



Final Exercise Report Kewaunee Nuclear Power Plant

Licensee: **Wisconsin Public Service Corporation**
Exercise Date: **October 5, 1999**
Report Date: **December 17, 1999**

**FEDERAL EMERGENCY MANAGEMENT AGENCY
REGION V
536 South Clark Street
Chicago, Illinois 60605**



Federal Emergency Management Agency
Region V
536 South Clark Street, 6th Floor
Chicago, IL 60605-1521

December 17, 1999

Mr. James Dyer
Regional Administrator, Region III
U. S. Nuclear Regulatory Commission
801 Warrenville Road
Lisle, Illinois 60532-4351

Dear Mr. Dyer:

Enclosed is a copy of the Final Exercise Report for the Biennial Radiological Emergency Preparedness (REP) Exercise conducted on October 5, 1999 for the Kewaunee Nuclear Power Plant.

State and local organizations demonstrated knowledge of their emergency response plans and satisfactorily implemented them. There were no Deficiencies identified. There was no Area Requiring Corrective Action (ARCA) for the State of Wisconsin. There was initially one ARCA identified in both Kewaunee and Manitowoc Counties. The ARCAs for both Counties were cleared after discussion and further review of the issues.

Based on the results of the October 5, 1999 exercise, the offsite radiological emergency response plans and preparedness for the State of Wisconsin, Kewaunee and Manitowoc Counties, site-specific to the Kewaunee Nuclear Power Plant can be implemented. These plans are adequate to provide reasonable assurance that appropriate measures can be taken offsite to protect the health and safety of the public in the event of a radiological emergency at the site.

Therefore, Title 44 CFR, Part 350, approval of the offsite radiological emergency response plans and preparedness for the State of Wisconsin, site-specific to the Kewaunee Nuclear Power Plant, granted on June 14, 1985 remains in effect. Copies of the report were also sent to the Nuclear Regulatory Commission (NRC) National Office, FEMA National Office and the State of Wisconsin.

If there should be any questions, please do not hesitate to let me know or have a member of your staff contact Cleven Lloyd at (312) 408-5321.

Sincerely,

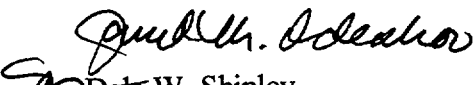

Dale W. Shipley
Regional Director

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I. EXECUTIVE SUMMARY

On October 5, 1999, an exercise was conducted in the plume exposure pathway emergency planning zone (EPZ) around the Kewaunee Nuclear Power Plant by the Federal Emergency Management Agency (FEMA), Region V. The purpose of the exercise was to assess the level of State and local preparedness in responding to a radiological emergency. This exercise was held in accordance with FEMA's policies and guidance concerning the exercise of State and local radiological emergency response plans (RERPs) and procedures.

The most recent exercise at this site was conducted on September 23, 1997. The qualifying emergency preparedness exercise was conducted on January 21, 1981.

FEMA wishes to acknowledge the efforts of the many individuals who participated in this exercise. In the State of Wisconsin the risk counties of Kewaunee and Manitowoc participated, along with the State government.

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

This report contains the final evaluation of the biennial exercise.

State and local organizations, except where noted in the report, demonstrated knowledge of their emergency response plans and satisfactorily implemented them. There were no Deficiencies identified. There was initially one Area Requiring Corrective Action identified in both Kewaunee and Manitowoc Counties, as described in the Narrative Report provided to the State and Counties during the participants briefing on October 8, 1999. The ARCAs for both Counties were cleared after discussion and further review of the issues.

II. INTRODUCTION

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

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

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

- Taking the lead in offsite emergency planning and in the review and evaluation of RERPs and procedures developed by State and local governments;
- Determining whether such plans and procedures can be implemented on the basis of observation and evaluation of exercises of the plans and procedures conducted by State and local governments;
- Responding to requests by the U.S. Nuclear Regulatory Commission (NRC) pursuant to the Memorandum of Understanding between the NRC and FEMA dated June 17, 1993 (Federal Register, Vol. 58, No. 176, September 14, 1993); and
- Coordinating the activities of Federal agencies with responsibilities in the radiological emergency planning process:
 - U.S. Department of Commerce,
 - U.S. Nuclear Regulatory Commission,
 - U.S. Environmental Protection Agency,
 - U.S. Department of Energy,
 - U.S. Department of Health and Human Services,
 - U.S. Department of Transportation,
 - U.S. Department of Agriculture,
 - U.S. Department of the Interior, and
 - U.S. Food and Drug Administration.

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

Formal submission of the RERPs for the Kewaunee Nuclear Power Plant to FEMA Region V by the State of Wisconsin and involved local jurisdictions occurred on April 4, 1984. Formal approval of the RERP was granted by FEMA on June 14, 1985 under 44 CFR 350.

A REP exercise was conducted on October 5, 1999 by FEMA Region V to assess the capabilities of State and local emergency preparedness organizations in implementing their RERPs and procedures to protect the public health and safety during a radiological emergency involving the Kewaunee Nuclear Power Plant. The purpose of this exercise report is to present the exercise results and findings on the performance of the offsite response organizations (ORO) during a simulated radiological emergency.

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

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

- NUREG-0654/FEMA-REP-1, Rev. 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," November 1980;
- FEMA-REP-14, "Radiological Emergency Preparedness Exercise Manual," September 1991; and
- FEMA-REP-15, "Radiological Emergency Preparedness Exercise Evaluation Methodology," September 1991.

Section III of this report, entitled "Exercise Overview," presents basic information and data relevant to the exercise. This section of the report contains a description of the plume pathway EPZ, a listing of all participating jurisdictions and functional entities which were evaluated, and a tabular presentation of the time of actual occurrence of key exercise events and activities.

Section IV of this report, entitled "Exercise Evaluation and Results," presents detailed information on the demonstration of applicable exercise objectives at each jurisdiction or functional entity evaluated in a jurisdiction-based, issues-only format. This section also contains: (1) the description of the ARCA assessed during this exercise, recommended corrective action, and the State and local governments' schedule of corrective action and exercise issue.

III. EXERCISE OVERVIEW

Contained in this section are data and basic information relevant to the October 5, 1999 exercise to test the offsite emergency response capabilities in the area surrounding the Kewaunee Nuclear Power Plant. This section of the exercise report includes a description of the plume and ingestion pathway EPZs, a listing of all participating jurisdictions and functional entities which were evaluated, and a tabular presentation of the time of actual occurrence of key exercise events and activities.

A. Plume Emergency Planning Zone Description

The Kewaunee Nuclear Power Plant is operated by the Wisconsin Public Service Corporation of Green Bay, Wisconsin. The plant is located in the Town (Township) of Carlton in the southeast corner of Kewaunee County, Wisconsin. The site, on the west shore of Lake Michigan, is in a productive dairy farming and vegetable canning region.

The ten (10) mile plume pathway EPZ total population is 22,700. There are relatively large populations of Hispanic and Vietnamese immigrants within the 10-mile EPZ. Two Rivers, 13 miles south of the site has a population of 13,354. The nearest population centers of 25,000 people or more according to the 1990 census, are Manitowoc, 17.5 miles south southeast of the site with 32,547 people; Green Bay 27 miles west northwest of the site with 87,899 people; Appleton 43 miles west of the site with 59,032, and Sheboygan, 42 miles south southwest of the site with 48,085 people. There are no other population centers greater than 25,000 people that lie within 50 miles of the site.

B. Exercise Participants

The following agencies, organizations, and units of government participated in the Kewaunee County Nuclear Power Plant exercise on October 5, 1999.

STATE OF WISCONSIN

Governor's Office
Department of Military Affairs
Wisconsin Emergency Management
Department of Health and Family Services-Radiation Protection Section
Department of Agriculture, Trade and Consumer Protection
Division of Animal Health
Department of Transportation
Division of Food Safety

Wisconsin Department of Natural Resources
Wisconsin Emergency Police Services
Wisconsin Environmental Quality
Resource Management
American Red Cross
State Patrol
Wisconsin Public Service Corporation

RISK JURISDICTIONS

KEWAUNEE COUNTY

County Board Chairperson
County Emergency Management
County Health Department
County Fire and Rescue
County Extension Agency
County Human Services
County Sheriff's Department
County Highway Department
Kewaunee County School District

MANITOWOC COUNTY

County Board Chairperson
County Emergency Management
County Health and Human Services
County Fire and Rescue
County Extension Agency
County Sheriff's Department
County Highway Department
Manitowoc School District

SUPPORT JURISDICTIONS: NONE

PRIVATE/VOLUNTEER ORGANIZATIONS

Wisconsin Public Service Corporation
American Red Cross
Manitowoc Lutheran High School
Holy Family Memorial Hospital
Holy Rosary Elementary School
Radio Amateur Communication Emergency Services

C. Exercise Timeline

Table 1, on the following page, presents the time at which key events and activities occurred during the Kewaunee Nuclear Power Plant Exercise on October 5, 1999. Included also are times notifications were made to the participating jurisdictions/functional entities.

Table 1. Exercise Timeline

DATE AND SITE: October 5, 1999 Kewaunee Nuclear Power Plant

Emergency Classification Level or Event	Time Utility Declared						
		State of Wisconsin EOC	Kewaunee County EOC	Manitowoc County EOC	JPIC		
Unusual Event		N/A	N/A	N/A	N/A		
Alert		N/A	N/A	N/A	N/A		
Site Area Emergency	0814	0810	0808	0900			
	0756						
General Emergency	0955	1013	1013	0957			
	0955						
Radiation Release Started	1125	1210	1213	1125			
Radiation Release Terminated:							
Facility Declared Operational	0905	0911	0901	0930			
Declaration State of Emergency	1013			1030			
Exercise Terminated	1320	1302	1258	1310			
Early Precautionary Action	0922	0926	0924	0930			
Decision: Personnel preparedness							
Livestock Advisory							
1st Protective Action	1010	1013	1013	1013			
Recommendation: Evacuate 0-2 miles							
all sectors							
1st Siren Activation	1023	1023	1023	1023			
1st EAS/EBS Message	1025	1025	1025	1025			
2nd Protective Action	1037	1037	1037	1055			
Recommendation: KI to emergency							
workers & immobile population							
Evacuate 0-5 miles, sectors P, Q,							
R, A, and Lake Areas							
2nd Siren Activation	1045	1045	1044	1045			
2nd EAS/EBS Message	1045	1052	1049	1045			
KI Administration Decision:	1037	1047	1044	1050			
Emergency Workers							

LEGEND:

D - Decision Making Jurisdiction
- Not Reported

A - Activating Jurisdiction

N/A - Not Applicable

Blank

IV. EXERCISE EVALUATION AND RESULTS

Contained in this section are the results and findings of the evaluation of all jurisdictions and functional entities which participated in the October 5, 1999 exercise to test the offsite emergency response capabilities of State and local governments in the 10-mile Plume Pathway EPZs surrounding the Kewaunee Nuclear Power Plant.

