



444 South 16th Street Mall

Omaha NE 68102-2247

November 21, 2002

LIC-02-0135

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555

Reference: Docket No. 50-285

**SUBJECT: Transmittal of Changes to Emergency Plan Implementing Procedures (EPIP)**

In accordance with 10 CFR 50.54(q), 10 CFR 50, Appendix E, Section V, and 10 CFR 50.4(b)(5), please find EPIP change packages enclosed for the Document Control Desk (holder of Copy 165) and the NRC Region IV Plant Support Branch Secretary (holder of Copies 154 and 155).

The document update instructions and summary of changes are included on the Confirmation of Transmittal form (Form EP-1) attached to each controlled copy change package. Please return the Confirmation of Transmittal forms by January 7, 2003.

The revised documents included in the enclosed package are:

EPIP Index pg 2 & 3 issued 11/07/02

EPIP-RR-17A R20 issued 11/07/02

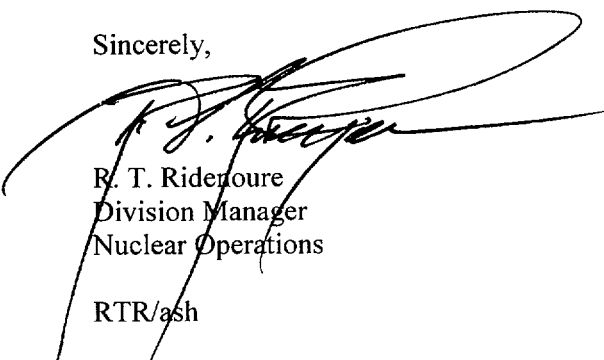
EPIP-RR-29 R20 issued 11/07/02

EPIP Index pg 1 issued 11/12/02

EPIP-EOF-3 R18 issued 11/12/02

If you have any questions regarding the enclosed changes, please contact Mr. Carl Simmons at (402) 533-6430.

Sincerely,



R. T. Ridenoure  
Division Manager  
Nuclear Operations

RTR/ash

Enclosures

- c: NRC Region IV Plant Support Branch Secretary (2 sets)  
Alan Wang, NRC Project Manager (w/o enclosures)  
J. G. Kramer, NRC Senior Resident Inspector (w/o enclosures)  
Winston & Strawn (w/o enclosures)  
Emergency Planning Department (w/o enclosures)

A045

OMAHA PUBLIC POWER DISTRICT

Confirmation of Transmittal for  
Emergency Planning Documents/Information

<input type="checkbox"/> Radiological Emergency Response Plan (RERP)	<input checked="" type="checkbox"/> Emergency Plan Implementing Procedures (EPIP)	<input type="checkbox"/> Emergency Planning Forms (EPF)
<input type="checkbox"/> Emergency Planning Department Manual (EPDM)	<input type="checkbox"/> Other Emergency Planning Document(s)/ Information	

Transmitted to:

Name: Document Control Desk Copy No: 165 Date: \_\_\_\_\_  
Plant Support Branch Secretary Copy No: 154  
Plant Support Branch Secretary Copy No: 155

The following document(s) / information are forwarded for your manual:

REMOVE SECTION

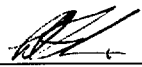
EPIP Index pg 2 & 3 issued 07/09/02  
EPIP-RR-17A R19 issued 07/23/01  
EPIP-RR 29 R19 issued 03/13/01  
EPIP Index pg 1 issued 10/29/02  
EPIP-EOF-3 R17 issued 12/07/01

INSERT SECTION

EPIP Index pg 2 & 3 issued 11/07/02  
EPIP RR-17A R20 issued 11/07/02  
EPIP-RR 29 R20 issued 11/07/02  
EPIP Index pg 1 issued 11/12/02  
EPIP-EOF-3 R18 issued 11/12/02

Summary of Changes:

EPIP-RR-17A R20 adds instructions for TSC Admin Logistics Coordinator to interface with the EOF Admin Logistics Manager to determine what special needs may be needed and to ensure that it is understood who performs these tasks. EPIP-RR-29 R20 changes instructions on ordering food and arranging transportation and lodging; also ensures that the EOF Logistics Manager understands that this is his duty, with assistance as needed from the TSC Logistics Coordinator. EPIP-EOF-3 R18 was rewritten to provide an easier format to follow.

