

CONTROL ROOM OPERATIONS

1. PURPOSE

- 1.1. This procedure provides a layout of the Control Room (CR) activities associated with an emergency condition. When the Shift Manager decides that a situation warrants activation of the Emergency Plan, 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.

2.2 "Timeliness": (NRC Performance Indicator R.EP.01)

- For event classification purposes, this is defined as the decision made to classify event within 15 minutes of the report or availability of supporting indications to the Control Room and ERO.
- 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 time.

3. RESPONSIBILITIES

- 3.1 The **Shift Manager**, as Shift Emergency Director, assumes command and control for the emergency response activities until relieved by the Station Emergency Director (TSC) or Corporate Emergency Director (EOF). The Shift Manager will be the initial person to recognize the emergency action level (EAL) condition and make the initial declaration of an emergency.

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- 3.2 The **Shift Dose Assessor** is an on-shift Radiation Protection Technician (RPT) at the unaffected station will perform initial dose assessments in support of the Control Room Shift Manager at the affected station. The Shift Dose Assessor will provide offsite dose projections and applicable protective action recommendations (PARs) due to an actual or projected radiological release within 60 minutes of the initiating event prior to the activation of the Technical Support Center (TSC) and/or Emergency Operations Facility (EOF).

The Shift Dose Assessor shall have no other responsibilities during emergencies at the affected station, while required to actively perform dose assessments, that detract from dose assessment calculations until relieved by the TSC and/or EOF.

- 3.3 The **Operations Communicator** relays information event status, priorities, and significant changes in plant system/ equipment or in-plant radiological conditions. The Operations Status Line is established in the Control Room (CR), Technical Support Center (TSC) and Emergency Operations Facility (EOF).
- 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).

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- 3.5 The **Shift Communicator** is a designated member of the on-shift staffing, who is responsible for performing notifications to State and local government agencies and for assisting the Shift Manager in initiating Emergency Response Organization (ERO) augmentation.

4. MAIN BODY

CONTROL ROOM / TSC COMMUNICATIONS

Following the transfer of Command and Control (C&C), the Shift Manager will report to the Operations Manager in the Technical Support Center (TSC). Therefore, communications with the TSC should be primarily through the Operations Manager, except for significant changes in event / plant status.

The use of the Operations and Damage Control Communicators should be maximized to reduce the communications burden on the Shift Manager and TSC Operations Manager.

- 4.1. The Shift Manager will **ASSUME** the position of *Shift Emergency Director* and **INITIATE** the appropriate Emergency Plan activities using the checklist in Attachment 1.
- 4.2. The Emergency Response Organization (ERO) will be mobilized at the direction of the Shift Manager using Attachment 2, ERO Activation.
- 4.3. Designated Communicators will be assigned to the Control Room as part of the TSC activation to support intra-facility communications using the checklists in Attachments 4 and 6.

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- 4.4 An on-shift Radiation Protection Technician (RPT) from the unaffected station will **ASSUME** the role of *Dose Assessor* and **PERFORM** initial dose projections using the checklist in Attachment 3.

5. DOCUMENTATION

None

6. REFERENCES

None

7. **ATTACHMENTS**

- 7.1 Attachment 1, Shift Emergency Director Checklist
- 7.2 Attachment 2, ERO Activation
- 7.3 Attachment 3, Shift Dose Assessor Checklist **Limerick / Peach Bottom**
- 7.4 Attachment 4, Operations Communicator (CR) Checklist
- 7.5 Attachment 5, Damage Control Communicator (CR) Checklist
- 7.6 Attachment 6, Shift Communicator **Limerick / Peach Bottom**

ATTACHMENT 1

SHIFT EMERGENCY DIRECTOR CHECKLIST

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Section 1, Immediate Actions (Control Room in Command and Control)

Section 2, Transfer of Command and Control

Section 3, Ongoing Actions

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

GE	SE	AL	UE	IMMEDIATE ACTIONS TABLE (Control Room in C & C)	ATTACHMENT STEP
R	R	R	R	Announce the classification	1.2
R	R	R	O*	Activate the Emergency Response Organization (ERO)	1.3
R	N/A	N/A	N/A	Determine the correct PAR per station PAR flowchart	1.4
R	R	R	R	Initiate State/Local notification (within 15 minutes of classification)	1.5
R	R	R	R	Initiate ENS notification (within 60 minutes of classification)	1.6
R	R	R	N/A	Activate ERDS (within 60 minutes of an Alert classification)	1.7
R	R	O	O	Initiate Personnel Accountability	1.8
R	R	O	O	Perform "Quick Assessment" (if release in progress)	1.9 / 1.10
R	R	R	R	Significant Events Reporting (OP-AA-106-101)	1.11
R	R	R	R	[MWROG] RP support for ERT	1.12
R	R	R	R	Emergency Exposure Controls (KI, exposure extensions)	1.13 / 1.14

O – Indicates that this action is optional at this classification level

R – Indicates that this action is required at this classification level

* Precautionary staffing for a credible security threat (HU1)

1. IMMEDIATE ACTIONS (CONTROL ROOM IN COMMAND & CONTROL)

1.1 **PERFORM** actions identified for event classification **AND** any actions not performed for a lower classification (as indicated by use of "→" symbol).

NOTE: Steps 1.2 and 1.3 may be delegated to allow the Shift Manager to begin the required notifications.

PRECAUTIONARY ERO STAFFING OF FACILITIES

ERO Activation is required for an Unusual Event based on a credible security threat (HU1). ERO activation remains optional for all other Unusual Event classifications.

GE SAE AL UE (initials)

1.2 _____ _____ _____ _____ **ANNOUNCE** the event classification to the Control Room staff, and over the plant Public Address (PA) system based on pre-scripted message guidelines in EP-AA-112, Attachment 6.

- If necessary, **DISPATCH** personnel with bullhorns to make the activation announcement.

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SHIFT EMERGENCY DIRECTOR CHECKLIST
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	<u>GE</u>	<u>SAE</u>	<u>AL</u>	<u>UE</u> (initials)	
1.3	→	→	___	O*	PERFORM Attachment 2, ERO Augmentation. Call Out System / Pagers activated at: _____
1.4	___	NA	NA	NA	DETERMINE the correct plant-based PAR per the appropriate site-specific PAR flowchart in EP-AA-111, Attachments 2 through 8.
1.5	___	___	___	___	INITIATE required State/Local notifications within 15 minutes of the event classification as required per EP-AA-114. – REFER to EP-MW(MA)-114-100 for instructions on completion and transmittal of State/County notifications.
1.6	___	___	___	___	INITIATE required NRC notifications immediately following notification of the appropriate State and local agencies but <u>not</u> later than (1) hour after the time of classification per EP-AA-114.
1.7	→	→	___	NA	ACTIVATE the NRC Emergency Response Data System (ERDS) within (1) hour following classification of an Alert or higher for unit(s) affected per EP-MW(MA)-110-100. Initiated at: _____

Limerick

1.7.1 DISPATCH a shift I&C technician to activate ERDS

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SHIFT EMERGENCY DIRECTOR CHECKLIST

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CAUTION

Special consideration should be given to performing (or not performing) accountability and/or evacuation when in a Security Event or other hazardous condition (i.e. hazardous condition from a nearby industrial facility or weather conditions).

1.8 → NA NA **IMPLEMENT** Accountability per EP-MW(MA)-113-100, "Assembly / Site Evacuation".

Alarm/ PA announcement at:

– **ENSURE** that the names of any unaccounted for persons within the Protected Area have been determined within 30 minutes of announcing the assembly: **Accountability completed at:**

No. persons "unaccounted for":

– **If not performed as part of accountability, then INITIATE** the site evacuation when accountability is completed per EP-MW(MA)-113-100.

Initiated at:

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1.9 → → NA **CONTACT** the unaffected station Control Room and **REQUEST** that an on-shift Radiation Protection Technician (RPT) be assigned as Shift Dose Assessor.

1.10 → → NA **If** a release is in progress and time permits, **then PERFORM** a "Quick Assessment" per EP-MW(MA)-110-200, "Dose Assessment".

1. Continue to **MONITOR** radiological effluent conditions. **If a release occurs or likely prior to the transfer of Command and Control, then PERFORM** Step 1.10.

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SHIFT EMERGENCY DIRECTOR CHECKLIST

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GE SAE AL UE (initials)

1.11 → → → _____ **PERFORM** internal and external notifications per Significant Event Reporting Procedure (OP-AA-106-101).

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1.12 → → → _____ **CONTACT** RP and **REQUEST** that an RPT be dispatched to the Control Room to support ongoing Control Room ERT activities.

1.13 → → → _____ **APPROVE** and **DOCUMENT** the use of thyroid blocking agents (potassium iodide, KI) per EP-AA-113, "Personnel Protective Actions," when requested.

1.14 → → → _____ **APPROVE** emergency personnel to receive exposures greater than 5 Rem TEDE (EPA-400 lower limit) per EP-AA-113.

1.15 **PERFORM** the "Ongoing Actions" in Section 3 and **TURNOVER** Command and Control per Section 2 when contacted by the Station Emergency Director.

2. TRANSFER OF COMMAND AND CONTROL

NOTE: Command and Control can be transferred to the TSC or the EOF. When transferring directly to the EOF, Classification and Emergency Exposure remains at the station. Command and Control can be performed prior to facility activation if deemed appropriate.

2.1 **TURNOVER** Command and Control using EP-AA-112, Attachment 1, "Command and Control Turnover Briefing Form"

2.2 **ESTABLISH** direct communications with the TSC Operations Manager, or Station Emergency Director if the Operations Manager is NOT yet present.

1. **BRIEF** the Operations Manager of significant changes in plant/ system/ equipment status or when plant conditions may require a change in event classification or protective actions.

2.3 Continue to **MONITOR** communications over Director's Hotline, as applicable.

ATTACHMENT 1**SHIFT EMERGENCY DIRECTOR CHECKLIST**

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3. ONGOING ACTIONS

- 3.1 Continue to **REVIEW** EALs for changes in the event classification.
1. **RETURN** to Step 1.1 if an EAL is met for a higher event classification.
- 3.2 **MAINTAIN** a log, until the emergency is terminated, of significant events, decisions and emergency response actions.
- 3.3 **NOTIFY** the station NRC resident inspector in accordance with the current protocol.
- 3.4 If the emergency involves a hazardous substance and/or oil discharges, **then ENSURE** that appropriate notifications and responses have or are being made in accordance with the Reportability Manual in coordination with the Nuclear Duty Officer (NDO).

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NLO's assigned to the ERT will be retained in the Control Room until affected unit(s) are in a safe shutdown condition. **TRACK** Safe Shutdown / ERT personnel dispatched by the Control Room and **NOTIFY** the TSC and OSC, via the Damage Control Line Communicator, when ERT is dispatched or returns.

- 3.5 **RELOCATE** the Field/Floor Supervisor (SO) and NLO's to the OSC.
Directed at: _____
1. If Maintenance or RP / Chemistry support is required for activities to support the Control Room, **then REQUEST** via the TSC Operations Manager or Operations Communicator that an OSC team be dispatched.
 2. **DIRECT** NLO actions through the Field/Floor Supervisor, who will coordinate actions with the OSC Director and Group Leads.
- 3.6 **ASSIGN** Communicators, dispatched from the TSC, to the following Emergency Plan communications circuits:
- Operational Status Line (between the CR, TSC and EOF, and used to monitor changes plant/system/ equipment status, event priorities, and significant event activities).
 - Damage Control Line (between the CR, TSC and OSC, and used to request and monitor status of OSC team activities).

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SHIFT EMERGENCY DIRECTOR CHECKLIST

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- 3.7 **If** the TSC and EOF have been activated, **then ENSURE** that copies of the State/local and NRC notification forms created in the Control Room are faxed to the TSC and EOF.
- 3.8 **ASSIST** the TSC in determination of station priorities for repair and mitigation actions on-site.
- 3.9 **If** Severe Accident Management Guidelines (SAMG) are entered, **then ASSUME** the role of SAMG Implementor.
- 3.10 **PROVIDE** periodic (at least hourly) briefings and updates to Control Room staff to include the following:
 - Classification level and reason for classification
 - Jobs in progress and priority of work
 - Significant plant status
 - Summary of ongoing activities and an event prognosis

ATTACHMENT 2
ERO AUGMENTATION

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This Table outlines the steps necessary for the mobilization the Emergency Response Organization (ERO) under the Emergency Plan by the Control Room.

Section 1, Automated Call Out System (“COMMUNICATOR”) Activation

- | | |
|---|----------------------|
| ▪ Auto-Dialer Activation (Mid-Atlantic ROG) | REFER to Section 1.1 |
| ▪ Manual Activation of Primary System | REFER to Section 1.2 |
| ▪ Manual Activation of Backup System | REFER to Section 1.3 |
| • Scenario Cancellation | REFER to Section 1.4 |

Section 2, Alternate Pager Notification Method

1. AUTOMATED CALL OUT SYSTEM (“COMMUNICATOR”) ACTIVATION

NOTE: The automated system will initiate the call out of bargaining unit personnel required to meet Emergency Plan staffing requirements. Additional staffing of bargaining unit personnel shall be the responsibility of the individual Managers and Directors in the TSC/OSC following activation of those facilities.

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1.1 Auto-Dialer Activation

- 1.1.1 **LIFT** the designated EP Pager Call Phone receiver or **PRESS** the “Speaker” button.
- 1.1.2 **PRESS** the applicable “Scenario” button. The telephone will automatically dial system and enter scenario and ID codes.
- **UNUSUAL EVENT** – Management Notification Only
 - **ACTUAL EVENT** – Full Activation
 - **COMM Test**
- 1.1.3 After you hear the voice prompt: “**Good-bye**”, **HANG-UP** the receiver or **PRESS** the “Speaker” button.
- If you hear a voice prompt other than: “**Good-bye**”, then **HANG-UP** the receiver or **PRESS** the “Speaker” button. **WAIT** five (5) seconds, and **REPEAT** Steps 1.1.1 through 1.1.3.
- If the “**Good-bye**” prompt is **NOT** heard after the 2nd attempt, the system was **NOT** successfully activated, then **PROCEED** to Section 1.2 to attempt to manually initiate system via telephone.

ATTACHMENT 2
ERO AUGMENTATION

1.2 Manual Activation of Primary System

1.2.1 **DIAL** the designated toll free phone number listed below to access COMMUNICATOR System:

Limerick / Peach Bottom
REFER to the Confidential Pager Report
Mid-West ROG
DIAL 1-877-486-6612

– If the number is busy after a 2nd attempt, then **GO TO** Step 1.3.

The COMMUNICATOR System will answer, *"This is the remote activation module. Please enter your scenario activation password followed by the # sign."*

1.2.2 **ENTER** the activation password for the scenario, followed by the # key.

Mid-West ROG						
↓ Scenario / Activation Password →	BWD	BYR	CLN	DRE	LAS	QDC
Response Required ERO Activation for <u>Alert, Site Area, General Emergency, or credible security threat (HU1)</u> "Optional for all other Unusual Event"	101	201	301	401	501	601
Notification Only ("Unusual Event", except HU1)	111	211	311	411	511	611

Mid-Atlantic ROG		
↓ Scenario / Activation Password →	LGS	PBAPS
Response Required ERO Activation for <u>Alert, Site Area, General Emergency, or credible security threat (HU1)</u> "Optional for all other Unusual Event"	111	211
Management Notification Only: ("Unusual Event", except HU1)	122	222

The COMMUNICATOR System will then state, *"To start a scenario, enter the scenario ID followed by the # sign or press # alone for more options."*

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ERO AUGMENTATION

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1.2.3 **ENTER** the number previously entered in Step 1.2.2, followed by the # button.

The COMMUNICATOR System will then ask, "*If you want to Start a Scenario Activation Press 3.*"

1.2.4 **PRESS 3** to activate scenario.

The COMMUNICATOR System will then state, "*The scenario is building.*"

1.2.5 **PRESS #**, when prompted, to exit.

NOTE: If cancellation of the callout scenario is required once activated, then **GO TO** Step 1.4 (Scenario Cancellation).

1.2.6 **PROCEED** to Section 2 (Activation Using Pagers) if a call is not received in Control Room from the COMMUNICATOR System within approximately 10 minutes confirming scenario activation.

NOTE: A Response Status Report will be faxed every 15 minutes to the Control Room and upon completion / termination of scenario.

1.3 Manual Activation of Backup System

1.3.1 **DIAL** the designated toll free phone number (listed or referenced below) to access redundant activation facility.

Limerick / Peach Bottom

REFER to the Confidential Pager Report

Mid-West ROG

DIAL 1-800-308-8836

1.3.2 **ENTER** the Company ID No., when prompted, and **RETURN** to Step 1.2.2.

MWROG

The Company ID Number is **1741.**

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The Company ID Number is **17412.**

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ERO AUGMENTATION

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1.4 Scenario Cancellation

- 1.4.1 **DIAL** the designated toll free phone number listed below to access COMMUNICATOR System:

Limerick / Peach Bottom

REFER to the Confidential Pager Report

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DIAL 1-877-486-6612

- If the number is busy after a 2nd attempt, then **GO TO** Step 1.3.

The COMMUNICATOR System will answer, ***"This is the remote activation module. Please enter your scenario activation password followed by the # sign."***

- 1.4.2 **ENTER** the activation password for the scenario currently running, followed by the # button. REFER to table under Step 1.2.2 for a listing of scenario numbers.)

The COMMUNICATOR System will then state, ***"To start a scenario, enter the scenario ID followed by the # sign or press # alone for more options."***

- 1.4.3 **ENTER** the ID number for the scenario running, followed by the # button.
(NOTE: Same as activation password.)

The COMMUNICATOR System will state, ***"That scenario is currently active. Would you like to stop the scenario? Press 9 (y) for Yes, 6 (n) for No."***

- 1.4.4 **PRESS 9** for Yes.

The COMMUNICATOR System will then state, ***"The scenario will be stopped,"*** and return you to the Main Menu.

ATTACHMENT 2
ERO AUGMENTATION

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2. ALTERNATE PAGER NOTIFICATION METHOD

2.1 If notified that the automated call out system is not available or its operation is questionable, then **NOTIFY** emergency response personnel using pagers.

NOTE: An ERO pager displaying a designated code means to respond to the ERF immediately, if fit for duty, and not to call into COMMUNICATOR System.

2.2 **CALL** the appropriate pager numbers for the affected station, listed or referenced in Tables 2-1 and 2-2, and **ENTER** the respective code as the callback number, followed by the “#” sign:

Table 2-1 Limerick / Peach Bottom

• LIMERICK	REFER to the Confidential Pager Report	CODE: 6633
• PEACH BOTTOM	REFER to the Confidential Pager Report	CODE: 7733

Table 2-2 Mid-West ROG

• BRAIDWOOD	815-767-1160 815-767-0166 Onsite pagers: 6 (prompt) 99997827 (prompt) 9999 Corporate: 630-603-7007 Nuclear Duty Officer: 630-727-7399	CODE: 505505
• BYRON	815-395-2568 Corporate: 630-603-7007 Nuclear Duty Officer: 630-727-7399	CODE: 505505
• CLINTON	217-528-9014 (long tone) 928-4028 (3 beeps) Corporate: 630-603-7007 Nuclear Duty Officer: 630-727-7399	CODE: 505505
• DRESDEN	815-767-0991 Corporate: 630-603-7007 Nuclear Duty Officer: 630-727-7399	CODE: 505505
• LaSALLE	815-381-5137 Corporate: 630-603-7007 Nuclear Duty Officer: 630-727-7399	CODE: 505505
• QUAD CITIES	773-260-3056 Onsite pagers: 309-528-9248 PIN 5286209 Corporate: 630-603-7007 Nuclear Duty Officer: 630-727-7399	CODE: 505505

ATTACHMENT 3**SHIFT DOSE ASSESSOR (CR) CHECKLIST**

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Limerick / Peach Bottom

The Shift Dose Assessor position, and therefore this attachment, is applicable **ONLY** to Limerick and Peach Bottom Stations.

Section 1, Immediate Actions

Section 2, Subsequent Actions

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

1. IMMEDIATE ACTIONS

(Initials)

- 1.1 _____ When contacted by Control Room Shift Management, **REPORT** to the following location:
Limerick – OSC (RWP Office) or TSC
Peach Bottom – OSC (2nd floor Administrative Building)
- 1.2 _____ **ESTABLISH** communications with the Control Room at the affected station and **OBTAIN** a briefing using a Dose Assessment Turnover Form (EP-AA-112, Attachment 5) TIME _____
- 1.3 _____ **ACCESS** the Dose Assessment and Protective Action Recommendation (DAPAR) Model per EP-MA-110-200, Dose Assessment.
- 1.4 _____ **ACCESS** the Emergency Preparedness Data System (EPDS) to obtain current radiological effluent and meteorological data.
- 1.5 _____ **PROVIDE** DAPAR Input Sheet (EP-MA-110-100, Attachment 7) to the Shift Technical Advisor (STA) or Independent Assessor (IA) for system / event status information need for dose projection.
- 1.6 _____ **If** either of the below criteria is met, **then PERFORM** a dose projection using the DAPAR Model "Quick Assessment" Option:
- The potential for an offsite radiological release exists, or
 - An unexpected or unexplained increase in effluent vent/stack monitor readings.

ATTACHMENT 3**SHIFT DOSE ASSESSOR (CR) CHECKLIST**

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- 1.6.1 _____ **DETERMINE** appropriate dose-based PARs per EP-AA-111 if dose projections exceed 1 Rem TEDE and/or 5 Rem CDE_{thyroid} at or beyond the Site Boundary.
- 1.6.2 _____ **COMPARE** dose-based PAR against plant-based (default) PARs per Attachment 8 to EP-AA-111, and **DETERMINE** the appropriate PAR, if applicable.
- 1.6.3 _____ If dose-based PAR exceeds the plant-based (default) PAR, then **immediately CONTACT** the affected station Shift Manager and **RECOMMEND** the a revised PAR based on dose projection values.
- 1.7 _____ **EVALUATE** projected offsite doses against the Emergency Action Levels (EALs) under Recognition Category "R" (Abnormal Radiological Effluents / Levels)."
- NOTE:** EALs are contained in Section 3 of the respective Station Emergency Plan Annex.
- 1.7.1 _____ If the dose projection indicates that an Emergency Action Level (EAL) under Recognition Category "R" has been reached, then **CONTACT** the Shift Manager at the affected station and **RECOMMEND** escalation of the event classification, as appropriate.
- 1.8 _____ After each dose projection, **FAX** (or transmit) a copy of DAPAR Dose Assessment, PAR and STATE Reports to the affected station Control Room and the Pennsylvania Emergency Operations Center (EOC) – "Attention BRP".