Each jurisdiction and functional entity was evaluated on the basis of its demonstration of criteria delineated in exercise objectives contained in FEMA-REP-14, *Radiological Emergency Preparedness Exercise Manual*, September 1991. Detailed information on the exercise objectives and the extent-of-play agreement used in this exercise are found in Appendix 3 of this report.

A. Summary Results of Exercise Evaluation - Table 2

The matrix presented in Table 2, on the following pages, presents the status of all exercise objectives from FEMA-REP-14 which were scheduled for demonstration during this exercise at all participating jurisdictions and functional entities. Exercise objectives are listed by number and the demonstration status of those objectives is indicated by the use of the following letters:

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

D - Deficiency assessed

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

N - Not Demonstrated (Reason explained in Subsection B)

Table 2 Summary Results of Exercise Evaluation

JURISDICTION/FUNCTIONAL ENTITY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
STATE OF WISCONSIN																																	
State Emergency Operation Center	M	M	M	M	M				M	M	M	M	M										M										
State Radiological Coordinator Room							M																										
Joint Public Information Center		M	M	M								M	M																				
Medical Services (MS-1) Drill-Facility																					M												
Forward Operations Center				M	M	M								M																			
Field Team 1				M	M	M								M																			
Field Team 2				M	M	M		M						M																			
Reception Center Evacuee Monitoring/Decontamination Center-Roncalli				M															M														
Reception Center Evacuee Monitoring/Decontamination Center-Algoma																		M															
Emergency Workers, Equipment and Vehicle Monitoring/Decontamination-Roncalli																						M											
Emergency Workers, Equipment and Vehicle Monitoring and Decontamination-Algoma																						M											
RISK JURISDICTIONS																																	
KEWAUNEE COUNTY																																	
Emergency Operations Center	M	M	M	M	M					M	M	M	M	M	M	M																	
Sheriffs Warning Point	M																																
Traffic and Access Control					M									M			M																
Medical Services (MS-1) Drill-Tranportation				M	M									M							M												
Kewaunee Media Center	M	M		M								M	M																				
Emergency Alerting System											M																						
Reception Center - Evacuee Monitoring, Decontamination and Registration-Algoma	M	M		M															M														
Congregate Care Center	M	M		M																M													
Implementation of Protective Action-School				M	M									M		M																	
MANITOWOC COUNTY																																	
County Emergency Operations Center	M	M	M	M	M					M	M	M	M	M	M	M	M																
Sheriffs Warning Point	M	M		M																													
Traffic and Access Control				M	M									M			M																
Medical Services (MS-1) Drill-Tranportation	M	M		M	M									M							M												
Manitowoc Media Center	M	M		M								M	M																				
Emergency Alerting System											M																						
Reception Center - Evacuee Monitoring, Decontamination and Registration-Roncalli	M	M		M															M														

LEGEND:

M = Met (No Deficiency or ARCA's assessed) A = ARCA(s) assessed or prior ARCAs not resolved D = Deficiency(ies) assessed

N = Not Demonstrated Blank = Not Scheduled For Demonstration

1

1

B. Status of Jurisdictions Evaluated

This subsection provides information on the evaluation of each participating jurisdiction and functional entity, in a jurisdiction based, issues only format. Presented below is a definition of the terms used in this subsection relative to objective demonstration status.

- **Met** - Listing of the demonstrated exercise objectives under which no Deficiencies or ARCAs were assessed during this exercise and under which no ARCAs assessed during prior exercises remain unresolved.
- **Deficiency** - Listing of the demonstrated exercise objectives under which one or more Deficiencies was assessed during this exercise. Included is a description of each Deficiency and recommended corrective actions.
- **Area Requiring Corrective Action** - Listing of the demonstrated exercise objectives under which one or more ARCAs were assessed during the current exercise or ARCAs assessed during prior exercises that remain unresolved. Included is a description of the ARCAs assessed during this exercise and the recommended corrective action to be demonstrated before or during the next biennial exercise.
- **Not Demonstrated** - Listing of the exercise objectives which were not demonstrated as scheduled during this exercise and the reason they were not demonstrated.
- **Prior ARCAs - Resolved** - Descriptions of ARCAs assessed during previous exercises which were resolved in this exercise and the corrective actions demonstrated.
- **Prior ARCAs- Unresolved** - Descriptions of ARCAs assessed during prior exercises, which were not resolved in this exercise. Included is the reason the ARCA remains unresolved and recommended corrective actions to be demonstrated before or during the next biennial exercise.

The following are definitions of the two types of exercise issues which are discussed in this report.

- **A Deficiency-** is defined in FEMA-REP-14 as "...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."

An **ARCA** is defined in FEMA-REP-14 as "...an observed or identified inadequacy of organizational performance in an exercise that is not considered, by itself, to adversely impact public health and safety."

FEMA has developed a standardized system for numbering exercise issues (Deficiencies and ARCAs). This system is used to achieve consistency in numbering exercise issues among FEMA Regions and site-specific exercise reports within each Region. It also expedites tracking of exercise issues on a nationwide basis.

The identifying number of Deficiencies and ARCAs includes the following elements, with each element separated by a hyphen (-).

- Plant Site Identifier - A two-digit number, corresponding to the Utility Billable Plant Site Codes.
- Exercise Year - Last two-digits of the year the exercise was conducted.
- Objective Number - A two-digit number corresponding to the objective number in FEMA-REP-14
- Issue Classification Identifier - (D = Deficiency, A= ARCA). Only Deficiencies and ARCAs are included in exercise reports.
- Plan Issues are reported to the State via letter from the Regional Director. Therefore, standardized issue numbers are not assigned to Plan Issues.
- Exercise issue Identification Number - A separate two (or three) digit indexing number assigned to each issue identified in the exercise.

1. STATE OF WISCONSIN

1.1 State Emergency Operations Center

- a. MET: Objectives 1, 2, 3, 4, 5, 9, 10, 11, 12, 13, and 14
- b. DEFICIENCY: NONE
- c. AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE
- d. NOT DEMONSTRATED: NONE
- e. PRIOR ISSUES - RESOLVED: NONE
- f. PRIOR ISSUES - UNRESOLVED: NONE

1.2 State Radiological Coordination Room

- a. MET: Objectives 4, and 7
- b. DEFICIENCY: NONE
- c. AREAS REQUIRING CORRECTIVE ACTION: NONE
- d. NOT DEMONSTRATED: NONE
- e. PRIOR ISSUES - RESOLVED: NONE
- f. PRIOR ISSUES - UNRESOLVED: NONE

1.3 Forward Operations Center/Mobile Laboratory

- a. MET: Objectives 3, 4, 6, and 8
- b. DEFICIENCY: NONE
- c. AREAS REQUIRING CORRECTIVE ACTION: NONE
- d. NOT DEMONSTRATED: NONE
- e. PRIOR ISSUES - RESOLVED: NONE
- f. PRIOR ISSUES - UNRESOLVED: NONE

1.4 Field Team 1

- a. **MET:** Objectives 4, 5, 6, 8, and 14
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION:** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ISSUES - RESOLVED:** NONE
- f. **PRIOR ISSUES - UNRESOLVED:** NONE

1.5 Field Team 2

- a. **MET:** Objectives 4, 5, 6, 8, and 14
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION:** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ISSUES - RESOLVED:** NONE
- f. **PRIOR ISSUES - UNRESOLVED:** NONE

1.6 Joint Public Information Center

- a. **MET:** Objective 2, 3, 4, 12, and 13
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA):** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ISSUES - RESOLVED:** NONE
- f. **PRIOR ISSUES - UNRESOLVED:** NONE

1.7 Medical Services (MS-1) Drill-Facility

- a. **MET:** Objectives 1, 2, 3, 4, 5, and 21
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA):** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ISSUES - RESOLVED:** NONE
- f. **PRIOR ISSUES - UNRESOLVED:** NONE

1.8 Reception Center-Evacuee Monitoring/ Decontamination Center-Roncalli High School

- a. **MET:** Objectives 1, 2, 3, 4, 5, and 18
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA):** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ISSUES - RESOLVED:** NONE
- f. **PRIOR ISSUES - UNRESOLVED:** NONE

1.9 Reception Center-Evacuee Monitoring/ Decontamination Center-Algoma High School

- a. **MET:** Objectives 1, 2, 3, 4, 5, and 18
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA):** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ISSUES - RESOLVED:** NONE
- f. **PRIOR ISSUES - UNRESOLVED:** NONE

1.10 Emergency Worker Equipment and Vehicle Monitoring/ Decontamination Center-Roncalli High School

- a. MET: Objectives 1, 2, 3, 4, 5, and 22
- b. DEFICIENCY: NONE
- c. AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE
- d. NOT DEMONSTRATED: NONE
- e. PRIOR ISSUES - RESOLVED: NONE
- f. PRIOR ISSUES - UNRESOLVED: NONE

1.11 Emergency Worker Equipment and Vehicle Monitoring Decontamination-Algoma High School

- a. MET: Objectives 1, 2, 3, 4, 5, and 22
- b. DEFICIENCY: NONE
- c. AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE
- d. NOT DEMONSTRATED: NONE
- e. PRIOR ISSUES - RESOLVED: NONE
- f. PRIOR ISSUES - UNRESOLVED: NONE

2. RISK JURISDICTIONS

2.1 KEWAUNEE COUNTY

2.1.1 County Emergency Operations Center

- a. MET: Objectives 1, 2, 3, 4, 5, 10, 11, 12, 13, 14, 15, and 16
- b. DEFICIENCY: NONE
- c. AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE

- d. **NOT DEMONSTRATED: NONE**
- e. **PRIOR ISSUES - RESOLVED: NONE**
- f. **PRIOR ISSUES - UNRESOLVED: NONE**

2.1.2 Sheriff's Warning Point

- a. **MET: Objectives 1, 2, 3, and 4**
- b. **DEFICIENCY: NONE**
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE**
- d. **NOT DEMONSTRATED: NONE**
- e. **PRIOR ISSUES - RESOLVED: NONE**
- f. **PRIOR ISSUES - UNRESOLVED: NONE**