  
\_\_\_\_\_  
Supervisor - Emergency Planning

I hereby acknowledge receipt of the above documents/information and have included them in my assigned manuals.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Please sign above and return by 01/07/03 to:

Beth Nagel  
Fort Calhoun Station, FC-2-1  
Omaha Public Power District  
444 South 16<sup>th</sup> Street Mall  
Omaha, NE 68102-2247

**NOTE:** If the document(s)/information contained in this transmittal is no longer requested or needed by the recipient, or has been transferred to another individuals, please fill out the information below.

☐ Document(s)/Information No Longer Requested/Needed

☐ Document(s)/Information Transferred to:

Name: \_\_\_\_\_ Mailing Address: \_\_\_\_\_  
\_\_\_\_\_  
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Document	Document Title	Revision/Date
EPIP-EOF-19	Recovery Actions	R7 09-30-98
EPIP-EOF-21	Potassium Iodide Issuance	R4 11-07-00
EPIP-EOF-23	Emergency Response Message System	R5 10-12-99
EPIP-EOF-24	EOF Backup Alert Notification System Activation	R3 09-09-99
EPIP-RR-11	Technical Support Center Director Actions	R14 02-29-00
EPIP-RR-13	Reactor Safety Coordinator Actions	R14 12-09-99
EPIP-RR-17	TSC Security Coordinator Actions	R14 04-04-01
EPIP-RR-17A	TSC Administrative Logistics Coordinator Actions	R20 11-07-02
EPIP-RR-19A	Operations Liaison Actions	R5 10-07-99
EPIP-RR-21	Operations Support Center Director Actions	R12 09-23-99
EPIP-RR-21A	Maintenance Coordinator Actions	R4 11-30-99
EPIP-RR-22	Protective Measures Coordinator/Manager Actions	R21 07-02-01
EPIP-RR-22A	Chemistry Coordinator Actions	R6 12-07-01
EPIP-RR-25	EOF Dose Assessment Coordinator Actions	R20 11-15-01
EPIP-RR-28	OSC Accountability and Dosimetry Technician Actions	R8 09-25-01

Document	Document Title	Revision/Date
EPIP-RR-29	EOF Administrative Logistics Manager Actions	R20 11-07-02
EPIP-RR-39	Control Room Medical Responder Actions	R0 03-27-01
EPIP-RR-63	EOF Dose Assessment Assistant Actions	R10 11-19-01
EPIP-RR-66	Communication Specialist Actions	R8 08-31-99
EPIP-RR-72	Field Team Specialist Actions	R13 07-09-02
EPIP-RR-87	Radiation Protection Coordinator Actions	R7 08-24-00
EPIP-RR-90	EOF/TSC CHP Communication Actions	R0 10-24-00

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Fort Calhoun Station  
Unit No. 1

**EPIP-RR-17A**

EMERGENCY PLAN IMPLEMENTING PROCEDURE

**Title:** TSC ADMINISTRATIVE LOGISTICS COORDINATOR ACTIONS

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FC-68 Number: EC 29517

Reason for Change: Add instructions for TSC Admin Logistics Coordinator to interface with the EOF Admin Logistics Manager to determine what special needs may be needed. To ensure that it is understood who performs these tasks.

Requestor: Mark Reller

Preparer: Mark Reller

## TSC ADMINISTRATIVE LOGISTICS COORDINATOR ACTIONS

### 1. PURPOSE

- 1.1 This procedure provides guidance to the TSC Administrative Logistics Coordinator in performing actions outlined in the Emergency Plan Implementing Procedures (EIPs).

### 2. REFERENCES/COMMITMENT DOCUMENTS

#### 2.1 Commitment Documents

- AR 13301, IER 92-20
- AR 12110, IER 91-23

### 3. DEFINITIONS

None

### 4. PREREQUISITES

None

### 5. PROCEDURE

- 5.1 Review the procedure and checklist, Attachment 6.1 and accomplish the applicable steps both upon initial activation and periodically, as required, thereafter.
- 5.2 At the completion of the shift or at event termination, check the steps which are completed.
- 5.3 Retain all documentation (logs, calculation sheets, notes, etc) generated or used during the emergency
- 5.4 At event termination, collect all documentation from the TSC, OSC and CR.
- 5.4.1 Assemble all documentation for legal records and event analysis. Request the Emergency Planning Department to place in safe storage.

