

OPERATIONS SUPPORT CENTER ACTIVATION AND OPERATION

1. PURPOSE

This procedure provides a layout of the Operations Support Center (OSC) activities associated with an emergency condition. When the Shift Manager decides that a situation warrants activation of the OSC, this procedure becomes applicable.

2. TERMS AND DEFINITIONS

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- 2.1 Emergency Response Team (ERT) -- The ERT is intended to support safe shutdown actions, including verification of system/component status, initial event assessment, and system line-ups or equipment manipulations to support Emergency Operating Procedure actions. However, all repair and troubleshooting activities should be dispatched and coordinated through the Operations Support Center (OSC). The Shift Manager will maintain oversight and dispatch authority over pre-designated ERT personnel in the Control Room until the unit is in a stable shutdown mode.

3. RESPONSIBILITIES

- 3.1 The **Operations Support Center (OSC) Director** initially reports to the Shift Manager (Shift Emergency Director). Once the TSC assumes Command and Control then the OSC will transfer to the Maintenance Director. The OSC Director's overall responsibility is to manage and supervise the activities of OSC personnel.
- 3.2 The **Assistant OSC Director** reports to the OSC Director and supports the OSC Director in supervising the activities of personnel reporting to the OSC. An OSC Group Lead may fill the Assistant OSC Director position.
- 3.3 The **OSC Group Leads** report to the OSC Director and are responsibility for managing and supervising OSC team personnel. The OSC Group Lead assigned to an OSC Team is responsible at all times for the safety of team personnel.

- 3.4 The ***Damage Control Communicator*** relays requests for the dispatching of OSC teams and for keeping the Control Room and TSC apprised of OSC team activities. Damage Control Communicators are stationed in the Control Room (CR), Technical Support Center (TSC) and Operations Support Center (OSC).

4. **MAIN BODY**

- 4.1 **INITIATE** the appropriate Emergency Plan activities using the OSC position specific checklists in the following attachments.

5. **DOCUMENTATION**

None

6. **REFERENCES**

None

7. **ATTACHMENTS**

- 7.1 Attachment 1, OSC Director Checklist
- 7.2 Attachment 2, Assistant OSC Director Checklist
- 7.3 Attachment 3, OSC Group Leads Checklist
- 7.4 Attachment 4, OSC Configuration
- 7.5 Attachment 5, OSC Team Briefing Form
- 7.6 Attachment 6, OSC Team Debriefing Form
- 7.7 Attachment 7, Staff Guidelines
- 7.8 Attachment 8, Damage Control Communicator (OSC) Checklist

ATTACHMENT 1
OSC DIRECTOR CHECKLIST
Page 1 of 7

Section 1, Initial Actions

Section 2, Ongoing Actions

Section 3, Situational Actions

3.1, Accountability

3.2, OSC Evacuation

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. INITIAL ACTIONS

(Initials)

- 1.1 _____ **INITIATE** and **MAINTAIN** a position log documenting significant actions performed and communications related to your position.
- 1.2 _____ **DIRECT** the Assistant OSC Director, or available OSC staff, to initially setting up the OSC per EP-AA-112-300, Attachment 4, "OSC Configuration" and the appropriate station Table for a suggested configuration and flow-path for initial set-up of the OSC.
1. If not present, then **APPOINT** an Assistant OSC Director from available Supervisors or staff .
- 1.3 _____ **VERIFY** that Radiation Protection (RP) personnel have established a dosimetry issuance area

NOTE: Adequate staffing is determined by the needs of the event. The OSC should be considered operational when staffing is sufficient to respond to the event.

**ATTACHMENT 1
OSC DIRECTOR CHECKLIST
Page 2 of 7**

1.4 **DETERMINE** adequacy of OSC staffing.

NOTE: Table includes on-shift and 60 minute augmentation commitments.

	<u>MWROG</u>	<u>MAROG</u>	<u>ACTUAL</u>
OSC Director	1	1	
Mechanical Maintenance	2	2	
Electrical or Instrument Maintenance	3	N/A	
Electrical Maintenance	N/A	2	
Instrument Maintenance	N/A	3	
• Repair and Corrective Actions	N/A	(1)	
• Field Monitoring Team Drivers	N/A	(2)	
Radiation Protection (Total)	13	Verified by TSC Rad. Protection Manager	
• In-plant / Onsite Surveys	(9)		
• Field Monitoring Team Leaders	(4)		
Chemistry	2	2	

1.5 _____ **NOTIFY** the TSC Maintenance Manager and Shift Emergency Director of your arrival, and **OBTAIN** an initial briefing on event conditions.

1. **REQUEST** the Maintenance Manager, to initiate call outs to fill the required staffing positions.

1.6 **DESIGNATE** the following positions:

NOTE: A Group Lead is not required to be a Supervisor. Available Management, or as an interim measure, craft / technical personnel can fill this capacity. The Assistant OSC Director and OSC Group Leads should be applied to meet the "minimum staffing" requirements outline in Step 1.4.

- _____ Assistant OSC Director: _____
- _____ Mechanical / Electrical: _____
- _____ Instrumentation (I&C): _____
- _____ Radiation Protection:* _____
- _____ Chemistry:* _____

* If **NOT** yet designated by the TSC Radiation Protection Manager.

**ATTACHMENT 1
OSC DIRECTOR CHECKLIST
Page 3 of 7**

Mid-West ROG

NLO's assigned to the ERT will be retained in the Control Room until the affected unit(s) are in a safe shutdown condition.

- 1.7 ___ **REQUEST** the Shift Manager to dispatch the Field / Floor Supervisor and NLO's to the OSC.

Limerick only

- 1.8 ___ **DISPATCH** an I&C technician to shift TSC ventilation to its "emergency" mode per EP-AA-112-202, Attachment 1 (Table1-1), and **INFORM** the TSC Director when completed.

- 1.9 ___ **BRIEF** the Maintenance Manager on:
- OSC staffing
 - Any issues that may impact OSC operations
 - NLO's or other shift personnel dispatched in-plant by the Control Room and any support needed for these activities

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Requests for the dispatching of NLO's to perform TRIP and other operations procedural actions will be communicated by the Control Room (Unit) Supervisor directly to the Field / Floor Supervisor, who will coordinate actions with the OSC Director and OSC Group Leads.

- 1.10 ___ **COMMUNICATE** your expectations for information passing between the CR, TSC and OSC to the Damage Control Communicator (assigned by the TSC Director).

Information communicated over this circuit should be limited to:

- Requests for the dispatching of an OSC.
- OSC Team status, including time dispatched, estimates completion times, return of a team to OSC.
- Instructions for the immediate return, cancellation, or redirection of an OSC Team(s).
- Dispatching and return of NLO's requested from the Control Room.

**ATTACHMENT 1
OSC DIRECTOR CHECKLIST
Page 4 of 7**

1.11 _____ **CONDUCT** an initial OSC briefing for the personnel in the OSC. The briefing should include but not be limited to:

- Introduction of the OSC Director, Assistant OSC Director, and Group Leads
- Event Classification and a brief description of event
- Facility in Command and Control
- Plant Status and Current TSC Priorities
- How Team briefings and de-briefings will be conducted
- OSC Flowpaths (Briefing areas, entrances and exits, etc.)
- Communication with teams in-plant by telephone or radio
- OSC Staff Guidelines (Attachment 7)

1.12 _____ **INFORM** the Maintenance Manager when the OSC is set up and prepared to send out emergency response teams.

1. _____ **ASSUME** control of teams when directed by the Maintenance Manager.
2. _____ **ENSURE** that all teams dispatched by the Control Room are now tracked on the Team Status Board, or equivalent.
3. _____ **DIRECT** a Group Lead to **CONTACT** each team turned over to the OSC and **INFORM** them of the change in reporting location.
4. _____ **NOTIFY** the Control Room and TSC when each team has been assumed by the OSC.

Mid-West ROG

1.13 _____ **DIRECT** the Operations Group Lead to **MONITOR** the activities of ERT personnel dispatched from the Control Room.

1.14 _____ **VERIFY** with the RP Group Lead that accumulated exposure records are being maintained for personnel working in the OSC

1.15 _____ **DECLARE** the OSC as formally activated when "minimum staffing" levels outlined in Step 1.4 are met. TIME: _____

**ATTACHMENT 1
OSC DIRECTOR CHECKLIST
Page 5 of 7**

2. ONGOING ACTION:

- 2.1 **COORDINATE** the organization and briefing of teams following a request based on the briefing level (team priority) established by the TSC.
- 2.2 **ENSURE** that the RP Group Lead reviews each OSC Team Briefing Form prior to dispatch of the team to ensure the radiological conditions and precautions were adequately addressed during the briefing.

NOTE: OSC Communicator will fill out the top portion of EP-AA-112-300, Attachment 5 (OSC Team Briefing Form) as received from the TSC, and forward to the OSC Director.

1. **ASSIGN** the task to the appropriate OSC Group Leader to form and brief the team, documenting the briefing on Attachment 5.

NOTE: The use of RWP's may be waived during emergency situations. In-plant radiological conditions; dosimetry, respiratory and protective clothing requirements shall be documented on the OSC Team Briefing Form.

- 2.3 **ENSURE** that the team's assignment and departure time is tracked on the designated status board.
1. **DIRECT** the Damage Control Communicator to report the time of the team's departure to both the TSC and the Control Room.
2. **MAINTAIN** accountability of personnel assigned to the OSC and those that are assigned to in-plant tasks at all times.
- 2.4 **INSTRUCT** OSC Group Leads to communicate to the respective teams in the field significant changes to event/plant that would impact team activities or constitute a hazard.

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- 2.5 **Immediately NOTIFY** the Shift Manager of the potential delays in Emergency Operation Procedure (EOP) – T-200 implementation.

ATTACHMENT 1
OSC DIRECTOR CHECKLIST
Page 6 of 7

- 2.6 **ENSURE** that the appropriate OSC Group Leader performs a debrief of returning emergency teams to the OSC per EP-AA-112-300, Attachment 6 (OSC Team Debriefing Form).
1. **DIRECT** OSC Group Lead conducting debrief to communicate the results of activities to the TSC Maintenance Manager.
 2. **ENSURE** that RP documents radiological information on appropriate survey maps.
- 2.7 **DIRECT** requests for emergency special procedures or deviations to the Maintenance Manager for development and approval.
- 2.8 **CONDUCT** periodic OSC briefings (at least hourly or as significant changes occur). Information should include but not be limited to:
- Event Classification
 - Facility in Command and Control
 - Significant in-plant or onsite radiological concerns
 - Significant changes in plant/system status
 - Priority of work in-progress and planned
- 2.9 **CONSIDER** the need for support personnel, such as Work Planners, Storeroom personnel, etc.).
1. **REQUEST** additional personnel, materials and equipment from the Maintenance Manager.
- 2.10 **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).
3. **SITUATIONAL ACTION:**
- 3.1 **ACCOUNTABILITY**
1. **EVALUATE** whether dispatched teams are to be recalled or remain in the field if an Accountability is called for.
 2. **CONTACT** dispatched teams and direct them to return to the OSC or remain on task as appropriate.
 3. **PROVIDE** names and locations of dispatched teams to the Security Coordinator if Accountability is called for.

ATTACHMENT 1
OSC DIRECTOR CHECKLIST
Page 7 of 7

3.2 OSC EVACUATION

1. **CONSIDER** evacuation of the OSC if:
 - Dose rates in the facility exceed 100 mRem/hr.
 - Airborne conditions create the need for respiratory protection.
 - Any condition exists that endangers the health and safety of OSC personnel.

2. **CONFER** with the Maintenance Manager in the TSC prior to evacuation of the OSC, if possible, to determine the following:
 - Alternate OSC location.
 - Communications capabilities and other resources available to support OSC activities.

3. **IF** evacuation is deemed necessary, then **ATTEMPT** to maintain contact with the TSC/Control Room by radio until a back-up OSC can be established.

ATTACHMENT 2
ASSISTANT OSC DIRECTOR CHECKLIST
Page 1 of 3

Section 1, Initial Actions

Section 2, On-going Actions

Section 3, Situational Actions

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. INITIAL ACTIONS
(Initials)

1.1 _____ **INFORM** the OSC Director of your arrival, and **OBTAIN** and initial briefing on event conditions.

1.2 **If** for the any reason the OSC Director is unable or unavailable to direct OSC activities, **then ASSUME** the duties of the OSC Director and **PERFORM** the following:

- **REFER** to the EP-AA-112-300, Attachment 1, for the checklist outlining the duties of the OSC Director.
- **REQUEST** that the TSC call-out another qualified OSC Director.
- **ASSIGN** another individual to fulfill the Assistant OSC Director's responsibilities until you can assume those duties again.

1.3 _____ **INITIATE** a position log documenting significant actions performed and communications related to your position.

1.4 **SUPERVISE** the initial setting up the OSC, including:

- **REFER** to EP-AA-112-300, Attachment 4, "OSC Configuration" and the appropriate station Table for a suggested configuration and flow-path for initial set-up of the OSC.

1.4.1 _____ **ENSURE** that a flow-path is developed within the OSC for emergency teams to enter and leave the facility that still allows accountability to be maintained of the personnel.

1.4.2 _____ **DISTRIBUTE** EP-AA-112-300, Attachment 7 (OSC Staff Guidelines) to all personnel reporting to the OSC.

**ATTACHMENT 2
ASSISTANT OSC DIRECTOR CHECKLIST
Page 2 of 3**

NOTE: Adequate staffing is determined by the needs of the event. The OSC should be considered operational when staffing is sufficient to respond the event.

- 1.5 _____ **ASSIST** the OSC Director in determining and augmentation of OSC staffing.

NOTE: Table includes on-shift and 60 minute augmentation commitments.

	<u>MWROG</u>	<u>MAROG</u>	<u>ACTUAL</u>
OSC Director	1	1	
Mechanical Maintenance	2	2	
Electrical or Instrument Maintenance	3	N/A	
Electrical Maintenance	N/A	2	
Instrument Maintenance	N/A	3	
• Repair and Corrective Actions	N/A	(1)	
• Field Monitoring Team Drivers	N/A	(2)	
Radiation Protection (Total)	13	Verified by TSC Rad. Protection Manager	
• In-plant / Onsite Surveys	(9)		
• Field Monitoring Team Leaders	(4)		
Chemistry	2	2	

- 1.6 _____ **INSTRUCT** OSC Group Leads or available staff to log OSC personnel by department on facility status boards.

1. If available, then **COMPLETE** a magnetic name card (color-coded by department for each OSC participant).

- 1.7 _____ **VERIFY** with the RP Group Lead that Habitability Surveys of permanently occupied areas of the site have been initiated per EP-AA-113, Attachment 1.

- 1.8 _____ **VERIFY** that personnel have been assigned by the OSC RP Group Lead as Field Monitoring Team members

ATTACHMENT 2
ASSISTANT OSC DIRECTOR CHECKLIST
Page 3 of 3

2 **ONGOING ACTIONS**

- 2.1 **COORDINATE** with the OSC Director to organize in-plant teams to support station priorities.
1. **DETERMINE** the need with the RP Group Lead for radiological support for the in-plant team based on the in-plant radiological conditions.
 2. **ENSURE** that in-plant team dispatch briefings include expected activities and radiological hazards.
 3. **ENSURE** that OSC Team Briefing Form (EP-AA-112-300, Attachment 5) is being completed accurately and in sufficient details to reflect team activities.
- 2.2 **SUPERVISE** Damage Control Communicator activities in support of the OSC Director. Information communicated over this circuit should be limited to:
- Requests for the dispatching of an OSC team.
 - OSC Team status, including time dispatched, estimates completion times, return of a team to OSC.
 - Instructions for the immediate return, cancellation, or redirection of an OSC Team(s).
 - Dispatching and return of NLO's requested from the Control Room.
- 2.3 **ENSURE** that the team assignment and departure time is tracked on the designated status board, and that the Damage Control Communicator is updating the TSC and Control Room on team's departure and assigned Team No.
- 2.4 **APPRISE** the OSC Director of changes in OSC Team status, activities completed or unresolved, and **ASSIST** in the prompt resolution of conflicts in team status between the TSC and OSC.
1. **VERIFY** periodically that the OSC Team status, as recorded on the designated board, is consistent between the TSC and OSC.
 2. **MONITOR** the electronic logs and/or status boards, and **RESOLVE** errors in OSC Team status through the Damage Control Communicator.
 3. **ENSURE** that records of in-plant survey information, radiochemistry results, and accumulated exposure are being maintained by RP.
- 2.5 **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

ATTACHMENT 3
OSC GROUP LEADS CHECKLIST
Page 1 of 6

Section 1, Initial Actions

Section 2, Ongoing Actions

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. INITIAL ACTIONS

- 1.1 **INFORM** the OSC Director of your arrival, and **OBTAIN** an initial briefing on event status.
- 1.2 **INITIATE** and **MAINTAIN** a position log documenting significant actions performed and communications related to your position.
- 1.3 **ASSUME** the interim role of OSC Director or Assistant OSC Director if the arrival of qualified personnel is delayed.
- **REFER** to EP-AA-112-300, Attachment 1 (OSC Director)
 - **REFER** to EP-AA-112-300, Attachment 2 (Assistant OSC Director)
- 1.4 **IDENTIFY** individuals available within each group and **ADVISE** the OSC Director of their status.
- 1.5 **ASSIST** the OSC Director in initially setting up the OSC for operation using applicable table in Attachment 4.

**ATTACHMENT 3
OSC GROUP LEADS CHECKLIST
Page 2 of 6**

1.6 RP GROUP LEAD shall perform the following:

Limerick only

1.6.1 _____ **DISPATCH** an RP technician to the Aux. Equipment Room, ARM Panel to record ARM readings, if required.

1.6.2 _____ **DESIGNATE** personnel as Field Monitoring Teams and **DIRECT** them to contact the Radiological Controls Coordinator for briefing and initial dispatch. – Two (2) teams are required.

<u>Field Monitoring Team Composition</u>		
	<u>MWROG*</u>	<u>LGS / PBAPS</u>
Leader:	Qualified Individual	RPT
Driver:	Qualified Individual	I&C

RPT – Radiation Protection Technician

I&C – Instrument and Control Technician

* Composition may vary based on long-term staffing requirements per the respective station Annexes.

1.6.3 _____ **DESIGNATE** personnel to check radiation detection instruments, including a physical inspection, source check and calibration verification prior to initial use.

1.6.4 _____ **DESIGNATE** an individual to record results of samples and in-plant survey information and **POST** in facility.

1.6.5 _____ **ENSURE** that only one access point is used for the OSC, and **EVALUATE** the need to monitor this access point for contamination control.

Mid-West ROG

1.6.6 _____ **ENSURE** that an RPT has been dispatched to the Control Room to support ERT activities.

1.6.7 _____ **DIRECT** available RP personnel to establish a dosimetry issuance area.

ATTACHMENT 3
OSC GROUP LEADS CHECKLIST
Page 3 of 6

1.6.8 _____ **ASSIGN** a RPT(s) to perform Habitability Surveys of permanently occupied areas of the site per EP-AA-113, Attachment 1.

Peach Bottom

REFER to Table 4-9 (in EP-112-300, Attachment 4) for action in support of TSC Habitability.

1. **IF** an Accountability is in progress, **then ADD** the Assembly Areas listed on the Onsite Habitability Checklist.
2. **CONTACT** the Security Coordinator in the TSC to receive appropriate Badge Access level authorization.
3. **INSTRUCT** the RPT to place an Electronic Dosimeter at each area for Dose Monitoring of those areas.

1.6.9 _____ **REPORT** the results of the Habitability surveys to the Radiation Protection Manager.

1.7 CHEMISTRY GROUP LEAD shall perform the following:

1.7.1 _____ **OBTAIN** approval from the TSC Radiation Protection Manager to relocate Chemistry personnel from the OSC to the Chemistry Lab(s), after verifying habitability and establishing accountability.

1.7.2 _____ **DIRECT** available Chemistry personnel to set-up Chemistry Lab(s) for emergency sample collection and analysis.

Limerick / Peach Bottom

1.7.3 _____ **PREPARE** for a Post Accident Sample, as applicable

1. _____ **DIRECT** an inventory check of the Emergency Cabinet and Post Accident Sampling System (PASS) Preparation Station.
2. _____ **If** area dose rates are acceptable, **then DIRECT** an inventory of the PASS Cabinet.
3. _____ **DIRECT** preparation of sampling equipment per appropriate procedures

ATTACHMENT 3
OSC GROUP LEADS CHECKLIST
Page 4 of 6

2. ONGOING ACTIONS

- 2.1 **COORDINATE** with the OSC Director to organize in-plant teams to support station activities.
- 2.2 **ASSEMBLE** in-plant teams as requested by the OSC Director.

CAUTION

A minimum of two people should be assigned to a team, with the exception of RPT performing habitability surveys. At no time shall anyone be allowed to travel through or remain in a potentially high radiation area or otherwise hazardous area, unless they are within sight of another team member.

1. **COORDINATE** with the OSC RP Group Lead for radiological support for the briefing of team being assembled.
 2. **DISCUSS** any changes or deviations to station procedures required to accomplish OSC tasks with the OSC Director.
 3. **IDENTIFY** required TSC Engineering or station Operations support to the OSC Director.
 4. **ASSEMBLE** required drawings and procedures to support task completion. **NOTIFY** the Assistant OSC Director of needed reference materials not available in the OSC.
 - A. If an emergency special procedures or deviations are required, **then IDENTIFY** required procedures to the OSC Director for development by the TSC.
- 2.3 **CONDUCT** briefings of assigned OSC Team members regarding expected activities and radiological hazards using the OSC Team Briefing Form (EP-AA-112-300, Attachment 5) initiated for this task.

NOTE: The use of RWP's may be waived during emergency situations. In-plant radiological conditions; dosimetry, respiratory and protective clothing requirements shall be documented on the OSC Team Briefing Form.

1. **ENSURE** briefing on radiological hazards, exposure limits, and protective equipment requirements is performed by the OSC RP Group Lead or designated RPT.

ATTACHMENT 3
OSC GROUP LEADS CHECKLIST
Page 5 of 6

2. Upon the dispatching of team, **PERFORM** the following:
 - A. **RECORD** the time team dispatched and Estimated Completion Time for task on the bottom of OSC Team Briefing Form.
 - B. **NOTIFY** the OSC Director that the team has been dispatched.
 - C. **DIRECT** the Damage Control Communicator to announce the Team No., Time Dispatched, and Estimated Completion Time over the Damage Control Line.
 - D. **UPDATE** the OSC Team status on designated board to reflect the dispatching of team.
 - E. **FAX**, or have available clerical staff fax, completed briefing form to the TSC Maintenance Manager.

- 2.4 **COMMUNICATE** to assigned team members any significant changes to event / plant that would impact team activities or constitute a hazard and **TRACK** status of team activities.
 1. **NOTIFY** the OSC Director and Damage Control Communicator if the Estimate Completion Time is delayed significantly and **UPDATE** OSC Team status on designated board.
 - A. **REQUEST** additional personnel or resources from the OSC Director.
 2. **Immediately NOTIFY** the OSC Director and Damage Control Communicator upon completion of assigned task and team's return to the OSC.

- 2.5 **CONDUCT** de-briefings with returning in-plant teams:
 1. **COMPLETE** an OSC Team Debriefing Form (EP-AA-112-300, Attachment 6).
 2. **VERIFY** that the designated status board has been updated to reflect the return of team and **FAX** completed form to the TSC Maintenance Manager.
 3. **UPDATE** the Maintenance Manager (or RP Manager for specific radiological monitoring activities) for task activities completed and problems encountered.
 4. **VERIFY** with RP Group Lead that radiological information is appropriately documented in logs and on survey maps.

**ATTACHMENT 3
OSC GROUP LEADS CHECKLIST
Page 6 of 6**

- 2.6 Radiation Protection (RP) GROUP LEAD** shall perform the following:
- 2.6.1 ESTABLISH** contamination control points in-plant to limit the spread of contamination, and outside the TSC and OSC if a radiological release is occurring.
- 2.6.2.** Based on in-plant dose rates, **RECOMMEND** the need for issuance of Potassium Iodide (KI).
1. **CONTACT** the TSC Radiation Protection Manager for guidance concerning the use of KI if personnel will be sent into areas with high airborne activity.
- 2.6.3 CONDUCT** periodic facility briefings on plant radiological conditions. Information should include but not be limited to:
- In-plant radiological conditions
 - Dose approvals
 - Protective actions for on-site workers
 - Hazmat concerns on-site
1. **ENSURE** that wind direction is considered when planning work activities outside the plant power block when a radiological release is in progress.
- 2.6.4 When** directed by the TSC, **DISPATCH** an RPT to assembly areas to perform radiation and contamination surveys.
- 2.6.5 MAINTAIN** accumulated exposure records for all essential on-site personnel, including the TSC, OSC and Control Room, Security personnel and any other personnel left on-site.
1. **OBTAIN** approval from the TSC Radiation Protection Manager for emergency exposure extensions below 10CFR20 limits and **DOCUMENT** on Attachment 5, OSC Team Briefing Form.
 2. **OBTAIN** approval from the TSC Station Emergency Director for emergency exposure extensions above 10CFR20 limits per EP-AA-113.
- 2.7 CHEMISTRY GROUP LEAD** shall perform the following
- 2.7.1 MAINTAIN** accountability and **ENSURE** habitability for Chemistry technician relocated to Chemistry Lab(s).
- 2.8 PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

ATTACHMENT 4
OSC CONFIGURATION
Page 1 of 18

Initial activation of the OSC normally requires some rearranging and installation to allow the OSC to function as designed.

REFER to the station specific Tables for initial set-up of telephones, tables, and to establish the flowpath for processing emergency teams in and out of the facility.

Table 4-1, Braidwood OSC Suggested Configuration

Table 4-2, Byron OSC Suggested Configuration

Table 4-3, Dresden OSC Suggested Configuration

Table 4-4, LaSalle OSC Suggested Configuration

Table 4-5, Quad Cities OSC Suggested Configuration

Table 4-6, Clinton OSC Suggested Configuration

Table 4-7, Limerick OSC Suggested Configuration

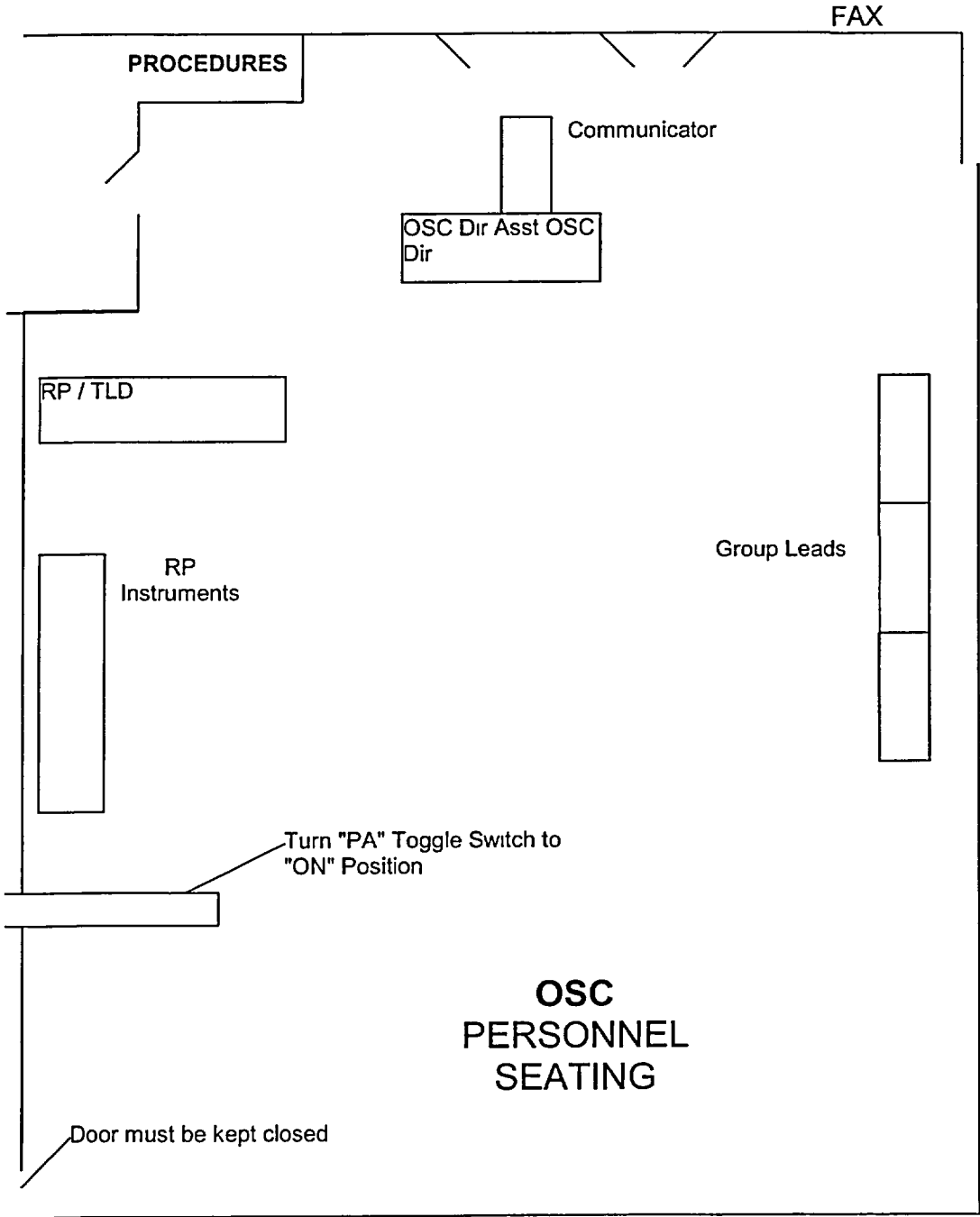
Table 4-8, Peach Bottom OSC Suggested Configuration

**ATTACHMENT 4
OSC CONFIGURATION
Page 2 of 18**

Braidwood OSC Suggested Configuration

TABLE 4-1

Page 1 of 2



**ATTACHMENT 4
OSC CONFIGURATION
Page 3 of 18**

Braidwood OSC Suggested Configuration

TABLE 4-1

Page 2 of 2

To Set-Up the Braidwood OSC, perform the following steps:

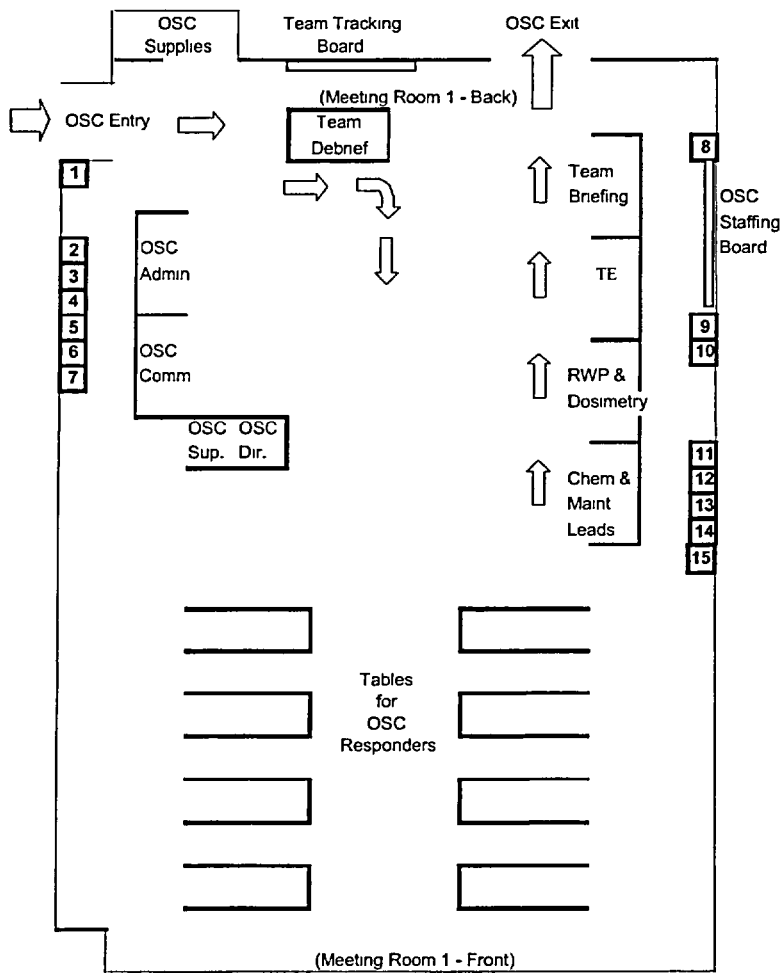
1. **TURN** on the lights and open sliding partitions between meeting room 'A' and 'B'.
2. **ARRANGE** tables and chairs per "OSC Suggested Configuration", Table 4-1, Page 1 of 2.
3. **BRING** OSC supplies out of the OSC storage room and place at proper locations.
4. **CONNECT** and **VERIFY** dial tone of OSC phones and Fax machine.
5. **TURN** Braidwood OSC Public Address System toggle switch to the "ON" position. (PA box on the north wall with the switch on face of unit).
6. **TURN ON** OSC Sound System in OSC Storage Room, get microphones.
7. **POST** outside of Meeting Room 'A' door with "No Entry / Exit Sign". Place all nameplates in OSC.
8. **OPEN** Procedures Cabinet and place procedure books at proper locations.
9. **SET** OSC clock with TSC time.