2.1.3 Traffic and Access Control

- a. **MET: Objectives 1, 2, 3, 4, 5, 14, and 17**
- b. **DEFICIENCY: NONE**
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE**
- d. **NOT DEMONSTRATED: NONE**
- e. **PRIOR ISSUES - RESOLVED: NONE**
- f. **PRIOR ISSUES - UNRESOLVED: NONE**

2.1.4 Medical Services (MS-1) Drill-Transportation

- a. **MET: Objectives 1, 2, 3, 4, 14, and 20**
- b. **DEFICIENCY: NONE**
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE**
- d. **NOT DEMONSTRATED: NONE**

- e. **PRIOR ISSUES - RESOLVED: NONE**
- f. **PRIOR ISSUES - UNRESOLVED: NONE**

2.1.5 Joint Public Information Center

- a. **MET: Objectives 1, 2, 3, 4, 12, and 13**
- b. **DEFICIENCY: NONE**
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE**
- d. **NOT DEMONSTRATED: NONE**
- e. **PRIOR ISSUES - RESOLVED: NONE**
- f. **PRIOR ISSUES - UNRESOLVED: NONE**

2.1.6 Emergency Alerting System (EBS)

- a. **MET: Objectives 1, 2, 3, 4, and 11**
- b. **DEFICIENCY: NONE**
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE**
- d. **NOT DEMONSTRATED: NONE**
- e. **PRIOR ISSUES - RESOLVED: NONE**
- f. **PRIOR ISSUES - UNRESOLVED: NONE**

2.1.7 Reception Center Evacuee/Monitoring-Registration- Algoma High School

- a. **MET: Objectives 1, 2, 3, 4, and 18**
- b. **DEFICIENCY: NONE**
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE**
- d. **NOT DEMONSTRATED: NONE**
- e. **PRIOR ISSUES - RESOLVED: NONE**

- f. PRIOR ISSUES - UNRESOLVED: NONE**

2.1.8 Congregate Care-Algoma High School

- a. MET: Objectives 1, 2, 3, 4, and 19**
- b. DEFICIENCY: NONE**
- c. AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE**
- d. NOT DEMONSTRATED: NONE**
- e. PRIOR ISSUES - RESOLVED: NONE**
- f. PRIOR ISSUES - UNRESOLVED: NONE**

2.1.9 Implementation of Protective Actions-Schools

- a. MET: Objectives 1, 3, 4, 5, 14, and 16**
- b. DEFICIENCY: NONE**
- c. AREAS REQUIRING CORRECTIVE ACTION: NONE**
- d. NOT DEMONSTRATED: NONE**
- e. PRIOR ISSUES - RESOLVED: NONE**
- f. PRIOR ISSUES - UNRESOLVED: NONE**

2.2 MANITOWOC COUNTY

2.2.1 County Emergency Operations Center

- a. **MET:** Objectives 1, 2, 3, 4, 5, 10, 11, 12, 13, 14, 15, 16, and 17
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA):** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ISSUES - RESOLVED:** NONE
- f. **PRIOR ISSUES - UNRESOLVED:** NONE

2.2.2 Sheriff's Warning Point

- a. **MET:** Objectives 1, 2, 3, and 4
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA):** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ISSUES - RESOLVED:** NONE
- f. **PRIOR ISSUES - UNRESOLVED:** NONE

2.2.3 Traffic and Access Control

- a. **MET:** Objectives 1, 2, 3, 4, 5, 14, and 17
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA):** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ISSUES - RESOLVED:** NONE
- f. **PRIOR ISSUES - UNRESOLVED:** NONE

2.2.4 Medical Services (MS-1) Drill-Transportation

- a. MET: Objectives 1, 2, 3, 4, 14, and 20**
- b. DEFICIENCY: NONE**
- c. AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE**
- d. NOT DEMONSTRATED: NONE**
- e. PRIOR ISSUES - RESOLVED: NONE**
- f. PRIOR ISSUES - UNRESOLVED: NONE**

2.2.5 Joint Public Information Center

- a. MET: Objective 1, 2, 3, 4, 12, and 13**
- b. DEFICIENCY: NONE**
- c. AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE**
- d. NOT DEMONSTRATED: NONE**
- e. PRIOR ISSUES - RESOLVED: NONE**
- f. PRIOR ISSUES - UNRESOLVED: NONE**

2.2.6 Emergency Alerting System (EBS)

- a. MET: Objectives 1, 2, 3, 4, and 11**
- b. DEFICIENCY: NONE**
- c. AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE**
- d. NOT DEMONSTRATED: NONE**
- e. PRIOR ISSUES - RESOLVED: NONE**
- f. PRIOR ISSUES - UNRESOLVED: NONE**

**2.2.7 Reception Center Evacuee/Monitoring-Registration
Roncalli High School**

- a. MET: Objectives 1, 2, 3, 4, and 18
- b. DEFICIENCY: NONE
- c. AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE
- d. NOT DEMONSTRATED: NONE
- e. PRIOR ISSUES - RESOLVED: NONE
- f. PRIOR ISSUES - UNRESOLVED: NONE

2.2.8 Congregate Care Center-Roncalli High School

- a. MET: Objectives 1, 2, 3, 4, and 19
- b. DEFICIENCY: NONE
- c. AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE
- d. NOT DEMONSTRATED: NONE
- e. PRIOR ISSUES - RESOLVED: NONE
- f. PRIOR ISSUES - UNRESOLVED: NONE

2.2.9 Implementation of Protective Actions -- Schools

- a. MET: Objectives 1, 3, 4, and 16
- b. DEFICIENCY: NONE
- c. AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE
- d. NOT DEMONSTRATED: NONE
- e. PRIOR ISSUES - RESOLVED: NONE
- f. PRIOR ISSUES - UNRESOLVED: NONE

APPENDIX 1

ACRONYMS AND ABBREVIATIONS

The following is a list of the acronyms and abbreviations which were used in this report.

ACP	Access Control Point
AMA	American Medical Association
ANI	American Nuclear Insurers
ARC	American Red Cross
ARCA	Area Requiring Corrective Action
CCC	Congregate Care Center
CD-V	Civil Defense - Victoreen
CFR	Code of Federal Regulations
CPM	Counts Per Minute
DHHS	U.S. Department of Health and Human Services
DOC	U.S. Department of Commerce
DOE	U.S. Department of Energy
DOI	U.S. Department of the Interior
DOT	U.S. Department of Transportation
DRD	Direct Reading Dosimeter
EAL	Emergency Action Level
EAS	Emergency Alert System
EBS	Emergency Broadcast System
ECL	Emergency Classification Level
EEM	Exercise Evaluation Methodology
EOC	Emergency Operations Center
EOF	Emergency Operations Facility
EPA	U.S. Environmental Protection Agency
EPZ	Emergency Planning Zone
ETA	Estimated Time of Arrival
ETE	Evacuation Time Estimate
EWMDS	Emergency Worker Monitoring and Decontamination Station
FAA	Federal Aviation Agency
FCC	Federal Communications Commission
FDA	U.S. Food and Drug Administration
FEMA	Federal Emergency Management Agency
FR	Federal Register
FTC	Field Team Coordinator
ft/min	feet per minute

ft ³ /min	cubic feet per minute
GE	General Emergency
GM	Guidance Memorandum
IP	Implementing Procedure
JIC	Joint Information Center
JPIC	Joint Public Information Center
KI	Potassium Iodide
mR	milliroentgen
mR/h	milliroentgen per hour
NOAA	National Oceanic and Atmospheric Administration
NOUE	Notification of Unusual Event
NRC	U.S. Nuclear Regulatory Commission
NUREG-0654	NUREG-0654/FEMA-REP-1, Rev. 1, <i>"Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," November 1980</i>
NWS	National Weather Service
OEM	Office of Emergency Management
ORO	Offsite Response Organization
PAD	Protective Action Decision
PAG	Protective Action Guide
PAO	Public Affairs Official
PAR	Protective Action Recommendation
PIO	Public Information Officer
POR	Point Of Review
R	Roentgen
RAC	Regional Assistance Committee
RACES	Radio Amateur Civil Emergency Service
RC	Reception Center
REA	Radioactive Emergency Area
REM	Roentgen Equivalent Man
REP	Radiological Emergency Preparedness
RERP	Radiological Emergency Response Plan
R/h	Roentgen(s) per hour
RO	Radiological Officer

SAE	Site Area Emergency
SEOC	State Emergency Operations Center
TCP	Traffic Control Point
TDD	Telecommunications Device for the Deaf
TL	Team Leader
TLD	Thermoluminescent Dosimeter
UHF	Ultra High Frequency
USCG	U.S. Coast Guard
USDA	U.S. Department of Agriculture
VHF	Very High Frequency
WP	Warning Point

APPENDIX 2

EXERCISE EVALUATORS AND TEAM LEADERS

The following is a list of the personnel who evaluated the Kewaunee Nuclear Power Plant Exercise on October 5, 1999. Evaluator Team Leaders are indicated by the letters "(TL)" after their names. The organization which each evaluator represents is indicated by the following abbreviations:

FEMA	- Federal Emergency Management Agency
ANL	- Argonne National Laboratory
NRC	- Nuclear Regulatory Commission
EPA	- Environmental Protection Agency

<u>EVALUATION SITE</u>	<u>EVALUATOR</u>	<u>ORGANIZATION</u>
Chair, Regional Assistance Committee	Woodie J. Curtis	FEMA
Exercise Director	Woodie J. Curtis	FEMA
WISCONSIN STATE EOC	Roy Smith (TL)	ANL
	Randy Lawden	ANL
	Harry Harrison	ANL
	Bill Lueders	ANL
	Daryl Thome	ANL
	Les Poch	ANL
	Phil Kier	ANL
	Clint Riemer	ANL
	Kevin Flynn	ANL
KEWAUNEE COUNTY EOC	Cleven Lloyd (TL)	ANL
	Bill Serrano	ANL
	Alan Birman	FEMA
	Bill Lueders	ANL
	Sue A. Curtis	ANL
	Joe Austin	ANL
MANITOWOC COUNTY EOC	Terri Murphy (TL)	FEMA
	Clinton Crackel	FEMA
	Bob Rospenda	ANL
	Arvind Teotia	ANL
	Bill Lueders	ANL
	Wayne Waddell	ANL

APPENDIX 3

EXERCISE OBJECTIVES AND EXTENT-OF-PLAY AGREEMENT

This appendix lists the exercise objectives which were scheduled for demonstration in the Kewaunee Nuclear Power Plant exercise on October 5, 1999 and the extent-of-play agreement approved by FEMA Region V on September 3, 1999.

The exercise objectives, contained in FEMA-REP-14, "Radiological Emergency Preparedness Exercise Manual," September 1991, represent a functional translation of the planning standards and evaluation criteria of NUREG-0654/FEMA-REP-1, Rev. 1, "Criteria for the Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," November 1980.