### 6. ATTACHMENTS

- 6.1 TSC Administrative Logistics Coordinator Checklist
- 6.2 Procurement or Addition of Diesel Fuel for Emergency Diesel Generators

Attachment 6.1 - TSC Administrative Logistics Coordinator Checklist Page 1 of 4

\* \* Maintain a log of all key activities \* \*

	(✓)	INIT/TIME
1. Upon arrival:		
• Sign in on the Accountability Roster	_____	
• Obtain worker packet	_____	
• Put on the Personnel Identification badge	_____	
• Assist in activation of TSC per EPIP-TSC-1	_____	_____ / _____
2. Direct:		
2.1 Site Director's Secretary to:		
• Maintain a log for the Site Director	_____	
• Gather information for input to the ERMS.	_____	
2.2 Other Site Directors Secretary to operate the ERMS.	_____	
2.3 The COP Communicator to:		
• Perform required notifications on the COP Network	_____	
• Maintain the Radiological Status Board [AR 13301]	_____	
2.4 The Status Board Keeper to obtain data from the ERFCS or Control Room to maintain the Status Board.	_____	
2.5 The Emergency Response Coordinator to assist other TSC positions.	_____	
2.6 Direct one Administrative Assistant to maintain the TSC Accountability Roster.	_____	
2.7 Direct the other Administrative Assistant to:		
• Perform copying duties in the TSC	_____	
• Distribution duties in the TSC	_____	
• Operate the fax machine	_____	_____ / _____

Attachment 6.1  
(continued)

Page 2 of 4

(✓)

INIT/TIME

3. Secure access/egress to the TSC from the back (west) entrance using the following signs:

- TSC IS ACTIVATED NO EXIT
- TSC IS ACTIVATED AUTHORIZED PERSONNEL ONLY
- WHEN TSC IS ACTIVATED DO NOT ENTER. USE EAST ENTRANCE
- TSC IS ACTIVATED

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_/\_\_\_\_\_

4. Establish 24 hour staffing:

4.1 Determine 24 hour Staffing for:

- TSC (assist the Site Director using FC-EPF10)
- Control Room (use FC-EPF-10)
- OSC (request that OSC Director prepare using FC-EPF-9 and fax to you)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4.2 When you have all the staffing schedules:

- Verify that all positions are filled
- Verify that second shift positions are filled
- Post shift schedules in the TSC
- Fax shift schedules to the CR and OSC for posting
- Distribute shift schedules in the TSC

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4.3 Notify personnel on the second shift to inform them of their work schedule (use other personnel to assist in this task as needed)

\_\_\_\_\_/\_\_\_\_\_

5. Periodically review the following steps and perform them as required:

5.1 Prepare copies of the following and distribute them throughout the TSC and transmit to the OSC, as required.

- Data sheets
- Messages

\_\_\_\_\_  
\_\_\_\_\_

5.2 Assist the Site and TSC Director, as needed.

\_\_\_\_\_

Attachment 6.1  
(continued)

Page 3 of 4

(✓)

INIT/TIME

5.3 Contact the EOF Administrative Logistics Manager's when:

- Evacuation of plant personnel to the North Omaha is ordered
- Any person is injured, contaminated and requires off-site medical response

\_\_\_\_\_

\_\_\_\_\_

5.4 Working with the EOF Administrative Logistics Manager coordinate logistics support, including:

- Transportation
- Food
- Lodging
- Special equipment
- Supplies

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ / \_\_\_\_\_

**NOTE:** Step 6 may be performed by the EOF Administrative Logistics Manager.

6. Determine from the Control Room Coordinator the status of the emergency diesel generators.

\_\_\_\_\_

6.1 If one or both are operating, within 10 hours **[AR 12110]**:

**NOTE:** The phone number for the diesel fuel supplier can be found in the Emergency Phone Book in the "Off-Site Support Agencies" section.

- Contact the diesel fuel supplier to arrange for the potential delivery of diesel fuel.
- If Diesels are loaded arrange for continuous fuel deliveries to the site.

\_\_\_\_\_

\_\_\_\_\_

6.2 If diesel fuel can not be delivered to the site within 20 hours of the start of the diesels:

- Request that the TSC or Site Director request an emergency work order to install the hardware for diesel fuel transfer described in Attachment 6.2.

\_\_\_\_\_

\_\_\_\_\_ / \_\_\_\_\_

Attachment 6.1  
(continued)

Page 4 of 4

(✓)

INIT/TIME

7. As required, provide a detailed briefing to your relief covering:

- Emergency conditions
- Actions taken (current status)

\_\_\_\_

\_\_\_\_

/

8. At emergency termination:

- Collect documentation and logs from all onsite facilities
- Ensure that the TSC is placed back into a state of readiness
- Review this checklist and ensure that special orders or supplies that were ordered are canceled
- Ensure personnel on the shift roster are informed of status of emergency and whether or not to report for their shift

\_\_\_\_

\_\_\_\_

\_\_\_\_

\_\_\_\_

/

Attachment 6.2 - Procurement or Addition of Diesel Fuel for Emergency Diesel Generators

INITIALS

1. DIESEL FUEL TRANSFER FROM FO-10 TO FO-1 (Auxiliary Boiler Fuel Storage Tank to Diesel Generator Fuel Oil Storage Tank)

**NOTE:** At full rated power, each diesel generator consumes approximately 3 gallons per minute. FO-37 delivers approximately 6 gallons per minute. If only one diesel is in service, or if the diesels are running at less than rated load, the level in FO-1 will steadily increase when adding fuel oil to FO-1 from FO-10.