2. SUBSEQUENT ACTIONS

- 2.1 **MONITOR** plant radiological conditions and possible release pathways.
1. **INFORM** the affected station's Shift Manager if any radiological effluent parameters increase significantly, and **RETURN** to Step 1.6.
- 2.2 If the affected station requests that a Field Monitoring Team be dispatched **AND** the TSC is not yet activated, then **PERFORM** the following:
1. **CONTACT** the RP Office at the affected station and **REQUEST** that available RP personnel report to the site boundary to monitor environmental conditions.
 2. **ESTABLISH** a method of communications with Field Monitoring Team.

ATTACHMENT 3

SHIFT DOSE ASSESSOR (CR) CHECKLIST

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- 2.3 When the Radiation Control Coordinator (RCC) arrives at the affected station's TSC, **PERFORM** the following:
1. **BRIEF** the RCC using the Dose Assessment Turnover Form
 2. **FAX** a copy of the completed Dose Assessment Turnover Form, and generated DAPAR dose assessment and PAR reports, to the affected station's TSC.
 3. **TURNOVER** dose assessment responsibilities to the TSC, when directed by the RCC, and **INFORM** the unaffected station Shift Management.

ATTACHMENT 4

OPERATIONS COMMUNICATOR (CR) CHECKLIST

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General Responsibilities include:

- **TRANSMIT** information between facilities from the Shift Manager or valid sources.
- **DOCUMENT** time, date and information being transmitted or received on.
- **RECORD** inquiries and **RELAY** responses to those inquiries.
- **ASSIST** the Shift Manager in maintaining proper records and logs of emergency related activities.
- **GATHER / RECORD** appropriate information and **POST** on facility status boards.

Section 1, Response Expectations

Section 2, Initial Actions

Section 3, 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. 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.
1. **If the TSC Director is not yet present in the TSC, then REPORT** to the Operations Manager for direction on facility assignment.

2. INITIAL ACTIONS

(Initials)

- 2.1 _____ Upon arrival in the Control Room, **REPORT** to the Shift Manager and **OBTAIN** an initial briefing on emergency conditions.
- 2.2 _____ **OBTAIN** a headset and **ESTABLISH** an open link with the TSC, and EOF once activated, using the Operations Status Line.
1. **If the TSC or EOF does not answer up to ringdown, then CONTACT** the TSC using a station extension and dialing the applicable telephone number from the ERF Telephone Directory.

ATTACHMENT 4**OPERATIONS COMMUNICATOR (CR) CHECKLIST**

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- 2.3 _____ **INITIATE** and **MAINTAIN** a position log documenting significant actions performed and communications related to your position.
3. **ON-GOING ACTIONS**
- 3.1 **MAINTAIN** communications between the Control Room, TSC and the EOF on the Operational Status Line.
- 3.2 **UPDATE** the TSC and EOF on significant changes to:
- Plant system and equipment status
 - In-plant conditions (system status and/or radiological)
 - (If the Control is still in Command and Control) Changes to event classification, release status, and protective action recommendations (PARs).
- 3.3 **APPRISE** the Shift Manager of changes to event status provided by the TSC and/or EOF, including changes in:
- Event classification
 - Transfer of Command and Control responsibilities to the EOF
 - Station priorities
 - Release status and PARs
 - Initiation / completion of station assembly / accountability and evacuation
 - Offsite support requested
 - Status of injured personnel
- 3.4 **ASSIST** the TSC and EOF with the following:
1. **CLARIFYING** plant data or **OBTAINING** significant parameters not available over PPDS / EPDS
 2. **VERIFYING** system / equipment line-ups
 3. **TRENDING** significant data points, as identified
- 3.5 **ASSIST** in maintaining electronic logs and status boards, as directed.
- 3.6 **PERFORM** a shift turnover with on-coming personnel using the guidance in EP-AA-112, Attachment 2 (Shift Turnover).

ATTACHMENT 5**DAMAGE CONTROL COMMUNICATOR (CR) CHECKLIST**

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General Responsibilities include:

- **TRANSMIT** information between facilities as directed by the Shift Manager.
- **DOCUMENT** time, date and information being transmitted or received on appropriate forms.
- **RECORD** inquiries and **RELAY** responses to those inquiries.
- **ASSIST** the Shift 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 Activities

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.
 - 1. If the TSC Director is not yet present in the TSC, **then REPORT** to the Maintenance Manager for direction on facility assignment.

2. INITIAL ACTIONS

(Initials)

- 2.1 _____ Upon arrival in the Control Room, **REPORT** to the Shift Manager and **OBTAIN** an initial briefing on emergency conditions.

ATTACHMENT 5**DAMAGE CONTROL COMMUNICATOR (CR) CHECKLIST**

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- 2.2 _____ **OBTAIN** a headset and **ESTABLISH** an open communications link with the TSC, and OSC, using the Damage Control Line.
1. If the TSC or OSC does not answer, then **CONTACT** as required using a station extension and dialing the applicable telephone number as listing in the ERF Telephone Directory.
- 2.3 _____ **INITIATE** and **MAINTAIN** a position log documenting significant actions performed and communications related to your position.

3. ON-GOING ACTIONS

- 3.1 **MAINTAIN** communications between the Control Room, OSC and the TSC on the Damage Control Line.
- 3.2 **COMMUNICATE** the following information to the TSC and OSC as changes occur:
- Significant changes in radiological conditions.
 - Dispatch and return of personnel dispatched from the Control Room.

NOTE: Requests by the Control Room for the dispatching of an OSC Team (other than NLO's) should be communicated by the Shift Manager directly to the TSC Operations Manager or via the Operations Communicator.

Limerick / Peach Bottom

Requests for the dispatching of NLO's 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.

- 3.3 **UPDATE** the Shift Manager on changes to the following, as updates become available:
- Status of key OSC Teams, including delays in dispatching teams
 - Return, recall or cancellation an OSC Team
- 3.4 **ASSIST** in maintaining logs and status boards, as directed.
- 3.5 **PERFORM** a shift turnover with on-coming personnel using the guidance in EP-AA-112, Attachment 2 (Shift Turnover).

ATTACHMENT 6**SHIFT COMMUNICATOR (CR) CHECKLIST**

Page 1 of 2

Limerick / Peach Bottom

The Shift Communicator position, and therefore this attachment, is applicable **ONLY** to Limerick and Peach Bottom Stations.

Section 1, Response Expectations

Section 2, Initial Actions

Section 3, 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. RESPONSE EXPECTATIONS

- 1.1 When notified via Station PA announcement or shift Control Room management of the classification or likely entry into an event, **REPORT** immediately to the affected Control Room.
- 1.2 **INFORM** the Shift Manager of your arrival.

2. INITIAL ACTIONS

(Initials)

- 2.1 _____ **INITIATE** and **MAINTAIN** a position log documenting significant actions performed and communications related to your position.
- 2.2 _____ **REVIEW** actions and guidelines outlined in EP-MA-114-100 for the completion and transmittal of a PA/MD Notification Form.
- 2.3 _____ **ASSIST** the Shift Manager, as directed, in the completion of the PA/MD Notification Form.

NOTE: The Shift Communicator is responsible for reviewing form, prior to transmittal, to ensure that all blocks are completed and the form approved by the Station Emergency Director.

ATTACHMENT 6**SHIFT COMMUNICATOR (CR) CHECKLIST**

Page 2 of 2

2. ON-GOING ACTIONS

- 2.1 **PERFORM** State/Local notifications in accordance with EP-MA-114-100, MAROG Offsite Notifications.
1. **DOCUMENT** any inquiries or requests for further information on an Information Request / Message Form (EP-AA-112, Attachment 7), or equivalent, and **FORWARD** to the Shift Manager for resolution.
- 2.2 **If** instructed by the Shift Manager, then **INITIATE** an ERO augmentation (call out) using the guidance listed in EP-AA-112-100, Attachment 2.
- 2.3 **ASSIST** Control Room staff in completing notification to the NRC and in maintaining an open Emergency Notification System (ENS) line, when requested by the NRC.
- 2.4 **When** directed by the Shift Manager, **CONTACT** the TSC State/Local Communicator, using the ERF Telephone Directory, to transfer notifications of the offsite State/Local authorities. TIME: _____
- 2.5 **ASSIST** the Shift Manager in faxing copies of completed State/Local and NRC notification forms to the TSC and EOF upon completion.
- 2.6 **ASSIST** the Control Room in other communications or clerical support functions as directed by the Shift Manager.

TSC ACTIVATION AND OPERATION

1. PURPOSE

- 1.1 This procedure describes the Technical Support Center (TSC) activities associated with an emergency. When the Shift Manager decides that a situation warrants activation of the TSC, this procedure becomes applicable.

2. TERMS AND DEFINITIONS

Mid-West ROG

- 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

None

4. MAIN BODY

- 4.1 **INITIATE** the appropriate Emergency Plan activities using the TSC position specific checklists in the following procedures:

EP-AA-112-201, "TSC Command and Control"

- Attachment 1, Station Emergency Director

EP-AA-112-202, "TSC Facility Support Group"

- Attachment 1, TSC Director
- Attachment 2, Logistics Coordinator
- Attachment 3, Security Coordinator
- Attachment 4, State/Local Communicator

EP-AA-112-203, "TSC Operations Group"

- Attachment 1, Operations Manager
- Attachment 2, ENS Communicator
- Attachment 3, Operations Communicator

EP-AA-112-204, "TSC Technical Support Group"

- Attachment 1, Technical Manager
- Attachment 2, Technical Communicator
- Attachment 3, Core / Hydraulic Engineer
- Attachment 4, Emergency Special Procedure

EP-AA-112-205, "TSC Maintenance Group"

- Attachment 1, Maintenance Manager
- Attachment 2, Damage Control Communicator

EP-AA-112-206, "TSC Radiation Protection / Chemistry Group"

- Attachment 1, Radiation Protection Manager
- Attachment 2, Radiation Controls Coordinator
- Attachment 3, Radiation Controls Engineer
- Attachment 4, HPN Communicator

5. DOCUMENTATION

None

6. REFERENCES

None

7. ATTACHMENTS

- 7.1 Attachment 1, OSC Emergency Team Dispatch Guidance
- 7.2 Attachment 2, OSC Team Request Form
- 7.3 Attachment 3, TSC Evacuation Guidelines

ATTACHMENT 1
Team Dispatch Guidance
Page 1 of 2

The normal process for the request and dispatch of OSC Teams should follow these guidelines. Pre-defined Teams will **not** be processed through the request system.

Pre-defined Teams include:

- Field Monitoring Teams (4 members) shall be dispatched by the RP Group Lead to the TSC or to designated locations. A briefing will be given at the TSC or via radio / telephone prior to dispatch. The EOF will take control of these teams once dispatched from the station.
- Habitability Survey Team (Radiation Protection Technicians, RPTs) shall be dispatched and controlled by the RP Group Lead.

Mid-West ROG

- The Control Room ERT is under the direction and control of the Shift Manager until turned over to the OSC Director.

Limerick / Peach Bottom

- [Limerick only] RPT to the Aux. Equipment Room, ARM Panel.
- Chemistry technician(s) for set-up of the Chemistry Lab(s) as part of OSC activation.

NOTE: The Shift Manager will track teams dispatched by the Control Room prior to OSC activation until they are released to the OSC.

Briefing Levels / Task Priority:

1. **URGENT (Minimum Briefing)** -- Tasks which involve life-saving, fire or must be accomplished to mitigate a release to the public or to mitigate core damage.

Tasks require briefing commensurate with the physical or radiological hazards associated with completion of the task. Team documentation may be completed while the task is in progress or has been accomplished.

Emergency Exposure Limits may apply and must be evaluated.

Team dispatch from the OSC must be accomplished as quickly as possible commensurate with ensuring the safety of the team members.

ATTACHMENT 1
Team Dispatch Guidance
Page 2 of 2

2. FULL BRIEFING:

Tasks requiring a full briefing conducted 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.

Team dispatch from the OSC must be accomplished as quickly as possible commensurate with station priorities.

Mid-West ROG

Tasks requiring **FULL** Briefings may be further categorized as:

- **HIGH:** The task must be accomplished for the restoration of safety functions or a fission product barrier in support of accident mitigation.
- **MEDIUM:** The task must be accomplished to support accident mitigation.
- **LOW:** The task supports the functions of the ERO.

Forming Emergency Teams Following a Request from the TSC

1. To request an OSC Team, **COMPLETE** EP-AA-112-200, Attachment 2, "OSC Team Request Form", and deliver it to the Maintenance Manager.
 - A. The Maintenance Manager shall consult other TSC Managers for precautions or required interfaces necessary for the performance of the task.
 - B. The Maintenance Manager, in coordination with the Operations Manager, shall assign the appropriate briefing level (task priority) to the request and forward it to the TSC Damage Control Communicator.
2. The OSC shall assign the task a unique sequential number.
3. The OSC shall assemble the requested team, which should be comprised of appropriate disciplines to accomplish the requested task
 - Always evaluate the need to send RP support with any Emergency Team.
 - An OSC Group Leader shall be responsible for providing the OSC Team a briefing based on the urgency of the task.
 - EP-AA-112-300, Attachment 6, "OSC Team Briefing Form", shall be completed for each team.

**ATTACHMENT 2
OSC Team Request Form**

Page 1 of 1

COMPLETED BY THE REQUESTOR	
TO: MAINTENANCE MANAGER	
Requested by: _____ at _____ (time) / _____ (date)	
Task:	
Recommended Group Lead: <input type="checkbox"/> Ops <input type="checkbox"/> Mech <input type="checkbox"/> I&C <input type="checkbox"/> Elect <input type="checkbox"/> RP <input type="checkbox"/> Chem	
COMPLETED BY MAINTENANCE MANAGER	
<ul style="list-style-type: none"> ▪ Assign the Briefing Level (Task Priority) based on the following definitions. <input type="checkbox"/> URGENT: (Minimum Briefing) 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. 	
<div style="border: 1px solid black; padding: 2px; display: inline-block; margin-bottom: 5px;">Mid-West ROG</div> <ul style="list-style-type: none"> <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. 	
COMPLETED BY TSC (CR) COMMUNICATOR	
Team Request transmitted to the OSC @ _____ (time)	
<ul style="list-style-type: none"> ▪ <input type="checkbox"/> TSC - Maintenance Manager / CR -Shift Manager Informed 	
Team # _____ Dispatched @ _____ (time)	
<ul style="list-style-type: none"> ▪ <input type="checkbox"/> TSC - Maintenance Manager / CR - Shift Manager Informed ▪ <input type="checkbox"/> Update TSC Status Board (N/A for Control Room) 	

**ATTACHMENT 3
TSC Evacuation Guidelines**

Page 1 of 1

If the Station Emergency Director orders evacuation of the TSC, then **PERFORM** the following actions:

- A. The *Station Emergency Director* shall:
1. **ESTABLISH** an area for the relocation of TSC Engineering Staff, based on radiological concerns and potential security-related threats or on-going events.
 2. **PROVIDE** a briefing on the location of the area to be re-located to and special precautions to be taken during the evacuation.
 - a. **EVACUATE** key TSC staff to the following locations, or other location(s) based on event conditions:
 - Station Emergency Director → Control Room
 - Operations Manager → Control Room
 - Radiation Protection Manager → Control Room
 - Maintenance Manager → Control Room
 - IDNS Representative (MWROG only) → Control Room
 - Radiation Controls Coordinator → OSC (or alternate OSC)
 - Security Coordinator → Central Alarm Station
 - TSC Engineering Staff → determined location (Step A.1).
 - NOTE:** This includes the Technical Manager, Technical Communicator, and required engineering disciplines based on event conditions.
 - b. **RELEASE** other TSC staff members (i.e., Operations, Damage Control, ENS, HPN & State/Local Communicators, Administrative Coordinator, etc.) to the OSC, designated site assembly areas, or offsite relocation centers/areas.
- B. The *Radiation Protection Manager* shall brief TSC staff on radiological concerns and issue additional dosimetry, as required.
- C. *TSC Staff members* shall:
1. **COLLECT** procedures, checklists and position logs from your work area.
 2. **OBTAIN** secondary dosimetry from the RP Manager, if required.
 3. **CONTACT** your counterpart in the EOF to turnover on-going responsibilities.
 4. **PROCEED** to the re-location center for the TSC.
 - **RECORD** your dosimetry reading upon arrival.
 5. **CONTACT** your counterpart and re-establish communications with the Station Emergency Director using available equipment, as applicable.

TSC COMMAND AND CONTROL

1. PURPOSE

- 1.1 This procedure describes the responsibilities and actions of the Station Emergency Director, located in the Technical Support Center (TSC). When the Shift Manager decides that a situation warrants activation of the TSC under the Emergency Plan, this procedure becomes applicable.

2. TERMS AND DEFINITIONS

Mid-West ROG

- 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.

2.2 "Timeliness": (NRC Performance Indicator R.EP.01)

- For event classification purposes, this is defined as the decision made to classify event within 15 minutes of the report or availability of supporting indications to the Control Room and ERO.
- 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 time.

3. RESPONSIBILITIES

- 3.1 The Station Emergency Director supervises and directs the station emergency response organization. The Station Emergency Director's responsibilities include organizing and coordinating onsite emergency efforts. Additionally, the Station Emergency Director has requisite authority, plant operating experience and qualifications to implement in-plant recovery operations.
- 3.2 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.

4. MAIN BODY**CONTROL ROOM / TSC COMMUNICATIONS**

Following the transfer of Command and Control (C&C), the Shift Manager will report to the Operations Manager in the Technical Support Center (TSC). Therefore, communications with the TSC should be primarily through the Operations Manager, except for significant changes in event / plant status.

The use of the Operations and Damage Control Communicators should be maximized to reduce the communications burden on the Shift Manager and TSC Operations Manager.

- 4.1 **ASSUME** the position of Station Emergency Director upon arrival in the TSC.
- 4.2 **INITIATE** the appropriate Emergency Plan activities using the position specific checklist contained in Attachment 1.

5. DOCUMENTATION

None

6. REFERENCES

None

7. ATTACHMENTS

- 7.1 Attachment 1, Station Emergency Director Checklist

ATTACHMENT 1
STATION EMERGENCY DIRECTOR CHECKLIST
Page 1 of 8

Section 1, Initial Actions

Section 2, Transfer of Command and Control to the EOF

Section 3, Ongoing Actions

Section 4, Situational Actions

4.1, TSC Evacuation

4.2, OSC Evacuation

4.3, Severe Accident Management Guidelines

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 TSC Organization Board.

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

1.3 _____ **DISCUSS** the status of the event with the Operations Manager and **DETERMINE:**

NOTE: The Operations Manager may use Page 2 of 2 of the Command and Control Turnover Briefing Sheet (EP-AA-112, Attachment 1) to obtain initial briefing from Shift Manager on plant conditions and system status.

- Plant status & actions in progress
- Classification (applicable EALs)
- Notifications (State/Local, ENS, outside agency support)
- Plant conditions and system status
- On-going in-plant activities

1.4 _____ **DIRECT** the TSC personnel to initiate their checklists and **OBTAIN** initial data from plant personnel and computer resources.

**ATTACHMENT 1
STATION EMERGENCY DIRECTOR CHECKLIST
Page 2 of 8**

1.5 **DETERMINE** adequacy of TSC staffing:

1.5.1 _____ **INSTRUCT** the TSC Director, or Logistics Coordinator, to coordinate with available staff to fill the following minimum staffing positions within 60 minutes of event classification:

- TSC Director
- Operations Manager
- Technical Manager
- Maintenance Manager
- Radiation Protection Manager
- ENS Communicator
- Core / Hydraulic Engineer
- Mechanical Engineer
- Electrical Engineer
- SAMG Evaluator (MWROG)

Mid-Atlantic ROG

SAMG Evaluator –The Operations Manager and Technical Manager positions are trained as SAMG Evaluators with the Station ED serving as the SAMG Decision-Maker.

1.5.2 _____ **APPROVE** and **DOCUMENT** the assignment of qualified staff members to function on an interim basis to support TSC activation.

1.5.3 If the TSC Director is NOT yet present, then **INSTRUCT** available staff to perform the following:

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

1. Within 15 minutes of achieving minimum staffing, **DECLARE** the TSC formally activated after performing or verifying the following:

- A. Personnel have been briefed on the event and priorities
- B. Facility is functionally capable of performing designated functions:

Event classified at (TIME): _____

Minimum Staffing achieved at (TIME): _____

TSC declared activated at (TIME): _____

2. _____ **ANNOUNCE** TSC activation over the TSC PA System.

3. _____ **NOTIFY** the Shift Emergency Director and the Corporate Emergency Director.

ATTACHMENT 1
STATION EMERGENCY DIRECTOR CHECKLIST
Page 3 of 8

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

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

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

2. **TRANSFER OF COMMAND AND CONTROL TO THE EOF**

2.1 — **ENSURE** that all TSC personnel have contacted their EOF counterparts.

NON-DELEGATE RESPONSIBILITIES

The Station Emergency Director will retain responsibility for event classification or the approval of emergency exposure controls (i.e., KI or exposure extensions).

2.2 — **COMPLETE** a Command and Control Turnover Briefing Form (EP-AA-112, Attachment 1), during a discussion with the Corporate Emergency Director in the EOF.

3. **ON-GOING ACTIONS**

3.1 **REVIEW** and **UPDATE** station priorities based on significant changes to event conditions and plant systems and equipment.

1. **ENSURE** that Priorities are accurately displayed on a Station Priorities Board and are consistent with OSC activities.
2. **BRIEF** the Corporate Emergency Director on significant changes to station priorities

**ATTACHMENT 1
STATION EMERGENCY DIRECTOR CHECKLIST
Page 4 of 8**

3. **DIRECT** the Operations Manager to track potential event escalation paths and long-term recovery issues using facility status boards.

3.2 **CONDUCT** facility briefings at least hourly, or every 30 minutes during rapidly changing events, and **SOLICIT** input from TSC Managers on significant activities.

NOTE: The Corporate Emergency Director (EOF) should monitor TSC briefings over the Directors Hotline.

These briefings should include, as a minimum, updates on the following:

- Current Classification and potential escalation paths
- Current plant status, including event prognosis
- Station priorities
- Radiological release status and PARs issued, if applicable

3.3 **DETERMINE** if the OSC needs to remain activated at an Unusual Event or Alert classification. [] YES [] NO TIME: _____

3.4 Classification - Continue to **REVIEW** EALs for changes in the event classification.

If a change in classification is required, then PERFORM the following:

	<u>GE</u>	<u>SAE</u>	<u>AL</u>	<u>UE</u> (Initials)	
3.4.1	_____	_____	_____	NA	ANNOUNCE any change in Classification level and reason for reclassification to the TSC and OSC staff.
3.4.2	_____	_____	_____	NA	Immediately NOTIFY the Corporate Emergency Director and ASSIST , as requested, in completing the State/Local and ENS notification forms.
3.4.3	_____	_____	_____	NA	PERFORM event escalation announcement over the Plant PA using pre-scripted messages in EP-AA-112, Attachment 6, or DIRECT the Shift Manager to make announcement.
3.4.4	_____	_____	_____	NA	RECORD time and reasoning for classification in your position log and UPDATE status boards.