Because the exercise objectives are intended for use at all nuclear power plant sites, and because of variations among offsite plans and procedures, an extent-of-play agreement is prepared by the State and approved by FEMA to provide evaluators with guidance on expected actual demonstration of the objectives.

A. Exercise Objectives

Listed below are the specific radiological emergency preparedness objectives scheduled for demonstration during this exercise.

OBJECTIVE 1: MOBILIZATION OF EMERGENCY PERSONNEL

Demonstrate the capability to alert and fully mobilize personnel for both emergency facilities and field operations. Demonstrate the capability to activate and staff emergency facilities for emergency operations.

OBJECTIVE 2: FACILITIES - EQUIPMENT, DISPLAYS, AND WORK ENVIRONMENT

Demonstrate the adequacy of facilities, equipment, displays and other materials to support emergency operations.

OBJECTIVE 3: DIRECTION AND CONTROL

Demonstrate the capability to direct and control emergency operations.

OBJECTIVE 4: COMMUNICATIONS

Demonstrate the capability to communicate with all appropriate emergency personnel at facilities and in the field.

OBJECTIVE 5: EMERGENCY WORKER EXPOSURE CONTROL

Demonstrate the capability to continuously monitor and control radiation exposure to emergency workers.

OBJECTIVE 6: FIELD RADIOLOGICAL MONITORING - AMBIENT RADIATION MONITORING

Demonstrate the appropriate use of equipment and procedures for determining field radiation measurements.

OBJECTIVE 7: PLUME DOSE PROJECTION

Demonstrate the capability to develop dose projections and protective action recommendations regarding evacuation and sheltering.

OBJECTIVE 8: FIELD RADIOLOGICAL MONITORING - AIRBORNE RADIOIODINE AND PARTICULATE ACTIVITY MONITORING

Demonstrate the appropriate use of equipment and procedures for the measurement of airborne radioiodine concentrations as low as 10^{-7} (0.0000001) microcuries per cubic centimeter in the presence of noble gases and obtain samples of particulate activity in the airborne plume.

OBJECTIVE 9: PLUME PROTECTIVE ACTION DECISION MAKING

Demonstrate the capability to make timely and appropriate protective action decisions.

OBJECTIVE 10: ALERT AND NOTIFICATION

Demonstrate the capability to promptly alert and notify the public within the 10-mile plume pathway emergency planning zone and disseminate instructional messages to the public on the basis of decisions by appropriate State or local officials.

OBJECTIVE 11: PUBLIC INSTRUCTIONS AND EMERGENCY INFORMATION

Demonstrate the capability to coordinate the formulation and dissemination of accurate information and instructions to the public.

OBJECTIVE 12: EMERGENCY INFORMATION - MEDIA

Demonstrate the capability to coordinate the development and dissemination of clear, accurate, and timely information to the news media.

OBJECTIVE 13: EMERGENCY INFORMATION - RUMOR CONTROL

Demonstrate the capability to establish and operate rumor control in a coordinated and timely manner.

OBJECTIVE 14: IMPLEMENTATION OF PROTECTIVE ACTIONS - USE OF POTASSIUM IODIDE FOR EMERGENCY WORKERS, INSTITUTIONALIZED INDIVIDUALS, AND THE GENERAL PUBLIC

Demonstrate the capability and resources to implement potassium iodide protective actions for emergency workers, institutionalized individuals, and, if the State plan specifies, the general public.

OBJECTIVE 15: IMPLEMENTATION OF PROTECTIVE ACTIONS - SPECIAL POPULATIONS

Demonstrate the capability and resources necessary to implement appropriate protective actions for special populations.

OBJECTIVE 16: IMPLEMENTATION OF PROTECTIVE ACTIONS - SCHOOLS

Demonstrate the capability and resources necessary to implement protective actions for school children within the plume pathway emergency planning zone.

OBJECTIVE 17: TRAFFIC AND ACCESS CONTROL

Demonstrate the organizational capability and resources necessary to control evacuation traffic flow and to control access to evacuated and sheltered areas.

OBJECTIVE 18: RECEPTION CENTER - MONITORING, DECONTAMINATION AND REGISTRATION

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

OBJECTIVE 19: CONGREGATE CARE

Demonstrate the adequacy of facilities, equipment, supplies, personnel, and procedures for congregate care of evacuees.

OBJECTIVE 20: MEDICAL SERVICES - TRANSPORTATION

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

OBJECTIVE 21: MEDICAL SERVICES - FACILITIES

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

**OBJECTIVE 22: EMERGENCY WORKERS, EQUIPMENT, AND VEHICLES
- MONITORING AND DECONTAMINATION**

Demonstrate the adequacy of procedures for the monitoring and decontamination of emergency workers, equipment, and vehicles.

OBJECTIVE 23: SUPPLEMENTARY ASSISTANCE (FEDERAL/OTHER)

Demonstrate the capability to identify the need for external assistance and to request such assistance from Federal or other support organizations.

OBJECTIVE 24: POST-EMERGENCY SAMPLING

Demonstrate the use of equipment and procedures for the collection and transportation of samples from areas that received deposition from the airborne plume.

OBJECTIVE 25: LABORATORY OPERATIONS

Demonstrate laboratory operations and procedures for measuring and analyzing samples.

**OBJECTIVE 26: INGESTION EXPOSURE PATHWAY - DOSE
PROJECTION AND PROTECTIVE ACTION DECISION
MAKING**

Demonstrate the capability to project dose to the public for the ingestion exposure pathway and to recommend protective actions.

OBJECTIVE 27: INGESTION EXPOSURE PATHWAY - PROTECTIVE ACTION IMPLEMENTATION

Demonstrate the capability to implement protective actions for the ingestion exposure pathway.

OBJECTIVE 28: RELOCATION, RE-ENTRY, AND RETURN - DECISION MAKING

Demonstrate the capability to develop decisions on relocation, re-entry, and return.

OBJECTIVE 29: RELOCATION, RE-ENTRY, AND RETURN - IMPLEMENTATION

Demonstrate the capability to implement appropriate measures for relocation, re-entry, and return.

OBJECTIVE 30: CONTINUOUS, 24-HOUR STAFFING

Demonstrate the capability to maintain staffing on a continuous, 24-hour basis through an actual shift change.

OBJECTIVE 31: OFFSITE SUPPORT FOR THE EVACUATION OF ONSITE PERSONNEL

Demonstrate the capability to provide offsite support for the evacuation of onsite personnel.

OBJECTIVE 32: UNANNOUNCED EXERCISE OR DRILL

Demonstrate the capability to carry out emergency response functions in an unannounced exercise or drill.

OBJECTIVE 33: OFF-HOURS EXERCISE OR DRILL

Demonstrate the capability to carry out emergency response functions during an off-hours exercise or drill.

B. Extent-of-Play Agreement

The extent-of-play agreement on the following pages was submitted by the State of Wisconsin and was approved by FEMA Region V on September 1, 1999, in preparation for the Kewaunee Nuclear Power Plant exercise on October 5, 1999. The extent-of-play agreement includes any significant modification or change in the level of demonstration of each exercise objective listed in Subsection A of this appendix.

STATE OF WISCONSIN OFF-SITE OBJECTIVES for the 1999 KEWAUNEE NUCLEAR POWER PLANT EXERCISE October 5, 1999

OBJECTIVE 1: MOBILIZATION OF EMERGENCY PERSONNEL

Demonstrate the capability to alert and fully mobilize personnel for both emergency facilities and field operations. Demonstrate the capability to activate and staff emergency facilities for emergency operations.

This is a full participation exercise for the State of Wisconsin. Wisconsin Emergency Management personnel and other state agency representatives will staff the State Emergency Operating Center (EOC) at 2400 Wright Street, Madison, WI. The EOC will be secured for the exercise.

Initial notification will be via Dial Select and passed to the Duty Officer; the DO will not follow standing operating procedures for EOC activation.

Pre-positioned staff for this exercise:

- State Emergency Police Services director at the State EOC. This position begins play when the EOC is activated.
- Wisconsin Emergency Management Regional directors will be at Kewaunee and Manitowoc County EOCs; they begin play when the County EOCs are activated.
- State JPIC staff will be pre-positioned in Green Bay, WI, and will report to the JPIC per the exercise scenario. (The Joint Public Information Center (JPIC) is at 600 North Adams Street, Green Bay, WI.)
- The Forward Operating Center/Mobile Radiological Laboratory (FOC/MRL) and field monitoring teams will be pre-positioned at the Wisconsin Public Service Corporation building, 800 Columbus Street, Two Rivers, Wisconsin.
- State Radiological Coordinator (SRC) support staff will be pre-positioned in the accident assessment room at the State EOC. The SRC will receive notification at his office and respond in real time.

**OBJECTIVE 2: FACILITIES--EQUIPMENT, DISPLAYS AND WORK
 ENVIRONMENT**

Demonstrate the adequacy of facilities, equipment, displays, and other materials to support emergency operations.

The State will demonstrate this in the State EOC through the use of maps, status boards and other displays. Appropriate materials will also be in the FOC/MRL.

OBJECTIVE 3: DIRECTION AND CONTROL

Demonstrate the capability to direct and control emergency operations.

The State will demonstrate direction and control of emergency operations at the State EOC. The State will coordinate with the FOC/MRL, the JPIC, Kewaunee and Manitowoc County EOCs, and the Wisconsin Public Service Corporation

OBJECTIVE 4: COMMUNICATIONS

Demonstrate the capability to communicate with all appropriate emergency personnel at facilities and in the field.

The State will use a variety of communications means including Dial-Select (primary for event notification), telephone (primary for other communications), cellular phone, radio, and facsimile (back-up/alternate) to communicate with other locations. RACES operators will test Amateur Radio VHF communications between the State and Risk County EOCs. The FOC/MRL will demonstrate its communications capabilities from its location.

OBJECTIVE 5: EMERGENCY WORKER EXPOSURE CONTROL

Demonstrate the capability to continuously monitor and control radiation exposure to emergency workers.

Three State field teams will use 0-200mR and 0-20R direct reading and thermoluminescent dosimeters to monitor and control emergency worker exposure. Direct reading dosimeters are calibrated annually by a certified calibration facility. According to Dosimeter Corporation, the dosimeter manufacturer, the 0-200 mR dosimeters do not have drift problems. The dosimeters are not leak tested quarterly per letter from Dosimetry Corporation, their manufacturer. Wisconsin does not use CDV-138 dosimeters. Dosimeters are in the field team kits.