ATTACHMENT 4
 OSC CONFIGURATION
 Page 4 of 18

Byron OSC Suggested Configuration
 TABLE 4-2

Page 1 of 1

Suggested OSC Configuration

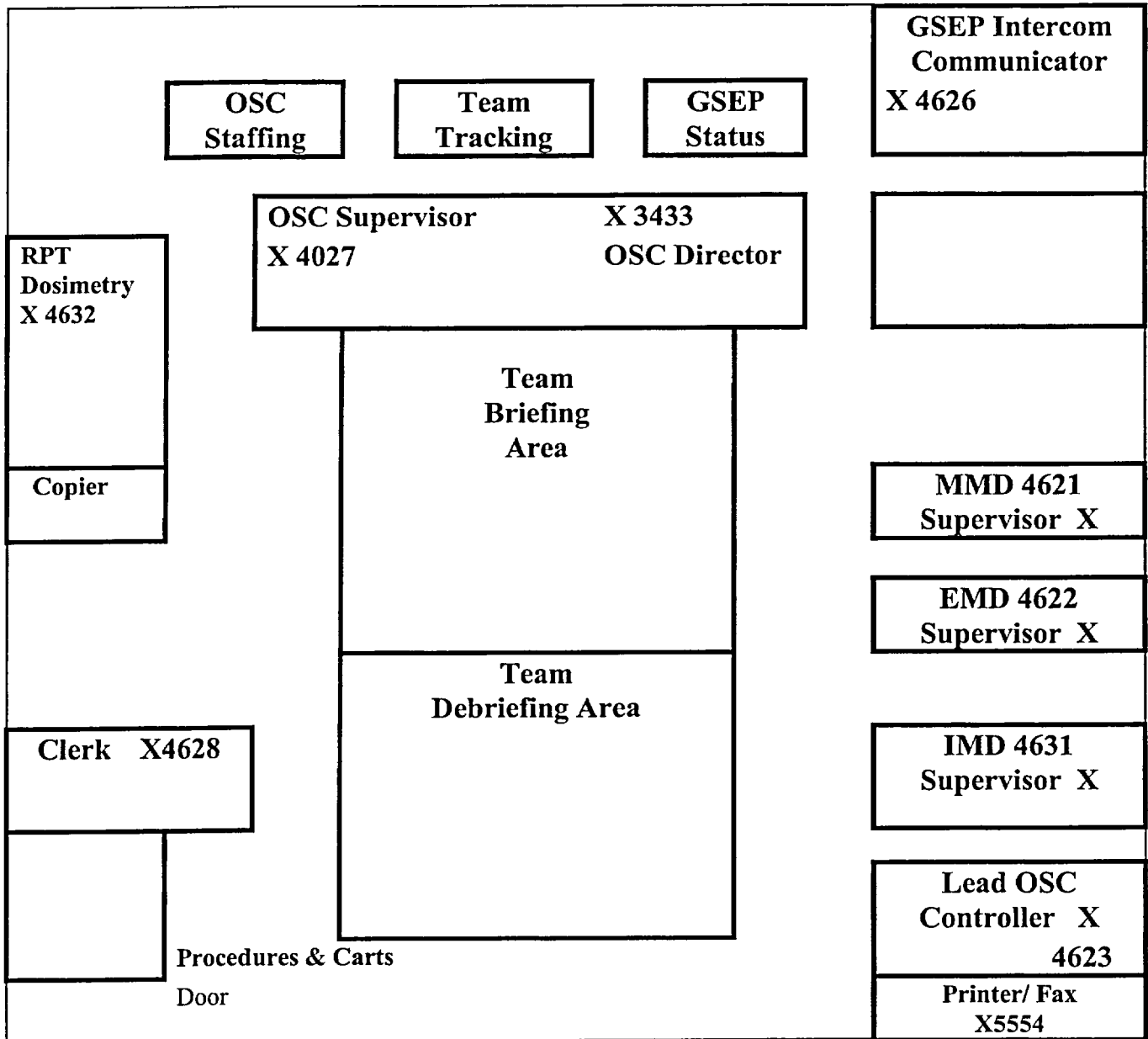


OSC Telephone numbers (number in box corresponds to location in the OSC)

- | | | | |
|------------------------|----------------------|--------------------|----------------------|
| 1 OSC Fax - X-234-4869 | 5 OSC Comm - X-2953 | 9 OSC TE Lan | 13 OSC IM - X-4864 |
| 2 OSC Admin - X-4868 | 6 TSC -CR/OSC (Blue) | 10 OSC TE Lan | 14 OSC Chem - X-4870 |
| 3 OSC Dir - X-4861 | 7 CR/TSC/OSC (Beige) | 11 OSC EM - X-4863 | 15 OSC Ops - X-4867 |
| 4A OSC Dir - X-4862 | 8 OSC RP - X-4867 | 12 OSC MM - X-4865 | |

ATTACHMENT 4
 OSC CONFIGURATION
 Page 5 of 18

Dresden OSC Suggested Configuration
 TABLE 4-3
 Page 1 of 2



ATTACHMENT 4
OSC CONFIGURATION
Page 6 of 18

Dresden OSC Suggested Configuration
TABLE 4-3
Page 2 of 2

OSC ACTIVATION CHECKLIST

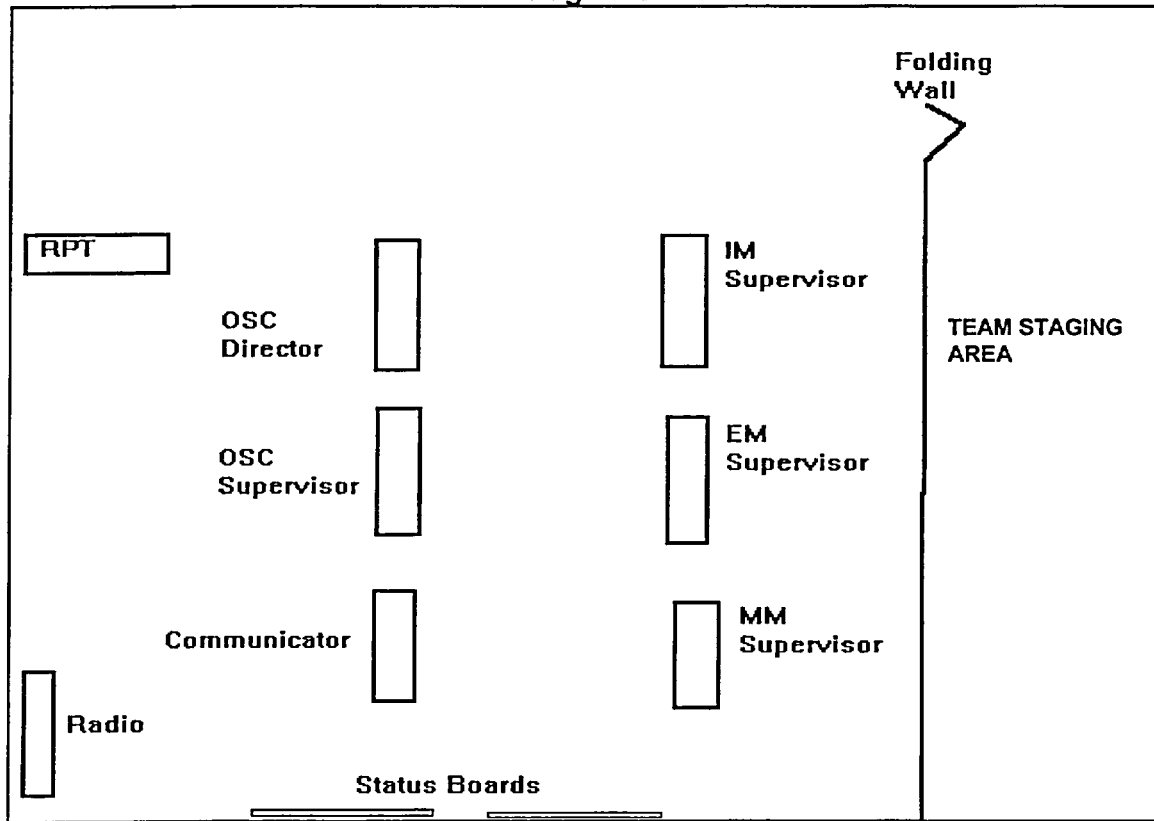
- ___ 1. **ESTABLISH** a radiological control point and frisking station at entrances to the OSC, when appropriate, based on data collected during habitability rounds.
- ___ 2. **ENSURE** entrances other than OSC Control Point are made inaccessible or radiologically controlled.
- ___ 3. **UNLOCK** OSC Equipment and Supplies Cabinets and perform cursory review of equipment and supplies
- ___ 4. **VERIFY** OSC phones and fax are operational.
- ___ 5. **TURN ON** public address system by pressing the power button.
- ___ 6. **PLACE** name plates at the appropriate locations in the OSC.
- ___ 7. **OBTAIN** completed current survey map books and the daily dose report from the Radiation Protection Office.
- ___ 8. **UNLOCK** the Personnel Decon Room and make ready for operation.
- ___ 9. **ENSURE** OSC status boards are set up.
- ___ 10. **SET UP** Dosimetry Issue Station.
- ___ 11. **PLACE** an electronic dosimeter with integrated dose set to alarm at 1 Rem in the OSC to monitor the dose rate.
- ___ 12. **ACTIVATE** the TSC ARM in the TSC and the TSC PING in the ventilation room.
- ___ 13. **NOTIFY** the Assistant OSC Director at the completion of this checklist.

Completed by

Date / Time

**ATTACHMENT 4
OSC CONFIGURATION
Page 7 of 18**

**LaSalle OSC Suggested Configuration
TABLE 4-4
Page 1 of 1**



The OSC is located in the Training Building on elevation 694'. Protective equipment and supplies for the OSC are located in the OSC Supply cabinets.

- OSC Director - 2193
- OSC Supervisor - 2194
- MM Supervisor - 2190
- EM supervisor - 2191
- IM Supervisor - 2192
- RPT - 2195

Dedicated Phones

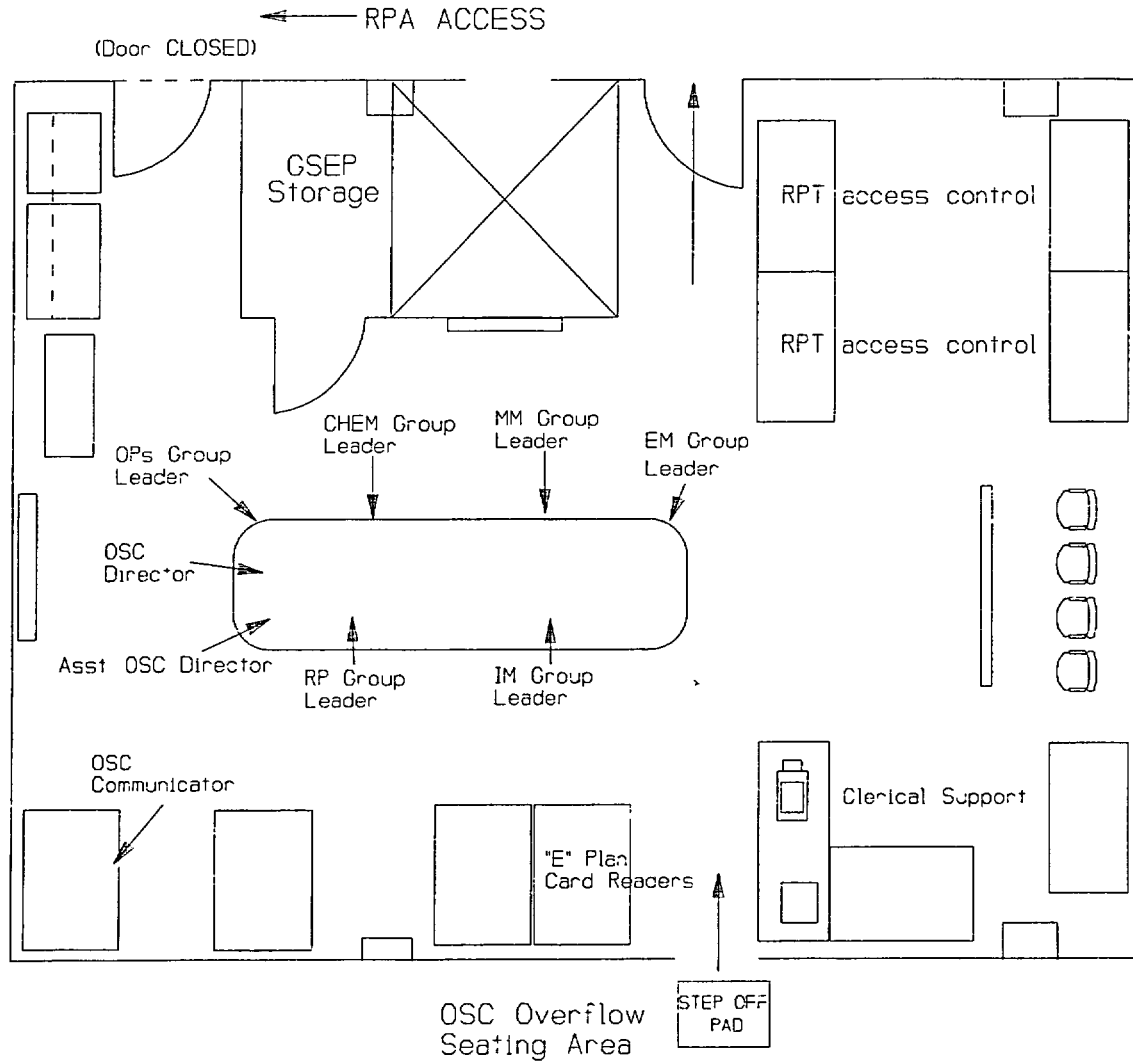
- "A" Phone - Control Room / OSC
- "B" Phone - Control Room / TSC / OSC

MOVE the Control Room PING into the Control Room from its normally stored location.

The Control Room PING is normally located down the hall from the Shift Manager's office.

ATTACHMENT 4
OSC CONFIGURATION
Page 8 of 18

Quad Cities OSC Suggested Configuration
TABLE 4-5
Page 1 of 2



**ATTACHMENT 4
OSC CONFIGURATION
Page 9 of 18**

Quad Cities OSC Suggested Configuration

TABLE 4-5

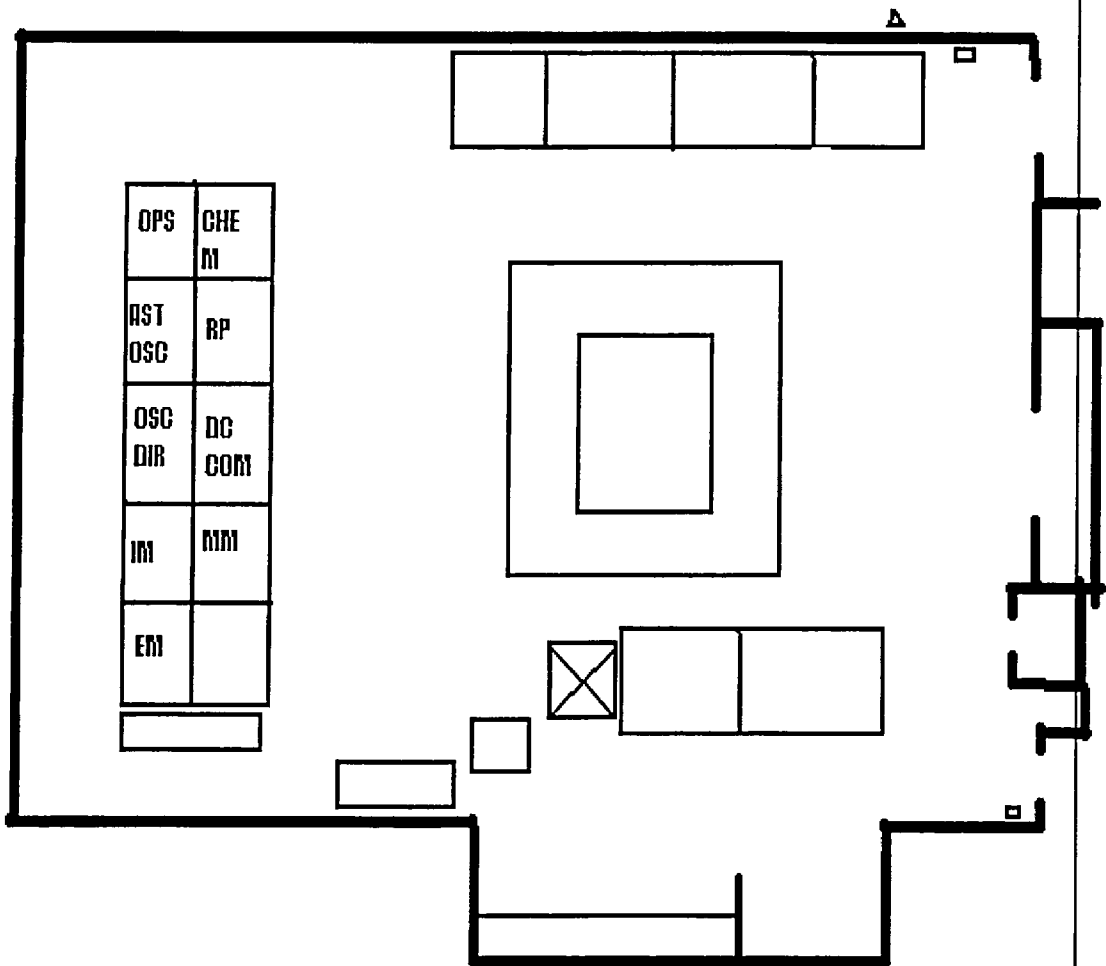
Page 2 of 2

1. **STACK** and **PLACE** chairs per Table 4-5, page 1 of 2.
2. **REMOVE** OSC supplies/equipment from the closet and **PLACE** at proper locations.
3. **LOCATE** the OSC Status Board as shown in Table 4-5, page 1 of 2.
4. **CONNECT** and **TEST** phones.
5. **PLACE** nameplates on the table at appropriate locations as shown in Table 4-5, Page 1 of 2.
6. **SET** the OSC clock with TSC time.
7. **POST** OSC Priorities chart by OSC Communicator on wall to right (left of flat screen monitor).
8. **SET UP** the PA Systems.
9. Station PA system (controls opposite from refrigerator) – **ADJUST** volume.
10. OSC / Mechanical Maintenance PA systems in closet – **TEST/ADJUST** volume.
11. **OBTAIN** microphone from closet and put at OSC Directors position.
12. **ESTABLISH** RP Access Control per Table 4-5, Page 1 of 2.
13. **POST** NO ENTRY and EXIT Signs on the doors leading into the OSC from the hallway and the door leading to the MM Break Room.
14. **TURN** on and properly configure the Access Computers for Eds.
15. **RELOCATE** completed current Survey map books and the Daily Dose Report from the RAD Protection office to the OSC.
16. **RELOCATE** a set of Operations and Maintenance procedures from Work Control or the Central Library by Admin personnel to the OSC.
17. **TURN ON** the computer (Work Week Managers location) and start the SPL in the view mode.
18. **TURN ON** the flat screen monitor and ensure it displays the SPL program.
19. **TURN ON** the computer next to the Work Week Manager and start the SPDS program.
20. **TURN ON** the computer next to SPDS and start the SEL program.

ATTACHMENT 4
OSC CONFIGURATION
Page 10 of 18

CLINTON OSC Suggested Configuration
TABLE 4-6

PAGE 1 OF 2



**ATTACHMENT 4
OSC CONFIGURATION
Page 11 of 18**

**CLINTON OSC Suggested Configuration
TABLE 4-6**

PAGE 2 OF 2

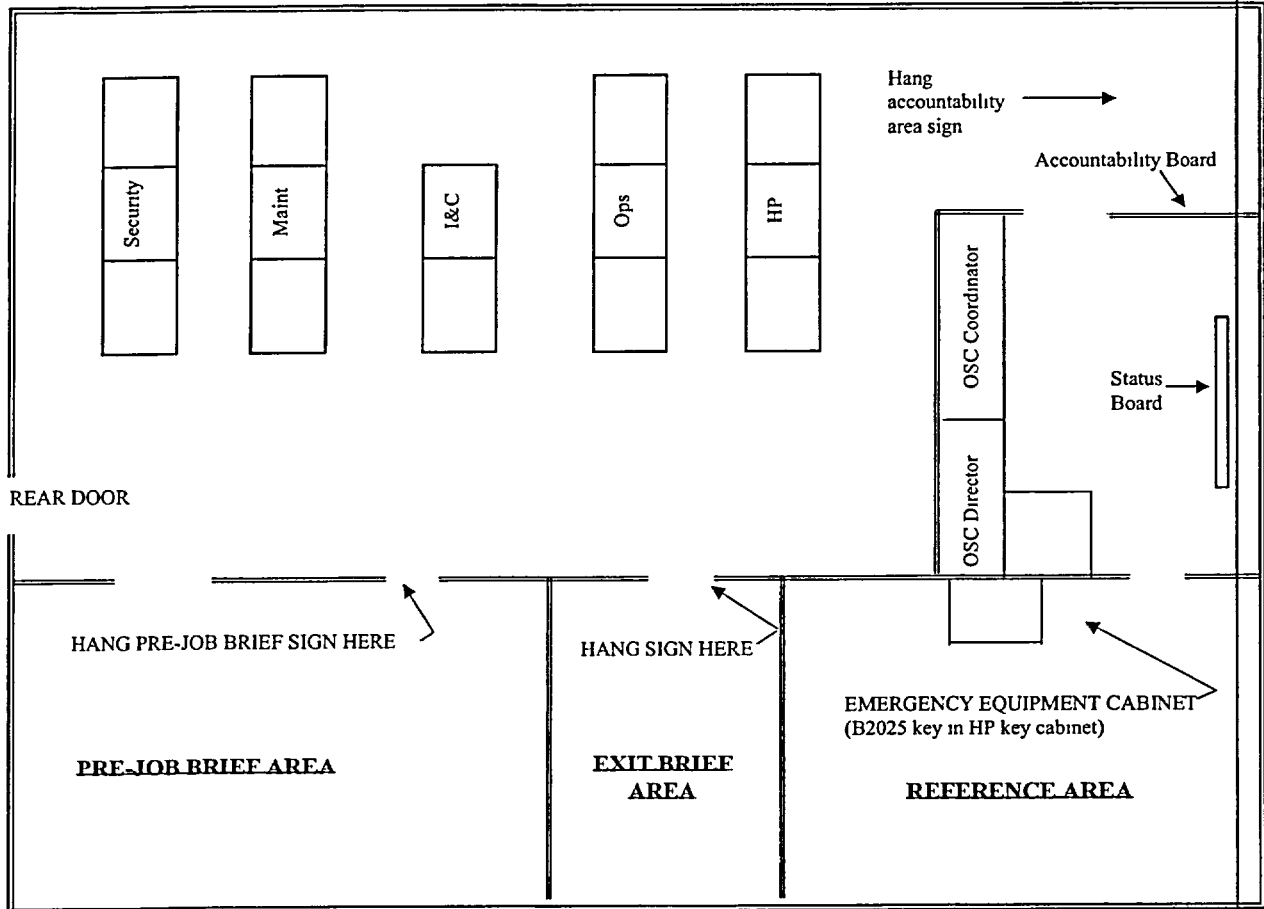
1. **SET-UP THE CPS OSC**
 - 1.1 Obtain the OSC status boards and place at the designated locations.
 - 1.2 Obtain the administrative supplies from the supply closet, the key is located in the ERO cabinet.
 - 1.3 Verify dial tone of the OSC phones and FAX machine.
 - 1.4 Obtain OSC procedures from the ERO cabinet and the supply closet.
 - 1.5 Set the OSC clock with the TSC time.
 - 1.6 Bring completed current survey maps and dose reports to the RP Group Lead.
 - 1.7 Turn on the computer (OSC Director) and start the SPL in the view mode.

ATTACHMENT 4
OSC CONFIGURATION
Page 12 of 18

LIMERICK OSC Suggested Configuration

Page 1 of 1

FIGURE 4-7



ATTACHMENT 4
OSC CONFIGURATION
Page 13 of 18

TABLE 4-7
LIMERICK OSC Suggested Configuration
Page 1 of 3

1. **OSC ACTIVATION**
- 1.1 **ENSURE** OSC personnel perform the following:
 1. **CARD IN** upon entrance using accountability card readers.
 - If the Security Computer fails, **then ENSURE** a listing of facility personnel names and badge/slot numbers is made available to Security using EP-MA-113-100, Attachment 6.
 2. **USE** the Personnel Assignment Board and Exposure Control Board.
- 1.2 **ENSURE** ERWPs using RADOS are implemented.
- 1.3 **DIRECT** available staff to **PERFORM** the following communications equipment checks:
 1. **CHECK** the following phones for dial tones:
 - Prelude Phone #149
 - Prelude Phone #174
 - Prelude Phone #129
 - Station Phone #2105 (OSC Director's Desk)
 - Station Phone #2106 (FAX)
 - Station Phone #2107 (on North Wall, Reference Room)
 - Station Phone #2637 (on East Wall)
 - Station Phone #2258 (Alternate Muster Area)
 2. **VERIFY** operability of the OSC base radio station.
 3. **VERIFY** operability of the OSC Public Address System
 4. **TURN ON** the OSC PA amplifier and **VERIFY** operability of the OSC Plant PA System
 5. **ACTIVATE** local paging function, as follows:
 - LOCATE** Panel 00-C688 (West end of Aux. Equipment Room)
 - OPEN** Panel 00-C688 and **MOVE** the "ON LINE / OFF LINE" switch to the "OFF LINE" position.

**ATTACHMENT 4
OSC CONFIGURATION
Page 14 of 18**

**TABLE 4-7
LIMERICK OSC Suggested Configuration
Page 2 of 3**

- 1.4 **UNLOCK** the OSC Emergency Equipment Cabinet and **DISTRIBUTE** the following from the:
- OSC Log Book (OSC Director Area)
 - ERO and Station telephone directories (OSC Director Area)
 - Administrative supplies (OSC Director Area)
 - OSC Team (Pre-Job) Briefing, (Post-Job) Debriefing, and Completed TRIP Procedure "In-Bins" (Cabinet behind OSC Director Area per Figure 4-7)
 - Nameplate for OSC Group Leads (per Figure 4-7)
 - Signs for "Pre-Job Brief", "Exit Brief" and "Accountability Area" (per Figure 4-7)
 - "Enter and Exit through Front Door" sign (Place at rear door to OSC)
 - "Use PCM Prior to Entering OSC" sign (Place at front door of OSC)
- 1.5 **SYNCHRONIZE** the OSC clock with the Control Room clock.
- 1.6 **MOVE** the OSC Status Board (on wheels) from the OSC entrance halway to the HP Field Office
- 1.7 **ASSIGN** available OSC personnel to perform the following:
- OSC Log Keeper (typically Communicator)
 - Status Board Keeper (typically Maintenance Supervisor / Group Lead)
 - Accountability Board Keeper (typically Dosimetry Clerk)
- 1.8 **ESTABLISH** the following radiological precautions:
- VERIFY** OSC habitability.
 - PERFORM** a physical inspection, source check and calibration verification for on survey instruments prior to initial use.
 - ENSURE** RWPs using Personnel Dosimetry are implemented.
 - ESTABLISH** step off pad(s) and friskers, if needed.
- 1.9 **CONTACT** the Shift Manager and the TSC Maintenance Manager for a briefing and **COORDINATE** OSC activation.

OSC DIRECTOR: _____ DATE/TIME: _____

**ATTACHMENT 4
OSC CONFIGURATION
Page 15 of 18**

**TABLE 4-7
LIMERICK OSC Suggested Configuration
Page 3 of 3**

- 2. **OSC DEACTIVATION** -- The OSC Director shall direct the following:
 - 2.1 [] **ANNOTATE** closeout in the OSC Director's Log
 - 2.2 [] **ASSEMBLE** documents for review and submittal to NRMS.
 - 2.3 [] **ENSURE** administrative supplies are returned to the OSC Emergency Supply Cabinet.
 - 2.4 [] **DEACTIVATE** the Local Page Function by moving "ON-LINE / OFF-LINE: switch to ON-LINE
 - 2.5 [] **NOTIFY** the TSC Maintenance Manager (or Shift Manager) when completed.

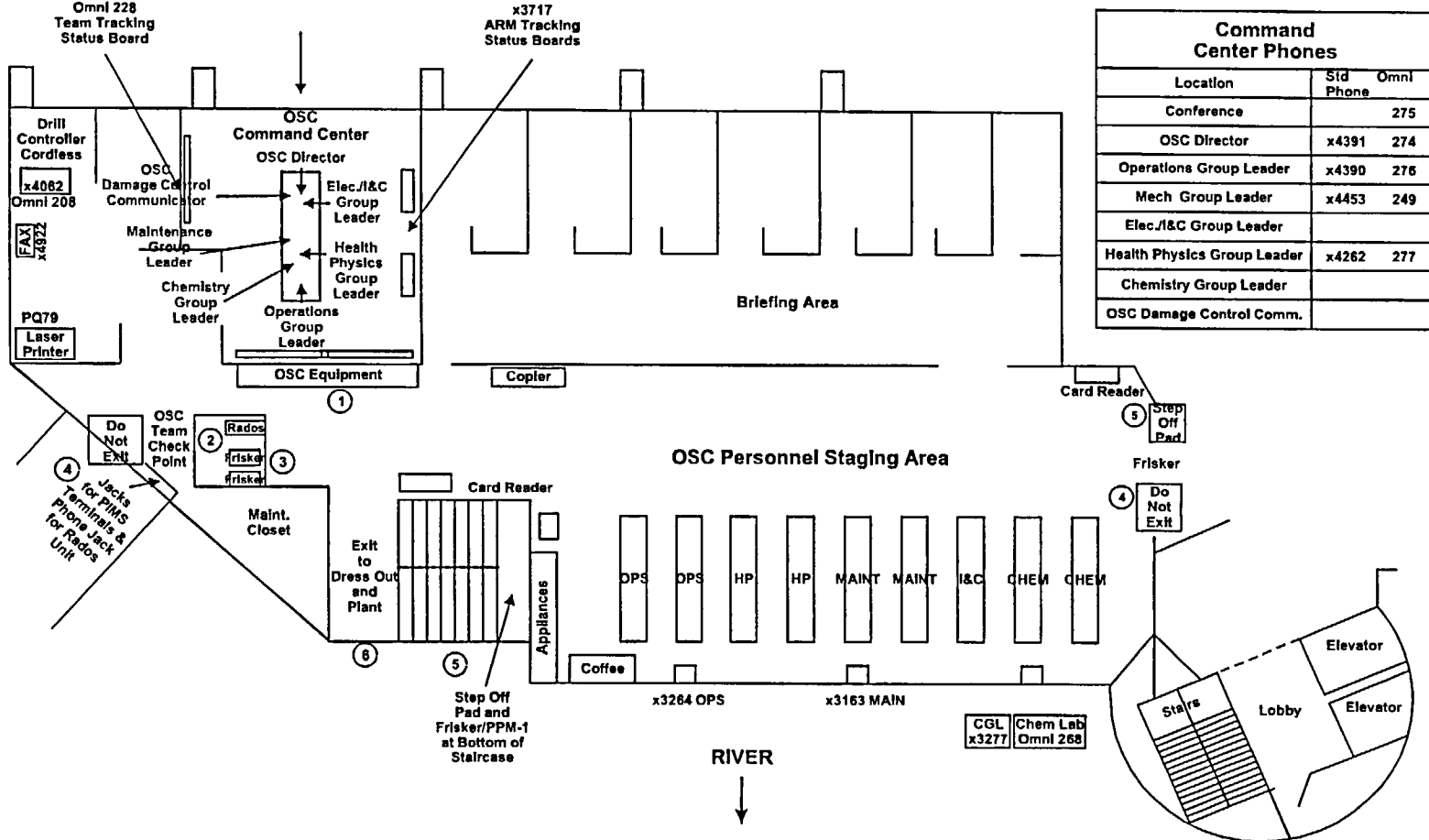
OSC DIRECTOR: _____ DATE/TIME: _____

**ATTACHMENT 4
 OSC CONFIGURATION
 Page 16 of 18**

Peach Bottom Operations Support Center Standard Emergency Plan Layout

FIGURE 4-8
 PEACH BOTTOM OSC Suggested Configuration
 Page 1 of 1

NORTH →



**ATTACHMENT 4
OSC CONFIGURATION
Page 17 of 19**

**TABLE 4-8
PEACH BOTTOM OSC Suggested Configuration
Page 1 of 2**

1. **OSC ACTIVATION:**

1.1 [] **LOCATE** both the OSC floor plan and numbered set-up instructions, located in the OSC Equipment Locker (on the 2nd floor of the Administration Building) – REFER to Figure 4-8.

1.2 [] **PLACE** the OSC Director's log book and file trays for Operations, Maintenance and Radiation Protection in the Command Center and the Chemistry file tray in the staging area.

NOTE: **RETRIEVE** sufficient Personnel Dosimetry from the PEARL Building.

1.3 [] **SET UP** a table for a PIMS and Personnel Dosimetry terminals. (The table is stored in the Maintenance closet.)

1.4 [] **INSTALL** PIMS and Personnel Dosimetry terminals. (Terminals are located in the OSC Equipment Locker, and a power outlet for the PIMS terminal is located in the Maintenance closet.)

– If PIMS terminals are unavailable, then **COMPLETE** OSC Personnel Exposure Records

1.5 [] **PLACE** "Do Not Exit" signs at North and South OSC doorways.

1.6 [] **PERFORM** a physical inspection, source check and calibration verification for on survey instruments prior to initial use.

1.7 [] **DIRECT** Radiation Protection to establish periodic habitability surveys per Table 4-9.

1.8 [] **If a potential exists for a radiological release or one has occurred, then PLACE** step off pad(s) and friskers at designated areas. Activate additional personnel monitoring equipment, as available.

– Frisker stands are located in the Maintenance closet.

NOTE: Additional RP equipment, Anti-C's and SCBA's are located on the ground floor in the vestibule between the Administration Building "A" and "B" on the river side of the building.

**ATTACHMENT 4
OSC CONFIGURATION
Page 18 of 19**

**TABLE 4-8
PEACH BOTTOM OSC Suggested Configuration
Page 2 of 2**

- 1.9 **ENERGIZE** the OSC PA system located in the cabinet at the OSC Conference Room entrance and **PERFORM** a test to verify the volume is audible in all areas. **ADJUST** as necessary using the channel inputs.
NOTE: Start up and shutdown directions are located on the PA system cabinet door.

- 1.10 **ASSIGN** available OSC personnel to:
 - MAINTAIN** a log of pertinent events and communications
 - MAINTAIN** status boards

- 1.11 **VERIFY** that personnel accountability has been established.

OSC DIRECTOR: _____ DATE/TIME: _____

2. OSC DEACTIVATION:

- 2.1 **RETURN** supplies and equipment to OSC lockers.

- 2.2 **REPORT** defective equipment and deficient supplies to the Emergency Preparedness Staff.

- 2.3 **COLLECT** forms, documents and transmittals and **FORWARD** to the Emergency Preparedness Staff.