**ATTACHMENT 1
STATION EMERGENCY DIRECTOR CHECKLIST
Page 5 of 8**

If the EOF has **not** yet assumed responsibility for PAR decision-making and offsite notifications, then **PERFORM** Steps 3.4.5 through 3.4.7:

- | | <u>GE</u> | <u>SAE</u> | <u>AL</u> | <u>UE</u> (Initials) | |
|-------|--|------------|-----------|----------------------|--|
| 3.4.5 | ___ | NA | NA | NA | DETERMINE the correct PAR per EP-AA-111, Attachments 2 thru 8. |
| 3.4.6 | ___ | ___ | ___ | NA | APPROVE State/Local notification form and INITIATE notification within 15 minutes of the classification change per: <ul style="list-style-type: none"> - EP-MW-114-100, MWROG Notifications - EP-MA-114-100, MAROG Notifications |
| 3.4.7 | ___ | ___ | ___ | NA | APPROVE Event Notification Worksheet (ENW) and INITIATE required NRC notification immediately following notification of the appropriate State and local agencies but not later than (1) hour after the time of classification per EP-AA-114. |
| 3.5 | If the emergency involves a hazardous substance and/or oil discharges, then ENSURE that appropriate notifications and responses have or are being made in accordance with the Reportability Manual. | | | | |

CAUTION

Special consideration should be given to performing (or not performing) these functions when in a Security Event or other hazardous condition (i.e. hazardous condition caused by a nearby industrial facility or weather factors).

- 3.6 Upon declaration of a Site Area Emergency or higher classification, **IMPLEMENT** Accountability per EP-MW(MA)-113-100. TIME: _____
- 3.6.1 **DETERMINE** from the Security Coordinator the number of unaccounted for persons within the Protected Area within 30 minutes of initiating accountability, and **INITIATE** search and rescue efforts, as appropriate
- No. **NOT** accounted for: _____ TIME: _____
- 3.6.2 **If NOT** performed as part of accountability, then **IMPLEMENT** an Evacuation of Non-Essential personnel from Site Assembly Areas per EP-MW(MA)-113-100, immediately once accountability is completed.
- TIME: _____

ATTACHMENT 1
STATION EMERGENCY DIRECTOR CHECKLIST
Page 6 of 8

- 3.7 **KI - APPROVE** and **DOCUMENT** the use of thyroid blocking agents when requested per EP-AA-113, Attachments 6.
- 3.8 **Emergency Exposure - APPROVE** emergency exposures greater than 5 Rem TEDE (EPA-400 lower limits) per EP-AA-113, Attachments 3.
- 3.9 **REVIEW** requests from Managers to procure equipment, supplies, and personnel and **APPROVE** expenditures, if appropriate.

NOTE: Additional material, personnel resources or equipment needed to implement response plans or actions may be requested from the Corporate Emergency Response Organization.

1. **DIRECT** the Logistics Coordinator to obtain any additional personnel that are needed.
 2. **DIRECT** the Maintenance Manager to obtain necessary equipment and supplies or coordinate obtaining them through the EOF Director.
 3. **DIRECT** the Radiation Protection Manager to obtain any needed additional dosimetry, instruments, or respiratory equipment as necessary based on the ongoing event.
- 3.10 If recovery of a system is immediately needed to protect the health and safety of the public, and no action consistent with licensee conditions and technical specifications that can provide adequate or equivalent protection is immediately apparent, then **INVOKE** 10 CFR 50.54(x).
- 3.10.1 **IMPLEMENT** plans, procedures and schedules to meet emergency response objectives as directed by the Corporate Emergency Director.
- 3.11 **KEEP** the Corporate Emergency Director apprised of significant changes in plant / event status, station priorities, and repair and assessment activities.
- 3.12 **PERFORM** a shift turnover with the on-coming shift of emergency response personnel using the guidance in EP-AA-112, Attachment 2 (Shift Turnover).

**ATTACHMENT 1
STATION EMERGENCY DIRECTOR CHECKLIST
Page 7 of 8**

4. SITUATIONAL ACTIONS

4.1 TSC EVACUATION

4.1.1 If notified of habitability problems in the TSC, then **CONSIDER** the following options to reduce potential exposure to the emergency response personnel.

1. **ENSURE** the TSC Ventilation system is operating in the emergency mode.
2. **DIRECT** the Radiation Protection Manager to evaluate increasing exposure limits for TSC personnel (not to exceed 5 Rem).
3. **APPROVE** the issuance of thyroid blocking agents for TSC personnel per EP-AA-113, Attachment 6, if recommended by the Radiation Protection Manager.

4.1.2 If Evacuation of the TSC is necessary, then **PERFORM** the action outlined in EP-AA-112-200, Attachment 3, TSC Evacuation Guidelines.

– If relocation to an onsite location is not practical, then **CONSIDER** utilizing the TSC of another Exelon station or moving to the EOF.

1. **INFORM** the Shift and Corporate Emergency Directors of the new location and communications channels. TIME: _____
2. **TRANSFER** Command and Control to the EOF or Control Room if applicable and time permits. TIME: _____
3. **INSTRUCT** the TSC Director to coordinate evacuation of the TSC. TIME: _____

ATTACHMENT 1
STATION EMERGENCY DIRECTOR CHECKLIST
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4.2 OSC EVACUATION

4.2.1 If notified of habitability problems in the OSC, then **CONSIDER** the following options to reduce potential exposure to the emergency response personnel:

1. **DIRECT** the Radiation Protection Manager to evaluate increasing exposure limits for OSC personnel (not to exceed 5 Rem).
2. **APPROVE** the issuance of thyroid blocking agents for OSC personnel per EP-AA-113, Attachment 6, if recommended by the Radiation Protection Manager.
3. **CONSIDER** evacuation of the OSC.

4.2.2 If OSC evacuation is necessary, then **INSTRUCT** the OSC Director to initiate the "Evacuation" section of the OSC Director Checklist. TIME: _____

4.2.3 **INFORM** the Shift Emergency Director and Corporate Emergency Director of the OSC evacuation and new location. TIME: _____

4.3 SEVERE ACCIDENT MANAGEMENT GUIDELINES

NOTE: The SAMG Evaluation Team consists of a SAMG Decision-Maker and at least two SAMG Evaluators located in the TSC. The Technical Manager will initially serve as one member, and the Team Lead. The 2nd team members will consist of the Operations Manager (MAROG) or a designated SAMG Evaluator (MWROG).

Mid-West ROG

Role of SAMG Decision-Maker may be delegated to the Operations Manager if qualified and NOT required to fill one of the 2 required SAMG Evaluator roles.

4.3.1 **ASSUME** the role of Severe Accident Management Decision-Maker.

4.3.2 **DIRECT** the Technical Manager to initiate the SAMG Checklist / Flowcharts using available SAMG Evaluators.

4.3.3 **ANALYZE** the actions directed by SAMGs for offsite impacts, and **PROVIDE** appropriate inputs to decision-making process.

4.3.4 **ADVISE** the Shift Emergency Director (Shift Manager) and Corporate Emergency Director of SAMG strategies to be implemented based on the recommendation of the SAMG Evaluation Team

TSC FACILITY SUPPORT GROUP

1. **PURPOSE**

- 1.1 This procedure describes the responsibilities and actions of the TSC Facility Support Group, which consists of the following positions reporting to the TSC Director:
- Logistics Coordinator
 - Security Coordinator
 - State/Local Communicator
- 1.2 The TSC Security Coordinator will report directly to the Station Emergency Director on security-related and accountability / site evacuation actions.
- 1.3 When the Shift Manager decides that a situation warrants activation of the TSC under the Emergency Plan, this procedure becomes applicable.

2. **TERMS AND DEFINITIONS**

Mid-West ROG

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.

2.2 "Timeliness": (NRC Performance Indicator R.EP.01)

- For event classification purposes, this is defined as the decision made to classify event within 15 minutes of the report or availability of supporting indications to the Control Room and ERO.
- 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 time.

3. **RESPONSIBILITIES**

- 3.1 The *TSC Director* is responsible for the content of information transmitted from the TSC to other facilities or agencies and for supporting overall TSC activities. TSC Director shall supervise the activities of the Logistics Coordinator and State/Local Communicator, and coordinate TSC activities in support of the Security Coordinator. The TSC Director will also assist in the performance of the Station Emergency Director's responsibilities, as directed.
- 3.2 The *Logistics Coordinator* provides administrative services in support of emergency / recovery operations.
- 3.3 The *Security Coordinator* maintains plant security and personnel accountability at the nuclear station.
- 3.4 The *State/Local Communicator* is responsible for communication of information from an approved notification form via the Nuclear Accident Reporting System (NARS) phone or commercial telephone line to appropriate agencies.

4. **MAIN BODY**

- 4.1 **INITIATE** the appropriate Emergency Plan activities using the position specific checklist listed in Attachments 1 thru 4.

5. **DOCUMENTATION**

None

6. **REFERENCES**

None

7. **ATTACHMENTS**

- 7.1 Attachment 1, TSC Director Checklist
- 7.2 Attachment 2, Logistics Coordinator Checklist
- 7.3 Attachment 3, Security Coordinator Checklist
- 7.4 Attachment 4, State/Local Communicator Checklist

**ATTACHMENT 1
TSC DIRECTOR CHECKLIST
Page 1 of 13**

Section 1, Initial Actions

Section 2, Ongoing Actions

Section 3, Situational Actions

3.1, TSC Ventilation

3.2, TSC Evacuation

3.3, NRC Site Team Interface

3.4, Siren Polling (Limerick Station)

Table 1-1, TSC Ventilation Checklist for Limerick Generating Station

Table 1-2, TSC Ventilation Checklist for Peach Bottom Station

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 TSC Organization Board, and **INFORM** the Station Emergency Director of your arrival.

Quad Cities / Byron / Braidwood / Dresden

1.1.1 _____ **ENSURE** appropriate Network Broadcast Message has been initiated for TSC/OSC staffing.

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

1.3 _____ **VERIFY** with the ENS Communicator that the NRC Emergency Response Data System (ERDS) has been activated per EP-MW(MA)-110-100 for the affected unit(s) if the event has been classified as an Alert or higher. TIME: _____

1.3.1 _____ If required AND ERDS has not yet been activated, **then INITIATE** or **DIRECT** the ENS Communicator to initiate link. TIME: _____

1.4 _____ **ENSURE** State / local and NRC notifications per EP-AA-114, Notifications, have been completed or are in progress by the Control Room.

COMPLETED AT: _____ (State / Local)

COMPLETED AT: _____ (NRC)

**ATTACHMENT 1
TSC DIRECTOR CHECKLIST
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1.4.1 _____ **REQUEST** copies of the State / local forms and NRC Event Worksheets previously transmitted by the Control Room through the Operations Manager.

1. **REVIEW** previously completed forms for accuracy and **INFORM** the Station Emergency Director of any problems noted.

MWROG

1.5 _____	DIRECT the Logistics Coordinator or designated staff member to INITIATE and MAINTAIN the electronic events and priorities log in accordance with EP-MW-110-100.
-----------	--

1.6 _____ **ACTIVATE** projection screen displays per the guidance contained in EP-MW(MA)-110-100.

1.7 _____ **ASSIGN** Communicator as they arrive in the TSC based on the priority identified in the Table below.

LOCATION	POSITION (ASSIGNED TO)	NAME:
Control Room	#1 Damage Control Communicator (Shift Mgr)	
	#2 Operations Communicator (Shift Manager)	
OSC	#3 Damage Control Communicator (OSC Director)	
TSC	#4 Operations Communicator (Operations Mgr)	
	#5 Damage Control Communicator (Maint. Mgr)	

1.8 _____ **ENSURE** that the current classification level and the facility currently in Command and Control are identified in the TSC.

NOTE: Notification to State/Local agencies must be initiated within 15 minutes of declaring or changing an emergency classification per EP-AA-114. NRC notification is to immediately follow State/local notification and not to exceed one (1) hour.

1.9 _____ **When** Command and Control is transferred to the TSC, **then ASSUME** responsibility for required State/local notifications per EP-AA-114-100.
TIME: _____

1. If the State/Local Communicator is not yet present in the TSC, **then PERFORM** the duties by performing required offsite notifications.

**ATTACHMENT 1
TSC DIRECTOR CHECKLIST
Page 3 of 13**

2. **ASSIST** the Operations Manager, as needed, in coordinating the actions of the ENS Communicator to ensure the timely completion of NRC notifications.

1.10 **ASSIST** the Station Emergency Director in staffing for the TSC.

TSC "MINIMUM STAFFING" REQUIREMENTS

Per Table B-1 of the Emergency Plan, the designated "minimum staffing" positions are required to be present in the TSC within 60 minutes from event classification. TSC activation is then required within 15 minutes of achieving "minimum staffing."

1.10.1 **VERIFY** the arrival of key TSC "minimum staffing" positions, and **DOCUMENT** arrival time:

- Station ED _____ TIME: _____
- TSC Director _____ TIME: _____
- Operations Manager _____ TIME: _____
- Technical Manager _____ TIME: _____
- Maintenance Manager _____ TIME: _____
- Rad. Protection Manager _____ TIME: _____
- ENS Communicator _____ TIME: _____
- Core / Hydraulic Engineer _____ TIME: _____
- Mechanical Engineer _____ TIME: _____
- Electrical Engineer _____ TIME: _____
- SAMG Evaluator (MWROG) _____ TIME: _____

Limerick / Peach Bottom

SAMG Evaluator –The Operations Manager and Technical Manager positions are trained as SAMG Evaluators with the Station ED serving as the SAMG Decision-Maker.

VERIFY that these positions are currently SAMG qualified and initiate call outs as required.

1.10.2 **DIRECT** the Logistics Coordinator to perform call-outs for any positions not currently staffed.

**ATTACHMENT 1
TSC DIRECTOR CHECKLIST
Page 4 of 13**

1.10.3 _____ **FILL** open staff positions with available personnel with appropriate background and experience, within 60 minutes of event classification.

1. **ENSURE** the Station Emergency Director approves the substitutions and document the use of substitutions in the Event Log.

1.10.4 _____ **INFORM** the Station Emergency Director when Minimum Staffing has been met. **TIME:** _____

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

1.11 Within 15 minutes of achieving minimum staffing, DECLARE the TSC formally 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): _____

TSC declared activated at (TIME): _____

1.11.1 _____ **ANNOUNCE** TSC activation over the TSC PA System.

1.11.2 _____ **REQUEST** that the Station Emergency Director **NOTIFY** the Shift Emergency Director and the Corporate Emergency Director.

Limerick only

1.12 _____ **VERIFY** with the Maintenance Manager that the TSC Ventilation has been shifted to its "emergency" mode per Table 1-1 by an I&C technician dispatched from the OSC.

Peach Bottom

1.13 _____ **UNLOCK** HP Survey Equipment Cabinet (1st Floor Lobby, Unit 1).

**ATTACHMENT 1
TSC DIRECTOR CHECKLIST
Page 5 of 13**

2. ONGOING ACTIONS

2.1 **ASSIST** in completing the tasks listed in the Station Emergency Director's Checklist (EP-AA-112-201, Attachment 1), as directed.

PERFORM Step 2.2 only prior to the transfer of Command and Control to the EOF.

2.2 **If the event classification level changes, then PERFORM** the following:

GE SAE AL UE (Initials)

2.2.1 NA **PROVIDE** the State / Local notification form to the Station Emergency Director (or Operations Manager) for completion per the following, as applicable:

- EP-MA-114-100, MAROG Notifications
- EP-MW-114-100, MWROG Notifications

2.2.2 NA **REVIEW** the form for completeness and **VERIFY** Station Emergency Director's approval, then **PROVIDE** to the State/Local Communicator for transmittal.

2.2.3 NA **DIRECT** the Logistics Coordinator to obtain a copy of form, once the notification is completed, for distribution and posting.

2.2.4 NA **VERIFY** with the ENS Communicator and/or Operations Manager that the NRC has been notified per EP-AA-114.

2.3 **ENSURE** that the ENS and HPN Communicators maintain open lines to the NRC upon request.

CIRCUIT	OPEN LINE REQUESTED AT	OPEN LINE ESTABLISHED AT
ENS		
HPN		

2.4 **MONITOR** overall facility communications to ensure the effective and timely exchange of information, including:

1. **ENSURE** transmittals contain both date and time.
2. **ENSURE** records of all transmittals are maintained.

**ATTACHMENT 1
TSC DIRECTOR CHECKLIST
Page 6 of 13**

3. **ENSURE** that the Station Emergency Director, prior to transmittal, approves both State/Local and NRC written responses to inquiries.
 4. **ENSURE** inquiries by the State or the NRC to the Communicator are recorded on Event Logs and message forms and relayed to the Station Emergency Director and responses recorded before reply transmission.
- 2.5 **SUPERVISE** the activities of the Logistics Coordinator.
1. **ENSURE** that provisions for subsequent shift staffing, meals and lodging are being made, as necessary.
 2. **ENSURE** that the TSC Status Boards and electronic logs, as applicable, are being maintained current and reflect accurate information.
 - Station Priorities – Station Emergency Director / Operations Manager
 - OSC Team Status – Maintenance Director
 - Event Chronology – TSC Director (assisted by ENS Communicator)
 - Engineering Activities – Technical Manager
 - Rad. Monitoring – Radiation Protection Manager
 - Event Classification / Notification Status – TSC Director
 - TSC Staffing – Logistics Coordinator
- 2.6 **ASSIST** the Station Emergency Director in maintaining proper records and in recording / relaying communications.
- 2.7 **PARTICIPATE** in periodic TSC briefings.
- Briefings should include but not be limited to:
- Notifications Completed / Due
 - Offsite Assistance Requested
 - State implemented protective actions
- 2.8 When notified that Command and Control has been transferred to the EOF, **CONTACT** the EOF Logistics Manager and **PERFORM** the following:
- 2.8.1 _____ **VERIFY** that the EOF has assumed responsibility for performing periodic updates to the State(s) per EP-MW(MA)-114-100.
TIME: _____
- 2.8.2 _____ **DISCUSS** completed and/or on-going offsite notifications, and FAX copies of completed State/Local and ENS event notification forms to the EOF.

**ATTACHMENT 1
TSC DIRECTOR CHECKLIST
Page 7 of 13**

2.8.3 **COORDINATE** the transfer of responsibility for offsite notifications to the EOF, when directed by the Station Emergency Director.

1. ____ **DIRECT** the State/Local Communicator to contact their counterpart in the EOF and coordinate transfer.
2. ____ **NOTIFY** the Station Emergency Director when the transfer is completed. TIME: _____

2.9 Continue to **ASSIST** the EOF, as requested, in the acquisition of information for offsite agency updates.

2.10 **ASSIST** the Security Coordinator in coordinating with TSC Managers to determine which personnel on-site are needed and which should be considered Non-Essential.

2.11 **CONSIDER** the need for support from other groups (such as IT, Work Planning, Quality Control, etc.)

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

3. **SITUATIONAL ACTIONS**

3.1 **TSC VENTILATION**

3.1.1 (If **NOT** performed as part of TSC activation, **then**) When directed by the Radiation Protection Manager, **REALIGN** the TSC ventilation to its "emergency" mode. TIME: _____

Dresden	REFER to DOP 5750-16, Technical Support Center Ventilation.
Limerick	REFER to Table 1-1, LGS Technical Support Center Ventilation.
Peach Bottom	REFER to Table 1-2, PBAPS Technical Support Center Ventilation.

**ATTACHMENT 1
TSC DIRECTOR CHECKLIST
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Quad Cities

REFER to QOP 5750-24, TSC Ventilation Emergency Operation.

3.2 TSC EVACUATION

If TSC Evacuation is ordered by the Station Emergency Director, **then REFER** to EP-AA-112-200, Attachment 3, TSC Evacuation Guidelines: TIME: _____

3.2.1 COLLECT the following documents for transfer to the new location:

- Event Logs,
- completed checklists,
- notifications records,
- at least one full set of EP-AA-11X procedures.

3.2.2 When directed by the Station Emergency Director, **then ENSURE** all TSC personnel proceed to the designated relocation area.

3.2.3 VERIFY arrival of all personnel evacuated.

3.2.4 PROVIDE new telephone numbers for the evacuated staff to the Control Room, OSC and EOF.

3.3 NRC SITE TEAM INTERFACE

If notified that an NRC Site Team will be dispatched to the station, **then COMPLETE** the following actions: TIME: _____

3.3.1 OBTAIN the following information from the NRC via ENS or by calling the NRC Region III offices directly:

- Names and Social Security numbers of the NRC personnel responding to the site.
- Estimated time of arrival.

**ATTACHMENT 1
TSC DIRECTOR CHECKLIST
Page 9 of 13**

3.3.2 **NOTIFY** the Security Coordinator of the information obtained and **REQUEST** that the following actions are taken:

1. **DETERMINE** if the NRC individuals are badged or if they will require escorts.
2. **ENSURE** security officers and escorts, if needed, are available at the gatehouse when the NRC arrives to expedite site access.

3.3.3 **ENSURE** that the Logistics Coordinator and clerical staff have assembled an information folder for the NRC including State and NRC notification worksheets, significant events and plant status.

3.3.4 **NOTIFY** the Radiation Protection Manager of the NRC Site Team dispatch and **DETERMINE** the need for dosimetry.

3.3.5 **ACT** as the Exelon Nuclear liaison to the NRC Site Team representatives. Upon arrival of the NRC Site Team, **ENSURE** the following actions are performed.

1. **INTRODUCE** the NRC Team Leader to the Station Emergency Director.
2. **PROVIDE** a tour of the TSC including the designated NRC workspace, counterpart seating and clerical support available.
3. **ENSURE** that an initial briefing is provided to the NRC Site Team.
4. **ASSIGN** counterparts to the NRC Site Team members. **REFER** to the table as a guide.

<u>NRC Position</u>	<u>TSC Position</u>
Reactor Safety Coordinator	Station Emergency Director
Emergency Response Coordinator	TSC Director
Radiation Safety Coordinator	Radiation Protection Manager
Senior Resident Inspector	Operations Manager
Reactor Safety Operations Coordinator	Operations Manager
Safeguards/Security Coordinator	Security Coordinator

5. **ANNOUNCE** the arrival of the NRC Site Team during the next periodic TSC briefing.

