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CRYSTAL RIVER UNIT 3  
PLANT OPERATING MANUAL

**EM-102**

**Operation of the Technical Support Center (TSC)**

REVISION 54

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## 1.0 PURPOSE

### 1.1 TSC Function

1. Provide instructions for the pre-operation, operation, evacuation and deactivation of the Technical Support Center (TSC).
2. The primary function of the TSC is to assume responsibility for Radiological Emergency Response Plan implementation from the Control Room, minimizing the number of personnel in the Control Room to those necessary to bring the plant to a safe condition. [R1]
3. The TSC functions as a point of assembly for experienced plant personnel in the planning and re-entry/recovery operation.
4. This procedure is an Emergency Plan Implementing Procedure (EPIP). Any revisions must be carefully considered for emergency plan impact.

### 1.2 General Information

1. The Primary TSC is co-located at the bottom of the northeast corner of the berm with the Operational Support Center (OSC), and is activated whenever an Alert, Site Area Emergency, or General Emergency classification is declared. [R2] The Alternate TSC is located in the Control Complex 145' Elevation Operations Breakroom and is used whenever conditions in the Primary TSC require evacuation. The Remote TSC is located at the EOF in Room 124 and is activated during Security threats/events to provide for safety of the ERO staff and teams.
2. The TSC combines both management and emergency teams needed for assuring appropriate measures are taken to protect public health and safety in the event of an emergency.
3. Notification for activation of the TSC is by the Emergency Response Organization Notification System (ERONS) (automated phone calls, text messages and PA announcements). Enclosure 1 illustrates the setup for functional areas described in this procedure.
4. Personnel fulfilling the functions to declare the TSC operational should have the capability of safely responding to the facility in a manner to ensure the facility is declared operational as required. Enclosure 2 illustrates the organizational structure of the TSC. [R3]
5. If the TSC is used for violent weather staging of personnel or discretionary staffing at an Unusual Event, the minimum staffing requirements and operation of the facility are **NOT** required.

## 2.0 REFERENCES

### 2.1 Developmental References

1. 10CFR50.47, Appendix E, Emergency Planning and Preparedness for Production and Utilization Facilities
2. 10CFR50.47, Emergency Plans
3. CR-3 Severe Accident Guideline
4. EM-202, Duties of the Emergency Coordinator
5. Health Physics Basis Document (HPB) 98-16, Potassium Iodide Use Guidelines for Radiation Emergency Workers
6. NEI 91-04, Rev. 1, Severe Accident Issue Closure Guidelines
7. NUREG-0654, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants
8. Radiological Emergency Response Plan
9. ADM-NGGC-0105, ALARA Planning
10. RTM-96, Response Technical Manual, Section J, Use of Potassium Iodide and Thyroid Monitoring
11. RIS 2008-26, Clarified Requirements of Title 10 of the Code of Federal Regulations (10 CFR) Section 50.54 (Y) When Implementing 10 CFR Section 50.54 (X) to Depart from a License Condition or Technical Specification
12. **[R1]** NOCS 1031, TSC Description, Location, Equipment, and Instrumentation
13. **[R2]** NOCS 1068, TSC Activation
14. **[R3]** NOCS 1137, Augmentation Requirements for Offsite Surveys
15. **[R4]** NOCS 63010, Guidance When TSC Occupancy Exceeds 50
16. **[R5]** NOCS 1126, TSC Used for Receipt and Analysis of All Field Monitoring Data and Coordination of Sample Media
17. **[R6]** NOCS 24200, Portable Supplies for Monitoring and Decontamination
18. **[R7]** NOCS 24290, EST Communications, Equipment, and Vehicle
19. **[R8]** NOCS 24120, TSC Data Display Equipment and/or Systems
20. **[R9]** NOCS 24070, Space and Communications for NRC Personnel
21. **[R10]** NOCS 24060, TSC Design for 75 ft<sup>2</sup>/person
22. **[R11]** NOCS 24130, Alternate OSC
23. **[R12]** NOCS 21207, Communicator for Offsite Notifications
24. **[R13]** NOCS 24110, Base Station for Communicating with EST
25. **[R14]** NOCS 100056, Severe Accident Management
26. **[R16]** NOCS 100521, Command and Control Enhancements
27. **[R15]** CR 521060-05, CORR to ensure timely ventilation switch to emergency mode

### 3.0 DEFINITIONS

1. **Activation** - An ERO notification system message that directs emergency response personnel to respond to their designated emergency response facility for staffing and operation.
2. **Badge-in** – Present Security badge briefly to TSC Card Reader. This ensures accountability of TSC/OSC personnel during emergency.
3. **Operational** – The TSC is operational when the necessary personnel and equipment are assembled, the Emergency Coordinator has assumed responsibility and authority for the emergency condition, and the TSC is executing its designated emergency response functions and tasks.
4. **Severe Accident** - An accident beyond that assumed in the CR-3 design and licensing basis that results in catastrophic fuel rod failure, core degradation, and fission product release into the Reactor Vessel, Reactor Building, or the environment.
5. **Ventilation System Emergency Mode** – re-circulates air through charcoal and HEPA filters and makes the TSC/OSC habitable similar to the Control Room for postulated accident conditions.

### 4.0 RESPONSIBILITIES

1. Below represents responsibilities maintained during minimum staffing:
  - a. Emergency Coordinator
    - 1) Turnover from Control Room.
    - 2) Implement EC responsibilities as identified in EM-202 (classification, notification and Protective Action Recommendations).
    - 3) Coordinate and direct on-site emergency response.
    - 4) Classify/terminate the emergency in accordance with the Emergency Action Levels (EALs).
  - b. Radiation Controls Coordinator
    - 1) Brief the EC on radiation matters, especially those affecting Emergency Action Levels (EALs) and Protective Action Recommendations (PARs).
    - 2) Update Release Significance Category using EM-202 Attachment 2.
    - 3) Acquire and update meteorological and radiological data information electronically or from the Control Room
  - c. Accident Assessment Coordinator
    - 1) Brief the EC on plant status (items contained in EM-225, Attachment 2), especially those impacting Emergency Action Levels or Protective Action Recommendations.
    - 2) Update Critical Safety Functions Status.
    - 3) Provide communication path between TSC and Control Room.
  - d. OSC Manager
    - 1) Mobilize Maintenance Department resources to assist in emergency repairs.

#### Section 4.0, Responsibilities (Cont'd)

- e. Communications/Report Coordinator
  - 1) Prepare Florida Nuclear Plant Emergency Notification Message Forms, and relay necessary information to State Watch Office.
  - 2) Prepare Reactor Plant Event Notification Worksheets if Accident Assessment personnel **NOT** already communicating on ENS. Ensure necessary information is relayed to the NRC via the Emergency Notification System (ENS).
- f. Security Coordinator
  - 1) Call-in additional TSC support, as needed.
  - 2) Direct Security in the implementation of emergency security procedures including accountability of personnel, evacuation of personnel, and access control within the CR-3 Protected Area and evacuation of personnel within the Owner Controlled Area.
- 2. Functions managed from, but **NOT** required to declare the TSC operational, are as follows:
  - a. NRC Liaison/Assistant Emergency Coordinator
    - 1) Coordinate entry of NRC Incident Response Team into TSC and Control Room.
    - 2) Hold briefing with NRC upon arrival at TSC. Brief the NRC on following:
      - Event history
      - Latest status of emergency
      - Latest Protective Actions taken
      - Explain displays and Status Board information
      - Determine NRC position and introduce to CR-3 counterpart (Review Enclosure 3)
      - Discuss TSC/OSC layout and location of NRC phones (ENS, HPN, RSCL, PMCL NRC extensions)
    - 3) Assist NRC during the emergency condition by providing logistic support and keeping the NRC continually informed of plant status and possible radiological consequences.
    - 4) Update NRC on plans for emergency and recovery actions and needs for assistance.
    - 5) Assist EC as needed.
  - b. Administrative Support
    - 1) Ensure computer setup for TSC viewing and EOF access to ERO electronic log via computer.
    - 2) Log key events, equipment problems and radiological events.
    - 3) Maintain Team Status and ERO electronic log visible.

#### Section 4.0, Responsibilities (Cont'd)

- 4) Update digital clock message as needed for time per computer network time and emergency classifications.
  - 5) Update team status as appropriate.
  - 6) Ensure EC holds briefings on hourly basis, at a minimum.
  - 7) Obtain notification forms for State and NRC from Communications / Report Preparation when complete and fax to EOF, State, Bureau of Radiation Control, Citrus and Levy County and CR-3 Control Room.
  - 8) Fax or make available other pertinent information to EOF (e.g., ERO electronic log) as needed.
  - 9) Distribute incoming faxes as appropriate.
- c. Recall/SPDS Data Specialist
- 1) Display Plant Parameters and trend data as identified by the EC or Accident Assessment Coordinator on TSC Display screens.
- f. Document Services / Plant Support
- 1) Maintain manuals, procedures, and drawings in the TSC/OSC.

#### 5.0 PREREQUISITES

None

## 6.0 PRECAUTIONS, LIMITATIONS AND NOTES

### 6.1 TSC Ventilation, Habitability, and Security Events/Threat

1. The TSC/OSC ventilation system, when in the emergency recirculation mode, supplies breathing air to support 50 people.
2. **IF** the occupancy of the TSC/OSC exceeds 50, **AND** the TSC/OSC ventilation is in the Emergency Recirculation Mode, or ventilation is malfunctioning **THEN** O<sub>2</sub> and CO<sub>2</sub> monitoring must be performed to ensure habitability. [R4]
3. Consideration should be given to the staffing levels outlined in Enclosure 2.
4. **IF** the TSC/OSC is uninhabitable due to inadequate ventilation, radiological conditions, security emergency, flooding, or for other reasons, **THEN** areas in the Control Complex become the Alternate TSC/OSC.
5. **IF** a Security event/threat is in progress during backshifts, weekends, or holidays and the safety of responding personnel would be jeopardized, **THEN** personnel should respond to the Remote TSC.
6. **IF** a Security event/threat is in progress during normal working hours and the safety of responding personnel would be jeopardized, **THEN** delay activating personnel to respond to the Primary TSC.
7. **IF** an exposure of 5 rem to the thyroid is received or greater than 25 rem to the thyroid is projected, **THEN** KI should be administered as directed by the TSC.
8. The TSC/OSC flood level is 101'6", raised to 103' or greater with flood protection.
9. Release Significance Category in CR3's permanently defueled condition is limited to No Release (NR), Less Than Normal Operating Limits (<NOL) for a monitored release below RM-A2 high alarm setpoint, and Non-Significant (NS) for an unmonitored release. RASCAL projections show fuel damaged underwater is insufficient to cause a release that would approach Protective Action Guideline (PAG) levels. Additionally, calculation F13-0002 concludes that the surface temperature of the cladding in the spent fuel pools will not exceed the failure temperature for zirconium following a total loss of water from the pools. Calculation N13-0002 conclusion notes doses for hypothetical cladding failure releases from the spent fuel pools that are well under PAG levels and gamma shine dose rates at the Exclusion Area Boundary from drained pools that are at or below detectable limits for typical Health Physics instrumentation.

### 6.2 TSC/OSC Equipment and Supplies

#### 6.2.1 Emergency Kits and Equipment [R5]

<b>NOTE:</b> HPP-409 identifies the supplies contained in the Emergency Kits 1-4 below.
---

1. TSC/OSC Emergency Supplies
2. Decontamination Supplies [R6]
3. Environmental Survey Supplies (located in Survey Vehicle) [R7]
4. Unit 1, 2, 4 and 5 Control Room Supplies
5. Portable Continuous Air Monitor
6. Dose Assessment Computer (RASCAL)
7. Plant parameters via computer (PICS) [R8]

## Section 6.0, Precautions, Limitations and Notes (Cont'd)

8. Safety Parameter Display System (SPDS) [R8]
9. Sandpiper Pump (electric)
10. Printer/Viewer for microfiche
11. CO<sub>2</sub>/O<sub>2</sub> Monitor
12. Decontamination Shower and Sink
13. Severe Accident fittings (2)
14. Calculators (minimum of 3)

### 6.2.2 Reference Materials

The built-in cabinets located in the TSC contain various manuals and reference material. A current list of reference material in these cabinets is listed on the outside of the main TSC cabinet. If it becomes necessary to move the TSC/OSC functions to an alternate location, consider the items marked with an asterisk as items that may need to be moved to the alternate location.

### 6.2.3 Controlled Procedures and Drawings

Most controlled procedures and drawings are located in file cabinets in the OSC. Various OP, EOP and other procedures are located in the Accident Assessment room files and in individual TSC files. Other plant drawings are available on aperture cards in the TSC/OSC Work Area.

### 6.2.4 Supplies

Administrative supplies are located in various locations throughout the TSC and OSC.

## Section 6.0, Precautions, Limitations and Notes (Cont'd)

### 6.2.5 Communications Equipment

1. Commercial Telephone including two NRC lines [R9] [16]
2. Company Microwave System
3. Florida Emergency Management Network (EMnet) [16]
4. Emergency Notification System (ENS) [R9]
5. Health Physics Network (HPN) [R9]
6. Public Address Exchange System (PAX)
7. State Hot Ringdown System (SHRD) [16]
8. Portable Transceivers (as assigned) [16]
9. Telecopy Machine (FAX)
10. Plant radio and 800 MHz radio base [R13] [16]
11. Dose Assessment Ringdown System
12. Accident Assessment Ringdown (CR- TSC/OSC/EOF)
13. Portable Satellite telephone [16]
14. RSCL (Reactor Safety Counterpart Link)
15. PMCL (Protective Measure Counterpart Link)

### 7.0 SPECIAL TOOLS AND EQUIPMENT

None

### 8.0 ACCEPTANCE CRITERIA

None

## 9.0 INSTRUCTIONS

1. The steps under this section may be performed in any sequence.
2. CHECK the listing below for required TSC position and refer to the designated section for instructions. Positions other than those listed below perform job functions as needed to support OSC activities and as identified under the responsibility subsection 4.0.2.

### IF YOUR TSC POSITION IS:

### REFER TO PAGE:

EMERGENCY COORDINATOR	11
RADIATION CONTROLS COORDINATOR	15
ACCIDENT ASSESSMENT COORDINATOR	19
OSC MANAGER	20
COMMUNICATIONS/REPORT COORDINATOR	21
SECURITY COORDINATOR	23

## 9.1 Emergency Coordinator

1. IF TSC is established at the Alternate TSC (Control Complex), THEN GO TO Enclosure 4 and Attachment 2 for set-up and staffing guidance.
2. IF TSC is established at the Remote TSC (EOF), THEN GO TO Enclosure 5 for Remote TSC Operation at the EOF.
3. IF TSC staffing size is inadequate to perform functions listed under Operation, AND Pre-Operation activities are complete, THEN, as a minimum, MAINTAIN responsibilities identified in Step 4.0.1.a for TSC Operation.

### 9.1.1 Pre-Operation

1. BADGE IN at TSC Card Reader and PLACE name on TSC Staffing Board.

**NOTE:** The EC may assign available personnel to functions until the designated personnel are available.

2. ENSURE Functions required to declare the TSC operational include the following personnel with capability to perform minimum functions identified in each respective pre-operation section.
  - Emergency Coordinator
  - Radiation Controls Coordinator
  - Security Coordinator
  - Accident Assessment Coordinator
  - Communications/Report Coordinator (One required for initial operation)
  - OSC Manager
3. OBTAIN turnover briefing on status of emergency from Control Room, using Attachment 1. CONSIDER contacting EOF Director and have Control Room provide turnover on conference line.

## 9.1 Emergency Coordinator (Continued)

### 9.1.1 Pre-Operation (Cont'd)

4. **IF** there is a delay in declaring the TSC operational immediately after turnover, **THEN ENSURE NO** data has changed from original turnover, especially notifications made.
5. DECLARE TSC operational within 60 minutes of declaration of an Alert, Site Area Emergency, or General Emergency. **[R3]**

### 9.1.2 Operation

1. REQUEST Control Room to announce to plant staff that the TSC is operational.
2. USE TSC Public Address system for TSC announcements and briefings.
3. ANNOUNCE to TSC/OSC staff that the TSC is Operational, and PROVIDE update on status of plant (Attachment 1) and times next State of Florida and NRC notifications are due, and next briefing time and expectations for conduct of briefings.
4. DETERMINE TSC/OSC habitability (release in progress, wind direction). If necessary, ENSURE TSC/OSC ventilation is placed in emergency recirculation mode. (EM-104, Attachment 4)
5. OBTAIN needed procedures and logbook from file drawer. An additional Emergency Coordinator Manual is in the TSC cabinet for use by an assistant.
6. INITIATE log of activities to document times, and results of significant actions.
7. ENSURE support functions are available as needed.
8. IMPLEMENT and DOCUMENT EM-202 responsibilities. **IF** unable to obtain original EM-202 from Control Room, **THEN START** TSC copy and REQUEST previous pages be faxed to the TSC.

<p><b>NOTE:</b> Update briefings should be held hourly, at a minimum. These briefings should include a brief update from every required function at the table or as a summary from the EC. These briefings are heard throughout the TSC and OSC and each person is to stand, speak into the microphone, and identify themselves and what function they are representing.</p>
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9. CONDUCT initial and periodic briefings.
10. UPDATE the TSC on any of the following as it occurs:
  - Change in emergency classification
  - Change in Protective Action Recommendations
  - Significant plant evolutions, equipment failures, releases
  - EOF operational (EOF assumes State notification and Protective Action Recommendations only)
  - ENSURE classifications, notifications and PARs are performed as required, as the TSC staff becomes focused on accident assessment and mitigation activities.
11. ENSURE emergency teams are dispatched as needed.

## 9.1 Emergency Coordinator (Continued)

### 9.1.2 Operation (Cont'd)

12. APPROVE Emergency RWP and Emergency Team Authorization forms according to EM-104 as needed.
13. OBTAIN guidance as needed on radiological and habitability matters, accident mitigation, repair and security functions.
14. ENSURE the Radiological Emergency Conditions Status Board has updated Protective Action Recommendations (PARs) for reports made to the NRC and State of Florida.
15. ENSURE TSC/OSC habitability is maintained.
  - a. IF necessary, THEN EVACUATE to Alternate TSC and OSC areas in the Control Complex.
16. ENSURE the NRC and the EOF Director is informed of plant status.
17. REVIEW and APPROVE mitigation strategies during a Severe Accident as developed by the Accident Assessment Team.