OSC DIRECTOR: _____ DATE/TIME: _____

**ATTACHMENT 4
OSC CONFIGURATION
Page 19 of 19**

**TABLE 4-9
PEACH BOTTOM HABITABILITY CHECK-OFF LIST
Page 1 of 1**

RP Technician: _____ Date / Time: _____

(√)	<u>TASK</u>	<u>TIME</u>
[]	1. PERFORM initial radiation contamination surveys in the TSC as necessary.	_____
[]	2. ACTIVATE radiation monitoring device (1 st floor).	_____
[]	3. OBTAIN and SET-UP Ebeline RM-14, or equivalent monitor, from the Emergency Equipment Storage Room in the 1 st floor lobby area.	_____
[]	4. ACTIVATE radiation monitoring device (3 rd floor) behind the TSC electrical distribution panel.	_____
[]	5. OBTAIN Ebeline RM-14, or equivalent monitor, from cabinet beneath TSC Trip Table and ACTIVATE in the 3 rd floor hallway.	_____
[]	6. VERIFY that ventilation was placed into "emergency" mode by the TSC Director	_____
[]	7. INSTALL "No Exit TSC – Ventilation Activated – Use South Stairwell" signs on the following doors in the 3 rd floor hallway: <ul style="list-style-type: none"> <li data-bbox="386 1184 837 1218">– Doors leading to Training Center <li data-bbox="386 1218 870 1251">– Door leading to Unit 1 Containment <li data-bbox="386 1251 721 1285">– North Stair Tower Door <li data-bbox="386 1285 841 1318">– Doors leading to Training Offices 	_____
[]	8. Periodically PERFORM contamination surveys at entrance to building and at the TSC entrance.	_____
[]	9. PERFORM air samples if potential for airborne contamination is indicated.	_____
<p>NOTE: An increase in detected activity on RM14's can result from increased airborne contamination levels, increased radiation levels, or both. If an increase is detected, air sampling should be performed to determine the cause.</p>		
[]	10. INSTALL step-off pads at TSC entrance if contamination is detected. INSTRUCT TSC staff to frisk prior to entry.	_____
[]	11. INITIATE habitability monitoring per EP-AA-113, Attachment 1 to include setting of alarm set point values as instructed by OSC RP Group Lead.	_____

ATTACHMENT 5
OSC Team Briefing Form
Page 1 of 1

Team No. _____

Team Requested by: (TIME)	At: _____ (DATE) / _____
Task: (Attach separate sheet for detailed description)	
Recommended Group Lead: [] Ops [] Mech [] I&C [] Elect [] RP [] Chem	
<input type="checkbox"/> URGENT: <u>Minimum briefing</u> Tasks which involve Life-Saving, Fires or must be accomplished to mitigate a release to the public or to mitigate core damage . Emergency Exposure Limits may apply. <input type="checkbox"/> FULL BRIEFING: Tasks may also require job planning, preparations, dose consequence evaluation, volunteer solicitation, hazards briefing and procedure development . Emergency Exposure Limits may apply and must be evaluated. (Further classification is optional) <input type="checkbox"/> HIGH The task must be accomplished for restoration of safety functions or a fission product barrier in support of accident mitigation. <input type="checkbox"/> MEDIUM The task must be accomplished to support accident mitigation. <input type="checkbox"/> LOW The task supports the functions of the ERO.	
Task Location: _____	
Name	Badge # Respiratory Prot. Current Approved Required Qualified Annual Dose Dose Yes / No Yes
Team Leader _____	_____ _____ _____ _____
Team Member _____	_____ _____ _____ _____
Team Member _____	_____ _____ _____ _____
Team Member _____	_____ _____ _____ _____
RPT _____	_____ _____ _____ _____
Highest ARM in area: _____ mR/hr Expected Accumulated Dose: _____ mRem	
Turn Back Dose Rate: _____ mR/hr Turn Back Dose: _____ mRem	
Protective Clothing Required: _____ / NONE	
Respiratory Equip. Required: _____ / NONE	
Radio Channel Assigned. _____ Pager # (if applicable): _____ PCS # _____	
Call Back Phone Number. Ext. _____ Entry/Exit Routes: _____	
Special Precautions: _____ / NONE	
Return to the OSC for Assembly / Accountability: Yes No, report status to OSC by radio or phone.	
Briefed by: _____ Group Lead	Asst. OSC Director or RP Lead Review: _____ Initials
Dispatch Time: _____ <u>Notified of Team Dispatch:</u> OSC Director Control Room TSC	
Est. Completion Time: _____	

PCS# applicable to Clinton Station

ATTACHMENT 7
OSC Staff Guidelines
Page 1 of 1

1. Find a seat and remain quiet in the OSC while waiting for an assignment. Log in on the OSC staffing board under the appropriate work group. (USE magnetic, colored tag if available.)
2. Listen to the periodic OSC briefings to be aware of changing conditions and be prepared for assignment to a team.
3. Do not leave the OSC without obtaining approval from the OSC Director or a Group Lead.
4. When assigned to a team, attend the briefing and comply with all radiological and safety requirements of the assignment.
5. All teams leaving the OSC must have a radio (Check batteries) [CLINTON] or PCS phone.
6. Use the Step-off Pads in the plant unless radiological conditions have changed in the area.
7. Upon returning to the OSC:
 - A. If established, use the step-off pad and frisker prior to entering the OSC.
 - B. Proceed to the de-briefing table and participate in the debriefing.
 - C. Ensure that your magnetic placard from the Team Tracking Status Board has your current exposure entered on it and is returned to the OSC Staffing Board.
 - D. Follow directions from Radiation Protection for the return of your dosimetry.
8. Any Radiation Protection Technician sent with a team should update the survey maps upon returning to the OSC. Each survey map is to be marked with the date and time of survey.
9. When directed to conduct assembly and accountability, card in on the GSEP card reader in the OSC. Teams in the plant should make contact with the OSC for directions, but will normally be directed to continue their efforts unless radiological conditions will prevent task completion.
10. Keep the noise level in the OSC to a minimum.
11. When dispatched on a team from the OSC, call/radio back to the OSC every 15-30 minutes with the status of your team.

ATTACHMENT 8
DAMAGE CONTROL COMMUNICATOR (OSC) CHECKLIST
Page 1 of 3

General Responsibilities include:

- **TRANSMIT** information that has been reviewed and/or approved by OSC Director or posted on status boards
- **DOCUMENT** time, date and information being transmitted or received on appropriate forms
- **Record** inquiries and **RELAY** responses to those inquiries
- **ASSIST** the Maintenance Manager in maintaining proper records and logs of emergency related activities.
- **GATHER / RECORD** appropriate information and **POST** on facility status boards, as directed

Section 1, Response Expectations

Section 2, Initial Actions

Section 3, On-Going Actions

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. **RESPONSE EXPECTATIONS**

- 1.1 **RESPOND** initially to the TSC when contacted or TSC activation is announced over the Station PA System.
- 1.2 **INFORM** the TSC Director of your arrival and **REQUEST** which on-site emergency facility you are being assigned to.
- **If** the TSC Director is not yet present in the TSC, **then REPORT** to the Maintenance Manager for direction on facility assignment.

ATTACHMENT 8
DAMAGE CONTROL COMMUNICATOR (OSC) CHECKLIST
 Page 2 of 3

2. INITIAL ACTIONS

Initials

- 2.1 _____ Upon arrival in the OSC, **REPORT** to the OSC Director and **OBTAIN** an initial briefing on emergency conditions.
- 2.2 _____ **OBTAIN** a headset and **ESTABLISH** an open circuit with the Control Room and TSC over the Damage Control Line.
- 2.3 _____ **INITIATE** and **MAINTAIN** a position log documenting significant actions performed and communications related to your position.

3. ON-GOING ACTIONS

Mid-West ROG

NLO's assigned to the ERT are retained by the Control Room until the affected unit(s) are in a safe shutdown condition.

Limerick / Peach Bottom

Requests for the dispatching of NLO's to perform TRIP and other operations procedural actions will be communicated by the Control Room (Unit) Supervisor directly to the Field / Floor Supervisor, who will coordinate actions with the OSC Director and OSC Group Leads.

- 3.1 **MAINTAIN** communications between the Station Control Room, OSC and the TSC on the Damage Control Line
- If the ringdown phone fails, then **ESTABLISH** contact with the TSC using a station telephone.
- 3.2 **ASSIST** in OSC Director in updating status board.

ATTACHMENT 8
DAMAGE CONTROL COMMUNICATOR (OSC) CHECKLIST
Page 3 of 3

- 3.3 **COMPLETE** the top portion of EP-AA-112-300, Attachment 5, "OSC Team Briefing Form" when a request is received from the TSC for OSC Team to be formed and dispatched.
1. **ASSIGN** a "Team Number" (based on guidance provided by the OSC Director for numbering of the tasks).
 2. **FORWARD** the form to the OSC Director.
 3. **UPDATE** status board to reflect team request.
- 3.4 **COMMUNICATE** the following information as changes occur:
- Requests for the dispatching of an OSC.
 - OSC Team status, including time dispatched, estimates completion times, return of a team to OSC.
 - Instructions for the immediate return, cancellation, or redirection of an OSC Team(s).
 - Dispatching and return of requested by the Control Room.
 - Return, recall or cancellation of in-plant teams.
- 3.5 **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

EMERGENCY OPERATIONS FACILITY ACTIVATION AND OPERATION

1. **PURPOSE**

- 1.1. This procedure describes the Emergency Operations Facility (EOF) activities associated with an emergency. When the Shift Manager decides that a situation warrants activation of the EOF, this procedure becomes applicable.

2. **TERMS AND DEFINITIONS**

None

3. **RESPONSIBILITIES**

None

4. **MAIN BODY**

- 4.1. **ACTIVATE** the EOF using the applicable checklist contained in Attachments 1 and 2.

- 4.2. **ASSUME** the positions of the Emergency Response Organization.

- 4.3. **INITIATE** the appropriate Emergency Plan activities using the EOF position specific checklists in the following procedures:

EP-AA-112-401, "Nuclear Duty Officer"

EP-AA-112-402, "EOF Command and Control"

- Attachment 1, Corporate Emergency Director
- Attachment 2, EOF Director

EP-AA-112-403, "EOF Logistics Support Group"

- Attachment 1, Logistics Manager
- Attachment 2, State / Local Communicator
- Attachment 3, EOC Communicator
- Attachment 3, Administrative Coordinator
- Attachment 4, Computer Specialist
- Attachment 5, Regulatory Liaison
- Attachment 6, Security Coordinator (Cantera)

EP-AA-112-404, "EOF Technical Support Group"

- Attachment 1, Technical Support Manager
- Attachment 2, Operations Advisor
- Attachment 3, ENS Communicator
- Attachment 4, Technical Advisor
- Attachment 5, Events Recorder

EP-AA-112-405, "EOF Protective Measures Group"

- Attachment 1, Radiation Protection Manager
- Attachment 2, Dose Assessment Coordinator
- Attachment 3, Dose Assessor
- Attachment 4, HPN Communicator
- Attachment 6, State Environs Communicator (MWROG Only)
- Attachment 7, Environmental Coordinator
- Attachment 8, Field Team Communicator

EP-MW-112-406, "MWROG Offsite Liaisons"

- Attachment 1, Illinois State EOC Liaison
- Attachment 2, Iowa State EOC Liaison
- Attachment 3, Illinois Department of Nuclear Safety (IDNS) Liaison
- Attachment 4, County EOC Liaison

EP-MA-112-406, "MAROG Offsite Liaisons"

- Attachment 1, Utility Liaison Officer Checklist

5. **DOCUMENTATION**

None

6. **REFERENCES**

None

7. **ATTACHMENTS**

- 7.1. Attachment 1, Cantera EOF Activation [**Mid-West ROG**]
- 7.2. Attachment 2, Coatesville EOF Activation [**Limerick / Peach Bottom**]
- 7.3. Attachment 3, Coatesville EOF – Loss of Normal Electrical Power
- 7.4. Attachment 4, Coatesville EOF – Helicopter Landing Information

ATTACHMENT 1
CANTERA EOF ACTIVATION [Mid-West ROG]
Page 1 of 2

Cantera EOF

1. **EOF ACTIVATION**
- 1.1. **OPEN** the EOF.
- 1.2. **START** all the computers.
 - **LOGON** to the computers using the instructions found on the mouse pad.
 - **CONTACT** the Solutions Center for problems with the computers
- 1.3. **ACTIVATE** the EOF Public Address (PA) system.
- 1.4. At the discretion of the EOF Director, **POST** an "Emergency Response Activities in Progress" sign in the hallway and at all entrances to the EOF.
- 1.5. **REQUEST** clerical support, as necessary.
 - Normally two (2) clerical personnel are called in for an EOF Staff activation.
- 1.6. **PERFORM** the following if the NRC, or another Federal Agency is at, or expected at, the EOF:
 - 1.6.1. **INSTALL** telephones and fax in the room for their use, if required.
 - The telephones are in a cabinet in the Media Center. The telephones are marked.
- 1.7. **DISPLAY** critical parameters for the affected Station/Unit on designated monitors per EP-MW-110-100.
 - **REFER** to EP-MW-110-1001 for data point table listings.
- 1.8. **ENSURE** that the position specific procedure books are available.
- 1.9. **DIRECT** responders upon entry to sign in and retrieve their position specific book.

ATTACHMENT 1
CANTERA EOF ACTIVATION [Mid-West ROG]
Page 2 of 2

2. **SITUATIONAL ACTIONS**

- 2.1. **CONTACT** the Telephone Service Center (telephone number found in the ERF telephone directory) for problems with telephones.

NOTE: If telephone service is a problem in the EOF, there are 10 phone lines installed which bypass the system. The telephones are located in the EMC cabinet and on the outside wall of the EMC and marked for Emergency Use Only.

ATTACHMENT 2
COATESVILLE EOF ACTIVATION [LIMERICK / PEACH BOTTOM]
Page 1 of 6

Coatesville EOF

1. **INITIAL ACTIONS**

1.1. Initial actions vary depending on whether the EOF is open during normal business hours (generally Monday through Friday, 7:30 AM to 4:30 PM) or the EOF and the gates leading to it are closed and locked after hours.

1.1.1. **During business hours**, the ***Coatesville Facility Manager or first EOF/JPIC Responder arriving at the facility*** is responsible completing Table 2-1, EOF Business Hours First Responder Checklist.

1.1.2. **During normal "off-hours"**, the ***first EOF/JPIC Responder arriving at the facility*** is responsible for the following:

1. **GAIN** access to the EOF, and disarm the security system using Table 2-2, EOF Emergency After Hours Entry.
2. **COMPLETE** Table 2-3, EOF After Hours First Responder Checklist.

1.2. **CONTROL** EOF access using EP Aid 28 (Approved Access List) and EP Aid 34 (EOF/JPIC Sign-In Sheets) until relieved by Facility Security personnel, or another EOF responder.

1. **PERMIT** access to the EOF for personnel with one of the following forms of identification:
 - Exelon Corporate, Exelon Nuclear, AmerGen, or PECO Energy
 - Pennsylvania Bureau of Radiation Protection (BRP)
 - Pennsylvania Emergency Management Agency (PEMA)
 - Maryland Department of the Environment (MDE)
 - Maryland Emergency Management Agency (MEMA)
 - Maryland Department of Natural Resources
 - Nuclear Regulatory Commission (NRC)
 - Federal Emergency Management Agency (FEMA)
 - Wackenhut Security Corporation
 - Co-owner representatives (for a PBAPS event), medical consultants, independent health physics consultants, and non-PECO / Exelon Facility Security personnel, listed in the ERF Telephone Directory, may be admitted with standard ID, such as a driver's license.

ATTACHMENT 2
COATESVILLE EOF ACTIVATION [LIMERICK / PEACH BOTTOM]
Page 2 of 6

- A. OBTAIN approval from the EOF Logistics Manager for personnel who cannot show an acceptable form of identification.
2. **DIRECT** news media arriving for press conferences to the JPIC entrance.
2. **DEACTIVATION**
 - 2.1. [The *EOF Director* shall] **PERFORM** the following:
 1. **MAKE** the following facility public address (PA) announcement

“All personnel shall ensure that their work area is in a clean and neat condition and that all equipment and left-over consumables are properly stowed. Group Leaders/Managers shall compile all logs, forms, and records produced during the event. These packages shall be turned over to the EOF Logistics Manager prior to dismissing staff members.”
 2. **DIRECT** the completion of Table 2-4, EOF Deactivation Checklist.
 - 2.2. EOF staff personnel shall **not** leave until released by their respective group leaders/manager.

ATTACHMENT 2
COATESVILLE EOF ACTIVATION [LIMERICK / PEACH BOTTOM]
Page 3 of 6

TABLE 2-1
EOF BUSINESS HOURS FIRST RESPONDER CHECKLIST
Page 1 of 1

INITIALS

ITEM

- _____ 1. **NOTIFY** all personnel within the EOF building that an emergency has been declared and that all non-responders must immediately leave the building through the front door.
- _____ 2. **VERIFY** the status of the following doors:

CAUTION
Leave all emergency exit doors AS FOUND.

- _____ Front Lobby Doors (**UNLOCKED**)
- _____ Room 104 Door to Lobby Area (**UNLOCKED**)
- _____ Common door between Rooms 104 & 107 (**LOCKED**)
- _____ Auditorium Door (**LOCKED**) – when empty of non-responders
- _____ Blue double doors by Front Desk (**LOCKED**)
- _____ All doors inside the blue double doors leading from the Lobby (**UNLOCKED**)
- _____ 3. **VERIFY** that the Responder's Lot Gate is **OPEN**.
- _____ 4. **RETURN** to the Responder's Entrance and **UNLOCK** the door.
MAINTAIN security at the door, checking identification per Section 1.2 of Attachment 1, until relieved by an EOF/JPIC ERO member.
- _____ 5. After being relieved, **VERIFY** that all rooms in the EOF Building are in their emergency condition, including the positioning of furniture (according to the floor plans posted for each room).
- _____ 6. **RETURN** to and **STAFF** the Lobby Desk until relieved by facility security.
- _____ 7. **DELIVER** this checklist to the EOF Administrative Coordinator or Logistics Manager, upon being relieved.

Completed by: _____ Date / Time: _____

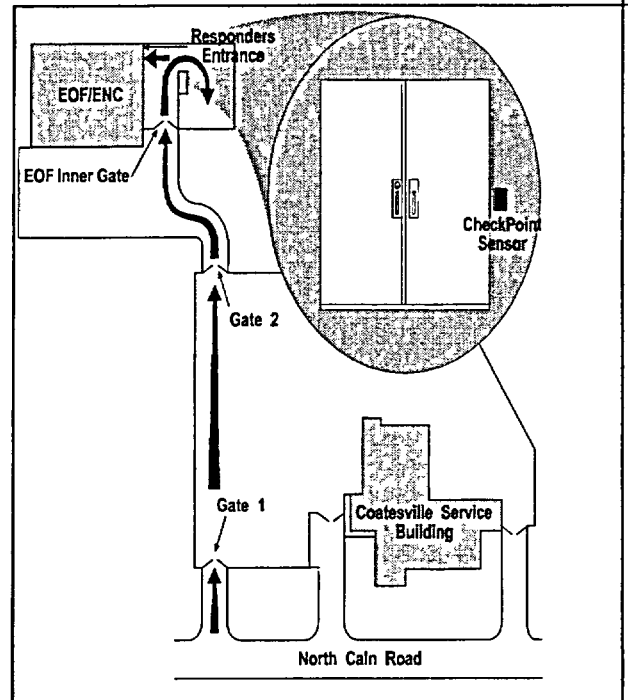
ATTACHMENT 2
COATESVILLE EOF ACTIVATION [LIMERICK / PEACH BOTTOM]
Page 4 of 6

TABLE 2-2
EOF EMERGENCY AFTER HOURS ENTRY
Page 1 of 1

1. **OPEN** combination locks on the North Caln Road and the Responder's Lot gates using "7326" as the numbers to be rotated into place (7326 = PECO on a telephone keypad).
2. **OPEN** the EOF responder's door by holding your Company ID close to the card reader mounted to the right of the back entrance doors (look for the four red LEDs).

After you hear the lock solenoid click, **immediately ENTER** through the right door.

3. **LOCATE** the security system panel, which is mounted to the left of the fire alarm by the back entrance. **DISARM** it by moving your Company ID close to the card reader.



When disarmed, the security panel will display "NOT READY TO ARM".

- If the system is not disarmed within 30 seconds, then **CALL** Dispatch at 215-841-5292 and **EXPLAIN** that the security system did not clear and that they need **NOT** call the police.
4. **LOCATE** the silver key box that is mounted to the left of the badge board and above the security system panel unit. **RETRIEVE** the EOF/ENC facility master key from it by pressing in sequence the buttons: "7326".
 5. **RETRIEVE** a copy of the EOF After Hours First Responder Checklist (Table 2-1).

ATTACHMENT 2
COATESVILLE EOF ACTIVATION [LIMERICK / PEACH BOTTOM]
Page 5 of 6

TABLE 2-3
EOF AFTER HOURS FIRST RESPONDER CHECKLIST
Page 1 of 1

INITIALS

ITEM

1. **VERIFY** that the following gates are OPEN:
- **UNLOCK** and **OPEN** if necessary using Table 2-2 (EOF Emergency After Hours Entry).

_____ North Caln Road Gate
_____ Gate to the EOF compound
_____ Gate to the EOF Responder's Lot

- _____ 2. **DISARM** EOF Building Security System (using Table 2-2), if required.
_____ 3. **NOTIFY** all personnel within the EOF building that an emergency has been declared and that all non-responders must immediately leave the building through the front door.
4. **VERIFY** the status of the following doors:

CAUTION Leave all emergency exit doors AS FOUND.
--

_____ Front Lobby Doors (**UNLOCKED**)
_____ Room 104 Door to Lobby Area (**UNLOCKED**)
_____ Common door between Rooms 104 & 107 (**LOCKED**)
_____ Auditorium Door (**LOCKED**) – when empty of non-responders
_____ Blue double doors by Front Desk (**LOCKED**)

- _____ 5. **RETURN** to the Responder's Entrance and **UNLOCK** the door.
MAINTAIN security at the door, checking identification per Section 1.2 of Attachment 1, until relieved by an EOF/ENC ERO member.
_____ 6. After being relieved, **UNLOCK** all doors inside the blue double doors leading from the Lobby.
_____ 6. **RETURN** to the Responder's Entrance and **LEAVE** this checklist with EOF/JPIC ERO member providing entrance security.

Completed by: _____ Date / Time: _____

ATTACHMENT 2
COATESVILLE EOF ACTIVATION [LIMERICK / PEACH BOTTOM]
Page 6 of 6

TABLE 2-4
EOF DEACTIVATION CHECKLIST
Page 1 of 1

INITIALS	ITEM
_____	1. VERIFY that emergency response equipment, except network server computers (EPDS4 and servers in TeleCom Room), is deactivated, de-energized, and stored in its proper location.
_____	2. VERIFY that Status boards are erased and cleaned.
_____	3. VERIFY that logs, forms and documents, pertaining to the emergency, have been collected by the Logistics Coordinator.
_____	4. VERIFY that unused consumables have been returned to appropriate storage areas
_____	5. VERIFY that desks are neat/clean and chairs have been replaced to their pre-activation locations.
_____	6. Verify that ventilation systems are in their normal configuration and lights are turned OFF.
_____	7. RECORD any defective or missing equipment, or other similar items, of the back of this checklist.
_____	8. VERIFY that other personnel have exited the facility if during after hours.
_____	9. VERIFY that the MASTER Key has been returned to the Responder's Entrance Lock Box.
_____	10. If deactivation occurs after hours, then ACTIVATE the EOF Alarm System and LOCK all gates.

EOF DEACTIVATION CHECKLIST COMPLETED BY:

PRINTED NAME: _____

SIGNATURE: _____

DATE COMPLETED: ___/___/___

TIME COMPLETED: _____

ATTACHMENT 3
COATESVILLE EOF – LOSS OF NORMAL ELECTRICAL POWER
Page 1 of 4

A. AUTOMATIC ACTIONS

1. Upon sensing a loss of commercial power, the uninterruptible power supply (UPS) provides power for selected electrical loads and telephone equipment. The UPS distribution panel is located in the telephone room and contains a list of load supplied by UPS.
2. The Diesel Generator (DG) auto starts and is available to carry load within 12 seconds.
3. Loads automatically picked up by the DG are:
 - AHU/CU #1 - Auditorium
 - AHU/CU #4 - Main Room
 - AC 1 - Telephone Room
 - Lighting and Electrical Outlets
 - Trickle Charge to UPS Battery

NOTE: Electrical loads not picked up automatically by the DG are the remaining Air Handling Units (AHU), Chiller Units (CU) and duct heaters. (PANEL H2).

B. RESTORATION OF POWER

To start equipment NOT automatically picked up by the DG, **PERFORM** the following:

1. **TURN OFF** all circuit breakers in panel H2 located in the auxiliary equipment room.
2. **CHANGE** the position of the manual transfer switch from the normal feed NDP Panel position to the Emergency Feed/MDP PNL position.

NOTE: The DG Output Breaker (LOCAL) will trip if total load placed on the DG reaches 350 amps.

DO NOT exceed 300 amps on the highest reading phase. Amperage for each circuit in panel H2 is listed inside the panel cover.

3. **TURN ON** individual circuit breakers in panel H2 while monitoring electrical load (amperage) on each phase using selector switch.

ATTACHMENT 3
COATESVILLE EOF – LOSS OF NORMAL ELECTRICAL POWER
Page 2 of 4

4. Approximately every 15 minutes, **MONITOR** DG load and maintain less than 300 amps by removing loads from Panel H2 if necessary.

NOTE: DG can supply power for approximately 10 hours.
 Fuel consumption is approximately 18.5 gals/hour.
 Fuel Oil Storage Tank capacity is 185 gallons.

5. Approximately every 15 minutes, **CHECK** if normal power has been restored, as indicated by the "Normal Power Available Light" on the transfer switch panel.

TABLE 3-1

AIR HANDLING AND CHILLER UNITS

<u>AHU/CU</u>	<u>ROOM</u>
1. Auditorium	107
2. Media Work Area	104
Restrooms - JPIC	103, 106
Lobby	
3. Lunch Room	135
Restrooms - EOF	138, 139
State Offices	
Dose Assessment Room	129
ERM Office	131
4. Main Room	124
5. Public Information Offices	108, 109, 110, 111
Emergency News Ops Center	126
NRC Office	125
Conference Room #2, JPIC	112
6. Administrative Services	120
Document Control	121
7. Government Offices/ Conference Room #1	132, 133
Public Affairs	116
Inquiry Response	117

**ATTACHMENT 3
COATESVILLE EOF – LOSS OF NORMAL ELECTRICAL POWER
Page 3 of 4**

Media Response 118

**TABLE 3-2
AMPERAGE**

<u>CIRCUITS, "PANEL H2"</u>		<u>HEATING</u>	<u>COOLING</u>
A - Circuits	#1 AHU (Air Handling Unit) - 2 #3 CU (Compressor Unit) - 2	26 amps	20 amps
B - Circuits	#2 AHU - 5 #4 CU - 5	26 amps	20 amps
C - Circuits	#5 AHU - 3 #7 CU - 3	27 amps	27 amps
D - Circuits	#6 AHU - 6 #8 CU - 6	17 amps	17 amps
E - Circuits	#10 AHU - 7 #12 CU - 7	17 amps	17 amps
F - Circuit	#9 Duct Heater - 124	9 amps	--
G - Circuit	#11 Vestibule Heater - 10	8 amps	--
H - Circuit	#13 Sec Heater - 122	8 amps	--
I - Circuit	#14 Duct Heater - 121	9 amps	--
J - Circuit	#15 Heater - 137	7 amps	--

ATTACHMENT 3
COATESVILLE EOF – LOSS OF NORMAL ELECTRICAL POWER
Page 4 of 4

C. RESTORATION FOLLOWING RETURN OF COMMERCIAL POWER

1. When normal power returns, all electrical loads will automatically transfer from the DG to commercial power after a 15 minute time delay or by **PLACING** the "Test/Normal/Retransfer" switch on the transfer switch panel to the retransfer position.

NOTE: The DG will continue to run for approximately 5 min. to allow for reconnection if necessary and DG cool down.

2. **TURN OFF** all circuit breakers in Panel H2.
3. **CHANGE** the position of the manual transfer switch from the Emergency Feed/MDP PNL position to the Normal Feed NDP PNL position.
4. **TURN ON** individual circuit breakers in panel H2 to restore power.

D. LOSS OF COMMERCIAL POWER AND DIESEL GENERATOR

1. In the event of a loss of all power (DG and commercial) the UPS battery will supply power to the UPS loads for approximately 8 hours (at full load).
2. During battery discharge, the LCD on the UPS panel in the battery room will provide a count down of battery time remaining based on running load.

ATTACHMENT 4
COATESVILLE EOF – HELICOPTER LANDING INFORMATION
Page 1 of 1

Heliport Information:

Altitude: 344 feet above Sea Level
Latitude: 39 degrees, 59 minutes, 30 seconds
Longitude: 75 degrees, 47 minutes, 08 seconds

Magnetic Direction of Approach / Departure Paths:

1. 020 degrees Approach 200 degrees Departure
2. 110 degrees Approach 290 degrees Departure

Helipad Landing Light Operation (Helicopter):

Frequency 123.050 MHz

- 5 clicks on the microphone to turn lights on for 10 minutes

Helipad Landing Light Operation (Manual):

If an approaching helicopter **CANNOT** activate the helipad lights, then **TURN ON** manually from the EOF by performing the following:

- **LOCATE** the **ORANGE** Helipad Control Box on the West Wall in the Mechanical Equipment Room.
- **DEPRESS** the **BLACK** button, within the control box, five (5) times.

NOTE: This will turn on helipad lights for 10 minutes.

NUCLEAR DUTY OFFICER (NDO)

1. **PURPOSE**

- 1.1. This procedure describes the responsibilities and actions of the Exelon Nuclear Duty Officer (NDO), which is a designated "24 / 7" duty position in both the Mid-West and Mid-Atlantic Regional Operating Group (ROGs).

When the Shift Manager decides that a situation warrants activation of the Emergency Response Organization (ERO) under the Emergency Plan, this procedure becomes applicable.

2. **TERMS AND DEFINITIONS**

None

3. **RESPONSIBILITIES**

- 3.1. The *Nuclear Duty Officer (NDO)* is responsible for functioning as the initial Exelon Nuclear Corporate Management contact when an emergency event is classified at an Exelon Nuclear station. The NDO shall decide the appropriate response for events not classified under the emergency plan.
- 3.2. The *NDO* is also responsible for interface with the State Duty Officers (or designated points of contact) regarding event information until the Corporate Emergency Director position is staffed.

4. **MAIN BODY**

- 4.1. **INITIATE** the appropriate Emergency Plan activities using the position checklist contained in Attachment 1.

5. **DOCUMENTATION**

None

6. **REFERENCES**

None

7. **ATTACHMENTS**

- 7.1. Attachment 1, Nuclear Duty Officer (NDO) Checklist

ATTACHMENT 1
NUCLEAR DUTY OFFICER (NDO) CHECKLIST
Page 1 of 3

Section 1, Event Classification

Section 2, Notification of Transportation Accident

Section 3, Hazardous Materials Emergency

Section 4, Activation of Electric Operations Emergency Load Conservation Program
[MWROG]

1. **EVENT CLASSIFICATION**

NOTE: The NDO will receive an alpha page message from the Emergency Response Organization (ERO) Callout System identifying the affected station, event classification, and facilities being activated.

- 1.1. **CONTACT** the affected Station Duty Manager to **VERIFY** and **OBTAIN** updated information concerning emergency response actions and event status.
- 1.2. **NOTIFY** the Nuclear Duty Executive (NDE) and the Chief Nuclear Officer (CNO).
- 1.3. **NOTIFY** the Exelon Nuclear ROG Communications Duty Officer of the event.
- 1.4. **REVIEW** news releases created by Exelon Generation Communications & Public Affairs for accuracy prior to activation of the Emergency Public Information Organization.
- 1.5. **RESPOND** to requests for information concerning the event from the State Duty Officer(s), if contacted.
- 1.6. **UPDATE** the Exelon Nuclear ROG Management, using the appropriate method listed below, until the EOF is in Command and Control or the event has been terminated:

MID-WEST ROG

MAINTAIN the NDO Message voice mailbox up to date

MID-ATLANTIC ROG

TRANSMIT periodic updates using NDO global paging capability.

**ATTACHMENT 1
NUCLEAR DUTY OFFICER (NDO) CHECKLIST
Page 2 of 3**

- 1.7. _____ **MAINTAIN** a record of activities.
- 1.8. _____ For an Alert or higher classification, **PERFORM** the following:
- 1.8.1. _____ **NOTIFY** Industry support organization of events classified as an Alert, Site Area Emergency or General Emergency per the Reportability Manual, using the contact numbers listed in the ERF Telephone Directory:
- Institute of Nuclear Power Operations (INPO)
 - American Nuclear Insurers (ANI)
- 1.8.2. _____ **TRANSFER** responsibility for notification of INPO and ANI to the EOF Logistics Manager once the EOF is activated

Mid-West ROG

Cantera NDO may relocate to the EOF to continue to assist with notifications to ANI, INPO and other support / governmental agencies.

2. NOTIFICATION OF TRANSPORTATION ACCIDENT

NOTE: A Transportation Accident is defined in 49 CFR 171.15 and 49 CFR 171.16.

- 2.1. _____ **REVIEW** OP-AA-101-102, "Accidents or Incidents Involving the Transportation of Rad Material."
- 2.2. _____ **CONTACT** the affected Station Duty Manager to get information on the event.
- 2.3. _____ **CONTACT** Exelon Nuclear Communication Services and coordinate press releases if necessary.
- 2.4. _____ **CONTACT** INPO to initiate the Voluntary Assistance Program, if necessary.
- 2.5. _____ **CONTACT** American Nuclear Insurers (ANI) to provide them with status of the event.
- 2.6. _____ **MAINTAIN** a record of activities.

**ATTACHMENT 1
NUCLEAR DUTY OFFICER (NDO) CHECKLIST
Page 3 of 3**

3. HAZARDOUS MATERIALS EMERGENCY

- 3.1. _____ **ASSIST** the Station Manager in performing the required notifications as stipulated in the station's Hazardous Materials Emergency Response Plan, Exelon Nuclear procedures and/or the Exelon Nuclear Reportability Manual.
1. National Response Center – Telephone numbers are available in the ERF Telephone Directory
 2. Local Emergency Planning Committee Coordinator – Telephone numbers are available in the station's Hazardous Materials Emergency Response Plan (or equivalent). Notification can also be performed through the local county Emergency Management Agency (EMA).

MID-WEST ROG only

4. ACTIVATION OF ELECTRIC OPS EMERGENCY LOAD CONSERVATION PROGRAM:

- 4.1. _____ **NOTIFY** Distribution Dispatch Center (DDC)/Load Dispatcher that a station is in an emergency condition. DDC will maintain power to that station's Emergency Planning Zone (EPZ) for the Alert and Notification System (ANS) sirens.
- 4.2. _____ **NOTIFY** the ANS siren maintenance vendor of possible rolling power outages, and **INSTRUCT** the vendor to monitor siren performance.
- 4.3. _____ **TRANSFER** the ELCP Bridge phone call to the Corporate Operations Center.
- 4.4. _____ **UPDATE** the NDO Message voice mailbox. **MAINTAIN** the NDO Message voice mailbox up to date until the EOF is activated or the event has been terminated.
- 4.5. _____ **If** support from the Site Restoration Management Team at a nuclear station, **then COORDINATE** plant access for the Team.
- 4.6. _____ **If** the ANS siren maintenance vendor was notified of rolling power outages and the outages have been terminated, **then NOTIFY** them that the outages have been terminated.
- 4.7. _____ **If** DDC/Load Dispatch was notified of an emergency condition, and the emergency is terminated, **then NOTIFY** the DDC/Load Dispatch that there is no longer an emergency condition at the affected station.

EOF COMMAND AND CONTROL

1. **PURPOSE**

- 1.1. This procedure describes the Command and Control responsibilities and actions of the Corporate Emergency Director, located in the Emergency Operations Facility (EOF). Reporting to the Corporate Emergency Director is the EOF Director.
- 1.2. This procedure becomes applicable when the Shift Manager decides that a situation warrants activation of the EOF.

Mid-West ROG only

When notified of a Joint Public Information Center (JPIC) activation, staff members will report to the Cantera Office and assemble in Training Room 109, adjacent to the EOF, prior to responding to the respective JPIC.

2. **TERMS AND DEFINITIONS**

- 2.2. **"Timeliness":** (NRC Performance Indicator R.EP.01)
 - For State/Local notification purposes, this is defined as the completion of Initial Roll Call for all required agencies within 15 minutes of the emergency classification and/or PAR decision time.
 - For PAR purposes, this is defined as the decision for a PAR change must be made within 15 minutes of indications being present or report that threshold criteria have been met or exceeded.

3. **RESPONSIBILITIES**

- 3.1. The *Corporate Emergency Director* is the designated individual who has the authority, management ability, and technical knowledge to manage Exelon Nuclear's Emergency Response activities. The Corporate Emergency Director, when in Command and Control, ensures that the resources of Exelon Nuclear are made available to the response effort and additional resources outside the company are secured as needed. The Corporate Emergency Director will also ensure that appropriate measures are promptly taken to terminate the condition causing the emergency, protect employees and the public, minimize damage to the plant, effect post-accident recovery and deactivation of the Emergency Response Organization, when appropriate, and coordinate all notifications and updates required for State and local agencies.

- 3.2. The *EOF Director* is responsible for directing the activation and overall response of the EOF staff in support of the Corporate Emergency Director. Reporting to the EOF Director are the Radiation Protection Manager (EOF), Technical Support Manager, and Logistics Manager.

In the event that the Corporate Emergency Director becomes incapacitated, the EOF Director shall assume the responsibilities of the Corporate Emergency Director until a transfer of Command and Control can be effected either back to the station or to another qualified Corporate Emergency Director.

4. **MAIN BODY**

- 4.1. **ASSUME** your designated ERO position upon arrival in the EOF.
- 4.2. **INITIATE** the appropriate Emergency Plan activities using the position specific checklist listed in Attachments 1 thru 2.