3.3.6 **VERIFY** periodically that the NRC Site Team is getting the information and site support that they need.

**ATTACHMENT 1
TSC DIRECTOR CHECKLIST
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Step 3.4: Limerick / Peach Bottom

3.4 SIREN POLLING

3.4.1 If requested by a risk county, **then PERFORM** a polling of county sirens with the TSC siren controller in the Telephone Equipment Room to verify operability:

1. **If** the screen saver is deployed, **then MOVE** the mouse or **PRESS** the "spacebar" to return to the map screen.
2. **USE** the mouse to left click on the "Services" option on the upper left corner of the screen.
3. **MOVE** the mouse down to the "Poll" option, and then **MOVE** to the right and down to the "CCU's" option.
4. **LEFT-CLICK** on the "CCU's" option
5. **LEFT-CLICK** on the "OK" button

3.4.2 If any siren responds other than "Normal", **then INFORM** the requesting risk county.

3.4.3 If requested by risk county(ies) to activate sirens, **then PEFORM** actions listed in EP-MA-110-100.

**ATTACHMENT 1
TSC DIRECTOR CHECKLIST
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TABLE 1-1

**TSC VENTILATION CHECKLIST FOR LIMERICK GENERATING STATION
Page 1 of 1**

1. **"EMERGENCY MODE" START-UP:**
- 1.1 **PLACE** switch ME-03 to "Emergency"
- 1.2 **ENTER** the TSC Mechanical Equipment Room (#126) using the B1090 key if required.
- 1.3 At Panel CP-1, **VERIFY** emergency fan ME-03 is running.
- 1.3.1 If the emergency fan is **NOT** running, **then PLACE** ME-03 hand-switch to "HAND" and **VERIFY** that fan starts.
- 1.4 At Panel CP-1, **VERIFY** exhaust fan MD-07 is stopped.
- 1.5 At Volutron Panel, **VERIFY** that airflow at monitor is approximately 3000 (2700-3300) cfm.
- NOTE:** Allow sufficient time for system flow to stabilize following start of fan (approximately 10-15 minutes).
- 1.6 **VERIFY** (visually) that the dampers have repositioned from "NORMAL" to "EMERGENCY" (I&C Aid next to Volutron Panel):
- MD-1
- MD-2
- MD-5
- MD-6
- 1.7 **NOTE** any annunciator windows in alarm on the common alarm panel in the TSC HVAC Room.
- 1.8 **ENSURE** that the Air Monitoring System (AMS4) in the TSC hallway is ON and functioning properly.

TIME COMPLETED: _____

**ATTACHMENT 1
TSC DIRECTOR CHECKLIST
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**TABLE 1-2
TSC VENTILATION CHECKLIST FOR PEACH BOTTOM STATION
Page 1 of 2**

PROCEED to Unit 1 Ventilation System Panel (P60A).

1. "EMERGENCY MODE" START-UP

1.1 **VERIFY** that "TSC Supply Fan" is in the ON or REMOTE position.

1.2 **VERIFY** that RAF-1 (10V364), "TSC Exhaust Fan" is in the ON or REMOTE position.

1.3 **PLACE** the AFF-1 (10V365), "HEPA Filter Fan" switch to the ON position.

1.4 **PLACE** the "TSC Outside Air" damper switch to the OPEN position.

1.5 **VERIFY** the following indications:

MOV-1 (AO-1) **CLOSED** (green light)

MOV-2 (AO-2) **CLOSED** (green light)

MOV-3 (AO-3) **OPEN** (red light)

MOV-4 (AO-4) **OPEN** (red light)

1.6 **VERIFY** that the pressure indicator reads greater than or equal to 0.125 inches of water.

1. If reading is less than 0.125 inches of water, then **CHECK** all doors entering the TSC to ensure that they are tightly closed.

2. If any operating equipment does **NOT** perform as expected, then **PLACE** the equipment in a safe condition and **NOTIFY** the TSC Maintenance Manager.

TIME COMPLETED: _____

ATTACHMENT 1
TSC DIRECTOR CHECKLIST
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TABLE 1-2
TSC VENTILATION CHECKLIST FOR PEACH BOTTOM STATION
Page 2 of 2

2. RETURN TSC VENTILATION TO "NORMAL MODE":
- 2.1 **VERIFY** that AHU-1, "TSC Supply Fan" is in the ON or REMOTE position.
- 2.2 **VERIFY** that RAF-1(10V364), "TSC Exhaust Fan" is in the ON or REMOTE position.
- 2.3 **PLACE** the AFF-1(10V365), "HEPA Filter Fan" switch to the OFF position.
- 2.4 **PLACE** the AHU-1, "TSC Outside Air" damper switch to the CLOSED position.
- 2.5 **VERIFY** the following indications:
- MOV-1 (AO-1) **OPEN** (red light)
 - MOV-2 (AO-2) **OPEN** (red light)
 - MOV-3 (AO-3) **CLOSED** (green light)
 - MOV-4 (AO-4) **CLOSED** (green light)

TIME COMPLETED: _____

**ATTACHMENT 2
LOGISTICS COORDINATOR CHECKLIST
Page 1 of 11**

Section 1, Initial Actions

Section 2, Ongoing Actions

Section 3, Situational Actions

3.1, Accountability / Site Evacuation

3.2, County EOC Liaisons (Mid-West ROG)

Table 2-1, Shift Assignment Guidance

Table 2-2, Shift Assignment Worksheets

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 TSC Organization Board.

Step 1.1.1: Braidwood – Byron –Dresden – Quad Cities

1.1.1 _____ **INITIATE** applicable Network Broadcast Message for TSC/OSC activation.

1.2 _____ **INFORM** the TSC Director of your arrival, and **OBTAIN** an initial briefing of the emergency condition.

1. **If the TSC Director has NOT yet arrived, then **PERFORM** Steps 1.3 through 1.9 in the TSC Director Checklist (Attachment 1) to facilitate TSC activation.**

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

CAUTION

Prior to dispatching any clerical staff outside of the TSC, consult with the Radiation Protection Manager for any special precautions that may be necessary.

1.4 _____ **CALL OUT** clerical personnel, as needed, to support copying, faxing, posting and distribution of forms and messages.

NOTE: Suggested Staffing: TSC – 2 / OSC – 1 / CR - 1

ATTACHMENT 2
LOGISTICS COORDINATOR CHECKLIST
Page 2 of 11

- 1.5 **ENSURE** operability of the following:
- Fax Machines
 - Copier Machines
 - TSC Public Address (PA) system, including distribution of microphones
 - Microfiche Reader/Printer
- 1.6 **ENSURE** availability of the following:
- Markers and Erasers at Status Boards
 - Signs for posting classification level, etc.
 - ERF Telephone Directories
- 1.7 **ESTABLISH** contact with the EOF Administrative Coordinator using the ERF Telephone Directory.
- 1.8 **ASSIST** the TSC Director in obtaining copies of the completed State/Local forms and NRC Event Notification Worksheets from the Control Room.
1. **COPY, POST and DISTRIBUTE** these forms as instructed by the TSC Director or user aid.
- 1.9 **UPDATE** and maintain the Event Classification / Notification Board, or equivalent, to reflect current status.

Mid-West ROG

- | | | |
|------|--------------------------|---|
| 1.10 | <input type="checkbox"/> | INITIATE and MAINTAIN electronic logs, as applicable, in accordance with EP-MW-110-100. A TSC staff member may be designated to maintain these electronic logs. |
|------|--------------------------|---|
- 1.11 **ASSIST** in the initial staffing and augmentation of the OSC and TSC:
- 1.11.1 **OBTAIN** the Automated Call Out System report from the TSC fax machine to determine the names of previously notified ERO responders and their availability and FFD status.
- 1.11.2 **ENSURE** that the TSC Organization Board is being used to reflect arrival of TSC staff.

ATTACHMENT 2
LOGISTICS COORDINATOR CHECKLIST
Page 3 of 11

- 1.11.3 _____ **CALL OUT** required TSC or OSC positions as requested by the TSC Director or TSC Managers to obtain "minimum staffing".
1. **ENSURE** that FFD is addressed during any call-out (EP-AA-112, Attachment 3) and **NOTIFY** the Security Coordinator of personnel being called in to the Station that may require FFD testing and/or observation.
 2. **USE** EP-AA-112, Attachment 4, FFD Verification, for personnel not screened during the callout.
2. **ONGOING ACTIONS**
- 2.1 **DIRECT** the clerical staff to perform the following:
- Routine posting, faxing and distribution.
 - Comply with requests for copying, and faxing additional documents as required.
- 2.1.1 **MAINTAIN** a log of any material sent or received by telecopy.
- 2.1.2 **DOCUMENT** event summaries and priorities every 30 minutes
- NOTE:** Event Summaries and Priorities may **either** be copied off the Status Boards **or** printed from the electronic logs.
- 2.1.3 **PREPARE** a NRC folder containing copies of incoming and outgoing information as well as State / Local notification forms and NRC Event Notification Worksheets.
- 2.1.4 **CREATE** files for records created during the emergency event, and **COORDINATE** record-keeping activities in support of the TSC Director.
- 2.2 **ASSIST** in the processing of special procedures and interim reports, as requested, that may be required during the emergency.
- 2.3 **ASSIST** TSC Managers, as requested, in maintaining and coordinating staffing of status boards and logs.
- 2.4 **CONSULT** with the TSC Director about the need to obtain food for the station emergency responders.

ATTACHMENT 2
LOGISTICS COORDINATOR CHECKLIST
Page 4 of 11

CAUTION

If a hazardous radiological conditions exist, outside vendors delivering food or supplies may have difficulty delivering to the station. **CONSULT** with the Radiation Protection Manager and the Security Coordinator on special actions that may be necessary.

1. If it is determined that food needs to be obtained, then **CONTACT** appropriate vendors to obtain food.
- 2.5 **ARRANGE** for specialized training of emergency response personnel as needed.
 1. **COORDINATE** with the Training Department to obtain Instructors, Classroom space and necessary supplies to facilitate training.
- 2.6 **ARRANGE** for sleeping facilities and other necessary accommodations for onsite emergency workers if required.
- 2.7 **COORDINATE** relief / continual staffing in support of the Control Room, TSC and OSC:
 1. **COMPLETE** Table 2-2, "Shift Assignment Worksheet" for the next relief of the on-duty personnel
 - **REFER** to Table 2-1, "Shift Assignment Guidance", for guidance on staffing subsequent shifts at the station.
 2. **PROVIDE** the completed "Shift Assignment Worksheet to the TSC Director for review.
 3. **COORDINATE** relief of staff augmentation callouts with the TSC Coordinator to address any on-going security threats or accountability issues.
 4. **NOTIFY** all personnel of the subsequent shift assignments that they have been given.
- 2.8 **PERFORM** a shift turnover with the on-coming shift of emergency response personnel using the guidance in EP-AA-112, Attachment 2, (Shift Turnover).

ATTACHMENT 2
LOGISTICS COORDINATOR CHECKLIST
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3. SITUATIONAL ACTIONS

3.1 Accountability / Site Evacuation

Step 3.1.1: Braidwood – Byron –Dresden – Quad Cities

3.1.1 _____ If a station assembly is order for personnel accountability, **INITIATE** the applicable Network Broadcast Message for "ACCOUNTABILITY".
TIME: _____

3.1.2 _____ **ASSIST** the TSC Director in the determination of which personnel on-site are needed and which should be considered Non-Essential and evacuated.

1. _____ **ENSURE** that adequate clerical staff is available onsite to support activities in the OSC, TSC and Control Room prior to evacuation.

Step 3.2: MWROG Only

3.2 County EOC Liaisons

NOTE: County EOC Liaisons will report to the TSC. The EOF EOC Communicator will contact the TSC when County EOC Liaisons are requested.

3.2.1 _____ **DISPATCH** the County EOC Liaisons to the requested Counties.

3.2.2 _____ **INFORM** the EOF EOC Communicator of who was dispatched to which County EOC.

**ATTACHMENT 2
LOGISTICS COORDINATOR CHECKLIST
Page 6 of 11**

**TABLE 2-1
SHIFT ASSIGNMENT GUIDANCE
Page 1 of 2**

During an extended emergency event, it may be necessary to plan for shift scheduling of both Emergency Response personnel and contract workers.

After approximately four hours, and emergency conditions are expected to continue beyond 12 hours, a shift schedule should be planned.

1. **REVIEW** staffing needs with each Manager, and **DEVELOP** a shift schedule using Table 2-2, "Shift Assignment Worksheet".
2. **REVIEW** the guidance in the following steps as the schedule is developed.
 - A. Control Room and Security Personnel
 - 1) If possible, **CONTINUE** existing shift schedules for the Control Room and Security personnel.
 - 2) **ASSIST** in contacting these personnel if there are precautions for the arriving personnel or if the Operations Manager or Security Coordinator determines that an increase in the number of persons per shift is required.
 - 3) **OBTAIN** copies of the shift schedules from the Operations Manager and Security Coordinator.
 - B. TSC and OSC
 - 1) **USE** Table 2-2, "Shift Assignment Worksheet" to assist in the planning.
 - 2) Initially, **ESTABLISH** two 12 1/2 hour shifts overlapping by 1/2 hour to provide for briefings and turnover. Within a week, modify the schedule to three 8 1/2 hour shifts.
 - 3) **COMPLETE** Table 2-2, "Shift Assignment Worksheet", Shift A with the personnel currently performing emergency functions.
 - 4) **COMPLETE** Shift B assignment of qualified personnel using the station ERO Call List.

ATTACHMENT 2
LOGISTICS COORDINATOR CHECKLIST
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TABLE 2-1
SHIFT ASSIGNMENT GUIDANCE
Page 2 of 2

- 5) **OBTAIN** approval for the shift schedule from the TSC Director.
 - 6) **CONTACT** the Radiation Protection Manager for any special instructions regarding personnel reporting to work on the next shifts.
 - 7) **CONTACT** the Security Coordinator for any special instructions for personnel reporting to work on the next shifts.
 - 8) **CONTACT** the relief personnel and provide them with a shift schedule and any special actions specified by the Radiation Protection Manager and Security Coordinator.
 - For any individuals living within the 10 mile EPZ, **OBTAIN** an alternate phone number should an evacuation of the 10 mile EPZ be implemented.
 - **INSTRUCT** relief personnel to carry an Exelon Nuclear ID card for access through security roadblocks.
 - 9) **INFORM** the TSC Director of personnel who could **not** be reached and **SELECT** alternates.
 - 10) **TELECOPY** the shift schedule to the EOF Administrative Coordinator.
3. Once shift schedules have been established, then **REVIEW** the staffing requirements with each onsite Director and **PERFORM** the following actions:
- A. **ADD** additional personnel if necessary
 - B. **NOTIFY** those personnel of the assignment.
 - C. **TELECOPY** the new schedule to the EOF Administrative Coordinator.
 - D. If roadblocks have been set up, then **PROVIDE** a copy of the new schedule to the Security Coordinator.

**ATTACHMENT 2
 LOGISTICS COORDINATOR CHECKLIST
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**TABLE 2-2
 SHIFT ASSIGNMENT WORKSHEET
 Page 1 of 4**

Approved by (TSC Director) _____ Date / Time: _____

POSITION	NAME	PHONE	NAME	PHONE	NAME	PHONE
	SHIFT A	to	SHIFT B	to	SHIFT C	to
Station Emergency Director						
Operations Manager						
RP Manager						
TSC Director						
Rad Controls Coordinator						
Technical Manager						
Maintenance Manager						
Logistics Coordinator						
Security Coordinator						
Rad Controls Engineer						
State/Local Communicator						
ENS Communicator						
HPN Communicator						
Technical Communicator						
Damage Control Comm. (CR)						
Damage Control Comm. (TSC)						
Damage Control Comm. (OSC)						
Operations Communicator (CR)						
Operations Communicator (TSC)						

ATTACHMENT 2
LOGISTICS COORDINATOR CHECKLIST
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TABLE 2-2
SHIFT ASSIGNMENT WORKSHEET
Page 2 of 4

POSITION	NAME PHONE SHIFT A ____ to ____	NAME PHONE SHIFT B ____ to ____	NAME PHONE SHIFT C ____ to ____
Core/Thermal Engineer			
Mechanical Engineer			
Electrical Engineer			
SAMG Evaluator (MWROG)			
Support Engineer			
Support Engineer			
Support Engineer			
Clerical			
Clerical			
Clerical			
Other:			

ATTACHMENT 3
SECURITY COORDINATOR CHECKLIST
Page 1 of 7

Section 1, Initial Actions

Section 2, Ongoing Actions

Section 3, Situational Actions

3.1, Accountability / Site Evacuation

3.2, Security Threat

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 TSC Organization Board.
- 1.2 ___ **INFORM** the TSC Director of your arrival, and **OBTAIN** an initial briefing on emergency conditions.
- 1.3 ___ **INITIATE** and **MAINTAIN** a position log documenting significant actions performed and communications related to your position.
- 1.4 ___ **EVALUATE** the emergency condition against security-related Emergency Action Levels (EALs), and **IDENTIFY** applicable EAL entry conditions to the Station Emergency Director.
- 1.5 ___ **CONSULT** the Radiation Protection Manager to determine radiological conditions, which could impact Security operations or response.
1. **COMMUNICATE** any precautions or contingencies to the Security Shift Supervisor.
- 1.6 ___ **OBTAIN** a listing of personnel within the Protected Area, by department, and provide lists to respective TSC Managers to aid in determination of essential personnel:
- Radiation Protection Manager: RP / Chemistry
 - Technical Manger: Engineering
 - Maintenance Manager: Mechanical/Electrical, I&C, Work Control & Work Planning, Supply Management
 - Operations Manager: Operations
 - TSC Director: Records Management, Administrative
- 1.7 ___ **DIRECT** the Security Shift Supervisor to implement SY-AA-101-121, or equivalent station procedure or posting instruction, and to maintain communications with the Security Coordinator.

**ATTACHMENT 3
SECURITY COORDINATOR CHECKLIST
Page 2 of 7**

1.8 _____ **REMIND** TSC Managers to notify the Security Coordinator of any FFD screenings necessary because of unscheduled call-outs of emergency workers.

1. **USE** EP-AA-112, Attachment 4, FFD Verification, for personnel not screened during the callout.

Mid-Atlantic ROG

1.9 _____	CONTACT the on-call Corporate Nuclear Security Representative, using the ERF Telephone Directory, and VERIFY that the Security Coordinator position, at the Cantera EOF, is being staffed.
-----------	--

1.10 **CONTACT** the EOF Security Coordinator, and **PERFORM** the following:

1.10.1 _____ **PROVIDE** an initial briefing of the emergency condition.

1.10.2 _____ **REQUEST** support for the station as necessary based on the emergency condition.

1.10.3 _____ **REQUEST** that the EOF Security Coordinator monitor Federal and State law enforcement and response activities.

2. ONGOING ACTIONS

2.1 **If** any onsite activities may impact Local Law Enforcement Agencies (LLEA) activities, **then NOTIFY** the applicable federal, state and local agencies.

1. **INFORM** the Station Emergency Director of any contact with LLEAs for evaluation of Emergency Notification System (ENS) requirements per 10 CFR 50.72.

2.2 **ASSESS** the nature of the emergency, and **DETERMINE** if any modifications or contingencies are necessary to Security procedures.

1. **IDENTIFY** any non-routine security procedures and/or contingencies that are in effect or that require a response.
2. **If** any modifications or contingencies to procedures are required, **then DOCUMENT** the modification in your Event Log.
3. **COMMUNICATE** any changes to procedures to the Security Shift Supervisor and EOF Security Coordinator.

ATTACHMENT 3
SECURITY COORDINATOR CHECKLIST
Page 3 of 7

- 2.3 **BRIEF** the Station Emergency Director on the following:
- The status of the security force
 - Any security contingency procedures that are in effect
 - Any security related EALs that are or could be in effect.
- 2.4 **ASSIST** the Station Emergency Director on an ongoing basis in evaluating changes in security-related threats and event classifications.
- 2.5 **MAINTAIN** communications with the Radiation Protection Manager regarding radiological conditions, which could impact Security operations and dispatching of Security Officers.
- 2.6 **COORDINATE** with the Radiation Protection Manager in controlling ingress and egress to and from the site or Protected Area if radiological concerns are present.
- 2.7 **COORDINATE** access to the site with the Security Coordinator at the EOF if off-site security, public evacuation or radiological concerns are present.
- 2.8 **DISCUSS** the need for access control at the Control Room, TSC and/or OSC with the Station Emergency Director.
1. **CONTACT** the EOF Security Coordinator for support if needed to establish and maintain access control if required.
- 2.9 **COORDINATE** with the Operations Manager for the possible quarantine of equipment, facilities, documentation, supplies, etc., in an "as found condition" following a failure of plant systems and possible tampering events.
- 2.10 **PARTICIPATE** in periodic TSC briefings, as necessary. Briefings should include but not be limited to:
- Assembly / Accountability / Evacuation
 - EPZ access control by LLEA
 - Law Enforcement / Fire / Ambulance Issues
 - Security Issues

ATTACHMENT 3
SECURITY COORDINATOR CHECKLIST
Page 4 of 7

- 2.11 **EXPEDITE** site access for incoming NRC or other agency personnel as requested by the TSC Director.
1. **PROVIDE** an escort for incoming NRC personnel if required.
 2. **INFORM** the TSC Director of the arrival of the NRC Site Team.
TIME: _____
 3. **ACT** as the TSC liaison with the appropriate NRC Site Team representative.
- 2.12 **EXPEDITE** ingress and egress for emergency response personnel.
1. **COORDINATE** with the TSC Director and the Logistics Coordinator to obtain lists of personnel who will be responding to the station.
 2. If roadblocks are being established by LLEA, then **PROVIDE** the lists of personnel to be responding to the station to the LLEA to expedite their access through the roadblocks.
 3. **CONSULT** with the Maintenance Manager on the expected delivery of equipment and supplies and coordinate their access to the site.
- 2.13 **REQUEST** updates from the EOF Security Coordinator on Federal, State and LLEA activities.
- 2.14 **PERFORM** a shift turnover with the on-coming shift of emergency response personnel using guidance in EP-AA-112, Attachment 2, (Shift Turnover).

**ATTACHMENT 3
SECURITY COORDINATOR CHECKLIST
Page 5 of 7**

3. SITUATIONAL ACTIONS

3.1 ACCOUNTABILITY / SITE EVACUATION

NOTE: Required at a Site Area or General Emergency classification

CAUTION

Special consideration should be given to performing (or not performing) these functions when in a Security Event or other hazardous condition (i.e. hazardous condition caused by a nearby industrial facility or weather factors).