**NOTE:** A separate notification is required to the NRC for each occasion defined by 10 CFR 50.54 (x). Once a Severe Accident is declared, 10 CFR 50.54 (x) (y) applies. Only one notification to the NRC for the Severe Accident is required while in a Severe Accident.

18. AUTHORIZES declaration of 10CFR50.54(x) and (y) to implement emergency actions deemed necessary to protect the health and safety of the public. DOCUMENT time entered and reason.
19. ENSURE Accident Assessment Team notifies the NRC and the Control Room of 10CFR50.54(x) (y) decisions. The TSC AAT is responsible for non-emergency related reportability.
20. DIRECT Radiation Controls Coordinator to issue KI when appropriate.
21. VERIFY Security has designated a Main Assembly Area Supervisor when a Site Evacuation is made. IF NOT, THEN assign an available individual to perform the function.
22. ASSIGN as needed personnel to assist NRC response personnel per section 4.2.a.
23. ENSURE request is made for supplemental support of the Site Emergency Response Coordinator at a General Emergency, via plant radio (Radio Channel 7 or appropriate talk group). STAGE the ERC in the CR-3 Control Complex to assist with fire response, confined space rescue, high-angle rescue, and medical emergencies. Notify the TSC Security Coordinator to allow ERC access to CR-3.

## 9.1 Emergency Coordinator (Continued)

### 9.1.3 Shift Change for Declared Emergencies

1. The Emergency Coordinator is responsible to:
  - ASSESS need for continued long-term support
  - IDENTIFY the emergency positions necessary for maintaining adequate response
  - ESTABLISH time for alternates to be at facility
  - REQUEST the individuals currently filling the position to contact their alternate
2. Individuals currently filling the position are responsible to:
  - CONTACT alternate for relief and provide adequate instructions for safe relief
    - Consider direction if radiological release occurring
    - Consider sleep, food, transportation arrangements
    - Consider staggering the relief of positions
  - PROVIDE the name of the alternate to the EC
  - BRIEF the alternate thoroughly upon relief of actions taken and in-progress, summarizing the scenario and how their position is affected

### 9.1.4 Deactivation

1. DIRECT deactivation/termination of TSC/OSC after concurrence with the Control Room, EOF Director, State of Florida and NRC and as identified in EM-202.
2. DIRECT Control Room to make announcement that TSC is deactivated.
3. DIRECT TSC/OSC staffs to ensure equipment and materials are returned to their pre-activation status, if possible, and SUBMIT documentation to Emergency Preparedness Staff.

### 9.1.5 Evacuation

1. EVACUATE the TSC/OSC based on:
  - Radiological data obtained by the Radiation Monitoring Team and recommendations of the Radiation Controls Coordinator.
  - Inadequate ventilation (CO<sub>2</sub>/O<sub>2</sub>).
  - Violent weather conditions.
  - Other conditions warranting evacuation.
2. REVIEW Attachment 2 before evacuation.
3. DETERMINE required staff needed based on plant conditions and RELOCATE to rooms adjacent to the Control Room as identified in Enclosure 4.
4. **IF** emergency teams are designated to relocate to the Control Complex **THEN** DIRECT them to the 124' elevation of the Control Complex.
5. **IF** flooding is projected, **THEN** TAKE precautions as outlined in Attachment 2 and in EM-220A.

## 9.2 Radiation Controls Coordinator

1. IF TSC is established at the Alternate TSC (Control Complex), **THEN GO TO** Enclosure 4 and Attachment 2 for set-up and staffing guidance.
2. IF TSC is established at the Remote TSC (EOF), **THEN GO TO** Enclosure 5 for Remote TSC Operation at the EOF.
3. IF TSC staffing size is inadequate to perform functions listed under Operation, **AND** Pre-Operation activities are complete, **THEN**, as a minimum, MAINTAIN responsibilities identified in Section 4.0.1 for TSC Operation.

### 9.2.1 Pre-Operation

1. BADGE IN at TSC Card Reader and PLACE name on TSC Staffing Board.
2. IF a release in progress is suspected, **THEN PERFORM** the following actions from the Mechanical Equipment Room to activate the emergency recirculation mode for the TSC/OSC [R15]:
  - a. OPEN the access door for AHD-119 (located by outside exit door).
  - b. At AH-229, ROTATE the switch from the "NORMAL (1)" to the "EMERGENCY (2)" position on the emergency mode control panel.
  - c. LOG start time on form next to AH-229 control switch.
3. PERFORM the following as minimum functions to declare the TSC operational:
  - DETERMINE Release Significance Category (REFER TO EM-202 Attachment 2)
  - DETERMINE radiological and chemistry matters affecting EALs (REFER TO EM-202 Enclosure 1) and PARs (REFER TO EM-202 Enclosure 3).

## 9.2 Radiation Controls Coordinator (Continued)

### 9.2.2 Operation

1. Activation of Personnel (this should be performed as soon as minimum functions completed)
  - ENSURE the required number, as identified in EM-104, Enclosure 2, page 1, of qualified Radiation Monitoring Team and OSC Sample Team members are notified to respond to ensure coverage of:
    - Re-entry coverage
    - Chemistry
    - Environmental monitoring
    - Dosimetry
  - ASSIGN an individual to the Dose Assessment Ringdown in the Control Room or Accident Assessment Team Room (preferred location) to monitor radiological and meteorological data.
  - ENSURE Status Board keeper is available for updating the Radiological Conditions Board and ENSURE the Release Significance Category status is updated. REFER TO Attachment 2 of EM-202.
  - ASSIGN someone with extensive Health Physics experience to the Health Physics Network as a communicator when requested by the NRC. REFER to Enclosure 3 for typical requested information over HPN and ENS phone lines.
2. DETERMINE TSC/OSC habitability (release in progress, met data, air monitoring system). **IF** necessary, **THEN** NOTIFY the EC to complete putting the TSC/OSC ventilation into the emergency recirculation mode OR restore ventilation to the "Normal" mode.
3. OBTAIN needed procedures and logbook from file drawer and USE push-to-talk headsets as needed for contact with HP and Chemistry personnel.
4. PROVIDE weather data and release information to the Communication/Report Coordinator immediately upon request, to ensure no delay in notification occurs.
5. **IF** release in progress, **THEN** OBTAIN information on release from REDAS, SPDS/RECALL or PICS, **AND** UPDATE the Release Significance Category.
6. ENSURE the set-up and testing of monitoring and counting equipment is taking place and qualified individuals are available to operate and interpret the data from this equipment.
7. ENSURE monitoring of TSC/OSC for radiological, O<sub>2</sub> and CO<sub>2</sub> (when TSC in Recirculation) is accomplished and EVALUATE Total Risk associated with ventilating with outside air, in accordance to EM-210A, Section 4.2.
8. VERIFY Emergency Teams and security personnel have TLDs and Eds set in the emergency mode and area TLDs are established throughout the TSC/OSC.
9. DISPATCH Health Physics Technicians to EOF for monitoring as requested by EOF Radiation Controls Manager.
10. REQUEST Sample Team dispatches through OSC Manager. CONTACT OSC Chemistry Coordinator, as needed, to discuss dispatch.

## 9.2 Radiation Controls Coordinator (Continued)

### 9.2.2 Operation (Cont'd)

11. INITIATE log of activities to document times and results of significant actions.

**NOTE:** The TSC/OSC ventilation should be placed into the emergency recirculation mode at the discretion of the EC or Radiation Controls Coordinator.

12. **IF** the outside iodine concentration is estimated to be  $>1$  DAC, **THEN CONSIDER** placing the TSC ventilation into the emergency recirculation mode.

#### CAUTION

Individuals who have known allergies to iodide substances such as shell fish, and adults with Graves, nodules, or Hashimoto's shall **NOT** be issued KI.

13. **IF** an exposure of 5 Rem to the thyroid is received or **WHEN** a calculated dose of greater than 25 Rem to the thyroid is determined, **THEN AUTHORIZE** the issuance of KI as needed.
14. **ISSUE** one KI tablet to each individual who is to receive KI. One tablet equals 130 mg. RTM-96 recommended dosage is 130 mg. / day for a minimum of three days.
15. **DOCUMENT** in TSC Radiation Controls Coordinator log or OSC Health Physics Coordinator log the following:
  - a. Lot number and expiration date of the KI administered.
  - b. Name and badge number of each individual the KI was given.
  - c. **IF** a bottle of KI tablets is given to a Supervisor for distribution, **THEN** the Supervisor is responsible for documenting names of those receiving KI.
  - d. Name of any individual declining to take the KI and the reason for **NOT** taking the drug.
16. **UPDATE** Emergency Coordinator with the following information:
  - a. Radiological aspects of the event, including EAL and PARs based on radiological conditions
  - b. TSC/OSC area dose rate information
  - c. Potential reclassification of the event based on radiological conditions
  - d. When TSC/OSC ventilation should be in recirculation based on radiological, CO<sub>2</sub> or O<sub>2</sub> results.
  - e. Issuance of KI to team members
17. **UPDATE** Accident Assessment with the Radiation Monitor readings and assessments, Release status (magnitude, direction, relative severity), and RCS data as plant conditions change.
18. **PROVIDE** ongoing technical and administrative direction to OSC Chemistry and Health Physics Coordinators.

## 9.2 Radiation Controls Coordinator (Continued)

### 9.2.2 Operation (Cont'd)

19. ENSURE TSC staff is aware of offsite radiological conditions and meteorological data.
20. REVIEW Enclosure 3 for possible NRC Incident Response personnel functions, and provide assistance as needed.
21. PROVIDE radiological conditions to the Security representative to ensure Security patrols are properly protected.
22. **IF** Security Personnel are required to evacuate, **THEN** DISCUSS suspension of Safeguards with EC.
23. UPDATE the Status Boards as needed.
24. ISSUE TLDs to TSC/OSC personnel (non-team members) as time permits.
25. **IF NON**-essential personnel are evacuated from the Site, **AND** personal vehicles are contaminated, **THEN** COORDINATE washdown stations with EOF.

<p><b>NOTE:</b> Normally the State of Florida or local government is responsible for off-site emergency responders.</p>
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26. **IF** off-site agencies respond inside the Owner Controlled Area (local law enforcement, National Guard), **THEN** ENSURE they receive proper dosimetry (TLD, Electronic Dosimeters set in the emergency mode), Health Physics coverage, **AND** as appropriate, KI.
27. DETERMINE if it is necessary to defeat the stand and count feature of the monitors in the NSOC or RCA exit based on estimated number of personnel on-site and radiological release in progress and DISPATCH an RMT member to defeat the stand and count feature of the GEMS 5 or equivalent using the instructions posted at the monitor location.

### 9.3 Accident Assessment Coordinator

1. IF TSC is established at the Alternate TSC (Control Complex), **THEN** GO TO Enclosure 4 and Attachment 2 for set-up and staffing guidance.
2. IF TSC is established at the Remote TSC (EOF), **THEN** GO TO Enclosure 5 for TSC operation at the EOF.
3. IF TSC staffing size is inadequate to perform functions listed under Operation, **AND** Pre-Operation activities are complete, **THEN**, as a minimum, MAINTAIN responsibilities identified in Section 4.0.1 for TSC Operation.

#### 9.3.1 Pre-Operation

1. BADGE IN at TSC Card Reader and PLACE name on TSC Staffing Board.
2. PERFORM the following as minimum functions to declare the TSC operational:
  - INITIATE determination of Critical Safety Functions
  - IDENTIFY plant status to include impact of EALs or PARs through use of either SPDS, phone link established with Control Room, or from EC turnover with Control Room.

#### 9.3.2 Operation

1. ACTIVATE additional AAT members as needed, and Fire Brigade personnel, as identified on EM-104, Enclosure 2.
2. PROVIDE plant status for the Florida Nuclear Plant Emergency Notification Form as requested by Communications/Report Coordinator.
3. UPDATE Mitigation Strategy Priority Board is updated as needed.
4. REFER to EM-225 and COORDINATE Accident Assessment Team activities to implement the following:
  - INITIATE log of activities to document times and results of significant actions.
  - INFORM EC of AAT activities and developments in plant status, especially those that may impact Emergency Action Levels and Protective Action Recommendations.
  - INFORM Control Room of changing radiological conditions and ongoing TSC activities, including accident mitigation priorities.
  - PROVIDE engineering support to develop mitigation strategies.
  - ESTABLISH direct communications with Technical Support Team at the EOF as needed.
  - MAINTAIN Critical Safety Function portion of the Radiological Emergency Conditions Status Board.
  - INFORM the EC and Radiation Controls Coordinator of spent fuel status.
  - EVALUATE the effects of proposed maintenance activities and operational manipulations on plant equipment.
  - REQUEST operator support through OSC Manager once operators established in OSC.
  - EVALUATE and DEVELOP mitigation strategies using the CR-3 Severe Accident Guideline during a Severe Accident. **[R14]**
  - REQUEST repair activities through OSC Manager.
  - ENSURE TSC Display Computers are logged in per EM-225, Attachment 12. Security can unlock the door to the display computers behind the screens.

#### 9.4 OSC Manager

1. IF TSC is established at the Alternate TSC (Control Complex), **THEN** GO TO Enclosure 4 and Attachment 2 for set-up and staffing guidance.
2. IF TSC is established at the Remote TSC (EOF), **THEN** GO TO Enclosure 5 for Remote TSC Operation at the EOF.
3. IF TSC staffing size is inadequate to perform functions listed under Operation, **AND** Pre-Operation activities are complete, **THEN**, as a minimum, MAINTAIN responsibilities identified in Section 4.0.1 for TSC Operation.
4. Mobilize Maintenance Department resources to assist in emergency repairs.

##### 9.4.1 Pre-Operation

1. BADGE IN at TSC Card Reader and PLACE name on TSC Staffing Board.
2. PERFORM the following as the minimum functions to declare the TSC operational:
  - DETERMINE status of on-going maintenance activities and emergency teams in field, if applicable.

##### 9.4.2 Operation

All duties of OSC Manager are as described in EM-104, Operation Of The Operational Support Center (OSC).

## 9.5 Communication / Report Coordinator

1. IF TSC is established at the Alternate TSC (Control Complex), **THEN GO TO** Enclosure 4 and Attachment 2 for set-up and staffing guidance.
2. IF TSC is established at the Remote TSC (EOF), **THEN GO TO** Enclosure 5 for Remote TSC Operation.
3. IF TSC staffing size is inadequate to perform functions listed under Operation, **AND** Pre-Operation activities are complete, **THEN**, as a minimum, MAINTAIN responsibilities identified in Section 4.0.1 for TSC Operation.

### 9.5.1 Pre-Operation

1. BADGE IN at TSC Card Reader and PLACE name on TSC Staffing Board.
2. PERFORM the following as minimum functions to declare the TSC operational:
  - ENSURE readiness to prepare Florida Nuclear Plant Emergency Notification Form (EM-202, Attachment 1), as necessary.
  - ENSURE readiness to prepare Reactor Plant Event Notification Worksheet (EM-202, Attachment 3), as necessary, if an Accident Assessment Team NRC Communicator has **NOT** been designated.
3. OBTAIN needed procedures and logbook from file drawer and MAKE copies of Florida Nuclear Plant Emergency Notification Form and NRC Reactor Plant Event Notification Worksheet for use as needed.

### 9.5.2 Operation

1. NOTIFY additional communicators, as identified on page 2 of Enclosure 2, for support. (This should be performed as soon as pre-operation functions completed)
2. OBTAIN times of last State and NRC notification from EC, Administrative Support or from copies on FAX machine, and be prepared for next report.
3. MAINTAIN Notification Board and ENSURE updates are timely.
4. REQUEST plant conditions from Accident Assessment, if **NOT** on board, and REQUEST weather data and release data for Florida Nuclear Plant Emergency Notification Form from Accident Assessment and Radiation Controls.
5. ENSURE the Florida Nuclear Plant Emergency Notification Form is prepared as required, following guidelines associated with form and faxing forms to Group 1. PROVIDE accurate form information for EC approval (time, date, classification, wind direction, release information, protective actions and description of EAL).

## 9.5.2 Communications / Report Coordinator (Continued)

### 9.5.2 Operation (Cont'd)

6. ENSURE the following EM-202 notifications using the telephone numbers from the Offsite Support Directory and updates are documented: **[R12]**
  - State notification and updates (via SHRD, Commercial line, Emnet or Portable Satellite Telephone)
  - NRC notification and updates via ENS
  - Resident NRC notification (if **NOT** previously done by Control Room)
  - Notification of event and updates to Units 1,2,4,5 (EM-202, Attachment 4)
  - Notification of American Nuclear Insurers (ANI) that CR3 is in an emergency declaration as soon as possible after the ALERT is declared (generally within 4 hours).
  - Notification to Risk Management to notify NEIL. It is acceptable to leave voice message with Risk Management and ask them to return call to you at 352/795-5078 (TSC direct line by Security), however, follow-up with Risk Management is essential if they do **NOT** return your call within an hour.
  - Notification to INPO that CR3 is in an emergency declaration.
7. ENSURE once EOF is operational, a link between the EOF and TSC is established for communicating plant status, TSC actions, EOF actions, State and County actions. UPDATE the EC and status board on Protective Action, State and County actions, as significant information is received from the EOF.
8. ENSURE proper turnover to the EOF for State of Florida and Risk County notifications only. The NRC, Units 1,2,4,5, ANI, Risk Management, and INPO notifications remain at the TSC.
9. INITIATE log of activities to document times and results of significant actions.
10. EVALUATE the needs of Communications/Report personnel once the EOF is operational and dismiss as necessary for future relief shift or re-assign to other positions where needed.

## 9.6 Security Coordinator

1. IF TSC is established at the Alternate TSC (Control Complex), **THEN GO TO** Enclosure 4 and Attachment 2 for set-up and staffing guidance.
2. IF TSC is established at the Remote TSC (EOF), **THEN GO TO** Enclosure 5 for Remote TSC Operation.
3. IF TSC staffing size is inadequate to perform functions listed under Operation, **AND** Pre-Operation activities are complete, **THEN**, as a minimum, MAINTAIN responsibilities identified in Section 4.0.1 for TSC Operation.

### 9.6.1 Pre-Operation

1. BADGE IN at TSC Card Reader and PLACE name on TSC Staffing Board.
2. ENSURE card readers are used upon entry to TSC/OSC during emergency conditions to provide accurate accountability throughout the emergency. Exit from TSC/OSC during emergency conditions is established through OSC Emergency Team Authorization forms. IF card readers are **NOT** working, **THEN ESTABLISH** manual accountability.

