Internal Correspondence

NSP

Date October 8, 1982

From Nuclear Support Services Department Location GO 8

To Distribution - Corporate Nuclear Emergency Plan Implementing Procedures Location Various

Subject Synopsis of October 8, 1982 Revisions to the Corporate Nuclear Emergency Plan Implementing Procedures

EPIP 1.1.1 Corporate Emergency Response Organization

Changes result from the addition of an Executive Spokesman and the consolidation of ERAD, Communications, and State Public Affairs Departmental duties under one Public Affairs Management tab. Additional changes include an HQEC clerical position and the Recovery Manager being staffed from the Nuclear Engineering and Construction Department.

EPIP 1.1.2 Notifications

Changes result from deleting ERAD from the call list and Power Production Management and Recovery Manager call lists being revised. Also an instruction to the SCC dispatcher has been added that, if a Shift Emergency Communicator calls, the dispatcher is to obtain the name and phone number of the ED.

EPIP 1.1.3 Public Information

Changes result from shifting the Media Liaison position from the EOF to the appropriate contact point (State EOC/JPIC or MIF).

EPIP 1.1.5 Start-Up and Operation of EOF

Changes result from an additional responsibility assigned to the EM for initiating a conference call with the state(s) whenever a protective action is recommended. Additional responsibilities assigned to the RPSS are monitoring of the CAM and the Emergency Ventilation System and responsibility for the HPN line. Additional responsibilities assigned to the EOF Coordinator are activation of the CAM and the emergency ventilation procedure and, if the RPSS position is not staffed, responsibility for monitoring both units. Offsite Communicator duty tabs include new contact numbers for the State EOCs. Additional duty assigned to the Technical Support Supervisor includes responsibility for the ENS Line. Figure 2, Emergency Notification Followup Message has changed to include a check off for the type of release (actual or potential).

EPIP 1.1.7 Start-Up and Operation of HQEC

Changes result from the startup section being incorporated into the HQEC Coordinator/Communicator Duties. Additional responsibilities assigned to the Power Production Management duties include assignment of an Executive Spokesman and, if necessary, a technical resource person to the State EOC/JPIC. A tab has been added for the NSP Executive Spokesman. Additional responsibility assigned to HQEC Technical Support is to provide technical information to the NSP technical resource person at the State EOC. Additional responsibility assigned to the Advisory Support Position is to be in communication with the NSP Executive Spokesman at the State EOC/JPIC. The new tab for Public Affairs Management combines the duties of Communications, ERAD, and State Public Affairs. A tab has also been added for HQEC clerical duties.

8211030613 821025
PDR ADOCK 05000263
F PDR

EPIP 1.1.8 Communication Equipment and Information

Changes result from new contact numbers for the State EOCs and identification of telecopier numbers.

EPIP 1.1.11 Accident Assessment

Changes result from the addition of conservative guidance for recommending protective action to the states at the discretion of the Emergency Manager and addition of a section for activation of the Public Alert & Notification System (PANS). Figure 1, Protective Action Recommendation Checklist has been changed to include: Consider evacuation of pregnant women and children and consider termination of Protective Actions in Progress. Also added to the form is a space for justification of the protective action and a note that, when the form is telecopied, a call to the states must be initiated by the EM.

EPIP 1.1.12 Implementation of the Emergency Radiological Environmental Monitoring Program (EREMP)

Changes result from adding a new tab to the procedure: Sample Courier Service between the Radiological Field Teams and the EOF Backup Count Room.

EPIP 1.1.14 Vendor/Consultant/Outside Agency Interface

Changes result from organizational changes within the Westinghouse Emergency Response Organization and the addition of Emergency Radiological Laboratory Facilities that may be called to provide assistance.

EPIP 1.1.16 Offsite Personnel and Vehicle Monitoring and Decontamination

Changes result from offsite assembly areas for setup of monitoring and decontamination stations being changed to reflect the new EOFs.

EPIP 1.1.17 Personnel Monitoring at the EOF

Changes result from the addition of tabs for the activation and operation of the CAM and the emergency ventilation procedure at the EOF. Usage of the word "shall" has been changed to the less restrictive "should" throughout the procedure.

NUCLEAR SUPPORT SERVICES DEPT NORTHERN STATES POWER COMPANY	CORPORATE NUCLEAR EMERGENCY PLAN IMPLEMENTING PROCEDURE NUMBER: REV: 8
PREPARED BY: Gary Huber Asst. Adm. Emergency Preparedness	EFFECTIVE DATE: October 8, 1982
REVIEWED BY: E T Ward Manager Nuclear Environmental Services	TITLE: TABLE OF CONTENTS RECORD OF REVISION
APPROVED BY: General Manager Nuclear Plants	

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NUCLEAR SUPPORT SERVICES DEPT NORTHERN STATES POWER COMPANY	CORPORATE NUCLEAR EMERGENCY PLAN IMPLEMENTING PROCEDURE NUMBER: EPIP 1.1.1 REV: 3
PREPARED BY: Gary Hudson Asst. Adm. Emergency Preparedness	EFFECTIVE DATE: October 8, 1982
REVIEWED BY: S C Wood Manager Nuclear Environmental Services	TITLE: 1.1.1 CORPORATE EMERGENCY RESPONSE ORGANIZATION
APPROVED BY: General Manager Nuclear Plants	

1.0 PURPOSE AND OBJECTIVES

The purpose of the "Corporate Emergency Response Organization" procedure is to specify the corporate emergency response organization including primary designees and alternates for emergency organization positions. The organization chart attached to this procedure presents the structure of the corporate emergency response organization. In order to provide a sufficient number of alternates to fill the various positions, some corporate positions are listed in more than one emergency organization position. In the event that an individual is assigned to more than one emergency organization position, the positions that are required to implement the actions at the EOF shall take precedence over all other positions.

2.0 CONDITIONS AND PREREQUISITES

An "Alert", "Site Area Emergency" or "General Emergency" has been declared at either Monticello or Prairie Island.

3.0 ORGANIZATION AND RESPONSIBILITIES

3.1 Overall Responsibilities - Power Production Management

3.2 In Charge - HQEC - Power Production Management

3.3 Assistance
- EOF - Emergency Manager
- HQEC - HQEC Coordinator/Communicator
- EOF - EOF Coordinator

FORM 17-4902

4.0 RESPONSIBILITIES

4.1 HEADQUARTERS EMERGENCY CENTER (HQEC)

1. Power Production Management

   a. The Power Production Management position should be staffed by the Director of Nuclear Generation. In his absence it is filled by the senior corporate person specified on the Power Production Management Call List, TAB A, EPIP 1.1.2, "Notifications".

   b. The responsibilities of the Power Production Management are specified in Tab A, EPIP 1.1.7, "Start-Up and Operation of HQEC".

2. Executive Spokesman

   a. The Executive Spokesman will be identified by Power Production Management from the following list of officers:

      D E Gilberts
      A V Dienhart
      R W Comstock
      B A Richard
      R O Duncanson

   b. The responsibilities of the Executive Spokesman are specified in TAB B, EPIP 1.1.7, "Start-Up and Operaton of HQEC".

3. HQEC Coordinator/Communicator

   a. The Coordinator/Communicator is a person selected by Power Production Management from duty list B under Section I of TAB A, EPIP 1.1.2, "Notifications".

   b. The responsibilities of the Coordinator/Communicator are specified in TAB C, EPIP 1.1.7, "Start-Up and Operation of HQEC".

4. HQEC Technical Support

   a. The Power Production Management will staff this position with technical personnel listed on Duty List B, Section I, TAB A, EPIP 1.1.2, "Notifications".

   b. The responsibilities of the HQEC Technical Support are specified in Tab D, EPIP 1.1.7, "Start-Up and Operation of HQEC".

5. Advisory Support

a. The Power Production Management will staff this position from duty list B under Section I of TAB A, EPIP 1.1.2, "Notifications".

b. The responsibilities of Advisory Support are specified in TAB E, EPIP 1.1.7 "Start-Up and Operation of HQEC".

6. Public Affairs Management

a. The Public Affairs Management position should be staffed by the Director of Communications or his designee. This responsibility will be activated by notification according to List C, Section I, TAB A of EPIP 1.1.2, "Notifications".

b. The responsibilities of Public Affairs are specified in Tab F, EPIP 1.1.7, "Start-Up and Operation of HQEC".

7. HQEC Clerical

a. The HQEC Coordinator/Communicator will fill this position by selecting a qualified person from office administrative staff.

b. The responsibilities are specified in TAB G, EPIP 1.1.7, "Start-Up and Operation of HQEC".

4.2 Emergency Operations Facility (EOF)

1. Emergency Manager

a. The Emergency Manager position should be staffed by the General Manager, Nuclear Plants. In his absence the position shall be staffed by use of the duty roster specified in the Call List, Tab A, EPIP 1.1.2, "Notifications".

b. The responsibilities of the Emergency Manager are specified in Tab A, EPIP 1.1.5, "Start-Up and Operation of EOF".

2. EOF Coordinator

a. The EOF Coordinator position should be staffed by available corporate personnel assigned to the Nuclear Technical Services Group or Production Training Group located at the respective plant sites. This position is filled by a duty roster maintained at the respective plant. EOF Coordinator designees assigned with an asterisk (*) in Section II of the Call List, TAB A, EPIP 1.1.2, "Notifications", are to initially perform as Emergency Manager until a designated Emergency Manager arrives.

b. The responsibilities of the EOF Coordinator are specified in Tab C, EPIP 1.1.5, "Start-Up and Operation of EOF".

3. Radiation Protection Support Supervisor

a. The Radiation Protection Support Supervisor should be staffed by the sister plant Superintendent, Radiation Protection or other qualified individuals as specified in the applicable plant Emergency Plan Implementing Procedures. Only personnel qualified in this manner may staff this position.

b. The responsibilities of the Radiation Protection Support Supervisor are specified in Tab B, EPIP 1.1.5, "Start-Up and Operation of EOF".

4. EOF Technical Support Supervisor

a. The EOF Technical Support Supervisor position should be staffed by the General Superintendent, Nuclear Technical Services. In his absence it is staffed by available personnel on the Corporate Call List, TAB A, EPIP 1.1.2, "Notifications".

b. The responsibilities of the EOF Technical Support Supervisor are specified in Tab H, EPIP 1.1.5, "Start-Up and Operation of EOF".

5. Communication Coordinator(s)

a. The duties of the Communication Coordinator(s) are the responsibility of the EOF Coordinator until he assigns an available individual to this position.

b. The responsibilities of the Communication Coordinator(s) are specified in Tab D, EPIP 1.1.5, "Start-Up and Operation of EOF".

6. Logistics Coordinator

a. The duties of the Logistics Coordinator are the responsibility of the EOF Coordinator until he assigns an available individual to this position.

b. The responsibilities of the Logistics Coordinator are specified in TAB E, EPIP 1.1.5, "Start-Up and Operation of EOF".

7. EOF Security Force

a. The duties of the Security Force are the responsibility of the EOF Coordinator until a Corporate Security Department individual assumes this position.

b. The responsibilities of the Security Force are specified in Tab F, EPIP 1.1.5, "Start-Up and Operation of EOF".

8. Records

a. The duties of the Records individual is the responsibility of the EOF Coordinator until he assigns an available individual to this position.

b. The responsibilities of the Records individual are specified in Tab G, EPIP 1.1.5, "Start-Up and Operation of EOF".

4.3 Additional Key Positions

1. Emergency Director

a. The Emergency Director position is staffed by the Plant Manager, or by a list of alternates designated in the respective plant Emergency Plan Implementing Procedures.

b. The responsibilities of the Emergency Director are delineated in the applicable plant's procedures.

2. Recovery Manager

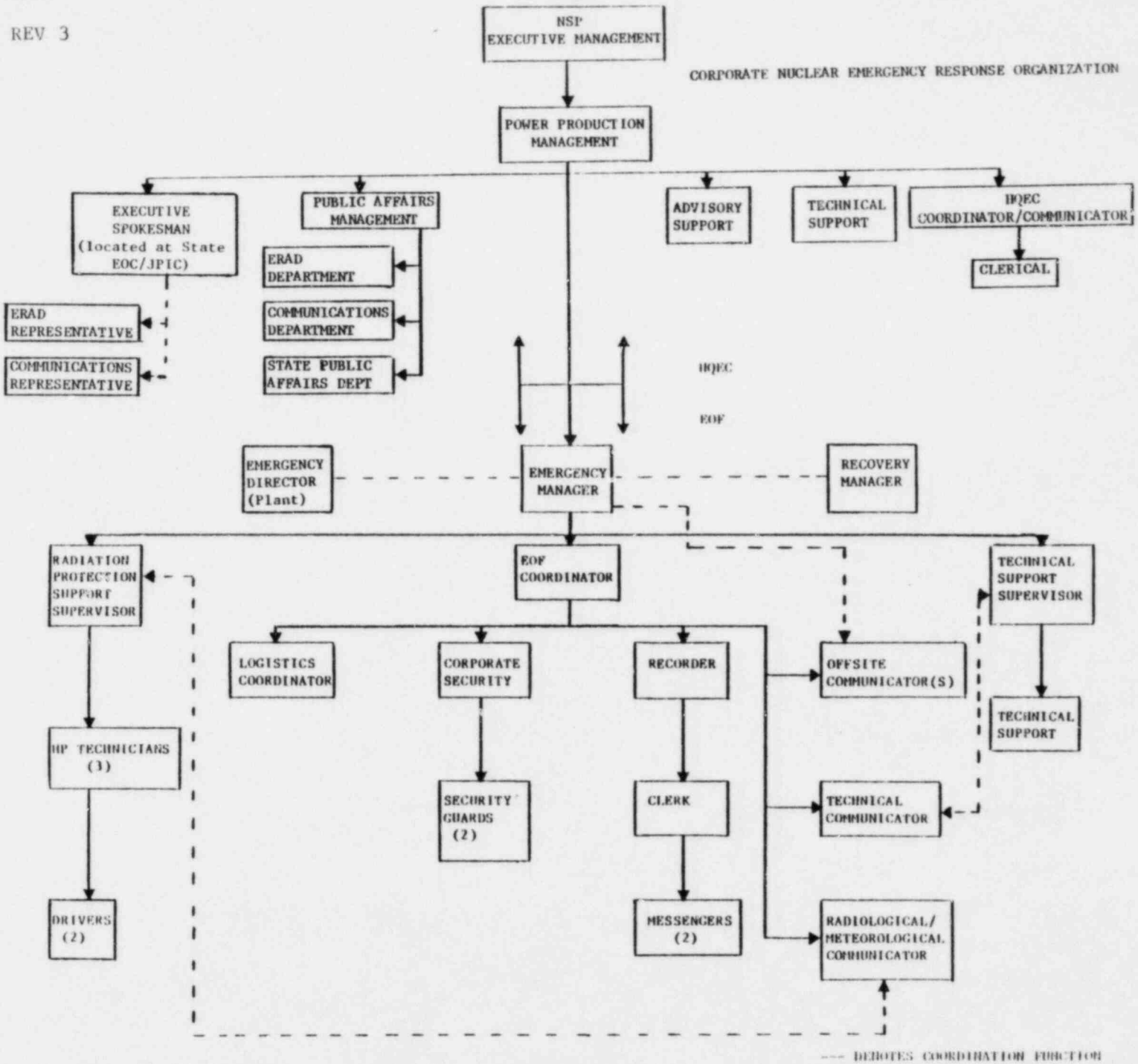
a. The Recovery Manager position is staffed by management personnel from the Nuclear Engineering and Construction Department designated on the Call List, TAB A, Section III, Item 14, of the "Notifications" procedure, EPIP 1.1.2.

b. The Recovery Manager is responsible for implementing the "Transition to Recovery Plan" procedure, EPIP 1.1.15, when directed by Power Production Management. He may be available at the EOF during the emergency condition to provide assistance in planning and logistics support, as needed.

3. System Dispatcher

The System Dispatcher provides the initial interface between the plant and the corporate staff. When notified by the Emergency Director that an emergency condition requiring a corporate response exists, he shall be responsible for notifying applicable corporate personnel in accordance with EPIP 1.1.2, "Notifications".

Figure 1
EPIP 1.1.1 REV 3



NUCLEAR SUPPORT SERVICES DEPT NORTHERN STATES POWER COMPANY	CORPORATE NUCLEAR EMERGENCY PLAN IMPLEMENTING PROCEDURE NUMBER: EPIP 1.1.2 REV: 5
PREPARED BY: Gary Hudson Asst. Adm. Emergency Preparedness	EFFECTIVE DATE: October 8, 1982
REVIEWED BY: E C Ward Manager Nuclear Environmental Services	TITLE: 1.1.2 NOTIFICATIONS
APPROVED BY: General Manager Nuclear Plants	

1.0 PURPOSE AND OBJECTIVE

The purpose of this procedure is to specify the sequence of events required to notify personnel in the Corporate Emergency Response Organization in the event of a declaration of an "Unusual Event", "Alert", "Site Area Emergency", or "General Emergency" by either the Monticello or Prairie Island Emergency Director.

2.0 CONDITIONS AND PREREQUISITES

2.1 An emergency condition has been declared at either Monticello Nuclear Generating Plant or Prairie Island Nuclear Generating Plant.

3.0 ORGANIZATION AND RESPONSIBILITIES

3.1 Overall Responsibility - System Dispatcher

3.2 In Charge - System Dispatcher

3.3 Assistance - Emergency Manager
- Emergency Director

4.0 RESPONSIBILITIES

4.1 SYSTEM DISPATCHER

1. When notified of an emergency by the Emergency Director or a Shift Emergency Communicator (SEC), the System Dispatcher shall call the Emergency Manager using Tab A, "Call List" and begin documenting notifications using the "Nuclear Emergency Notification List for System Control Center", Figure 1. If an SEC calls, request the name of the Emergency Director and the phone number where he can be reached.

2. Contact the Emergency Manager and inform him of the emergency condition. If the Emergency Manager cannot be contacted at the

listed telephone number(s), activate the Emergency Manager's pager by telephoning the listed pager number and state "Contact System Dispatcher Immediately." If the Emergency Manager is not immediately contacted, the System Dispatcher may call the mobile operator to attempt to locate the designated individual. If the Emergency Manager is contacted, proceed to Step 4.

3. If the first listed Emergency Manager can not be contacted within five (5) minutes proceed on down the Emergency Manager list until one is reached. Inform the first designee contacted that he is the first Emergency Manager designee notified.

4. Establish a three-way telephone connection between the System Dispatch Office, the affected plant's Emergency Director, and the Emergency Manager. Maintain the three-way connection until the Emergency Manager has verified the emergency and determined the extent of the response required, specifically the need for radiation protection support teams.

5. When the Emergency Director or Emergency Manager verifies the need for a corporate response, complete the Emergency Notification Message for NSP Response Organization (Figure 2). Request the Emergency Manager to specify, if in addition to communications, any of the following should be notified:

   Power Production Management _____
   Sister Plant Radiation
   Response Team _____
   Security _____

6. Contact and read the notification message to the individuals specified by the Emergency Manager. (If the emergency is an Alert, Site Area Emergency, or General Emergency just continue on with this procedure.)

FOR THE UNUSUAL EVENT CATEGORY STOP DO NOT COMPLETE THE REMAINDER OF THE PROCEDURE
* * * * * * * * * * * * * * * * * * * *

7. Contact the Emergency Manager designees who have not previously been contacted.

   When each of the remaining designees are notified, inform them that an Emergency Manager designee has already been contacted and who that Emergency Manager is, and then read the message developed in Step 5.

8. Attempt to contact any of the individuals who are listed as Power Production Mangement. They should be telephoned in the listed order until one of the designees is contacted. When a designee is contacted, read the message developed in Step 5. Inform the contacted individual that he is the first member of Power Production Management contacted.

9. Attempt to contact any of the individuals who are listed under Communications. They should be telephoned in listed order until one of the designees is contacted. If Communications personnel can not be contacted at the listed telephone numbers, activate the Pager Call System for Communications by telephoning the listed pager number and state, "Contact System Dispatcher Immediately". When a Communications Representative has been contacted, read the message developed in Step 5.

10. Contact the on-duty Shift Supervisor of the unaffected nuclear generating plant. When the Shift Supervisor is contacted, read the message developed in Step 5. In this manner, the "Sister plant" Emergency Response Team members will be notified of the activation support as determined in Step 4.

11. Attempt to contact any of the individuals who are designated Security Force personnel. They should be telephoned in the listed order until one of the designees is contacted. If Security Force personnel can not be contacted at the listed telephone numbers, activate the Pager Call System for Security Force by telephoning the listed pager number and leave the following message "Contact System Dispatcher Immediately". When a Security Force designee is contacted, read the message developed in Step 5.

12. As time permits, contact the remaining individuals who are listed as Power Production Management. When each remaining designee is contacted, read the message developed in Step 5.

13. When the "Notifications" procedure is completed, log the time of completion in the System Dispatcher's log. Retain copies of Figure 1, Nuclear Emergency Notification List for System Control Center, and Figure 2, Emergency Notification Message for NSP Response Organization, for future reports.

4.2 CORPORATE EMERGENCY RESPONSE PERSONNEL

1. EOF Coordinator designees will be notified by the plant notification procedure. When informed of an emergency condition that is other than an Unusual Event, they should proceed to their respective EOF.

2. All other emergency response personnel will be notified by the System Dispatcher and call lists activated by System Dispatcher notifications. These individuals should proceed to their assigned facility for other than an Unusual Event.

TAB A

CALL LIST

The positions in Sections I and II of the call list are positions with designated personnel to fulfill the requirements. The personnel in Section III are the body of the Corporate Emergency Response Team.

If the emergency occurs during normal working hours, notify the response team at their respective office telephones. If the emergency occurs during non-working hours, notify the applicable personnel as specified in the procedure at the listed call number.

SECTION I

		Telephone			
A. EMERGENCY MANAGER	Office	Home	Pager	Mobile ***
	DELETED			
		DELETED		
			DELETED	
				DELETED
B. P.P. MANAGEMENT	Office	Home	Pager	
	DELETED			
		DELETED		
			DELETED	

* Major Area provided for use in attempting mobile telephone contact.

** Individuals listed as Emergency Managers may also function as Power Production Management if not required to fulfill Emergency Manager duties.

*** To make a telephone call to a mobile station dial the Bell telephone operator and ask for a mobile operator.

C. COMMUNICATIONS

	Telephone		
	Office	Home	Pager
	DELETED	DELETED	DELETED

D. SISTER PLANT RADIATION RESPONSE TEAM

	Telephone
1. Monticello Shift Supervisor	DELETED
2. Prairie Island Shift Supervisor	DELETED

E. SECURITY

	Telephone			
	Offic	Home	Pager	Mobile
	DELETED		DELETED	

SECTION II (Called as part of plant notification)

	Telephone	
A. EOF COORDINATOR Prairie Island	Office	Home

DELETED

DELETED

DELETED

	Telephone		
B. EOF COORDINATOR Monticello	Office	Home	Pager

DELETED

DELETED

DELETED

* EOF Coordinator Designees who are authorized to assume Emergency Manager responsibilities until the arrival of an Emergency Manager Designee.

SECTION III (Call as needed)

	Office	Home
1. Fuel Supply		
a. Admin. Fuel Supply Contracts		
b. Mgr. Fuel Supply		
2. Plant Engineering and Construction	DELETED	
a. Mech. Engr.		
b. Engineer		
c. Project. Supt.		
d. Proj. Mgr. - Fossil		
e. Asst. Electrical Eng.		
f. Prairie Island Project Manager		
g. Proj. Engr.	DELETED	
h. Monticello Project Manager		
i. Electrical Engr.		
j. Suprv. Eng. Nuc. Sect-Tech Serv		
k. Proj. Engr.		
l. Electrical Engr.		
m. Proj. Eng.		
n. Supv.-Mechanical Sect.		
o. Const. Supt-Monticello		
p. Const. Supt. Fossil Proj.	DELETED	
q. Const. Supt.		
r. Mech. Engr		
s. Sr. Mech. Engr.		
t. Supr. Eng. Elect Sect.-Tech Serv		
u. Proj. Engr.		
v. P I Intake/Discharge Proj. Mgr.		
3. Property Management		
a. Supr. Bldg Operation	DELETED	
b. Mgr. Property Mgmt.		
c. Supt-Bldg. Maint. & Operation		
4. Corporate Strategy & Planning		
Mgr. Corp. Strategy		
5. Directors, Officers & Staff		
Asst. to Sr VP-Power Supply		

	Office	Home
6. Power Production - Nuclear Analysis		
a. Supt - Core Analysis	DELETED	
b. Asst. Nuc. Analysis Engr.		
c. Asst. Nuc. Analysis Engr.		
d. Asst. Nuc. Analysis Engr.		
e. Asst. Nuc. Analysis Engr.		
7. Power Production - Nuclear Support Services		
a. Admin. Rad. Env. Monitor		
b. Asst. Admin. Emerg. Preparedness		
c. Nuc Safety & Tech Serv. Engr. Sr	DELETED	
d. Nuc Safety & Tech Serv. Eng.		
8. Nuclear Technical Services		
a. Sr. Production Engr.	DELETED	
9. Federal Public Affairs		
a. Mgr.-Spec Nuclear Programs	DELETED	
10. Power Production - Production Plant Maintenance		
a. Supt-Maint Coordinator		
b. Supt-Electrical Plants		
c. Supt-Materials & Spec. Proc.	DELETED	
d. Supt-Overhaul Serv.		
11. Quality Assurance Department		
a. Q A Engr.		
b. Q A Spec. III		
c. Supt Supplier QA		
d. Q A Spec. Sr.		
e. Supt-Nuclear QA	DELETED	
f. Q A Engr		
g. Q A Spec I		
h. Q A Engr.		

SECTION III (Call as needed) (Continued)

	Office	Home
12. Corporate Planning and Development		
a. Asst. to the V. P.	DELETED	
13. Power Production Performance & Services		
a. Gen. Supt. Prod. Perf. & Serv		DELETED

14. RECOVERY MANAGER

	Office	Home
DELETED (Monticello)	DELETED	
(Prairie Island)		

* These names are listed in the "NSP Management & Technical Resources" Manual. These persons have had experience or training that could be beneficial in case of a nuclear emergency.

FIGURE 1

NUCLEAR EMERGENCY NOTIFICATION LIST FOR SYSTEM CONTROL CENTER

Individual Reached

Yes No Time

___ ___ ___ 1. Emergency Director (Most likely Shift Supervisor) will notify System Control Center. If a Shift Emergency Communicator calls, request the name of the Emergency Director and the phone number where he can be reached.

___ ___ ___ 2. System Control Center notify Emergency Manager. Call first manager listed only. No answer - use pager or mobile phone number. If the first listed Emergency Manager can not be contacted within 5 minutes proceed on down the Emergency Manager list until one is reached.

		Telephone			
A. EMERGENCY MANAGER	Office	Home	Pager	Mobile ***

DELETED

DELETED

DELETED

DELETED

___ ___ ___ 3. Establish three way call with Emergency Director to verify type of emergency.

4. When the Emergency Director or Emergency Manager verifies the need for a corporate response, complete the Emergency Notification Message for NSP Response Organization (Figure 2). Request the Emergency Manager to specify, if in addition to communications, any of the following should be notified.

Power Production Mgmt. _____
Sister Plant Radiation Response Team _____
Security _____

5. Contact and read the notification message to the individuals specified by the Emergency Manager. (If the emergency is an Alert, Site Area Emergency, or General Emergency just continue on with this procedure.)

FOR NOTIFICATION OF UNUSUAL EVENT STOP HERE

* * * * * * * * * * * * * * * * * * *

___ ___ ___ 6. Call remaining Emergency Manager designees. Inform subsequent contacts that the Emergency Manager has been previously contacted and who that Emergency Manager is.

___ ___ ___ 7. Call out one individual in Power Production management. Telephone in order listed. Read message. Inform individual that he is the first person contacted.

B. P.P. MANAGEMENT	Office	Home	Pager
	DELETED	DELETED	DELETED

6. **

___ ___ ___ 8. Call one individual in Communications. Telephone in order listed. Read message.

C. COMMUNICATIONS	Office	Home	Pager
	DELETED	DELETED	DELETED

___ ___ ___ 9. Call Sister Nuclear Plant Shift Supervisor. Read message.

D. SISTER PLANT RADIATION RESPONSE TEAM	Telephone
1. Monticello Shift Supervisor	295-3739
2. Prairie Island Shift Supervisor	388-1121, Ext. 251 or 255

___ ___ ___ 10. Call one individual in Security. Telephone in order listed. Read Message.

	Telephone			
E. SECURITY	Office	Home	Pager	Mobile ***
	DELETED	DELETED		

___ ___ ___ 11. Call remaining Power Production Management. Read message.

___ ___ ___ 12. Log completion of "Notifications" procedure. Retain copies of completed Figure 1 and Figure 2.

* Major Area provided for use in attempting mobile telephone contact.

** Individuals listed as Emergency Managers may also function as Power Production Management if not required to fulfill Emergency Manager duties.

*** To make a telephone call to a mobile station dial the Bell telephone operator and ask for a mobile operator.

FIGURE 2

EMERGENCY NOTIFICATION MESSAGE FOR NSP RESPONSE ORGANIZATION

"This is the NSP General Office Systems Dispatcher. The following is a notification of an emergency.

There has been an incident at the _____
(Prairie Island) (Monticello)
Nuclear Generating Plant.

The incident was declared an (a)

_____
(Unusual Event) (Alert) (Site Area Emergency) (General Emergency)

at _____ on _____
(time) (date)

Sister plant radiation protection support teams _____ requested.
are/are not

SELECT AND COMPLETE MESSAGE AS FOLLOWS:

☐ Unusual Event
Communications Department take appropriate actions. Response facility activations are not required for this notification."

☐ Alert, Site Area Emergency, General Emergency

All personnel assigned duties in the corporate emergency response organization are to proceed to their assigned stations to activate the Corporate Emergency Response Plan."

NUCLEAR SUPPORT SERVICES DEPT NORTHERN STATES POWER COMPANY	CORPORATE NUCLEAR EMERGENCY PLAN IMPLEMENTING PROCEDURE NUMBER: EPIP 1.1.3 REV: 3
PREPARED BY: Gary Hudson Asst. Adm. Emergency Preparedness	EFFECTIVE DATE: October 8, 1982
REVIEWED BY: E C Ward Manager Nuclear Environmental Services	TITLE: 1.1.3 PUBLIC INFORMATION
APPROVED BY: General Manager Nuclear Plants	

1.0 PURPOSE AND OBJECTIVES

The purpose of this procedure is to establish the method by which the Nuclear Emergency Communications Program will be implemented during an emergency at the Monticello or Prairie Island nuclear power plants.

2.0 CONDITIONS AND PREREQUISITES

An emergency has been declared at an NSP nuclear power plant.

3.0 ORGANIZATION AND RESPONSIBILITIES

A. Overall Responsibility - Director of Communications.
B. In Charge - Supervisor-Media Services.

4.0 DISCUSSION

4.1 Annual dissemination of information to the public regarding how they will be notified and what their actions should be in an emergency is coordinated between NSP, state, and local organizations.