5. **DOCUMENTATION**

None

6. **REFERENCES**

None

7. **ATTACHMENTS**

- 7.1. Attachment 1, Corporate Emergency Director Checklist
- 7.2. Attachment 2, EOF Director Checklist

**ATTACHMENT 1
CORPORATE EMERGENCY DIRECTOR CHECKLIST
Page 1 of 7**

When in Command and Control, the Corporate Emergency Director will accept from the TSC the following non-delegable responsibilities:

- Final decision to notify offsite authorities
- Final decision to recommend protective actions (PARs) for the general public

Responsibility for the final decision to classify an event (per EP-AA-111) or to approve emergency exposure control measures (per EP-AA-113) will not transfer to the EOF as part of Command and Control turnover.

Section 1, Initial Actions

Section 2, Ongoing Actions

Section 3, Situational Actions

3.1, Emergency Exposure Control

3.2, Habitability

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. **INITIAL ACTIONS**

1.1. _____ **SIGN IN** on the EOF Organization board.

Mid-West ROG Only

1.2. _____ **CONTACT** the NDO Voice Mailbox to obtain information about the station and unit that caused the activation of the EOF. Telephone and ID nos. for the NDO Voice Mailbox are located in the ERF Telephone Directory.

1.3. _____ **INITIATE** and **MAINTAIN** a position log documenting significant actions performed and communications related to your position.

ATTACHMENT 1
CORPORATE EMERGENCY DIRECTOR CHECKLIST
Page 2 of 7

EOF ACTIVATION TIMING

The EOF is required to be declared activated within 15 minutes of achieving "minimum staffing." A goal of 60 minutes from the time of event classification has been established to achieve minimum staffing.

- 1.4. _____ **VERIFY** with the EOF Director that the following "minimum staff" members have reported:
- EOF Director
 - Radiation Protection Manager (EOF)
 - Dose Assessment Coordinator
 - Environmental Coordinator
 - HPN Communicator
 - Logistics Manager
 - State / Local Communicator (EOF)
1. **EVALUATE** the need, based on events in progress, to call in additional support for the EOF to provide additional support to the Station.
2. **APPROVE** requests by the EOF Director to fill a designated EOF position on an interim basis with a suitable alternate, if available, to support EOF activation.
- 1.5. _____ **VERIFY** with the EOF Director or Logistics Manager that the activation steps listed in EP-AA-112-400 have been performed or are in progress, as applicable:
- EP-AA-112-400, Attachment 1 – Cantera EOF Activation
 - EP-AA-112-400, Attachment 2 – Coatesville EOF Activation
- 1.6. _____ **ESTABLISH** contact with the Station and **OBTAIN** a briefing of the current situation.
- DISCUSS** the following:
- Actions taken to mitigate the event;
 - Establish the priorities for placing the Station in a safe condition;
 - Protective actions taken to protect employees and the public;
 - Identify immediate support needed by the Station, which should be expediently provided by the EOF.

ATTACHMENT 1
CORPORATE EMERGENCY DIRECTOR CHECKLIST
Page 3 of 7

1. If the EOF was staffed at the Unusual Event classification, then **DISCUSS** with the Station Emergency Director whether the continued operation of the EOF will be necessary.

- 1.7. **PROVIDE** an initial briefing to EOF staff members.

Initial brief should include but not be limited to the following:

- Site and unit affected by the current event
- Classification level, include description of the EAL threshold.
- The facility currently in Command and Control.
- Provide a brief summary of the event.
- Provide a listing of the major station priorities.
- Protective actions initiated onsite (Assembly, Evacuation, KI, Emergency Exposure, etc) and PARs recommended for public.

- 1.8. **INITIATE** the transfer of Command and Control with the Station Emergency Director using the Command and Control Turnover Briefing Form EP-AA-112, Attachment 1) as soon as the following conditions are met:

NOTE: "Minimum staffing" is not required to transfer Command and Control.

1. Adequate staffing levels are present in support of the non-delegable duties based on event conditions
 - PAR Decision-Making
 - Offsite Notifications (State/County and NRC)
2. EOF staff has been fully briefed on event status and currently proposed plan of action

Mid-West ROG only

- 1.9. **DETERMINE** with the Corporate Spokesperson, and affected State agencies, when to staff the JPIC.

**ATTACHMENT 1
CORPORATE EMERGENCY DIRECTOR CHECKLIST
Page 4 of 7**

2. ONGOING ACTIONS

- 2.1. **DIRECT** the EOF Radiation Protection Manager (Protective Measures Group) to continue to **MONITOR** changes in plant or radiological / effluent status that may indicate a change is needed in plant-based or dose-based PARs.
1. **REVIEW** the PAR Determination Flowcharts in EP-AA-111 (Attachments 2 through 8) for the affected station.
 2. **REVIEW** the Emergency Action Levels under Category "R" (Abnormal Radiation Levels / Effluents) for the affected station.
 3. **NOTIFY** the Station Emergency Director of any identified need for changes in PARs or Emergency Classifications.
- 2.2. **DIRECT** the Technical Support Manager (Technical Support Group) to continue to **MONITOR** plant conditions and station priorities in support of dose assessment, updates to the Joint Public Information Center (JPIC) staff, and with Federal, State and local response organizations.
- 2.3. When the EOF assumes Command and Control, **PERFORM** the following:
- 2.3.1. **APPROVE** any changes to PARs for the general public at the General Emergency classification based on plant status and projected or actual offsite doses per EP-AA-111.
- 2.3.2. **DIRECT** the EOF Director and Technical Support Manager to initiate notification forms, to the State/Local authorities and NRC respectively, per EP-AA-114 for **ANY** of the following:
- Change in event classification; or
 - Change in offsite PAR for the general public, i.e.
 - A. General Emergency classification
 - B. Subsequent LOSS of all three fission product barriers following General Emergency classification;
 - C. Shift in wind direction altering affected downwind sectors for an existing PAR; or
 - D. Offsite projected or actual dose exceeds 1 Rem TEDE or 5 Rem CDE Thyroid)

Mid-West ROG only

-- Change in Release status

ATTACHMENT 1
CORPORATE EMERGENCY DIRECTOR CHECKLIST
 Page 5 of 7

1. **REVIEW** and **APPROVE** content and accuracy of the State / Local and NRC notifications, by signing the form, prior to transmittal.

Limerick / Peach Bottom

2. **CONDUCT** an update for the Senior State Officials per EP-MA-114-100 as soon as possible following event classification / PAR decision.

Mid-West ROG

3. **UPDATE** State agencies, as required, using EP-MW-114-100, Attachment 4 (PWR) or Attachment 5 (BWR).
- **MAKE** contact with the REAC Commander.
 - For Quad Cities, **MAKE** contact with REAC Commander and Iowa Department of Public Health.

- 2.4. **MAINTAIN** a current list of station priorities and **REVIEW** the status of these priorities with EOF Directors/Managers.
- 2.5. **COORDINATE** Exelon Nuclear press releases with the NDO and Exelon Nuclear Communications Services, as appropriate, prior to JPIC activation.
1. **REVIEW** the technical content of news releases and the Chronological Events Description Log prior to their being released to the media.
- 2.6. **CONDUCT** EOF briefings.
- NOTE:** Briefings should be concise and conducted approximately every 30 minutes. Managers and Directors providing a brief update to the EOF staff on information from their respective disciplines.
- 2.7. **MONITOR** periodic TSC briefings.
1. **REQUEST** from the Station Emergency Director to be monitor brief via the Director's Hotline.
- 2.8. **VERIFY** with the EOF Director that designated Liaison(s) have been dispatched to State Emergency Operations Centers (EOCs), if requested.

ATTACHMENT 1
CORPORATE EMERGENCY DIRECTOR CHECKLIST
Page 6 of 7

- 2.9. **COORDINATE** all company, industry, and governmental support activities:
1. **ENSURE** that Federal, State, and local authorities and industry support agencies remain cognizant of the status of the emergency situation.
 2. **ENSURE** that request for the following are coordinated by EOF staff:
 - Assistance from Industry and non-Exelon Nuclear emergency response organizations (including vendor and contractor support), as required or requested by the TSC.
 - Identification and mobilization of expertise and manpower from non-affected Exelon Nuclear stations, ROG Corporate Groups, and Exelon, PECO and ComEd resources.
- 2.10. If the potential for a radiological release occurs, then **DETERMINE** the need to notify other Exelon Nuclear facilities including commercial divisions, to recommend precautionary measures be taken for facilities and personnel who could be impacted by the radiological problems.
- 2.10.1. **CONSIDER** the following activities:
1. **DIRECT** the NDO and the Logistics Manager to **NOTIFY** Exelon Nuclear and company facilities in the affected areas:

NOTE: These facilities should consider shutting down, or reducing to minimal staff, if protective actions have been recommended for their area.
 2. **CONSIDER** precautionary actions, including curtailing field activities for Division personnel working in the emergency planning zone.
 3. **DIRECT** the EOF Radiation Protection Manager to **PROVIDE** for radiological monitoring and contamination control for Exelon personnel involved in emergency repairs in the affected area.
- 2.11. **When** the emergency condition no longer exists and the plant is considered to be in a stable, shutdown, safe condition with no possibility of the emergency condition to degrade further, **REFER** to EP-AA-111, Attachment 1 (Termination / Recovery Checklist).

NOTE: If entry into Recovery Phase is required, the checklist will direct user to EP-AA-115, "Recovery from a Classified Event."
- 2.12. **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

ATTACHMENT 1
CORPORATE EMERGENCY DIRECTOR CHECKLIST
Page 7 of 7

3. SITUATIONAL ACTIONS

3.1. EMERGENCY EXPOSURE CONTROL

3.1.1. At the EOF Radiation Protection Manager's recommendation, **EVALUATE** the following emergency exposure control measures for Exelon Nuclear personnel performing field survey activities or required to respond within the plume exposure area:

1. If it will be necessary to potentially expose a worker to greater than EPA-400 lower limit (5 Rem TEDE), **then REFER** to EP-AA-113, Attachment 2 and 3 (Authorization for Emergency Exposure Limits).
2. If the use of potassium iodide (KI) is considered, **then REFER** to EP-AA-113, Attachment 5 (KI Determination Flowchart).

3.1.2. OBTAIN the approval of the Station Emergency Director and **ENSURE** the adequate briefing of Exelon Nuclear emergency workers.

3.2. HABITABILITY

3.2.1. If the EOF becomes uninhabitable, or incapable of performing the non-delegable functions, **then TRANSFER** Command and Control back to the Station and **EVALUATE** alternate facilities for relocating EOF functions.

ATTACHMENT 2
EOF DIRECTOR CHECKLIST
Page 1 of 4

Section 1, Initial Actions

Section 2, Ongoing Actions

Section 3, Situational Actions

3.1 Habitability / Loss of Normal Electrical Power

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. **INITIAL ACTIONS**

1.1. _____ **SIGN IN** on the EOF Staffing Board.

1.2. _____ **REPORT** arrival to the Corporate Emergency Director

1. If the Corporate Emergency Director becomes incapacitated, **ASSUME** the responsibilities of the Corporate Emergency Director until a transfer of Command and Control can be affected either back to the Station or to another qualified Corporate Emergency Director.

1.3. _____ **INITIATE** a position log documenting significant actions performed and communications related to your position.

1.4. _____ **VERIFY** with the Logistics Manager that the activation steps listed in EP-AA-112-400 have been performed or are in progress, as applicable:

- EP-AA-112-400, Attachment 1 – Cantera EOF Activation
- EP-AA-112-400, Attachment 2 – Coatesville EOF Activation

"Minimum Staffing" is not required to transfer Command and Control, but must be met to declare facility fully activated.

1.5. **DETERMINE** the adequacy of EOF staffing to support facility activation.

1.5.1. **VERIFY** that each group is adequately staffed to support the transfer of Command and Control based on event conditions and **PROVIDE** frequent updates to the Corporate Emergency Director:

- _____ Logistics Support Group (Logistics Manager)
- _____ Protective Measures Group (Radiation Protection Manager)
- _____ Technical Support Group (Technical Support Manager)

**ATTACHMENT 2
EOF DIRECTOR CHECKLIST
Page 2 of 4**

1.5.2. **CONFIRM** when the following "minimum staffing" positions are filled:

- _____ EOF Director:
- _____ Radiation Protection Manager (EOF):
- _____ Dose Assessment Coordinator:
- _____ Environmental Coordinator:
- _____ HPN Communicator (EOF):
- _____ Logistics Manager:
- _____ State / Local Communicator (EOF):

NOTE: A goal of 60 minutes, from the time of event classification, is allotted to achieve "minimum staffing".

1. If any designated EOF position is not filled and a suitable alternate is available, **then RECOMMEND** interim staffing of position to the Corporate Emergency Director and **LOG** the participation of the substitute personnel.

1.6. Within 15 minutes of achieving minimum staffing, DECLARE the TSC formal activated after performing or verifying the following:

1. Personnel have been briefed on the event and priorities
2. Facility is functionally capable of performing designated functions

Event classified at (TIME): _____

Minimum Staffing achieved at (TIME): _____

EOF declared activated at (TIME): _____

1.6.1. _____ **ANNOUNCE** EOF activation over the facility Public Address (PA) System.

1.6.2. _____ **NOTIFY** the TSC Director of the formal activation of the EOF.

2. ONGOING ACTIONS

2.1. **ASSIST** the Corporate Emergency Director with the completion of checklist actions (EP-AA-112-402, Attachment 1) and as directed:

1. **MAKE** announcements over the facility PA system as directed by the Corporate Emergency Director.
2. **COORDINATE** periodic facility briefs for the Corporate Emergency Director with the Radiation Protection Manager, Technical Support Manager, Logistics Manager, and Federal, State or other government representatives present.

**ATTACHMENT 2
EOF DIRECTOR CHECKLIST
Page 3 of 4**

3. If delegated, then **APPROVE** the technical content of Press Releases and information released to the News Media.

2.2. **OVERSEE** the overall operation of the EOF, including:

1. **COORDINATE** the resolution of outstanding and/or continuing staffing issues / needs between EOF groups and the Administrative Coordinator (EOF).
2. **EVALUATE** the need to augment the EOF staff based on events in progress and to arrange for relief staffing for extended activations.
3. **ENSURE** the effective communication between EOF groups and in the communication of significant events and recommendations to the Corporate Emergency Director
4. **COORDINATE** services as necessary to support EOF operations such as accommodations, office support, food, and equipment maintenance as necessary through the Administrative Coordinator.
5. **ASSIST** the Logistics Manager in resolving any questions regarding facility access control and **AUTHORIZE** access to the EOF, as needed.

TIMELINESS OF OFFSITE NOTIFICATIONS (R.EP.1)

A notification to affected State and risk counties is required for the following:

- Change in event classification (by the TSC Station Emergency Director)
- Change in the protective action recommendation (PAR), based on: (1) General Emergency classification, (2) LOSS of all three fission product barriers, (3) shift in wind direction impacting affected downwind sectors for existing PAR, or (4) offsite dose based on model projection or Field Monitoring Team readings.

Initial roll call to State and risk counties must be completed and the notification started within 15 minutes of event classification and/or PAR decision time.

Mid-West ROG

Notification is also provided for a change in radiological release status.

**ATTACHMENT 2
EOF DIRECTOR CHECKLIST
Page 4 of 4**

- 2.3. **PREPARE** State/Local notification forms as required per EP-AA-114.
- **REFER** to EP-MW(MA)-114-100 for instructions on completion of the form.
1. **OBTAIN** the assistance of the Technical Support Manager and Radiation Protection Manager in completing appropriate portions of form.
 2. **OBTAIN** the Corporate Emergency Director's approval signature on form.
 3. **PROVIDE** approved form to the State / Local Communicator and **VERIFY** that initial roll call was performed within 15 minutes of event classification or PAR change.

Limerick / Peach Bottom

2.4. **ASSIST** the Corporate Emergency Director in updating the Senior State Official(s) per EP-MA-114-100 as soon as possible following event classification / PAR decision.

2.5. **MONITOR** information flow and the effectiveness of working relations (interfaces) within the EOF to ensure facility activities remain coordinated.

2.6. **ACT** as the purchasing agent for the EOF Organization and in support of the TSC for contract negotiations / administration.

2.7. **PERFORM** a shift turnover with the on-coming shift of personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

3. **SITUATIONAL ACTIONS**

3.1. **HABITABILITY / LOSS OF NORMAL ELECTRICAL POWER**

3.1.1. If the EOF becomes uninhabitable, or incapable of performing the non-delegable functions, then **ASSIST** the Corporate Emergency Director in identifying alternate facilities for relocating EOF functions.

Coatesville EOF

3.1.2. If a loss of normal electrical power occurs, then **REFER** to EP-AA-112-400, Attachment 3 for guidance

EOF LOGISTICS SUPPORT GROUP

1. **PURPOSE**

1.1. This procedure describes the responsibilities and actions of the EOF Facility Support Group, which consists of the following positions reporting to the Logistics Manager:

- Regulatory Liaison,
- Security Coordinator (EOF),
- State / Local Communicator (EOF),
- Emergency Operations Center (EOC) Communicator
- Administrative Coordinator (EOF), and
- Computer Specialist

1.2. When the Shift Manager decides that a situation warrants activation of the EOF under the Emergency Plan, this procedure becomes applicable.

2. **TERMS AND RESPONSIBILITIES**

None

3. **RESPONSIBILITIES**

3.1. The *Logistics Manager* provides support functions in organizational logistics and governmental interface. The Logistics Manager directs the activities of the administrative, security and liaison personnel staffing the EOF.

3.2. The *State / Local Communicator (EOF)* is responsible for transmitting, receiving and documenting information relayed to/from the EOF and State and county agencies.

3.3. The *EOC Communicator* is responsible for transmitting, receiving and documenting information relayed to/from the EOF and the Exelon Liaisons dispatched to the State and County Emergency Operations Centers (EOCs).

3.4. The *Administrative Coordinator (EOF)* is responsible for providing administrative, logistics, computer and personnel support for the EOF.

3.5. The *Computer Specialist* assists EOF personnel with the utilization of computer resources necessary to support nuclear emergencies. The Computer Specialist will also assist in trouble-shooting and coordinating repairs for problems encountered with communications and computer equipment and/or programs.

- 3.6. The *Regulatory Liaison* is responsible for maintaining an effective interface with Federal, State and local agencies, and arranging workspace for the Federal and State agencies in the EOF.
- 3.7. The *Security Coordinator (EOF)* acts as an interface with the TSC Security Coordinator on events relating to the security of a Nuclear Station. The Security Coordinator will assist in communications with Federal, State and local law enforcement agencies, serve as primary contact to Security Contractors, and interpret information for EOF staff on security events, and provide assistance to the TSC Security Coordinator in resolving security events. The Security Coordinator (EOF) also reviews significant security events for the potential of intentional transgression.

Coatesville EOF

The EOF Security Coordinator position will be staffed out of the Mid-West ROG / Cantera EOF.

4. MAIN BODY

- 4.1. **ASSUME** your designated ERO position upon arrival in the EOF.
- 4.2. **INITIATE** the appropriate Emergency Plan activities using the position specific checklist listed in Attachments 1 thru 7.

5. DOCUMENTATION

None

6. REFERENCES

None

7. ATTACHMENTS

- 7.1. Attachment 1, Logistics Manager Checklist
- 7.2. Attachment 2, State / Local Communicator (EOF) Checklist
- 7.3. Attachment 3, EOC Communicator Checklist
- 7.4. Attachment 4, Administrative Coordinator (EOF) Checklist
- 7.5. Attachment 5, Computer Specialist Checklist
- 7.6. Attachment 6, Regulatory Liaison Checklist
- 7.7. Attachment 7, Security Coordinator (EOF) Checklist

**ATTACHMENT 1
LOGISTICS MANAGER CHECKLIST
Page 1 of 6**

Section 1, Initial Actions

Section 2, Ongoing Actions

Section 3, Situational Actions

3.1, Exelon Nuclear Fitness for Duty Program

3.2, NRC Site Team Response

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. INITIAL ACTIONS

1.1. _____ **SIGN IN** on the EOF Organization Board.

1.2. _____ **REPORT** your arrival to the EOF Director.

1. If the EOF Director is not yet present, then **NOTIFY** the Corporate Emergency Director.

1.3. _____ **INITIATE** a position log documenting significant actions performed and communications related to your position.

1.4. **VERIFY** the arrival of Logistics Group staffing and completion of designated actions, as applicable:

• **State / Local Communicator:** _____

1.4.1. _____ **VERIFY** that operation of Nuclear Accident Reporting System (NARS) phone has been tested from the EOF

• **Administrative Coordinator:** _____

Coatesville EOF Only

1.4.2. **VERIFY** with the Administrative Coordinator that the EOF First Responder Checklist has been completed per EP-AA-112-400, Attachment 2.

▪ **Regulatory Liaison:** _____

▪ **Computer Specialist:** _____

• **Security Coordinator:** _____

**ATTACHMENT 1
LOGISTICS MANAGER CHECKLIST
Page 2 of 6**

Coatesville EOF

- 1.4.3. _____ If not yet contacted by the on-call Security Coordinator for the MWROG, then **PAGE** individual using number listed in the ERF Telephone Directory.
- 1.4.4. _____ **BRIEF** the MWROG EOF Security Coordinator on the event and required support.
- 1.4.5. _____ **DIRECT** the MWROG EOF Security Coordinator to contact his counterpart at the Station TSC and **PROVIDE** telephone number, if needed.
- 1.4.6. _____ **IDENTIFY** a telephone number where individual can be reached at the Cantera EOF and where you can be contacted at the Coatesville EOF.

• **EOC Communicator:** _____

- 1.4.7. _____ **CONFIRM** that each applicable State Agency listed on Table 3-1, "Key State Agency Listing," (Attachment 2).
1. If an Exelon Nuclear presence is requested by any of the State Agencies, then **DIRECT** the EOC Communicator to **CONTACT** and **DISPATCH** State Liaison(s).

• **Access Control:** _____

- 1.5. _____ **VERIFY** that Access Control has been established and access is being restricted to emergency response personnel only.
- 1.6. _____ **REVIEW** adequacy of EOF staffing based on responder present in facility and expected response as indicated on faxed copy of automated callout system status reports.
- 1.7. _____ **NOTIFY** the EOF Director when the Logistics Support Group is adequately staffed to support facility activation and **ADVISE** on the status of activities relating to governmental interfaces and readiness to accept responsibility for the notification of State and county authorities.
1. If the EOF Director is not yet present, then **PERFORM** the initial actions listed in the EOF Director Checklist (EP-AA-112-402, Attachment 2) to facilitate EOF activation.

ATTACHMENT 1
LOGISTICS MANAGER CHECKLIST
Page 3 of 6

1.8. As requested by EOF Directors/Managers, **PERFORM** the following to initiate callouts for required staff:

1.8.1. _____ **DIRECT** the Administrative Coordinator to **CALL** additional trained personnel to fill the vacant positions using EP-AA-112, Attachment 3, "FFD Call-Out Record" to ensure FFD compliance for called out personnel.

1.8.2. _____ **IDENTIFY** available personnel to fill the vacant emergency response position who possess appropriate skills and background.

1. **OBTAIN** Corporate Emergency Director approval and **RECORD** in Event Log.

2. **OBTAIN** a trained emergency responder for that position as soon as possible.

1.9. **ASSUME** primary responsibility from the Nuclear Duty Officer (NDO) for notifications to the Institute of Nuclear Power Operations (INPO) and the American Nuclear Insurers (ANI).

NOTE: ANI and INPO will be contacted initially by the NDO per the Reportability Manual following the declaration of an Alert or higher classification.

1.9.1. _____ **CONTACT** the NDO for the information that has already been provided to these agencies. TIME: _____

1.9.2. _____ **CONTACT** INPO/ANI and **INFORM** them that you are the Exelon Nuclear point of contact and **PROVIDE** a telephone number at the EOF. TIME: _____

2. **ONGOING ACTIONS**

2.1. **DIRECT** the activities of the Logistics Support Group.

2.2. **MAINTAIN** records of Logistics Group EOF activities, including contacts with offsite agencies, contractors, and other support organizations

**ATTACHMENT 1
LOGISTICS MANAGER CHECKLIST
Page 4 of 6**

Mid-West ROG

2.3. **CONTACT** the Siren Maintenance contractor and obtain a siren system status for the affected plant.

1. **If there are problems with any sirens, then DIRECT** the State/Local Communicator to notify the counties of the problems.

2.4. **ENSURE** facility access control is maintained and access limited to Emergency Responders.

Coatesville EOF

The first of 2 facility security members arriving at the EOF will assume responsibility for controlling access to the EOF. The 2nd facility security member will assume responsibility for controlling access to the Joint Public Information Center (JPIC).

1. **AUTHORIZE** admittance to non-Exelon personnel on an "as needed" basis.
 2. **CONSIDER** staffing additional Facility Security for long-term access control if State, local and/or Federal agencies may also be responding to the EOF and JPIC.
- 2.5. **PARTICIPATE** in periodic EOF briefings. Information to be discussed should include but not be limited to the following:
- State and County emergency response
 - EOC(s) staffed
 - Liaison(s) requested / dispatched
 - Communications established
 - State Radiological Assessment Centers staffed, as applicable
 - Other Exelon facilities potentially affected by the on-going event
 - State / NRC / other agencies present or enroute to the EOF
- 2.6. **PROVIDE** assistance to the State/Local Communicator(s), as needed, to ensure that notifications to offsite agencies are transmitted in a timely manner.

ATTACHMENT 1
LOGISTICS MANAGER CHECKLIST
Page 5 of 6

- 2.7. **COORDINATE** with the NDO to maintain communications with ANI and INPO and **UPDATE** periodically on the status of the event and of any changes in event Classification, PARs using the following:
- Approved State/Local Notification forms
 - Approved NRC Event Notification Worksheets
 - Approved Press Releases
 - Significant Events Log (SEL), maintained by the Events Recorder
- 2.8. **NOTIFY** the NDO of offsite protective actions implemented that affect Exelon facilities and/or activities, and **REQUEST** that the NDO contact affected Exelon, AmerGen and PECO/ComEd commercial divisions.
- 2.9. **ENSURE** that timely updates and information are provided by the EOC Communicators(s) to Exelon Nuclear Liaisons dispatched to State/County Emergency Operations Centers (EOCs), and to offsite officials present in the EOF.
1. **ADVISE** the EOF Director concerning the status of activities and interface(s) established with governmental agencies.
 2. **MAINTAIN** communications via the EOC Liaison with appropriate State and county EOCs whose assistance may be required to terminate the emergency and to expedite the recovery.
- 2.10. **COORDINATE** maintenance of EOF equipment as necessary.
- 2.11. **ASSIST** EOF Directors/Managers in obtaining and coordinating additional technical expertise, as requested, to support station response activities including Exelon Corporate staff, unaffected stations and vendors / contractors.
- 2.12. **If shift relief is considered or additional personnel are required to support continued EOF and/or Station activities, then DIRECT** the Administrative Coordinator to arrange for staff rotation and/or call outs.
1. **ENSURE** that the Exelon Nuclear Fitness for Duty Program is implemented for staff reporting to the EOF per Section 3.1.
- 2.13. **OBTAIN** support from Human Resources, Comptroller's Office, Legal, Accounting or other Exelon Departments, as required, to support emergency response activities.
- 2.14. **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

**ATTACHMENT 1
LOGISTICS MANAGER CHECKLIST
Page 6 of 6**

3. SITUATIONAL ACTIONS

3.1. EXELON NUCLEAR FITNESS FOR DUTY (FFD) PROGRAM

3.1.1. If this shift is **not** during normal business hours, then **COMPLETE** EP-AA-112, Attachment 4, Fitness For Duty Verification for each Exelon Nuclear EOF responder who's FFD status is not recorded as acceptable on the automated call out system report faxed to the EOF.

NOTE: State, Federal and Local representatives, who may be present in the EOF, which is located outside the protected area and do not have responsibilities directly affecting reactor safety, are not covered by the FFD rule.

1. **SUBMIT** the completed forms to the EOF Director for approval.

3.1.2. For State, Federal and Local Representatives, **USE** the following guidelines:

1. If the odor of alcohol is detected on these individuals, then **INSTRUCT** the Security Coordinator (Cantera) or Regulatory Liaison (Coatesville) to conduct an immediate behavioral observation to determine FFD.
2. If there is evidence of the person being unfit for duty, then **NOTIFY** applicable agency and **REQUEST** that the individual leave the property.

3.2. NRC SITE TEAM RESPONSE

3.2.1. When notified that an NRC Site Team has been dispatched to the EOF, **PERFORM** the following:

1. **VERIFY** that the NRC work locations are set up.
2. **DIRECT** the Regulatory Liaison to act as the primary Exelon Nuclear Liaison to NRC Site Team.

ATTACHMENT 2
STATE / LOCAL COMMUNICATOR (EOF) CHECKLIST
Page 1 of 2

Section 1, Initial Actions

Section 2, Ongoing Actions

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. **INITIAL ACTIONS**

- 1.1. **SIGN IN** on the EOF Organizational Board.
- 1.2. **REPORT** your arrival to the Logistics Manager and **OBTAIN** an initial briefing on the event.
- 1.3. **INITIATE** a position log documenting significant actions performed and communications related to your position.
- 1.4. **CONDUCT** a test to verify operation of the Nuclear Accident Reporting System (NARS) Circuit.
- 1.5. **CONTACT** the TSC State/Local Communicator to obtain a briefing on State/Local notifications performed and specific requests for updates.
- 1.6. **INFORM** the Logistics Manager when ready to assume State/Local notifications responsibility from the TSC.

2. **ONGOING ACTIONS**

- 2.1. **TRANSMIT** approved notification form to the appropriate agencies when directed per the following, as applicable:
 - EP-MW-114-100, MWROG Notifications
 - EP-MA-114-100, MAROG Notifications
 1. **Prior to transmitting, REVIEW** completed form for accuracy and **VERIFY** the Corporate Emergency Director's approval signature on form.
 2. **PROVIDE** copies of the completed notification forms to the Administrative Coordinator for distribution and posting.

ATTACHMENT 2
STATE / LOCAL COMMUNICATOR (EOF) CHECKLIST
Page 2 of 2

Mid-West ROG

- 2.2. **ANSWER** the NARS phone, when it rings and **RECORD** message on a notification form per EP-MW-114-100.
- 2.3. **COMMUNICATE** updates and information requests to State/County agencies, as directed by the Logistics Manager.
1. **LOG** relevant data (e.g. name, time, date, source).
 2. **ENSURE** that the Logistics Manager is made aware of issues and questions raised by the offsite agencies.
 3. **RELAY** replies to issues and questions expeditiously.
- 2.4. **ASSIST** the Logistics Manager to maintain an accurate record of event-related activities.
- 2.5. **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

**ATTACHMENT 3
EOC COMMUNICATOR CHECKLIST
Page 1 of 5**

Section 1, Initial Actions

Section 2, Ongoing Actions

Table 3-1, Key State Agency List

Table 3-2, County Emergency Management Agency Contacts

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. **INITIAL ACTIONS**

- 1.1. _____ **SIGN IN** on the EOF Organizational Board.
- 1.2. _____ **REPORT** your arrival to the Logistics Manager and **OBTAIN** an initial briefing on the event.
- 1.3. _____ **INITIATE** a position log documenting significant actions performed and communications related to your position.

Mid-West ROG

1.4. **CONTACT** the affected Station Logistics Coordinator to verify that County EOC Liaison(s) have been dispatched if requested, or at a Site Area or General Emergency if **not** yet dispatched.

1.5. **ESTABLISH** contact with applicable Key State Agencies per Table 3-1.

1.5.1. _____ **COMPLETE** Key State Agency List (Table 3-1) and **PROVIDE** a copy to the Logistics Manager and Regulatory Liaison.

Quad Cities

1.5.2. _____ **VERIFY** with the State of Iowa that the Emergency Response Data System (ERDS) is functioning. **If NOT, then CONTACT** a 2nd ENS Communicator to support communications with the Iowa EOC.

Coatesville EOF

1.5.3. _____ **DETERMINE** whether State Representatives have been dispatched to the EOF and/or stations, and **IDENTIFY** their names(s) and estimated arrival times if applicable.

**ATTACHMENT 3
EOC COMMUNICATOR CHECKLIST
Page 2 of 5**

Cantera EOF

1.6. _____ **USE** Table 3-2 (County Emergency Management Center Contact) to contact the affected County Emergency Managers and establish whether the County organization has been activated and inform them whether or not an EOC Liaison has been dispatched.

1.7. _____ **PROVIDE** an update to the Logistics Manager and Regulatory Liaison on:

- Status of activation of State/County Emergency Operations Centers (EOCs), and radiological assessment centers as applicable.
- Requests for the dispatching of Exelon Nuclear Liaisons.

Coatesville EOF

- State Representatives being dispatched to the EOF and/or stations

1.8. _____ **CONTACT** designated Exelon Nuclear Liaisons, using the information listed in the ERO Call Out List, and **DISPATCH** to requesting State facility.

2. ONGOING ACTIONS

2.1. At a Site Area Emergency, **ESTABLISH** a conference call/ bridge between the EOF and Exelon Nuclear Liaisons using the instructions in the ERF Telephone Directory entitled, "Activating and Accessing Conference Bridge."

1. If the conference bridge fails for any reason, then **SET UP** a conference call with the EOC Liaisons using the conference function on the phone.
2. **UPDATE** the EOC Liaisons, at a minimum, whenever a new notification form is issued.

FAXING OF PLANT DATA AND FORMS

Do **not** fax plant data or notification forms to the County EOC Liaisons, since the recommended PARs on our form may differ from the State recommended protective actions.

ATTACHMENT 3
EOC COMMUNICATOR CHECKLIST
Page 3 of 5

- 2.2. **ENSURE** that the following is faxed to the County and State Liaisons:
 - Key State Agency List (Table 3-1)
 - Approved Press Releases
 - Significant Event Log (SEL), obtained from the Events Recorder

- 2.3. **ASSIST** the Logistics Manager to maintain an accurate record of event-related activities.

- 2.4. **ADVISE** the Regulatory Liaison if informed of additional State and/or County personnel being dispatched to the EOF and/or JPIC.

- 2.5. **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

**ATTACHMENT 3
EOC COMMUNICATOR CHECKLIST
Page 4 of 5**

**TABLE 3-1
KEY STATE AGENCY POSITION LIST
Page 1 of 1**

1. **CONTACT** each agency listed in the table below.
2. **USE** the ERF Telephone Directory to find the telephone number.
3. **RECORD** the name of the person directing the agency's response.

Mid-West ROG

<u>Position</u>	<u>Name/Phone Number</u>
Illinois EMA (State EOC) Chief of Operations	
Illinois DNS (REAC) REAC Commander	
Illinois DNS (REAC) REAC Executive Officer	
Illinois DNS (REAC) REAC Reactor Analyst	
Illinois DNS (REAC) REAC Environmental Analyst	
Illinois DNS (REAC) Public information Officer	
Quad Only - Iowa EMD (State EOC) EMD Administrator	
Quad Only - Iowa DPH (State EOC) State Radiological Coordinator	

Limerick / Peach Bottom

<u>Position</u>	<u>Name/Phone Number</u>
Pennsylvania EOC (State Operations Officer)	
Peach Bottom Only: Maryland EOC (State Operations Officer)	

**ATTACHMENT 3
EOC COMMUNICATOR CHECKLIST
Page 5 of 5**

**Table 3-2
COUNTY EMERGENCY MANAGEMENT AGENCY CONTACT [MWROG]
Page 1 of 1**

Mid-West ROG

1. **USE** the chart below to determine the appropriate county(ies) to contact.