OBJECTIVE 6: FIELD RADIOLOGICAL MONITORING--AMBIENT RADIATION MONITORING

Demonstrate the appropriate use of equipment and procedures for determining field radiation measurements.

State field teams operating in Manitowoc and Kewaunee Counties will demonstrate approved field team procedures. State field teams do not use calibrated check sources. Our instruments can not do open/closed window readings. Three pre-positioned field teams will report to the FOC/MRL at designated times.
(At least two of three teams will be evaluated.)

OBJECTIVE 7: PLUME DOSE PROJECTION

Demonstrate the capability to develop dose projections and protective action recommendations regarding evacuation and sheltering.

This capability will be demonstrated at the State EOC by the State Radiological Coordinator (SRC) and the Dose Assessment Team. Dose modeling will be performed using RASCAL Version 2.2; backup capability for dose projections will be available at an alternate computer.

OBJECTIVE 8: FIELD RADIOLOGICAL MONITORING--AIRBORNE RADIOIODINE AND PARTICULATE ACTIVITY MONITORING

Demonstrate the appropriate use of equipment and procedures for the measurements of airborne radioiodine concentrations as low as 10^{-7} (0.0000001) microcuries per cubic centimeter in the presence of noble gases and obtain samples of particulate activity in the airborne plume.

Three State field teams will use RADeCO H-890C Portable Air Sampler for this objective. Silver zeolite cartridges, which do not require purging, are used for air sampling.

OBJECTIVE 9: PLUME PROTECTIVE ACTION DECISION-MAKING

Demonstrate the capability to make timely and appropriate protective action decisions.

The Governor or his designee will demonstrate this based on recommendations from the Officer-in-Charge and SRC at the State EOC. Prior to PAR approval, the Wisconsin State OIC contacts Manitowoc and Kewaunee County OICs for their input on the discussion of, and decision-making about, the PAR. The discussion/decision about the use of KI takes place under this objective. If the decision is made not to recommend KI, a contingency message will be injected instructing emergency workers to take KI to allow demonstration of Objective 16.

OBJECTIVE 10: ALERT AND NOTIFICATION

Demonstrate the capability to promptly alert and notify the public within the 10-mile plume pathway emergency planning zone (EPZ) and disseminate instructional messages to the public on the basis of decisions by appropriate State or local officials.

The State will complete the necessary assessment and notify Manitowoc and Kewaunee County Emergency Management Directors of the Protective Action Recommendation. The State and Counties jointly select the message and set siren activation time.

This is a County Objective.

OBJECTIVE 11: PUBLIC INSTRUCTIONS AND EMERGENCY INFORMATION

Demonstrate the capability to coordinate the formulation and dissemination of accurate information and instructions to the public.

The State and counties will select the EAS message(s) that reflect the protective action decisions and transmit them to Kewaunee and Manitowoc Counties. EAS messages are broadcast by the counties over their local EAS systems.

OBJECTIVE 12: EMERGENCY INFORMATION--MEDIA

Demonstrate the capability to coordinate the development and dissemination of clear, accurate, and timely information to the news media.

The State will demonstrate this at the JPIC. State of Wisconsin PIOs at the JPIC coordinate with State EOC, county and utility PIOs to ensure the media are briefed in a clear, accurate, and timely manner.

The JPIC is activated at an Alert. As stated in Objective 1, the Wisconsin PIO will be pre-positioned at the JPIC, 600 North Adams Street, Green Bay, and will report there upon receiving the Alert notification.

If necessary, procedures for early notification of the media will be demonstrated in the State EOC prior to JPIC activation.

OBJECTIVE 13: EMERGENCY INFORMATION--RUMOR CONTROL

Demonstrate the capability to establish and operate rumor control in a coordinated and timely manner.

State of Wisconsin rumor control will be coordinated at the JPIC. Rumors or incorrect information are collected from many sources including: State and County EOCs, the utility, reception centers, the media, the public, etc. Questions and incorrect information will be injected at various locations during the exercise. As trends in incorrect information (rumors) are identified, corrections will be made via press releases and/or media briefings. EAS is not used to correct rumors unless they directly impact PAR implementation.

**OBJECTIVE 14: IMPLEMENTATION OF PROTECTIVE ACTION USE OF KI FOR
EMERGENCY WORKERS, INSTITUTIONALIZED INDIVIDUALS,
AND THE GENERAL PUBLIC**

Demonstrate the capability and resources to implement potassium iodide (KI) protective actions for emergency workers, institutionalized individuals, and, if the State plan specifies, the general public.

Potassium Iodide is available in state emergency response field team kits. The Field Team Coordinator in the FOC/MRL instructs field teams if, and when, they should simulate taking KI. The Wisconsin Radiological Incident Response Plan directs that KI is not made available to the general public.

**OBJECTIVE 15: IMPLEMENTATION OF PROTECTIVE ACTIONS--SPECIAL
POPULATIONS**

Demonstrate the capability and resources necessary to implement appropriate protective actions for special populations.

This is a county objective.

OBJECTIVE 16: IMPLEMENTATION OF PROTECTIVE ACTIONS--SCHOOLS

Demonstrate the capability and resources necessary to implement protective actions for school children with the plume pathway emergency-planning zone (EPZ).

This is a county objective.

OBJECTIVE 17: TRAFFIC AND ACCESS CONTROL

Demonstrate the organizational capability and resources necessary to control evacuation traffic flow and to control access to evacuated and sheltered areas.

This is a county objective.

**OBJECTIVE 18: RECEPTION CENTER--MONITORING, DECONTAMINATION, AND
REGISTRATION**

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

The State of Wisconsin will demonstrate the adequacy of procedures, facilities, equipment and personnel for radiological monitoring and decontamination. Registration is a county responsibility. Three health monitoring teams will demonstrate radiological monitoring and decontamination of evacuees at reception centers per the procedures set forth in the appropriate County Reception Center Plan.

Reception Center demonstration sites:

Manitowoc County - Roncalli High School (October 5, 1999, in sequence with scenario.)

Kewaunee County - Algoma High School (October 4, 1999, 1800-2100)

The health monitoring teams will include personnel from the Department of Health and Family Services' Radiation Protection Section (DHFS-RPS) and individuals from the counties who have received training as Auxiliary Health Monitors. The health teams do not use calibrated check sources. The instruments are calibrated annually by a certified calibration facility. The personnel from the county will work under the supervision of DHFS-RPU staff and should be evaluated as part of the State of Wisconsin's response. Once the reception center is operational and monitors have frisked several evacuees to establish flow, at least six evacuees will be monitored and registered, one evacuee will require decontamination.

Kewaunee County uses (a) portal monitor(s); Manitowoc uses hand held monitors.

Two vehicles will be monitored and one decontaminated, at each location, to meet this objective.

OBJECTIVE 19: CONGREGATE CARE

Demonstrate the adequacy of facilities, equipment, supplies, personnel, and procedures for congregate care of evacuees.

This is a county objective.

OBJECTIVE 20: MEDICAL SERVICES--TRANSPORTATION

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

This is a county objective.

OBJECTIVE 21: MEDICAL SERVICES--FACILITIES

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

Medical staff at Holy Family Memorial Hospital in Manitowoc, Wisconsin, will demonstrate this objective out of sequence (date/time TBD). The hospital demonstration will not be a direct continuation of the Transportation demonstration (Objective 20 for Kewaunee County).

A person with simulated contamination and an injury will be prepared by controller staff and loaded into a local ambulance for transport at a location (TBD) near the hospital. The local ambulance will then simulate transporting the patient from a reception Center, making appropriate notifications and delivering the patient to the hospital.

**OBJECTIVE 22: EMERGENCY WORKERS, EQUIPMENT, AND VEHICLES
MONITORING AND DECONTAMINATION**

Demonstrate the adequacy of procedures for the monitoring and decontamination of emergency workers, equipment, and vehicles.

Health monitoring teams at the Reception Centers at Algoma and Roncalli High Schools will monitor and decontaminate emergency workers at these locations, using the same procedure used for evacuees. One or two emergency workers will be monitored at each center to demonstrate this objective.

In Kewaunee County, emergency workers are given head of the line privileges at the evacuee Reception Center at Algoma High School. In Manitowoc County, emergency workers enter through a separate entrance at the evacuee Reception Center located at Roncalli High School.

OBJECTIVE 23: SUPPLEMENTARY ASSISTANCE (FEDERAL/OTHER)

Demonstrate the capability to identify the need for external assistance and to request such assistance from federal or other support organizations.

The State will demonstrate this objective in the State EOC by identifying which agencies would be contacted and the type of assistance that would be requested.

OBJECTIVE 24: POST-EMERGENCY SAMPLING

Demonstrate the use of equipment and procedures for the collection and transportation of samples from areas that receive deposition from the airborne plume.

Not selected

OBJECTIVE 25: LABORATORY OPERATIONS

Demonstrate laboratory operations and procedures for measuring and analyzing samples.

Not selected.

OBJECTIVE 26: INGESTION EXPOSURE PATHWAY--DOSE PROJECTION AND PROTECTIVE ACTION DECISION-MAKING

Demonstrate the capability to project dose to the public for the ingestion pathway and to recommend protective measures.

Not selected

OBJECTIVE 27: INGESTION EXPOSURE PATHWAY--PROTECTIVE ACTION IMPLEMENTATION

Demonstrate the capability to implement protective actions for ingestion exposure pathway.

Not selected

OBJECTIVE 28: RELOCATION, RE-ENTRY, AND RETURN DECISION-MAKING

Demonstrate the capability to develop decisions on relocation, re-entry, and return.

Not selected.

OBJECTIVE 29: RELOCATION, RE-ENTRY, AND RETURN IMPLEMENTATION

Demonstrate the capability to implement relocation, re-entry and return.

Not selected

OBJECTIVE 30: CONTINUOUS, 24-HOUR STAFFING

Demonstrate the capability to maintain staffing on a continuous, 24-hour basis through an actual shift change.

Not selected.

OBJECTIVE 31: OFFSITE SUPPORT FOR THE EVACUATION OF ONSITE PERSONNEL

Demonstrate the capability to provide offsite support for the evacuation of on-site personnel.

This is a county objective.

OBJECTIVE 32: UNANNOUNCED EXERCISE OR DRILL

Demonstrate the capability to carry out emergency response functions in an unannounced exercise or drill.

Not selected.

OBJECTIVE 33: OFF-HOURS EXERCISE OR DRILL

Demonstrate the capability to carry out emergency response functions during an off-hours exercise or drill.

Not selected.

