November 16, 2010

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TONY IRAOLA GETS:.... E-PLAN, IP-EP-115 (FORMS), IP-EP-260(JOINT CENTER INFORMATION) " NO FORMS GO TO THE OFFSITERS"

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ATTACHMENT 10.1 SMM CONTROLLED DOCUMENT TRANSMITTAL FORM

SITE MANAGEMENT MANUAL CONTROLLED DOCUMENT TRANSMITTAL FORM - **PROCEDURES**

Page 1 of 1

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THE FOLLOWING PROCEDURE HAS BEEN REVISED, PLEASE REMOVE YOUR CURRENT COPY AND REPLACE WITH ATTACHED REVISIED PROCEDURE:

IP-EP-230 REV.6

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Entergy	IPEC EMERGENCY PLAN IMPLEMENTING PROCEDURES	NON-QUALITY RELATED PROCEDURE	IP-EP-220	Revision 6
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Technical Support Center

Prepared by:	Lori Glander		11/10/10
	Print Name	Signature	Date
Approval:	Brian Sullivan		11/15/10
	Print Name	Signature	Date

Effective Date: November 22, 2010

This procedure excluded from further LI-100 reviews.

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TECHNICAL SUPPORT CENTER (TSC)

1.0 PURPOSE

To describe the activation and operation of the Technical Support Center (TSC)

2.0 REFERENCES

2.1 Indian Point Energy Center Emergency Plan

2.2 IP-EP-130, Emergency Notifications and Mobilization

3.0 DEFINITIONS

3.1 Activated – an order has been made to activate an emergency response facility, and the facility is in the process of being staffed.

3.2 Staffed – The emergency response facility has been activated and sufficient personnel are available to perform the required functions as determined by the facility manager.

3.3 Operational – The emergency response facility has been activated and staffed, and has assumed responsibilities for performing its intended functions.

4.0 RESPONSIBILITIES

4.1 The Emergency Plant Manager (EPM) is responsible for:

4.1.1 Overall management of the Emergency Response Organization within the Protected Area Fence

4.1.2 Keeping the Emergency Director informed on the status of the plant and conditions within the Protected Area Fence.

4.1.3 Authorizing emergency radiation exposures and issuance of KI for Emergency Response Organization personnel and other workers within the Owner Controlled Area.

4.1.4 Set priorities for the TSC/OSC staff

4.2 The TSC Manager is responsible for:

4.2.1 Directing TSC personnel to provide technical support to the Control Room and other portions of the Emergency Response Organization.

4.2.2 Working with the EPM to set priorities for the TSC Staff.

4.2.3 Ensuring that the TSC is made operational in accordance with this procedure.

A. Ensuring minimum staffing is attained.

B. Declaring TSC staffed as soon as minimum staffing can assume its responsibilities.

4.2.4 Directing the activation and operation of ERDS and MRPDAS.

4.3 All other members of the TSC Staff are responsible for performing their duties as outlined in their position specific checklist or as directed by the TSC Manager.

5.0 DETAILS

5.1 The Emergency Plant Manager (EPM) SHALL follow the instructions outlined in Attachment 9.1, Emergency Plant Manager Checklist.

5.2 The TSC Manager SHALL follow the instructions outlined in Attachment 9.2, TSC Manager Checklist.

5.3 The Operations Advisor SHALL follow the instructions outlined in Attachment 9.3, Operations Advisor Checklist.

5.4 The Technical Assessment Coordinator SHALL follow the instructions outlined in Attachment 9.6, Technical Assessment Coordinator Checklist.

5.5 The Mechanical and Electrical / I&C Engineer SHALL follow the instructions outlined in Attachment 9.7, Mechanical and Electrical / I&C Engineer Checklist.

5.6 The TSC IT Support SHALL follow the instructions outlined in Attachment 9.8, TSC IT Support.

5.7 The TSC Communicator SHALL follow the instructions outlined in Attachment 9.9, TSC Communicator.

5.8 The TSC Admin Assistant SHALL follow the instructions outlined in Attachment 9.10, TSC Admin Assistant.

5.9 The TSC SAMG Evaluator SHALL follow the instructions outlined in Attachment 9.11, TSC SAMG Evaluator.

6.0 INTERFACES

6.1 IP-EP-115, Emergency Plan Forms

6.2 IP-EP-210, Central Control Room

6.3 IP-EP-230, Operations Support Center

6.4 IP-EP-430, Site Assembly, Accountability and Relocation of Personnel Offsite

6.5 IP-EP-510, Meteorological, Radiological & Plant Data Acquisition System

6.6 IP-EP-610, Emergency Termination and Recovery

6.7 IP-EP-420, Use of Potassium Iodide by Indian Point Personnel during an Emergency

7.0 RECORDS

All forms and logs completed by the Emergency Response Organization during a declared emergency are quality records and shall be maintained for the life of the plant plus twenty (20) years.

8.0 REQUIREMENTS AND COMMITMENT CROSS-REFERENCE

None

9.0 ATTACHMENTS

9.1 Emergency Plant Manager Checklist.
9.2 TSC Manager Checklist.
9.3 Operations Advisor Checklist
9.4 Deleted (Formerly Radiological Advisor Checklist)
9.5 Reactor Engineer Checklist
9.6 Technical Assessment Coordinator Checklist
9.7 Mechanical and Electrical / I&C Engineer Checklist
9.8 TSC IT Support Checklist
9.9 TSC Communicator
9.10 TSC Admin Assistant Checklist
9.11 TSC SAMG Evaluator Checklist
9.12 OSC/TSC Layout

Attachment 9.1

Emergency Plant Manager Checklist

Sheet 1 of 10

NOTE: The expectation for all ERO positions is to use WebEOC for logkeeping purposes. Reference to traditional paper forms remains in this checklist for the situation in which WebEOC is unavailable, such as a power or computer failure.

1.0 Initial Responsibility/Activity

NOTE:
Procedure refers to an event at Unit 2, Unit 3 or both (i.e., Security, Natural event). If determined to be a Site event, then Unit 2 will be the lead plant for all communications.

1.1 Assume the position of Emergency Plant Manager (EPM).

A. Swipe your badge in one of the accountability card readers.

B. Sign in at the facility.

C. Call the affected Unit Control Room (CR) and receive a briefing on plant conditions from the Plant Operations Manager (POM) (Shift Manager if POM is not available). Use an Essential Information Checklist (IP-EP-115 Form EP-9) to document turnover information.

D. Review electronic displays, plant data and any other available information to become familiar with current plant conditions.

E. **IF** relieving another EPM **THEN** perform a formal turnover with the current EPM

1. Review position log.
2. Obtain a briefing from current EPM on the emergency, plant conditions and any actions that have been completed or are in progress.
3. Relieve current EPM

F. Announce yourself as the EPM and provide initial briefing to the TSC/OSC staff. Ensure briefing covers the following items:

1. Introduction of Self and Facility Managers.
2. Establish clear expectations for:
   a. Use of Three-Part Communications by ERO members
   b. Use of phones during facility briefs
   c. Limit excess chatter during emergency

Attachment 9.1
Emergency Plant Manager Checklist
Sheet 2 of 10

Initial Responsibility/Activity (cont)

d. Review and follow your procedures

3. Remind personnel to validate information

1.2 Inform the POM and EOF you have assumed the duties of the EPM.

2.0 Continuous Responsibility/Activity

2.1 Maintain (or direct an Admin Assistant to maintain) a log using WebEOC or if unavailable, an ERO Log Sheet IP-EP-115 Form EP-10.

A. Log when you assumed the duties of EPM.

B. Log significant communications to individuals outside the TSC/OSC complex and all communications to individuals offsite

C. Log major decisions and any important details used to make decision

2.2 Inform the TSC Manager and OSC Manager when temporarily leaving the work area.

A. **IF** you are leaving the TSC/OSC Complex (the restroom is within complex) **THEN**:

1. Designate an individual to be in command during your absence.

2. Inform the OSC Team Coordinator and/or Accountability Coordinator when you leave, where you are going and when you expect to return. (for accountability purposes)

3. Inform the OSC Team Coordinator and/or Accountability Coordinator when you return.

B. Upon return, obtain a briefing from TSC Manager on any events that have occurred while you were away.

Attachment 9.1
Emergency Plant Manager Checklist
Sheet 3 of 10

Continuous Responsibility/Activity (cont)

NOTE:
After initial accountability has been completed, facility managers are responsible for accountability of individuals assigned to their respective organizations.

2.3 At a Site Area Emergency or higher classification, or if the decision has been made to do so, INIIATE accountability.

A. Direct the OSC Manager to coordinate with Lead Accountability Officer (LAO) to perform accountability. Initial accountability shall be completed within approximately 30 minutes of the sounding of the Site Assembly Alarm

B. **IF** anyone is unaccounted for **THEN** direct the Lead Accountability Officer (LAO) and the OSC Manager to commence search and rescue operations.

C. Direct TSC Manager, OSC Manager, POM and Security Supervisor to maintain onsite accountability throughout the event.

2.4 Confer with the Emergency Director on release or evacuation of non-essential personnel from the Energy Education Center and the Generation Support Building. (Indian Point Training Center if used)

A. Check with POM, TSC Manager and OSC Manager to determine if additional personnel are needed to support emergency response.

B. Inform the ED when you no longer have any immediate personnel needs and concur with release of non-essential personnel from the site.

2.5 Coordinate and direct the Response Activities of all Onsite ERO Personnel.

A. Establish and promulgate onsite priorities in response to the emergency.

Attachment 9.1
Emergency Plant Manager Checklist
Sheet 4 of 10

Continuous Responsibility/Activity (cont)

1. Designate priorities as High (H), Medium (M), or Low (L) as appropriate.
   (a) High (H): The task is necessary to protect the immediate health and safety of the public. High priority tasks are in response to plant conditions that are allowing the rapid deterioration of safety barriers, or barriers have already been broken such that a release is either occurring or is imminent.

   (b) Medium (M): Any task that requires action by the TSC/OSC and should be worked on at the immediate time period, but does not fit the criteria of a health and safety of the public related item (for example, if a system has only one remaining component, repair of the backup components).

   (c) Low (L): Any task, which can be worked on when resources permit (i.e. getting meals, preparations for recovery activities).

2. If multiple tasks exist within a single priority classification, confer with the appropriate managers and personnel to establish the preferred sequence.

B. Direct TSC Manager and OSC Manager to maintain current task and priorities in WebEOC.

2.6 Prepare for NRC Site Team response activities.

A. Coordinate the arrival of the Site Response Team with the EOF.

B. Brief (or designate an individual to brief) the in-plant NRC Site Team upon arrival.

C. Direct the TSC Manager to coordinate activities associated with the NRC Site Team.

Attachment 9.1
Emergency Plant Manager Checklist
Sheet 5 of 10

Continuous Responsibility/Activity (cont)

2.7 When applicable, direct implementation of Severe Accident Management Guidelines.

A. When the Control Room transitions from the EOPs to SACRG-1, **ENSURE** the TSC SAM Evaluator is ready to take over Severe Accident Management control.

B. Once the TSC SAM Evaluator is ready to take over Severe Accident Management control **ANNOUNCE** yourself as the Severe Accident Management Decision Maker.

C. **CONFER** with the SAM Evaluators which SAM guidance should be implemented.

D. **NOTIFY** the Emergency Director (ED) which guidance will be implemented. **IF** the guidance involved a release to the environment, **ENSURE** the ED discusses this with the Offsite Radiological Manager (ORM) and the State/Counties prior to implementation.

2.8 Authorize Emergency Exposures / KI issuance

A. Inform the OSC Manager and RP Team Leader that you authorize emergency exposures up to 1 Rem TEDE for all OSC and Operations personnel dispatched into the plant. Document this authorization in WebEOC, **OR** on your ERO Log Sheet (IP-EP-115 Form EP-10) if WebEOC is unavailable.

B. **IF** emergency measures require additional exposure **THEN** raise the emergency exposure limit 1 Rem at a time up to 5 Rem.

C. Review and authorize, when requested by OSC Staff, emergency exposures beyond 5 Rem on an individual basis using Emergency Exposure Authorization (IP-EP-115 Form EP-6). General guidelines (more details are listed on authorization form):

1. ERO members may receive up to 5 Rem TEDE (per event) for any required emergency activities.
2. ERO members may be authorized emergency exposures up to 10 Rem TEDE to protect vital equipment.

Attachment 9.1
Emergency Plant Manager Checklist
Sheet 6 of 10

Continuous Responsibility/Activity (cont)

3. ERO members may be authorized emergency exposures up to 25 Rem TEDE to save a life.
4. Individuals may volunteer to receive greater than 25 Rem TEDE to save a life.

D. When requested by OSC Rad Protection Team Leader, authorize issuance of Potassium Iodine (KI). (KI is normally issued at 5 REM CDE projected child thyroid dose or declaration of a General Emergency.)

2.9 Maintain communications with the Shift Manager

A. Discuss current plant status and planned operations

B. Discuss tasks the TSC/OSC are performing and review priorities.

C. Inform POM of any other important ERO activities (such as shift changes, arrival of NRC personnel, etc.)

2.10 Maintain communications with the Emergency Director (ED).

A. Use an Essential Information Checklist (IP-EP-115 Form EP-9) to periodically update ED on conditions.

B. Inform the ED of onsite priorities and activities.

C. Inform the ED of any plant conditions or events which have the potential for change of emergency classification or radiological releases status.

2.11 Coordinate with TSC and OSC Managers to establish a time period for the conduct of facility briefings

A. Make an announcement approximately 5 minutes before actual brief that a brief will be conducted (if possible).

B. Use an Essential Information Checklist (IP-EP-115 Form EP-9) as guide for leading briefings.

C. **Emphasize** the following items in each brief:

1. What the major task and priorities are.

Attachment 9.1
Emergency Plant Manager Checklist
Sheet 7 of 10

Continuous Responsibility/Activity (cont)

2. Everyone should review their procedure checklist to ensure proper actions are being taken.
3. Everyone should ensure they are maintaining proper logs and all forms are completed and legible.

D. Establish briefing periods at approximately 30 minute intervals or as conditions change.

2.12 Maintain adequate manning, access control, and 24-hour functional continuity of the CR, TSC, and OSC.

NOTE:
The OSC Accountability Coordinator prepares shift relief schedules and calls out the second shift.

A. Request additional material, manpower, and equipment as necessary.

2.13 Circumstances including, but not limited to a power outage, toxic gas condition, or increased radiation levels may necessitate the need to evacuate the TSC/OSC complex. IF it becomes necessary to evacuate the TSC/OSC complex for any reason, the following guidance shall be followed.

A. Determine a suitable alternate location(s) for TSC and OSC staffs. In selecting an alternate location, keep the following in mind:

1. In the event of increased radiation levels or a toxic gas condition, consider relocating individuals to the Central Control Room or Outage Control Center. Another possible alternative location for consideration is the EOF. Although desirable to keep the entire staff together, it may be necessary to utilize more than one facility.
2. In the event of a power outage, there may be additional locations that could be relocated to. Such possible locations include an IPEC Conference Room within the Protected Area, the Outage Control Center, the Indian Point Training Center or even the Generation Support Building.

Attachment 9.1

Emergency Plant Manager Checklist

Sheet 8 of 10

Continuous Responsibility/Activity (cont)

3. In selecting the facility to which you are evacuating, ensure that you consider the ability for the TSC/OSC staffs to function in the new facility. Some items for consideration include:
   - Is the required Plant information able to be readily obtained?
   - Are the necessary computer resources available?
   - Will adequate communications be obtainable with all of the necessary parties?

B. PRIOR to evacuating the TSC/OSC complex, address the following:

1. Ensure that evacuating personnel take their position books with them to the new location.
2. Ensure that all needed data is gathered and transported during the relocation of personnel. Examples include information on the electronic displays, other charted information, completed logs and the like.
3. Inform the Emergency Director and the Plant Operations Manger of your relocation plans. Advise them that you will notify them of when you have relocated and are a functioning facility. If relocation will be at two or more sites, direct an individual at each of those sites to advise you when their relocation is complete. When you are advised, notify both the Emergency Director and the Plant Operations Manager of the completed relocation.
4. Determine the speed at which the relocation of personnel should occur giving consideration to the following items:
   a. Consider the impact of immediate relocation vs. mitigation activities in progress.
   b. Current radiological or hazardous conditions within the TSC/OSC.
   c. Radiological or hazardous conditions at the proposed TSC/OSC.
   d. Radiological or hazardous conditions en route.
   e. The adequacy of response from the alternate location.

Attachment 9.1
Emergency Plant Manager Checklist
Sheet 9 of 10

C. Determine proper path to take to new locations.

D. Direct personnel to relocate.

E. Notify Security to instruct incoming personnel to report to the designated alternate TSC/OSC.

F. After arriving at the new TSC/OSC location(s), re-establish this new location as the TSC/OSC.

1. Set up the appropriate equipment such as electronic displays, plant data displays and telephones.

2. Notify the Emergency Director and Plant Operations Manager when established and ready to commence functioning as the TSC/OSC.

3. Obtain an updated briefing on the current status of the emergency; plant conditions and any actions that are in progress or that may have been completed.

4. Continue functioning as the EPM.

G. Direct personnel to relocate TSC/OSC personnel.

3.0 Closeout Responsibility/Activity

3.1 Preparations for Recovery Phase:

A. Start preparations as soon as conditions and resources allow. This should occur several hours before actual termination of an event.

B. Review IP-EP-610, Emergency Termination and Recovery for guidance on termination of the emergency and entry into Recovery.

Attachment 9.1
Emergency Plant Manager Checklist
Sheet 10 of 10

3.2 Direct Onsite personnel to return all equipment to proper storage locations.

3.3 Review all documentation:

A. Ensure logs, forms and other documentation are complete.

B. Direct the OSC Manager to ensure that all repairs performed by OSC Teams that deviate from normal station procedures are properly documented in WebEOC so that necessary actions can be taken for continuous plant operations or long-term restoration. If WebEOC is unavailable, use another method such as PCRS or traditional hard-copy.

