

NUCLEAR SUPPORT SERVICES DEPT		CORPORATE NUCLEAR EMERGENCY PLAN IMPLEMENTING PROCEDURE	
NORTHERN STATES POWER COMPANY		NUMBER:	REV: 12
PREPARED BY: <i>Gary Hudson</i> Asst. Adm. Emergency Preparedness		EFFECTIVE DATE: May 20, 1983	
REVIEWED BY: <i>Edward</i> Manager Nuclear Environmental Services		TITLE: TABLE OF CONTENTS RECORD OF REVISION	
APPROVED BY: <i>[Signature]</i> General Manager Nuclear Plants			

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NUCLEAR SUPPORT SERVICES DEPT		CORPORATE NUCLEAR EMERGENCY PLAN IMPLEMENTING PROCEDURE	
NORTHERN STATES POWER COMPANY		NUMBER: EPIP 1.1.1	REV: 4
PREPARED BY: <i>Gary Hudson</i> Asst Admin. Emergency Preparedness		EFFECTIVE DATE: May 20, 1983	
REVIEWED BY: <i>Ed Ward</i> Manager Nuclear Environmental Services		TITLE: 1.1.1 CORPORATE EMERGENCY RESPONSE ORGANIZATION	
APPROVED BY: <i>[Signature]</i> 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 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
- EOF - Emergency Manager

#### 3.3 Assistance

- HQEC - HQEC Coordinator/Communicator
- EOF - EOF Coordinator

#### 4.0 RESPONSIBILITIES

##### 4.1 HEADQUARTERS EMERGENCY CENTER (HQEC)

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

###### 4.1.2 HQEC Coordinator/Communicator

- a. The Coordinator/Communicator is a qualified person selected by Power Production Management.
- b. The responsibilities of the Coordinator/Communicator are specified in TAB C, EPIP 1.1.7, "Start-Up and Operation of HQEC".

###### 4.1.3 HQEC Technical Support

- a. The Power Production Management will staff this position with technical personnel.
- b. The responsibilities of the HQEC Technical Support are specified in Tab D, EPIP 1.1.7, "Start-Up and Operation of HQEC".

###### 4.1.4 Advisory Support

- a. The Power Production Management will staff this position with a qualified management individual.
- b. The responsibilities of Advisory Support are specified in TAB E, EPIP 1.1.7 "Start-Up and Operation of HQEC".

###### 4.1.5 Public Affairs Management

- a. The Public Affairs Management position should be staffed by the Director of Communications or his designee.
- b. The responsibilities of Public Affairs are specified in Tab F, EPIP 1.1.7, "Start-Up and Operation of HQEC".

###### 4.1.6 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 STATE EMERGENCY OPERATIONS CENTER (EOC) JOINT PUBLIC INFORMATION CENTER (JPIC)

##### 4.2.1 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 Operation of HQEC".

##### 4.2.2 Technical Resource Person

- a. The Technical Resource Person will be identified by Power Production Management and assigned to the State EOC/JPIC.
- b. The responsibilities of the Technical Resource Person are specified in TAB B, EPIP 1.1.7, "Start-up and Operation of HQEC".

#### 4.3 Emergency Operations Facility (EOF)

##### 4.3.1 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.
- b. The responsibilities of the Emergency Manager are specified in Tab A, EPIP 1.1.5, "Start-Up and Operation of EOF".

##### 4.3.2 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 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".

#### 4.3.3 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".

#### 4.3.4 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 the senior member of the Site Nuclear Technical Services group.
- b. The responsibilities of the EOF Technical Support Supervisor are specified in Tab H, EPIP 1.1.5, "Start-Up and Operation of EOF".

#### 4.3.5 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".

#### 4.3.6 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".

#### 4.3.7 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".

#### 4.3.8 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".

### 4.4 Additional Key Positions

#### 4.4.1 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.

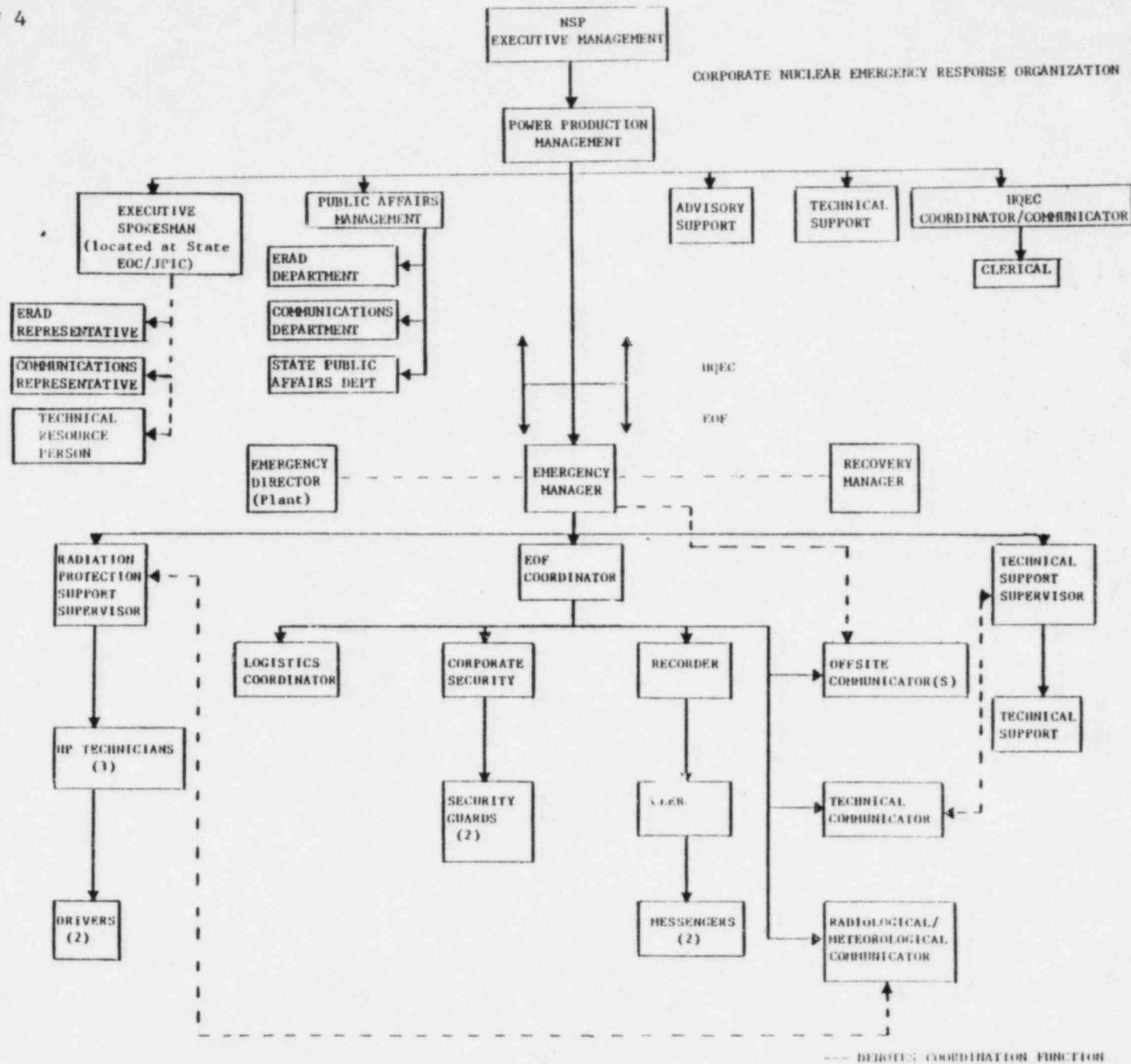
#### 4.4.2 Recovery Manager

- a. The Recovery Manager position is staffed by management personnel from the Nuclear Engineering and Construction Department.
- 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.

#### 4.4.3 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 4



<b>NUCLEAR SUPPORT SERVICES DEPT</b>  <b>NORTHERN STATES POWER COMPANY</b>	<b>CORPORATE NUCLEAR EMERGENCY PLAN IMPLEMENTING PROCEDURE</b>  <b>NUMBER:</b> EPIP 1.1.2 <b>REV:</b> 7
<b>PREPARED BY:</b> <i>Gary Hudson</i> Asst. Admin. Emergency Preparedness	<b>EFFECTIVE DATE:</b> May 20, 1983
<b>REVIEWED BY:</b> <i>EC Ward</i> Manager Nuclear Environmental Services	<b>TITLE:</b> 1.1.2 NOTIFICATIONS
<b>APPROVED BY:</b> <i>[Signature]</i> General Manager Nuclear Plants	
<p>1.0 <u>PURPOSE AND OBJECTIVE</u></p> <p>The purpose of this procedure is to specify the sequence of events required to notify personnel in the Corporate Nuclear 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.</p> <p>2.0 <u>CONDITIONS AND PREREQUISITES</u></p> <p>2.1 An emergency condition has been declared at either the Monticello Nuclear Generating Plant or the Prairie Island Nuclear Generating Plant.</p> <p>3.0 <u>ORGANIZATION AND RESPONSIBILITIES</u></p> <p>3.1 Overall Responsibility - System Dispatcher</p> <p>3.2 In Charge - System Dispatcher</p> <p>3.3 Assistance - Emergency Manager - Emergency Director</p> <p>4.0 <u>DISCUSSION</u></p> <p>4.1 Nuclear Support Services Department maintains a master copy of the Nuclear Emergency Notification List for System Control Center. This list identifies individuals who are to be notified in the event of a nuclear plant emergency and it provides the System Dispatcher with their telephone numbers.</p> <p>4.2 <u>The System Control Center is provided a Controlled Copy of the Nuclear Emergency Notification List for System Control Center.</u></p> <p>4.3 The Nuclear Emergency Preparedness Telephone Directory is also available to provide emergency telephone numbers.</p>	

5.0 RESPONSIBILITIES5.1 SYSTEM DISPATCHER

- 5.1.1 When notified of an emergency by the Emergency Director or a Shift Emergency Communicator (SEC), the System Dispatcher shall call the Emergency Manager and begin documenting notifications using the "Nuclear Emergency Notification List for System Control Center". If an SEC calls, request the name of the Emergency Director and the phone number where he can be reached.
- 5.1.2 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 5.1.4.
- 5.1.3 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.
- 5.1.4 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.
- 5.1.5 When the Emergency Director or Emergency Manager verifies the need for a corporate response, complete the Emergency Notification Message for NSP Response Organization (Figure 1). 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                    | _____ |
- 5.1.6 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

\* \* \* \* \*

- 5.1.7 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 5.1.5.

- 5.1.8 Attempt to contact any of the individuals who are listed as Power Production Management. 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 5.1.5. Inform the contacted individual that he is the first member of Power Production Management contacted.

- 5.1.9 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 5.1.5.

- 5.1.10 Contact the on-duty Shift Supervisor of the unaffected nuclear generating plant. When the Shift Supervisor is contacted, read the message developed in Step 5.1.5. In this manner, the "Sister plant" Emergency Response Team members will be notified of the activation support as determined in Step 5.1.4.

- 5.1.11 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 5.1.5.

- 5.1.12 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 5.1.5.

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



5.2 CORPORATE EMERGENCY RESPONSE PERSONNEL

- 5.2.1 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.
- 5.2.2 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.

FIGURE 1EMERGENCY 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	CORPORATE NUCLE IMPLEMENTING PROC
NORTHERN STATES POWER COMPANY	NUMBER: EPIP 1.
PREPARED BY: <i>Gary Hudson</i> Asst. Adm. Emergency Preparedness	EFFECTIVE DATE:
REVIEWED BY: <i>Edward</i> Manager Nuclear Environmental Services	TITLE: 1.1.3
APPROVED BY: <i>[Signature]</i> General Manager Nuclear Plants	

#### 1.0 PURPOSE AND OBJECTIVES

The purpose of this procedure is to establish the Emergency Communications Program will be implemented Monticello or Prairie Island nuclear power plants.

#### 2.0 CONDITIONS AND PREREQUISITES

2.1 An emergency has been declared at an NSP nuclear

#### 3.0 ORGANIZATION AND RESPONSIBILITIES

3.1 Overall Responsibility - Director of Communicat

3.2 In Charge - Manager-Public Information

#### 4.0 DISCUSSION

4.1 NSP, state and local organizations coordinate the of information to the public explaining emergency dures and explaining the actions required of the an emergency.

4.2 A program is conducted annually to acquaint news agency plans and to provide information concerning of contact for release of public information in

4.3 The above programs provide information for the emergency and advise the media of the principle in the event of an emergency.

## 5.0 RESPONSIBILITIES

### 5.1 DIRECTOR OF COMMUNICATIONS

- 5.1.1 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.
- 5.1.2 Ensure information flow to appropriate federal, state and local government officials not directly involved in the emergency response effort.
- 5.1.3 Verify that all actions specified in the Nuclear Emergency Communications Program are promptly initiated.

### 5.2 FIRST COMMUNICATIONS REPRESENTATIVE CONTACTED

- 5.2.1 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, Manager-Public Information, Supervisor-Media Services, Media representatives and State Public Affairs Department and Environmental and Regulatory Activities Department (ERAD) representatives, 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 MANAGER-PUBLIC INFORMATION

- 5.3.1 When informed of an emergency condition requiring activation of the Corporate Emergency Response Organization, Manager-Public Information shall:
  - a. If the first communications representative contacted, complete Section 5.2 of this procedure.
  - b. Complete the actions specified in the Nuclear Emergency Communications Program.
  - c. Direct the Joint Public Information Center (JPIC) Media Liaison to proceed to the JPIC.
  - d. Direct the HQEC Media Liaison to proceed to the HQEC.

- e. Prior to the activation of the HQEC and JPIC, supervise the Corporate General Office communications staff and coordinate initial release of information to the media.
- f. Upon activation of the HQEC, but prior to the activation of the JPIC, direct the dissemination to the media of news releases and summaries prepared by the HQEC Media Liaison.
- g. Upon activation of the JPIC, provide support as needed to the JPIC Media Liaison.
- h. If its activation becomes necessary, ensure that the Media Information Facility (MIF) is available and ready to accommodate the media.
- i. Verify that the rumor control procedures specified in the Nuclear Emergency Communications Program are implemented.

#### 5.4 MANAGER-CORPORATE INFORMATION

5.4.1 When informed of an emergency condition requiring activation of the Corporate Emergency Response Organization, the Manager-Corporate Information shall:

- a. Coordinate distribution of emergency information to customers who contact the company directly and to company employees not directly involved in the emergency.
- b. Supervise provision of support services for public information staff.

#### 5.5 HQEC MEDIA LIAISON

5.5.1 When informed of an emergency condition requiring activation of the Corporate Emergency Response Organization, the HQEC Media Liaison shall:

- a. If the first communications representative contacted, complete Section 5.2 of this procedure.
- b. Complete assigned tasks in the Nuclear Emergency Communications Program.
- c. Proceed, as directed, to the HQEC.
- d. Prior to the activation of the JPIC, supervise the gathering of information and preparation of news releases and summaries and obtain Power Production Management approval of the technical content of all proposed releases.
- e. Provide approved drafts of all HQEC-prepared releases and summaries to the Manager-Public Information for release.

- f. Upon activation of the JPIC, provide support for other emergency communications personnel as directed by the Manager-Public Information.
- g. Verify that the rumor control procedures specified in the Nuclear Emergency Communications Program are implemented.

#### 5.6 JOINT PUBLIC INFORMATION CENTER (JPIC) MEDIA LIAISON

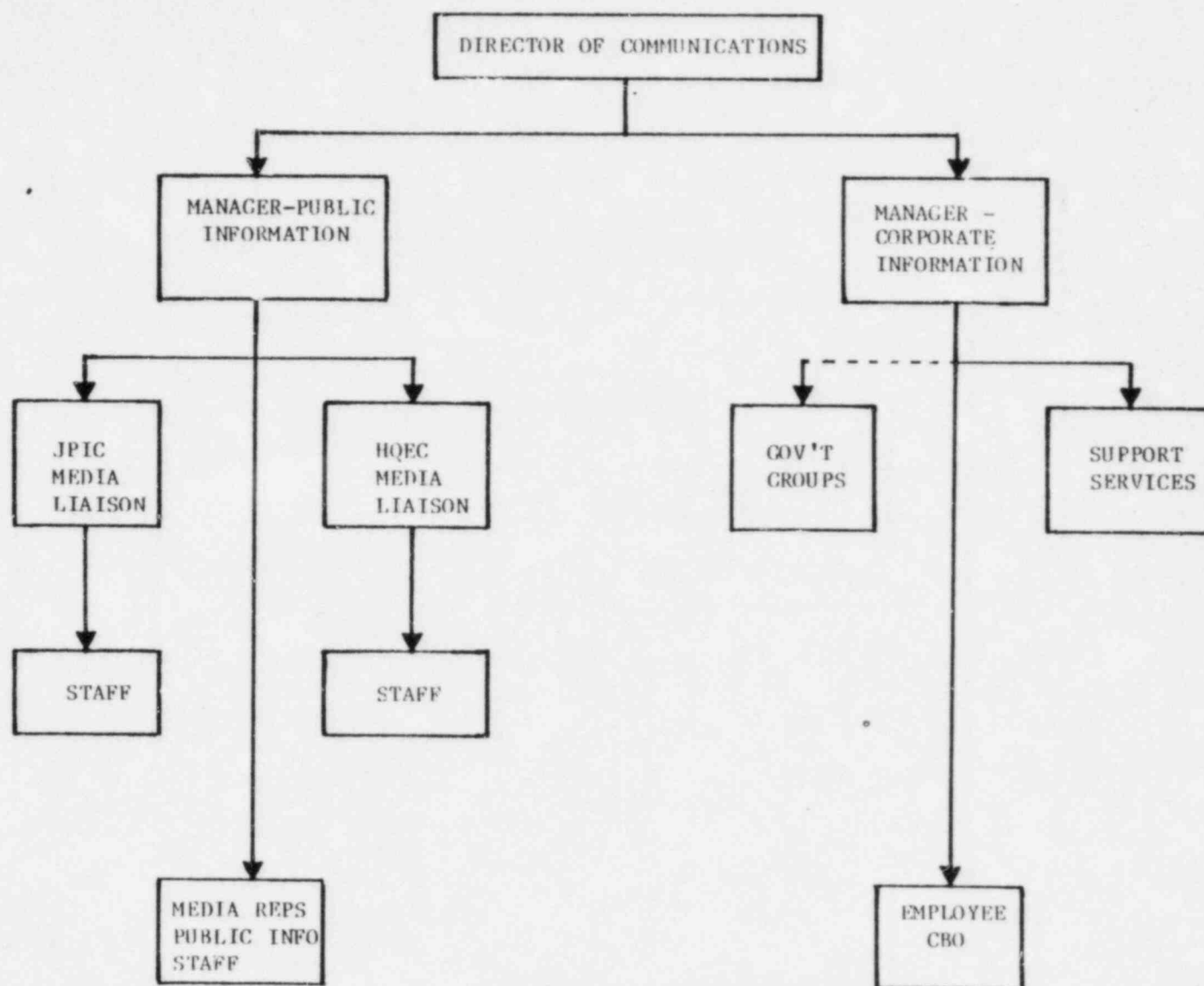
- 5.6.1 When informed of an emergency condition requiring activation of the Corporate Emergency Response Organization, the JPIC Media Liaison shall:
  - a. If the first communications representative contacted, complete Section 5.2 of this procedure.
  - b. Complete assigned tasks in the Nuclear Emergency Communications Program.
  - c. Proceed, as directed, to the JPIC facility.
  - d. Ensure that the JPIC is staffed by appropriate Communications Department personnel and by the designated Executive Spokesman and ERAD representative.
  - e. Upon activation of the JPIC, prepare draft news releases and summaries and obtain Executive Spokesman or Power Production Management approval of the technical content of all proposed releases.
  - f. Give news releases and summaries to the media as necessary; coordinate with Power Production Management to prepare the scenario for and the conduct of formal news conferences.
  - g. Provide approved drafts of all news releases and summaries to the Manager-Public Information and to appropriate county, state and federal emergency officials at the state EOC.
  - h. Verify that the rumor control procedures specified in the Nuclear Emergency Communications Program are implemented.

#### 5.7 COMMUNICATIONS REPRESENTATIVES

- 5.7.1 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 5.2 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		CORPORATE NUCLEAR EMERGENCY PLAN IMPLEMENTING PROCEDURE	
NORTHERN STATES POWER COMPANY		NUMBER: EPIP 1.1.4	REV: 5
PREPARED BY: <i>Gary Hudson</i> Asst. Admin. Emergency Preparedness		EFFECTIVE DATE: May 20, 1983	
REVIEWED BY: <i>Edward</i> Manager Nuclear Environmental Services		TITLE: 1.1.4 EMERGENCY ORGANIZATION RECORDS AND FORMS	
APPROVED BY: <i>[Signature]</i> General Manager Nuclear Plants			

#### 1.0 PURPOSE AND OBJECTIVE

The purpose of this procedure is to identify the forms and records that are to be maintained by the Corporate Nuclear Emergency Response Organization.

#### 2.0 CONDITIONS AND PREREQUISITES

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

#### 3.0 ORGANIZATION AND RESPONSIBILITIES

3.1 Overall Responsibility - Power Production Management

3.2 In Charge

- HQEC - HQEC Coordinator
- EOF - EOF Coordinator
- SCC - System Dispatcher

#### 4.0 DISCUSSION

4.1 In order to record the events, actions and results that occur during an emergency, the Corporate Nuclear Emergency Plan Implementing Procedures specify that various forms and records are to be maintained.