4.2 A program to acquaint news media with the emergency plans, information concerning radiation, and points of contact for release of public information in an emergency is conducted annually.

4.3 The above programs establish, in advance, information to be available in the home and the principal contacts for the news media.

5.0 RESPONSIBILITIES

5.1 DIRECTOR OF COMMUNICATIONS

1. Ensure the implementation and operation of the Nuclear Emergency Communications Program. A chart depicting the Director of Communication's organization is shown in Figure 1.

2. Provide Communications Department support to Power Production Management at the HQEC.

3. Verify that all actions specified in the Nuclear Emergency Communications Program are promptly initiated.

5.2 FIRST COMMUNICATIONS REPRESENTATIVE CONTACTED

1. The first member of the Emergency Communications Organization contacted by the System Dispatcher shall:

   a. Complete the specified instructions to activate the Nuclear Emergency Communications Program.

   b. Contact the Director of Communications, Supervisor-Media Services and Media Liaison, as applicable, and inform them of the emergency conditions.

   c. Proceed to the Corporate General Office to complete responsibilities assigned in the Nuclear Emergency Communications Program, as applicable.

5.3 SUPERVISOR-MEDIA INFORMATION

1. When informed of an emergency condition requiring activation of the Corporate Emergency Response Team, Supervisor-Media Services shall:

   a. If the first communications representative contacted, complete Section B of this procedure.

   b. Complete the actions specified in the Nuclear Emergency Communications Program.

   c. Direct the Media Liaison to proceed to the appropriate media contact point.

   d. Supervise the gathering of information and development of news releases.

   e. Provide the drafted news releases to the Director of Communications for review by Power Production Management.

f. Direct the dissemination of news releases and situation reports.

g. Coordinate with Power Production Management to prepare the scenario for and the conduct of formal news conferences.

h. Ensure that the Media Information Facility is ready to accommodate the media.

i. Verify that the Rumor Control procedures specified in the Nuclear Emergency Communications Program are implemented.

5.4 MEDIA LIAISON

1. When informed of an emergency condition requiring activation of the Corporate Emergency Response Organization, the Media-Liaison shall:

   a. If the first communications representative contacted, complete Section B of this procedure.

   b. Complete assigned tasks in the Nuclear Emergency Communications Program.

   c. When directed, proceed to the appropriate media contact point.

   d. Supervise the collection of information for news releases and press conferences.

   e. Prepare draft news releases and obtain Power Production Management approval of the technical content of all proposed news releases.

   f. Provide approved drafts to the Supervisor-Media Information.

   g. Provide an interface with any media personnel who arrive at the appropriate media contact point.

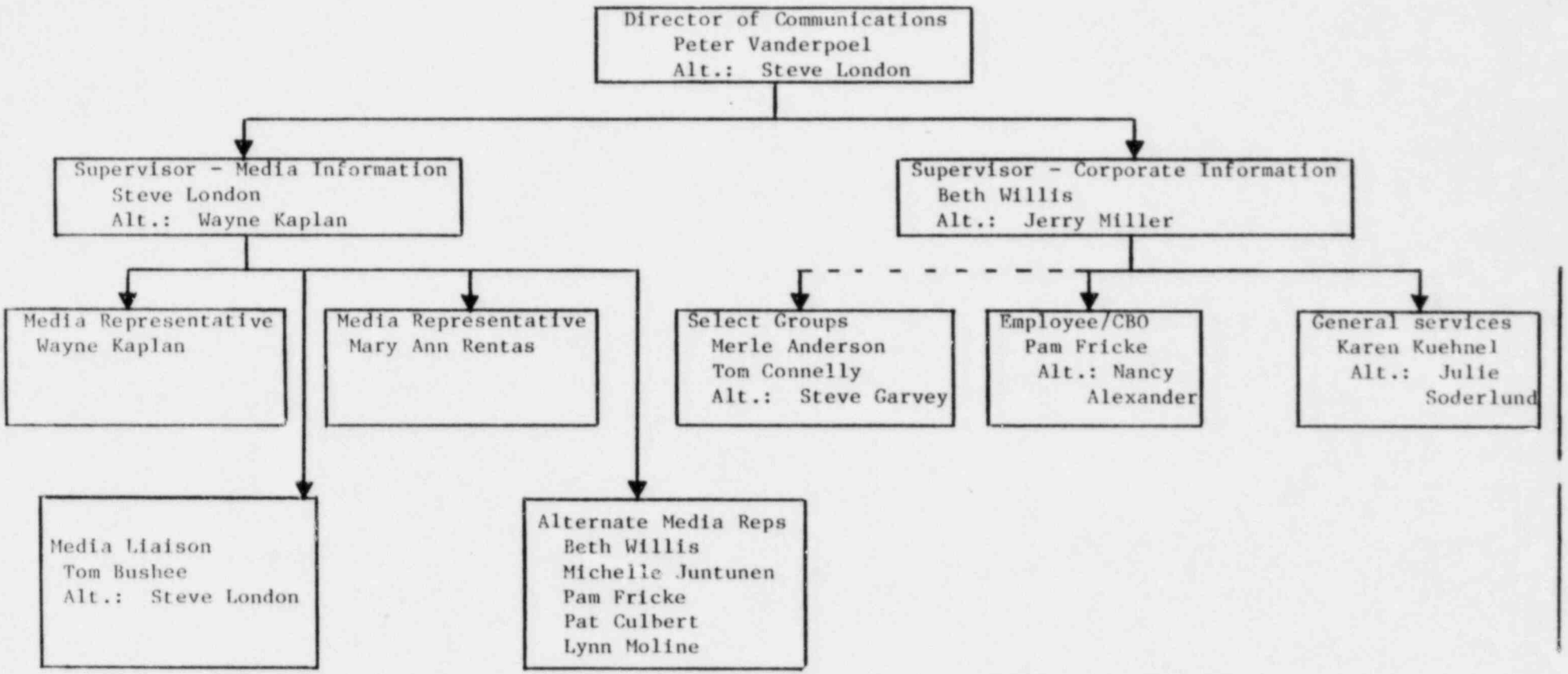
5.5 COMMUNICATIONS REPRESENTATIVES

1. When notified of an emergency condition requiring activation of the Corporate Emergency Response Organization, communications representatives shall:

   a. If the first representative contacted, complete Section B of this procedure.

   b. Complete assigned tasks in the Nuclear Emergency Communications Program.

EMERGENCY PUBLIC INFORMATION ORGANIZATION CHART



----- indicates information flow only

Figure 1

NUCLEAR SUPPORT SERVICES DEPT NORTHERN STATES POWER COMPANY	CORPORATE NUCLEAR EMERGENCY PLAN IMPLEMENTING PROCEDURE NUMBER: EPIP 1.1.5 REV: 6
PREPARED BY: Gary Hudson Asst. Adm. Emergency Preparedness	EFFECTIVE DATE: October 8, 1982
REVIEWED BY: EC Ward Manager Nuclear Environmental Services	TITLE: 1.1.5 STARTUP AND OPERATION OF EOF
APPROVED BY: General Manager Nuclear Plants	

1.0 PURPOSE AND OBJECTIVES

The purpose of the "Startup and Operation of EOF" procedure is to activate the EOF and specify the functions of corporate personnel staffing it.

2.0 CONDITIONS AND PREREQUISITES

An "Alert", "Site Area Emergency" or "General Emergency" condition has been declared by either the Prairie Island or Monticello Emergency Director and the Emergency Response Organization has been activated.

3.0 ORGANIZATION AND RESPONSIBILITIES

A. Overall Responsibility - Emergency Manager

B. In Charge - EOF Coordinator

C. Assistance - Radiation Protection Support Supervisor
- Technical Support Supervisor

4.0 RESPONSIBILITIES

The individual responsibilities of Corporate Personnel assigned to the EOF are specified in tabs attached to this procedure. The following tabs are included:

Position	Tab
• Emergency Manager duties	A
• Radiation Protection Support Supervisor duties	B
• EOF Coordinator duties	C
• Communication Coordinator duties	D
- Prairie Island EOF Offsite Communicator	D1
- Prairie Island EOF Radiological/Meteorological Communicator	D2

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Position	Tab
- Prairie Island EOF Technical Support Communicator	D3
- Monticello EOF Offsite Communicator	D4
- Monticello EOF Radiological/ Meteorological Communicator	D5
- Monticello EOF Technical Support Communicator	D6
• Logistics Coordinator duties	E
• Security Force duties	F
• Records duties	G
• Technical Support Supervisor duties	H

TAB A

EMERGENCY MANAGER DUTIES

1. Contact the plant Emergency Director and determine the extent of the emergency and the need for offsite radiation protection support. Determine the message to be relayed to the emergency response organization.

2. Provide the System Dispatcher with the information required to complete the "Emergency Notification Message for NSP Response Organization," Figure 2, EPIP 1.1.2, "Notifications". Direct the System Dispatcher to complete the "Notifications" procedure, EPIP 1.1.2.

3. Proceed to the affected plant's EOF and assume control of the offsite organization as follows:

   a. Upon arrival at the EOF, review the status of the emergency organization at the EOF.

   b. If the EOF is already functioning as the center for control of offsite activities, conduct the "Emergency Organization Shift Turnover", procedure EPIP 1.1.6, for the Emergency Manager position, then proceed to Step 6. If the Emergency Manager position has not been staffed, proceed to Step 3.c.

   c. Contact the Emergency Director. Determine the extent of offsite operations presently in progress and any considered necessary but not yet initiated.

   d. When familiar with the operations at the EOF and the offsite organization activities, and when the EOF is ready to assume full responsibility for offsite activities, inform the Emergency Director that the EOF is ready to assume control of the offsite organization. Transfer of control of offsite activities shall be formally documented by the Recorder.

   e. Direct the Communications Coordinator (5) to inform offsite agencies of the transfer of control of offsite activities and communications to the EOF.

4. Assess the need for any offsite radiation protection monitoring. Consider the potential for any radioactive release and the probable time lag to initiate offsite monitoring. If there is a potential need for offsite monitoring and the offsite radiation support team was not activated in the initial corporate activation, contact the Sister Plant Shift Supervisor and direct him to activate the Offsite Radiation Protection Support Team in accordance with the individual plant's response procedure for an emergency at the sister plant.

5. Assign personnel, as available, to perform the following functions. (If the position is already filled, additional assignments are not required.)

   a. EOF Coordinator
   b. Radiation Protection Support Supervisor
   c. Technical Support Supervisor

6. Direct the Radiation Protection Support Supervisor to obtain all applicable offsite survey information available at the TSC and to implement the "Offsite Survey" procedure, EPIP 1.1.10.

7. Provide direct interface with the NRC and, if necessary, the Department of Energy.

8. Direct the Communications Coordinator to establish communications with the state and county EOCs (EPIP 1.1.8, "Communications Equipment and Information", provides guidelines for available means of communication). Ensure that these groups have been informed that all communications will be coordinated through the EOF Command Center.

9. Determine the necessity for any assistance from vendors, consultants or outside agencies. Direct the Logistics Coordinator to notify primary vendors in accordance with EPIP 1.1.14, "Vendor/Consultant/Outside Agency Interface". If additional assistance is necessary, direct the Logistics Coordinator to procure services in accordance with EPIP 1.1.9, "Emergency Processing of Purchase Orders" and EPIP 1.1.14, "Vendor/Consultant/Outside Agency Interface."

10. Implement EPIP 1.1.11, "Accident Assessment" based on the information gathered by the Radiation Protection Support Group (survey results and offsite dose estimates), provide recommendations to the Emergency Director, HQEC and State EOC as to the extent of offsite releases and the potential need for protective actions.

11. Provide routine status reports to the HQEC, state, and the NRC. The following forms should be used:
    - Emergency Classification Change Figure 1, EPIP 1.1.5, "Start-up and Operation of EOF".
    - Emergency Notification Follow-up Message Figure 2, "Start-up and Operation of EOF".
    - Offsite Protective Action Recommendation Checklist Figure 1, EPIP 1.1.10, "Accident Assessment".

12. Prior to, or simultaneously with, telephoning or telecopying a protective action recommendation to the state(s):

    - If at Monticello
      Initiate a 2-way phone call between the EM and the Minnesota Team Coordinator and explain the basis for the recommended protective action.

- If at Prairie Island
  Initiate a 3-way conference call between the EM, the Minnesota Team Coordinator and the Wisconsin State Radiological Coordinator and explain the basis for the recommended protective action.

13. Instruct all support groups to report the status of all activities in progress at specified intervals.
    a. Technical Support Group
    b. EOF Coordinator
    c. Radiation Protection Support Supervisor

14. Direct the EOF staff to provide engineering, radiation protection and general support services as requested by the Emergency Director.

15. Implement EPIP 1.1.12, "Implementation of Emergency Radiological Environmental Monitoring Program", in accordance with recommendations from the Radiation Protection Support Supervisor and guidelines provided in the procedure.

16. Through discussions with Power Production Management, the Emergency Director and the Recovery Manager determine if there will be a need for the Recovery Organization. This decision should consider the plant status and the estimated long term efforts required to return the plant to an operable condition as well as the effect of the emergency on the surrounding area and the necessary efforts to correct any damage. If a recovery effort is necessary, request that the Recovery Manager prepare the recovery organization. Provide input to the Recovery Manager, as necessary, to facilitate preparation of the Recovery Organization, in accordance with EPIP 1.1.15, "Transition to the Recovery Phase".

17. If notified by the Emergency Director that an evacuation of site personnel is required due to a radiological contaminating event, implement EPIP 1.1.16, "Offsite Personnel and Vehicle Monitoring and Decontamination".

18. When the emergency condition is over, the plant in a stable condition, all releases terminated and there is no potential for additional release, operation of the Emergency Organization may be concluded. The Emergency Manager shall contact Power Production Management and the Emergency Director and verify that all members agree that the emergency condition can be terminated. If all are in agreement, the Emergency Manager shall direct the Emergency Director to reclassify the emergency condition as applicable.

19. Ensure that all appropriate individuals and agencies are notified that the emergency has been terminated & whether or not a recovery phase will be initiated.

20. Upon completion of the "Transition to the Recovery Phase" procedure, direct the EOF Coordinator to verify that the EOF equipment is inventoried and the equipment lockers are returned to a standby status.

TAB B

RADIATION PROTECTION SUPPORT SUPERVISOR DUTIES

1. When notified of the need to activate the offsite radiation protection support team, the sister plant Superintendent, Radiation Protection shall verify that the sister plant support team has been notified in accordance with the applicable plant procedure. He shall assume the responsibilities of the Radiation Protection Support Supervisor upon arrival at the EOF.

2. Upon arrival at EOF the Radiation Protection Support Supervisor shall contact the onsite Radiological Emergency Coordinator at the TSC and determine the extent of the radiological surveys that have been completed, offsite dose estimates, and any exclusion areas that have been established.

3. When familiar with the offsite survey activities in progress, assume responsibility for the control and coordination of offsite survey teams.

4. Dispatch survey teams to conduct surveys in accordance with the "Offsite Survey" procedure, EPIP 1.1.10.

5. Request the Offsite Communicator to contact the State EOC and establish an interface with the State Health official in charge of the State field teams and the State accident assessment operations. Obtain any available data that the State has determined concerning offsite doses or field survey results. Use this data to provide additional information for the development of the plume map in accordance with EPIP 1.1.11, "Accident Assessment".

   The following forms should be used to transfer information to the State EOC.

   - Emergency Classification Change Figure 1, EPIP 1.1.5, "Start-up and Operation of EOF".
   - Emergency Notification Follow-up Message Figure 2, "Start-up and Operation of EOF".
   - Offsite Protective Action Recommendation Checklist Figure 1, EPIP 1.1.10, "Accident Assessment".

6. Ensure the CAM is monitoring the EOF atmosphere and provide routine updates to the EOF Coordinator or Emergency Manager concerning the habitability of the EOF as necessary. Activation and operation instructions for the CAM and the emergency ventilation system are located in EPIP 1.1.17, Personnel Monitoring at the EOF.

7. Ensure that dosimetry for EOF personnel is being issued, collected and recorded in accordance with EPIP 1.1.17, "Personnel Monitoring at the EOF".

8. When radiation protection field teams forward survey results, log the data on an Emergency Sample Results Form, Figure 1 of EPIP 1.1.10 and supervise the development of the plume map in accordance with EPIP 1.1.11, "Accident Assessment".

9. At specified intervals prepare status reports of operations in progress for the Emergency Manager. The report should cover the extent of surveys conducted, dose estimates based on surveys, any recommendations for evacuation of personnel in plume path, average hourly dose to radiation protection personnel, additional personnel required and any significant problems of a radiation protection nature.

10. Based on information obtained from offsite surveys, provide recommendations to the Emergency Manager concerning the necessity for protective actions. EPIP 1.1.11, "Accident Assessment", provides guidance for protective actions.

11. Assume responsibility for the HPN Line and provide information to the NRC as required.

12. Provide recommended evacuation routes for plant personnel in the event that a site evacuation is required. If evacuated plant personnel require monitoring or decontamination, implement EPIP 1.1.16, "Offsite Personnel and Vehicle Monitoring and Decontamination."

13. Provide recommendations to the Emergency Manager as to the need to implement the "Emergency Radiological Environmental Monitoring Plan", EPIP 1.1.12. If the Emergency Radiological Environmental Monitoring Plan is implemented, provide dosimetry for the assigned personnel and inform them of any radiological problems in the areas in which they will be working.

14. Upon termination of the emergency condition, direct the survey teams to return all equipment items to the trailer and radiological equipment lockers. Conduct an inventory of the emergency trailer contents and requisition any equipment necessary to return equipment to a standby status.

TAB C

EOF COORDINATOR DUTIES

1. Pick up keys at the plant guardhouse to gain access to the Training Center and the EOF. If you have access to the Training Center but not the EOF, there is a glass-covered key located outside the door of the EOF. Break the glass and use this key to open the EOF. Ensure the training building classroom entrance is locked and place on the door a sign directing EOF personnel to the side entrance.

2. Turn on the CAM to determine airborne levels and activate the emergency ventilation procedure (activation and operation instructions are located in EPIP 1.1.17, Personnel Monitoring at the EOF). If levels are above normal, inform the Radiation Protection Support Supervisor and the Emergency Manager.

3. Contact each member of the Nuclear Technical Services Group and Production Training Group assigned to the affected plant. These individuals are listed in Section II, Tab A, EPIP 1.1.2, "Notifications". Inform each individual of the emergency condition and direct them to proceed to the EOF immediately. This group will form the initial staff to initiate EOF activities.

4. If you are listed, in EPIP 1.1.2 TAB A Section II, as authorized to assume Emergency Manager responsibilities until the arrival of an Emergency Manager Designee, implement TAB A EPIP 1.1.5 Emergency Manager Duties.

5. Assign personnel as necessary to the following positions and supervise their activities. (If any position is not delegated to another individual, the EOF Coordinator shall assume those duties.)

   a. Communication Coordinators
      - Offsite Communicator
      - Technical Support Communicator
      - Radiological/Meteorological Communicator

   b. Records
      - Recorder
      - Clerk
      - Messenger

   c. Security Guards
   d. Logistics Coordinator

6. Assign Security Force personnel to guard the front and rear accesses to the EOF. If the security force personnel have not arrived at the EOF, assign available personnel to act as guards until the designated force has arrived. A Corporate Security Department individual, on arrival, will assume responsibility for supervision of contract guards. Specify the areas to which access should be controlled.

Provide the guard at the EOF entrance with a copy of the "Personnel Monitoring at the EOF",procedure, EPIP 1.1.17. Direct the guard to issue and collect personal dosimetry in accordance with the procedure and to record the pertinent data on the EOF Entry Log EPIP 1.1.17, Figure 1. A security force checklist is provided in Tab F of this procedure.

7. Complete, or if delegated, direct the activities of the individual assigned responsibility for maintaining EOF records. Verify that the "Emergency Organization Records and Forms" procedure, EPIP 1.1.4, has been implemented.

8. Direct the activities of the Logistics Coordinator to arrange food and lodging, as necessary, for the EOF staff. The Logistics Coordinator's duties are listed in TAB E of this procedure.

9. Determine a shift rotation that will allow staffing of the EOF on a 24 hour basis.

10. If necessary, request HQEC to supply a Communications Department representative as soon as possible.

11. Provide portable radios to the EOF security guards.

12. If the RPSS position has not been staffed, verify the habitability of the EOF by ensuring the CAM is operating or by having an EOF air sample taken and analyzed at frequent intervals. Consult EPIP 1.1.13, Evacuation of the EOF, and EPIP 1.1.17, Personnel Monitoring at the EOF, TABS B & C.

13. Prepare regular status reports for the Emergency Manager concerning the status of manning the EOF and any problems concerning the EOF operation or logistics.

14. If any radio or telephone equipment malfunctions, contact the HQEC and request that they obtain someone to service the equipment. If unable to contact the HQEC, contact the following:

    Monticello
    Radio - Granite City Electronics
    Telephone - Service

    DELETED

    Prairie Island
    Radio - Folsom Electronics
    Telephone - Service

    DELETED

15. Upon termination of the emergency condition, supervise the inventory of equipment and transition of the EOF to a standby status.

16. Secure the EOF and Training Center.

TAB D1

PRAIRIE ISLAND EOF OFFSITE COMMUNICATOR DUTIES

A. When authorized by the Emergency Manager or EOF Coordinator, establish communications with the following organizations using the auto-ring hotlines or telephone numbers. Inform them that the EOF has assumed responsibility for coordinating offsite activities and all requests for information and transmission of data should now be directed to the EOF.

1. HQEC

DELETED

(telecopier number)

2. Minnesota State EOC
- Auto-ring Hotline

DELETED (telecopier)
(accident assessment Minnesota Team Coordinator)

(*These numbers are activated only when the State EOC is operational)

3. Wisconsin State EOC

DELETED (telecopier)
(accident assessment Wisconsin State Radiological Coordinator)

4. Local EOCs
- Goodhue County

DELETED

- Dakota County

DELETED

- Pierce County Wisconsin

DELETED

TAB D1

PRAIRIE ISLAND EOF OFFSITE COMMUNICATION DUTIES (con't.)

B. Re-classification or close-out of Emergencies
When there is a classification change (escalation, reduction, or close-out) that has been approved by the Emergency Manager, using the Emergency Classification Change Form Figure 1, EPIP 1.1.5 contact:

1. Local County EOCs and read them the message

2. Read the message and then telecopy the form as time and equipment permits to the:
   - State EOCs
     - Minnesota Department of Health
     - Wisconsin Division of Radiation Protection
   - HQEC

3. Verify that the telecopies have been received by the State EOCs and the HQEC.

C. Radiological or Meteorological Data
When the Emergency Manager or the Radiation Protection Support Supervisor authorize transmittal of radiological or meteorological data, use the Emergency Notification Follow-up Message Figure 2 of EPIP 1.1.5 and

1. Telecopy the form to the:
   - State EOCs
     - Minnesota Deptartment of Health
     - Wisconsin Division of Radiation Protection

2. Verify that the telecopies have been received by the State EOCs and the HQEC.

D. Protective Action Recommendation
When a Protective Action Recommendation Checklist Figure 1, EPIP 1.1.11 has been prepared by the Radiation Protection Support Supervisor and approved by the Emergency Manager:

1. Telecopy the form to the:
   - State EOCs
     - Minnesota Department of Health
     - Wisconsin Division of Radiation Protection

   (A telephone call between the EM and the Health Department Coordinators will either precede or be simultaneous with this telecopy.)
   - HQEC

2. Verify that the telecopies have been received by the State EOCs and the HQEC.

TAB D1

PRAIRIE ISLAND EOF OFFSITE COMMUNICATION DUTIES (Con't.)

E. Monitor offsite communication links and forward all data or information requests from state or local organizations to the Emergency Manager.

F. Standardized forms for message transfers should be used whenever possible. (EPIP 1.1.4 Emergency Organization Records and Forms.) After the message has been transferred, forms should be given to the Recorder.

G. For messages that are sent or received and that cannot be accomplished by using a standardized form, a 3-color carbon copy interoffice communication form should be used. Carbons shall be maintained as follows:

- white copy to address individual
- yellow copy to the Recorder
- pink copy to records basket

H. Periodically update the state & local EOCs with available information, or simply indicate there is no change from the latest information they received.

TAB D2

PRAIRIE ISLAND EOF RADIOLOGICAL/METEOROLOGICAL COMMUNICATOR

A. Establish communications with the Radiological Emergency Coordinator at the TSC.

DELETED

DELETED

B. Using an Emergency Notification Follow-up Message and an Emergency Sample Results Log, determine the extent of offsite surveys and obtain both present and prior radiological and meteorlogical data from the TSC. The Radiation Protection Support Group will use this information to trend the course of the accident.

C. As available information permits, assist the Radiation Protection Support Supervisor or Emergency Manager in completing the following forms.

1. Emergency Notification Follow-up Message
   Figure 2 of EPIP 1.1.5
2. Emergency Sample Results Log
   Figure 1 of EPIP 1.1.10
3. Offsite Protective Action Recommendation Checklist
   Figure 1 of EPIP 1.1.11

D. When the above forms are completed and approved by the Emergency Manager they should be given to the Offsite Communicator for transmittal to offsite agencies.

E. Standardized forms for message transfers should be used whenever possible. (EPIP 1.1.4 Emergency Organization Records & Forms.) After the message has been transferred, forms should be given to the recorder.

F. For messages that are sent or received and that cannot be accomplished by using a standardized form, a 3-color carbon copy interoffice communication form should be used. Carbons shall be maintained as follows:

- white copy to address individual
- yellow copy to the Recorder
- pink copy to records basket

TAB D3

PRAIRIE ISLAND EOF TECHNICAL SUPPORT COMMUNICATOR

A. Establish communications with the Engineers or Technical Support at the TSC. (The control room may establish a 3-way link between the EOF, TSC, and the control room for updating plant status.)

DELETED

DELETED

B. Determine the plant status and obtain technical data both present and prior, for the EOF & HQEC Technical Support Groups to trend the course of the accident. A Plant Data form should be used for obtaining the required information.

C. Update the Plant Status Board as new information becomes available.

D. Establish communications with the Technical Support Group at the HQEC and convey plant status and technical data for HQEC Plant Status Board.

1. Auto Ring Hotline
(or direct 4 digit if a 330 prefix)

DELETED

E. Standardized forms for message transfers should be used whenever possible. (EPIP 1.1.4 Emergency Organization Records & Forms.) After the message has been transferred, forms should be given to the recorder.

F. For messages that are sent or received and that cannot be accomplished by using a standardized form, a 3-color carbon copy interoffice communication form should be used. Carbons shall be maintained as follows:

- white copy to address individual
- yellow copy to the Recorder
- pink copy to records basket

TAB D4

MONTICELLO EOF OFFSITE COMMUNICATOR DUTIES

A. When authorized by the Emergency Manager or EOF Coordinator, establish communications with the following organizations using the auto-ring hotlines or telephone numbers. Inform them that the EOF has assumed responsibility for coordinating offsite activities and all requests for information and transmission of data should now be directed to the EOF.

1. HQEC

DELETED

(Telecopier number)

2. Minnesota State EOC
   Auto-ring Hotline
   (Telecopier)
   DELETED (Accident assessment Minnesota Team Coordinator)
   (*These numbers are activated only when the State EOC is operational.)

3. Local EOC
   - Wright County
   - Sherburne County

B. Re-classification or close-out of Emergencies
When there is a classification change (escalation, reduction, or close-out) that has been approved by the Emergency Manager, using the Emergency Classification Change Form Figure 1 EPIP 1.1.5 contact:

1. Local County EOC and read them the message

2. Read the message and then telecopy the form as time and equipment permits to the:
   - State EOC
     - Minnesota Department of Health
   - HQEC

3. Verify that the telecopies have been received by the State EOC and the HQEC.

TAB D4

MONTICELLO EOF OFFSITE COMMUNICATION DUTIES (con't)

C. Radiological or Meteorological Data
When the Emergency Manager or the Radiation Protection Support Supervisor authorize transmittal of radiological or meteorological data, use the Emergency Notification Follow-up Message Figure 2 of EPIP 1.1.5 and

1. Telecopy the form to the:
   - State EOC
     - Minnesota Department of Health
   - HQEC

2. Verify that the telecopies have been received by the State EOC and the HQEC.

D. Protective Action Recommendation
When a Protective Action Recommendation Checklist Figure 1, EPIP 1.1.11 has been prepared by the Radiation Protection Support Supervisor and approved by the Emergency Manager:

1. Telecopy the form to the:
   - State EOC
     - Minnesota Department of Health

   (A telephone call between the EM and the Health Department Coordinator will either precede or be simultaneous with this telecopy.)

   - HQEC

2. Verify that the telecopies have been received by the State EOC and the HQEC.

E. Monitor offsite communication links and forward all data or information requests from state or local organizations to the Emergency Manager.

F. Standardized forms for message transfers should be used whenever possible. (EPIP 1.1.4 Emergency Organization Records and Forms.) After the message has been transferred, forms should be given to the Recorder.

G. For messages that are sent or received and that cannot be accomplished by using a standardized form, a 3-color carbon copy interoffice communication form should be used. Carbons shall be maintained as follows:

- white copy to address individual
- yellow copy to the Recorder
- pink copy to records basket

H. Periodically update the state & local EOCs with available information, or simply indicate there is no change from the latest information they received.

TAB D5

MONTICELLO EOF RADIOLOGICAL/METEOROLOGICAL COMMUNICATOR

A. Establish communications with the Radiological Emergency Coordinator at the TSC.

B. Using an Emergency Notification Follow-up Message and an Emergency Sample Results Log, determine the extent of offsite surveys and obtain both present and prior radiological and meteorlogical data from the TSC. The Radiation Protection Support Group will use this information to trend the course of the accident.

C. As available information permits, assist the Radiation Protection Support Supervisor or Emergency Manager in completing the following forms.

1. Emergency Notification Follow-up Message
   Figure 2 of EPIP 1.1.5
2. Emergency Sample Results Log
   Figure 1 of EPIP 1.1.10
3. Offsite Protective Action Recommendation Checklist
   Figure 1 of EPIP 1.1.11

D. When the above forms are completed and approved by the Emergency Manager they should be given to the Offsite Communicator for transmittal to offsite agencies.

E. Standardized forms for message transfers should be used whenever possible. (EPIP 1.1.4 Emergency Organization Records & Forms.) After the message has been transferred, forms should be given to the recorder.

F. For messages that are sent or received and that cannot be accomplished by using a standardized form, a 3-color carbon copy interoffice communication form should be used. Carbons shall be maintained as follows:

- white copy to address individual
- yellow copy to the Recorder
- pink copy to records basket

TAB D6

MONTICELLO EOF TECHNICAL SUPPORT COMMUNICATOR

A. Establish communications with the Engineers or Technical Support at the TSC. (The control room may establish a 3-way link between the EOF, TSC, and the control room for updating plant status.)

DELETED

B. Determine the plant status and obtain technical data both present and prior, for the EOF & HQEC Technical Support Groups to trend the course of the accident. A Plant Data form should be used for obtaining the required information.

C. Update the Plant Status Board as new information becomes available.

D. Establish communications with the Technical Support Group at the HQEC and convey plant status and technical data for HQEC Plant Status Board.