### 9.6.2 Operation

1. Activation of Personnel (this should be performed as soon as minimum functions completed)
  - STAFF proper Security personnel to perform access control, personnel accountability, and badging of external responders.
  - CALL-IN additional TSC/OSC support as requested.
2. OBTAIN logbook and procedures as necessary from file drawer and INITIATE log of activities to document times, actions and results.
3. ESTABLISH and MAINTAIN contact with Security personnel and Main Assembly Area Supervisor (MAAS), as appropriate. IF Security personnel **NOT** available to act as MAAS, **THEN CONTACT** Emergency Coordinator to assign an available individual.
4. NOTIFY Security personnel of Site Area Emergency and ENSURE:
  - ERO Notification System is initiated, unless informed otherwise
  - Announcement is made for evacuation of Protected Area
  - Security at Site Administration Building makes SAE announcement in the building and prepares for assembly of plant personnel
5. NOTIFY EC of evacuation status and accountability of CR-3 and Units 1, 2, 4 and 5. Protected Area Accountability (Site Evacuation) must be completed within 30 minutes of sounding of Site evacuation alarm.
6. DETERMINE coordination efforts needed by Security supervision dispatched to perform functions associated with the Main Assembly Area Supervisor.
7. DISPATCH Security personnel when a medical response occurs to provide scene control.

## 9.6 Security Coordinator (Continued)

### 9.6.2 Operation (Cont'd)

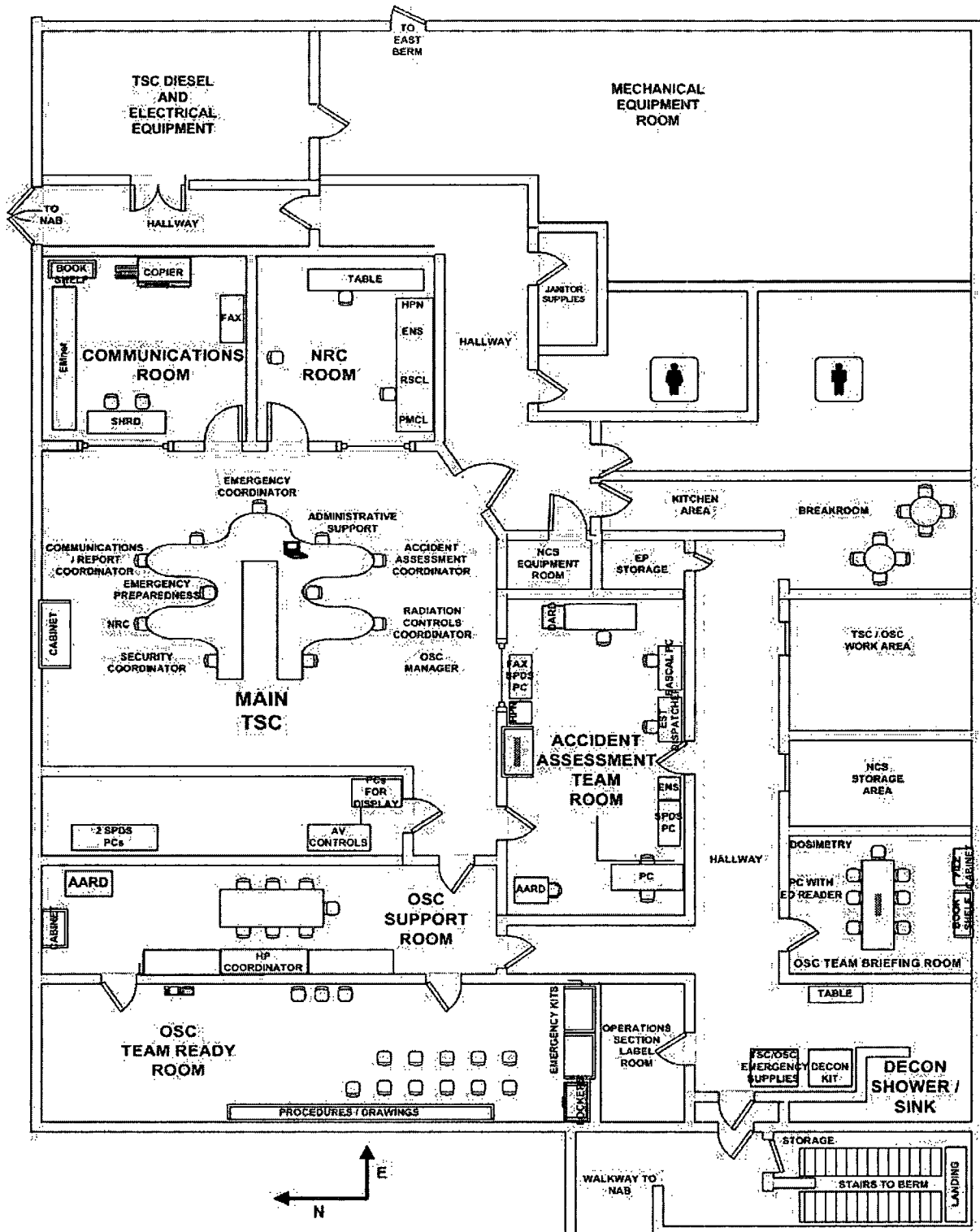
8. COORDINATE Security personnel maintaining posts or responding to an emergency scene during radiological conditions with the Radiation Controls Coordinator for Radiation Monitoring Team coverage.
9. INFORM Security personnel of the overall radiological conditions of the plant to include instrumentation, TLDs, and protective clothing as indicated by the Radiation Controls Coordinator.
10. **IF** suspension of Safeguards is required, **THEN** COORDINATE with EC, **AND ENSURE** 10CFR50.54(x) (y) is invoked **OR** use Section 24, Temporary Suspension of Security Measures of the CR3 Physical Security Plan.
11. **IF** suspension of Safeguards has been invoked, **AND** Security personnel have been evacuated or staged in the Control Complex, **THEN** OBTAIN key for OSC Team dispatch into locked plant areas.
12. DETERMINE if additional Personnel Protective Equipment (PPE) is needed by OSC personnel.
13. **IF** OSC Manager determines additional PPE is needed, **THEN** REQUEST Security bring visitor PPE supplies to OSC.
14. In the event of injury, ENSURE notification of injured individual's family (s) is made. This is normally performed by the injured individual's Supervisor.
15. In the event that an Incident Command Post (ICP) is established due to a Security-related event, Large Area Fire, or the like, ASSIGN an available TSC or EOF Security Coordinator to staff the ICP to support its function and to provide liaison between CR3 Security and off-site response agencies (i.e., local law enforcement, fire/rescue, emergency medical, etc.).

### 10.0 RECORDS

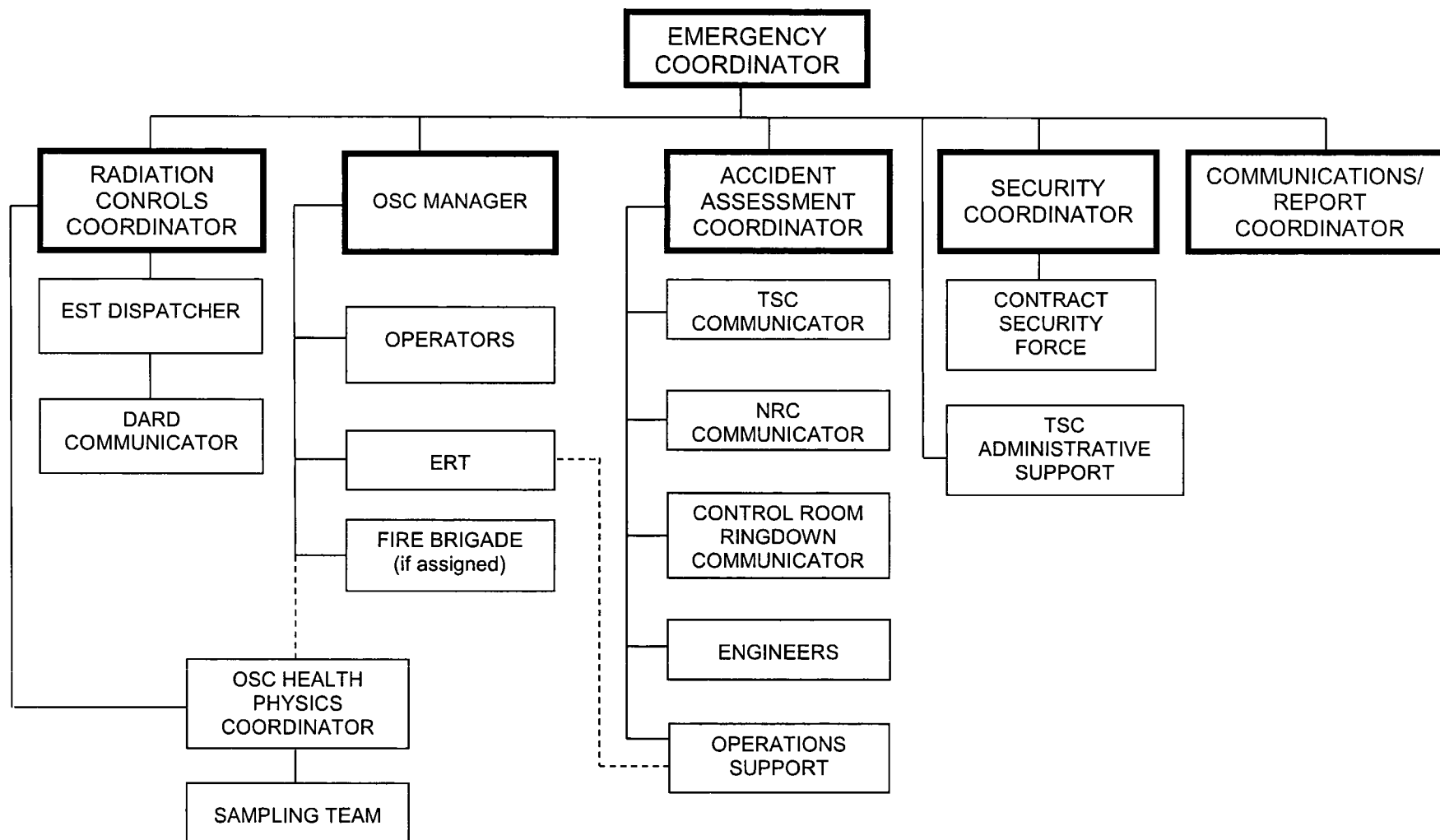
No records are generated by this procedure.

## PRIMARY TSC FLOOR PLAN

(Recommended Layout)



## TSC/OSC ORGANIZATIONAL CHART



Note: The dark-bordered boxes indicate the minimum staff required to declare the TSC/OSC operational.

### TSC STAFFING [R4 / R10]

(Telephone numbers listed in Emergency Directories / Rosters)

FUNCTION	RECOMMENDED	REQUIRED
		Augmentation Time
Emergency Coordinator	1	60 minutes
Administrative Support	1	
<b>Emergency Preparedness</b>	1	
<b>State of Florida &amp; NRC Notification Form Preparation</b>	1	60 minutes
<b>SWO Communicator</b> (In Control Room until TSC operational)	1	30 minutes
OSC Manager	1	60 minutes
Radiation Controls Coordinator (off-site dose assessment capability in Control Room until TSC operational)	1	*30 minutes
EST Dispatcher	1	
Accident Assessment Coordinator	1	60 minutes
Accident Assessment Communicator	2	
Engineer (electrical/mechanical) (can be filled at EOF)	2	60 minutes
Security Coordinator	1	60 minutes
NRC Resident	1	
Other NRC ( <b>NOT</b> part of initial staffing)	4	

Once the EOF is operational and the bolded functions are supported at the EOF, the TSC function can be discontinued.

- \* This indicates that the capability for off-site dose assessment is able to be performed and is not associated with declaring the TSC operational within the required 60 minutes.

### POSSIBLE NRC INCIDENT RESPONSE TEAM MEMBERS AT TSC/OSC

If CR-3 enters a GENERAL EMERGENCY, and possibly a SITE AREA EMERGENCY, the NRC sends an Incident Response Team. The following represents possible NRC positions that could be at the TSC and the CR-3 counterpart.

**Senior Resident Inspector / Operations Coordinator** – Verifies accuracy of information provided by licensee. Establishes open line from TSC to NRC. Briefs the NRC Site Team Leader. Will want to be briefed on plant status, radiological conditions, and special instructions before proceeding into the 10-mile EPZ. Establishes contact and manages other NRC on-site.

This individual stays at the TSC and coordinates NRC functions through Emergency Coordinator.

**Reactor Safety / Operations Coordinator** Needs overall status of facility – sequence and details of the events in progress, classification of the event, emergency core cooling, ability to achieve/maintain adequate core cooling, degree of core damage or potential damage, potential consequences, status of safety related or important to safety equipment including ultimate heat sink, vital shutdown equipment and vital electrical distribution, containment integrity, licensee actions taken or to be taken to mitigate the consequences.

CR-3's counterpart is the "Accident Assessment Team."

**Reactor Safety Counterpart Link (RSCL) Or Emergency Notification System (ENS) Communicator** – One or the other will be at the TSC, **NOT** both. NRC management has their discussions over the RSCL by reporting reactor safety-related recommendations, decisions and implementation status to headquarters.

As CR-3 supplies information over ENS, NRC monitors the exchange of the reactor safety technical data. The NRC RSCL communicator is stationed in NRC office or with the Accident Assessment Team.

**Radiation Safety Coordinator** – Monitors CR-3s radiological survey program, actions to ensure radiation protection of emergency workers, evaluates and recommends protective measures for in-plant personnel, ensures radiological safety of NRC emergency workers, assess and report to NRC status on in-plant surveys, monitored releases, radwaste systems, licensee and NRC personnel exposures.

CR-3's counterpart is the Radiation Controls Coordinator or the OSC Health Physics Coordinator.

**Health Physics Specialist/In-Plant Coordinator** – Assesses status of on-site/in-plant radiological systems and equipment, monitors HP activities, evaluates on-site protective measures and makes appropriate recommendations, monitors in-plant surveys, releases, radwaste systems.

CR-3's counterpart is the OSC Health Physics Coordinator.

**Health Physics Network (HPN) Monitor Or Protective Measures Counterpart Link (PMCL)** – One or the other is at the TSC, **NOT** both. NRC management holds discussions over the PMCL. CR-3's HPN talker provides radiological data. NRC monitors and requests information such as: plant conditions as they relate to source term, source term information, meteorological data and forecasts, dose projections, survey data, contamination levels, sample results, personnel exposures.

NRC monitors the PMCL from the NRC Office.

**QUESTIONS NRC MAY ASK OVER ENS OR HPN PHONE**

- ENS/HPN Is there any change to the classification of the event? If so, what is the reason? (Accident Assessment / Maintenance)
- ENS What is the ongoing/imminent damage to the facility, including affected equipment and safety features? (Accident Assessment / Maintenance)
- ENS/HPN Have toxic or radiological releases occurred or been projected, including changes in the release rate? If so, what are the actual or currently projected on-site and off-site releases, and what is the basis of assessment? (Dose Assessment should be discussing with NRC on HPN line at EOF. If individual **NOT** on HPN line, then review information on Florida Nuclear Plant Emergency Notification Form or request information from Dose Assessment)
- ENS/HPN What are the health effects/consequences to on-site/off-site people? How many on-site/off-site people are/will be affected and to what extent? (EOF Dose Assessment Team or EOF Staff)
- ENS/HPN Is the event under control? When was control established, or what is the planned action to bring the event under control? What mitigative actions are currently underway or planned? (Accident Assessment)
- ENS/HPN What on-site protective measures have been taken or planned? (Florida Nuclear Plant Emergency Notification Form)
- ENS/HPN What off-site protective actions are being considered or have been recommended to State/local officials? (Florida Nuclear Plant Emergency Notification Form)
- ENS What is the status of State/local/other Federal agencies' responses, if known? (TSC Communicator can obtain information from EOF or request EOF to put someone on ENS telephone at EOF. This information is more easily obtained from EOF personnel)
- ENS If applicable, what is the status of public information activities, such as alarm, broadcast, or press releases (regulatory/State/local/other Federal agencies)? Has the Joint Information Center (Emergency News Center at EOF) been activated? (TSC Communicator can obtain information from EOF or request EOF to put someone on ENS telephone at EOF. This information is more easily obtained from EOF personnel)
- HPN What are the current meteorological conditions? (Dose Assessment Team)
- HPN What are the dose and dose rate readings on-site and off-site?

**THERE IS A "GROUP" UNDER THE RECALL DISPLAY THAT CAN BE SET UP TO DISPLAY ERDS – THIS PROVIDES THE SAME INFORMATION THE NRC IS SEEING OVER ERDS.**

**ALTERNATE TSC AREA SET-UP AND STAFFING GUIDELINES [R11]****CAUTION**

Once the Control Complex is placed in the Emergency Recirculation Mode, and the Alternate TSC/OSC is operational, O<sub>2</sub> and CO<sub>2</sub> monitoring must be performed according to EM-210A to ensure habitability.

**OPERATION OF THE ALTERNATE TSC**

The focus for Alternate TSC operation is to assume responsibility for emergency declarations, off-site notifications, and PAR decision-making. Keep traffic into the Control Room to a minimum.

This enclosure identifies areas outside the Control Room for Alternate TSC operation. Minimum requirements as identified in Section 4.0.1 should be maintained. Additional responsibilities as identified in Section 9.0 are implemented as necessary.

**OPERATIONS BREAK AREA** (see page 3 of this enclosure)

**ACTIVITY** – Serves as the main TSC conference room

**PERSONNEL** – Emergency Coordinator, Radiation Controls Coordinator, Accident Assessment Coordinator, OSC Manager, Communications/Report Coordinator, Security Coordinator, Accident Assessment Ringdown Communicator and NRC representative.

**SET-UP** – Arrange TSC functions around the table, adding chairs as needed. The Accident Assessment Ringdown telephone must be established.

**OPERATION** – Required TSC function personnel need to access information from the Control Room to keep the EC and other functions informed. The Accident Assessment Ringdown must be maintained. This provides communication with the Control Room and is monitored/used by the EOF Technical Support Team.