4.2 The instructions for completing these forms are described in the procedures that implement the individual forms.

4.3 This procedure contains a list of all of the official records and forms that are required by the various procedures.

- 4.4 Original copies of all records should be consolidated and filed to provide a permanent history of activities and events.
- 4.5 Forms which may be used at either the EOF or HQEC are described in the TABS to this procedure.
- 4.6 The following is a composite of all forms provided by the NSP Corporate Nuclear Emergency Plan Implementing Procedures. These forms should be used as specified by the procedures.

4.6.1 Emergency Notification Message for NSP Response Organization.

This form is found in Figure 1, EPIP 1.1.2, "Notifications". The form is to be completed by the System Dispatcher, as directed by the Emergency Manager or Emergency Director. This is the message to be transmitted to the Corporate Emergency Response Organization during activation.

4.6.2 Narrative Log

This form is found in Figure 1, Tab A, EPIP 1.1.4, "Emergency Organization Records and Forms". The use of the Narrative Log is implemented at the EOF by EPIP 1.1.5, "Start-up and Operation of EOF", and at the HQEC by EPIP 1.1.7, "Start-up and Operation of HQEC". The Narrative Log is used to provide a chronological history of events and actions.

4.6.3 Logistics Information Sheet

This form is found in Figure 2, TAB B, EPIP 1.1.4, "Emergency Organization Records and Forms". The purpose of this form is to provide a means of tracking previous actions concerning requisitions of supplies and equipment. It will provide a status of all requisitions.

4.6.4 Emergency Sample Results Log

This form is found in Figure 1, EPIP 1.1.10, "Offsite Surveys". This form is used to provide a record of offsite survey results and is used by the survey teams and the EOF personnel assigned to plume mapping.

4.6.5 Emergency Classification Change

This form is found in Figure 1, EPIP 1.1.5, "Start-up and Operation of EOF". This form is used to provide information to NSP facilities and federal, state, and local agencies when re-classifying an emergency condition.

#### 4.6.6 Emergency Notification Follow-up Message

This form is found in Figure 2, EPIP 1.1.5, "Start-up and Operation of EOF". This form is used to update the information relayed to federal and state agencies. It is also available to provide NSP personnel with current information concerning the status of radiological releases.

#### 4.6.7 Offsite Protective Action Recommendation Checklist

This form is found in Figure 1, EPIP 1.1.11, "Accident Assessment". This form is used to advise federal and state agencies of protective action which may be necessary based upon EPA Guidelines and the known or projected offsite conditions.

#### 4.6.8 Whole Body Survey Form

This form is found in Figure 1, EPIP 1.1.16, "Offsite Personnel and Vehicle Monitoring and Decontamination". The form is used to record personnel monitoring results in the event that a site evacuation is ordered. The form will be completed for each contaminated individual monitored prior to their unrestricted release.

#### 4.6.9 Vehicle Survey Form

This form is found in Figure 2, EPIP 1.1.16, "Offsite Personnel and Vehicle Monitoring and Decontamination". The form is used to record vehicle monitoring results in the event that a site evacuation is ordered. The form will be completed for each contaminated vehicle prior to its unrestricted release.

#### 4.6.10 EOF Entry Log

This form is found in Figure 1, EPIP 1.1.17, "Personnel Monitoring at the EOF". This form is used by the EOF Security Guard to log personnel in and out of the EOF. It records the actual exposure received during each period at the EOF.

#### 4.6.11 Individual Exposure Record

This form is found in Figure 2, EPIP 1.1.17, "Personnel Monitoring at the EOF". This form is used by the Radiation Protection Support Supervisor, or designee, to record the accumulated exposure of personnel in the EOF Emergency Response Organization.

## 4.6.12 3-Carbon Inter-Office Communication Form

This form is available at the EOF and HQEC and should be used for transferring messages and information that can not be accomplished by the use of a standardized form.

4.7 Emergency Plan Drawings (Maps) are provided at each of the emergency response facilities. The following maps, as listed, are utilized by NSP, state, and local response organizations.

4.7.1 A 10-mile radius map which identifies sampling locations for NSP and state survey teams.

- a) Prairie Island Area Radiological Sampling Points Utilized by the State of Minnesota, Wisconsin and NSP Survey Teams. E-EPD-5.1 (supplemented by a list of location descriptions).
- b) Monticello Area Radiological Sampling Points Utilized by the State of Minnesota and NSP Survey Teams. E-EPD-4.1 (supplemented by a list of location descriptions).

4.7.2 A 10-mile radius map which identifies road block locations of various law enforcement agencies.

- a) Prairie Island Area - Minnesota and Wisconsin Traffic Control Points E-EPD-5.2.
- b) Monticello Area - Minnesota Traffic Control Points E-EPD-4.2.

4.7.3 A 10-mile radius map which provides population estimates within specific sectors and distances from the plant site.

- a) Prairie Island Area - Minnesota and Wisconsin Population Distribution Map 1980 Census Estimate E-EPD-5.3.
- b) Monticello Area - Minnesota Population Distribution Map 1980 Census Estimate E-EPD-4.3.

4.7.4 A 10-mile radius map which identifies locations for the NSP Radiation Environmental Monitoring Program (REMP) air sampling sites and the Thermoluminescent dosimeters (TLDs).

- a) Prairie Island Area - Minnesota and Wisconsin NSP-REMP Air and TLD Sampling Points E-EPD-5.4.
- b) Monticello Area - Minnesota NSP - REMP Air and TLD Sampling Points E-EPD-4.4.

4.7.5 A 10-mile radius map which identifies the locations of NRC Thermoluminescent dosimeters (TLDs).

a) Prairie Island Area - Minnesota and Wisconsin Location of NRC - TLDs E-EPD-5.5.

b) Monticello Area - Minnesota Locations of NRC - TLDs E-EPD-4.5.

## 5.0 RESPONSIBILITIES

### 5.1 Headquarters Emergency Center (HQEC)

5.1.1 The HQEC Coordinator is responsible to coordinate the documentation of activities at the HQEC.

5.1.2 The HQEC Coordinator shall ensure that the following records are maintained, as applicable.

- a) Narrative Log
- b) Tapes of meetings and conversations
- c) 3-Carbon Inter-Office Communication Form
- d) Logistics Information Sheet

### 5.2 Emergency Operations Facility (EOF)

5.2.1 The EOF Coordinator is responsible to coordinate the documentation of activities at the EOF.

5.2.2 The EOF Coordinator shall ensure that the following records are maintained, as applicable.

- a) Narrative Log
- b) Logistics Information Sheets
- c) Emergency Sample Results
- d) Emergency Classification Change
- e) Emergency Notification Followup Message
- f) Offsite Protective Action Recommendation Checklist
- g) Whole Body Survey Form
- h) Vehicle Survey Form
- i) EOF Entry Log
- j) Individual Exposure Records
- k) Tapes of meetings or conversations
- l) 3-Carbon Inter-Office Communication Form

### 5.3 System Control Center (SCC)

5.3.1 The System Dispatcher is responsible to complete and maintain records at the SCC.

5.3.2. The System Dispatcher shall maintain the following records.

- a) Nuclear Emergency Notification List for System Control Center.
- b) Emergency Notification Message for NSP Response Organization.



TAB ANARRATIVE LOG

1. The Narrative Log is used to provide a running commentary of the events and actions during the emergency condition.
2. As a minimum, Narrative Logs shall be maintained at the following facilities:
  - a) HQEC
  - b) EOF
3. The Narrative Log, Figure 1, 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.

Figure 1

[illegible]

NARRATIVE LOG

Date \_\_\_\_\_

[illegible]

Page \_\_\_\_\_

TAB BLOGISTICS INFORMATION SHEET

1. The Logistics Information Sheet is a form that should be used to summarize purchasing activities or requests for services.
2. The Logistics Information Sheet, Figure 2, should be maintained as follows:
  - a) An entry for each purchase or request for services.
  - b) Entry should adequately describe the request.
  - c) Entry should indicate the name of the individual who is expediting the request at the organization we are requesting services of.
  - d) Entry should indicate the phone number of the individual who is expediting the request at the organization we are requesting services of.
  - e) Entry should indicate time of request.
  - f) Entry should indicate the projected arrival time of goods or services requested.

[illegible]



<b>NUCLEAR SUPPORT SERVICES DEPT</b>  <b>NORTHERN STATES POWER COMPANY</b>	<b>CORPORATE NUCLEAR EMERGENCY PLAN IMPLEMENTING PROCEDURE</b>
	<b>NUMBER:</b> EPIP 1.1.5 <b>REV:</b> 8
<b>PREPARED BY:</b> <i>Gary Hudson</i> Asst. Adm. Emergency Preparedness	<b>EFFECTIVE DATE:</b> May 20, 1983
<b>REVIEWED BY:</b> <i>EC Ward</i> Manager Nuclear Environmental Services	<b>TITLE:</b> 1.1.5 STARTUP AND OPERATION OF EOF
<b>APPROVED BY:</b> <i>[Signature]</i> 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**

3.1 Overall Responsibility - Emergency Manager

3.2 In Charge - EOF Coordinator

3.3 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:

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



<u>Position</u>	<u>Tab</u>
- 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 AEMERGENCY 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 1, 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 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.

A-1

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. The Technical Support Supervisor is to assume responsibility for the ENS line and the Radiation Protection Support Supervisor is to assume responsibility for the HPN line.
8. Direct the Communications Coordinator to establish communications with the state and county EOCs. 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 vendor or consultants. Direct the Logistics Coordinator to notify primary vendors in accordance with EPIP 1.1.14, "Vendor and Consultant Services". 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 and Consultant Services".
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 EOC(s) and the NRC.
  - a. The Radiation Protection Support Supervisor will prepare the following forms for your signature:
    - 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".

- b. After you have authorized the form for release, direct the offsite communicators to update the HOEC and the State EOC. The Radiation Protection Support Supervisor and the Technical Support Supervisor should be directed to update the NRC via the HPN, and ENS lines accordingly.
12. Prior to, or simultaneously with telephoning or telecopying a protective action recommendation to the support groups):
- 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 Radiological Environmental Monitoring Program", in accordance with recommendations from the Radiation Protection Support Supervisor and guidelines provided in the procedure.
16. 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".
17. When provided with updates concerning EOF habitability refer to guidance contained in EPIP 1.1.13 "Protective Guidelines for EOF Personnel and Evacuation".
18. 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. 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".

19. 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.
20. Ensure that all appropriate individuals and agencies are notified that the emergency has been terminated & whether or not a recovery phase will be initiated.
21. 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 BRADIATION 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. 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".
6. Prepare the following forms for transfer of 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 1.1.11, "Accident Assessment".

After the form has been prepared, request the Emergency Manager to authorize its release.

7. Ensure the CAM is monitoring the EOF atmosphere and as necessary, request that a dose rate reading be taken using a portable area radiation monitor. Provide routine updates to the Emergency Manager concerning the habitability of the EOF. Refer to EPIP 1.1.13 "Protective Guidelines for EOF Personnel and Evacuation" for guidance concerning habitability. Activation and opera-



tion instructions for the CAM and the emergency ventilation system are posted at the EOF.

8. Ensure that dosimetry for EOF personnel is being issued, collected and recorded in accordance with EPIP 1.1.17, "Personnel Monitoring at the EOF". Provide the Security group with a list of individuals who may leave the EOF with dosimetry (Survey Teams, etc).
9. 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".
10. Provide supervision for and obtain offsite sample results from the EOF Backup Count room. Staff for the count room will be provided by the plant.
11. 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.
12. 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.
13. Assume responsibility for the HPN Line and provide information to the NRC as required by consulting approved message forms and status boards.
14. 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."
15. If there is a need for field survey team drivers, couriers to transport samples between the radiological field teams and the EOF Backup Count Room, or a need for Environmental monitoring, request the Emergency Manager to implement the "Radiological Environmental Monitoring Program" EPIP 1.1.12. If the "Radiological Environmental Monitoring Program" is implemented, provide dosimetry for the assigned personnel and inform them of any radiological problems in the areas in which they will be working.
16. When the EM is considering downgrading of an emergency action level or relaxation of a protective action recommendation, include due consideration to confirmatory radiological readings.
17. Upon termination of the emergency condition, direct the survey teams to return all equipment items to the radiological equipment lockers.

B-2

TAB CEOF 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 posted in 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. 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 authorized, 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 (Obtains supervision from Technical Support Supervisor)
    - Radiological/Meteorological Communicator (Obtains supervision from Radiation Protection Support Supervisor)
  - 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.

C-1

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.
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.
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 D1PRAIRIE 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 in the Nuclear Emergency Preparedness Telephone Directory. 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
  2. Minnesota State EOC
    - Minnesota Department of Health (Minnesota Team Coordinator)
  3. Wisconsin State EOC
    - Wisconsin Department of Health (Wisconsin Radiological Coordinator)
  4. Local EOCs
    - Goodhue County
    - Dakota County
    - Pierce County Wisconsin
- 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 within 15 minutes:
1. Local County EOCs and read them the message
  2. Read the message and then facsimile 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 facsimiles 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

TAB D1PRAIRIE ISLAND EOF OFFSITE COMMUNICATION DUTIES (con't.)

1. Facsimile the form to the:
    - State EOCs
      - Minnesota Department of Health
      - Wisconsin Division of Radiation Protection
    - HQEC
  2. Verify that the facsimiles 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. Facsimile 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 facsimile.)

    - HQEC
  2. Verify that the facsimiles have been received by the State EOCs 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 authorized for release, or simply indicate there is no change from the latest information they received.



TAB D2PRAIRIE ISLAND EOF RADIOLOGICAL/METEOROLOGICAL COMMUNICATOR

- A. Establish communications with the Radiological Emergency Coordinator at the TSC (refer to the Nuclear Emergency Preparedness Telephone Directory).
- 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 meteorological 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.
  - Emergency Notification Follow-up Message  
Figure 2 of EPIP 1.1.5
  - Emergency Sample Results Log  
Figure 1 of EPIP 1.1.10
  - 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
- G. Update Field Survey Teams with appropriate information such as classification changes, protective actions, dose rates, etc.



TAB D3PRAIRIE ISLAND EOF TECHNICAL SUPPORT COMMUNICATOR

- A. Establish communications with the Engineers or Technical Support at the TSC (refer to the Nuclear Emergency Preparedness Telephone Directory). (The control room may establish a 4-way link between the EOF, TSC, HQEC, and the control room for updating plant status.) The HQEC has an extension of the EOF number used to create this link.
- 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. Inform the Recorder of significant information that should be included in the Narrative Log.
- E. 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 D4MONTICELLO 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 in the Nuclear Emergency Preparedness Telephone Directory. Inform them that the EOF has assumed responsibility coordinating offsite activities and all requests for information and transmission of data should now be directed to the EOF.
1. HQEC
  2. Minnesota State EOC
    - Minnesota Department of Health (Minnesota Team Coordinator)
  3. Local EOCs
    - 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 within 15 minutes:
1. Local County EOC and read them the message
  2. Read the message and then facsimile the form as time and equipment permits to the:
    - State EOC
      - Minnesota Department of Health
    - HQEC
  3. Verify that the facsimiles have been received by the State EOC and the HQEC.

TAB D4MONTICELLO 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. Facsimile the form to the:

- State EOC
  - Minnesota Department of Health
- HQEC

## 2. Verify that the facsimiles 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. Facsimile 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 facsimile.)

- HQEC

## 2. Verify that the facsimiles 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 &amp; local EOCs with available information, or simply indicate there is no change from the latest information they received.

. TAB D5MONTICELLO EOF RADIOLOGICAL/METEOROLOGICAL COMMUNICATOR

- A. Establish communications with the Radiological Emergency Coordinator at the TSC (refer to the Nuclear Emergency Preparedness Telephone Directory).
- 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 meteorological 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.
- Emergency Notification Follow-up Message  
Figure 2 of EPIP 1.1.5
  - Emergency Sample Results Log  
Figure 1 of EPIP 1.1.10
  - 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
- G. Update Field Survey Teams with appropriate information such as classification changes, protective actions, dose rates, etc.

TAB D6MONTICELLO EOF TECHNICAL SUPPORT COMMUNICATOR

- A. Establish communications with the Engineers or Technical Support at the TSC (refer to the Nuclear Emergency Preparedness Telephone Directory). (The control room may establish a 4-way link between the EOF, TSC, HQEC, and the control room for updating plant status.) The HQEC has an extension of the EOF number used to create this link.
- 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. Inform the Recorder of significant information that should be included in the Narrative Log.
- E. 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 ELOGISTICS COORDINATOR DUTIES

1. All logistics information concerning requests for services or purchases should be maintained on a Logistics Information Sheet, Figure 2, TAB B, EPIP 1.1.4 "Emergency Organization Records and Forms".
2. Provide office support supplies to facilitate recordkeeping.
  - Pens/Pencils/Markers
  - Writing paper/Note pads
  - Reproduction paper
  - Recording tapes
3. Provide special forms and charts as necessary to support EOF operation. (EPIP 1.1.4 Emergency Organization Records & Forms)
4. 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.
5. 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.
6. 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 and Consultant Services". If additional assistance is required, request or procure services as directed in accordance with EPIP 1.1.9, "Emergency Processing of Purchase Orders".
7. 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 FEOF SECURITY FORCE DUTIES

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

1. Security Force members (or available personnel) are assigned the following responsibilities:
  - a. Access Control
  - b. Issuance of Dosimetry
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. Copy of EPIP 1.1.17, "Personnel Monitoring at the EOF" and Entry Log Forms supplied to the Area Guard. Issue dosimetry to all personnel as specified in EPIP 1.1.17.
5. Security guards directed as follows:
  - a. Only NSP Emergency Response Personnel should be admitted to the EOF.
  - b. NSP personnel should have an employee identification or have another NSP employee verify their employment.
  - c. Non-NSP employees, such as state or local officials, NRC representatives, or vendors, will be granted access 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 GRECORD DUTIESRecorder

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 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 GRECORD 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 (if present).

TAB HEOF 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 by consulting approved message forms and status boards.
5. At frequent intervals, establish a 3-way link between the EOF, HQEC Technical Support and the NSP Executive Spokesman at the State EOC. The purpose of this link is to provide periodic update information and simultaneous discussion of technical issues.
6. Supervise the efforts of the technical support staff at the EOF.
7. Use available information for trending the course of the emergency.

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

THIS IS \_\_\_\_\_, \_\_\_\_\_ AT THE  
(Name) (Title)  
\_\_\_\_\_  
(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

at \_\_\_\_\_ hours  
(time)

METEOROLOGICAL CONDITIONS AT THE PRESENT TIME ARE AS FOLLOWS:

Wind Direction is from the \_\_\_\_\_ AT \_\_\_\_\_ MPH  
(Direction) (Speed)

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)

## FIGURE 2

EMERGENCY NOTIFICATION FOLLOWUP MESSAGE\*

Date \_\_\_\_\_

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

2. Class of emergency: \_\_\_\_\_

3. Type of release:  
( ) actual  
( ) potential  
( ) airborne  
( ) waterborne  
( ) surface spill4. Current release data:

Time: \_\_\_\_\_ hours am/pm

Release rate: \_\_\_\_\_ uCi/sec

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

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

Estimated quantity of radioactive material released  
or being released: \_\_\_\_\_ curies5. 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. Dose Projections based on a release rate of \_\_\_\_\_ uCi/sec  
at \_\_\_\_\_ hours am/pm.

		<u>Whole Body</u>	<u>Thyroid</u>	<u>Sectors Affected</u>
Projected dose rate at:	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 2EMERGENCY NOTIFICATION FOLLOWUP MESSAGE\* (Con't.)