Affected Station / Associated EOCs					
Local EOC Locations/County Emergency Manager Contact					
Braidwood	Byron	Clinton	Dresden	LaSalle	Quad Cities
Will County EOC	Ogle County EOC	DeWitt County EOC	Will County EOC	Grundy County EOC	Clinton County EOC
Grundy County EOC			Grundy County EOC	LaSalle County EOC	Scott County EO
Kankakee County EOC			Kendall County EOC		Rock Island Count EOC
					Whiteside County EOC

- 1) **REFERENCE** the ERF Telephone Directory, State and County Emergency Response Organizations Section, for EOC telephone numbers.
- 2) **CONTACT** the County Emergency Management Agency Coordinator at the county EOC.
- 3) **DETERMINE** if their EOC has been activated.
- 4) **DETERMINE** if an Exelon Nuclear presence is desired.
- 5) **LOG** all relevant data (e.g. contact name, position, telephone numbers, liaison presence requested, etc).
- 6) If a Exelon Nuclear presence is requested in the county, then **CONTACT** the affected station Logistics Coordinator to dispatch County EOC Liaisons.
 - **LOG** the name of the county and the liaison dispatched.
- 7) If liaisons are dispatched, then **ACTIVATE** the conference bridge using the instructions contained in the ERF Telephone Directory.

ATTACHMENT 4
ADMINISTRATIVE COORDINATOR (EOF) CHECKLIST
Page 1 of 5

Section 1, Initial Actions

Section 2, Ongoing Actions

Section 3, Situational Actions

3.1, Specialized Training

3.2, Relocation Center Transportation [MWROG]

3.3, Event Termination

Table 4-1, EOF Staffing

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. **INITIAL ACTIONS**

1.1. ___ **SIGN IN** on the EOF Organization Board.

1.2. ___ **REPORT** your arrival to the Logistics Manager and **OBTAIN** a briefing.

1.3. ___ **INITIATE** a position log documenting significant actions performed and communications related to your position.

1.4. ___ **REVIEW** the automated call out system listing faxed to the EOF, and **OBTAIN** the names of the expected EOF personnel and their response times from the status report.

1.4.1. **If** the Call Out System Status Report indicates that EOF staffing is not complete **OR** additional staff is requested by EOF Director / Managers, **then PERFORM** the following:

1. ___ **IDENTIFY** suitable personnel for the missing staff positions with the assistance of the Logistics Manager and group leads.

– **REFER** to the ERO Telephone Directory for a listing of qualified personnel for emergency response positions.

NOTE: Fitness For Duty (FFD) requirements apply to all EOF emergency responders.

2. ___ **CONTACT** identified emergency personnel, as necessary to fill EOF positions

A. **COMPLETE** EP-AA-112, Attachments 3 and 4, for all personnel contacted to fill EOF response positions.

ATTACHMENT 4
ADMINISTRATIVE COORDINATOR (EOF) CHECKLIST
Page 2 of 5

- 1.5. _____ **OBTAIN** additional clerical support for the EOF and JPIC, as required.
- EOF: at least 2 to 3 clerical personnel suggested.
 - JPIC: at least 2 clerical personnel suggested.
- 1.6. _____ **CONFIRM** with the Computer Specialist that computer systems and communications are functioning properly.
- 1.7. _____ **DISTRIBUTE** copies of notification forms completed by the TSC/Control Room.

Mid-West ROG

INCLUDE copies of the Significant Events Log (SEL), completed by the TSC/Control Room, from the Events Recorder

2. ONGOING ACTIONS

- 2.1. **DIRECT** the actions of the Administrative Staff positions:
- Computer Specialist
 - Clerical Support
- 2.2. **VERIFY** arrival of clerical support personnel and **ASSIGN** tasks. Tasks include:
- Administrative support to the Corporate Emergency Director.
 - Copying and distributing information per Clerical Fax and Distribution Guidance located at the Administrative Coordinator's desk.
 - Posting copies of completed forms in a central location.
- 2.3. **OBTAIN** services, as necessary, to support operations of the EOF such as accommodations, office support services, food services, training support, transportation and waste disposal.

ATTACHMENT 4
ADMINISTRATIVE COORDINATOR (EOF) CHECKLIST
Page 3 of 5

2.4. If ongoing staffing of the EOF is necessary, then **PERFORM** the following:

NOTE: Arrange for relief staffing in coordination with the JPIC Administrative Coordinator.

1. **DEVELOP** a shift schedule based on continuing needs of EOF Directors/Managers, using Table 4-1 (EOF Staffing) to document the current and future staffing assignments.
 - Shift lengths should be 12 hours (maximum);
 - EOF shift change should not occur closer than one hour either side of TSC shift-change;
 - All responders should have ≥ 7 hours between scheduled work periods.
 2. **CONSULT** with the EOF Radiation Protection Manager to identify areas that should be avoided by relief personnel enroute due to radiological or other hazardous conditions.
 3. **CONSULT** with the EOF Security Coordinator for coordination of relief staff with Local Law Enforcement Agencies (LLEA) through control points that may have been set up to control re-entry into evacuated areas.
 4. **CONTACT** relief personnel for the next shift, using EP-AA-112, Attachment 3, and **PROVIDE** schedules and any special instructions for reporting to work.
- 2.5. **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

ATTACHMENT 4
ADMINISTRATIVE COORDINATOR (EOF) CHECKLIST
Page 4 of 5

3. SITUATIONAL ACTIONS

3.1. SPECIAL TRAINING

- 3.1.1. COORDINATE** with the TSC Logistics Coordinator for training of emergency response personnel obtained to augment the Emergency Response Organization. This may include Nuclear General Employee Training (NGET), special site-specific training, radiological protection training, etc.
- 3.1.2. CONSIDER** requesting assignment of a Training Specialist to the EOF to coordinate this activity.

Mid-West ROG only

3.2. RELOCATION CENTER TRANSPORTATION

- 3.2.1. ARRANGE**, if requested, for transportation of Station shift relief personnel from the Relocation Center where shift personnel can leave their cars and ride buses to the Station. Provisions should include:
- Arrangement for buses (these may be obtained from state, city, school authorities or private companies through the Logistics Manager);
 - Bus schedules to support Station shift schedules;
 - Security for employee vehicles;
 - Radiological precautions for persons being bused to and from the Station;
 - Notification to employees of bus pick-up points; and
 - Notification to local Law Enforcement Agency personnel at roadblocks to direct employees to the bus pickup points.

3.3. EVENT TERMINATION

- 3.3.1. COLLECT** all documents generated and forms completed in the EOF and provide to Corporate Emergency Preparedness.
- 3.3.2. CONTACT** personnel designated for shift relief and **INFORM** them of the termination of EOF activities.

ATTACHMENT 4
ADMINISTRATIVE COORDINATOR (EOF) CHECKLIST
Page 5 of 5
TABLE 4-1
EOF STAFFING
Page 1 of 1

Position	Notes	Date	Date
		Shift/Time	Shift/Time
		Fill in names below	Fill in names below
<i>Corporate Emergency Director*</i>			
<i>EOF Director*</i>			
Technical Support Manager			
Technical Advisor			
Operations Advisor			
Events Recorder			
ENS Communicator			
<i>Radiation Protection Manager*</i>			
<i>Dose Assessment Coordinator*</i>			
State Environs Communicator [MWROG]			
Dose Assessor			
<i>HPN Communicator*</i>			
<i>Environmental Coordinator*</i>			
Field Team Communicator			
<i>Logistics Manager*</i>			
<i>State / Local Communicator*</i>			
EOC Communicator			
County EOC Liaison [MWROG]	As needed		
State EOC Liaison	As needed		
Administrative Coordinator			
Computer Specialist			
Security Coordinator (Cantera)			
Regulatory Liaison			
Clerical Staff			

POSITION* -- "Minimum Staffing" position

Mid-West ROG			
Public Information Director			
ENC Events Recorder			
ENC Newswriter			
ENC Technical Advisor			
ENC Radiological Advisor			
ENC Media Monitor			
ENC Rumor Control Monitor			

EOF Director Approval: _____

ATTACHMENT 5
COMPUTER SPECIALIST CHECKLIST
Page 1 of 2

Section 1, Initial Actions

Section 2, Ongoing Actions

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. **INITIAL ACTIONS**

- 1.1. **SIGN IN** on the EOF Organization Board.
- 1.2. **REPORT** your arrival to the Administrative Coordinator.
- 1.3. **INITIATE** a position log documenting significant actions performed and communications related to your position.
- 1.4. **ASSIST** EOF personnel with logging in to desired programs by walking around the EOF workstation by workstation.
- **REFER** to EP-MW(MA)-110-100, ERO Computer Applications, for guidance on accessing the computer applications.
- 1.4.1. If the Operations Advisor is not yet present, **then INITIATE** facility data display screens (i.e., flat screens or overhead projection) per EP-MW(MA)-110-100.
- 1.5. **VERIFY** the proper operation of notification circuits with the following facility communicators upon their arrival:
- State / Local Communicator (**N**uclear **A**ccident **R**eporting **S**ystem)
 - ENS Communicator (**E**mergency **N**otification **S**ystem)
 - HPN Communicator (**H**ealth **P**hysics **N**etwork)
- 1.6. **CALL** Information Technology (IT) Solution Center / Help Desk, or equivalent, and **ENSURE** an analyst is assigned in case immediate assistance is needed with the LAN/WAN access

**ATTACHMENT 5
COMPUTER SPECIALIST CHECKLIST
Page 2 of 2**

2. ONGOING ACTIONS

2.1. PERFORM first response troubleshooting when computer problems are reported by EOF personnel:

1. **REQUEST** IT assistance for software problems that cannot be corrected at the EOF
 - During off-hours, IT may be contacted via the Solution Center / Help Desk.
2. **REQUEST** offsite assistance from the IT Solution Center / Help Desk for LAN/WAN and server problems that cannot be corrected at the EOF
3. **CONSULT** with IT personnel from the affected station to establish corrective actions for problems that occur on the station LAN that affect the programs.

Mid-West ROG

4. **ADVISE** the Administrative Coordinator to request assistance from the Operational Analysis Department (OAD) for equipment problems that cannot be corrected at the EOF.

2.2. PERFORM first response troubleshooting when communications (telephone) problems are reported by EOF personnel:

1. **CONTACT** the appropriate local telephone company(ies), using the numbers listed in the ERF Telephone Directory, to ensure their availability of telephone lines and to arrange for a service representative to be available.
2. If problems arise, then **PERFORM** visual inspections; **MAKE** minor repairs if possible; or **CONTACT** appropriate telephone service representative to perform repairs.
3. **ARRANGE** for expanded facility communications capabilities, as needed.

2.3. PERFORM a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

**ATTACHMENT 6
REGULATORY LIAISON CHECKLIST
Page 1 of 3**

Section 1, Initial Actions

Section 2, Ongoing Actions

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. INITIAL ACTIONS

- 1.1. **SIGN IN** on the EOF organization board.
- 1.2. **REPORT** your arrival to the Logistics Manager and **OBTAIN** a briefing on event.
- 1.3. **INITIATE** a position log documenting significant actions performed and communications related to your position.
- 1.4. Upon arrival of the EOC Communicator, **OBTAIN** copies of the completed Key State Agency List (Table 2-1, Attachment 3) and **DETERMINE** status of the following:
 - Activation of State and County Emergency Operations Centers (EOC)
 - Dispatching of Exelon Nuclear Liaisons to State / [MWROG: County] EOCs
 - [Coatesville EOF] State Representatives being dispatched to EOF and estimated time of arrival.
- 1.5. **OBTAIN** copies of notification forms and Significant Events Log (SEL), completed by the TSC/Control Room, from the Administrative Coordinator.

Coatesville EOF

- 1.6 **ENSURE** that designated rooms and equipment for State Representatives are unlocked and accessible and **NOTIFY** Facility Security (Access Controller) of their pending arrival.

**ATTACHMENT 6
REGULATORY LIAISON CHECKLIST
Page 2 of 3**

2. ONGOING ACTIONS

- 2.1. **FUNCTION** as the primary interface between Exelon Nuclear and the arriving governmental agencies (NRC, State, Federal) within the EOF.
1. When informed of the dispatching of an NRC Site Team, **OBTAIN** a list of NRC personnel expected at the EOF and JPIC from the ENS Communicator.
 2. **MEET** the NRC, State or Federal representatives in the entrance area of the building.
 - A. **OBTAIN** Visitor badges.
 - B. **ESCORT** the agency representatives to the EOF area.
 3. **INTRODUCE** agency personnel to their counterparts in the EOF.
 4. **ARRANGE** an initial briefing on current conditions.
 - A. **COORDINATE** with the EOF Director for obtaining an initial briefing.
 - B. **CONSULT** with the Administrative Coordinator to obtain copies of documents and forms that would be of interest to the agency representatives.
 5. **ALLOCATE** necessary work space, equipment, and supplies.
 - Designated rooms as well as counterpart seating in each of the EOF work areas have been identified.
 - State and Federal agency representatives should be shown their work space in the designated State room.
 6. **ACT** as the Exelon Nuclear Liaison to the NRC Site Team members, and State representatives if applicable.
 7. **OBTAIN** necessary equipment and supplies from the Administrative Coordinator and the clerical staff to support activities of governmental agencies located in the EOF.
- 2.2. **IDENTIFY** additional resources needed to support Licensing activities to the Logistics Manager.

ATTACHMENT 6
REGULATORY LIAISON CHECKLIST
Page 3 of 3

- 2.3. **RESOLVE** questions regarding Licensing requirements based on existing or proposed abnormal operating modes or plant modifications.
- 2.4. **COORDINATE** with Owners Group representative on relevant licensing matters (using numbers listed in the ERF Telephone Director).
- 2.5. **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

ATTACHMENT 7
SECURITY COORDINATOR (EOF) CHECKLIST
Page 1 of 5

Section 1, Initial Actions

Section 2, Ongoing Actions

Table 7-1, Security Data Sheet

Table 7-2, Supplemental Support Worksheet

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

Coatesville EOF

For an event at Limerick or Peach Bottom Station, the on-call (Mid-West) EOF Security Coordinator will report to the Cantera EOF when notified and contact the Logistics Manager at the Coatesville EOF via telephone upon arrival.

1. **INITIAL ACTIONS**

- 1.1. **SIGN IN** on the EOF Organization Board.
- 1.2. **REPORT** your arrival to the Logistics Manager.
- 1.3. **INITIATE** a position log documenting significant actions performed and communications related to your position.
- 1.4. **CONTACT** the Security Coordinator in the TSC and obtain information to complete Table 7-1, Security Data Sheet.
- 1.5. **BRIEF** the Logistics Manager of the security-related information obtained.
- 1.6. **REPORT** information related to the security-based EAL classifications directly to the Corporate Emergency Director.
- 1.7. **INFORM** Corporate Nuclear Security of the status of the event.

ATTACHMENT 7
SECURITY COORDINATOR (EOF) CHECKLIST
Page 2 of 5

2. ONGOING ACTIONS

- 2.1. **ASSIST** in coordinating access control activities at the EOF and JPIC with the EOF Logistics Manager and JPIC Coordinator.
- 2.2. If a Security Event is in progress or is determined to be credible, then **REPORT** directly to the Corporate Emergency Director and **PERFORM** the following:
1. **MAINTAIN** an open line with the TSC Security Coordinator.
 2. **PROVIDE** appropriate security related information to the Public Information Manager.
 3. **CONSIDER** calling in another Security Coordinator to address the remainder of the responsibilities in this checklist.
 4. **PROVIDE** and **INTERPRET** information on Station Nuclear Security Plan response, contingency measures implemented, and security-related emergency action levels (EALs).
 5. **CONFIRM** with the TSC Security Coordinator that the "Two-Person, Line of Sight" Rule has been implemented during a specific, credible insider threat (reference SY-AA-101-132 and SY-AA-101-111-1002).

Mid-West ROG

- 2.3. **OBTAIN** the traffic control access map, if available, and **IDENTIFY** roadblocks, relocation routes, relocation centers, etc. (IPRA – Map A)

- 2.4. **PROVIDE** assistance to the TSC Security Coordinator:
- **COORDINATE** additional security support at the station, or Relocation Center [MWROG], as required from unaffected stations or security contractor.
 - **COORDINATE** access to the site with the EOF Administrative Coordinator, Radiation Protection Manager and LLEA, as necessary.
 - **PROVIDE** other assistance as requested by the TSC Security Coordinator.

- 2.5. In coordination with the TSC Security Coordinator, **ESTABLISH** contact with Local Law Enforcement Agencies (LLEA), State, and FBI if appropriate.
1. **INFORM** them of your role as primary contact point for the event from a security/access control point. (Notify TSC that you are doing this)

ATTACHMENT 7
SECURITY COORDINATOR (EOF) CHECKLIST
Page 3 of 5

2. **COMPLETE** Table 7-2, Supplemental Support Worksheet with names and phone numbers for the agencies and personnel contacted.
 3. **SERVE** as the primary liaison for local, State and Federal Law Enforcement Agencies during security related events.
- 2.6. **ASSIST** the EOF Administrative Coordinator with EOF access and FFD requirements.

Cantera EOF

1. **ARRANGE** for building access to provide checkpoints at the EOF entrance.

NOTE: State, Federal and Local representatives, who may be present in the EOF, which is located outside the protected area and do not have responsibilities directly affecting reactor safety, are not covered by the FFD rule.

Mid-West ROG

- 2.7. **DIRECT** the activities of the Access Control Coordinator at the JPIC.
- 2.8. **COORDINATE** security-related activities within the EOF.
- 2.9. When EOF/JPIC next-shift staffing is being developed, **ADVISE** the Administrative Coordinator of travel routes that should be avoided by relief personnel due to traffic control points established by LLEAs.
- 2.10. **COORDINATE** with the Environmental Coordinator travel by the Field Monitoring Team within the EPZ.
 1. **ENSURE** LLEAs (staffing roadblocks) are informed of the Field Monitoring Team locations.
- 2.11. **SERVE** as the primary contact to the Security Contractors for additional support, if necessary.
- 2.12. **ASSESS** all significant emergency events and system/component failures for the potential of intentional transgression.
- 2.13. **OBTAIN** additional resources to support access control measures needed at the EOF and JPIC, with the EOF Logistics Manager and JPIC Coordinator respectively.
- 2.14. **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

**ATTACHMENT 7
SECURITY COORDINATOR (EOF) CHECKLIST**

Page 4 of 5

TABLE 7-1

SECURITY DATA SHEET

Page 1 of 1

EAL's	<p>Have any of the EAL Threshold values for the H1 series classifications been reached?</p> <p>Which, if any: _____</p>	Y / N
Security Force Impact	<p>Has the current event lead to any impacts on the implementation of the Site Security Plan?</p> <p>Equipment: _____</p> <p>Procedures: _____</p> <p>Personnel: _____</p>	Y / N
Personnel Accountability	<p>Has Personnel Accountability been initiated?</p> <p>Siren sounded / PA: _____ (Time / Date)</p> <p>Completed: _____ (Time / Date)</p> <p>Total initially unaccounted for: _____</p> <p>Were all personnel accounted for? _____ Y / N</p> <p>Persons missing _____</p> <p>Search and Rescue in use _____ Y / N</p>	Y / N
Site Evacuation	<p>Has a Site Evacuation been initiated?</p> <p>Evacuation Route in use: _____</p> <p>Has a Relocation Center been established? _____ Y / N</p> <p>What is the location of the Relocation Center? _____</p> <p>Are Security personnel present / needed at the Relocation Center?</p> <p>Total personnel on-site prior to evacuation: _____</p> <p>Total personnel deemed essential remaining on-site: _____</p> <p>Total non-essentials evacuated from the site: _____</p>	Y / N

ATTACHMENT 7
SECURITY COORDINATOR (EOF) CHECKLIST
 Page 5 of 5
TABLE 7-2
SUPPLEMENTAL SUPPORT WORKSHEET
 Page 1 of 1

NOTE: This worksheet is for the convenience of the Security Coordinator and need not be adhered to item-by-item. Consult the ERF Telephone Directory for telephone numbers.

I. LAW ENFORCEMENT AGENCIES

LOCAL

AGENCY	CONTACT NAME	PHONE NUMBER
--------	--------------	--------------

STATE

AGENCY	CONTACT NAME	PHONE NUMBER
--------	--------------	--------------

FEDERAL

AGENCY	CONTACT NAME	PHONE NUMBER
--------	--------------	--------------

II. CONTRACTED SECURITY

COMPANY	CONTACT NAME	PHONE NUMBER
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EOF TECHNICAL SUPPORT GROUP

1. **PURPOSE**

- 1.1. This procedure describes the responsibilities and actions of the EOF Technical Support Group, which consists of the following positions reporting to the EOF Technical Support Manager:
- Operations Advisor
 - Emergency Notification System (ENS) Communicator
 - Technical Advisor
 - Events Recorder
- 1.2. This procedure becomes applicable when the Shift Manager decides that a situation warrants activation of the EOF.

2. **TERMS AND DEFINITIONS**

None

3. **RESPONSIBILITIES**

- 3.1. The *Technical Support Manager* (TSM) manages the Technical Support Group in the EOF. The TSM monitors the status of plant parameters and advises the Corporate Emergency Director concerning event classification and changes in plant-based protective action recommendations (PARs).
- 3.2. The *Operations Advisor* monitors and analyzes plant status information and ensures that it is properly disseminated in the EOF. The Operations Advisor directs the actions of the ENS Communicator in obtaining and transmitting information.
- 3.3. The *ENS Communicator (EOF)* is the primary link between the EOF Response Organization and the Nuclear Regulatory Commission (NRC) Operations Center. The ENS Communicator maintains continuous communication with the NRC, as requested, in teleconference with the ENS Communicator (TSC). The ENS Communicator (EOF) conveys classification upgrades and plant status information to the NRC. The ENS Communicator (EOF) documents information requests from the NRC and provides follow-up responses to these requests.
- 3.4. The *Technical Advisor* is responsible for obtaining and analyzing event mitigating activities, monitoring station priorities and activities underway, and ensuring that information is disseminated in the EOF. The Technical Advisor also directs the activities of the Events Recorder.

- 3.5. The *Events Recorder* updates plant status and event information. The Events Recorder is also responsible for maintaining and posting the Significant Events Log, as applicable.

4. **MAIN BODY**

- 4.1. **ASSUME** your designated ERO position upon arrival in the EOF.
- 4.2. **INITIATE** the appropriate Emergency Plan activities using the position specific checklist listed in Attachments 1 thru 5.

5. **DOCUMENTATION**

None

6. **REFERENCES**

None

7. **ATTACHMENTS**

- 7.1. Attachment 1, Technical Support Manager Checklist
- 7.2. Attachment 2, Operations Advisor (EOF) Checklist
- 7.3. Attachment 3, ENS Communicator (EOF) Checklist
- 7.4. Attachment 4, Technical Advisor (EOF) Checklist
- 7.5. Attachment 5, Events Recorder (EOF) Checklist

ATTACHMENT 1
TECHNICAL SUPPORT MANAGER CHECKLIST
Page 1 of 3

Section 1, Initial Actions

Section 2, Ongoing Actions

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. **INITIAL ACTIONS**

(Initials)

- 1.1. **SIGN IN** on the EOF Organization Board.
- 1.2. **REPORT** your arrival to the EOF Director.
- 1.3. **VERIFY** that the arrival of the following Technical Support Group members: (**NOT** required "minimum staffing" positions)
- Operations Advisor
 - Technical Advisor
 - NRC Emergency Notification System (ENS) Communicator
 - Events Recorder
- 1.4. **INITIATE** a position log documenting significant actions performed and communications related to your position.

Mid-West ROG Only

- 1.5. **CALL** the Nuclear Duty Officer (NDO) Mailbox to obtain initial information on the station and unit causing the EOF activation
- 1.6. **ESTABLISH** contact with the Technical Manager in the TSC to obtain update on event status, details on event classification and potential escalation paths, TSC engineering activities, and overall station assessment and mitigative activities.
- 1.7. **VERIFY** the following with the Operations Advisor:
- Appropriate event and plant status screens are being displayed on facility projection / electronic screens.
 - Readiness to assume responsibility for NRC ENS notifications

ATTACHMENT 1
TECHNICAL SUPPORT MANAGER CHECKLIST
Page 2 of 3

- 1.8. _____ **BRIEF** Corporate Emergency Director on the status of TSC engineering activities and priorities.
- 1.9. _____ **NOTIFY** the EOF Director when the TSC Technical Support Group is ready to support facility activation. TIME: _____

2. ONGOING ACTIONS

- 2.1. When the EOF is in Command & Control of the event, VERIFY with the Operations Advisor that notifications/ updates are being performed per EP-AA-114 and that, if requested by the NRC, an open ENS line is being maintained in the EOF. the NRC Event Notification Worksheet prior to transmittal from the EOF.
- 2.2. **DIRECT** the activities of the Operations Advisor and Technical Advisor, including monitoring of changes in event classification and the status of plant, significant systems, and key parameters.
1. **ENSURE** appropriate parameters are being trended and that applicable Status Boards present current and accurate data.
 2. **ENSURE** that information on the status of plant systems and equipment is disseminated in a timely and accurate manner to EOF staff.
- 2.3. **PROVIDE** updates and further clarification to the Corporate Emergency Director on the following:
- Changes in event classification made by the TSC and potential escalation paths
 - Status of plant operations, including significant changes in plant/system status
 - Emergency Operating Procedure (EOP) actions
 - Activities underway or proposed to mitigate the consequences of the accident
- 2.4. **MONITOR** known or anticipated release paths and core damage assessment results.
- 2.5. **ENSURE** that the Radiation Protection Manager is informed of changes in plant status that impact or have a potential impact on offsite environs or PARs.

ATTACHMENT 1
TECHNICAL SUPPORT MANAGER CHECKLIST
Page 3 of 3

- 2.6. **ASSIST** the Corporate Emergency Director in determining plant-based PARs based upon plant status.
- **REFER** to EP-AA-111, Attachments 2 through 8 to review the plant-based PAR flowchart for the specific station affected.
- 2.7. **ASSIST** the EOF Director, as requested, with the following:
- Completion of the State/Local Notification Form per EP-MA-114-100;
 - Specific briefings for NRC, Federal Emergency Management Agency (FEMA) and State representatives present in the EOF; and
 - Periodic updates to Exelon Nuclear Liaisons dispatched to State and/or County Emergency Operations Centers (EOCs).
- 2.8. **COORDINATE** overall engineering / technical support and resources in support of requests made by the TSC Technical Manager, including **INTERFACE** with Industry and contractor/vendor organizations:
- Non-affected Exelon Nuclear stations
 - Exelon Nuclear Corporate Engineering
 - Architect Engineers
 - System/Component Manufacturers
 - Industry Technical/Engineering Support (i.e., Owners Group, etc.)
 - Exelon, AmerGen, PECO and ComEd resources
- 2.9. **PARTICIPATE** in periodic EOF briefings. Items to be discussed should include but not be limited to:
- Current event classification and potential escalation pathways
 - Current work in progress
 - Release paths - known or anticipated
 - Key plant / system parameters being monitored
 - Summary of NRC ENS discussions / inquiries
- 2.10. **PROVIDE** assistance to the TSC Technical Manager with decisions and plans to take the plant to and maintain safe shutdown.
- 2.11. **ASSIST** the TSC in obtaining technical information on facility and system design from available reference materials and vendor representatives
- 2.12. **ASSIST** in the development of post-accident recovery measures.
- 2.13. **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

ATTACHMENT 2
OPERATIONS ADVISOR (EOF) CHECKLIST
Page 1 of 3

Section 1, Initial Actions

Section 2, Ongoing Actions

Section 3, Situational Action

3.1, Loss of Data Acquisition Capability

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. **INITIAL ACTIONS**

(Initials)

- 1.1. _____ **SIGN IN** on the EOF Organization Board.
- 1.2. _____ **REPORT** your arrival to the Technical Support Manager and **OBTAIN** an initial briefing on the plant's current status and immediate priorities.
1. _____ **DISCUSS** expectations for the tracking, trending and display of significant plant parameters and system/equipment status.
- 1.3. _____ **INITIATE** a position log documenting significant actions performed and communications related to your position.

Mid-West ROG only

- 1.4. _____ **OBTAIN** a current print out of the electronic Significant Events Log (SEL) per EP-MW-110-100, ERO Computer Applications.
- 1.5. _____ **ESTABLISH** displays for plant/system status on designated projection / electronic screens per EP-MW(MA)-100, ERO Computer Applications.

ATTACHMENT 2
OPERATIONS ADVISOR (EOF) CHECKLIST
Page 2 of 3

1.6. _____ **ESTABLISH** communications over the Operations Status Line with the Control Room and TSC, and **OBTAIN** the following:

- Station priorities
- Status on integrity of Fission Product Barriers
- Plant operating mode and any technical specification constraints
- Status of key plant systems/equipment (i.e., ECCS, reactivity control, electrical distribution, etc.)
- Emergency /Abnormal operating procedures entered
- Event classification, release condition and PARs
- Initiation/completion of accountability and site evacuation
- Offsite support requested (fire-fighting, ambulance, etc.)
- Status of injured personnel

1.7. _____ **VERIFY** arrival of the ENS Communicator and **DETERMINE** readiness to assume responsibility for NRC notifications over the ENS Circuit.

- If the ENS Communicator has not yet arrived, then **CONTACT** the TSC ENS Communicator directly for a turnover per the ENS Communicator Checklist (Attachment 3) and **PERFORM** required notifications in support of the transfer of Command and Control to the EOF.

NOTE: The EOF may assume responsibility for NRC notifications per EP-AA-114; however, an open ENS line should not be established from the EOF prior to the arrival of the EOF ENS Communicator.

1. _____ **NOTIFY** the Technical Support Manager when ready to assume ENS notification responsibilities.

2. **ONGOING ACTIONS**

2.1. **MONITOR** the Operations Status Line to keep apprised of:

- Control Room activities, including progress on Emergency Operating Procedures (EOPs)
- Significant changes in plant system/equipment status and critical parameters
- Changes to event classification, including potential escalation paths
- Severe Accident Management status and recommendations

ATTACHMENT 2
OPERATIONS ADVISOR (EOF) CHECKLIST
Page 3 of 3

2.2. **IDENTIFY** and **TRACK** critical parameters for the identification and trending of current plant status informations.

1. **DIRECT** the activities of the ENS Communicator to assist in identifying, posting and trending current plant status and critical parameters.

NOTE: While not required, the Events Recorder can be assigned through the Technical Advisor to assist the ENS Communicator in this capacity.

2.3. **ASSIST** the ENS Communicator in completing the NRC Event Notification Worksheet (ENW) per EP-AA-114 and in responding to NRC inquiries.

NOTE: When used, the Corporate Emergency Director must approve the Event Notification Worksheet prior to issuance.

2.4. **INFORM** the EOF Radiation Protection Manager of changes in plant status that impact or may potentially impact the offsite environs (i.e., release status or rate, etc.).

2.5. **ASSIST** the Technical Support Manager in identifying Operations resources from Corporate staff and/or unaffected stations in support of plant shift operations personnel as requested by the TSC.

2.6. **SUPPORT** requests for information and clarification from the ENC/JPIC Technical Advisor or Federal / State representatives in the EOF.

2.7. **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

3. **SITUATIONAL ACTIONS**

3.1. **LOSS OF DATA ACQUISITION CAPABILITY**

3.1.1. **PROVIDE** direction to the ENS Communicator, and Events Recorder if assigned, on the manual trending of data using facility status boards.

3.1.2. **OBTAIN** a periodic update of key plant and system/equipment status over the Operations Status Line.

3.1.3. **REQUEST** the faxing of Plant Status sheets, as applicable, from the TSC.

ATTACHMENT 3
ENS COMMUNICATOR (EOF) CHECKLIST
Page 1 of 3

Section 1, Initial Actions

Section 2, Ongoing Actions

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. **INITIAL ACTIONS**

(Initials)

- 1.1. _____ **SIGN IN** on the EOF Organization Board.
- 1.2. _____ **REPORT** your arrival to the Operations Advisor.
- 1.3. _____ **INITIATE** a position log documenting significant actions performed and communications related to your position.
- 1.4. _____ **CONTACT** the ENS Communicator in the TSC via commercial phone to receive an update on the following:
 - Status of ENS Circuit (i.e., open line being maintained, updates being provided at specific periods, etc.)
 - Status of Emergency Response Data System (ERDS) broadcast
 - NRC Response Mode and activation status of Operations Center
 - Notifications performed / due status
 - Summary of information provided to NRC
1. _____ **REQUEST** that a copy of any previously transmitted NRC Event Notification Worksheets be faxed to the EOF.

NOTE: Event Notification Worksheet (ENS) form is contained in LS-AA-1150.
- 1.5. _____ **OBTAIN** a briefing from the Operations Advisor and **ADVISE** them on the status of communications with the NRC and readiness to assume communications responsibility.

ATTACHMENT 3
ENS COMMUNICATOR (EOF) CHECKLIST
Page 2 of 3

NOTE: The EOF does not have a designated ENS phone, which connects to the Federal Telecommunications System (FTS). Calling into the ENS from the EOF using a commercial telephone requires the use of a "9" before dialing NRC telephone numbers. Teleconferencing can only be initiated by the NRC.

1.6. Prior to the EOF assuming Command and Control, PERFORM the following:

1.6.1. _____ **If continuous communication has been established by the TSC, then ESTABLISH** contact with the NRC Operations Center:

1. _____ **DIAL** the telephone number listed in the ERF Telephone Directory, Support Groups, NRC Operations Center. (Number is also listed on the phone designated for ENS Communicator use.)
2. _____ **REQUEST** to be attached to the ENS bridge.
3. _____ **MONITOR** communications between the NRC and the TSC ENS Communicator

1.6.2. _____ **ASSIST** the Operations Advisor, as needed, in tracking event activities and updating status boards.

1.7. Upon the transfer of Command and Control to the EOF, PERFORM the following:

NOTE: The TSC Station Emergency Director will retain responsibility for event classification and emergency exposure controls approval.

1.7.1. _____ **NOTIFY** the NRC that the EOF is in Command and Control assuming responsibility for:

- Notifications to offsite State and risk counties
- Final decision on PARs for the general public

1. _____ **If not** already in continuous communication with the NRC, then **INQUIRE** if continuous communication is desired at this time.

NOTE: Generally, the TSC ENS Communicator focuses on real time plant operations and the EOF ENS Communicator focuses on NRC ENW information.

1.7.2. _____ **ASSUME** the role of primary ENS Communicator, with the TSC ENS Communicator on the ENS line in a support role.

- **REFER** to EP-AA-114, for guidance on the requirements of items for NRC notifications and/or updates.

ATTACHMENT 3
ENS COMMUNICATOR (EOF) CHECKLIST
Page 3 of 3

2. **ONGOING ACTIONS**

- 2.1. **MAINTAIN** continuous communications with the NRC, unless otherwise requested by NRC.
1. **UPDATE** the NRC of changing conditions.
 2. **DOCUMENT** the information as requested on the Events Log.

Changes in classification levels **shall** be communicated to the NRC immediately following the State Notification, but in all cases within 1 hour of the time of declared change in classification level. The intent is not to delay contacting the NRC until State/County notifications are completed, but rather to ensure that additional resources are available in the event that one or more State/County contacts do not answer initial roll call.