C. Direct the TSC Manager to ensure that all deviations from Technical Specifications, Quality Assurance Documents and other procedures are properly documented in WebEOC so that these items are evaluated during the Recovery Phase. If WebEOC is unavailable, use another method such as PCRS or traditional hard-copy.

3.4 Provide all logs and records to the Recovery Manager upon termination of the emergency and entry into the Recovery Phase.

Attachment 9.2
TSC Manager Checklist
Sheet 1 of 6

NOTE: The expectation for all ERO positions is to use WebEOC for logkeeping purposes. Reference to traditional paper forms remains in this checklist for the situation in which WebEOC is unavailable, such as a power or computer failure.

1.0 Initial Responsibility/Activity

1.1 Activation of the TSC and assuming the position of TSC Manager.

A. Swipe your Security Badge at one of the Accountability card readers.

B. Sign in at the facility.

C. Synchronize your time with the TSC/OSC clock located above the PICS computer displays. Verify with the EOF and/or CR that the time displayed in the TSC/OSC is the same as it is there.

D. Review the facility electronic displays, plant data and any other available information to become familiar with current plant conditions.

E. **IF** the TSC has not been previously operational **THEN** perform the following:

1. Obtain a briefing from the Emergency Plant Manager (EPM) to identify the following: (Do not delay TSC becoming operational for this briefing)

   (a) Plant conditions using an Essential Information Checklist (IP-EP-115 Form EP-9).
   (b) Actions that have been taken.
   (c) Engineering requirements for actions to be initiated.

2. Verify you have the following minimum ERO prior to declaring the TSC staffed:

   (a) TSC Manager
   (b) TSC Communicator
   (c) Based on your judgement, adequate Engineering Staff to provide some support to Control Room Personnel for the current events.

F. **IF** additional personnel are required **THEN**:

1. **IF** it is during normal working hours **THEN** call or assign someone to call the Assembly Areas for needed personnel

Attachment 9.2
TSC Manager Checklist
Sheet 2 of 6

Initial Responsibility/Activity (cont)

2. **IF** needed individuals are not available onsite **THEN** assign someone to call individuals at home using the Emergency Telephone Directory.

G. Verify the following systems are operational (normally started by TSC IT Support, however can be performed by available personnel):

1. Emergency Response Data System (ERDS) should be set up to transfer plant data to the NRC for both Unit 2 and Unit 3 data.
2. MRP-DAS should be started to display plant data for which ever unit is affected. If both Units are affected utilize multiple computers to display both plants' data.

H. Announce to the TSC Staff that the TSC is operational and you are the TSC Manager.

1.2 Report readiness status to the EPM and CR when prepared to assume the TSC Manager position and declare the TSC operational.

NOTE:
The list on "Normal TSC Staffing (IP-EP-115 Form EP-46) is the basic staffing level, however the TSC Manager should call in as many resources as needed to support the event in progress.

A. **IF** TSC staffing is less than that shown on "Normal TSC Staffing (IP-EP-115 Form EP-46) **THEN** call for additional personnel.

B. **IF** relieving another TSC Manager **THEN** perform a formal turnover:

1. Review Position Log.
2. Obtain a briefing from current TSC Manager on the emergency, plant conditions and any actions that have been completed or are in progress.

C. Relieve current TSC Manager

D. Inform the EPM, POM, OSC Manager and the TSC staff that you are now the TSC Manager.

E. Log the time you assumed duties of TSC Manager

Attachment 9.2
TSC Manager Checklist
Sheet 3 of 6

Initial Responsibility/Activity (cont)

2.0 Continuous Responsibility/Activity

2.1 Inform the Technical Assessment Coordinator (TAC) when temporarily leaving the work area.

A. **IF** you are leaving the TSC/OSC Complex (the restroom is within complex) **THEN**
   1. Inform the OSC Team Coordinator and/or Accountability Coordinator when you leave, where you are going and when you expect to return. (for accountability purposes)
   2. Inform the OSC Team Coordinator and/or Accountability Coordinator when you return.

B. Upon return, obtain a briefing from the TAC on any events that have occurred while away.

2.2 Use WebEOC or if unavailable, ERO Log Sheet(s) (IP-EP-115 Form EP-10) to maintain a log.

A. Log the time when you assumed the duties of TSC Manager.

B. Log significant communications to individuals outside the TSC/OSC complex and all communications to individuals offsite

C. Log major decisions, actions and any important details

2.3 Manage the activities of the TSC Staff:

A. Analyze plant information to provide support to plant operations personnel in returning the plant to a safe condition.

B. Develop action plans and procedures to repair and/or mitigate consequences.

C. Provide a central organization and facility for the accumulation and transmittal of plant information to the EOF and NRC

Attachment 9.2
TSC Manager Checklist
Sheet 4 of 6

Continuous Responsibility/Activity (cont)

D. When applicable, direct the appropriate individuals to implement and perform monitoring and evaluations as directed in the Indian Point Severe Accident Management Guidelines.

E. **IF** requested by the NRC to provide an open communications line for plant data, **THEN** direct an individual having sufficient knowledge staff the phone. This person may locate in any facility with ENS phone access. If necessary, request the OSC Accountability Coordinator to obtain additional personal to support this activity.

F. Anticipate TSC support requirements from ERO.

G. Procure drawings and information needed to solve plant problems.

2.4 Maintain TSC Staffing

A. Prepare second shift scheduling (IP-EP-115 Form EP-43)

B. With OSC Accountability Coordinator assistance, ensure second shift personnel are available and do not have other ERO assignments.

C. Upon direction from the EPM, reduce staffing per shift schedule

D. Continually assess the need for additional personnel, especially during off hours.

2.5 Direct EOP questions to the Operations Advisor.

Attachment 9.2
TSC Manager Checklist
Sheet 5 of 6

Continuous Responsibility/Activity (cont)

2.6 Monitor containment integrity status throughout the event:

A. Initiate a review to determine if any non-automatic containment isolation valves should be closed.

B. Repeat the above review approximately every 2 hours for first 24 hours of event and thereafter at the discretion of the EPM.

2.7 Assist the EPM in setting priorities for TSC activities.

A. In conjunction with EPM:

1. Designate priorities as High (H), Medium (M), or Low (L) as appropriate.

   (a) High (H): The task is necessary to protect the immediate health and safety of the public. High priority tasks are in response to plant conditions that are allowing the rapid deterioration of safety barriers, or barriers have already been broken such that a release is either occurring or is imminent.

   (b) Medium (M): Any task that requires action by the TSC/OSC and should be worked on at the immediate time period, but does not fit the criteria of a health and safety of the public related item (for example, if a system has only one remaining component, repair of the backup components).

   (c) Low (L): Any task, which can be worked on when resources permit (i.e. getting meals, preparations for recovery activities).

2. If multiple tasks exist within a single priority classification, confer with the appropriate managers and personnel to establish the preferred sequence.

B. Keep TSC Staff informed of priorities

C. Direct that TSC assignments in WebEOC are updated to reflect priorities.

Attachment 9.2
TSC Manager Checklist
Sheet 6 of 6

Continuous Responsibility/Activity (cont)

2.8 Participate in periodic briefings with EPM and OSC Manager on the following items:

A. Current plant conditions
B. Emergency Classifications
C. Activities underway to mitigate the emergency
D. Current priorities
E. Log and record keeping

2.9 Establish communications as needed with the Entergy Engineering Groups for engineering support functions. Use company phone directory and Emergency Telephone Directory (ETD) to locate phone numbers.

2.10 Core Damage Assessment

A. Direct TSC Staff members to complete core damage assessment, using guidance provided in IP-EP-360, Core Damage Assessment.
B. Provide summary of core status to other emergency facilities when core damage assessment is complete.

2.11 Notify Westinghouse and other vendors of emergency conditions, as required. (Phone numbers in ETD).

3.0 Closeout Responsibility/Activity

3.1 Direct TSC Staff to return all equipment to proper storage locations.

3.2 Review all documentation the TSC Managers and TSC Staff maintained during the emergency:

A. Ensure logs, forms and other documentation are complete

B. Ensure all temporary procedures used and/or developed are properly documented in WebEOC for use by Recovery Organization so that necessary actions can be taken for plant operations

3.3 Provide all logs and records to the Recovery Manager upon termination of the emergency and entry into the Recovery Phase.

Attachment 9.3

Operations Advisor Checklist

Sheet 1 of 3

NOTE: The expectation for all ERO positions is to use WebEOC for logkeeping purposes. Reference to traditional paper forms remains in this checklist for the situation in which WebEOC is unavailable, such as a power or computer failure.

1.0 Initial Responsibility/Activity

1.1 Assume the position of Operations Advisor.

A. Swipe your Security Badge at one of the Accountability card readers.

B. Sign in at the facility.

C. Synchronize your time with the TSC/OSC clock located above the PICS computer displays.

D. Review facility electronic displays, plant data and any other available information to become familiar with current plant conditions.

E. Report readiness status to the Technical Assessment Coordinator or TSC Manager when prepared to assume the Operations Advisor position.

F. **IF** relieving another Operations Advisor **THEN** Perform a formal turnover:

1. Review Position Log

2. Obtain a briefing from current Operations Advisor on the emergency, plant conditions and any actions that have been completed or are in progress.

3. Relieve the current Operations Advisor

G. Inform TSC Manager and staff that you are now the Operations Advisor.

Attachment 9.3
Operations Advisor Checklist
Sheet 2 of 3

2.0 Continuous Responsibility/Activity

2.1 Inform the Technical Assessment Coordinator when temporarily leaving the work area.

A. **IF** you are leaving the TSC/OSC Complex (the restroom is within complex) **THEN:**

1. Inform the OSC Team Coordinator and/or Accountability Coordinator when you leave, where you are going and when you expect to return. (for accountability purposes)

2. Inform the OSC Team Coordinator and/or Accountability Coordinator when you return.

B. Upon return, obtain a briefing on any events, which have occurred while away.

2.2 Use WebEOC or if unavailable, ERO Log Sheet (IP-EP-115 Form EP-10) to maintain a log of significant items pertaining to your position.

2.3 Monitor plant data communications between CR and other Emergency Response Facilities

2.4 Monitor fission product barrier and plant status

A. Provide recommendations to TSC Manager and EPM for emergency classification changes based on EALs.

B. Assist the Reactor Engineer in maintaining the Fission Product Barrier Status. As applicable, refer to the guidance Intact, Challenged and Lost as provided on the EAL charts.

C. Assist in clarifying Plant Parameter Information to EPM, TSC Manager and other members of the Technical Assessment Team.

Attachment 9.3
Operations Advisor Checklist
Sheet 3 of 3

Continuous Responsibility/Activity (cont)

2.5 Work with other members of the Technical Assessment Team to provide support to the CR to mitigate the effects of the event and return the plant to a safe condition.

A. Provide recommendations on plant operations.

B. Assist in developing emergency procedures if needed.

C. Provide technical support to OSC teams as needed.

D. Look ahead for possible plant problems and solutions.

3.0 Closeout Responsibility/Activity

3.1 Assist TSC personnel in returning all equipment to proper storage locations.

3.2 Review all documentation the Operations Advisor(s) maintained during the emergency:

A. Ensure logs, forms and other documentation are complete

B. Ensure all emergency procedures performed that deviate from normal station procedures are properly documented so that necessary actions can be taken for continuous plant operations or long-term recovery activities.

3.3 Provide all logs and records to the Technical Assessment Coordinator upon termination of the emergency and entry into the Recovery Phase.

Attachment 9.5

Reactor Engineer Checklist

Sheet 1 of 3

NOTE: The expectation for all ERO positions is to use WebEOC for logkeeping purposes. Reference to traditional paper forms remains in this checklist for the situation in which WebEOC is unavailable, such as a power or computer failure.

1.0 Initial Responsibility/Activity

1.1 Assume the position of Reactor Engineer.

A. Swipe your Security Badge at one of the Accountability card readers.

B. Sign in at the facility.

C. Synchronize your time with the TSC/OSC clock located above the PICS computer displays.

D. Review facility electronic displays, plant data and any other available information to become familiar with current plant conditions.

E. Discuss Fission Product Barrier status with the Operations Advisor and update displays as required.

F. Report readiness status to the Technical Assessment Coordinator or TSC Manager when prepared to assume the Reactor Engineer position.

G. **IF** relieving another Reactor Engineer **THEN** perform a formal turnover:

1. Review Position Log.
2. Obtain a briefing from current Reactor Engineer on the emergency, plant conditions, fission product barrier status and any actions that have been completed or are in progress.
3. Relieve the current Reactor Engineer.

H. Inform TSC Manager and staff that you are now the Reactor Engineer.

I. If not already available, access plant status forms by starting desktop PC's as follows:

1. Log in using your user name and password.

Attachment 9.5

Reactor Engineer Checklist

Sheet 2 of 3

2. Click on Internet Explorer; go to IPEC, under "applications" and click on MRPDAS.
3. Ensure Guest User is entered as user name and no password is entered, then hit logon.
4. From left Treeview, select desired forms (for U2 plant data, select 42's, for U3 plant data, select 31's)

2.0 Continuous Responsibility/Activity

2.1 Inform the Technical Assessment Coordinator when temporarily leaving the work area.

A. **IF** you are leaving the TSC/OSC Complex (the restroom is within complex) **THEN**

B. Inform the OSC Team Coordinator and/or Accountability Coordinator when you leave, where you are going and when you expect to return. (for accountability purposes)

C. Upon return to the TSC/OSC complex:

1. Inform the OSC Team Coordinator and/or Accountability Coordinator you are back

2. Obtain a briefing on any events that have occurred while away

2.2 Use WebEOC or if unavailable, ERO Log Sheet(s) (IP-EP-115 Form EP-10) to maintain a log of significant items pertaining to your position.

2.3 Monitor plant conditions for any indications of core damage.

A. Perform and update core damage assessment based on current information using guidance provided in procedure IP-EP-360, Core Damage Assessment.

B. Notify TSC Manager and/or Technical Assessment Coordinator immediately of any changes in core status.

Attachment 9.5

Reactor Engineer Checklist

Sheet 3 of 3

Continuous Responsibility/Activity (cont)

C. Keep the OSC RP and Chemistry Team Leaders informed on core status to assist in maintaining radiological controls for plant personnel.

D. Through the TSC Manager and/or the Rp Team Leader, ensure that the Offsite Radiological Manager (ORM) is kept informed of the latest estimate of the amount of core damage.

E. Work with the Operations Advisor to maintain Fission Product Barrier Status board.

2.4 Assist operations personnel in calculating and tracking core reactivity.

2.5 Assist in clarifying core parameter information to other members of the Technical Assessment Team.

2.6 Work with other members of the Technical Assessment Team to provide support to the CR to mitigate the effects of the event and return the plant to a safe condition.

A. Provide recommendations on plant operations.

B. Assist in developing emergency procedures if needed

3.0 Closeout Responsibility/Activity

3.1 Assist TSC personnel in returning all equipment to proper storage locations.

3.2 Review all documentation the Reactor Engineers maintained during the emergency:

A. Ensure logs, forms and other documentation are complete

B. Ensure any core parameters, which were outside technical specifications during the event, are properly documented so that proper actions can be taken during the recovery phase.

3.3 Provide all logs and records to the Technical Assessment Coordinator upon termination of the emergency and entry into the Recovery Phase.

Attachment 9.6
Technical Assessment Coordinator Checklist
Sheet 1 of 5

NOTE: The expectation for all ERO positions is to use WebEOC for logkeeping purposes. Reference to traditional paper forms remains in this checklist for the situation in which WebEOC is unavailable, such as a power or computer failure.

1.0 Initial Responsibility/Activity

1.1 Assume the position of Technical Assessment Coordinator (TAC).

A. Swipe your Security Badge at one of the Accountability card readers.

B. Sign in at the facility.

C. Synchronize your time with the TSC/OSC clock located above the PICS computer displays.

D. Review facility electronic displays, plant data and any other available information to become familiar with current plant conditions.

E. Evaluate the adequacy of the Technical Assessment Team staffing and ability to support CR in technical assessment activities. The normal Technical Assessment Team includes:

1. Operations Advisor
2. OSC Radiological Protection or Chemistry Team Leader
3. Reactor Engineer
4. Electrical / I&C Engineer
5. Mechanical Engineer

G. Report readiness status to the TSC Manager when prepared to assume the Technical Assessment Coordinator position.

H. **IF** relieving another Technical Assessment Coordinator **THEN** perform a formal relief:

1. Review Position Log.
2. Obtain a briefing from current Technical Assessment Coordinator on the emergency, plant conditions and any tasks that have been completed or are in progress.
3. Relieve current Technical Assessment Coordinator.
4. Inform TSC Manager and staff that you are now the Technical Assessment Coordinator.

Attachment 9.6
Technical Assessment Coordinator Checklist
Sheet 2 of 5

2.0 Continuous Responsibility/Activity

2.1 Inform a staff member when temporarily leaving the work area.

A. **IF** you are leaving the TSC/OSC Complex (the restroom is within complex) **THEN:**

1. Inform the OSC Team Coordinator and/or Accountability Coordinator when you leave, where you are going and when you expect to return. (for accountability purposes)
2. Inform the OSC Team Coordinator and/or Accountability Coordinator when you return.

B. Upon return, obtain a briefing on any events, which have occurred while away.

2.2 Use WebEOC or if unavailable, ERO Log Sheet (IP-EP-115 Form EP-10) to maintain a log of significant items.

A. Time you assume position of Technical Assessment Coordinator

B. Technical Assessment Team activities undertaken with information pending actions to ensure the plant is returned to a safe condition.

