of communication of Wright County and Sherburne County each with the state at 7:30 am August 29, 2017.



**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

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

Line of Communication	Primary	Secondary	Tertiary	Alternative
SEOC to Ingestion Counties	Commercial telephone/FAX machine	Public Safety Radio VHF/800 MHz ARMER system	Satellite telephone	
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/email	800 MHz Xcel	Satellite telephone
SEOC to Federal Response Organizations (FEMA, NRC, DOE, and Corps of Engineers)	Commercial telephone/FAX machine	National Warning System (NAWAS)	FNARS/ Shares	Amateur Radio
SEOC to Field Monitoring Teams	Commercial telephone/ Cell phone	800 MHz ARMER	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	Amateur Radio

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

SEOC to Mobile Medical Support	Commercial telephone to primary/backup hospital	Public Safety Radio VHF/800 MHz ARMER system	Amateur Radio	
--------------------------------	---	---	---------------	--

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 Xcel	Cell Phones
MDO to SEOC	Commercial telephone/FAX Machine	Public Safety Radio VHF/800 MHz ARMER system	National Warning System (NAWAS)	Satellite Phone

### **Wright County**

The Wright County EOC's primary communication link is a commercial phone line to the Monticello Nuclear Generating Plant, verification is through fax or callback to the plant. A Dedicated Private Branch Exchange circuit is the primary communications link between the County EOC and the State Emergency Operations Center (SEOC).

The secondary communications method is a privately owned utility frequency radio to the Monticello Nuclear Generating Plant and a Commercial telephone/FAX line to the SEOC.

The tertiary communication method with the Monticello Nuclear Generating Plant is a public dispatch number on commercial telephone/FAX machine and a Public Safety Radio VHF/800 MHz ARMER system with the SEOC.

Wright County will demonstrate one back up means of communication between the state and the county by receiving the additional communication initiated by the state. Special populations are notified using Everbridge (a change from the use of Code Red) which can be used for notification to emergency workers. This may be used but will not be evaluated.

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

Line of Communication	Primary	Secondary	Tertiary	Alternative
MNGP to Wright County EOC/Dispatcher	Commercial phone line specific to MNGP with verification call back to plant or verification by fax	800 MHz Xcel radio	Public dispatch number on Commercial telephone/FAX machine-verification call back to plant	

**Sherburne County**

The Sherburne County EOC's primary communication link is a commercial phone line to the Monticello Nuclear Generating Plant, verification is through fax or callback to the plant. A Dedicated Private Branch Exchange circuit is the primary communications link between the County EOC and the State Emergency Operations Center (SEOC).

The secondary communications method is a privately owned utility frequency radio to the Monticello Nuclear Generating Plant and a Commercial telephone/FAX line to the SEOC.

The tertiary communication method with the Monticello Nuclear Generating Plant is a public dispatch number on commercial telephone/FAX machine and a Public Safety Radio VHF/800 MHz ARMER system with the SEOC.

Sherburne County will demonstrate one back up means of communication between the state and the county by receiving the additional communication initiated by the state. Special populations are notified using Code Red which can be used for notification to emergency workers. This may be used but will not be evaluated.

Line of Communication	Primary	Secondary	Tertiary	Alternative
MNGP to Sherburne County EOC/Dispatcher	Commercial phone line specific to MNGP with verification call back to plant or verification by fax	800 MHz Xcel radio	Public dispatch number on Commercial telephone/FAX machine-verification call back to plant	

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

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

**State of Minnesota**

- Equipment, Maps and Displays:

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

This criterion is not selected for evaluation by the State but will play in support of the counties demonstration needs.

○ Dosimetry:

This criterion is not selected for evaluation by the State; however, but will play in support of the counties demonstration needs and for the field teams. Field Teams and Emergency Workers will use Electronic Reading dosimeters, DRDs and TLDs and control exposure as followed and according per their procedures.

Emergency Worker		Dosimeter Range		Pick-up Location	
State RAD Teams	Electronic Dosimetry			TLD	Maple Grove Fire Station #2 and Plymouth Fire Station #1
DNR Field Teams (Not demonstrated this exercise)		0-200 mR		TLD	Command Van
MDA Field Teams (Not demonstrated this exercise)		0-200 mR		TLD	MDA DOC
State Patrol & MnDOT (Wright County)		0-200 mR	0-20 R	TLD	Wright County EOC
State Patrol & MnDOT (Sherburne County)		0-200 mR	0-20 R	TLD	Sherburne County EOC
Ambulance crew (Doesn't take KI)		0-200 mR		TLD	Reception Center
On-Site HAB Responders (Not demonstrated this exercise)	Electronic Dosimetry	0-200 mR	0-20 R	TLD	ICC or Stagin
Dispatch/Jail		0-200 mR	0-20 R	TLD	Dispatch/Jail

○ Potassium Iodide (KI):

This criterion is not selected for evaluation by the State; however, will play in support of the counties and field team demonstration needs.

Packets of KI are a part of the state field team 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 March 2025. Per the State of Minnesota Emergency Operations Plan, emergency workers located outside the 10 mile EPZ such as at the reception center do not take KI; however, emergency workers placing barricades or manning traffic control points within the Emergency Planning Zone (EPZ) do take KI as directed.

*Note: IPAWS may be used for the initial evaluation and for future implementation for the use in performing an alternate alert process than performing route alerting.*

○ Monitoring Instruments:

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

This criterion is not selected for evaluation by the State but will play in support of the counties and field team demonstration needs.

All instruments will be operationally checked before use. Instruments have been calibrated in accordance with the manufacturer's recommendations and calibration documentation will be supplied at the FEMA entrance meeting.

- Equipment Maintenance:

This criterion is not selected for evaluation by the State but will play in support of the counties and field team demonstration needs.

All routine equipment checks and maintenance is reported in the Annual Letter of Certification. Calibration of radiological detection equipment will be reviewed on August 28, 2017, by FEMA. All radiation monitoring equipment will be operationally checked prior to use.

- Traffic Control Points:

This criterion is not selected for evaluation by the State but will play in support of the counties demonstration needs.

Traffic control equipment is permanently located at the designated Trunk Highway Traffic Control Points (TCP) in the area surrounding the Monticello 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 request of the SEOC and coordinated with the county. The Minnesota Department of Transportation will simulate the setting up and movement of barriers.

