

23226N

CONTROLLED DOCUMENT TRANSMITTAL

23226N

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Description:

ISSUE OF 1 EMERGENCY PLAN PROCEDURE (RMT)

Distribution Group(s):

RM: RMT-2080-EOF-001

Section/Name	Mail Zone	Copies	Comments
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Emer Plan:U1 Mockup	11	1C	
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Training Lib:Master Copy	11	1U	
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TSC	1*	2C	Include 1C Index Only
Unit 1 Control Room	29*	2C	
Unit 2 Control Room	29*	2C	
Visitor Center	25	1C	

Transmitted Controlled Document Listing: (1)

Document	Revision	Status	Title
RMT-2080-EOF-001	001	Approved	ACTIVATION AND OPERATION OF THE EOF

Controlled Document Transmittal Receipt and File Acknowledgement:

CONTROLLED DOCUMENTS ONLY

Signature

Date

Please sign and return within 14 calendar days to: C. Cook Nuclear Plant

Nuclear Documents Mgmt (Mail Zone #1) - Document Control
Bridgman, MI. 49106

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DOCUMENT

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PMP-2080-EPP-100	EMERGENCY RESPONSE	0 04/06/2001	
PMP-2080-EPP-101	EMERGENCY CLASSIFICATION	3B 12/07/2001	
PMP-2080-EPP-107	NOTIFICATION	15A 06/12/2001	
PMP-2080-EPP-108	INITIAL DOSE ASSESSMENT	4 05/03/2002	
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PMP-2080-EPP-200	INITIATING CHANGES TO THE EMERGENCY PLAN OR EMERGENCY PLAN IMPLEMENTING PROCEDURES	0 03/12/2001	
PMP-2081-EPP-105	INITIAL CORE DAMAGE ASSESMENT	4-CS1 06/16/2000	
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RMT-2080-EOF-001	ACTIVATION AND OPERATION OF THE EOF	1 05/03/2002	
RMT-2080-EOF-002	EMERGENCY TERMINATION AND RECOVERY	0 07/03/2001	
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REVIEW AND APPROVAL TRACKING FORM

Procedure Information:	
Number: <u>RMT-2080-EOF-001</u>	Rev. <u>1</u> Change: <u>0</u>
Title: <u>Activation and Operation of the EOF</u>	
Category (Select One Only):	
<input type="checkbox"/> Correction (Full Procedure) <input checked="" type="checkbox"/> Change (Full Procedure) with Review of Change Only <input type="checkbox"/> Correction (Page Substitution) <input type="checkbox"/> Change (Page Substitution) with Review of Change Only <input type="checkbox"/> Cancellation <input type="checkbox"/> New Procedure or Change with Full Review <input type="checkbox"/> Superseded (list superseding procedures): _____	
Associated Configuration Impact Assessments:	
Change Driver/CDI Tracking No(s): _____ <input checked="" type="checkbox"/> N/A	
Required Reviews:	
Cross-Discipline Reviews: <input type="checkbox"/> Chemistry <input type="checkbox"/> Training <input type="checkbox"/> Maintenance <input type="checkbox"/> Work Control <input type="checkbox"/> NDM <input type="checkbox"/> _____ <input type="checkbox"/> Operations <input type="checkbox"/> _____ <input type="checkbox"/> PA/PV <input type="checkbox"/> _____ <input type="checkbox"/> Reg Affairs <input type="checkbox"/> _____ <input type="checkbox"/> RP <input checked="" type="checkbox"/> None Required	Programmatic Reviews: <input type="checkbox"/> ALARA <input type="checkbox"/> Performance Assurance <input type="checkbox"/> Bus. Services Proc Grp <input type="checkbox"/> Reactivity Mgmt Team <input type="checkbox"/> Component Engineering <input type="checkbox"/> SPS (Safety & Health) <input type="checkbox"/> Design Engineering <input type="checkbox"/> Surveillance Section <input type="checkbox"/> Emerg Oper Proc Grp <input type="checkbox"/> System Engineering <input type="checkbox"/> Environmental <input type="checkbox"/> _____ <input type="checkbox"/> ISI/IST Coordinator <input checked="" type="checkbox"/> None Required
<input checked="" type="checkbox"/> Cognizant Org Review: <u>Cindy Draffner</u> Date: <u>3/20/02</u>	
<input checked="" type="checkbox"/> Technical Review: <u>Bill Malley</u> Date: <u>3/21/02</u>	
Concurrence:	
<input type="checkbox"/> Ops Mgr Concurrence: <u>N/A</u> Date: <u> / / </u>	
<input checked="" type="checkbox"/> Owner Concurrence: <u>Paul Hill</u> Date: <u>3/21/02</u>	
Package Check:	
Updated Revision Summary attached? <input checked="" type="checkbox"/> Yes	
10 CFR 50.59 Requirements complete? Tracking No.: <u>2002-0520-00</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	
Implementation Plan developed? <u>Paul Hill</u> (Ref. Step 3.4.18) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	
Package Complete: <u>Paul Hill</u> Date: <u>3/22/02</u>	
Approvals:	
PORC Review Required: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Mtg. No.: <u>3932</u> <i>guld</i>	
Administrative Hold Status: <input type="checkbox"/> Released <input type="checkbox"/> Reissued <input checked="" type="checkbox"/> N/A CR No.: _____	
Approval Authority Review/Approval: <u>Joe Black</u> Date: <u>4/3/02</u>	
Expiration Date/Ending Activity <u>N/A</u> Effective Date: <u>5/3/02</u>	
Periodic Review:	
Periodic Review conducted? (Data Sheet 5 Complete) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Follow-up Actions:	
Commitment Database Updated? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A	
NDM notified of new records or changes to records that could affect record retention? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A	

NDM Use Only	NUCLEAR DOCUMENT MANAGEMENT SECTION	Office Information For Form Tracking Only – Not Part of Form	
	MAY 03 2002	This form is derived from the information in PMP-2010-PRC-002, Procedure Correction, Change, and Review, Rev. 9a, Data Sheet 1, Review and Approval Tracking Form.	
	CONTROLLED DOCUMENT		
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REVISION SUMMARY

Number: RMT-2080-EOF-001

Revision: 1

Change: 0

Title: Activation and Operation of the EOF

Revision 1 eliminates the EOF Manager position and positions which were required for communication purposes when the JPIC was located in the Lake Michigan Mendal Center. This revision also incorporates changes made because of changes in the State of Michigan notification forms and processes and the changes to the Dose Assessment computer program. Revision 1 also adds an attachment for classification. Though classifications will continue using the classification procedure, the new attachment provides instructions for follow-up actions not in the classification procedure.

Section or Step	Change/Reason For Change
2.1	Change: Changed EOF Manager to Emergency Director (ED) Reason: The EOF Manager position is being eliminated. The ED is assuming these responsibilities.
2.6	Change: Under "Briefings" changed EOF Manager to Emergency Director Reason: The EOF Manager position is being eliminated. The ED is assuming these responsibilities.
2.6	Change: Under "Classification" changed reference from PMP-2080-EPP-001 to Attachment 7. Reason: The Classification procedure does not contain all actions necessary by plant personnel when a classification is upgraded. Attachment 7 now provides those supplemental instructions.
2.6	Change: Changed the numbering for references 7 - 19 to 8 - 20. Reason: Attachment 7, "Classification" was added to the procedure. Subsequent attachments were renumbered accordingly.
Step 3.1.2	Change: Corrected Use Reference for the Core Damage Assessment Procedure Reason: Incorrect reference. 12-RSM-2080-CDA-002 does not exist.
Attachment 1, Note in Step 1.3	Change: Added exception for ED Reason: Non-qualified individuals cannot fill the Emergency Director position.
Attachment 1, Step 1.3	Change: Deleted EOF Manager Reason: The EOF Manager position is being eliminated. The ED is assuming these responsibilities.

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REVISION SUMMARY

Number: RMT-2080-EOF-001

Revision: 1

Change: 0

Title: Activation and Operation of the EOF

Section or Step	Change/Reason For Change
Attachment 1, Step 2	<p>Change: Clarified step to directive statements. Changed times based on new state requirements from 15 minutes to 30 minutes for EMD-32b Technical Data sheets. Added bullet to determine the time the last EMD-32a or b was issued from the control rooms.</p> <p>Reason: Emergency Directors were not assuming responsibilities when the facility activated. The State of Michigan requires EMD-32b forms on a 30-minute cycle. The addition of the bullet will help Emergency Directors from transmitting duplicate notification forms to the state and county during the transition.</p>
Attachment 1, Steps 3, 4, and 5	<p>Change: Clarified steps to directive statements</p> <p>Reason: Provide Emergency Directors with more distinct instructions for steps to activate the EOF.</p>
Attachment 2, Step 3.1	<p>Change: Added "Facility Priorities"</p> <p>Reason: Provide briefer with additional instructions to enhance brief.</p>
Attachment 4	<p>Change: Attachment was completely revised based on the new Dose Assessment Program (DAP).</p> <p>Reason: The new DAP computer program has on screen prompts and instant helps available for all fields. The program also allows the user to move between screens unlike the old version. Therefore, many of the instructions in revision 0 to this procedure are no longer necessary as they are available in the program.</p>
Attachment 6, Step 1.5	<p>Change: Moved the "Day" heading to the right and inserted a line to block the section.</p> <p>Reason: The line is necessary to indicate that the Wind Speed is applicable to the Day and Night sections of the table. Previously the wind speed appeared to only apply to the Day section of the table.</p>

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Number: RMT-2080-EOF-001

Revision: 1

Change: 0

Title: Activation and Operation of the EOF

Section or Step	Change/Reason For Change
Attachment 7	<p>Change: Added attachment 7, "Classifications".</p> <p>Reason: PMP-2080-EPP-101 does not supply instructions for completion of the EMD-32a, Nuclear Plant Event Notification form, additional instructions for transmitting the information to the appropriate off-site agencies, or notifying control room personnel for follow-up actions. Attachment 7 now provides these instructions.</p>
Attachment 8	<p>Change: Added steps to include the use of the EMD-32a and EMD-32b notification forms.</p> <p>Reason: The State of Michigan has revised the EMD-32 notification form and added an EMD-32 technical notification form. The attachment was changed to clarify the proper use of the new forms and to provide instructions for notification of the state or county centers.</p>
Attachment 9, Step 7	<p>Change: Added instructions for the EMD-32a and EMD-32b forms along with appropriate time frames. Changed instructions for distribution to JPIC personnel.</p> <p>Reason: The State of Michigan has revised the EMD-32 notification form and added an EMD-32 technical notification form. The JPIC has moved to the Buchanan office building. Transmission is no longer necessary.</p>
Attachment 12, Position Table	<p>Change: Deleted PPC Operator, Communicator-ENC/JPIC, and EOF Manager.</p> <p>Reason: Positions are being eliminated. The EOF Computer Analyst is assuming the PPC Operators duties. The ED is assuming the EOF Managers duties. The ENC/JPIC position is no longer needed because the JPIC is moving to the Buchanan office building.</p>
Attachment 14, Step 1	<p>Change: Deleted EOF Manager</p> <p>Reason: The EOF Manager position is being eliminated. The ED is assuming these responsibilities.</p>

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Revision: 1

Change: 0

Title: Activation and Operation of the EOF

Section or Step	Change/Reason For Change
Attachment 15, Step 1.1.2	Change: Changed EMD-32 to EMD-32a or EMD-32b. Reason: The EMD-32 notification form was revised to two forms, the EMD32a and EMD-32b.
Attachment 15, Steps 1.1.2.a and b.	Change: Removed reference to Items used on the EMD-32 forms. Reason: The new EMD-32 forms do not have item number references anymore.
Attachment 15, Step 1.2.2.b	Change: Combined sub-steps b, c, and d. Removed reference to Items used on the EMD-32 forms. Changed wording to provide the same instructions but with reference to the appropriate section of the new EMD-32 forms. Reason: The new EMD-32 forms do not have item number references. The wording change specifically addresses the PAR section of the EMD-32a form.
Attachment 18, Step 3	Change: Removed reference to Items used on the EMD-32 forms. Reason: The new EMD-32 forms do not have item number references anymore.
Data Sheet 3, Under Vegetation, Step 5	Change: Clarified instructions to state the amount of vegetation to be collected. Reason: Previous instruction lead users to believe a 12 liter sample container existed.
Figure 1 under EMD-32	Change: Deleted the EMD-32 and added the EMD-32a and EMD-32b along with the appropriate meanings. Reason: The EMD-32 form was replaced with the EMD-32a and EMD-32b forms when the State of Michigan revised the forms.
Figure 2, Under Berrien County Liaison	Change: Changed ...EOC at a SAE to ...EOC at an SAE Reason: Grammatically incorrect.
Figure 2, Under Communications Director	Change: Changed EOF Manager to Emergency Director Reason: The Communications Director now reports to the Emergency Director.

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Number: RMT-2080-EOF-001

Revision: 1

Change: 0

Title: Activation and Operation of the EOF

Section or Step	Change/Reason For Change
Figure 2, Under Communications Director	Change: Deleted bullet for assuming duties of EOF Manager Reason: The EOF Manager position is being eliminated. The ED is assuming these responsibilities. The Communications Director is not qualified to assume the ED duties.
Figure 2, Under Computer Analyst	Change: Added bullet to include PPC/RDR operations responsibilities to this position. Reason: This responsibility belonged to the Plant Process Computer Operator. That position has been eliminated.
Figure 2, Under Emergency Director	Change: Deleted bullet for ED to assume the EOF Managers responsibilities. Added bullets to include EOF Managers responsibilities that were eliminated from the EOF Managers position description. Reason: The EOF Manager position is being eliminated therefore this is a redundant statement. The ED is assuming the activation and communications responsibilities from the EOF Manager.
Figure 2, Under Emergency Planning	Change: Added Position Reason: Position added to provide over site to the ED during emergency situations.
Figure 2, Under ENC/JPIC Communicator	Change: Removed the position Reason: The JPIC has been moved to the Buchanan Office Building. This interface is no longer necessary since individuals in the EOF and JPIC can now interface directly without going through a communicator.
Figure 2, Under Engineering Design & Site Services Manager	Change: Changed EOF Manager to Emergency Director Reason: The EOF Manager position is being eliminated. The ED is assuming these responsibilities.
Figure 2, Under ENS Communicator	Change: Moved the position in the figure into the correct alphabetical order. Reason: Order correction.

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Revision: 1

Change: 0

Title: Activation and Operation of the EOF

Section or Step	Change/Reason For Change
Figure 2, Under Environmental Assessment Director	Change: Changed EOF Manager to Emergency Director Reason: The EOF Manager position is being eliminated. The ED is assuming these responsibilities.
Figure 2, Under EOF Manager	Change: Deleted EOF Manager position description from the figure. Reason: The EOF Manager position is being eliminated. The ED is assuming these responsibilities.
Figure 2, Under HPN Communicator	Change: Moved the position in the figure into the correct alphabetical order. Reason: Order correction.
Figure 2, Under Operations Advisor	Change: Added the new position. Reason: Position added to assist the ED with Emergency Classifications and interpretation of plant conditions.
Figure 2, Under Plant Process Computer Operator	Change: Deleted Plant Process Computer Operator position description from the figure Reason: The PPC Operator position is being eliminated. The Computer Analyst is assuming these responsibilities.
Figure 2, Under Regulatory Affairs Coordinator	Change: Changed EOF Manager to Emergency Director Reason: The EOF Manager position is being eliminated. The ED is assuming these responsibilities.

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Reference		Effective Date: <u>5/3/02</u>	
P. E. Holland Writer	P. E. Holland Owner	Emergency Planning Cognizant Organization	

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1 PURPOSE AND SCOPE

- 1.1 This procedure provides guidance to Emergency Operations Facility (EOF) personnel during emergencies.
- 1.2 Use of this procedure is restricted to emergency conditions or drills/exercises only.

NOTE:	10 CFR 50.54(x) and (y) describe the actions required if deviation from Technical Specifications or License Condition becomes necessary.
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2 DETAILS

- 2.1 The Emergency Director (ED) implements this procedure.
- 2.2 Use Attachment 1, Activation, when an emergency response is initiated.
- 2.3 Use Figure 1, Definitions and Abbreviations for a listing of abbreviations, acronyms, and their meanings.
- 2.4 Figure 2, Position Descriptions contains supplemental directions for ERO personnel.
- 2.5 IF additional assistance from other utilities or agencies is required THEN refer to the list in Appendix C of the Emergency Plan. Phone numbers are available in the Emergency Response Organization Phone Directory.

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NOTE: O = Optional M = Mandatory

2.6 Perform activities based on the following table.

Activity	Attachment/ Procedure	Responsible Position	UE	Alert	SA	GE
Briefings	2	ED	M	M	M	M
Habitability	3	EAD			M	M
Dose Assessment (EMD-32)	4	EAD		O	M	M
PAR	8	ED				M
Core Damage Assessment	PMP-2081- EPP.105	Reactor Physics Analyst		O	O	O
Classification	7	ED	M	M	M	M
Document Transmission / Distribution	9	Communications Director	O	M	M	M
Field Team Communications	10	FMT Coordinator		O	M	M
Environmental Sampling	11	Field Teams				
Logistical Support	14	Scheduling/Planning Manager			O	O
Shift Designation	12	Security Director	O	O	O	O
Information Requests	20	Communications Director				
External Support	19	Industry Support Communicator		O	O	O
ENS Communications	16	ENS Communicator		M	M	M
HPN Communications	17	HPN Communicator		M	M	M
County Communications	15	Berrien County Communicator			M	M
State Communications	18	MSP Communicator			M	M
Termination/Recovery	12-RMT-2080- EOF-002	ED		M	M	M

3 REFERENCES

3.1 Use References:

- 3.1.1 PMP-2080-EPP-101, Emergency Classification.
- 3.1.2 PMP-2081-EPP.105, Initial Core Damage Assessment.
- 3.1.3 12-RSM-2080-EOF-002, Emergency Termination and Recovery.
- 3.1.4 Donald C. Cook Nuclear Plant MSP Emergency Plan.