## 8. Survey Results

TIME	SURVEY POINT	READING
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Estimate of any surface radioactive contamination: \_\_\_\_\_ dpm/100 cm<sup>2</sup>

10. Chemical and physical form of released material: \_\_\_\_\_

11. Emergency response actions underway: \_\_\_\_\_

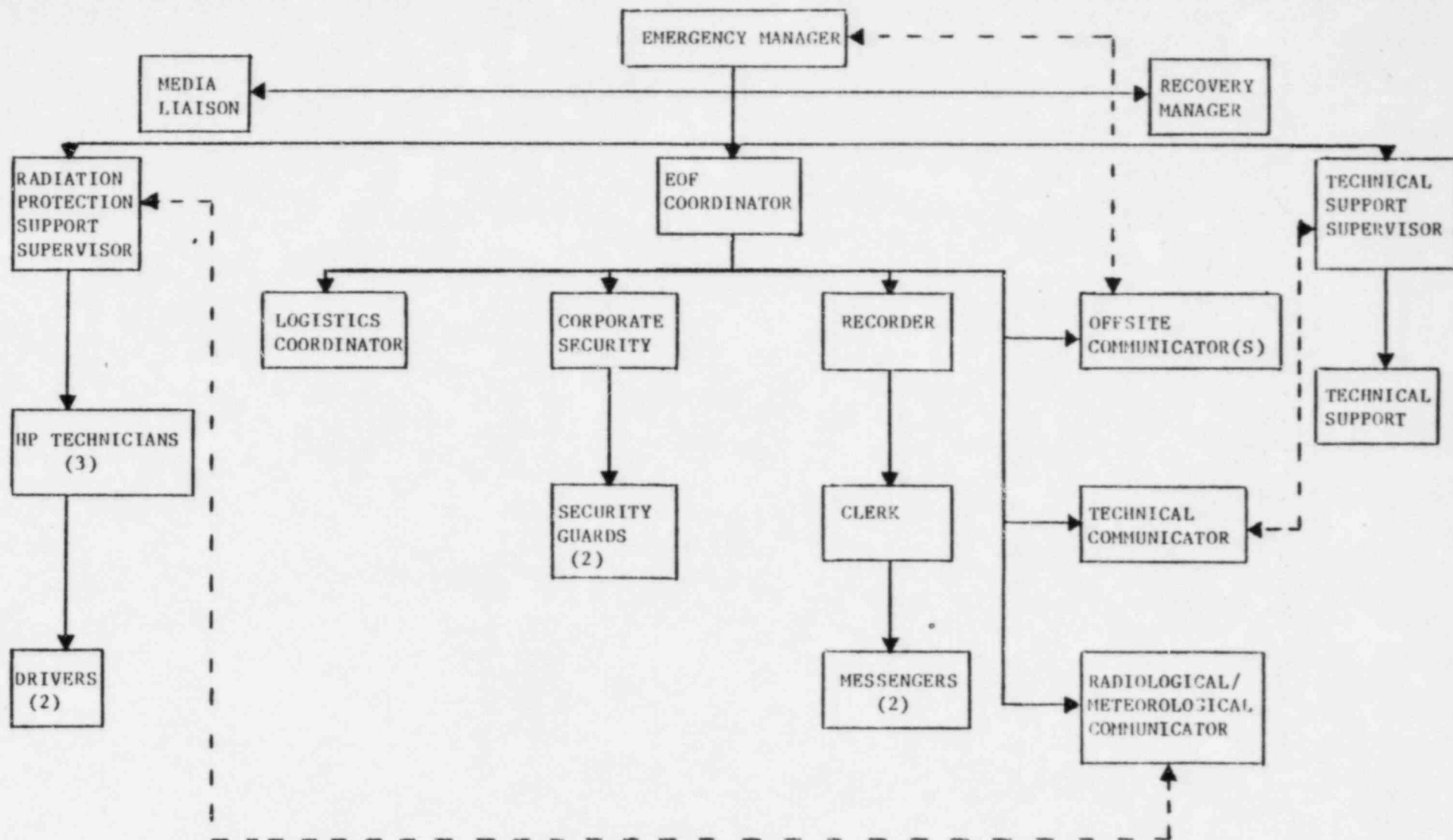
12. For liquid release to the River, estimate release volume, release activity and estimated time for concentration to reach public water: \_\_\_\_\_

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: 5
PREPARED BY: <i>Gary Hudson</i> Asst. Adm. Emergency Preparedness	EFFECTIVE DATE: May 20, 1983
REVIEWED BY: <i>EC Ward</i> Manager Nuclear Environmental Services	TITLE: 1.1.7 START-UP AND OPERATION OF HQEC
APPROVED BY: <i>[Signature]</i> 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

3.1 Overall Responsibility - Power Production Management

3.2 In Charge - Power Production Management

3.3 Assistance

- Executive Spokesman
- HQEC Coordinator/Communicator
- HQEC Technical Support
- HQEC Advisory Support
- Public Affairs Management (not necessarily in attendance at HQEC)
- HQEC Clerical

#### 4.0 RESPONSIBILITIES

The first person arriving at the HQEC should undertake the startup process described under TAB H. This will activate telephones and telecopiers so messages and data can be received promptly from the EOF. Other individual responsibilities of corporate personnel assigned to the HQEC Emergency Response Organization are specified in the following tabs to this procedure.

<u>Position</u>	<u>Tab</u>
• Power Production Management Duties	A
• Executive Spokesman and Technical Resource Person Duties	B
• HQEC Coordinator/Communicator Duties	C
• Technical Support Duties	D
• Advisory Support Duties	E
• Public Affairs Management	F
• HQEC Clerical	G
• Startup Process	H

Headquarters Emergency Center Setup Conference Room 4A (Midland Square Bldg)



TAB APower 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 arrives.
2. Assign an individual to function as the HQEC Coordinator/Communicator. 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 and the Nuclear Emergency Preparedness Telephone Directory provides phone numbers).
4. If additional assistance is required at the HQEC or the EOF, contact the required additional corporate personnel by utilizing the Nuclear Emergency Preparedness Telephone Directory.
5. Verify that Public Affairs Management has provided personnel to staff the State JPIC/EOC.
- \*6. Dispatch a technical resource person to the NSP office at the State EOC.
- \*7. Depending 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.

- \*8. Ensure that the Technical Support Group has contact with the NSP Executive Spokesman and/or Technical Resource person for the purpose of providing periodic technical updates via an EOF-HQEC-JPIC conference call that is initiated by the EOF.
- \*9. Be accessible, as a prime information source, to Public Affairs management to assist in Public Information activities.
- \*Media releases will be developed at the JPIC by Communications Department personnel with assistance from the Executive Spokesman and/or the technical resource person. Executive management approval of media releases will be the



responsibility of the Executive Spokesman. In his absence the approval responsibility will revert to Power Production Management directly or via the technical resource person located at the JPIC.

10. Provide assistance to the EOF as requested by the Emergency Manager.
11. Notify Sherco Steam Generating Plant about the emergency. Maintain contact with the Sherco plant particularly regarding projected or actual offsite releases that might result in elevated radiation levels at the Sherco site.
12. If it becomes necessary to evacuate the EOF, assemble an organization at the HQEC which can assume EOF responsibilities. This may involve additional staffing and an additional sister plant individual qualified to assume the Radiation Protection Support Supervisor duties should be requested to report to the HQEC.
13. If it becomes necessary to evacuate the EOF, HQEC personnel should refer to EPIP 1.1.6 "Emergency Organization Shift Turnover" for assistance in the transfer of duties from the EOF to the HQEC.
14. Approve information developed by the Technical Support group for Communications with INPO.
15. 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 to determine the need for transition to the Recovery Phase. If necessary, implement EPIP 1.1.15 "Transition to the Recovery Phase".
16. 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.

NOTE:

The HQEC shall serve as the contact point for the corporate Strategy Management Team (SMT). The SMT is a body of senior management people who are to provide guidance to the decision makers at the HQEC for prolonged security events, i.e., planned civil disturbances, bomb threats, hostage situations, etc. at the plant. The Manager Corporate Security or his designee will provide the interface between the SMT and the HQEC.

TAB BNSP EXECUTIVE SPOKESMAN DUTIES

1. Serve as the NSP spokesman for major media meetings and conferences held at the Minnesota State EOC/JPIC.
2. Supply information to NSP Communications personnel who are to develop media releases at the State JPIC/EOC.
3. Represent NSP at the State EOC/JPIC by interfacing with state officials.

NSP TECHNICAL RESOURCE PERSON

1. Assist the Executive Spokesman in supplying information to the NSP Communications personnel located at the JPIC/EOC.
2. Act in the absence of the Executive Spokesman taking direction from Power Production Management at the HQEC.
3. As an NSP technical representative, assist other personnel at the JPIC/EOC.
4. Maintain technical liaison with the HQEC Technical Support.

TAB CHOEC COORDINATOR/COMMUNICATOR DUTIES

1. 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.
2. Inform HOEC personnel as to the nature & number of records to be maintained. (Refer EPIP 1.1.4.)
3. Notify EOF when HQEC is adequately staffed and functioning.
4. Verify the data and information flow from the EOF is underway.
5. Inform guards at the HOEC facility that you are to determine personnel access and will develop an access list for guard use.
6. Secure clerical personnel and supervise the clerical duties in the HQEC.
7. As directed by Power Production Management, communicate with EOF and other NSP personnel, vendors, INPO, ANI (refer EPIP 1.1.14).
8. Transmit on "NOTEPAD" all NSP media releases delivered to the HQEC by the Communications Department.
9. Provide continuing contact with American Nuclear Insurers (ANI) to obtain needed services or funds after the plant has made an initial contact with ANI. The plant has the responsibility to make the initial contact with ANI after an "Alert" has been declared. 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.

TAB DHOEC Technical Support Duties

1. Assign a person to maintain the plant data status board. This person will man an HOEC party line phone to receive, simultaneously with the TSC and EOF, new status data originating from a communicator in the control room. This link is a one-way transmittal of information from the control room.
2. Provide necessary manuals, publications, and prints to assist in analysis of plant conditions.
3. Provide technical support personnel to assist in engineering analysis as directed by Power Production Management.
4. Provide technical liaison with the EOF Technical Support Group and the NSP technical resource person at the State EOC through the EOF-HQEC-JPIC conference call which is initiated by the EOF.
5. Oversee the efforts of vendor engineering groups retained by Power Production Management to assist the emergency response effort.
6. If requested by the EOF Logistics Coordinator, assist in the Emergency Processing of Purchase Orders EPIP 1.1.9.

TAB E

Advisory Support Duties

1. Keep NSP Executive Management informed about emergency operations and actions.
2. Be accessible to the NSP Executive Spokesman located at the State EOC/JPIC.

TAB FPublic Affairs Management Duties

1. Implement EPIP 1.1.3 "Public Information"
2. Provide Communications Representatives to prepare news releases, conduct press conferences and direct the overall public information program.
3. Assign Communications Representatives to the State EOC/JPIC who will develop media releases from information furnished by the NSP Executive Spokesman and/or technical resource person.
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.
6. If not in attendance at the HQEC, be accessible to Power Production Management.

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 GHQEC 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.

TAB FHOEC Startup Process

1. Request that all individuals not part of the Corporate Emergency Response Organization vacate the HOEC (Conference Room 4A, Midland Square Bldg).
2. Remove the dial telephones from the telephone shelves in the HOEC Storage room and plug them into the telephone jacks with corresponding labels (see Figure 1, EPIP 1.1.7). These jacks are located on the lower walls in Conference Room 4A. Secure speaker phone (Panasonic) from desk drawer in HOEC Storage Room and connect it to X7890 instrument. (This phone will be used to provide a three-way conference capability with the HOEC, the plant EOF, and the NSP Executive Spokesman at the State Capitol building. Be sure to check each telephone for operability.
3. Remove the "Auto-ring Hotline" telephones from the telephone shelves in the HOEC Storage Room for the appropriate plant. Phones are labeled "Monticello" or "Prairie Island" EOF to HOEC-1 (or 2). (Dialers and push buttons on these phones do not operate.) HOEC-1 properly connected, will contact the Emergency Manager's station, and HOEC-2 will contact the EOF technical support station. The jacks are located along the wall (see Figure 1) in Conference Room 4A. Care should be taken in placing the telephone cord jacks into the proper wall jacks. The telephones should be placed on the table adjacent to this wall.
4. Two Radiation Field Team Radio handsets are located on the telephone shelves in the HOEC Storage Room 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 telephone cord from this set into the appropriate wall jack located on the wall (see Figure 1) in Conference Room 4A. This unit requires a 120 Volt AC power source to operate. A wall outlet is located on the wall for this use.
5. Remove the "Low Band Paging" radio telephone and encoder from the telephone shelves in the HOEC Storage Room. Plug the telephone cord from the radio telephone unit into the wall jack identified for this use on the wall (see Figure 1) in Conference Room 4A. Two electrical cords from this unit need 120 VAC power. In order to provide three outlets (one for paragraph 4 above and these two) a heavy duty 4 outlet power cord is available on the telephone shelves in the HOEC Storage Room. The radio telephone and encoder should be placed on the table adjacent to the wall with the telephone jacks.
6. The facsimile machine located on the desk in the HOEC Storage Room is operational. Instructions for operating the facsimile are on the desk.
7. Verify that NSP Security has requested contract guards for the HOEC-Midland Square Building.

8. A telephone instrument and headset is located on a small rolling table in the HQEC Storage Room. Attach the telephone cord jack to the appropriate wall jack (Prairie Island or Monticello Plant extension) on the north wall under the Plant Status Boards (see Figure 1). This telephone and headset will be used by the individual responsible for updating the event status board.
9. Move the emergency cart from the HQEC Storage Room into the Conference Room Area. This cart contains source materials and supplies to make the HQEC functional.

NUCLEAR SUPPORT SERVICES DEPT		CORPORATE NUCLEAR EMERGENCY PLAN IMPLEMENTING PROCEDURE	
NORTHERN STATES POWER COMPANY		NUMBER: EPIP 1.1.8	REV: 3
PREPARED BY: <i>Gary Hudson</i> Asst. Adm. Emergency Preparedness		EFFECTIVE DATE: May 20, 1983	
REVIEWED BY: <i>Edward</i> Manager Nuclear Environmental Services		TITLE: 1.1.8 COMMUNICATION EQUIPMENT AND INFORMATION	
APPROVED BY: <i>[Signature]</i> General Manager Nuclear Plants			

### 1.0 PURPOSE AND OBJECTIVE

This procedure describes the communication equipment that is available at each EOF and at the HQEC. Reference diagrams which indicate the available lines of communication are also provided.

### 2.0 CONDITIONS AND PREREQUISITES

- 2.1 An emergency condition has been declared and the Corporate Emergency Response Organization has been activated.
- 2.2 This procedure is to be utilized only after the "Notifications" procedure EPIP 1.1.2 has been completed and the Corporate Emergency Response Organization has activated Emergency Response Facilities.
- 2.3 Emergency telephone numbers are in Nuclear Emergency Preparedness Telephone Directories which are available at all NSP Emergency Response Facilities.

### 3.0 EQUIPMENT

The equipment in each individual Corporate Emergency Response Facility is specified in TABS attached to this procedure. The following TABS are included:

<u>Facility</u>	<u>TAB</u>
• Monticello EOF Communication Information	A
• Prairie Island EOF Communication Information	B
• HQEC Communication Information	C

TAB AMONTICELLO COMMUNICATION INFORMATIONI. MONTICELLO (EOF)A. Auto-Ring "Hot Lines"

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

B. Emergency Manager

1. Multi-line Phone
  - a. 2 General Office extensions
  - b. St Cloud extension
  - c. Plant extension
2. Multi-line Phone
  - a. Auto-ring to HOEC #1 (EM - PP Mgmt)
  - b. Auto-ring to TSC #1 (EM - ED)
  - c. Auto-ring to Minn EOC

C. EOF Coordinator

1. Multi-line phone
  - a. 2 General Office extensions
  - b. St Cloud extension
  - c. Plant extension

D. Radiation Protection Support Supervisor (RPSS)

1. Multi-line phone
  - a. Auto-ring to TSC #2 (RPSS - REC)
  - b. Auto-ring to Minn EOC
  - c. Plant extension

E. Radiological/Meteorological Communicator

1. Multi-line phone
  - a. 2 General Office extensions
  - b. St Cloud extension
  - c. Plant extension

TAB AMONTICELLO COMMUNICATION INFORMATIONF. Survey Team Communicator

1. Field Team Radio Console

G. Offsite Communicator(s)

1. Multi-line phone at Station #1
  - a. 2 General Office extensions
  - b. St Cloud extension
  - c. Auto-ring to Minn EOC
2. Multi-line phone at Station #2
  - a. 2 General Office extensions
  - b. St Cloud extension
  - c. Auto-ring to Minn EOC

H. Technical Support Supervisor/Engineers)

1. Two Multi-line phones (same capabilities)
  - a. 2 General Office extensions
  - b. St Cloud extension
  - c. Plant extension
  - d. Auto-ring to HQEC #2 (Tech Support)

I. Technical Support Communicator

1. Multi-line phone
  - a. 2 General Office extensions
  - b. St Cloud extension
  - c. Plant extension

J. Facsimile Station

1. Facsimile Machine #1 General Office extension
2. Facsimile Machine #2 General Office extension
3. Facsimile Operator General Office extension
4. Facsimile Operator Multi-line phone
  - a. St Cloud extension
  - b. Plant extension

K. Logistics Coordinator

1. Multi-line phone
  - a. Monticello local extension
  - b. Plant extension



TAB AMONTICELLO COMMUNICATION INFORMATIONL. NPC (FOF Command Center)

1. Multi-line phone (Rad Protection area)
  - a. 2 General Office extensions
  - b. St Cloud extension
2. Health Physics Network (HPN) phone
3. Emergency Notification System (ENS) phone
4. General Office extension

M. NRC FOF Office Space (Training Room #7)

1. HPN phone
2. Facsimile phone General Office extension
3. Two multi-line phones (same capabilities)
  - a. General Office extension
  - b. St Cloud extension
  - c. Monticello local extension
  - d. ENS phone

N. Drill Coordinator

1. Plant extension

O. Switchboard Operator

1. Operator phone console
  - a. 4 General Office extensions
  - b. 3 St Cloud extensions
  - c. 4 Plant extensions
  - d. 5 Auto-ring lines
2. EOF Switchboard Paging System  
(Allows intercom console to phone)
3. Training Center Public Address
4. Radio console
  - a. Channel 1 Security Primary
  - b. Channel 2 Security Secondary
  - c. Channel 3 Plant Repeater
  - d. Channel 4 Rad Survey Teams
  - e. Channel 5 County EOCs and Sheriffs
    - Wright
    - Sherburne
  - f. Channel 6 Low Band Paging System

TAB AMONTICELLO COMMUNICATION INFORMATIONP. NSP Communications Department EOF Office Space (Training Room #4)

1. General Office extension
2. General Office extension

Q. EOF Count Room

1. Multi-line phone
  - a. Two plant extensions
2. Multi-line phone
  - a. Two plant extensions

R. State and Local Government EOF Office Space (Training Room #5)

1. Multi-line phone
  - a. St Cloud extension
  - b. Monticello Local extension
2. Multi-line phone
  - a. St Cloud extension
  - b. Monticello Local extension

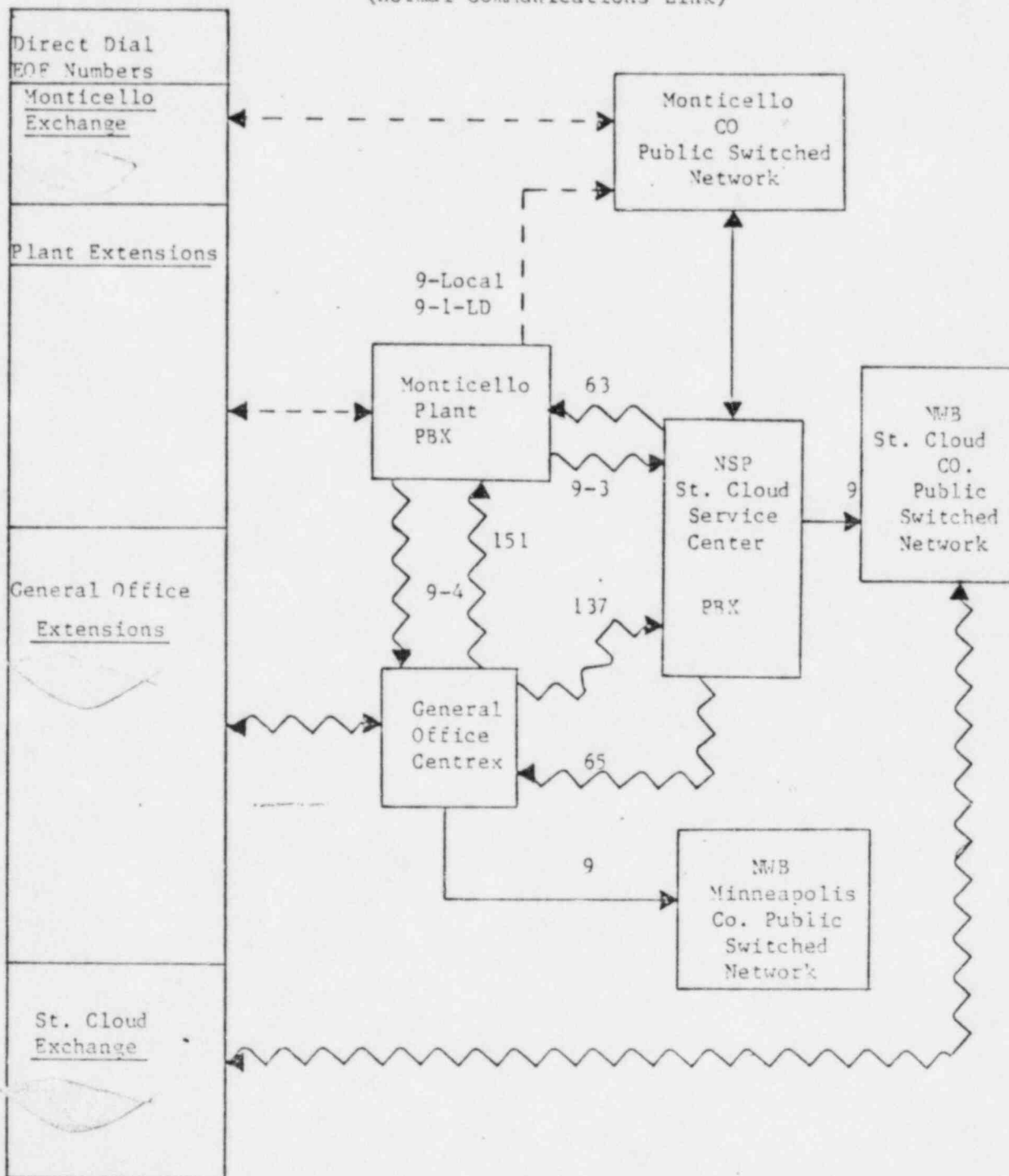
## TAB A

## KEY

1. — Bell System Lines
2. — Bridgewater Lines
3. WW NSP Microwave

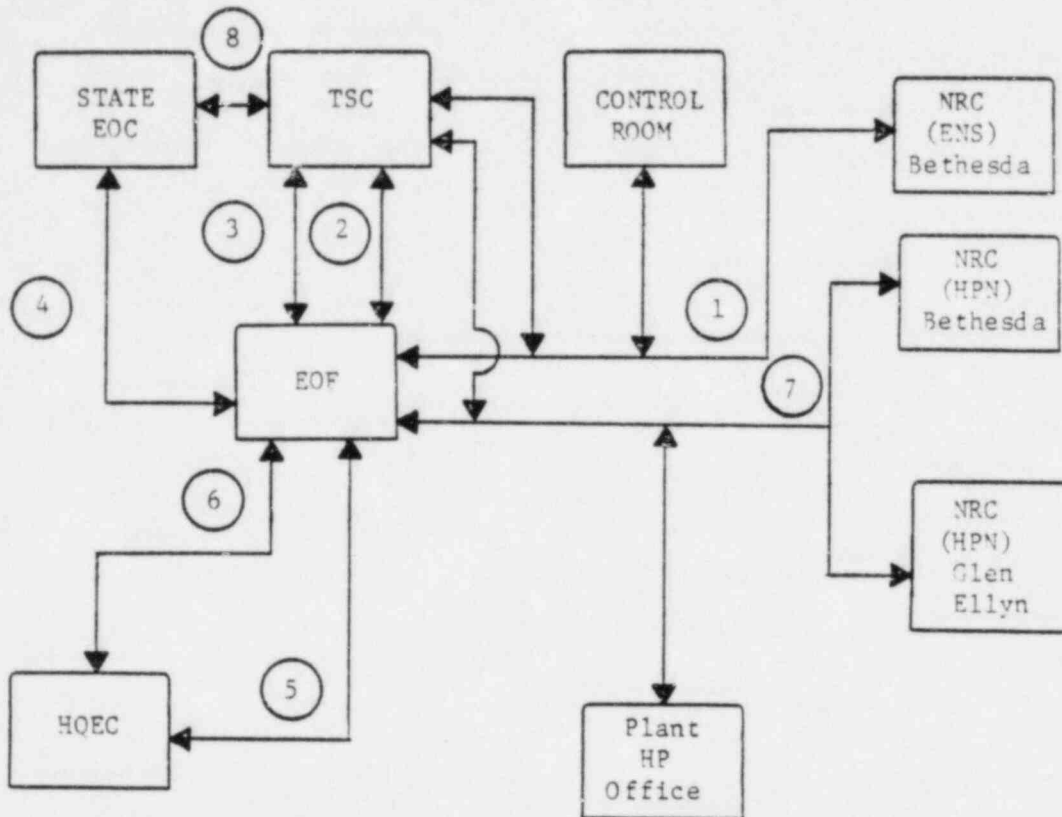
MONTICELLO  
DIRECT DIAL COMMUNICATIONS

(Normal Communications Link)