The barricades are deployed as follows:

Truck Station	Location	# of Barricades
Maintenance Area 3B HQ/St. Cloud Sub-Area	3725 12 <sup>th</sup> Street North St. Cloud, MN 56303	1 2
Buffalo Truck Station/Lake Sub-Area	1137 Highway 25 SE Buffalo MN 55313	4

Truck Station	Location	# of Barricades
Monticello Truck Station/Lake Sub-Area	112 Chelsea Road Monticello, MN 55362	8
Elk River Truck Station/Elk River Sub-Area	18938 Dodge Ave NW Elk River, MN 55330	19

### **Wright County**

- Equipment, Maps and Displays:

Wright County will demonstrate the use of equipment, maps, and displays at the Wright County EOC as necessary to support emergency operations.

- Dosimetry:

All county emergency workers in or entering the 10 mile EPZ will be issued dosimeters and TLDs as outlined in their plans.

- Potassium Iodide (KI):

KI for emergency workers is stored at the County EOC and Law Enforcement Center. The shelf life of Minnesota's current supply of KI is approved until March 2025.

- Equipment Maintenance:

All routine equipment checks and maintenance is reported in the Annual Letter of Certification. Calibration of radiological detection equipment will be reviewed on August 28, 2017, by FEMA.

### **Sherburne County**

Equipment, Maps and Displays:

Sherburne County will demonstrate the use of equipment, maps, and displays at the Sherburne County EOC as necessary to support emergency operations.

- Dosimetry:

All county emergency workers in or entering the 10 mile EPZ will be issued dosimeters and TLDs as outlined in their plans.

- Potassium Iodide (KI):

KI for emergency workers is stored at the Sherburne County EOC. The shelf life of Minnesota's current supply of KI has been approved until March 2025.

- Equipment maintenance:

All routine equipment checks and maintenance is reported in the Annual Letter of Certification. Calibration of radiological detection equipment will be reviewed on , by FEMA.

## **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 PAGs.

**State of Minnesota**

This criterion is not selected for evaluation by the State but will play in support of the counties.

*Note: at a General Emergency, all emergency workers are advised to take potassium iodide (KI).*

**Wright County, Sherburne County**

Due to the State of Minnesota non selection of this criterion the counties however will demonstrate the following in Criterion 3.a.1 by each county Radiological Officer's briefing:

The Wright and Sherburne County Radiological Officers will instruct county emergency workers to take KI after the recommendation is made by the SEOC Planning and Assessment Center (PAC). All emergency workers inside the 10- mile EPZ have a radiation dose limit of 5 rem and a turnback limit of 1 R.

**SUB-ELEMENT 2.b – Dose Assessment & PARs & PADs for the Emergency Event**

Criterion 2.b.1: Appropriate PARs are based on available information on plant condition, field monitoring data, and licensee and ORO dose projections, as well as knowledge of onsite and offsite environmental conditions.

**State of Minnesota**

This criterion is not selected for evaluation by the State.

**Wright County, Sherburne County**

The counties are not selected to demonstrate this criterion.

Criterion 2.b.2: A decision-making process involving consideration of appropriate factors and necessary coordination is used to make PADs for the general public (including the recommendation for the use of KI, if ORO policy).

**State of Minnesota**

This criterion is not selected for evaluation by the State but will play in support of the counties demonstration needs.

The Governor's Authorized Representative (GAR) will demonstrate the ability to make appropriate protective action decisions based on a recommendation from the State Incident Manager and the Planning Chief. Decision-making for incidents at the Monticello Nuclear Generating Plant is the responsibility of the Governor or GAR as outlined in state statute.

KI is pre-distributed on a voluntary basis to members of the general public living in the Monticello 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 in the affected areas at the General Emergency ECL. KI is not distributed post incident and is not available at reception centers. The call to the pharmacies located within Target stores will be simulated at the ALERT ECL to stop KI distribution.

**Wright County, Sherburne County**

Wright and Sherburne counties participate in the protective action decision process in accordance with the state's PAR process. This includes concurrence between the SEOC and with Wright and Sherburne counties.

*Note: Minnesota is not a home-rule state.*

**SUB-ELEMENT 2.c – PADs for the Protection of persons with disabilities and access/functional needs**

Criterion 2.c.1: PADs are made, as appropriate, for groups of people with disabilities and those with access/functional needs.

**State of Minnesota**

This criterion is not selected for evaluation by the State but will play in support of the counties demonstration needs.

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.

The State of Minnesota acts as the backup for notifying school systems/districts and will demonstrate, but will not be evaluated. The capability to contact public school systems/districts during the exercise to alert and notify all public school systems/districts of emergency conditions that are expected to or may necessitate protective actions for students will be demonstrated by each county.

**Wright County, Sherburne County**

Staff at the Wright County and Sherburne 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 PADs are made based on the ORO planning criteria.

**State of Minnesota**

This criterion is not selected for evaluation.

**Wright County**

This criterion is not selected for evaluation.



**Sherburne County**

This criterion is not selected for evaluation.

**Ingestion Counties**

This criterion is not selected for evaluation.

**SUB-ELEMENT 2.e – Radiological Assessment & Decision-making Concerning Post-Plume Phase Relocation, Re-entry, and Return**

Criterion 2.e.1: Timely post-plume phase 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.

**Wright County**

This criterion is not selected for evaluation.

**Sherburne County**

This criterion is not selected for evaluation.

**Ingestion Counties**

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 issue appropriate dosimetry, KI, and procedures, and manage radiological exposure to emergency workers in accordance with the plans/procedures. Emergency workers periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. Appropriate record-keeping of the administration of KI for emergency workers is maintained.

**State of Minnesota**

This criterion is not selected for evaluation by the State but will play in support of the counties demonstration needs.

**Wright 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. Wright County will demonstrate the capability to accomplish distribution of KI to emergency workers consistent with decisions made. Emergency workers will demonstrate basic knowledge of procedures for using KI whether or not the scenario drives the implementation of KI use. One participant will receive the dosimetry and briefing to

reflect the simulation of group dosimetry distribution and briefing. This may be accomplished by an interview with the evaluator.

The Wright County Radiological Officer will instruct county emergency workers to take KI after the recommendation is made by the SEOC Planning and Assessment Center (PAC). All emergency workers inside the 10-mile EPZ have a radiation dose limit of 5 rem and a turnback limit of 1 R.

As driven by the scenario, field personnel (i.e. Highway and Sheriff personnel), will be called in to the EOC (all will be simulated except for 1 Deputy and 1 highway worker/ Public Works worker) to pick up KI and dosimetry to receive a briefing and their emergency assignment.