There are several possible methods to transfer diesel fuel from FO-10 to FO-1. This method allows using installed equipment that will require a minimum amount of "temporary" changes to accomplish the fuel transfer:

- 1.1 Connect a 1 inch hose from FO-201 "Auxiliary Feedwater Pump FW-54 Fuel Oil Transfer Pump FO-37 Discharge Drain Valve" to the 3 inch fill connection on FO-1. This will require approximately 400 feet of hose. The 1 inch hose may be run inside the 3 inch fill connection and duct taped in place. All mechanical joints should be stabilized with lock wires and taped to prevent leakage. Sleeves or blocks should be used around hoses that are run through doors to prevent damage to the hose. (Hose fittings and a hand pump are available in the warehouse stored under Stock Code Number 30869-2(fuel)).

---
- 1.2 The normal Auxiliary Feedwater Pump fuel oil system lineup in OI-AFW-1 can be used, but HC-FO-37 must be placed in the "Hand" position, or it will automatically shut off when the Fuel Oil Day Tank FO-38 is full. Also, FO-196 must be closed or fuel will recirculate through FO-38 back to FO-10 if that is the path of least resistance. FO-38 should be checked and refilled periodically; it contains an 8 hour supply of fuel oil when full.

---
- 1.3 Continue to monitor LI-2107 and shut off the transfer pump when FO-1 level is approximately 17,500 gallons.

---
- 1.4 Upon completion of the fuel transfer evolution, drain and store hose properly to prevent possible fuel jelling in the hose.

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Fort Calhoun Station  
Unit No. 1

**EPIP-RR-29**

EMERGENCY PLAN IMPLEMENTING PROCEDURE

**Title:** EOF ADMINISTRATIVE LOGISTICS MANAGER ACTIONS

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FC-68 Number: EC 29518

Reason for Change: Change instructions on ordering food and supplies and arranging transportation and lodging. To ensure that the EOF Logistics Manager understands that this is his duty, with assistance as needed from the TSC Logistics Coordinator.

Requestor: Mark Reller

Preparer: Mark Reller

EOF ADMINISTRATIVE LOGISTICS MANAGER ACTIONS

**NON-SAFETY RELATED**

1. PURPOSE

- 1.1 The purpose of this procedure is to provide guidance to the EOF Administrative Logistics Manager in performing actions outlined in the Emergency Plan Implementing Procedures (EIPs).

2. REFERENCES/COMMITMENT DOCUMENTS

- 2.1 EPIP-EOF-1, Activation of the Emergency Operations Facility
- 2.2 EPIP-EOF-21, Potassium Iodide Issuance
- 2.3 EPIP-EOF-24, EOF Backup Alert Notification System Activation
- 2.4 ANI Underwriter's Manual
- 2.5 Emergency Telephone Book

3. DEFINITIONS

NONE

4. PREREQUISITES

NONE

5. PROCEDURE

- 5.1 Use the EOF Administrative Logistics Manager Checklist, Attachment 6.1, as an aid to completing required actions.

**NOTE:** The attached checklist is designed as a reminder of actions which are required to be performed during an emergency condition.

- 5.2 Review the procedure and checklist, and accomplish the applicable steps both upon initial activation and periodically, as required, thereafter.
- 5.3 At the completion of the shift or at event termination, initial the steps which are completed.

- 5.4 Retain all documentation (logs, calculation sheets, notes, etc.) generated or used during the emergency. At the termination, every position in the EOF will deliver documentation to you. Assemble all documentation for legal records and event analysis. Request the Emergency Planning Department to place in safe storage.