TAB A

MONTICELLO AUTO RING HOTLINE NETWORK  
(Primary Communications Link)



<u>Number</u>	<u>Name</u>	<u>Stations</u>
1.	Emergency Notification System (ENS)	4 station line between the EOF, TSC, Control Room and NRC Bethesda NRC. Each station can activate circuit.
2.	EOF - TSC #1 (EM - ED)	2 station line between the EOF (EM) and TSC (ED). Either station can activate the circuit.
3.	EOF - TSC #2 (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 #1 (EM - PP Mgmt)	2 station line between the EOF and the HQEC. Either station can activate the circuit.

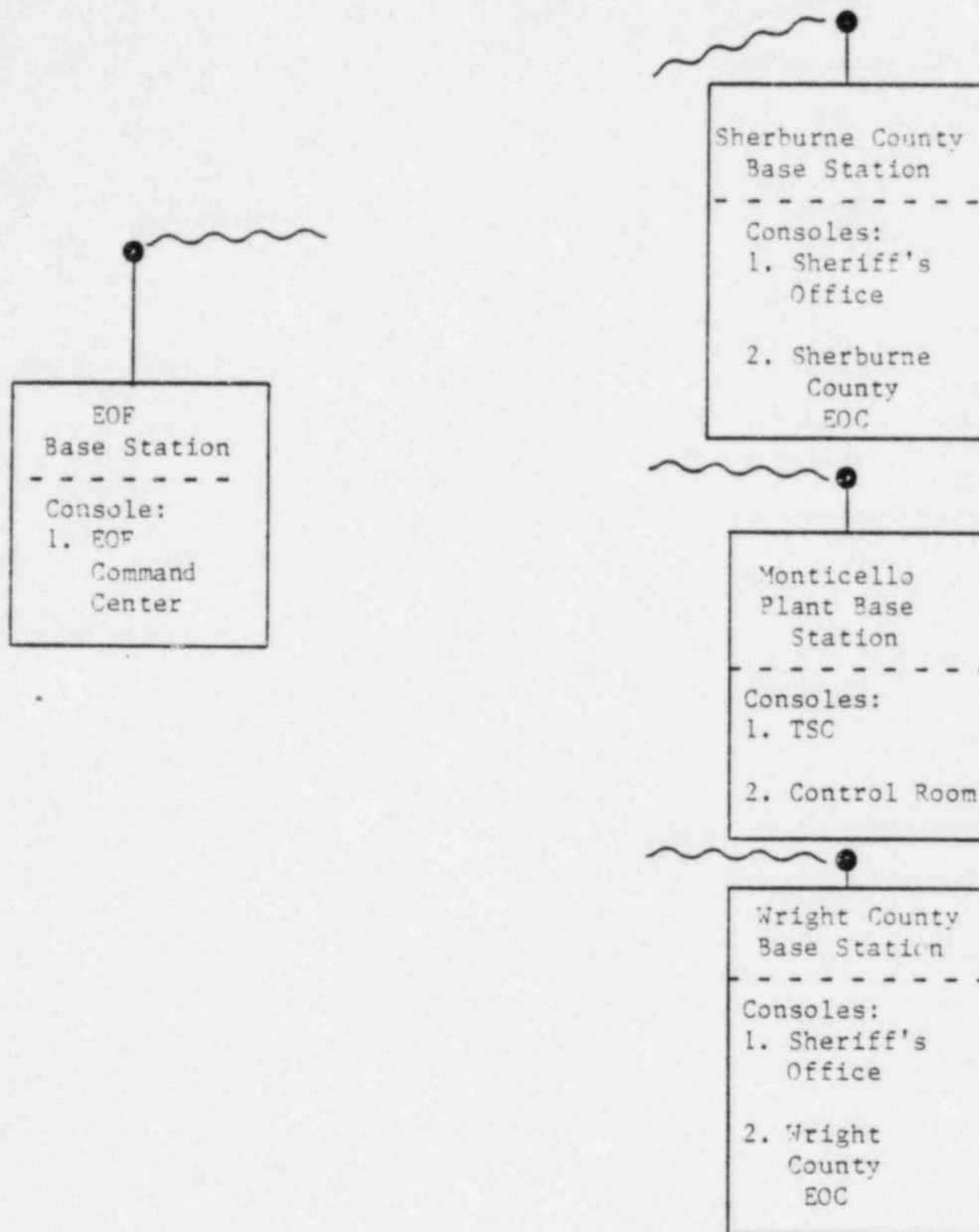
MONTICELLO AUTO RING HOTLINE NETWORK (con't.)  
(Primary Communications Link)

<u>Number</u>	<u>Name</u>	<u>Stations</u>
6.	EOF - HOEC #2 (Tech Support)	2 station line between technical support groups at the EOF and the HOEC. 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.

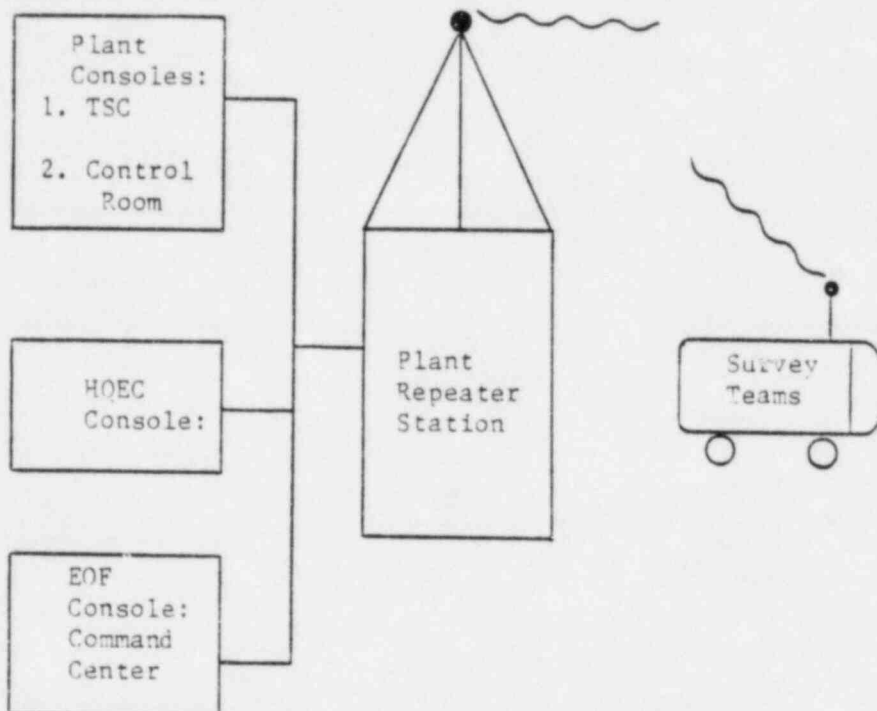
TAB AEOC Backup Radio System in Monticello EPZ  
(Secondary Communications Link)

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.



TAB AMonticello Portable Communications  
(Primary Communication Link)Fixed StationsPortable Radios

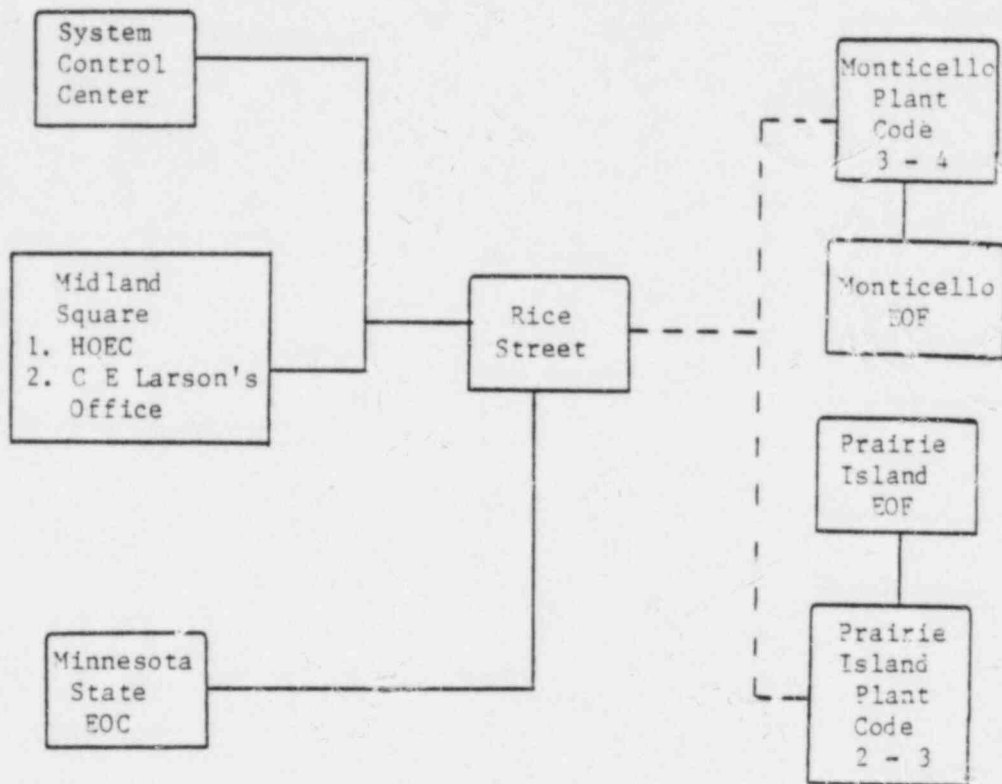
(Handie-Talkie)



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 with the exception of the HQEC link which is microwave to the repeater.

## TAB A

LOW BAND PAGING SYSTEM  
(Secondary Communications Link)



## KEY:

Radio

Bell System

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 HOEC (when connected).
3. The State can activate the Prairie Island and Monticello Receivers.
4. Each station can monitor.
5. The HOEC can activate receivers at all the plant stations.

TAB BPRAIRIE ISLAND COMMUNICATION INFORMATIONI. PRAIRIE ISLAND (EOF)A. Auto-Ring "Hot Lines"

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

B. Emergency Manager

1. Multi-line Phone
  - a. 2 General Office extensions
  - b. Eau Claire extension
  - c. Auto-Ring to Minn EOC
  - d. Plant extension
2. Multi-line Phone
  - a. 2 General Office extensions
  - b. Auto-ring to HQEC #1 (EM - PP Mgmt)
  - c. Auto-ring to TSC #1 (EM - ED)
  - d. Auto-ring to Minn EOC
3. Intercom Station #3

C. EOF Coordinator

1. Multi-line phone
  - a. 2 General Office extensions
  - b. Eau Claire extension
  - c. Plant extension
  - d. Auto-Ring to TSC #1 (EM - ED)

D. Radiation Protection Support Supervisor (RPSS)

1. Multi-line phone
  - a. 2 General Office extensions
  - b. Auto-ring to TSC #2 (RPSS - REC)
  - c. Auto-ring to Minn EOC
  - d. Plant extension

TAB BPRAIRIE ISLAND COMMUNICATION INFORMATIONE. Radiological/Meteorological Communicator

1. Multi-line phone
  - a. 2 General Office extensions
  - b. Eau Claire extension
  - c. Plant extension

F. Survey Team Communicator

1. Field Team Radio Console

G. Offsite Communicator(s)

1. Multi-line phone at Station #1
  - a. 2 General Office extensions
  - b. Eau Claire extension
  - c. Auto-ring to Minn EOC
2. Multi-line phone at Station #2
  - a. 2 General Office extensions
  - b. Eau Claire extension
  - c. Auto-ring to Minn EOC

H. Technical Support Supervisor

1. Multi-line phone
  - a. 2 General Office extensions
  - b. Eau Claire extension
  - c. Auto-Ring to HQEC #2 (Tech Support)
  - d. Plant extension

I. Technical Support Communicator

1. Multi-line phone
  - a. 2 General Office extensions
  - b. Eau Claire extension
  - c. Plant extension

J. Technical Support (Engineering)

1. Multi-line phone
  - a. 2 General Office extensions
  - b. Eau Claire extension
  - c. Plant extension
  - d. Auto-Ring to HQEC #2 (Tech Support)
2. Intercom Station #4

TAB BPRAIRIE ISLAND COMMUNICATION INFORMATIONK. Facsimile Station

1. Facsimile Machine #1 General Office extension
2. Facsimile Machine #2 General Office extension
3. Facsimile Operator General Office extension

L. Logistics Coordinator

1. General Office extension

M. NRC (EOF Command Center)

1. Multi-line phone (Rad Protection area)
  - a. 2 General Office extensions
  - b. Eau Claire extension
  - c. Plant extension
2. Health Physics Network (HPN) phone
3. Emergency Notification System (ENS) phone
4. General Office extension

N. NRC EOF Office Space (Training Room #7)

1. HPN phone
2. ENS phone
3. Multi-line phone
  - a. General Office extension
  - b. Eau Claire extension
  - c. Red Wing extension
4. Multi-line phone
  - a. General Office extension
  - b. Eau Claire extension
  - c. Red Wing extension

O. Drill Coordinator

1. Plant extension

P. Switchboard Operator

1. Operator phone console
  - a. 6 General Office extensions
  - b. 2 Eau Claire extensions
  - c. Plant extension
  - d. Training Department telephone number rollovers


TAB BPRAIRIE ISLAND COMMUNICATION INFORMATION

2. Intercom Station #2
  3. Public Address
  4. Radio console
    - a. Channel 1 County Sheriff and EOC
      - Goodhue
      - Dakota
      - Pierce
    - b. Channel 2 Field Survey Teams
    - c. Channel 3 Plant Repeater
    - d. Channel 4 Security - Primary
    - e. Channel 5 Security - Secondary
    - f. Channel 7 Low Band Paging System
    - g. Channel 8 Auxiliary System IN-Plant radios
- Q. NSP Communications Department EOF Office Space (Training Room #4)
1. General Office extension
  2. General Office extension
- R. EOF Count Room
1. Multi-line phone
    - a. Two plant extensions
  2. Multi-line phone
    - a. Two plant extensions
- S. State and Local Government EOF Office Space (Training Room #5)
1. Multi-line phone
    - a. Eau Claire extensor
    - b. Red Wing extension
  2. Multi-line phone
    - a. Eau Claire extensor
    - b. Red Wing extension



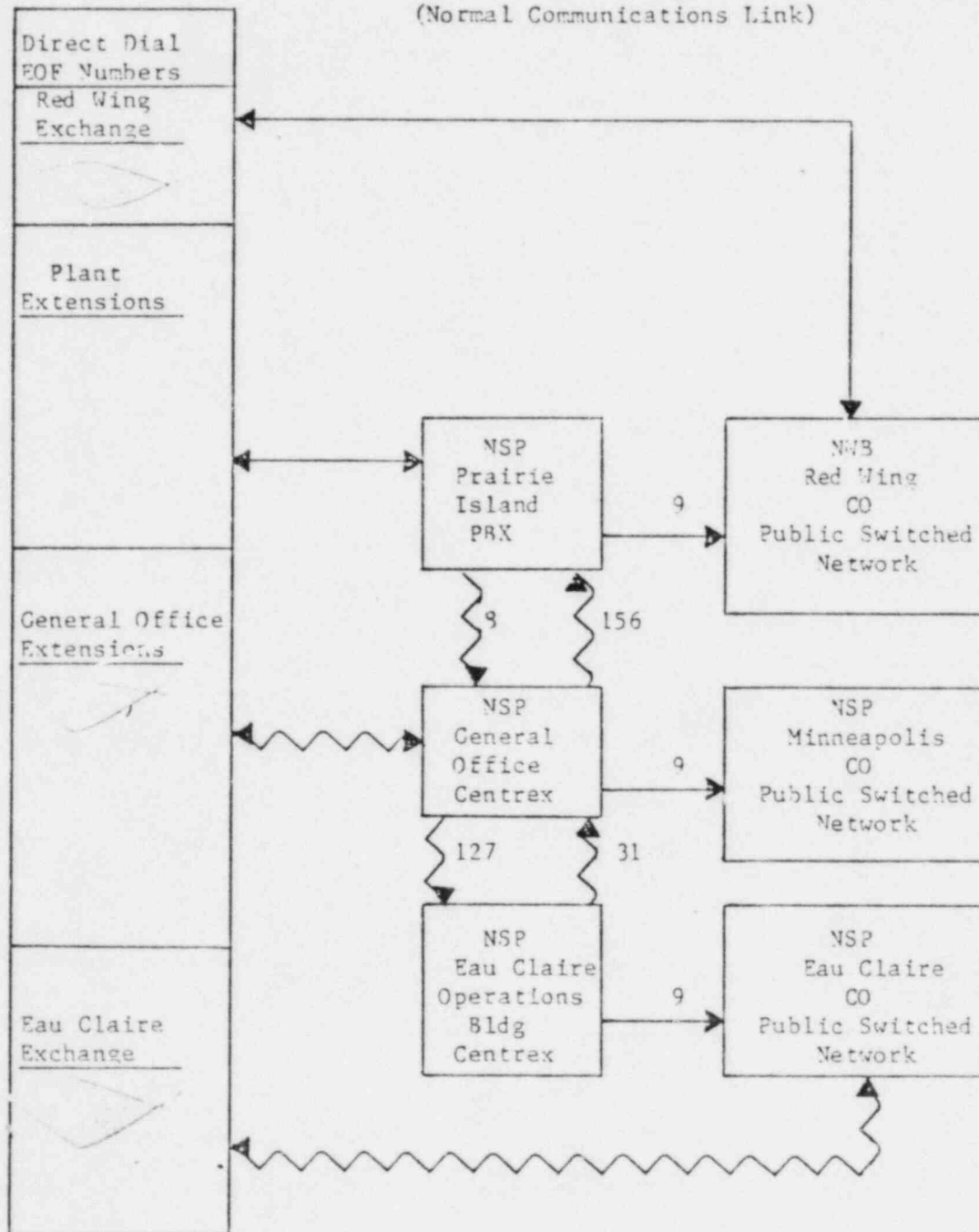
## TAB 8

## KEY

1. Bell System Lines
2.  NSP Microwave

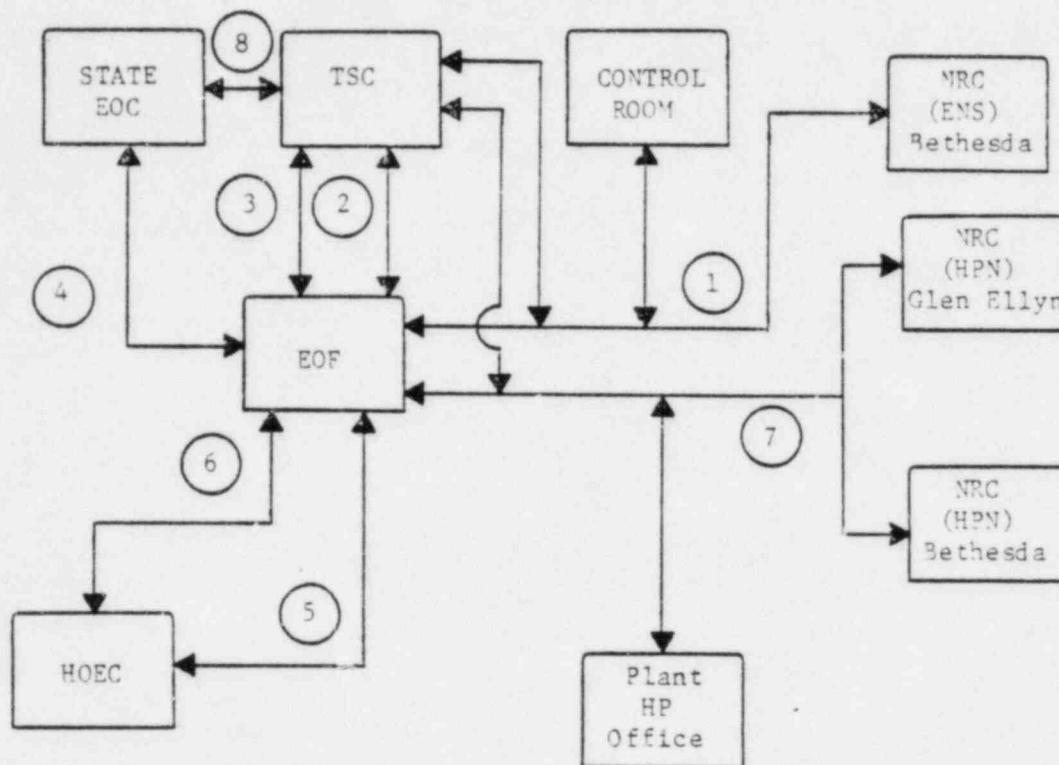
PRAIRIE ISLAND  
DIRECT DIAL COMMUNICATIONS

(Normal Communications Link)



## TAB B

PRAIRIE ISLAND HOTLINE NETWORK  
(Primary Communications Link)



<u>Number</u>	<u>Name</u>	<u>Stations</u>
1.	Emergency Notification System (ENS)	4 station line between the EOF, TSC, Control Room and NRC Bethesda NRC. Each station can activate circuit.
2.	EOF - TSC #1 (EM - ED)	2 station line between the EOF (EM) and TSC (ED). Either station can activate the circuit.
3.	EOF - TSC #2 (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 #1 (EM - PP Mgmt)	2 station line between the EOF and the HQEC. Either station can activate the circuit.