Workers at the Wright County Dispatch Center will be notified by the Wright County RADEF officer and issued dosimetry and KI at the General Emergency ECL if and only if the 10S subarea is affected during a General Emergency ECL. The actual taking of KI will be simulated

### **Sherburne 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. Sherburne County will demonstrate the capability to accomplish distribution of KI to emergency workers consistent with decisions made. Emergency workers will demonstrate basic knowledge of procedures for using KI whether or not the scenario drives the implementation of KI use. This may be accomplished by an interview with the evaluator.

The Sherburne County Radiological Officer will instruct county emergency workers to take KI after the recommendation is made by the SEOC Planning and Assessment Center (PAC). All emergency workers inside the 10-mile EPZ have a radiation dose limit of 5 rem and a turnback limit of 1 R.

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 and 1 Public Works worker) to pick up KI and dosimetry, receive a briefing and their emergency assignment.

## **SUB-ELEMENT 3.b – Implementation of KI Decision for Institutionalized Individuals and the Public**

Criterion 3.b.1: KI and appropriate instructions are made available in case a decision to recommend use of KI is made. Appropriate record keeping of the administration of KI for institutionalized individuals and the general public is maintained.

### **State of Minnesota**

This criterion is not selected for evaluation by the State but will play in support of the counties demonstration needs.

Minnesota has made KI available to institutionalized individuals and it has been pre-distributed to the general public on a voluntary basis through designated pharmacies located within Target stores. Distribution of KI is stopped at the Alert ECL and will be simulated for the exercise demonstration. For evaluation purposes, the actual ingestion of KI will not be performed. Minnesota has disseminated instructions on using KI for those advised to take it.

### **Wright County**

Wright County will demonstrate the capability to accomplish distribution of KI consistent with decisions made as needed. They will demonstrate the ability to develop and maintain lists of institutionalized individuals who have ingested KI, including documentation of the date(s) and time(s) they were instructed to ingest KI. For evaluation purposes, the actual ingestion of KI will not be performed. OROs must demonstrate the capability to formulate and disseminate instructions on using KI for those advised to take it.

Workers at the Wright County Dispatch Center will be notified by the Wright County RADEF officer and issued KI for the institutionalized individuals use at the General Emergency ECL if and only if the 10S subarea is affected during a General Emergency ECL. The actual taking of KI will be simulated.

*Note: Actual emergency workers protective actions are covered in 3.a.1 for dosimetry and KI. Refer to Criterion for 3.a.1 for respective wording.*

### **Sherburne County**

Sherburne County will demonstrate the capability to accomplish distribution of KI consistent with decisions made. They will demonstrate the ability to develop and maintain lists of institutionalized individuals who have ingested KI, including documentation of the date(s) and time(s) they were instructed to ingest KI. For evaluation purposes, the actual ingestion of KI will not be performed. OROs must demonstrate the capability to formulate and disseminate instructions on using KI for those advised to take it.

## **SUB-ELEMENT 3.c – Implementation of Protective Actions for persons with disabilities and access/functional needs**

Criterion 3.c.1: PADs are implemented for people with disabilities and those with access/functional needs other than schools within areas subject to protective actions.

### **State of Minnesota**

This criterion is not selected for evaluation.

### **Wright County**

Wright County will demonstrate this criterion by an interview process with EOC staff. It is the intent of Wright County to simulate the evacuation of all persons with disabilities and access/functional needs at the Site Area Emergency ECL. All calls will be simulated and contacts logged. At least one transportation provider will be contacted.

The Wright County Dispatch Center located at 3800 Braddock Av NE, Buffalo MN 55313 intends to shelter-in-place at a General Emergency and will evacuate if advised by the county EOC.

### **Sherburne County**

Sherburne County will demonstrate this criterion by an interview process with EOC staff. It is the intent of Sherburne County to simulate the evacuation of all persons with disabilities and access/functional needs at the Site Area Emergency ECL. All calls will be simulated and contacts logged. At least one transportation provider will be contacted.

Criterion 3.c.2: OROs/School officials implement protective actions for schools.

### **State of Minnesota**

- Evacuation:

This criterion is not selected for evaluation by the State but will play in support of the counties demonstration needs.

Evacuation of schools is a precautionary measure action for all schools in the EPZ and could be initiated at a Site Area Emergency ECL. This action is a county and school district responsibility and will not be demonstrated by the state during the exercise. Information about reporting back the status of school evacuation may be observed at the SEOC. 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 be simulated at the SEOC during the Site Area Emergency ECL. Any Precautionary Measures decision will be communicated to the appropriate personnel (simulated when necessary).

### **Wright County**

- Evacuation

Evacuation will be simulated. Notifications to the schools by the county EOC are given beginning at an Alert ECL.

- EV-2

Buffalo and St. Michael-Albertville School Districts will demonstrate this based on their plans and procedures:

**Buffalo EV-2** is scheduled for Thursday August 3, 2017 from 10:00 AM – 12:00 PM located at the District Office 214 N.E. 1st Ave Buffalo, MN 55313. Buffalo's evacuation agreement is with the Rockford School District. Evaluation will be through interview of the necessary school and transportation officials that should include but not limited to: the superintendent, one principal, one nurse, one transportation provider and a host school representative.

Preschools and daycares are notified by county human services agencies at the Alert ECL and are treated as the general population at the General Emergency ECL.

**The St. Michael** - Albertville School District EV-2 is scheduled for Tuesday August 1, 2017 from 10:00 AM – 12:00 PM at their District Office located at 11343 50th St. NE, Albertville, MN 55301. St. Michael-Albertville's plan is to evacuate the elementary school located within the EPZ to their middle school located outside of the EPZ. Evaluation will be through an interview of the necessary school and transportation officials that should include but not limited to: the superintendent, one principal, one teacher, one nurse, one transportation provider, one bus driver and host school superintendent/or principal.

**Sherburne County**

No schools are selected for evaluation.

- Evacuation

Evacuation will be simulated. Notifications to the schools by the county EOC will begin at the Alert ECL.

**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**

This criterion is not selected for evaluation by the State but will play in support of the counties demonstration needs.

**Wright County**

The Wright County EOC staff will select, establish, and coordinate staffing of traffic and access control points consistent with the protective action decisions for evacuation areas. This criterion will be demonstrated by simulation and staff interview.

A deputy and/or public works employee 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.

**Sherburne County**

The Sherburne County EOC staff will select, establish, and coordinate staffing of traffic and access control points consistent with the protective action decisions for evacuation areas. This criterion will be demonstrated by simulation and staff interview.

A deputy and/or public works employee 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.

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

---

**State of Minnesota**

This criterion is not selected for evaluation by the State but will play in support of the counties demonstration needs.