**AREA ADJACENT TO THE BREAK ROOM**

**ACTIVITY** – Communication by PAX with emergency team personnel located on 124' elevation. This is also a possible work area for Accident Assessment personnel.

**SET-UP** – **NO** setup required. One PAX telephone in area.

**OPERATION** – OSC Manager maintains contact with Emergency Teams located on the 124' elevation by radio or at PAX number 237. Communication to teams located on the 124' elevation should be established and maintained as much as possible to keep them informed of changing plant conditions. As teams are requested to be dispatched, personnel should be identified and briefed on the 124' elevation.

**ALTERNATE TSC SET-UP AND STAFFING GUIDELINES (Continued)****ADMINISTRATIVE SUPPORT OFFICE OUTSIDE OF CONTROL ROOM**

ACTIVITY – Dispatch of EST

PERSONNEL – EST Dispatcher

SET-UP – Access REDAS, OSI/PI, and RASCAL from computer in room

OPERATION – Could be used to perform dose projections, as needed, until the EOF DAT is operational or dispatching of the EST. The telephone can be used for contacting the EOF DAT for communication with the Off-site RMT. Update TSC staff as needed for dose projections and Environmental Survey Team results.

**SHIFT MANAGER OFFICE**

PERSONNEL – To be used as needed by TSC personnel.

SET-UP – **NO** set-up required.

**124' ELEVATION**

ACTIVITY – Team Staging Area.

PERSONNEL – Fire Brigade, Sample Team, Emergency Repair Team, Radiation Monitoring Team (on-site), Security.

SET-UP – May include chairs, tables and emergency kits as needed.

OPERATION – The OSC Manager remains on 124' elevation with emergency teams. He should assign someone to the PAX phone to remain in communication with the Alternate TSC. Teams are dispatched as needed according to EM-104. OSC Coordinators may be on 124' with teams or may reside across from the Control Room, as needed.

**CONTROL ROOM – (See Attachment 2 for available communication/equipment)**

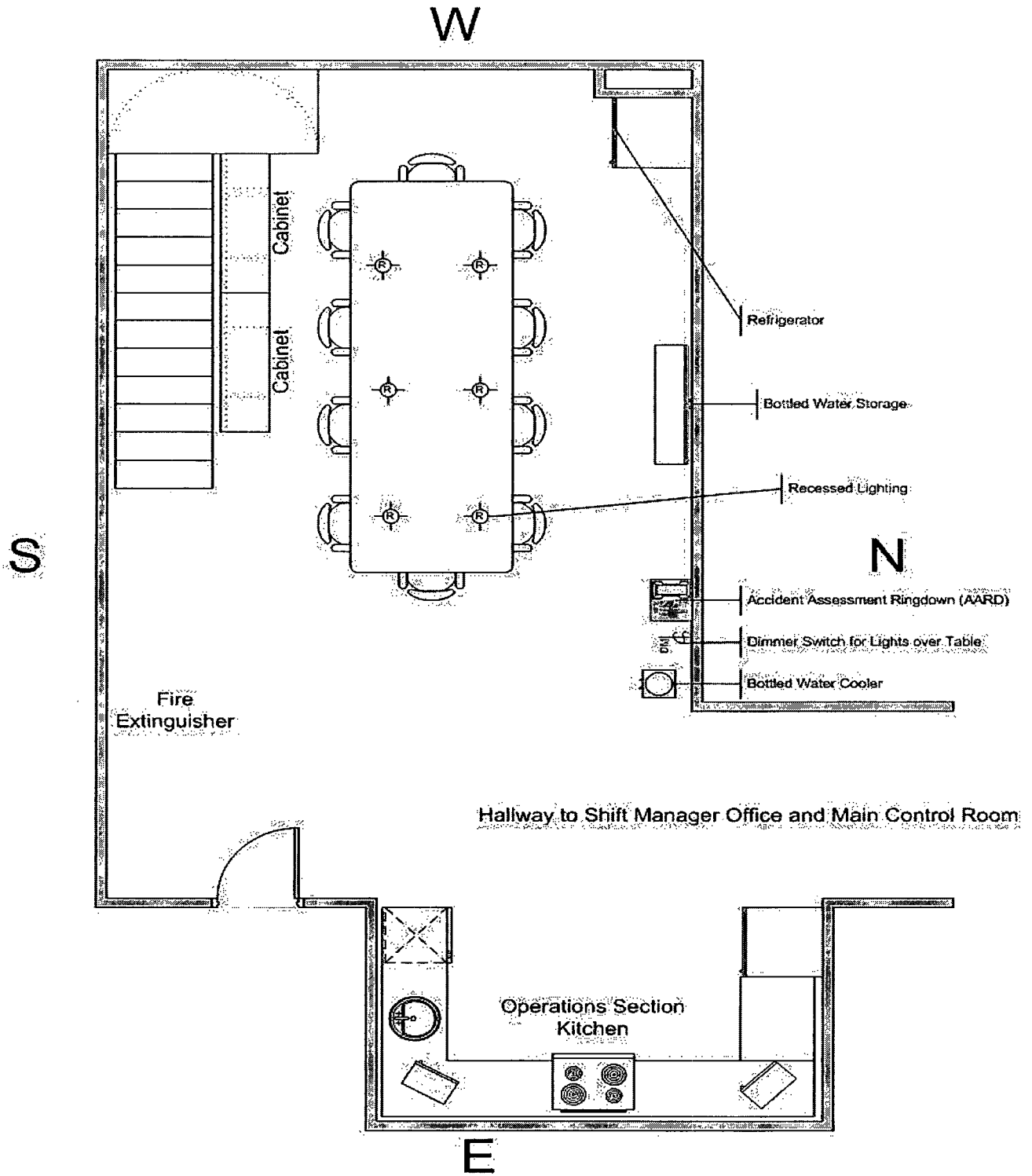
ACTIVITY – State Watch Office notifications on SHRD, NRC Operations Center notifications on ENS, Accident Assessment Ringdown communications to Alternate TSC conference room, Dose Assessment Ringdown communications to EOF, SPDS data gathering.

PERSONNEL – Communications/Report Preparation, Dose Assessment communicator, Accident Assessment.

SET-UP – Use Control Room equipment, as needed. **NO** setup required other than headsets if desired.

OPERATION – Alternate TSC personnel enter the Control Room as necessary and use the designated equipment to complete their duties. Once EOF is operational, State notification and PAR responsibilities transfer. If unable to access SPDS on other computers, Accident Assessment personnel can observe plant parameters on the SPDS computer in Computer Main Cabinet #5 or on the main control board as accessible.

ALTERNATE TSC FLOOR PLAN  
(Recommended Layout)



**REMOTE TSC OPERATION AT THE EOF**

**NOTE:** EOF personnel are also activated during a security event to support TSC personnel. EOF personnel establish operation in Room 119 and 122, with EOF Technical Support personnel assisting TSC Accident Assessment Team in Room 124 as needed. EOF personnel have separate functions than TSC; however, communication is essential to ensure everyone knows status of security events. Requesting EOF personnel to assist with TSC functions is acceptable until the EOF is required to be operational at a Site Area Emergency.

TSC/EOF Counterpart positions:

<b>TSC</b>	<b>EOF</b>
Emergency Coordinator	EOF Director
Accident Assessment Coordinator	Technical Support Coordinator
Communications/Report Coordinator	Report Preparation Director
Security Coordinator	Security Coordinator
Radiation Controls Coordinator	Radiation Controls Manager
OSC Manager	Technical Support Coordinator

1. **IF** TSC personnel are sent to the EOF, most likely due to a Security emergency, **THEN** TSC personnel are to report to Room 124.
2. **IF** EOF personnel have **NOT** setup the room for TSC personnel, **THEN** SETUP room according to TSC setup instructions located in cabinet labeled "TSC SETUP SUPPLIES". Remote TSC setup instructions are addressed on pages 3 and 4.
3. OBTAIN individual position specific manual, name plate, briefing plaque, logbook, and phones located in TSC SETUP SUPPLIES cabinet in Room 124. Additional procedures, drawings, manuals, etc. are located as indicated on cabinet door poster.
4. REFER to Facility Phone Books for phone numbers associated with Control Room, EOF and TSC personnel. Other communication locations at EOF are as follows:

<b>Communication</b>	<b>Location</b>
Accident Assessment Ringdown	Technical Support area Room 124
ENS (NRC may request Security Representative man the ENS phone)	Room 144 (Radio Room)
Emnet	Room 136 (PAR Conference Room)
Fax	Room 144 (Radio Room)
HPN	Dose Assessment Room
PAX 382	Room 124 – Part of Setup Instructions
State Hot Ringdown	Room 136 (PAR Conference Room)

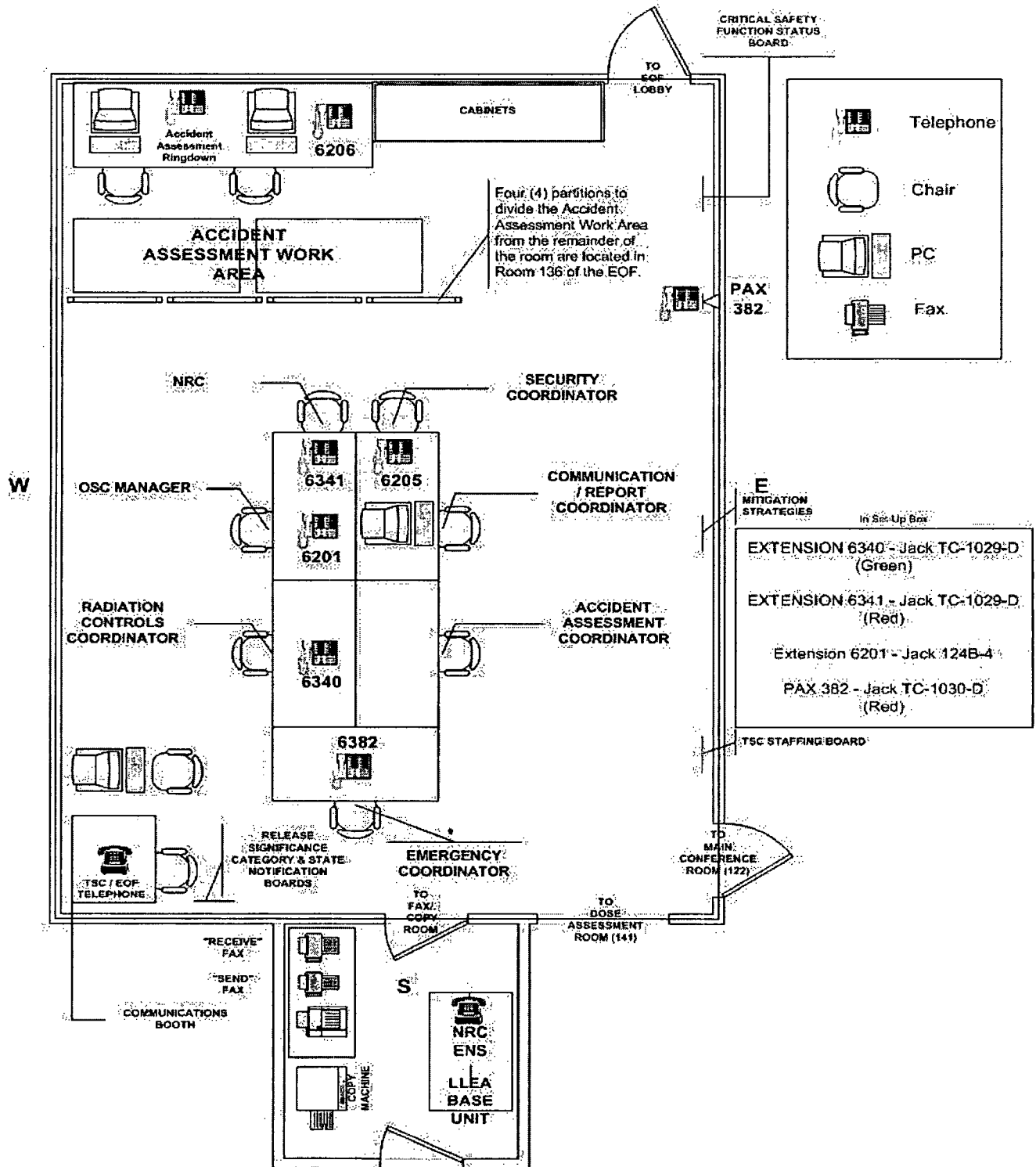
5. DECLARE the TSC operational when required TSC personnel available, **AND** communication is established with the Control Room.

**REMOTE TSC OPERATION AT THE EOF (Continued)**

**NOTE:** A Security Safeguards Cabinet is located in Room 147 (behind the Emergency News Center). Security personnel have the combination for this cabinet. Security Information located in the bottom drawer of the 2-drawer Security cabinet includes CR3 Physical Security Plan; the Safeguards Contingency Plan, SS-206, Safeguards Contingency Events and a copy of the Large Area Fire Document.

6. **CONSIDER** the following for Security Events:
  - What onsite actions need to be accomplished or verified?
  - Evacuation of Energy Complex status and Control Room access secured
  - Additional Emergency Response Organization support needed and location for additional stand-by for damage assessment
  - Security considerations identified in EM-911
7. **ASSIGN** someone to capture follow-up actions.
8. In addition to considerations for Security Event, **RETURN** to position specific instructions under Section 9.0 **AND PERFORM** Operation instructions as capabilities allow.
9. When the Security Event is terminated, coordinate with the Security Shift Supervisor the movement of TSC personnel to the onsite TSC location. This may not be achievable due to the site being a possible crime scene. This will take a coordination effort between the TSC staff, Control Room and Security.

**REMOTE TSC**  
(Recommended Layout)  
**Room 124 of the EOF**  
**N**



**INSTRUCTIONS FOR REMOTE TSC:**

1. Supplies (pens, markers, tablets) are located in the cabinet labeled "Supplies".
2. Telephones and equipment are located in the cabinet labeled "TSC Setup" cabinet (north wall). Ensure all the telephones are placed in the correct locations per the diagram and equipment/supplies are placed appropriately. Telephones **NOT** in cabinets need to be moved as indicated below:
  - a. Move Extension 6382 from Communications booth to Emergency Coordinator
2. Equipment in "TSC Setup" cabinet includes:
  - Telephones (labeled for the appropriate jack) and telephone extension cords
  - Telephone Directories
  - Desk Nameplates for Position Identification
  - Position Briefing Plaques
  - Log Books
  - TSC Position Manuals
  - Magnetic status boards (TSC Staffing, Critical Safety Function, Release Significance Category and Mitigation Strategy/Equipment OOS) are available and should be hung on the whiteboards as directed on the back of each board and on layout.
  - EM-225 laminated Enclosures
  - Laminated Flow Diagrams

**EXPLANATION OF TELEPHONE CODE:**

A telephone identification number is printed on the bottom of each telephone. This identification number indicates the room in which the telephone is to be located and the jack into which it is to be plugged. For example, telephone identification number "124-C-2" corresponds to the jack box labeled "124-C" in Room 124, and the second receptacle from the left.

**FACILITY TURNOVER / BRIEFING WORKSHEET****1. STATUS OF EMERGENCY PLAN IMPLEMENTATION**

1. TIME: Alert \_\_\_\_\_ Site Area Emergency \_\_\_\_\_ General Emergency \_\_\_\_\_
2. EALs met (EAL number or description). \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
3. Time SWO Notification Due: \_\_\_\_\_ Time NRC Notification Due: \_\_\_\_\_
4. Release Significance Category: NR ☐ <NOL ☐ NS ☐ PAG ☐
5. EM-204A Completed: Yes ☐ NO ☐
6. EM-202 EC guide completed through step \_ (fax copy)
7. Energy Complex protective actions:  
 CR3 Protected Area: None ☐ Assembly ☐ Evacuated ☐  
 Units 1, 2, 4, 5 and Energy Complex: None ☐ Assembly ☐ Evacuated ☐
8. Offsite Protective Action Recommendations (PARs) made: \_\_\_\_\_  
 \_\_\_\_\_
9. AP/EOP status (include NLO dispatches): \_\_\_\_\_  
 \_\_\_\_\_

**B. PLANT STATUS:** Degrading ☐ Stable ☐ Improving ☐

1. Is the core adequately cooled? Yes ☐ No ☐  
 Has spent fuel been damaged? Yes ☐ No ☐
2. Auxiliary Building Damage/Ventilation Challenges: \_\_\_\_\_  
 \_\_\_\_\_
3. Electrical Power Status:  
 Off-Site Power Available? Yes ☐ No ☐  
 ES Bus Energized? Yes ☐ No ☐  
 Emergency Diesel Generator Available? Yes ☐ No ☐  
 DC Power Available? Yes ☐ No ☐
4. Control Complex Status:  
 Ventilation/Cooling Available? Yes ☐ No ☐  
 Necessary instrumentation Available? Yes ☐ No ☐
5. Other Plant Conditions/Challenges: \_\_\_\_\_  
 \_\_\_\_\_
6. Request Control Room to make announcement that TSC is Operational.
7. Verify Control Room time to ensure notifications are made as required. \_\_\_\_\_

## CONTINGENCY PLAN FOR SECURING TSC AND ESTABLISHING AN ALTERNATE TSC

### EQUIPMENT AVAILABLE IN CONTROL ROOM / COMPLEX:

- a. Commercial Telephone System
- b. Company Microwave
- c. Dose Assessment Ringdown Telephone
- d. State Hot Ringdown
- e. Florida Emnet
- f. Emergency Notification System (ENS)
- g. PAX System
- h. Accident Assessment Ringdown
- i. Portable Transceivers (as assigned by the EC)
- j. PICS
- k. RASCAL (on computer in the office adjacent to the Control Room)
- l. Telecopy machine (Fax)

### BEFORE GOING TO ALTERNATE TSC LOCATION

**CHECK**

- a. IDENTIFY minimum staff necessary based on plant conditions.
- b. CONSIDER taking items identified with "\*" on list of TSC cabinet.
- c. TAKE satellite phone(s) if conditions warrant.

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### STEPS TO SECURE TSC IF STORM SURGE IS EXPECTED

**CHECK**

- a. PLACE high value items on tables:
  - Computers and peripherals
  - Communication equipment
  - Anything else that can be placed on tables
- b. ENSURE appropriate implementation of EM-220A, EM-220C.
- c. RELOCATE to Alternate TSC and ENSURE plant personnel/Security is informed of new TSC/OSC location.