C. Communications external to the TSC

2.3 Coordinate with the TSC Manager to call in additional engineering assistance as needed:

A. All Entergy engineering resources should be utilized as required. Individuals may be tasked with activities to be completed at the offsite engineering offices, be called to report to the TSC or directed to other facilities as needed.

B. Non-Entergy engineering support such as Westinghouse, Equipment Vendors and/or NRC Engineers. (some support organization phone numbers are located in the Emergency Telephone Directory)

Attachment 9.6

Technical Assessment Coordinator Checklist

Sheet 3 of 5

Continuous Responsibility/Activity (cont.)

2.4 Assist the TSC Manager in planning and performing engineering assessment of the plant conditions and/or actions to be taken to mitigate plant damage.

A. Assist the EPM and TSC Manager in establishing onsite priorities in response to the emergency.

1. Designate priorities as High (H), Medium (M), or Low (L) as appropriate.

(a) High (H): The task is necessary to protect the immediate health and safety of the public. High priority tasks are in response to plant conditions that are allowing the rapid deterioration of safety barriers, or barriers have already been broken such that a release is either occurring or is imminent.

(b) Medium (M): Any task that requires action by the TSC/OSC and should be worked on at the immediate time period, but does not fit the criteria of a health and safety of the public related item (for example, if a system has only one remaining component, repair of the backup components).

(c) Low (L): Any task, which can be worked on when resources permit (i.e. getting meals, preparations for recovery activities).

2. If multiple tasks exist within a single priority classification, confer with the appropriate managers and personnel to establish the preferred sequence.

2.5 Direct the activities of the Technical Assessment Team in the following areas:

A. Direct the technical support and engineering activities in accordance with the priorities established by the EPM and the TSC Manager.

B. Use available computer systems along with communications with the CR to monitor and assess vital plant parameters and conditions

C. Direct the Assessment Team to monitor, trend and assess plant parameters and status to:

Attachment 9.6
Technical Assessment Coordinator Checklist
Sheet 4 of 5

Continuous Responsibility/Activity (cont.)

Determine the condition of safety related systems and the fission product barriers.

1. Verify that the status of equipment out-of-service is maintained.
2. Provide recommendations for emergency classification changes based on review of the EALs.
3. Provide recommendations for mitigating activities.
4. Forecast expected changes in the level of plant and system safety.
5. Determine the extent of core damage.

D. When applicable, perform monitoring, assessment and evaluation in accordance with the Indian Point Severe Accident Management Guidelines.

E. Direct personnel to develop or modify procedures to perform response activities as necessary. (Such as emergency repairs or emergency system lineups).

F. Confirm that any sample requests for chemistry sampling contain specific details on the type of results information that is necessary (such as system boron concentration, activity, etc.).

G. Focus TSC Engineering efforts on short term (< 12 hours) support activities. **IF** longer-term engineering activities are to be undertaken, **THEN** a separate team should be established at offsite engineering locations.

H. Provide engineering support for OSC activities as requested.

Attachment 9.6
Technical Assessment Coordinator Checklist
Sheet 5 of 5

Continuous Responsibility/Activity (cont.)

2.6 Provide information to the NRC Operations Center as requested.

A. Use (IP-EP-115 NRC Form 361) to organize information for NRC.

B. Use the Emergency Notification System (ENS) phone to transmit information; phone numbers are on sticker on telephone.

3.0 Closeout Responsibility/Activity

3.1 Direct Technical Assessment Team Staff to return all equipment to proper storage locations.

3.2 Review all documentation the Technical Assessment Team maintained during the emergency:

A. Ensure logs, forms and other documentation are complete

B. Ensure all temporary procedures used and/or developed are properly documented for use by the Recovery Organization so that necessary actions can be taken for continuous plant operations or long-term restoration.

3.3 Provide all logs and records to the TSC Manager upon termination of the emergency and entry into the Recovery Phase.

Attachment 9.7
Mechanical and Electrical / I&C Engineer Checklist
Sheet 1 of 3

NOTE: The expectation for all ERO positions is to use WebEOC for logkeeping purposes. Reference to traditional paper forms remains in this checklist for the situation in which WebEOC is unavailable, such as a power or computer failure.

1.0 Initial Responsibility/Activity

1.1 Assume the position of Mechanical or Electrical / I&C Engineer.

A. Swipe your Security Badge at one of the Accountability card readers.

B. Sign in at the facility.

C. Synchronize your time with the TSC/OSC clock located above the PICS computer displays.

D. Review facility electronic displays, plant data and any other available information to become familiar with current plant conditions.

1. If not already available, access plant status forms by starting desktop PC's as follows:

   a. Log in using your user name and password.

   b. Click on Internet Explorer; go to IPEC, under "applications" click on MRPDAS.

   c. Ensure Guest User is entered as user name and no password is entered, then hit logon.

   d. From left Treeview, select desired forms (for U2 plant data, select 42's, for U3 plant data, select 31's)

E. **IF** relieving another Engineer **THEN** perform a formal turnover:

1. Review Position Log.

2. Obtain a briefing from current Mechanical / Electrical / I&C Engineer on the emergency, plant conditions and any actions that have been completed or are in progress.

3. Relieve the current Mechanical or Electrical / I&C Engineer

Attachment 9.7
Mechanical and Electrical / I&C Engineer Checklist
Sheet 2 of 3

2.0 Continuous Responsibility/Activity

2.1 Inform the Technical Assessment Coordinator when temporarily leaving the work area (such as to the restroom).

2.2 IF you are leaving the TSC/OSC Complex (the restroom is within complex), **THEN:**

A. Inform the OSC Team Coordinator and/or Accountability Coordinator when you leave, where you are going and when you expect to return. (for accountability purposes).

B. Inform the OSC Team Coordinator and/or Accountability Coordinator when you return.

C. Upon return, obtain a briefing on any events that have occurred while away.

2.3 Use WebEOC or if unavailable, ERO Log Sheet (IP-EP-115 Form EP-10) to maintain a log of significant items pertaining to your position.

2.4 Assist in clarifying Mechanical or Electrical / I&C information to other members of the Technical Assessment Team.

2.5 Work with other members of the Technical Assessment Team to provide support to the CR to mitigate the effects of the event and return the plant to a safe condition.

A. Provide recommendations on equipment operations.

B. Develop emergency procedures if needed.

C. Identify emergency repairs that can be undertaken to restore and maintain equipment operability and plant safety.

Attachment 9.7
Mechanical and Electrical / I&C Engineer Checklist
Sheet 3 of 3

Continuous Responsibility/Activity

2.6 Assist the OSC Maintenance and I&C Team Leaders in preparing to send repair teams into the plant.

A. Provide information on parts needed.

B. Provide information on tools required.

C. Prepare emergent maintenance procedures for OSC Repair Teams.

D. Participate in team briefing if required.

3.0 Closeout Responsibility/Activity

3.1 Assist TSC personnel in returning all equipment to proper storage locations.

3.2 Review all documentation the Mechanical or Electrical / I&C Engineers maintained during the emergency:

A. Ensure logs, forms and other documentation are complete

B. Ensure any equipment repairs which were performed outside normal requirements during the event are properly documented so that proper actions can be taken during the recovery phase.

3.3 Provide all logs and records to the Technical Assessment Coordinator upon termination of the emergency and entry into the Recovery Phase.

Attachment 9.8
TSC IT Support Checklist
Sheet 1 of 5

NOTE: The expectation for all ERO positions is to use WebEOC for logkeeping purposes. Reference to traditional paper forms remains in this checklist for the situation in which WebEOC is unavailable, such as a power or computer failure.

1.0 Initial Responsibility/Activity

1.1 Assume the position of TSC IT Support

A. Swipe your Security Badge at one of the Accountability card readers.

B. Sign in at the facility.

C. Synchronize your time with the TSC/OSC clock located above the PICS computer displays.

D. Synchronize your time with the TSC/OSC clock.

E. **If Unit 2** is the affected unit, **THEN:**

1. Verify that the TSC PICS Terminals are operational (PCs and monitors are ON) to display plant data (turn on and adjust brightness).

   Note: The logon = sds Password = sds

2. IF THIS IS A DRILL: If necessary, open the ICONs labeled "PICS SIM LEFT", "PICS SIM MID" or "PICS SIM RIGHT".

   a. Verify that PICS SIM is open – a yellow bar and the words "IPEC U2 SIM" will appear at the bottom of the screen. If not, close PICS and reopen the appropriate icons.
   b. From the PICS main menu select the "SYSTEM MENU" button.
   c. At the SYSTEM MENU select "ERDS" button.
   d. At the ERDS screen, select the "Activate" button. This will simulate activating ERDS. NOTE: Notifications will NOT be sent (no Modem installed).

Attachment 9.8
TSC IT Support Checklist
Sheet 2 of 5

3. IF THIS IS A REAL EVENT: If necessary, open the ICONs labeled "PICS PRIM LEFT", "PICS PRIM MID" or "PICS PRIM RIGHT".
   a. Verify that PICS PRIM is open – a green bar and the words "IPEC U2" will appear at the bottom of the screen. If not, close PICS and reopen the appropriate icons.
   b. From the PICS main menu select the "SYSTEM MENU" button.
   c. At the SYSTEM MENU select "ERDS" button.
   d. Verify that the NRC is aware that ERDS is getting activated. This could be done by calling the NRC directly at (301) 816-5140 or getting verbal permission for the EPM or ED.
   e. When authorized at the ERDS screen, select the "activate" button.
   f. Verify that ERDS is connected and transmitting data every 15 seconds.
   g. Contact an IT specialist if ERDS is not functional.

F. **If Unit 3** is the affected unit, **THEN** activate ERDS as follows:
   1. Logon to a TSC computer that has been setup for IP3 ERDS activation. (TAC, EPM, OPS Advisor's computers.)
   2. Double click either the CFMS A or CFMS B icon on the desktop to open a terminal session. OS/32 TERMINAL MONITOR 09-02.2 ENNE 3244A/B will be displayed.
   3. Logon to the CFMS computer by typing: **signon tsc,3,entergy0**
   4. If this is not the master CFMS computer, the following message will be displayed:
      "Welcome to the IP3 ERDS program on the CFMS A/B computer.
      ERDS can only be activated from the master CFMS computer.
      CFMS A/B is the master CFMS computer.
      Please log on to the CFMS A/B computer.
      This window will automatically close in 30 seconds."

Attachment 9.8
TSC IT Support Checklist
Sheet 3 of 5

5. If this is the master CFMS computer, the following interactive dialogue will occur:
   Welcome to the IP3 ERDS program on the CFMS A/B computer.
   Is this a DRILL or a REAL event?
   > Enter "drill" or "real".
   This is a DRILL hh:mm:ss Enter START or STOP for IP3 ERDS.
   or
   This is REAL hh:mm:ss Enter START or STOP for IP3 ERDS.
   > Enter "start" or "stop".
   "start" begins a 3-minute DRILL simulation , or a continuous REAL IP3 ERDS session.
   "stop" terminates either a DRILL or a REAL session.
6. A DRILL window will automatically close 30 seconds after the simulated session ends.
7. A REAL window will continue indefinitely. If the window displaying a REAL session is accidentally closed, repeat the steps for STARTing a REAL session. The display of the continuous session will be joined in progress.

G. Assist Admin Support in setting up the TSC/OSC electronic displays.

H. **IF** relieving another IT Support **THEN** perform a formal turnover:
   1. Obtain a briefing on the emergency, plant conditions and any actions that have been completed or are in progress.
   2. Relieve current TSC IT Support.

I. Log time of ERDS activation.

1.2 Inform TSC Manager and staff that you are now the TSC IT Support

2.0 <u>Continuous Responsibility/Activity</u>

2.2 Inform the TSC Manager when temporarily leaving the work area.

Attachment 9.8
TSC IT Support Checklist
Sheet 4 of 5

Continuous Responsibility/Activity (cont)

A. **IF** you are leaving the TSC/OSC Complex **THEN**
   1. Inform the OSC Team Coordinator/Accountability Coordinator when you leave, where you are going and when you expect to return.
   2. **IF** you left TSC/OSC Complex **THEN** inform the OSC Team Coordinator/Accountability Coordinator you have returned.

B. Upon return, obtain a briefing on any events from the TSC Manager, which have occurred while away.

2.3 Assist the Technical Assessment Team in obtaining plant data from the various TSC Computer systems

2.4 Coordinate TSC Communicators, Document Controller and Admin Support to assist TSC operations.

2.5 Ensure computer displays continue to operate properly.

A. **IF** the MRP-DAS displays are **NOT** functioning THEN perform the following:
   1. **IF Unit 2** obtain 42A, 42B and 42C data printout from PICS
      a) **IF** PICS is **NOT** operating **THEN** obtain information from the CCR (IP-EP-115 EP Forms 53, 54 and 55)
      b) Have Admin Support transcribe form data to TSC Electronic displays **AND** fax form information to the EOF
   2. **IF Unit 3** obtain 31A, 31B and 31C data from the CCR (IP-EP-115 EP Forms 57, 58 and 59).
      a) Have Admin Support transcribe form data to TSC Electronic displays **AND** fax form information to the EOF.

3.0 Closeout Responsibility/Activity

3.1 Assist TSC support personnel to return all equipment to pre-emergency conditions:

A. Erase TSC Electronic displays
B. Return plant drawings, procedures and other items obtained from the Document Control area.
C. Log off the PCs
D. Turn off or dim computer display systems.

Attachment 9.8
TSC IT Support Checklist
Sheet 5 of 5

Closeout Responsibility/Activity (cont)

IF Unit 2:

E. Deactivate ERDS data link by:
   1. From the PICS main menu select "SYSTEM MENU"
   2. At the SYSTEM MENU select "ERDS."
   3. At the ERDS screen, select "TERMINATE".
   4. Verify that ERDS is disconnected and not transmitting data.
   5. Leaving the **PICS PCs ON – Turn off the PICS Monitors.**

IF Unit 3:

F. Deactivate ERDS data link by:
   1. Entering "STOP". This will terminate either DrillI or REAL session.

3.2 Provide all logs and records to the Technical Assessment Coordinator upon termination of the emergency and entry into the Recovery Phase.

Attachment 9.9
TSC Communicator Checklist
Sheet 1 of 3

NOTE: The expectation for all ERO positions is to use WebEOC for logkeeping purposes. Reference to traditional paper forms remains in this checklist for the situation in which WebEOC is unavailable, such as a power or computer failure.

1.0 Initial Responsibility/Activity

1.1 Assume the position of TSC Communicator

A. Swipe your Security Badge at one of the Accountability card readers.

B. Sign in at the facility.

C. Synchronize your time with the TSC/OSC clock located above the PICS computer displays.

D. Review facility electronic displays, plant data and any other available information to become familiar with current plant conditions.

E. **IF** an open phone line has not been established with the other facilities on the Communicator's Hotline **THEN** establish open line:

1. Remove handset from cradle
2. Press appropriate call # to ring other locations
3. Listen to ensure other parties pick up
4. Inform all parties you are establishing open line from the TSC/OSC and are now monitoring line.
5. Stay on line at all times or inform other parties when you will be off line.

F. **IF** relieving another TSC Communicator **THEN** perform a formal turnover:

1. Review TSC Communicator Log.
2. Obtain a briefing from current TSC Communicator on the emergency, plant conditions.
3. Relieve the current TSC Communicator

G. Inform TSC Manager and staff that you are now the TSC Communicator.

Attachment 9.9
TSC Communicator Checklist
Sheet 2 of 3

2.0 Continuous Responsibility/Activity

2.1 Inform the TSC Manager when temporarily leaving the work area (such as to the restroom).

A. Request the TSC Operation Advisor monitor the open phone line to the CR and EOF while you are away.
B. **IF** you are leaving the TSC/OSC Complex (the restroom is within complex) **THEN:**
   1. Inform the OSC Team Coordinator and/or Accountability Coordinator when you leave, where you are going and when you expect to return. (for accountability purposes)
   2. Inform the OSC Team Coordinator and/or Accountability Coordinator when you return.
   3. Upon return, obtain a briefing on any events, which have occurred while away.

2.2 Use WebEOC or if unavailable, ERO Log Sheet(s) (IP-EP-115 Form EP-10) to maintain a log

A. Log the time when you assumed the duties of TSC Communicator.
B. Log significant communications pertaining to plant operations and all communications to individuals offsite
C. Remain on the direct line to transmit / receive data to / from the TSC and OSC Managers as applicable regarding action being taken in all Emergency Response Facilities (ERF).
D. Advise Direct-Line Communicators in the other ERFs of the actions being taken in the TSC/OSC:
   1. Report TSC/OSC activities
   2. Question others regarding activities and actions at their facilities.
   3. Ask for feedback from OSC on engineering decisions.

2.3 Maintain communications as necessary with the Entergy engineers.

Attachment 9.9
TSC Communicator Checklist
Sheet 3 of 3

Continuous Responsibility/Activity (cont)

2.4 Monitor communications from the CCR and EOF. (IP-EP-115 Form EP-56)

A. Log pertinent information/questions received from other facilities on IP-EP-115 Form EP-56.

B. Keep aware of CCR personnel actions and procedures being implemented, notified TSC Engineers if appropriate.

2.5 Work with other members of the TSC Staff to provide support to the CCR to mitigate the effects of the event and return the plant to a safe condition.

2.6 When requested by TSC Manager, notify Westinghouse and other vendors of emergency conditions. Phone numbers can be found in Emergency Telephone Directory.

2.7 Provide information to the NRC Operations Center as requested.

3.0 Closeout Responsibility/Activity

3.1 Assist TSC personnel in returning all equipment to proper storage locations.

3.2 Review all documentation the TSC Communicators maintained during the emergency.

A. Ensure logs, forms and other documentation are complete

B. Ensure any equipment and procedure problems noted during the event are properly documented so that proper actions can be taken to correct them.