3.1.1 ASSIST the TSC Radiation Protection Manager in determining the appropriate evacuation route(s) for non-essential personnel per EP-MW(MA)-113-100 based on on-going or potential security threats.

1. If a Security Threat exists, then **DETERMINE** whether an evacuation should be initiated early or delayed, or alternate assembly areas and evacuation routes designated.

3.1.2 DIRECT the Security Shift Supervisor to perform the following:

1. **INITIATE** security actions in support of assembly / accountability per Station Security procedures and EP-MW(MA)-113-100. TIME: _____
2. **HALT** Protected Area access until after accountability is established.
3. **PERFORM** accountability per Security procedures and generate a listing of missing personnel within 30 minutes of accountability initiation.
No. Missing: _____ TIME: _____
 - A. **NOTIFY** the Station Emergency Director of the number of persons missing. TIME: _____
4. **ANNOUNCE**, or **DIRECT** the Central Alarm Station (CAS) to announce, the names of missing persons and request a call back to determine location and status.
 - A. If after several minutes not response is received, then **REQUEST** that the Maintenance Manager contact the OSC to form and dispatch Search and Rescue teams.

ATTACHMENT 3
SECURITY COORDINATOR CHECKLIST
Page 6 of 7

5. **NOTIFY** appropriate local law enforcement agencies (LLEAs) that a site evacuation has or will be occurring and **REQUEST** assistance as needed for the following:
 - Notification of people in designated or remote locations of the Owner Controlled Area accessible to the general public
 - Controlling access to the Owner Controlled Area

 6. **COORDINATE** notification of personnel in buildings and areas within the Station's Owner Controlled Area, located outside the Protected Area, to evacuate personnel following the same directions given to the onsite personnel.
 - **REFER** to EP-MW(MA)-113-100 for a listing of potentially occupied areas outside the Protected Area.
 - A. **If** sufficient Security personnel are **NOT** available to perform the verification, **then REQUEST** support from the TSC Maintenance Manager to use OSC personnel to perform Owner Controlled Area notifications.

 7. **MAINTAIN** continuous accountability by limiting access to the site and Protected Area.

 8. **If** a Site Area or General Emergency has been declared, **then DETERMINE** required resources to augment existing ERO staffing.
 - A. **GENERATE** a listing of personnel, by department, at on-site assembly area(s) using Security computer or manual process.
 - B. **COORDINATE** with the TSC Director the distribution of list to TSC Managers for review.
 - C. **COLLECT** the list of selected personnel at assembly area(s) to be retained.
 - D. **COORDINATE** with the TSC Director the notification of selected personnel and direct them to remain at assembly area and proceed to the TSC or OSC when directed.
- 3.1.3 **COORDINATE** site evacuation activities with the Security Shift Supervisor and LLEAs, when directed by the Station ED. Initiated: _____ / Completed: _____

ATTACHMENT 3
SECURITY COORDINATOR CHECKLIST
Page 7 of 7

Limerick Station

3.1.4 If off-site assembly is required, then **NOTIFY** the designated assembly area(s) using the telephone numbers listed in the ERF Telephone Directory.

- Cromby Generating Station
- Limerick Airport (Pottstown)

3.2 SECURITY THREAT

3.2.1 If a security threat is received, then **NOTIFY** the Station Emergency Director, and the NRC and State representatives in the TSC if present.

3.2.2 **DETERMINE** if a change in the Emergency Classification level is warranted due to the potential threat on-site.

3.2.3 **ADVISE** the Station Emergency Director on the following based on on-going security concerns:

- Delaying or early implementation of personnel accountability and/or site evacuation
- Actual or potential delays or impediments in site or in-plant access that may impact OSC team response or the augmentation of TSC/OSC staffing

3.2.4 Upon the existence of a specific and credible insider threat, **CONFIRM** that the station has implemented the "two person" (Line of sight) rule in accordance with SY-AA-101-132, "Threat Assessment," and SY-AA-101-111-1002, "Guidance Document for the Implementation of Safeguards Advisory Actions."

1. **PROVIDE** control of access to the Control Room, TSC and/or OSC as deemed appropriate.

3.2.5 **DETERMINE** whether the quarantining of equipment, documents or areas is required for later investigation

ATTACHMENT 4
STATE/LOCAL COMMUNICATOR CHECKLIST
 Page 1 of 2

Section 1, Initial Actions

Section 2, 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. **INITIAL ACTIONS**

(Initials)

- 1.1 _____ **SIGN IN** on the TSC Organization Board.
- 1.2 _____ **INFORM** the TSC Director of your arrival, and **OBTAIN** an initial briefing on emergency conditions.
- 1.3 _____ **INITIATE** and **MAINTAIN** a position log documenting significant actions performed and communications related to your position.
- 1.4 _____ **OBTAIN** from the TSC Director or Logistics Coordinator copies of any previously issued State/Local notification forms faxed by the Control Room to the TSC, as soon as event conditions allow. TIME: _____

2. **ON-GOING ACTIONS**

NOTIFICATION CRITERIA

For event notification purposes, *timely* refers to the completion of initial roll call within 15 minutes of event classification (as listed on notification form).

Form *accuracy* is also considered. The State/Local Communicator is responsible for reviewing form, prior to transmittal, to ensure that all blocks are completed and the form approved by the Station Emergency Director.

- 2.1.1 **PERFORM** State/Local notifications in accordance with the applicable procedure attachment:

NOTE: The Station Emergency Director must sign the completed notification form prior to transmitting to offsite agencies.

- EP-MW-114-100, MWROG Offsite Notifications
- EP-MA-114-100, MAROG Offsite Notifications

ATTACHMENT 4
STATE/LOCAL COMMUNICATOR CHECKLIST
Page 2 of 2

- 2.1.2 **ENSURE** that event classification, release status, and offsite protective action recommendation (PAR), as listed on form, are accurately recorded on TSC status board(s), as applicable.
- 2.1.3 **DOCUMENT** any inquiries or requests for further information on an Information Request / Message Form (EP-AA-112, Attachment 7), or equivalent, and **FORWARD** to the TSC Director for resolution.

Step 2.2: MWROG only

- 2.2 **RECEIVE** and **DOCUMENT** incoming NARS calls from the State of Illinois per EP-MW-114-100, Attachment 3, (Receiving a NARS Message).
- 2.2.1 **ENSURE** State PAR on notification form received is recorded on TSC status board.

- 2.3 **When** directed by the TSC Director, **CONTACT** the EOF State/Local Communicator, using the ERF Telephone Directory, to transfer notifications of the offsite State/Local authorities. TIME: _____
- 2.4 Continue to **MONITOR** NARS Circuit for subsequent notification to and from State/local authorities.
- 2.5 **PERFORM** a shift turnover with on-coming emergency response personnel using the guidance in EP-AA-112, Attachment 2, (Shift Turnover).

TSC OPERATION GROUP

1. PURPOSE

1.1 This procedure describes the responsibilities and actions of the TSC Operations Group, which consists of the following positions reporting to the TSC Operations Manager:

- ENS Communicator
- Operations Communicator

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

2. TERMS AND DEFINITIONS

Mid-West ROG

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.

2.2 “Timeliness”:

- For NRC communication purposes, notifications must be completed no later than 60 minutes of the emergency classification time but as soon as possible following the notification of local authorities.
- For event classification purposes, this is defined as the decision made to classify event within 15 minutes of the report or availability of supporting indications to the Control Room and ERO.

3. RESPONSIBILITIES

3.1 The *Operations Manager* determines the extent of station emergencies, initiates corrective actions, and implements protective actions for onsite personnel. The Operations Manager shall report directly to the Station Emergency Director. In the event that the Station Emergency Director becomes incapacitated and can no longer fulfill the designated responsibilities, the Operations Manager will assume the responsibilities of the Station Emergency Director until relieved by another qualified Station Emergency Director.

- 3.2 The *TSC ENS Communicator* is responsible for communications with the Nuclear Regulatory Commission (NRC) Operations Center via the Emergency Notification System (ENS) phone or commercial telephone line.
- 3.3 The *TSC Operations Communicator* is responsible for relaying information event status, priorities, and significant changes in plant system/ equipment or in-plant radiological conditions. The Operations Status Line is established in the Control Room (CR), Technical Support Center (TSC) and Emergency Operations Facility (EOF).

4. **MAIN BODY**

CONTROL ROOM / TSC COMMUNICATIONS

Following the transfer of C&C, the Shift Manager will report to the TSC Operations Manager. Therefore, communications with the TSC should be primarily through the Operations Manager, except for significant changes in event / plant status.

The use of the Operations and Damage Control Communicators should be maximized to reduce the communications burden on the Shift Manager and TSC Operations Manager.

- 4.1 **INITIATE** the appropriate Emergency Plan activities using the position specific checklist listed in Attachments 1 thru 3.

5. **DOCUMENTATION**

None

6. **REFERENCES**

None

7. **ATTACHMENTS**

- 7.1 Attachment 1, Operations Manager Checklist
- 7.2 Attachment 2, ENS Communicator (TSC) Checklist
- 7.3 Attachment 3, Operations Communicator (TSC) Checklist

ATTACHMENT 1
OPERATIONS MANAGER CHECKLIST
Page 1 of 9

Section 1, Initial Actions

Section 2, Ongoing Actions

Section 3, Situational Actions

- 3.1, Personnel Emergencies
- 3.2, Search and Rescue
- 3.2, Security Threat
- 3.4, Accountability / Site Evacuation
- 3.5, Severe Accident Management

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 TSC Organization Board.
- 1.2 **INFORM** the TSC Director of your arrival.
- 1.2.1 If the Station Emergency Director **either** has **not** arrived or becomes incapacitated, **then ASSUME** the role of the Station Emergency Director on an interim basis and **PERFORM** the following:
 - 1. **INFORM** the TSC, Control Room and EOF that you have temporarily assumed Station Emergency Director duties.
 - 2. **DIRECT** the Logistics Coordinator to call out another Station Emergency Director if necessary.
 - 3. **INITIATE** performance of the Station Emergency Director Checklist (EP-AA-112-201, Attachment 1).
- 1.3 **INITIATE** and **MAINTAIN** a position log documenting significant actions performed and communications related to your position.
- 1.4 **CONTACT** the Shift Manager and **PERFORM** the following:
 - 1. **BECOME** apprised of the status of plant systems and equipments, current Control Room priorities, and shift personnel dispatched in-plant using Command and Control Turnover Briefing Sheet (EP-AA-112, Attachment 1).

**ATTACHMENT 1
OPERATIONS MANAGER CHECKLIST
Page 2 of 9**

2. _____ **VERIFY** the accuracy of clock in TSC with the Control Room, and **DIRECT** the TSC Director to adjust TSC clock time if required.
TSC Clock Time: _____ **CR Clock Time:** _____
3. _____ **REQUEST** that copies of completed State/Local and NRC notification forms be faxed to the TSC.
- 1.5 _____ If the TSC Maintenance Manager has **not** yet arrived, then **CONTACT** the OSC Director and **DETERMINE** the status of OSC activation, adequacy of staffing and readiness to assume Command and Control of in-plant repair / assessment teams. **TIME:** _____
1. _____ 1. If necessary, **APPOINT** an available supervisor or lead in the OSC to serve as the interim OSC Director and **ASSUME** responsibility for coordination of OSC activities until the arrival of the Maintenance Manager.
- 1.6 _____ **VERIFY** that the following Communicator positions have been dispatched and/or assigned by the TSC Director, in the order listed:
- **[TSC] ENS Communicator#:** _____
 - **[TSC] Operations Communicator:** _____
 - **[Control Room] Operations Communicator:** _____
 - **[Control Room] Damage Control Communicator:** _____
- # Denotes a "Minimum Staff position required for facility activation."
1. _____ 1. **REQUEST** the TSC Director to initiate call outs to augment staffing as necessary.
- 1.6.1 _____ **COMMUNICATE** your expectations to the Operations Communicator for information passing between the Control Room, TSC and EOF.
 Information communicated over this circuit should include:
- Changes in event status and priorities
 - Significant changes in unit / system / component status or parameters
 - Changes in event classification, release condition or PARs.
 - Initiation and completion of assembly and site evacuation.
 - Transfer of Command and Control

**ATTACHMENT 1
OPERATIONS MANAGER CHECKLIST
Page 3 of 9**

- 1.7 _____ **REVIEW** EALs with the other Managers in the TSC, and **VERIFY** that the appropriate classification has been made per EP-AA-111.
 - 1. **If** the classification or EAL is **not** correct, **then NOTIFY** the Station Emergency Director to correct the classification or EAL.
- 1.7.1 _____ **IDENTIFY** and **TRACK** potential EAL escalation paths
- 1.8 _____ **ENSURE** status boards reflect correct classification, potential escalation paths, station priorities and long-term recovery issues.
 - 1. **PROVIDE** guidance to available staff on expectations for maintaining status boards and projection screen(s), if applicable, to display significant plant system data or trends.
- 1.9 _____ **PARTICIPATE** on the initial briefing to the TSC and **ADDRESS** as a minimum:
 - Plant / System status
 - Control Room activities, including teams / personnel dispatched from the Control Room
 - Classification, including current EALs and potential escalation paths

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.

- 1.10 _____ Upon activation of the OSC, **REQUEST** that the Shift Manager relocate the Field/Floor Supervisor (SO) and NLOs to the OSC TIME: _____
- 1.11 _____ **NOTIFY** the TSC Director when the Operations Group is ready to support TSC activation. TIME: _____

**ATTACHMENT 1
OPERATIONS MANAGER CHECKLIST
Page 4 of 9**

2. ONGOING ACTIONS

2.1 Continue to **MONITOR** the EALs for potential escalation paths.

1. **RECOMMEND** escalation in event classification to the Station Emergency Director based on changes in plant or system status.

PERFORM Step 2.2 prior to Command and Control being transferred to the EOF.

2.2 If the event is reclassified by the Station Emergency Director, then **PERFORM** the following:

GE SAE AL UE (Initials)

2.2.1 _____ **NA** **DIRECT** the Emergency Notification System (ENS) Communicator to initiate an NRC Event Notification Worksheet per EP-AA-114.

2.3 **SUPERVISE** the activities of the ENS Communicator, including:

1. **ENSURE** that an open ENS line is maintained when requested.
2. **COORDINATE** with the TSC Director to **ENSURE** that required NRC notifications are performed per EP-AA-114.
3. **ENSURE** that the ENS Communicator is kept apprised of significant changes in plant / event status.
4. **ASSIST** in the resolution of any NRC inquiries or interpretation of data over the ENS Circuit or Emergency Response Data System (ERDS) broadcast.

2.4 **ASSESS** plant conditions based on:

- On-going contact with the Shift Manager in the Control Room
- On-going Control Room and OSC activities
- Monitoring of key plant parameters via the computer displays and TSC Status boards

2.5 **ASSIST** the Station Emergency Director in performing the following:

1. Evaluating station priorities -- **ENSURE** that established station priorities and OSC team activities reflect Control Room needs, and are accurately posted on status boards.
2. Tracking of long-term recovery issues.

ATTACHMENT 1
OPERATIONS MANAGER CHECKLIST
Page 5 of 9

3. Identifying steps or procedures that the Operations staff should be utilizing to properly respond to the emergency.
 4. Evaluating changes in event classification -- **ENSURE** that potential escalation paths are identified and tracked.
- 2.6 **INITIATE** immediate corrective actions to limit or contain the emergency, invoking the provisions of 10 CFR 50.54(x), if appropriate, and specifically when addressing Severe Accident Management Guidelines (SAMG)
1. **APPROVE** emergency special procedures developed by the TSC Technical Support Group and **IMPLEMENT** as applicable under the provisions of 10 CFR 50.54(x).
- 2.7 **PERFORM** periodic updates with the Shift Manager on the following:
- NOTE:** These status updates should be performed through the Operations Status Line to ensure that information is communicated simultaneously between the Control Room, TSC and EOF.
- Status of important safety systems.
 - Status of the three fission product barriers.
 - Status of any alarms relevant to the current conditions
 - Out of Service (OOS) equipment that needs priority repair.
 - Status of any unusual radiological conditions.
 - Prognosis for the situation to improve or worsen.
 - OSC staff utilization and activities.
- 2.8 **COORDINATE** TSC efforts in support of Control Room needs in determining the nature and extent of emergencies pertaining to equipment and plant facilities.
1. **INFORM** the Maintenance Manager of out of service equipment needing priority repair.

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.

ATTACHMENT 1
OPERATIONS MANAGER CHECKLIST
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2. **COMPLETE** a Team Request Form (EP-AA-112-200, Attachment 2) for the dispatching of an OSC team as requested by Control Room, and **FORWARD** to the Maintenance Manager.
- 2.9 **BRIEF** the Radiation Protection Manager of any unusual radiological conditions and current fission product barrier status.
- 2.10 **RECOMMEND** equipment operations, checks and miscellaneous actions to the Control Room in support of restoration and accident mitigation.
- 2.11 **COORDINATE** with the Shift Manager to identify and recommend operations based on EOPs, Severe Accident Management (SAM) procedures, or temporary procedures developed by TSC Technical Support Staff.
- 2.12 **ASSIST** the Maintenance Manager in determining appropriate briefing levels (task priorities) for OSC tasks requested.
- **REFER** to EP-AA-112-200, Attachment 1, "OSC Emergency Team Dispatch Guidance".
1. **ENSURE** that the Damage Control Communicator is used by Control Room to keep the TSC apprised of NLO's or other shift personnel dispatched from the Control Room
- 2.13 **SUPERVISE** the activities of the TSC Operations Communicator, and **ENSURE** that updates are being communicated over the Operations Status Line to the CR and EOF
- 2.14 **ACT** as a TSC liaison for appropriate NRC Site Team personnel if present.
- 2.15 **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2, (Shift Turnover).
3. **SITUATIONAL ACTIONS**
- 3.1 **PERSONNEL EMERGENCIES**
- 3.1.1 **ORGANIZE** and **DIRECT** medical response efforts for injured personnel in relief of the Control Room.
- 3.1.2 **VERIFY** that ambulance services have been notified, if required.
- 3.1.3 **COORDINATE** with the Radiation Protection Manager for the transfer of injured/contaminated personnel.

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OPERATIONS MANAGER CHECKLIST
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3.2 SEARCH AND RESCUE

- 3.2.1 **COORDINATE** Search and Rescue efforts for missing persons
- 3.2.2 **INFORM** the OSC Director immediately of any changes in plant conditions that could impact the search and rescue effort
- 3.2.3 **INFORM** the Station Emergency Director and Radiation Protection Manager of progress and completion of the effort.

3.3 SECURITY THREATS

- 3.3.1 **NOTIFY** the Control Room of security threats reported by the Security Coordinator.
 - 1. **DIRECT** the Control Room staff to implement the "Two-Person" (Line of Sight) Rule for a specific, credible internal security threat based on the direction of the Security Coordinator.
- 3.3.2 **COORDINATE** with the Security Coordinator to establish increased security for the Control Room if necessary.
- 3.3.3 **EVALUATE** plant equipment that may be impacted or restrictions to in-plant and site areas.
- 3.3.4 **RECOMMEND** the quarantining of failed or damaged equipment for further investigation for potential sabotage.

**ATTACHMENT 1
OPERATIONS MANAGER CHECKLIST
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3.4 PERSONNEL ACCOUNTABILITY / SITE EVACUATION

3.4.1 If Accountability is ordered by the Station Emergency Director, **PERFORM** the actions as listed in the applicable procedure:

Step 1: Limerick / Peach Bottom

1. **PROMPT** the Control Room to initiate accountability per EP-MA-113-100, Attachment 2 (Site Evacuation Alarm and Announcement Instructions).
TIME: _____

Step 2: MWROG, except Clinton

2. **ASSIST** the Shift Emergency Director with communications to the Control Room regarding initiation of assembly per EP-MW-113-100:
- a. **DIRECT** the Control Room to sound the assembly siren for 2 minutes.
TIME: _____
 - b. **DIRECT** the Control Room to **ANNOUNCE** over the PA System:
"Attention, Attention, plant assembly has been ordered. All persons are to report to your assigned assembly areas." (Repeat this message at 5 minutes intervals until accountability is achieved.) TIME: _____

3.4.2 When an evacuation of non-essential personnel from the site is ordered, **PERFORM** the following: TIME: _____

1. **ASSIST** the Security Coordinator in the determination of which personnel on-site are needed and which should be considered Non-Essential and evacuated.

Consider the following groups:

- Current operational staffing in the Control Room, TSC and OSC
- SAMG qualified personnel, Fuel Handling and Radwaste personnel

2. If NOT performed as part of accountability, then **DIRECT** the Control Room to initiate an evacuation of Site Assembly Areas per EP-MW(MA)-113-100, as applicable. TIME: _____

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OPERATIONS MANAGER CHECKLIST
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3.5 SEVERE ACCIDENT MANAGEMENT GUIDELINES (SAMG)

NOTE: The SAMG Evaluation Team consists of the SAMG Decision-Maker and at least two SAMG Evaluators located in the TSC. The Technical Manager will initially serve as one member and the Team Lead. The 2nd team member will consist of the Operations Manager (MAROG) or a designated TSC Evaluator (MWROG).

Mid-West ROG

Role of SAMG Decision-Maker may be delegated to the Operations Manager if qualified and NOT required to fill one of the 2 required SAMG Evaluator roles.

- **REFER** to Section 4.3 of EP-AA-112-201, Attachment 1 (Station Emergency Director Checklist) for SAMG Decision-Maker actions.

3.5.1 ASSUME the role of SAMG Evaluator.

3.5.2 ASSIST the Technical Manager in evaluating SAMG procedures and Technical Support Guidelines (TSG).

3.5.3 REQUEST the Logistics Manager to contact a 2nd Operations Manager, if required, to support continued SAMG activities.

ATTACHMENT 2
ENS COMMUNICATOR (TSC) CHECKLIST
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Section 1, Initial Actions

Section 2, 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. **INITIAL ACTIONS**

(Initials)

Step 1.1: NOT APPLICABLE to Clinton Station

1.1 _____ **VERIFY** that ERDS has been activated per EP-MW(MA)-110-100., and **NOTIFY** the TSC Director if ERDS has **not** yet been activated.

1. If directed by the TSC Director, then **ACTIVATE** ERDS.

ERDS initiated at: _____

1.2 _____ **SIGN IN** on the TSC Organization Board.

1.3 **INFORM** the Operations Manager of your arrival, and:

1.3.1 _____ **OBTAIN** an initial briefing on emergency condition.