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## Summary of Changes

PRR 604335

- NOTES:** 1. Procedure Sponsor: Ensure that any changes to EM-102 that affect information contained in ERF posters, Enclosures, briefing cards, guidelines, etc. are made to those items as well.
2. Procedure Sponsor: Changes to certain parts of EM-102 may impact other EPIPs. Specifically, if any changes are made that impact: EM-104, Enclosure 2, EM-202, Enclosure 2, EM-210A, Section 4.2, EM-225, Attachment 12, and EM-401, Enclosure 7, ensure appropriate PRRs are initiated as needed.

SECTION/STEP	CHANGES
Throughout	<p>This revision implements Decommissioning Transition Organization (DTO) reductions to the TSC/OSC staff as summarized below and detailed in the changes for individual steps. Several changes unrelated to DTO are also addressed as noted.</p> <p>The TSC Repairs Coordinator position is being eliminated and the OSC Manager will become the minimum staff position and assume the functions. This is the only change to ERO minimum staff positions.</p> <p>The TSC NRC Liaison/Assistant Emergency Coordinator position becomes discretionary. The Emergency Coordinator will retain the functions and delegate as desired.</p> <p>The TSC Status Board Keeper position is being eliminated and the Radiation Controls Coordinator, the Communications/Reports Coordinator, and Accident Assessment Coordinator will assume the functions with the Emergency Coordinator maintaining oversight.</p> <p>The TSC Recall/SPDS Data Specialist position is being eliminated. The action for this position was already included in the Accident Assessment Coordinator instructions.</p> <p>The TSC NRC Communicator position becomes discretionary or as needed based on NRC response. There are no specific responsibilities assigned in EM-102. They are in EM-225. EM-102 mentions this position only in the instructions for the Communications/Reports Coordinator to ensure the function is being performed as needed.</p> <p>The TSC HPN Communicator position becomes discretionary or as needed based on NRC response. The action for this position was already included in the Radiation Controls Coordinator instructions.</p>
2.1.26, 6.2.5	Added NOCS 100521. (PRR 545773, CR 539068-30)
4.0.1.d	Replaced Repairs Coordinator with OSC Manager.

4.0.2	As noted below, deleted steps 4.0.2.b, 4.0.2.c, and 4.0.2.e and relabeled remaining steps in the section.
4.0.2.a	Noted "if assigned" with the responsibilities assigned to the NRC Liaison/Emergency Coordinator assistant.
4.0.2.b	Per DTO, deleted HPN Communicator responsibility listing. This was already included in the Radiation Controls Coordinator instructions. Under the DTO, this position becomes discretionary.
4.0.2.c	Per DTO, deleted the Status Board Keeper responsibility listing and moved applicable details to the Radiation Controls Coordinator instructions.
4.0.2.e	Per DTO, deleted the Recall/SPDS Data Specialist responsibility listing. The action for this position was already included in the Accident Assessment Coordinator instructions.
6.1.2, 9.2.2.7	Added provision to arrange for CO2 monitoring if the HVAC system malfunctions while the TSC/OSC is occupied. PRR 582674
6.1.9	Added a Limit and Precaution for determination of Release Significance Category based on CR3's permanently defueled condition.
6.2.3	Replaced reference to TSC/OSC aperture card reader with Nuclear Administration Building aperture card reader. The Cannon machine in the TSC is unreliable and obsolete. Radiological concerns that would limit travel outside the facility are significantly reduced. (PRR 623993)
9.0.2	Replaced Repairs Coordinator with OSC manager.
9.1.1.2, 6th bullet	Replaced Repairs Coordinator with OSC manager.
9.1, 9.2, 9.4	Corrected Continuation heading section number. Added Continuation heading subsection.
9.1.2.3	Added referenced to Attachment 1 Facility Turnover /Briefing Worksheet to remind the EC to communicate key information to TSC staff. (CR 573127-34)
9.1.2.5	Revised reference to "NRC Liaison" to "assistant." Per the DTO, the NRC Liaison/Assistant EC position is being deleted. This position becomes discretionary.
9.1.2.15	Created sub-step and moved IF/THEN statement to it for human factoring.
9.1.2.22	Added new EC instruction to "ASSIGN as needed personnel to assist NRC response personnel per section 4.2.a." Per the DTO, the NRC Liaison/Assistant EC position is being deleted. This position becomes discretionary.

9.1.2.23	Added new EC instruction to "ENSURE request is made for supplemental support of the Site Emergency Response Coordinator at a General Emergency and to STAGE the ERC in the CR-3 Control Complex to assist with fire response, confined space rescue, high-angle rescue, and medical emergencies. NOTIFY the TSC Security Coordinator to allow ERC access to CR-3." This responsibility rolled from the OSC Fire Assessment position deleted by the DTO.
9.1.5.5	Changed reference to EM-220 to EM-220A. (PRR 599419)
9.2.2.1	Added to 3rd bullet for the Radiation Controls Coordinator to ensure meteorological data and Release Significance Category is updated on the status board since the Status Board Keeper position is eliminated under the DTO.  Added to 4th bullet, a reference to Enclosure 3 for typical requested information over HPN and ENS phone lines (moved from 4.0.2.b).
9.2.2.5	In the Radiation Controls Coordinator instruction to update Release Significance Category, deleted the need to get core status as it does not apply to a permanently defueled condition. Release Significance Category guidance was added in step 6.1.9.
9.2.2.17	Added EOF Radiation Controls Manger in the Radiation Controls Coordinator instruction to provide updates to Accident Assessment on radiological/plant conditions. Also added to communicate Auxiliary Building damage/ventilation status and changed RCS reference to spent fuel as RCS is no longer relevant. (CR 573127-34)
9.3.2.4, 5 <sup>th</sup> bullet	Spelled out TST (Technical Support Team).
9.3.2.4, 7 <sup>th</sup> bullet	In the Accident Assessment Coordinator instruction for information to provide, replaced core status with spent fuel status.
9.3.2.4, 9 <sup>th</sup> and 11 <sup>th</sup> bullets	Replaced Repairs Coordinator with OSC manager.
9.4 and Table of Contents	Replaced Repairs Coordinator with OSC Manager as the title and position performing this section. Deleted instructions directing communications between the Repairs Coordinator and the OSC Manager.
9.4.2	Removed all "original" Repairs Coordinator duties and added statement that OSC manager duties are as described in EM-104, Operation Of The Operational Support Center (OSC). Statement now says, "All duties of OSC Manager are as described in EM-104, Operation Of The Operational Support Center (OSC)."

9.5.1.2	Restated bullets in the format of instructions to "ENSURE readiness to prepare" State and NRC notification forms. Changed 2nd bullet caveat "if Accident Assessment Team NRC Communicator has not assumed responsibility," to "if a NRC communicator has not be designated." The DTO eliminates the NRC Communicator ERO position.
9.5.1.3	Capitalized action word "MAKE."
9.5.2.6	Deleted instruction to "ENSURE the Accident Assessment Team NRC Communicator is completing notifications and PREPARE Reactor Plant Event Notification Worksheet, as needed." This is addressed in 9.5.1.2. Renumbered remaining steps in the section.
9.5.2.6 (new)	Added guidance for notification of ANI. (Based PRR 497302. This PRR subject is applicable, but was written for EM-202.)
9.5.2.7 (new)	Deleted reference to the TSC/EOF Telephone and revised step to ensure once EOF is operational, a communications link between the EOF and TSC is established. In the second action of the step, revised to update the status board instead of the Status Board Keeper on Protective Action, State and County actions received from the EOF as the DTO eliminates this position.
Enclosure 1, page 1 of 1	In Main TSC: - Deleted NRC Liaison. Replaced Repairs Coordinator with OSC Manager. Deleted the EOF/TSC phone, which is no longer used, and Aperture card file and reader, which are no longer used. The card file and reader in the NAB will now be used.  In OSC Leadership and Support Room: Deleted Maintenance Coordinator, Chemistry Coordinator, Fire Assessment, Administrative Support and Planner/OSC Engineer.
Enclosure 2, Page 1 of 2	Updated TSC/OSC organizational chart.
Enclosure 2, page 2 of 2	Updated the TSC staffing: -Deleted the following functions: NRC Liaison/Assistant Emergency Coordinator TSC/EOF Communicator HPN Communicator Computer Specialist - Changed Repairs Coordinator to OSC Manager. - Changed number of Accident Assessment Communicators to 2 as the DTO eliminates the NRC (ENS) Communicator. -Changed ESV to EST
Enclosure 3 page 1 of 2	Deleted reference to NRC Liaison.

Enclosure 4, page 1	Replaced Repairs Coordinator in two places with OSC Manager.
Enclosure 4, page 3 of 3	Removed instructions for connecting the AARD speaker since the AARD phone is now installed on the breakroom wall, and removed wording depicting speaker in the drawer. (PRR 476569)
Enclosure 5, page 1 of 4	The table below "TSC/EOF Counterpart positions": Replaced Repairs Coordinator with OSC manager.
Enclosure 5, page 3 of 4	Replaced Repairs Coordinator with OSC Manager on Remote TSC layout.
Enclosure 5, step 9	Added that the EC coordinates with Security when needing to move people during a security event. (PRR 536878)
Attachment 1	<p>Facility Turnover/Briefing Worksheet revised for permanently defueled condition. (CR 573127-34)</p> <p>Item A.4: Deleted PAG Release Significance Category (see 6.1.9).</p> <p>Item A.9: replaced "EOP status" with "AP/EOP status".</p> <p>Item B: Changed "Core Status" to "Plant Status."</p> <p>Item B.1: Changed "Is the reactor shutdown?" to "Is spent fuel adequately cooled?" and "Has spent fuel been damaged?"</p> <p>Item B.2: Changed "Is the core adequately cooled?" to "Auxiliary Building Damage/Ventilation Challenges."</p> <p>Item B.3: Deleted "Is containment intact?" and renumbered remaining items.</p> <p>Item B.6: Clarified this item refers to control room "clock" time.</p>
Attachment 2	Changed reference to EM-220 to EM-220A and EM-220C. (PRR 599419)



1242  
R  
Reference  
Use

DUKE ENERGY  
CRYSTAL RIVER UNIT 3

PLANT OPERATING MANUAL

**EM-104**

**OPERATION OF THE OPERATIONAL SUPPORT CENTER (OSC)**

REVISION 16

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## 1.0 PURPOSE [R1]

### 1.1 OSC Function

1. Provide instructions for the activation and operation of the Operational Support Center (OSC).
2. Provide a point of assembly for emergency response teams assisting the Technical Support Center (TSC) in managing repair and monitoring activities during an emergency.
3. Provide planning, briefings and dispatch of emergency team personnel to areas evacuated during emergency conditions and areas where the radiological conditions warrant.
4. This procedure is an Emergency Plan Implementing Procedure (EPIP) and any revisions must be carefully considered for emergency plan impact.

### 1.2 General Information

1. The Primary OSC is co-located at the bottom of the northeast corner of the berm with the TSC, and is activated whenever an Alert, Site Area Emergency, or General Emergency is declared. The Alternate OSC is located on the 124' Elevation of the Control Complex and is used when conditions (radiological, weather-related, etc.) require evacuation of the Primary OSC. The Remote OSC is located at the SAB, a warehouse, the EOF or other location designated by the OSC Manager and is used during a Security Condition to provide for safety of the ERO staff and teams.
2. The OSC receives direction from the TSC concerning activities and priorities.
3. Notification for activation of the OSC is by any combination of activation of the Emergency Response Organization Notification System (ERONS) (automated phone calls, text messages and PA announcements) or manual callout. Enclosure 1 illustrates the layout for the OSC.
4. The Radiation Monitoring Teams, Sampling Team, Emergency Repair Team, and additional Operations personnel are based and operate from the OSC.
5. The OSC maintains full accountability for personnel dispatched from the OSC.

## 2.0 REFERENCES

### 2.1 Developmental References

1. 10CFR50.47, Emergency Plans
2. 10CFR50, Appendix E, Emergency Planning and Preparedness for Production and Utilization Facilities
3. EM-102, Operation of the Technical Support Center
4. EM-103, Operation and Staffing of the CR3 Control Room During Emergency Classifications
5. EM-206, Emergency Response Organization Notification
6. EM-210A, Duties of the Radiation Monitoring Team: CR-3 and Energy Complex Personnel and Area Monitoring
7. EM-210B, Duties of the Radiation Monitoring Team: Environmental Sampling and Plume Tracking
8. HPP-409, Inventory and Availability of Emergency Supplies/Equipment
9. Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, EPA-400-R-92-001, Environmental Protection Agency (October, 1996)
10. NUREG-0654, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants
11. Radiological Emergency Response Plan
12. **[R1]** NOCS 1031, Operation of the OSC
13. **[R2]** NOCS 1126, Emergency Kits
14. **[R3]** NOCS 24130, Alternate OSC Location
15. **[R4]** NOCS 24200, Emergency Kits
16. **[R5]** NOCS 24290, Environmental Survey Team Vehicle

### 3.0 DEFINITIONS

1. **Activation** - An ERO notification system message or manual callout that directs emergency response personnel to respond to their designated emergency response facility for staffing and operation.
2. **Emergency Response Team Roster** - List of current qualified emergency team members. The Roster identifies qualified Emergency Repair Team, Sampling Team, Radiation Monitoring Team members and other qualified emergency responders.
3. **Operational** – The OSC is operational when the emergency team personnel are available to support the TSC and equipment is assembled, the OSC Manager has assumed responsibility and authority for emergency repair activities and the OSC is executing its designated emergency response functions and tasks.
4. **Qualified** - Successfully completed appropriate emergency team training and currently listed on Emergency Response Team Roster.
5. **Re-entry** - The return of personnel to an area evacuated during an emergency condition. A re-entry may be made for any one of the following purposes: 1) search for unaccounted personnel, 2) perform monitoring, sampling, operations, or repairs to minimize or eliminate the source of the emergency, 3) perform the surveys needed to assess the radiological conditions and establish exclusion area boundaries, 4) perform rescue operations, and 5) save property.
6. **Security Condition** - Any Security Event as listed in the approved security contingency plan that constitutes a threat/compromise to site security, threat/risk to site personnel, or a potential degradation to the level of safety of the plant. A SECURITY CONDITION does **NOT** involve a HOSTILE ACTION.
7. **Self-Reading Dosimetry (SRD)** - Personal Ion Chamber (PIC) or Electronic Dosimeter (ED).
8. **Team Leader** - A qualified, emergency response member performing the lead responsibilities for a dispatched emergency team.

### 4.0 RESPONSIBILITIES

1. OSC Manager – Qualified individual reporting to the TSC Emergency Coordinator managing the OSC to:
  - a. Perform duties as identified in Subsection 9.1.
  - b. Ensure OSC repair activities are performed in a safe and expeditious manner.
  - c. Coordinate with TSC staff to establish priorities for OSC activities and communicate results.
  - d. Maintain command and control of OSC activities.

- e. Coordinate and plan maintenance emergency repair and dispatch efforts.
  - f. Provide technical and administrative direction for repair activities.
  - g. Ensure a log or tape recording of repair team activities is maintained.
  - h. Coordinate and plan Sampling Team dispatch efforts.
  - i. Provide Chemistry information to the Radiation Controls Coordinator.
  - j. Provide technical and administrative support to Chemistry activities.
  - k. Provide support to obtain liquid and gas samples.
  - l. Ensures OSC Tracking Board is maintained and provides team status to TSC.
2. OSC Health Physics Coordinator – Supervisor Radiation Control or qualified Radiation Monitoring Team (RMT) member reporting to the TSC Radiation Controls Coordinator to:
- a. Perform duties as identified in Subsections 9.2 and **Error! Reference source not found.**
  - b. Coordinate and plan RMT dispatch efforts and RMT support of other emergency response teams.
  - c. Report radiological information to the TSC Radiation Controls Coordinator and update the OSC Manager on relevant radiological conditions and team status.
  - d. Ensure habitability surveys, radiological and non-radiological, are periodically performed in the TSC/OSC.
  - e. Direct the issue of dosimetry and protective equipment as required and track emergency exposure.
  - f. Ensure emergency teams are briefed on radiological conditions and limitations.
  - g. Provide technical and administrative direction to HP personnel.
  - h. Coordinate overall radiological control of RMT activities according to EM-210A.
  - i. Maintain logs or tape recordings of significant RMT activities.
  - j. Coordinate and plan Sampling Team dispatch efforts.
  - k. Provide Chemistry information to the TSC Radiation Controls Coordinator and updates to OSC Manager as needed.
  - l. Provide technical and administrative support to Chemistry activities.
  - m. Provide support to obtain liquid and gas samples.
  - n. Maintain log or tape recording of significant ST activities.

3. Operations - ERT qualified Operator reporting to the OSC Manager to:
  - a. Perform duties identified in Subsection 9.3.
  - b. Provide operator support for OSC and TSC activities.
4. Team Leaders perform the functions identified on Attachment 2, Team Briefing / Re-Entry Checklist.
5. Emergency Repair Team members repair equipment and facilities necessary to return to a safe condition.
6. Sampling Team members perform chemical or isotopic sampling and analysis.
7. Radiation Monitoring Team member responsibilities and functions are identified in EM-210A and EM-210B.
8. TSC Accident Assessment Coordinator. Maintains contact with the Main Control Room, determines priorities for OSC operators, and develops strategies for accident mitigation. Reports to Emergency Coordinator.
9. TSC Radiation Controls Coordinator. Updates and makes recommendations to the Emergency Coordinator on radiological and chemistry-related activities. Reports to the Emergency Coordinator.
10. TSC Emergency Coordinator. Provides for overall coordination and direction of emergency response and authorizes re-entries and exposure limits in excess of 5 rem TEDE. Reports to the EOF Director when EOF becomes operational.
11. Radiation Protection Sub-Unit maintains inventory of emergency kits as identified in Subsection 7.1.1.
12. Document Services / Plant Support maintain manuals, procedures, and drawings in the TSC/OSC.
13. HP Responders assist the Radiation Monitoring Teams in providing access control, in-plant / out-of-plant surveys, and personnel monitoring activities and report to OSC HP Coordinator or RMT Leader and take technical direction from an RMT member.