1. Auto Ring Hotline
(or direct 4 digit if a 330 prefix)

DELETED

E. Standardized forms for message transfers should be used whenever possible. (EPIP 1.1.4 Emergency Organization Records & Forms.) After the message has been transferred, forms should be given to the recorder.

F. For messages that are sent or received and that cannot be accomplished by using a standardized form, a 3-color carbon copy interoffice communication form should be used. Carbons shall be maintained as follows:

* white copy to address individual
* yellow copy to the Recorder
* pink copy to records basket

TAB E

LOGISTICS COORDINATOR DUTIES

1. Provide office support supplies to facilitate recordkeeping.

   a. Pens/Pencils/Markers
   b. Writing paper/Note pads
   c. Reproduction paper
   d. Recording tapes

2. Provide special forms and charts as necessary to support EOF operation. (EPIP 1.1.4 Emergency Organization Records & Forms)

3. Provide additional office supplies as necessary. If additional supplies are required, make arrangements to obtain equipment from corporate offices or requisition necessary supplies in accordance with the "Emergency Processing of Purchase Orders", EPIP 1.1.9.

4. As required, arrange for mobile food/beverage delivery or with commissary vendors to supply prepared food for the number of personnel assigned to the EOF.

5. If directed by the Emergency Manager, verify that the plant's NSSS primary vendor and architect engineer have been notified in accordance with EPIP 1.1.14, "Vendor/Consultant/Outside Agency-Interface". If additional assistance is required, request or procure services as directed in accordance with EPIP 1.1.9, "Emergency Processing of Purchase Orders".

6. If long term arrangements are necessary and a substantial number of additional personnel will be assigned to the site, make arrangements for the needed equipment to be supplied to the EOF, as requested.

TAB F

EOF SECURITY FORCE DUTIES

Note: Supervision of contract guards will be performed by the EOF coordinator or on arrival, a Corporate Security Department individual.

1. Security Force members (or available personnel) assigned to the following areas:

   a. EOF - rear guard
   b. EOF - front guard

2. Two-way radio supplied to each guard and the EOF Coordinator.

3. Copy of the EOF Security Force Duties supplied to each guard.

4. Access list supplied to the Command Center Guard. The access list should consist of the "Notifications" call list, EPIP 1.1.2, Tab A, Sections I and II. Additional individuals requiring Command Center access may be added as necessary, by the EOF Coordinator.

5. Access list supplied to the EOF area guard. The list should consist of the "Notifications" call list. EPIP 1.1.2 Tab A, Section I, II and III. Additional individuals requiring access to the EOF may be added as necessary by the EOF Coordinator.

6. Copy of EPIP 1.1.17, "Personnel Monitoring at the EOF" and Entry Log Forms supplied to the Area Guard.

7. Security guards directed as follows:

   a. Only individuals on the access list should be admitted to the area.

   b. NSP personnel should have an employee identification.

   c. Non-NSP employees, such as state or local officials, NRC representatives, or vendors, will be added to the access list as necessary by the EOF Coordinator.

   d. Maintain running total of individuals in the EOF area.

   e. Complete Entry Log for each individual entering the EOF in accordance with EPIP 1.1.17, "Personnel Monitoring at the EOF".

TAB G

RECORD DUTIES

Recorder

1. As a message form, or information is given to you, write the following on a flip chart.

   - Time of message, information, or activity (military)
   - Summary of Event, message, information, or activity

2. When you have completed the entry on the flip chart, place all messages or forms in the records basket.

Messenger(s)

1. Pick up messages and forms, make the required copies, distribute as necessary.

2. Assist EOF personnel in message and information transfer.

3. Contents of baskets marked Recorder should be taken to the Recorder for entry on the flip chart.

4. Contents of baskets marked Messages should be given to the address individual.

5. Contents of the basket marked Records should be given to the records Clerk.

Clerk

1. Records should be consolidated and filed to provide a permanent history of activities and events. These records may be used to assist management in decision making functions and to provide a reference for final reports.

2. Ensure that the following records are maintained, as applicable.

   a) Narrative Log
   b) Logistics Coordinator Information Sheets
   c) Emergency Sample Results Log
   d) Emergency Classification Change
   e) Emergency Notification Followup Message
   f) Offsite Protective Action Recommendation Checklist
   g) Whole Body Survey Form

TAB G

RECORD DUTIES (Con't.)

h) Vehicle Survey Form
i) EOF Entry Log
j) Individual Exposure Records
k) Tapes of meetings or conversations
l) Three - carbon inter-office communications form

3. Periodically obtain the flip chart information and prepare a Narrative Log.

4. The Narrative Log, Figure 1, EPIP 1.1.4, should be maintained as follows:

a) An entry for each significant event, conversation, decision or action shall be made.

b) The entries shall be made in chronological order.

c) Each entry shall include the time of the event and a brief summary of the event or action.

d) As each page is completed, it shall be sequentially numbered and filed in a loose-leaf binder.

e) In some cases, an entry may be made out of sequence. In these cases, an asterisk should precede the time and the words "late entry" used to start the summary.

5. Periodically the Narrative Log should be copied and distributed to the Emergency Manager, Radiation Protection Support Supervisor, EOF Coordinator, Technical Support Supervisor and the EOF Media Liaison.

TAB H

EOF TECHNICAL SUPPORT SUPERVISOR DUTIES

1. If unavailable in the Training Center Library move the following necessary manuals, publications & prints to assist in analysis of plant conditions.

    a. USAR Volumes
    b. Technical Specifications
    c. Plant ACDs
    d. Operation Manuals
    e. Plant Logic Diagrams
    f. Plant Flow Diagrams
    g Controlled Drawing Index
        - Vendor
        - Domestic
        - Manufacturer Drawing No. Cross Reference

    h. Aperture Cards
    i. Notepad Terminal and Paper
    j. Power Production ACDs
    k. Power Production AWIs

2. Provide technical analysis as requested by the Emergency Manager.

3. Provide an interface with vendor and NRC technical analysts who are located at the EOF.

4. Assume responsibility for the ENS line and provide information to the NRC as required.

5. Provide information to the HQEC Technical Support Group.

6. Supervise the efforts of the technical support staff at the EOF.

7. Use available information for trending the course of the emergency.

FIGURE 1
EMERGENCY CLASSIFICATION CHANGE

Verify that the organization/person called is correct prior to relaying emergency information.

THIS IS _____ (Name), _____ (Title) AT THE

_____ (Plant) NUCLEAR GENERATING PLANT.

WE HAVE RE-CLASSIFIED THE EVENT AND

- ☐ Escalated
- ☐ Down-graded
- ☐ The Event May Be Terminated

TO A(N)

- ☐ Notification of Unusual Event
- ☐ Alert
- ☐ Site Area Emergency
- ☐ General Emergency

EXAMPLE ONLY
USE
CURRENT REVISION

at _____ (time) hours

METEOROLOGICAL CONDITIONS AT THE PRESENT TIME ARE AS FOLLOWS:

Wind Direction is from the _____ (Direction) AT _____ (Speed) MPH

Form of Precipitation _____ (if applicable)

THE AFFECTED SECTOR(S) IS(ARE) _____ (list sector(s) by letter designation)

Give a brief description of the emergency:

_____

_____

PLEASE RELAY THIS INFORMATION TO YOUR EMERGENCY ORGANIZATION PERSONNEL.

Emergency Director/Manager Approval _____ (Name/Date)

Emergency Communicator _____ (Name/Date)

FORM 17-4911

FIGURE 2

EXAMPLE ONLY
USE
CURRENT REVISION

EMERGENCY NOTIFICATION FOLLOWUP MESSAGE*

Date _____

Sample Time _____ AM/PM

1. Location of incident: _____
(Monticello - Prairie Island)

2. Class of emergency: _____

3. Type of release:
( ) actual
( ) potential
( ) airborne
( ) waterborne
( ) surface spill

4 Height of release:
( ) ground level
( ) 100 meters (stack) (Monticello only)

Relative quantity:
_____% Noble Gases _____uCi/sec
_____% Iodines _____uCi/sec
_____% Particulates _____uCi/sec

Estimated quantity of radioactive material released or being released: _____ curies

5. Meteorological Conditions: Wind Velocity _____mph
Wind Direction (from): _____ degrees Temperature _____ °C
Atmospheric Stability Class _____ Form of precipitation _____

6. Release is expected to continue for _____ hours
(hours)

7. Projected dose rates:

	Whole Body		Thyroid		Sectors Affected
S. B.	_____	mrem/hr	_____	mrem/hr	_____
2 miles	_____	mrem/hr	_____	mrem/hr	_____
5 miles	_____	mrem/hr	_____	mrem/hr	_____
10 miles	_____	mrem/hr	_____	mrem/hr	_____

Projected integrated dose at:

S. B.	_____	mrem	_____	mrem	_____
2 miles	_____	mrem	_____	mrem	_____
5 miles	_____	mrem	_____	mrem	_____
10 miles	_____	mrem	_____	mrem	_____

*Complete as much of the form as information availability and time allows. All blanks need not be completed.

FIGURE 2

EMERGENCY NOTIFICATION FOLLOWUP MESSAGE* (Con't.)

8. Survey Results

TIME	SURVEY POINT	READING

EXAMPLE ONLY
USE
CURRENT REVISION

9. Estimate of any surface radioactive contamination: _____ dpm/100 cm^2

10. Chemical and physical form of released material: _____

11. Emergency response actions underway: _____

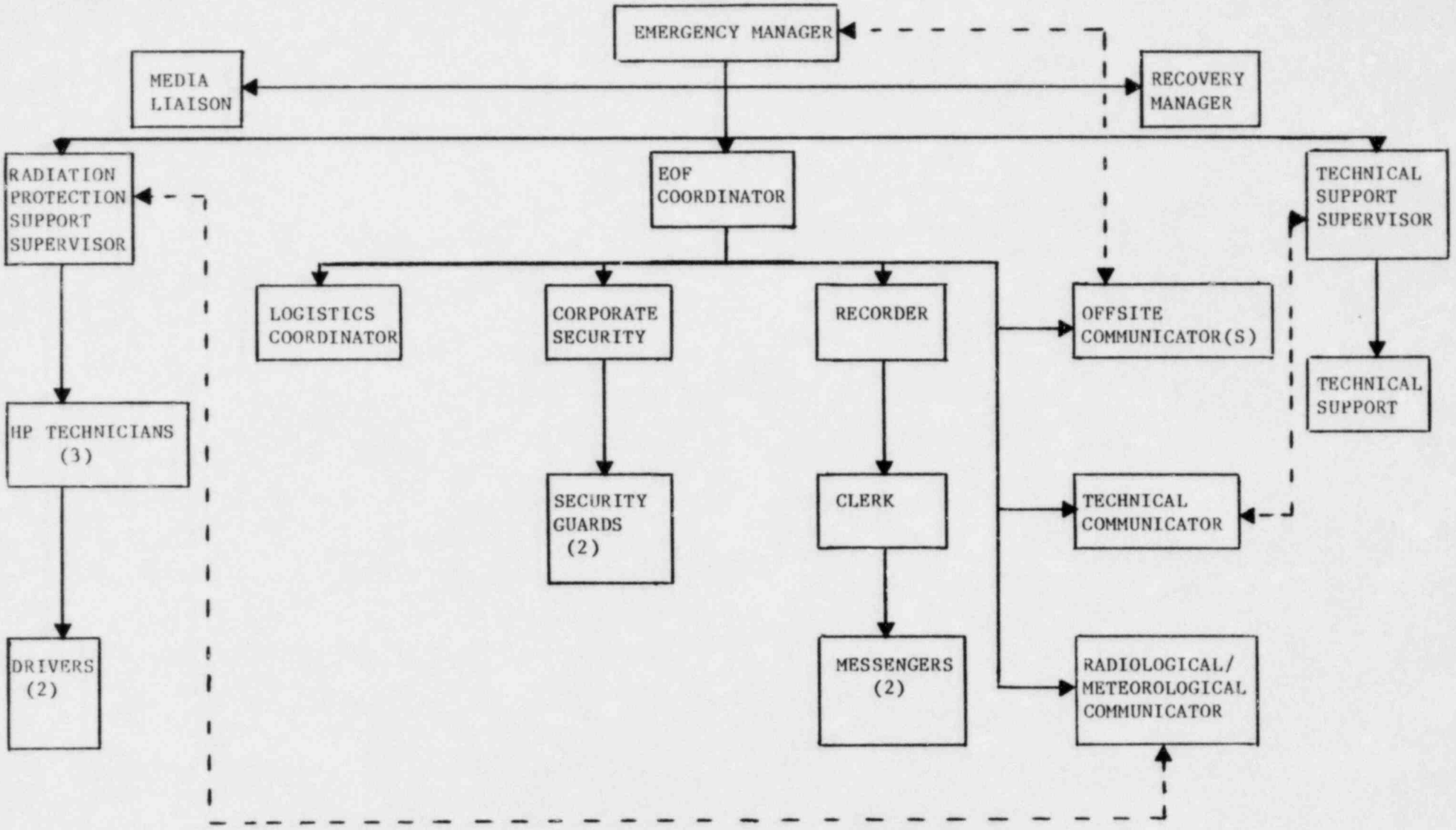
12. For liquid release to the River, estimate release volume, release activity and estimated time for concentration to reach public water:

13. Recommended emergency actions, including protective actions:

14. Request for any needed support by offsite organizations:

15. Prognosis for worsening or termination of event based on plant information:

_____
Emergency Director/Manager
(or Designee)



EOF EMERGENCY RESPONSE ORGANIZATION POSITIONS

NOTE: These Positions may or may not be staffed at the discretion of the Emergency Manager

_ _ _ _ _ _ Denotes major communication Responsibility

NUCLEAR SUPPORT SERVICES DEPT NORTHERN STATES POWER COMPANY	CORPORATE NUCLEAR EMERGENCY PLAN IMPLEMENTING PROCEDURE NUMBER: EPIP 1.1.7 REV: 3
PREPARED BY: Gary Hudson Asst. Adm. Emergency Preparedness	EFFECTIVE DATE: October 8, 1982
REVIEWED BY: E T Ward Manager Nuclear Environmental Services	TITLE: 1.1.7 START-UP AND OPERATION OF HQEC
APPROVED BY: General Manager Nuclear Plants	

1.0 PURPOSE AND OBJECTIVE

The purpose of the "Start-up and Operation of HQEC" procedure is to activate the HQEC and specify the functions of corporate personnel staffing it.

2.0 CONDITIONS AND PREREQUISITES

An "Alert", "Site Area Emergency" or "General Emergency" condition has been declared by either the Prairie Island or Monticello Emergency Director and the emergency response organization has been activated.

3.0 ORGANIZATION AND RESPONSIBILITIES

A. Overall Responsibility - Power Production Management

B. In Charge - Power Production Management

C. Assistance
- Executive Spokesman
- HQEC Coordinator/Communicator
- HQEC Technical Support
- HQEC Advisory Support
- Public Affairs Management
- HQEC Clerical

4.0 RESPONSIBILITIES

The individual responsibilities of corporate personnel assigned to the HQEC Emergency Response Organization are specified in the following tabs to this procedure.

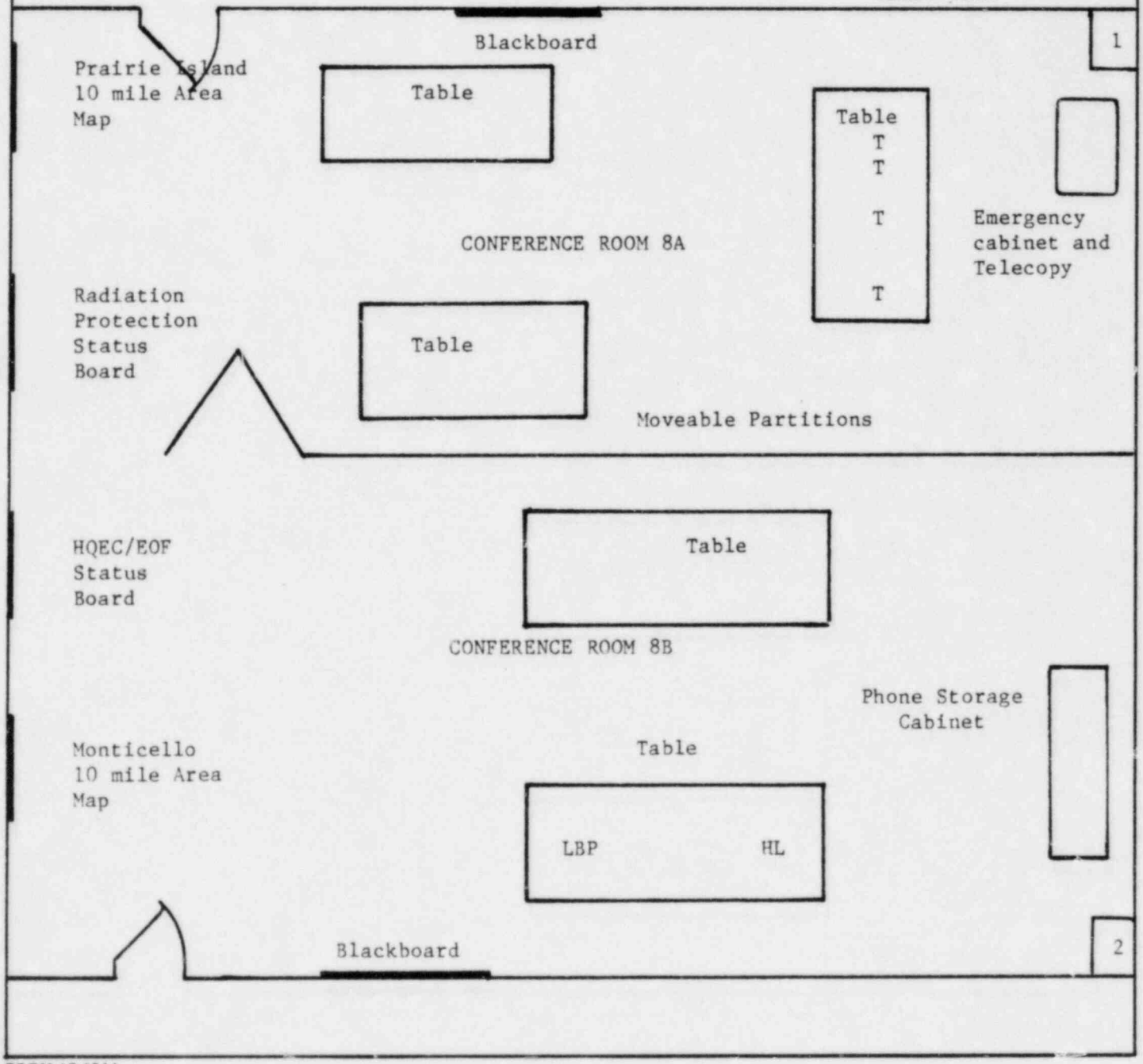
Position	Tab
• Power Production Management Duties	A
• Executive Spokesman Duties	B
• HQEC Coordinator/Communicator Duties	C
• Technical Support Duties	D
• Advisory Support Duties	E
• Public Affairs Management	F
• HQEC Clerical	G

FIGURE 1

HEADQUARTERS EMERGENCY CENTER SETUP

CONFERENCE ROOM 8A/B

KEY
T - Dial Telephone
LBP - Low-band Paging Radio Telephone
HL - Auto-ring Hotline
1 - Dial Telephone Jacks
2 - Hotline & Low-band Paging Jacks
2 - Rad. Survey Team Radio Jack



TAB A

Power Production Management Duties

1. Proceed to the HQEC and assume control of HQEC operations. The first Power Production Management designee arriving at the HQEC shall assume the Power Production Management position until a more senior designee on the Call List, Section I, Tab A, EPIP 1.1.2, "Notifications", arrives.

2. Assign an individual to function as the HQEC Coordinator/Communicator. This position should be assigned to one of the first individuals arriving at the HQEC. The assigned individual should be familiar with the emergency planning effort, location of equipment, procedures, and methods of communication. He will perform the duties outlined under TAB C of this procedure.

3. Contact the Emergency Manager to determine the emergency status and any immediate needs for resources (EPIP 1.1.8, "Communications Equipment and Information" provides information concerning available communication links.)

4. If additional assistance is required at the HQEC or the EOF, select required additional corporate personnel from list in Section III of Tab A, EPIP 1.1.2, "Notifications".

5. Verify that Public Affairs Management has provided personnel to interface with state and local agencies.

6. Based on severity of emergency, determine if an Executive Spokesman is required at the State EOC/JPIC. Select spokesman from the following duty list:

   1) D E Gilberts
   2) A V Dienhart
   3) R W Comstock
   4) B A Richard
   5) R O Duncanson

   Dispatch spokesman to the NSP office located at the Minnesota State EOC.

7. Maintain contact with the NSP Executive Spokesman and provide information and assistance as needed.

8. If requested, dispatch a technical resource person to assist the Executive Spokesman.

9. Assist Public Affairs Management in determining plant status and the appropriate media releases to be dispatched in accordance with the "Public Information" procedure, EPIP 1.1.3.

10. Provide final approval of news releases and scenarios for press conferences, working with the NSP Executive Spokesman, if appropriate.

11. Provide assistance to the EOF as requested by the Emergency Manager.

12. If necessary, provide direction for the HQEC Technical Support Group concerning any engineering analysis required.

13. Determine the information to be transmitted to INPO. Direct the HQEC Technical Support Group to establish an interface with INPO's Emergency Response Center and to request assistance or provide information as necessary.

14. Determine the need for assistance from other utilities and the scope of any information to be placed in the "NOTEPAD" system.

15. Provide continuing contact with American Nuclear Insurers (ANI) to obtain needed services or funds after the plant has made an initial contact with ANI. Appropriate guidance may be obtained in the November 1981 ANI Bulletin to agents/brokers and risk managers "Accident Notification Procedures for Property and Liability Insureds". This document is located in the HQEC Emergency Cabinet.

16. When the plant status indicates that the emergency condition has evolved into a long term planning condition, contact the Emergency Director and the Emergency Manager (see EPIP 1.1.8, "Communications Equipment and Information", for communications information) to determine the need for transition to the Recovery Phase. If necessary, direct the Recovery Manager to proceed with the Recovery Phase.

17. When the emergency condition is over, the plant is in a stable condition, all releases terminated, and there is no potential for additional release, operation of the emergency organization may be concluded. Through discussion with the Emergency Manager and Emergency Director, assist in determining that the emergency condition can be terminated. When all are in agreement, direct the activities of the corporate staff at the HQEC to complete operations and to return the HQEC facilities to a standby status.

TAB B

NSP EXECUTIVE SPOKESMAN DUTIES

1. Serve as the NSP spokesman for major media meetings and conferences held at the Minnesota State EOC/JPIC.

2. Give direction to NSP Communications and ERAD representatives at the State EOC/JPIC.

3. Represent NSP at the State EOC/JPIC by interfacing with state officials.

TAB C

HQEC COORDINATOR/COMMUNICATOR DUTIES

1. Request that all individuals not part of the Corporate Emergency Response Organization vacate the HQEC (Conference Rooms 8A & 8B).

2. Remove the dial telephones from the HQEC Emergency cabinet. Plug the telephones into the telephone jacks with corresponding numbers. These jacks are located on the wall in conference room 8A. Disconnect phone instrument in NSS Meeting Room (extension on 7890). Check each telephone for operability. Place telephones on the table in the 8A section of the HQEC. (See Figure 1)

3. Remove the red "Auto-ring Hotline" telephone from the cabinet for the appropriate plant. Phones are labeled "Monticello" or "Prairie Island" EOF to HQEC-1 (or 2). (Dialers and push buttons on these phones do not operate.) HQEC-1 properly connected, will contact the Emergency Manager's station, and HQEC-2 will contact the EOF technical support station. The jacks are located on the wall in the corner of 8B conference room and care should be taken in placing the telephone cord into the proper jack.

4. Two Radiation Field Team Radio handsets are located in the cabinet and labeled "Monticello" and "Prairie Island" Rad Team Repeater. This handset provides access into the rad survey team radio system for contact or monitoring. Plug the cord from this set into the appropriate jack in the area of the "Auto Ring Phone" jacks.

5. Remove the "Low Band Paging" radio telephone and encoder from the cabinet. Plug the radio telephone into the jack labeled "Low Band Paging". This jack is located on the wall in the corner of the 8B conference room. Plug the electrical cords into an appropriate 120 V AC outlet. Place the radio telephone and encoder on the table in the 8B section of the HQEC.

6. The telecopier (on top of emergency cabinet) must be plugged into an electrical outlet, and its telephone cable into the "telecopier jack", with the telephone jacks (see Figure 1). Instructions for operating the telecopier are under the machine.

7. Establish and maintain the Narrative Log as specified in the "Emergency Organization Records and Forms" procedure, EPIP 1.1.4 and assign an individual to assume HQEC clerical duties in TAB F.

8. Verify that the Superintendent of Building Operation and Maintenance provides security guards for the following areas in accordance with the Building Security Plan:

   a) HQEC area
   b) General Office First Floor Elevator Area
   c) Media Information Facility

9. Place writing materials on each table in the HQEC. Distribute copies of EPIP 1.1.8, "Communications Equipment and Information", to each table and place one copy under each telephone.

10. Inform HQEC personnel as to the nature & number of records to be maintained.

11. Notify EOF when HQEC is adequately staffed and functioning.

12. Communicate with EOF, and other NSP personnel, vendors, INPO, ANI, etc. as directed by Power Production Management.

13. Supervise the clerical operation of HQEC.

TAB D

HQEC Technical Support Duties

1. Provide necessary manuals, publications, and prints to assist in analysis of plant conditions.

2. Provide technical support personnel to assist in engineering analysis as directed by Power Production Management.

3. Provide technical liaison with the EOF Technical Support Group and the NSP technical resource person at the State EOC.

4. Oversee the efforts of vendor engineering groups retained by Power Production Management to assist the emergency response effort.

5. Provide general information for communication to other utilities via INPO or the "NOTEPAD" information system.

TAB E

Advisory Support Duties

1. Keep NSP Executive Management informed about emergency operations and actions.

2. Be in communications with the NSP Executive Spokesman located at the STATE EOC.

TAB F

Public Affairs Management Duties

1. Implement EPIP 1.1.3 "Public Information"
2. Provide Communications Respresentatives to prepare news releases, conduct press conferences and direct the overall public information program.
3. Supply Communications Representatives to the State EOC/JPIC and assist the NSP Executive Spokesman as appropriate to interface with media personnel.
4. Provide NSP liaison to the State & local government agencies.
5. Provide timely information to Power Production Management of all the actions that are taken or planned by the State and local government agencies.

NOTE: "Public Affairs" here means three departments having responsibilities under the Emergency Plan as:
Communications Department
Environmental and Regulatory Activities Dept
State Public Affairs Department

TAB G

HQEC Clerical Duties

1. Operate telecopy machines.

2. Make copies of telecopy messages and distribute to HQEC personnel.

3. Operate the terminal required for INPO NOTEPAD communications.

4. Distribute forms used in the HQEC as:
   Narrative Log
   Logistics Coordinator Information Forms
   Inter-office Communication Forms

5. Implement EPIP 1.1.4 Emergency Organization Records and Forms at the EOF.

6. Pick up messages and forms, make any required copies, and distribute, as necessary.

7. Records should be consolidated and filed to provide a permanent history of activities and events. These records may be used to assist management in decision making functions and to provide a reference for final reports.

NUCLEAR SUPPORT SERVICES DEPT NORTHERN STATES POWER COMPANY	CORPORATE NUCLEAR EMERGENCY PLAN IMPLEMENTING PROCEDURE NUMBER: EPIP 1.1.8 REV: 2
PREPARED BY: Gary Hudson Asst. Adm. Emergency Preparedness	EFFECTIVE DATE: October 8, 1982
REVIEWED BY: E C Ward Manager Nuclear Environmental Services	TITLE: 1.1.8 COMMUNICATION EQUIPMENT AND INFORMATION
APPROVED BY: General Manager Nuclear Plants	

1.0 PURPOSE AND OBJECTIVE

The purpose of the Communication Equipment and Information Procedure is to provide a quick, easy and complete reference of the telephone numbers that are applicable to the Corporate Emergency Response Organization facilities. The procedure also provides reference diagrams which indicate the available lines of communication.

2.0 CONDITIONS AND PREREQUISITES

An emergency condition has been declared and the Corporate Emergency Response Organization has been activated.

NOTE: THIS PROCEDURE IS TO BE UTILIZED ONLY AFTER THE "NOTIFICATIONS" PROCEDURE, EPIP 1.1.2, HAS BEEN COMPLETED.

3.0 PROCEDURE

The information sheets are arranged in the following manner.

Pages		Name
2-8	TAB A,	Monticello Communication Information
9-17	TAB B,	Prairie Island Communication Information
18-27	TAB C,	Normal, Primary and Secondary Communication Links

TAB A

MONTICELLO COMMUNICATION INFORMATION SHEET 1

I. EMERGENCY OPERATIONS FACILITY (EOF) COMMUNICATION

A. Auto-Ring "Hot Lines"

1. EOF - TSC (EM-ED)
2. EOF - TSC (RPSS -REC)
3. EOF - State EOC
4. EOF - HQEC (EM-PP Mgmt)
5. EOF - HQEC (Tech Support)
6. ENS (NRC Emergency Notification System)
7. HPN (NRC Health Physics Network)

B. EOF Command Center (Emergency Manager Conference Table)

1. Multi Station Phones
   a. Auto Ring line to HQEC
   b. Auto Ring line to TSC
   c. Auto Ring line to ENS
   d. Auto Ring line to Minn. EOC

2. Phone with auto-dial unit
   a. DELETED
   c.
   d. Monticello Plant DELETED

3. Training Center Public Address System

C. EOF Coordinator

1. Multi function phone
   a.
   b. DELETED
   c.
   d. Monticello Plant DELETED

2. Training Center Public Address System

D. Radiation Protection Support Supervisor

1. Multi function phone
   a. Monticello Plant
   b. Auto Ring to State EOC DELETED
   c. Auto Ring to TSC (REC)

NOTE: * Indicates that this phone will ring at this number. If there is no asterisk, the phone is a non-ringing extension of that number. (EOF phone only.)

TAB A

MONTICELLO COMMUNICATION INFORMATION SHEET 2

2. Highway Patrol Transceiver (to be installed)

3. Radiological Meteorological Communicator
   Multi function phone
   a.
   b. DELETED
   c.
   d. Monticello Plant

4. Survey Team Communicator
   a. Multi function phone
      1.
      2. DELETED
      3.

   b. Radio Console
      1. survey teams

E. Off-Site Communicator(s)

1. Multi function phone at Station #1
   a. Auto Ring to State EOC*
   b.
   c.
   d. DELETED

2. Multi function phone at Station #2
   a. Auto Ring to State EOC
   b.
   c.
   d. DELETED

F. Technical Support (Engineering)

1. Technical Support Communicator
   Multi function phone
   a.
   b. DELETED
   c
   d. Monticello Plant

NOTE: * Indicates that this phone will ring at this number. If there is no asterisk, the phone is a non-ringing extension of that number. (EOF phone only.)