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3.2 Writing References:

3.2.1 Source References.

- a. Donald C. Cook Nuclear Plant Emergency Plan.
- b. EPA 400-R-92-001 Manual of Protective Action Guides and Protective Actions for Nuclear Incidents.
- c. Dose Assessment Program – Computer Program, Rev. 7.
- d. Meteorology and Atomic Energy 1968. U. S. Atomic Energy Commission.
- e. Evacuation Time Estimates for the D. C. Cook Nuclear Plant Plume Exposure Emergency Planning Zone HMM Associates July 1992 (Rev.1).

3.2.2 General References

- a. Michigan Emergency Preparedness Plan.
- b. Berrien County Emergency Preparedness Plan.

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Attachment 1	Activation		Pages: 6 - 7

NOTE: The Emergency Plan requires activation of the EOF within 60 minutes of the time of a declaration of an Alert, SAE, or GE.

1 Ensure the facility has the following or an acceptable alternate prior to activation.

1.1 Equipment

- Facility Power
- Plant Process Computer (RDR)
- Dose Assessment Programs and Printers
- Continuous Air and Area Radiation Monitor
- Clocks set with the Plant Process computer

1.2 Communications

- 1.2.1 Telephones, Fax machines, or Radios to:
- State of Michigan Emergency Operations Center
 - Berrien County Emergency Operations Center
- 1.2.2 Field Monitoring Team Radios
- 1.2.3 Communications with the Control Room
- 1.2.4 Managers Telephone Bridge

1.3 Personnel

NOTE: With the exception of the Emergency Director, the use of non-qualified personnel is permissible provided they are briefed and understand the position specific requirements.

- ☐ Emergency Director
- ☐ Communications Director
- ☐ Environmental Assessment Director
- ☐ Boardwriter
- ☐ Communicator - Berrien County Sheriff Department
- ☐ Communicator - Michigan State Police
- ☐ Communicator -ENS

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Attachment 1	Activation		Pages: 6 - 7

- 2 Perform the following:
 - Assume responsibilities for communications with offsite agencies.
 - Assume responsibilities for Classification, Notification and PARs from the SEC.
 - Determine the time the control room will issue their last EMD-32.
 - Determine the time the EOF will issue the first EMD-32, Nuclear Plant Event form. The EMD-32a must be issued within 15 minutes of a classification or PAR change. The EMD-32b must be issued within 30 minutes of the last EMD-32a or EMD-32b.
- 3 Perform a facility brief.
- 4 Activate the facility.
- 5 Inform the other ERO facilities that the EOF has been activated.

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Attachment 2	Briefings		Page: 8

- 1 Announce the briefing time 2 to 3 minutes prior to it beginning.
- 2 Ensure everyone is paying attention, there are no phone conversations or side discussions taking place, and personnel remain stationary during the brief.
- 3 Perform the briefing. (Time limits are for reference only.)
 - 3.1 **Current Plant Status (1- Minute Maximum)**
 - Major on-going events
 - Major Equipment out of service
 - Prognosis
 - Facility priorities
 - 3.2 **Current Classification (30-Seconds Maximum)**
 - PAR in effect
 - Anticipated changes in classification or PAR
 - 3.3 **Status of the EOF (for initial briefings up to and including activation)**
 - Activation Status (When command and control will be taken over from the Control Room),
 - Problems delaying activation,
 - Time the first EMD-32 is required for transmission to the State (at activation only).
 - 3.4 **Ask the EOF team for updates on important information**
 - Don't solve the problems here. Delegate; then update at the next briefing if necessary.
 - 3.5 **Ask the EOF team if anyone is having any problems**
 - Don't solve the problems here. Delegate; then update at the next briefing if necessary.

Reference	RMT-2080-EOF-001	Rev. 1	Page 9 of 48
Activation and Operation of the EOF			
Attachment 3	Habitability		Page: 9

NOTE: The EOF has no specific habitability requirements because it is outside the 10-mile Emergency Planning Zone. Actions taken are at the discretion of the EAD.

- 1 IF a radioactive plume is expected to pass over the EOF, THEN:
 - Start the continuous air monitor.
 - Issue dosimetry to all EOF occupants.
 - Shelter or evacuate non-essential personnel in the Buchanan Office Building.
 - Turn off or close dampers on ventilation systems that draw air from outside the facility.
 - Have personnel remain in the EOF and office building.
 - Perform routine surveys to assess dose rates, airborne activity, and post plume contamination.

- 2 Maintain the dose to the occupants of the EOF below the following for the duration of the emergency.
 - TEDE < 5 Rem
 - CDE Thyroid < 25 Rem

Reference	RMT-2080-EOF-001	Rev. 1	Page 10 of 48
Activation and Operation of the EOF			
Attachment 4	Dose Assessment		Pages: 10 - 12

- 1 **UNLESS** the State of Michigan EOC has been notified in advance of a delay or change in frequency, **THEN** transmit Nuclear Plant Event Technical Data forms (EMD-32b) to the State of Michigan at least every 30 minutes.
- 2 Obtain and record an 8-hour and 24-hour weather forecast on Data Sheet 1, Meteorological Forecast.
 - 2.1 Forecasts are normally obtained through Murray and Trettle. The phone number is available in the Emergency Response Organization Phone Directory.
 - 2.2 Provide Data Sheet 1, Meteorological Forecast, to the runners for distribution.
 - 2.3 Obtain subsequent forecasts approximately every 8 hours.
- 3 **IF** a projected dose is **NOT** available from the Dose Assessment Program, **THEN** use projected doses based on measured dose rates from the field and expected duration of the exposure time.
- 4 **IF** projected doses are **NOT** available and a PAR is necessary, **THEN** use the default PAR. See Attachment 8, PAR.
- 5 Obtain Meteorological Data. See Attachments 5, Meteorological Data, and 6, Pasquill Category, for additional information and help.
- 6 Obtain radiological data as applicable.
 - 6.1 Radiation Monitoring System (RMS) data listed in order of preference:
 - PPC/RDR
 - RMS Display Terminals
 - Technical Support Center
 - Direct readings from the Local Area Data Acquisition Modules
 - 6.2 Field Team data
 - Radiation reading in R/hr
 - Iodine concentration in $\mu\text{Ci/cc}$
 - Sample location

Reference	RMT-2080-EOF-001	Rev. 1	Page 11 of 48
Activation and Operation of the EOF			
Attachment 4	Dose Assessment		Pages: 10 - 12

- 7 Determine the Coolant Type from:
 - EOF Reactor Physics Analyst
 - Technical Support Center Plant Evaluation Team
 - GO TO Initial Core Damage Assessment procedure, PMP-2081-EPP-105.
- 8 Determine the Projected Duration of the Release.
 - IF the projected duration of the release is unknown, THEN use 1-hour.
 - IF releases are occurring from multiple points, THEN use the longest projected duration.
- 9 Determine if an Actual Release versus a Potential Release is occurring.
 - 9.1 An actual release is occurring when any of the following are true:
 - Valid indication on release point radiation monitoring system channels are present that are associated with a classified event, or
 - Measured offsite radiation readings indicate a release is in progress, or
 - Indications exist that an unmonitored release may be occurring.
 - 9.2 A potential release exists if calculated data is postulated based on present plant conditions (i.e., Containment Loss Of Coolant Accident, CLOCA).
- 10 Complete the EMD-32b form.
 - The EMD-32b, Release/Offsite Dose Data section, is only required to be completed if a release is or is suspected to be occurring.
 - The EMD-32b, Measured Offsite Radiation Levels section, needs only be reported when available.
- 11 Review the EMD-32b form to determine if a change in classification or PAR is required.
- 12 IF a change is necessary, THEN:
 - The ED approves the EMD-32b form.
 - Follow the instructions on the Classification or PAR attachment.

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Activation and Operation of the EOF			
Attachment 4	Dose Assessment		Pages: 10 - 12

13 IF a change is not necessary, THEN:

- The ED approves the EMD-32b form.
- Provide the EMD-32b form to the Fax operators for transmittal.

Reference	RMT-2080-EOF-001	Rev. 1	Page 13 of 48
Activation and Operation of the EOF			
Attachment 5	Meteorological Data		Pages: 13 - 14

NOTE: Wind speeds are expressed as Miles per Hour. To convert Knots to Miles per Hour multiply by 1.15.

- 1 Consider lake breezes in the dose assessment process if all the following are true:
 - The current date is between April 15 and October 31,
 - The current time is between 1-hour after sunrise and 1-hour after sunset,
 - Ambient temperature measured at the main tower must be greater than the Lake Michigan temperature,
 - Wind speed on the shoreline tower is ≤ 13.4 Miles per Hour,
 - Pasquill category must be A, B, C, or D,
 - Shoreline tower wind direction is **FROM** 205° to 23° (i.e., Wind is from the lake).
- 1.1 Obtain meteorological data from one of the following sources. Sources are listed in order of preference.
 - 1.1.1 Plant Process Computer
 - 10 Meter Main
 - 10 Meter Backup
 - 60 Meter Main
 - 1.1.2 Murray and Trettle
 - a. Obtain the phone number from the Emergency Response Organization Phone Directory.
 - b. Request to speak to the Nuclear Emergency Director.
 - c. Obtain
 - Wind Speed in Miles per Hour
 - Wind Direction from, in degrees
 - Pasquill Category as a letter **NOT** a number
 - Eight and 24-hour meteorological forecast

Reference	RMT-2080-EOF-001	Rev. 1	Page 14 of 48
Activation and Operation of the EOF			
Attachment 5	Meteorological Data		Pages: 13 - 14

1.1.3 Manual Acquisition of Meteorological Tower Data

- Contact the Technical Support Center and request a team be dispatched to collect this data.

1.1.4 National Oceanic and Atmospheric Administration (NOAA)

- Obtain the plants NOAA phone extension from the Emergency Response Organization Phone Directory.
- Use any NOAA weather radio.

Reference	RMT-2080-EOF-001	Rev. 1	Page 15 of 48
Activation and Operation of the EOF			
Attachment 6	Pasquill Category		Page: 15

- 1 Obtain Pasquill Category data from one of the following sources. Sources are listed in order of preference.

1.1 Plant Process Computer

1.2 Temperature Differential

$\Delta T^{\circ}F = T @ 60m - T @ 10m$ (Z = 50 Meters)	Pasquill Category	$\Delta T^{\circ}C = T @ 60m - T @ 10m$ (Z = 50 Meters)
$\Delta T^{\circ}F \leq -1.8$	A	$\Delta T^{\circ}C \leq -1.0$
$-1.8 < \Delta T^{\circ}F \leq -1.6$	B	$-1.0 < \Delta T^{\circ}C \leq -0.9$
$-1.6 < \Delta T^{\circ}F \leq -1.4$	C	$-0.9 < \Delta T^{\circ}C \leq -0.8$
$-1.4 < \Delta T^{\circ}F \leq -0.5$	D	$-0.8 < \Delta T^{\circ}C \leq -0.3$
$-0.5 < \Delta T^{\circ}F \leq +1.3$	E	$-0.3 < \Delta T^{\circ}C \leq +0.7$
$+1.3 < \Delta T^{\circ}F \leq +3.6$	F	$+0.7 < \Delta T^{\circ}C \leq +2.0$
$+3.6 < \Delta T^{\circ}F$	G	$+2.0 < \Delta T^{\circ}C$

1.3 Standard Deviation of the Horizontal Wind Direction (STD)

STD	Pasquill Category
$STD \geq 22.5$	A
$22.5 \geq STD > 17.5$	B
$17.5 \geq STD > 12.5$	C
$12.5 \geq STD > 7.5$	D
$7.5 \geq STD > 3.8$	E
$3.8 \geq STD > 2.1$	F
$2.1 \geq STD$	G

1.4 Murray and Trettle

- See Attachment 5, Meteorological Data.

1.5 Observation

Incoming Solar Radiation (Day Only) (1 hour after sunrise to 1 hour before sunset)					
Sun Angle Degrees from Horizon	Cloud Cover				
	None	1/8 - 5/8	5/8 - 7/8		8/8
			Middle Clouds	Low Clouds	
15° - 35°	Slight	Slight	Slight	Slight	Slight
35° - 60°	Moderate	Slight	Slight	Slight	Slight
> 60°	Strong	Strong	Moderate	Slight	Slight

Wind Speed @ 10 meters Miles per Hour (Mph)	Day			Night	
	Incoming Solar Radiation			Thinly Overcast or ≥ 4/8 Low Clouds	≤ 3/8 Clouds
	Strong	Moderate	Slight		
Mph ≤ 5	A	A - B	B	--	--
5 < Mph ≤ 7	A - B	B	C	E	F
7 < Mph ≤ 11	B	B - C	C	D	E
11 < Mph ≤ 13	C	C - D	D	D	D
Mph > 13	C	D	D	D	D

Reference	RMT-2080-EOF-001	Rev. 1	Page 16 of 48
Activation and Operation of the EOF			
Attachment 7	Classifications		Pages: 16 - 17

- 1 Perform classifications using PMP-2080-EPP-101.
- 2 If a classification upgrade is made:
 - 2.1 Note the time of the classification and determine the 15-minute notification time.
 - 2.2 Notify the control room to initiate plant public address announcements and sound the Nuclear Emergency Alarm as specified in the control room procedures.
 - 2.3 Complete an EMD-32a, Nuclear Plant Event Notification, form.
 - 2.3.1 Reason for Classification:
 - IF (H-1) SEC Judgement is used, THEN select the reason most applicable to the situation.
 - 2.3.2 Radiological Release in Progress Due to Event is yes when:
 - Valid indications on release point radiation monitoring system channels are present that are associated with a classified event, or
 - Measured offsite radiation readings indicate a release is in progress, or
 - Indications exist that an unmonitored release may be occurring.
 - 2.3.3 IF the classification is a General Emergency, THEN develop a PAR.
 - 2.4 The ED approves the classification upgrade.
 - 2.5 The ED notifies the State/County authorities.
 - 2.5.1 If the State EOC has NOT been activated:
 - Transmit the EMD-32a to the Berrien County Sheriff's Department
 - The ED discusses the EMD-32a data and applicable PARS, with the Berrien County Sheriff's Department.
 - 2.5.2 If the State EOC has been activated:
 - Transmit the EMD-32 to the State of Michigan EOC.
 - The ED discusses the EMD-32a data, and applicable PARS, with the State EOC.

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Attachment 7	Classifications		Pages: 16 - 17

- 2.6 Notify the other facilities as applicable.
- 2.7 Perform a facility brief.
- 2.8 Update the facility status boards/maps with classification data, PARs, and Protective Action Orders received from the State of Michigan.

Reference	RMT-2080-EOF-001	Rev. 1	Page 18 of 48
Activation and Operation of the EOF			
Attachment 8	Protective Action Recommendations (PAR)	Pages: 18 - 20	

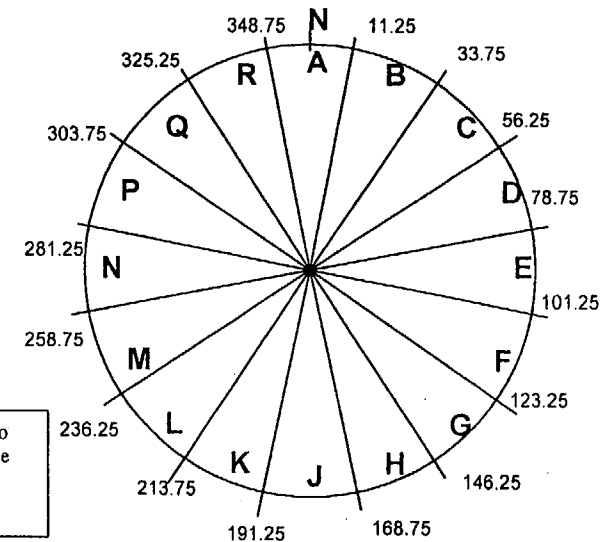
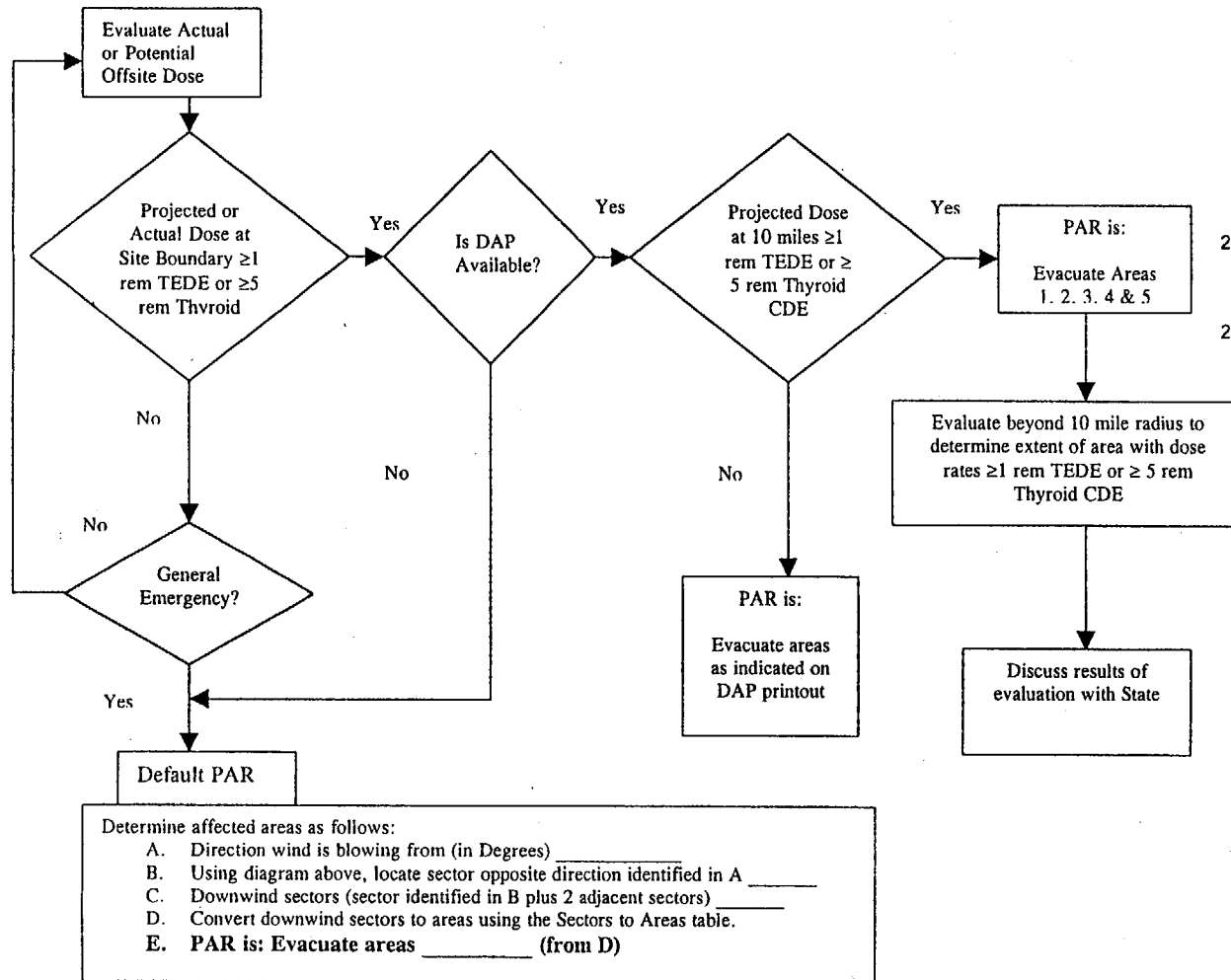
NOTE: PARs must accompany the declaration of a General Emergency.