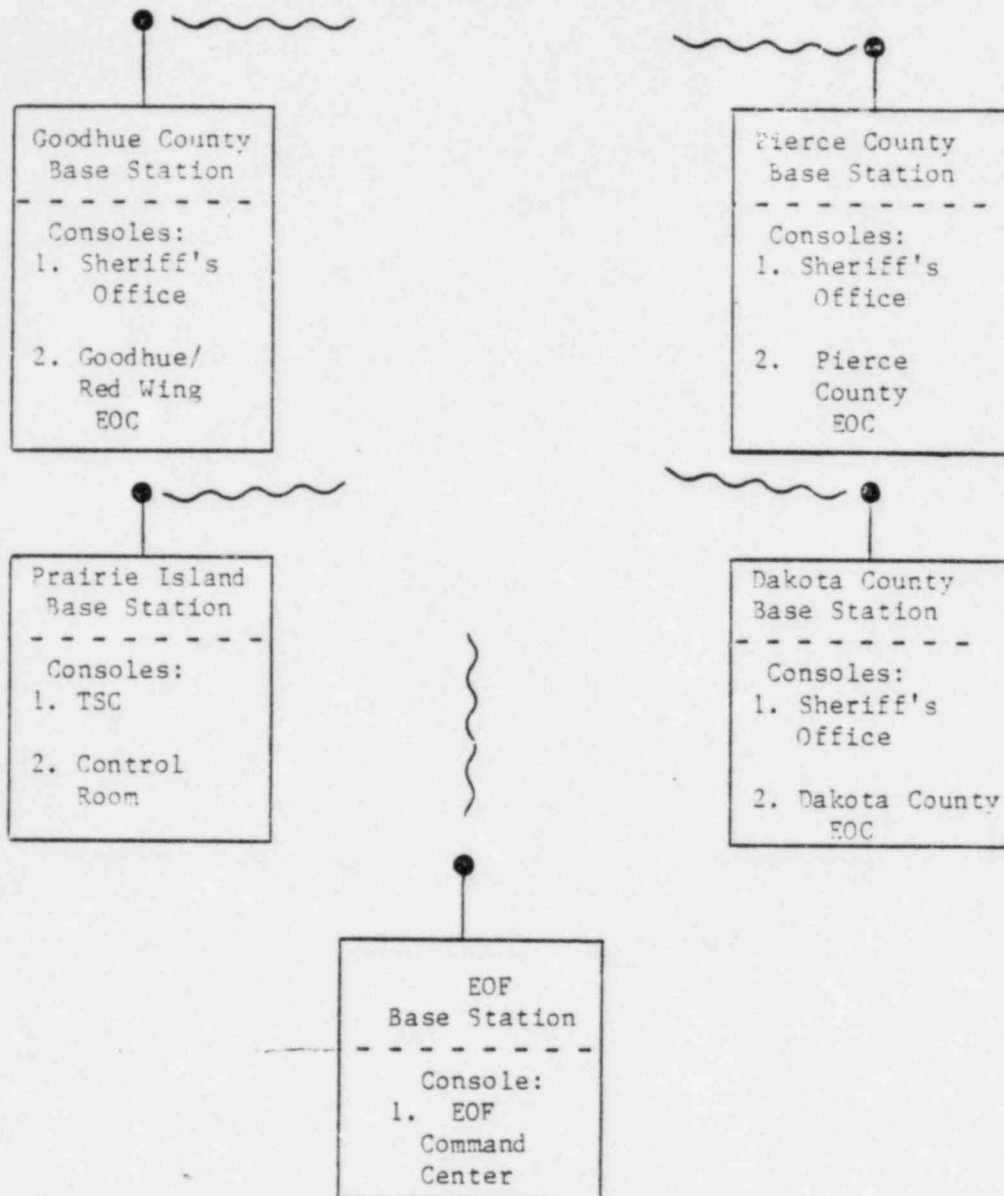
TAB BPRAIRIE ISLAND HOTLINE NETWORK (con't.)  
(Primary Communications Link)

- | <u>Number</u> | <u>Name</u>                  | <u>Stations</u>  |
|---------------|------------------------------|--|
| 6.            | EOF - HOEC #2 (Tech Support) | 2 station line between technical support groups at the EOF and the HOEC. 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.   |

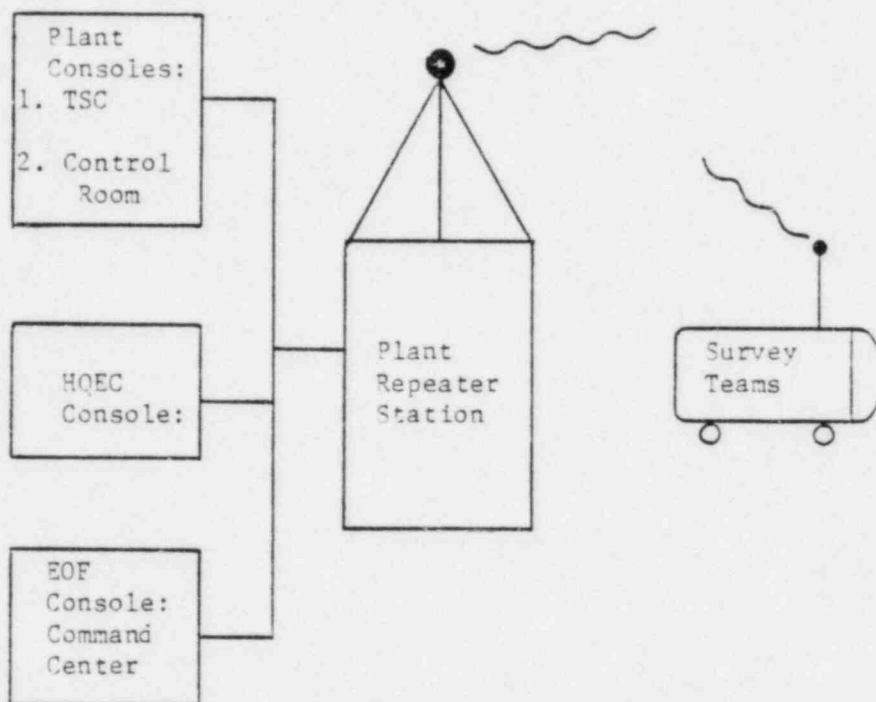
NOTE: When you pick up the phone you will not be able to hear it ringing.

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.

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

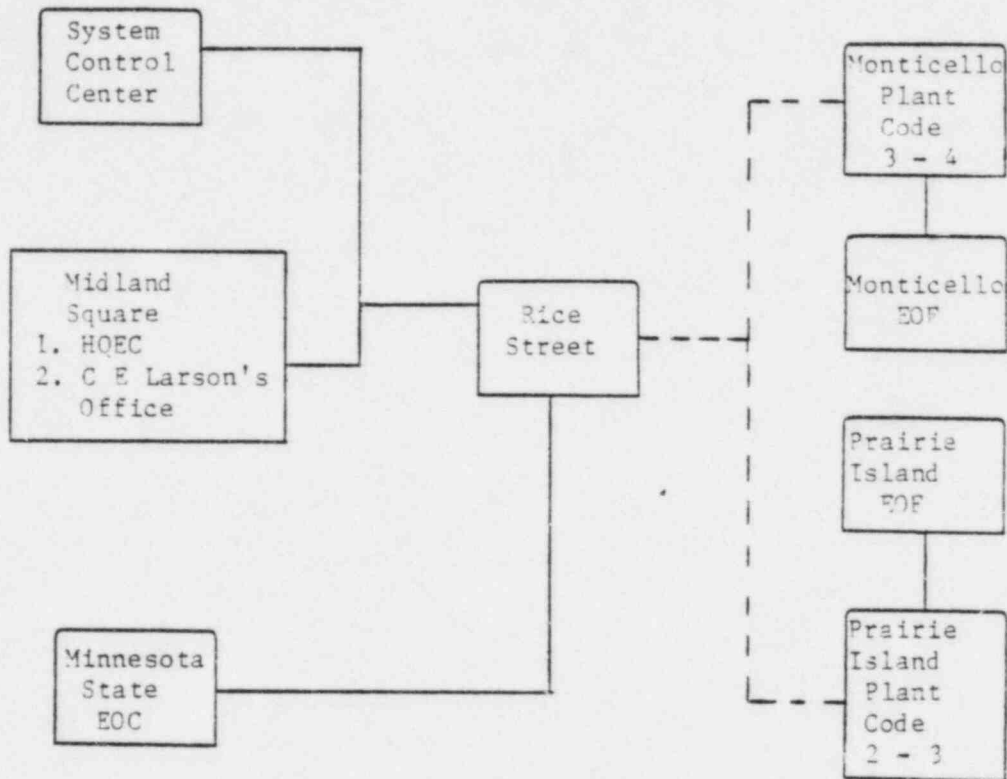
1. All consoles are hard wired to their respective base station.
2. Each base station can talk to all other base stations. The base station must be operating. There is no automatic activation.
3. Digital Voice Protection is provided for each base station.

TAB BPrairie Island Portable Communications  
(Primary Communication Link)Fixed StationsPortable 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 with the exception of the HQEC link which is microwave to the repeater.

TAB B

LOW BAND PAGING SYSTEM  
(Secondary Communications Link)

KEY:

Radio

Bell System

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.



TAB CHEADQUARTERS EMERGENCY CENTER (HOEC) COMMUNICATIONI. HQEC Phones (General)

- A. Technical Support
  - 1. General Office extension
- B. Facsimile Station
  - 1. Facsimile Machine General Office extension
  - 2. Facsimile Operator General Office extension
- C. HOEC Coordinator
  - 1. General Office extension
- D. Low Band Paging System Radio

II. HOEC Phones Monticello Specific

- A. Power Production Management (PP Mgmt)
  - 1. Auto-Ring to Monticello EOF #1 (PP Mgmt - EM)
- B. Technical Support
  - 1. Auto-Ring to Monticello EOF #2 (Tech Support)
- C. Technical Support Communicator (Status Board)
  - 1. Monticello Plant extension
- D. Monticello Field Survey Team Radio

III. HOEC Phones Prairie Island Specific

- A. Power Production Management (PP Mgmt)
  - 1. Auto-Ring to Prairie Island EOF #1 (PP Mgmt - EM)
- B. Technical Support
  - 1. Auto-Ring to Prairie Island EOF #2 (Tech Support)
- C. Technical Support Communicator (Status Board)
  - 1. Prairie Island Plant extension

TAB C

D. Prairie Island Field Survey Team Radio

IV. Minnesota EOC/JPIC

A. NSP Executive Spokesman

1. General Office extension
2. Facsimile machine - General Office extension

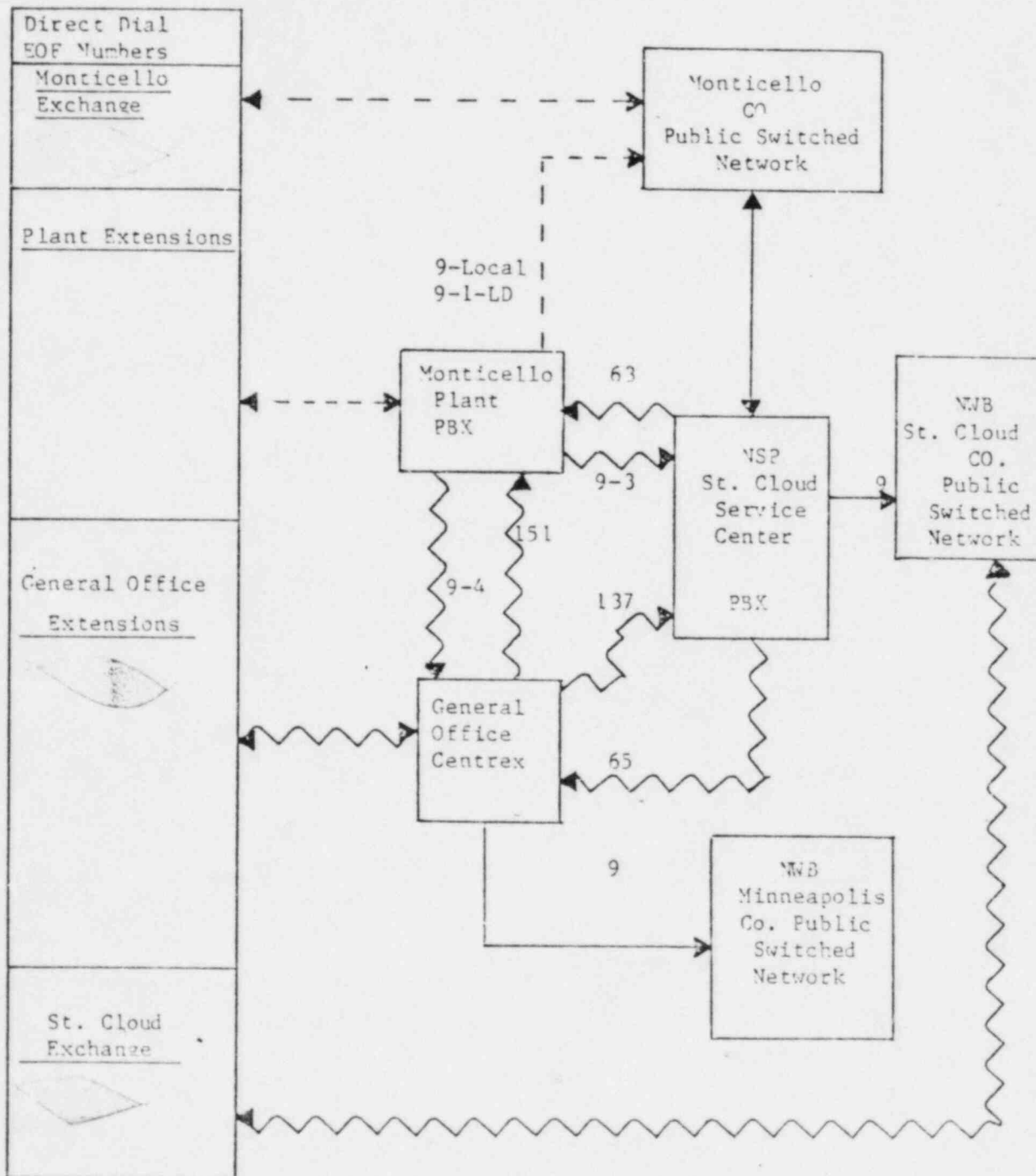
TAB C

KEY

1.      Bell System Lines
2.      Bridgewater Lines
3. WW NSP Microwave

MONTICELLO  
DIRECT DIAL COMMUNICATIONS

(Normal Communications Link)