TAB A

MONTICELLO COMMUNICATION INFORMATION SHEET 3

2. Technical Support Station #1
   Multi function phone
   a.
   b. DELETED
   c.
   d. Monticello Plant
   e. Auto Ring to HQEC (Tech Support)*

3. Technical Support Station #2
   Multi function phone
   a.
   b. DELETED
   c.
   d. Monticello Plant
   e. Auto Ring to HQEC (Tech Support)

G. Telecopier Station

1. Multi function phone
   a.
   b. Monticello Plant DELETED

2. Telecopier Lines (3 dedicated)
   a.
   b.
   c. DELETED

H. NSP Communications Department EOF Office Space

Two single line phones
1.
2 DELETED (telecopy)*

I. Back-up Count Room

1. Multi function phone
   a. Monticello Plant DELETED
   b. Monticello Plant

2. Multi function phone
   a. Monticello Plant DELETED
   b. Monticello Plant

NOTE: * Indicates that this phone will ring at this number. If there is no asterisk, the phone is a non-ringing extension of that number. (EOF phone only.)

TAB A

MONTICELLO COMMUNICATION INFORMATION SHEET 4

J. Security Stations

1. Front (uses Training Center phone)
2. Back (uses Training Center phone)

K. Switchboard Operator

1. Training Center Public Address System
2. Motorla Multi Channel Radio System
3. Access to all telephone numbers at the Training Center

L. EOF Emergency Manager Office Space

1. Multi function phone
   a.
   b. Monticello Plant DELETED

2. Training Center Public Address System

M. NRC Office Space

1. NRC HPN Phone

2. Telecopier phone/line

3. Multi function phone
   a.
   b. DELETED
   c.

4. Auto Ring ENS*

5. Multi function phone
   a. DELETED
   b.
   c.

6. Auto Ring ENS

NOTE: * Indicates that this phone will ring at this number. If there is no asterisk, the phone is a non-ringing extension of that number. (EOF phone only.)

N. Wright & Sherburne County EOF Office Space

1. Multi function phone
   a.
   b. DELETED

2. Multi function phone
   a.
   b. DELETED

TAB A

MONTICELLO COMMUNICATION INFORMATION SHEET 5

II. HEADQUARTERS EMERGENCY CENTER (HQEC) COMMUNICATION

A.
B. DELETED
C.
D. (Telecopier)
E. Auto-Ring Hotline
HQEC - EOF
F. Low Band Paging System

III. TECHNICAL SUPPORT CENTER (TSC) COMMUNICATION (PLANT)

A. Emergency Director

DELETED

B. Radiological Emergency Coordinator

C. Engineering

DELETED

D. NRC in TSC

DELETED

IV. OFFSITE EMERGENCY RESPONSE FACILITIES DIRECT DIAL LINES

A. NRC Operations Center (Washington)

DELETED

B. NRC Regional Office (Region III)

DELETED

C. NRC Health Physics Network
1. NRC Operations Center
a. Rotary - Dial 22
b. Pushbutton - Depress *22

2. Region III
a. Rotary - Dial 23
b. Pushbutton - Depress *23

TAB A

MONTICELLO COMMUNICATION INFORMATION SHEET 6

D. Minnesota State EOC

1. Division of Emergency Services
   a. DELETED
   b.
   c. DES Director's Office
   d.
   e DELETED (*These numbers bypass the capitol centrex system)

2. Minnesota Department of Health
   a. Auto-ring Hotline
   b. (Telecopier)
   c. DELETED Minnesota Team Coordinator (accident assessment)
   d. (*These numbers are operational only when the State EOC is activated)

3. NSP Executive Spokesman Office (State EOC/JPIC)
   a.
   b. DELETED (Telecopier)

E. Wright County Sheriff
   1.
   2. DELETED

F. Wright County EOC
   DELETED

G. Sherburne County Sheriff
   DELETED

H. Sherburne County EOC
   1.
   2. DELETED
   3.

I. State Highway Patrol
   1. St. Cloud
   2. Golden Valley DELETED
   3. St. Paul

J. Monticello Civil Defense
   1.
   2. DELETED

TAB A

MONTICELLO COMMUNICATION INFORMATION SHEET 7

K. Monticello - Big Lake Community Hospital

DELETED

L. Monticello - Ambulance Service

DELETED

M. Monticello Fire Department

DELETED

N. Northern States Power Telephone Lines
1. Corporate General Office
2. Northwest Division
3. Prairie Island Nuclear Generating Plant DELETED
4. System Control Center
5. Monticello Nuclear Generating Plant

O. Radio Communication
1. Backup Radio Communication (Console Locations)
a. EOF
b. Monticello (city)
c. Plant
1) TSC
2) Control Room
d. Wright County
1) Sheriff
2) EOC
e. Sherburne County
1) Sheriff
2) EOC

2. Walkie-Talkies at EOF
a. Security Force Guards
b. EOF Coordinator

3. Portable Radios (Handie-Talkie) Locations
a. Plant
b. EOF
c. Survey Teams

P. Telephones Out-of-Order
Telephone Number for Emergency Telephone Service

DELETED

Q. Radios Out-of-Order
Granite City Electronics

DELETED

TAB B

PRAIRIE ISLAND COMMUNICATION INFORMATION SHEET 1

I. EMERGENCY OPERATIONS FACILITY (EOF) COMMUNICATION

A. Auto-Ring "Hot Lines"

1. EOF - TSC (EM-ED)
2. EOF - TSC
3. EOF - State EOC (Minn)
4. EOF - HQEC (EM-PP Mgmt)
5. EOF - HQEC (Tech Support)
6. ENS (NRC Emergency Notification System)
7. HPN (NRC Health Physics Network)

B. EOF Command Center (Emergency Manager Conference Table)

1. Multi Station Phones
   a. Auto Ring line to HQEC*
   b. Auto Ring line to TSC*
   c. Auto Ring line to ENS*
   d. Auto Ring line to Minn. EOC

2. Phone with auto-dial unit
   a.
   b. DELETED
   c.
   d. Prairie Island Plant DELETED

3. Training Center Public Address System (to be installed)

4. Plant Intercom Station (to be installed)

C. EOF Coordinator

1. Multi function phone
   a.
   b. DELETED
   c.
   d. Prairie Island Plant DELETED

D. Radiation Protection Support Supervisor

1. Multi function phone
   a. Prairie Island Plant DELETED
   b. Auto Ring to State EOC (Minn)*
   c. Auto Ring to TSC (REC)*

NOTE: * Indicates that this phone will ring at this number. If there is no asterisk, the phone is a non-ringing extension of that number. (EOF phones only.)

TAB B

PRAIRIE ISLAND COMMUNICATION INFORMATION SHEET 2

2. Highway Patrol Transceiver
   a. Minnesota
   b. Wisconsin (to be installed)

3. Radiological Meteorological Communicator
   Multi function phone
   a.
   b. DELETED
   c. DELETED
   d. Prairie Island Plant

4. Survey Team Communicator
   a. Multi function phone
      1.
      2. DELETED
      3.

   b. Radio Console
      1. survey teams

E. Off-Site Communicator(s)

1. Multi function phone at Station #1
   a. Auto Ring Line to Minn EOC*
   b.
   c. DELETED
   d.

2. Multi function phone at Station #2
   a. Auto Ring Line to Minn EOC
   b.
   c. DELETED
   d.

F. Technical Support (Engineering)

1. Technical Support Communicator
   Multi function phone
   a.
   b. DELETED
   c.
   d. Prairie Island Plant DELETED

NOTE: * Indicates that this phone will ring at that number. If there is no asterisk, the phone is a non-ringing extension of that number. (EOF phone only.)

TAB B

PRAIRIE ISLAND COMMUNICATION INFORMATION SHEET 3

2. Technical Support Station #1
   Multi function phone
   a.
   b. DELETED
   c.
   d. Prairie Island Plant Ext. 504
   e. Auto Ring to HQEC (Tech Support)*

3. Technical Support Station #2
   Multi function phone
   a.
   b.
   c. DELETED
   d. Prairie Island Plant DELETED
   e. Auto Ring to HQEC (Tech Support)

G. Telecopier Station

Telecopier Lines (3 dedicated)
a.
b. DELETED
c.

H. NSP Communications Department EOF Office Space

Two single line phones
1.
2. DELETED (telecopy)*

I. Back-up Count Room

1. Multi function phone
   a. Prairie Island Plant DELETED
   b. Prairie Island Plant

2. Multi function phone
   a. Prairie Island Plant
   b. Prairie Island Plant DELETED

J. Security Stations

1. Front (uses plant intercom station #5)
2. Back (uses plant intercom station #6) (or portable radio)

NOTE: * Indicates that this phone will ring at that number. If there is no asterisk, the phone is a non-ringing extension of that number. (EOF phones only.)

TAB B

PRAIRIE ISLAND COMMUNICATION INFORMATION SHEET 4

K. Switchboard Operator

1. Training Center Public Address System
2. Motorola Multi Channel Radio System
3. Operator Station for Training and EOF Telephone Systems
4. Plant Intercom Station #2 (to be installed)

L. EOF Emergency Manager Office Space

1. Multi function phone (with speaker)
   a. DELETED
   b. Prairie Island Plant DELETED

2. Plant Intercom Station #1 (to be installed)

3. Training Center Public Address System

M. NRC Office Space

1. NRC HPN Phone

2. Telecopier phone/line
   DELETED

3. Multi function phone
   a. DELETED
   b.
   c.
   d. Auto Ring ENS*

4. Multi function phone
   a.
   b. DELETED
   c.
   d. Auto Ring ENS

N. Pierce, Goodhue, and Dakota County EOF Office Space

1. Multi function phone
   a.
   b. DELETED

2. Multi function phone
   DELETED

NOTE: * Indicates that this phone will ring at that number. If there is no asterisk, the phone is a non-ringing extension of that number. (EOF phones only.)

TAB B

PRAIRIE ISLAND COMMUNICATION INFORMATION SHEET 5

II. HEADQUARTERS EMERGENCY CENTER (HQEC) COMMUNICATION

A.
B. DELETED
C.
D. (Telecopier)
E. Auto-Ring Hotline
HQEC - EOF
F. Low Band Paging System

III. TECHNICAL SUPPORT CENTER (TSC) COMMUNICATION (PLANT)

A. Emergency Director (ED)
Conference Table Area

1.
2.
3.
4. DELETED
5.
6.
7.

B. Radiological Emergency Coordinator (REC)
Radiation Protection Area

1.
2.
3. DELETED
4.
5.
6.
7.

C. Communication Area

1.
2.
3. DELETED
4.
5.

TAB B

PRAIRIE ISLAND COMMUNICATION INFORMATION SHEET 6

D. Westinghouse & NSP Engineers Area

1.
2.
3. DELETED
4.
5.
6.

E. NRC Office in TSC

1. DELETED
2.

F. Status Board Area

1. DELETED (Rad. Prot. Status Board)
2. (Plant Status Board)

IV. OFFSITE EMERGENCY RESPONSE FACILITIES DIRECT DIAL LINES

A. NRC Operations Center (Washington)

DELETED

B. NRC Regional Office

DELETED

C. NRC Health Physics Network

1. NRC Operations Center
   a. Rotary - Dial 22
   b. Pushbutton - Depress *22

2. Region III
   a. Rotary - Dial 23
   b. Pushbutton - Depress *23

D. Minnesota State EOC

1. Division of Emergency Services (DES)
   a.
   b. DELETED
   c. DES Director's Office DELETED
   d.
   e. DELETED (*These numbers bypass the capitol centrex system)

TAB B

PRAIRIE ISLAND COMMUNICATION INFORMATION SHEET 7

2. Minnesota Department of Health
   a. Auto-ring Hotline
   b. DELETED (Telecopier)
   c. Minnesota Team Coordinator (accident assessment)
   d. (*These numbers are operational only when the State EOC is activated)

3. NSP Executive Spokesman Office (State EOC/JPIC)
   a. DELETED
   b. (Telecopier)

E. Wisconsin State EOC

1. Division of Emergency Government (DEG)
   a. DELETED DELETED
   b. Officer in Charge
   c. Operations Officer
   d. Public Information Officer DELETED

2. Wisconsin Division of Health
   a. (Telecopier)
   b. DELETED (accident assessment Wisconsin State Radiological Coordinator)
   c.
   d. Radiological Dose Assessment DELETED

F. Goodhue County Sheriff
DELETED

G. Goodhue County EOC
1.
2. DELETED
3.

H. Dakota County Sheriff
1.
2. DELETED

I. Dakota County EOC
1.
2. DELETED
3.
4.

TAB B

PRAIRIE ISLAND COMMUNICATION INFORMATION SHEET 8

J. Red Wing Police Department
DELETED

K. Red Wing Fire Department
DELETED

L. Pierce County Sheriff
DELETED

M. Pierce County EOC
DELETED (Highway Dept)

N. St. John's Hospital - Red Wing
DELETED

O. Ambulance Service - Red Wing
DELETED

P. State Highway Patrol
1. Rochester
2. St. Paul
DELETED

Q. Northern States Power Telephone Lines
1. Corporate General Office
2. Division Office
3. Prairie Island Nuclear Generating Plant
4. System Control Center
5. Monticello Nuclear Generating Plant
DELETED DELETED DELETED

R. Radio Communication
1. Backup Radio Communication (Console Locations)
   a. EOF
   b. Goodhue County
      1) Sheriff
      2) EOC
   c. Plant
      1) TSC
      2) Control Room

TAB B

PRAIRIE ISLAND COMMUNICATION INFORMATION SHEET 9

d. Pierce County
   1) Sheriff
   2) EOC

e. Dakota County
   1) Sheriff
   2) EOC

2. Walkie-Talkies at EOF
   a. Security Force Guards
   b. EOF Coordinator

3. Portable Radios (Handie Talkie) Locations
   a. Plant
   b. EOF
   c. Survey Teams

S. Telephones Out-of-Order
   Telephone Number for Emergency Telephone Service
   DELETED

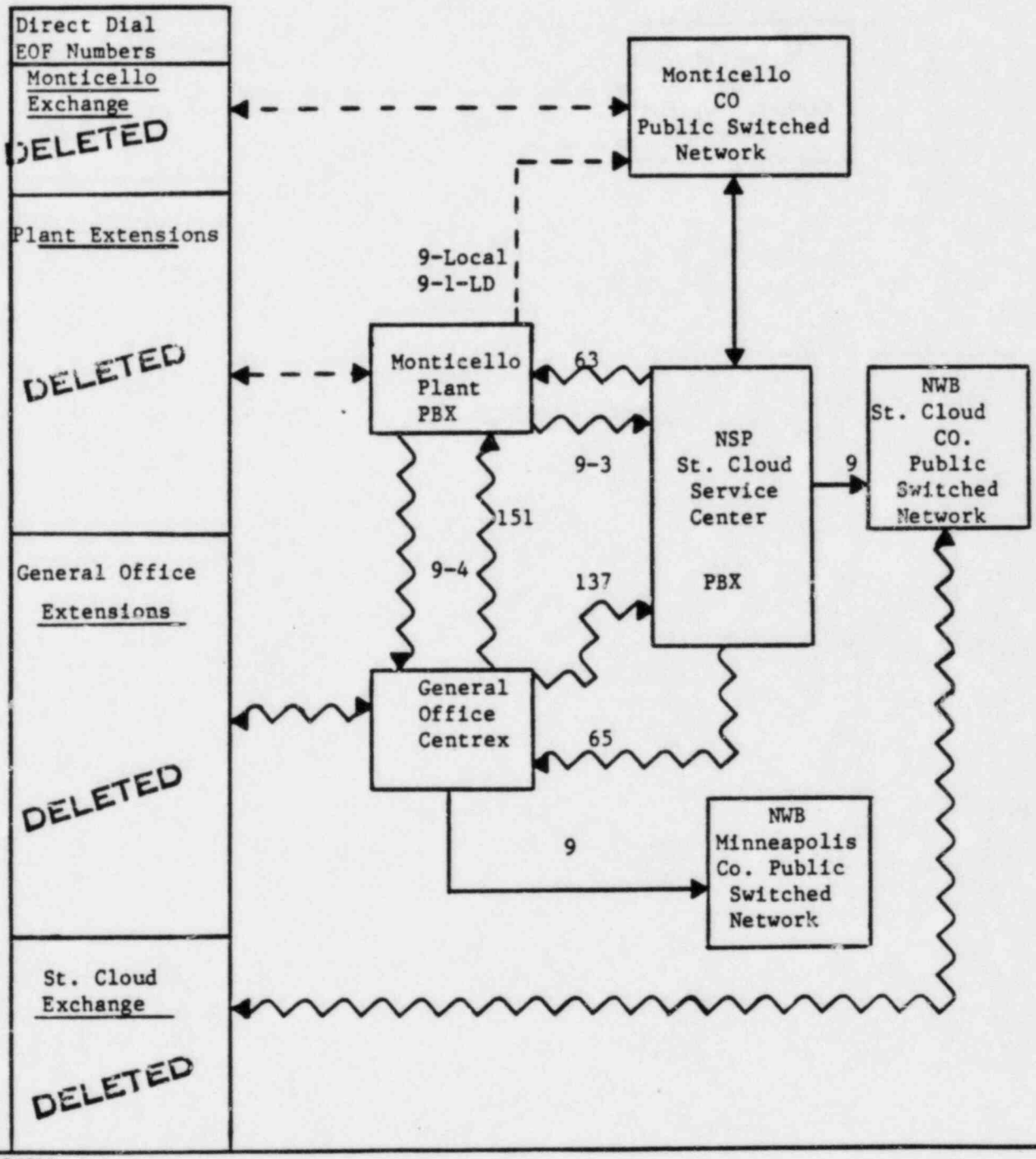
T. Radios Out-of-Order
   Folsom Electronics
   DELETED

TAB C

KEY
1. ____ Bell System Lines
2. ____ Bridgewater Lines
3. /\/\/\/ NSP Microwave

MONTICELLO
DIRECT DIAL COMMUNICATIONS

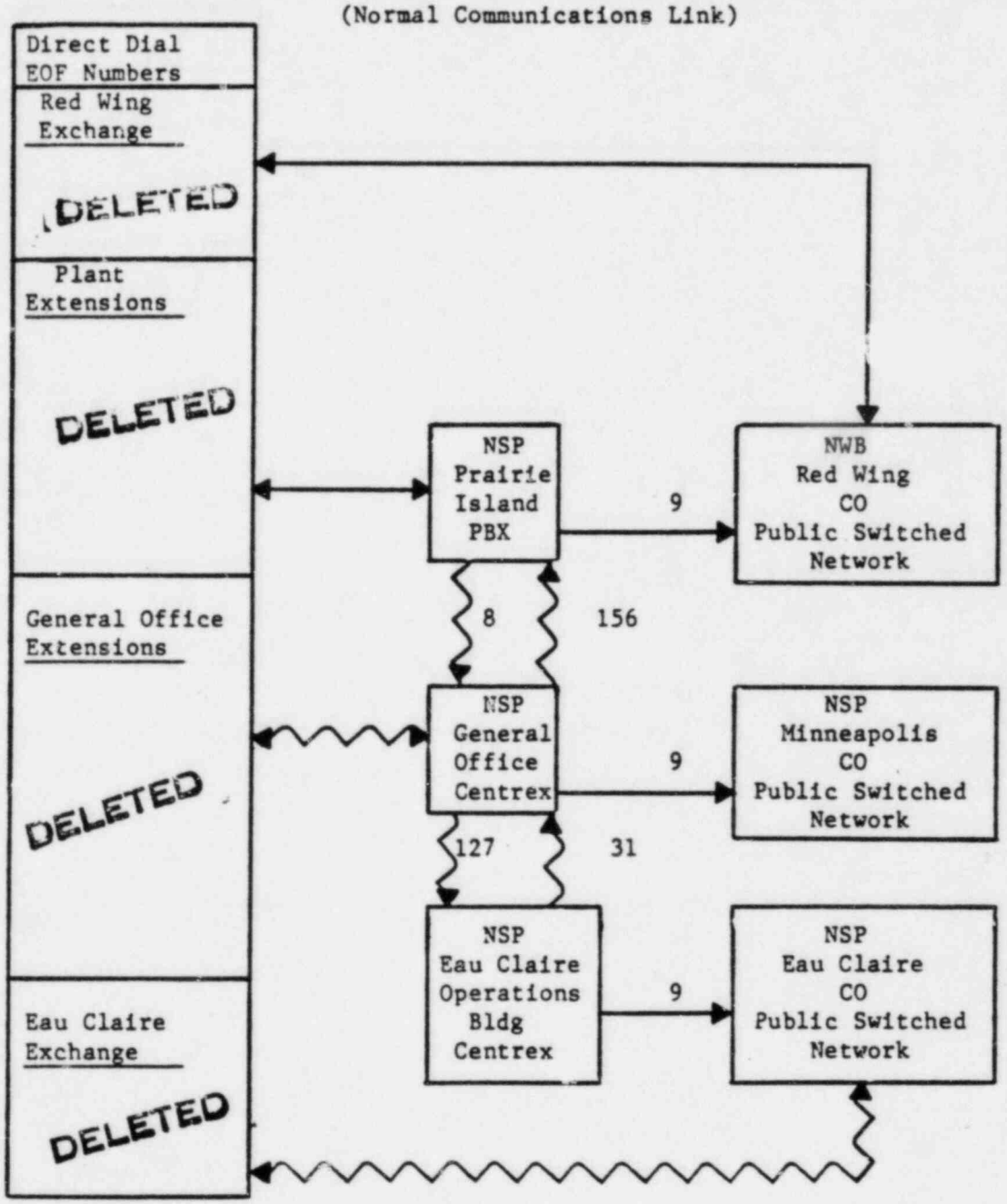
(Normal Communications Link)



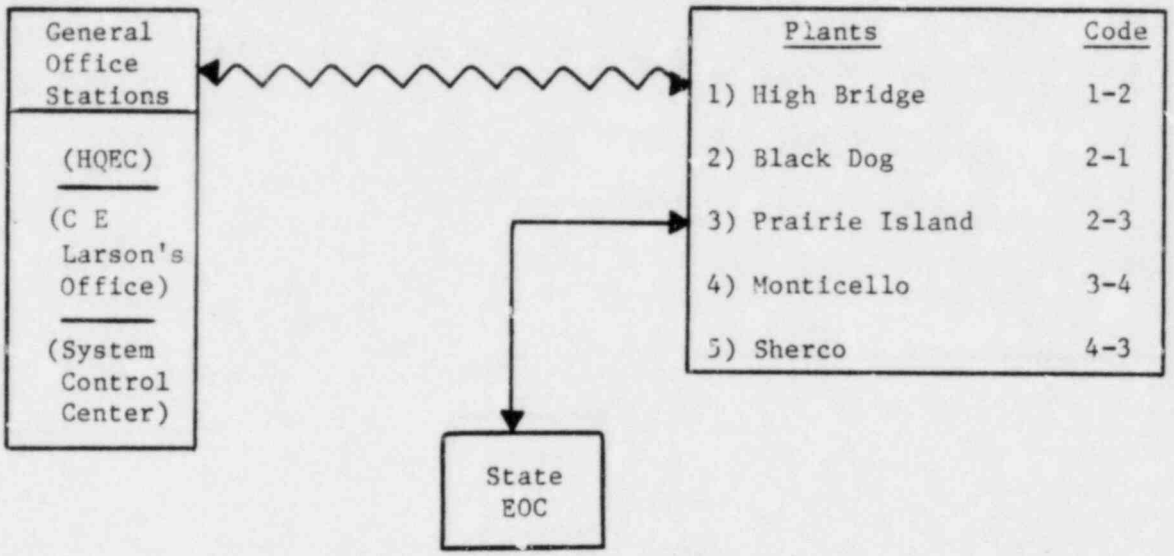
KEY
1. ____ Bell System Lines
2. /\/\/\/ NSP Microwave

PRAIRIE ISLAND
DIRECT DIAL COMMUNICATIONS

(Normal Communications Link)



LOW BAND PAGING SYSTEM
(Secondary Communications Link)

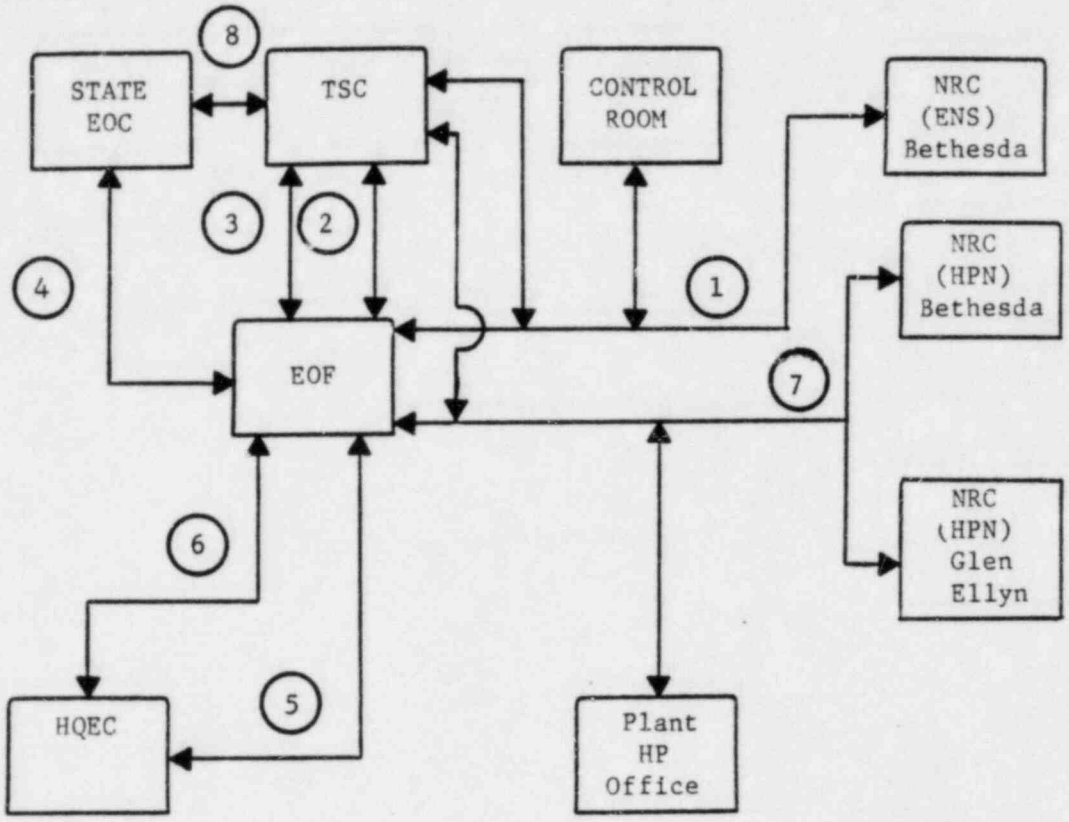


Definition:

Low Band Paging System
An FCC licensed 2-way radio system utilizing point-to-point systems interconnecting two or more locations.

1. The System Control Center can activate Receivers at all plant stations.
2. The Plants can activate the Receiver at the System Control Center and the HQEC (when connected).
3. The State can activate the Prairie Island and Monticello Receivers.
4. Each station can monitor.
5. The HQEC can activate receivers at all the plant stations.

MONTICELLO AUTO RING HOTLINE NETWORK
(Primary Communications Link)



Number	Name	Stations
1.	Emergency Notification System (ENS)	4 station line between the EOF, TSC, Control Room and NRC Bethesda. Each station can activate circuit
2.	EOF - TSC (EM - ED)	2 station line between the EOF (EM) and TSC (ED). Either station can activate the circuit.
3.	EOF - TSC (RPSS - REC)	2 station line between the EOF (RPSS) and the TSC (REC). Either station can activate the circuit.
4.	EOF - Minn. State EOC	2 station line between the EOF and the Minnesota State EOC. Either station can activate the circuit.
5.	EOF - HQEC (EM - PP Mgmt)	2 station line between the EOF and the HQEC. Either station can activate the circuit.

MONTICELLO AUTO RING HOTLINE NETWORK (con't.)
(Primary Communications Link)

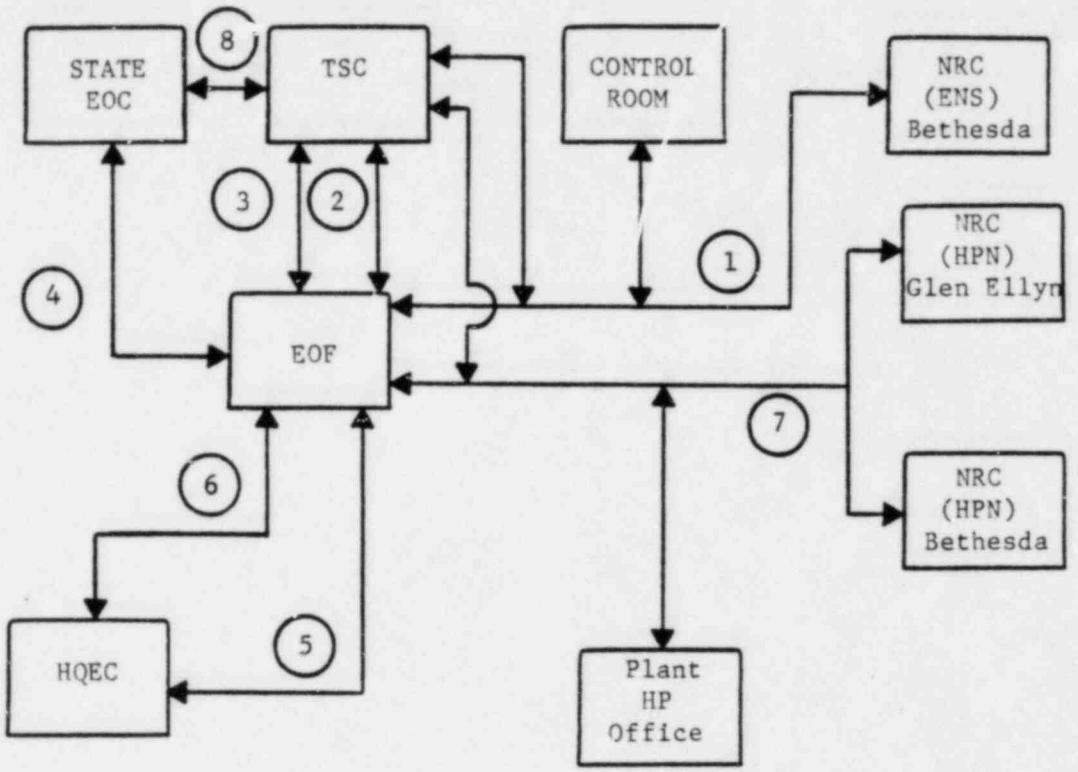
Number	Name	Stations
6.	EOF - HQEC (Tech Support)	2 station line between technical support groups at the EOF and the HQEC. Either station can activate the circuit.
7.	Health Physics Network (HPN)	Multiple station line between the EOF, Plant HP office, TSC, NRC Bethesda, NRC Glen Ellyn, and other utilities. Each station can activate circuit.
8.	TSC - Minn. State EOC	2 station line between the TSC and the Minn. State EOC. Either station can activate the circuit.

NOTE: When you pick up the phone you will not be able to hear the phone ringing.