3.3 Provide all logs and records to the TSC Manager upon termination of the emergency and entry into the Recovery Phase.

Attachment 9.10

TSC Administrative Support Checklist

Sheet 1 of 2

NOTE: The expectation for all ERO positions is to use WebEOC for logkeeping purposes. Reference to traditional paper forms remains in this checklist for the situation in which WebEOC is unavailable, such as a power or computer failure.

Initial Responsibility/Activity

1.1 Assume the position of TSC Administrative Support

A. Swipe your Security Badge at one of the Accountability card readers.

B. Sign in at the facility.

C. Synchronize your time with the TSC/OSC clock located above the PICS computer displays.

D. **IF** the TSC has not been previously activated **THEN** perform the following:

1. **IF** directed by the TSC Manager, **THEN** update the TSC/OSC Electronic displays.

2. Ensure the TSC Telephones, fax machines and photo-copiers are operable.

E. **IF** relieving another TSC Admin Assistant **THEN** perform a formal relief:

1. Review Admin Assistant's ERO Log Sheets (IP-EP-115 Form EP-10)

2. Obtain a briefing on facility status

3. Relieve current Admin Assistant.

F. Inform TSC Manager and staff that you are now TSC Admin Support.

2.0 Continuous Responsibility/Activity

2.1 Assist the TSC Manager in scheduling second shift

A. Obtain shift turnover time from TSC Manager

B. Contact second shift to verify their availability and inform them of turnover time.

Attachment 9.10
TSC Admin Assistant Checklist
Sheet 2 of 2

Continuous Responsibility/Activity (cont)

2.2 Use WebEOC or if unavailable, ERO Log Sheet(s) (IP-EP-115 Form EP-10) to maintain a log.

2.3 IF directed by the TSC Manager THEN maintain a log for the TSC Log.

2.4 Receive status updates from the TSC Manager and if directed post updates on the appropriate electronic displays.

3.0 Closeout Responsibility/Activity

3.1 Provide all logs and records to the TSC Manager upon termination of the emergency and entry into the Recovery Phase.

Attachment 9.11

TSC SAMG Evaluator Checklist
Sheet 1 of 2

NOTE: The expectation for all ERO positions is to use WebEOC for logkeeping purposes. Reference to traditional paper forms remains in this checklist for the situation in which WebEOC is unavailable, such as a power or computer failure.

1.0 Initial Responsibility/Activity

1.1 Assume the position of TSC SAMG Evaluator.

A. Swipe your Security Badge at one of the Accountability card readers.

B. Sign in at the facility.

C. Synchronize your time with the TSC/OSC clock located above the PICS computer displays.

D. **IF** the TSC has not been previously activated **THEN** perform the following:

1. **IF** directed by the TSC Manager, **THEN** work with Admin Support to update the TSC/OSC Electronic Displays.

E. **IF** relieving another TSC SAMG Evaluator **THEN** perform a formal relief:

1. Review SAMG Evaluator ERO Log Sheets (IP-EP-115 Form EP-10)

2. Obtain a briefing on facility status

3. Relieve current SAMG Evaluator.

F. Inform TSC Manager and staff that you are now the TSC SAMG Evaluator.

2.0 Continuous Responsibility/Activity

2.1 Maintain a log using WebEOC or if unavailable, an ERO Log Sheet (IP-EP-115 Form EP-10)

A. Log when you assumed the duties of SAMG Evaluator

Attachment 9.11

TSC SAMG Evaluator Checklist

Sheet 2 of 2

Continuous Responsibility/Activity (cont)

B. Log significant communications to individuals outside the TSC/OSC complex and all communications to individuals offsite.

C. Log major decisions and any important details used to make decisions.

2.2 Assist the EPM in implementation of Severe Accident Management Guidelines.

A. When the Control Room transitions from the EOPs to SACRG-1, inform the EPM when you are ready to take over Severe Accident Management control.

B. **INFORM** EPM which SAM guidance should be implemented

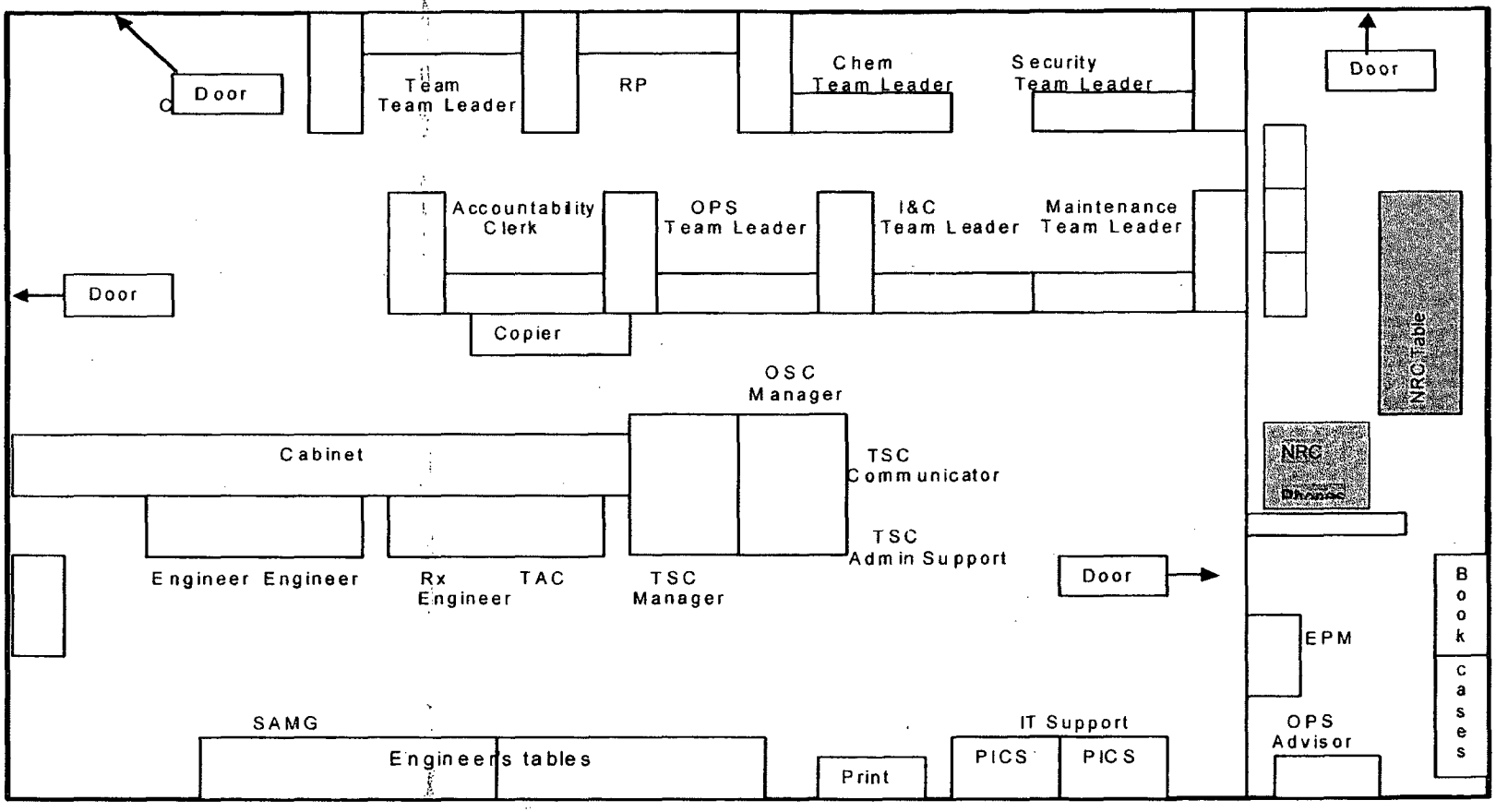
C. **IF** guidance involved a release to the environment **ENSURE** ED discussed with Offsite Radiological Manager (ORM) and the State/Counties prior to implementation.

2.3 Receive status updates from the TSC Manager and/or EPM and if directed post updates on the appropriate electronic displays.

3.0 Closeout Responsibility/Activity

3.1 Provide all logs and records to the TSC Manager upon termination of the emergency and entry into the Recovery Phase.

TSC / OSC Layout and NRC Room



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Entergy	ENN IPEC EMERGENCY PLAN IMPLEMENTING PROCEDURES	NON-QUALITY RELATED PROCEDURE REFERENCE USE	IP-EP-230 Revision 6 Page 1 of 61

Operations Support Center

Prepared by:	Lori Glander		11/10/10
	Print Name	Signature	Date
Approval:	Brian Sullivan		11/15/10
	Print Name	Signature	Date

Effective Date: November 22, 2010

This procedure excluded from further LI-100 reviews.

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OPERATIONS SUPPORT CENTER (OSC)

1.0 PURPOSE

To describe the activation and operation of the Operations Support Center (OSC)

2.0 REFERENCES

2.1 Indian Point Energy Center Emergency Plan

2.2 IP-EP-130, Notifications and Mobilization

2.3 New York State Implementation of the use of Potassium Iodide (KI) as a Protective Action for the Public

2.4 IP-EP-350, Emergency Contamination Control

3.0 DEFINITIONS

3.1 Activated – an order has been made to activate an emergency response facility, and the facility is in the process of being staffed.

3.2 Staffed – The emergency response facility has been activated and sufficient personnel are available to perform the required functions as determined by the facility manager.

3.3 Operational – The emergency response facility has been activated and staffed, and has assumed responsibilities for performing its intended functions.

4.0 RESPONSIBILITIES

4.1 The OSC Manager is responsible for:

A. Ensuring adequate staffing of the OSC to support the emergency.
B. Working with the Emergency Plant Manager to set priorities for the OSC Staff
C. Directing the activities of the OSC staff to support emergency response.

4.2 The OSC Staff is responsible to complete tasks as defined in their checklists and/or duties assigned by the OSC Manager.

5.0 DETAILS

5.1 The OSC Manager **SHALL** follow the instructions outlined in Attachment 9.1, OSC Manager Checklist.

5.2 The I & C Team Leader **SHALL** follow the instructions outlined in Attachment 9.2, I & C Team Leader Checklist.

5.3 The Maintenance Team Leader **SHALL** follow the instructions outlined in Attachment 9.3, Maintenance Team Leader Checklist.

5.4 The Operations Team Leader **SHALL** follow the instructions outlined in Attachment 9.4, Operations Team Leader.

5.5 The Rad Protection Team Leader **SHALL** follow the instructions outlined in Attachment 9.5, Rad Protection Team leader Checklist.

5.6 The Security Team Leader **SHALL** follow the instructions outlined in Attachment 9.6, Security Team Leader Checklist.

5.7 The Team Coordinator **SHALL** follow the instructions outlined in Attachment 9.7, Team Coordinator Checklist.

5.8 The Accountability Coordinator **SHALL** follow the instructions outlined in Attachment 9.8, Accountability Coordinator Checklist.

5.9 The Chemistry Team Leader **SHALL** follow the instructions outlined in Attachment 9.9, Chemistry Team Leader Checklist.

6.0 INTERFACES

6.1 IP-EP-115, Emergency Plan Forms

6.2 IP-EP-210, Central Control Room

6.3 IP-EP-220, Technical Support Center

6.4 IP-EP-430, Site Assembly, Accountability and Relocation of Personnel Offsite

6.5 IP-EP-420, Use of Potassium Iodide by Indian Point Personnel During an Emergency

7.0 RECORDS

All Logs, Completed Forms and other records generated during an actual emergency shall be considered quality records and maintained for the life of the plant.

8.0 REQUIREMENTS AND COMMITMENTS

None

9.0 ATTACHMENTS

9.1 OSC Manager Checklist

9.2 I & C Team Leader Checklist

9.3 Maintenance Team Leader Checklist

9.4 Operations Team Leader Checklist

9.5 Rad Protection Team Leader Checklist

9.6 Security Team Leader Checklist

9.7 Team Coordinator Checklist

9.8 Accountability Coordinator Checklist

9.9 Chemistry Team Leader Checklist

9.10 OSC/TSC Layout

Attachment 9.1

OSC Manager Checklist

Sheet 1 of 8

1.0 Initial Responsibility/Activity

NOTE: The expectation for all ERO positions is to use WebEOC for logkeeping purposes. Reference to traditional paper forms remains in this checklist for the situation in which WebEOC is unavailable, such as a power or computer failure.

NOTE:

Procedure refers to an event at Unit 2, Unit 3 or both (e.g., Security, Natural event). If determined to be a Site event, then Unit 2 will be the lead plant for all communications.

1.1 Initial Accountability

A. **IF** the event has been classified as a Site Area Emergency or General Emergency **AND** initial accountability has not been performed **THEN** direct accountability to be performed in accordance with Section 2.8 of this checklist.

1.2 Assume the duties of the OSC Manager.

A. Swipe your Security Badge at one of the Accountability card readers.

B. Sign in at the facility.

C. Synchronize your time with the TSC/OSC clock.

D. Review electronic displays of the facility (status boards), plant data and any other available information to become familiar with current plant conditions.

E. **IF** the OSC has not yet been declared operational **THEN** staff the OSC as follows:

1. Receive a briefing from the EPM or the Shift Manager/POM in the CR on the following items:

   (a) Plant conditions

   (b) Equipment Status

   (c) Actions being taken (any repair/Operations personnel currently in the field)

   (d) Team requirement for actions planned but not yet initiated.

Attachment 9.2

OSC I&C Team Leader Checklist

Sheet 2 of 8

Initial Responsibility/Activity (cont)

2. Verify that the following minimum staffing is available before declaring operational:

   (a) OSC Manager

   (b) Team Coordinator

   (c) Rad Protection Team Leader

   (d) 1 RP Technician (may be in field at time of activation)

F. Direct the Accountability Coordinator or other personnel to monitor both Accountability card readers while ERO members are carding into the TSC/OSC. Direct them to verify badges are properly read by the Accountability card reader. Direct them to log the name and badge number on an Accountability Roster (IP-EP-115 Form EP-47) of anyone having difficulty carding in.

G. Designate two individuals to act as Assembly Area Coordinators (AAC). Assign one to report to the Energy Education Center and the other to the Generation Support Building (GSB) and have them follow guidance provided on Assembly Area Coordinator Instructions (IP-EP-115 Form EP-45).

H. If event occurs during an outage, assess the need to staff the back-up assembly area at the Indian Point Training Center (IPTC). Designate an individual to report to the IPTC and have them follow guidance provided on Assembly Area Coordinator Instructions (IP-EP-115 Form EP-45)

   1. Inform other AACs that the IPTC is being utilized and to direct overflow of non-essentials to the IPTC.

   2. **IF** additional personnel are required to meet staffing needs (Normal staffing per IP-EP-115 Form EP-41, or special requirements as needed) **THEN** call or assign someone to call the Assembly Areas or individuals at home (using the Emergency Telephone Directory) for additional personnel.

I. Determine when the OSC staff is prepared to assume primary functions of OSC (dispatching and accounting of operations, RP, maintenance Teams into the plant).

J. When ready formally relieve the CR of the responsibilities to track in-plant teams as follows:

Attachment 9.2
OSC I&C Team Leader Checklist
Sheet 3 of 8

Initial Responsibility/Activity (cont)

1. Call the POM (Shift Manager if POM not available) and request a complete listing of personnel currently performing tasks outside the CR.
2. Inform the Shift Manager that the OSC is now operational and assuming responsibility for accountability of all personnel inside the Protected Area and outside the CR.
3. Inform the EPM that the OSC is operational.
4. Make an announcement to the OSC, TSC, and inform the EOF that the OSC is operational.

Note:
OSC Guidelines (IP-EP-115 Form EP-44) information should be provided to each OSC technician, mechanic and operator.

K. Conduct, or have the Team Coordinator conduct, a briefing for the OSC technicians, mechanics and operators:
   1. Provide a brief explanation of the event that caused the emergency.
   2. Inform personnel not to leave the TSC/OSC Complex without checking out with the OSC Team Coordinator and/or Accountability Coordinator.
   3. Inform personnel that they will be briefed by one of the OSC Team Leaders prior to being sent into the field to perform a task.
   4. When briefed and dispatched by a Team Leader they MUST check out with the OSC Team Coordinator and/or Accountability Coordinator before they leave the TSC/OSC Complex.
   5. When returning from an assignment they MUST check in with the OSC Team Coordinator and/or Accountability Coordinator and report any radiation exposure received while dispatched.

L. **IF** relieving another OSC Manager **THEN** perform a formal turnover with the current OSC Manager.
   1. Review the OSC Manager's Log, and other information relating to status and teams.

Attachment 9.2

OSC I&C Team Leader Checklist

Sheet 4 of 8

Initial Responsibility/Activity (cont)

2. Obtain a briefing on the emergency and any actions that have been completed or are in progress. Discuss the following:
   (a) Emergency Classification
   (b) Initiating Event (Date, time and cause)
   (c) Current Plant Conditions
   (d) Equipment out of service
   (e) Proposed/In-Progress / Completed Corrective Actions
   (f) Site Accountability / Relocation of Non-essential Personnel
3. Make a formal announcement to OSC/TSC when the turnover takes place.

M. **IF** relieving another OSC Manager AND there has been a shift change of OSC Technicians **THEN** brief the OSC Technicians using OSC Guidelines (IP-EP-115 Form EP-44).

2.0 Continuous Responsibility/Activity

2.1 Inform EPM and OSC Team Leaders when temporarily leaving the work area.

A. **IF** you are leaving the TSC/OSC Complex (the restroom is within complex) **THEN**

1. Inform the OSC Team Coordinator and/or Accountability Coordinator when you leave, where you are going and when you expect to return. (for accountability purposes)
2. Inform the OSC Team Coordinator and/or Accountability Coordinator when you return.