1.4 _____ **VERIFY** whether an open ENS line is currently being maintained in the Control Room or has been requested by the NRC.

1. **ESTABLISH** an open ENS line, if currently open in Control Room or requested by the NRC.

Open line established at: _____

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

1.6 _____ **OBTAIN** from the TSC Director or Logistics Coordinator copies of any previously issued Event Notification Worksheets faxed by the Control Room to the TSC, when event conditions allow.

**ATTACHMENT 2
ENS COMMUNICATOR (TSC) CHECKLIST
Page 2 of 3**

2. **ON-GOING ACTIONS**

PERFORM Step 2.1 prior to the transfer of Command and Control to the EOF.

- 2.1 **NOTIFY** the NRC **immediately** following a State/Local notification but **not** later than one (1) hour per the criteria listed in EP-AA-114.
1. **COMPLETE** the NRC Event Notification Worksheet (ENW) per EP-AA-114 with the assistance of TSC Managers:
 - A. **OBTAIN** plant / system status information from the Operations Manager or Operations Communicator.
 - B. **OBTAIN** in-plant radiological and effluent release information from the Radiation Protection Manager.
 2. **PROVIDE** completed form to the Station Emergency Director for review and approval prior to transmittal.
 3. **PERFORM** ENS notification in accordance with EP-AA-114.
 4. **PROVIDE** a copy of ENW form to the TSC Director or Logistics Coordinator for distribution and posting.
- 2.2 **MAINTAIN** an open communications link when requested by the NRC over the ENS line, or commercial phone as backup. TIME: _____
1. **DOCUMENT** any inquiries or requests for further information on an Information Request / Message Form (EP-AA-112, Attachment 7), or equivalent, and **FORWARD** to the Operations Manager or Operations Communicator for resolution.
- 2.3 **NOTIFY** the TSC Director and **DIRECT** the TSC HPN Communicator to establish an open line to the NRC over the Health Physics Network (HPN) when requested by the NRC. TIME: _____

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

- 2.4 **When** the EOF assumes Command and Control, **CONTACT** the EOF ENS Communicator to confirm the transfer of ENS responsibilities. TIME: _____
1. Continue to **ASSIST** the EOF ENS Communicator in completing the NRC Event Notification Worksheet.
 2. Continue to **MONITOR** ENS Circuit:
 - A. **PROVIDE** real time updates on significant changes to plant and system status as required per EP-AA-114.
 - B. **RESPOND** to NRC inquiries for information and clarification through the Operations Manager.
 - C. **DOCUMENT** questions that cannot be immediately answered on an Information Request / Message Form (EP-AA-112, Attachment 7), or equivalent, and **FORWARD** to the Operations Manager or Operations Communicator for resolution.
- 2.5 **ASSIST** the TSC Director in updating the Event Chronology Board, or electronic events log as applicable.
- 2.6 **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

ATTACHMENT 3
OPERATIONS COMMUNICATOR (TSC) CHECKLIST
Page 1 of 3

Section 1, Response Expectations

Section 2, 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. **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.

1. If the TSC Director is not yet present in the TSC, **then REPORT** to the Operations Manager for direction on facility assignment.

2. **INITIAL ACTIONS**

(Initials)

- 2.1 _____ When directed, **REPORT** to the Operations Manager and **OBTAIN** an initial briefing on emergency conditions.
- 2.2 _____ **SIGN IN** on the TSC Organization Board.
- 2.3 _____ **INITIATE** and **MAINTAIN** a position log documenting significant actions performed and communications related to your position.
- 2.4 _____ **ESTABLISH** communications with the Operations Communicator (CR) and Operations Advisor (EOF) over the Operations Status Line.

3. **ON-GOING ACTIONS**

- 3.1 **MAINTAIN** communications between the Control Room, TSC and the EOF on the Operational Status Line.

NOTE: Requests from the EOF for additional information or data shall be handled by the TSC.

1. **SERVE** as a continuous communications link between the Shift Manager, TSC Operations Manager, and EOF Operations Advisor.

ATTACHMENT 3
OPERATIONS COMMUNICATOR (TSC) CHECKLIST
Page 2 of 3

- 3.2 **UPDATE** the Control Room and EOF on significant changes to:
- Station priorities
 - In-plant conditions (system status and/or radiological)
 - Initiation / completion of station assembly/accountability and evacuation
 - Offsite support requested
 - Status of injured personnel
 - Changes to event classification
 - If TSC has Command and Control, changes to release status and protective action recommendations (PARs)
 - Transfer of Command and Control responsibilities to the EOF
- 3.3 **APPRISE** the Operations Manager of changes to event status provided by the Control Room and/or EOF, including changes in:
- Plant system and equipment status and line-ups
 - In-plant conditions (system status and/or radiological)
 - Adverse plant trends (e.g. exceeding maximum safe level, EOP entries/status, etc.)
 - If CR or EOF has Command and Control, changes to release status and protective action recommendations (PARs)
- 3.4 **ASSIST** the Operations Manager in monitoring and tracking proper implementation of Emergency Operating Procedure (EOP) actions by the Control Room.
- 3.5 **ASSIST** the Operations Manager in maintaining facility status boards, as instructed.
1. If a loss of data acquisition occurs, then **ASSIST** in updating key plant / equipment status information and parameters on facility status boards.
- Mid-West ROG**
1. **ASSIST** in maintaining electronic logs, as directed.
- 3.6 **ASSIST** the ENS Communicator with the completion of NRC Emergency Notification Worksheet (ENW) and in responding to NRC inquiries system / event status.

ATTACHMENT 3
OPERATIONS COMMUNICATOR (TSC) CHECKLIST
Page 3 of 3

Limerick / Peach Bottom

REFER to DAPAR Input Sheet contained in EP-MA-110-200.

- 3.7 **ASSIST** the Radiation Controls Coordinator in determining and keeping apprised of system / event status information required to perform offsite dose assessments prior to transfer to the EOF.
- 3.8 **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

TSC TECHNICAL SUPPORT GROUP

1. **PURPOSE**

- 1.1 This procedure describes the responsibilities and actions of the TSC Technical Support Group, which consists of the following positions reporting to the TSC Technical Manager:
- Technical Communicator (TSC)
 - Core / Thermal Hydraulic Engineer
 - Electrical Engineer
 - Mechanical Engineer
- 1.2 When the Shift Manager decides that a situation warrants activation of the TSC under the Emergency Plan, this procedure becomes applicable.

2. **TERMS AND DEFINITIONS**

None

3. **RESPONSIBILITIES**

- 3.1 The *Technical Manager* directs a staff in performing technical assessments of station emergencies and assists in recovery planning. The Technical Manager shall report to the Station Emergency Director in the TSC.
- 3.2 The *Technical Communicator (TSC)* reports to the Technical Manager and is responsible for maintaining an open line with the Technical Advisor (EOF) to provide updates on plant status, engineering priorities, and accident mitigation strategies.
- 3.3 The *TSC Technical Support Group* shall consist of, at a minimum, a Core / Thermal Hydraulic Engineer, Mechanical Engineer and Electrical Engineer. Additional station engineering expertise may be augmented to support TSC engineering priorities and activities. The TSC Technical Support Group reports to the Technical Manager and is responsible for supporting engineering assessment and mitigation activities based on established priorities.
- 3.3.1 The Core / Thermal Hydraulic Engineer will serve as the Core Damage Assessment Methodology (CDAM) Evaluator using the guidelines contained in EP-AA-110-301 & -302, as applicable.

4. **MAIN BODY**

- 4.1 **ASSUME** your designated ERO position upon arrival in the TSC.
- 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, Technical Manager Checklist
- 7.2 Attachment 2, Technical Communicator (TSC) Checklist
- 7.3 Attachment 3, Core / Thermal Hydraulic Engineer Checklist
- 7.4 Attachment 4, Emergency Special Procedure Form

ATTACHMENT 1
TECHNICAL MANAGER CHECKLIST
Page 1 of 6

Section 1, Initial Actions

Section 2, Ongoing Actions

Section 3, Situational Actions

3.1, Replacement Parts Evaluation

3.2, Security Threats

3.3, Accountability / Site Evacuation

3.4, Severe Accident Management Guidelines (SAMG)

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 TSC Organization Board.

1.2 _____ **INFORM** the TSC Director of your arrival.

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

1.4 **VERIFY** the arrival of the following positions and **INFORM** the TSC Director when "minimum staffing" has been met: **TIME:** _____

- _____ **Electrical Engineer #:** _____

- _____ **Mechanical Engineer #:** _____

- _____ **Core / Thermal Hydraulic Engr#:** _____

- _____ **Technical Communicator:** _____

Mid-West ROG

- _____ **SAMG Evaluator:** _____

Denotes a "Minimum Staff position required for facility activation."

1.5 _____ **EVALUATE** the need for additional technical or engineering support based on the existing emergency including additional contractor or vendor engineering support (e.g. NSSS, architect engineer, etc.).

1.5.1 _____ **REQUEST** the Logistics Coordinator to initiate call outs for any additional personnel and contractor / vendor support, as needed.

ATTACHMENT 1

TECHNICAL MANAGER CHECKLIST

Page 2 of 6

- 1.6 _____ **VERIFY** with the other TSC Managers, as applicable, the appropriate classification has been made and potential escalation paths.
1. If the classification or EAL is **not** correct, then **NOTIFY** the Station Emergency Director to correct the classification or EAL.
- 1.7 _____ **VERIFY** that the correct plant-based Protective Action Recommendation (PAR) has been identified per EP-AA-111, Attachments 2 thru 8, as applicable.
1. If the plant-based PAR is **not** correct, then **NOTIFY** the Station Emergency Director.
- 1.8 _____ **COMMUNICATE** your expectations for information passing between the TSC and EOF to the Technical Communicator. Information communicated over this circuit should include:
- Engineering priorities
 - Accident mitigation strategies
 - Status of on-going Engineering activities
1. If a Technical Communicator has not yet arrived, then **IDENTIFY** staffing needed to the TSC Director, and in the interim, **USE** available engineering staff to initiate communications with the EOF Technical Support Group.
- 1.9 _____ **BRIEF** Technical Support Group members on event chronology, priorities and initial engineering issues
- 1.10 _____ **NOTIFY** the TSC Director when the Technical Support Group is ready, based on event conditions, to support TSC activation.

TIME: _____

2. ONGOING ACTIONS

- 2.1 **SUPERVISE** Technical Support Group activities based on station priorities established by the Station Emergency Director.
1. If deemed appropriate based on the event, then **APPOINT** a Technical Support Group Lead from available staff to assist in coordinating engineering activities and communications.

ATTACHMENT 1**TECHNICAL MANAGER CHECKLIST**

Page 3 of 6

- 2.2 **ACCUMULATE, TABULATE** and **EVALUATE** data on plant parameters to determine the overall plant condition conditions.
1. **INITIATE** trending of critical parameters.
 2. **IDENTIFY** data points and control parameters that the Operations staff should monitor.
 3. **ENSURE** that current and adequate technical information is depicted on status boards in the TSC.
- 2.3 **ASSIST** the Station Emergency Director in evaluating changes to plant-based PARs (prior to the EOF accepting Command and Control) and event classifications.
1. **MONITOR** any EAL thresholds that have been exceeded but do **not** cause a change in the classification level, or potential paths that may lead to event escalation.
 2. **If** actual or projected plant conditions indicate that the three fission product barriers **cannot** be maintained, **then NOTIFY** the Station Emergency Director and **ASSIST** in evaluating appropriate PAR.
- 2.4 **If** you need to request an Emergency Team from the OSC, **then COMPLETE** the upper portion of EP-AA-112-200, Attachment 2, "Team Request Form", and **FORWARD** the form to the Maintenance Manager.
- 2.5 **ASSIST** the OSC in evaluation of emergency repairs and parts evaluations.
- **REFER** to Section 3.1 for guidance on replacement parts evaluation.
- 2.6 **CONSULT** with the Radiation Protection Manager to determine what information or technical assistance is needed to support radiological assessment activities.
- 2.7 **SUPERVISE** the activities of the Technical Communicator as required.
- 2.8 **BRIEF** the EOF Technical Support Manager or Technical Advisor, as required, concerning technical issues being evaluated.
- 2.9 **ACT** as the TSC Liaison with State and/or the appropriate NRC Site Team representative, upon their arrival, on technical/engineering priorities and activities underway.

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

- 2.10 **PARTICIPATE** in periodic TSC briefings. Briefings should include but not be limited to:
- Core Conditions
 - EALs and escalation paths
 - Engineering Status
 - SAMG Status
- 2.11 **IDENTIFY** and **DIRECT** the development of emergency special procedures, using Attachment 4, needed to effect long-term safe shutdown or to mitigate a release.
1. **SUBMIT** Emergency Special Procedures developed to the Operations Manager for review and approval prior to implementation.
 2. **COMPLETE** and **SUBMIT** to the Maintenance Manager an OSC Team Request Form (EP-AA-112-200, Attachment 2) with approved Emergency Special Procedure form attached.
- 2.12 **COORDINATE** core damage assessment activities.
1. **CONSULT** with the Radiation Protection Manager to determine whether Post Accident Samples should be taken.
 2. **DIRECT** a Core/Thermal Hydraulic Engineer to initiate Core Damage Assessment evaluations, if required, in coordination with the Radiation Controls Engineer per the applicable procedure:
 - EP-AA-110-301, Core Damage Assessment (BWR)
 - EP-AA-110-302, Core Damage Assessment (PWR)
 3. **EVALUATE** core damage assessment results against EALs, and immediately **NOTIFY** the Station Emergency Director and Radiation Protection Manager of results.
- 2.13 **ENSURE** the tracking of long-term recovery issues.
- 2.14 **COORDINATE** required engineering support from Exelon Corporate, unaffected stations, Industry groups and contractors, through the EOF Technical Support Group.

ATTACHMENT 1**TECHNICAL MANAGER CHECKLIST**

Page 5 of 6

- 2.15 If a loss of data acquisition occurs, then **PERFORM** the following:
1. **DIRECT** the Technical Communicator to assist the Operations Communicator in manually updating facility plant / system status boards.
 2. **ASSIST** the Operations Manager in identifying key plant / system status and parameters to be tracked on status boards.
 3. **REQUEST** that the Logistics Coordinator call in additional personnel and **IDENTIFY** the support required.
- 2.16 **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).
3. **SITUATIONAL ACTIONS**
- 3.1 **REPLACEMENT PARTS EVALUATION**
- 3.1.1 If **not** yet staffing the TSC/OSC, then **CONTACT** the on-call Procurement / Materials Management Liaison, as required, for assistance in parts evaluations.
- 3.1.2 If the need exists to issue a replacement part that is **not** qualified for Safety Related or Environmentally Qualified equipment, then **PERFORM** the following actions:
1. **REVIEW** the situation with the Maintenance Manager and the Station Emergency Director.
 2. **PERFORM** an evaluation considering the following criteria as a minimum:
 - Urgency of the repair
 - Time required to obtain a qualified part
 - Possible consequences of the unqualified part failing
 3. **CONSULT** the EOF Technical Support Manager or Director as necessary.

ATTACHMENT 1**TECHNICAL MANAGER CHECKLIST**

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3.1.3 **When** non-qualified part(s) are approved for use, then **PERFORM** the following actions:

1. **DIRECT** Engineering to perform reviews of acceptability of part(s) and limitations to be established until qualified part(s) can be obtained.
2. **DOCUMENT** the use of the non-qualified part in either the Event Log or station tracking system for deficiencies.
3. **REQUEST** support from the EOF Technical Support Manager or TSC Maintenance Manager as necessary.

3.2 **SECURITY THREAT**

- 3.2.1 For bombs threats or plant sabotage, **EVALUATE** consequences of actual or potential damage, and **DETERMINE** compensating actions to be implemented.
- 3.2.2 For on-going threats of sabotage, **DETERMINE** critical equipment that must be protected from attempted sabotage and **ADVISE** the Station Emergency Director.

3.3 **ACCOUNTABILITY / SITE EVACUATION**

- 3.3.1 **ASSIST** the Security Coordinator in the determination of which personnel on-site are needed and which should be considered Non-Essential and evacuated. Consider the following groups:

3.4 **SEVERE ACCIDENT MANAGEMENT GUIDELINES (SAMG)**

3.4.1 **ASSEMBLE** SAMG Evaluation Team

NOTE: The SAMG Evaluation Team consists of at least two SAMG Evaluators located in the TSC. The Technical Manager will initially serve as one member, and the Team Lead. The 2nd team member will consist of the Operations Manager (MAROG) or a designated TSC Evaluator (MWROG).

- 3.4.2 **SUPERVISE** the development of SAMG strategies using available guidance.
- 3.4.3 **REQUEST** that the Logistics Coordinator initiate a call out for a 2nd Technical Manager, if required, to assist in coordinating SAMG Evaluation Team activities.

ATTACHMENT 2
TECHNICAL COMMUNICATOR (TSC) CHECKLIST
Page 1 of 1

Section 1, Initial Actions

Section 2, 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. **INITIAL ACTIONS**

(Initials)

- 1.1 _____ **SIGN IN** on the TSC Organization Board.
- 1.2 _____ **INFORM** the Technical Manager of your arrival and **OBTAIN** an initial briefing on emergency conditions.
- 1.3 _____ **INITIATE** and **MAINTAIN** a position log documenting significant actions performed and communications related to your position.
- 1.4 _____ **ESTABLISH** communication with the EOF Technical Advisor and **MAINTAIN** an open line using the Technical Conference Line.

2. **ON-GOING ACTIONS**

- 2.1 **PERFORM** updates over the Technical Conference Line on the following:
- Engineering priorities
 - Accident mitigation strategies
 - Status of on-going Engineering activities
- 2.2 **PROVIDE** interpretation of plant system and parameter data as requested by the Technical Advisor to support EOF and JPIC activities.
- 2.3 **ASSIST** the Technical Support Group with the tracking and communication of engineering priorities and activities.
- 2.4 **DOCUMENT** information requests for technical assistance and responses using an Information Request / Message Form (EP-AA-112, Attachment 7).
- 2.5 **If a loss of computer generated data occurs, then PERFORM** the following:
1. **ASSIST** the Operations Communicator in updating facility status boards based on information from the Control Room.
 2. **INITIATE** manual data trending on Plant Status Sheets using status boards and **FORWARD** the EOF at least every 30 minutes.
- 2.6 **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

ATTACHMENT 3**CORE / THERMAL HYDRAULIC ENGINEER CHECKLIST**

Page 1 of 2

Section 1, Initial Actions

Section 2, 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.

3. INITIAL ACTIONS

(Initials)

- 3.1 _____ **SIGN IN** on the TSC Organization Board.
- 3.2 _____ **INFORM** the Technical Manager of your arrival and **OBTAIN** an initial briefing on potential core damage aspects or control rod insertion or Anticipated Transient Without a Scram (ATWS) scenarios.
- 3.3 _____ **INITIATE** and **MAINTAIN** a position log documenting significant actions performed and communications related to your position.
- 3.4 _____ **IDENTIFY** yourself to the Radiation Controls Engineer upon his/her arrival.
- 3.5 _____ **LOG** into available Core Damage Assessment Methodology (CDAM) tools or models (e.g., Boil Off, etc.) and **LOCATE** required reference materials.

4. ON-GOING ACTIONS

- 4.1 **MONITOR** applicable plant conditions to determine if potential exists for core damage:
- Reactor Pressure Vessel (RPV) level (PWR – pressure, core exit thermocouples, etc.)
 - Containment radiation levels
 - Containment hydrogen concentrations
- 4.2 **INFORM** the Technical Manager if Emergency Action Level (EAL) thresholds, under the Fission Product Barrier Matrix, indicate a potential or actual LOSS of the Fuel Clad Barrier.
- 4.3 **COORDINATE** with the Radiation Controls Engineer to obtain a reactor coolant sample and **ASSIST** in determining applicable sample locations.

ATTACHMENT 3

CORE / THERMAL HYDRAULIC ENGINEER CHECKLIST

Page 2 of 2

- 4.4 If potential core damage is indicated, then **EVALUATE** extent of failure using approved calculational models / tools and CDAM guidelines contained in:
- EP-AA-110-301, "Core Damage Assessment (BWR)"
 - EP-AA-110-302, "Core Damage Assessment (PWR)"
- 4.5 **PROVIDE** input to Severe Accident Management (SAM) Team, and **SERVE** as a SAMG Evaluator if qualified.
- 4.6 **UPDATE** the EOF Technical Advisor periodically on CDAM activities, and determination of core state and spent fuel accident aspects for offsite dose calculations.
- 4.7 **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover)
- .

ATTACHMENT 4
EMERGENCY SPECIAL PROCEDURE FORM
Page 1 of 1

INSTRUCTIONS: COMPLETE all applicable sections. ENTER "N/A" in sections already addressed in attached procedure draft or mark up.

PURPOSE:
PREREQUISITES / PRECAUTIONS:
REQUIRED EQUIPMENT:
PROCEDURE:
NOTES:
PREPARED BY _____ / _____
REVIEWED BY: _____ / _____
OPERATIONS MANAGER APPROVAL _____ / _____

CAUTION		
PRIOR TO INVOLVING 10 CFR 50.54(X)/(Y), OBTAIN SENIOR LICENSED OPERATOR APPROVAL.		
_____ / _____ / _____		
Signature	Date	Time

TSC MAINTENANCE GROUP

1. **PURPOSE**

1.1 This procedure describes the responsibilities and actions of the TSC Maintenance Group, which consists of the following positions reporting to the TSC Maintenance Manager:

- Damage Control Communicator (TSC)

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

2. **TERMS AND DEFINITIONS**

Mid-West ROG

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 *Maintenance Manager* directs the OSC in providing labor, tools, protective equipment and parts needed for emergency repair, damage control and recovery efforts to return the plant to its pre-accident status. The Maintenance Manager shall report to the Station Emergency Director.

3.2 *Damage Control Communicators* are stationed in the Control Room (CR), Technical Support Center (TSC) and Operations Support Center (OSC), and are responsible for relaying requests for the dispatching of OSC teams and for keeping the Control Room and TSC apprised of OSC team activities.

4. **MAIN BODY**

4.1 **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, Maintenance Manager Checklist

7.2 Attachment 2, Damage Control Communicator (TSC) Checklist

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

Section 1, Initial Actions

Section 2, Ongoing Actions

Section 3, Situational Actions

3.1, Replacement Parts Evaluation

3.2, Personnel Accountability and 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

(Initials)

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

1.2 _____ **INFORM** the TSC Director of your arrival and **OBTAIN** an initial briefing of the emergency condition from the Station Emergency Director and Operations Manager.

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

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.