Definitions:

Auto-Ring Hotlines (dedicated private lines)
The interconnection of two or more telephones, which automatically ring the circuit when the telephone is removed from its cradle. This service can be provided intra-facility, intra-city or inter-city. This is a full-period circuit which is available 24 hours a day with no limit to its use.

PRAIRIE ISLAND HOTLINE NETWORK
(Primary Communications Link)



Number	Name	Stations
1.	Emergency Notification System (ENS)	4 station line between the EOF, TSC, Control Room and NRC Bethesda. Each station can activate circuit
2.	EOF - TSC (EM - ED)	2 station line between the EOF (EM) and TSC (ED). Either station can activate the circuit.
3.	EOF - TSC (RPSS - REC)	2 station line between the EOF (RPSS) and the TSC (REC). Either station can activate the circuit.
4.	EOF - Minn. State EOC	2 station line between the EOF and the Minnesota State EOC. Either station can activate the circuit.
5.	EOF - HQEC (EM - PP Mgmt)	2 station line between the EOF and the HQEC. Either station can activate the circuit.

PRAIRIE ISLAND HOTLINE NETWORK (con't.)
(Primary Communications Link)

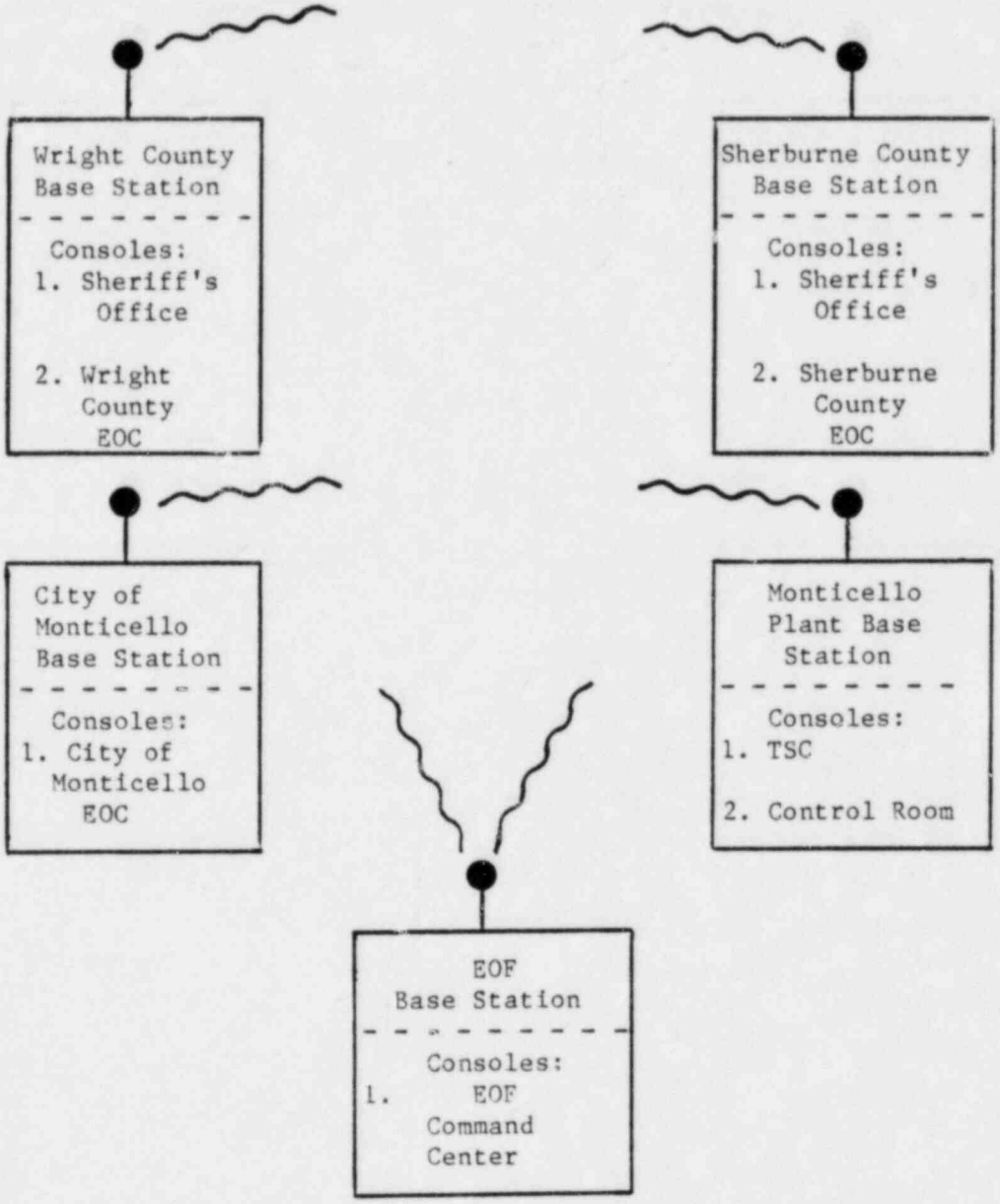
Number	Name	Stations
6.	EOF - HQEC (Tech Support)	2 station line between technical support groups at the EOF and the HQEC. Either station can activate the circuit.
7.	Health Physics Network (HPN)	Multiple station line between the TSC, EOF, Plant HP office, NRC Bethesda, NRC Glen Ellyn, and other utilities. Each station can activate circuit.
8.	TSC - Minn. State EOC	2 station line between the TSC and the Minn. State EOC. Either station can activate the circuit.

NOTE: When you pick up the phone you will not be able to hear it ringing.

Definitions:

Auto-Ring Hotlines (dedicated private lines)
The interconnection of two or more telephones, which automatically ring the circuit when the telephone is removed from its cradle. This service can be provided intra-facility, intra-city or inter-city. This is a full-period circuit which is available 24 hours a day with no limit to its use.

EOC Backup Radio System in Monticello EPZ
(Secondary Communications Link)

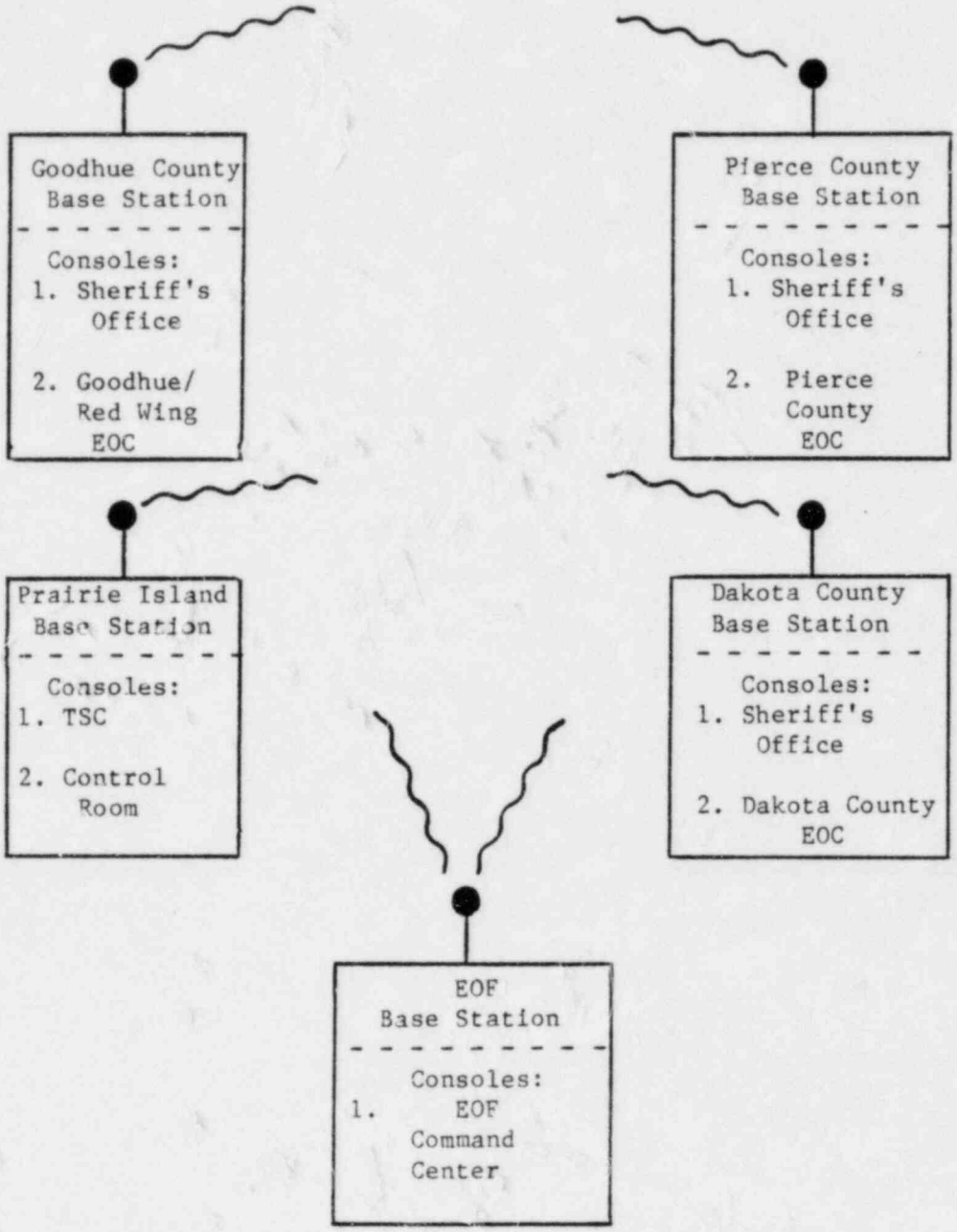


1. All consoles are hard wired to their respective base station.

2. Each base station can talk to all other base stations. The base station must be operating. There is no automatic activation.

3. Digital Voice Protection is provided for each base station.

EOC Backup Radio System in Prairie Island EPZ
(Secondary Communications Link)



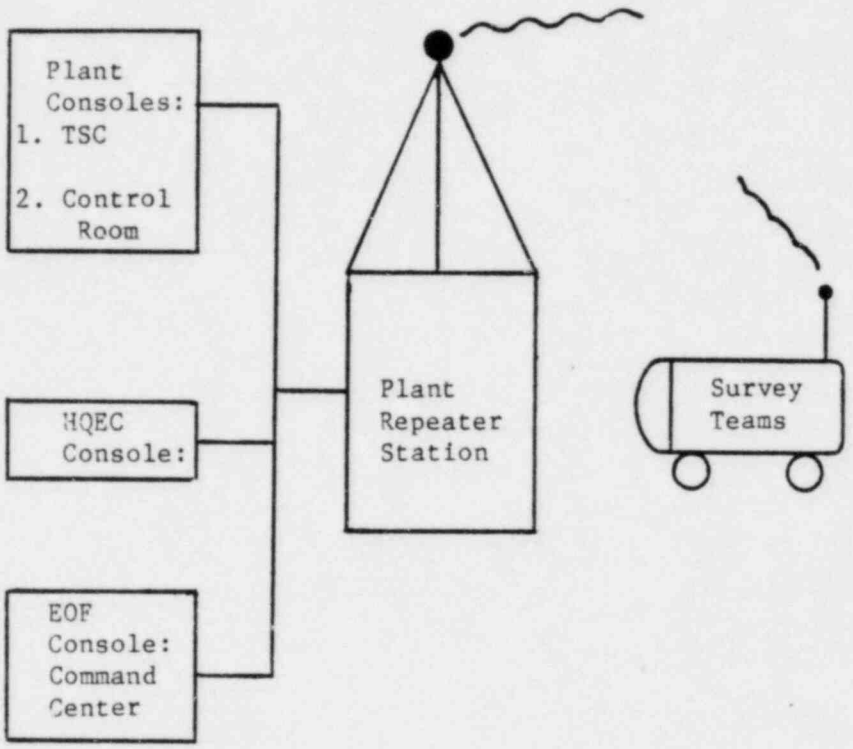
1. All consoles are hard wired to their respective base station.

2. Each base station can talk to all other base stations. The base station must be operating. There is no automatic activation.

3. Digital Voice Protection is provided for each base station.

Monticello and Prairie Island Portable Communications
(Primary Communication Link)

Fixed Stations Portable Radios (Handie-Talkie)



1. Each portable unit can talk to all other portable units in their band and all console positions.
2. The repeater/relay station receives the transmission and amplifies and retransmits the signal to all other stations.
3. Digital Voice Protection is provided for all stations and each portable.
4. Consoles are hard wired to the repeater station.

NUCLEAR SUPPORT SERVICES DEPT NORTHERN STATES POWER COMPANY	CORPORATE NUCLEAR EMERGENCY PLAN IMPLEMENTING PROCEDURE NUMBER: EPIP 1.1.11 REV: 3
PREPARED BY: Gary Hudson Asst. Adm. Emergency Preparedness	EFFECTIVE DATE: October 8, 1982
REVIEWED BY: E C Ward Manager Nuclear Environmental Services	TITLE: 1.1.11 ACCIDENT ASSESSMENT
APPROVED BY: General Manager Nuclear Plant	

1.0 PURPOSE AND OBJECTIVE

The purpose of this procedure is to specify the techniques and methods for data collection and analysis to assess the offsite consequences of an emergency condition. This procedure also provides recommendation guidelines for protective actions based on these assessments.

2.0 CONDITIONS AND PREREQUISITES

An emergency condition has been declared involving the potential for, or an actual release of, radioactive material from an NSP nuclear plant.

3.0 ORGANIZATION AND RESPONSIBILITIES

A. Overall Responsibility - Emergency Manager

B. In Charge - Radiation Protection Support Supervisor

4.0 DISCUSSION

Accident assessment is required to ensure that the consequences of any radiological release are evaluated and that recommendations for protective actions are formulated and provided to appropriate state officials. This assessment is a continuous process throughout the duration of an emergency and should be continued as directed by the Emergency Manager.

The responsibility for accident assessment is initially assigned to the TSC. The Radiological Emergency Coordinator will make evaluations based on actual plant data, and calculated or measured doses. He will formulate protective action recommendations for the Emergency Director and the Emergency Director will inform the state officials of the recommendations.

After the EOF is activated, the Emergency Manager is responsible for all communication with state and local officials. Therefore, all recommendations for protective actions shall be made to the Emergency Manager. In

the initial stages of EOF activation, the Emergency Manager may have assumed the responsibilities for the offsite response prior to the Radiation Protection Support Group's arrival. In this instance, the TSC will continue to provide accident assessment and protective action recommendations. These will be made to the Emergency Manager, who will make appropriate recommendations to the state officials.

The decision to transfer accident assessment responsibilities from the TSC to the EOF is made by the Emergency Manager. This decision will be based on the type of emergency, the EOF equipment status and the staffing of the Radiation Protection Support Group. When the Emergency Manager has determined that the EOF has the capability to perform accident assessment and formulate protective action recommendations, he will inform the TSC. He will then direct the Radiation Protection Support Supervisor to assume these responsibilities. The transfer of responsibilities shall be closely coordinated with the Radiological Emergency Coordinator. In general, the Radiation Protection Support Supervisor will supply the TSC with information concerning the results of offsite surveys. The Radiological Emergency Coordinator, located at the TSC, will supply the EOF with actual release rates, meteorological data, results of projected offsite doses, and any applicable survey data obtained by plant survey teams. Each organization (offsite and onsite) should compare actual measured doses with projected doses to verify that no undetected releases have occurred and that assumptions made in projections were valid.

The Radiation Protection Support Supervisor will use the projected dose rates and actual survey results to formulate protective actions. He will inform the Emergency Manager of his recommendations. The Emergency Manager will make the necessary recommendations to state and local officials.

The Radiation Protection Support Supervisor will provide current information concerning offsite activities to the Radiological Emergency Coordinator, at the TSC. This information is provided for inclusion in the sites projected dose rate computer program and to ensure that the plant is aware of the extent of the offsite releases. Updated dose projections based on this information shall be passed to the EOF to upgrade previous protective action recommendations. This technique for review, reconsideration, and evaluaton of recommendations for protective actions should continue until the response phase of the emergency is complete.

5.0 RESPONSIBILITIES

5.1 Emergency Manager

1. Direct the Radiation Protection Support Supervisor to assume accident assessment responsibilities. This should be implemented when the Radiation Protection Support Group is fully staffed and transfer of responsibilities will enhance the overall emergency response.

2. Ensure that the state(s) receive(s) Protective Action Recommendations as required. Guidelines specified in this procedure should

form the basis for any recommendations. [Use Figure 1 for transmittal of recommendations to state(s).]

3. Prior to, or simultaneously with, telecopying a protective action recommendation to the state(s):

   - If at Monticello
     Initiate a 2-way phone call between the EM and the Minnesota Team Coordinator and explain the basis for the recommended protective action.

   - If at Prairie Island
     Initiate a 3-way conference call between the EM, the Minnesota Team Coordinator and the Wisconsin State Radiological Coordinator and explain the basis for the recommended protective action.

5.2. Radiation Protection Support Supervisor

1. Obtain offsite dose projection data from the affected plant TSC.

2. Obtain and analyze the result of offsite monitoring efforts and compare these results with calculated dose projections.

3. Obtain and analyze the results of the Emergency Radiological Environmental Monitoring Program (EREMP) as appropriate.

4. Obtain information from the affected plant TSC regarding the magnitude and nature of potential radioactive releases and analyze the potential offsite consequences.

5. Provide the TSC with offsite survey results.

6. Provide the Emergency Manager with offsite dose and dose rate information and recommendations for offsite protective actions.

7. If it becomes necessary to issue a protective action recommendation to the state(s), prepare a Protective Action Recommendation Checklist, Figure 1 for Emergency Manager approval.

8. Prepare Emergency Notification Follow-up Message as found in Figure 2, of EPIP 1.1.5, "Start-up and Operation of EOF". Provide completed form to the Emergency Manager and transmit information to the State EOC.

6.0 PROCEDURE

6.1 Analysis of Dose Projections for Actual Airborne Releases

1. Obtain the following information from the TSC.

   a. Release rates and type of release (ground or elevated).

   b. Meteorological data (wind speed, wind direction, and stability class).

   c. Survey results from plant survey teams, as applicable.

   d. Projected offsite dose calculations.

2. Record dose projections on area map referenced in EPIP 1.1.4 (use red marker).

   a. This will normally be in the form of 16 sector dose data out to 10 miles.

   b. Determine the highest integrated dose region and highest dose rate region.

3. Determine applicable radiation protection requirements for NSP personnel in affected offsite areas.

4. Dispatch survey teams to affected offsite regions with due regard to radiation protection requirements.

   a. Teams should be deployed to populated areas where the highest dose rates are projected.

   b. Direct the offsite monitoring to be performed in accordance with Corporate EPIP 1.1.10, "Offsite Surveys".

5. When survey data is available, plot the data on the area maps referenced in EPIP 1.1.4. Offsite survey results should be plotted (in blue marker) logging beta-gamma survey results in milliREM/hr followed by air sample results in uCi/cc.

6. Provide offsite monitoring results to the TSC for comparison with computer based estimates.

7. Perform a comparison of radiological data as follows:

a. Compare offsite monitoring results for consistency. Re-monitor areas of concern, as required.

b. Compare offsite monitoring results with dose calculation projections. Re-monitor areas of concern, as required.

c. Dose calculation techniques should represent an upper bound to potential offsite dose and dose rates. Field survey results more accurately indicate integrated dose and dose rate in the environs.

8. Contact the Radiological Emergency Coordinator for an update of offsite dose projections. Verify that offsite dose projections are consistent with offsite survey team results.

9. Determine any protective action recommendations that are prudent. These recommendations should be made and plotted on Figure 1 using the guidance provided in this procedure.

10. Provide the Emergency Manager with the current integrated dose and dose rate information data for populated areas and other areas of major concern. A summary report should be prepared at periodic intervals as time and information permit. The summary report should consist of the following:

a. Plot of integrated dose and dose rate information on area maps referenced in EPIP 1.1.4 (date, time, color code).

b. Summary of meteorological conditions, past changes in conditions and potential changes germaine to radioactive material transport.

c. Areas of highest integrated dose and dose rate.

d. Population areas of greatest concern.

e. Summary of monitoring and dose calculation efforts to date.

f. Planned monitoring and dose calculations in progress.

11. Complete the Emergency Notification Follow-up Message for reporting of the event. Use Figure 2, EPIP 1.1.5, "Start-up and Operation of EOF". Provide completed form to the Emergency Manager.

6.2. Analysis of Dose Projection for Potential Airborne Releases

1. If the potential exists for a significant release of radioactive material from the plant, perform an analysis of potential offsite consequences as follows:

a. Request the TSC to determine the approximate releasable curie content of the containment.

b. Request the TSC to determine the most probable release path, i.e. ground release, stack release or building ventilation release.

c. Request the TSC to determine dose projection calculations based on release of this material under present and various meteorological conditions using the affected plant procedure for offsite dose calculations; Prairie Island Nuclear Generating Plant procedure F3-13, "Offsite Dose Calculations", or Monticello Nuclear Generating Plant procedure, A.2-406, "Offsite Dose Projection".

d. Using the data developed by the TSC assess the probability of a total rapid release vs a continuous slow release for an extended period of time. Perform dose calculations for most likely release mode and worse case mode.

e. Using the data developed by the TSC determine the population areas in risk.

2. Contact the Radiological Emergency Coordinator. Verify that the TSC calculations and assessment of offsite dose rates are in general agreement with those at the EOF. Any disagreements shall be brought to the attention of the Emergency Manager.

3. Determine any protective action recommendations that are prudent. These recommendations should be made, plotted on Figure 1, and forwarded to the Emergency Manager using the guidance in this procedure.

4. Provide the Emergency Manager with current assessment information. A summary report should be prepared at periodic intervals as other duties and information permit. The summary report should include the following:

   a. Plot of most probable and worse case integrated dose on an area map.

   b. Meteorological basis for the plot and potential for improvement or degradation of meteorological conditions.

   c. Sectors of highest potential dose and population centers of concern.

   d. Efforts underway to better determine the magnitude of the potential release.

5. Complete the Emergency Notification Follow-up Message using Figure 2, EPIP 1.1.5, "Start-up and Operation of EOF". Provide the completed form to the Emergency Manager.

6.3. Assessment of Liquid Releases

1. Obtain offsite monitoring data in accordance with Corporate EPIP 1.1.10, "Offsite Surveys".

2. Develop a followup report to the Emergency manager which includes the following:

   a. Results of offsite monitoring.

   b. Release status and potential for resumption or termination.

   c. Dilution considerations and projected concentration of radioactive material at the nearest public water intake structure.

3. If the release is at Monticello, contact the TSC and obtain the expected arrival time of the radioactive material at the Minneapolis and St. Paul water intake structures.

4. If necessary, contact the state EOC and recommend that Minneapolis and St. Paul water intakes be closed. (Use Figure 1.)

7.0 GUIDANCE FOR RECOMMENDING PROTECTIVE ACTION

NOTE:

1. The values given in this section are conservative guidance for recommending protective action to the state(s). This guidance is to be used at the discretion of the Emergency Manager and is based upon the following:

   [1]The dose expressed is based on 1/4 of the EPA lower limit dose for evacuation.

   [2]The thyroid dose expressed is based on child thyroid dose.

   [3]The dose expressed is based on RG 8.13.

   [4]The dose expressed is based on the EPA lower limit dose for evacuation.

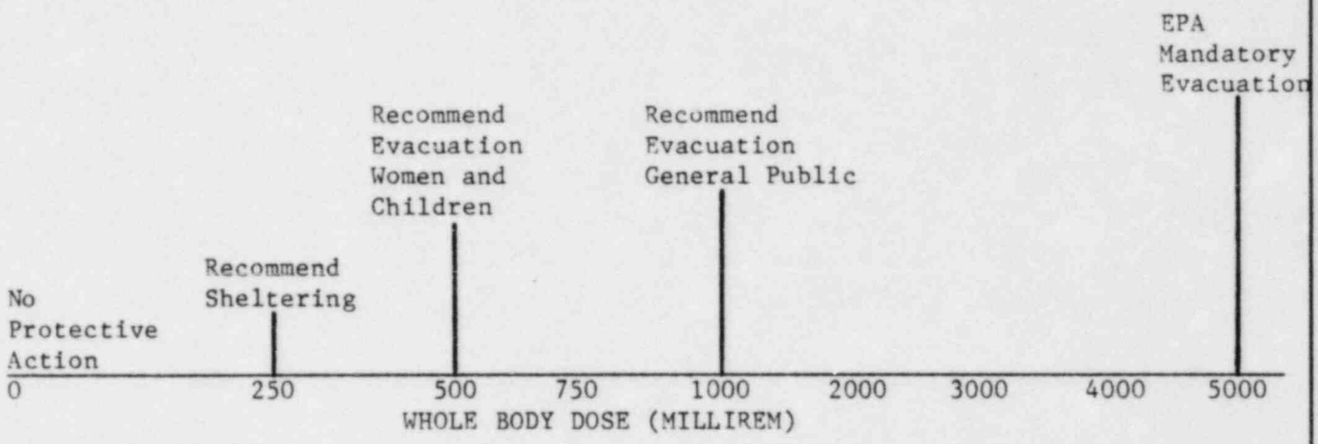
2. These recommendations are based on actual offsite doses or a high degree of confidence that these doses are actually expected offsite.

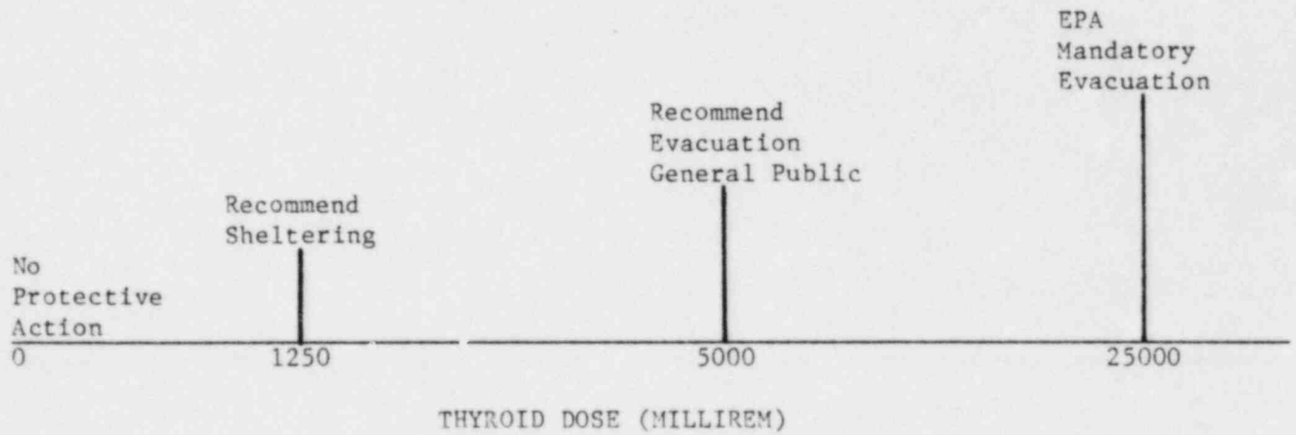
3. All protective action recommendations should be discussed with the State(s) Health Department.

4. The EPA Guidelines for Recommended Protective Actions located in TAB A shall serve as the maximum levels.

5. Further guidance may be found in Appendix C, Protective Action Guidance, NSP Corporate Nuclear Emergency Plan.

NSP Conservative Guidance for
Protective Action Recommendations
(see note in Section 7.0)





7.1 No Protective Actions will be recommended up to 250 mRem whole body dose or 1250 mRem Thyroid dose [1,2] (see note)

7.2 Sheltering

1. Sheltering is a protective action which involves members of the general public taking cover in a building that can be made relatively air tight. Generally, any building suitable for winter habitation, with windows and doors closed and ventilation turned off, would provide reasonably good protection for about two hours; but would be ineffective after that period due to natural ventilation of the structure. Sheltering is an appropriate protective action for the following:

   a. Severe incidents in which an evacuation cannot be implemented because of the rapid passage of the plume ("puff" release).

   b. When an evacuation is indicated, but local constraints, such as inclement weather, road condition, etc., dictate that directing the public to seek shelter is a more feasible and effective protective measure than evacuation.

   c. As a precautionary measure, while a determination of the need to evacuate is made.

2. Sheltering of the general public may be recommended at 250 mRem whole body dose or 1250 mRem thyroid dose [1,2] (see note)

7.3 Evacuation

1. Timely evacuation of members of the population is the most effective protective action. There are, however, disadvantages and constraints that may make evacuation inappropriate. Evacuation is an appropriate protective action for the following:

   a. Situations where the lead time between declaration of the emergency and population relocation is compatible with plume movement.

   b. Situations which do not provide for advance warning, but for which substantial reductions in population dose can be made by avoiding exposure to residual radioactivity (plume fallout) in wake of sudden severe incidents.

2. Evacuation of pregnant women and children may be recommended at 500 mRem whole body dose. [3] (see note)

3. Evacuation of the general public may be recommended at 1000 mRem whole body dose, or 5000 mRem thyroid dose. [4] (see note)

4. Evacuation Time Estimates are located in Appendix D to the Corporate Nuclear Emergency Plan.

7.4 Public Alert & Notification System (PANS)

NOTE: It is the responsibility of the state(s) to activate this system.

1. A Site Area Emergency and a protective action such as sheltering or evacuation has been recommended for the public within all, or a portion of, the 10 mile Emergency Planning Zone (EPZ) surrounding each plant.

2. A General Emergency classification has been declared at either the Monticello or Prairie Island Nuclear Generating Plant.

3. The Emergency Manager shall, if necessary, recommend to the Minnesota Division of Emergency Services (DES) and the Wisconsin Division of Emergency Government (WDEG) activation of the Public Alert and Notification System when a protective action guideline (PAG) is recommended.

4. The State(s) Duty Officer will be responsible for activating the Public Alert & Notification System which includes development of messages for the public.

5. If the State EOCs are not activated and the emergency requires immediate activation, make such a recommendation directly to the County Sheriffs.

Monticello Area	Prairie Island Area
• Sherburne County	• Goodhue County
• Wright County	• Dakota County
	• Pierce County

6. The Public Alert & Notification System for alerting the public in the 10 mile Emergency Planning Zone (EPZ) surrounding each plant consists of the following:

   - Fixed sirens for 100% coverage throughout the 5 mile zone and in population centers in the 5-10 mile zone.
   - Emergency vehicles with sirens and public address in the 5-10 mile areas not covered by fixed sirens.
   - National Oceanic and Atmospheric Administration (NOAA) activated tone alert radios in institutional, educational, and commercial facilities.
   - The Emergency Broadcast System (EBS) which has access to television and radio stations within the area.

The primary means of alerting the public to an impending notification will be the use of fixed and mobile sirens. Once alerted, the public should turn to local commercial broadcast messages as the primary means of notification for conditions. Should there be more than one PAG during an incident and they are determined at different times, this procedure shall be repeated.

7.5 Contamination Control (food, water, milk, etc.)

1. On a timely basis considering the needs of the emergency effort and the personnel resources available, the extent of radiological contamination within the 10 mile and 50 mile emergency planning zones should be assessed. This can be accomplished by activation of the "Emergency Radiological Environmental Monitoring Program", EPIP 1.1.12 or by examination of environmental monitoring data from the state. This may not be part of the initial Protective Action effort.