- 2.2. **NOTIFY** the NRC Operations Center of changes in event classification.
1. **PREPARE** an NRC ENW with the assistance of the Operations Advisor to document each change in classification level
 2. **OBTAIN** approval of the completed ENW from the Corporate Emergency Director.
 3. **CONVEY** the information from the approved ENW to the NRC Operations Center.
 - **REFER** to EP-AA-114 for guidance on ENW completion / transmittal.
- 2.3. **ENSURE** that the Operations Advisor is aware of technical issues raised by questions from the NRC and **RELAY** the replies to those questions and requests.
- 2.4. **ADVISE** the EOF Director when notified over the ENS Circuit of a change in NRC response mode or the dispatching of a site team to the station and/or EOF.
- 2.5. **APPRISE** the Regulatory Liaison of significant changes in response activities by the NRC or other Federal agencies.
- 2.6. **PROVIDE** updates on significant NRC communications and inquiries during facility briefings.
- 2.7. **ASSIST** the Operations Advisor in identifying, posting and trending current plant status and critical parameters.
- 2.8. **PERFORM** a shift turnover with the on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

ATTACHMENT 4
TECHNICAL ADVISOR (EOF) CHECKLIST
Page 1 of 2

Section 1, Initial Actions

Section 2, Ongoing Actions

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. **INITIAL ACTIONS**

- 1.1. _____ **SIGN IN** on the EOF Organization Board.
- 1.2. _____ **REPORT** your arrival to the Technical Support Manager and **OBTAIN** an initial briefing on the plant's current status and immediate priorities.
- 1.3. _____ **INITIATE** a position log documenting significant actions performed and communications related to your position.
- 1.4. _____ Upon arrival, **DIRECT** the Events Recorder to maintain a log of significant events and **PROVIDE** guidance on maintaining appropriate status boards.
- 1.5. _____ **ESTABLISH** communications over the Technical Conference Line with the TSC, and **OBTAIN** the following:
 - Station priorities
 - Status on integrity of Fission Product Barriers
 - Plant operating mode and any technical specification constraints
 - TSC Technical Support Group priorities
 - Accident mitigation activities

ATTACHMENT 4
TECHNICAL ADVISOR (EOF) CHECKLIST
Page 2 of 2

2. ONGOING ACTIONS

- 2.1. **MONITOR** the Technical Conference Line and **APPRISE** the Technical Support Manager of significant changes in station technical response activities, strategies and priorities.
- 2.2. **ASSIST** in updating status boards to reflect timely and accurate event/plant information and status.
- 2.3. **ASSIST** the Technical Support Manager with the following:
 1. Coordination of engineering support activities with Corporate Engineering and unaffected stations
 2. Interfacing with Industry/contractor organizations
 3. Obtaining technical information on facility and system design from available reference materials and vendor representatives
- 2.4. **ENSURE** the Logistics Manager is made aware of the Technical Group's activities and plans affecting facility space utilization at the Coatesville facility and/or Corporate Offices, including arrangements for contractor support.
- 2.5. **ASSIST** the Dose Assessment Coordinator in acquiring technical information pertaining to release pathway and core damage assessment activities being performed by the TSC.
- 2.6. **SUPERVISE** the activities of the Events Recorder.
 1. **CONSIDER** assigning the Events Recorder to assist the Operations Advisor in identifying, posting and trending critical parameters / system status, as conditions warrant.
- 2.7. **SUPPORT** requests for information and clarification from the ENC/JPIC Technical Advisor or Federal / State representatives in the EOF.
- 2.8. **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

ATTACHMENT 5
EVENTS RECORDER (EOF) CHECKLIST
Page 1 of 2

Section 1, Initial Actions

Section 2, Ongoing Actions

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. **INITIAL ACTIONS**

- 1.1. _____ **SIGN IN** on EOF Organization Board.
- 1.2. _____ **REPORT** your arrival to the Technical Advisor and **OBTAIN** an update on plant status and current classification level.
- 1.2.1. _____ **DISCUSS** the information to be displayed and **UPDATE** status board(s), as directed.
- 1.3. _____ **INITIATE** a log tracking significant overall event and facility activities and decisions.

This Significant Events Log (SEL) shall include, but is not limited to the following:

- Facility staffing (i.e., "minimum staffing" achieved, activation)
- Transfer of Command and Control
- Event classification
- Release status
- Offsite protective action recommendation (PAR) decisions
- Event priorities
- Fission product barrier integrity
- Activation of NRC and/or State facilities and response modes

Mid-West ROG only

- 1.4. _____ **LOGIN** to the electronic events log, as applicable, and **OBTAIN** a printout per EP-MW-110-100, ERO Computer Applications.

ATTACHMENT 5
EVENTS RECORDER (EOF) CHECKLIST
Page 2 of 2

2. ONGOING ACTIONS

- 2.1. **MAINTAIN SEL** and periodically provide copy to Logistics Manager for distribution to EOF staff and Federal/State representatives.
- Information may be obtained from the Technical Advisor, EOF Director or through facility briefings and announcements.
- 2.2. **UPDATE** designated status boards, as directed by the Technical Advisor.
- This board should be updated periodically or **immediately** whenever a major event change occurs, such as a change in:
- Classification
 - Release Status
 - Station Priorities
- 2.3. **If** directed by the Technical Advisor, **then ASSIST** the Operations Advisor in identifying, posting and trending critical parameters and system status.
- 2.4. **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover)

EOF PROTECTIVE MEASURES GROUP

1. **PURPOSE**

1.1. This procedure describes the responsibilities and actions of the EOF Protective Measures Group, which consists of the following positions reporting to the EOF Radiation Protection Manager:

- Dose Assessment Coordinator
- Dose Assessor
- HPN Communicator
- State Environs Communicator (MWROG only)
- Environmental Coordinator
- Field Team Communicator

1.2. When the Shift Manager decides that a situation warrants activation of the EOF under the Emergency Plan, this procedure becomes applicable.

2. **TERMS AND RESPONSIBILITIES**

None

3. **RESPONSIBILITIES**

The non-delegable authority for approving changes emergency exposure control measures is retained by the Station Emergency Director in the TSC. These measures include the issuance of potassium iodide (KI) and exposure limit extensions above EPA-400 lower limits for Exelon Nuclear emergency workers.

The non-delegable authority for approving protective action recommendations (PARs) for the general public will transfer to the Corporate Emergency Director, as well as responsibility for offsite dose assessment and coordination of Field Monitoring Team activities to the EOF Protective Measures Group.

3.1. The *Radiation Protection Manager* directs the activities of the Protective Measures Group. The Radiation Protection Manager manages radiological consequence assessment and interacts with supporting agencies.

3.2. The *Dose Assessment Coordinator* is responsible for coordinating the assessment of radiological consequences and developing appropriate protective action recommendations (PARs) for the general public based on projected dose. Reporting to the Dose Assessment Coordinator are the Dose Assessor and HPN Communicator.

- 3.3. The *Dose Assessor* is responsible for monitoring onsite and offsite radiological conditions and providing dose projections using the dose assessment computer models.
- 3.4. The HPN Communicator communicates with the Nuclear Regulatory Commission (NRC) via the Health Physics Network (HPN). The HPN Communicator (EOF) provides the NRC with information such as onsite/offsite radiation monitoring, meteorological data, field sampling data and personnel exposure and contamination data.
- 3.5. The *State Environs Communicator* is applicable only to the MWROG. The position is responsible for interfacing with the affected State(s) Environs Emergency Response authority. In contact with these State personnel, the State Environs Communicator communicates and exchanges environmental information and helps coordinate joint Exelon Nuclear and State(s) Environmental response personnel activities. The position is not applicable to the MAROG due to Commonwealth of Pennsylvania and State of Maryland having representatives in the Coatesville EOF.
- 3.6. The *Environmental Coordinator* is responsible for dispatching and coordinating the activities of the Exelon Nuclear Field Monitoring Teams when the full EOF is activated. The Environmental Coordinator should assume responsibility for directing Field Survey Teams from the TSC and should coordinate activities with the environmental field teams activated by State authorities.
- 3.7. The *Field Team Communicator* is responsible for establishing and maintaining contact with the Exelon Nuclear Field Monitoring Teams and relaying directions issued by the Environmental Coordinator.

4. **MAIN BODY**

- 4.1. **ASSUME** your designated ERO position upon arrival in the EOF.
- 4.2. **INITIATE** the appropriate Emergency Plan activities using the position specific checklist listed in Attachments 1 thru 7.

5. **DOCUMENTATION**

None

6. **REFERENCES**

None

7. **ATTACHMENTS**

- 7.1. Attachment 1, Radiation Protection Manager (EOF) Checklist
- 7.2. Attachment 2, Dose Assessment Coordinator Checklist
- 7.3. Attachment 3, Dose Assessor Checklist
- 7.4. Attachment 4, HPN Communicator (EOF) Checklist
- 7.5. Attachment 5, State Environs Communicator Checklist
- 7.6. Attachment 6, Environmental Coordinator Checklist
- 7.7. Attachment 7, Field Team Communicator Checklist

ATTACHMENT 1
RADIATION PROTECTION MANAGER (EOF) CHECKLIST
Page 1 of 5

Section 1, Initial Actions

Section 2, Ongoing Actions

Section 3, Situational Actions

3.1, Site Evacuation

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. **INITIAL ACTIONS**

- 1.1. **SIGN IN** on the EOF Organization/Staffing Board.
- 1.2. **REPORT** your arrival to the Corporate Emergency Director.
- 1.3. **VERIFY** staffing positions have been filled. [**Designates "Minimum Staffing" position*]
- Dose Assessment Coordinator*:** _____
- Environmental Coordinator*:** _____
- HPN Communicator*:** _____
- Field Team Communicator:** _____
- State Environs Communicator: [MWROG]** _____
- 1.4. **INITIATE** a position log documenting significant actions performed and communications related to your position.
- 1.5. **OBTAIN** a briefing from the Corporate Emergency Director on the history and current event status.
- 1.6. **ESTABLISH** contact with the TSC Radiation Protection Manager and **REVIEW** the current status of plant radiological conditions, dose projections performed, environmental sampling activities, Protective Action Recommendations (PARs) and radiological EALs.
- 1.7. **BRIEF** the Managers / Directors on the status of radiological and environmental conditions.

**ATTACHMENT 1
RADIATION PROTECTION MANAGER (EOF) CHECKLIST**

Page 2 of 5

- 1.8. _____ **NOTIFY** the EOF Director when the Protective Measures Group is ready to support facility activation. TIME: _____
- 1.9. **AUTHORIZE** the transfer of offsite dose assessment and coordination of Field Monitoring Teams to the EOF after obtaining concurrence from the TSC radiation Protection Manager.
- 1.10. **INFORM** the Corporate Emergency Director when the EOF has assumed responsibility for:
 - 1. _____ Dose Assessment: TIME: _____
 - 2. _____ Coordination of Field Monitoring Teams: TIME: _____

2. ONGOING ACTIONS

- 2.1. **DIRECT** the activities of the Dose Assessment Coordinator, Environmental Coordinator and **MONITOR** progress of the performance of the Protective Measures Group activities in the EOF.
- 2.2. **MAINTAIN** cognizance of environmental sampling activities.
- 2.3. **MONITOR** in-plant and effluent radiological conditions and **ADVISE** the TSC Radiation Protection Manager of any adverse trends or potential release pathways that may impact existing event classification and/or PARs.
- 2.4. **ASSIST** in evaluating the significance of an emergency with respect to the general public and **PROVIDE** recommendations for changes in event classifications do to actual or projected effluent radiological conditions.
 - 1. **REVIEW** applicable Radiological EALs (Event Category "R") and EP-AA-111, "Emergency Classification and PARs", for guidance in classifying events
- 2.5. **ASSESS** known or anticipated release paths and **MONITOR** for significant changes in meteorological conditions that may impact existing PAR.
- 2.6. **ENSURE** that the appropriate state authorities are kept current on the status of environmental assessment activities and plant radiological conditions.

Mid-West ROG

The State Environs Communicator should **PERFORM** hourly state updates using EP-MW-114-100.

**ATTACHMENT 1
RADIATION PROTECTION MANAGER (EOF) CHECKLIST**

Page 3 of 5

- 2.7. **ADVISE** the Corporate Emergency Director on issues relating to PARs at the General Emergency classification.
1. If dose assessment results are NOT available, then **MAKE** an immediate recommendation based only on the applicable Plant-based PAR flowchart in EP-AA-111, Attachments 2 through 8.
 2. If dose assessment results ARE available, then **IDENTIFY** zones where the EPA-400 TEDE (1 Rem) and Thyroid CDE (5 Rem) protective action guidelines are exceeded and **REVIEW** existing PAR per EP-AA-111.
- 2.8. Immediately **NOTIFY** the Corporate Emergency Director and EOF Director of the following:
- A radiological release occurs or changes in magnitude
 - Meteorological changes that may impact the identification of downwind areas
 - Exposure control measures implemented for station personnel
- 2.9. **ASSIST** in the completion and review of the State/Local notification form per EP-MW(MA)-114-100.
- 2.10. **COMMUNICATE** with the Technical Support Manager on the following:
- Input concerning plant status that may potentially affect the public
 - Current PARs
 - Changes in accident classification based upon effluent releases or dose projections.
- 2.11. **ASSIST** the TSC Radiation Protection / Chemistry Group with the following, as requested:
1. **PLAN** and **COORDINATE** activities associated with the evacuation of non-essential personnel.
 2. Identification and mobilization of additional radiological manpower and resources from ROG Corporate, Exelon Nuclear non-affected stations, Industry support groups, and Exelon / Amergen / PECO / ComEd.
 3. Acquisition of additional equipment (i.e., survey instrumentation, dosimetry, protective clothing, respirators, etc.)

ATTACHMENT 1
RADIATION PROTECTION MANAGER (EOF) CHECKLIST

Page 4 of 5

- 2.12. **ADVISE** the Corporate Emergency Director of the need for emergency exposure approval or the administering thyroid blocking agents for Field Monitoring Team members or emergency workers having to enter the plume exposure zone.
- **REFER** to EP-AA-113 for KI guidance.
 - 1. **OBTAIN** approval from the Station Emergency Director through TSC Radiation Protection Manager.
 - 2. **DETERMINE** the need for and **CONTACT** Occupational Health Services personnel for assistance.
 - 3. **If** non-nuclear division personnel are involved in emergency repairs in affected areas **then PROVIDE** for radiological monitoring and contamination control for these personnel.
- 2.13. **VERIFY** that Field Monitoring Team personnel have proper dosimetry and protective clothing for radiological conditions encountered in the environment per EP-AA-112-500, Attachment 2
- 2.14. **PARTICIPATE** in periodic EOF briefing. Items to be discussed should include but not be limited to:
- Release status
 - Dose and contamination results - on-site and offsite.
 - PARs - those recommended by the utility and the actions implemented by the state(s).
 - Injuries and/or contamination of emergency workers
 - On-site protective actions implemented
 - Summary of NRC HPN discussions / inquiries
- 2.15. **ASSIST** and **INTERFACE** with the EOF Technical Support Group and the station in the development of plans for plant surveys, sampling, shielding, and special tools in support of waste systems processing and design modification activities.
- 2.16. **PROVIDE** and **INTERPRET** in-plant and effluent radiological and environmental conditions and data for Emergency Public Information Organization personnel and the HPN Communicator, as requested
- 2.17. **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

ATTACHMENT 1
RADIATION PROTECTION MANAGER (EOF) CHECKLIST
Page 5 of 5

3. **SITUATIONAL ACTIONS**

3.1. **SITE EVACUATION**

3.1.1. **PROVIDE** supplementary Health Physics support to the Station and Exelon Nuclear Relocation Center(s) as needed.

Mid-West ROG

REFER to EP-MW-113-100 for activation and operation of Relocation Centers for evacuated station personnel.

3.1.2. **ASSIST** the TSC Radiation Protection Manager with planning and implementing the evacuation of nonessential personnel to the Relocation Center(s).

**ATTACHMENT 2
DOSE ASSESSMENT COORDINATOR CHECKLIST
Page 1 of 5**

Section 1, Initial Actions

Section 2, Ongoing Actions

Section 3, Situational Actions

3.1, Offsite Post Accident Sampling Analysis [**Limerick / Peach Bottom**]

3.2, SGTS Filter Loading [**Limerick / Peach Bottom**]

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. **INITIAL ACTIONS**

- 1.1. _____ **SIGN IN** on the EOF Organization Board.
- 1.2. _____ **REPORT** your arrival to the EOF Radiation Protection Manager and **OBTAIN** a briefing on the history and current event status.
- 1.3. _____ **INITIATE** a position log documenting significant actions performed and communications related to your position.
- 1.4. _____ **ESTABLISH** contact with the Radiation Controls Coordinator in the TSC and **OBTAIN** a briefing using a Dose Assessment Turnover Form (EP-AA-112, Attachment 5).
 - 1. If possible, a joint call with the EOF Environmental Coordinator should be made to the TSC Radiation Controls Coordinator.
- 1.5. _____ **VERIFY** the arrival of the following positions and **DETERMINE** status of actions needed to assume control of offsite dose assessment and Health Physics Network (HPN) communications: [***Designates "Minimum Staffing" position**]
 - _____ Dose Assessor: _____
 - _____ **HPN Communicator***: _____
 - 1. If the EOF Dose Assessor is not yet present, then **PERFORM** the actions outlined in the Dose Assessor Checklist (Attachment 3) on an interim basis to support the transfer of Command and Control from the TSC.
 - 2. _____ **INFORM** the EOF Radiation Protection Manager of the arrival of staff members and readiness to assume dose assessment duties from the TSC.

ATTACHMENT 2
DOSE ASSESSMENT COORDINATOR CHECKLIST
Page 2 of 5

- 1.6. _____ **BRIEF** the EOF Protective Measures Group on the current information.
- 1.7. **TRANSFER** responsibility for offsite dose assessments from the TSC to the EOF as follows:
- 1.7.1. _____ **OBTAIN** authorization from the EOF Radiation Protection Manager to execute the transfer.
- 1.7.2. _____ **BRIEF** the Dose Assessor using the completed Dose Assessment Turnover Form.
- 1.7.3. _____ **DIRECT** the Dose Assessor to contact the TSC Radiation Controls Coordinator to transfer responsibility for performing offsite dose projections.
- 1.8. **INFORM** the EOF Radiation Protection Manager when the following has been completed:
- _____ Transfer of dose assessment responsibilities at: _____
- _____ Communications established with the NRC via HPN at: _____

2. ONGOING ACTIONS

- 2.1. **DIRECT** the activities of the Dose Assessor and HPN Communicator to **MONITOR** progress in the performance of their duties:
1. Dose Assessor – **MONITORS** meteorology and station effluents conditions (per Attachment 3) and **PERFORMS** dose assessment calculations (per EP-AA-110-200).
 2. HPN Communicator – **ESTABLISHES** and **MAINTAINS** communications with the NRC (per Attachment 4).
- 2.2. **ASSIST** the Dose Assessor in evaluating dose projection results and in determining correct input for dose model (i.e., reduction factors, release / ventilation path, Reactor operating mode, etc.).
1. **RESOLVE** questions regarding release duration, release path, application of reduction factors (i.e., filtration, scrubbing, plate out, etc.), and the potential for Containment venting with the Technical Support Group.
- 2.3. **REMAIN** cognizant of forecast and meteorological data and **ENSURE** status is updated periodically by the Dose Assessor.

ATTACHMENT 2
DOSE ASSESSMENT COORDINATOR CHECKLIST
Page 3 of 5

- 2.4. **INTERPRET** dose projection and release data against the following:
- EAL threshold values (under Recognition Category 'R', "Abnormal Radiation Levels and Effluents")
 - PARs using dose-based values per EP-AA-111, "Emergency Classification and PARs"
- 2.4.1. **RECOMMEND** a change in event classification, as required, based on effluent releases or offsite dose projections.
- 2.4.2. **ADVISE** the EOF Radiation Protection Manager on issues relating to PARs at the General Emergency classification:
1. If dose assessment results are NOT available, then **MAKE** an immediate recommendation based only on the applicable Plant-based PAR flowchart in EP-AA-111, Attachments 2 through 8.
 2. If dose assessment results ARE available, then **IDENTIFY** zones where the EPA-400 TEDE (1 Rem) and Thyroid CDE (5 Rem) protective action guidelines are exceeded and **REVIEW** existing PAR per EP-AA-111.
- 2.5. **NOTIFY** the EOF Radiation Protection Manager and Environmental Coordinator when a radiological release is detected, its magnitude changes significantly, or a change in wind direction may impact downwind areas.
- 2.6. **ADVISE** the EOF Radiation Protection Manager when a situation requires the issuing of a State/Local notification and **ASSIST** in completing the notification form.
- NOTE:** The criteria used for issuing State/Local notification is outlined in EP-AA-114.
- 2.7. **PROVIDE** recommendations to the Environmental Coordinator on the appropriate deployment of Field Monitoring Teams and the collection of environmental samples to confirm projected position of the radiological release plume, expected dose / dose rates and deposition.
- 2.8. **ASSIST** the Environmental Coordinator in determining the need for issuance of KI or emergency exposure extensions to Field Monitoring Team personnel per EP-AA-113, "Personnel Protective Actions."
- 2.9. **ASSIST** the HPN Communicator in responding to information requests from the NRC.

ATTACHMENT 2
DOSE ASSESSMENT COORDINATOR CHECKLIST
Page 4 of 5

- 2.10. **COORDINATE** requests for in-plant / on-site sampling and analysis by the station through the TSC Radiation Controls Engineer.
 1. **CONSIDER** performing analysis of release to determine isotopic mix for input into the dose projection model per EP-MW(MA)-110-200, "Dose Assessment".
- 2.11. **PROVIDE** release and dose assessment data to ENC/JPIC Radiological Advisor/Spokesperson, EOF HPN Communicator, and the State Environmental Coordinator (MWROG only), upon request.
- 2.12. **ASSIST** the EOF Radiation Protection Manager in interfacing with Health Physics and Environmental Assessment personnel from the NRC, State and other offsite agencies as needed.
- 2.13. **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

ATTACHMENT 2
DOSE ASSESSMENT COORDINATOR CHECKLIST
Page 5 of 5

3. SITUATIONAL ACTIONS

Limerick / Peach Bottom

3.1 OFFSITE POST ACCIDENT SAMPLING ANALYSIS

- 3.1.1 If assistance is requested by the TSC on coordinating offsite analysis, then **OBTAIN** the following information from the TSC: size or type, source, and dose rate
- 3.1.2 **CONTACT** the Babcock and Wilcox (B&W) Lynchburg Research Center, using the 24-hour number listed in the ERF Telephone Directory, and **PROVIDE** the following:
- Utility / Station /Unit
 - No of samples, including type and measured radiation levels at surface & 3'
 - Estimated shipment time, method of transportation, and name of carrier
- 3.1.3 If the Pool Inventory Management Cask is necessary or a leak test is required, then **COORDINATE** request through the Logistics Manager to the vendor representative.
- 3.1.4 **NOTIFY** the TSC Radiation Protection Manager when shipment is in route.

Limerick / Peach Bottom

NOTE: Each train of SGTS has been designed to be more than adequate for the absorption of all expected iodine. For more information, REFER to PIMS EWR A0659758.

3.2 STANDBY GAS TREATMENT SYSTEM (SGTS) FILTER LOADING

- 3.2.1 **CONSIDER** loading capacity of the SGTS filters for extended releases.

ATTACHMENT 3
DOSE ASSESOR CHECKLIST
Page 1 of 4

Section 1, Initial Actions

Section 2, Ongoing Actions

Table 3-1, Meteorological Forecast Worksheet

Table 3-2, Dose Assessment Turnover

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. **INITIAL ACTIONS**

- 1.1. _____ **SIGN IN** on the EOF Organization Board.
- 1.2. _____ **REPORT** your arrival to the Dose Assessment Coordinator and **OBTAIN** a briefing on the history and current event status.
(**OPTIONAL: REFER** to Dose Assessment Turnover Form (EP-AA-112, Attachment 5).
 1. If instructed by or if the Dose Assessment Coordinator's arrival is delayed, **CONTACT** the TSC Radiation Controls Coordinator directly and obtain a turnover briefing.
- 1.3. _____ **INITIATE** a position log documenting significant actions performed and communications related to your position.
- 1.4. _____ **ACCESS** the computer programs for the affected station.
 - **REFER** to EP-MW(MA)-110-100 for guidance on ERO Computer Applications and EP-MW(MA)-110-200 for guidance on dose models.
1. _____ **OBTAIN** the latest meteorological and effluent data and **UPDATE** status boards accordingly.
- 1.5. _____ **CONTACT** the National Weather Service (NWS) or meteorological contractor/supplier to obtain the most recent meteorological forecast data and **RECORD** on Table 3-1, Meteorological Forecast Worksheet.
- 1.6. _____ **INFORM** the Dose Assessment Coordinator when ready to assume responsibility for offsite dose assessment from the TSC.
 1. _____ **CONTACT** the TSC Radiation Controls Coordinator when directed and **COORDINATE** the transfer of dose assessment duties

**ATTACHMENT 3
DOSE ASSESOR CHECKLIST
Page 2 of 4**

2. _____ **NOTIFY** the Dose Assessment Coordinator when the transfer is completed.

Quad Cities

- 1.7 _____ **CONTACT** the Environmental Analyst at the Iowa State EOC using the Health Physics Hotline and **PROVIDE** the Environmental Analyst with your name and number.

Limerick / Peach Bottom

- 1.8 _____ **NOTIFY** the Pennsylvania Department of Environmental Resources / Bureau of Radiation Protection (DER/BRP) of plant and release status.

2. **ONGOING ACTIONS**

- 2.1. **PERFORM** dose projections as directed by the Dose Assessment Coordinator per EP-MW(MA)-112-200, "Dose Assessment."
1. **If a release is underway, then PERFORM** a dose assessment to establish initial projected doses and plume location (centerline / affected downwind areas)
- NOTE:** I-131 concentration, in $\mu\text{Ci}/\text{cm}^3$, is calculated using the KI Spreadsheet Program per EP-MW(MA)-110-100. This value is used for potassium iodide (KI) determination (per EP-AA-113, Attachment 4) and in DAPAR dose calculation based on Field Monitoring Team air sample results (per EP-MW/MA-110-200).
2. **DIRECT** questions to the Dose Assessment Coordinator for resolution with the Technical Support Group regarding: release duration, release path, application of reduction factors (i.e., filtration, scrubbing, plateout, etc.), and the potential for Containment venting.

Limerick / Peach Bottom

3. After each dose assessment run, **TRANSMIT** (fax, etc.) copies of DAPAR Dose Assessment, PAR and STATE Reports to the Pennsylvania Emergency Operations Center (EOC) – "Attention BRP".

**ATTACHMENT 3
DOSE ASSESOR CHECKLIST**

Page 3 of 4

- 2.2. **COORDINATE** the deployment of Field Monitoring Teams with the Environmental Coordinator to confirm projected position of the radiological release plume and expected dose / dose rates.
- 2.3. **MONITOR** and **TREND** meteorological and plant effluent conditions.
- NOTE:** At a minimum trend wind direction, wind speed, stability class, containment radiation and all monitored radiological effluent release points. In addition, trending area radiation monitors may assist in determination of filtered or unfiltered release paths.
- 2.4. **UPDATE** status boards to ensure information remains accurate.
- 2.5. **NOTIFY** the Dose Assessment Coordinator and Environmental Coordinator of the following:
- Start of a radiological release or significant change in magnitude
 - Meteorological changes impacted affected downwind sectors
 - Change in Protective Action Recommendations (PARs) based on projected dose(s).

Mid-West ROG

- 2.6. **OBTAIN** GEMS and Reuter-Stokes data using EP-MW-110-200 or through IDNS REAC.
- 2.7. **PERFORM** calculations for estimating thyroid dose, when directed, per EP-AA-113, Attachment 4 for administering KI to Field Monitoring Team members or Exelon Nuclear personnel required to enter the plume exposure zone.
- 2.8. **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

ATTACHMENT 4
HPN COMMUNICATOR (EOF) CHECKLIST
Page 1 of 5

Section 1, Initial Actions

Section 2, Ongoing Actions

Table 4-1, HPN Communicator Worksheet

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. **INITIAL ACTIONS**

- 1.1. ___ **SIGN-IN** on the EOF Organization Board
- 1.2. ___ **REPORT** your arrival to the Dose Assessment Coordinator.
- 1.3. ___ **INITIATE** a position log documenting significant actions performed and communications related to your position.
- 1.4. ___ Upon the arrival of either the ENS Communicator or the TSC HPN Communicator, **DETERMINE** if the NRC has requested continuous communication on the HPN Circuit.

NOTE: The EOF does not have a designated HPN phone, which connects to the Federal Telecommunications System (FTS). Calling into the HPN from the EOF using a commercial telephone requires the use of a "9" before dialing NRC telephone numbers. Teleconferencing can only be initiated by the NRC.

- 1.5. Prior to the EOF assuming Command and Control, **PERFORM** the following:
- 1.5.1. ___ **If continuous communication has been established by the TSC, then ESTABLISH** contact with the NRC Operations Center:
1. ___ **DIAL** the telephone number listed in the ERF Telephone Directory for the NRC Operations Center. (Number is also listed on sticker under the handset of the phone designated for HPN Communicator use.)
2. ___ **REQUEST** to be attached to the HPN bridge.
3. ___ **MONITOR** communications between the NRC and the TSC HPN Communicator
- 1.5.2. ___ **ASSIST** the Dose Assessment Coordinator, as needed, in tracking event activities and updating status boards.

ATTACHMENT 4
HPN COMMUNICATOR (EOF) CHECKLIST
Page 2 of 5

1.6. Upon the transfer of Command and Control to the EOF, PERFORM the following:

NOTE: The TSC Station Emergency Director will retain responsibility for the final decision on event classification and emergency exposure controls.

1.6.1. _____ **NOTIFY** the NRC that the EOF is in Command and Control assuming responsibility for:

- Notifications to offsite State and risk counties
- Decision on PARs for the general public

NOTE: Generally, the TSC HPN Communicator focuses on real time in-plant and site radiological conditions and the EOF HPN Communicator focuses on effluent release conditions, dose projections, Field Monitoring Team findings, and PARs.

1.6.2. _____ **If not** already in continuous communication with the NRC, **then INQUIRE** if continuous communication is desired at this time.

2. **ONGOING ACTIONS**

2.1. **MAINTAIN** continuous communications with the NRC, unless otherwise requested by NRC.

1. **UPDATE** the NRC of changing conditions.
2. **DOCUMENT** the information as requested on a Message Form or in your position log.

2.2. Obtain release and dose assessment data from the Dose Assessment Coordinator and Field Monitoring Team data from the Environmental Coordinator in response to NRC inquiries and information requests.

**ATTACHMENT 4
HPN COMMUNICATOR (EOF) CHECKLIST**

Page 3 of 5

- 2.3. **COMMUNICATE** to the NRC the following types of information as it becomes available, using Table 4-1 to compile information:

Astericked (*) items will be communicated by the EOF HPN Communicator once Command and Control has been transferred to the Corporate Emergency Director.

- Changes to Protective Action Recommendations*;
- Environmental release information*;
- Changes to plant systems affecting release path, source term, radiation monitoring, filtration and removal;
- Actual and/or forecasted meteorology*;
- Abnormal or unexpected radiological conditions;
- Onsite protective actions implemented;
- Environmental monitoring results*;
- Dose Assessment results*;
- Contaminated and/or injured workers; and
- Authorization to administer KI.

1. **DOCUMENT** questions that cannot be immediately answered to ensure that a response is provided back to the NRC.

- 2.4. **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

**ATTACHMENT 4
HPN COMMUNICATOR (EOF) CHECKLIST
Page 4 of 5**

**TABLE 4-1
HPN COMMUNICATOR WORKSHEET
Page 1 of 2**

PART A: IN-PLANT RADIOLOGICAL DATA (to be provided by TSC)																													
DATE: _____ TIME: _____																													
CNTMT/DW Rad.: _____ R/hr MSL Rad: _____ R/hr SIGNIFICANT AREA RAD MONITORS: <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:10%;"></th> <th style="width:30%;">Location</th> <th style="width:30%;">Reading</th> <th style="width:30%;">Units</th> </tr> </thead> <tbody> <tr><td>#1</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>#2</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>#3</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>#4</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>#5</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>#6</td><td>_____</td><td>_____</td><td>_____</td></tr> </tbody> </table>		Location	Reading	Units	#1	_____	_____	_____	#2	_____	_____	_____	#3	_____	_____	_____	#4	_____	_____	_____	#5	_____	_____	_____	#6	_____	_____	_____	<input type="checkbox"/> YES <input type="checkbox"/> NO - Accountability Initiated At: _____ <input type="checkbox"/> YES <input type="checkbox"/> NO - Accountability Completed At: _____ <input type="checkbox"/> YES <input type="checkbox"/> NO - Site Evacuation Initiated At: _____ <input type="checkbox"/> YES <input type="checkbox"/> NO - Site Evacuation Completed At: _____ <input type="checkbox"/> YES <input type="checkbox"/> NO - OFFSITE ASSEMBLY: <ul style="list-style-type: none"> • Location(s)
	Location	Reading	Units																										
#1	_____	_____	_____																										
#2	_____	_____	_____																										
#3	_____	_____	_____																										
#4	_____	_____	_____																										
#5	_____	_____	_____																										
#6	_____	_____	_____																										
AREAS REQUIRING ACCESS BUT RETRICTED:																													
CONTAMINATED INJURY(IES): VICTIM #1: _____ Injury Description: Contamination Levels / Location: Ambulance: <input type="checkbox"/> Responding <input type="checkbox"/> On-Site <input type="checkbox"/> In Transit Hospital: _____ <input type="checkbox"/> ER <input type="checkbox"/> Admitted <input type="checkbox"/> Discharged	CONTAMINATED INJURY(IES): VICTIM #2: _____ Injury Description: Contamination Levels / Location: Ambulance: <input type="checkbox"/> Responding <input type="checkbox"/> On-Site <input type="checkbox"/> In Transit Hospital: _____ <input type="checkbox"/> ER <input type="checkbox"/> Admitted <input type="checkbox"/> Discharged																												
EXPOSURE EXTENSIONS:	POTASSIUM IODIDE:																												
OTHER:																													

**ATTACHMENT 4
HPN COMMUNICATOR (EOF) CHECKLIST
Page 5 of 5**

**TABLE 4-1
HPN COMMUNICATOR WORKSHEET
Page 2 of 2**

PART B: ENVIRONMENTAL DATA (to be provided by EOF) DATE: _____ TIME: _____																
METEOROLOGY: Wind Speed: _____ (mph or meters/sec) Wind Direction (FROM) _____ (degrees) Stability Class: _____ FORECAST: _____	RELEASE STATUS: <input type="checkbox"/> NONE <input type="checkbox"/> IN PROGRESS: INITIATED AT _____ • ESTIMATED DURATION, _____ hrs. • <input type="checkbox"/> MONITORED / <input type="checkbox"/> UNMONITORED • <input type="checkbox"/> FILTERED / <input type="checkbox"/> UNFILTERED • <input type="checkbox"/> ELEVATED / <input type="checkbox"/> GROUND <input type="checkbox"/> TERMINATED AT: _____															
EFFLUENT MONITOR(S): POINT #1: _____ • READING _____ (UNITS) _____ • FLOW _____ (UNITS) _____	POINT #2: _____ • READING _____ (UNITS) _____ FLOW _____ (UNITS) _____															
DOSE PROJECTIONS: <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>TEDE (mR)</u></th> <th style="text-align: center;"><u>CDE_{thyroid} (mR)</u></th> </tr> </thead> <tbody> <tr> <td>• SB</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>• 2 Miles</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>• 5 Miles</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>• 10 Miles</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> </tbody> </table>		<u>TEDE (mR)</u>	<u>CDE_{thyroid} (mR)</u>	• SB	_____	_____	• 2 Miles	_____	_____	• 5 Miles	_____	_____	• 10 Miles	_____	_____	FIELD MONITORING RESULTS: • LOCATION #1 _____ • LOCATION #2 _____
	<u>TEDE (mR)</u>	<u>CDE_{thyroid} (mR)</u>														
• SB	_____	_____														
• 2 Miles	_____	_____														
• 5 Miles	_____	_____														
• 10 Miles	_____	_____														
PROTECTIVE ACTIONS: <input type="checkbox"/> PLANT-BASED (GENERAL EMERGENCY) <input type="checkbox"/> PLANT-BASED (LOSS OF ALL 3 BARRIERS) <input type="checkbox"/> DOSE-BASED	<input type="checkbox"/> NONE <input type="checkbox"/> EVACUATE 360 degrees (0 to _____ miles) <input type="checkbox"/> EVACUATE: _____ to _____ miles in <input type="checkbox"/> SECTORS / <input type="checkbox"/> SUBAREAS _____															
OTHER INFORMATION (INQUIRY RESPONSES) 																

ATTACHMENT 5
STATE ENVIRONS COMMUNICATOR CHECKLIST [MID-WEST ROG]
 Page 1 of 3

Section 1, Initial Actions

Section 2, Ongoing Actions

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. **INITIAL ACTIONS**

- 1.1. **SIGN IN** on the EOF Organization Board.
- 1.2. **REPORT** your arrival to the Environmental Coordinator and **OBTAIN** an update of plant status, effluent releases and monitoring teams.