## 5.0 PREREQUISITES

None

## 6.0 PRECAUTIONS, LIMITATIONS, AND NOTES

1. OSC personnel follow the guidelines for exposure of emergency workers during re-entry activities as identified below or as stated on Emergency Team Authorization Form:

Dose Limit (Rem TEDE)	Activity	Condition
5	All	
10	Prevent serious injury, protect valuable property, prevent catastrophic incident	Lower dose <b>NOT</b> practicable
25	Life saving or protection of large populations	Lower dose <b>NOT</b> practicable
>25	Life saving or protection of large populations	Voluntary > 45 years old, trained, and understand radiological health risks involved

- a. Health Physics personnel provide recommended courses of action to minimize exposure.
  - b. Any exposure in excess of 25 rem TEDE should be on a voluntary basis. To perform activities outside those addressed in the above Table, personnel exposure in excess of 5 rem TEDE may be authorized by the Emergency Coordinator with guidance from the TSC Radiation Controls Coordinator.
  - c. During declared emergencies, emergency workers are allowed to receive up to 5 rem TEDE for duration of emergency regardless of normal exposure to date for the year.
2. Re-entry into any emergency evacuated areas must be authorized by the Emergency Coordinator or designee.
  3. As a group, the re-entry team is knowledgeable in Radiation Protection procedures and has capabilities in Operations and Maintenance.
  4. Maintain efforts to minimize exposure by ALARA practices.
  5. For safety reasons, an emergency team dispatched from the OSC consists of at least two persons, one being a Radiation Monitoring Team member. The OSC Health Physics Coordinator may waive the RMT member requirement when radiological conditions warrant.
  6. RMT members may be independently dispatched from the OSC to perform radiological surveys.
  7. Emergency team members must be verified as qualified by reviewing the current Emergency Call Rosters.
  8. Personnel making re-entries shall use portable survey instruments and personnel monitoring devices. RMT members accompanying other team

personnel satisfy the requirement for entering the evacuated area using portable survey instruments.

9. Emergency Operating Procedure (EOP) actions taken before the TSC is operational are exempt from the guidance of this procedure.
10. OSC Request Forms are initiated by the TSC Ringdown Communicator to document Main Control Room requests for most repair and operation activities. The TSC Radiation Controls Coordinator and OSC Manager approve the form and forward the form to the OSC for action. When the activity is complete, the TSC Ringdown Communicator provides feedback to the Main Control Room.
11. The TSC/OSC ventilation system, when in the emergency recirculation mode, includes a minimum breathing air requirement to support 50 people. Monitoring of O<sub>2</sub> and CO<sub>2</sub> must take place when the TSC/OSC is in the emergency recirculation mode and occupancy exceeds 50.
12. **IF** an exposure of 5 rem to the thyroid is received or greater than 25 rem to the thyroid is projected, **THEN CONSIDER** the administration of KI as directed by the TSC Radiation Controls Coordinator.
13. The TSC/OSC habitability boundary doors must remain tightly closed when the TSC/OSC is in the emergency recirculation mode, unless being used for ingress/egress. This is the inside door on the west end and the inside door adjacent to the Emergency Diesel Room door on the east end.
14. Each emergency team member is to report to Dosimetry before re-entry and upon completion of re-entry to verify dose margin and update individual doses records.
15. During Security events, emergency response team dispatch from the OSC / movement within the plant may need to be coordinated with the TSC Security Coordinator to ensure safety of team members.

## 7.0 SPECIAL TOOLS AND EQUIPMENT

### 7.1 OSC Equipment and Supplies

#### 7.1.1 Emergency Kits [R2/R4]

<b>NOTE:</b> HPP-409 identifies the supplies contained in the following emergency kits.
---

1. TSC/OSC Emergency Supplies
2. Decontamination Supplies
3. Environmental Survey Supplies (2 kits located in Survey Vehicle) [R5]

#### 7.1.2 Drawing / Procedure / Supply Files

1. Selected plant drawings, Plant Procedures and administrative supplies are contained in file cabinets located in the OSC. Other plant drawings are available on aperture cards in the TSC/OSC Work Area.

### 7.2 Equipment

1. Commercial Telephone
2. Microwave System
3. Public Address Exchange System (PAX)
4. Portable Transceivers set to appropriate talk groups (plant radios)
5. Electric pump
6. Portable Continuous Air Monitor
7. Tape recorder
8. Tool Box containing basic tools
9. Scrubs for modesty garments

## 8.0 ACCEPTANCE CRITERIA

None

## 9.0 INSTRUCTIONS

1. The steps under this section may be performed in any sequence.
2. Check the listing below for OSC position and refer to the designated page for instructions. Positions other than those listed below perform job functions as needed to support OSC activities and as identified under the responsibility section.

### IF YOUR OSC POSITION IS:

### REFER TO PAGE:

OSC Manager	11
OSC Health Physics Coordinator	15
OSC Operations Personnel	19
Emergency Team Members	20
Emergency Team Leader	28

## 9.1 OSC Manager

### 9.1.1 Activation

1. OBTAIN plant radios set to the appropriate talk groups for emergency use.
2. REPORT to the TSC upon the declaration of an Alert, Site Area Emergency, or General Emergency
3. BADGE-IN at TSC/OSC Card reader.
4. NOTIFY TSC Emergency Coordinator of your arrival.
5. OBTAIN procedures as needed from Procedure file cabinet.
6. VERIFY as desired the operability of communication link between TSC and OSC.
7. REPORT equipment problems/readiness to the TSC Emergency Coordinator.

**NOTE:** The OSC Manager may assign available personnel to functions until the designated personnel are available.

8. REPORT the following OSC staffing status to the Emergency Coordinator:
  - The OSC is "Operational" when it is staffed with enough emergency team personnel to support the TSC.
  - The OSC is "Fully staffed" when it is staffed with all personnel listed in Enclosure 2, OSC Staffing Levels. However, Enclosure 2 represents required staffing capabilities, not required response. Only the OSC personnel necessary to complete TSC directives need to report.
9. OBTAIN tape recorders, valve locator books, system one line switching diagram, plant layout floor maps from file drawer as needed.
10. IF emergency occurs during off-hours, **THEN NOTIFY** an adequate number of qualified ERT members to complete TSC directives.

## Subsection 9.1, OSC Manager (Cont'd)

11. UNLOCK the toolboxes in the OSC Team Room and the electric pump located in the decon shower/sink area using the key located in the file drawer.

### 9.1.2 Operation

1. DETERMINE status of repair activities already in progress. NOTIFY TSC Emergency Coordinator of repair teams in the field and ENSURE the personnel are listed on an Emergency Team Authorization form (Attachment 1, Emergency Team Authorization).
2. IDENTIFY equipment repair priorities with the TSC Emergency Coordinator and PROVIDE advice to the Emergency Coordinator on plant repairs and corrective actions as appropriate.

**NOTE:** An OSC Request Form (EM-225, Attachment 11) is initiated by the Accident Assessment Team and approved by Accident Assessment Coordinator and provided to the OSC Manager.

3. REVIEW the OSC Request Form and GIVE copy to TSC Ringdown Communicator for information.
4. COMPLETE the Emergency Team Authorization Form based on OSC Request Form OR ATTACH the OSC Request Form to Emergency Team Authorization Form.
5. CROSS-REFERENCE Form on Team Status Board in the OSC.
6. **WHEN** the activity from OSC Request Form is complete, **THEN** INFORM the TSC AAT Ringdown Communicator so feedback can be provided to the Control Room as necessary on the status of the request.
7. UPDATE the TSC Priority and Equipment Out of Service board.
8. VERIFY each ERT member is currently ERT qualified. (listed on ERT Emergency Response Team Roster)
9. CONSIDER heat stress and crew rotation needs to supplement manpower requirements.
10. COORDINATE repair activities already in progress with Maintenance Lead and ENSURE RMT coverage is provided as needed.
11. COORDINATE Sampling Team (ST) activities already in progress with OSC Chemistry Lead and ENSURE RMT coverage is provided as needed.
12. ENSURE an Emergency Team Authorization (ETA, Attachment 1)) form is written for emergency response teams in the field and teams dispatched from the OSC.
13. APPROVE appropriate ETAs <5 rem before team dispatch. CONSIDER having team members dressed out and dosimetry issued before need for dispatch once radiological conditions warrant.

#### Subsection 9.1, OSC Manager (Cont'd)

14. INITIATE log of activities to document times and results of significant OSC activities. As a minimum, include time of specific TSC requests, and time of results provided back to TSC.
15. **IF** it is determined that the TSC/OSC is to be put into emergency recirculation mode, **THEN COMPLETE** Attachment 4, TSC/OSC Emergency Recirculation Mode.
16. ESTABLISH the Decontamination Shower Storage Tank sump connections for processing of contaminated water as needed. The electric sump pump is in the decontamination shower / sink area. REFER TO Attachment 5, Instructions for Hooking-Up and Pumping into Decontamination Shower Storage Tank for guidance on set-up.
17. AUGMENT OSC staff as needed (refer to Enclosure 2 and/or EM-206, Emergency Response Organization Notification), and when available, DISPATCH appropriate team members to the Control Complex ~~when available,~~ as the Control Complex Emergency Repair Team. This team remains in the Control Complex taking direction from the OSC Manager as prioritized by the TSC.
18. CONDUCT briefings, as needed, with OSC personnel to ensure awareness of plant conditions. UPDATE Control Complex Repair Team as needed.
19. Upon request from the TSC for team dispatch, COORDINATE with the OSC Health Physics Coordinator, Maintenance Lead, or Chemistry Lead and ENSURE the requested activity is planned consistent with directions from the TSC.
20. **WHEN** the activity is planned and the appropriate Team Leader identified, **THEN ENSURE** briefings with Health Physics are conducted according to Attachment 2, Team Briefing / Re-Entry Checklist.
21. COORDINATE OSC Operator dispatch with the TSC Accident Assessment Coordinator.
22. UPDATE OSC Team Status Board and PROVIDE information to the TSC.
23. **IF** Operations personnel are dispatched from the Main Control Room, instead of from the OSC, **THEN DISPATCH** an RMT member / HP Technician with them as needed, **AND ENSURE** they are informed of the briefing discussion.
24. ENSURE teams hold post-job briefings with respective Leads as appropriate upon return to the OSC and DOCUMENT the results in logs or on tape.
25. UPDATE the TSC Emergency Coordinator of OSC activities (Team dispatch, problems and activity results as appropriate)
26. COORDINATE a shift relief rotation for OSC personnel as appropriate and PROVIDE shift turnover to the on-coming shift.

**NOTE:** Evacuated maintenance personnel at the Main Assembly may be reached by contacting the Main Assembly Area Supervisor using the phone number from the Emergency Response Facility Telephone Directory.

27. **IF** required, **THEN** relocate additional team members to 124' elevation level of the Control Complex before evacuation of the Energy Complex.
28. **IF** required, **THEN** INITIATE Alternate OSC relocation according to Attachment 3, Contingency Plan for Securing OSC and Establishing an Alternate OSC if requested by Emergency Coordinator or designee. [R3].
29. **IF** the event is based on a Security Threat where personnel safety is required, **THEN** designate a Remote OSC for management team and support functions. The location could be the SAB, a warehouse, the EOF or other location where communications could be established with the Emergency Coordinator.
30. MAINTAIN contact with and DIRECT Emergency Repair Teams.
31. IDENTIFY parts, tools, and support needs **NOT** available on-site to the Materials Manager in the EOF.
32. DIRECT the Team Leader to document the results of the repair on tape or in a log book for each emergency repair upon return to the OSC. RECORD sufficient information to be able to document work activity after the emergency.

#### 9.1.3 OSC Request Forms

1. **WHEN** an OSC Request Form is received from the TSC, **THEN** DISPATCH appropriate team according to this procedure.
2. **IF** the OSC Request Form has detailed instructions, **THEN** CONSIDER attaching a copy to the Emergency Team Authorization form.
3. REFERENCE the OSC Request Form number on the Team Status Board.
4. Upon completion of the task / activity, NOTIFY the TSC Ringdown Communicator to provide feedback to the Main Control Room on the status of the request.

#### 9.1.4 Deactivation

1. DEACTIVATE the OSC, when directed by the Emergency Coordinator or designee.
2. RETURN equipment and supplies to storage location.
3. ASSEMBLE logbooks and any other documentation generated during the emergency for collection by Emergency Preparedness personnel.

## Subsection 9.2, OSC Health Physics Coordinator (Cont'd)

### 9.2 OSC Health Physics Coordinator

#### 9.2.1 Activation

1. OBTAIN HP master key from HP Office for use by re-entry teams and a plant radio and REPORT to the OSC upon the declaration of an Alert, Site Area Emergency or General Emergency .
2. BADGE-IN at TSC/OSC Card reader.
3. NOTIFY OSC Manager and TSC Radiation Controls Coordinator of your arrival.
4. OBTAIN procedures as needed for HP and Chemistry.
5. **IF** emergency occurs during off hours, **THEN** NOTIFY an adequate number of qualified RMT and ST members to report to the OSC. REFER TO Enclosure 2 for staffing level and the Emergency Response Team Roster, located in file drawer, for qualified members.
6. VERIFY operability of communication links to the TSC Radiation Controls Coordinator.

#### 9.2.2 Operation

**NOTE:** RMT members dispatched to the Main Assembly Area for survey of personnel may be reached by contacting the Main Assembly Area Supervisor using the phone number from the Emergency Response Facility Telephone Directory.

1. COORDINATE the initiation of an Emergency Radiation Work Permit (ERWP) with the Radiation Controls Coordinator and according to Attachment 6, Emergency Radiation Work Permit and Enclosure 5, ERWP Guidance.
2. OBTAIN EC or designee approval for ERWP.
3. LIST RMT members performing surveys and monitoring activities up to 5 rem on a separate, approved ETA form and POST until conditions warrant EC approval for > 5 rem (TEDE).
4. COORDINATE RMT members needed by other teams in the plant with OSC Manager. These may include EOP actions, depending on the length of the EOP action.
5. IDENTIFY ST members in the plant, supporting the emergency, to the OSC Manager and ENSURE they are listed on an Emergency Team Authorization (ETA) form (Attachment 1, Emergency Team Authorization).
6. VERIFY each RMT and ST member is currently qualified (listed on RMT and ST Emergency Response Team Rosters).
7. COORDINATE dispatch of ST and OSC Manager.
8. INITIATE periodic CO<sub>2</sub>/O<sub>2</sub> sampling according to EM-210A, Section 4.2 when the TSC/OSC is in the emergency recirculation mode and occupancy exceeds 50 personnel.
9. ESTABLISH controlled access into radiation areas as required by procedures.

Subsection 9.2, OSC Health Physics Coordinator (Cont'd)

10. ASSIGN when available, an RMT member to the Control Complex Emergency Repair Team to take direction from the OSC HP Coordinator as needed.
11. UPDATE the large OSC survey maps as needed. (i.e. radiological data, wind direction).

9.2.2, Operation (Cont'd)

12. COMPLETE items listed on Attachment 1 of EM-210A, Radiation Monitoring Team Checklist.
13. ENSURE TLDs are provided for all team members that report to the OSC and for teams already dispatched.
14. PROVIDE OSC Manager with periodic updates on radiological conditions.
15. Upon request from the TSC, IDENTIFY a Team Leader and PLAN identified radiological monitoring or survey activity.
16. ASSEMBLE RMT personnel and ensure an appropriate briefing is held. CONSIDER performing a "generic" briefing for all team members at OSC.
17. WRITE an Emergency Team Authorization (ETA) form (Attachment 1 and Enclosure 4) for emergency response teams in the field and teams dispatched from the OSC.
18. IF Operators are **NOT** available at the TSC/OSC, **AND** Operators are dispatched from the Control Room to perform an action or join a reentry team from the OSC, **THEN** COORDINATE a briefing or meeting place with the OSC.
19. ASSIGN an RMT member for each re-entry, when conditions warrant, to assist in preparation and job coverage.
20. UPDATE responding emergency team members on changing radiological conditions affecting the team.
21. MAINTAIN awareness of OSC personnel radiation exposure status and INFORM the TSC Radiation Controls Coordinator of personnel approaching 5 rem (TEDE) exposure limits.
22. INFORM the TSC Radiation Controls Coordinator if radiological conditions are such that Security personnel should prepare for suspension of safeguards in areas affected by radiological releases.
23. INFORM the TSC Radiation Controls Coordinator if any team member's thyroid dose of 5 rem is reached. UPDATE as needed until the magnitude of projected thyroid dose reaches 25 rem thyroid.
24. OBTAIN KI located in TSC Cabinet H (Main Conference Room) and DISTRIBUTE to OSC personnel when authorized by Section 9.3.3.
25. UPDATE the TSC Radiation Controls Coordinator of RMT activities and dose rate survey results. DOCUMENT times of significant dose rate results.
26. ESTABLISH a log of activities documenting time the TSC requests chemistry samples, time the sample is pulled and time results are given to the TSC.
27. DESIGNATE a ST Team Leader to plan ST activities.

Subsection 9.2, OSC Health Physics Coordinator (Cont'd)

28. ASSEMBLE appropriate team personnel and PERFORM a briefing according to Attachment 2, Team Briefing/Re-Entry Checklist.
29. PROVIDE technical and administrative support to chemistry activities.
30. ENSURE the Sampling Team continues to perform chemical or radiological liquid and gas samples for fuel damage assessments as requested.
31. MAINTAIN communication with the TSC Radiation Controls Coordinator, providing updates on Sampling Team activities as appropriate.
32. MAINTAIN contact with dispatched Sampling Team.
33. CONDUCT a post-job briefing and DOCUMENT sample results.

9.2.3 Administration of Potassium Iodide (KI)

**CAUTION**

KI distribution is a supplemental strategy to be considered along with other protective measures. The use of KI can significantly reduce the number of thyroid nodules resulting from the ingestion of radioiodines; however, it has **NO** impact on immediate health effects and only a moderate impact on delayed cancer deaths.

1. Upon receipt of in-plant and/or offsite radioiodine data, REQUEST the TSC Radiation Controls Coordinator to DETERMINE the need for KI and AUTHORIZE its use as following guidance:
  - a. **IF** radioiodine will be a contributor to the release dose, **THEN** KI should be considered for the worker.
  - b. KI is 90% effective in blocking the uptake of radioiodine by the thyroid if administered within the first hour of uptake and is 50% effective if administered within four (4) hours after uptake.
  - c. KI remains 80% effective in blocking the uptake of radioiodine when taken as long as 20 hours **before** the exposure.
  - d. Minimal benefit is obtained if KI is administered >10-14 hours after exposure and therefore should **NOT** be administered beyond this exposure period.