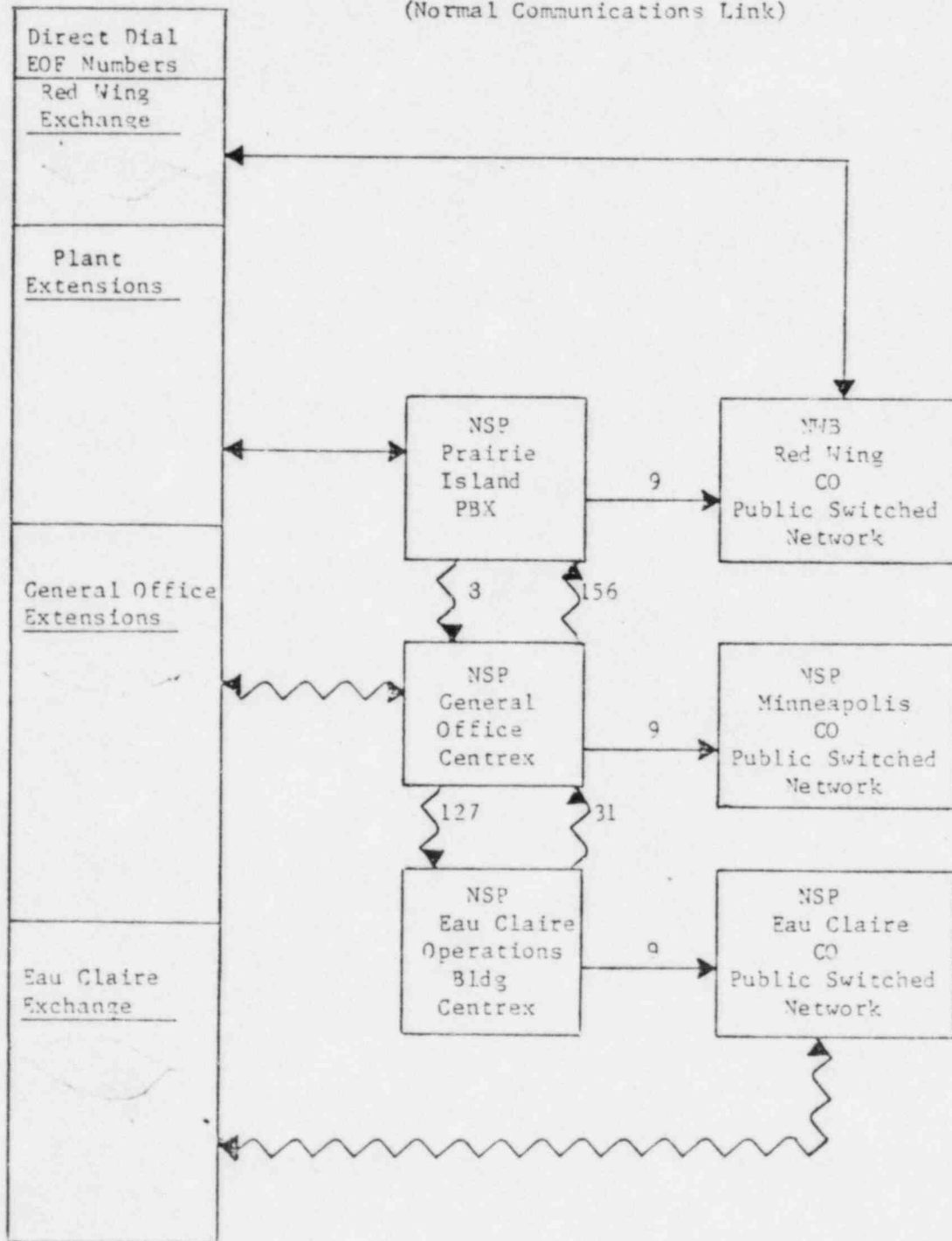
TAB C

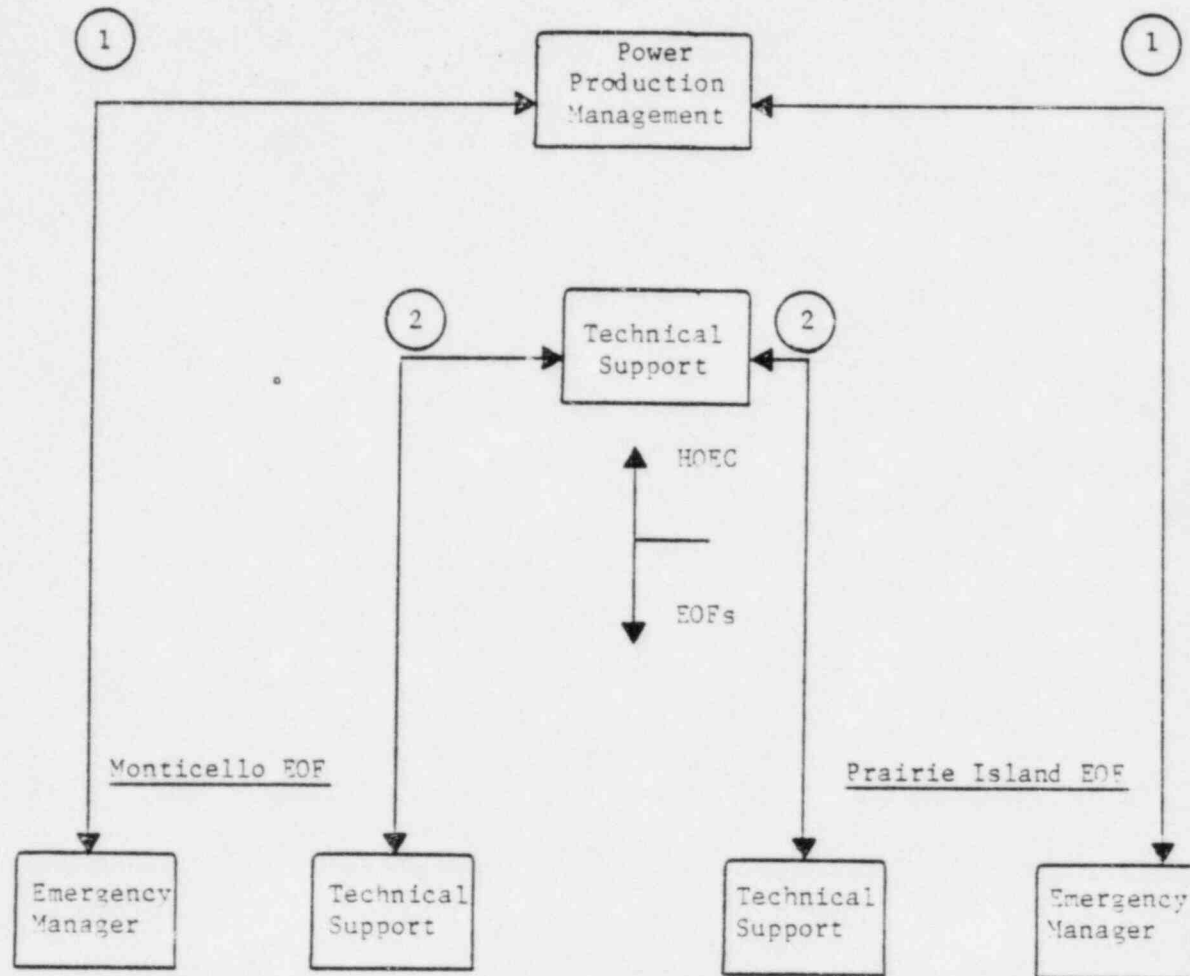
KEY

1. Bell System Lines
2. WW NSP Microwave

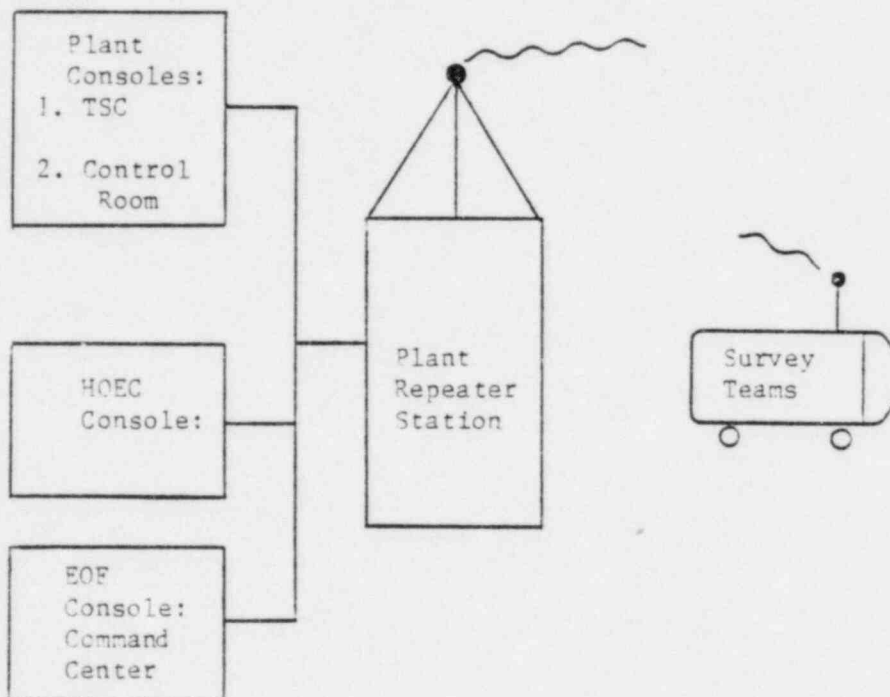
PRAIRIE ISLAND  
DIRECT DIAL COMMUNICATIONS

(Normal Communications Link)



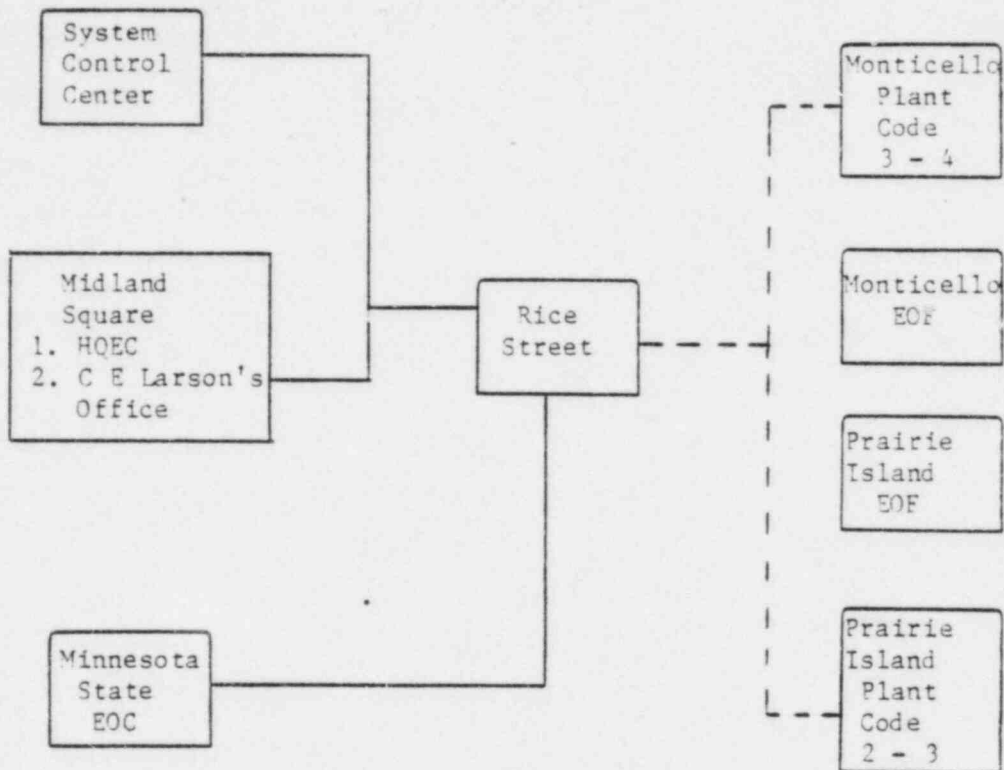
TAB CHOEC Auto-Ring Hotlines

<u>Number</u>	<u>Name</u>	<u>Stations</u>
1.	HOEC to EOF #1 (PP Mgmt - EM)	2 station line between the HOEC and the EOF. Either station can activate the circuit.
2.	HOEC to EOF #2 (Tech Support)	2 station line between the HOEC and the EOF. Either station can activate the circuit.

TAB CMonticello and Prairie Island Portable Communications  
(Primary Communication Link)Fixed StationsPortable 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 with the exception of the HOEC link which is microwave to the repeater.



TAB CLOW BAND PAGING SYSTEM  
(Secondary Communications Link)KEY:

Radio

Bell System

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.

NUCLEAR SUPPORT SERVICES DEPT	CORPORATE NUCLEAR EMERGENCY PLAN IMPLEMENTING PROCEDURE
NORTHERN STATES POWER COMPANY	NUMBER: EPIP 1.1.11      REV: 3
PREPARED BY: <i>Gary Hudson</i> Asst. Adm. Emergency Preparedness	EFFECTIVE DATE: May 20, 1983
REVIEWED BY: <i>EC Ward</i> Manager Nuclear Environmental Services	TITLE: 1.1.11 ACCIDENT ASSESSMENT
APPROVED BY: <i>[Signature]</i> 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

3.1 Overall Responsibility - Emergency Manager

3.2 In Charge - Radiation Protection Support Supervisor

#### 4.0 DISCUSSION

4.1 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.

4.2 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. We will formulate protective action recommendations for the Emergency Director and the Emergency Director will inform the state officials of the recommendations.

- 4.3 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.
- 4.4 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.
- 4.5 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.
- 4.6 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 evaluation of recommendations for protective actions should continue until the response phase of the emergency is complete.

## 5.0 RESPONSIBILITIES

### 5.1 Emergency Manager

- 5.1.1 Direct the Radiation Protection Support Supervisor to assume accident assessment responsibilities. This should be imple-

mented when the Radiation Protection Support Group is fully staffed and transfer of responsibilities will enhance the overall emergency response.

5.1.2 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).]

5.1.3 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

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

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

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

5.2.4 Provide the TSC with offsite survey results.

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

5.2.6 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.

5.2.7 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.

5.2.8 If there has been a release to the environs, consider increasing the normal sampling frequency of the Radiological Environmental Monitoring Program (REMP) after all significant releases are terminated and the plant is in a stable condition.

5.2.9 Obtain and analyze the results of the Radiological Environmental Monitoring Program (REMP) as appropriate.

## 6.0 PROCEDURE

### 6.1 Analysis of Dose Projections for Actual Airborne Releases

6.1.1 Obtain the following information from the TSC.

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

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

6.1.1.3 Survey results from plant survey teams, as applicable.

6.1.1.4 Projected offsite dose calculations.

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

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

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

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

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

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

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

6.1.5 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.

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



- 6.1.7 Perform a comparison of radiological data as follows:
  - 6.1.7.1 Compare offsite monitoring results for consistency. Re-monitor areas of concern, as required.
  - 6.1.7.2 Compare offsite monitoring results with dose calculation projections. Re-monitor areas of concern, as required.
  - 6.1.7.3 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.
- 6.1.8 Contact the Radiological Emergency Coordinator for an update of offsite dose projections. Verify that offsite dose projections are consistent with offsite survey team results.
- 6.1.9 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.
- 6.1.10 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:
  - 6.1.10.1 Plot of integrated dose and dose rate information on area maps referenced in EPIP 1.1.4 (date, time, color code).
  - 6.1.10.2 Summary of meteorological conditions, past changes in conditions and potential changes germane to radioactive material transport.
  - 6.1.10.3 Areas of highest integrated dose and dose rate.
  - 6.1.10.4 Population areas of greatest concern.
  - 6.1.10.5 Summary of monitoring and dose calculation efforts to date.
  - 6.1.10.6 Planned monitoring and dose calculations in progress.
- 6.1.11 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.
- 6.1.12 After the release has been terminated, consider retrieval of the "Emergency" TLDs (refer to EPIP 1.1.12 Implementation of



Radiological Environmental Monitoring Program).

6.2. Analysis of Dose Projection for Potential Airborne Releases

6.2.1 If the potential exists for a significant release of radioactive material from the plant, perform an analysis of potential off-site consequences as follows:

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

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

6.2.1.3 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, "Off-site Dose Calculations", or Monticello Nuclear Generating Plant procedure, A.2-406, "Offsite Dose Projection".

6.2.1.4 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.

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

6.2.2 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.

6.2.3 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.

6.2.4 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:

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

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

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

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

6.2.5 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

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

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

6.3.2.1 Results of offsite monitoring.

6.3.2.2 Release status and potential for resumption or termination.

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

6.3.3 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.

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

### 6.4 Assessment for Re-Entry

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

6.4.2 Prepare a report to the Emergency Manager which includes:

6.4.2.1 Summary of offsite monitoring results, including exposure rates, contamination levels, and isotopic information

6.4.2.2 Calculated values for the one-year integrated exposures, whole body and thyroid, which would be experienced by an individual allowed unrestricted re-entry to the affected area. (Use procedure in TAB 3.)

7.0 GUIDANCE FOR RECOMMENDING PROTECTIVE ACTIONNOTE:

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:
  - <sup>1</sup> The dose expressed is based on 1/4 of the EPA lower limit dose for evacuation.
  - <sup>2</sup> The thyroid dose expressed is based on child thyroid dose.
  - <sup>3</sup> The dose expressed is based on RG 8.13.
  - <sup>4</sup> 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.

TABLE 1

NSP CONSERVATIVE GUIDANCE FOR  
PROTECTIVE ACTION RECOMMENDATIONS  
(see note in Section 7.0)

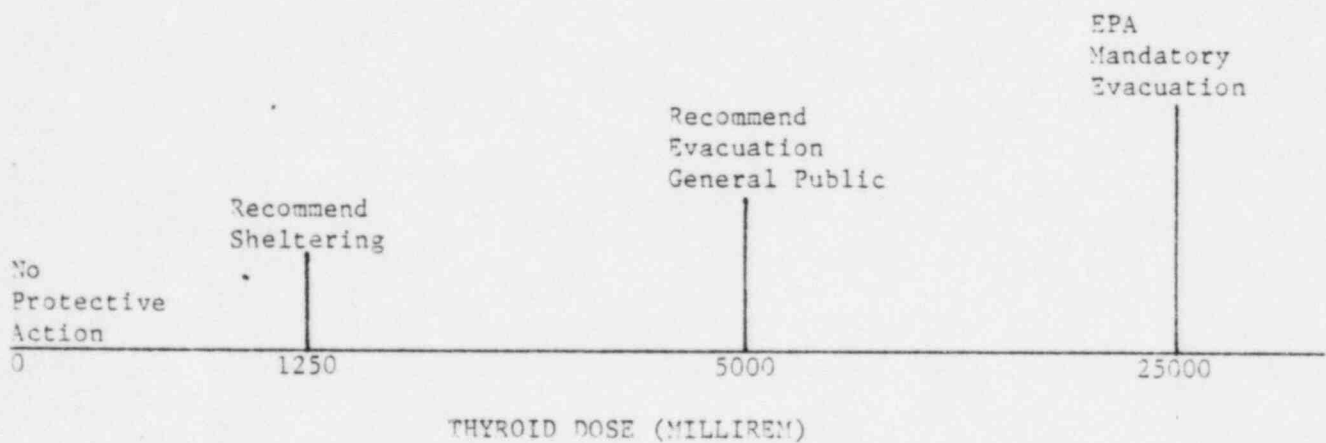
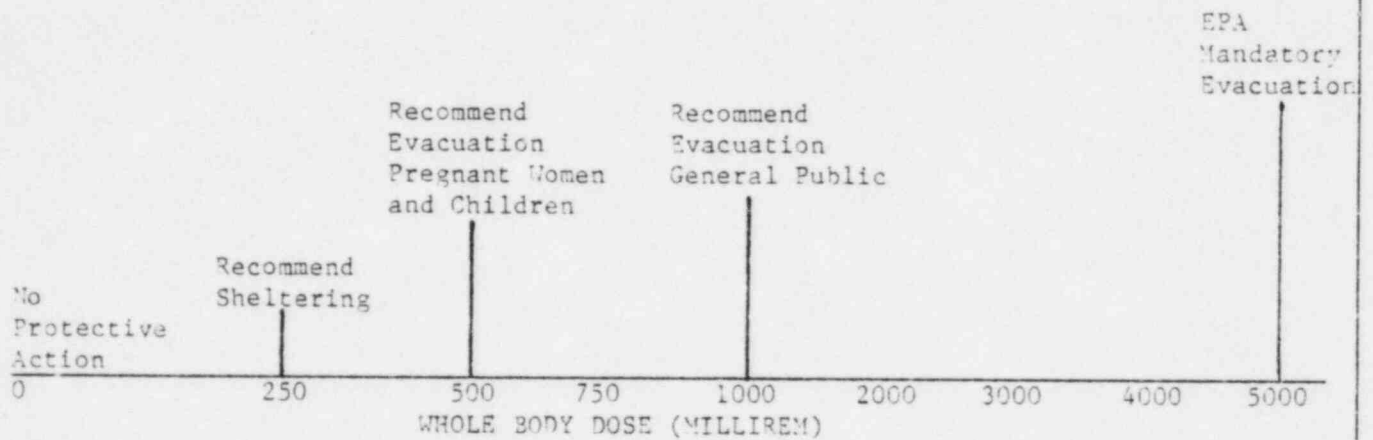
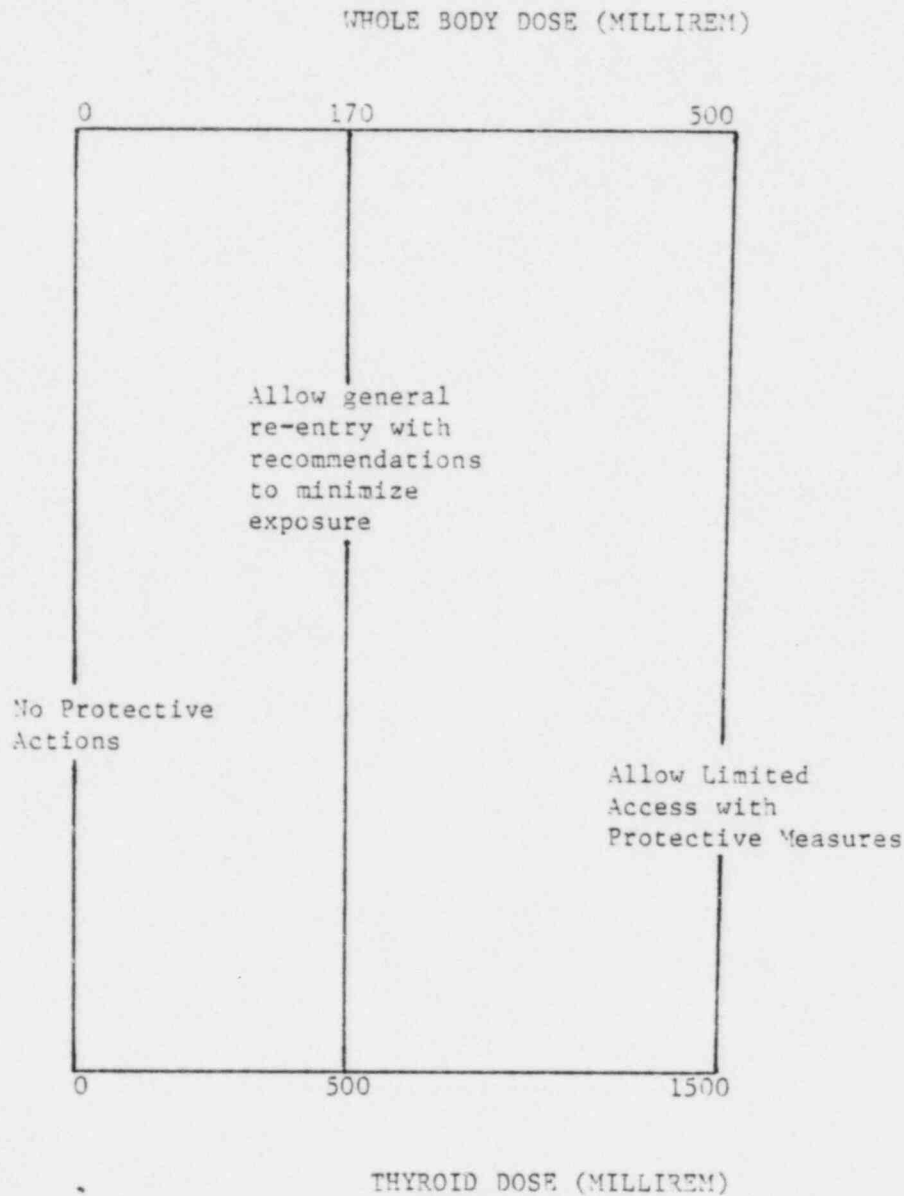


TABLE 2

NSP CONSERVATIVE GUIDANCE  
FOR ALLOWING RE-ENTRY  
(see Section 8.2)



- 7.1 No Protective Actions will be recommended up to 250 mRem whole body dose or 1250 mRem Thyroid dose<sup>1,2</sup> (see note)

7.2 Sheltering

7.2.1 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:

- 7.2.1.1 Severe incidents in which an evacuation cannot be implemented because of the rapid passage of the plume ("puff" release).
- 7.2.1.2 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.
- 7.2.1.3 As a precautionary measure, while a determination of the need to evacuate is made.