B. Upon return, obtain a briefing from the EPM on any events, which have occurred while away.

2.2 Maintain Adequate OSC Staffing

A. Ensure an adequate number of personnel is available for Repair and Corrective Action Teams.

B. Prepare shift scheduling, utilizing (Form EP-43).

1. With assistance from the Accountability Coordinator, ensure those personnel required for the second shift are available and do not have other emergency response duties.
2. Ensure second shift personnel are notified of their assignments and time of shift turnover.

Attachment 9.2
OSC I&C Team Leader Checklist
Sheet 5 of 8

Continuous Responsibility/Activity (cont)

C. Upon direction from the ED, reduce staffing per shift schedule.

D. Continually assess the need for additional personnel.

2.3 Use WebEOC or if unavailable, ERO Log Sheet (IP-EP-115 Form EP-10) to maintain a log

A. Log, or have someone log, when OSC is activated, staffed, and operational or when there is a manager change.

B. Log major decisions and any important details of actions taken

2.4 Supervise the activities of the OSC Team Leaders and team personnel.

A. The EPM is responsible for overall control of the onsite emergency response. Obtain EPM concurrence prior to directing any actions that may affect the operability of a plant system.

B. Coordinate activities of operations personnel in the OSC with the Operations Team Leader and the POM.

C. Inform the EPM immediately of any operations teams requested to be dispatched from the OSC by the CR.

D. Maintain adequate personnel and material resources for the onsite response.

E. Assign tasks to OSC Team Leaders. The OSC Manager's Task Assignment Log (IP-EP-115 Form EP-39) may be used to track task assignments.

F. Keep the Team Coordinator, Team Leaders, and Team Members informed of the overall focus of the emergency, task priorities and existing radiological conditions.

G. Remind the Team Coordinator and Team Leaders to maintain an awareness of the activities and concerns of OSC team members.

H. Verify that the Team Coordinator's Status Board is updated as new tasks are assigned, old tasks are completed, and as priorities are changed.

Attachment 9.2

OSC I&C Team Leader Checklist

Sheet 6 of 8

Continuous Responsibility/Activity (cont)

I. Interact with the OSC Team Leaders and clarify any concerns/questions regarding plant or equipment status.

J. Prioritize team dispatch with POM.

K. Ensure the TSC Communicator promptly reports dispatched teams to the POM and Emergency Director.

L. Coordinate development of emergent repair and corrective actions with the TSC Manager and the POM

2.5 Ensure adequate materials and supplies are available to conduct emergency operations.

A. **IF** any necessary materials or supplies are not available on site **THEN** request assistance in obtaining items from the Material Control Storekeeper and/or the Administrative and Logistics Director at the EOF.

2.6 Direct OSC Operations

A. Keep OSC Team Leaders updated on pending assignments.

B. **IF** multiple pre-assignment briefs are to occur simultaneously **THEN** instruct the Team Leaders to use other areas of the TSC/OSC to conduct briefings.

C. Ensure OSC staff members are following appropriate procedures.

2.7 Obtain approval from the EPM prior to deviating from any existing plant procedure dealing with changing plant configuration or personnel safety. Also, obtain approval from the EPM prior to performing an action that would normally require a procedure but no procedure exists.

2.8 IF the emergency classification is changed to a Site Area Emergency or General Emergency OR if directed by the Emergency Plant Manager THEN establish or re-establish initial accountability as follows:

Attachment 9.2
OSC I&C Team Leader Checklist
Sheet 7 of 8

Continuous Responsibility/Activity (cont)

NOTE:
Initial Accountability shall be accomplished within approximately 30 minutes of the sounding of the Site Assembly Alarm at the Site Area Emergency or General Emergency. Accountability may be directed at the Alert classification (or any other time deemed necessary) at the direction of the Shift Manager or Emergency Plant Manager.

Accountability is accomplished by assembly of all non-essential personnel outside the Protected Area and physically accounting for all individuals who remain within the IPEC Protected Area (Unit 2 and Unit 3).

A. All ERO members reporting to the TSC/OSC shall swipe their Security Badge at one of the Accountability card readers.

B. TSC/OSC personnel assigned to specific job functions should identify themselves and move to the front of the line to expedite facility activation.

C. The Lead Accountability Officer (LAO) will generate the list of missing persons. This list will be provided to the OSC Manager or the OSC Security Team Leader who will notify the Emergency Plant Manager of any missing persons.

NOTE:
During plant shutdowns, when there may be large numbers of workers onsite and within the radiological control areas, a Health Physics computer printout may be used to assist in locating missing personnel within the radiological control area after accountability is completed.

D. **IF** there are individuals who are missing for (Unit 2 or Unit 3) **THEN** verify that the following is performed:

1. The Radiation Protection Team Leader sends an RP tech to obtain a Computer Printout of individuals within the Radiological Control Area.
2. Review Computer Printout for any missing individuals within the Radiological Control Area.

Attachment 9.2
OSC I&C Team Leader Checklist
Sheet 8 of 8

Continuous Responsibility/Activity (cont)

3. Coordinate the search and rescue activities in accordance with procedure IP-EP-430, Site Assembly, Accountability and Relocation of Personnel Offsite.

NOTE
Ongoing Accountability is required at the Site Area Emergency level, but may be relaxed by Emergency Plant Manager at the Alert level.

E. Direct OSC Staff to maintain accountability of all OSC personnel through the use of status boards, team assignments, Individual Exposure Tracking Log (IP-EP-115 Form EP-29) and ERO Tracking Log (IP-EP-115 Form EP-42).

1. Instruct search and rescue teams not to move an incapacitated victim without a Medical Representative or qualified first responder UNLESS the potential harm from radiation or other hazards out weights the potential harm of moving the victim.

F. Coordinate release of personnel at the EEC, GSB and IPTC with the Emergency Plant Manager, LAO and Assembly Area Coordinator.

2.9 Inform the EPM of changing situations in the plant based on information received from teams out in the field.

2.10 Participate in periodic briefings of TSC/OSC staff. (~ every 30 minutes) and ensure personnel in the field are updated.

3.0 Closeout Responsibility/Activity

3.1 Direct OSC personnel to return all equipment to proper storage locations.

3.2 Review all documentation:

A. Verify that logs, forms and other documentation are complete

B. Verify that all repairs performed by OSC Teams that deviated from normal station procedures are properly documented so that necessary actions can be taken for continuous plant operations or plant recovery operations.

3.3 Provide all logs and records to the Recovery Manager upon termination of the emergency and entry into the Recovery Phase

Attachment 9.2

OSC I&C Team Leader Checklist

Sheet 1 of 3

NOTE: The expectation for all ERO positions is to use WebEOC for logkeeping purposes. Reference to traditional paper forms remains in this checklist for the situation in which WebEOC is unavailable, such as a power or computer failure.

1.0 Initial Responsibility/Activity

1.1 Assume the position of I&C Team Leader.

A. Swipe your security badge at one of the accountability card readers.

B. Sign in at the facility.

C. Synchronize your time with the TSC/OSC Clock.

D. Report readiness status to the OSC Manager when prepared to assume the I&C Team Leader position.

E. **IF** the OSC has not yet been activated **THEN** perform the following steps:

1. Receive briefing from the OSC Manager.
2. Call additional personnel from the Assembly Area as needed to support emergency.

F. **IF** relieving another I&C Team Leader **THEN** perform a formal turnover:

1. Review the I&C Team Leader's Emergency Response Organization Log Sheet(s). (WebEOC **OR** Form EP-10)
2. Obtain a briefing on the emergency, radiological conditions and any actions that have been completed or are in progress.
3. Relieve current I&C Team Leader

G. Inform OSC Manager and staff that you are now the I&C Team Leader.

2.0 Continuous Responsibility/Activity

2.1 Inform another OSC Team Leader and the OSC Manager when temporarily leaving the work area.

Attachment 9.2

OSC I&C Team Leader Checklist

Sheet 2 of 3

Continuous Responsibility/Activity

A. **IF** you are leaving the TSC/OSC Complex (the restroom is within complex) **THEN:**

1. Inform the OSC Team Coordinator and/or Accountability Clerk when you leave, where you are going and when you expect to return. (for accountability purposes)
2. Inform the OSC Team Coordinator and/or Accountability Clerk when you return.

B. Upon return, obtain a briefing from another Team Leader on any events which have occurred while away.

2.2 Use WebEOC or if unavailable, ERO Log Sheet(s) (IP-EP-115 Form EP-10) to maintain a log of activities.

A. Record the time you assume position of I&C Team Leader

B. Record I&C Team activities undertaken with information on repairs performed and pending actions to ensure repairs are completed. (you need not repeat information on team briefing forms.)

C. Record all communications outside the Protected Area Fence.

2.3 Assist OSC Manager in planning and preparing for any I&C maintenance activities needed to return the plant to a safe condition.

2.4 Participate in Team dispatch and field operations:

A. Choose I&C personnel who are best qualified to conduct assigned task(s)

B. Use Emergency Team Briefing Form (IP-EP-115 Form EP-38) to prepare and document team assignments. Ensure each team dispatched has a copy of the Emergency Team Briefing Form.

C. Ensure Team is properly equipped to conduct repairs, including procedures, drawings, tools and repair parts.

Attachment 9.2

OSC I&C Team Leader Checklist

Sheet 3 of 3

Continuous Responsibility/Activity

D. Participate in Team briefings to ensure team members properly understand assigned task

E. Maintain communication capability (i.e. phone, radio) and work with the Team Coordinator while the team is in the field to answer any questions that may arise concerning task

NOTE:
Ensure any deviations from Quality Control work practices are logged as part of the Team debriefings.

F. Debrief I&C maintenance team members when they return and ensure actions are properly documented.

G. Report results and status of team efforts to the OSC Manager as necessary.

3.0 Closeout Responsibility/Activity

3.1 Assist OSC personnel to return all equipment to proper storage locations.

3.2 Review all documentation the I&C Team Leaders maintained during the emergency:

A. Ensure logs, forms and other documentation are complete

B. Ensure all repairs performed by OSC Teams that deviated from normal station procedures are properly documented so that necessary actions can be taken for continuous plant operations or recovery operations.

3.3 Provide all logs and records to the OSC Manager upon termination of the emergency and entry into the Recovery Phase.

Attachment 9.3

OSC Maintenance Team Leader Checklist

Sheet 1 of 3

NOTE: The expectation for all ERO positions is to use WebEOC for logkeeping purposes. Reference to traditional paper forms remains in this checklist for the situation in which WebEOC is unavailable, such as a power or computer failure.

1.0 Initial Responsibility/Activity

1.2 Assume the position of Maintenance Team Leader

A. Swipe your security badge at one of the accountability card readers.

B. Sign in at the facility.

C. Synchronize your time with the TSC/OSC Clock.

D. Report readiness status to the OSC Manager when prepared to assume the Maintenance Team Leader position.

E. **IF** the OSC has not yet been activated **THEN** perform the following steps:

1. Receive briefing from the OSC Manager.
2. Call additional personnel from the Assembly Area as needed to support emergency.

F. **IF** relieving another Maintenance Team Leader **THEN** perform a formal turnover:

1. Review the Maintenance Team Leader's Emergency Response Organization Log Sheet(s). (Form EP-10)
2. Obtain a briefing on the emergency, radiological conditions and any actions that have been completed or are in progress.
3. Relieve current Maintenance Team Leader

G. Inform OSC Manager and staff that you are now the Maintenance Team Leader.

2.0 Continuous Responsibility/Activity

2.1 Inform another OSC Team Leader and the OSC Manager when temporarily leaving the work area.

Attachment 9.3

OSC Maintenance Team Leader Checklist

Sheet 2 of 3

Continuous Responsibility/Activity

A. **IF** you are leaving the TSC/OSC Complex (the restroom is within complex) **THEN:**

1. Inform the OSC Team Coordinator and/or Accountability Clerk when you leave, where you are going and when you expect to return. (for accountability purposes)
2. Inform the OSC Team Coordinator and/or Accountability Clerk when you return.

B. Upon return, obtain a briefing from another Team Leader on any events, which have occurred while away.

2.2 Use WebEOC or if unavailable, ERO Log Sheet(s) (IP-EP-115 Form EP-10) to maintain a log of activities.

A. Record the time you assume position of Maintenance Team Leader

B. Record Maintenance Team activities undertaken with information on repairs performed and pending actions to ensure repairs are completed. (you need not repeat information on team briefing forms.)

C. Record all communications outside the Protected Area Fence.

2.3 Assist OSC Manager in planning and preparing for any Maintenance activities needed to return the plant to a safe condition.

2.4 Participate in Team dispatch and field operations:

A. Choose Maintenance personnel who are best qualified to conduct assigned task(s)

B. Use Emergency Team Briefing Form (IP-EP-115 Form EP-38) to prepare and document team assignments. Ensure each team dispatched has a copy of the Emergency Team Briefing Form.

C. Ensure Team is properly equipped to conduct repairs, including procedures, drawings, tools and repair parts.

Attachment 9.3
OSC Maintenance Team Leader Checklist
Sheet 3 of 3

Continuous Responsibility/Activity

D. Participate in Team briefings to ensure team members properly understand assigned task

E. Maintain communication capability (i.e. phone, radio) and work with the Team Coordinator while the team is in the field to answer any questions that may arise concerning task

NOTE:
Ensure any deviations from Quality Control work practices are logged as part of the Team debriefings.

F. Debrief mechanical and electrical maintenance team members when they return and ensure actions are properly documented.

G. Report results and status of team efforts to the OSC Manager as necessary.

3.0 Closeout Responsibility/Activity

3.1 Assist OSC personnel to return all equipment to proper storage locations.

3.2 Review all documentation the Maintenance Team Leaders maintained during the emergency:

A. Ensure logs, forms and other documentation are complete

B. Ensure all repairs performed by OSC Teams that deviated from normal station procedures are properly documented so that necessary actions can be taken for continuous plant operations or recovery operations.

3.3 Provide all logs and records to the OSC Manager upon termination of the emergency and entry into the Recovery Phase.

Attachment 9.4

OSC Operations Team Leader Checklist

Sheet 1 of 4

NOTE: The expectation for all ERO positions is to use WebEOC for logkeeping purposes. Reference to traditional paper forms remains in this checklist for the situation in which WebEOC is unavailable, such as a power or computer failure.

1.0 Initial Responsibility/Activity

1.1 Assume the position of Operations Team Leader

A. Swipe your security badge at one of the accountability card readers.

B. Sign in at the facility.

C. Synchronize your time with the TSC/OSC Clock.

D. Report readiness status to the POM and the OSC Manager when prepared to assume the Operations Team Leader position.

E. **IF** the OSC has not yet been activated **THEN** perform the following steps:

1. Receive briefing from the OSC Manager.
2. Call additional personnel from the Assembly Area as needed to support emergency.

F. **IF** relieving another Operations Team Leader **THEN** perform a formal turnover:

1. Review the Operations Team Leader's Emergency Response Organization Log Sheet(s). (Form EP-10)
2. Obtain a briefing on the emergency, radiological conditions and any actions that have been completed or are in progress.
3. Relieve current Operations Team Leader

G. Inform OSC Manager and staff that you are now the Operations Team Leader.

2.0 Continuous Responsibility/Activity

2.1 Inform another OSC Team Leader and the OSC Manager when temporarily leaving the work area.

Attachment 9.4

OSC Operations Team Leader Checklist
Sheet 2 of 4

Continuous Responsibility/Activity

A. **IF** you are leaving the TSC/OSC Complex (the restroom is within complex) **THEN:**

1. Inform the OSC Team Coordinator and/or Accountability Clerk when you leave, where you are going and when you expect to return. (for accountability purposes)
2. Inform the OSC Team Coordinator and/or Accountability Clerk when you return.

B. Upon return, obtain a briefing from another Team Leader on any events, which have occurred while away.

2.2 Use WebEOC or if unavailable, ERO Log Sheet(s) (IP-EP-115 Form EP-10) to maintain a log of activities.

A. Record the time you assume position of Operations Team Leader

B. Record Operation Team activities undertaken with information on repairs performed and pending actions to ensure repairs are completed. (you need not repeat information on team briefing forms.)

C. Record all communications outside the Protected Area Fence.

2.3 Assist POM and the OSC Manager in planning and preparing for any Operations activities needed to return the plant to a safe condition.

A. Establish communications with the POM. Keep the POM informed of field team activities currently underway or that are planned.

B. Coordinate operations and repair activities with the POM.

C. Provide operational guidance to other OSC Staff and inplant teams.

2.4 Participate in Team dispatch and field operations:

A. Choose Operations personnel who are best qualified to conduct assigned task(s)

NOTE:
For urgent operations requirements – the Emergency Team Briefing Form (IP-EP-115 Form EP-38) may be completed after team dispatch.

Attachment 9.4

OSC Operations Team Leader Checklist

Sheet 3 of 4

Continuous Responsibility/Activity

B. Use Emergency Team Briefing Form (IP-EP-115 Form EP-38) to prepare and document team assignments. Ensure each team dispatched has a copy of the Emergency Team Briefing Form.

C. Ensure Team is properly equipped to conduct repairs, including procedures, drawings, tools and repair parts.

D. Participate in Team briefings to ensure team members properly understand assigned task

E. Keep the POM aware of all team's progress.

F. Maintain communication capability (i.e. phone, radio) and work with the Team Coordinator while the team is in the field to answer any questions that may arise concerning task

NOTE:
Ensure any deviations from Quality Control work practices are logged as part of the Team debriefings.

G. Debrief mechanical and electrical maintenance team members when they return and ensure actions are properly documented.

H. Report results and status of team efforts to the OSC Manager as necessary.

3.0 Closeout Responsibility/Activity

3.1 Assist OSC personnel to return all equipment to proper storage locations.

3.2 Review all documentation the Operations Team Leaders maintained during the emergency:

A. Ensure logs, forms and other documentation are complete

Attachment 9.4

OSC Operations Team Leader Checklist

Sheet 4 of 4

Closeout Responsibility/Activity

B. Ensure all repairs performed by OSC Teams that deviated from normal station procedures are properly documented so that necessary actions can be taken for continuous plant operations or recovery operations.