## 6. ATTACHMENTS

- 6.1 EOF Administrative Logistics Manager Checklist
- 6.2 Westinghouse Electric Emergency Information Sheet
- 6.3 INPO Event Notification

1. Obtain and put on your Personnel Identification Badge.	_____ /
2. Contact Security at Energy Plaza to ensure security for the EOF and/or MRC have been dispatched and that 24-hour coverage is established. (See Emergency Telephone Book)	_____ /
3. Maintain security at the EOF either personally, or via a designee, until such time as formal security is in place.	_____ /
4. Lock the Northwest Hallway Door to prevent personnel from entering. Personnel should use the Southwest hallway.	_____ /
5. Place magnetic signs on the outside of the East doors to the EOF and manually lock the East doors. (Signs are located on door of the Copy Machine Room.)	_____ /
6. Retrieve Interactive Notification System (INS) Reports from your e-mail. Determine status of positions at the EOF to ensure it is staffed according to EPIP-EOF-1.	_____ /
7. Commence activation of the EOF using EPIP-EOF-1.	_____ /
8. Working with the TSC Admin Logistics Coordinator determine needs, order and arrange for delivery of support items including:	
• Transportation	_____
• Food	_____
• Lodging	_____
• Special Equipment	_____
• Supplies	_____ /
9. When formal security arrives at the EOF, they should be issued Security Guard - EOF - West Entrance Booklet #58. This booklet is located at the Administrative Logistics Manager's Workstation. Oversee the security operations at the EOF.	_____ /

Attachment 6.1 - EOF Administrative Logistics Manager Checklist Page 2 of 3

(✓) INIT/TIME

**NOTE:** At declaration of Site Area Emergency, monitor the Alert Notification System Controller to identify any siren that failed.

10. Prepare the Alert Notification System Controller to monitor siren system activation using EPIP-EOF-24.

10.1 If activated and any siren fails to sound, then notify the sheriff of the affected county as to which siren did not sound, so that notification of the public in that area can be made using other methods. \_\_\_\_\_

10.2 If requested by the states or counties, activate the sirens per EPIP-EOF-24. \_\_\_\_\_

10.3 Notify the Emergency Director, EOF Information Specialist, Iowa Emergency Management EOF Liaison and Nebraska Assistant to Governor Authorize Representative (GAR) of any siren activations or malfunctions. \_\_\_\_\_ / \_\_\_\_\_

11. Determine 24-hour staffing for all EOF positions (use EPF-11, as necessary). \_\_\_\_\_ / \_\_\_\_\_

12. When all shift rotation schedules have been submitted, direct the preparation of an EOF shift schedule and roster for posting and distribution. (Use EPF-11, as necessary). \_\_\_\_\_ / \_\_\_\_\_

13. Contact scheduled personnel to inform them of the shift schedules, using other personnel to assist, as necessary. \_\_\_\_\_ / \_\_\_\_\_

14. At Site Area Emergency and General Emergency, make notifications to the following support groups SAE GE

14.1 American Nuclear Insurers (see Emergency Phonebook) \_\_\_\_\_

14.2 Fill out Attachment 6.2, Westinghouse Electric Emergency Information Sheet;

14.2.1 Have Emergency Director determine the level of Westinghouse Electric response desired; \_\_\_\_\_

Attachment 6.1 - EOF Administrative Logistics Manager Checklist Page 3 of 3

(✓) INIT/TIME

14.2.2	Relay the information on Attachment 6.2 by calling the Westinghouse Electric Emergency Response Center.	SAE	GE	
14.3	Nuclear Regulatory Commission Region IV			
14.4	Nuclear Electric Insurance Limited (NEIL) (see Emergency phone book)			
14.5	Federal Emergency Management Agency			
14.6	Institute of Nuclear Power Operations (using Attachment 6.3, INPO Event Notification)			
14.7	Metropolitan Utilities District			
14.8	Notify Union Pacific that a radiological emergency has occurred at the Fort Calhoun Station which may require stopping all railway traffic through the 10-mile EPZ (see the Emergency Telephone Book).			/
14.9	OPPD Insurance and Claims Department (See the Emergency Telephone Book).			/
15.	Provide a detailed briefing to your shift relief of any actions taken and the current emergency status.			/
16.	Assist in development and arranging Emergency Director staff briefings. Briefings should be held at maximum of 4 hour intervals. Attendees should include state and federal officials along with appropriate OPPD Emergency Response Organization members.			/
17.	As needed, contact OPPD support groups/individuals for assistance (see Emergency Phone Book).			/
18.	Notify the Radiation Health Center at University Hospital NHS (see Emergency Phone Book) of any OPPD employees that were administered potassium iodide (KI) per EPIP-EOF-21. Inform them that the individual(s) will be asked to report to the Radiation Health Center for follow-up examinations.			/