- 7.2.2 Sheltering of the general public may be recommended at 250 mRem whole body dose or 1250 mRem thyroid dose<sup>1,2</sup> (see note)

7.3 Evacuation

7.3.1 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:

- 7.3.1.1 Situations where the lead time between declaration of the emergency and population relocation is compatible with plume movement.
- 7.3.1.2 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.

- 7.3.2 Evacuation of pregnant women and children may be recommended at 500 mRem whole body dose.<sup>3</sup> (see note)

- 7.3.3 Evacuation of the general public may be recommended at 1000 mRem whole body dose, or 5000 mRem thyroid dose.<sup>4</sup> (see note)



7.3.4 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.

7.4.1 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.

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

7.4.3 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.

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

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

Monticello Area

- Sherburne County
- Wright County

Prairie Island Area

- Goodhue County
- Dakota County
- Pierce County

7.4.6 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.

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

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

8.0 Guidance for Recommending Contamination Control and Re-entry

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

- 8.1.1 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 implementing the "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.

- 8.1.2 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.

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

8.2 Guidance for Recommending Re-entry

Following a general evacuation, re-entry may be recommended according to the following:

- 8.2.1 On an individual basis, persons with valid, urgent needs for access may be allowed to re-enter under the following conditions:

- 8.2.1.1 The expected whole body dose commitment does not exceed 500 mrem/yr;

8.2.1.2 The expected thyroid dose commitment does not exceed 1500 mrem/yr; and

8.2.1.3 Precautions are taken to minimize exposure.

8.2.2 The general population may be allowed to re-enter if the following applies:

8.2.2.1 The expected whole body dose commitment does not exceed 170 mrem/yr; and

8.2.2.2 The expected thyroid dose commitment does not exceed 500 mrem/yr.

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.
<u>Projected Dose (Rem)</u> <u>To Emergency Workers</u>		
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 <u>lifesaving missions.</u>
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 AGUIDELINES FOR CONTAMINATION OF HUMAN FOOD AND ANIMAL FEED\*Preventive PAGs -

- 1.5 rem projected dose commitment to thyroid  
 0.5 rem projected dose commitment to whole body, bone marrow, or any other organ

Response Levels Preventive PAG

	I-131	Cs-134	Cs-137	Sr-90	Sr-89
Initial Activity Area Deposition ( $\mu\text{Ci}/\text{m}^2$ )	0.13	2	3	0.5	8
Forage Concentration ( $\mu\text{Ci}/\text{kg}$ ) (Fresh Weight)	0.05	0.8	1.3	0.18	3
Peak Milk Activity ( $\mu\text{Ci}/\text{liter}$ )	0.015	0.15	0.24	0.009	0.14
Total Intake ( $\mu\text{Ci}$ )	0.09	4	7	0.2	2.6

Emergency PAGs -

- 15 rem projected dose commitment to the thyroid  
 5 rem projected dose commitment to the whole body, bone marrow, or any other organ

Response Levels for Emergency PAG

	I-131 Infant/Adult		Cs-134 Infant/Adult		Cs-137 Infant/Adult		Sr-90 Infant/Adult		Sr-89 Infant/Adult	
Initial Activity Area Deposition ( $\mu\text{Ci}/\text{m}^2$ )	1.3	18	20	40	30	50	5	20	80	1600
Forage Concentration ( $\mu\text{Ci}/\text{kg}$ )	0.5	7	8	17	13	15	1.8	8	30	700
Peak Milk Activity ( $\mu\text{Ci}/\text{liter}$ )	0.15	2	1.5	3	2.4	4	0.09	0.4	1.4	30
Total Intake ( $\mu\text{Ci}$ )	0.9	10	40	70	70	80	2	7	26	400

\*Reference: Accidental Radioactive Contamination of Human Food and Animal Feeds;  
 Food and Drug Administration Recommendations for State and Local Agencies, Federal  
 Register, October 22, 1982.

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  (24 hours* to 30 days)	Ingestion of fruits and vegetables	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.
	Whole body exposure and inhalation	Relocation, decontamination, access control.
LONG TERM PHASE 3  (Over 30 days)*	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.
	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 AREPRESENTATIVE SHIELDING FACTORS FROM GAMMA CLOUD SOURCE

Structure or Location	Shielding Factor (a)	Representative Range
Outside	1.0	—
Vehicles 1.0		—
Wood-Frame House (b) (No Basement)	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 <sup>(a)</sup>	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 <sup>2</sup> 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 <sup>2</sup> - 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)

TAB BDETERMINATION OF ONE-YEAR DOSE COMMITMENT  
AS CRITERIA FOR RE-ENTRY TO EVACUATED AREAS

- Inputs: - Ground deposition,  $Q$ , in  $\text{uCi}/\text{m}^2$  of radionuclides whose composition has been determined by laboratory analyses or portable MCA.
- Exposure rate,  $R$ , 3' above contaminated ground determined by field measurements. Used to confirm calculated dose rates.
- Assume: - Soil-to-air re-suspension factor of  $10^{-4} \text{ uCi}/\text{m}^3$  per  $\text{uCi}/\text{m}^2$  (units of  $\text{m}^{-1}$ ) for inhalation pathway.
- Breathing rate of  $0.91 \text{ m}^3/\text{hr}$ .

- Find: - Projected one-year dose to individuals re-entering evacuated area, sum of external and internal doses.

$$\text{External: } \sum_{i=1}^{i=n} (\text{D.F.})_i^* \text{ mrem/hr/pCi/m}^2 \times Q_i \text{ uCi/m}^2 \times 10^6 \text{ pCi/uCi} \times 1.44 T_i (1 - e^{-\lambda_i t})$$

\* Dose factors can be obtained from Table E-6 of Reg. Guide 1.109.

$$\text{Inhalation: } \sum_{i=1}^{i=n} 0.91 \text{ m}^3/\text{hr} \times Q_i \text{ uCi/m}^2 \times 10^6 \text{ pCi/uCi} \times 10^{-4} \text{ m}^{-1} \times (\text{D.F.})_i^{**} \text{ mrem/pCi} \times 1.44 T_i (1 - e^{-\lambda_i t})$$

\*\* Dose factors for inhaled radionuclides can be obtained from Tables E-7 to E-10 of Reg. Guide 1.109. Use most restrictive D.F. listed (infant to adult).

$i$  = identified isotope

$t$  = integration period (use 1 year)

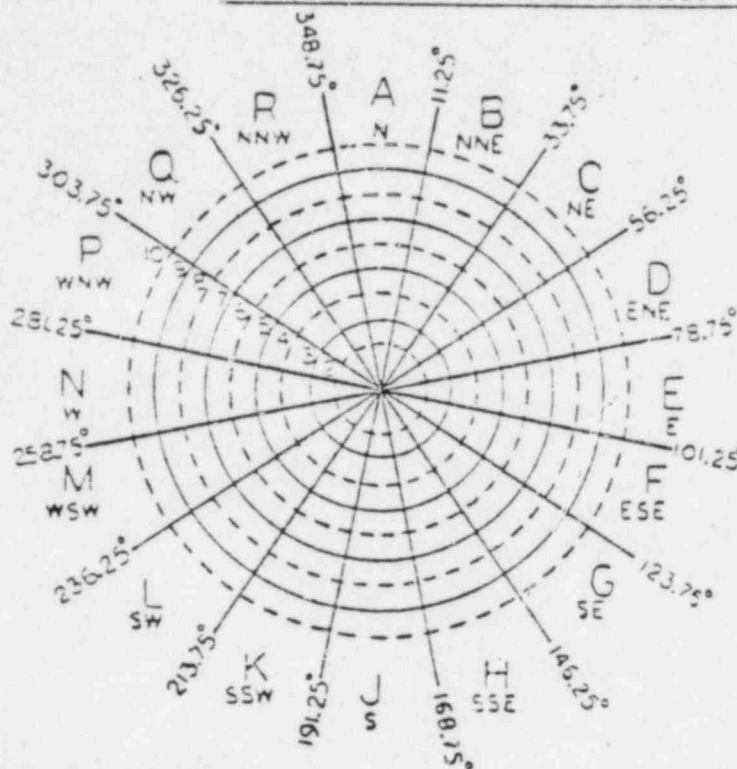
$T_i$  = Effective environmental half-life of isotope  $i$ . Use radiological half-life, unless better information available.

$Q_i$  = Ground concentration in  $\text{uCi}/\text{m}^2$  of isotope  $i$ .

\_\_\_\_\_ Ingestion : (To be determined)

Note: For times when the ground is snow-covered, assume ingestion pathway exposure to be negligible.

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 \_\_\_\_\_ ° At \_\_\_\_\_  
From (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 Sector(s) \_\_\_\_\_ Mile(s) \_\_\_\_\_  
(food, water, milk) Sector(s) \_\_\_\_\_ Mile(s) \_\_\_\_\_
- ☐ CONSIDER TERMINATION OF PROTECTIVE ACTIONS IN PROGRESS

Justification for Protective Action Recommendations: \_\_\_\_\_

Prepared by: \_\_\_\_\_ Approved by: \_\_\_\_\_  
Emergency Manager/Emergency Director

NUCLEAR SUPPORT SERVICES DEPT	CORPORATE NUCLEAR EMERGENCY PLAN IMPLEMENTING PROCEDURE
NORTHERN STATES POWER COMPANY	NUMBER: EPIP 1.1.13      REV: 3
PREPARED BY: <i>Gay Hudson</i> Asst. Adm. Emergency Preparedness	EFFECTIVE DATE: May 20, 1983
REVIEWED BY: <i>Edward</i> Manager Nuclear Environmental Services	TITLE: 1.1.13 PROTECTIVE GUIDELINES FOR EOF PERSONNEL AND EVACUATION
APPROVED BY: <i>[Signature]</i> General Manager Nuclear Plants	

#### 1.0 PURPOSE AND OBJECTIVE

This procedure includes protective guidelines for EOF personnel and specifies the actions to be taken if the EOF must be evacuated to the HQEC.

#### 2.0 CONDITIONS AND PREREQUISITES

- 2.1 Conditions requiring an evacuation of the EOF may vary significantly based on the extent of operations in progress, the severity of the radiation levels, the estimated time that the radiation levels will be significant, and the integrated dose to personnel.
- 2.2 In general, non-essential personnel, those not directly involved in the activities of the offsite organization, should be evacuated first from any areas that exhibit elevated radiation or contamination levels. These personnel would include vendors, consultants, and public employees of the state and local agencies.
- 2.3 The need to evacuate emergency response team personnel should be determined based on the following considerations:
  - 2.3.1 The integrated dose that these personnel would receive if they remained in a radiation area.
  - 2.3.2 The calculated total dose that would be accumulated over the period of EOF operation.
  - 2.3.3 The potential loss of the ability to utilize key technical personnel due to radiation exposure limits.
  - 2.3.4 The effectiveness of the emergency organization operating in a condition of reduced mobility or communication due to use of protective clothing and equipment.

2.3.5 The potential exposure received during evacuation compared to the potential exposure received by not evacuating.

2.4 EPA Guidelines for Recommended Protective Action to limit total exposure to personnel are:

Projected Dose (Rem) to Emergency Workers	Recommended Actions	Comments
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 <u>lifesaving missions</u> .
Whole Body 75	Control exposure of emergency team members performing a lifesaving mission to this level. (Control of time exposure will be most effective.)	

2.5 The following MSP guidance may be used, at the discretion of the Emergency Manager, for determining protective actions at the EOF.

Whole Body Exposure Rates (mrem/hr)	Protective Action	Comments
greater than 1	Evacuate non-EOF areas of the training building and personnel who are not part of the emergency response organization.	
greater than 10	Consider evacuation of women and non-essential personnel.	
greater than 100	<u>Consider activation of the HOC as backup EOF. Execute exposure authorization for those personnel approaching administrative limits and deemed by the Emergency Manager as vital to the</u>	<u>CAUTION</u> consider only if levels are expected to be sustained for a significant period of time and would cause excessive exposure to emergency personnel or



Whole Body Exposure Rates (mrem/hr)	Protective Action	Comments (cont'd)
	emergency response effort. <u>Evacuate all others.</u>	levels are such that they seriously reduce the effectiveness of the emergency organization.
Smearable Surface Contamination Levels (dpm/100 cm <sup>2</sup> )	Protective Action	Comments
greater than 100	Evacuate non-EOF areas of the training building and personnel who are not part of the emergency response organization. Control eating, drinking, and smoking.	
greater than 500	Consider use of protective clothing, evacuate non-essential personnel, consider use of respiratory protection.	Operation may continue as long as effective respiratory protection exists and restriction on personnel movements to limit the spread of contamination do not become limiting to operations.
greater than 5000	Ensure use of protective clothing.	
Airborne Radioactive Levels (MPC)	Protective Action	Comments
greater than 0.25	Evacuate non-EOF areas of the training building and personnel who are not part of the emergency response organization.	This measure is to ensure that classrooms and other non-EOF areas do not contain personnel being trained, i.e., badging classes, visitors, consultants, etc.
greater than 1	Evaluate personnel MPC-hrs. Limit exposures to less than 40 MPC-hrs/week if possible. Use respirators whenever practical.	Operation may continue as long as effective respiratory protection exists and restrictions on personnel movements to limit the spread of

Airborne Radioactive Levels (MPC)	Protective Action	Comments (cont'd)
-----------------------------------	-------------------	-------------------

contamination do not become limiting to operations. Prolonged exposure to excessive airborne levels without protection that would lead to a whole body exposure of 3000 mrem whole body or equivalent to any part of the body in one quarter should be avoided.

greater than 10

Evacuate all personnel not deemed by the Emergency Manager as vital to the emergency response effort.

CAUTION consider evacuation only if levels are expected to be sustained for a significant period of time and would cause excessive exposure to emergency personnel or levels are such that they seriously reduce the effectiveness of the emergency organization.

Consider use of KI if Thyroid exposure is projected to approach 25 rem.

CAUTION Refer to plant procedures for thyroid blocking agents and their use.

- 2.6 Generally, operational limits are flexible considering the "stay time" in the radiation area. An integrated dose in excess of 3000 mrem in one quarter should be avoided. Consideration to the exposure of key individuals should be used to determine the advisability of long term operation of the EOF in any area greater than 25 mr/hr.

~~NOTE: Radiation levels are probably from the plume. Consideration should be given to a potential wind shift and/or decrease of radalevels prior to ordering an evacuation.~~

The time to reach quarterly limits at various radiation levels is:

<u>Radiation level</u>	<u>Number of 12 hr. shifts</u>
5 mr/hr	50
10 mr/hr	25
25 mr/hr	10
50 mr/hr	5
100 mr/hr	2.5

### 3.0 ORGANIZATION AND RESPONSIBILITIES

- 3.1 Overall Responsibility - Emergency Manager
- 3.2 In Charge - Emergency Manager
- 3.3 Assistance - Radiation Protection Support Supervisor
  - EOF Coordinator

### 4.0 RESPONSIBILITIES

#### 4.1 Emergency Manager

- 4.1.1 Direct the EOF Coordinator and Radiation Protection Support Supervisor (RPSS) to provide routine status reports for the EOF atmosphere.
- 4.1.2 As necessary, refer to Section 2.5 of this procedure for protective action guidelines for EOF personnel.
- 4.1.3 If it becomes necessary to evacuate, inform Power Production Management and the Emergency Director of the impending need to evacuate. Request that the HQEC staff prepare to assume offsite organization operational responsibilities. This may involve additional staffing of the HQEC and they should be so advised.
- 4.1.4 Direct the Radiation Protection Support Supervisor to determine the evacuation route that would limit exposure and provide the simplest means of monitoring personnel evacuating the area. Offsite assembly areas (in addition to the EOF site) may facilitate the set-up of monitoring and decontamination stations.
  - a. These areas are as follows:
    - (1) Monticello
      - NSP Monticello District Service Center
      - NSP Sherburne County Generating Center
    - (2) Prairie Island
      - NSP Red Wing Service Center
  - b. These areas or alternative areas may be selected at the discretion of the Emergency Manager.
  - c. 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 off-site radioactive release.

- 4.1.5 Contact Power Production Management and turnover operations of the EOF to the HQEC. EPIP 1.1.6, "Emergency Organization Shift Turnover" may be used to assist in the turnover process with EOF personnel referring to it as they brief their HQEC counterparts.

NOTE: Radiation Protection activities such as responsibility for offsite surveys and the formulation of protective actions may be transferred back to the TSC if it is operational. The TSC will forward protective action recommendations and survey information to the HQEC until such time as the HQEC is staffed by Radiation Protection personnel and they can assume all radiation protection activities.

- 4.1.6 When the activities of the EOF have been turned over to the HQEC, inform the NRC, TSC, and state and local governments of the change.

- 4.1.7 Supervise the evacuation of personnel from the EOF.

#### 4.2 EOF Coordinator

- 4.2.1 When informed of the decision to evacuate the EOF, supervise the assembly of materials and equipment to be removed from the area. Materials may be contaminated and thus may not be able to be removed. Everything that cannot be removed should be secured in a locked area.

- 4.2.2 Direct the Logistics Coordinator to arrange for transportation of personnel and equipment.

#### 4.3 Radiation Protection Support Supervisor

- 4.3.1 Monitor the EOF and inform the Emergency Manager when the EOF exposure levels are above guideline levels specified in Section 2.5

- 4.3.2 Determine possible evacuation paths that would limit the exposure to personnel as identified in Section 4.1.4.

- 4.3.3 Supervise the assembly of monitoring teams to coordinate the monitoring and decontamination of personnel, as necessary, during the evacuation.

#### 4.4 Power Production Management

- 4.4.1 When informed of the need to evacuate the EOF area, direct the assembly of a parallel organization that can function as an offsite operational organization at the HQEC. This may involve additional personnel.
- 4.4.2 Direct the activities of the corporate organization following the evacuation of the EOF. The HQEC will assume its role as the backup EOF and take over EOF responsibilities for the Offsite Emergency Response Organization.

NUCLEAR SUPPORT SERVICES DEPT		CORPORATE NUCLEAR EMERGENCY PLAN IMPLEMENTING PROCEDURE	
NORTHERN STATES POWER COMPANY		NUMBER: EPIP 1.1.17	REV: 2
PREPARED BY: <i>Gary Hudson</i> Asst. Adm. Emergency Preparedness		EFFECTIVE DATE: May 20, 1983	
REVIEWED BY: <i>EC Ward</i> Manager Nuclear Environmental Services		TITLE: 1.1.17 PERSONNEL MONITORING AT THE EOF	
APPROVED BY: <i>[Signature]</i> 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.

#### 2.0 CONDITIONS AND PREREQUISITES

- 2.1 The EOF is activated and personnel are entering to man emergency support positions.
- 2.2 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

- 3.1 Overall Responsibility - Emergency Manager
- 3.2 In Charge - Radiation Protection Support Supervisor
- 3.3 Assistance - EOF Coordinator  
- Security Guard

#### 4.0 DISCUSSION AND PRECAUTIONS

- 4.1 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.



4.2 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:

4.2.1 Individual must have a current NRC Form 4 or equivalent on file.

4.2.2 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

5.1.1 Overall responsibility for exposure limits of workers.

### 5.2 Radiation Protection Support Supervisor

5.2.1 Verifies and supervises the records of exposure including re-zeroing and recording self-reading dosimeter results.

5.2.2 Provides administrative control information to the Emergency Manager.

5.2.3 Assigns qualified personnel for record keeping and dose assessment.

5.2.4 Ensures the CAM and the ventilation system are operating properly to protect the emergency response organization at the EOF.

5.2.5 As necessary, request that dose rate reading be taken using a portable area radiation monitor.

5.2.6 Provide the Security Group with a list of individuals who may leave the EOF with dosimetry (i.e., survey teams, drivers, etc.).

### 5.3 EOF Coordinator

5.3.1 Assigns personnel to maintain entry log, issue and collect dosimetry.

5.3.2 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

- 5.4.1 Initiates Entry Log (Figure 1) in accordance with EPIP 1.1.5, TAB F, "EOF Security Force Duties".
- 5.4.2 Issues and collects dosimetry.
- 5.4.3 Records self-reading dosimeter reading in log upon issue and collection.
- 5.4.4 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, shall be logged into area and issued dosimetry as follows:
  - 6.1.1 After verifying personnel authorization, enter name on EOF Entry Log, Figure 1, in column (1).
  - 6.1.2 Enter individual's social security number in column (2) of entry log.
  - 6.1.3 Enter individual's organization, i.e. NSP Corp., Monticello, PI, NRC, etc. on entry log in column (3).
  - 6.1.4 Remove one TLD and one self-reading dosimeter from emergency dosimetry box and record TLD number in column (4) of entry log.
  - 6.1.5 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).
  - 6.1.6 Read and record reading from self-reading dosimeter on entry log in column (6). Zero dosimeter if reading greater than 25% of scale.
- 6.2 Personnel leaving EOF environs should surrender issued dosimetry equipment to the EOF Entrance Guard. Personnel should be logged out as follows:
  - 6.2.1 Locate name of individual leaving EOF on Entry Log.
  - 6.2.2 Enter time individual exited EOF in column (7) of Entry Log. Use 24 hour notation as explained in 6.1.5 above.
  - 6.2.3 Read and record the reading of the dosimeter on Entry Log, column (8).

- 6.2.4 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.

NOTE: TLDs collected should not be re-issued to other personnel.