Subsection 9.2, OSC Health Physics Coordinator (Cont'd)

9.2.3 Administration of Potassium Iodide (KI) (Cont'd)

2. ISSUE the KI as follows:

**CAUTION**

Potassium Iodide shall **NOT** be administered to individuals who have known allergies to iodide substances, such as shellfish, or who have medical conditions, such as Graves' disease, thyroid nodules, or Hashimoto's thyroiditis due to the potential severe side effects.

- a. BRIEF personnel on the use and consequences of KI before distribution. This briefing is **NOT** required for personnel screened annually as part of continuing training. USE the package insert.

**NOTE:** Authorization for the distribution of Potassium Iodide (KI) may be approved verbally for Environmental Survey Teams.

- b. COMPLETE Attachment 7 (Potassium Iodide Administration Form).
- c. REQUEST the TSC Radiation Controls Coordinator AUTHORIZE the administration of KI by signing Attachment 7, **Error! Reference source not found.**, and NOTIFY the Emergency Coordinator that KI was administered to ERO members. This may be accomplished during a facility update briefing.

**NOTE:** Expired KI tablets as indicated by the manufacturer's recommendations shall **NOT** be issued.

- d. PROVIDE one 130 mg tablet to each individual who is to receive KI.
- e. CONTINUE DISTRIBUTING one 130 mg KI tablet daily for a minimum of three days (if exposed to radioiodines) but STOP distributing tablets at 10 days unless approved by the company's designated physician.
- f. **IF** Emergency Response Organization (ERO) members have sensitivity to KI, **THEN** do **NOT** administer KI or dispatch the team member where radioiodine is a major contributor to the release dose.
- g. RETURN completed records to the TSC Radiation Controls Coordinator.
- h. PERFORM follow-up whole body counts and bioassay analysis on those emergency workers using thyroid-blocking agents as determined by the company's designated physician.
- i. FORWARD completed documents to the TSC Radiation Controls Coordinator, as applicable, who reviews and submits all records to Document Services.
- j. CONTACT the company's designated physician and request follow-up care and definitive guidance concerning KI administration.

### 9.3 Operations Personnel

#### 9.3.1 Activation/Operation

**NOTES:**

1. ERT qualified operators respond to the OSC during an Alert, Site Area Emergency and General Emergency as soon as available to support OSC re-entry and Main Control Room / Accident Assessment activities.
2. Operators assigned to the OSC are under the direction of the OSC Manager. The OSC Manager coordinates Operator actions through the TSC Emergency Coordinator to ensure the TSC Accident Assessment Coordinator is aware of and agrees to the dispatch.

1. NOTIFY the OSC Manager **AND** TSC Accident Assessment Coordinator of your arrival.
2. COORDINATE activities with OSC Manager and ENSURE before dispatch from the OSC you are briefed according to Attachment 2, Team Briefing / Re-Entry Checklist, and FOLLOW instructions for Emergency Teams.
3. When possible, MONITOR Accident Assessment Ringdown and provide updates of plant conditions to OSC Manager.
4. REFER to EM-103, Enclosure 1 for operator dispatch guidance, as necessary.

## 9.4 Emergency Team Members

### 9.4.1 Activation

**NOTE:** Emergency team responders, unless pre-identified to report to an Emergency Response Facility, must report to appropriate Local Assembly Area during an Alert declaration. For on-shift personnel performing assigned actions to mitigate the emergency, they may continue with the assigned duties unless evacuated and listen for further instructions over the PA system.

1. REPORT to the OSC upon assignment to respond as an emergency team member.
2. REPORT directly to the OSC for assignment as an emergency team member upon the declaration of a Site Area Emergency or General Emergency.
3. BADGE-IN at TSC/OSC Card reader.
4. NOTIFY the OSC Manager of your arrival.
5. REMAIN in OSC Team room until requested for emergency response.
6. FOLLOW instructions of the OSC Manager.

### 9.4.2 Operation

1. Upon formation of an emergency team, the following occurs:
  - a. The Radiation Monitoring Team members will:
    - 1) COMPLETE the Emergency Team Authorization form (Attachment 1 and Enclosure 4) according to the requirements of the Emergency RWP (Attachment 6 and Enclosure 5) and any instructions stated during the briefing.
    - 2) ENSURE team members follow the instructions stated on the ERWP and ETA.
    - 3) REPORT any problem or hazard encountered along the route traveled or during the mission of that team.
    - 4) ABORT the re-entry if physical or radiological conditions deteriorate or exceed the limits set, or if communications are lost between the Team Leader and the OSC and re-locate to a safe area or find another communication systems to re-establish communications with the OSC.
    - 5) UPDATE team member dose records.
    - 6) PERFORM radiological duties, as required, according to EM-210A.

## Subsection 9.4, Emergency Team Members (Cont'd)

### 9.4.2 Operation (Cont'd)

#### **CAUTION**

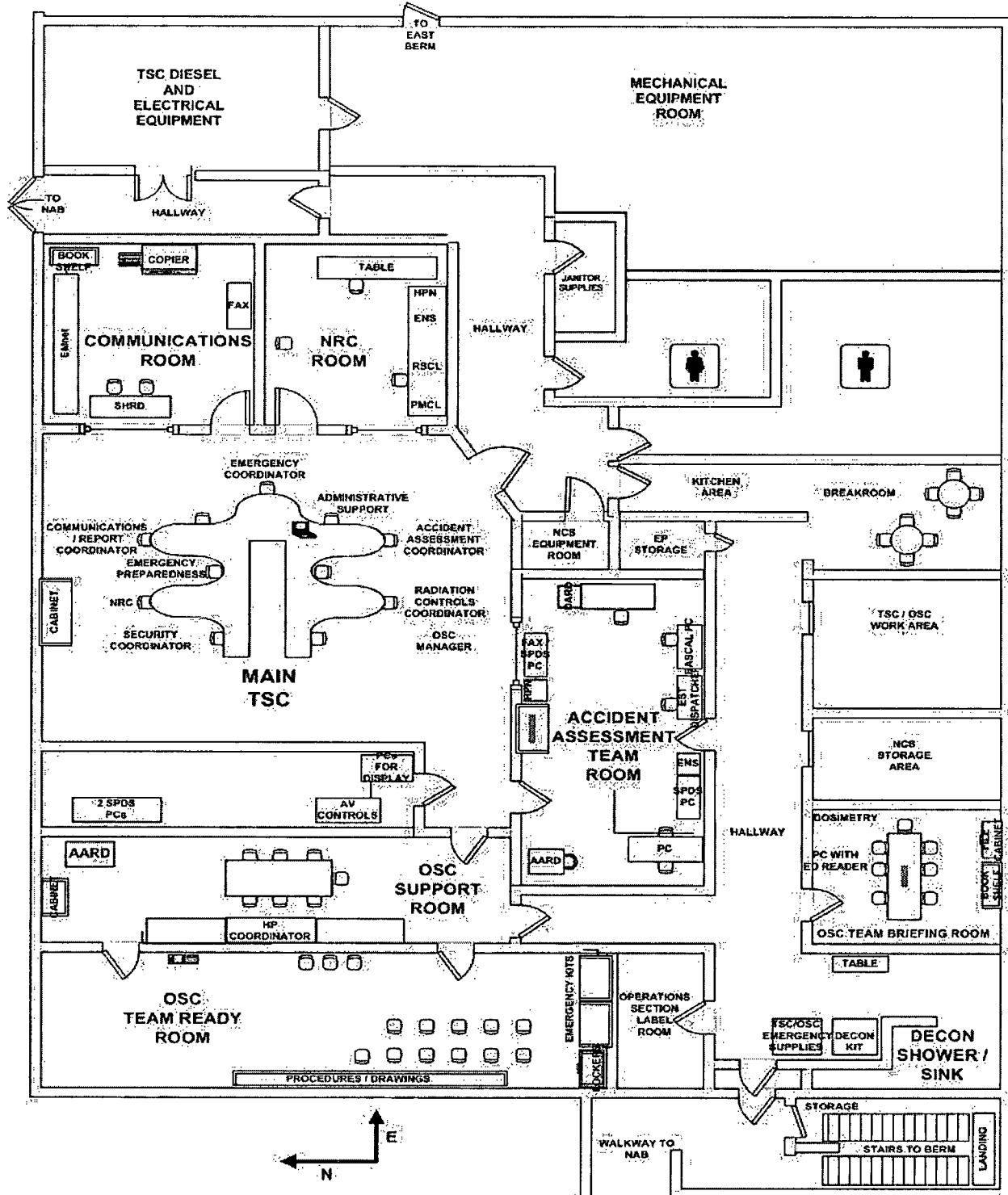
Deviating from a planned route, unless specifically directed due to unanticipated conditions, rescue, or to perform an activity that would minimize the emergency condition, could result in personnel injury or increased radiological dose.

- b. The responding emergency team will:
- 1) ATTEND briefing according to Attachment 2, Team Briefing / Re-Entry Checklist.
  - 2) OBTAIN respiratory devices, dosimetry, protective clothing, and portable survey instruments required by the Emergency Team Authorization.
  - 3) RE-ZERO dosimetry as needed.
  - 4) PROCEED to designated area following the pre-determined route, observing all written and/or verbal precautions.
  - 5) PERFORM designated work per written procedures or as discussed in briefing.
  - 6) Routinely EVALUATE exposures during the re-entry as directed by the RMT member or Emergency team Authorization form.
  - 7) OBTAIN as much information as possible along the route, such as physical plant conditions, equipment damage or radiological data.
  - 8) RETURN to point of departure via the same predetermined route taken above unless given other instructions.
  - 9) RETURN to the OSC after completion of assigned tasks and FOLLOW the directions of the RMT member at the control point.

## 10.0 RECORDS

No records are generated by this procedure.

# PRIMARY OSC FLOOR PLAN (Recommended Layout)



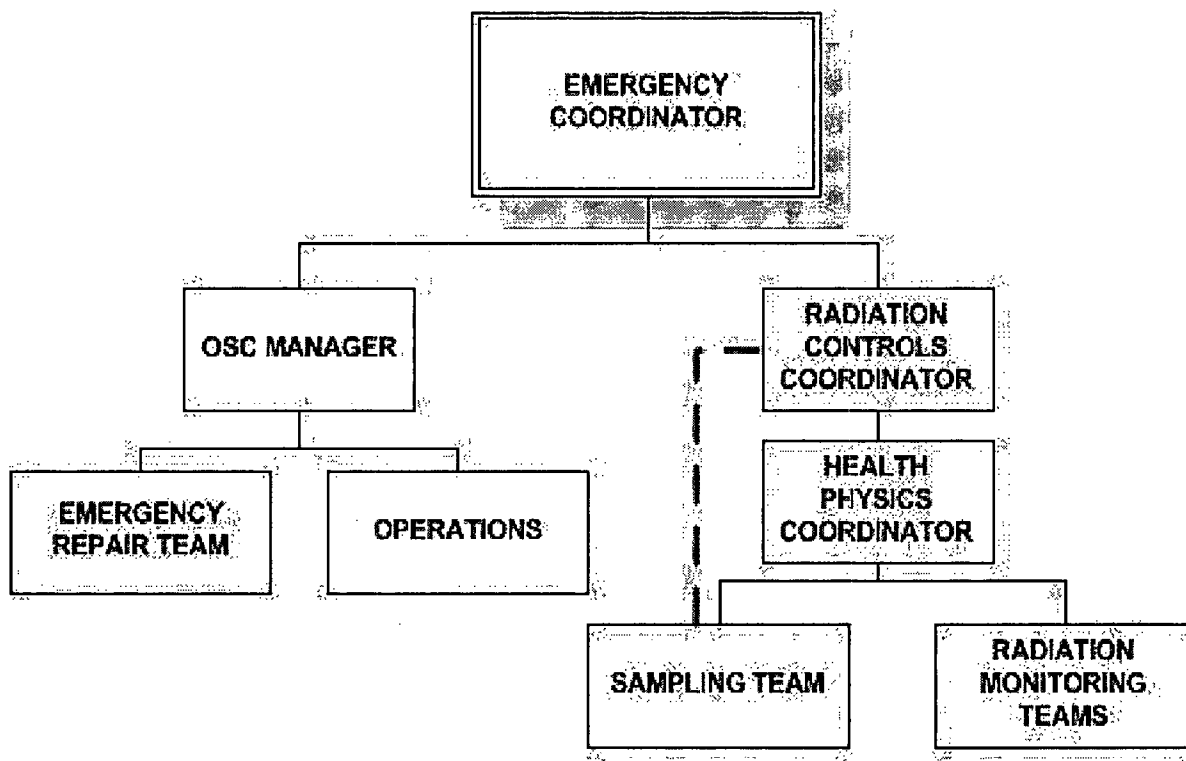
**OSC STAFFING LEVELS**

(Telephone numbers listed in Emergency Telephone Directories and on Emergency Team Rosters.  
Engineering contact list in OSC file drawer "E")

Emergency Response Teams	Required Coverage		Recommended Additional
	30 minute	60 minute	
Radiation Monitoring Teams (Perform in-plant Surveys)	6*	6*	
Sampling Team (chemistry / radiochemistry)		1	1
Emergency Repair Team			
• Electrical	1	1	
• Instrument & Controls Technician	1		
• Mechanical		1	1
Operators (when available and/or released from the MCR)		1	1
OSC Manager			1
OSC Health Physics Coordinator			1
Fire Brigade (and for rescue and as needed)	5	5	

\* Three 30-minute positions and three 60-minute positions can be HP Responders.

# OSC ORGANIZATION CHART



Dotted line represents lines of communications

**EMERGENCY TEAM AUTHORIZATION (ETA) GUIDANCE****A. Purpose**

To authorize the dispatch of a designated team of personnel from the OSC for the performance of specific emergency related tasks.

**B. Contents**

1. Type of team dispatched and number– Include type of team and team number (ERT-2, ST-1, RMT-1)
2. Reason for entry – A brief description of why the team is dispatched.
3. Radiological Conditions – The anticipated conditions the team may encounter during the re-entry. **IF** the ETA is for tracking personnel only (**NO** radiological conditions exist), **THEN** check box for accountability purposes only.
4. Instructions from Briefing – Include a brief description of the task the team is to perform, if **NOT** indicated in "Reason for Entry." Add telephone number of the OSC Manager.
5. Equipment Used – Identify protective equipment to be used by personnel assigned to the team involved in the re-entry.
6. Dose limit for entry and approval – The OSC HP Coordinator approves the dose limit applicable to each of the team members up to and including 5 rem. If greater than 5 rem, this step can be N/A as approval is from the Emergency Coordinator (Step 9). Because of the health risks associated with the dose limit, lifesaving missions should be undertaken by volunteers (healthy and above the age of 45) who have an understanding of the health risks and preferably by those whose normal duties have trained them for such missions. The Maximum Anticipated Dose Rate is the dose rate used to determine the dose limit for the re-entry (dose rate X work time). The Re-Entry Abort Dose Rate is the Cut and Run number determined for that re-entry.
7. Emergency Worker Exposure Calculation: **IF NO** core melt, **THEN** TEDE = ED Dose; **IF** core melt, **THEN** TEDE = ED Dose times five.
8. Emergency Team Personnel – List team members assigned to re-entry, time leaving OSC to return to evacuated area (INTO), and time the team returns to the OSC from the evacuated area (OUT).
9. Re-entry Approval – Signed by the EC or Radiation Controls Coordinator if > 5 rem (TEDE) and delegated to the OSC Manager for up to and including 5 rem (TEDE), designating that the re-entry for the team is authorized.

**C. Development and Approval**

1. After selecting team members, prepare for dispatch by addressing such items as tools needed, scope of task, review of procedures applicable to task and assigning specific tasks that may increase the effectiveness and speed of the task completion (see Attachment 2).
2. Meet with the RMT member assigned to re-entry. After filling out the ETA form up to and including the Equipment Used, the RMT member takes the ETA to the OSC HP Coordinator for Dose Limit approval up to and including 5 rem.
3. Take form to the OSC Manager for entries < 5 rem (TEDE) or to the EC or his designee if > 5 rem (TEDE), who reviews and approves the re-entry to be conducted.
4. The ETA is updated to reflect time of team dispatch and posted for tracking. The copy should go in field with Team.
5. When the re-entry is completed, dose records are updated with the dose accumulated for the team members. The ETA is updated to reflect the time the team exited the re-entry.
6. Subsequent team entries are made on separate ETAs, except as noted on ERWP.

## EMERGENCY RADIATION WORK PERMIT (ERWP) GUIDANCE

### A. Purpose

To establish a blanket ERWP for use under emergency conditions. An ERWP is used in conjunction with the Emergency Team Authorization form.

### B. Contents

1. Emergency Status – denotes current emergency classification level, updated as escalation in levels occur.
2. Plant Status or Condition Causing Emergency – the actual status of the plant including information on systems or equipment directly related to, or impacting radiological conditions.
3. Radiological Status – radiological status of CR3 at the time of escalation of emergency.
4. Instructions – generic instructions for anyone involved with the emergency. Specific instructions are given on the Emergency Team Authorization form.

### C. Development and Approval

1. The OSC Health Physics Coordinator or designee completes this form and submits for review to the Radiation Controls Coordinator.
2. The Radiation Controls Coordinator reviews the permit and includes any additional information pertinent to the emergency.
3. The Emergency Coordinator or designee approves the ERWP.
4. This action authorizes the permit **AND** automatically sets the exposure limit for personnel assigned to the ERWP to Emergency Dose Limit (margin) of 5 rem Total Effective Dose Equivalent when there are radiological consequences.