Attachment 6.2 - Westinghouse Electric Emergency Information Sheet

1. Date: \_\_\_\_\_ Time: \_\_\_\_\_
2. Name and title: \_\_\_\_\_
3. Omaha Public Power District, Fort Calhoun Nuclear Station, Fort Calhoun, Nebraska
4. Call Back Numbers (2): \_\_\_\_\_ or \_\_\_\_\_
5. This call is for a: (circle one)

**REAL EMERGENCY or DRILL**

6. What is the EMERGENCY CLASSIFICATION? (circle one)

Alert                      Site Area Emergency                      General Emergency

7. What is the desired Westinghouse Electric Response, as specified by the Emergency Director (circle one):

- 7.1 **STANDBY** - No Westinghouse Electric action authorized other than to standby for further information as it becomes available.
- 7.2 **ALERT** - Westinghouse Electric is to inform its Emergency Response Organization (ERO), but no further action beyond the notification is authorized.
- 7.3 **CENTER ACTIVATION** - Westinghouse Electric is to inform its ERO and assemble their Emergency Response Team at the Westinghouse Electric Emergency Response Center (ERC). Further action would be specified by OPPD.
- 7.4 **FULL RESPONSE** - Westinghouse Electric to activate its ERC and bring other available system resources up to full alert. Further action would normally be specified by the utility, **but Westinghouse Electric would be authorized to take prudent, independent action where timely utility approval could not be obtained.**

8. Describe event briefly, with dates and times:

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Attachment 6.3 - INPO Event Notification

1. Notification status (check one):

- a. Actual Event ☐
- b. Drill or Exercise ☐

2. Omaha Public Power District, Fort Calhoun Station, Unit 1, Fort Calhoun, Nebraska

3. Caller's Name: \_\_\_\_\_ Phone No.: \_\_\_\_\_  
Calling From: ☐ Control Room (Simulator) ☐ TSC ☐ EOF ☐ Other

4. Utility's Sr Mgr in Charge of Emergency: \_\_\_\_\_ Phone No.: \_\_\_\_\_  
Located in: ☐ Control Room (Simulator) ☐ TSC ☐ EOF ☐ Other Fax No.: \_\_\_\_\_

5. Event Classification (check one):

		Date Declared	Time Declared	Plant Time Zone
a. Unusual Event	<input type="checkbox"/>			
b. Alert	<input type="checkbox"/>			
c. Site Area Emergency	<input type="checkbox"/>			
d. General Emergency	<input type="checkbox"/>			
e. Terminated	<input type="checkbox"/>			

6. Reason for Event Declaration: \_\_\_\_\_  
\_\_\_\_\_

7. INPO Assistance Requested? \_\_\_\_\_ (yes/no)

- Type ☐ Facilitating technical information flow to the nuclear industry by maintaining NUCLEAR NETWORK®
- ☐ Locating **replacement equipment** and industry personnel with special **technical expertise**
- ☐ Providing **technical information and industry experience** with similar plant systems and components
- ☐ Dispatching an **INPO Liaison** to the affected plant/utility to facilitate utility interface with INPO and its industry resources
- ☐ Other: \_\_\_\_\_

When Needed: \_\_\_\_\_ Where Needed: \_\_\_\_\_  
Utility Contact Requesting Assistance: \_\_\_\_\_  
Utility Contact Phone Number: \_\_\_\_\_

Document	Document Title	Revision/Date
EPIP-OSC-1	Emergency Classification	R35 05-02-02
EPIP-OSC-2	Command and Control Position Actions/Notifications	R40 02-04-02
EPIP-OSC-9	Emergency Team Briefings	R7 12-09-99
EPIP-OSC-15	Communicator Actions	R22 10-24-00
EPIP-OSC-21	Activation of the Operations Support Center	R12 10-29-02
EPIP-TSC-1	Activation of the Technical Support Center	R23 10-29-02
EPIP-TSC-2	Catastrophic Flooding Preparations (R0 03-22-95) DELETED (05-09-95) REINSTATED	R2 02-06-96
EPIP-TSC-8	Core Damage Assessment	R14 01-19-01
EPIP-EOF-1	Activation of the Emergency Operations Facility	R13 10-29-02
EPIP-EOF-3	Offsite Monitoring	R18 11-12-02
EPIP-EOF-6	Dose Assessment	R32 01-23-02
EPIP-EOF-7	Protective Action Guidelines	R13 10-31-00b
EPIP-EOF-10	Warehouse Personnel Decontamination Station Operation	R10 01-13-00a
EPIP-EOF-11	Dosimetry Records, Exposure Extensions and Habitability	R18 09-18-97b

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Fort Calhoun Station  
Unit No. 1

**EPIP-EOF-3**

EMERGENCY PLAN IMPLEMENTING PROCEDURE

**Title:** OFFSITE MONITORING

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FC-68 Number: EC 28896

Reason for Change: Rewrite to update and provide easier format to follow.