Quad Cities

If the affected station is Quad Cities, then two SECs will be assigned to the EOF, one for each affected state. The first SEC to arrive at the EOF will assume the duties of Illinois SEC. The second will assume the duties of Iowa SEC.

- 1.3 **INITIATE** a position log documenting significant actions performed and communications related to your position.
- 1.4. **CONTACT** the Environmental Analyst at the affected State:
- Illinois** – Contact REAC
- Iowa** – Use the Health Physics Hotline
1. **REQUEST** data from the state monitoring system, where available.
2. **OBTAIN** a contact name and number of the State Field Team Analyst. **PROVIDE** this information to the Environmental Coordinator.

ATTACHMENT 5
STATE ENVIRONS COMMUNICATOR CHECKLIST [MID-WEST ROG]
 Page 2 of 3

3. **PROVIDE** an outside telephone number assigned to your position as a contact number; and
 - When multiple states are involved, **PROVIDE** a separate number for each state.
 4. **PROVIDE** the event status, calculation inputs and results.
 5. **OBTAIN** information relative to the status of state environmental monitoring efforts.
 6. **PROVIDE** the following information:
 - Number of Exelon Field Teams
 - Exelon Field Team locations
 - Sampling strategy
 - Summary of field data collected
- 1.5. _____ **PROVIDE** the Dose Assessment Coordinator and EOF Environmental Coordinator with an update on State environmental field team activities.

Quad Cities

- 1.6 _____ **CONTACT** the Iowa Emergency Management Division in Des Moines:
1. **CALL** into The Health Physics Hotline (listed under Iowa EOC in the State and County Emergency Response Organization section, Tab 5, of the ERF Telephone Directory).
 2. **OBTAIN** a contact name and number of the Hotline Coordinator.
 3. **PROVIDE** an outside telephone number as a contact number.
 4. **OBTAIN** information relative to the status of State of Iowa environmental monitoring efforts.

2. **ONGOING ACTIONS**

NOTE: Environmental data provided by the State Environmental Analyst has not been validated for dissemination to the Media. Release of these data requires approval from the State Environmental Analyst.

- 2.1. **OBTAIN** release and dose assessment data from the Dose Assessment Coordinator.

ATTACHMENT 5

STATE ENVIRONS COMMUNICATOR CHECKLIST [MID-WEST ROG]

Page 3 of 3

- 2.2. **OBTAIN** Field Team data from the Environmental Coordinator.
- 2.3. **MAINTAIN** contact with State Environmental authorities. Share information related to field monitoring, dose assessment and sample results.
 1. If significant environmental or dose assessment data becomes available, then **PROVIDE** an update.
- 2.4. **UPDATE** State Environmental at the top of each hour, plus or minus 10 minutes, starting in the second hour following a classification of Alert or higher **REFER** to EP-MW-114-100, "Radiological State Update", as a guide for the information to cover with the state authorities during the update.
- 2.5. **UPDATE** the Dose Assessment Coordinator, the Dose Assessor and the Environmental Coordinator on a periodic basis as to state environmental activities.
 1. If significant dose assessment or environmental data is reported by the State, then immediately **CONTACT** the Dose Assessment Coordinator and the Environmental Coordinator and **PROVIDE** an update.
- 2.6. **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

ATTACHMENT 6
ENVIRONMENTAL COORDINATOR CHECKLIST
Page 1 of 9

Section 1, Initial Actions

Section 2, Ongoing Actions

Section 3, Situational Actions

3.1, Environmental Sampling [Mid-West ROG]

3.2, Environmental Sampling [Limerick / Peach Bottom]

Table 6-1, EOF Field Monitoring Team Turnover Checklist

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. **INITIAL ACTIONS**

- 1.1. **SIGN IN** on the EOF Organization Board.
- 1.2. **REPORT** your arrival to the Radiation Protection Manager
- 1.3. **OBTAIN** an initial update of the plant status, effluent releases and on-site and off-site protective actions from the Dose Assessment Coordinator.
- 1.4. **INITIATE** a position log documenting significant actions performed and communications related to your position.
- 1.5. **VERIFY** the arrival of the following support positions: ***[None of these positions are designated "minimum staffing" required for facility activation.]***
- Field Team Communicator:
- State Environs Communicator [MWROG only]: _____
1. **If** the Field Team Communicator is not yet present, **then PERFORM** the actions outlined in the Field Team Communicator Checklist (Attachment 7) on an interim basis to support the transfer of Command and Control from the TSC.
- 1.6. **INFORM** the Radiation Protection Manager of the arrival of staff members and readiness to assume duties from the TSC.
- 1.7. **DISCUSS** the projected or potential doses downwind, the wind direction, and the wind speed with the Dose Assessment Coordinator

ATTACHMENT 6
ENVIRONMENTAL COORDINATOR CHECKLIST
Page 2 of 9

or Dose Assessor and **OBTAIN** the most recent meteorological forecast data.

- 1.8. _____ **CONTACT** the TSC Radiation Controls Coordinator and **DISCUSS** / **CONFIRM** current Field Monitoring Team deployment / status, accident conditions, meteorological conditions and release status, etc.
1. If possible, a joint call with the EOF Dose Assessment Coordinator should be made to the TSC Radiation Controls Coordinator.
- 1.8.2. _____ **COMPLETE** Table 6-1, Field Team Turnover Checklist in anticipation of assuming responsibility for field team operations and **PROVIDE** a copy to the Field Team Communicator.
- 1.8.3. _____ **REQUEST** that copies of completed Field Survey Data Sheets and Environmental Assessment Logs (EP-AA-112-500, Attachments 3 and 4) be faxed to the EOF for review.
- 1.9. _____ **BRIEF** the EOF Protective Measures Group on the current information.
- 1.10. **COORDINATE** the transfer of responsibility for Field Monitoring Teams from the TSC to the EOF as follows:
- 1.10.1. _____ **OBTAIN** authorization from the EOF Radiation Protection Manager to execute the transfer.
- 1.10.2. _____ **DIRECT** the Field Team Communicator to:
1. **CONTACT** the TSC Radiation Controls Coordinator to transfer control for Field Monitoring Teams to the EOF.
2. **INFORM** the teams that the EOF is now directing field survey activities.
- 1.10.3. _____ **INFORM** the EOF Radiation Protection Manager when the EOF has accepted control of Field Monitoring Teams.
- 1.11. _____ **DETERMINE** information needs of the Dose Assessment Coordinator, Dose Assessor, HPN Communicator, and the State Environs Communicator (MWROG) and **ENSURE** updates are provided to support those needs.

ATTACHMENT 6
ENVIRONMENTAL COORDINATOR CHECKLIST
Page 3 of 9

Mid-West ROG only

- 1.12. _____ **CONTACT** the State of Illinois Radiological Environmental Assessment Center (REAC) and **ESTABLISH** contact with the Environmental Analyst

2. ONGOING ACTIONS

NOTE: For events with no offsite radiological concerns, one or both Field Monitoring Teams may be recalled and team members released back to the OSC to support onsite response.

- 2.1. **REVIEW** release status and potential with the EOF Radiation Protection Manager and Dose Assessment Coordinator.

2.1.1. If there has **NOT** been a release and the potential for a release is very low, **then OBTAIN** the concurrence of the EOF Radiation Protection Manager to recall Field Monitoring Teams.

1. **CONTINUE** to monitor conditions and reactivate Field Monitoring Team(s) if required.

2.1.2. If **NO** release is in progress but a significant potential for a release exists, **then CONSIDER** the following precautionary measures to document the environmental impact of event:

Limerick / Peach Bottom

CONTACT the Environmental Services Vendor (ESV) per Section 3.2 to perform these activities in coordination with the EOF.

1. **CHANGE OUT** the cartridges at the fixed air sampling sites nearest to the station first. Work from affected sectors out.
2. **EXCHANGE** environmental TLD's (one of a pair) to monitor a radioactive release. Also consider the use of electronic dosimetry.
3. **COLLECT** reference samples of grass, water, and soil at or near the periphery of the station. Document the sampling locations.

ATTACHMENT 6
ENVIRONMENTAL COORDINATOR CHECKLIST
Page 4 of 9

2.1.3. If a release is "in progress" or imminent, then **MAINTAIN** cognizance of Field Monitoring Team exposures

NOTE: I-131 concentration, in $\mu\text{Ci}/\text{cm}^3$, is calculated using the KI Spreadsheet Program per EP-MW(MA)-110-100. This value is used for potassium iodide (KI) determination (per EP-AA-113, Attachment 4) and in DAPAR dose calculation based on Field Monitoring Team air sample results (per EP-MW/MA-110-200).

1. If release has the potential for radioactive iodine, then **REQUEST** from the Dose Assessment Coordinator that a thyroid dose evaluation for the Field Monitoring Teams be performed in accordance with EP-AA-113, Attachments 4 through 5 to determine the need for thyroid blocking agents.
 2. If conditions exist that require emergency exposure limits or potassium iodide (KI), then **DOCUMENT** request per EP-AA-113, Attachments 3 and 6, and **FORWARD** through the EOF Radiation Protection Manager for approval by the TSC Station Emergency Director.
 3. **REVIEW** EP-AA-112-500, Attachment 2 to determine if additional protective equipment or personnel dosimetry is warranted.
 4. **IDENTIFY** a monitoring and sample strategy that addresses the following:
 - Positioning of teams to the monitoring locations so that they approach a suspected plume or release point from the upwind or crosswind direction while continuously monitoring radiological conditions to ensure that proper protective measures are established.
 - Monitoring of dose rates in the center of the prevailing wind direction downwind of the plant prior to a possible release.
 - Establishing of air-sample equipment in the downwind areas. Air sampling should occur as near as possible to the plume centerline (location of maximum dose rate). Air sampling should be performed within a two-mile radius of the plant.
 5. **OBTAIN** the estimated location and footprint of release plume from the Dose Assessment Coordinator and **PLOT** using available EPZ maps.
- 2.2. **INSTRUCT** the Field Team Communicator on the deployment of Field Monitoring Teams:

ATTACHMENT 6
ENVIRONMENTAL COORDINATOR CHECKLIST
Page 5 of 9

1. **POSITION** one Field Monitoring Team as early as practical in potentially affected sectors that may require extended travel times to reach, such as opposite sides of rivers and lakes.
 2. **PROVIDE** alternate routes to enter and exit affected sectors in anticipation of changing weather conditions when possible
 3. **TRAVERSE** the plume to obtain dose profile (particularly in the 1/2 miles to 2 mile zone) and **LOCATE** the plume by identifying the centerline for obtaining the highest dose rate.
 4. **OBTAIN** air samples to determine iodine content.
- 2.3. **COORDINATE** with the EOF (or TSC) Security Coordinator concerning State and local roadblocks to ensure Field Monitoring Teams have access to sampling locations.
- 2.4. **DIRECT** the Field Team Communicator to provide hourly updates to Field Monitoring Teams to include:
- Pertinent information on issued State/Local notification forms
 - Current classification
 - Plant status
 - Protective Action Recommendations
 - Environmental Release information
 - Meteorology information (wind direction/speed, current and forecasted weather conditions).
1. **If** a radiological release occurs or plume location / magnitude changes significantly, **then DIRECT** the Field Team Communicator to immediately update the Field Monitoring Teams with the latest information concerning the release, including wind direction, wind speed, projected downwind doses, and general plant status.

ATTACHMENT 6
ENVIRONMENTAL COORDINATOR CHECKLIST
Page 6 of 9

- 2.5. **VERIFY** that the Field Team Communicator is using status boards to track the following Field Monitoring Team information:
- Routes and current locations
 - Estimated times of arrival to monitoring locations
 - Cumulative personal doses
1. **MAINTAIN** cognizance of team member exposure and location in respect to release plume.
- 2.6. **PROVIDE** periodic updates to the Dose Assessment Coordinator and Dose Assessor on dose rates and contamination as measured by the Field Monitoring Teams and **COMPARE** against dose projection model output.

Coatesville EOF

The Environmental Liaison is responsible for communicating listed directly to State representatives present at the EOF. The State Environs Communicator is NOT staffed.

- 2.7. **COORDINATE** with the State(s) Environmental Communicator to integrate activities and data collected between the State and Exelon Nuclear Field Monitoring Teams:
1. **PROVIDE** the following data:
- Number of Exelon Nuclear Field Monitoring Teams and Locations
 - Sampling strategy
 - Summary of field data collected
2. **ENSURE** state agencies are updated hourly on environmental monitoring activities and sample results.
- 2.8. **PROVIDE** environmental data to Radiological Advisor/Spokesperson, upon request.
- 2.9. **ASSIST** the HPN Communicator in responding to inquiries from the NRC regarding environmental monitoring activities and results.
- 2.10. **DETERMINE** if the number of Field Monitoring Teams is adequate. At least two teams should be maintained.
- 2.10.1. **If** additional teams are needed, **then COORDINATE** the identification and mobilization of personnel and equipment from the unaffected Stations through

ATTACHMENT 6
ENVIRONMENTAL COORDINATOR CHECKLIST
Page 7 of 9

the EOF Administrative Coordinator to augment existing capabilities and/or provide relief.

1. **BRIEF** new Field Monitoring Teams as they report contact the EOF.
 - **REFER** to EP-AA-112-500, Attachment 1: Table 1-2 (Field Team Dispatch Log).
- 2.10.2. **If** unable to perform all the actions necessary to assess the environment because of the limited resources, **then FOCUS** on the following priorities:
 - #1** Monitor dose rates to check for an undetected release or to track and assess a release in progress
 - #2** Obtain air samples to confirm iodine concentrations.
- 2.11. **DEVELOP** a Recovery Environmental Monitoring and Sampling Plan in coordination with affected States.
 - **REFER** to Section 3 of this attachment for guidance on environmental sampling and analysis.
- 2.12. **PROVIDE** for relief for the Field Monitoring Team personnel, as appropriate.
 1. **ENSURE** that the on-coming team is briefed using EP-AA-112-500, Attachment 1: Table 1-2 (Field Team Dispatch Log).
 2. **REFER** the Field Monitoring Teams to EP-AA-112-500, Attachment 1: Table 1-3 (Field Team Turnover Checklist) to ensure the off-going and on-coming team members exchange appropriate information concerning field-monitoring activities.
- 2.13. **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

**ATTACHMENT 6
ENVIRONMENTAL COORDINATOR CHECKLIST
Page 8 of 9**

3. SITUATIONAL ACTIONS

Mid-West ROG

3.1. ENVIRONMENTAL SAMPLING PROCESS

- 3.1.1. **DIRECT** the collection of environmental samples in accordance with EP-AA-112-500, Attachment 5.
- 3.1.2. **COORDINATE** the transfer of environmental samples to Radio-analytical Labs and the Radio-analytical Environmental Contractor.
- REFER to EP-AA-112-500, Attachment 6.
- 3.1.3. **CONTACT** the environmental TLD contractor to verify their availability, if needed.
1. **REQUEST** that any scheduled TLD change-outs be delayed until further notice.
 2. **CONSULT** the Dose Assessment Coordinator to develop a special TLD change-out and/or augmentation schedules based upon continuing radiological events.

Limerick / Peach Bottom

3.2. ENVIRONMENTAL SAMPLING PROCESS

- 3.2.1. **PERFORM** the actions listed in EP-AA-112-500, Attachment 7 for the mobilization and coordination of Recovery Phase environmental monitoring activities.

**ATTACHMENT 6
ENVIRONMENTAL COORDINATOR CHECKLIST
Page 9 of 9**

**TABLE 6-1
EOF FIELD MONITORING TEAM TURNOVER CHECKLIST
Page 1 of 1**

Date: _____ Time: _____

1. Status of teams in field and designators:

Team Color/No	Team Members	Dose (mRem)	Location
	(Lead)		
	(Lead)		
	(Lead)		

2. Dose Limit: _____ mRem

3. KI Administered: YES / NO Time administered: _____

4. Current activities underway by each team:

<u>Team Color/No.</u>	<u>Assignment</u>
_____	_____
_____	_____
_____	_____

5. Problems (e.g., Missing Inoperable Equipment): _____

ATTACHMENT 7
FIELD TEAM COMMUNICATOR CHECKLIST
Page 1 of 3

Section 1, Initial Actions

Section 2, Ongoing Actions

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. **INITIAL ACTIONS**

- 1.1. _____ **SIGN IN** on the EOF Organization Board .
- 1.2. _____ **REPORT** your arrival to the EOF Environmental Coordinator and **OBTAIN** an initial update on plant status, release conditions and protective actions implemented on-site and offsite.
1. _____ **If the Environmental Coordinator has not arrived, then REPORT** to the Dose Assessment Coordinator.
- 1.3. _____ **INITIATE** an Event Log and **DOCUMENT** questions and answers, and all key communications, directed to and received from the Field Monitoring Teams.
- 1.4. _____ **SET-UP / UPDATE** designated status board(s) to track Field Monitoring Team location and plume location.
- 1.5. _____ **PERFORM** a communications equipment operation check, and equipment check with the TSC and Field Monitoring Teams.

Mid-West ROG

REFER to EP-MW-110-100 for instructions on Field Monitoring Team Radio and Satellite Telephone System.

1. **MONITOR** communications traffic until the EOF assumes responsibility for the Field Monitoring Teams.
- 1.6. _____ **POST** Field Monitoring Team locations, current exposure and authorized dose limit on status boards.
- 1.7. _____ **REVIEW** completed Field Survey Data Sheets and Environmental Assessment Logs (EP-AA-112-500, Attachments 3 and 4) faxed to the EOF by the TSC.

**ATTACHMENT 7
FIELD TEAM COMMUNICATOR CHECKLIST**

Page 2 of 3

- 1.8. When instructed by the Environmental Coordinator, **PERFORM** the following:
- 1.8.1. _____ **CONTACT** the TSC Radiation Controls Coordinator to transfer responsibility for Field Monitoring Teams.
- 1.8.2. _____ **INFORM** the teams that the EOF is now directing field survey activities.
- 1.8.3. _____ **INFORM** the Environmental Coordinator that the EOF has accepted control of Field Monitoring Teams.

2. ONGOING ACTIONS

2.1. MAINTAIN contact with the Field Monitoring Teams.

1. **RELAY** information to the Field Monitoring Teams, ensuring that appropriate "3-Way" communications practices are used.

MWROG

REFER to EP-AA-112-500, Attachment 8 for instruction on Satellite Telephone Operation.

2.2. DEPLOY Field Monitoring Teams, as directed by the Environmental Liaison, using the following guidelines:

1. **POSITION** one Field Monitoring Team as early as practical in potentially affected sectors that may require extended travel times to reach, such as opposite sides of rivers and lakes.
2. **PROVIDE** alternate routes to enter and exit affected areas in anticipation of changing weather conditions when possible
3. **TRAVERSE** the plume to obtain dose profile (particularly in the 1/2 miles to 2 mile zone) and **LOCATE** the plume by identifying the centerline for obtaining the highest dose rate.
4. **OBTAIN** air samples to determine iodine content if warranted based on relative value of sample versus expected dose to team members.

ATTACHMENT 7
FIELD TEAM COMMUNICATOR CHECKLIST
Page 3 of 3

- 2.3. **DOCUMENT** the instructions to and environmental survey results from the Field Monitoring Teams using:
- Plume Survey Readings: Field Survey Data Sheet (EP-AA-112-500, Attachment 3)
 - Air Samples: Environmental Assessment Log (EP-AA-112-500, Attachment 4)
- 2.4. **ENSURE** the Environmental Coordinator is cognizant of the Field Monitoring Teams information requests and **RELAY** replies to these requests.
1. **PASS** information to the Environmental Coordinator to facilitate ingress/egress at offsite access points.
- 2.5. **PROVIDE** periodic briefings and updates to Field Monitoring Teams including the following as a minimum:
- Current Event Classification
 - Plant Status
 - Protective Action Recommendations
 - Environmental Release Information
 - Meteorology Information (wind, direction/speed, current and forecasted weather conditions)
1. **PROVIDE** situational updates to the Field Monitoring Teams following significant changes.
 - A radiological release occurs or is likely
 - Protective Action Recommendations are issued for the public
 2. **DOCUMENT** questions and answers directed to and received from the Field Monitoring Teams, and **ENSURE** the Environmental Coordinator is cognizant of these requests for information and supports replies to these requests.
- 2.6. **ASSIST** the Environmental Coordinator in updating status boards with the following Field Monitoring Team information:
- Routes and current locations
 - Estimated times of arrival to monitoring locations
 - Cumulative personal doses
- 2.7. **DOCUMENT** Field Team members' exposure and **REPORT** exposures to the Environmental Coordinator promptly.
- 2.8. **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

MAROG OFFSITE LIAISONS

1. **PURPOSE**

- 1.1. This procedure describes the responsibilities and actions of the Exelon Nuclear Liaisons, referred to as a Utility Liaison Officer (ULO), dispatched to designated State Emergency Operations Centers (SEOCs) upon request or based on arrangements with Exelon Nuclear.

2. **TERMS AND DEFINITIONS**

- 2.1. State Emergency Operations Center (SEOC) -- An offsite facility designed and equipped for the effective coordination and control of emergency operations carried out within the State's jurisdiction. EOCs have been established in Harrisburg, PA for the Commonwealth of Pennsylvania and in Reisterstown, MD for the State of Maryland.
- 2.2. Utility Liaison Officer (ULO) -- Term used by the Commonwealth of Pennsylvania and State of Maryland to define the role of the Exelon Nuclear EOC Liaison as described in the Exelon Nuclear Standardized Radiological Emergency Plan.

3. **RESPONSIBILITIES**

- 3.1. The *Utility Liaison Officer (ULO)* is responsible for answering questions and providing explanations of incoming technical information in the SEOCs for the Commonwealth of Pennsylvania and State of Maryland. The ULO is also responsible for keeping the EOF updated on actions taken or proposed by SEOC personnel.

4. **MAIN BODY**

- 4.1. **ASSUME** your designated ERO position notification.

- 4.1.1. Utility Liaison Officer(s) will be dispatched to the following SEOC for events classified as an ALERT of higher classification:

Limerick

- Pennsylvania SEOC

Peach Bottom

- Pennsylvania SEOC
- Maryland SEOC

- 4.2. **INITIATE** the appropriate Emergency Plan activities using the position-specific checklist listed in Attachments 1 thru 2.
- 4.2.1. A communications bridge will be established by the EOC Communicator to facilitate communications between the EOF and SEOC.
- 4.2.2. The Utility Liaison Officer reports to the EOF Director, but will maintain continuous communications with the EOF EOC Communicator. Unresolved issues or specific requests for Exelon support should be directed to the EOF Director for action.

5. **DOCUMENTATION**

None

6. **REFERENCES**

None

7. **ATTACHMENTS**

- 7.1. Attachment 1, State EOC Utility Liaison Officer Checklist
- 7.2. Attachment 2, List of Commonly Asked Questions at EOCs

ATTACHMENT 1
STATE EOC UTILITY LIAISON OFFICER CHECKLIST
Page 1 of 7

The Exelon Nuclear Liaison to the State Emergency Operations Center (SEOC) is responsible for assisting the interface between Exelon Nuclear and the offsite governmental officials in the SEOC.

Section 1, Initial Actions

Section 2, "SEOC Activities"

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. INITIAL ACTIONS

- 1.1. Upon pager notification, **PROCEED** to the designated SEOC.
- **REFER** to Table 1-1 for directions to the SEOC for the Commonwealth of Pennsylvania, located in Harrisburg, PA.
 - **REFER** to Table 1-2 for directions to the SEOC for the State of Maryland, located in Reisterstown, MD.
- 1.2. **SIGN IN** at the SEOC security control point and receive a badge (if applicable).
- **REFER** to Figure 1-1 for a layout of the SEOC for Pennsylvania.
- 1.3. **SIGN IN** on the SEOC sign-in board (if applicable).
- 1.4. **INFORM** your arrival to the EOC Director as the Exelon Nuclear Utility Liaison Officer.
- 1. **REQUEST** you be placed on the distribution list for fax data received in the SEOC for the Exelon Nuclear Utility Liaison Officer.
- 1.5. **OBTAIN** your liaison kit.
- 1.6. **INITIATE** an Events Log.
- 1.7. **CALL** into conference bridge established by the EOF upon activation:
- (877) 950-6416**
Participant's Code 530723
- 1.7.1. If the conference bridge has not yet been established, then **CONTACT** the EOC Communicator at the EOF: (610) 380-3817

ATTACHMENT 1
STATE EOC UTILITY LIAISON OFFICER CHECKLIST
Page 2 of 7

- 1.7.2. **PROVIDE** a telephone number and fax number where you can be reached.

Pennsylvania SEOC

Phone: (717) 651-2001

FAX: (717) 651-2021

E-Mail: StateEOC@state.pa.us

Maryland SEOC

Phone: (410) 517-3600

FAX: (410) 517-3610

- 1.7.3. **DISCUSS** the items on "List of Commonly Ask Questions at EOCs" (EP-MA-112-406, Attachment 3).

- 1.7.4. **REQUEST** that copies of the following be regularly faxed to you from the EOF:

- Approved Press Releases and Chronological Event Description Logs (issued from the JPIC)
- Approved State/Local Notifications and NRC Event Notification Worksheets
- Completed State Radiological Update forms

2. **SEOC ACTIVITIES**

NOTE: The State Environs Communicator in the EOF is responsible for providing meteorological data and radiological information to State Representatives at the Coatesville EOF. The Corporate Emergency Director in the EOF is responsible for providing status updates to the Senior State Official upon changes to Exelon Nuclear Protective Action Recommendations (PARs).

- 2.1. **BRIEF** the lead State EOC person on the current status of the event and as significant changes and events occur.

1. **PREPARE** to brief the entire State EOC staff, if requested.
2. **CONSIDER** the following sources and topics for each State EOC briefing:
 - List of Commonly Asked Questions EOCs
 - Exelon Nuclear information on the course of events
 - Impact on the plant and public
 - Potential for further degradation

ATTACHMENT 1
STATE EOC UTILITY LIAISON OFFICER CHECKLIST
Page 3 of 7

- 2.2. **PROVIDE** simplified explanations to State EOC personnel to clarify technical information.
1. **USE** simplified descriptions and plant diagrams from the Emergency Action Level Reference Manual.
 2. **REQUEST** EOF assistance when additional technical explanations are required.
 - EOF Radiation Protection Manager (610) 380-2710
 - EOF Technical Support Manager (610) 380-3832
- 2.3. **MAINTAIN** contact with the EOF through the EOC Communicator to enhance communications and information flow between Exelon Nuclear and the State EOC.
- 2.4. **MONITOR** and **STAY** current on activities as they occur in the State EOC. Be alert to:
- Areas of concern in the State EOC.
 - State EOC concentration of efforts and decision making.
 - Areas where Exelon Nuclear can assist with the flow of data from Exelon Nuclear to the State EOC or the conversion of technical data (e.g. environmental or radiological).
 - State activities and decisions that could affect the plant, the EOF, or Exelon Nuclear in general.
- 2.5. **INTERFACE** with the Media:
1. If requested by the State to act as a Exelon Nuclear Media Spokesperson, then **CONTACT** the Corporate Spokesperson at (610) 380-3910 for approval, and **OBTAIN** an update of the current situation and information approved for public release.
 2. If contacted by members of the Media, then **PROVIDE** only the following information:
 - Emergency Classification, Time / Date of Classification and Station involved.
 - Which Emergency Response Facilities are activated (TSC, OSC, EOF or JPIC)
 - All official press information, from Exelon, will be released from the JPIC; no press information will be available at the station.
 - Location of the JPIC

ATTACHMENT 1
STATE EOC UTILITY LIAISON OFFICER CHECKLIST
Page 4 of 7

- 2.6. **ADVISE** the EOF of any issues noted and coordinate the effort, between Exelon Nuclear and the SEOC to assist, inform, clarify, or resolve each issue identified.
 1. **INFORM** the EOC Communicator in the EOF of any potential conflicts and ensure that they are resolved.
- 2.7. **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

ATTACHMENT 1
STATE EOC UTILITY LIAISON OFFICER CHECKLIST
Page 5 of 7

TABLE 1-1
DIRECTIONS TO PENNSYLVANIA SEOC (Harrisburg, PA)
Page 1 of 1

LOCATION: Pennsylvania Emergency Management Agency (PEMA) Headquarters
2605 Interstate Drive
Harrisburg, PA

*PEMA is the three-story, white building at the top of hill.

From I-81 AND Sout/West

Follow I-81 NORTH to Progress Avenue Exit. At light off exit, turn LEFT onto Progress Avenue and proceed under I-81 to intersection with Interstate Drive (2nd light beyond I-81 overpass). Turn RIGHT and follow road to top of the hill*.

From I-81 AND North

Proceed SOUTH on I-81 to Progress Avenue. At the light off exit, turn LEFT. Proceed to the next traffic light. Turn right onto Interstate Drive and follow road to top of the hill*.

From PA Turnpike (I-76) AND West

Follow PA Turnpike to Carlisle Exit (#16). Follow signs to I-81 (Harrisburg). Follow I-81 NORTH to Progress Avenue Exit. At light off exit, turn LEFT onto Progress Avenue and proceed under I-81 to intersection with Interstate Drive (2nd light beyond I-81 overpass). Turn RIGHT and follow road to top of the hill*.

From PA Turnpike (I-76) AND EAST

Follow PA Turnpike to Harrisburg East Exit (#19). Follow I-283 NORTH/WEST from exit to I-83 NORTH (2nd exit beyond toll plaza ... Stay left approaching exit and take Center ramp for I-83). Follow I-83 NORTH to I-81 SOUTH (LEFT exit at merge). Move to right on I-81 and exit at Progress Avenue. At the light off exit, turn LEFT. Proceed to the next traffic light. Turn right onto Interstate Drive and follow road to top of the hill*.

ATTACHMENT 1
STATE EOC UTILITY LIAISON OFFICER CHECKLIST
Page 6 of 7

TABLE 2-1
DIRECTIONS TO MARYLAND SEOC (Reisterstown, MD)
Page 1 of 1

From Baltimore

Take Interstate 695 (Baltimore Beltway) and exit at Interstate 795 (Northwest Expressway) towards Owings Mills and Reisterstown. Stay on I-795 in the left lane. The road becomes Maryland Route 128 after I-795 ends. Travel through the first traffic light as the road merges onto Butler Road and proceed for ½ mile. Turn left at the second traffic light onto Hanover Road (MD Route 30). The entrance to the Camp Fretterd Military Reservation is approximately 1.9 miles on the left (Rue Saint Lo Drive). Once through the gate, follow the road to the first building on the left. The State Emergency Operations Center entrance is on the left side of the building.

ATTACHMENT 1
STATE EOC UTILITY LIAISON OFFICER CHECKLIST
Page 7 of 7

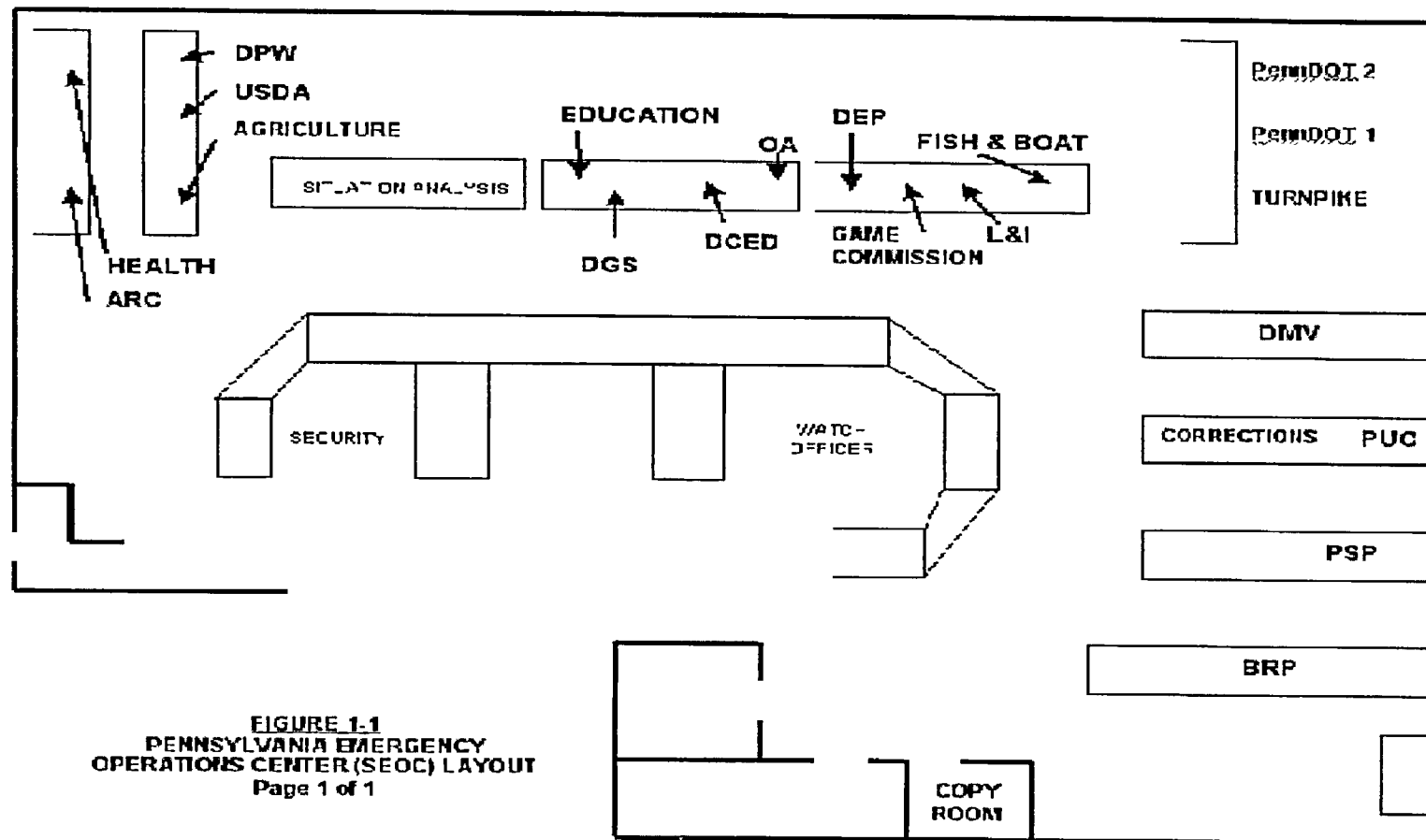


FIGURE 1-1
PENNSYLVANIA EMERGENCY
OPERATIONS CENTER (SEOC) LAYOUT
Page 1 of 1

ATTACHMENT 2
LIST OF COMMONLY ASKED QUESTIONS AT EOCS
Page 1 of 2

1. Have any injuries or fatalities occurred?
 - How many? _____
 - How did the accident occur? _____
 - What response actions are underway? _____
 - Names of injured and killed? _____
 - Any contamination involved? _____
 - Anyone taken to the hospital? _____

2. Has any offsite assistance been activated? Specify.
 - Fire _____
 - Police _____
 - Medical _____
 - State/Federal _____

3. When were the Exelon Nuclear emergency facilities activated? (TSC, OSC, EOF) _____

4. When did the JPIC become operational? _____
5. Have non-essential personnel been evacuated from the site?
 - When? _____
 - How many people? _____
 - Where were they sent? _____
 - Was the site siren sounded? _____

6. Have Exelon Nuclear Environs Field Teams been dispatched?
 - How many? _____
 - Where? _____
 - Are they finding any radiation? _____

7. Have State Liaisons arrived at the EOF? When? _____

**ATTACHMENT 2
LIST OF COMMONLY ASKED QUESTIONS AT EOCS**

Page 2 of 2

- 8. Have NRC Site Teams arrived?
When? _____

- 9. Does American Nuclear Insurers have anyone on
the scene yet, or on the way. _____
- 10. Has everyone at the plant been accounted for? _____
- 11. What was the radiation release path?
How is it monitored? _____

- 12. Is the reactor operating?
Is the plant shut down? _____

- 13. What actions are being taken to fix the problem? _____
- 14. Any estimate of how long it will take to make fixes?
Restore Electrical Power? _____
Establish Alternate Feed/Cooling? _____
Isolate the Leak? _____
Other? _____

EMERGENCY ENVIRONMENTAL MONITORING

1. **PURPOSE**

- 1.1 This procedure describes the responsibilities and actions for the coordination of Exelon Nuclear Field Monitoring Teams, including the tracking of a radiological release plume and the collection of environmental samples.