**Wright County, Sherburne County**

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 will 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.

**Wright County**

This criterion was not selected for this exercise.

**Sherburne County**

This criterion was not selected for this exercise.

**Ingestion Counties**

This criterion was not selected for this exercise.

Criterion 3.e.2: Appropriate measures, strategies, and pre-printed instructional material are developed for implementing PADs for contaminated water, food products, milk, and agricultural production.

**State of Minnesota**

This criterion was not selected for this exercise.

**Wright County**

This criterion was not selected for this exercise.

**Sherburne County**

This criterion was not selected for this exercise.

**Ingestion Counties**

This criterion was not selected for this exercise.

**SUB-ELEMENT 3.f – Implementation of Post-Plume Phase 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 during the post emergency phase are coordinated with appropriate organizations and implemented.

**State of Minnesota**

This criterion was not selected for this exercise.

**Wright County**

This criterion was not selected for this exercise.

**Sherburne County**

This criterion was not selected for this exercise.

**Ingestion Counties**

This criterion was not selected for this exercise.

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

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

Criterion 4.a.1: [RESERVED]

Criterion 4.a.2: Field teams (two or more) 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. This is an in- sequence demonstration to be demonstrated August 29, 2017.

The responsibility for obtaining peak (centerline) measurements in the plume has been accepted by licensee field monitoring teams, with concurrence from the State of Minnesota, therefore there is no need for these measurements to be repeated by ORO monitoring teams.

**Wright County, Sherburne 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 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. RadResponder may be used but will not be evaluated. 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 which will be simulated.

**Wright County, Sherburne 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 (two or more) demonstrate the capability to make appropriate measurements and to collect 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.

**Wright County, Sherburne 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 PADs.

**State of Minnesota**

This criterion was not selected for this exercise.

**Wright County, Sherburne 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 REP guidance.

**State of Minnesota**



This criterion is not selected for evaluation by the State but will play in support of the counties demonstration needs.

The development and dissemination of an Emergency Alert System (EAS) message will be shown 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 PAC and communicated to the Operations Chief.
4. The Operations Chief gets concurrence on the Protective Action Recommendation (PAR) from the risk counties.
5. The PAR is communicated to the Minnesota State Incident Manager (SIM)
6. The PAR is communicated to the Governor's Authorized Representative (GAR) where once approved, it becomes a Protective Action Decision (PAD).
7. 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 GAR.
8. The approved PAD goes to the Operations Chief to coordinate these times with Wright and Sherburne counties via a conference call – the EAS message is the State's responsibility.
9. The sirens are sounded (simulated).
10. The EAS message is transmitted (simulated).
11. Special News Bulletins are sent out.
12. Media Briefings occur.

An EAS Writer (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 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 broadcasts and media releases.

Activation of sirens, EAS, weather radios and the broadcast of media messages will 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.

**Wright County**

All EAS messages are developed and disseminated by the SEOC. After PAR concurrence via a conference call with the other county and the state, sirens are sounded once following each evacuation or sheltering PAR. Wright County has the lead for siren activation coordination with Sherburne County. The coordination of alert and notification implementation will be demonstrated in the Wright County Dispatch Center (siren activation will be simulated). Special populations are notified using Everbridge, which can be used for notification to emergency workers. This may be used but will not be evaluated.

**Sherburne County**

All EAS messages are developed and disseminated by the SEOC. After PAR concurrence via a conference call with the other county and the state, sirens are sounded once following each evacuation or sheltering PAR. The coordination of alert and notification implementation will be demonstrated in the Sherburne County EOC (siren activation will be simulated). Special populations may be notified using Code Red which can be used for notification for emergency workers. This may be used but will not be evaluated.

Criterion 5.a.2: [RESERVED]

Criterion 5.a.3: Backup alert and notification of the public is completed within a reasonable time following detection by the ORO of a failure of the primary alert and notification system.

**State of Minnesota**

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

*Note: IPAWS may be used for the initial evaluation and for future implementation for the use in performing an alternate alert process than performing route alerting.*

**Wright County**

Wright County has 100% siren coverage; there will not be an inoperable siren inject for demonstration.

**Sherburne County**

Sherburne has 100% siren coverage; there will not be an inoperable siren inject for demonstration.

Criterion 5.a.4: Activities associated with FEMA approved exception areas (where applicable) are completed within 45 minutes of the initial decision by authorized offsite emergency officials to notify the public of an emergency situation.

**State of Minnesota**

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

**Wright County**

This criterion is not selected for this exercise and is not demonstrating route alerting.

**Sherburne County**

This criterion is not selected for this exercise and is not demonstrating route alerting.

**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**

This criterion is not selected for evaluation by the State but will play in support of the counties demonstration needs.

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 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. Social media will be used to further disseminate messaging but will not be evaluated.

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 however, the emergency information will contain all the necessary and applicable instructions (e.g., evacuation instructions, evacuation routes, reception center locations, what to take when evacuating, shelter-in-place instructions, information concerning protective actions for schools and persons with disabilities and access/functional needs, and the public inquiry hotline telephone number) to assist the public in carrying out the PADs provided. The emergency information will include previously identified protective action areas that are still valid, as well as new areas and emergency information that is no longer valid will be rescinded and not repeated by broadcast media. In addition, the JIC may conduct the capability to ensure that current emergency information is repeated at pre-established intervals in accordance with the plans/procedures but will not be demonstrated for evaluation. Media briefings may be conducted but will not be demonstrated for evaluation in the media briefing room. Media briefings will be streamed live into the SEOC but will not be evaluated.

PIOs will simulate the distribution of news releases and advisories via e-mail and will 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. Televisions used to monitor media broadcasts are located in the PIO work areas. For the exercise the televisions may not be turned on.

The Information Hotline (public inquiry) is not evaluated; therefore, it will not be demonstrated but rumors will be injected for exercise play.

### **Wright County**

Emergency information released to the public and the news media are the responsibility of the SEOC and the JIC. The Wright County Public Information Liaison will demonstrate the coordination of county public information through the JIC. The Wright County PIO state liaison will be pre-positioned near the SEOC and will wait an appropriate amount of time before beginning play.

Wright County will not be demonstrating any local briefings.

### **Sherburne County**

Emergency information released to the public and the news media are the responsibility of the SEOC and the JIC. The Sherburne County Public Information Liaison will demonstrate the coordination of county public information through the JIC. The Sherburne County PIO state liaison will be pre-positioned near the SEOC and will wait an appropriate amount of time before beginning play.

Sherburne County will not be demonstrating any local briefings.