2. As information becomes available, determinations concerning the need for offsite protective actions within the 50 mile EPZ should be made. These determinations should be made in accordance with the environmental guidance of the State Protective Action Guides provided in the Corporate Emergency Plan, Appendix C, and the State of Minnesota Radiological Emergency Response Plan.

3. Provide any recommendations for contamination control to the state(s).

7.6 Close Minneapolis and St Paul Water Intakes (for Monticello liquid release).

1. This protective action should be recommended as determined necessary by Section 6.3 of this procedure.

TAB A

EPA GUIDELINES FOR RECOMMENDED PROTECTIVE ACTIONS
(WHOLE BODY AND THYROID DOSE FROM EXPOSURE TO A GASEOUS PLUME)

Projected Dose (Rem) to The Population	Recommendation Actions	Comments
Whole Body <1 Thyroid <5	No planned protective actions. Issue an advisory to seek shelter and await further instructions. Monitor environmental radiation levels.	Previously recommended protective actions may be reconsidered or terminated.
Whole Body 1 to <5 Thyroid 5 to <25	Seek shelter as a minimum. Consider evacuation. Evacuate unless constraints make it impractical. Monitor environmental radiation levels. Control access.	If constraints exist, special consideration should be given for evacuation of children and pregnant women.
Whole Body 5 and above Thyroid 25 and above	Conduct mandatory evacuation. Monitor environmental radiation levels and adjust area for mandatory evacuation based on these levels. Control access.	Seeking shelter would be an alternative if evacuation were not immediately possible.
Projected Dose (Rem) To Emergency Workers		
Whole Body 25 Thyroid 125	Control exposure of emergency team members to these levels except for lifesaving missions. (Appropriate controls include time limitations, respirators and thyroid prophylaxis.)	Although respirators and thyroid prophylaxis should be used where effective to control dose to emergency workers, Thyroid dose should not be the limiting factor for lifesaving missions.
Whole Body 75	Control exposure of emergency team members performing a life saving mission to this level. (Control of time exposure will be most effective.)	

TAB A

GUIDELINES FOR PROTECTION AGAINST INGESTION OF CONTAMINATION+

I. Ground Contamination
   A. Action Levels
      1. Projected whole body dose above the ground 1 Rem.
      2. Ground Contamination levels 200 uci/m^2 at t = 1 hr post-accident.
      3. Exposure rate 12mRem/hr at 1 meter above ground at t = 1 hr post-accident.
   B. Recommended Protective Actions
      1. Evacuation of affected areas.
      2. Restriction of entry of contaminated offsite areas until radiation level has decreased to state approved levels.

II. Food and Water Contamination
   A. Action Levels

	Concentration in Milk or Water (0.5 Rem WB or bone: 1.5 Rem Thyroid)		Total Intake via all Food & Water Pathways		Pasture Grass (Fresh Weight)	
	Preventive Level (uCi/l)	Emergency Level (uCi/l)	Preventive (uCi)	Emergency (uCi)	Preventive (uCi/kg)	Emergency (uCi/kg)
Nuclide*						
I-131 (Thyroid)	0.012	0.12	0.09	0.9	0.27	2.7
Cs-137 (Whole Body)	0.34	3.4	7	70	3.5	35
Sr-90 (Bone)	0.007	0.0008	0.02	0.2	0.7	7
Sr-89 (Bone)	0.13	1.3	2.6	26	13	130

   B. Recommended Protective Actions

Preventive

1. Removal of lactating dairy cows from contaminated pasture and substitution of uncontaminated stored feed.
2. Substitute source of uncontaminated water.
3. Withhold contaminated milk from market to allow radioactive decay.
4. Divert fluid milk to production of dry whole milk, butter, etc.

Emergency

Isolate food and water from its introduction into commerce after considering:

a. availability of other possible actions;
b. importance of particular food in nutrition;
c. time and effort to take action;
d. availability of other foods.

* If other nuclides are present, Reg. Guide 1.109 should be used to calculate the dose to the critical organ(s). Infants are the critical segment of the population.

\+ References: U S Food and Drug Administration, Federal Register.

TAB A

RECOMMENDED PROTECTIVE ACTIONS

ACCIDENT PHASE	EXPOSURE PATHWAY	EXAMPLES OF ACTIONS TO BE RECOMMENDED
EMERGENCY PHASE 1 (0.5 to 24 hours)*	Inhalation of gases, radio iodine, or particulate	Evacuation, shelter, access control, respiratory protection, prophylaxis (thyroid protection).
	Direct whole body exposure	Evacuation, shelter, access control
	Ingestion of milk	Take cows off pasture, prevent cows from drinking surface water, discard contaminated milk, or divert to stored products, such as cheese.
INTERMEDIATE PHASE 2	Ingestion of fruits and	Wash all produce, or impound produce, delay harvest until approve substitute uncontaminated produce.
	Ingestion of water	Cut off contaminated supplies, substitute from other sources, filter, demineralize.
(24 hours* to 30 days)	Whole body exposure and inhalation	Relocation, decontamination, access control.
LONG TERM PHASE 3	Ingestion of food and water contaminated from the soil either by resuspension or uptake through roots.	Decontamination, condemnation, or destruction of food; deep plowing, condemnation, or alternate use of land.
(Over 30 days)*	Whole body exposure from deposition material or inhalation of resuspended material.	Relocation, access control, decontamination, fixing of contamination, deep plowing.

1 Emergency Phase - Time period of major release and subsequent plume exposure.

2 Intermediate Phase - Time period of moderate continuous release with plume exposure and contamination of environment.

3 Long Term Phase - Recovery period.

* "Typical" Post-Accident time periods.

TAB A

REPRESENTATIVE SHIELDING FACTORS FROM GAMMA CLOUD SOURCE

Structure or Location	Shielding Factor (a)	Representative Range
Outside	1.0	—
Vehicles 1.0		—
Wood-Frame House (No Basement) (b)	0.9	—
Basement of Wood House	0.6	0.1 to 0.7 (c)
Masonry House (No Basement)	0.6	0.4 to 0.7 (c)
Basement of Masonry House	0.4	0.1 to 0.5 (c)
Large Office or Industrial Building	0.2	0.1 to 0.3 (c, d)

(a) The ratio of the dose received inside the structure to the dose that would be received outside the structure.

(b) A wood frame house with brick or stone veneer is approximately equivalent to a masonry house for shielding purposes.

(c) This range is mainly due to different wall materials and different geometries.

(d) The shielding factor depends on where the personnel are located within the building (e.g., the basement or an inside room).

SELECTED SHIELDING FACTORS FOR AIRBORNE RADIONUCLIDES

Wood house, no basement	0.9
Wood house, basement	0.6
Brick house, no basement	0.6
Brick house, basement	0.4
Large Office or Industrial Building	0.2
Outside	1.0

*Taken from SAND 77-1725 (Unlimited Release)

TAB A

REPRESENTATIVE SHIELDING FACTORS FOR SURFACE DEPOSITED RADIONUCLIDES

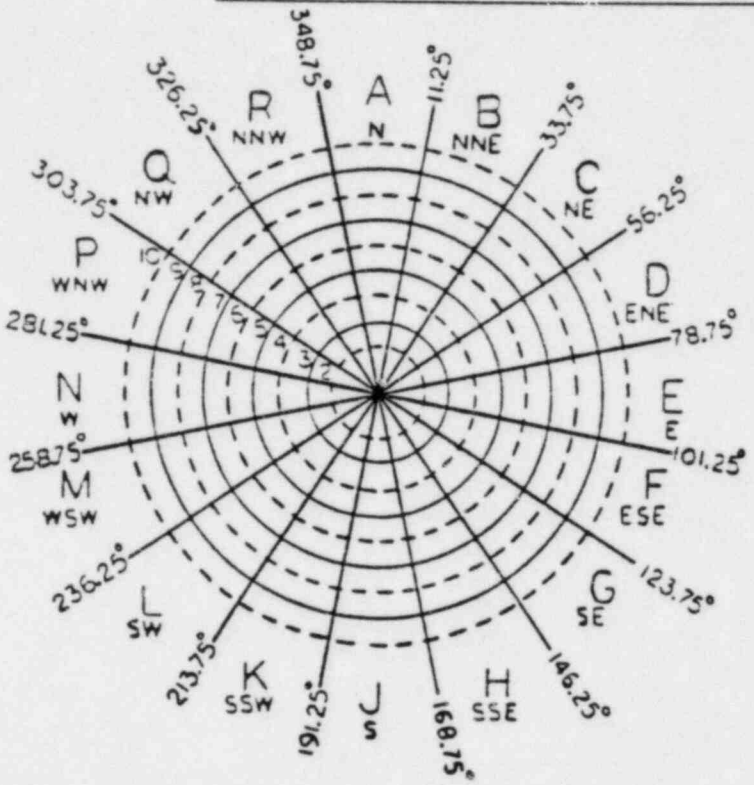
STRUCTURE OR LOCATION	REPRESENTATIVE SHIELDING FACTOR[a]	REPRESENTATIVE RANGE
1 m above an infinite smooth surface	1.00	—
1 m above ordinary ground	0.70	0.47 - 0.85
1 m above center of 50-ft roadways, 50% decontaminated	0.55	0.4 - 0.6
Cars on 50-ft road;		
Road fully contaminated	0.5	0.4 - 0.7
Road 50% decontaminated	0.5	0.4 - 0.6
Road fully decontaminated	0.25	0.2 - 0.5
Trains	0.40	0.3 - 0.5
One and two-story wood-frame house (no basement)	0.4	0.2 - 0.5
One and two-story block and brick house (no basement)	0.2 [b]	0.04 - 0.40
House basement, one or two walls fully exposed:	0.1 [b]	0.03 - 0.15
One story, less than 2 ft of basement, walls exposed	0.5 [b]	0.03 - 0.07
Two stories, less than 2 ft of basement, walls exposed	0.03 [b]	0.02 - 0.05
Three- or four-story structures, 5000 to 10,000 ft^2 per floor;		
First and second floors:	0.05 [b]	0.01 - 0.08
Basement	0.01 [b]	0.001 - 0.07
Multi-story structures, 10,000 ft - per floor:		
Upper floors	0.01 [b]	0.001 - 0.02
Basement	0.005 [b]	0.001 - 0.015

(a) The ratio of dose received inside the structure to the dose that would be received outside the structure.

(b) Away from doors and windows.

* Taken from SAND 77-1725 (Unlimited Release)

FIGURE 1
PROTECTIVE ACTION RECOMMENDATION CHECKLIST



NOTE:

- When this form is telecopied to the state, a call must be initiated by the EM to explain the basis for any recommendation.
- This form may be used in conjunction with an Emergency Notification Follow-up Message.
- Designate affected zones as follows: S for sheltering E for evacuation

Date _____
Time _____ Wind direction/speed _____° From At _____ (mph)

PROTECTIVE ACTION:

☐ SHELTER Sector(s) _____ Mile(s)_____
Sector(s) _____ Mile(s)_____

☐ CONSIDER EVACUATION OF PREGNANT WOMEN AND CHILDREN

☐ EVACUATION Sector(s) _____ Mile(s)_____
Sector(s) _____ Mile(s)_____

☐ ACTIVATE PUBLIC ALERT & NOTIFICATION SYSTEM

☐ CLOSE MINNEAPOLIS & ST PAUL WATER INTAKES (for Monticello liquid release)

☐ CONTAMINATION CONTROL (food, water, milk) Sector(s) _____ Mile(s)_____
Sector(s) _____ Mile(s)_____

☐ CONSIDER TERMINATION OF PROTECTIVE ACTIONS IN PROGRESS

Justification for Protective Action Recommendations: _____

Prepared by: _____ Approved by: _____
Emergency Manager/Emergency Director

EXAMPLE ONLY
USE
CURRENT REVISION

NUCLEAR SUPPORT SERVICES DEPT NORTHERN STATES POWER COMPANY	CORPORATE NUCLEAR EMERGENCY PLAN IMPLEMENTING PROCEDURE NUMBER: EPIP 1.1.12 REV: 4
PREPARED BY: Gary Hudson Asst. Adm. Emergency Preparedness	EFFECTIVE DATE: OCTOBER 8, 1982
REVIEWED BY: E C Ward Manager Nuclear Environmental Services	TITLE: 1.1.12 IMPLEMENTATION OF THE EMERGENCY RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM (EREMP)
APPROVED BY: General Manager Nuclear Plants	

1.0 PURPOSE AND OBJECTIVE

The purpose of this procedure is to to provide for special offsite environmental samples in the event that a plant emergency develops which may affect the environs of the Emergency Planning Zones. Various tabs attached to this procedure provide for sampling instructions.

2.0 CONDITIONS AND PREREQUISITES

An emergency condition requiring offsite response has been declared at either the Monticello or Prairie Island Nuclear Generating Plants.

3.0 ORGANIZATION AND RESPONSIBILITIES

A. Overall responsibility - Emergency Manager

B. In Charge - Administrator REMP

C. Sample Collection - Manager ERAD

4.0 RESPONSIBILITIES

4.1 Emergency Manager

1. If necessary, activate REMP personnel to serve as sample couriers between the Radiological Field Teams and the EOF Backup Count Room.

2. The Emergency Manager will notify the Administrator - REMP that special environmental sampling is needed. If the Administrator - REMP cannot be reached, the EM will call the Supervisor - Ecological Studies or his designee at the affected plant. Special samples may be taken at any time during an accident to provide additional information as to the extent of radioactive release to the environment.

3. The REMP Program provides for various environmental samples at recognized intervals and locations. The following is a list of the types of samples and the normal sample frequency:

A.	Air Particulate and Radioiodine cartridges changed	- continuous sample/filters and - Weekly
B.	TLD	- Quarterly
C.	Milk (Cow)	- Monthly
D.	Well Water	- Quarterly
E.	Drinking Water	- Weekly
F.	Mississippi River Water	- Weekly
G.	Cultivated Crops	- Annually
H.	Natural Vegetation	- Semi-annual
I.	Top Soil	- Every Three Years
J.	Macroinvertebrates or Periphyton	- Semi-annual
K.	Fish	- Semi-annual
L.	Aquatic Vegetation	- Semi-annual
M.	Bottom Sediment (River)	- Semi-annual
N.	Shoreline Sediment	- Semi-annual
O.	Small Animals	- Semi-annual

4. The following guidelines are provided to aid the Emergency Manager in determining the extent of additional environmental monitoring required to document any release or determine additional protective actions.

   Two sets of TLD's containing 3 chips each are placed at each location in the area of the plant site. One set (Regular) is exchanged and read out quarterly. The second set (Emergency) is read out when requested by the Emergency Manager. If the "Emergency" set is not read out during the regular exposure period, they are exchanged at the same time as the "regular" set. Maps are available to show the locations. (E-EPD-4.4 [Monticello] and E-EPD-5.4 [Prairie Island])

   1) For Alert and Site Area Emergency Conditions the Emergency set of TLD dosimeters can be collected for affected sectors upon termination of the emergency condition.

   2) For a General Emergency condition the Emergency set of TLD dosimeters may be exchanged during the emergency conditions, but should not be exchanged during any known release period. Considerations for exchanging the dosimeters should include:

      a) Taking parallel actions with the state and NRC as deemed necessary.

      b) Providing interim data concerning the long term effects of the casualty on the environment.

c) Providing additional data concerning the extent of the release plume.

d) The Regular set of dosimeters should not be exchanged, except at the normal ninety-one day exchange date.

3) For airborne releases, samples 1, 2, 3, 8, and 9, as listed on Page 2, could provide representative date on immediate environmental effects. For liquid effluent releases, samples 7, 12, 14 and 15, also listed on Page 2, could provide data on immediate effects.

4.2 Administrator - REMP

1. Contact the contract laboratory (Hazleton Environmental Services) and request new sets of dosimeters be immediately forwarded to NSP. He shall inform the laboratory that special samples, which require processing, will be forwarded.

2. Contact the EOF Radiation Protection Support Supervisor to determine if any special precautions are necessary when the samples are collected. He shall request personal dosimetry be supplied to the personnel who will be collecting the samples.

3. Notify the Supervisor - Ecological Studies (ERAD) or if unavailable the next person on the list at the affected plant and request that special samples be collected. Specify any special precautions to be observed during sample collection. Direct personnel responsible for sample collection to obtain dosimeters at the EOF.

4. Request REMP personnel to report to the Radiation Protection Support Supervisor for assignment to a Radiological Field Team. These persons will provide a courier service to transport samples between the field teams and the EOF laboratory facilities.

5. Specify that sampling procedures for collecting, identifying, and shipping environmental samples to the contract laboratory for analyses will be implemented in accordance with the Emergency Radiological Environmental Monitoring Program (EREMP).

6. Inform the Emergency Manager of the results of the Emergency Radiological Environmental Monitoring Plan.

5.0 NOTIFICATIONS

5.1 Corporate

	Office	Home
Administrator - REMP	DELETED	

5.2 Prairie Island Site

	Office	Home	Pager
L W Eberley (Supv-Ecological Studies)	DELETED		-
Designees			
P R Palmquist	DELETED		-
G M Kuhl			-
K N Mueller			-

5.3 Monticello Site

	Office	Home	Pager
G D Heberling, Jr. (Supv-Ecological Studies)		DELETED	
Designees			
D F Johnson		DELETED	
J W Weinhold			

6.0 SPECIAL SAMPLING PROCEDURES

Special sampling procedures are specified in tabs attached to this procedure. The following tabs are included:

Procedure	Tab
• Identification and Shipping	A
• TLDs	B
• Raw Milk Sampling	C
• River Water Sampling	D
• Natural Vegetation Sampling	E
• Leafy Green Vegetables Sampling	F
• Sample Courier Service between Radiological Field Teams and the EOF Backup Count Room	G

TAB A

IDENTIFICATION AND SHIPPING

All samples collected shall be identified either by placing the following information on the sample container or on a tag attached to the sample container. These samples must be specifically marked "Emergency Samples".

Plant:	Monticello or Prairie Island
Location of Sample:	Farm name and address
Date Collected:	Month-day-year
Kind of Sample:	Milk-Natural Vegetation-etc

Unless otherwise stated in a procedure, all samples shall be shipped by Greyhound Package Express, "Next Bus Out", Service to:

Hazleton Environmental Sciences
1810 Frontage Road
Northbrook, Illinois 60062
Attn: Mr L G Huebner

Notifying the Laboratory Contact with the laboratory or Mr L G Huebner must be made prior to, or at the time of sample shipment; call , extension DELETED (lab) or extension (office) and tell them about the sample shipment and the analysis to be performed by them. During non-working hours, before 8:30 a.m., after 4:15 p.m., and on weekends, call L G Huebner, DELETED

Milk samples are placed into a shipping cooler with sufficient ice to last 3 days, labeled and delivered to a Greyhound pickup point.

TLD's can be boxed in a carton, labeled and shipped by plane or by bus. See special instructions in the TLD section.

River water samples are boxed, sealed, labeled and shipped without ice via Greyhound Package Express.

Natural Vegetation and Leafy Green Vegetables These samples are collected in plastic bags, labeled, placed in boxes, sealed, labeled and shipped without ice by Greyhound Package Express.

TAB B

TLDs

(Thermoluminescent Dosimeters)

General: Normally these dosimeters are placed inside an environmental case that has been bolted to a steel fence post. The locations are 4-5 miles away from the plant in 16 different meteorological sectors, at the site boundary in the 16 different meteorological sectors, at a control location, and at special interest areas.

Two cards of 3 TLDs each, are encased in plastic with proper identification and placed at each exposure location. One card will be identified as "Regular" and the other will be marked "Emergency". Under normal conditions the plastic case will be changed on a quarterly basis and the laboratory has instructions to ready only the "Regular" card. The "Emergency" card will be annealed only. In case of an unscheduled gaseous release and the Emergency Director/Manager requests TLD pickup, the plastic case will be opened the "Emergency" card removed and sent to the laboratory for reading.

Control Dosimeters: When the set of unexposed dosimeters is received from the laboratory, specially marked "control" badges are placed inside a lead-shielded case (control shield) located at the biological station and remains there until the other badges are removed to be returned to the laboratory. In case of an unscheduled release and the emergency badges are picked up, the "Emergency Control" must accompany them to the laboratory.

Recording Exposure Time: Be sure beginning and ending exposure time (date-hours) have been recorded on the shipping tag for each dosimeter.

Special Reporting: If special reporting of the results of the radioactivity found in the badges is required, the laboratory must be informed. Otherwise the results will be mailed to the Nuclear Support Services Department at a later date.

Replacement Badges: In case additional replacement badges are needed, they will be supplied by the contract laboratory by calling Hazleton, Mr Leo Huebner (312) 564-0700 Extension 224. Ask him to zero a set and ship them by "preferred air space" on the next commercial airline leaving O'Hara airport for Minneapolis. You must meet that plane and the package of badges will be delivered to the airline baggage office. Return of exposed badges can be accomplished by placing them in the carton the replacement badges arrived in, and reversing the above shipping procedure.

Be sure to remind persons involved in handling badges that they are "not" to be put through the airport x-ray machines. Better to open the package for visual inspection.

Tab B Con't

TLD LOCATIONS MONTICELLO NUCLEAR GENERATING PLANT
(Map E-EPD-4.4)

INNER RING (General Area of Site Boundary)

M01A - North Boundary Road - North Sector - Sampler is located on the south side of the road near pole #485. It is outside the fenced area of north sector air sampling station.

M02A - North Boundary Road - NNE Sector - Sampler is located on the south side of the road between poles #474 and #475. It is outside the fenced area of the NNE Sector air sampling station.

M03A - North Boundary Road - NE Sector - Sampler is located on the south side of the road between poles #455 & #456.

M04A - Road to Biology Station - East Sector - Sampler is located next to corner fence post around the first curve at the bottom of the road.

M05A - Road to Biology Station - ESE Sector - Sampler is located next to fence post opposite the road that leads to the meteorological tower.

M06A - Road to Biology Station - SE Sector - Sampler is located next to a fence post at the first curve in the road.

M07A - County Road 75 - SSE Sector - Sampler is located on the north side of the road adjacent to a sign that reads "Left Turn Traffic - 600 Feet".

M08A - County Road 75 - South Sector - Sampler is located on the north side of the road opposite the west side of the bridge over Hwy. 94.

M09A - County Road 75 - SSW Sector - Sampler is located on the east side of the fenced area of the air sampling station between County Road 75 and Highway 94.

M10A - County Road 75 - SW Sector - Sampler is located adjacent to the mail box of a trailer home north of County Road 75.

M11A - County Road 75 - WSW Sector - Sampler is located on the north side of the road opposite a "no passing zone" sign.

M12A - County Road 75 - West Sector - Sampler is located adjacent to a railroad communication pole and about 600 feet West of an unused service road entrance (Plant).

M13A - North Boundary Road - NW Sector - Sampler is located on the south side of the road between poles 497 and 498 near an existing fence post.

M14A - North Boundary Road - NNW Sector - Sampler is located on the south side of the road between poles 491 and 492

Tab B Con't

OUTER RING (4 to 5 miles distance)

M01B - Sherco #1 Air Monitoring Station - North Sector - Sampler is located on the south side of the monitoring building facing the Monticello Plant. (Sherburne County Road #4, east of the town of Becker about 1 mile).

M02B - County Road 11 and 55th Ave - NNE Sector - The sampler is located near the street signpost behind the telephone junction box, facing the plant.

M03B - Intersection of County Road 73 and 81 - NE Sector - The sampler is located behind the telephone junction box and faces the direction of the plant.

M04B - Sherco #6 Air Monitoring Station - ENE Sector - (On County Road #73) - Sampler is located south of the monitoring building adjacent to the power pole and facing the direction of the Monticello Plant.

M05B - City of Big Lake Garage - East Sector - County Road #73 and Highway 10 (NE corner) - Sampler is located on the southwest corner of the building about 6 feet away and facing the plant.

M06B - At junction of County Road #14 and 196th Street - ESE Sector Sampler is located on the northwest corner of the intersenction, midway between the street sign and a tree and facing the plant.

M07B - Industrial Drive - SE Sector - Sampler is located adjacent to NSP power pole #21 and facing the plant.

M08B - Dale K Larson Residence - SSE Sector - Highway #25 and approximately ¼ mile south of County Road #106. - Sampler is located adjacent to the residence power pole and facing the plant.

M09B - Near Norbert Weinand Farm - South Sector - The sampler is located adjacent to power pole #44 and about 6 feet south of it facing the plant.

M10B - Near the John Reisewitz Farm - SSW Sector - The sampler is located near the road adjacent to pole #EM204, facing the Monticello Plant.

M11B - Near the Clifford Vanlith Farm - SW Sector - The sampler is located north of the road adjacent to the mail box and near pole #35.

M12B - Lake Maria State Park Entrance - WSW Sector - The sampler is located on the south side of the entrance road between a "state park" sign and a tree.

Tab B Con't

M13B - Near Bridgewater Switching Station - West Sector - (Enfield exchange) - Sampler is located outside the southeast corner of the fenced area and facing the Monticello Plant.

M14B - Near the Richard K Anderson Residence - WNW Sector - Sampler is located on the west side of the road adjacent to the mail boxes.

M15B - Near the Gary Williamson Residence - NW Sector - Sampler is located on the west side of the road adjacent to the mail boxes.

M16B - Sand Plain Research Farm (U of M) - NNW Sector - Sampler is located behind the signboard and facing the Monticello Plant.

SPECIAL INTEREST AREAS

M01S - Floyd Hartung Residence - SSW Sector - Sampler is located east of driveway next to a fence post.

M02S - Edgar Klucas Residence - SE Sector - Sampler is located adjacent to a pole with a night light on it - next to driveway.

M03S - Big Oaks Park - East Sector - (on County Road #11) - Sampler is located near the signpost on the north side of the entrance road and facing the plant.

M04S - Pinewood Elementary School - SSE Sector - Sampler is located adjacent to the northeast corner of the tennis court fence.

M05S - Roman Greener Residence - ESE Sector - (Near County Road #50 and 208th Street) - Sampler is located near the flag pole on the residence property.

M06S - Near Monticello Service Center - SE Sector - Sampler is located adjacent to the air monitoring station west of the building.

CONTROL (More than 10 miles away)

M01C - Kirchenbauer Farm - NW Sector - Sampler is located adjacent to the mail boxes.

Tab B Con't

(TLD LOCATIONS PRAIRIE ISLAND NUCLEAR PLANT)
(Map E-EPD-5.4)

INNER RING (General Area of Site Boundary)

P01A - Property Line - North Sector - Sampler is located on the inside of the fence adjacent to Corps of Engineers public access parking area and facing the plant.

P02A - Property Line - NNE Sector - Sampler is located at a corner of the property line fence near the biology station.

P03A - Property Line - South Sector - Sampler is located adjacent to southeast end of guard rail along the road near a power pole.

P04A - Property Line - SSW Sector - Sampler is located adjacent the northwest end of a guard rail along the roadway next to a small access road.

P05A - Property Line - SW Sector - Sampler is located inside the fenced area adjacent to a transmission tower.

P06A - Property Line - WSW Sector - Sampler is located just inside the fenced area adjacent to a telephone junction box and south of an underground cable warning sign.

P07A - Property Line - West Sector - Sampler is located just inside the fenced area about 75 feet north of the railroad entrance gate adjacent to a fence sign.

P08A - Property Line - WNW Sector - Sampler is located adjacent to the last power pole that serves the meteorological station, along the property fence line.

P09A - Property Line - NW Sector - Sampler is located at the northwest corner of the property fenced area, just inside the fence and facing the plant.

P10A - Property Line - NNW Sector - Sampler is located on the inside of the fence, west of the north entrance gate facing the plant. (Adjacent to a transmission tower).

Tab B Con't.

OUTER RING (4-5 miles distance)

P01B - Thomas Killian Residence - North Sector - Sampler is located adjacent to a power pole north of the driveway.

P02B - Roy Kinneman Farm - NNE Sector - Sampler is located south of the driveway adjacent to a telephone junction box.

P03B - Wayne Anderson Farm - Northeast Sector - Sampler is located in the front yard adjacent to a power pole facing toward the plant.

P04B - Nelson Drive (Road) - ENE Sector - Sampler is located adjacent a power pole and a telephone junction box about 15 feet south of the road.

P05B - County Road E near Goodwin Coulee Road - East Sector - Sampler is located north of County Road E and about 300 feet northwest of the Goodwin Coulee Road (Near a power pole that has a "Danger High Voltage" sign on it and about 25 feet northwest of the Richard Enberg mailbox.

P06B - William Hauschildt Residence - ESE Sector - Sampler is located between a power pole and a telephone junction box on the east side of the driveway.

P07B - Red Wing Service Center - SE Sector (North of Highway 61 on Tyler Road) - Sampler is located adjacent to a corner transmission pole and the railroad right-of-way close to a chain link fence.

P08B - David Wnuk Residence - SSE Sector - Sampler is located on the west edge of property adjacent to a telephone control pole and a road sign "Do not Pass".

P09B - Highway 19, South of 61 - South Sector - Sampler is located adjacent a pole supporting a telephone junction box. Pole is located opposite a new bridge on the east side of Highway 19.

P10B - Cannondale Farm - (Leeson Lane - James Bryon) SSW Sector - Sampler is located adjacent to a corner fence post and ne[illegible] "Speed Limit 30" road sign.

P11B - Wallace Weberg Farm - SW Sector (This farm is located on top of the bluffs) - Sampler is located adjacent to a power pole and the telephone junction box facing the plant. (East of Driveway).

P12B - Ray Gergen, Jr Farm - WSW Sector - Sampler is located north of driveway in the farmyard on the east end of a storage shed facing the plant.

Tab B Con't.

OUTER RING (4-5 miles distance)

P13B - Thomas O'Rourke Farm - West Sector - Sampler is located adjacent to a power pole and a telephone junction box outside a stock fence area.

P14B - David J Anderson Farm - NW Sector - Sampler is located near the front yard south of a red cedar tree. (This sampler is not located near the main road for protection.

P15B - Holst Farms - NNW Sector - Sampler is located east of the residence near a corner post of a fenced area.

SPECIAL INTEREST AREAS

P01S - Federal Lock & Dam #3 - SE Sector - Sampler is located north of the fenced air sampling station (#4) and facing the plant.

P02S - Charles Suter Residence - SSE Sector - Sampler is located on the north side of a power pole in the farmyard and facing the plant.

P03S - Carl Gustafson Farm - South Sector - Sampler is located near the north side of the road on the last curve before the farmyard. (Close to a corner power pole and a fence post) (keep sampler away from field gate).

P04S - Near Richard Burt Residence - SSW Sector - Sampler is located next to a tree about 15 feet away from the curve in the road.

P05S - Kenney Store - Trailer Park - West Sector - Sampler is located at the north end of a redwood fence and adjacent to a telephone junction box.

P06S - Earl Flynn Farm - WNW Sector - Sampler is located on the east side of the house adjacent to a large stump and facing the plant.

CONTROL (More than 10 miles away)

P01C - Robert Kinneman Farm - NNW Sector - The sampler is located about 250 feet east of the residence adjacent to a corner fence post and facing the plant.