- 1 Note the time of the PAR and determine the 15-minute notification time.
- 2 Use the Default PAR if:
 - A General Emergency has been declared for non-radiological release conditions, or
 - It is not possible to determine the Site Boundary TEDE or CDE dose and a release is or is suspected to be in progress.
- 3 Prior to developing a PAR, consider any forecasts of changing weather conditions.
- 4 IF the PAR is based on Dose Calculations, THEN an EMD-32b, Nuclear Plant Event Technical Data sheet must accompany the EMD-32a, Nuclear Plant Event Notification form
- 5 Compare field team data to the projected area of the PAR.
- 6 IF the field team data indicates the plume is outside the projected area, THEN change the PAR to include the actual data.
- 7 Update the EMD-32a with the PAR information.
- 8 The ED approves the PAR change.
- 9 The ED notifies the State/County authorities.
- 9.1 If the State EOC has NOT been activated:
 - Transmit the EMD-32a (and EMD-32b as applicable) to the Berrien County Sheriff's Department.
 - The ED discusses the EMD-32 data, and applicable PARs with the Berrien County Sheriff's Department.
- 9.2 If the State EOC has been activated:

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Attachment 8	Protective Action Recommendations (PAR)	Pages: 18 - 20	

- Transmit the EMD-32a (and EMD-32b as applicable) to the State of Michigan EOC.
 - The ED discusses the EMD-32 data, and applicable PARs with the State EOC.
- 10 Notify the other facilities as applicable.
- 11 Perform a facility brief.
- 12 Update the facility status boards/maps with classification data, PARs, and Protective Action Orders received from the State of Michigan.

Reference	RMT-2080-EOF-001	Rev. 1	Page 20 of 48
Activation and Operation of the EOF			
Attachment 8	Protective Action Recommendations (PAR)	Pages: 18 - 20	



Sectors	Areas
A, B & C to 5 miles	1 and 2
B, C & D to 5 miles	1, 2 and 3
C, D & E to 5 miles	1, 2 and 3
D, E, & F to 5 miles	1, 2 and 3
E, F & G to 5 miles	1, 2 and 3
F, G & H to 5 miles	1 and 3
G, H & J to 5 miles	1 and 3
H, J & K to 5 miles	1 and 3
J, K & L to 5 miles	1 and 3
K, L & M to 5 miles	1 and 3
L, M & N to 5 miles	1
M, N & P to 5 miles	1
N, P & Q to 5 miles	1
P, Q & R to 5 miles	1
Q, R & A to 5 miles	1
R, A & B to 5 miles	1 and 2

Reference	RMT-2080-EOF-001	Rev. 1	Page 21 of 48
Activation and Operation of the EOF			
Attachment 9	Document Transmission/Distribution		Page: 21 - 22

NOTE: Some of the facility Fax machines are designated within the phone directory as TRANSMIT and others as RECEIVE. These machines should remain in their designated mode to better facilitate communications between facilities.

- 1 Ensure the Fax machine dates and times are set correctly.
- 2 Obtain the Fax machine phone numbers for the facilities and off site agencies from the Emergency Response Organization Phone Directory.
- 3 Forward all documents for duplication and distribution to the facility runners.
- 4 Forward all original documents to the Communication Director.
- 5 Log all incoming and outgoing Fax's in the facility Fax Log.
- 6 **IF** a Fax is **NOT** specifically addressed to an individual or position, **THEN** distribute incoming Fax's to all positions as described on the facility distribution map located in the copy area.

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Activation and Operation of the EOF			
Attachment 9	Document Transmission/Distribution	Page: 21 - 22	

- 7 The following table gives additional direction on the transmission and distribution of material:

Document	Destination	Frequency	Additional Instructions
Nuclear Plant Event Notification Form (EMD-32a) Nuclear Plant Event Technical Data (EMD-32b)	State EOC	EMD-32a 15-Minutes EMD-32b 30-Minutes	The EMD-32a and b forms transmitted to the State of Michigan should have priority over all other Fax's.
	TSC	As Available	
	News Center	As Available	The initial transmission of all documents to Corporate Communications shall be established through the News Center by corporate communications personnel.
	JPIC	As Available	Distribution to the JPIC members.
	EOF Personnel	As Available	Distribute to EOF members.
Meteorological Forecast Data Sheet 1	State EOC	As Available	None
	Berrien County EOC	As Available	None
	NRC	As Available	None
	EOF Personnel	As Available	Distribute to EOF members.
Boardwriter Notes	EOF Personnel	As Available	Distribute to EOF members.

Reference	RMT-2080-EOF-001	Rev. 1	Page 23 of 48
Activation and Operation of the EOF			
Attachment 10	Field Team Communications		Pages: 23 - 25

- 1 **WHEN** dose assessment is considering lake breezes, **THEN** dispatch the field teams along the standard routes to locations either North and/or South of the plant to determine if the plume is moving in a parallel path to the Lake Michigan shore line.

- 2 **IF** the projected offsite dose rates for the team positions exceed 1 rem/hr TEDE or 5 rem/hr CDE Thyroid, **THEN** consider:
 - Repositioning the team(s) to reduce the overall expected exposure.
 - Distribution of Potassium Iodine (KI) to team members.

- 3 Have the field teams perform surveys based on the appropriate release status:
 - 3.1 Pre-release - no release has occurred.
 - 3.1.1 Determine the postulated direction and dispersion width of the plume based on the wind direction, wind speed, Pasquill Category stability class, and its associated isopleth.
 - 3.1.2 Position the survey vehicles downwind on Red Route 1.
 - 3.1.3 Have the survey vehicle traverse the downwind portion of the route while surveying for radiation readings above background.
 - 3.1.4 **IF** above background readings are reported, **THEN** notify the EAD immediately. An unmonitored release may be occurring.
 - 3.2 Plume Phase
 - 3.2.1 Determine the postulated direction and dispersion width of the plume based on the wind direction, wind speed, Pasquill Category stability class, and isopleth.
 - 3.2.2 Use the projected dose rates as guidance to determine the best distance from the plant to collect airborne sample data without risking overexposure to field team members. Iodine and particulate materials tend to plate out quickly on surrounding surfaces. Airborne samples should be collected at the location of the highest dose rate reading within the plume.

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Activation and Operation of the EOF			
Attachment 10	Field Team Communications		Pages: 23 - 25

3.2.3 Direct the survey teams to perform either a full traverse or plume definition survey.

a. Full Traverse

1. Direct the survey teams to traverse the plume reporting back, as a minimum, boundary (0.1 mR/hr) and centerline (highest reading) data.
2. **IF** an air sample is necessary, **THEN** have it taken at the plume centerline.
3. Record the Field Team data on Data Sheet 2, Offsite Survey Log.
4. Plot the data on a map to define the plume boundaries and centerline.

b. Plume Definition

1. Direct the survey teams to:
 - Enter the plume until ≥ 0.1 mR/hr is detected.
 - Immediately exit the plume.
 - Report back the plume boundary location and radiation reading.
2. Record the Field Team data on Data Sheet 2, Offsite Survey Log.
3. Plot the data on a map to define the plume boundary.

3.2.4 **IF** field teams report a reading ≥ 1 R/hr, **THEN** immediately notify the EAD. A change in the emergency classification may be necessary.

3.2.5 Compare the field team data to the most recent PARs.

3.2.6 **IF** the field team data does **NOT** match the projected location of the plume, **THEN** immediately notify the EAD. A change to the PAR may be necessary.

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Activation and Operation of the EOF			
Attachment 10	Field Team Communications		Pages: 23 - 25

3.3 Post Plume Phase

3.3.1 The post plume phase should be performed in 2 stages: (initial and long term)

a. Initial (Ground Deposition Foot Print)

1. Direct the field monitoring teams to traverse the areas the plume covered starting close-in to the plant and working outward.
2. Plot the results on a map to determine the extent of the ground deposition.
3. **WHEN** the deposition footprint has been determined, **THEN** initiate the long term post plume phase sampling.

b. Long Term

NOTE:	Though the emergency may have been terminated prior to entering the long-term post plume phase, these directions are intended to give the field team guidance for the collection of samples.
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1. Direct the field teams to collect soil, water, snow, and vegetation samples as applicable within the ground deposition area. Take samples in locations to define deposition on the ground.
2. Direct the field teams to collect soil, water, snow, and vegetation samples as applicable outside the ground deposition area. Negative results are necessary to confirm no hazards are present.
3. Plot the sample positions on a map to allow for further deposition analysis.

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Activation and Operation of the EOF			
Attachment 11	Environmental Sampling		Pages: 26 - 27

- 1 Collect samples that are representative of the topography of the area unless otherwise specifically requested.
- 2 Change the volume or surface area of samples collected as conditions warrant. Note the changes in the comment section on the appropriate form.
- 3 Log all samples on Data Sheet 3, Environmental Sample Collection, giving a specific location listed in order of preference.
 - Physical location
 - On a map
 - Using landmarks; ensure sufficient references are documented to relocate the specific area.
- 4 Perform Plume Surveys, as directed:
 - 4.1 Plume Traverse
 - 4.1.1 Traverse the route as instructed by the EOF, keeping the closed window probe outside the vehicle.
 - 4.1.2 Record the location and reading on Data Sheet 2, Offsite Survey Log, where the instrument indicates:
 - The leading edge of the plume (0.1 mR/hr)
 - The centerline (highest reading) of the plume
 - The trailing edge of the plume (0.1 mR/hr)
 - 4.1.3 Transmit the data to the EOF.
 - 4.1.4 IF an air sample was requested, THEN re-enter the plume to the instructed location and obtain the sample. This is normally performed at the plume centerline.
 - 4.2 Plume Definition
 - 4.2.1 Start the route as instructed by the EOF, keeping the closed window probe outside the vehicle.
 - 4.2.2 Record the location and reading on Data Sheet 2, Offsite Survey Log, where the instrument indicates the leading boundary (≥ 0.1 mR/hr) of the plume.

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Activation and Operation of the EOF			
Attachment 11	Environmental Sampling		Pages: 26 - 27

4.2.3 Exit the plume.

4.2.4 Transmit the data to the EOF.

5 Obtain an air sample as follows:

- Draw a minimum of 4 cubic feet of air.
- Document all air sample data on the air sample envelope.

6 Obtain soil, snow, water, and vegetation samples as follows:

- Use Data Sheet 3 for instructions for collection and documentation of environmental samples.

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Activation and Operation of the EOF			
Attachment 12	Shift Designation		Pages: 28 - 29

NOTE: Obtain individual phone numbers from the Emergency Response Organization Phone Directory.

- 1 Managers coordinate shift turnovers to ensure plant conditions allow individuals to report to their respective facilities without undue risk or exposure.
- 2 Security Director coordinates and communicates any plant access restrictions with the security force.
- 3 Finalize routing instructions prior to notifying any individuals.
- 4 Obtain position lists specific to the OSC and TSC from 12-RMT-2080-OSC.001 and 12-RMT-2080-TSC-001.
- 5 IF roadblocks have been established by local or state law enforcement, THEN the State EOC should be notified with the list of oncoming personnel to allow passage through roadblocks.
- 6 IF desired, THEN the Dialogic Paging system can be used to contact off-duty team members. Attachment 13, Dialogic Paging System gives detailed instructions for reprogramming and activation.

Shift Start Time: _____

Routing Instructions:

Position Title	Name
Berrien County Liaison	
Boardwriter	
Communicator – Berrien County Sheriff Department	
Communications Director	
Communicator – Michigan State Police	
Communicator –ENS	

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Activation and Operation of the EOF			
Attachment 12	Shift Designation		Pages: 28 - 29

Communicator -HPN	
Computer Analyst	
Emergency Director	
Emergency Planning	
Engineering Design & Site Services Manager	
Environmental Assessment Coordinator (1)	
Environmental Assessment Coordinator (2)	
Environmental Assessment Director	
Fax Operator	
Field Monitoring Team Coordinator	
Industry Support Communicator	
Michigan State Police Liaison	
Operations Advisor	
Reactor Physics Analyst	
Regulatory Affairs Coordinator	
Runner (1)	
Runner (2)	
Security Director	
Scheduling & Planning Manager	

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Activation and Operation of the EOF			
Attachment 13	Dialogic Paging System		Pages: 30 - 31

NOTE: The Dialogic Paging system can be reprogrammed to contact off-duty members of the Emergency Response Organization. These actions should only be performed from one facility, preferably the EOF, and should be done to provide subsequent staffing for ALL facilities.

- 1 Prior to contacting Dialogic:
 - 1.1 Notify the facility managers to instruct all ERO members who are currently in a facility, NOT to respond to the page.
 - 1.2 Prescript the instructions (Dialogic refers to this as a greeting) that will be recorded prior to the activation of the pagers. Consider:
 - 1.2.1 All ERO pagers will be activated. You cannot select a specific team for response.
 - 1.2.2 Having ERO members contact the EOF at particular phone number(s) to receive further instructions after accepting a position.
 - 1.2.3 Where and how the individuals should report. If a release has occurred, it may be advantageous to have member's report to the EOF for transport to the plant.
 - 1.2.4 What time the ERO members are to report.
 - 1.3 Obtain the password code, located in the Security Directors' lock box in the EOF.
- 2 To change the recorded instructions for responding ERO members and activate the scenario:
 - 2.1 Call Dialogic. The Dialogic Pager Activation phone number can be obtained from the Emergency Response Organization Phone Directory.
 - 2.2 The system will ask you for your company ID number, followed by the # sign.
Enter 1344 #
 - 2.3 The system will ask for your scenario activation password, followed by the # sign.
Enter the password code followed by the # sign.

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Attachment 13	Dialogic Paging System		Pages: 30 - 31

- 2.4 To start a scenario, enter the scenario ID followed by the # sign or press # alone for more options. Enter 911 #
- 2.5 The system will state:
- 2.5.1 To listen to the current scenario message, Press 1
- 2.5.2 To re-record the scenario message, Press 2
- The system will direct you to record the new message followed by the # sign.
- 2.5.3 To start the scenario, Press 3
- The system will respond with "The scenario is building". Press # and hang up.
- 2.5.4 To return to the main menu, Press #
- The system will give more options to consider or press # to end this call.
- 2.6 Reports will be faxed to the EOF containing the names of the individuals who have responded and accepted a position.
- 2.7 Forward results to the appropriate facility managers.

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Activation and Operation of the EOF			
Attachment 14	Logistical Support		Page: 32

NOTE: The Scheduling and Planning Manager can provide the following services to the ERO. This position has the authority to purchase or lease materials and equipment necessary to support the ERO and the Plant and to generate contracts necessary for the augmentation of staffing.

- Arranging lodging for ERO personnel who cannot return to their homes because of an evacuation.
- Arranging lodging for personnel responding from outside agencies.
- Providing for the purchase of food to ERO facility members and support personnel.
- Purchasing or renting equipment necessary to mitigate or respond to emergencies.
- Providing for additional assistance from contractors or other agreement facilities.
- Arranging for delivery of equipment and materials.
- Providing assistance for contractual issues.
- Other services as deemed necessary by the Emergency Director.

- 1 Obtain permission from the Emergency Director to initiate the requested actions.
- 2 Generate the appropriate documents necessary to perform the requested action.
- 3 UPON completion of the documents, THEN obtain the Emergency Directors approval.
- 4 IF the materials need to be brought into the 10-mile Emergency Planning Zone, THEN:
 - Obtain concurrence from the Environmental Assessment Director for delivery restrictions.
 - Discuss the delivery route with the TSC Security Director.
 - Ensure the State of Michigan EOC has been notified of the intended delivery and route.
- 5 Implement the approved request, including any restrictions.