Field Monitoring Teams are mobilized and initially dispatched by the Radiation Controls Coordinator in the Technical Support Center (TSC). Coordination of Field Monitoring Team activities is transferred to the Environmental Coordinator upon activation of the Emergency Operations Facility (EOF).

2. **TERMS AND DEFINITIONS**

None

3. **RESPONSIBILITIES**

- 3.1 Field Monitoring Teams are responsible for performing field surveys outside the Station Protected Area, including tracking of the radiological release plume and obtaining environmental samples, as trained.

4. **MAIN BODY**

- 4.1 **INITIATE** the appropriate Emergency Plan activities using the Field Monitoring Team Checklist listed in Attachment 1, when designated as a Field Monitoring Team member.

5. **DOCUMENTATION**

None

6. **REFERENCES**

None

7. **ATTACHMENTS**

- 7.1 Attachment 1, Field Monitoring Team Checklist
7.2 Attachment 2, Protective Equipment and Personnel Dosimetry

- 7.3 Attachment 3, Field Monitoring Team Data Sheet
- 7.4 Attachment 4, Environmental Assessment Log
- 7.5 Attachment 5, Environmental Sample Collection Procedures
- 7.6 Attachment 6, Environs Group Transfer or Shipment of Environmental Radiological Samples to Radiological Laboratories
- 7.7 Attachment 7, Mobilization and Direction of the Environmental Sampling Vendor
- 7.8 Attachment 8, Satellite Telephone Operation

ATTACHMENT 1**FIELD MONITORING TEAM CHECKLIST**

Page 1 of 9

Limerick / Peach Bottom

Collection of environmental samples, other than plume survey and airborne samples is performed by an Environmental Sampling Vendor (ESV).

Section 1, Initial Actions

Section 2, On-Going Activities

NOTE: Steps in this checklist may be performed in an order other than listed or they may be omitted if not applicable.

1. INITIAL ACTIONS

REPORT to the OSC after facility activation is directed, and **PERFORM** the following if designated as a Field Monitoring Team members:

- 1.1 **OBTAIN** a vehicle and keys for equipment storage areas, as applicable.
- 1.2 **PERFORM** the actions outlined in Table 1-1, "Initial Field Monitoring Team Checklist".
- 1.3 **REPORT** to the TSC or **CONTACT** the Radiological Controls Coordinator (RCC) from a pre-designated location (i.e., vehicles, equipment area, etc.) for an initial briefing using Table 1-2 (Field Monitoring Team Dispatch Log).
- 1.4 **DON** appropriate protective clothing and dosimetry, as directed by the RCC per Attachment 2 (Field Monitoring Team Protective Equipment and Personnel Dosimetry).

The following ALARA considerations apply:

- Field Monitoring Teams should take and report dose rates upon arrival to the monitoring location. If habitable, sampling should proceed as instructed.
- In radiation fields greater than 1 R/hr, the Field Monitoring Team should leave the area during sampling and return to retrieve their air sampling equipment.
- Field Monitoring Teams should request further instructions when radiation levels approach 100 mR/hr.

ATTACHMENT 1**FIELD MONITORING TEAM CHECKLIST**

Page 2 of 9

- 1.5 _____ **PROCEED** to designated staging area or off-site location and **CONTACT** the RCC upon arrival.

2. ON-GOING ACTIONS

NOTE: Actions are not required to be performed in the order listed.

CAUTION

When traversing a potential release path, vehicle windows and ventilation paths (i.e., air conditioning, vent fan) shall be closed or secured except when performing measurements or taking air samples. Consider hazards in terrain when choosing location to stop vehicle.

- 2.1 **USE** "3-Way" communications principles and phonetic alphabet (Table 1-4) for all communications to and from controlling facility and Field Monitoring Team.

Mid-West ROG only

REFER to communications equipment instructions provided in Attachment 8.

- 2.2 **PERFORM** radiation surveys while in transit to specified survey location or deployment point.

CAUTION

(Unless instructed otherwise) **If** radiation levels approach 100 mR/hr, **then STOP** and **RETURN** to a lower dose area. **NOTIFY** the controlling facility (TSC/EOF) immediately for further instructions.

1. **OBSERVE** instruments for changes above background levels, and **NOTIFY** the RCC (TSC) / Field Team Communicator (EOF) of any noticeable increases in levels (> 1 mR/hr).
 2. **NOTIFY** the RCC (TSC) / Field Team Communicator (EOF) upon arrival at specified survey location or deployment point.
- 2.3 When directed to traverse plume, **PERFORM** the following:
1. If required to obtain an air sample, then **PREPARE** for sample in advance.

ATTACHMENT 1**FIELD MONITORING TEAM CHECKLIST****Page 3 of 9**

- A. **CHECK** portable air sampler for particulate filter and silver zeolite cartridge, and **INSTALL** if necessary (checking the direction of air flow, marking the "hot-side" of the filter, and ensuring gaskets are in place).
- B. **DON** protective clothing, as directed
- **REFER** to EP-AA-113, Attachment 3 (Emergency Radiation Exposure Limits and Associated Risks)
 - **REFER** to KI Package Insert in EP-AA-113, Attachment 6 if the use of potassium iodide (KI) is recommended.

2. **TRAVERSE** the expected release plume recording the following information on Attachment 3 (Field Survey Data Sheet):

NOTE: A good indication of being in the plume is when the measured window open reading is significantly greater than the window closed reading.

- Team No. (Color)
 - Date / Time
 - Starting point landmark (i.e., road intersection, etc.)
 - Initial plume boundary dose rate and location from starting point
 - Plume centerline (highest reading) dose rate and location from starting point
 - Exiting plume boundary dose rate and location from starting point
3. If directed, **OBTAIN** an air sample and required surveys at the plume centerline in accordance with Health Physics guidelines. **RECORD** information on an Environmental Assessment Log (Attachment 4)
- A. **OBTAIN** radiation readings at 6 inches and 3 feet (~ waist height) in both the window open and window closed positions
- B. **PLACE** air sampler at location, positioned with inlet facing towards the station and at least 3 feet above the ground

ATTACHMENT 1
FIELD MONITORING TEAM CHECKLIST
Page 4 of 9

CAUTION

If obtaining an air sample in a high dose area, a minimum air sample volume of 10 ft³ is permissible with authorization from the controlling facility.

- C. **SET** sampler flow at 3 cfm and **RUN** for approximately 10 minutes to obtain at least a 30 ft³ volume air sample.

Peach Bottom only

SET air sampler flow rate based on instruction guidelines and **OBTAIN** a 12 ft³ volume air sample.

- D. **MOVE** to a low background area (less than 300 cpm).

NOTE: Personnel performing the sampling tasks should wear gloves, at a minimum, to prevent contamination.

4. Upon exiting plume, **PERFORM** the following:

- A. **REMOVE** the air sample cartridge and **SURVEY** both the prefilter and iodine cartridge. **RECORD** information on an Environmental Assessment Log (Attachment 5)
- B. **CONTACT** the controlling facility and **REPORT** information recorded on Attachments 3 and 4.
- C. **RUN** air sampler per RP guidelines to purge unit of noble gases.

2.4 **REPORT** exposure history, as requested, and frequently **CHECK** dosimeter readings to ensure individual dose limits will not be exceeded.

2.5 **PERFORM** additional plume surveys as directed.

MWROG Only

2.6 **COLLECT** environmental samples (i.e., water, soil, vegetation, etc.) as directed per Attachment 6 (Environmental Sample Collection Procedures).

ATTACHMENT 1

FIELD MONITORING TEAM CHECKLIST

Page 5 of 9

- 2.7 When directed, **RETURN** to the Station or the EOF, as directed:
- 2.7.1 **REPORT** final dosimeter readings to the controlling facility
- 2.7.2 **ENSURE** that all samples are packaged and labeled appropriately.
- 2.7.3 **DELIVER** samples and completed data sheets to the Station Chemistry Lab or to designated EOF location, as applicable.
- 2.7.4 **SURVEY** vehicle and all team members for contamination, and **REPORT** to a decontamination location designated by the EOF if contamination is present.
- 2.7.5 **INVENTORY** equipment kit and **RESTOCK**, if possible. **REPORT** any deficiencies to the EOF.
- 2.7.6 **If being relieved, then COMPLETE** Table 1-4 (Field Monitoring Team Turnover Checklist) with on-coming personnel.

ATTACHMENT 1
FIELD MONITORING TEAM CHECKLIST
 Page 6 of 9

TABLE 1-1
INITIAL FIELD MONITORING TEAM CHECKLIST
 Page 1 of 1

Date: ___/___/___ Team Designation _____

(1) **OBTAIN** equipment kits and instruments.

Peach Bottom Limerick
 Emergency Response Equip Room (Unit 1, 1st floor) Equipment Storage Locker (Site Mgmt Building)

- If seal on equipment kit is broken, then **OBTAIN** a sealed kit or **PERFORM** an inventory.

(2) **VERIFY** operability of meters, air samplers, and battery-operated equipment.

- When using ion chamber-type instrumentation in a suspected noble gas environment, completely seal the ion chamber in plastic.

INSTRUMENT TYPE	SERIAL NO.	CAL. DUE	BATTERY CHECK (√)	RESPONSE CHECK (√)

(3) **OBTAIN** vehicle and keys for Field Monitoring Team use.

(4) **CHECK** gas tank level (at least ½ full).

(5) **PERFORM** a communications check over designated channel / frequency

Mid-West ROG Limerick Peach Bottom
 REFER to Attachment 8 of EP-AA-112-500 Channel 1 – TSC / EOF EP Channel
 Channel 2 – Other teams

(6) **PERFORM** a visual inspection of the vehicle.

(7) **DON** low and high range dosimetry, if provided in kit.

(8) **VERIFY** that team members have Exelon Nuclear identification.

(9) **REPORT** any vehicle and/or equipment problems to the TSC Radiation Controls Coordinator.

Comments / Equipment Discrepancies:

Leader: _____ / /

Driver: _____ / /

ATTACHMENT 1

FIELD MONITORING TEAM CHECKLIST

Page 7 of 9

Table 1-2

FIELD MONITORING TEAM DISPATCH LOG

Page 1 of 1

A. Assignment of Team Personnel:

	TEAM COLOR	MEMBER NAMES	CURRENT DOSE (QTR / YEAR)	DOSE APPROVED TO	KI ISSUED (YES / NO)	INITIAL LOCATION
TEAM 1			/			
			/			
TEAM 2			/			
			/			

B. Briefing of Conditions:

Current Classification: UNUSUAL EVENT / ALERT / SITE AREA EMERGENCY / GENERAL EMERGENCY

Plant Conditions: HOT SHUTDOWN / COLD SHUTDOWN / NOT SHUTDOWN

DETERIORATING / STABLE / IMPROVING

Affected Sectors/Subareas: _____ Wind Direction: _____ Wind Speed: _____ mph

Release Potential: NONE / OCCURRING / TERMINATED

Release Type: ELEVATED / GROUND MONITORED / UNMONITORED IODINE / NOBLE GAS / PART.

Projected Doses: (mRem/hr) 2 Mile 5 mile 10 Mile Turnback Dose: _____ mRem

Whole Body _____

Thyroid _____

Completed: (Team _____) _____ / (Team _____) _____

ATTACHMENT 1

FIELD MONITORING TEAM CHECKLIST

Page 8 of 9

TABLE 1-3
PHONETIC ALPHABET
Page 1 of 1

A	Alpha	N	November
B	Bravo	O	Oscar
C	Charlie	P	Papa
D	Delta	Q	Quebec
E	Echo	R	Romeo
F	Foxtrot	S	Sierra
G	Golf	T	Tango
H	Hotel	U	Uniform
I	Indigo	V	Victor
J	Juliet	W	Whiskey
K	Kilo	X	X-ray
L	Lima	Y	Yankee
M	Mike	Z	Zulu

ATTACHMENT 2
PROTECTIVE EQUIPMENT AND PERSONNEL DOSIMETRY
Page 1 of 2

The purpose of this Attachment is to provide guidance with respect to the wearing of protective clothing by Field Monitoring Teams and to specify the dosimetry requirements for those teams.

Respiratory protective equipment and radiological protective clothing should be inspected for proper function before use in the field.

Radiological protective clothing should only be worn at the express direction of the Environmental Coordinator.

The MSA combination cartridge for use in both airborne radioactive iodine and particulate atmospheres has a protection factor of 100 for particulates and 1 for radioiodine. The lack of an approved protection factor for iodine should not prevent the use of these cartridges in atmospheres when both radioactive airborne particulates and iodines exist.

1. **PROTECTIVE EQUIPMENT AND PERSONNEL DOSIMETRY**

1.1 **ASSIGN** each Field Monitoring Team member:

1.1.1 TLD

1.1.2 Self-reading dosimeters one of each in the following ranges:

<u>LGS / PBAPS</u>	<u>MWROG</u>
<ul style="list-style-type: none"> • 0-1500 mR • 0-5 R range 	<ul style="list-style-type: none"> • 0-200 mR • 0-1 R range • 0-10 R range

OR

Electronic dosimeter capable of same coverage

NOTE: Secondary Dosimetry can be expected to **under-report** the actual dose (TEDE) received by a factor of 2 when immersed in a noble gas plume.

ATTACHMENT 2
PROTECTIVE EQUIPMENT AND PERSONNEL DOSIMETRY
Page 2 of 2

1.2 **EVALUATE** the magnitude and type of any possible release in order to determine protective equipment use.

1.2.1 Respiratory Protection:

CAUTION

Respirators should be used only as a precautionary measure until air samples have been collected and analyzed, when a high dose field is encountered. The long-term use of a full-face respirator or SCBA is **NOT** recommended due to the safety hazard involved in operating vehicle.

1. **EVALUATE** the use of respiratory protection as it affects the TEDE of Field Monitoring Team personnel.
2. **DETERMINE** whether affected personnel are respirator qualified.
3. **USE** a full-face respirator **only** when it is beneficial to TEDE **AND** the sufficient priority exists for sample collection.

1.2.2 Protective Clothing:

1. **ASSESS** the likelihood of particulates in the release.
2. **ASSIGN** a full set of protective clothing when particulates or residual contamination is expected.
3. **USE** EP-AA-113, Attachment 5, to assess the need for thyroid blocking agents.

**ATTACHMENT 3
FIELD MONITORING TEAM DATA SHEET
Page 1 of 1**

TEAM: _____ LEAD: _____ DRIVER: _____

NOTE: Ion Chambers should be used above 2 mR/hr, and GM detectors should be used below 2 mR/hr, as applicable based on equipment inventory.

TRAVERSE #1 DATE / TIME: _____

Starting Point Reference: (i.e., intersection)

PLUME TRAVERSE (A)	LOCATION (B)	DOSE RATE (Mr/hr)	
		OPEN (C)	CLOSED (D)
(1) Initial Boundary			
(2) Centerline (Highest)			
(3) End Point (Boundary)			

Dosimeter Reading -- LEADER: _____ DRIVER: _____

TRAVERSE #2 DATE / TIME: _____

Starting Point Reference: (i.e., intersection)

PLUME TRAVERSE (A)	LOCATION (B)	DOSE RATE (Mr/hr)	
		OPEN (C)	CLOSED (D)
(1) Initial Boundary			
(2) Centerline (Highest)			
(3) End Point (Boundary)			

Dosimeter Reading -- LEADER: _____ DRIVER: _____

Numbers and letters are for assistance in communicating data if desired

**ATTACHMENT 4
ENVIRONMENTAL ASSESSMENT LOG
Page 1 of 1**

Event Date (1)		Affected Station (2)					Team (3)
NO. (4)	Location (5)	Time (6)	3ft WO (7)	3ft WC (8)	6in WO (9)	6in WC (10)	Instructions
(A)							
(B)							
(C)							
(D)							
(E)							
(F)							
(G)							
(H)							
(I)							
(J)							

Air Samples:

Collection Location (11)	Time Sampler Started (12)	Sampler Run Time, in min (13)	Sampler Flow Rate, in cfm (14)	Background Rate, in cpm (15)	Gross Prefilter Results, cpm (16)	Gross Zeolite Results, cpm (17)
(A)						
(B)						
(C)						

Other Samples:

Collection Location (18)	Collection Time (19)	Sample Type (20)	Counting Location (21)	Time Counted (22)	Background Rate, cpm (23)	Gross Sample Results, cpm (24)
(A)						
(B)						
(C)						

Numbers and letters are for assistance in communicating data if desired

ATTACHMENT 5
ENVIRONMENTAL SAMPLE COLLECTION

Page 1 of 4

MWROG Only

The purpose of this Attachment is to describe the proper methods for collecting, handling and packaging of radiological environmental samples.

Section 1, General Sampling Guidance

Section 2, Water Sampling

Section 3, Soil Sampling

Section 4, Vegetation Sampling

Section 5, Snow Sampling

1. GENERAL SAMPLING GUIDANCE

- 1.1 In general air samples and dose rates are used when tracking the plume. The snow, water, vegetation and soil samples will be taken after the plume has stopped.
- 1.2 If milk samples are requested by offsite agencies, **then COLLECT** a minimum of one gallon.
- 1.3 **TREAT** samples with survey results of greater than or equal to 0.5 mR/h, or a count rate of 2500 cpm measured on a GM-type instrument as "radioactive material" for transportation and shipping, per 49 CFR 173.421(a)(2). Such samples require the completion of radioactive material shipping documents.
- 1.4 **TAKE** all samples to, or as near as possible, to the designated monitoring locations. If samples are taken at locations other than those points, report the monitoring location and record it in the 'comments' section on the Environmental Assessment Log.
- 1.5 **TAKE** samples from an undisturbed area, which is suspected to be contaminated and obtain a representative sample.
- 1.6 **LABEL** each container with the following:
- team name,
 - sample type,
 - chronological sample number,

ATTACHMENT 5**ENVIRONMENTAL SAMPLE COLLECTION****Page 2 of 4**

- date, time, and monitoring location,
- for air samples; initial air sampling flow rate, final air sampling flow rate, initial running time, final running time, total cubic feet (usually 30 cubic feet),
- sample results, and
- other information pertinent to analysis.

1.7 **RECORD** data on the Environmental Assessment Log (Attachment 3), or similar log

2. WATER SAMPLING

2.1 Stream, River or Lake water sampling (sample size: 1 gallon)

2.1.1 **RINSE** collection container several times before collecting water if container was used previously.

2.1.2 **OBTAIN** a sample that is representative of the water source without disturbing the sediment.

2.1.3 If sampling is to be performed from a bridge, **LOWER** the sampling pail on a rope into the stream on the upstream side of the bridge. Permit the pail to sink beneath the surface and **RETRIEVE** the pail full of water.

2.1.4 **TRANSFER** the sample into the sample container and **CLOSE** tightly. Wipe the outside of the container and **PLACE** a completed label on the container. **PLACE** the labeled sample container in a clean plastic bag and seal tightly.

2.2 Well water samples (normal sample size: 1 gallon)

2.2.1 **PURGE** the well or fountain by allowing the water to flow for at least two minutes to assure that a representative sample is collected.

2.2.2 **FILL** the plastic sample container and **CLOSE** tightly. **WIPE** the outside of the container and **PLACE** a completed label on the container. **PLACE** the labeled sample container in a clean plastic bag and seal tightly.

ATTACHMENT 5**ENVIRONMENTAL SAMPLE COLLECTION**

Page 3 of 4

3. SOIL SAMPLES

3.1 Soil samples should be free of vegetation and/or rocks and obtained from a small, flat area. Permanent pastures are the preferred sampling sites if available. Avoid obtaining soil samples from freshly plowed fields. (Normal sample size: quantity sufficient to fill 1 quart plastic cube container) **REPORT** back if soil is unsuitable.

3.1.1 From a one-foot square area. **SCRAPE** soil from within the square, not exceeding a depth of one inch, and store in the sample container.

NOTE: Maximize collection of the upper most soil area.

3.1.2 **IDENTIFY** sampling area with sample point flag or fluorescent spray paint. Information on the exact location, nature of terrain, vegetation cover, nearby trees, etc., should also be noted.

3.1.3 **FILL** the plastic container, **CLOSE**, and **PLACE** a completed label on the container. **PLACE** the labeled sample container in a clean plastic bag and **SEAL** tightly.

4. VEGETATION SAMPLES

4.1 **COLLECT** the leafy portion of pasture-type grass only. Weeds and other types of vegetation are discouraged. (sample size: quantity sufficient to fill 1 quart plastic cube container, packed tightly, or other appropriate size container)

NOTE: New vegetation growth is desirable; do not sample dried grass.

4.1.1 **NOTIFY** Environmental Coordinator if vegetation is limited.

4.1.2 **IDENTIFY** sampling area with sample point flag or fluorescent spray paint.

4.1.3 **FILL** the plastic container, **CLOSE**, and **PLACE** a completed label on the container. **PLACE** the labeled sample container in a clean plastic bag and **SEAL** tightly.

ATTACHMENT 5
ENVIRONMENTAL SAMPLE COLLECTION

Page 4 of 4

5. SNOW SAMPLES

NOTE: Snow Sampling is dependent on weather conditions and proper site selection. Areas where the wind has swept away snow cover, drifting has occurred; or the snow has been disturbed by outside sources (plowing, snow mobiles, etc.) should be avoided.

5.1 **LINE** the bucket with a plastic bag. If a bucket is unavailable, a representative sample may be obtained by filling a 1 quart container 12 times and placing the sample in a plastic bag.

NOTE: Sample volume should exceed 1 liter of melted snow or approximately 3 gallons of packed snow.

5.2 **PACK** lined bucket with snow taken from selected area:

1. **If** a crust layer remains from an earlier snow, **then COLLECT** snow from surface to crust layer.
2. **If** snow has fallen after release, **then COLLECT** crust layer and loose snow next to crust layer, sweeping away new fallen snow.
3. **If** unsure of the time it snowed, **then COLLECT** snow closest to ground level.

5.3 **SEAL** sample bag securely, **PLACE** sample inside another plastic bag and **SEAL** tightly.

5.4 **MEASURE** area sampled in square feet and depth in inches.

5.5 **IDENTIFY** sampling area with sample point flag or fluorescent spray paint.

5.6 **PLACE** a completed label on double bagged sample and **PLACE** in a (third) clean plastic bag; **SEAL** tightly for storage.

5.7 **RECORD** any unusual features or terrain information on the back of the Environmental Assessment Log (Attachment 3).

ATTACHMENT 6
ENVIRONS GROUP TRANSFER OR SHIPMENT OF ENVIRONMENTAL
RADIOLOGICAL SAMPLES TO RADIOANALYTICAL LABORATORIES
Page 1 of 4

MWROG Only

This Attachment describes the methods to be used to transfer or ship environmental samples to a counting laboratory. Environmental samples shall be collected and packaged as described in EP-AA-112-500, Attachment 5, if the conversion factors supplied in this procedure are to be used when determining shipping requirements.

Personnel transporting environmental samples should have completed an Exelon Nuclear equivalent radiation worker training program.

Ensure samples are appropriately labeled with Field Monitoring Team Identification, sample volume, sample location, and sample date and time.

Personnel handling environmental sampling shall wear specified dosimetry and protective clothing, as appropriate.

Caution should be exercised when handling environmental samples to limit the spread of contamination and maintain personnel exposure ALARA.

Consult with appropriate Federal Regulatory Agencies and offsite Agencies to determine whether the steps of this procedure apply, in situations where high contamination are found in the environment, consider requesting exemptions from shipping requirements in order to expedite critical analyses.

Dose rate measurements of the sample containers should be performed in an area where background is less than 100 cpm on a GM instrument (<0.1 mR/hr).

Sample measurements exhibiting an exposure level of greater than 0.5 mR/hr when using an ion chamber device or 2,500 cpm on a GM instrument shall be classified as radioactive material for shipment purposes. All calculations for shipping assume the environmental mix is all radioactive iodines.

Section 1, Sample Transfer and Shipment

Table 6-1, Sample Data - Used as Basis Document for determination of average sample weights and specific activity. Not required by procedure user.

Table 6-2, Direction to Radiological Environmental Contractor

ATTACHMENT 6
ENVIRONS GROUP TRANSFER OR SHIPMENT OF ENVIRONMENTAL
RADIOLOGICAL SAMPLES TO RADIOANALYTICAL LABORATORIES
Page 2 of 4

1. SAMPLE TRANSFER AND SHIPMENT

1.1 Field Monitoring Team Personnel

- 1.1.1 PERFORM** a contamination survey on the exterior of the sample container.
- 1.1.2 DECONTAMINATE** the container (or change containers) until exterior surfaces are free of detectable radioactive contamination.
- 1.1.3 PERFORM** an exposure rate survey using an ion chamber device or instrument of similar sensitivity at the center for the sample of interest. **REPORT** survey results to the Environmental Coordinator.

1.2 Environmental Coordinator or Staff

1.2.1 If no detectable exposure level exists, shipping requirements do not apply.

- **CONTACT** the radiological environment contractor and **CONFIRM** any special handling requirements and contractor's readiness to receive samples.
- **INSTRUCT** the Field Monitoring Team or runner to transfer samples to the laboratory. Directions are found in Table 6-2.

1.2.2 If detectable exposure levels exist, shipping requirements apply.

- **CALCULATE** the curie content of each shipping package in accordance with the station shipping procedures.
- **COMPLETE** required shipping papers in accordance RP-AA-600.
- **INSTRUCT** Environs Team or runner on sample shipment requirements. Directions to the laboratory are found in Table 6-2.

**ATTACHMENT 6
 ENVIRONS GROUP TRANSFER OR SHIPMENT OF ENVIRONMENTAL
 RADIOLOGICAL SAMPLES TO RADIOANALYTICAL LABORATORIES
 Page 3 of 4**

**TABLE 6-1
 SAMPLE DATA
 Page 1 of 1**

A. Grass Sample

Trial	Tare Wt (gm)	Gross Wt (gm)	Net Wt (gm)
1	91.33	144.13	72.80
2	71.33	137.27	65.94
3	71.33	128.17	56.84
4	71.33	136.43	65.10
5	71.33	133.01	61.68
6	70.07	136.43	61.36

n = 6
 x = 63.95 gms
 s = 5.40 gms

B. Dirt Samples

Trial	Tare Wt (gm)	Gross Wt (gm)	Net Wt (gm)
1	71.33	1027.87	956.54
2	71.33	910.43	847.10
3	71.33	1007.31	935.98
4	70.07	979.88	909.81
5	70.07	962.11	892.11
6	70.07	1007.74	937.67

n = 6
 x = 913.19 gms
 s = 39.56 gms

C. Water Samples (Gallon Container)

Trial	Tare Wt (gm)	Gross Wt (gm)	Net Wt (gm)
1	75.08	4280	4205
2	75.08	4235	4160
3	75.08	4230	4155
4	75.08	4215	4140
5	75.08	4250	4175
6	74.28	4225	4151
7	74.28	4200	4206
8	74.28	4285	4211
9	74.28	4285	4211
10	74.28	4310	4236

n = 10
 x = 4185 gms
 s = 33 gms

n = Number of Trials
 x = Average Weight (gm)
 s = Standard deviation of the sample

ATTACHMENT 6
ENVIRONS GROUP TRANSFER OR SHIPMENT OF ENVIRONMENTAL
RADIOLOGICAL SAMPLES TO RADIOANALYTICAL LABORATORIES
Page 4 of 4

TABLE 6-2

Directions To Radiological Environmental Contractor Teledyne Isotopes

Page 1 of 1

Teledyne Isotopes
700 Landwehr
Northbrook, IL 60062

8 a.m. - 5:45 p.m.

- From I-294 (Tri-State Tollway) South: Exit east (right) on Willow Road. Proceed to Landwehr and turn north (left). Follow Landwehr past Dundee Road. Teledyne is located 1 and 1/2 blocks north of Dundee on the west (left) side.
- From I-94 North. Exit west (left) on Dundee Road. Proceed to Landwehr and turn north (right). Teledyne is located 1 and 1/2 blocks north of Dundee on the west (left) side.
- From US-41 South. Exit west (right) on Lake-Cook Road. Proceed to US-43 and turn south (left). Go to Dundee and turn west (right). Proceed to Landwehr and turn north (right); Teledyne is located 1 and 1/2 blocks north of Dundee on the west (left) side.
- From I-55 South. North on I-294 (Tri-State Tollway). I-294 to Willow Road exit, go east (right) on Willow Road. Proceed to Landwehr and turn north (left). Follow Landwehr past Dundee Road. Teledyne is located 1 and 1/2 blocks north of Dundee on the west (left) side.
- From I-88 East, North on I-294 (Tri-State Tollway). I-294 to Willow Road exit, go east (right) on Willow Road. Proceed to Landwehr and turn north (left). Follow Landwehr past Dundee Road. Teledyne is located 1 and 1/2 blocks north of Dundee on the west (left) side.

ATTACHMENT 7**MOBILIZATION AND DIRECTION OF ENVIRONMENTAL SAMPLING VENDOR**

Page 1 of 2

Mid-Atlantic ROG only**PART 1: MOBILIZATION**

1. ____ **CONTACT** the REMP Environmental Sampling Vendor (ESV), using the ERF Telephone Directory, and **INFORM** them of a potential for a radiological release.
2. ____ **ESTABLISH** a communication protocol between the Environmental Coordinator (EOF) and the ESV.
3. ____ **DIRECT** the ESV to prepare for a radiological release, and **PROVIDE** them the following information:
 - Affected Site
 - Wind Direction / Speed
 - Radiological Release Status
 - Anticipated Time of Release

NOTE: Per their procedure, the ESV will contact the REMP radiological analytical laboratories and TLD vendor.

4. ____ **OBTAIN** from the ESV a list of names of individuals who will be traveling in the EPZ to be provided to the State Police.
5. ____ **If available, then DIRECT** ESV to pick up electronic dosimetry and place in field as part of Step 6.

NOTE: Steps 6 & 7 should be performed starting with the down wind, affected sectors and then to other sectors.

6. ____ **DIRECT** the ESV to begin placing air pumps at the sites.
7. ____ **PLACE** the emergency air pumps in service.
8. ____ When the above steps are completed or if offsite radiological conditions change, **DIRECT** the ESV to relocate to an upwind distance and await further instructions.

ATTACHMENT 7**MOBILIZATION AND DIRECTION OF ENVIRONMENTAL SAMPLING VENDOR**

Page 2 of 2

PART 2: RECOVERY PHASE

1. ____ **EVALUATE** offsite dose, and as appropriate, REQUEST Exelon Nuclear Radiation Protection (RP) support from the EOF Radiation Protection Manager for the ESV.
2. ____ **DIRECT** the ESV to collect the following samples, as appropriate:
 - a. ____ Air particulate and iodine samples from all air sampling equipment

NOTE: At each REMP sampling location, there are two (2) TLDs. One (1) TLD may be removed, but only if it is being replaced. The 2nd TLD must remain until the end of the sampling quarter.

- b. ____ Electronic dosimetry or TLDs
 - c. ____ Milk
 - d. ____ Vegetation
 - e. ____ Water
 - f. ____ Soil
3. ____ **DETERMINE** an appropriate sample delivery staging area.
 4. ____ **REQUEST** Exelon Nuclear support from the EOF Radiation Protection Manager for radioactive shipping expertise.

ATTACHMENT 8**SATELLITE TELEPHONE OPERATIONS**

Page 1 of 2

Mid-West ROG only

The satellite phone system provides phone communication and two-way radio coverage. This system provides clarity and security to assure private communications through an all-digital network.

Each satellite phone includes a handset for phone conversations and a push-to-talk (PTT) microphone for radio communications. All Field Survey Team communicators will use the PTT.

Powering On Unit:

1. **PRESS** and **HOLD** the PWR key on either PTT or telephone handset to power on the Mobile Terminal (MT).

NOTE: If you power on the unit using the telephone handset, the PTT display will read **SLEEP**. To activate PTT, **PRESS** and **HOLD** any key on the PTT keypad (except PWR or BAR).

2. If using a land mobile unit, remain stationary until the satellite has been acquired and the service is ready to use.
3. You will see **NO SVC** in the upper right corner of the PTT display. Within 20 seconds to one minute, your MT should be locked on the satellite; **NO SVC** will disappear from the display and you will be ready to use the service. If the **NO SVC** display does not disappear after 1 minute, push the * key and wait 20 seconds. Repeat, if necessary.

Initiating a Radio Call:

1. **PRESS** and **HOLD** the PTT. When the display reads **SELF** you will hear a two-tone beep. You can begin talking, holding mic approximately two inches from your mouth.

NOTE: **WAIT** until **SELF** is displayed before speaking to avoid having your voice cut off.

2. **RELEASE** the PTT when finished speaking and the display will change to **VACANT**, accompanied by a single beep. Someone can now respond to you.

NOTE: **VACANT** means that the talk group is still active and anyone can now become the speaker.

ATTACHMENT 8**SATELLITE TELEPHONE OPERATIONS****Page 2 of 2**

- When someone in the talk group responds, you will see their unique four-digit Directory Number (DN) appear on the PTT display. When they stop talking, the DN will be replaced by **VACANT**.
3. You can respond to a communication as soon as you see **VACANT** on your display. To respond, simply **PRESS** and **HOLD** the PTT. When **SELF** is displayed, you may begin speaking. Release PTT when finished speaking.

NOTE: A talk group will remain in the **VACANT** state for 10 seconds if another user does not PTT. After 10 seconds in the **VACANT** state the call will be terminated.

When **IDLE** is displayed it means the talk group has stopped. You must follow the steps for initiating a radio call to re-establish communications on the talk group.

The cue that the talk group is available - **VACANT** - is always accompanied by a single beep. The cue that you may speak - **SELF** - is always accompanied by a two-tone beep. Once users become accustomed to the service they can navigate usage through audio tones without relying on the PTT display.