3.3 Provide all logs and records to the OSC Manager upon termination of the emergency and entry into the Recovery Phase.

Attachment 9.5

OSC Rad Protection Team Leader Checklist

Sheet 1 of 20

NOTE: The expectation for all ERO positions is to use WebEOC for logkeeping purposes. Reference to traditional paper forms remains in this checklist for the situation in which WebEOC is unavailable, such as a power or computer failure.

1.0 Initial Responsibility/Activity

1.1 Assume the position of Rad Protection Team Leader.

A. Swipe your security badge at one of the accountability card readers.

B. Sign in at the facility organization chart.

C. Synchronize your time with the TSC/OSC Clock.

D. **IF** the OSC has not yet been activated **THEN** perform the following:

1. Contact the Watch RP and receive a briefing of radiological conditions and status of any ongoing jobs.

2. Determine if any personnel are currently in the field.

3. Request the CR to align the TSC/OSC ventilation system for incident operation per procedure.

4. **IF** necessary **THEN** Direct a TSC/OSC habitability survey and that radiological controls be set up as shown on sheet 10 of this checklist.

5. Establish the capability for monitoring of Iodine, should it become necessary.

a. Operate the AMS-4

NOTE
AMS-4 **SHALL** be started during TSC/OSC activation

1. Initial AMS-4 Start Up

- **OPEN** filter-housing cover, remove any existing filter media AND install a new charcoal filter paper (#508 Carbon Impreg). The "lined" side should face down.

- **CLOSE** and latch the filter housing cover.

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OSC Rad Protection Team Leader Checklist
Sheet 2 of 20

Initial Responsibility/Activity (cont)

- **PLUG** the AMS-4 in and turn on SW1 (power) and SW2 (pump) switches located in the back of the monitor

NOTE
IF beeping continues, **THEN** readjust filter paper and restart.

- **AFTER** the AMS-4 has gone through the initial self test cycle (approximately 5 minutes), **THEN** VERIFY the "READY" light is on **AND** activity is displayed.
- **PRESS** "2" on the keypad **AND** VERIFY that indicated flow rate is near the posted reference flow rate for charcoal filter. A low flow rate may indicate a flow blockage **OR** loaded filter paper.
- **PRESS** "1" on keypad to display airborne concentration. Negative numbers indicate the current activity is less than the historical data.

2. Normal AMS-4 Operation

NOTE
This instrument is calibrated to monitor gas and particles.

- CHECK periodically the AMS-4 flow rate by pressing "2" on the keypad. IF desired return to activity monitoring by pressing "1" on the keypad.
- **IF** the flow rate approaches 28320 cm3/min OR the "MIN FLOW FAIL" alarm activates **THEN** CHANGE the filter paper as per Section 3

Attachment 9.5

OSC Rad Protection Team Leader Checklist

Sheet 3 of 20

Initial Responsibility/Activity (cont)

- **IF** the AMS-4 "DAC HOUR ALARM DETECTED" alarm activates **THEN** NOTIFY the ORM. The alarm set point is 60 DAC hrs, which is equivalent to 150 mRem.
- **IF** the "FILTER DOOR, OPEN OUT OF SERVICE" alarm activates **THEN** VERIFY that the filter housing is closed and latched.
- **IF** the gamma background in the area changes substantially **THEN** GO to Section 4 to set the Gamma Factor.
- **WHEN** finished monitoring with the AMS-4 **THEN** turn off SW1 (power), SW2 (pump).

3. Changing AMS-4 Filter Paper

- TURN SW2 (pump) OFF
- **WHEN** the audible alarm activates **THEN** PRESS "ALARM ACK".
- OPEN the filter housing cover **AND WHEN** the audible alarm activates PRESS "ALARM ACK".
- REMOVE any existing filter media **AND** install a new charcoal filter paper (#508 Carbon Impreg). The "lined" side should face down.
- CLOSE and latch the filter housing cover.
- TURN on SW2 (pump) switch.

Attachment 9.5

OSC Rad Protection Team Leader Checklist

Sheet 4 of 20

Initial Responsibility/Activity (cont)

- **WHEN** the audible alarm activates **THEN** PRESS "ALARM ACK".
- PRESS "2" on the keypad **AND** verify that indicated flow rate is near the posted reference flow rate for charcoal filter. The low flow rate alarm set point is 28320 cm3/min. A low flow rate may indicate a flow blockage OR loaded filter paper.
- RETURN to Section 2 for normal operations.

4. Gamma Factor Set

- VERIFY "READY" light is on. The AMS-4 front panel will NOT respond as expected if an alarm condition exists.
- PRESS "MENU"
- AT the prompt "password" type in "8435" THEN press "ENTER"
- PRESS "_" button until "Calibrate" appears in display.
- PRESS "ENTER"
- WHEN "Calibration Mode Halts Normal Operation" displays THEN press "ENTER"
- WAIT until both Beta AND BKG counts are greater than 400 counts THEN observe "Factor = XX.XXX" (where XX.XXX is a number) on display AND press "ENTER".

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OSC Rad Protection Team Leader Checklist

Sheet 5 of 20

Initial Responsibility/Activity (cont)

- PRESS "ENTER" to accept and update Gamma Factor value.
- PRESS "MENU" key twice.

NOTE

WHEN "READY" light appears AND airborne concentrations appears on top line of display THEN go to Section 2 for normal operation. (IF the flow rate appears THEN press "1" to display activity).

b. Periodically check readings of AMS-4 and ensure proper instrument operation.

1. IF there is a release THEN monitor the AMS-4 to identify any increase in the radiological levels in the EOF.
2. Follow directions in Section 1.2.C of this checklist to maintain AMS-4 operations.

c. Sample Count Using the MS-2/SPA-3:

1. Enclose the cartridge (e.g. in plastic wrap)
2. Place the enclosed sample in the detector shield on the shelf closest to the detector
3. Set the controls on the MS-2 as follows:
   - POWER switch – "ON"
   - CPM RANGE switch – appropriate multiplier setting to register expected sample count rate
   - COUNTING TIME IN MINUTES control – set to desired counting time (normally one minute)

Attachment 9.5

OSC Rad Protection Team Leader Checklist

Sheet 6 of 20

Initial Responsibility/Activity (cont)

- Window IN/OUT switch – "IN"
- TEST switch – "OFF"
- TIMED/STOP/MAN switch – "TIMED"
- WINDOW THRESHOLD **AND** HV ADJUST dials – set to values posted on the instrument.

4. Momentarily depress the RESET-START button.
5. WHEN the sample has finished counting **THEN** record the digital display value on appropriate HP survey form.
6. Calculate the sample activity using the appropriate correction factor as per Reference 6.3 using the following formula:
   - EFF – Efficiency (as given on the instrument or as directed by ORAD or Health Physics Supervisor)
   - CCF – Charcoal Correction Factor (.95 or as directed by ORAD or Health Physics Supervisor)

$$uCi/cc = \frac{(SampleCPM - BkgdCPM)x(1E-9)}{2.2xEFFVolume(L)xCCF}$$

$$Volume\ (L) = 28.32 \frac{L}{ft^3} Volume\ (ft^3)$$

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OSC Rad Protection Team Leader Checklist

Sheet 7 of 20

Initial Responsibility/Activity (cont)

7. Remove the cartridge from the detector chamber and store or dispose of it properly, as appropriate.

8. Do a one minute background verification count to verify it has not changed and the counter is not contaminated. IF contaminated THEN take appropriate measures to decontaminate.

9. Insert new filter.

d. Sample Count Using the E-140N OR RM-14/HP-210:

1. Connect the HP-210 detector, using the coaxial cable to the terminal on the instrument marked "detector" or "probe".

2. IF using the RM-14 on AC, **THEN** do the following:

- Connect it to a 120 VAC supply using the power cord which connects at the back of the instrument chassis.
- Place the rotary switch in the X10 position.
- Operate the toggle "Test on" switch at the chassis rear AND check that the indication on the meter is APPROXIMATELY 3600 CPM (± 10%).
- Turn the toggle switch off
- Record data on appropriate HP survey form

Attachment 9.5

OSC Rad Protection Team Leader Checklist

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Initial Responsibility/Activity (cont)

3. **IF** using the instrument on battery **THEN** check battery condition by placing the rotary switch in "Batt" position **AND** record data on appropriate HP survey form.

4. Energize the instrument by turning the five position rotary switch from "OFF" to one of the three counting ranges: X1, X10, or X100.

5. Check the operability of the counter:

   - Placing the detector in contact with the Ba-133 check source (located in the kit next to the meter).
   - Read source CPM above background **AND** record result on appropriate HP survey form.
   - Compare to count rate labeled on the source.

6. Place the detector on the sample holder (SH-4, -4a or equivalent) and check the background.

   - Record the background CPM on DETERMINATION OF RADIOACTIVE AIRBORNE CONCENTRATION (Form EP-16).
   - Use lead bricks as shielding to reduce the background CPM to read on the XI scale (if possible).

7. Place particulate filters to be counted, one at a time, face up in the counting chamber.

8. Read sample CPM and record results on DETERMINATION OF RADIOACTIVE AIRBORNE CONCENTRATION (Form EP-16)

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OSC Rad Protection Team Leader Checklist

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Initial Responsibility/Activity (cont)

9. Calculate the filter activity as follows:

$$uCi/cc = \frac{(SampleCPM - BkgdCPM)x(1E-9)}{2.2xEFF\,Volume(L)}$$

EFF-Efficiency = 0.1

NOTE

Should sample holders be unavailable, the filters may be counted by placing the detectors within half inch of the filter.

10. To count the iodine filter cartridges in the sample holders, modify the holders as follows:

    IF using the SH-4 **THEN** do the following:

    - Remove the sample holder slide
    - Place the charcoal cartridge (lip up) or the silver zeolite cartridge (face up) in the cavity created by removing the sample holder slide.
    - Place the detector on the cartridge
    - Determine the count rate

    IF using the SH-4a **THEN** pull out the slide

    - Remove the insert
    - Push the slide back in
    - Place the charcoal cartridge (lip up) or the silver zeolite cartridge (face up) in the cavity created by removing the sample holder slide.

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OSC Rad Protection Team Leader Checklist

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Initial Responsibility/Activity (cont)

- Place the detector on the cartridge
- Determine the count rate

11. Calculate the cartridge activity as follows:

$$uCi/cc = \frac{(SampleCPM - BkgdCPM)x(1E-9)}{2.2xEFF\,Volume(L)xCCF}$$

EFF – Efficiency = 0.0015

CCF – Charcoal Correction Factor = 0.95

12. Perform background and source checks:
    - Approximately every hour:

      OR

    - As specified by the ORAD (frequency may be adjusted, either more or less often, in consideration of current radiological conditions).

e. Using the readings from the Triton Monitor and the noble gas-to-iodine ratio from Chemistry, determine the iodine activity.

f. IF iodine activity is determined to be greater than $1X10^{-7}$ microcuries/cubic centimeters by any of the above methods, notify the RP Team Leader.

6. Establish contamination controls for the CR if necessary.

7. **IF** individuals have not been previously issued TLDs **THEN** have TLDs issued to them, if necessary.

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OSC Rad Protection Team Leader Checklist

Sheet 11 of 20

Initial Responsibility/Activity (cont)

8. Assign Personnel to the following positions:

   (a) OSC / TSC RP Monitor

   (b) Protected Area Monitoring Team, **IF** requested by the EOF

   (c) EOF RP Monitor, **IF** requested by the EOF

   (d) Rad Waste Personnel to report to the EOF to support any decontamination efforts, **IF** requested by the EOF.

   (e) RP Monitor to Assembly Areas if a radiological release has occurred

E. Report readiness status to the OSC Manager when prepared to assume the Rad Protection Team Leader position.

F. **IF** relieving another Rad Protection Team Leader **THEN** perform a formal turnover:

1. Review the RP Team Leader's Emergency Response Organization Log Sheet(s). (Form EP-10)

2. Obtain a briefing on the emergency, radiological conditions and any actions that have been completed or are in progress.

3. Relieve current Rad Protection Team Leader

4. Inform OSC Manager and staff that you are now the Rad Protection Team Leader.

2.0 Continuous Responsibility/Activity

2.1 Establish and Maintain radiological habitability.

A. Direct periodic monitoring of Emergency Response Facilities within the Protected Area and other occupied areas as necessary, particularly when a release of radioactive material into plant environments is in progress or suspected.

1. At a minimum, verify habitability in the Main Control Room, TSC & OSC.

Attachment 9.5

OSC Rad Protection Team Leader Checklist

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Initial Responsibility/Activity (cont)

2. If there has been a release of radioactive material dispatch RP Technicians to Assembly Areas to verify habitability if areas are occupied.

B. **IF** the following conditions exist in the TSC/OSC or CR **THEN** request EPM (Emergency Plant Manager) implement restrictions on eating and drinking in the effected areas.

- Radiological conditions are unknown
- Contamination Levels above background
- Airborne contamination levels above background

C. Sheet 19 of this checklist provides guidance on set up of radiological controls for the TSC/OSC complex.

D. Insure CR/TSC/OSC/Security personnel are aware of any restrictions in place. Note any Radiological Release that may interfere with personnel movement outside.

E. **IF** any of the following conditions exist **THEN** request the OSC Manager immediately consider a planned evacuation of the TSC/OSC Complex:

- TSC/OSC (or other occupied area) Dose rates > 80 mRem/Hr TEDE or 500 mRem/hr
- Projected doses > 1 Rem TEDE or 5 Rem CDE over a 12 hour period
- Airborne concentrations which may result in exceeding occupational limits for inhalation specified in 10CFR20, Appendix B, Table 1.

F. **IF** any of the above limits are reached **THEN** coordinate with the OSC/TSC Managers to survey alternate locations for habitability prior to relocation if possible.

2.2 Inform another OSC Team Leader and the OSC Manager when temporarily leaving the work area.

A. IF you are leaving the TSC/OSC Complex (the restroom is within complex) **THE**

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OSC Rad Protection Team Leader Checklist

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Continuous Responsibility/Activity (cont)

1. Inform the OSC Team Coordinator and/or Accountability Coordinator when you leave, where you are going and when you expect to return. (for accountability purposes)

2. Inform the OSC Team Coordinator and/or Accountability Coordinator when you return.

B. Upon return, obtain a briefing from another coordinator on any events, which have occurred while away.

2.3 Use WebEOC or if unavailable, ERO Log Sheet(s) (IP-EP-115 Form EP-10) to maintain a log.

A. Record the time you assume position of Rad Protection Team Leader.

B. Record any significant and unusual indications from the Plant RMS.

C. Record any significant changes in radiological conditions reported from field teams.

D. Record any communications outside the Protected Area Fence or significant communications to facilities outside the OSC.

2.4 Suspend normal RWP requirements for performing work in radiological controlled areas if necessary. Emergency Radiation Work Permits (ERWP) will then be used for team dispatch. In the event that radiation fields change while a team is in the field, the RP Technician accompanying the team becomes a "Walking ERWP" and may determine what radiological precautions are appropriate for the situation.

2.5 **IF** immediate action is necessary to mitigate a situation that severely threatens plant or personnel safety, **THEN** documentation on ERWPs and Team Briefing Forms may be deferred. Documentation shall be finished as soon as possible after team dispatch.

2.6 Suspend radiological posting requirements, if necessary, for areas outside the RCA that are affected by the accident until the Recover Phase is entered

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OSC Rad Protection Team Leader Checklist

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Continuous Responsibility/Activity (cont)

2.7 Document radiological readings taken by RP Technicians or other meter qualified individuals in the field on survey maps.

2.8 Establish and maintain dosimetry, protective clothing, and other protective equipment requirements for onsite ERO personnel.

A. Use ERWPs (IP-EP-115 Form EP-40) to control radiological requirements for personnel sent into the plant.

B. Initiate ERWPs for anticipated activities in various plant areas.

C. When possible, use normal criteria when establishing requirements for dosimetry, protective clothing, and respiratory protection equipment.

D. Verify the Team Coordinator is tracking individual exposure data on Individual Exposure Tracking Log (IP-EP-115 Form EP-29)

E. Direct radiological control personnel to read TLDs for personnel whose exposure limits are approached.

2.9 Direct Radiation Protection Personnel in the following activities:

A. Assign Radiation Protection personnel to assist in emergency response support activities.

B. Use Emergency Team Briefing Form (IP-EP-115 Form EP-38) to prepare and document team assignments. Ensure each team dispatched has a copy of the Emergency Team Briefing Form.

C. Assign personnel to conduct in-plant radiological surveys as required to support ERO activities.

D. Assign RP Technicians to accompany Teams requiring radiological support.

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OSC Rad Protection Team Leader Checklist

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Continuous Responsibility/Activity (cont)

2.10 IF there are contaminated injured personnel THEN perform the following:

A. Provide radiological support for the assessment, treatment, and transportation of contaminated injured personnel.

B. Monitor patients for contamination and decontaminate as appropriate. (IP-EP-350, Emergency Contamination Control)

C. Make arrangements to pick up RP personnel at the hospital.

D. Follow proper procedures to retrieve radioactive waste from offsite treatment locations.

E. Obtain concurrence from the EPM prior to releasing the hospital's Radiological Emergency Room or the ambulance for uncontrolled use.

NOTE

Emergency Team Briefing Forms (IP-EP-115 Form EP-38) may be completed after team dispatch if time does not allow. Briefings shall still take place.

2.11 Ensure emergency teams receive proper briefs on radiological conditions and requirements.

A. Depending on conditions, the ERWP should state who will give radiological brief to emergency teams

B. Request that the Team Coordinator attend briefings to ensure continuous accountability of dispatched Team personnel.

C. Use the ERWP to discuss dose limits, surveys to be performed, expected and maximum dose rates, and stay times. Advise team members to immediately contact or return to the OSC when dose rates or stay times approach the established limits.