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Activation and Operation of the EOF			
Attachment 15	County Communications		Pages: 33 - 34

NOTE: The Berrien County Emergency Operations Center may not be operational immediately after the declaration of a Site Area or General Emergency. Continue to communicate with the Berrien County Sheriff's Department until the Berrien County EOC is operational.

- 1 Contact the appropriate Berrien County facility based on the emergency classification.
 - 1.1 Alert
 - 1.1.1 Contact the Berrien County Sheriff's Department.
 - 1.1.2 UPON receipt of an EMD-32a or EMD-32b, THEN provide the following information:
 - a. Provide your name, Title (BCSD Communicator), and your telephone number.
 - b. Provide the remainder of the information as entered on the EMD-32.
 - 1.1.3 UPON receipt of any inquiries from the Sheriff's Department, THEN follow the instructions on the Information Request attachment.
 - 1.1.4 UPON completion of each communication with the Sheriff's Department, THEN hang up the phone and re-establish communications when necessary.
 - 1.2 SAE OR GE
 - 1.2.1 Contact the Berrien County Liaison at the Berrien County EOC. This individual is provided to the county EOC by AEP and is an AEP employee.
 - 1.2.2 UPON receipt of an EMD-32, THEN provide the following information:
 - a. Provide your name, Title (BCSD Communicator), and your telephone number.
 - b. Provide all information except the Protective Action Recommendations on the EMD-32a.
 - 1.2.3 UPON receipt of any inquiries from the Berrien County EOC, THEN follow the instructions on the Information Requests attachment.

Reference	RMT-2080-EOF-001	Rev. 1	Page 34 of 48
Activation and Operation of the EOF			
Attachment 15	County Communications		Pages: 33 - 34

- 1.2.4 Maintain constant communications with the Berrien County EOC. Do not hang up the phone.

Reference	RMT-2080-EOF-001	Rev. 1	Page 35 of 48
Activation and Operation of the EOF			
Attachment 16	ENS Communications		Page: 35

- 1 Contact the NRC using the Emergency Notification System phone.
 - 1.1 Dial the MAIN number listed on the phone. **IF** there is no answer, **THEN** dial the BACKUP number.
 - 1.2 Once communications is established state the following:
 - “This is the D. C. Cook Emergency Operations Facility. This is an initial contact notification to ensure communications have been established. The EOF is not activated at this time. Communications relative to plant status should continue from the control rooms.
- 2 Provide the NRC Duty Officer with the following information relative to plant conditions:
 - Current emergency classification.
 - Emergency Condition Category (ECC) under which the emergency was declared. Include the ECC number, title, and a brief description of the actual event.
 - Current plant conditions.
- 3 Continue to notify the NRC of changes such as:
 - Changes to the emergency classification
 - Status of injured personnel
 - Equipment unavailability
 - Damage control team status
 - Calculated leak rates
 - Core damage assessment
 - Fission product barrier status
- 4 **UPON** receipt of any inquiries from the NRC that cannot be answered using data already available from other sources, **THEN** follow the instructions on the Information Requests attachment.

Reference	RMT-2080-EOF-001	Rev. 1	Page 36 of 48
Activation and Operation of the EOF			
Attachment 17	HPN Communications		Page: 36

- 1 Contact the NRC using the Health Physics Notification System phone.
 - 1.1 Dial the MAIN number listed on the phone. **IF** there is no answer, **THEN** dial the BACKUP number.
 - 1.2 Once communications is established state the following:
 - “This is the D. C. Cook Emergency Operations Facility. This is an initial contact notification to ensure communications have been established. Communications relative to Health should continue from the control rooms.”
- 2 Provide the NRC Duty Officer with the following information relative to plant conditions:
 - Current emergency classification.
 - Emergency Condition Category (ECC) under which the emergency was declared. Include the ECC number, title, and a brief description of the actual event.
 - Current plant conditions.
- 3 Continue to notify the NRC of changes from the EMD-32 such as:
 - Changes to the emergency classification
 - Meteorological data
 - Radiological releases
 - Calculated offsite dose and dose rates
 - Field Team monitoring data
 - PAR
- 4 **UPON** receipt of any inquiries from the NRC that cannot be answered using data already available from other sources, **THEN** follow the instructions on the Information Requests attachment.

Reference	RMT-2080-EOF-001	Rev. 1	Page 37 of 48
Activation and Operation of the EOF			
Attachment 18	Michigan State Police Communications		Page: 37

NOTE: Phone extension 1088 exists in the control rooms and the EOF MSP Communicators position. Communications should already be established between the Control Room and the MSP.

- 1 Contact the Control Room and the MSP Operations Center by:
 - 1.1 Using EOF phone extension 1088, pick up the handset and listen for a dial tone.
 - 1.2 **IF** a dial tone is present, **THEN** using another phone, contact the Control Room MSP Communicator by dialing extension 1088.
 - 1.3 **IF** a dial tone is **NOT** present, **THEN** identify yourself and wait for a reply from the Control Room and/or the State.
- 2 **WHEN** communications is established, **THEN** provide the current activation status of the EOF.
- 3 **IF**, after activation, the EOF is **NOT** capable of faxing EMD-32 forms to the State, **THEN** transmit the information verbally.
 - Provide your name, Title (MSP Communicator), and your telephone number (1-616-465-5901, Ext. 1088).
 - Provide the remainder of the information as entered on the EMD-32a or EMD-32b.
- 4 **UPON** receipt of any inquiries from the MSP, that cannot be answered using data already available from other sources, **THEN** follow the instructions on the Information Request attachment.

IRreference	RMT-2080-EOF-001	Rev. 1	Page 38 of 48
Activation and Operation of the EOF			
Attachment 19	External Support		Page: 38

1 UPON declaration of an Alert, SAE, or GE, and activation of the EOF, THEN contact the following agencies. Obtain phone numbers and contact names from the Emergency Response Organization Phone Directory.

- American Nuclear Insurers (ANI)
- Institute of Nuclear Power Operators (INPO)
- Westinghouse

2 Provide each with the following information:

2.1 ANI

- Plant status
- Current emergency classification
- Offsite PAR
- Offsite Protective Action Orders

2.2 INPO

- Plant status
- Unavailable equipment
- Current emergency classification
- Offsite PARs
- Offsite Protective Action Orders

2.3 Westinghouse

- Plant status
- Unavailable equipment
- Current emergency classification

3 UPON receipt of any inquiries that cannot be answered using data already available from other sources, THEN follow the instructions on the Information Requests attachment.

IReference	RMT-2080-EOF-001	Rev. 1	Page 39 of 48
Activation and Operation of the EOF			
Attachment 20	Information Requests		Page: 39

NOTE: Information requests are designed to document questions and answers for information not normally available.

- 1 Generating a request.
 - 1.1 Print information request on all-purpose forms in complete and legible format.
 - 1.2 Supply the following minimal information:
 - Position requesting the information.
 - Position the request is being sent to.
 - Detailed question.
 - 1.3 Retain the bottom copy.
 - 1.4 Forward the request to the Communications Director.
 - 1.5 The Communications Director:
 - 1.5.1 Reads the request and ask for clarification if necessary.
 - 1.5.2 Forwards the request to the appropriate position.
- 2 Responding to a Request.
 - 2.1 Print responses in complete and legible format.
 - 2.2 Forward the response to the Communications Director.
 - 2.3 The Communications Director:
 - 2.3.1 Forwards a copy of the response to the originator.
 - 2.3.2 Retains the original message form.

Reference	RMT-2080-EOF-001	Rev. 1	Page 40 of 48
Activation and Operation of the EOF			
Data Sheet 1	Meteorological Forecast		Page: 13

Facility: Cook Nuclear Plant

Time/Date Forecast Obtained:

_____ / _____

Forecast Source: _____ Murray & Trettle

_____ NOAA

_____ Other _____

A. Eight Hour Forecast

1. Wind Direction: _____ Degrees From
2. Wind Speed: _____ Miles Per Hour
3. Differential Temperature: _____ °F or °C
4. Stability Class: _____
5. Remarks: _____

B. Twenty-four Hour Forecast

1. Wind Direction: _____ Degrees From
2. Wind Speed: _____ Miles Per Hour
3. Differential Temperature: _____ °F or °C
4. Stability Class: _____
5. Remarks: _____

Reference	RMT-2080-EOF-001	Rev. 1	Page 42 of 48
Activation and Operation of the EOF			
Data Sheet 3	Environmental Sample Collection		Page: 42

Environmental Sample Collection Data Sheet			
Date: _____	Time: _____	Sampled By: _____	
Type: Soil	Snow	Water	Vegetation _____
Location: Location _____			
Comments: _____			
Soil			
1) Do NOT obtain samples from disturbed areas or under trees containing foliage. 2) Remove sufficient soil from the surface of the area to fill a 4-liter sample container. 3) Mark all containers with the date, time, and samplers initials.			
Surface area of material removed _____ cm ²			
Snow			
1) Do NOT obtain samples from drifts, disturbed areas, or under trees containing foliage. 2) IF additional snow has fallen since the release occurred, THEN remove fresh snow to obtain a representative sample. 3) IF it was snowing during the plume phase, THEN take the sample to the depth of the accumulated snow exposed to the plume. 4) Collect a minimum of 12-liters of snow. 5) Mark all containers with the date, time, and samplers initials.			
Surface area of material removed _____ cm ² Depth _____ cm			
Water			
1) Do NOT collect samples from stagnant pools under trees containing foliage. 2) Avoid disturbing and collecting the surrounding sediment. 3) Collect a minimum of 4 liters of water. 4) Mark all containers with the date, time, and samplers initials.			
Sample obtained from a: Stagnant Pool Running Tributary			
Vegetation			
1) Do NOT obtain samples from disturbed areas or under trees containing foliage. 2) Cut as close to the root as possible, when sampling ground vegetation. 3) Remove material from the outer, exposed areas only, when sampling trees or bushes. 4) Collect only the normally edible portion, when sampling foodstuffs. 5) Collect a minimum of 12 liters of vegetation. 6) Mark all containers with the date, time, and samplers initials			
Surface area of material removed _____ cm ²			

Reference	RMT-2080-EOF-001	Rev. 1	Page 43 of 48
Activation and Operation of the EOF			
Figure 1	Definitions and Abbreviations		Pages: 43 - 44

Term	Meaning
AEP	American Electric Power
ANI	American Nuclear Insurers
BCSD	Berrien County Sheriff's Department
CDE	Committed Dose Equivalent
CLOCA	Containment Loss of Coolant Accident
DAP	Dose Assessment Program
EAD	Environmental Assessment Director
ECC	Emergency Condition Category
ED	Emergency Director
EMD-32a	Nuclear Plant Event Notification form
EMD-32b	Nuclear Plant Event Technical Data form
EOC	Emergency Operations Center
EOF	Emergency Operations Facility
ENS	Emergency Notification System
ERO	Emergency Response Organization
FMT	Field Monitoring Team
GE	General Emergency
HPN	Health Physics Network
INPO	Institute of Nuclear Power Operations
JPIC	Joint Public Information Center
KI	Potassium Iodine thyroid blocking agent

Reference	RMT-2080-EOF-001	Rev. 1	Page 44 of 48
Activation and Operation of the EOF			
Figure 1	Definitions and Abbreviations		Pages: 43 - 44

Term	Meaning
MSP	Michigan State Police
NOAA	National Oceanic and Atmospheric Administration
NRC	Nuclear Regulatory Commission
OSC	Operations Support Center
PAO	Protective Action Order
PAR	Protective Action Recommendation
PC	Personal Computer
PET	Plant Evaluation Team
PPC	Plant Process Computer
PORV	Power Operated Relief Valve
RDR	Real-Time Data Repository
RMS	Radiation Monitoring System
SAE	Site Area Emergency
STD	Standard Deviation
TEDE	Total Effective Dose Equivalent
TSC	Technical Support Center
X/Q	Mathematical term for Dispersion Coefficient
ΔT	Net Temperature Difference
ΔZ	Net Vertical Distance

Reference	RMT-2080-EOF-001	Rev. 1	Page 45 of 48
Activation and Operation of the EOF			
Figure 2	Position Descriptions		Pages: 45 - 48

The position descriptions provided are intended as guidance. Deviations and additions to these descriptions are allowed as long as the accomplished objectives can be achieved.

Berrien County Liaison

- Reports to the Berrien County EOC at an SAE or GE. He should be dispatched at an Alert if escalation is expected.
- Assists county personnel with interpretation of data supplied by plant and state facilities as necessary.

Boardwriter

- Reports to the Communications Director.
- Obtains data from the other facilities and the EOF that is considered common to all facilities and the affected control room in a chronological order.
- Provides other facilities with information and decisions generated in the EOF.
- Maintains the Emergency classification Board with the proper emergency classification, classification time, and reasons for the classification.
- Documents incoming messages or inquiries to other EOF personnel on all-purpose message forms and forwards them to the Communication Director.
- Provides the EOF runners with copies of board data at, at least, 15-minute intervals.

Berrien County Sheriff Department Communicator

- Reports to the Communications Director.
- Prior to activation of the Berrien County EOC, provides plant status to the county.
- Upon activation of the Berrien County EOC, provides plant status and radioactive release data to the Berrien County Liaison.

Communications Director

- Reports to the Emergency Director.
- Directs and coordinates communication activities within the facility.

Computer Analyst

- Reports to the Communications Director.
- Provides for all repair/replacement of computer related equipment in the EOF.
- Operates the PPC/RDR used to display data throughout the EOF.

Emergency Director

- Is responsible for the overall command and control of the emergency.
- Assumes responsibility for Classification, Notification and PAR's.
- Communicates with senior state and county officials on plant conditions and PARs.
- Reviews press releases.
- Directs and coordinates EOF activities.

Reference	RMT-2080-EOF-001	Rev. 1	Page 46 of 48
Activation and Operation of the EOF			
Figure 2	Position Descriptions		Pages: 45 - 48

- Activates the EOF.
- Maintains regular communication with the other facility managers on the Managers Bridge.
- Updates EOF members through facility briefs on the status of the emergency approximately every 30 minutes.
- Informs the Environmental Assessment Director of changes in plant parameters that may effect off-site releases or PARs.

Emergency Planning

- Reports to the Emergency Director
- Provides facility oversight.
- Provides guidance to the ERO to ensure critical functions are completed in a timely manner.

Engineering Design & Site Services Manager

- Reports to the Emergency Director.
- Coordinates engineering and technical support from sources outside the ERO.
- Provides engineering support and analysis to the EOF.

ENS Communicator

- Reports to the Communications Director.
- Provides information to the NRC relative to plant equipment conditions and plant status.

Environmental Assessment Coordinator

- Reports to the Environmental Assessment Director.
- Evaluates plant effluent readings for indications of radiological releases.
- Evaluates off-site field team data.
- Performs dose assessment.
- Generates EMD-32 Nuclear Plant Accident Notification forms.
- Make recommendations to the Environmental Assessment Director relative to radioactive releases and plant status.

Environmental Assessment Director

- Reports to the Emergency Director.
- Directs and coordinates offsite radiological assessment.
- Provides basic direction to the Environmental Assessment Coordinators for performing dose assessment.
- Generates PARs
- Directs the Field Team Coordinator for placement of survey vehicles.
- Provides overall radiological habitability assessments of the EOF.

Reference	RMT-2080-EOF-001	Rev. 1	Page 47 of 48
Activation and Operation of the EOF			
Figure 2	Position Descriptions		Pages: 45 - 48

Fax Operator

- Reports to the Communications Director.
- Provides Fax services to personnel within the EOF.
- Forwards all copies of incoming Fax's to the facility Runners for distribution and maintenance.
- Forwards all original outgoing Fax's and data sheets to the Communications Director.

Field Monitoring Team Coordinator

- Reports to the Environmental Assessment Director.
- Directs off-site monitoring teams for tracking of radioactive releases (Plumes).
- Directs off-site monitoring teams for collection of post plume samples.
- Provides data plots to the Environmental Assessment Team showing plume locations and footprints.

HPN communicator

- Reports to the Communications Director.
- Provides information to the NRC relative to radiological conditions on-site and off-site releases.
- Provides PARs and Protective Action Orders information.

Industry Support Coordinator

- Reports to the Communications Director.
- Provides communications links to ANI, Westinghouse, and INPO relative to plant status and radioactive releases.

Michigan State Police Communicator

- Reports to the Communications Director
- Provides plant status and PAR data to the State of Michigan EOC.

Michigan State Police Liaison

- Reports directly to the State of Michigan Emergency Operations Center in Lansing, Michigan.
- Reports to the State of Michigan EOC at a SAE or GE. He should be dispatched at an Alert if escalation is expected.
- Obtains answers to inquiries form the State of Michigan and ensuring these responses are relayed to the State.
- Assists state personnel with interpretation of data supplied by plant facilities as necessary.

Reference	RMT-2080-EOF-001	Rev. 1	Page 48 of 48
Activation and Operation of the EOF			
Figure 2	Position Descriptions		Pages: 45 - 48

Operations Advisor

- Reports to the Emergency Director.
- Assists the ED with classification determinations.
- Provides EOF personnel and off-site agencies with plant status clarifications.

Reactor Physics Analyst

- Reports to the Engineering Design & Site Services Manager.
- Provides EOF personnel with the current core status.
- Determines the current reactor coolant status used in dose assessment.
- Coordinates core damage assessment with TSC-PET personnel.

Regulator Affairs Coordinator

- Reports to the Emergency Director.
- Provides guidance to the Emergency Director for license-based decisions and actions.
- Primary EOF contact for the NRC site response team.