TAB C

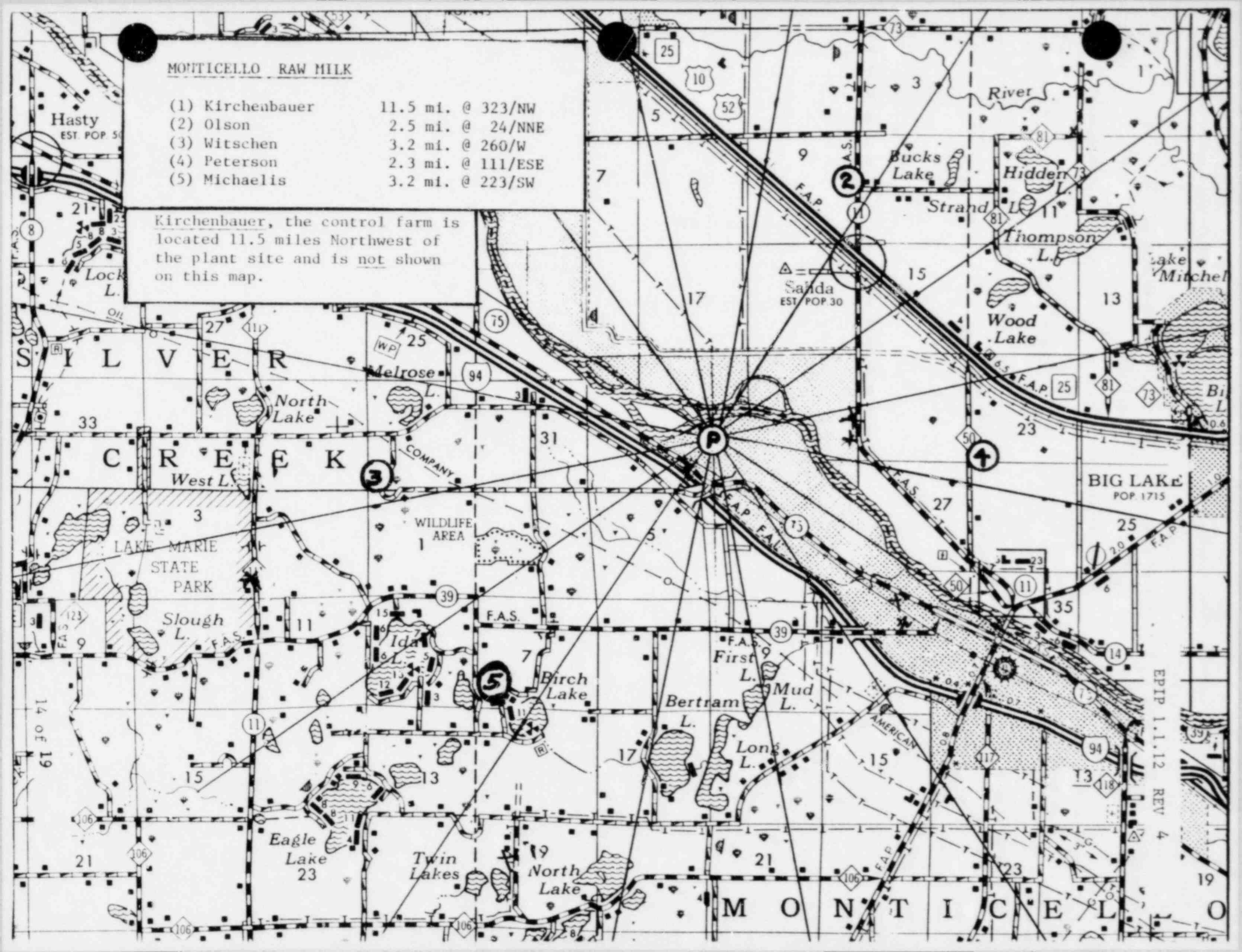
RAW MILK SAMPLING

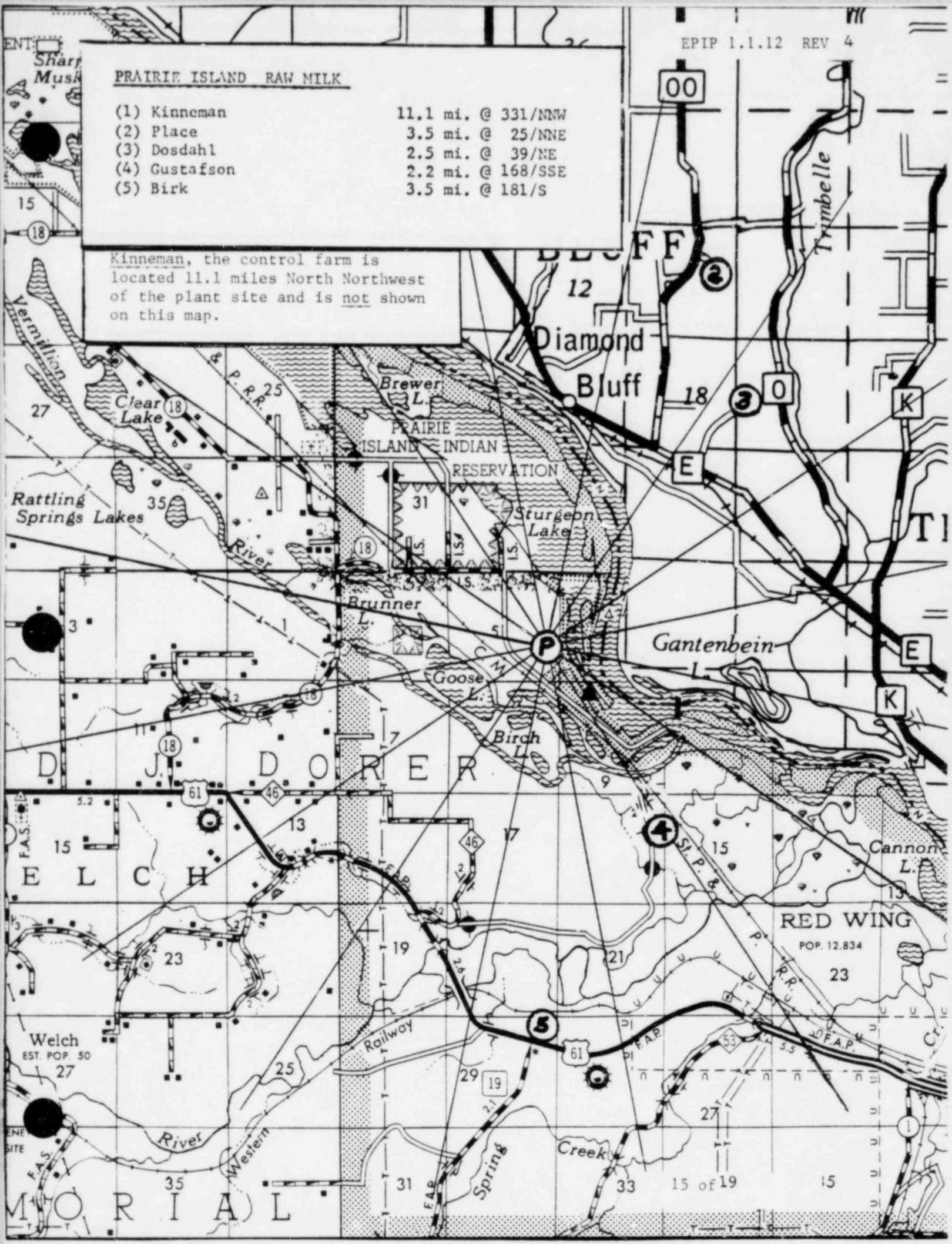
General: On a routine monthly basis, four indicator farms close to the plant and one control farm more than 10 miles away are sampled. These farms are located on the two attached maps (Monticello-Raw Milk, Prairie Island-Raw Milk). Additional milk herds in the area should be sampled if it has been determined any gaseous releases could have fallen into the herd area. Additional milk sampling may be desirable even if no releases to that area have been established.

Sample Size: One gallon of raw milk is collected from each herd.

Sampling Procedure:

1. All containers must be identified as described on the "Identification and Shipping" page prior to filling, as writing on the container afterward is very difficult.
2. Agitate milk tank for 5 minutes prior to taking sample.
3. Use plastic pitcher to dip from the swirling milk.
4. Fill the bottles as full as possible allowing the foam to escape from the bottle.
5. When filled, cap the container and wash down the equipment and work area.
6. Pay the farmer for the milk.
7. Do not add formalin to the sample. (These samples are shipped fresh).
8. Place filled gallon jugs into ice chest.


MONTICELLO RAW MILK
(1) Kirchenbauer 11.5 mi. @ 323/NW
(2) Olson 2.5 mi. @ 24/NNE
(3) Witschen 3.2 mi. @ 260/W
(4) Peterson 2.3 mi. @ 111/ESE
(5) Michaelis 3.2 mi. @ 223/SW
Kirchenbauer, the control farm is located 11.5 miles Northwest of the plant site and is not shown on this map.
Hasty
EST. POP. 50
Sanda
EST. POP. 30
Melrose
Bucks Lake
Hidden L.
Strand L.
Thompson L.
Wood Lake
North Lake
West L.
Lake Marie State Park
Wildlife Area
Slough L.
Ida L.
Birch Lake
First L.
Mud L.
Bertram L.
Long L.
Eagle Lake
Twin Lakes
North Lake
BIG LAKE
POP. 1715
SILVER CREEK
MONTICELLO
River
COMPANY
AMERICAN
F.A.P.
F.A.S.
14 of 19
EPIP 1.1.12 REV 4


PRAIRIE ISLAND RAW MILK
(1) Kinneman 11.1 mi. @ 331/NNW
(2) Place 3.5 mi. @ 25/NNE
(3) Dosdahl 2.5 mi. @ 39/NE
(4) Gustafson 2.2 mi. @ 168/SSE
(5) Birk 3.5 mi. @ 181/S
Kinneman, the control farm is located 11.1 miles North Northwest of the plant site and is not shown on this map.
Diamond Bluff
Trimbelle
Vermillion
Clear Lake
Brewer L.
PRAIRIE ISLAND INDIAN RESERVATION
Rattling Springs Lakes
Sturgeon Lake
Brunner L.
Gantenbein L.
Goose L.
Birch L.
Cannon L.
RED WING
POP. 12,834
Welch
EST. POP. 50
Railway
Western
Creek
Spring
River
D J D O R E R
E L C H
M O R I A L
P.R.R.
C.M.St.P.&P.
F.A.P.
F.A.S.
I.S.

TAB D

RIVER WATER SAMPLING

General:

Raw river water samples are collected routinely upstream and downstream of the plants at specified distances or locations. In case of an emergency, the upstream sample should be collected at a point where no recirculation with plant water occurs. The downstream sample should be taken far enough away from the discharge canal that adequate mixing has occurred in the river. As an example, at Monticello the downstream sample is taken at a point about 1000 feet downstream of the plant discharge canal, however, at Prairie Island, the downstream sample is collected at the Federal Lock & Dam #3, which is several thousand feed downstream of the end of the plant discharge canal.

Sample Size:

At least one gallon of water is collected.

Sampling Procedure:

1. Bottles must be identified prior to filling as described on the "Identification and Shipping" page as writing on the bottle surface after is very difficult.

2. Samples are collected at a depth of 1-3 feet below the surface.

3. Rinse sample bottle with water before filling it.

4. Be sure to fill container as full as possible and stopper.

TAB E

NATURAL VEGETATION SAMPLING

General: These samples, natural grasses and weeds are taken in areas where the possibility that contamination has occurred. Also, if raw milk is collected and the animals are allowed to graze, those grasses in the grazing area should be collected.

Sample Size: Approximately 3 pounds is needed.

Sampling Procedure:

1. Determine a one square meter area and cut all the sample within that area to within 1-2 inches of the ground.

2. If sample collected isn't enough, move to another area and repeat the sample collection technique.

3. Identify sample as stated in "Identification and Shipping".

TAB F

LEAFY GREEN VEGETABLE SAMPLING

General

These samples are a garden product, and of the variety whose edible portion is found above ground. Celery, cabbage, cauliflower, and other leafy vegetables are in this group. Collect these samples from gardens located downwind from the plant or where the possibility of contamination has occurred.

Sample Size

Two medium sized heads of cabbage (about4-6 lbs) or other types of vegetables as stated above of similar weight. If a control is used, similar kinds of samples should be collected at indicator and control locations.

Sampling Procedure

1. Large plastic bags can be used to contain the sample, and identification of the sample as stated in "Identification and Shipping".

2. None of the outer leaves are to be removed but the roots can be cut off for easier packaging.

TAB G

SAMPLE COURIER SERVICE BETWEEN THE RADIOLOGICAL FIELD TEAMS AND THE EOF BACKUP COUNT ROOM

General

A need exists to provide a courier service, transporting samples between the Radiological Field Teams and the Backup Count Room located in the EOF. Persons assigned this duty would be ERAD field personnel knowledgeable with the area of the plant.

Reporting

Notification by the Emergency Manager will activate a need for two persons from the ERAD field personnel to report to the EOF. They will report to the Radiation Protection Support Supervisor (RPSS) for personnel badges, portable radios, and assignment.

The RPSS will direct the couriers to pickup samples from the Radiological Field Teams and to return them to the EOF Backup Count Room.

NUCLEAR SUPPORT SERVICES DEPT NORTHERN STATES POWER COMPANY	CORPORATE NUCLEAR EMERGENCY PLAN IMPLEMENTING PROCEDURE NUMBER: EPIP 1.1.14 REV: 4
PREPARED BY: Gary Hudson Asst. Adm. Emergency Preparedness	EFFECTIVE DATE: October 8, 1982
REVIEWED BY: E C Ward Manager Nuclear Environmental Services	TITLE: 1.1.14 VENDOR/CONSULTANT/OUTSIDE AGENCY INTERFACE
APPROVED BY: General Manager Nuclear Plants	

1.0 PURPOSE AND OBJECTIVES

The purpose of this procedure is to provide instructions for the notification of primary vendors and other service organizations that an emergency condition exists, and provide instructions concerning the method to establish interfaces with non-NSP organizations.

2.0 CONDITIONS AND PREREQUISITES

An Emergency condition has been declared at either the Monticello or Prairie Island Nuclear Generating Plant and the EOF has been activated.

3.0 ORGANIZATION AND RESPONSIBILITIES

A. Overall Responsibility - Emergency Manager

B. In Charge - Emergency Manager

C. Assistance - EOF Coordinator
- Logistics Coordinator

4.0 RESPONSIBILITIES

4.1 EMERGENCY MANAGER

1. If the NSSS vendor has not already been notified by the plant, direct the Logistics Coordinator to notify the NSSS vendor of the emergency condition.

2. If site assistance is required, direct the EOF Coordinator/Logistics Coordinator to request that the vendor send a site response team to the applicable EOF.

3. Determine the need for assistance from vendors and contractors. Direct the Logistics Coordinator to procure necessary services.

4.2 EOF COORDINATOR

1. Assist the Emergency Manager in obtaining vendor or consultant services.

2. Function in the capacity of the Logistics Coordinator if that position has not been delegated to another employee.

4.3 LOGISTICS COORDINATOR

1. Notify the NSSS vendor and architect engineer of the applicable plant of the emergency condition. Notification procedures are provided in Tab A of this procedure.

2. Provide information to the applicable vendor response center as to necessary equipment or assistance that is desired from the vendor.

3. If instructed by the Emergency Manager, request that the vendor site response team proceed to the EOF.

4. If vendor assistance will be required for more than three days, initiate procedures to procure long-term services in accordance with the "Emergency Processing of Purchase Orders" procedure, EPIP 1.1.9.

TAB A

PRIMARY VENDOR/AE CONTACT NUMBERS

To inform the primary vendors and architect engineers of an emergency condition or to request emergency assistance, the Logistics Coordinator or an alternate should contact the individuals listed below and explain the situation or emergency request. The vendor contact person will control the contacting of applicable organizations within his company to supply whatever assistance is required. In addition to these vendor numbers, INPO has access to many supplier and contracting firm emergency contact telephone numbers and can provide additional technical assistance as requested.

A. PRAIRIE ISLAND

1. NSSS - Westinghouse Electric Corporation

Please inform one Westinghouse contact, using this list in the order shown, to ensure early notification to W of an emergency occurring at your plant. Please be prepared to discuss as many facts as are available at the time of the call and identify a cognizant individual in your organization to provide continuing communications and updates to W.

	Title	Name	Office	Home	HHL
a.	Operating Plant Regional Manager	Bill Johnson	DELETED		
	1st Alternate	Chuck Rowland		DELETED	
	2nd Alternate	Dave Hollein			DELETED
b.	Service Response Manager	Bob Stokes			
	1st Alternate	John Miller			
	2nd Alternate	Dave Campbell		DELETED	
c.	Emergency Response Director	Tom Anderson		DELETED	
d.	Emergency Response Deputy Director	Ron Lehr		DELETED	
e.	Emergency News Communications	Mike Mangan		DELETED	

NOTE: Unless indicated otherwise, all phone numbers are area code 412. Where an area code other than 412 is shown, it applies to the office, home, and HHL numbers.

2. AE - Fluor Power Services

FPS switchboard number is DELETED

Name	Office	Home
DELETED	DELETED	DELETED

B. MONTICELLO

1. NSSS - General Electric Corporation

a. Manager, Product Service
DELETED

NOTE: General Electric's number is that of an answering service assigned to monitor calls for emergency purposes. The NSP representative contacting this number shall request that the on-call Product Service Manager be notified of the call and provide the answering service with a call-back number. The applicable product service manager will then return the call to determine NSP needs.

2. AE - Bechtel Power Corporation

a. J. L. Carton: DELETED

b. A. Teller: DELETED

c. C. Hogg: DELETED

d. R. W. Fosse: DELETED

C. INPO

1. INPO Emergency Response Center: DELETED

D. HELICOPTER SERVICE

In case of an accident and you need immediate transportation, the following helicopter services are committed to respond:

1. Imperial International Inc.
(Fleming Field)
South St Paul, MN
DELETED (days)
(nights)

Contact: Robert Rishovd
(612) DELETED
OR Mrs Elaine Fleming
(612) DELETED

This organization flies only Bell Jet Rangers that carry 5 passengers.

2. Flight Transportation Corp.
(Flying Cloud Airport)
9960 Flying Cloud Drive
Eden Prairie, MN
DELETED (day or night)

Contact: Mrs Gayle Hillis

This organization flies the Bell Jet Rangers that carry either 3 or 5 passengers.

E. Emergency Radiological Laboratory Facilities

The following companies have personnel and laboratory facilities available for emergency response.

	Laboratory	Address	Telephone	Contact	Remarks
1.	Hazleton Environmental Sciences	1500 Frontage Rd Northbrook, IL 60062	DELETED	Leo Huebner	*can send 4 persons
2.	NUS Corporation Radiological Labs	5350 Campbells Run Road Pittsburgh, PA 15205	DELETED	Charles J Marcinkiewicz	*can send 6 persons
3.	Science Applications Inc (Nuclear Environmental Services)	3 Choke Cherry Rd Rockville, MD 20850	DELETED	Greg Duggan	*can send 4 persons
4.	Radiation Management Corporation	3508 Market Street P O Box 7940 Philadelphia, PA 19101	DELETED	C E McGee	*can send 5 persons

*24 HOUR LAB AVAILABLE

NUCLEAR SUPPORT SERVICES DEPT NORTHERN STATES POWER COMPANY	CORPORATE NUCLEAR EMERGENCY PLAN IMPLEMENTING PROCEDURE NUMBER: EPIP 1.1.16 REV: 1
PREPARED BY: Gary Hudson Asst. Adm. Emergency Preparedness	EFFECTIVE DATE: OCTOBER 8, 1982
REVIEWED BY: E C Ward Manager Nuclear Environmental Services	TITLE: 1.1.16 OFFSITE PERSONNEL AND VEHICLE MONITORING AND DECONTAMINATION
APPROVED BY: General Manager Nuclear Plants	

1.0 PURPOSE AND OBJECTIVES

This procedure will specify the requirements and directives for monitoring and decontaminating onsite personnel and vehicles from the Prairie Island or Monticello Nuclear Generating Plant that have been evacuated to a radiologically unaffected offsite area.

2.0 CONDITIONS AND PREREQUISITES

2.1 A radiological contaminating event is occurring.
2.2 An evacuation of station personnel has been ordered and is under way.
2.3 The EOF is activated and staffed.

3.0 ORGANIZATION AND RESPONSIBILITIES

3.1 Overall Responsibility - Emergency Manager
3.2 In Charge - Emergency Manager
3.3 Assistance - Radiation Protection Support Supervisor
- Radiological Emergency Coordinator

4.0 DISCUSSION AND PRECAUTIONS

4.1 The safety of personnel shall take precedence over the monitoring of personnel and vehicles for radiation/contamination control purposes. Monitoring of personnel and/or vehicles shall be terminated (or delayed) if such monitoring is known or suspected to be increasing the hazard to personnel during evacuation.

4.2 Evacuation of each site shall be in accordance with applicable site procedures.

4.3 When advised by the station radiation protection personnel (health physics) that a radiological contaminating event is occurring, the Emergency Director may elect to order an evacuation of site personnel. This decision will be made in accordance with guidelines established in Prairie Island implementing Procedure F.3-9, "Emergency Evacuation", or Monticello Implementing Procedure A.2-301, "Emergency Evacuation".

4.4 Offsite assembly areas at each nuclear site may facilitate the set-up of monitoring and decontamination stations. These areas area as follows:

1. Prairie Island
   a. Emergency Operations Facility (EOF)
      - Prairie Island Training Center
   b. NSP Red Wing Service Center

2. Monticello
   a. Emergency Operations Facility (EOF)
      - Monticello Training Center
   b. NSP Monticello District Service Center
   c. NSP Sherburne County Generating Plant

These areas or alternative areas may be selected at the discretion of the Emergency Director or Emergency Manager.

The site that is selected as the offsite assembly area will depend on various factors such as wind direction, weather conditions and availability of the site. The following guidelines are used to assist in the selection of the assembly area:

1. Selected site should be upwind from release.
2. Selected offsite assembly area should be accessible.
3. Evacuation routes to the selected assembly area should minimize the time personnel would be exposed to any offsite radioactive release.

4.5 Accountability of onsite personnel will be performed in accordance with Prairie Island EPIP F.3-10, "Personnel Accountability" or Monticello EPIP A.2-206, "Personnel Accountability Assembly Points", as applicable.

4.6 Plant technicians will attempt to monitor and decontaminate all personnel prior to their evacuating the site. When this is not possible, the evacuating personnel will be directed by the plant to proceed to one of the two offsite assembly areas.

4.7 The offsite assembly areas will serve as a holding area for evacuees until they can be monitored and released. The assembly area monitoring and decontamination teams will be supplied by the affected plant until the EOF is activated and the Corporate Emergency Response Organization is manned. After activation of the EOF, the offsite assembly area will be staffed by the Offsite Organization.

5.0 RESPONSIBILITIES

5.1 Emergency Manager

1. Assist in determining need for evacuation of site personnel in conjunction with the Emergency Director. If the site has been evacuated prior to activation of the EOF, assume control of the assembly area activities.

2. Direct the effort of personnel and vehicle monitoring and decontamination following evacuation of personnel to an offsite area.

5.2 Radiation Protection Support Supervisor

1. Assist the Emergency Manager in determining evacuation routes (to prevent evacuees from prolonged exposure to the plume).

2. The Radiation Protection Support Supervisor shall assign personnel to serve on monitoring and decontamination teams as needed, in accordance with TAB A.

3. Direct the activities of the offsite assembly personnel and vehicle monitoring and decontamination functions. Monitoring of personnel and equipment shall be conducted in accordance with TAB B. Decontamination of personnel and equipment shall be conducted in accordance with TAB C. Decontamination materials are listed in TAB D.

TAB A

MONITORING AND DECONTAMINATION TEAM ASSIGNMENTS

A. The Radiation Protection Support Supervisor shall appoint (from available personnel) teams for personnel and vehicle monitoring and decontamination.

1. Monitoring Team

a. Consists of three personnel. Two personnel should be qualified in radiation protection monitoring techniques. The third, a data recorder, does not have to be rad-con qualified, but must understand terms used during monitoring.

b. Surveys should be conducted on personnel first.

c. Skin contamination levels requiring decontamination are listed in TAB B.

d. Vehicles should be parked in a holding area and surveyed on a time-allowed basis. Vehicles with levels greater than those expressed in TAB B should be decontaminated on a time-allowed basis. Contaminated vehicles should not be utilized until decontaminated.

2. Decontamination Team

a. Consists of two or more personnel with a selected Radiation Protection Specialist as team leader. It is suggested these personnel be trained in radioactive decontamination techniques, however, this is not a necessity with guidance from the Radiation Protection Specialist.

b. Teams shall decontaminate affected personnel following the guidance of a qualified Radiation Protection Specialist.

c. Decontamination techniques should follow guidelines expressed in TAB C.

d. All monitoring and decontamination personnel should wear personal monitoring devices, i.e. TLD and self-reading dosimeter.

TAB B

MONITORING TECHNIQUES AND REQUIREMENTS

A. Personnel monitoring takes precedence over all other monitoring requirements. Guidelines expressed below should be followed for personnel monitoring:

1. Monitoring teams should dress in appropriate protective clothing.

2. Using a RM-14 with a 2" GM pancake probe (or equivalent instrumentation) quickly scan evacuees for high contamination levels, i.e. 50,000 dpm/scan or greater (5,000 cpm).

3. Segregate those personnel identified in Step 2 into three groups; highly contaminated, contaminated and non-contaminated. Non-contaminated personnel may be released immediately.

4. For highly contaminated personnel proceed as follows:

   a. Initiate Whole Body Survey Form (Figure 1) for each contaminated person scanned.

   b. Carefully scan personnel. If contamination appears to be confined to clothing, have the personnel carefully strip contaminated clothing and rescan. Pay particular attention to nose, mouth and eyes. Segregate contaminated clothing. Record results of initial scan on Figure 1.

NOTE: Contamination levels of 10,000 dpm/scan (1000 cpm) of nose or mouth shall require further bioassay information. Direct affected personnel to blow nose and scan for loose contamination in mucus. Rescan nose. If results of either scan or nasal blow area greater than 1000 dpm/scan (100 cpm), record name and social security number for future Body Burden Analysis. Record results on Figure 1.

   c. Personnel with body contamination levels greater than 1000 dpm/scan (100 cpm) should be segregated until they can be decontaminated in accordance with TAB C.

5. When monitoring of highly contaminated personnel is complete, begin monitoring the second group of contaminated personnel as specified in Step 4, a - c above.

TAB B (Continued)

MONITORING TECHNIQUES AND REQUIREMENTS

6. When monitoring of personnel is complete, isolate all contaminated items.

7. Monitoring of vehicles should be performed on a time-allowed basis. Guidelines listed below should be followed for vehicle monitoring:

   a. Dress monitoring teams in appropriate protective clothing.

   b. Establish an area for "clean", i.e. non-contaminated, vehicle staging.

   c. Using an RM-14 with a 2" GM pancake probe (or equivalent instrumentation) scan interior and exterior of vehicles for surface contamination.

   d. Initiate a Vehicle Survey Form (Figure 2) for each contaminated vehicle.

NOTE:	To avoid decontamination of entire vehicle and the resultant generation of large volumes of dry waste, indicate small areas of contamination using a grease pencil to outline the area.

   e. If area indicates greater than 1000 dpm/scan (100 cpm), smear the area with a paper disc smear and count.

   f. Record results of monitoring effort on a Vehicle Survey Form, Figure 2.

   g. If vehicle is not contaminated, i.e. less than 1000 dpm/100 cm^2 smearable (100 cpm), it may be released to a clean area.

   h. Contaminated vehicles, i.e. greater than 1000 dpm/100 cm^2 smearable (100 cpm), shall have a Vehicle Survey Form taped to the front windshield and shall be isolated. They will be decontaminated on a time-allowed basis.

   i. Decontamination of vehicles shall be performed in accordance with TAB C.

   j When monitoring of vehicles is complete, isolate all contaminated materials.

TAB C

DECONTAMINATION TECHNIQUES AND REQUIREMENTS

A. Personnel and vehicles shall be decontaminated as low as reasonably achievable in the field. Personnel decontamination shall not proceed past the techniques expressed in this tab.

B. Personnel shall not be released if skin contamination levels exceed 1000 dpm/scan (100 cpm). Personnel who indicate nasal, ear canal, mouth or eye contamination shall be decontaminated under medical supervision only. Personnel who indicate nasal or mouth contamination shall have further Body Burden Analysis performed as soon as practicable.

C. Vehicles shall be decontaminated to less than 1000 dpm/100 cm^2 (100 cpm) smearable or 0.1 mRem/hr fixed. If these limits can not be reached by techniques expressed in this tab, notify the Radiation Protection Support Supervisor. Do not attempt mechanical decontamination as this may further spread contaminated material.

D. Decontamination of personnel shall begin with the most highly contaminated personnel receiving priority.

Personnel shall be decontaminated as follows:

1. Decontamination team personnel should be equipped with the following:

   a. Lab coat
   b. Rubber gloves
   c. Shoe covers

2. Establish a decontamination area.

3. Using Whole Body Survey Form, decontaminate individual using the following guidance:

   (These steps are provided as guidelines. It is not mandatory that each step be followed in sequence. The individual technician's judgement may be used to determine the complete decontamination method.)

   a. Using soap and water, wash the affected area and survey.

   b. If results indicate less than 1000 dpm/scan (100 cpm), record results on Figure 1 and release individual from control group.

   c. If results are still greater than 1000 dpm/scan (100 cpm), repeat Step a as necessary.

TAB C (Continued)

DECONTAMINATION TECHNIQUES AND REQUIREMENTS

d. If results continue to indicate greater than 1000 dpm/scan (100 cpm), proceed to Step e.

NOTE: Do not use Tide paste near eyes, nose or ear canal.

e. Make a paste using plain water and Tide detergent. Using a soft cloth, apply paste liberally to contaminated area. Wait two minutes. Rinse area with copious amounts of plain water, catching the water in a poly bag. Wipe area one time and survey.

f. If results are less than 1000 dpm/scan (100 cpm), record results and release individual from control group. Issue appropriate clothing as necessary.

g. If results are greater than 1000 dpm/scan (100 cpm), repeat Step e.

h. If results continue to indicate greater than 1000 dpm/scan (100 cpm) after a second attempt to decon using Tide and water, record results and proceed to Step i.

CAUTION: Do not use betadyne near eyes. The application of betadyne should be used one time only.

i. Using betadyne, water and soft cloth, make one application of betadyne, wipe one time with soft cloth. Fold cloth, rinse with copious amounts of water, wipe one final time with folded soft cloth and survey.

j. If results indicate less than 1000 dpm/scan (100 cpm), record results and release individual from control group.

k. If results are still greater than 1000 dpm/scan (100 cpm), notify the Radiation Protection Support Supervisor to receive medical guidance for more stringent decontamination methods.

l. Segregate personnel with body contamination greater than 1000 dpm/scan (100 cpm) from other personnel in a holding area.

m. Segregate all wastes generated by this procedure and label these materials as contaminated waste.