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

### **SUB-ELEMENT 6.a – Monitoring, Decontamination, and Registration of Evacuees**

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

### **State of Minnesota**

Rogers Reception Center will be exercised as an out-of-sequence demonstration. Evacuee monitoring will be demonstrated on August 3, 2017 at 6:00 pm at the Rogers High School 21000 141st Ave N Rogers, MN 55374 in Hennepin County. All emergency workers that are issued dosimetry will demonstrate appropriate use of that dosimetry and record keeping in accordance with their established procedures/guidelines. A verbal briefing, or the read and sign in Emergency Worker Exposure Handbooks as well as with the video/QR code within the Emergency Worker Exposure Handbook may be used as the dosimetry briefing. The emergency workers will demonstrate their knowledge of exposure rate and administrative limits. The reception center will use a combination of group and individual dosimetry per procedures. KI will not be issued due to the facilities not being within the 10 mile Emergency Planning Zone (EPZ).

The Minnesota Department of Human Services (DHS) will direct and coordinate the reception center under a unified command structure. The evacuee monitoring stations use both vehicle and personnel portal monitors and will process at least 6 evacuees to demonstrate the 20% EPZ population monitoring capability in a 12-hour period. Hand held survey instruments (Ludlum Model 26s) are used by monitoring staff in the decontamination areas and will be operationally checked prior to use. Reception Center volunteer staff will conduct monitoring and serve as recorders. Volunteer mock evacuees will go through the reception center monitoring, decontamination and registration process. At least one “evacuee” will require decontamination. The decontamination process will be demonstrated by interview with reception center staff. Contamination levels, monitoring and decontamination results will be provided by controllers.

All evacuees who pass through the Reception Center will be processed through the registration station.

#### Vehicle Monitoring and Decontamination

At least one evacuee vehicle will be monitored and will require decontamination. The vehicle monitoring process will be demonstrated on August 3, 2017 using a combination of portal monitors and hand held survey instruments at the Rogers High School 21000 141st Ave N Rogers, MN 55374 in Hennepin County. Decontamination processes will be demonstrated at the Vision Transportation Company facility located at 14620 James Road, Rogers, MN 55374.

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

Ambulance personnel may be set up onsite to respond to potentially contaminated and injured evacuees, but this portion will not be evaluated.

Household pet decontamination and monitoring may be set up, but will not be evaluated as a part of this exercise.

#### **Wright County and Sherburne County**

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

### **SUB-ELEMENT 6.b – Monitoring and Decontamination of Emergency Workers and their Equipment and Vehicles**

Criterion 6.b.1: The facility/ORO has adequate procedures and resources to accomplish monitoring and decontamination of emergency workers and their equipment and vehicles.

#### **State of Minnesota**

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

#### **Wright County**

This criterion was not selected during this exercise.

### **Sherburne County**

Emergency Worker Monitoring and Decontamination will be demonstrated on Tuesday August 29, 2017, 6:00 pm at the Zimmerman Fire Department located at 13028 Fremont Ave Zimmerman, MN 55398. All emergency workers that are issued dosimetry will demonstrate appropriate use of that dosimetry and record keeping in accordance with their established procedures/guidelines. A verbal briefing, or the read and sign in Emergency Worker Exposure Handbooks as well as with the video/QR code within the Emergency Worker Exposure Handbook may be used as the dosimetry briefing. The emergency workers will demonstrate their knowledge of exposure rate and administrative limits. The EWD personnel use individual dosimetry per procedures. KI will not be issued due to the facilities not being within the 10 Emergency Planning Zone (EPZ).

At least one emergency worker will go through the EWD 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.

One emergency worker vehicle will be monitored and will require decontamination. The vehicle decontamination process will be demonstrated by an interview with the Zimmerman Emergency Worker Decontamination Center staff.

A combination of portal monitors and hand held survey instruments (Ludlum Model 26s) will be used by the Emergency Worker Decontamination Center staff to monitor emergency workers, their vehicles and their equipment. The survey instruments will be operationally checked prior to use.

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 planning guidelines. Managers demonstrate the procedures to assure that evacuees have been monitored for contamination and have been decontaminated as appropriate before entering congregate care facilities.

#### **State of Minnesota**

Congregate Care will be demonstrated Thursday August 3, 2017 in conjunction with the Rogers Reception Center stationed in the Rogers High School. The Congregate Care demonstration will be held in Hennepin County at the Rogers High School located at 21000 141st Ave N Rogers, MN 55374.

An American Red Cross shelter manager and Health Service Representative will meet the evaluator at the Rogers High School reception center. They will proceed to the selected mass shelter location and conduct a walk-through of the facility. The evaluator will be provided with

a list of supplies, equipment, personnel and logistical information for review. The shelter agreement will also be available for review.

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

**Wright County and Sherburne 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**

- MS-1 Transportation (Ambulance) – North Memorial

North Memorial Medical Center's North Memorial Ambulance Service will demonstrate this criterion objective in an out-of-sequence demonstration on Tuesday August 1, 2017 at 8:00 am located at 3300 Oakdale Avenue North Robbinsdale, MN 55422. All emergency workers that are issued dosimetry will demonstrate appropriate use of that dosimetry and record keeping in accordance with their established procedures/guidelines. A verbal briefing, or the read and sign in Emergency Worker Exposure Handbooks as well as with the video/QR code within the Emergency Worker Exposure Handbook may be used as the dosimetry briefing. The emergency workers will demonstrate their knowledge of exposure rate and administrative limits. The hospital uses group dosimetry per procedures. KI will not be issued due to the facilities not being within the 10 mile Emergency Planning Zone (EPZ).

A person will portray an injured contaminated individual. 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 North Memorial Medical Center.

- MS-1 Transportation (Ambulance) – Fairview Northland

Fairview Northland Medical Center's North Memorial Ambulance Service will demonstrate this objective in the parking lot outside Fairview Northland Medical Center (simulating the reception center) at 8:00 am Wednesday August 2, 2017 located at 911 Northland Drive Princeton, MN 55371. All emergency workers that are issued dosimetry will demonstrate appropriate use of that dosimetry and record keeping in accordance with their established procedures/guidelines. A verbal briefing, or the read and sign in Emergency Worker Exposure Handbooks as well as with the video/QR code within the Emergency Worker Exposure Handbook may be

used as the dosimetry briefing. The emergency workers will demonstrate their knowledge of exposure rate and administrative limits. The hospital uses group dosimetry per procedures. KI will not be issued due to the facilities not being within the 10 mile Emergency Planning Zone (EPZ).