Runner

- Reports to the Communications Director.
- Picks up and delivers copies of forms generated by EOF personnel needing either faxing to other facilities or duplication and distribution to EOF personnel.

Scheduling & Planning Manager

- Reports to the ED and Engineering Design and Site Services Manager.
- Provides support for items such as meals, transportation, temporary lodging, and other logistical issues for personnel within the ERO and other organizations responding to the facility.
- Purchases, leases, or contracts with suppliers for equipment, materials, or personnel necessary to support the emergency.

Security Director

- Reports to the Emergency Director.
- Maintains control of personnel entering and exiting the facility.
- Maintains control of unauthorized personnel within the owner controlled area at the Buchanan Office Building.
- Provides transportation to and from the plant as necessary.
- Arranges shift designations.

Telecommunications Personnel

- Reports to the Communications Director.
- Provide any communications equipment or repair/replacement necessary to support the emergency facilities.

REVIEW AND APPROVAL TRACKING FORM

Procedure Information:			
Number: <u>RMT-2080-EOF-001</u>	Rev. <u>1</u>	Change: <u>0</u>	
Title: <u>Activation and Operation of the EOF</u>			
Category (Select One Only)			
<input type="checkbox"/> Correction (Full Procedure)	<input checked="" type="checkbox"/> Change (Full Procedure) with Review of Change Only		
<input type="checkbox"/> Correction (Page Substitution)	<input type="checkbox"/> Change (Page Substitution) with Review of Change Only		
<input type="checkbox"/> Cancellation	<input type="checkbox"/> New Procedure or Change with Full Review		
<input type="checkbox"/> Superseded (list superseding procedures): _____			
Associated Configuration Impact Assessments:			
Change Driver/CDI Tracking No(s): _____			<input checked="" type="checkbox"/> N/A
Required Reviews:			
Cross-Discipline Reviews:		Programmatic Reviews:	
<input type="checkbox"/> Chemistry	<input type="checkbox"/> Training	<input type="checkbox"/> ALARA	<input type="checkbox"/> Performance Assurance
<input type="checkbox"/> Maintenance	<input type="checkbox"/> Work Control	<input type="checkbox"/> Bus. Services Proc Grp	<input type="checkbox"/> Reactivity Mgmt Team
<input type="checkbox"/> NDM	<input type="checkbox"/> _____	<input type="checkbox"/> Component Engineering	<input type="checkbox"/> SPS (Safety & Health)
<input type="checkbox"/> Operations	<input type="checkbox"/> _____	<input type="checkbox"/> Design Engineering	<input type="checkbox"/> Surveillance Section
<input type="checkbox"/> PA/PV	<input type="checkbox"/> _____	<input type="checkbox"/> Emerg Oper Proc Grp	<input type="checkbox"/> System Engineering
<input type="checkbox"/> Reg Affairs	<input type="checkbox"/> _____	<input type="checkbox"/> Environmental	<input type="checkbox"/> _____
<input type="checkbox"/> RP	<input checked="" type="checkbox"/> None Required	<input type="checkbox"/> ISI/IST Coordinator	<input checked="" type="checkbox"/> None Required
<input checked="" type="checkbox"/> Cognizant Org Review: <u>Cindy Draffenius</u>		Date: <u>3/20/02</u>	
<input checked="" type="checkbox"/> Technical Review: <u>DKM</u>		Date: <u>3/21/02</u>	
Concurrence:			
<input type="checkbox"/> Ops Mgr Concurrence: <u>N/A</u>		Date: <u> / / </u>	
<input checked="" type="checkbox"/> Owner Concurrence: <u>Paul Del</u>		Date: <u>3/21/02</u>	
Package Check:			
Updated Revision Summary attached?		<input checked="" type="checkbox"/> Yes	
10 CFR 50.59 Requirements complete?		Tracking No.: <u>2002-0520-00</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	
Implementation Plan developed? <u>Paul Del</u>		(Ref Step 3.4.18) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	
Package Complete: <u>Paul Del</u>		Date: <u>3/22/02</u>	
Approvals:			
PORC Review Required: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Mtg. No.: <u>3932</u>	
Administrative Hold Status: <input type="checkbox"/> Released <input type="checkbox"/> Reissued <input checked="" type="checkbox"/> N/A		CR No.: _____	
Approval Authority Review/Approval: <u>JE Block</u>		Date: <u>4/3/02</u>	
Expiration Date/Ending Activity: <u>N/A</u>		Effective Date: <u>5/3/02</u>	
Periodic Review:			
Periodic Review conducted?		(Data Sheet 5 Complete) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Follow-up Actions:			
Commitment Database Updated?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A	
NDM notified of new records or changes to records that could affect record retention?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A	

NDM Use Only	NUCLEAR DOCUMENT MANAGEMENT SECTION	Office Information For Form Tracking Only – Not Part of Form	
	MAY 03 2002	This form is derived from the information in PMP-2010-PRC-002, Procedure Correction, Change, and Review, Rev. 9a, Data Sheet 1, Review and Approval Tracking Form.	
	CONTROLLED DOCUMENT	Page <u>1</u> of <u>7</u>	

REVISION SUMMARY

Number: RMT-2080-EOF-001

Revision: 1

Change: 0

Title: Activation and Operation of the EOF

Revision 1 eliminates the EOF Manager position and positions which were required for communication purposes when the JPIC was located in the Lake Michigan Mendal Center. This revision also incorporates changes made because of changes in the State of Michigan notification forms and processes and the changes to the Dose Assessment computer program. Revision 1 also adds an attachment for classification. Though classifications will continue using the classification procedure, the new attachment provides instructions for follow-up actions not in the classification procedure.

Section or Step	Change/Reason For Change
2.1	Change: Changed EOF Manager to Emergency Director (ED) Reason: The EOF Manager position is being eliminated. The ED is assuming these responsibilities.
2.6	Change: Under "Briefings" changed EOF Manager to Emergency Director Reason: The EOF Manager position is being eliminated. The ED is assuming these responsibilities.
2.6	Change: Under "Classification" changed reference from PMP-2080-EPP-001 to Attachment 7. Reason: The Classification procedure does not contain all actions necessary by plant personnel when a classification is upgraded. Attachment 7 now provides those supplemental instructions.
2.6	Change: Changed the numbering for references 7 - 19 to 8 - 20. Reason: Attachment 7, "Classification" was added to the procedure. Subsequent attachments were renumbered accordingly.
Step 3.1.2	Change: Corrected Use Reference for the Core Damage Assessment Procedure Reason: Incorrect reference. 12-RSM-2080-CDA-002 does not exist.
Attachment 1, Note in Step 1.3	Change: Added exception for ED Reason: Non-qualified individuals cannot fill the Emergency Director position.
Attachment 1, Step 1.3	Change: Deleted EOF Manager Reason: The EOF Manager position is being eliminated. The ED is assuming these responsibilities.

Office Information For Form Tracking Only - Not Part of Form

This is a free-form as called out in PMP-2010-PRC-002, Procedure Correction, Change, and Review, Rev. 9a.

Page 2 of 7

REVISION SUMMARY

Number: RMT-2080-EOF-001

Revision: 1

Change: 0

Title: Activation and Operation of the EOF

Section or Step	Change/Reason For Change
Attachment 1, Step 2	<p>Change: Clarified step to directive statements. Changed times based on new state requirements from 15 minutes to 30 minutes for EMD-32b Technical Data sheets. Added bullet to determine the time the last EMD-32a or b was issued from the control rooms.</p> <p>Reason: Emergency Directors were not assuming responsibilities when the facility activated. The State of Michigan requires EMD-32b forms on a 30-minute cycle. The addition of the bullet will help Emergency Directors from transmitting duplicate notification forms to the state and county during the transition.</p>
Attachment 1, Steps 3, 4, and 5	<p>Change: Clarified steps to directive statements</p> <p>Reason: Provide Emergency Directors with more distinct instructions for steps to activate the EOF.</p>
Attachment 2, Step 3.1	<p>Change: Added "Facility Priorities"</p> <p>Reason: Provide briefer with additional instructions to enhance brief.</p>
Attachment 4	<p>Change: Attachment was completely revised based on the new Dose Assessment Program (DAP).</p> <p>Reason: The new DAP computer program has on screen prompts and instant helps available for all fields. The program also allows the user to move between screens unlike the old version. Therefore, many of the instructions in revision 0 to this procedure are no longer necessary as they are available in the program.</p>
Attachment 6, Step 1.5	<p>Change: Moved the "Day" heading to the right and inserted a line to block the section.</p> <p>Reason: The line is necessary to indicate that the Wind Speed is applicable to the Day and Night sections of the table. Previously the wind speed appeared to only apply to the Day section of the table.</p>

Office Information For Form Tracking Only – Not Part of Form

This is a free-form as called out in PMP-2010-PRC-002, Procedure Correction, Change, and Review, Rev. 9a.

Page 3 of 7

REVISION SUMMARY

Number: RMT-2080-EOF-001

Revision: 1

Change: 0

Title: Activation and Operation of the EOF

Section or Step	Change/Reason For Change
Attachment 7	<p>Change: Added attachment 7, "Classifications".</p> <p>Reason: PMP-2080-EPP-101 does not supply instructions for completion of the EMD-32a, Nuclear Plant Event Notification form, additional instructions for transmitting the information to the appropriate off-site agencies, or notifying control room personnel for follow-up actions. Attachment 7 now provides these instructions.</p>
Attachment 8	<p>Change: Added steps to include the use of the EMD-32a and EMD-32b notification forms.</p> <p>Reason: The State of Michigan has revised the EMD-32 notification form and added an EMD-32 technical notification form. The attachment was changed to clarify the proper use of the new forms and to provide instructions for notification of the state or county centers.</p>
Attachment 9, Step 7	<p>Change: Added instructions for the EMD-32a and EMD-32b forms along with appropriate time frames. Changed instructions for distribution to JPIC personnel.</p> <p>Reason: The State of Michigan has revised the EMD-32 notification form and added an EMD-32 technical notification form. The JPIC has moved to the Buchanan office building. Transmission is no longer necessary.</p>
Attachment 12, Position Table	<p>Change: Deleted PPC Operator, Communicator-ENC/JPIC, and EOF Manager.</p> <p>Reason: Positions are being eliminated. The EOF Computer Analyst is assuming the PPC Operators duties. The ED is assuming the EOF Managers duties. The ENC/JPIC position is no longer needed because the JPIC is moving to the Buchanan office building.</p>
Attachment 14, Step 1	<p>Change: Deleted EOF Manager</p> <p>Reason: The EOF Manager position is being eliminated. The ED is assuming these responsibilities.</p>

Office Information For Form Tracking Only - Not Part of Form

This is a free-form as called out in PMP-2010-PRC-002, Procedure Correction, Change, and Review, Rev. 9a.

Page 4 of 7

REVISION SUMMARY

Number: RMT-2080-EOF-001

Revision: 1

Change: 0

Title: Activation and Operation of the EOF

Section or Step	Change/Reason For Change
Attachment 15, Step 1.1.2	Change: Changed EMD-32 to EMD-32a or EMD-32b. Reason: The EMD-32 notification form was revised to two forms, the EMD32a and EMD-32b.
Attachment 15, Steps 1.1.2.a and b.	Change: Removed reference to Items used on the EMD-32 forms. Reason: The new EMD-32 forms do not have item number references anymore.
Attachment 15, Step 1.2.2.b	Change: Combined sub-steps b, c, and d. Removed reference to Items used on the EMD-32 forms. Changed wording to provide the same instructions but with reference to the appropriate section of the new EMD-32 forms. Reason: The new EMD-32 forms do not have item number references. The wording change specifically addresses the PAR section of the EMD-32a form.
Attachment 18, Step 3	Change: Removed reference to Items used on the EMD-32 forms. Reason: The new EMD-32 forms do not have item number references anymore.
Data Sheet 3, Under Vegetation, Step 5	Change: Clarified instructions to state the amount of vegetation to be collected. Reason: Previous instruction lead users to believe a 12 liter sample container existed.
Figure 1 under EMD-32	Change: Deleted the EMD-32 and added the EMD-32a and EMD-32b along with the appropriate meanings. Reason: The EMD-32 form was replaced with the EMD-32a and EMD-32b forms when the State of Michigan revised the forms.
Figure 2, Under Berrien County Liaison	Change: Changed ...EOC at a SAE to ...EOC at an SAE Reason: Grammatically incorrect.
Figure 2, Under Communications Director	Change: Changed EOF Manager to Emergency Director Reason: The Communications Director now reports to the Emergency Director.

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REVISION SUMMARY

Number: RMT-2080-EOF-001

Revision: 1

Change: 0

Title: Activation and Operation of the EOF

Section or Step	Change/Reason For Change
Figure 2, Under Communications Director	Change: Deleted bullet for assuming duties of EOF Manager Reason: The EOF Manager position is being eliminated. The ED is assuming these responsibilities. The Communications Director is not qualified to assume the ED duties.
Figure 2, Under Computer Analyst	Change: Added bullet to include PPC/RDR operations responsibilities to this position. Reason: This responsibility belonged to the Plant Process Computer Operator. That position has been eliminated.
Figure 2, Under Emergency Director	Change: Deleted bullet for ED to assume the EOF Managers responsibilities. Added bullets to include EOF Managers responsibilities that were eliminated from the EOF Managers position description. Reason: The EOF Manager position is being eliminated therefore this is a redundant statement. The ED is assuming the activation and communications responsibilities from the EOF Manager.
Figure 2, Under Emergency Planning	Change: Added Position Reason: Position added to provide over site to the ED during emergency situations.
Figure 2, Under ENC/JPIC Communicator	Change: Removed the position Reason: The JPIC has been moved to the Buchanan Office Building. This interface is no longer necessary since individuals in the EOF and JPIC can now interface directly without going through a communicator.
Figure 2, Under Engineering Design & Site Services Manager	Change: Changed EOF Manager to Emergency Director Reason: The EOF Manager position is being eliminated. The ED is assuming these responsibilities.
Figure 2, Under ENS Communicator	Change: Moved the position in the figure into the correct alphabetical order. Reason: Order correction.

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REVISION SUMMARY

Number: RMT-2080-EOF-001

Revision: 1

Change: 0

Title: Activation and Operation of the EOF

Section or Step	Change/Reason For Change
Figure 2, Under Environmental Assessment Director	Change: Changed EOF Manager to Emergency Director Reason: The EOF Manager position is being eliminated. The ED is assuming these responsibilities.
Figure 2, Under EOF Manager	Change: Deleted EOF Manager position description from the figure. Reason: The EOF Manager position is being eliminated. The ED is assuming these responsibilities.
Figure 2, Under HPN Communicator	Change: Moved the position in the figure into the correct alphabetical order. Reason: Order correction.
Figure 2, Under Operations Advisor	Change: Added the new position. Reason: Position added to assist the ED with Emergency Classifications and interpretation of plant conditions.
Figure 2, Under Plant Process Computer Operator	Change: Deleted Plant Process Computer Operator position description from the figure Reason: The PPC Operator position is being eliminated. The Computer Analyst is assuming these responsibilities.
Figure 2, Under Regulatory Affairs Coordinator	Change: Changed EOF Manager to Emergency Director Reason: The EOF Manager position is being eliminated. The ED is assuming these responsibilities.

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Reference		Effective Date: 5/3/02	
P. E. Holland Writer	P. E. Holland Owner	Emergency Planning Cognizant Organization	

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1 PURPOSE AND SCOPE

- 1.1 This procedure provides guidance to Emergency Operations Facility (EOF) personnel during emergencies.
- 1.2 Use of this procedure is restricted to emergency conditions or drills/exercises only.

NOTE:	10 CFR 50.54(x) and (y) describe the actions required if deviation from Technical Specifications or License Condition becomes necessary.
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2 DETAILS

- 2.1 The Emergency Director (ED) implements this procedure.
- 2.2 Use Attachment 1, Activation, when an emergency response is initiated.
- 2.3 Use Figure 1, Definitions and Abbreviations for a listing of abbreviations, acronyms, and their meanings.
- 2.4 Figure 2, Position Descriptions contains supplemental directions for ERO personnel.
- 2.5 IF additional assistance from other utilities or agencies is required THEN refer to the list in Appendix C of the Emergency Plan. Phone numbers are available in the Emergency Response Organization Phone Directory.

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NOTE: O = Optional M = Mandatory

2.6 Perform activities based on the following table.

Activity	Attachment/ Procedure	Responsible Position	UE	Alert	SA	GE
Briefings	2	ED	M	M	M	M
Habitability	3	EAD			M	M
Dose Assessment (EMD-32)	4	EAD		O	M	M
PAR	8	ED				M
Core Damage Assessment	PMP-2081- EPP.105	Reactor Physics Analyst		O	O	O
Classification	7	ED	M	M	M	M
Document Transmission / Distribution	9	Communications Director	O	M	M	M
Field Team Communications	10	FMT Coordinator		O	M	M
Environmental Sampling	11	Field Teams				
Logistical Support	14	Scheduling/Planning Manager			O	O
Shift Designation	12	Security Director	O	O	O	O
Information Requests	20	Communications Director				
External Support	19	Industry Support Communicator		O	O	O
ENS Communications	16	ENS Communicator		M	M	M
HPN Communications	17	HPN Communicator		M	M	M
County Communications	15	Berrien County Communicator			M	M
State Communications	18	MSP Communicator			M	M
Termination/Recovery	12-RMT-2080- EOF-002	ED		M	M	M

3 REFERENCES

3.1 Use References:

- 3.1.1 PMP-2080-EPP-101, Emergency Classification.
- 3.1.2 PMP-2081-EPP.105, Initial Core Damage Assessment.
- 3.1.3 12-RSM-2080-EOF-002, Emergency Termination and Recovery.
- 3.1.4 Donald C. Cook Nuclear Plant Emergency Plan.