KEWAUNEE COUNTY OFF-SITE OBJECTIVES
for the
1999 KEWAUNEE NUCLEAR POWER PLANT EXERCISE
October 5, 1999

OBJECTIVE 1: MOBILIZATION OF EMERGENCY PERSONNEL

Demonstrate the capability to alert and fully mobilize personnel for both emergency facilities and field operations. Demonstrate the capability to activate and staff emergency facilities for emergency operations.

Kewaunee County will fully activate its Emergency Operating Center (EOC) at 416 Fremont Street, Algoma, WI and will use the alerting and staff call-up procedures in Tab B of the Kewaunee County Plan.

**OBJECTIVE 2: FACILITIES -- EQUIPMENT, DISPLAYS AND WORK
 ENVIRONMENT**

Demonstrate the adequacy of facilities, equipment, displays, and other materials to support emergency operations.

Kewaunee County will demonstrate its ability to adequately support operations through the use of maps, status boards, and other displays as appropriate.

OBJECTIVE 3: DIRECTION AND CONTROL

Demonstrate the capability to direct and control emergency operations.

Kewaunee County will direct and control emergency operations within the county and coordinate decisions and emergency activities with the State of Wisconsin, Manitowoc County and the Joint Public Information Center (JPIC).

OBJECTIVE 4: COMMUNICATIONS

Demonstrate the capability to communicate with all appropriate emergency personnel at facilities and in the field.

Kewaunee County uses a variety of communication systems (including Dial-Select, telephone, cellular phone, radio, and facsimile) to communicate with other locations.

The County uses computer workstations and electronic mail for internal EOC communications.

OBJECTIVE 5: EMERGENCY WORKER EXPOSURE CONTROL

Demonstrate the capability to continuously monitor and control radiation exposure to emergency workers.

Emergency workers use direct reading dosimeters (DRD) and thermoluminescent dosimeters (TLD) in Kewaunee County to monitor and control radiation exposure. Reception Center staff who are involved in monitoring and decontamination wear a 0-200 mR DRD and a TLD. All other emergency workers who may work with or near contaminated personnel or equipment and those who enter the evacuated area wear a 0-200 mR and a 0-20 R DRD and a TLD. Some dosimetry will be distributed at the Kewaunee County Courthouse Annex in the City of Kewaunee; if exercise events warrant, the rest will be distributed from the County's Mobile Command Post at a location designated by the players. (Wisconsin dosimetry policy is that 0-200 mR dosimeters are calibrated annually; they are not subject to drift problems per letter from Dosimeter Corporation of America, the manufacturer, and are not drift checked quarterly.)

OBJECTIVE 6: FIELD RADIOLOGICAL MONITORING -- AMBIENT RADIATION MONITORING

Demonstrate the appropriate use of equipment and procedures for determining field radiation measurements.

This is a state objective.

OBJECTIVE 7: PLUME DOSE PROJECTION

Demonstrate the capability to develop dose projections and Protective Action Recommendations (PAR) regarding evacuation and sheltering.

This is a state objective.

OBJECTIVE 8: FIELD RADIOLOGICAL MONITORING -- AIRBORNE RADIOIODINE AND PARTICULATE ACTIVITY MONITORING

Demonstrate the appropriate use of equipment and procedures for the measurements of airborne radioiodine concentrations as low as 10^{-7} (0.0000001) microcuries per cubic centimeter in the presence of noble gases and obtain samples of particulate activity in the airborne plume.

This is a state objective.

OBJECTIVE 9: PLUME PROTECTIVE ACTION DECISION-MAKING

Demonstrate the capability to make timely and appropriate protective action decisions.

This is a state objective.

OBJECTIVE 10: ALERT AND NOTIFICATION

Demonstrate the capability to promptly alert and notify the public within the 10-mile plume pathway Emergency Planning Zone (EPZ) and disseminate instructional messages to the public on the basis of decisions by appropriate State or local officials.

The State will complete the necessary decision-making and notify Kewaunee County of the Protective Action Recommendation. Kewaunee County will growl its sirens and broadcast an EAS message for the first exercise PAR. For subsequent PAR's, siren activation and EAS transmissions will be simulated. The County uses pre-scripted EAS messages.

The County will provide recent successful siren test evidence to the federal evaluator. The primary EAS radio station, WDOR, will be contacted per the Kewaunee County Plan and will have staff available for interviews during the exercise.

A county escort will be made available upon request.

OBJECTIVE 11: PUBLIC INSTRUCTIONS AND EMERGENCY INFORMATION

Demonstrate the capability to coordinate the formulation and dissemination of accurate information and instructions to the public.

Upon recommendation from the State of Wisconsin, the Kewaunee County Emergency Public Information Officer and the Emergency Government Director, will demonstrate the ability to select the appropriate EAS message and transmit it by appropriate means.

OBJECTIVE 12: EMERGENCY INFORMATION -- MEDIA

Demonstrate the capability to coordinate the development and dissemination of clear, accurate, and timely information to the news media.

A Kewaunee County Public Information Officer (PIO) will be at the Joint Public Information Center (JPIC) and will work with State, Manitowoc County and utility PIOs to ensure that County interests and concerns are represented in briefings for the media.

OBJECTIVE 13: EMERGENCY INFORMATION -- RUMOR CONTROL

Demonstrate the capability to establish and operate rumor control in a coordinated and timely manner.

Kewaunee County coordinates its rumor control activities with the State of Wisconsin, Manitowoc County, and utility PIOs at the JPIC. Primary rumor control is handled at the agency level that can provide an accurate response; the response is then forwarded to the JPIC.

**OBJECTIVE 14: IMPLEMENTATION OF PROTECTIVE ACTIONS -- USE OF KI FOR
EMERGENCY WORKERS, INSTITUTIONALIZED INDIVIDUALS,
AND THE GENERAL PUBLIC**

Demonstrate the capability and resources to implement potassium iodide (KI) protective actions for emergency workers, institutionalized individuals, and, if the State plan specifies, the general public.

Each county emergency worker dosimetry kit contains a simulated individual initial dose of KI. The Kewaunee County EOC will instruct emergency workers, through their supervisor, when they should take the simulated KI. If the scenario requires, Kewaunee County will simulate KI distribution to institutionalized individuals in the city of Kewaunee. The Wisconsin Radiological Incident Response Plan states that KI is not made available to the general public.

**OBJECTIVE 15: IMPLEMENTATION OF PROTECTIVE ACTIONS --
SPECIAL POPULATIONS**

Demonstrate the capability and resources necessary to implement appropriate protective actions for special populations.

The County EOC staff will demonstrate the ability and resources to implement appropriate protective actions for special populations with special transportation needs through plans and simulating evacuation assistance as dictated by the scenario.

**OBJECTIVE 16: IMPLEMENTATION OF PROTECTIVE ACTIONS --
SCHOOLS**

Demonstrate the capability and resources necessary to implement protective actions for school children with the plume pathway emergency planning zone (EPZ).

Kewaunee County will demonstrate this objective Date to be Set by interviewing the superintendent, a principal and one teacher of a school from the Kewaunee School District. The bus company manager, dispatcher and a driver will also be interviewed at a time and date to be determined.

The evacuation of one classroom from a Kewaunee School to an Algoma School the day of the Exercise. The time and schools will be identified at a later date.

OBJECTIVE 17: TRAFFIC AND ACCESS CONTROL

Demonstrate the organizational capability and resources necessary to control evacuation traffic flow and to control access to evacuated and sheltered areas.

Kewaunee County will demonstrate this objective at one location to be designated prior to the exercise, or as a result of play. Evaluators will be informed of the location and time of this demonstration the day of the exercise. A county escort will be available upon request.

**OBJECTIVE 18: RECEPTION CENTER -- MONITORING,
DECONTAMINATION, AND REGISTRATION**

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

Kewaunee County will open its reception center at Algoma High School, 1715 Division St. Algoma, *October 4, 1999 from 1800 to 2100* for the demonstration. Kewaunee County is responsible for registering evacuees and assigning them to appropriate congregate care facilities. The State of Wisconsin is responsible for demonstrating the radiological monitoring and decontamination portions of the objective.

OBJECTIVE 19: CONGREGATE CARE

Demonstrate the adequacy of facilities, equipment, supplies, personnel, and procedures for congregate care of evacuees.

Kewaunee County will open the Algoma High School congregate care center for demonstration and evaluation TBD.

OBJECTIVE 20: MEDICAL SERVICES -- TRANSPORTATION

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

Kewaunee County will demonstrate this objective TBD, at Algoma High School in conjunction with the Algoma Reception Center Exercise. Algoma Fire and Rescue Service will prepare a person with simulated contamination and injury. County ambulance crews are prepared to brief evaluators about the route to the hospital, and unloading procedures; they will not drive the route.

To simulate completion of the drive, a local ambulance service from Manitowoc will deliver the simulated contaminated injured patient to the hospital.

OBJECTIVE 21: MEDICAL SERVICES -- FACILITIES

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

This is a state objective.

**OBJECTIVE 22: EMERGENCY WORKERS, EQUIPMENT, AND VEHICLES
-MONITORING AND DECONTAMINATION**

Demonstrate the adequacy of procedures for the monitoring and decontamination of emergency workers, equipment, and vehicles.

This is a state objective.

OBJECTIVE 23: SUPPLEMENTARY ASSISTANCE (FEDERAL/OTHER)

Demonstrate the capability to identify the need for external assistance and to request such assistance from federal or other support organizations.

This is a state objective.

OBJECTIVE 24: POST-EMERGENCY SAMPLING

Demonstrate the use of equipment and procedures for the collection and transportation of samples from areas that receive deposition from the airborne plume.

This is a state objective.

OBJECTIVE 25: LABORATORY OPERATIONS

Demonstrate laboratory operations and procedures for measuring and analyzing samples.

This is a state objective.

**OBJECTIVE 26: INGESTION EXPOSURE PATHWAY -- DOSE
PROJECTION AND PROTECTIVE ACTION DECISION-
MAKING**

Demonstrate the capability to project dose to the public for the ingestion pathway and to recommend protective measures.

This is a state objective.

**OBJECTIVE 27: INGESTION EXPOSURE PATHWAY -- PROTECTIVE
ACTION IMPLEMENTATION**

Demonstrate the capability to implement protective actions for ingestion exposure pathway.

This objective will not be demonstrated.

**OBJECTIVE 28: RELOCATION, RE-ENTRY, AND RETURN -- DECISION-
MAKING**

Demonstrate the capability to develop decisions on relocation, re-entry, and return.

This objective will not be demonstrated

**OBJECTIVE 29: RELOCATION, RE-ENTRY, AND RETURN --
IMPLEMENTATION**

Demonstrate the capability to implement relocation, re-entry and return.