Requestor: Mark Reller

Preparer: Mark Reller

OFFSITE MONITORING

**NON-SAFETY RELATED**

1. PURPOSE

- 1.1 This procedure provides guidance to field teams on performing offsite radiological monitoring.

2. REFERENCES/COMMITMENT DOCUMENTS

2.1 Ongoing Commitments

- AR 30448

2.2 RP-418, Operation of the Eberline ESP-2 Digital Meter

2.3 RP-420, Operation of Ludlum and Eberline Count Ratemeters Using External Pancake GM Probes

2.4 RP-439, Operation of the Dose Rate Meter

2.5 RP-434, Operation of the Radeco Model H-810 Air Totalizer

2.6 RP-203, Air Sample Collection and Analysis

2.7 FC-EPF-2, Offsite Monitoring Log

2.8 FC-EPF-8, Sample Worksheet

3. DEFINITIONS

None

4. PREREQUISITES

None

5. PROCEDURE

- 5.1 The TSC Field Team Technician will use Attachment 6.1 when preparing for departure.

- 5.2 The TSC Field Team Technician will use Attachment 6.2 when performing a plume search.

- 5.3 The TSC Field Team Technician will use Attachment 6.3 for performing surveys.
- 5.4 The TSC Field Team Technician will use Attachment 6.4 for counting samples.
- 5.5 The TSC Field Team Technician will use Attachment 6.5 for follow-up actions.

6. ATTACHMENTS

- 6.1 Preparing for Departure
- 6.2 Plume Search
- 6.3 Performing Surveys
- 6.4 Counting Samples
- 6.5 Follow-up Actions

Attachment 6.1 - Preparing for Departure

(✓) INITIALS

1. Upon arrival at the TSC report to the TSC Protective Measures coordinator for:

1.1 A briefing of current conditions:

- Emergency Classification Level \_\_\_\_\_
- Initiating conditions \_\_\_\_\_
- Prognosis \_\_\_\_\_

1.2 A briefing on weather data:

- Wind Speed \_\_\_\_\_
- Wind direction \_\_\_\_\_
- Stability class \_\_\_\_\_
- Affected sectors \_\_\_\_\_

1.3 Dose Assessments (if being performed)

- PARs \_\_\_\_\_
- Action taken by states \_\_\_\_\_

1.4 Special precautions or strategy to be used in field. \_\_\_\_\_

1.5 Field team assignments \_\_\_\_\_

2. Proceed to the Security Building Emergency Gear locker and obtain:

- Vehicle keys \_\_\_\_\_
- Survey and monitoring instruments \_\_\_\_\_
- Potassium Iodide tablets (3 bottles) \_\_\_\_\_
- Self reading dosimeters \_\_\_\_\_

3. Verify radio operability:

**NOTE:** Push the talk button to talk, release the button to listen.

- Turn on radio
- Select desired sub-fleet number (normally SF4)
- Contact EOF (TSC as backup) for a radio check \_\_\_\_\_

Attachment 6.1 - Preparing for Departure

(✓) INITIALS

4. Record the following information on the FC-EPF-2 form:

- Field Team color (red or blue)
- Serial numbers of survey instruments
- Calibration due dates of survey instruments
- Names of Field Team members
- Initial readings of Field Team members dosimetry

\_\_\_\_\_

5. Prior to departure receive instructions from the EOF Field Team Specialist on:

- Current plant conditions
- Projected plume pathway
- Targeted sample location
- Preferred route to sample location
- Personal protective actions required (use ALARA principals)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

6. When directed proceed to the sample location using the Monitor Book Map for directions.

Attachment 6.2 - Plume Search

**NOTE:** Ensure dose rate instrument is kept in the on position on the lowest possible scale.

**NOTE:** Always follow ALARA principles when performing your duties.

1. Plume search when enroute to the projected plume pathway:
  - 1.1 Periodically monitor background.
  - 1.2 Report and record any increase in background to the EOF Field Team Specialist include:
    - Maximum dose rate location
    - Any other conditions of note
  - 1.3 Follow the instructions of the Field Team Specialist.
2. Plume search when in the plume or the projected plume pathway:
  - 2.1 Continually monitor background
  - 2.2 Report and record any increase in background to the EOF Field Team Specialist include:
    - Maximum dose rate
    - Lowest dose rate
    - Location
    - Changes in meteorological conditions
    - Any other conditions of note
3. Consult with the EOF Field Team Specialist to determine the location in which to perform surveys.