Reference	RMT-2080-EOF-001	Rev. 1	Page 5 of 48
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3.2 Writing References:

3.2.1 Source References.

- a. Donald C. Cook Nuclear Plant Emergency Plan.
- b. EPA 400-R-92-001 Manual of Protective Action Guides and Protective Actions for Nuclear Incidents.
- c. Dose Assessment Program – Computer Program, Rev. 7.
- d. Meteorology and Atomic Energy 1968. U. S. Atomic Energy Commission.
- e. Evacuation Time Estimates for the D. C. Cook Nuclear Plant Plume Exposure Emergency Planning Zone HMM Associates July 1992 (Rev.1).

3.2.2 General References

- a. Michigan Emergency Preparedness Plan.
- b. Berrien County Emergency Preparedness Plan.

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Activation and Operation of the EOF			
Attachment 1	Activation		Pages: 6 - 7

NOTE: The Emergency Plan requires activation of the EOF within 60 minutes of the time of a declaration of an Alert, SAE, or GE.

1 Ensure the facility has the following or an acceptable alternate prior to activation.

1.1 Equipment

- Facility Power
- Plant Process Computer (RDR)
- Dose Assessment Programs and Printers
- Continuous Air and Area Radiation Monitor
- Clocks set with the Plant Process computer

1.2 Communications

- 1.2.1 Telephones, Fax machines, or Radios to:
- State of Michigan Emergency Operations Center
 - Berrien County Emergency Operations Center
- 1.2.2 Field Monitoring Team Radios
- 1.2.3 Communications with the Control Room
- 1.2.4 Managers Telephone Bridge

1.3 Personnel

NOTE: With the exception of the Emergency Director, the use of non-qualified personnel is permissible provided they are briefed and understand the position specific requirements.

- ☐ Emergency Director
- ☐ Communications Director
- ☐ Environmental Assessment Director
- ☐ Boardwriter
- ☐ Communicator - Berrien County Sheriff Department
- ☐ Communicator - Michigan State Police
- ☐ Communicator -ENS

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Activation and Operation of the EOF			
Attachment 1	Activation		Pages: 6 - 7

- 2 Perform the following:
 - Assume responsibilities for communications with offsite agencies.
 - Assume responsibilities for Classification, Notification and PARs from the SEC.
 - Determine the time the control room will issue their last EMD-32.
 - Determine the time the EOF will issue the first EMD-32, Nuclear Plant Event form. The EMD-32a must be issued within 15 minutes of a classification or PAR change. The EMD-32b must be issued within 30 minutes of the last EMD-32a or EMD-32b.
- 3 Perform a facility brief.
- 4 Activate the facility.
- 5 Inform the other ERO facilities that the EOF has been activated.

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Activation and Operation of the EOF			
Attachment 2	Briefings		Page: 8

- 1 Announce the briefing time 2 to 3 minutes prior to it beginning.
- 2 Ensure everyone is paying attention, there are no phone conversations or side discussions taking place, and personnel remain stationary during the brief.
- 3 Perform the briefing. (Time limits are for reference only.)
 - 3.1 **Current Plant Status (1- Minute Maximum)**
 - Major on-going events
 - Major Equipment out of service
 - Prognosis
 - Facility priorities
 - 3.2 **Current Classification (30-Seconds Maximum)**
 - PAR in effect
 - Anticipated changes in classification or PAR
 - 3.3 **Status of the EOF (for initial briefings up to and including activation)**
 - Activation Status (When command and control will be taken over from the Control Room),
 - Problems delaying activation,
 - Time the first EMD-32 is required for transmission to the State (at activation only).
 - 3.4 **Ask the EOF team for updates on important information**
 - Don't solve the problems here. Delegate; then update at the next briefing if necessary.
 - 3.5 **Ask the EOF team if anyone is having any problems**
 - Don't solve the problems here. Delegate; then update at the next briefing if necessary.

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Activation and Operation of the EOF			
Attachment 3	Habitability		Page: 9

NOTE: The EOF has no specific habitability requirements because it is outside the 10-mile Emergency Planning Zone. Actions taken are at the discretion of the EAD.

- 1 IF a radioactive plume is expected to pass over the EOF, THEN:
 - Start the continuous air monitor.
 - Issue dosimetry to all EOF occupants.
 - Shelter or evacuate non-essential personnel in the Buchanan Office Building.
 - Turn off or close dampers on ventilation systems that draw air from outside the facility.
 - Have personnel remain in the EOF and office building.
 - Perform routine surveys to assess dose rates, airborne activity, and post plume contamination.

- 2 Maintain the dose to the occupants of the EOF below the following for the duration of the emergency.
 - TEDE < 5 Rem
 - CDE Thyroid < 25 Rem

Reference	RMT-2080-EOF-001	Rev. 1	Page 10 of 48
Activation and Operation of the EOF			
Attachment 4	Dose Assessment		Pages: 10 - 12

- 1 **UNLESS** the State of Michigan EOC has been notified in advance of a delay or change in frequency, **THEN** transmit Nuclear Plant Event Technical Data forms (EMD-32b) to the State of Michigan at least every 30 minutes.
- 2 Obtain and record an 8-hour and 24-hour weather forecast on Data Sheet 1, Meteorological Forecast.
 - 2.1 Forecasts are normally obtained through Murray and Trettle. The phone number is available in the Emergency Response Organization Phone Directory.
 - 2.2 Provide Data Sheet 1, Meteorological Forecast, to the runners for distribution.
 - 2.3 Obtain subsequent forecasts approximately every 8 hours.
- 3 **IF** a projected dose is **NOT** available from the Dose Assessment Program, **THEN** use projected doses based on measured dose rates from the field and expected duration of the exposure time.
- 4 **IF** projected doses are **NOT** available and a PAR is necessary, **THEN** use the default PAR. See Attachment 8, PAR.
- 5 Obtain Meteorological Data. See Attachments 5, Meteorological Data, and 6, Pasquill Category, for additional information and help.
- 6 Obtain radiological data as applicable.
 - 6.1 Radiation Monitoring System (RMS) data listed in order of preference:
 - PPC/RDR
 - RMS Display Terminals
 - Technical Support Center
 - Direct readings from the Local Area Data Acquisition Modules
 - 6.2 Field Team data
 - Radiation reading in R/hr
 - Iodine concentration in $\mu\text{Ci/cc}$
 - Sample location

Reference	RMT-2080-EOF-001	Rev. 1	Page 11 of 48
Activation and Operation of the EOF			
Attachment 4	Dose Assessment		Pages: 10 - 12

- 7 Determine the Coolant Type from:
 - EOF Reactor Physics Analyst
 - Technical Support Center Plant Evaluation Team
 - GO TO Initial Core Damage Assessment procedure, PMP-2081-EPP-105.
- 8 Determine the Projected Duration of the Release.
 - IF the projected duration of the release is unknown, THEN use 1-hour.
 - IF releases are occurring from multiple points, THEN use the longest projected duration.
- 9 Determine if an Actual Release versus a Potential Release is occurring.
 - 9.1 An actual release is occurring when any of the following are true:
 - Valid indication on release point radiation monitoring system channels are present that are associated with a classified event, or
 - Measured offsite radiation readings indicate a release is in progress, or
 - Indications exist that an unmonitored release may be occurring.
 - 9.2 A potential release exists if calculated data is postulated based on present plant conditions (i.e., Containment Loss Of Coolant Accident, CLOCA).
- 10 Complete the EMD-32b form.
 - The EMD-32b, Release/Offsite Dose Data section, is only required to be completed if a release is or is suspected to be occurring.
 - The EMD-32b, Measured Offsite Radiation Levels section, needs only be reported when available.
- 11 Review the EMD-32b form to determine if a change in classification or PAR is required.
- 12 IF a change is necessary, THEN:
 - The ED approves the EMD-32b form.
 - Follow the instructions on the Classification or PAR attachment.

Reference	RMT-2080-EOF-001	Rev. 1	Page 12 of 48
Activation and Operation of the EOF			
Attachment 4	Dose Assessment		Pages: 10 - 12

13 IF a change is not necessary, THEN:

- The ED approves the EMD-32b form.
- Provide the EMD-32b form to the Fax operators for transmittal.

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Activation and Operation of the EOF			
Attachment 5	Meteorological Data		Pages: 13 - 14

NOTE: Wind speeds are expressed as Miles per Hour. To convert Knots to Miles per Hour multiply by 1.15.

1 Consider lake breezes in the dose assessment process if all the following are true:

- The current date is between April 15 and October 31,
- The current time is between 1-hour after sunrise and 1-hour after sunset,
- Ambient temperature measured at the main tower must be greater than the Lake Michigan temperature,
- Wind speed on the shoreline tower is ≤ 13.4 Miles per Hour,
- Pasquill category must be A, B, C, or D,
- Shoreline tower wind direction is **FROM** 205° to 23° (i.e., Wind is from the lake).

1.1 Obtain meteorological data from one of the following sources. Sources are listed in order of preference.

1.1.1 Plant Process Computer

- 10 Meter Main
- 10 Meter Backup
- 60 Meter Main

1.1.2 Murray and Trettle

- a. Obtain the phone number from the Emergency Response Organization Phone Directory.
- b. Request to speak to the Nuclear Emergency Director.
- c. Obtain
 - Wind Speed in Miles per Hour
 - Wind Direction from, in degrees
 - Pasquill Category as a letter **NOT** a number
 - Eight and 24-hour meteorological forecast

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Attachment 5	Meteorological Data		Pages: 13 - 14

1.1.3 Manual Acquisition of Meteorological Tower Data

- Contact the Technical Support Center and request a team be dispatched to collect this data.

1.1.4 National Oceanic and Atmospheric Administration (NOAA)

- Obtain the plants NOAA phone extension from the Emergency Response Organization Phone Directory.
- Use any NOAA weather radio.

Reference	RMT-2080-EOF-001	Rev. 1	Page 15 of 48
Activation and Operation of the EOF			
Attachment 6	Pasquill Category		Page: 15

- 1 Obtain Pasquill Category data from one of the following sources. Sources are listed in order of preference.

- 1.1 Plant Process Computer

- 1.2 Temperature Differential

$\Delta T^{\circ}F = T @ 60m - T @ 10m$ (Z = 50 Meters)	Pasquill Category	$\Delta T^{\circ}C = T @ 60m - T @ 10m$ (Z = 50 Meters)
$\Delta T^{\circ}F \leq -1.8$	A	$\Delta T^{\circ}C \leq -1.0$
$-1.8 < \Delta T^{\circ}F \leq -1.6$	B	$-1.0 < \Delta T^{\circ}C \leq -0.9$
$-1.6 < \Delta T^{\circ}F \leq -1.4$	C	$-0.9 < \Delta T^{\circ}C \leq -0.8$
$-1.4 < \Delta T^{\circ}F \leq -0.5$	D	$-0.8 < \Delta T^{\circ}C \leq -0.3$
$-0.5 < \Delta T^{\circ}F \leq +1.3$	E	$-0.3 < \Delta T^{\circ}C \leq +0.7$
$+1.3 < \Delta T^{\circ}F \leq +3.6$	F	$+0.7 < \Delta T^{\circ}C \leq +2.0$
$+3.6 < \Delta T^{\circ}F$	G	$+2.0 < \Delta T^{\circ}C$

- 1.3 Standard Deviation of the Horizontal Wind Direction (STD)

STD	Pasquill Category
$STD \geq 22.5$	A
$22.5 \geq STD > 17.5$	B
$17.5 \geq STD > 12.5$	C
$12.5 \geq STD > 7.5$	D
$7.5 \geq STD > 3.8$	E
$3.8 \geq STD > 2.1$	F
$2.1 \geq STD$	G

- 1.4 Murray and Trettle

- See Attachment 5, Meteorological Data.

- 1.5 Observation

Incoming Solar Radiation (Day Only) (1 hour after sunrise to 1 hour before sunset)					
Sun Angle Degrees from Horizon	Cloud Cover				
	None	1/8 - 5/8	5/8 - 7/8		8/8
			Middle Clouds	Low Clouds	
15° - 35°	Slight	Slight	Slight	Slight	Slight
35° - 60°	Moderate	Slight	Slight	Slight	Slight
> 60°	Strong	Strong	Moderate	Slight	Slight

Wind Speed @ 10 meters Miles per Hour (Mph)	Day			Night	
	Incoming Solar Radiation			Thinly Overcast or ≥ 4/8 Low Clouds	≤ 3/8 Clouds
	Strong	Moderate	Slight		
Mph ≤ 5	A	A - B	B	--	--
5 < Mph ≤ 7	A - B	B	C	E	F
7 < Mph ≤ 11	B	B - C	C	D	E
11 < Mph ≤ 13	C	C - D	D	D	D
Mph > 13	C	D	D	D	D

Reference	RMT-2080-EOF-001	Rev. 1	Page 16 of 48
Activation and Operation of the EOF			
Attachment 7	Classifications		Pages: 16 - 17

- 1 Perform classifications using PMP-2080-EPP-101.
- 2 If a classification upgrade is made:
 - 2.1 Note the time of the classification and determine the 15-minute notification time.
 - 2.2 Notify the control room to initiate plant public address announcements and sound the Nuclear Emergency Alarm as specified in the control room procedures.
 - 2.3 Complete an EMD-32a, Nuclear Plant Event Notification, form.
 - 2.3.1 Reason for Classification:
 - IF (H-1) SEC Judgement is used, THEN select the reason most applicable to the situation.
 - 2.3.2 Radiological Release in Progress Due to Event is yes when:
 - Valid indications on release point radiation monitoring system channels are present that are associated with a classified event, or
 - Measured offsite radiation readings indicate a release is in progress, or
 - Indications exist that an unmonitored release may be occurring.
 - 2.3.3 IF the classification is a General Emergency, THEN develop a PAR.
 - 2.4 The ED approves the classification upgrade.
 - 2.5 The ED notifies the State/County authorities.
 - 2.5.1 If the State EOC has NOT been activated:
 - Transmit the EMD-32a to the Berrien County Sheriff's Department
 - The ED discusses the EMD-32a data and applicable PARS, with the Berrien County Sheriff's Department.
 - 2.5.2 If the State EOC has been activated:
 - Transmit the EMD-32 to the State of Michigan EOC.
 - The ED discusses the EMD-32a data, and applicable PARs, with the State EOC.

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Activation and Operation of the EOF			
Attachment 7	Classifications		Pages: 16 - 17

- 2.6 Notify the other facilities as applicable.
- 2.7 Perform a facility brief.
- 2.8 Update the facility status boards/maps with classification data, PARs, and Protective Action Orders received from the State of Michigan.

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Attachment 8	Protective Action Recommendations (PAR)	Pages: 18 - 20	

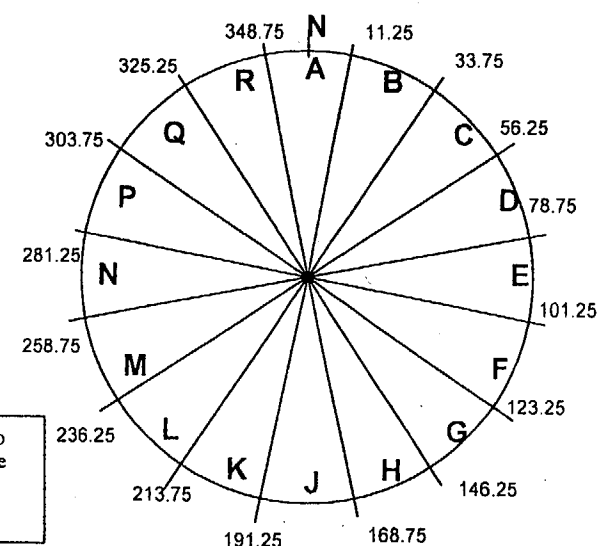
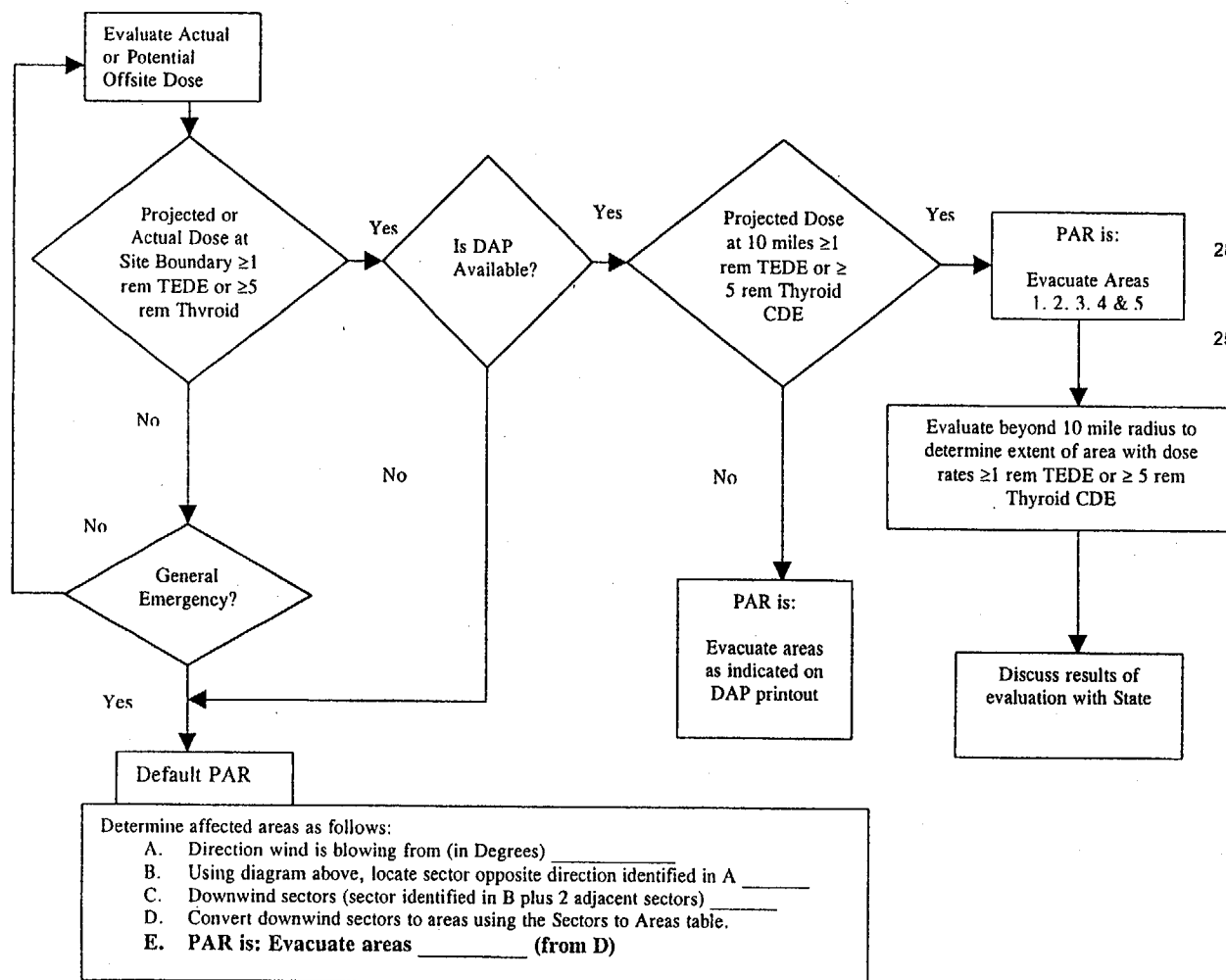
NOTE: PARs must accompany the declaration of a General Emergency.