A person will portray an injured contaminated individual. 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 Fairview Northland Medical Center.

- MS-1 Transportation (Ambulance) – St. Cloud

St. Cloud Gold Cross Ambulance Emergency Services will demonstrate this objective in the parking lot outside St. Cloud CentraCare Hospital (simulating the reception center) at 8:00 am Wednesday August 30, 2017 located at 1406 Sixth Avenue North St. Cloud, MN 56303. All emergency workers that are issued dosimetry will demonstrate appropriate use of that dosimetry and record keeping in accordance with their established procedures/guidelines. A verbal briefing, or the read and sign in Emergency Worker Exposure Handbooks as well as with the video/QR code within the Emergency Worker Exposure Handbook may be used as the dosimetry briefing. The emergency workers will demonstrate their knowledge of exposure rate and administrative limits. The hospital uses group dosimetry per procedures. KI will not be issued due to the facilities not being within the 10 mile Emergency Planning Zone (EPZ).

A person will portray an injured contaminated individual. 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 St. Cloud CentraCare Hospital.

- MS- 1 (Facilities) – North Memorial

North Memorial Medical Center (3300 Oakdale Avenue North Robbinsdale, MN 55422) will demonstrate this criterion objective in an out-of-sequence demonstration on Tuesday August 1, 2017 at 8:00 am. Upon notification, the hospital personnel will prepare the emergency room area for arrival of a contaminated patient, including appropriate contamination control measures. All emergency workers that are issued dosimetry will demonstrate appropriate use of that dosimetry and record keeping in accordance with their established procedures/guidelines. A verbal briefing, or the read and sign in Emergency Worker Exposure Handbooks as well as with the video/QR code within the Emergency Worker Exposure Handbook may be used as the dosimetry briefing. The emergency workers will demonstrate their knowledge of exposure rate and administrative



**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

limits. The ambulance personnel use individual dosimetry per procedures. KI will not be issued due to the facilities not being within the 10 mile Emergency Planning Zone (EPZ).

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 North Memorial 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.

- MS- 1 (Facilities) – Fairview Northland

Fairview Northland Medical Center (911 Northland Drive Princeton, MN 55371) will demonstrate this objective at 8:00 am on Wednesday August 2, 2017. Upon notification, the hospital personnel will prepare the emergency room area for arrival of a contaminated patient, including appropriate contamination control measures. All emergency workers that are issued dosimetry will demonstrate appropriate use of that dosimetry and record keeping in accordance with their established procedures/guidelines. A verbal briefing, or the read and sign in Emergency Worker Exposure Handbooks as well as with the video/QR code within the Emergency Worker Exposure Handbook may be used as the dosimetry briefing. The emergency workers will demonstrate their knowledge of exposure rate and administrative limits. The ambulance personnel use individual dosimetry per procedures. KI will not be issued due to the facilities not being within the 10 mile Emergency Planning Zone (EPZ).

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 North Memorial Ambulance Service. 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.

- MS- 1 (Facilities) – St. Cloud

St. Cloud CentraCare Hospital (1406 Sixth Avenue North St. Cloud, MN 56303) will demonstrate this objective at 8:00 am on Wednesday August 30, 2017. Upon

notification, the hospital personnel will prepare the emergency room area for arrival of a contaminated patient, including appropriate contamination control measures. All emergency workers that are issued dosimetry will demonstrate appropriate use of that dosimetry and record keeping in accordance with their established procedures/guidelines. A verbal briefing, or the read and sign in Emergency Worker Exposure Handbooks as well as with the video/QR code within the Emergency Worker Exposure Handbook may be used as the dosimetry briefing. The emergency workers will demonstrate their knowledge of exposure rate and administrative limits. The ambulance personnel use individual dosimetry per procedures. KI will not be issued due to the facilities not being within the 10 mile Emergency Planning Zone (EPZ).

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 Gold Cross 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.

**Wright County, Sherburne County**

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

## **APPENDIX E: SCENARIO TIMELINES**

This appendix presents the Off-Site Scenario Timelines for the State of Minnesota and Counties of Sherburne and Wright that drove the Monticello Nuclear Generating Plant Radiological Emergency Preparedness, Partial Participation, Plume Exposure Pathway Exercise conducted on August 29, 2017. The timelines include both On-Site events and comments and expected Off-Site response actions. All times listed in the timelines are Central Daylight Time (CDT).

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

This page intentionally left blank.

## Onsite Scenario Timeline

TIME	EVENT SUMMARY
<b>1) <u>INITIAL CONDITIONS</u></b>	
	<b>Plant Status</b>
	Reactor has been at continuous operation at 100% power (Mode 1) for 100 days.
	HPCI out of service for maintenance, but currently being restored.
	Xcel Energy Grid condition is Green.
	CDF, LERF, and Fuel Pool cooling and makeup are all Green.
	There are two operators on the refuel floor conducting crane operation training.
	<b>MET Conditions</b>
	See SECTION IV Part J - METEOROLOGICAL DATA for 7 day forecast.
<b>2) <u>DRILL TIMELINE</u></b>	
[0830]	<i>(Initiating Condition):</i> HPCI Aux oil pump fire. Motor is damaged
[0830]	<b>SCENARIO NOTE:</b> There will be no Fire alarm in the control room.
[0845]	SM should declare an ALERT based on EAL <b><u>HA2.1</u></b> .
[0850]	ERO activation should be complete.
<b>0845-0900</b>	<b>Offsite Notifications (State and Counties) for the Alert should be completed.</b>
	1. Call list notifications take place.
	2. Emergency Operating Center (EOC) activation (State of Minnesota, Wright and Sherburne Counties) occurs. <ul style="list-style-type: none"><li>- EOC security system initiated</li><li>- Maps, displays set up, messages forms, logs, etc. distributed</li><li>- Communication links established and maintained throughout the exercise</li><li>- Assembled EOC personnel briefed, with additional briefings held periodically throughout the exercise</li></ul>