D. Discuss dosimetry requirements.

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OSC Rad Protection Team Leader Checklist

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Continuous Responsibility/Activity (cont)

E. Discuss protective clothing and respiratory protection requirements.

F. Discuss travel route requirements and if there are any releases in progress.

G. Advise team members on monitoring and decontamination procedures following mission completion.

H. Advise team how they will be notified of changing conditions or classifications.

2.12 Emergency Exposure Control:

A. **IF** emergency exposure controls are implemented **THEN** maintain individual emergency exposures as follows:

1. Give EPM the recommendation for the ERO (Emergency Response Organization) Dose Limits to be raised to 5 Rem.

2. **IF** individuals are required to receive greater than 5 Rem emergency exposures **THEN** complete Emergency Exposure Authorization Form (EP-6) **AND** request permission from EPM authorizing exposures in excess of 5 Rem.

B. An RP Technician escort or qualified self-monitor is required for any team being sent into an area where any of the following conditions exist:

1. Radiological conditions are unknown. Surveys or ARMs may be used to predict radiological conditions.

2. Radiation field in excess of 1 R/hr are expected.

3. In the event of any release of radioactivity to the environment.

Attachment 9.5

OSC Rad Protection Team Leader Checklist

Sheet 17 of 20

Continuous Responsibility/Activity (cont)

2.13 IF individuals receive or are expected to receive radioiodine uptakes >5 REM CDE child thyroid dose or a General Emergency has been declared THEN:

A. Control the specified issuance of KI to onsite emergency workers as follows:

1. Discuss issuance of KI with ORM.
2. Get approval of the EPM for issuance of KI.
3. Direct team members to read Patient Package Insert prior to taking KI (see page 20 of this checklist for sample).
4. Recommend emergency workers to take one KI tablet per day for 3 to 5 days. KI supplies are located in TSC/OSC cabinets, EOF and both Control Rooms.
5. Record KI issuance information on Individual Exposure Tracking Log (IP-EP-115 Form EP-29).
6. Have all ERO members inside the Protected Area report to the TSC/OSC for distribution of KI.
7. Notify the Assembly Area Coordinators to issue KI to all personnel in the assembly area.

B. Evaluate iodine uptakes for persons issued KI. Informing contracted medical representatives of KI issuance.

2.14 Direct the decontamination efforts of personnel, equipment, and onsite areas as appropriate.

2.15 Ensure adequate materials and supplies are available for assigned missions.

A. Obtain needed materials from normal station supply locations.

B. IF additional supplies are needed THEN request any materials, supplies, or personnel needs from the OSC Manager.

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OSC Rad Protection Team Leader Checklist

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3.0 Closeout Responsibility/Activity

3.1 IF radiological conditions allow THEN Direct RP Technicians:

A. To return emergency equipment to proper storage areas and restock supplies as needed.

B. Review radiological conditions in the plant and update postings as required.

C. Review any open RWPs to ensure conditions have not changed which may effect their use.

3.2 Provide all logs and records to the OSC Manager upon termination of the emergency.

Attachment 9.5

OSC Rad Protection Team Leader Checklist

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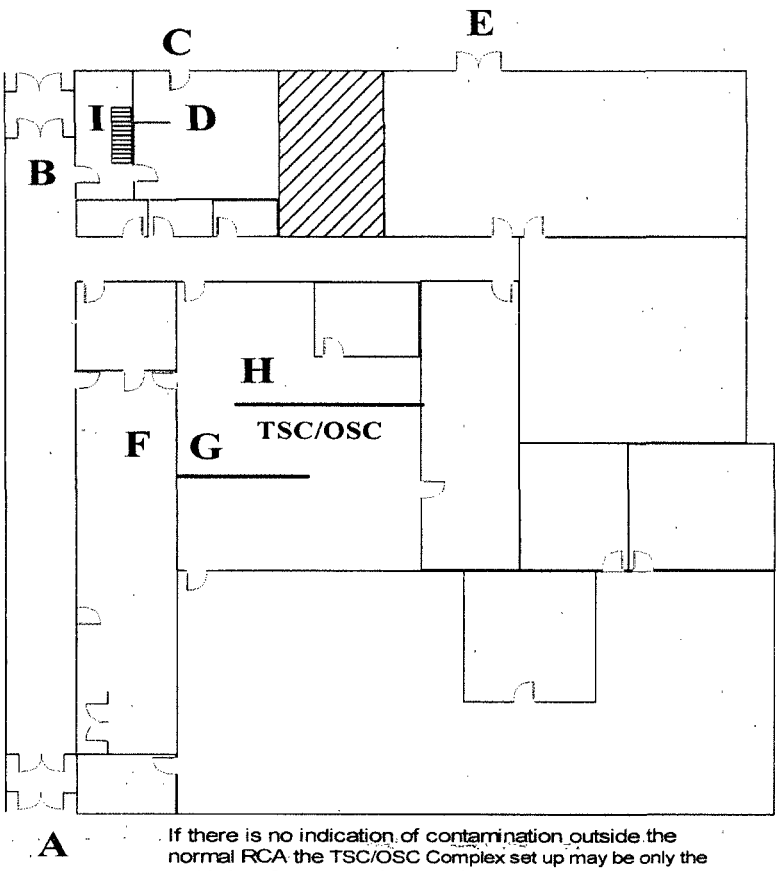
Setup of radiological controls in the OSC/TSC Complex



If there is no indication of contamination outside the normal RCA the TSC/OSC Complex set up may be only the restricting of access and egress through point A and E.

If hallway contamination < 1000 dpm/100cm^2

A - No Entry / No Exit
B - Exit Only
C - Entry to TSC/OSC, No Exit, White Step Off Pad & Frisk shoes before stepping here sign
D - Nothing is installed here
E - No Entry / No Exit
F - HPT Station
G - Equipment Cabinet
H - OSC Coordinators
I - Place sign at top of the stairway no entry / no exit without permission from RPC

If hallway contamination > 1000 dpm/100cm^2

A - No Entry / No Exit
B - Exit Only
C - Entry to TSC/OSC, No Exit, White Step Off Pad & Frisk shoes before stepping here sign
D -White Step Off Pad & Frisk shoes before stepping here sign
E - No Entry / No Exit
F - HPT Station
G - Equipment Cabinet
H - OSC Coordinators
I - Place sign at top of the stairway no entry / no exit without permission from RPC

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OSC Rad Protection Team Leader Checklist

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Information on use of Potassium Iodide
IOSAT™ Tablets
Potassium Iodide Tablets

- TAKE POTASSIUM IODIDE ONLY WHEN PUBLIC HEALTH OFFICIALS TELL YOU. IN A RADIATION EMERGENCY RADIOACTIVE IODINE COULD BE RELEASED INTO THE AIR. POTASSIUM IODIDE (A FORM OF IODINE) CAN HELP PROTECT YOU.
- IF YOU ARE TOLD TO TAKE THIS MEDICINE, TAKE IT ONE TIME EVERY 24 HOURS. DO NOT TAKE IT MORE OFTEN. MORE WILL NOT HELP YOU AND MAY INCREASE THE RISK OF SIDE EFFECTS. NOT TAKE THIS DRUG IF YOU KNOW YOU ARE ALLERGIC TO IODIDE (SEE SIDE EFFECTS BELOW)

DIRECTIONS FOR USE

Use only when directed by Emergency Management, State, Local or Public Health Officials

DOSE

ADULTS AND CHILDREN ONE YEAR OF AGE OR OLDER:

One (1) tablet once a day. Crush for small children.

BABIES UNDER ONE YEAR OF AGE:

One-half (1/2) tablet once a day. Crush first.

DOSAGE

Take for 10 days unless directed otherwise.

Store your supply at room temperature between 59° F and 86° F. Keep package dry and foil packets intact.

KEEP YOUR SUPPLY OUT OF REACH OF CHILDREN.

SIDE EFFECTS

Usually, side effects of potassium iodide happen when people take higher doses for a long time. You should be careful not to take more than the recommended dose or take it for longer than you are told. Side effects are unlikely because of the low dose and the short time you will be taking the drug.

Possible side effects include skin rashes, swelling of the salivary glands, and "iodism" (metallic taste, burning mouth and throat, sore teeth and gums, symptoms of a head cold, and sometimes stomach upset and diarrhea).

WARNING

POTASSIUM IODIDE SHOULD NOT BE USED BY PEOPLE ALLERGIC TO IODIDE. Keep out of the reach of children. In case of overdose or allergic reaction, contact a physician or public health authority.

HOW POTASSIUM IODIDE WORKS

Certain forms of iodine help your thyroid gland work right. Most people get the iodine they need from foods like iodized salt or fish. The thyroid can "store" or hold only a certain amount of iodine.

In a radiation emergency radioactive iodine may be released in the air. If this air is breathed or swallowed it may enter the thyroid and damage it. The damage may not show itself for years. Children are the most likely to have thyroid damage.

If you take potassium iodide, it will fill up you thyroid gland. This reduced the chances that radioactive iodine will enter your thyroid.

WHO SHOULD NOT TAKE POTASSIUM IODIDE

The only people who should not take tablets when directed to do so are people who know they are allergic to iodine. Pregnant women, nursing women, children and babies may take this drug.

HOW AND WHEN

Potassium Iodide should be taken as soon as possible after authorities tell you to take it.

You should take one dose every 24 hours. MORE WILL NOT HELP YOU, AND WILL INCREASE THE CHANCES OF SIDE EFFECTS.

Continue to take the drug for 10 days.

WHAT TO DO IF SIDE EFFECT OCCUR

STOP taking the drugs and contact a doctor or public health officials for instructions.

DESCRIPTION AND USE

Each IOSATTM Tablet contains 130 mg. of potassium iodide.

Thyroid blocking in radiation emergency only.

Attachment 9.6

OSC Security Team Leader Checklist

Sheet 1 of 4

NOTE: The expectation for all ERO positions is to use WebEOC for logkeeping purposes. Reference to traditional paper forms remains in this checklist for the situation in which WebEOC is unavailable, such as a power or computer failure.

1.0 Initial Responsibility/Activity

1.1 Assume the duties of the OSC Security Team Leader.

A. Swipe your security badge at one of the accountability card readers.

B. Sign in at the facility.

C. Synchronize your time with the TSC/OSC Clock

D. **IF** the OSC has not yet been activated **THEN** perform the following steps:

1. Perform a communication check with the Unit 3 Central Alarm Station (CAS) and the Unit 2 Secondary Alarm Station (SAS) and inform them you are the OSC Security Team Leader and how you can be contacted.
2. Perform a communications check with the EOF. (The phone number is in the Emergency Telephone Directory.)
3. Secure Site Access at the SITE AREA or GENERAL EMERGENCY level as follows:

(a) Notify Unit 3 CAS and Unit 2 SAS to secure the site, except for ERO Members, per procedure IP-EP-240, Security.

(b) Notify the OSC Manager this has been done.

E. **IF** relieving another OSC Security Team Leader **THEN**

1. Review the OSC Security Team Leader's Emergency Response Organization Log Sheet(s). (Form EP-10)
2. Receive briefing from current OSC Security Team Leader
3. Do a formal turnover with current OSC Security Team Leader.

F. Inform the OSC Manager and staff you are now filling the duties of the OSC Security Team Leader.

Attachment 9.6

OSC Security Team Leader Checklist

Sheet 2 of 4

2.0 Continuous Responsibility/Activity

2.1 Inform another OSC Team Leader and the OSC Manager when temporarily leaving the work area.

A. **IF** you are leaving the TSC/OSC Complex (the restroom is within complex) **THEN:**

1. Inform the OSC Team Coordinator and/or Accountability Clerk when you leave, where you are going and when you expect to return. (for accountability purposes)
2. Inform the OSC Team Coordinator and/or Accountability Clerk when you return.

B. Upon return, obtain a briefing from another Team Leader on any events, which have occurred while away.

2.2 Use WebEOC or if unavailable, ERO Log Sheet(s) (IP-EP-115 Form EP-10) to maintain a log of activities.

A. Record the time you assume position of Operations Team Leader

B. Record Operation Team activities undertaken with information on repairs performed and pending actions to ensure repairs are completed. (you need not repeat information on team briefing forms.)

C. Record all communications outside the Protected Area Fence.

2.3 Establish and Maintain communications with the OSC Radiation Protection Team Leader. Review following items as necessary:

A. Radiological conditions and any restrictions of Security Force movements.

B. Dosimetry requirements for Security Force.

C. Issuance of Potassium Iodide (KI) to Security Force

2.4 Establish and maintain communications with the Security Force. Keep them updated on following items:

A. Plant conditions and actions being taken to end emergency.

Attachment 9.6

OSC Security Team Leader Checklist

Sheet 3 of 4

Continuous Responsibility/Activity (cont)

B. Radiological conditions, other hazards and any restrictions of movement. Notify second shift personnel of shift turnover time. Phone numbers are listed in Emergency Telephone Directory.

2.5 Coordinate the Security response to any emergency conditions with other emergency response organizations (TSC/OSC/EOF). Use guidance provided in:

A. Procedures for response to Site Access Threat.

B. IP-EP-430, Site Assembly, Accountability and Relocation of Personnel Offsite.

C. IP-EP-240, Security.

D. Procedures responding to fire or medical emergencies.

2.6 Provide assistance in evaluating plant equipment / system(s) to determine if malfunctions are related to sabotage.

2.7 Coordinate assistance to monitoring teams by permitting access to owner controlled areas normally gated off.

2.8 IF Relocation of personnel offsite is called for THEN:

A. Follow guidance in IP-EP-430, Site Assembly, Accountability and Relocation of Personnel Offsite.

B. Coordinate with Radiation Protection Team Leader to monitor evacuation routes.

C. Ensure Security Force (both Units) is aware of pending relocation and routes to be used.

D. Notify the Lead Accountability Officer (LAO) of the following:

1. Pending Evacuation
2. Routes to be used
3. Mode of Transportation
4. If a decontamination location has been designated

Attachment 9.6

OSC Security Team Leader Checklist

Sheet 4 of 4

Continuous Responsibility/Activity (cont)

E. Coordinate the relocation efforts with the Security Force.

2.9 Interface with Offsite Law Enforcement Agencies as necessary.

2.10 IF relocating to the Security Administration Offices THEN inform the following individuals:

A. OSC Manager

B. EOF Manager

C. Emergency Plant Manager

D. Plant Operations Manager

E. Emergency Director

F. Lead Accountability Officer (LAO)

3.0 Closeout Responsibility/Activity

3.1 Return all equipment to proper storage locations.

3.2 Turn any completed documents into the OSC Manager

Attachment 9.7

OSC Team Coordinator Checklist

Sheet 1 of 5

NOTE: The expectation for all ERO positions is to use WebEOC for logkeeping purposes. Reference to traditional paper forms remains in this checklist for the situation in which WebEOC is unavailable, such as a power or computer failure.

1.0 Initial Responsibility/Activity

1.1 Assume the position of Team Coordinator.

A. Swipe your security badge at one of the accountability card readers.

B. Sign in at the facility.

C. Review TSC/OSC status boards if available.

D. Synchronize your time with the TSC/OSC Clock.

E. Report readiness to the OSC Manager when prepared to assume the Team Coordinator position, and assist in OSC staffing as needed.

F. Ensure that charged batteries are installed in portable radios.

G. Obtain a briefing from the OSC Manager on the status of any personnel or teams currently in the field.

H. Coordinate taking control of personnel and/or teams by establishing communications with field personnel and informing them that they are now under the control of the OSC.

I. **IF** relieving another Team Coordinator **THEN** perform a formal turnover with current Team Coordinator.

1. Review the Team Coordinator's Emergency Response Organization Log Sheet(s). (Form EP-10)

2. Obtain a briefing on the emergency and any actions that have been completed or are in progress.

3. Review field operations and take control of accountability for personnel in the field.

4. Inform the OSC Manager and staff you are now the Team Coordinator.

Attachment 9.7
OSC Team Coordinator Checklist
Sheet 2 of 5

2.0 Continuous Responsibility/Activity

2.1 Inform another OSC Team Leader or the OSC Manager when temporarily leaving the work area.

A. Request another OSC Team Leader assume the Team Coordinator duties while you are away.

B. **IF** you are leaving the TSC/OSC Complex (the restroom is within complex) **THEN**

1. Inform the OSC Accountability Clerk when you leave, where you are going and when you expect to return. (for accountability purposes)

2. Inform the Accountability Clerk when you return.

C. Upon return, obtain a briefing from acting Team Coordinator on any events, which have occurred while away.

2.2 Use WebEOC or if unavailable, ERO Log Sheet(s) (IP-EP-115 Form EP-10) to maintain a log of significant items.

A. Time you assume position of OSC Team Coordinator

B. Major activities completed.

C. Major communications external to the OSC

2.3 Issue radios (and headsets as needed) to Team Leaders and teams being dispatched.

NOTE:
The headphone would normally be used when workers are dressed in Protective Clothing and/or respirators.

A. Ensure proper radio communications protocol is utilized at all times. Refer to IP-SMM-MA-102, "Site Communications" for additional guidance.

B. Remind personnel using radios to check operability of their radio when entering any area (for example pump cells) for which communications might be suspect.

Attachment 9.7

OSC Team Coordinator Checklist

Sheet 3 of 5

Continuous Responsibility/Activity (cont)

2.4 Use of Headphones on portable Radio

A. Attach headset to portable radio, using the adapter unit. The adapter unit has a three position switch.
   - OFF
   - PTT (Push to Talk)
   - VOX (Voice Activated)

B. Ensure radio is turned on.

C. Attach radio and adapter unit to workers clothing.

D. Place headset on workers heads and ears.

E. Wrap the Velcro strap, which holds the microphone, around users neck so that the microphone sits to the right of throat / Adams apple.