- 1 Note the time of the PAR and determine the 15-minute notification time.
- 2 Use the Default PAR if:
 - A General Emergency has been declared for non-radiological release conditions, or
 - It is not possible to determine the Site Boundary TEDE or CDE dose and a release is or is suspected to be in progress.
- 3 Prior to developing a PAR, consider any forecasts of changing weather conditions.
- 4 **IF** the PAR is based on Dose Calculations, **THEN** an EMD-32b, Nuclear Plant Event Technical Data sheet must accompany the EMD-32a, Nuclear Plant Event Notification form
- 5 Compare field team data to the projected area of the PAR.
- 6 **IF** the field team data indicates the plume is outside the projected area, **THEN** change the PAR to include the actual data.
- 7 Update the EMD-32a with the PAR information.
- 8 The ED approves the PAR change.
- 9 The ED notifies the State/County authorities.
- 9.1 If the State EOC has **NOT** been activated:
 - Transmit the EMD-32a (and EMD-32b as applicable) to the Berrien County Sheriff's Department.
 - The ED discusses the EMD-32 data, and applicable PARs with the Berrien County Sheriff's Department.
- 9.2 If the State EOC has been activated:

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Attachment 8	Protective Action Recommendations (PAR)	Pages: 18 - 20	

- Transmit the EMD-32a (and EMD-32b as applicable) to the State of Michigan EOC.
 - The ED discusses the EMD-32 data, and applicable PARs with the State EOC.
- 10 Notify the other facilities as applicable.
- 11 Perform a facility brief.
- 12 Update the facility status boards/maps with classification data, PARs, and Protective Action Orders received from the State of Michigan.

Reference	RMT-2080-EOF-001	Rev. 1	Page 20 of 48
Activation and Operation of the EOF			
Attachment 8	Protective Action Recommendations (PAR)	Pages: 18 - 20	



Sectors	Areas
A, B & C to 5 miles	1 and 2
B, C & D to 5 miles	1, 2 and 3
C, D & E to 5 miles	1, 2 and 3
D, E, & F to 5 miles	1, 2 and 3
E, F & G to 5 miles	1, 2 and 3
F, G & H to 5 miles	1 and 3
G, H & J to 5 miles	1 and 3
H, J & K to 5 miles	1 and 3
J, K & L to 5 miles	1 and 3
K, L & M to 5 miles	1 and 3
L, M & N to 5 miles	1
M, N & P to 5 miles	1
N, P & Q to 5 miles	1
P, Q & R to 5 miles	1
Q, R & A to 5 miles	1
R, A & B to 5 miles	1 and 2

Reference	RMT-2080-EOF-001	Rev. 1	Page 21 of 48
Activation and Operation of the EOF			
Attachment 9	Document Transmission/Distribution		Page: 21 - 22

NOTE: Some of the facility Fax machines are designated within the phone directory as TRANSMIT and others as RECEIVE. These machines should remain in their designated mode to better facilitate communications between facilities.

- 1 Ensure the Fax machine dates and times are set correctly.
- 2 Obtain the Fax machine phone numbers for the facilities and off site agencies from the Emergency Response Organization Phone Directory.
- 3 Forward all documents for duplication and distribution to the facility runners.
- 4 Forward all original documents to the Communication Director.
- 5 Log all incoming and outgoing Fax's in the facility Fax Log.
- 6 **IF** a Fax is **NOT** specifically addressed to an individual or position, **THEN** distribute incoming Fax's to all positions as described on the facility distribution map located in the copy area.

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Activation and Operation of the EOF			
Attachment 9	Document Transmission/Distribution	Page: 21 - 22	

- 7 The following table gives additional direction on the transmission and distribution of material:

Document	Destination	Frequency	Additional Instructions
Nuclear Plant Event Notification Form (EMD-32a) Nuclear Plant Event Technical Data (EMD-32b)	State EOC	EMD-32a 15-Minutes EMD-32b 30-Minutes	The EMD-32a and b forms transmitted to the State of Michigan should have priority over all other Fax's.
	TSC	As Available	
	News Center	As Available	The initial transmission of all documents to Corporate Communications shall be established through the News Center by corporate communications personnel.
	JPIC	As Available	Distribution to the JPIC members.
	EOF Personnel	As Available	Distribute to EOF members.
Meteorological Forecast Data Sheet 1	State EOC	As Available	None
	Berrien County EOC	As Available	None
	NRC	As Available	None
	EOF Personnel	As Available	Distribute to EOF members.
Boardwriter Notes	EOF Personnel	As Available	Distribute to EOF members.

Reference	RMT-2080-EOF-001	Rev. 1	Page 23 of 48
Activation and Operation of the EOF			
Attachment 10	Field Team Communications		Pages: 23 - 25

- 1 **WHEN** dose assessment is considering lake breezes, **THEN** dispatch the field teams along the standard routes to locations either North and/or South of the plant to determine if the plume is moving in a parallel path to the Lake Michigan shore line.

- 2 **IF** the projected offsite dose rates for the team positions exceed 1 rem/hr TEDE or 5 rem/hr CDE Thyroid, **THEN** consider:
 - Repositioning the team(s) to reduce the overall expected exposure.
 - Distribution of Potassium Iodine (KI) to team members.

- 3 Have the field teams perform surveys based on the appropriate release status:
 - 3.1 Pre-release - no release has occurred.
 - 3.1.1 Determine the postulated direction and dispersion width of the plume based on the wind direction, wind speed, Pasquill Category stability class, and its associated isopleth.
 - 3.1.2 Position the survey vehicles downwind on Red Route 1.
 - 3.1.3 Have the survey vehicle traverse the downwind portion of the route while surveying for radiation readings above background.
 - 3.1.4 **IF** above background readings are reported, **THEN** notify the EAD immediately. An unmonitored release may be occurring.
 - 3.2 Plume Phase
 - 3.2.1 Determine the postulated direction and dispersion width of the plume based on the wind direction, wind speed, Pasquill Category stability class, and isopleth.
 - 3.2.2 Use the projected dose rates as guidance to determine the best distance from the plant to collect airborne sample data without risking overexposure to field team members. Iodine and particulate materials tend to plate out quickly on surrounding surfaces. Airborne samples should be collected at the location of the highest dose rate reading within the plume.

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Attachment 10	Field Team Communications		Pages: 23 - 25

3.2.3 Direct the survey teams to perform either a full traverse or plume definition survey.

a. Full Traverse

1. Direct the survey teams to traverse the plume reporting back, as a minimum, boundary (0.1 mR/hr) and centerline (highest reading) data.
2. **IF** an air sample is necessary, **THEN** have it taken at the plume centerline.
3. Record the Field Team data on Data Sheet 2, Offsite Survey Log.
4. Plot the data on a map to define the plume boundaries and centerline.

b. Plume Definition

1. Direct the survey teams to:
 - Enter the plume until ≥ 0.1 mR/hr is detected.
 - Immediately exit the plume.
 - Report back the plume boundary location and radiation reading.
2. Record the Field Team data on Data Sheet 2, Offsite Survey Log.
3. Plot the data on a map to define the plume boundary.

3.2.4 **IF** field teams report a reading ≥ 1 R/hr, **THEN** immediately notify the EAD. A change in the emergency classification may be necessary.

3.2.5 Compare the field team data to the most recent PARs.

3.2.6 **IF** the field team data does **NOT** match the projected location of the plume, **THEN** immediately notify the EAD. A change to the PAR may be necessary.

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Activation and Operation of the EOF			
Attachment 10	Field Team Communications		Pages: 23 - 25

3.3 Post Plume Phase

3.3.1 The post plume phase should be performed in 2 stages: (initial and long term)

a. Initial (Ground Deposition Foot Print)

1. Direct the field monitoring teams to traverse the areas the plume covered starting close-in to the plant and working outward.
2. Plot the results on a map to determine the extent of the ground deposition.
3. **WHEN** the deposition footprint has been determined, **THEN** initiate the long term post plume phase sampling.

b. Long Term

NOTE: Though the emergency may have been terminated prior to entering the long-term post plume phase, these directions are intended to give the field team guidance for the collection of samples.

1. Direct the field teams to collect soil, water, snow, and vegetation samples as applicable within the ground deposition area. Take samples in locations to define deposition on the ground.
2. Direct the field teams to collect soil, water, snow, and vegetation samples as applicable outside the ground deposition area. Negative results are necessary to confirm no hazards are present.
3. Plot the sample positions on a map to allow for further deposition analysis.

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Attachment 11	Environmental Sampling		Pages: 26 - 27

- 1 Collect samples that are representative of the topography of the area unless otherwise specifically requested.
- 2 Change the volume or surface area of samples collected as conditions warrant. Note the changes in the comment section on the appropriate form.
- 3 Log all samples on Data Sheet 3, Environmental Sample Collection, giving a specific location listed in order of preference.
 - Physical location
 - On a map
 - Using landmarks; ensure sufficient references are documented to relocate the specific area.
- 4 Perform Plume Surveys, as directed:
 - 4.1 Plume Traverse
 - 4.1.1 Traverse the route as instructed by the EOF, keeping the closed window probe outside the vehicle.
 - 4.1.2 Record the location and reading on Data Sheet 2, Offsite Survey Log, where the instrument indicates:
 - The leading edge of the plume (0.1 mR/hr)
 - The centerline (highest reading) of the plume
 - The trailing edge of the plume (0.1 mR/hr)
 - 4.1.3 Transmit the data to the EOF.
 - 4.1.4 **IF** an air sample was requested, **THEN** re-enter the plume to the instructed location and obtain the sample. This is normally performed at the plume centerline.
 - 4.2 Plume Definition
 - 4.2.1 Start the route as instructed by the EOF, keeping the closed window probe outside the vehicle.
 - 4.2.2 Record the location and reading on Data Sheet 2, Offsite Survey Log, where the instrument indicates the leading boundary (≥ 0.1 mR/hr) of the plume.

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Attachment 11	Environmental Sampling		Pages: 26 - 27

4.2.3 Exit the plume.

4.2.4 Transmit the data to the EOF.

5 Obtain an air sample as follows:

- Draw a minimum of 4 cubic feet of air.
- Document all air sample data on the air sample envelope.

6 Obtain soil, snow, water, and vegetation samples as follows:

- Use Data Sheet 3 for instructions for collection and documentation of environmental samples.

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Activation and Operation of the EOF			
Attachment 12	Shift Designation		Pages: 28 - 29

NOTE: Obtain individual phone numbers from the Emergency Response Organization Phone Directory.

- 1 Managers coordinate shift turnovers to ensure plant conditions allow individuals to report to their respective facilities without undue risk or exposure.
- 2 Security Director coordinates and communicates any plant access restrictions with the security force.
- 3 Finalize routing instructions prior to notifying any individuals.
- 4 Obtain position lists specific to the OSC and TSC from 12-RMT-2080-OSC.001 and 12-RMT-2080-TSC-001.
- 5 IF roadblocks have been established by local or state law enforcement, THEN the State EOC should be notified with the list of oncoming personnel to allow passage through roadblocks.
- 6 IF desired, THEN the Dialogic Paging system can be used to contact off-duty team members. Attachment 13, Dialogic Paging System gives detailed instructions for reprogramming and activation.

Shift Start Time: _____

Routing Instructions:

Position Title	Name
Berrien County Liaison	
Boardwriter	
Communicator - Berrien County Sheriff Department	
Communications Director	
Communicator - Michigan State Police	
Communicator -ENS	

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Attachment 12	Shift Designation		Pages: 28 - 29

Communicator -HPN	
Computer Analyst	
Emergency Director	
Emergency Planning	
Engineering Design & Site Services Manager	
Environmental Assessment Coordinator (1)	
Environmental Assessment Coordinator (2)	
Environmental Assessment Director	
Fax Operator	
Field Monitoring Team Coordinator	
Industry Support Communicator	
Michigan State Police Liaison	
Operations Advisor	
Reactor Physics Analyst	
Regulatory Affairs Coordinator	
Runner (1)	
Runner (2)	
Security Director	
Scheduling & Planning Manager	

Reference	RMT-2080-EOF-001	Rev. 1	Page 30 of 48
Activation and Operation of the EOF			
Attachment 13	Dialogic Paging System		Pages: 30 - 31

NOTE: The Dialogic Paging system can be reprogrammed to contact off-duty members of the Emergency Response Organization. These actions should only be performed from one facility, preferably the EOF, and should be done to provide subsequent staffing for ALL facilities.

- 1 Prior to contacting Dialogic:
 - 1.1 Notify the facility managers to instruct all ERO members who are currently in a facility, NOT to respond to the page.
 - 1.2 Prescript the instructions (Dialogic refers to this as a greeting) that will be recorded prior to the activation of the pagers. Consider:
 - 1.2.1 All ERO pagers will be activated. You cannot select a specific team for response.
 - 1.2.2 Having ERO members contact the EOF at particular phone number(s) to receive further instructions after accepting a position.
 - 1.2.3 Where and how the individuals should report. If a release has occurred, it may be advantageous to have member's report to the EOF for transport to the plant.
 - 1.2.4 What time the ERO members are to report.
 - 1.3 Obtain the password code, located in the Security Directors' lock box in the EOF.
- 2 To change the recorded instructions for responding ERO members and activate the scenario:
 - 2.1 Call Dialogic. The Dialogic Pager Activation phone number can be obtained from the Emergency Response Organization Phone Directory.
 - 2.2 The system will ask you for your company ID number, followed by the # sign.
Enter 1344 #
 - 2.3 The system will ask for your scenario activation password, followed by the # sign.
Enter the password code followed by the # sign.

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Activation and Operation of the EOF			
Attachment 13	Dialogic Paging System		Pages: 30 - 31

- 2.4 To start a scenario, enter the scenario ID followed by the # sign or press # alone for more options. Enter 911 #
- 2.5 The system will state:
- 2.5.1 To listen to the current scenario message, Press 1
- 2.5.2 To re-record the scenario message, Press 2
- The system will direct you to record the new message followed by the # sign.
- 2.5.3 To start the scenario, Press 3
- The system will respond with "The scenario is building". Press # and hang up.
- 2.5.4 To return to the main menu, Press #
- The system will give more options to consider or press # to end this call.
- 2.6 Reports will be faxed to the EOF containing the names of the individuals who have responded and accepted a position.
- 2.7 Forward results to the appropriate facility managers.

Reference	RMT-2080-EOF-001	Rev. 1	Page 32 of 48
Activation and Operation of the EOF			
Attachment 14	Logistical Support		Page: 32

NOTE: The Scheduling and Planning Manager can provide the following services to the ERO. This position has the authority to purchase or lease materials and equipment necessary to support the ERO and the Plant and to generate contracts necessary for the augmentation of staffing.

- Arranging lodging for ERO personnel who cannot return to their homes because of an evacuation.
- Arranging lodging for personnel responding from outside agencies.
- Providing for the purchase of food to ERO facility members and support personnel.
- Purchasing or renting equipment necessary to mitigate or respond to emergencies.
- Providing for additional assistance from contractors or other agreement facilities.
- Arranging for delivery of equipment and materials.
- Providing assistance for contractual issues.
- Other services as deemed necessary by the Emergency Director.

- 1 Obtain permission from the Emergency Director to initiate the requested actions.
- 2 Generate the appropriate documents necessary to perform the requested action.
- 3 UPON completion of the documents, **THEN** obtain the Emergency Directors approval.
- 4 **IF** the materials need to be brought into the 10-mile Emergency Planning Zone, **THEN:**
 - Obtain concurrence from the Environmental Assessment Director for delivery restrictions.
 - Discuss the delivery route with the TSC Security Director.
 - Ensure the State of Michigan EOC has been notified of the intended delivery and route.
- 5 Implement the approved request, including any restrictions.

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Activation and Operation of the EOF			
Attachment 15	County Communications		Pages: 33 - 34

NOTE: The Berrien County Emergency Operations Center may not be operational immediately after the declaration of a Site Area or General Emergency. Continue to communicate with the Berrien County Sheriff's Department until the Berrien County EOC is operational.