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

TIME	EVENT SUMMARY
	<p>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.</p> <p>3. Radiological Accident Deployment (RAD) teams and Team Captain respond to Maple Grove fire station. From there, they will be dispatched to affected areas. (Command Van and Field Team actions are simulated)</p> <p><b>(CONTROLLER MESSAGE 1- Field Teams level of play)</b></p> <p>4. Department of Natural Resources and Department of Agriculture Department Operations Centers (DOCs) are activated (simulated).</p> <p>5. Local and state first responders are put on standby.</p> <p>6. Joint Information Center (JIC) is activated.</p> <ul style="list-style-type: none"><li>- Public Information Officers (PIOs) notified</li><li>- JIC displays and media information kits arranged</li><li>- JIC Security and Moderator report to media briefing room</li><li>- Initial JIC Management Team meeting</li><li>- Initial news briefing conducted by HSEM Director</li><li>- Preparation and issue of Public Information Bulletins and news releases will continue until the termination of the exercise</li></ul> <p>7. Planning Chief requests additional radiological assets from the 55thCST and DOE radiological assets are requested through FRMAC. (Simulated).</p> <p>8. The Planning and Assessment Center initiates dose assessment</p> <p><b>(CONTROLLER MESSAGE 2 – Weather)</b></p> <p>[0900] Offsite Notifications for the Alert should be completed.</p> <p>~0930 <b>CONTROLLER MESSAGE 3 – Definition/Meaning of Alert</b></p> <p>[0950] ERO staffing should be complete.</p> <p>[1000] High Turbine Vibes occur.</p> <p>[1000] <b>EAL CONDITION NOTE</b> (<i>Initiating Condition SS2.1</i>): The operating crew may attempt to reduce power. This will be unsuccessful in reducing turbine vibes</p>
TIME	EVENT SUMMARY

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

resulting in an attempt to SCRAM the Rx. The Rx will fail to scram. ATWS is hydraulic in nature

The failure of RPS and ATWS to lower power below 4% meets the threshold for declaring a SITE AREA EMERGENCY per EAL SS2.1.

[~1005] SCENARIO NOTE: Turbine trips causing steam to go to the torus. Both sides of SBLC fail to start. Turbine trip will occur at -50" as RPV level is lowered for ATWS response.

[1015] The Station should declare a SITE AREA EMERGENCY based on EAL **SS2.1**. (no release in progress)

[~1020] Crane cable fails. This causes the crane hook to fall into the fuel pool damaging fuel and the fuel pool wall. Refuel floor rad levels will rapidly rise. Water is leaking out the bottom of the fuel pool. Most the water will go into the RHR rooms along with HPCI and RCIC rooms. Water is on the deck on 935', but the airlock doors and RR bay doors are preventing water from leaking out. There is no water in the stairwell or access control (obj. 9.01, 9.04, 11.05).

[1022] Fuel pool water level monitor will show water level dropping and multiple alarms (Rx bldg. high rad alarm and fuel pool high rad alarm) will begin going off in control room.

**1015-1030 The off-site notifications to the state and counties of the SITE AREA EMERGENCY should be completed.**

1. EOC and field staff are notified of the classification upgrade.
  - State EOC, JIC
  - Sherburne and Wright County EOCs
  - RAD Teams Maple Grove & Plymouth (DNR and Agriculture are simulated)
  - Decontamination Centers (simulated/out of sequence activity)
  - Reception Centers are activated (simulated/out of sequence activity)
2. Congregate Care Center is activated (simulated/ out of sequence activity)
3. Schools are evacuated to sister schools (simulated).
4. MDA and DNR field sampling teams put on standby (simulated).
5. Governor advised of incident status. "State of Emergency" recommended

**TIME**

**EVENT SUMMARY**

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

by State Incident Manager.

6. "State of Emergency" declared by Governor.

7. Livestock placed on covered water and stored feed.

[1030] Offsite Notifications for the SAE should be completed.

[1045] Rad levels will rise in the OSC to require dosimeter distribution but not evacuation

~1050 **CONTROLLER MESSAGES 4 – Evacuated Schools’ Respective Sister School**

**CONTROLLER MESSAGE 5 – FT data kept in PAC/ not shared with plant reps**

~1050 Traffic Impediments

**CONTROLLER MESSAGES 6 & 7**

[1115] **EAL CONDITION NOTE {Initiating Condition}:** Stack release rates increase as a result of damaged fuel in dry SFP will result in Dose Assessment indicating greater than 1000 mRem TEDE or 5000 mRem thyroid CDE at or beyond site boundary.

[1130] The EM should declare a GENERAL EMERGENCY based on EAL RG1.2 (release in progress).

PAR: Evacuate 2 mile 360 degrees and 2-5 miles downwinds sectors P, Q, & R. Affected Subareas to evacuate are 2, 5N and 5W.

[1145] Offsite Notifications should be completed for GE and PAR.

**1130-1145 The off-site notifications to the state and counties of the GENERAL EMERGENCY and Initial PAR should be completed.**

1. EOC and field staff are notified of the classification upgrade.
  - State EOC, JIC
  - Wright and Sherburne County EOCs
  - RAD Teams
  - Decontamination Centers

**TIME**

**EVENT SUMMARY**



**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

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 5W will be recommended by the Planning Chief to the State Incident Manager.
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).
4. As PADs are recommended, necessary traffic control points are activated for evacuee traffic flow and to restrict incoming traffic (simulated).
5. RAD teams are in the field monitoring radiation levels and reporting to planning and assessment staff in State EOC. (simulated)
6. All emergency response organizations are fully activated.
7. Radiological response support requested from FEMA

~1215

**CONTROLLER MESSAGES 8 – Reception Center Pet Policy**

[1230]

Facility Lead announcement Exercise termination

> 1230

The following positions will remain on as Control Cells to support off-site activities:

- RPSS
- EOF Communicator

These positions will provide input to the critique process at the end of the State's play.

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

This page intentionally left blank.

## Offsite Scenario Timeline

TIME	EVENT SUMMARY
------	---------------

### 1) INITIAL CONDITIONS

#### **Plant Status**

Reactor has been at continuous operation at 100% power (Mode 1) for 100 days.

HPCI out of service for maintenance, but currently being restored.

Xcel Energy Grid condition is Green.

CDF, LERF, and Fuel Pool cooling and makeup are all Green.

There are two operators on the refuel floor conducting crane operation training.

#### **MET Conditions**

See SECTION IV Part J - METEOROLOGICAL DATA for 7 day forecast.

### 2) DRILL TIMELINE

[0830]        *(Initiating Condition)*: HPCI Aux oil pump fire. Motor is damaged

[0830]        **SCENARIO NOTE:** There will be no Fire alarm in the control room.

[0845]        SM should declare an ALERT based on EAL **HA2.1**.

[0850]        ERO activation should be complete.