- 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:
- 6.5.1 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.
- 6.5.2 Zero dosimeter and reissue to personnel as applicable.
- CAUTION: Do Not Reissue TLDs
- 6.5.3 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.
- 6.5.4 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 EOF Coordinator.
- 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, Section 4.0, 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.



FIGURE 2

## INDIVIDUAL EXPOSURE RECORD

NAME: \_\_\_\_\_  
ORGANIZATION: \_\_\_\_\_  
SOCIAL SECURITY NUMBER: \_\_\_\_\_

DATE: \_\_\_\_\_  
FORM 4: YES/NO  
AGE IN YEARS

AUTHORIZED EXPOSURE: mR

[illegible]

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



NUCLEAR SUPPORT SERVICES DEPT		CORPORATE NUCLEAR EMERGENCY PLAN IMPLEMENTING PROCEDURE	
NORTHERN STATES POWER COMPANY		NUMBER: EPIP 1.2.1	REV: 2
PREPARED BY: <u>Gary Hudson</u> Asst. Adm. Emergency Preparedness		EFFECTIVE DATE: May 20, 1983	
REVIEWED BY: <u>Edward</u> Manager Nuclear Environmental Services		TITLE: 1.2.1 EMERGENCY PLAN TRAINING	
APPROVED BY: <u>[Signature]</u> General Manager Nuclear Plants			
<p><u>1.0 PURPOSE AND OBJECTIVE</u></p> <p>The purpose of this procedure is to specify the training requirements for NSP and support agency emergency response plan personnel. Documentation requirements are also specified. Detailed outlines of the training topics are to be provided in the lesson plans.</p> <p><u>2.0 CONDITIONS AND PREREQUISITES</u></p> <p>2.1 Personnel assigned emergency response activities shall receive training as described in this procedure.</p> <p>2.2 Emergency Plan Training is conducted in accordance with the Emergency Plan Training Program.</p> <p><u>3.0 ORGANIZATION AND RESPONSIBILITIES</u></p> <p>3.1 <u>Overall Responsibility</u> - General Manager Headquarters Nuclear Group</p> <p>3.2 <u>In Charge</u> - Manager, Production Training</p> <p>3.3 <u>Assistance</u> - Production Training Staff</p> <p><u>4.0 RESPONSIBILITIES</u></p> <p>4.1 <u>General Manager Headquarters Nuclear Group</u></p> <p>4.1.1 Responsible for overall development of the Emergency Response Training Program</p> <p>4.2 <u>Manager Nuclear Environmental Services</u></p> <p>4.2.1 Administration of the overall NSP Emergency Preparedness Program.</p>			

4.3 Manager of Production Training

- 4.3.1 Administration of the NSP Emergency Plan Training Program.
- 4.3.2 Development and conduct of the Emergency Plan Training Program.
- 4.3.3 Development of Training Program course content.
- 4.3.4 Assignment of program instructors.
- 4.3.5 Scheduling of personnel for emergency response training.
- 4.3.6 Coordination of the Emergency Plan Training Program with scheduled emergency response drills and exercises.

4.4 Department Managers

- 4.4.1 Scheduling subordinate personnel to attend emergency plan training in accordance with schedules developed by Production Training Department.

5.0 PROCEDURE5.1 Training Requirements for the Corporate Emergency Organization5.1.1 Corporate Overview Training

- a. All corporate personnel assigned emergency response duties shall annually receive Corporate Overview Training which generally encompasses the following areas:
  - 1) Introduction to Emergency Planning
  - 2) Summary of NUREG 0654/FEMA - Reg-1 and Emergency Planning Criteria
  - 3) Corporate Emergency Response Plan
  - 4) Summary of Site Emergency Plans
  - 5) Summary of State Emergency Plans

5.1.2 Specialized Training

- a. All personnel assigned the responsibility for filling the Power Production Management Position shall annually receive training which generally encompasses the following areas:
  - 1) Corporate Overview Training
  - 2) HQEC Orientation
  - 3) Corporate Implementing Procedure Training

- b. All personnel assigned the responsibility for filling the Emergency Manager position shall annually receive training which generally encompasses the following areas:
- 1) Corporate Overview Training
  - 2) Emergency Manager Training
  - 3) EOF Coordinator Training
  - 4) Protective Action Guide Training
  - 5) EOF Orientation
  - 6) HQEC Orientation
- c. All personnel assigned the responsibility to fill the EOF Coordinator position shall annually receive training which generally encompasses the following areas:
- 1) Corporate Overview Training
  - 2) EOF Coordinator Training
  - 3) Emergency Manager Training
  - 4) Protective Action Guide Training
  - 5) EOF Orientation
  - 6) Communication Training
- NOTE: Only EOF Coordinators authorized to assume Emergency Manager responsibilities are required to receive EM and PAG training.
- d. All System Dispatchers who have Emergency Plan responsibilities shall annually receive training which generally encompasses the following area:
- 1) Corporate Emergency Plan Implementing Procedures - Notification
- e. All personnel assigned emergency organization responsibilities which require their presence in the HQEC shall annually receive HQEC training which generally encompasses the following areas:
- 1) Corporate Overview Training
  - 2) HQEC Orientation
  - 3) Corporate Implementing Procedure Training
- f. All personnel assigned emergency organization responsibilities which require their presence in the EOF shall annually receive training which generally encompasses the following areas:
- 1) Corporate Overview Training
  - 2) EOF Orientation
  - 3) Corporate Implementing Procedure Training

- g. All personnel assigned the responsibility for filling the Radiation Protection Support Supervisor position shall annually receive training which generally encompasses the following areas:

- 1) Corporate Overview Training
- 2) EOF Orientation
- 3) Corporate Implementing Procedure Training
- 4) Protective Action Guide Training

## 5.2 Training Requirements for the Plant Emergency Organizations

### 5.2.1 Plant Overview Training

- a. All plant personnel assigned emergency response duties shall annually receive Plant Overview Training which generally encompasses Plant Emergency Response Plan/Procedures.
- b. For initial training an overview of the interface between Plant Emergency Plans, Corporate Plan, and State Plans should be presented.

### 5.2.2 Specialized Training

- a. All plant personnel assigned emergency response duties for in-plant radiation protection functions shall annually receive Emergency Radiation Protection Specialist training which generally encompasses the following areas:
- 1) Plant Overview Training
  - 2) Plant Emergency Plan Implementing Procedures (appropriate to job assignment)
  - 3) Activation of Emergency Plan
- b. All plant personnel assigned the responsibility to fill the Radiological Emergency Coordinator position shall annually receive special training which generally encompasses the following areas:
- 1) Plant Overview Training
  - 2) Protective Action Guide Training
  - 3) Accident Assessment
  - 4) Activation of Emergency Plan
  - 5) Plant Emergency Plan Implementing Procedures
- c. All personnel who are assigned responsibility to fill the Emergency Director position shall annually receive training which generally encompasses the following areas:
- 1) Plant Overview
  - 2) Classification of Emergencies

- 3) Activation of Emergency Organization
- 4) Protective Action Guide
- 5) Accident Assessment

- d. All personnel who are assigned responsibility to fill the Emergency Communicator and/or Assembly Point Coordinator positions shall annually receive training which generally encompasses the following areas:

- 1) Plant Overview Training
- 2) Roles of Emergency Communicator and Assembly Point Coordinator

### 5.3 Training Requirements for Outside Organizations

#### 5.3.1 State and Local

- a. Hospital and emergency medical personnel shall be trained annually in the following areas:

- 1) Basic Radiation Protection and Contamination Control
- 2) Plant Emergency Response Plan and Implementing Procedures

- b. Local Fire Department personnel shall be trained annually in the following areas:

- 1) Basic Radiation Protection and Contamination Control
- 2) Site Access Procedures
- 3) Plant Fire Fighting Equipment and Aspects of Fire Fighting in Contaminated Areas

- c. Local and State Police department personnel shall be trained annually in the following areas:

- 1) Specific Plant Emergency Response Plan (as applicable to offsite notification and response)

- d. Local and state agencies shall receive initial training in and subsequent training as part of annual drills in the following areas:

- 1) Plant and Corporate Emergency Response Plan Overview
- 2) Interfaces between NSP and outside agencies

- e. Training for media and public information personnel shall be performed on an annual basis by the Communications Department. Training for these personnel shall be performed in the following areas:

- 1) The Corporate Emergency Response Plan and Organization

- 2) The Nature and Effects of Radiation/Plant Overview
- 3) Corporate Communications of Public Information

#### 5.3.2 Vendors

- a. Vendors will receive necessary training upon request.

### 5.4 Scheduling of Emergency Preparedness Training

#### 5.4.1 Corporate and Plant Training Schedule

- a. The Manager Production Training shall produce an annual schedule that covers the required training. This schedule should cover the time period from April 1 to March 30 of the succeeding year. A 3 month grace period is allowed for additional training.
- b. Scheduled training may be in the form of lectures (live or video tape), exercises, drills, reading assignments or practical factor training. Subsequent annual training may be documented through reading assignments, attendance of scheduled lectures, or participation in drills, and drill critiques. The Manager Production Training shall forward a summary report of completed training to the Manager Nuclear Environmental Services. This summary should be submitted on an annual basis (based on Emergency Plan training annual cycle).
- c. Training that is specifically applicable to either the Monticello and/or Prairie Island Plants shall be conducted and/or coordinated by the Production Training Staff. In order to adequately document completion of this training the Manager, Production Training, shall provide the plant training supervision with a list of the required training to be conducted by the plant. The plant training supervision will schedule the listed training in the plant's training program and complete the list by supplying the scheduled dates. The completion of the scheduled training will be documented and returned to the Manager, Production Training, for documentation on the corporate schedule. The Manager, Production Training, shall forward a summary report of completed training to the Manager Nuclear Environmental Services. Training that is part of a continuous program of qualification at the plant sites, such as the first aid or the fire fighting programs, satisfies the requirements of this instruction.

### 5.5 Documentation



5.5.1 Activities accomplished to meet the requirements of this procedure shall be documented. When training has been completed, the instructor shall forward the following documentation to the Manager Production Training (corporate and state/gov't agencies) or Plant Training Superintendent (plant specific).

- a. Training lesson plan or outline
- b. Lecture quiz (if applicable)
- c. Attendance record
- d. Quiz grades (if applicable)

5.5.2 The Manager Production Training shall ensure that all outside organizations and corporate personnel assigned to the emergency response team complete the required training. He shall schedule additional training as necessary to ensure all response team members maintain proficiency in their emergency plan actions.

NUCLEAR SUPPORT SERVICES DEPT		CORPORATE NUCLEAR EMERGENCY PLAN IMPLEMENTING PROCEDURE	
NORTHERN STATES POWER COMPANY		NUMBER: EPIP 1.2.2	REV: 2
PREPARED BY: <u>Gary Hudson</u> Asst. Adm. Emergency Preparedness		EFFECTIVE DATE: May 20, 1983	
REVIEWED BY: <u>Edward</u> Manager Nuclear Environmental Services		TITLE: 1.2.2 EXERCISES AND DRILLS	
APPROVED BY: <u>[Signature]</u> General Manager Nuclear Plants			
<p>1.0 <u>PURPOSE AND OBJECTIVE</u></p> <p>The purpose of this procedure is to specify the responsibilities and requirements for conducting drills and exercises. Drills and exercises are conducted to test the Corporate and Plant Nuclear Emergency Response Organizations, Plans, Implementing Procedures, facilities, and equipment.</p> <p>2.0 <u>CONDITIONS AND PREREQUISITES</u></p> <p>Exercises and drills should be conducted in accordance with the NSP Drill and Exercise Program.</p> <p>3.0 <u>ORGANIZATION AND RESPONSIBILITIES</u></p> <p>3.1 Overall Responsibility - General Manager Headquarters Nuclear Group</p> <p>3.2 In Charge - Manager Nuclear Environmental Services - Manager Production Training</p> <p>3.3 Assistance - Production Training Sections</p> <p>4.0 <u>RESPONSIBILITIES</u></p> <p>4.1 <u>General Manager Headquarters Nuclear Group</u></p> <p>4.1.1 Management responsibility for development, implementation, and maintenance of the Drill and Exercise Program.</p> <p>4.2 <u>General Manager Nuclear Plants</u></p> <p>4.2.1 Responsible for approval of drill schedule.</p> <p>4.2.2 Responsible for authorizing the conduct of major exercises specified in the program.</p>			

#### 4.3 Manager Nuclear Environmental Services

- 4.3.1 Responsible to ensure that applicable regulatory requirements are met.
- 4.3.2 Responsible for coordinating pre-exercise drills and exercises with the activities of all involved NSP organizations, state and local officials, and the NRC, as appropriate.
- 4.3.3 Responsible for reviewing drill and exercise critiques, and tracking identified deficiencies.

#### 4.4 Manager Production Training

- 4.4.1 Administrative responsibility for the development, implementation and maintenance of the Drill and Exercise Program.
- 4.4.2 Responsible for the conduct of drills and exercises.
- 4.4.3 Responsible for coordinating the Emergency Response Training Program with the Drill and Exercise Program.
- 4.4.4 Responsible for development of drill/exercise scenarios.
- 4.4.5 Responsible for assignment of observers/controllers for the conduct of the Drill and Exercise Program.
- 4.4.6 Responsible for assigning individuals to correct deficiencies identified as a result of drills or exercises.
- 4.4.7 Responsible for revision to the Training Program as required to correct deficiencies identified during drills/exercises.
- 4.4.8 Responsible for developing a schedule of drills as specified in the program.
- 4.4.9 Responsible for verifying completion of the drill schedule.
- 4.4.10 Responsible for approval of plant drill scenario packages.
- 4.4.11 Responsible for preparation of drill and exercise critiques.
- 4.4.12 Responsible for maintaining records associated with the Drill and Exercise Program.

#### 4.5 Plant Manager

- 4.5.1 Responsible for providing personnel to assist in the development of scenarios.
- 4.5.2 Responsible for providing personnel to serve as drill and exercise observers/controllers.

- 4.5.3 Responsible for assisting in the conduct of drills and exercises at plant sites by providing personnel to participate in the drills and exercises as scheduled.

5.0 DRILL AND EXERCISE PROGRAM DEVELOPMENT

- 5.1 A comprehensive program of drills and exercises shall be developed and maintained.
- 5.2 The program shall describe the administrative organization for planning, conducting and documenting drills and exercises.
- 5.3 The program shall describe all the necessary drills and exercises required to maintain NSP personnel qualifications in emergency preparedness activities. These requirements shall satisfy 10 CFR Part 50, Appendix E and the guidelines provided in NUREG-0654 and IE Information Notice No. 82-44.

NUCLEAR SUPPORT SERVICES DEPT	CORPORATE NUCLEAR EMERGENCY PLAN IMPLEMENTING PROCEDURE
NORTHERN STATES POWER COMPANY	NUMBER: EPIP 1.2.3      REV: 2
PREPARED BY: <i>Gary Hudson</i> Asst. Adm. Emergency Preparedness	EFFECTIVE DATE: May 20, 1983
REVIEWED BY: <i>EC Ward</i> Manager Nuclear Environmental Services	TITLE: 1.2.3 MAINTENANCE OF EMERGENCY PLANS AND PROCEDURES
APPROVED BY: <i>[Signature]</i> General Manager Nuclear Plants	

#### 1.0 PURPOSE AND OBJECTIVE

This procedure and Nuclear Support Services Departmental Procedures establish a system to govern the generation, identification, revision, distribution, and inventory of the Corporate Nuclear Emergency Plan and Corporate Nuclear Emergency Plan Implementing Procedures. It also provides for periodic reviews of plans and procedures and specifies other administrative programs that support the emergency preparedness effort.

#### 2.0 CONDITIONS AND PREREQUISITES

2.1 Maintenance of emergency plans and procedures is supported by the Operational Quality Assurance Program.

#### 3.0 ORGANIZATION AND RESPONSIBILITIES

3.1 Overall Responsibility - Manager Nuclear Environmental Services

3.2 In Charge - Assistant Administrator Emergency Preparedness.

#### 4.0 RESPONSIBILITIES

##### 4.1 Manager Nuclear Environmental Services

1. Maintenance of the Corporate Nuclear Emergency Plan and Corporate Nuclear Emergency Plan Implementing Procedures.
2. Review of Plant Nuclear Emergency Plans.
3. Scheduling of exercises.
4. Scheduling of an Annual Independent Review of the Emergency Preparedness Program to include:

- a. An evaluation for adequacy of interfaces with state and local governments.
  - b. Drills & Exercises.
  - c. Emergency Plans & Implementing Procedures.
  - d. Training (capabilities).
  - e. Facilities & Equipment.
5. Establish management controls to ensure that corrective actions identified as a result of NRC Inspection Reports, Drill and Exercise Critiques, and Annual Reviews of the Emergency Preparedness Program are implemented.
  6. Maintain the Headquarters Emergency Center (HQEC).
  7. Maintain the Public Alert and Notification Systems (PANS).
  8. Annual Internal review, update, and certification of emergency plans and agreements.
  9. Corporate Nuclear Emergency Plan Surveillance Program.
  10. Funding for state and local emergency preparedness.

#### 4.2 Assistant Administrative Emergency Preparedness

1. Preparation of the Corporate Nuclear Emergency Plan and Corporate Nuclear Emergency Plan Implementing Procedures.



NUCLEAR SUPPORT SERVICES DEPT	CORPORATE NUCLEAR EMERGENCY PLAN IMPLEMENTING PROCEDURE
NORTHERN STATES POWER COMPANY	NUMBER: EPIP 1.2.4      REV: 2
PREPARED BY: <i>Gary Hudson</i> Asst. Adm. Emergency Preparedness	EFFECTIVE DATE: May 20, 1983
REVIEWED BY: <i>E. Ward</i> Manager Nuclear Environmental Services	TITLE: 1.2.4 SURVEILLANCE
APPROVED BY: <i>[Signature]</i> General Manager Nuclear Plants	

#### 1.0 PURPOSE AND OBJECTIVE

This procedure establishes a Surveillance Program to maintain the Corporate Nuclear Emergency Plan, Implementing Procedures, response facilities and equipment.

#### 2.0 CONDITIONS AND PREREQUISITES

The HQEC and EOFs have been established and equipped.

#### 3.0 ORGANIZATION AND RESPONSIBILITIES

- |                            |  |
|----------------------------|--|
| 3.1 Overall Responsibility | - Manager Nuclear Environmental Services |
| 3.2 In Charge              | - Manager Nuclear Environmental Services |
|                            | - Manager Production Training            |
|                            | - Plant Managers                         |
| 3.3 Assistance             | - Production Training                    |
|                            | - Plants                                 |

#### 4.0 CORPORATE NUCLEAR EMERGENCY PLAN SURVEILLANCE REQUIREMENTS

##### 4.1 Emergency Operations Facility (EOF)

<u>Procedure</u>	<u>Frequency</u>
1. Communication Test (federal, state, local)	Monthly
2. Communications Test (equipment check)	Quarterly
3. Inventory non-HP Equipment	Quarterly
4. Inventory HP Equipment	Quarterly
5. Operational Test of HVAC	Quarterly
6. HVAC HEPA Filters	Once per operating cycle or once every 18 months

## 4.2 Headquarters Emergency Center (HQEC)

<u>Procedure</u>	<u>Frequency</u>
1. Communication Test	Monthly
2. Inventory	Quarterly

## 4.3 Corporate Surveillances

<u>Procedure</u>	<u>Frequency</u>
1. Telephone Number Verification	Quarterly
2. Independent Review of Emergency Preparedness	Annually
3. Internal Update and Review	Annually

5.0 RESPONSIBILITIES5.1 Manager Nuclear Environmental Services

5.1.1 Responsible for ensuring that the required surveillance procedures are developed to maintain corporate plans, procedures, facilities and equipment.

5.1.2 Responsible for maintaining the following surveillance procedures:

- HQEC Communication Test
- HQEC Inventory
- Telephone Number Verification
- Independent Review
- Internal Update Review

5.1.3 Responsibilities that are required to maintain the above Surveillance procedures include:

1. Development and revision of surveillance procedures.
2. Scheduling of surveillances.
3. Conduct of surveillances.
4. Initiation and resolution or corrective action for discrepancies noted as a result of the surveillances.
5. Records
  - Completed surveillance procedures
  - Copies of revisions to surveillance procedures
  - Completed surveillance schedules

5.2 Manager Production Training

5.2.1 Responsible for the following EOP Surveillance Procedures:

- Communication Test (federal, state and local)
- Communication Test (equipment check)
- Inventory non-HP equipment
- Operational Test of HVAC
- HVAC HEPA Filters

5.2.2 Responsibilities that are required to maintain the above Surveillance Procedures include:

- Development and revision of surveillance procedures.
- Scheduling of surveillances.
- Conduct of surveillances.
- Initiation and resolution of corrective action for discrepancies noted as a result of the surveillance.
- Records
  - Completed surveillance procedures
  - Copies of revisions to surveillance procedures
  - Completed surveillance schedules

### 5.3 Plants Managers

5.3.1 Responsible for the following EOP Surveillance Procedure:

- Inventory of HP equipment

5.3.2 Responsibilities that are required to maintain the above Surveillance Procedure include:

- Development and revision of surveillance procedures.
- Scheduling of surveillances.
- Conduct of surveillances.
- Initiation and resolution of corrective action for discrepancies noted as a result of the surveillance.
- Records
  - Completed surveillance procedures
  - Copies of revisions to surveillance procedures
  - Completed surveillance schedules