1.4 **DETERMINE** adequacy of OSC staffing:

- _____ **OSC Director#:** _____

- _____ **Damage Control Communicator:** _____

Denotes a "Minimum Staff position required for facility activation.

1. If the arrival of OSC Director is delayed, then **ASSIGN** the Assistant OSC Director, on-shift Field/Floor Supervisor or a Maintenance / RP First Line Supervisor (FLS) present in the facility as interim OSC Director. **RECORD** the substitute in your position log.

1.4.1 _____ **REQUEST** support from the TSC Director (or Logistics Coordinator) in initiating call outs to fill the following minimum staffing levels that have not responded to the event:

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

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		
Electrical Maintenance		2	
Instrument Maintenance		3	
• Repair and Corrective Actions		(1)	
• Field Monitoring Team Drivers		(2)	
Radiation Protection (Total)	13	Verified by TSC Rad. Protection Manager	
• In-plant / Onsite Surveys	(9)		
• Field Monitoring Team Leaders	(4)		
Chemistry	2	2	

NOTE: A Group Lead is not required to be a Supervisor. Available Management, or as an interim measure, Bargaining Unit / Craft personnel can fill this capacity.

1.4.2 _____ **VERIFY** that the following Group Leads have been designated using the manpower pool available in the OSC:

- Mechanical / Electrical: _____ / _____
- Instrument Maint.(I&C): _____
- Radiation Protection: _____
- Chemistry: _____

1.4.3 _____ **CONSIDER** the need for additional groups to report to the OSC based on the plant conditions to support OSC activities.

1.5 _____ **BRIEF** the Station Emergency Director on OSC staffing and any issues that may impact OSC operations.

1.6 **DISCUSS** the following with the Operations Manager or with the OSC:

1.6.1 _____ **DETERMINE** the status on shift personnel current dispatched in-plant by the Control Room.

1.6.2 _____ **CONFIRM** that the equipment to be repaired is in a safe condition to perform the needed repairs

ATTACHMENT 1
MAINTENANCE MANAGER CHECKLIST
Page 3 of 6

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.

1.6.3 _____ **ENSURE** that Operations on-shift Field / Floor Supervisor and NLOs have relocated to the OSC
TIME: _____

1.7 _____ **COMMUNICATE** your expectations for communications between the CR, TSC and OSC to the Damage Control Communicator, once assigned by the TSC Director.

Information communicated over this circuit should be limited to:

NOTE: Pre-defined teams, as listed in Attachment 1 to EP-AA-112-200, do not require an OSC Team Request Form to be completed.

- Requests for the dispatching of an OSC team an OSC Team Request Form.
- 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 by the Control Room.

1.8 _____ **ASSUME** responsibility for these teams once the TSC assumes Command and Control of the event.

Limerick

1.9 _____ **VERIFY** that an I&C technician has been dispatched to shift TSC ventilation to its "emergency mode" per EP-AA-112-202, Attachment 1 (Table 1-1).

1.10 _____ **NOTIFY** the TSC Director when the Maintenance Group is ready to support TSC activation.
TIME: _____

**ATTACHMENT 1
MAINTENANCE MANAGER CHECKLIST**

Page 4 of 6

2. ONGOING ACTIONS

2.1 **SUPERVISE** the activities of the Damage Control Communicator to ensure the timely dispatching and accurate tracking of OSC teams using the designated status board.

2.2 **SUPERVISE** the activities of the OSC Director, including the direction of the total on-site maintenance and equipment restoration effort.

1. **ENSURE** the OSC Director is kept informed of changes to station priorities established by the Station Emergency Director.

2.3 **DETERMINE** the briefing levels (team priorities) based on overall station priorities for requested OSC tasks, in coordination with the Operations Manager, and **DOCUMENT** on an Team Request Form.

1. **CONSULT** with other TSC Managers to determine if additional precautions or interfaces are necessary for the performance of this task.

– **REFER** to EP-AA-112-200, Attachment 1, "OSC Emergency Team Dispatch Guidance".

2. **FORWARD** the Team Request Form to the Damage Control Communicator for transmittal to the OSC.

Limerick / Peach Bottom

3. **UPDATE** "Priority" on status board based on overall station priorities assigned by the Station Emergency Director.

2.4 **MONITOR** progress of repair teams, and **ENSURE** that the Damage Control Communicator records Team dispatch and status on the designated status board.

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.

2.5 **TRACK** NLO's dispatched from the Control Room in coordination with the Operations Manager.

**ATTACHMENT 1
MAINTENANCE MANAGER CHECKLIST**

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- 2.6 **EVALUATE** the need for additional maintenance personnel and additional equipment to expedite equipment recovery and restoration.
1. **REQUEST** that the Logistics Coordinator oversee obtaining these resources.
- 2.7 **REQUEST** engineering support from the Technical Manager in support of OSC team activities
1. **If** an emergency event situation exists where non-qualified parts are to be used to repair safety related equipment, **then PERFORM** the actions outlined in Section 3.1.
 2. **IDENTIFY** any required emergency special procedures or deviations that need to be developed or implemented in support of OSC activities.
 - A. **ENSURE** that deviations from station procedures are approved by the Operations Manager.
- 2.8 **If** Accountability is initiated, **then PERFORM** the actions outlined in Section 3.2.
- 2.9 **AUGMENT** TSC / OSC staffing, as required, to provide needed Supply Management and Work Planning support.
- 2.10 **PARTICIPATE** in periodic TSC briefings, keeping TSC Managers apprised of the status of OSC staff utilization and activities. Briefings should include but not be limited to:
- Jobs in progress
 - Offsite or technical assistance needed
 - OSC staffing
- 2.11 **APPRISE** the OSC Director of significant changes in priorities and event or plant status, including unexpected or sudden changes in radiological conditions affecting OSC team activities.
- 2.12 **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).

**ATTACHMENT 1
MAINTENANCE MANAGER CHECKLIST
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3. SITUATIONAL ACTIONS

3.1 REPLACEMENT PARTS EVALUATION

If an emergency event situation exists where non-qualified parts are to be used to repair safety related equipment, **then PERFORM** the following actions:

3.1.1 _____ **EVALUATE** the following in conjunction with the Technical Manager:

- Urgency of the repair.
- Time required to obtain a qualified part.
- Possible consequences of the unqualified part failing.

3.1.2 _____ **DOCUMENT** the application, use, and location of the unqualified parts.

3.1.3 _____ **REVIEW** the situation with the Technical Manager.

3.1.4 _____ **OBTAIN** approval to install the unqualified part from the Station Emergency Director.

3.2 PERSONNEL ACCOUNTABILITY / SITE EVACUATION

3.2.1 _____ **COORDINATE** with the OSC Director to establish communications to assembly areas through either phone or radio communications.

3.2.2 _____ **PROVIDE** staffing, tools, and equipment to assist in search and rescue efforts, as requested.

3.2.3 _____ **If a Site Evacuation is ordered, then ASSIST** the Security Coordinator in the determination of which personnel on-site are needed and which should be considered Non-Essential and evacuated:

- Consider the following groups: Current OSC bargaining group staffing levels and departmental Group Leaders in the OSC
- Consider the need for support.

3.2.4 _____ **REQUEST** that any personnel in the Assembly Areas, that have been determined to be "essential", report to the TSC or OSC as required.

ATTACHMENT 2
DAMAGE CONTROL COMMUNICATOR (TSC) CHECKLIST
Page 1 of 3

General Responsibilities include:

- **TRANSMIT** information that has been reviewed by the Maintenance Manager or posted on facility 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 OSC Team Status Board, as directed

Section 1, Response Expectations

Section 2, Initial Actions

Section 3, 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. **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 2
DAMAGE CONTROL COMMUNICATOR (TSC) CHECKLIST
Page 2 of 3**

2. INITIAL ACTIONS

(Initials)

2.1 ___ **REPORT** to the Maintenance Manager and **OBTAIN** an initial briefing on emergency conditions.

2.2 ___ **OBTAIN** a headset and **CONTACT** the Damage Control Communicator assigned to the OSC.

NOTE: Set-up and operation of Damage Control Line may vary between stations.

1. **COORDINATE** establishing an open circuit with the Control Room 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

1. **If** the ringdown phone fails, **then USE** an existing station to establish and maintain communications with the OSC.

**ATTACHMENT 2
DAMAGE CONTROL COMMUNICATOR (TSC) CHECKLIST**

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- 3.2 **OBTAIN** status on teams/personnel currently dispatched by Control Room and **POST** on designated status board, or equivalent.

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1. **POST** team "Priority" at the Maintenance Manger's direction based on overall station priorities established by the Station Emergency Director.

- 3.3 **UPDATE** the OSC on changes to:

- Team / Task priorities
- Classification changes
- Facility in Command and Control
- Status of Assembly and Site Evacuation
- Changes to in-plant conditions (system status and/or radiological)

- 3.4 **TRANSMIT** team requests to the OSC using a completed OSC Team Request Form (EP-AA-112-200, Attachment 2), which has been reviewed by the Maintenance Manager.

- 3.5 **ENSURE** team status is accurately reflected on designated status board.

Mid-West ROG

1. **VERIFY** periodically that the electronic Station Priority Log (SPL) accurately reflects OSC Team status.

- 3.6 **NOTIFY** the Operations Manager of the following:

- Requests from the Control Room received over the Damage Control Line for the dispatching of an OSC team.
- Changes in status of NLO's dispatched from the Control Room
- Requests from the Control Room for the dispatching NLO's

1. **POST** NLO activities on designated status board, or equivalent, as requested by the Operations Manager.

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

TSC RADIATION PROTECTION / CHEMISTRY GROUP

1. **PURPOSE**

1.1 This procedure describes the responsibilities and actions of the TSC Radiation Protection (RP) / Chemistry Group, which consists of the following positions reporting to the TSC Radiation Protection Manager (RPM):

- Radiation Controls Coordinator (RCC),
- Radiation Controls Engineer (RCE), and
- HPN Communicator (TSC)

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

2. **TERMS AND DEFINITIONS**

Mid-West ROG

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 *TSC Radiation Protection Manager (RPM)* reports to the Station Emergency Director and supervises the activities of the Radiation Controls Coordinator and Radiation Controls Engineer. The Radiation Protection Manager directs a staff in determining the extent and nature of radiological or hazardous material problems on-site.

3.2 The *Radiation Controls Coordinator (RCC)* reports to the Radiation Protection Manager. The RCC supervises the activities of OSC Radiation Protection Lead and coordinates dose assessment and environmental field teams until the EOF is activated. The RCC will continue to monitor off-site environmental data and will assist the Radiation Protection Manager as deemed appropriate.

- 3.3 The *Radiation Controls Engineer (RCE)* reports to the Radiation Protection Manager. The RCE coordinates the radiological and chemistry interface with the technical / engineering staff and supervises the activities of the OSC Chemistry Group Lead.
- 3.4 The *TSC HPN Communicator* reports to the Radiation Controls Coordinator and is responsible for the communication of radiological in-plant and environmental information to the NRC over the Health Physics Network (HPN) Circuit.

4. **MAIN BODY**

- 4.1 **INITIATE** the appropriate Emergency Plan activities using the position specific checklist listed in Attachments 1 thru 4.

5. **DOCUMENTATION**

None

6. **REFERENCES**

None

7. **ATTACHMENTS**

- 7.1 Attachment 1, Radiation Protection Manager Checklist
- 7.2 Attachment 2, Radiation Controls Coordinator Checklist
- 7.3 Attachment 3, Radiation Controls Engineer Checklist
- 7.4 Attachment 4, HPN Communicator (TSC) Checklist

**ATTACHMENT 1
RADIATION PROTECTION MANAGER CHECKLIST
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Section 1, Initial Actions

Section 2, Ongoing Actions

Section 3, Situational Actions

3.1, Accountability / Site Evacuation

3.2, Request to exceed Exposure Limits

3.3, Issuance of Potassium Iodide (KI)

3.4, Transport of Contaminated Injured Personnel to Offsite Hospital

3.5, TSC Habitability Alarms

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 TSC Organization Board.

1.2 **INFORM** the TSC Director of your arrival.

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

1.4 **CONTACT** the Radiation Protection (RP) Group Lead in the OSC to become apprised on applicable radiological conditions.

OSC RP Group Lead: _____

1. If an RP Supervisor is not present in the OSC, then **DESIGNATE** a member of RP management, or as an interim measure an RP Technician (RPT), as OSC RP Lead to support OSC activities.

Mid-West ROG

1.4.1 **VERIFY** that an RPT has been dispatched to the Control Room to support ERT activities.

Limerick

1.4.2 **VERIFY** that an RPT has been dispatched to the Aux. Equipment Room, ARM Panel, if required.

**ATTACHMENT 1
RADIATION PROTECTION MANAGER CHECKLIST
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1.5 **DETERMINE** adequacy of the RP support staff in the TSC.

The following positions should be staffed but are not required for TSC activation:

- _____ Radiation Controls Coordinator (RCC): _____
- _____ Radiation Controls Engineer (RCE): _____
- _____ TSC HPN Communicator: _____

1. **INFORM** the TSC Director of any RP support positions still needing to be staffed.

1.6 _____ **VERIFY** that the installed TSC area and airborne monitors are functional, if applicable, or **CONTACT** the OSC RP Group Lead to establish appropriate radiological monitoring of the TSC.

Peach Bottom

REFER to Table 4-9 (in EP-112-300, Attachment 4) for action in support of TSC Habitability. Actions are initiated by the OSC RP Group Lead.

1.7 _____ If **NOT** performed as part of TSC activation, then (When an actual or potential radiological hazard exists, **INSTRUCT** the TSC Director to shift the TSC HVAC to its "emergency" mode.

1.8 _____ **VERIFY** that the OSC has dispatched a RPT to begin habitability surveys of all permanently occupied areas on-site per EP-AA-113.

1.9 _____ If the RCC is not yet present, then **VERIFY** the correct release condition and dose-based Protective Action Recommendations (PARs) have been determined using the dose assessment model per EP-MW(MA)-110-200.

1. If the PAR is **not** correct, then **NOTIFY** the Station Emergency Director to correct the PAR through a new notification to the state.

1.10 _____ **NOTIFY** the TSC Director when the Radiation Protection / Chemistry Group is ready to support TSC activation. TIME: _____

NOTE: Responsibility for performing dose assessments and coordination of field monitoring teams may be transferred when the EOF Protective Measures Group is adequately staffed. However, until Command and Control is formally transferred, PAR decision-making will be retained by the TSC Station Emergency Director.

ATTACHMENT 1
RADIATION PROTECTION MANAGER CHECKLIST
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- 1.11 _____ **ESTABLISH** communications with the EOF Radiation Protection Manager and **DISCUSS** the following:
- Transfer of dose assessment and field monitoring teams
 - In-plant and site radiological conditions
 - Radiation Protection resources required from Corporate, unaffected stations and/or Industry/vendors

Limerick / Peach Bottom

- 1.12 _____ **VERIFY** that Radiation Protection staffing is adequate to support Emergency Plan, with a "minimum staffing" as follows:
- RP Technicians: Nine (9)
 - OSC RP Group Lead
 - Radiation Controls Coordinator
 - Radiation Protection Manager

2. **ONGOING ACTIONS**

- 2.1 **SUPERVISE** the activities of the RCC, including the monitoring of meteorological, environmental and Field Monitoring Team data prior to transfer to the EOF.
1. **REVIEW** dose projections performed by the RCC for a possible change to classification or PARs
 2. Once the EOF has assumed control of dose assessment and field monitoring teams, **BRIEF** the RCC on OSC activities and **TRANSFER** supervision of the OSC RP Group Lead to the RCC.
- 2.2 **MAINTAIN** frequent communications with the RCC to exchange information and evaluate consequences associated with any of the following:
- Facility habitability and in-plant conditions;
 - Offsite release concerns (effluent readings / meteorology);
 - Use of protective clothing, respiratory protection, and access control in the plant to control exposure;
 - Need for additional radiation protection staffing, equipment and supplies; and
 - Personnel are decontaminated, if necessary.

ATTACHMENT 1
RADIATION PROTECTION MANAGER CHECKLIST
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- 2.3 **ENSURE** that personnel entering or leaving the TSC have or are issued dosimetry (TLD or personnel dosimeter).
- 2.4 **ASSIST** the Maintenance Manager in determining appropriate radiological protective measures to be implemented for in-plant repair activities.
- 2.5 **PROVIDE** assistance as required to the Operations Manager for response, treatment and transfer of injured and contaminated personnel to off-site facilities and for rescue operations and injury situations.
1. **IMPLEMENT** the action listed under Section 3.4 for radiologically contaminated injuries requiring the transport of victim(s) to an offsite hospital.
- 2.6 **EVALUATE** and **AUTHORIZE** entry into High Radiation Areas.
- 2.7 **SUPERVISE** the activities of the RCE, including:
1. **ENSURE** that the following indications are monitored and trended for changes impacting OSC activities, EOP Maximum Safe Operating Levels, EAL thresholds (Category 'R'), and area habitability.
- In-plant Area Radiation Monitors
 - Process Radiation Monitors
 - Containment Radiation Monitors
 - Gaseous Effluent Release Rate Monitors
2. **ENSURE** that any hazardous material accidents are properly evaluated and emergency response efforts are effectively coordinated with TSC staff and offsite agencies.
3. **ENSURE** setup of required sampling systems and identification of alternate sampling locations, as applicable.
- 2.8 **ADVISE** the Station Emergency Director and EOF Radiation Protection Manager of changes in radiological release status.
- 2.9 **ASSIST** the Station Emergency Director in evaluating dose based PARs per EP-AA-111 (prior to the EOF accepting Command and Control) and changes in radiological event classification.
- 2.10 **ASSIST** in the completion of the State/Local and NRC event notification forms based on changes in release rate, plant or meteorological conditions, or offsite dose projections.

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RADIATION PROTECTION MANAGER CHECKLIST
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NOTE: Instructions for the completion of the NRC Event Notification Worksheet (ENW) and State/Local notification form are contained in EP-AA-114 and EP-MW(MA)-114-100 respectively.

2.11 **EVALUATE** the need for restrictions on Security patrols based on current radiological conditions and **BRIEF** the Security Coordinator on any restrictions that may be necessary.

2.12 **BRIEF** the EOF Radiation Protection Manager periodically on the current situation.

NOTE: Pre-defined teams, as outlined in Attachment 1 to EP-AA-112-200, do **NOT** required an OSC Team Request Form (EP-AA-112-200, Attachment 2).

2.13 **If you need to request an Emergency Team from the OSC, then COMPLETE** the upper portion of an OSC Team Request Form, and **FORWARD** to the Maintenance Manager.

2.14 **COORDINATE** the dispatching of RP personnel from offsite or unaffected stations to areas outside the Station Site Boundary with the EOF Radiation Protection Manager.

NOTE: A Team Request Form is only needed if personnel are being dispatched from the OSC.

2.15 **PARTICIPATE** in periodic TSC briefings to include as a minimum:

- Release Status
- Dose Rate concerns
- Contaminated / Injured personnel
- ERF Habitability
- Protective Actions (onsite and offsite)
- Need for KI issuance or Emergency Exposure approval

2.16 **ENSURE** proper decontamination, if necessary, and **DETERMINE** the proper bioassay program needed for on-site emergency workers.

2.17 **BRIEF** the appropriate NRC Site Team representative periodically on current radiological conditions and **ACT** as the TSC Liaison.

2.18 **ENSURE** that an adequate supply of respiratory protection equipment is available to support emergency response activities, including respirators and filters, SCBA tanks and spare bottles, etc.

ATTACHMENT 1
RADIATION PROTECTION MANAGER CHECKLIST
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1. **ENSURE** that respiratory equipment is processed for reuse in accordance with Exelon Radiation Protection procedures.
- 2.19 **ARRANGE** for additional RP resources from Corporate, unaffected stations, and vendors/contractors through the EOF Radiation Protection Manager.
- 2.20 **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).
3. **SITUATIONAL ACTIONS**
 - 3.1 **ACCOUNTABILITY / SITE EVACUATION**

NOTE: Accountability is required to be performed at a Site Area or General Emergency classification, but may be performed at anytime at the discretion of the Station Emergency Director.

 - 3.1.1 **RECOMMEND** to the Station Emergency Director whether or not offsite assembly / relocation of non-essential personnel evacuating the site is required , based on radiological conditions, to perform further monitoring and decontamination.
 1. **If** off-site assembly / relocation of non-essential personnel is deemed necessary, **then ADVISE** on recommended assembly center(s) and evacuation route(s) per EP-MW(MA)-113-100 based on radiological and meteorological conditions present or projected.
 - A. **COORDINATE** with the Security Coordinator to determine routes to be used for the evacuation of non-essential personnel from the site.
 - 3.1.2 **PROVIDE** assistance to Security at the Guard House, as needed, in the monitoring of station person evacuating the Protected Area.
 - 3.1.3 **DISPATCH** RP personnel to assembly / relocation center(s) per EP-MW(MA)-113-100 to evaluate habitability and, if required, and perform surveys of vehicles and evacuees.
 1. **REQUEST** RP assistance from an unaffected station through the EOF Radiation Protection Manager to assist in off-site assembly / relocation center activities
 - 3.1.4 **TURNOVER** responsibility for assembly / relocation center operations to the EOF Radiation Protection Manager.

ATTACHMENT 1
RADIATION PROTECTION MANAGER CHECKLIST
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LIMERICK	PEACH BOTTOM
<u>Designated Assembly Areas For Non-Essential Personnel</u>	
<ul style="list-style-type: none"> • If WD (from) is 210^o to 260^o, then USE the Cromby Generating Station • If WD (from) is 261^o to 209^o, then USE the Limerick Airport (Pottstown) 	<ul style="list-style-type: none"> • If WD (from) is North to WEST, then USE the North Sub-Station • If WD (from) is South to East, then USE Unit 1
<u>Designated Site Evacuation Routes</u>	
<ul style="list-style-type: none"> • If WD (from) is 165^o to 215^o, then USE the Back Gate only • If WD (from) is 305^o to 350^o, then USE the Main Gate only • If ANY other WD, then USE both gates based on ED's judgment 	<ul style="list-style-type: none"> • ED judgment. No designated evacuation route options.

3.2 EMERGENCY EXPOSURE

3.2.1 If a request is received to exceed the administrative exposure limit, that remains below 5 Rem TEDE (EPA-400 lower limits), then **PERFORM** the following:

1. **REVIEW** the request and current annual exposure information for the personnel(s) in question with the Radiation Controls Coordinator to determine the necessity for the exposure.
2. **APPROVE** the exposure if deemed appropriate and document on your position log.
3. **DIRECT** the Radiation Controls Coordinator to have the OSC Radiation Protection Lead **DOCUMENT** the approval on the OSC Team Briefing Sheet (EP-AA-112-300, Attachment 5).