F. To transmit, touch the center front of the adapter unit and speak. Release center of adapter unit when finished speaking.

2.5 Ensure ongoing accountability (unless directed otherwise) for TSC and OSC personnel.

NOTE:
A computer spreadsheet may be used in place of the ERO Tracking Log (IP-EP-115 Form EP-42) and Individual Exposure Tracking Log (Form EP-29) to keep records of teams sent into the field from the OSC.

A. Use Emergency Team Briefing Form (IP-EP-115 Form EP-38) to prepare and document team assignments. Ensure each team dispatched has a copy of the Emergency Team Briefing Form.

B. **Track all individuals leaving TSC/OSC Complex on the ERO Tracking Log (IP-EP-115 Form EP-42). IF** the computer spreadsheet is used **THEN** printout copies often to maintain hard copy records of team activities.

Attachment 9.7
OSC Team Coordinator Checklist
Sheet 4 of 5

Continuous Responsibility/Activity (cont)

C. **IF** individuals are leaving the TSC/OSC complex and not returning, inform the Lead Accountability Officer to monitor the individual through communications with Security personnel at the station exits.

D. **IF** individuals are going to be receiving emergency radiation exposure **THEN** track radiation exposures on Individual Exposure Tracking Log (IP-EP-115 Form EP-29).

E. Inform the OSC Manager immediately of any missing personnel.

F. **IF** anyone is unaccounted for **THEN** assist in search and rescue operations utilizing teams.

2.6 Monitor the activities of the team personnel in the field.

A. Keep informed on team mission priorities

1. The OSC Manager will inform you of task priorities.
2. Place (or direct the Accountability Coordinator to place) the priority number on the Coordinators Status board.
3. Continually remind OSC personnel dispatched to perform task of current priorities and any changes to priorities.
4. Teams are to be designated by a two number designation, such as 1 – 3. The first number is the team numerical; the second number is the Unit the team has been dispatched to.

B. When possible, participate in team briefings to ensure you are aware of the teams assigned tasks and expected hazards.

C. Maintain the Coordinators Status Board. Update as tasks are assigned, old tasks are completed, and as priorities are changed.

D. Maintain communications with teams once they are dispatched from the OSC.

E. Keep track of team radiation exposure while they are in the field using spreadsheet or manual forms. Transfer information to Individual Exposure Tracking Log (IP-EP-115 Form EP-29) when teams return.

Attachment 9.7

OSC Team Coordinator Checklist

Sheet 5 of 5

Continuous Responsibility/Activity (cont)

F. When possible, participate in Team Debriefings when teams return to the OSC, to keep informed on field conditions.

G. Immediately update teams of any change in emergency classifications or changing conditions, which may affect their safety, such as the start of a release.

H. Immediately update RP Team Leader of any changing or unexpected conditions reported by teams in the field.

2.7 Direct the Accountability Coordinator to assist you in maintaining records as necessary.

2.8 Inform the OSC Manager and other OSC Team Leaders of changing situations in the plant based on information received from dispatched teams.

A. Unexpected radiation levels.

B. Unreported hazardous conditions.

C. Important equipment status.

3.0 Closeout Responsibility/Activity

3.1 Assist OSC personnel to return all equipment to proper storage locations.

3.2 Review all documentation the OSC Team Leaders maintained during the emergency:

A. Ensure logs, forms and other documentation are complete

B. Work with other OSC Team Leaders to ensure all repairs performed by OSC Teams that deviated from normal station procedures are properly documented so that necessary actions can be taken for continuous plant operations or recovery operations.

3.3 Provide all logs and records to the OSC Manager upon termination of the emergency and entry into the Recovery Phase.

Attachment 9.8

OSC Accountability Coordinator Checklist

Sheet 1 of 5

NOTE: The expectation for all ERO positions is to use WebEOC for logkeeping purposes. Reference to traditional paper forms remains in this checklist for the situation in which WebEOC is unavailable, such as a power or computer failure.

1.0 Initial Responsibility/Activity

1.1 Initial Accountability

A. Contact the Lead Accountability Officer (LAO) and verify that the accountability card readers are active.

B. **IF** the event has been classified as a Site Area Emergency or General Emergency AND Initial Accountability has not been performed **THEN IMMEDIATELY** perform accountability in accordance with step 2.2 of this checklist.

1.2 Assume the position of Accountability Coordinator.

A. Swipe your security badge at one of the accountability card readers.

B. Sign in at the facility organization chart.

C. Synchronize your time with the TSC/OSC Clock.

D. Report readiness to assume position to the OSC Manager.

E. **IF** the OSC has not yet been activated **THEN** perform the following steps:

1. Assist the OSC Manager in establishing a roster of who is staffing each position.

F. Direct personnel to monitor both Accountability card readers while ERO members are carding into the TSC/OSC. Direct them to verify badges are properly read by the Accountability card reader. Direct them to log the name and badge number on an Accountability Roster (IP-EP-115 Form EP-47) of anyone having difficulty carding in.

G. **IF** relieving another Accountability Coordinator **THEN,** perform a formal turnover:

1. Review the Accountability Coordinator's Emergency Response Organization Log Sheet(s). (Form EP-10)

Attachment 9.8

OSC Accountability Coordinator Checklist

Sheet 2 of 5

Initial Responsibility/Activity (cont)

2. Obtain a briefing on the emergency, radiological conditions and current status of personnel accountability.
3. Relieve the current Accountability Coordinator.

H. Inform OSC Manager and staff that you are now the Accountability Coordinator.

2.0 Continuous Responsibility/Activity

2.1 Inform an OSC Team Leader when temporarily leaving the work area.

A. **IF** you are leaving the TSC/OSC Complex (the restroom is within complex) **THEN**

1. Inform the OSC Team Coordinator when you leave, where you are going and when you expect to return. (for accountability purposes).
2. Inform the OSC Team Coordinator when you return.

B. Upon return, obtain a briefing from a coordinator on any events, which have occurred while away.

2.2 Establish and Maintain ongoing accountability.

A. **IF** the emergency classification is changed to a Site Area Emergency or General Emergency OR if directed by the Emergency Plant Manager **THEN** establish or re-establish initial accountability as follows:

NOTE:

Initial Accountability shall be accomplished within approximately 30 minutes for events classified at the Site Area Emergency or General Emergency. Accountability may be directed at the Alert classification (or any other time deemed necessary) at the direction of the Shift Manager or Emergency Plant Manager.

Accountability is accomplished by assembly of all non-essential personnel outside the Protected Area and physically accounting for all individuals who remain within the IPEC Protected Area.

Attachment 9.8

OSC Accountability Coordinator Checklist

Sheet 3 of 5

Continuous Responsibility/Activity (cont)

1. All ERO members reporting to the TSC/OSC will report to the TSC/OSC and swipe their Security Badge at one of the Accountability card readers.

2 The Lead Accountability Officer (LAO) will generate the list of missing persons. This list will be provided to the Emergency Plant Manager, POM, and/or OSC Security Team Leader.

NOTE:
During plant shutdowns, when there may be large numbers of workers onsite and within the radiological control areas, a Radiation Protection computer printout may be used to assist in locating missing personnel within the radiological control area after accountability is completed.

3. **IF** there are individuals who are missing **THEN**:

   a. Review Accountability Rosters (IP-EP-115 Form EP-47) used to identify ERO members experiencing difficulty carding into the TSC/OSC to remove them from the Missing Persons List.

   b. Obtain the Radiation Protection Computer Printout of individuals within the Radiological Control Area.

   c. Check off names of possible missing individuals who have left the Protected Area to narrow the list of actual missing persons and review RP computer printout for any missing individuals within the Radiological Control Area

   d. Inform the OSC Manager immediately of any personnel discovered missing during accountability process.

4. Assist OSC Staff in maintaining accountability of all OSC personnel through the use of status boards, team assignments, Individual Exposure Tracking Log (IP-EP-115 Form-29) and ERO Tracking Log (IP-EP-115 Form-42).

Attachment 9.8

OSC Accountability Coordinator Checklist

Sheet 4 of 5

2.3 Ensure the emergency classification posted is accurate.

2.4 Work with the OSC Coordinators to maintain Continuing Accountability

A. Assist Team Coordinator in maintaining Individual Exposure Tracking Logs (IP-EP-115 Form EP-29) and ERO Tracking Log (IP-EP-115 Form EP-42).

B. Assist Team Coordinator in maintaining OSC Status boards.

2.5 Develop Second Shift Rosters for ERO and contact second shift

A. Use Onsite ERO Shift Rosters (IP-EP-115 Form EP-43) to list individuals currently on the first shift in the TSC and OSC.

B. Request EOF Administrative Staff to identify the current EOF personnel.

C. Work with TSC and OSC Managers to identify personnel to fill second shift and ensure all needed positions are identified and establish time second shift is to be called in.

D. Use Emergency Telephone Directory to identify and contact individuals to fill positions on second shift. TSC and EOF Admin Support may be used to assist in notifications.

E. Inform the OSC Manager when notifications are completed and if there are any problems filling required positions.

Attachment 9.8

OSC Accountability Coordinator Checklist

Sheet 5 of 5

2.6 Process Plant Information

A. **IF** screen display of plant data is **NOT AVAILABLE THEN**:

1. Receive plant data printouts (~15 min) from the Data Coordinator via the printer in the Team Coordinator area.
2. Copy (8 copies) and distribute to:
   (a) OSC Manager
   (b) Security Team Leader
   (c) R.P. Team Leader
   (d) Operations Team Leader
   (e) I&C Team Leader
   (f) Maintenance Team Leader
   (g) Briefing Room Table
3. **IF** there is trouble receiving this information **THEN** notify the TSC Data Coordinator.

3.0 Closeout Responsibility/Activity

3.1 Assist OSC personnel to return all equipment to proper storage locations.

3.2 Review all documentation the Operations Coordinators maintained during the emergency:

A. Ensure logs, forms and other documentation are complete

B. Ensure all activities performed by OSC Teams that deviated from normal station procedures are properly documented

3.3 Provide all logs and records to the OSC Manager upon termination of the emergency and entry into the Recovery Phase.

Attachment 9.9

OSC Chemistry Team Leader Checklist

Sheet 1 of 3

NOTE: The expectation for all ERO positions is to use WebEOC for logkeeping purposes. Reference to traditional paper forms remains in this checklist for the situation in which WebEOC is unavailable, such as a power or computer failure.

1.0 Initial Responsibility/Activity

1.1 Assume the position of Chemistry Team Leader

A. Swipe your security badge at one of the accountability card readers.

B. Sign in on the facility organization chart.

C. Synchronize your time with the TSC/OSC clock.

D. Report readiness status to the OSC Manager when prepared to assume the Chemistry Team Leader position.

E. **IF** the OSC has not yet been activated **THEN** perform the following steps:

1. Receive briefing from the OSC Manager.
2. Call additional personnel from the Assembly Area as needed to support emergency.

F. **IF** relieving another Chemistry Team Leader **THEN** perform a formal turnover:

1. Review the Chemistry Team Leader's Emergency Response Organization Log Sheet(s). (Form EP-10)
2. Obtain a briefing on the emergency, radiological conditions and any actions that have been completed or are in progress.
3. Relieve current Chemistry Team Leader

G. Inform OSC Manager and staff that you are now the Chemistry Team Leader

2.0 Continuous Responsibility/Activity

2.1 Inform another OSC Team Leader and the OSC Manager when temporarily leaving the work area.

A. IF you are leaving the TSC/OSC Complex (the restroom is within complex) **THEN:**

Attachment 9.9
OSC Chemistry Team Leader Checklist

Sheet 2 of 3

1. Inform the OSC Team Coordinator and/or Accountability Clerk when you leave, where you are going and when you expect to return. (for accountability purposes)
2. Inform the OSC Team Coordinator and/or Accountability Clerk when you return.

B. Upon return, obtain a briefing from another Team Leader on any events, which have occurred while away.

2.2 Use WebEOC or if unavailable, ERO Log Sheet(s) (IP-EP-115 Form EP-10) to maintain a log of activities.

A. Record the time you assume position of Chemistry Team Leader

B. Record Chemistry Team activities undertaken with information on repairs performed and pending actions to ensure repairs are completed. (you need not repeat information on team briefing forms.)

C. Record all communications outside the Protected Area Fence.

2.3 Assist OSC Manager in planning and preparing for any Chemistry activities needed to return the plant to a safe condition.

2.4 Participate in Team dispatch and field operations:

A. Choose Chemistry personnel who are best qualified to conduct assigned task(s)

B. Use Emergency Team Briefing Form (IP-EP-115 Form EP-38) to prepare and document team assignments. Ensure each team dispatched has a copy of the Emergency Team Briefing Form.

1. Inform the Team Coordinator prior to dispatching teams.

C. Ensure Team is properly equipped to perform their functions including sample taking and analysis.

Participate in Team briefings to ensure team members properly understand assigned task.

H. Maintain communication capability (i.e. phone, radio) and work with the Team Coordinator while the team is in the field to answer any questions that may arise concerning task

Attachment 9.9
OSC Chemistry Team Leader Checklist

Sheet 3 of 3

NOTE:
Ensure any deviations from Quality Control work practices are logged as part of the Team debriefings.

I. Debrief Chemistry team members when they return and ensure actions are properly documented.

J. Report results and status of team efforts to the OSC Manager as necessary.

K. Maintain communication through the Operations Team Leader for any identified sampling requirements.

L. Support the Radiation Protection Team Leader as needed or requested regarding radiation protection evaluation and information.

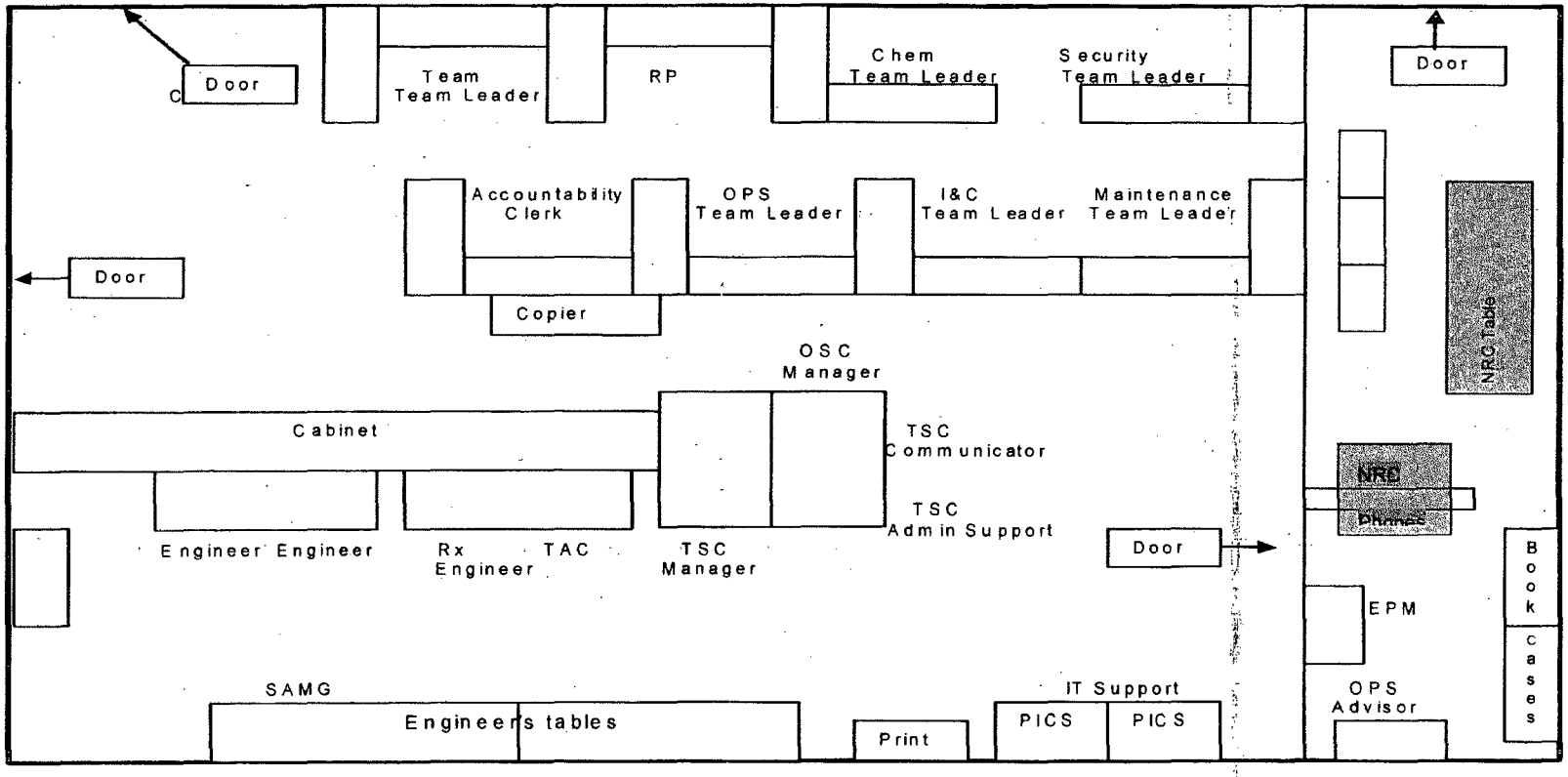
3.0 <u>Closeout Responsibility/Activity</u>

3.1 Assist OSC personnel to return all equipment to proper storage locations.

3.2Review all documentation the Chemistry Team Leaders maintained during the emergency:

A. Ensure logs, forms and other documentation are complete

B. Ensure all repairs performed by OSC Teams that deviated from normal station procedures are properly documented so that necessary actions can be taken for continuous plant operations or recovery operations.

3.3 Provide all logs and records to the OSC Manager upon termination of the emergency and entry into the Recovery Phase.

Attachment 9.10
TSC/OSC Layout