TAB C (Continued)

DECONTAMINATION TECHNIQUES AND REQUIREMENTS

NOTE: Label all bags containing liquid or absorbed liquid for special processing.

E. Vehicles shall be decontaminated on a time-allowed basis using the following techniques:

1. Establish a decontamination area.

2. Decontamination personnel should be equipped with the following:

   a. Lab coat
   b. Rubber gloves
   c. Shoe covers

3. Using Vehicle Survey Form and indicated contamination areas as a guide, decontaminate vehicle as follows:

   a. Using masslinn cloths or equivalent, wipe contaminated areas.

   b. After each wipe-down, survey the area by smear and scan.

   c. Vehicle may be released when smearable contamination levels are below 1000 dpm/100 cm^2 (100 cpm) or fixed activity is less than 0.1 mREM/hr. Note that air filters, radiators and similar equipment may contain concentrated levels of contamination and should be checked separately.

   d. If after a reasonable number of attempts, levels are still greater than in Step c. above, isolate vehicle in a holding area.

   e. Isolate all radioactive contaminated material.

TAB D

DECONTAMINATION MATERIALS REQUIRED

Material

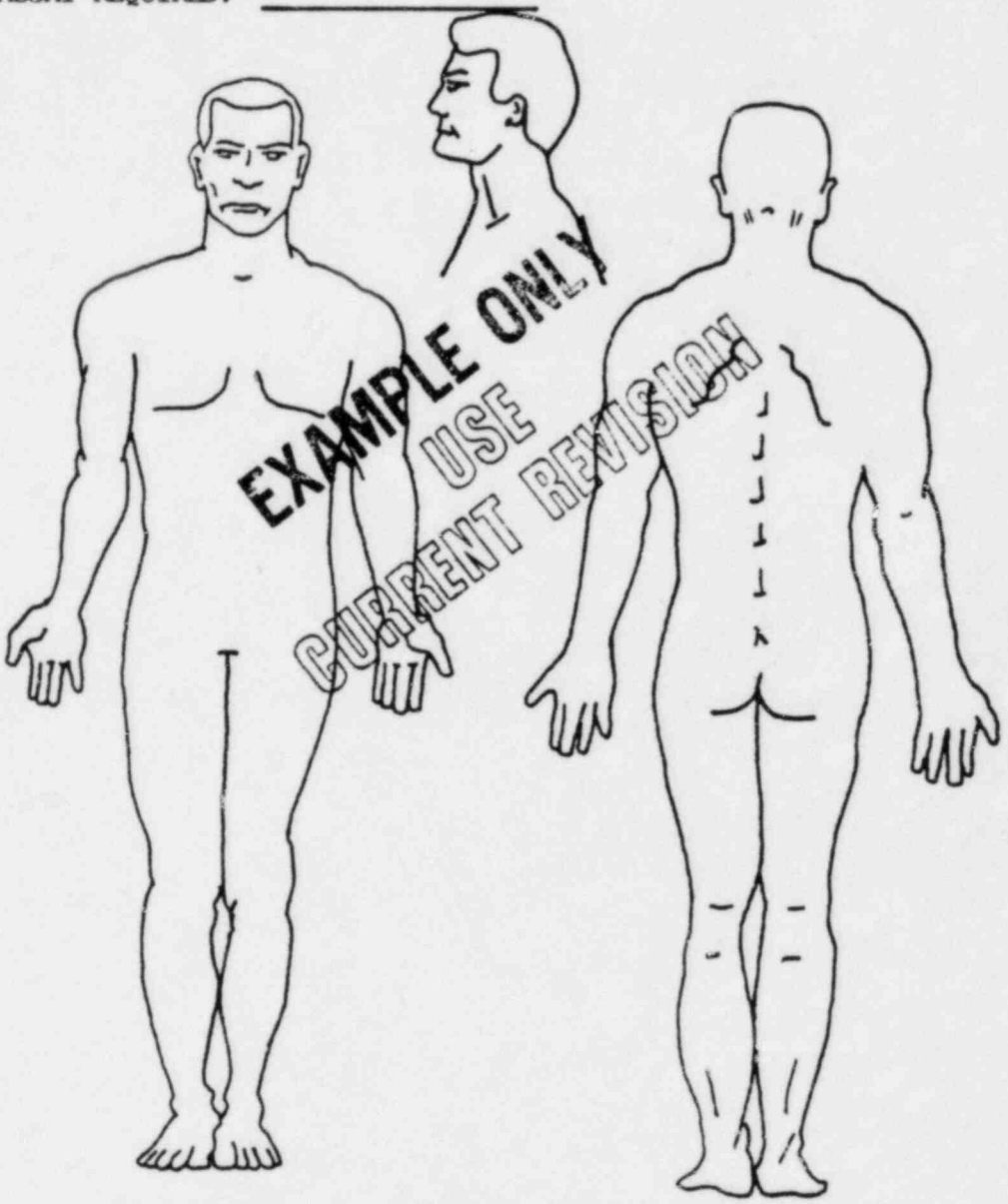
1. Water supply
2. Soft cloths
3. Tide detergent or soap
4. Betadyne solution
5. Masslinn cloths or equivalent
6. Absorbent paper
7. Survey meter (RM-14 with 2 inch GM pancake probe or equivalent)
8. Dose rate meter (RO-2 or equivalent)
9. Smears
10. Poly bags
11. Pens/pencils/grease pen
12. Survey forms (Figure 1 and Figure 2)
13. Clipboard
14. Buckets or similar means of containing water
15. Paper coveralls
16. Masking tape
17. 200 feet of rope or line

FIGURE 1

WHOLE BODY SURVEY FORM

NAME _____ SOCIAL SECURITY NUMBER ___ - ___ - ___

BIOASSAY REQUIRED: _____



Technician _____ Instrument Type _____ Instrument S/N _____	Limits: 1000 dpm 100 CPM	Indicate Contaminated Area on Drawing Record Results in (CPM/scan)

Initial Survey Results	Final Survey Results

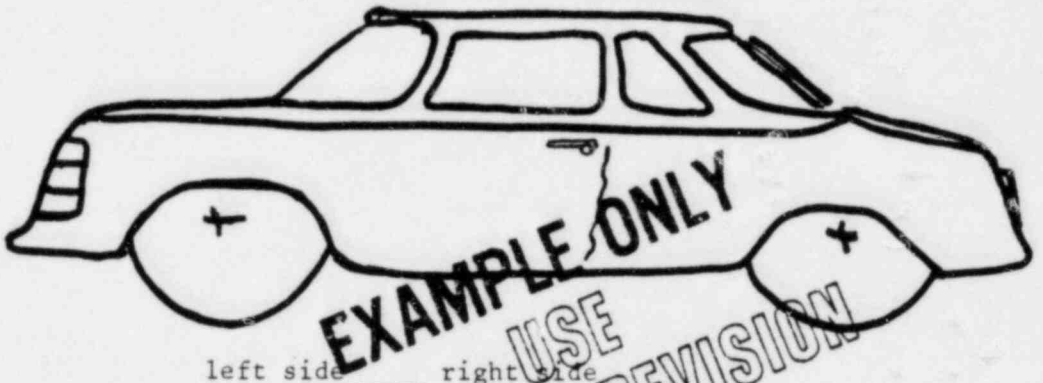
FORM 17-4911

FIGURE 2

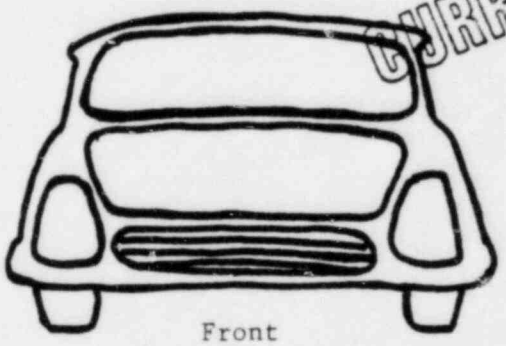
VEHICLE SURVEY FORM

VEHICLE OWNED BY _____
OWNERS SOCIAL SECURITY NUMBER ___ - ___ - ___

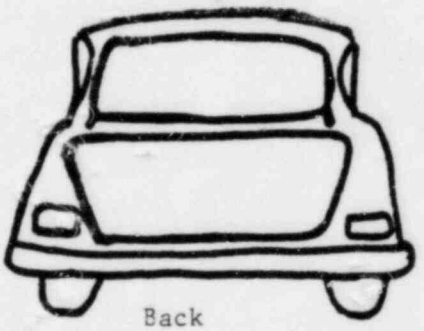
VEHICLE IDENTIFICATION
Type _____
Make _____
License No. _____
Color _____



left side ____ right side



Front



Back

Technician _____ Instrument Type _____ Instrument S/N _____	Limits: 1000 dpm/scan 100 CPM .1 MREM/hr	Indicate Contaminated Area on Drawing Record Results in (CPM/scan)

Initial Survey Results	Final Survey Results

NUCLEAR SUPPORT SERVICES DEPT NORTHERN STATES POWER COMPANY	CORPORATE NUCLEAR EMERGENCY PLAN IMPLEMENTING PROCEDURE NUMBER: EPIP 1.1.17 REV: 1
PREPARED BY: Gary Hudson Asst. Adm. Emergency Preparedness	EFFECTIVE DATE: OCTOBER 8, 1982
REVIEWED BY: EC Ward Manager Nuclear Environmental Services	TITLE: 1.1.17 PERSONNEL MONITORING AT THE EOF
APPROVED BY: General Manager Nuclear Plants	

1.0 PURPOSE AND OBJECTIVES

The purpose of this procedure is to establish the requirements and techniques for the issuance and collection of personnel monitoring devices, (Thermoluminescent Dosimeters (TLD) and Self Reading Dosimeters), to personnel entering the Emergency Operations Facility (EOF) during a declared emergency at either Prairie Island or Monticello Nuclear Generating Stations. It also provides instructions for activation and operation of the EOF CAM (TAB B) and the EOF ventilation (TAB C).

2.0 CONDITIONS AND PREREQUISITES

A. The EOF is activated and personnel are entering to man emergency support positions.

B. Personnel entering are required to be monitored for potential exposure to radiation resulting from accident conditions at the affected plant.

3.0 ORGANIZATION AND RESPONSIBILITIES

A. Overall Responsibility - Emergency Manager
B. In Charge - Radiation Protection Support Supervisor
C. Assistance - EOF Coordinator
- Security Guard

4.0 DISCUSSION AND PRECAUTIONS

A. Personnel manning emergency support positions at the EOF should be monitored for radiation exposure. In order to accomplish this, personnel should be issued a TLD and a self-reading dosimeter upon entering the EOF or while functioning as members of the Corporate Emergency Response Team. When leaving the EOF, or upon completion of assigned duties, personnel should surrender the TLD and self-reading dosimeter to the entry guard.

B. The administrative limit for personnel whole body exposure is 1250 mr/qtr. If an individual exceeds 300 mRem in one quarter, a signed statement specifying their known cumulative exposure for the current quarter shall be obtained on the Individual Exposure Record. (Figure 2.) The Emergency Manager is authorized to allow additional exposure during any emergency situation. The following requirements should be used by the Emergency Manager to determine when to allow an individual to exceed administrative limits:

1. Individual must have a current NRC Form 4 or equivalent on file.

2. No individual may exceed 3 Rem per calendar quarter or 5 (N-18) Rem where N is current age in whole years.

5.0 RESPONSIBILITIES

5.1 Emergency Manager

1. Overall responsibility for exposure limits of workers.

5.2 Radiation Protection Support Supervisor

1. Verifies and supervises the records of exposure including re-zeroing and recording self-reading dosimeter results.

2. Provides administrative control information to the Emergency Manager.

3. Assigns qualified personnel for record keeping and dose assessment.

4. Ensures the CAM and the ventilation system are operating properly to protect the emergency response organization at the EOF.

5.3 EOF Coordinator

1. Assigns personnel to maintain entry log, issue and collect dosimetry.

2. If the Radiation Protection Support Supervisor (RPSS) position has not been staffed, the EOF Coordinator should assume the RPSS duties.

5.4 EOF Entrance Guard

1. Initiates Entry Log (Figure 1) in accordance with EPIP 1.1.5, TAB F, "EOF Security Force Duties".

2. Issues and collects dosimetry.

3. Records self-reading dosimeter reading in log upon issue and collection.

4. Notifies Radiation Protection Support Supervisor in the event of lost, damaged or off-scale dosimeter readings.

6.0 PROCEDURE

6.1 Personnel authorized to enter the EOF in accordance with the EOF Security Force Duties, TAB F, EPIP 1.1.5, should be logged into area and issued dosimetry as follows:

1. After verifying personnel authorization, enter name on EOF Entry Log, Figure 1, in column (1).

2. Enter individual's social security number in column (2) of entry log.

3. Enter individual's organization, i.e. NSP Corp., Monticello, PI, NRC, etc. on entry log in column (3).

4. Remove one TLD and one self-reading dosimeter from emergency dosimetry box and record TLD number in column (4) of entry log.

5 Enter time personnel entered EOF in column (5) of entry log. Use 24 hour notation (i.e. 0700 for 7:00 am, 1215 for 12:15 pm, 2130 for 9:30 pm).

6. Read and record reading from self-reading dosimeter on entry log in column (6). Guidance on reading self-reading dosimeters is provided in TAB A.

6.2 Personnel leaving EOF environs should surrender issued dosimetry equipment to the EOF Entrance Guard. Personnel should be logged out as follows:

1. Locate name of individual leaving EOF on Entry Log.

2. Enter time individual exited EOF in column (7) of Entry Log. Use 24 hour notation as explained in A.5 above.

3. Read and record the reading of the dosimeter on Entry Log, column (8). Guidance on reading self-reading dosimeters is provided in TAB A.

4. Collect TLD and self-reading dosimeter, check and verify the number of the TLD. Place the collected TLD and self-reading dosimeter in the box provided.

6.3 If personnel who are exiting area present entry guard with a damaged or off-scale dosimeter, the entry guard should immediately notify the Radiation Protection Support Supervisor who will perform the appropriate follow-up actions as required.

6.4 Personnel should be reminded on a periodic basis, as required by area measured dose rate, to read dosimeters. When dosimeter reaches three-quarter scale; (150 mR on 0-200 mR dosimeter, 375 on 0-500, etc.) dosimeters should be taken to the Radiation Protection Support Supervisor or his designee for reading and rezeroing.

6.5 Dosimeters requiring rezeroing should be handled as follows:

1. The Radiation Protection Support Supervisor or his designee should initiate Individual Exposure Record, Figure 2, and record dosimeter results. If a record has already been initiated, results shall be recorded on the existing form.

2. Zero dosimeter and reissue to personnel as applicable.

CAUTION: Do Not Reissue TLDs

3. If the cumulative total (column 4) is near 300 mR, the Radiation Protection Support Supervisor should verify the individuals cumulative quarterly exposure and request they sign the acknowledgement statement on Figure 2.

4. If cumulative total (column 4) is near 1000 mR then the Radiation Protection Support Supervisor should require the individual to fill out an NRC Form 4.

6.6 If an individual has presented a damaged or off-scale dosimeter, the Radiation Protection Support Supervisor should analyze the situation.

6.7 Personnel exiting the EOF should not remove emergency personnel dosimetry from the environs of the EOF unless their emergency duties require it and they are authorized to do so by the Radiation Protection Support Supervisor or the Emergency Manager.

6.8 Periodically, the Radiation Protection Support Supervisor or his designee should obtain a copy of the entry log, initiate Individual Exposure Records for personnel listed on entry log, read and record dosimeter results and assess dose received. Personnel shall not be allowed to exceed limits as specified in Discussion and Precautions. item B, of this procedure, without written permission of the Emergency Manager.

6.9 The Radiation Protection Support Supervisor should notify the Emergency Manager of individuals who are nearing or have exceeded 1000 mR during the current quarter.

6.10 After the emergency is terminated, records of individuals who received doses should be forwarded to the affected plant for daily inclusion into the permanent plant records and forwarding to the appropriate organizations as required by 10 CFR 20.

Date _____

FIGURE 1

EOF ENTRY LOG

(1) NAME	(2) SOC. SECURITY-NUMBER	(3) ORGANIZATION	(4) TLD/NUMBER	(5) TIME IN	(6) DOSIMETER IN	(7) TIME OUT	(8) DOSIMETER OUT

EXAMPLE ONLY
USE
CURRENT REVISION

FIGURE 2

INDIVIDUAL EXPOSURE RECORD

NAME: _____ DATE: _____
ORGANIZATION: _____ FORM 4: YES/NO
SOCIAL SECURITY NUMBER: _____ AGE IN YEARS _____
AUTHORIZED EXPOSURE: _____ mR

DOSIMETER IN	DOSIMETER OUT	TOTAL THIS EXPOSURE	CUMULATIVE TOTAL	REMARKS

EXAMPLE ONLY
USE
CURRENT REVISION

Individual named above certifies that he has not received exposure during the current quarter.

_____
Individual's Signature/date

Individual named above authorized to exceed _____ mr/qtr, but not to exceed _____ mR/qtr.

_____
Emergency Manager/date

TAB A

GUIDANCE ON READING SELF-READING DOSIMETER RESULTS

1. Holding dosimeter with lens toward eye, aim dosimeter at light source.
2. Individual should observe scale in dosimeter.
3. Look for hairline and read value from hairline.
4. Record results.

TAB B

ACTIVATION AND OPERATION OF CAM

1.0 Precautions

1.1 Monitoring of the EOF for direct radiation and airborne radioactive materials (particulate and iodine) should be performed to ensure the habitability of the EOF.

1.2 Protective actions for individuals located in the EOF should be taken at the prescribed levels of direct radiation or airborne radioactivity.

2.0 Procedure

2.1 The Radiation Protection Support Supervisor or, in his absence, the EOF Coordinator should:

2.1.1 Designate an individual to establish monitoring of the environment and take appropriate protective actions as specified in this section.

2.1.2 Ensure that the EOF doors are closed.

2.1.3 Establish a routine sampling and monitoring program by the Radiation Protection Group, as conditions permit.

2.2 Cam Startup

The CAM is in a hot standby condition with the electronics energized and the blower, chart, and filter paper off.

2.2.1 Turn the blower switch to the ON position (located next to the recorder) to start the blower, strip chart recorder, and the filter paper drive.

2.2.2 Adjust the blower flow rate to 3 SCFM using the toggle switch located on the right side of the CAM.

2.2.3 Verify the CAM is in operation (i.e., verify the blower, filter, strip charts are operating; meters are on scale, etc.).

2.2.4 If the CAM fails to operate properly, arrange for additional sampling.

2.3 Routinely monitor the CAM for airborne particulate and iodine activity.

2.4 Take the following Protective Actions based on readings from the CAM.

CAM - particulate

2.4.1 $< 1 \times 10^{-9}$ uCi/cc - no protective action necessary

2.4.2 $> 1 \times 10^{-9}$ but $< 1 \times 10^{-6}$ uCi/cc - consider use of respiratory protection and evacuation of all unnecessary personnel.

2.4.3 $> 1 \times 10^{-6}$ uCi/cc - evacuation to the HQEC is recommended.

2.5 CAM - Iodine (See Figure 1)

2.5.1 at 40 MPC hours - consider evacuation of all unnecessary personnel.

2.5.2 at 200 MPC hours - consider evacuation to the HQEC.

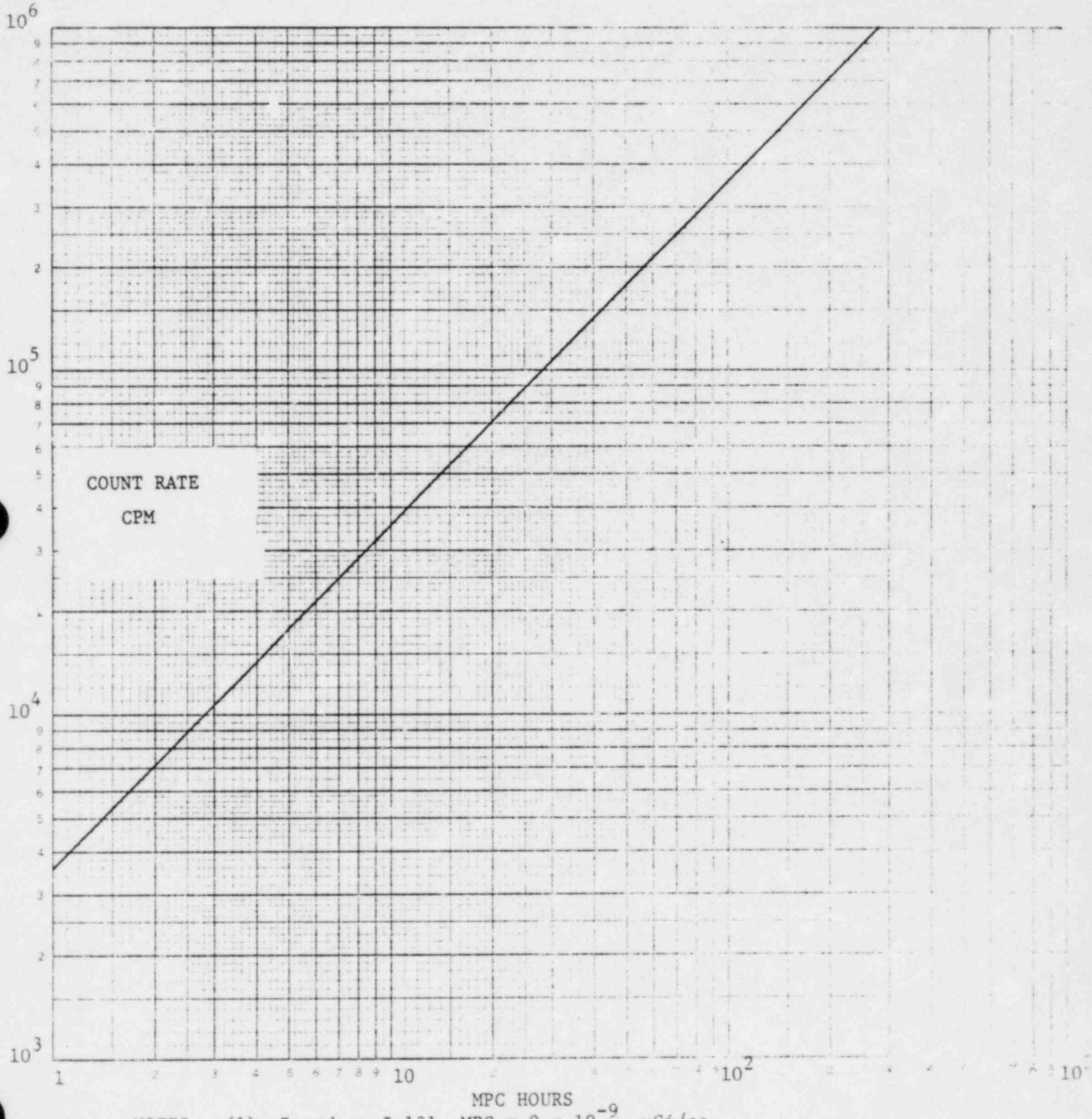
2.5.3 at about 3000 MPC hours - consider use of potassium iodide pills (thyroid blocking agent).

NOTE: The Radiation Protection Support Supervisor (RPSS) will recommend the use of potassium iodide pills (thyroid blocking agent) if the projected thyroid exposure approaches 10 REM, which is equivalent to approximately 3000 MPC hours.

FIGURE 1

DETERMINATION OF MPC HOURS VS. INTEGRATED

COUNT RATE



NOTES: (1) Based on I-131, MPC = 9×10^{-9} µCi/cc
(2) Curve valid only for initial period following CAM startup (0-6 hours)
(3) Curve is <u>not</u> valid if silver zeolite absorber is changed

TAB C

EMERGENCY OPERATING FACILITY EMERGENCY VENTILATION PROCEDURE

1.0 GENERAL DISCUSSION

The Emergency Operating Facility Ventilation Emergency Configuration, located in the mechanical room, is designed to recirculate the air within the Emergency Operating Facility area of the Training Center through HEPA filters with a minimum 10% outside air damper position setting for fresh air makeup.

2.0 REQUIREMENTS AND PRECAUTIONS

2.1 License

2.1.1 NUREG 0696, Table 2 "EOF Habitability Criteria"

2.2 Operating

2.2.1 Use the HEPA FILTER ONLY DURING AN ACTUAL EMERGENCY.

2.3 Precautions

2.3.1 The ventilation equipment may become a radiological hazard during emergency operation.

3.0 PROCEDURE

3.1 Initial Conditions

There are two (2) possible sets of initial conditions.

3.1.1 Normal Ventilation System running.

3.1.2 Normal Ventilation System not running (off hours).

In either case the establishment of the ventilation emergency configuration is the same.

3.1.3 All filters installed.

3.2 Establishing the Ventilation Emergency Configuration

3.2.1 Open HEPA filter dampers and close HEPA B-P dampers (only during an actual emergency).

1. Loosen wingnuts on damper indicators located on both sides of filter housing.
2. Position HEPA filter dampers open. Lock wingnuts.
3. Position HEPA filter bypass dampers closed. Lock wingnuts.

EMERGENCY OPERATING FACILITY EMERGENCY VENTILATION PROCEDURE (cont'd)

3.2.2 Place the control knob on the front of the Robertshaw cabinet to "EMERGENCY".

3.2.3 Place the OCC/UNOCC/AUTO three (3) position toggle switch inside or on the Robertshaw cabinet to OCC (occupied) position.

3.2.4 Observe Ventilation System operation and ensure the supply and return fans are operating as indicated by red lites located on unit electrical control cabinets.

3.3 Operation

3.3.1 Routinely (at least every 8 hours) check filter D/P. Acceptable D/P is less than 0.8" W.G. Replace disposable prefilter pads, if necessary. Filter DP manometer is located on back side of filter housing.

3.3.2 Verify outside air damper is open at least 10% for fresh air makeup. This can be observed, on the indicator labeled S-1 unit, in the mechanical room.

3.3.3 Routinely (at least every 8 hours) check E.O.F. magnehelic gage for positive pressure. Gage is located on the indicator, labeled S-1 unit, in the mechanical room.

3.3.4 For extended emergency operation, the routine maintenance of equipment may be necessary including the replacement of the HEPA filters. Radiological precautions may be necessary in these activities.

3.4 Returning the Ventilation System to the Normal Configuration

3.4.1 Place the three (3) position toggle switch to AUTO inside or on the Robertshaw cabinet.

3.4.2 Place the control switch to normal on the Robertshaw cabinet.

3.4.3 Open the HEPA filter B-P dampers and close the HEPA filter dampers.

4.0 REFERENCES

4.1 Filters

Pre-filters Pads	20" x 24" x 2"
Bag Filters	20" x 24" x 21"
HEPA Filters	24" x 24" x 11½" 95% D.O.P.

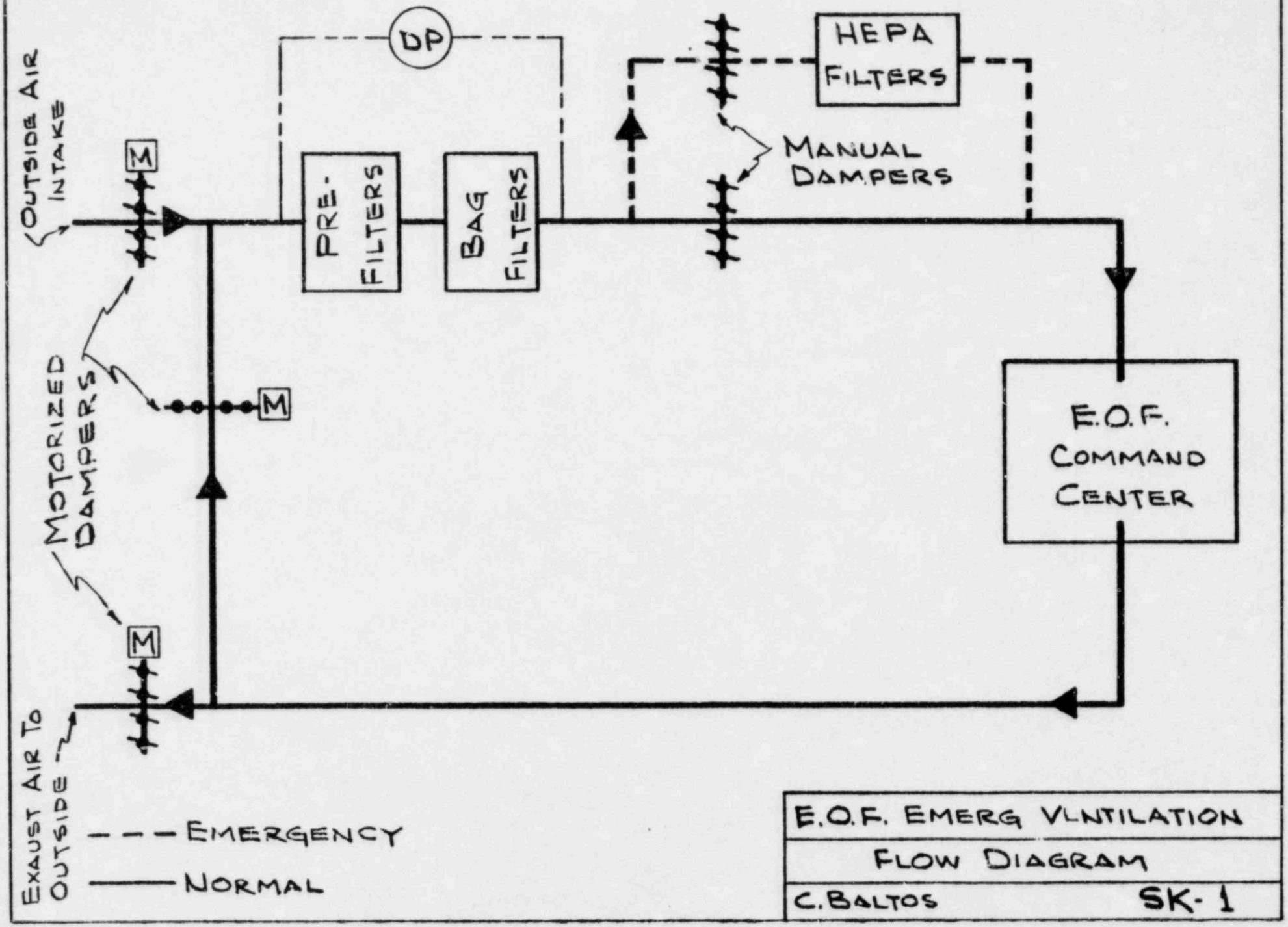
EMERGENCY OPERATING FACILITY EMERGENCY VENTILATION PROCEDURE (cont'd)

Filters can be obtained from:

C C Day, Inc
Westview Business Center
632 North County Road 18
Minneapolis, MN 55427
Telephone No. DELETED

4.2 Associated Drawings

Schematic - SK-1
Mechanical - NF-93231-16
Electrical - NF-93231-24



E.O.F. EMERG VENTILATION	
FLOW DIAGRAM	
C. BALTOS	SK-1