3.2.2 If a request is received to approve exposure for a planned emergency activity, which is above 5 Rem TEDE (EPA-400 lower limits), then **INSTRUCT** the Radiological Controls Coordinator (RCC) to coordinate with the OSC RP Group Lead to complete the Authorization for Emergency Exposure Form (EP-AA-113, Attachment 3) and brief volunteers per EP-AA-113, Personnel Protective Actions

3.2.3 **REVIEW** completed form and **FORWARD** requests from the OSC, and EOF for Field Monitoring Team members, to the Station Emergency Director for approval and **ADVISE** on the request.

ATTACHMENT 1
RADIATION PROTECTION MANAGER CHECKLIST
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3.2.4 If an unplanned exposure above 5 Rem TEDE (EPA-400 lower limits) is received, then **DIRECT** the RCC to complete an Authorization for Emergency Exposure Form.

3.3 ISSUANCE OF POTASSIUM IODIDE (KI)

NOTE: Thyroid blocking agents should be considered for use when emergency personnel may be exposed to elevated radioiodine levels in excess of 50 Rem (CDE) actual or projected dose to the thyroid or will be subjected to an unknown radiological atmosphere containing high levels of radioactive iodine.

3.3.1 **DIRECT** the RCC to perform the following:

1. **COORDINATE** with the OSC RP Group Lead to complete the Thyroid Blocking Agent Authorization Form (EP-AA-113, Attachment 6) and **BRIEF** volunteer(s) on associated risks per EP-AA-113.
2. **EVALUATE** the need for issuance of KI per EP-AA-113, Attachment 5.

NOTE: This flowchart shall provide an initial method of determining the need for KI with or without an air sample.

3.3.2 **REVIEW** the completed Thyroid Blocking Agent Authorization Form.

3.3.3 **FORWARD** requests from the OSC, and EOF for Field Monitoring Team members, to the Station Emergency Director for approval.

3.4 TRANSPORT OF CONTAMINATED INJURED PERSONNEL TO OFFSITE HOSPITAL

3.4.1 **VERIFY** that RPTs have been assigned to or call outs initiated to provide for contamination control and decontamination support: TIME: _____

1. _____ Escort injured individual(s) in ambulance during transport
2. _____ Receiving hospital

3.4.2 **VERIFY** that transported individual(s) have arrived at the receiving hospital and **DETERMINE** status. TIME: _____

3.4.3 **BRIEF** the Station Emergency Director and EOF Radiation Protection Manager on changes in medical and/or radiological condition of the injured personnel.

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RADIATION PROTECTION MANAGER CHECKLIST
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3.5 TSC HABITABILITY

If alarms or survey information are received from the TSC's installed ARM and airborne monitoring systems or from an RPT that indicate habitability concerns for the TSC's emergency workers, **then:**

3.5.1 VERIFY with the TSC Director that the TSC air filtration system is operating in the "Emergency" Mode. |

3.5.2 RECOMMEND appropriate radiological protective actions to the Station Emergency Director. |

1. **CONSIDER** the following protective actions to reduce exposure:

- **ESTABLISH** reduced shift schedules.
- **REDUCE** the numbers of TSC personnel to a minimum.
- **EVALUATE** the use of KI and/or respiratory protection
- **ESTABLISH** restrictions on eating and drinking

2. **CONSIDER** evacuation of the TSC when:

- dose rates in the facility exceed 100 mRem/hr,
- personnel exposure (TEDE) exceeds 1 Rem, or
- airborne concentrations warrant the issuance of respiratory protection.

3.5.3 BRIEF the EOF Radiation Protection Manager on protective actions or evacuation plans. |

ATTACHMENT 2
RADIATION CONTROLS COORDINATOR CHECKLIST
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Section 1, Initial Actions

Section 2, Ongoing Actions

Section 3, Situational Actions

3.1 Emergency Exposure Authorization

3.2 Issuance of Potassium Iodide (KI)

3.3 Coordination of Field Monitoring Teams / Offsite Dose Assessment

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 TSC Organization Board.
- 1.2 _____ **INFORM** the Radiation Protection Manager of your arrival, and **OBTAIN** an initial briefing on emergency conditions.
1. **If the Radiation Protection Manager has not arrived in the TSC, then **BEGIN** execution of the Radiation Protection Manager's Checklist (Attachment 1).**
- 1.3 _____ **INITIATE** and **MAINTAIN** a position log documenting significant actions performed and communications related to your position.
- 1.4 _____ **MONITOR** meteorological conditions and station radioactive effluents.
- 1.5 _____ **DIRECT** the HPN Communicator, upon arrival, to perform the following:
1. **MONITOR** area and process radiation monitors in coordination with the Radiation Controls Engineer (RCE)
 2. **NOTIFY** you immediately of any significant or unanticipated changes to in-plant radiological conditions.
- NOTE:** Ensure that the HPN Communicator is aware of EAL thresholds of concern and EOP / TRIP Limits for abnormal in-plant radiological conditions.
3. **TREND** significant actual and potential changes to radiological conditions

**ATTACHMENT 2
RADIATION CONTROLS COORDINATOR CHECKLIST
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- 1.6 _____ **VERIFY** that the correct release condition and dose-based Protective Action Recommendations (PARs) have been determined per EP-AA-111, Attachments 2 thru 8, as applicable.
- 1.7 _____ **CONTACT** the National Weather Service (MAROG) or designated contractor/supplier for current weather forecast information.
- 1.8 _____ **RECORD** initial meteorological, effluent monitor, and release rate information on the Meteorological / Environs Board, or equivalent.
- 1.9 _____ **CONTACT** the Dose Assessment Coordinator in the EOF, and **PROVIDE** an initial briefing. (OPTIONAL: REFER to Dose Assessment Turnover Form (EP-AA-112, Attachment 5).
- 1.9.1 _____ **TURNOVER** responsibility for dose assessment when the EOF has reported they are prepared to accept it, after obtaining the TSC Radiation Protection Manager's concurrence. TIME: _____
- 1. If the transfer of dose assessment to the EOF is delayed, then **PERFORM** the actions outlined in Section 3.3.
- 1.9.2 _____ **REPORT** turnover of dose assessment functions to the Radiation Protection Manager.
- 1.10 **ASSEMBLE** two Field Monitoring Teams as follows:

<u>Field Monitoring Team Composition</u>		
	<u>MWROG</u>	<u>LGS / PBAPS</u>
Leader:	RP personnel	RPT
Driver:	RP personnel	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.

- 1.10.1 _____ **REQUEST** from the OSC RP Group Lead that qualified personnel for two (2) Field Monitoring Teams be mobilized per EP-AA-112-500.
- 1.10.2 _____ **EVALUATE** the need for augmenting Field Monitoring Teams with personnel from unaffected stations.

- 1. If required, then **REQUEST** the EOF Environmental Coordinator to coordinate obtaining additional resources from unaffected stations.

ATTACHMENT 2
RADIATION CONTROLS COORDINATOR CHECKLIST
Page 3 of 7

- 1.10.3 _____ **When** contacted by the Field Monitoring Teams, **PROVIDE** a briefing using Table 1-2 (Field Monitoring Team Dispatch Log) from EP-AA-112-500, Attachment 1.
- 1.10.4 _____ **DETERMINE** dosimetry and protective clothing requirements using EP-AA-112-500, Attachment 3 (Field Monitoring Team Equipment and Personnel Dosimetry).
- 1.10.5 _____ **DISPATCH** the teams to pre-established monitoring points and/or areas that may be affected by the effluent release. **TIME:** _____
- **REFER** to EP-AA-112-500, Attachment 8, for guidance on the Field Monitoring Team communications.
- 1.10.6 _____ **CONTACT** the Environmental Coordinator in the EOF, and **PROVIDE** an initial briefing on the current plant conditions, Field Monitoring Team briefing instructions and status.
1. **If** the transfer of Field Monitoring Teams to the EOF is delayed, **then PERFORM** the actions outlined in Section 3.3.
- 1.10.7 _____ **TURNOVER** responsibility for Field Monitoring Team control when the EOF has reported they are prepared to accept it, after obtaining the TSC Radiation Protection Manager's concurrence. **TIME:** _____
- 1.10.8 _____ **REPORT** turnover of Field Monitoring Team control to the TSC Radiation Protection Manager.
- 1.11 _____ **OBTAIN** a briefing from the TSC Radiation Protection Manager on OSC activities and **ACCEPT** responsibility for supervising OSC RP Group Lead activities.

2. ONGOING ACTIONS

- NOTE:** Following transfer to the EOF, the TSC is **NOT** required to continue to perform dose assessments or track field monitoring teams.
- 2.1 **MAINTAIN** frequent communications with the OSC RP Group Lead to exchange information on facility habitability, in-plant conditions, and off-site release concerns.

ATTACHMENT 2
RADIATION CONTROLS COORDINATOR CHECKLIST
Page 4 of 7

- 2.2 **SUPERVISE** the activities of the OSC RP Group Lead in support of the dispatching of OSC Teams, including:
1. **ENSURE** the proper use of protective clothing, respiratory protection, and access control in the plant as appropriate to control personnel exposure.
 2. **ASSESS** the need for additional radiation protection staffing, equipment and supplies.
 3. **ASSIST** the Operations Manager in planning radiological controls for personnel dispatched from the Control Room.
 4. **ENSURE** that personnel are decontaminated, if necessary.
- 2.3 **SUPERVISE** the activities of the HPN Communicator:
1. **ENSURE** that an open HPN line is established with the NRC when requested over the ENS Circuit.
 2. **ASSIST** the HPN Communicator in responding to NRC inquiries and requests for information.
- 2.4 When deployment of an Onsite Field Team is determined to be necessary, then **COMPLETE** the upper portion of EP-AA-112-200, Attachment 2, Team Request Form, and **FORWARD** the form to the Maintenance Manager.
- 2.5 **MONITOR** the radiological effluent release paths and **EVALUATE** environmental and radiological data.
1. **BRIEF** the TSC Radiation Protection Manager of any increase in the radiological effluent release rate or changes to affected subareas / sectors.
- 2.6 **MONITOR** in-plant radiological conditions that could potentially impact access to the plant and/or site areas.
1. **BRIEF** the TSC Radiation Protection Manager of any significant increases that would impact access or habitability of an area requiring access to support OSC activities.
- 2.7 **ENSURE** applicable status boards are updated promptly to reflect significant changes to in-plant radiological, effluent or meteorological conditions.
- 2.8 **ASSIST** the EOF Environmental Coordinator in the acquisition of information for periodic state updates.

ATTACHMENT 2
RADIATION CONTROLS COORDINATOR CHECKLIST
Page 5 of 7

2.9 **REQUEST** additional radiation protection personnel and/or equipment, as necessary through the TSC Radiation Protection manager, in support of station activities and staff relief.

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

3. **SITUATIONAL ACTIONS**

3.1 **EMERGENCY EXPOSURE AUTHORIZATION**

3.1.1 **If** a request is received to exceed the administrative exposure limit that remains below Rem TEDE (EPA-400 lower limits), **then PERFORM** the following:

1. **REVIEW** the request with the OSC Radiation Protection Lead to determine the necessity for the exposure.
2. **OBTAIN** current annual exposure information for the personnel to be approved beyond administrative limits.
3. **FORWARD** request with justification to the TSC Radiation Protection Manager for approval
4. **DIRECT** the OSC RP Group Lead to **DOCUMENT** the approval.

3.1.2 **If** a request is received to approve an unplanned exposure which is above the Rem TEDE (EPA-400 lower limits), **then PERFORM** the following:

1. **DIRECT** the OSC RP Group Lead to:
 - A. **FILL IN** the Authorization for Emergency Exposure Form (EP-AA-113, Attachment 3)
 - B. **BRIEF** volunteer(s) on associated risks and have emergency workers sign form.
 - C. **FAX** or **DELIVER** completed form to the TSC
2. **VERIFY** that the volunteer(s) have signed the form indicating that the exposure is voluntary.
3. **FORWARD** completed form to the Radiation Protection Manager for review.

ATTACHMENT 2
RADIATION CONTROLS COORDINATOR CHECKLIST
Page 6 of 7

3.2 ISSUANCE OF POTASSIUM IODIDE (KI)

3.2.1 CALCULATE thyroid dose, based on I-131 concentrations, using KI Spreadsheet Program per EP-AA-113, Attachment 4 (Calculating Thyroid Dose).

3.2.2 EVALUATE the need for issuance of thyroid blocking agents (Potassium Iodide, KI) by reviewing EP-AA-113, Attachment 5 (Guidelines for the Determination of Potassium Iodide Usage).

NOTE: Thyroid blocking agents should be considered for use when emergency personnel may be exposed to elevated radioiodine levels in excess of 50 Rem (CDE) actual or projected dose to the thyroid or will be subjected to an unknown radiological atmosphere containing high levels of radioactive iodine.

3.2.3 DIRECT the OSC RP Group Lead to:

1. **FILL IN** the Thyroid Blocking Agent Authorization Form (EP-AA-113, Attachment 6)
2. **BRIEF** volunteer(s) on associated risks.
3. **FAX** or **DELIVER** completed form to the TSC.

3.2.4 FORWARD completed form to the TSC Radiation Protection Manager for review.

3.2.5 If approved, then DIRECT the OSC Radiation Protection Group to issue one (1) 130 mg KI tablet to each affected emergency worker.

3.3 COORDINATION OF FIELD MONITORING TEAMS / OFFSITE DOSE ASSESSMENT

If activation of the EOF is delayed, then PERFORM the following:

3.3.1 DISPATCH the Field Monitoring 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.

1. **If conditions exist that require emergency exposure limits or potassium iodide (KI), then OBTAIN** approval from the Station Emergency Director and **DOCUMENT** per EP-AA-113.
2. **If radiation levels at the site boundary are elevated, then DETERMINE** the off-site exposure levels and the recommended protective actions required for the public.

ATTACHMENT 2
RADIATION CONTROLS COORDINATOR CHECKLIST
 Page 7 of 7

3. **MONITOR** dose rates in the center of the prevailing wind direction downwind of the plant prior to a possible release. **PREPARE** to take air samples when release occurs to determine iodine content.
4. **PROVIDE** periodic updates and briefings to the Field Monitoring Teams at least hourly and when conditions (classification, release status, major plant conditions, etc.) change.
5. **RECORD** all environmental monitoring team instructions and results.

3.3.2 **PERFORM** dose projections as required to monitor elevated effluent monitor levels and determine release conditions.

– **REFER** to EP-MW(MA)-110-200, Dose Assessment

1. **OBTAIN** current meteorological forecast data at least once per shift and **REQUEST** that meteorological consultants alert you of any changes in the forecasted prevailing wind direction.
2. **MONITOR** the current meteorological conditions, especially the wind direction, to determine if the affected subareas may be changed.

Limerick / Peach Bottom

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

3.3.3 **EVALUATE** the data obtained from the monitored radioactive effluent data and the Field Monitoring Team sampling results against the following:

- EALs (Recognition Category “R”) for potential escalation in event classification
- EPA-400 guidelines (1 Rem TEDE / 5 Rem CDE thyroid) per EP-AA-111.

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).

ATTACHMENT 3
RADIATION CONTROLS ENGINEER CHECKLIST
 Page 1 of 4

Section 1, Initial Actions

Section 2, Ongoing Actions

Section 3, Situational Actions

3.1, Personnel Accountability / Site Evacuation

3.2, Hazardous Materials

3.3, Sample Drain Lines (Clinton Station)

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 TSC Organization Board.
- 1.2 **INFORM** the Radiation Protection Manager of your arrival, and **OBTAIN** an initial briefing on emergency conditions.
- 1.3 **INITIATE** and **MAINTAIN** a position log documenting significant actions performed and communications related to your position.
- 1.4 If a designated Chemistry Lead is not present in the OSC, **then DESIGNATE** available Chemistry personnel to serve as interim OSC Chemistry Group Lead.
- 1.5 **ASSESS** plant conditions to determine if sampling may be necessary and to identify any immediate hazardous radiological or environmental conditions.

Limerick / Peach Bottom

- 1.6 **VERIFY** that actions have been initiated as part of OSC activation to set-up the Chemistry Lab(s) for emergency sampling and analysis.
- 1.7 **OBTAIN** concurrence from the TSC Radiation Protection Manager to relocate Chemistry technicians from the OSC to Lab(s) based on the ability to maintain habitability and accountability.

ATTACHMENT 3
RADIATION CONTROLS ENGINEER CHECKLIST
Page 2 of 4

2. ONGOING ACTIONS

- 2.1 **ASSIST** the OSC Chemistry Lead in the determination of additional chemistry support, as warranted by the emergency.
- 2.2 **MONITOR** area and process radiation monitors to identify trends or potential hazards within the station.
1. **APPRISE** the Radiation Protection Manager of changes to in-plant radiological conditions that would impact **ANY** of the following:
 - Control Room in-plant and OSC Team activities
 - EOP / TRIP In-Plant Radiation Action Levels
 - EAL threshold values (Category 'R')
 - Release status
 2. **EVALUATE** impact of proposed system or equipment operation on in-plant and effluent radiological conditions.
- 2.3 **ASSIST** the HPN Communicator in answering NRC inquiries over the HPN Circuit and in maintaining status boards.
- 2.4 **ASSIST** the Radiation Controls Coordinator in monitoring changes to release conditions and PARs.
1. **NOTIFY** the Radiation Controls Coordinator immediately of any adverse radiological trends that will or have the potential to impact release conditions or PAR currently issued.
- 2.5 **SUPERVISE** the OSC Chemistry Group and **PROVIDE** instructions, as applicable, based on station requirements:
- Conversion of sampling system alignments from normal operation to post accident operation following site procedures, as applicable.
 - Need to post sampling areas as High Radiation Areas.
 - Directions for the in-plant team if an assembly is initiated to either call back in to be accounted for or to come back to the OSC and be assembled.
1. If alternate sampling locations are required, **then IDENTIFY** new locations with the assistance of the Radiation Protection Manager, Technical Manager and the Operations Manager.
 2. If sampling is determined to be necessary, **then COMPLETE** the upper portion of EP-AA-112-200, Attachment 2 (OSC Team Request Form) and **FORWARD** the form to the Maintenance Manager.

ATTACHMENT 3
RADIATION CONTROLS ENGINEER CHECKLIST
Page 3 of 4

Mid-Atlantic ROG

"Time Requested" on the Team Request Form will be used as "T+0" for PASS collection and analysis purposes.

3. **EVALUATE** chemistry sample results, and **REPORT** the results of each sample taken to the Radiation Protection Manager.
 4. **ENSURE** arrangements have been made for use of appropriate sampling casks.
- 2.6 **COORDINATE** radiological and chemistry information with the Core/Thermal Hydraulics Engineer in support of core damage assessment, as applicable:
- EP-AA-110-301, Core Damage Assessment (BWR)
 - EP-AA-110-302, Core Damage Assessment (PWR)
- 2.7 Periodically **APPRISE** the TSC Radiation Protection Staff of the following:
- Adverse in-plant or effluent radiological trends
 - Current sample results
 - Status of requested sampling
 - Hazardous material updates
 - Offsite assistance obtained / requested
- 2.8 **PERFORM** a shift turnover with on-coming personnel using guidance in EP-AA-112, Attachment 2 (Shift Turnover).
3. **SITUATIONAL ACTIONS**
- 3.1 **ACCOUNTABILITY / SITE EVACUATION**
- 3.1.1 **ASSIST** the Security Coordinator in the determination of which personnel on-site are needed and which should be considered Non-Essential and evacuated.
1. **ENSURE** that an adequate number of Chemistry personnel are available on-site prior to evacuation.
- 3.1.2 **ASSIST** the Operations Manager in planning rescue operations and monitoring as required for hazardous material accidents.

**ATTACHMENT 3
RADIATION CONTROLS ENGINEER CHECKLIST
Page 4 of 4**

3.2 HAZARDOUS MATERIALS

- 3.2.1 **EVALUATE** hazardous material events or contact appropriate station or corporate contact to perform evaluation.
- **REFER** to the station's Hazardous Materials Emergency Response Plan, or equivalent, for guidance.
- 3.2.2 **ASSIST** in determining the required notifications and response actions.

Clinton

3.3 SAMPLE LINE DRAINS

- 3.3.1 The accident range monitor (AXM) sample line drains should be drained every 54 hours.
- 3.3.2 The PRM sample line drains should be drained every 8 hours while in operation.

NOTE: Should the correction factor CF_w for water in sample lines be used, then consideration should be given to requesting sample and analysis of condensate from the drain lines.

ATTACHMENT 4
HPN COMMUNICATOR (TSC) CHECKLIST
Page 1 of 4

Section 1, Initial Actions

Section 2, 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. **INITIAL ACTIONS**

- 1.1 **SIGN IN** on the TSC Organization Board.
- 1.2 **INFORM** the Radiation Protection Manager or Radiation Controls Coordinator (RCC) of your arrival, and **OBTAIN** an initial briefing on emergency conditions.
- 1.3 **INITIATE** and **MAINTAIN** a position log documenting significant actions performed and communications related to your position.
- 1.4 **ASSIST** the RCC and Radiation Controls Engineer (RCE) in updating facility radiological status boards, as directed.

2. **ON-GOING ACTIONS**

- 2.1 **MONITOR** area and process radiation monitors in coordination with the RCE.
1. **NOTIFY** the Radiation Controls Coordinator immediately of any significant or unanticipated changes to in-plant radiological conditions.
 2. **ASSIST** the Radiation Controls Engineer in trending of adverse in-plant radiological conditions.
 - **UPDATE** status boards with current information, if applicable.
- 2.2 **ESTABLISH** an open Health Physics Network (HPN) line for continuous communications when directed by the ENS Communicator. TIME: _____
1. **CONTACT** the NRC by dialing either the primary or backup numbers listed on the HPN phone label or using the ERF Telephone Directory.

ATTACHMENT 4
HPN COMMUNICATOR (TSC) CHECKLIST
Page 2 of 4

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

Asterisked (*) 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 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 injuries; and
- Authorization to administer KI.

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

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

**ATTACHMENT 4
HPN COMMUNICATOR (TSC) CHECKLIST
Page 3 of 4**

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

PART A: IN-PLANT RADIOLOGICAL DATA (Completed by: TSC HPN Communicator)																													
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:40%;">Location</th> <th style="width:20%;">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 (TSC) CHECKLIST
Page 4 of 4**

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

PART B: ENVIRONMENTAL DATA (Completed by: EOF HPN Communicator)																
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 style="width:30%;"></th> <th style="width:30%; text-align: center;"><u>TEDE (mR)</u></th> <th style="width:30%; 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 TEAM 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)																