This objective will not be demonstrated

OBJECTIVE 30: CONTINUOUS, 24-HOUR STAFFING

Demonstrate the capability to maintain staffing on a continuous, 24-hour basis through an actual shift change.

This objective will not be demonstrated

**OBJECTIVE 31: OFFSITE SUPPORT FOR THE EVACUATION OF ONSITE
PERSONNEL**

Demonstrate the capability to provide offsite support for the evacuation of onsite personnel.

This objective will not be demonstrated

OBJECTIVE 32: UNANNOUNCED EXERCISE OR DRILL

Demonstrate the capability to carry out emergency response functions in an unannounced exercise or drill.

This objective will not be demonstrated

OBJECTIVE 33: OFF-HOURS EXERCISE OR DRILL

Demonstrate the capability to carry out emergency response functions during an off-hours exercise or drill.

This objective will not be demonstrated

MANITOWOC COUNTY OFF-SITE OBJECTIVES
for the

1999 KEWAUNEE NUCLEAR POWER PLANT EXERCISE
OCTOBER 5, 1999

OBJECTIVE 1: MOBILIZATION OF EMERGENCY PERSONNEL

Demonstrate the capability to alert and fully mobilize personnel for both emergency facilities and field operations. Demonstrate the capability to activate and staff emergency facilities for emergency operations.

Manitowoc County will fully activate its Emergency Operating Center (EOC) at 1025 S. 9th St., Manitowoc, and will use the alerting and staff call-up procedures in Tab B of the Manitowoc County Plan.

OBJECTIVE 2: FACILITIES -- EQUIPMENT, DISPLAYS AND WORK ENVIRONMENT

Demonstrate the adequacy of facilities, equipment, displays, and other materials to support emergency operations.

Manitowoc County will demonstrate its ability to adequately support operations through the use of maps, status boards, and other displays as appropriate.

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Demonstrate the capability to direct and control emergency operations.

Manitowoc County will direct and control emergency operations within the county and coordinate decisions and emergency activities with the State of Wisconsin, Kewaunee County and the Joint Public Information Center (JPIC).

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Manitowoc County uses a variety of communication systems (including Dial Select, telephone, cellular phone, radio, and facsimile) to communicate with other locations.

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Demonstrate the capability to continuously monitor and control radiation exposure to emergency workers.

Emergency workers use direct reading dosimeters (DRD) and thermoluminescent dosimeters (TLD) in Kewaunee County to monitor and control radiation exposure. All emergency workers who may work with or near contaminated personnel or equipment and those who enter the evacuated area wear a 0-200 mR and a 0-20 R DRD and a TLD. Some dosimetry will be pre-distributed; the remainder will be distributed at Roncalli High School in the City of Manitowoc.

(Wisconsin dosimetry policy is that 0-200 mR dosimeters are calibrated annually; they are not subject to drift problems per letter from Dosimeter Corporation of America, the manufacturer, and are not drift checked quarterly.)

OBJECTIVE 6: FIELD RADIOLOGICAL MONITORING -- AMBIENT RADIATION MONITORING

Demonstrate the appropriate use of equipment and procedures for determining field radiation measurements.

This is a state objective.

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Demonstrate the capability to develop dose projections and protective action recommendations regarding evacuation and sheltering.

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OBJECTIVE 8: FIELD RADIOLOGICAL MONITORING -- AIRBORNE RADIOIODINE AND PARTICULATE ACTIVITY MONITORING

Demonstrate the appropriate use of equipment and procedures for the measurements of airborne radioiodine concentrations as low as 10^{-7} (0.0000001) microcuries per cubic centimeter in the presence of noble gases and obtain samples of particulate activity in the airborne plume.

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OBJECTIVE 9: PLUME PROTECTIVE ACTION DECISION-MAKING

Demonstrate the capability to make timely and appropriate protective action decisions.

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OBJECTIVE 10: ALERT AND NOTIFICATION

Demonstrate the capability to promptly alert and notify the public within the 10-mile plume pathway Emergency Planning Zone (EPZ) and disseminate instructional messages to the public on the basis of decisions by appropriate State or local officials.

The State will complete the necessary decision-making and notify Manitowoc County of the Protective Action Recommendation. Manitowoc County will growl its sirens and broadcast an EAS message for the first exercise PAR. For subsequent PAR's, siren and EAS transmissions will be simulated. The county uses pre-scripted EAS messages.

The County will provide siren test evidence to the federal evaluator.

An aircraft mounted public address system is used to provide backup to the siren system and warning notification for boaters on Lake Michigan. If weather prohibits flight, the public address system will be mounted atop a four-wheel drive for ground alerting.

WCUB, a county EAS radio station, will be contacted per the Manitowoc County Plan and have staff available for interviews during the exercise.

OBJECTIVE 11: PUBLIC INSTRUCTIONS AND EMERGENCY INFORMATION

Demonstrate the capability to coordinate the formulation and dissemination of accurate information and instructions to the public.

Upon recommendation from the State of Wisconsin, the Manitowoc County Emergency Public Information Officer and the Emergency Management Director will demonstrate the ability to select the appropriate EAS message and transmit it by appropriate means.

OBJECTIVE 12: EMERGENCY INFORMATION -- MEDIA

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A Manitowoc County Public Information Officer (PIO) will be at the JPIC and will work with State, Kewaunee County and utility PIOs to ensure that County interests and concerns are presented at media briefings.

OBJECTIVE 13: EMERGENCY INFORMATION -- RUMOR CONTROL

Demonstrate the capability to establish and operate rumor control in a coordinated and timely manner.

Manitowoc County will coordinate its rumor control activities with the State of Wisconsin, Kewaunee County, and utility PIOs at the JPIC. Primary rumor control is handled by the agency/organization representative that is the object of the rumor, with the response forwarded to the PIO's at the JPIC as information or for dissemination.

**OBJECTIVE 14: IMPLEMENTATION OF PROTECTIVE ACTIONS -- USE OF KI FOR
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AND THE GENERAL PUBLIC**

Demonstrate the capability and resources to implement potassium iodide (KI) protective actions for emergency workers, institutionalized individuals, and, if the State plan specifies, the general public.

Each county emergency worker dosimetry kit contains a simulated individual initial dose of KI. The Manitowoc County EOC will instruct emergency workers, through their supervisor, when the workers should take the simulated KI. If the scenario requires, Manitowoc County will simulate distributing KI to institutionalized individuals. The Wisconsin Radiological Incident Response Plan states that KI is not distributed to the general public.

**OBJECTIVE 15: IMPLEMENTATION OF PROTECTIVE ACTIONS -- SPECIAL
POPULATIONS**

Demonstrate the capability and resources necessary to implement appropriate protective actions for special populations.

Manitowoc County will not demonstrate this objective.

OBJECTIVE 16: IMPLEMENTATION OF PROTECTIVE ACTIONS -- SCHOOLS

Demonstrate the capability and resources necessary to implement protective actions for school children with the plume pathway emergency-planning zone (EPZ).

Manitowoc County will not demonstrate this objective.

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Demonstrate the organizational capability and resources necessary to control evacuation traffic flow and to control access to evacuated and sheltered areas.

Manitowoc County will demonstrate this objective at one location to be designated prior to the exercise, or as a result of play. Evaluators will be informed of the location and timing of this demonstration in the County EOC the day of the exercise. A county escort will be available upon request.

OBJECTIVE 18: RECEPTION CENTER -- MONITORING, DECONTAMINATION, AND REGISTRATION

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

Manitowoc County will demonstrate this objective in sequence with the scenario at Roncalli High School in the City of Manitowoc. Manitowoc County is responsible for registering evacuees and assigning them to appropriate congregate care facilities. The State of Wisconsin is responsible for demonstrating the radiological monitoring and decontamination portions of this objective. (October 5, 1999, in sequence with scenario)

OBJECTIVE 19: CONGREGATE CARE

Demonstrate the adequacy of facilities, equipment, supplies, personnel, and procedures for congregate care of evacuees.

Manitowoc County will demonstrate this objective by opening one congregate care center located at (date/time TBD). Washington Jr. High School, 2101 Division Street, Manitowoc.

OBJECTIVE 20: MEDICAL SERVICES -- TRANSPORTATION

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

Manitowoc County will demonstrate this objective in sequence at the Reception Center at Roncalli High School in the City of Manitowoc. An ambulance service will prepare a person with a simulated injury and contamination. Actual transportation to the hospital will not be demonstrated. Unified Ambulance will conduct the demonstration. (October 5, 1999 in sequence with scenario).

OBJECTIVE 21: MEDICAL SERVICES -- FACILITIES

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

This is a state objective.

**OBJECTIVE 22: EMERGENCY WORKERS, EQUIPMENT, AND VEHICLES --
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This is a state objective.

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Demonstrate the use of equipment and procedures for the collection and transportation of samples from areas that receive deposition from the airborne plume.

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OBJECTIVE 25: LABORATORY OPERATIONS

Demonstrate laboratory operations and procedures for measuring and analyzing samples.

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**OBJECTIVE 26: INGESTION EXPOSURE PATHWAY -- DOSE PROJECTION AND
PROTECTIVE ACTION DECISION-MAKING**

Demonstrate the capability to project dose to the public for the ingestion pathway and to recommend protective measures.

This is a state objective.

OBJECTIVE 27: INGESTION EXPOSURE PATHWAY -- PROTECTIVE ACTION IMPLEMENTATION

Demonstrate the capability to implement protective actions for ingestion exposure pathway.

This objective will not be demonstrated.

OBJECTIVE 28: RELOCATION, RE-ENTRY, AND RETURN -- DECISION-MAKING

Demonstrate the capability to develop decisions on relocation, re-entry, and return.

This is a state objective.

OBJECTIVE 29: RELOCATION, RE-ENTRY, AND RETURN -- IMPLEMENTATION

Demonstrate the capability to implement relocation, re-entry and return.

This objective will not be demonstrated.

OBJECTIVE 30: CONTINUOUS, 24-HOUR STAFFING

Demonstrate the capability to maintain staffing on a continuous, 24-hour basis through an actual shift change.

This objective will not be demonstrated.

OBJECTIVE 31: OFFSITE SUPPORT FOR THE EVACUATION OF ONSITE PERSONNEL

Demonstrate the capability to provide offsite support for the evacuation of onsite personnel.

This objective will not be demonstrated.

OBJECTIVE 32: UNANNOUNCED EXERCISE OR DRILL

Demonstrate the capability to carry out emergency response functions in an unannounced exercise or drill.

This objective will not be demonstrated.