#### **0845-0900    Offsite Notifications (State and Counties) for the Alert should be completed.**

1.        Call list notifications take place.
2.        Emergency Operating Center (EOC) activation (State of Minnesota, Wright and Sherburne Counties) occurs.
  - EOC security system initiated
  - Maps, displays set up, messages forms, logs, etc. distributed
  - Communication links established and maintained throughout the exercise
  - Assembled EOC personnel briefed, with additional briefings held periodically throughout the exercise

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

TIME	EVENT SUMMARY
	<p>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.</p> <p>3. Radiological Accident Deployment (RAD) teams and Team Captain respond to Maple Grove fire station. From there, they will be dispatched to affected areas. (Command Van and Field Team actions are simulated)</p> <p><b>(CONTROLLER MESSAGE 1- Field Teams level of play)</b></p> <p>4. Department of Natural Resources and Department of Agriculture Department Operations Centers (DOCs) are activated (simulated).</p> <p>5. Local and state first responders are put on standby.</p> <p>6. Joint Information Center (JIC) is activated.</p> <ul style="list-style-type: none"><li>- Public Information Officers (PIOs) notified</li><li>- JIC displays and media information kits arranged.</li><li>- JIC Security and Moderator report to media briefing room</li><li>- Initial JIC Management Team meeting</li><li>- Initial news briefing conducted by HSEM Director</li><li>- Preparation and issue of Public Information Bulletins and news releases will continue until the termination of the exercise.</li></ul> <p>7. Planning Chief requests additional radiological assets from the 55thCST and DOE radiological assets are requested through FRMAC. (Simulated).</p> <p>8. The Planning and Assessment Center initiates dose assessment</p> <p><b>(CONTROLLER MESSAGE 2 – Weather)</b></p> <p>[0900] Offsite Notifications for the Alert should be completed.</p> <p>~0930 <b>CONTROLLER MESSAGE 3 – Definition/Meaning of Alert</b></p> <p>[0950] ERO staffing should be complete.</p> <p>[1000] High Turbine Vibes occur.</p>

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

TIME	EVENT SUMMARY
[1000]	<p><b>EAL CONDITION NOTE</b> (<i>Initiating Condition SS2.1</i>): The operating crew may attempt to reduce power. This will be unsuccessful in reducing turbine vibes resulting in an attempt to SCRAM the Rx. The Rx will fail to scram. ATWS is hydraulic in nature</p> <p>The failure of RPS and ATWS to lower power below 4% meets the threshold for declaring a SITE AREA EMERGENCY per EAL SS2.1.</p>
[~1005]	<p>SCENARIO NOTE: Turbine trips causing steam to go to the torus. Both sides of SBLC fail to start. Turbine trip will occur at -50" as RPV level is lowered for ATWS response.</p>
[1015]	<p>The Station should declare a SITE AREA EMERGENCY based on EAL <b><u>SS2.1</u></b>. (no release in progress)</p>
[~1020]	<p>Crane cable fails. This causes the crane hook to fall into the fuel pool damaging fuel and the fuel pool wall. Refuel floor rad levels will rapidly rise. Water is leaking out the bottom of the fuel pool. Most the water will go into the RHR rooms along with HPCI and RCIC rooms. Water is on the deck on 935', but the airlock doors and RR bay doors are preventing water from leaking out. There is no water in the stairwell or access control (obj. 9.01, 9.04, 11.05).</p>
[1022]	<p>Fuel pool water level monitor will show water level dropping and multiple alarms (Rx bldg. high rad alarm and fuel pool high rad alarm) will begin going off in control room.</p>
<b>1015-1030</b>	<p><b>The off-site notifications to the state and counties of the SITE AREA EMERGENCY should be completed.</b></p> <ol style="list-style-type: none"><li>EOC and field staff are notified of the classification upgrade.<ul style="list-style-type: none"><li>- State EOC, JIC</li><li>- Sherburne and Wright County EOCs</li><li>- RAD Teams Maple Grove &amp; Plymouth (DNR and Agriculture are simulated)</li><li>- Decontamination Centers (simulated/out of sequence activity)</li><li>- Reception Centers are activated (simulated/out of sequence activity)</li></ul></li><li>Congregate Care Center is activated (simulated/ out of sequence activity)</li><li>Schools are evacuated to sister schools (simulated).</li><li>MDA and DNR field sampling teams put on standby (simulated).</li></ol>

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

TIME	EVENT SUMMARY
	5. Governor advised of incident status. "State of Emergency" recommended by State Incident Manager.
	6. "State of Emergency" declared by Governor.
	7. Livestock placed on covered water and stored feed.
[1030]	Offsite Notifications for the SAE should be completed.
[1045]	Rad levels will rise in the OSC to require dosimeter distribution but not evacuation
~1050	<b>CONTROLLER MESSAGES 4 – Evacuated Schools’ Respective Sister School</b>
	<b>CONTROLLER MESSAGE 5 – FT data kept in PAC/ not shared with plant reps</b>
~1050	Traffic Impediments
	<b>CONTROLLER MESSAGES 6 &amp; 7</b>
[1115]	<b>EAL CONDITION NOTE {Initiating Condition}</b> : Stack release rates increase as a result of damaged fuel in dry SFP will result in Dose Assessment indicating greater than 1000 mRem TEDE or 5000 mRem thyroid CDE at or beyond site boundary.
[1130]	The EM should declare a GENERAL EMERGENCY based on EAL RG1.2 (release in progress).
[1145]	PAR: Evacuate 2 mile 360 degrees and 2-5 miles downwinds sectors P, Q, & R. Affected Subareas to evacuate are 2, 5N and 5W. Offsite Notifications should be completed for GE and PAR.
<b>1130-1145</b>	<b>The off-site notifications to the state and counties of the GENERAL EMERGENCY and Initial PAR should be completed.</b>
	1. EOC and field staff are notified of the classification upgrade. <ul style="list-style-type: none"><li>- State EOC, JIC</li><li>- Wright and Sherburne County EOCs</li><li>- RAD Teams</li><li>- Decontamination Centers</li></ul>

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

TIME	EVENT SUMMARY
	<ol style="list-style-type: none"><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 5W 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 (simulated).</li><li>5. RAD teams are in the field monitoring radiation levels and reporting to planning and assessment staff in State EOC. (simulated)</li><li>6. All emergency response organizations are fully activated.</li><li>7. Radiological response support requested from FEMA</li></ol>
~1215	<b>CONTROLLER MESSAGES 8 – Reception Center Pet Policy</b>
[1230]	Facility Lead announcement Exercise termination
> 1230	<p>The following positions will remain on as Control Cells to support off-site activities:</p> <ul style="list-style-type: none"><li>- RPSS</li><li>- EOF Communicator</li></ul> <p>These positions will provide input to the critique process at the end of the State's play.</p>

**Unclassified**  
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Monticello Nuclear Generating Plant

---

This page intentionally left blank.