- 1 Contact the appropriate Berrien County facility based on the emergency classification.
 - 1.1 Alert
 - 1.1.1 Contact the Berrien County Sheriff's Department.
 - 1.1.2 **UPON** receipt of an EMD-32a or EMD-32b, **THEN** provide the following information:
 - a. Provide your name, Title (BCSD Communicator), and your telephone number.
 - b. Provide the remainder of the information as entered on the EMD-32.
 - 1.1.3 **UPON** receipt of any inquiries from the Sheriff's Department, **THEN** follow the instructions on the Information Request attachment.
 - 1.1.4 **UPON** completion of each communication with the Sheriff's Department, **THEN** hang up the phone and re-establish communications when necessary.
 - 1.2 SAE OR GE
 - 1.2.1 Contact the Berrien County Liaison at the Berrien County EOC. This individual is provided to the county EOC by AEP and is an AEP employee.
 - 1.2.2 **UPON** receipt of an EMD-32, **THEN** provide the following information:
 - a. Provide your name, Title (BCSD Communicator), and your telephone number.
 - b. Provide all information except the Protective Action Recommendations on the EMD-32a.
 - 1.2.3 **UPON** receipt of any inquiries from the Berrien County EOC, **THEN** follow the instructions on the Information Requests attachment.

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Activation and Operation of the EOF			
Attachment 15	County Communications		Pages: 33 - 34

- 1.2.4 Maintain constant communications with the Berrien County EOC. Do not hang up the phone.

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Activation and Operation of the EOF			
Attachment 16	ENS Communications		Page: 35

- 1 Contact the NRC using the Emergency Notification System phone.
 - 1.1 Dial the MAIN number listed on the phone. **IF** there is no answer, **THEN** dial the BACKUP number.
 - 1.2 Once communications is established state the following:
 - “This is the D. C. Cook Emergency Operations Facility. This is an initial contact notification to ensure communications have been established. The EOF is not activated at this time. Communications relative to plant status should continue from the control rooms.
- 2 Provide the NRC Duty Officer with the following information relative to plant conditions:
 - Current emergency classification.
 - Emergency Condition Category (ECC) under which the emergency was declared. Include the ECC number, title, and a brief description of the actual event.
 - Current plant conditions.
- 3 Continue to notify the NRC of changes such as:
 - Changes to the emergency classification
 - Status of injured personnel
 - Equipment unavailability
 - Damage control team status
 - Calculated leak rates
 - Core damage assessment
 - Fission product barrier status
- 4 **UPON** receipt of any inquiries from the NRC that cannot be answered using data already available from other sources, **THEN** follow the instructions on the Information Requests attachment.

Reference	RMT-2080-EOF-001	Rev. 1	Page 36 of 48
Activation and Operation of the EOF			
Attachment 17	HPN Communications		Page: 36

- 1 Contact the NRC using the Health Physics Notification System phone.
 - 1.1 Dial the MAIN number listed on the phone. **IF** there is no answer, **THEN** dial the BACKUP number.
 - 1.2 Once communications is established state the following:
 - “This is the D. C. Cook Emergency Operations Facility. This is an initial contact notification to ensure communications have been established. Communications relative to Health should continue from the control rooms.”
- 2 Provide the NRC Duty Officer with the following information relative to plant conditions:
 - Current emergency classification.
 - Emergency Condition Category (ECC) under which the emergency was declared. Include the ECC number, title, and a brief description of the actual event.
 - Current plant conditions.
- 3 Continue to notify the NRC of changes from the EMD-32 such as:
 - Changes to the emergency classification
 - Meteorological data
 - Radiological releases
 - Calculated offsite dose and dose rates
 - Field Team monitoring data
 - PAR
- 4 **UPON** receipt of any inquiries from the NRC that cannot be answered using data already available from other sources, **THEN** follow the instructions on the Information Requests attachment.

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Activation and Operation of the EOF			
Attachment 18	Michigan State Police Communications		Page: 37

NOTE: Phone extension 1088 exists in the control rooms and the EOF MSP Communicators position. Communications should already be established between the Control Room and the MSP.

- 1 Contact the Control Room and the MSP Operations Center by:
 - 1.1 Using EOF phone extension 1088, pick up the handset and listen for a dial tone.
 - 1.2 **IF** a dial tone is present, **THEN** using another phone, contact the Control Room MSP Communicator by dialing extension 1088.
 - 1.3 **IF** a dial tone is **NOT** present, **THEN** identify yourself and wait for a reply from the Control Room and/or the State.
- 2 **WHEN** communications is established, **THEN** provide the current activation status of the EOF.
- 3 **IF**, after activation, the EOF is **NOT** capable of faxing EMD-32 forms to the State, **THEN** transmit the information verbally.
 - Provide your name, Title (MSP Communicator), and your telephone number (1-616-465-5901, Ext. 1088).
 - Provide the remainder of the information as entered on the EMD-32a or EMD-32b.
- 4 **UPON** receipt of any inquiries from the MSP, that cannot be answered using data already available from other sources, **THEN** follow the instructions on the Information Request attachment.

IReference	RMT-2080-EOF-001	Rev. 1	Page 38 of 48
Activation and Operation of the EOF			
Attachment 19	External Support		Page: 38

1 UPON declaration of an Alert, SAE, or GE, and activation of the EOF, THEN contact the following agencies. Obtain phone numbers and contact names from the Emergency Response Organization Phone Directory.

- American Nuclear Insurers (ANI)
- Institute of Nuclear Power Operators (INPO)
- Westinghouse

2 Provide each with the following information:

2.1 ANI

- Plant status
- Current emergency classification
- Offsite PAR
- Offsite Protective Action Orders

2.2 INPO

- Plant status
- Unavailable equipment
- Current emergency classification
- Offsite PARs
- Offsite Protective Action Orders

2.3 Westinghouse

- Plant status
- Unavailable equipment
- Current emergency classification

3 UPON receipt of any inquiries that cannot be answered using data already available from other sources, THEN follow the instructions on the Information Requests attachment.

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Activation and Operation of the EOF			
Attachment 20	Information Requests		Page: 39

NOTE: Information requests are designed to document questions and answers for information not normally available.

- 1 Generating a request.
 - 1.1 Print information request on all-purpose forms in complete and legible format.
 - 1.2 Supply the following minimal information:
 - Position requesting the information.
 - Position the request is being sent to.
 - Detailed question.
 - 1.3 Retain the bottom copy.
 - 1.4 Forward the request to the Communications Director.
 - 1.5 The Communications Director:
 - 1.5.1 Reads the request and ask for clarification if necessary.
 - 1.5.2 Forwards the request to the appropriate position.
- 2 Responding to a Request.
 - 2.1 Print responses in complete and legible format.
 - 2.2 Forward the response to the Communications Director.
 - 2.3 The Communications Director:
 - 2.3.1 Forwards a copy of the response to the originator.
 - 2.3.2 Retains the original message form.

Reference	RMT-2080-EOF-001	Rev. 1	Page 40 of 48
Activation and Operation of the EOF			
Data Sheet 1	Meteorological Forecast		Page: 13

Facility: Cook Nuclear Plant

Time/Date Forecast Obtained:

_____ / _____

Forecast Source: _____ Murray & Trettle

_____ NOAA

_____ Other _____

A. Eight Hour Forecast

1. Wind Direction: _____ Degrees From
2. Wind Speed: _____ Miles Per Hour
3. Differential Temperature: _____ °F or °C
4. Stability Class: _____
5. Remarks: _____

B. Twenty-four Hour Forecast

1. Wind Direction: _____ Degrees From
2. Wind Speed: _____ Miles Per Hour
3. Differential Temperature: _____ °F or °C
4. Stability Class: _____
5. Remarks: _____

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Activation and Operation of the EOF			
Data Sheet 2	Offsite Survey Log		Page: 41

[illegible]

Reference	RMT-2080-EOF-001	Rev. 1	Page 42 of 48
Activation and Operation of the EOF			
Data Sheet 3	Environmental Sample Collection	Page: 42	

Environmental Sample Collection Data Sheet			
Date: _____	Time: _____	Sampled By: _____	
Type: Soil	Snow	Water	Vegetation _____
Location: Location _____			
Comments: _____			
Soil			
1) Do NOT obtain samples from disturbed areas or under trees containing foliage. 2) Remove sufficient soil from the surface of the area to fill a 4-liter sample container. 3) Mark all containers with the date, time, and samplers initials.			
Surface area of material removed _____ cm ²			
Snow			
1) Do NOT obtain samples from drifts, disturbed areas, or under trees containing foliage. 2) IF additional snow has fallen since the release occurred, THEN remove fresh snow to obtain a representative sample. 3) IF it was snowing during the plume phase, THEN take the sample to the depth of the accumulated snow exposed to the plume. 4) Collect a minimum of 12-liters of snow. 5) Mark all containers with the date, time, and samplers initials.			
Surface area of material removed _____ cm ² Depth _____ cm			
Water			
1) Do NOT collect samples from stagnant pools under trees containing foliage. 2) Avoid disturbing and collecting the surrounding sediment. 3) Collect a minimum of 4 liters of water. 4) Mark all containers with the date, time, and samplers initials.			
Sample obtained from a: Stagnant Pool Running Tributary			
Vegetation			
1) Do NOT obtain samples from disturbed areas or under trees containing foliage. 2) Cut as close to the root as possible, when sampling ground vegetation. 3) Remove material from the outer, exposed areas only, when sampling trees or bushes. 4) Collect only the normally edible portion, when sampling foodstuffs. 5) Collect a minimum of 12 liters of vegetation. 6) Mark all containers with the date, time, and samplers initials			
Surface area of material removed _____ cm ²			

Reference	RMT-2080-EOF-001	Rev. 1	Page 43 of 48
Activation and Operation of the EOF			
Figure 1	Definitions and Abbreviations		Pages: 43 - 44

Term	Meaning
AEP	American Electric Power
ANI	American Nuclear Insurers
BCSD	Berrien County Sheriff's Department
CDE	Committed Dose Equivalent
CLOCA	Containment Loss of Coolant Accident
DAP	Dose Assessment Program
EAD	Environmental Assessment Director
ECC	Emergency Condition Category
ED	Emergency Director
EMD-32a	Nuclear Plant Event Notification form
EMD-32b	Nuclear Plant Event Technical Data form
EOC	Emergency Operations Center
EOF	Emergency Operations Facility
ENS	Emergency Notification System
ERO	Emergency Response Organization
FMT	Field Monitoring Team
GE	General Emergency
HPN	Health Physics Network
INPO	Institute of Nuclear Power Operations
JPIC	Joint Public Information Center
KI	Potassium Iodine thyroid blocking agent

Reference	RMT-2080-EOF-001	Rev. 1	Page 44 of 48
Activation and Operation of the EOF			
Figure 1	Definitions and Abbreviations		Pages: 43 - 44

Term	Meaning
MSP	Michigan State Police
NOAA	National Oceanic and Atmospheric Administration
NRC	Nuclear Regulatory Commission
OSC	Operations Support Center
PAO	Protective Action Order
PAR	Protective Action Recommendation
PC	Personal Computer
PET	Plant Evaluation Team
PPC	Plant Process Computer
PORV	Power Operated Relief Valve
RDR	Real-Time Data Repository
RMS	Radiation Monitoring System
SAE	Site Area Emergency
STD	Standard Deviation
TEDE	Total Effective Dose Equivalent
TSC	Technical Support Center
X/Q	Mathematical term for Dispersion Coefficient
ΔT	Net Temperature Difference
ΔZ	Net Vertical Distance

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Activation and Operation of the EOF			
Figure 2	Position Descriptions		Pages: 45 - 48

The position descriptions provided are intended as guidance. Deviations and additions to these descriptions are allowed as long as the accomplished objectives can be achieved.

Berrien County Liaison

- Reports to the Berrien County EOC at an SAE or GE. He should be dispatched at an Alert if escalation is expected.
- Assists county personnel with interpretation of data supplied by plant and state facilities as necessary.

Boardwriter

- Reports to the Communications Director.
- Obtains data from the other facilities and the EOF that is considered common to all facilities and the affected control room in a chronological order.
- Provides other facilities with information and decisions generated in the EOF.
- Maintains the Emergency classification Board with the proper emergency classification, classification time, and reasons for the classification.
- Documents incoming messages or inquiries to other EOF personnel on all-purpose message forms and forwards them to the Communication Director.
- Provides the EOF runners with copies of board data at, at least, 15-minute intervals.

Berrien County Sheriff Department Communicator

- Reports to the Communications Director.
- Prior to activation of the Berrien County EOC, provides plant status to the county.
- Upon activation of the Berrien County EOC, provides plant status and radioactive release data to the Berrien County Liaison.

Communications Director

- Reports to the Emergency Director.
- Directs and coordinates communication activities within the facility.

Computer Analyst

- Reports to the Communications Director.
- Provides for all repair/replacement of computer related equipment in the EOF.
- Operates the PPC/RDR used to display data throughout the EOF.

Emergency Director

- Is responsible for the overall command and control of the emergency.
- Assumes responsibility for Classification, Notification and PAR's.
- Communicates with senior state and county officials on plant conditions and PARs.
- Reviews press releases.
- Directs and coordinates EOF activities.

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Activation and Operation of the EOF			
Figure 2	Position Descriptions		Pages: 45 - 48

- Activates the EOF.
- Maintains regular communication with the other facility managers on the Managers Bridge.
- Updates EOF members through facility briefs on the status of the emergency approximately every 30 minutes.
- Informs the Environmental Assessment Director of changes in plant parameters that may effect off-site releases or PARs.

Emergency Planning

- Reports to the Emergency Director
- Provides facility oversight.
- Provides guidance to the ERO to ensure critical functions are completed in a timely manner.

Engineering Design & Site Services Manager

- Reports to the Emergency Director.
- Coordinates engineering and technical support from sources outside the ERO.
- Provides engineering support and analysis to the EOF.

ENS Communicator

- Reports to the Communications Director.
- Provides information to the NRC relative to plant equipment conditions and plant status.

Environmental Assessment Coordinator

- Reports to the Environmental Assessment Director.
- Evaluates plant effluent readings for indications of radiological releases.
- Evaluates off-site field team data.
- Performs dose assessment.
- Generates EMD-32 Nuclear Plant Accident Notification forms.
- Make recommendations to the Environmental Assessment Director relative to radioactive releases and plant status.

Environmental Assessment Director

- Reports to the Emergency Director.
- Directs and coordinates offsite radiological assessment.
- Provides basic direction to the Environmental Assessment Coordinators for performing dose assessment.
- Generates PARs
- Directs the Field Team Coordinator for placement of survey vehicles.
- Provides overall radiological habitability assessments of the EOF.

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Activation and Operation of the EOF			
Figure 2	Position Descriptions		Pages: 45 - 48

Fax Operator

- Reports to the Communications Director.
- Provides Fax services to personnel within the EOF.
- Forwards all copies of incoming Fax's to the facility Runners for distribution and maintenance.
- Forwards all original outgoing Fax's and data sheets to the Communications Director.

Field Monitoring Team Coordinator

- Reports to the Environmental Assessment Director.
- Directs off-site monitoring teams for tracking of radioactive releases (Plumes).
- Directs off-site monitoring teams for collection of post plume samples.
- Provides data plots to the Environmental Assessment Team showing plume locations and footprints.

HPN communicator

- Reports to the Communications Director.
- Provides information to the NRC relative to radiological conditions on-site and off-site releases.
- Provides PARs and Protective Action Orders information.

Industry Support Coordinator

- Reports to the Communications Director.
- Provides communications links to ANI, Westinghouse, and INPO relative to plant status and radioactive releases.

Michigan State Police Communicator

- Reports to the Communications Director
- Provides plant status and PAR data to the State of Michigan EOC.

Michigan State Police Liaison

- Reports directly to the State of Michigan Emergency Operations Center in Lansing, Michigan.
- Reports to the State of Michigan EOC at a SAE or GE. He should be dispatched at an Alert if escalation is expected.
- Obtains answers to inquiries from the State of Michigan and ensuring these responses are relayed to the State.
- Assists state personnel with interpretation of data supplied by plant facilities as necessary.

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Activation and Operation of the EOF			
Figure 2	Position Descriptions		Pages: 45 - 48

Operations Advisor

- Reports to the Emergency Director.
- Assists the ED with classification determinations.
- Provides EOF personnel and off-site agencies with plant status clarifications.

Reactor Physics Analyst

- Reports to the Engineering Design & Site Services Manager.
- Provides EOF personnel with the current core status.
- Determines the current reactor coolant status used in dose assessment.
- Coordinates core damage assessment with TSC-PET personnel.

Regulator Affairs Coordinator

- Reports to the Emergency Director.
- Provides guidance to the Emergency Director for license-based decisions and actions.
- Primary EOF contact for the NRC site response team.

Runner

- Reports to the Communications Director.
- Picks up and delivers copies of forms generated by EOF personnel needing either faxing to other facilities or duplication and distribution to EOF personnel.

Scheduling & Planning Manager

- Reports to the ED and Engineering Design and Site Services Manager.
- Provides support for items such as meals, transportation, temporary lodging, and other logistical issues for personnel within the ERO and other organizations responding to the facility.
- Purchases, leases, or contracts with suppliers for equipment, materials, or personnel necessary to support the emergency.

Security Director

- Reports to the Emergency Director.
- Maintains control of personnel entering and exiting the facility.
- Maintains control of unauthorized personnel within the owner controlled area at the Buchanan Office Building.
- Provides transportation to and from the plant as necessary.
- Arranges shift designations.

Telecommunications Personnel

- Reports to the Communications Director.
- Provide any communications equipment or repair/replacement necessary to support the emergency facilities.