OBJECTIVE 33: OFF-HOURS EXERCISE OR DRILL

Demonstrate the capability to carry out emergency response functions during an off-hours exercise or drill.

This objective will not be demonstrated.

Scenario Timeline - KNPP 10/5/99

<i>Time</i>	<i>ID# To</i>	<i>Subject</i>
7:30	351 Control Room	KNPP Met Data
7:35	352 Control Room	Loss of Coolant at KNPP
7:37	353 Control Room	Pump failure at plant
7:55	354 Control Room	Plant is manually tripped due to loss of coolant
8:00	355 Control Room	Steam generator fault
8:02	356 Control Room	Possible ALERT declared.
8:03	357 Duty Officer	"Alert" notification to Manitowoc & Kewaunee Counties & State from KNPP
8:10	358 Control Room	Site Area Emergency declared at plant
8:25	359 State DO	Dial Select notification of SAE to Manitowoc & Kewaunee counties & State
8:30	377 ALL	JPIC Is being activated.
8:30	431 DATCP	Plan to minimize damage to Wisconsin Dairy and agriculture products
8:32	366 Controller	Site Area Emergency is verified by State and counties
8:34	362 Controller	EOC Activation Begins at Kewaunee County
8:34	365 Controller	EOC Activation Begins in Manitowoc.
8:38	369 SRC	SRC notified of Site Area Emergency at Kewaunee.
8:40	361 Controller	State EOC Activation
8:40	367 Control Room	Accident on I-43 delays plant personnel response to EOF.
8:42	370 Control Room	Update from plant on situation.
8:45	374 Controller	KNPP issues first news release on Site Area Emergency at plant.
8:48	454 Controller	State PIO starts contacting State agency PIOs.
8:48	380 Field Teams	Field teams activated
8:48	397 Governor	Advises governor of State response
8:55	379 Control Room	TSC Activated
<i>Time</i>	<i>ID#</i>	<i>To Subject</i>
8:55	473 Governor's Rep.-EOC	What's going on?
9:00	502 WEM Administartor	Cabinet Meeting
9:00	438 Controller	Discussion of issuing advisories

9:00	484 SRC	Field Team Data
9:02	388 PIO, Kewaunee County	What's going on at the plant and the County
9:03	389 PIO, Manitowoc County	What's going on at the plant and the County
9:04	372 PIO, State EOC	Media inquiry about Site Area Emergency
9:04	371 Operations Officer	County EOC's are activated and operational.
9:05	376 Wisconsin Media	KNPP incident first notice
9:05	475 State DOT-EOC	Impact of incident on transportation in the area.
9:06	455 Controller	OIC orders communications check and time synchronization with Kewaunee and Manitowoc counties.
9:06	391 Manitowoc Cty Ag Agent	Is their danger to his herds
9:08	392 Kewaunee Cty Ag Agent	Is there danger to his herds
9:10	383 State EOC PIO	Accessibility to plant
9:10	477 DNR-EOC	Impact of incident on Parks and recreation
9:10	375 ALL	JPIC is Operational
9:10	373 Controller	State EOC is fully activated and operational.
9:10	498 DHFS	Are fish from Lake Michigan safe?
9:13	384 State EOC PIO	Accessability to plant
9:13	387 Manitowoc Public Health	request for radiation immunity pill
9:14	398 Manitowoc FD	Home fire
9:15	483 Manitowoc PIO	Location of shelters
9:15	386 Kewaunee Human Services	Bedridden parent
9:16	385 State EOC PIO	Accessibility to plant
	<i>Time ID#</i>	<i>To Subject</i>
9:20	393 JPIC State & County PIO's	Status of events at plant
9:20	509 Wisconsin PIO	Fly over of plant
9:20	390 Kewaunee Sheriff	Boyfriend lost
9:20	479 DHFS- State EOC	Impact of incident on health of people
9:22	416 Kewaunee PIO	Wants to send news crew.
9:23	394 State EOC-PIO	What's going on at KNPP

What's going on at KNPP

9:25	434 Manitowoc PIO	News crew at reception Center
9:30	442 Lead Ops Officer	Wants to observe EOC operations
9:30	425 PIO	Numerous calls from family members with family working at plant
9:30	444 County Health	What is danger to fishermen
9:30	485 SRC	Field Team Data
9:30	500 DATCP	Plan to minimize damage to Wisconsin Dairy and agriculture products
9:30	443 Manitowoc County Exec	What is danger to people in my town
9:30	435 PSC	Electric Availability
9:30	497 DNR	Are fish from Lake Michigan safe?
9:30	510 Wisconsin PIO	Establish feed for live commentary
9:30	433 Kewaunee PIO	Reception Center
9:35	504 Manitowoc County Health	What is danger to people at Fox Hills
9:35	396 TSC	Large break LOCA
9:40	506 Kewaunee County Exec	What is danger to my constituents?
9:40	426 Kewaunee County PIO	Reporter saw parents taking kids out of school
9:40	418 State EOC	SRC and OIC discuss large LOCA
9:42	423 Kewaunee Sheriff	Congestion at County BB & Hwy 42
	<i>Time ID#</i>	<i>To Subject</i>
9:44	424 Sheriff	TV video crew outside plant holding up traffic
9:45	399 Control Room	Bus Failure
9:45	465 State Patrol-State EOC	State Patrol assistance and impact
9:45	400 Control Room	RHR failure
9:50	401 Control Room	Thermocouple couple temp increasing
9:50	402 Control Room	Wind shift
9:50	403 Control Room	Thermocouple temp rises
9:55	419 SRC	Wind shift and thermocouple temps rising
9:55	404 Control room	Control room turns Severe Accident Management over to TSC and the SAM team.
10:00	486 SRC	Field Team Data
10:00	405 Control room	Core-exit thermocouples reach 1800 deg. F

10:05	466 PSC-State EOC	Safety of other nuclear plants in State.
10:05	420 OIC at State EOC	SRC reviews wind shift and rising thermocouple temperatures
10:05	421 Kewaunee PIO	KNPP plant employees going home early.
10:05	422 Manitowoc PIO	KNPP plant employees going home early.
10:10	406 Control room	Core-exit thermocouples reach 2500 deg. F and fail.
10:15	427 Human Services	Transportation to Congregate Care
10:15	407 Control Room	Emergency Director declares General Emergency
10:15	432 Red Cross, Kewaunee	Inquiry about aged mother
10:18	511 Wisconsin PIO	Kewaunee employees leaving
10:20	408 OIC, State EOC & Counties	KNPP uses Dial-Select to advise State and Counties of "General Emergency"
10:25	467 Kewaunee Red Cross	Can't contact spouse at plant.
10:25	468 Manitowoc Red Cross	Can't contact spouse at plant.
10:28	449 Controller	PAR discussed with Counties
Time	ID# To	Subject
10:30	487 State Radiological Coordinator	Field Team Data
10:30	445 Manitowoc Red Cross	No more hotel space
10:30	441 DATCP	Cancellation of dairy product orders.
10:30	447 State PIO, JPIC	Impact of accident of accident on tourism
10:32	428 County Agriculture Agent	Want radiation pill
10:33	450 Controller	PAR to Governor for approval.
10:35	448 Controller	Utility PAR to State
10:35	446 Kewaunee Red Cross	No more hotel space
10:36	429 County Ag Agent	Radiation Pills
10:40	409 Control Room	OSF restores some ECCS
10:40	451 Controller	Governor approves PAR
10:40	436 Manitowoc Sheriff	Callers wanting more information on General Emergency
10:40	512 Wisconsin PIO	Set up live three way interview
10:40	494 SRC	Evacuation
10:40	430 DATCP	Safety of Wisconsin Dairy products

10:40	437 Kewaunee Sheriff	Traffic congestion
10:45	439 Manitowoc Ag Agent	Safety of dairy products
10:48	452 Controller	Counties sound sirens
10:48	440 Kewaunee Ag Agent	Safety of dairy products
10:50	488 SRC	Field Team Data
10:50	513 Wisconsin PIO	Traffic routing
10:50	410 Control Room	Tube rupture develops
10:55	501 Governor's Rep.-EOC	What's going on?
11:00	514 Wisconsin PIO	What does Emergency declaration mean?
Time	ID# To	Subject
11:00	411 Control Room	Offsite release begins
11:03	515 Wisconsin PIO	Information on State of Emergency
11:10	457 Controller	SRC and OIC discuss release at plant.
11:10	489 SRC	Field Team Data
11:12	458 Manitowoc Fire & Rescue	Fire in Two creeks
11:13	459 Kewaunee Fire	Fire in Kewaunee
11:15	499 SRC	Patient injured during evacuation - FYI.
11:15	456 Controller	SRC notified of radiation release at plant.
11:15	516 Wisconsin PIO	Overflight of evacuation area.
11:21	481 Kewaunee Red Cross	wants to bring parrot to shelter
11:24	482 Manitowoc Red Cross	Wants to bring Chihuahua to shelter
11:25	460 Manitowoc Health	certification of non-contamination
11:25	461 Kewaunee Health	certification of non-contamination
11:28	469 Kewaunee Health	How do I protect myself from radiation?
11:30	495 SRC	Evacuation
11:30	476 State DOT-EOC	Impact of incident on transportation in the area.
11:30	490 SRCr	Field Team Data
11:35	472 Manitowoc Extension Agent	Need feed for animals
11:35	470 Manitowoc Health	How do I protect myself from radiation?

11:35	412 Control Room	Bus 51 restored
11:40	496 DNR	Point Beach State Forest Evacuation
11:40	478 DNR-EOC	Impact of incident on Parks and recreation
11:45	507 Kewaunee County Exec	What is danger to my constituents?
11:45	474 Governor's Rep.-EOC	What's going on?
	Time ID#	To Subject
11:45	471 Kewaunee Extension Agent	Protect cows from radiation.
11:50	491 SRC	Field Team Data
11:50	517 Wisconsin PIO	Future operations of Kewaunee plant
11:50	480 DHFS- State EOC	Impact of incident on health of people
11:55	503 DATCP	Concern about radiation leak on dairy products
11:58	518 Wisconsin PIO	What's impact release on State's agriculture future?
12:00	413 Control Room	release terminated
12:05	519 Wisconsin PIO	Want to talk to evacuees at shelters.
12:10	492 SRC	Field Team Data
12:15	505 Manitowoc County Exec	What is danger to people in my district?
12:15	462 Manitowoc Sheriff	Threat on leaving
12:22	464 Kewaunee Sheriff	Threat on leaving reception center
12:25	493 SRC	Field Team Data
12:30	414 Control Room	Final Conditions
12:45	415 Control Room	Exercise termination
12:50	521 SRC	Field Team Data