Attachment 6.3 - Performing Surveys

(✓) INITIALS

1. General instructions:

- 1.1 Ensure that EOF Field Team Specialist is aware of your location.
- 1.2 Always use ALARA principles.
- 1.3 When stopped use roof mounted yellow light.
- 1.4 Always park in a safe and secure location.
- 1.5 Exercise care when handling sample to prevent cross-contamination.
- 1.6 Be aware of the need for protective clothing.
- 1.7 If radio communication is lost for any reason contact Field Team Specialist by commercial telephone.
- 1.8 Dosimetry should be read at each sample location as a minimum, record results on FC-EPF-2.

2. Beta/Gamma Surveys

**NOTE:** Determine beta and gamma radiation levels using the ion chamber instrument. The ESP-2 with HP270 probe may be used as a backup.

**NOTE:** In a noble gas field, an ion chamber instrument can become internally contaminated and provide erroneous readings.

- 2.1 In an open area, avoiding trees and other obstructions:
  - 2.1.1 Monitor for beta and gamma radiation at ground level.
  - 2.1.2 Monitor for beta and gamma radiation at waist level.
  - 2.1.3 Record readings on FC-EPF-2.

Attachment 6.3 - Performing Surveys

(✓) INITIALS

3. Air Sampling [AR 30448]

3.1 Load the air sampler with both a particulate filter and a charcoal cartridge.

3.1.1 Note the direction of the air flow on the cartridge using the arrow for guidance.

3.1.2 Note the collection side of the particulate filter with an ink mark.

3.1.3 Ensure the gaskets are in place and the particulate filter is properly positioned to prevent air to bypass the filter.

**NOTE:** Perform air sampling in an open area away from trees, buildings and other obstructions.

**NOTE:** Do not place air sampler on the ground or in any other place where it may vacuum surface contamination.

3.2 If power is to be supplied from the vehicle inverter:

3.2.1 Put the power supply switch in "generator" or "inverter" position.

3.2.2 Turn on the inverter switch (located on the inverter).

3.3 If power is to be supplied from an outside power source:

3.3.1 Ensure power supply switch is on outside power.

3.3.2 Plug van into the power source.

3.4 Plug Sampler in and operate in accordance with

- RP-434
- Perform air sampling as per RP-203

3.5 Bag the particulate and iodine samples separately and fill out and attach the supplied label.

Attachment 6.3 - Performing Surveys

(✓) INITIALS

4. Smear Collection:

4.1 Obtain and clearly number the desired amount of smears:

4.1.1 Smear surfaces as desired using a standard 100 cm<sup>2</sup>  
(approximate) smear area.

4.1.2 Bag the smears and fill out and attach the supplied label.

Attachment 6.4 - Counting Samples

1. Sample Counting

1.1 Upon completion of sample collection:

**NOTE:** If instrument backgrounds remain high after leaving the plume area try decontaminating the probes.

1.1.1 Move to a low background area (<300 cpm) to count samples.

1.1.2 Re-establish a background for all instruments.

1.2 Count and calculate samples, using FC-EPF-8 for guidance:

**NOTE:** Use care not to cross contaminate samples.

1.2.1 Count the charcoal cartridge for gross iodine activity.

1.2.2 Count the paper filters for gross particulate activity.

1.2.3 Count smears for activity in DPM/100 cm<sup>2</sup>.

1.2.4 Log iodine and particulate air sample results and the highest smear results on FC-EPF-2.

1.2.5 Return all samples to their original labeled bags.

1.2.6 Seal bags and place in designated storage bin.

1.3 Report results to the EOF Field Team Specialist or TSC Protective Measures Coordinator.

Attachment 6.5 - Follow-up Actions

(✓) INITIALS

1. If directed to return to site or the EOF:

1.1 Obtain appropriate direction to the selected site. \_\_\_\_\_

1.2 Assume that you and the vehicle are contaminated. \_\_\_\_\_

1.3 Secure vehicle by:

- Turning off the power \_\_\_\_\_
- Turn off the power inverter \_\_\_\_\_
- If possible plug vehicle tank heater into AC power supply \_\_\_\_\_

1.4 Ensure vehicle and all personnel are monitored for contamination and deconned as necessary. \_\_\_\_\_

1.5 Prepare a list of supplies that are needed to return the vehicle to ready state. \_\_\_\_\_

1.6 Deliver all samples, forms and logs to the Field Team Specialist at the EOF or the OSC RP Coordinator at the site. \_\_\_\_\_