## EMERGENCY TEAM AUTHORIZATION

EMERGENCY TEAM AUTHORIZATION						
TYPE OF EMERGENCY TEAM DISPATCHED and NUMBER			DATE		TIME	
REASON FOR ENTRY						
OSC Request Form # _____ (if applicable)						
RADIOLOGICAL CONDITIONS						
No Release – ETA used for accountability purposes only <input type="checkbox"/>						
INSTRUCTIONS FROM BRIEFING						
1) Team Leader must carry radio.      2) OSC Telephone Number :      3)						
EQUIPMENT USED						
<b>PROTECTIVE CLOTHING / EQUIPMENT</b> <input type="checkbox"/> None <input type="checkbox"/> Standard PCs <input type="checkbox"/> Double PCs <input type="checkbox"/> Plastics <input type="checkbox"/> Cloth/Paper		<b>RESPIRATORY</b> <input type="checkbox"/> None <input type="checkbox"/> SCBA <input type="checkbox"/> Negative Pressure Respirator <input type="checkbox"/> Particulate <input type="checkbox"/> Sorbent		<b>DOSIMETRY</b> <input type="checkbox"/> ED: Setpoints: _____ <input type="checkbox"/> Low Range Dosimeter <input type="checkbox"/> High Range Dosimeter <input type="checkbox"/> TLD <input type="checkbox"/> Multi-Badge <input type="checkbox"/> Extremity		
DOSE LIMIT FOR ENTRY  <div style="text-align: right;">mREM *</div>			MAXIMUM ANTICIPATED DOSE RATE / RE-ENTRY ABORT DOSE RATE			
EMERGENCY TEAM PERSONNEL		BADGE #	INTO Evacuated Area	OUT Back at OSC	*Use for manual input of DOSE (TEDE) as needed INTO      OUT	
TEAM LEADER						
TEAM MEMBERS						
DOSE LIMIT APPROVAL / OSC HP COORDINATOR <5 rem (TEDE)				DATE		TIME
RE-ENTRY APPROVAL / OSC MANAGER <5 rem (TEDE) EC OR DESIGNEE >5 rem (TEDE)				DATE		TIME

\* EMERGENCY DOSE LIMITS

5 rem (TEDE) -

10 rem (TEDE) -

25 rem (TEDE) -

VOLUNTEER &gt;25 rem (TEDE) -

Allowable margin for each worker

Prevent injury, protect valuable property

Life saving, protect large populations

Life saving, should be trained volunteer

IF NO core melt, THEN TEDE = ED Dose

IF core melt, THEN TEDE = ED Dose times 5

ORIGINAL: Posted in OSC

COPY: Re-Entry Team

**TEAM BRIEFING / RE-ENTRY CHECKLIST**

**NOTE:** Steps may be performed in any order ..... ☐

**1.0 BEFORE DISPATCH**

1. DETERMINE scope of tasks, pre-plan work activities as needed ..... ☐
2. ENSURE Team members have protective clothing, dosimetry, respiratory devices, and/or other protective equipment as specified by the Emergency Team Authorization (ETA) form ..... ☐
3. VERIFY operability of survey instruments and any other equipment needed, and ensure that all radios to be used are programmed for the appropriate talk groups before departure from OSC. .... ☐
4. ENSURE Self-Reading Dosimetry is re-zeroed as needed. Extremity TLDs are available in the TSC/OSC Emergency Kit. .... ☐
5. NOTIFY the OSC Manager the team is ready to depart. .... ☐

**NOTE:** If additional briefing areas are needed, team members can perform briefings in the Break Room Area or any available room. .... ☐

**2.0 BRIEFING**

1. The appropriate Team Leader, in conjunction with OSC Health Physics Coordinator or designee, briefs the emergency team on the following before re-entry:
  - a. The nature of the emergency and any other known hazards. .... ☐
  - b. The purpose of the dispatch and the expected result. .... ☐
  - c. Route the team will take back into the evacuated area. .... ☐
  - d. Area dose rates (if known), amount of dose each team member may expect to receive based on hazards en route and at emergency site. .... ☐
  - e. What actions should be taken if unanticipated conditions are encountered ..... ☐

**TEAM BRIEFING/RE-ENTRY CHECKLIST (Continued)****3.0 EMERGENCY TEAM LEADER FUNCTIONS:**

1. UNDERSTAND the purpose of the re-entry and perform briefings as requested. .... ☐
2. **IF** the suspension of safeguards has been invoked, **AND** a key is necessary for entry into a locked area of the plant, **THEN** obtain key from the Main Control Room or TSC Security Coordinator. .... ☐
3. REPORT any condition or event, within the scope of the team's individual training or experience, which could minimize the effects of the emergency. .... ☐
4. ENSURE the completion of the task / activity for which the team was dispatched. .... ☐
5. RELAY relevant plant conditions and significant actions taken by the team to the OSC HP Coordinator for logging. .... ☐
6. COORDINATE returning equipment to service (opening or closing of valves, energizing components, etc.) directly with the Main Control Room. .... ☐
7. INFORM Main Control Room of job completion when it affects plant equipment. .... ☐
8. ENSURE all team members report to Dosimetry upon return to OSC to update individual dose records. .... ☐
9. PERFORM post-job briefing with the HP Coordinator or OSC Manager upon return. .... ☐
10. DOCUMENT repair actions taken during the re-entry to provide enough information for Work Request that is created during the emergency by Planning or after the emergency. Documentation may be made in OSC Log or on tape. .... ☐

**CONTINGENCY PLAN FOR SECURING OSC AND ESTABLISHING AN ALTERNATE OSC  
[R3]****1.0 BEFORE GOING TO ALTERNATE OSC LOCATION**

1. IDENTIFY minimum OSC staff necessary based on plant conditions. .... ☐
2. CONSIDER taking items identified below
  - a. OSC Tool Boxes..... ☐
  - b. Radios ..... ☐
  - c. Emergency Kits or contents as needed..... ☐
  - d. Other items as determined by OSC Coordinators. .... ☐

**2.0 STEPS TO SECURE OSC IF STORM SURGE IS EXPECTED**

1. PLACE high value items on tables:
  - a. Computers and peripherals ..... ☐
  - b. Communication equipment..... ☐
  - c. Other items that can be placed on tables ..... ☐
  - d. VERIFY flood protection has been placed around TSC/OSC (EM-220A). .... ☐
  - e. ENSURE appropriate TSC equipment has been de-energized (EM-220A, Attachment 2). .... ☐
  - f. DISABLE auto start on diesel by selecting the "Auto/Test" switch to the center "Off" position on the generator Kohler Controller..... ☐

**3.0 RELOCATE TO 124' ELEVATION OF THE CONTROL COMPLEX**

1. ACTIVITY – Team Staging Area
2. PERSONNEL – Fire Brigade, Sampling Team, Emergency Repair Team, Radiation Monitoring Team, Security, OSC Manager, OSC Coordinators (as needed).
3. SET-UP – Some emergency supplies are located in labeled cabinets in area. Additional supplies such as chairs, plant radios, tables and equipment from TSC/OSC emergency may need to be re-located to this area.
4. OPERATION – The OSC Manager and OSC HP Coordinator remain on the 124' elevation with emergency teams. He assigns someone to the PAX phone to remain in communication with the Alternate TSC located outside the Control Room. Once a team is identified, a briefing occurs and then dispatched.

**TSC/OSC EMERGENCY RECIRCULATION MODE****CAUTION**

Activation of the emergency mode may require entry into potential Radiation Controlled Areas if a release is in progress. Radiation Monitoring Team member accompanies personnel performing this action, as necessary.

**1.0 PLACING TSC/OSC INTO THE EMERGENCY RECIRCULATION MODE**

1. OBTAIN duct tape and pliers from OSC area before going to Mechanical Equipment (HVAC) Room. .... ☐
2. PERFORM the following actions from the Mechanical Equipment Room to activate the emergency recirculation mode for the TSC/OSC: (See schematic on page 3 of Enclosure)
  - a. OPEN the access door for AHD-119 (located by outside exit door). .... ☐
  - b. At AH-229, ROTATE the switch from the "NORMAL (1)" to the "EMERGENCY (2)" position on the emergency mode control panel. .... ☐
  - c. LOG start time on form next to AH-229 control switch. .... ☐
3. VERIFY the following indications:
  - a. AHD-120 damper is in the emergency mode position. AHD-120 is located at waist level at the south side of the room. .... ☐
  - b. AHF-62 fan is operational as indicated by a red light at the motor/starter panel on the southeast wall. .... ☐
  - c. AHU-20 is operational as indicated by a red light at the motor/starter panel on the west wall. .... ☐
  - d. AHF-60 fan is operational as indicated by a red light at the motor/starter panel in the middle of the room. .... ☐
  - e. AHF-61 fan is operational as indicated by a red light at the motor/starter panel in the middle of the room. .... ☐
4. IF the fans and dampers are **NOT** operational or **NOT** in the proper position, **THEN** NOTIFY the OSC Manager. .... N/A ☐ ☐
5. IF the fans and dampers are operational and in the proper position, **THEN** perform the following. .... N/A ☐ ☐
  - a. **OBTAIN** pliers and duct tape. .... ☐
  - b. EXIT the TSC/OSC and proceed to roof over Mechanical Equipment Room. .... ☐
  - c. CLOSE and LATCH the goose neck cover for AHD-115, located as shown on Page 3 of 3. .... ☐

**TSC/OSC EMERGENCY RECIRCULATION MODE (Cont'd)****1.0 PLACING TCS/OSC INTO EMERGENCY RECIRCULATION MODE (Continued)**

6. PLACE duct tape around the access door seals and latches on AHD-115 to provide an additional protective barrier in order to prevent air in-leakage ..... ☐
7. CLOSE and LATCH the goose neck cover for AHD-116, located as shown on Page 3 of 3. .... ☐
8. PLACE duct tape around the access door seals and latches on AHD-116 to provide an additional protective barrier in order to prevent air in-leakage..... ☐
9. RETURN to the TSC/OSC. .... ☐

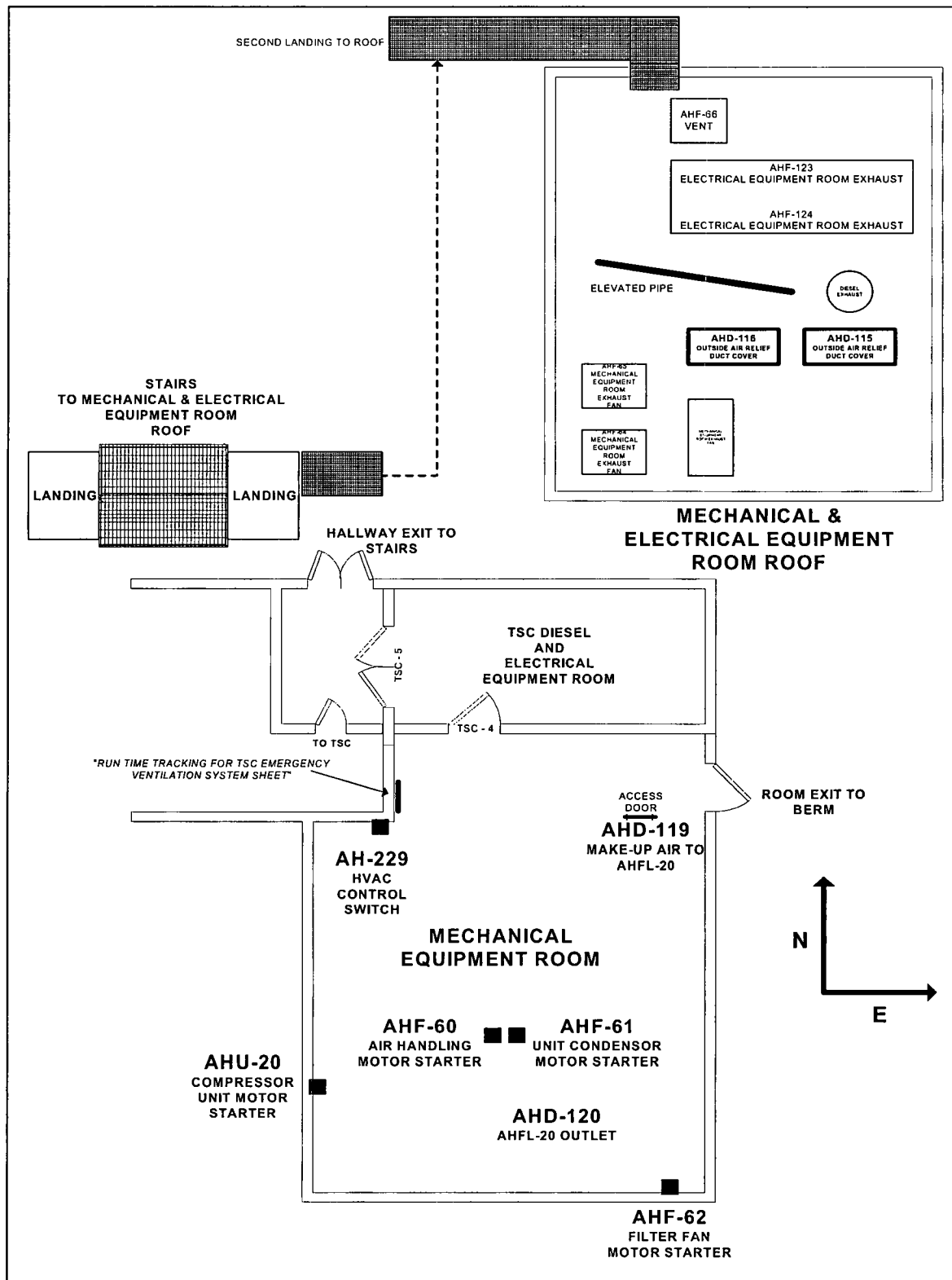
<b>NOTE:</b> Habitability boundary doors are the inside door on the west end and the inside door adjacent to the Emergency Diesel Room door on the east end. ....	<input type="checkbox"/>
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10. VERIFY the TSC/OSC habitability boundary doors remain are tightly closed unless being used for ingress/egress while emergency recirculation mode is in service..... ☐
11. The TSC/OSC Ventilation System emergency recirculation mode is now operational..... ☐

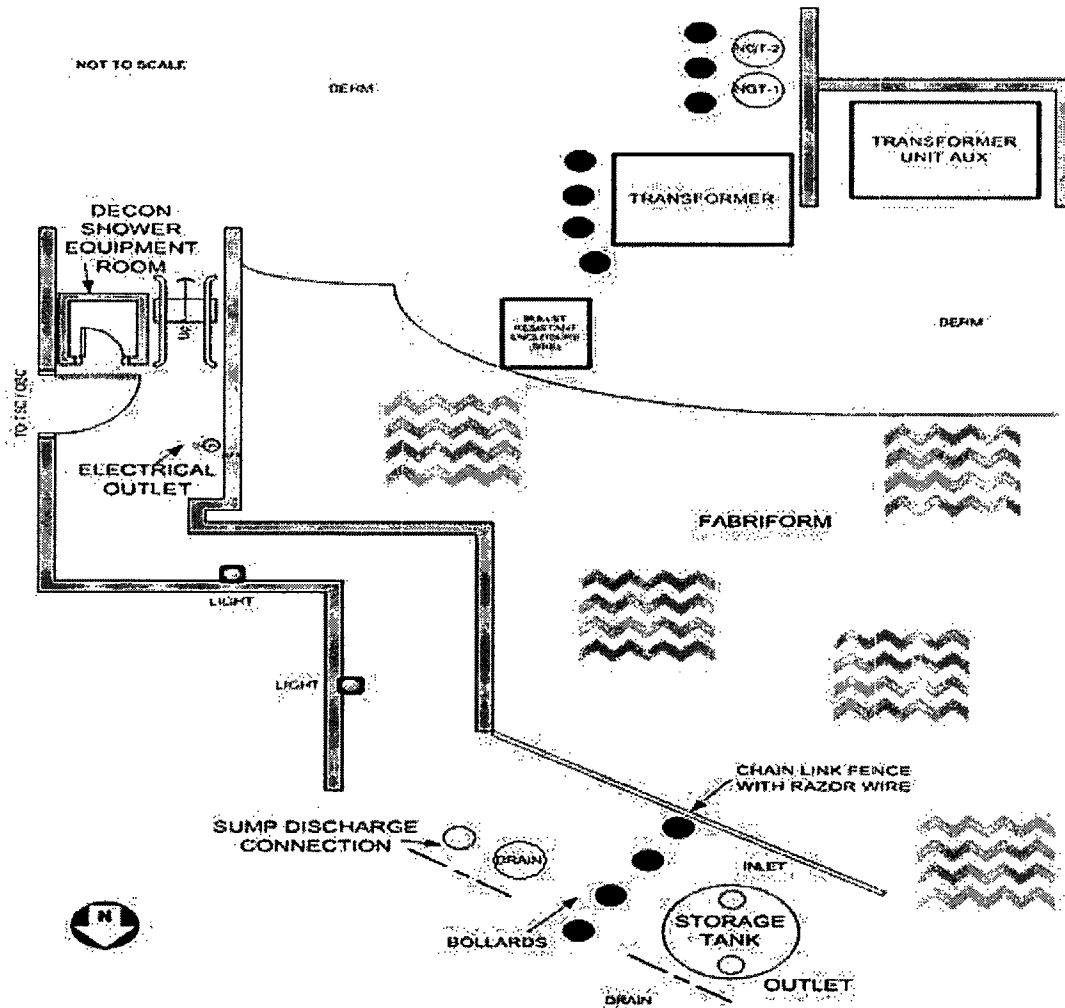
**2.0 RESTORATION**

1. PERFORM the following actions to restore the emergency recirculation mode for the TSC/OSC:
  - a. REMOVE the duct tape from the access door seals and latches on AHD-116 and AHD-115. .... ☐
  - b. UNLATCH and OPEN the goose neck covers for AHD-116 and AHD-115. .... ☐
  - c. RETURN to Mechanical Equipment Room and rotate the switch from the "EMERGENCY (2)" to the "NORMAL (1)" position on the emergency mode control panel (AH-229)..... ☐
  - d. LOG stop time on form next to AH-229 control switch. .... ☐
  - e. VERIFY AHD-120 is in the "CLOSED" position. .... ☐
  - f. CLOSE the access door for AHD-119. .... ☐

## TCS/OSC EMERGENCY RECIRCULATION MODE (Continued)



## INSTRUCTIONS FOR HOOKING-UP AND PUMPING INTO DECONTAMINATION SHOWER STORAGE TANK



**NOTE:** Portable lighting (e.g. flashlights) may be required to safely access equipment in storage room under the stairs at west end of TSC.

1. Obtain equipment (hoses, etc.) from room under stairs on west end of TSC including electrical pump from decontamination shower / sink area..... ☐
2. Connect the 1½-inch stainless steel, suction line with the cam-lock fittings to the suction side of the pump. .... ☐
3. Connect the other end of the suction line to the sump discharge connection..... ☐
4. Prime the pump with water
5. Connect the discharge of the pump to the inlet connection of the storage tank. .... ☐
6. Remove cap on storage tank outlet connection to establish tank vent path. .... ☐

# **EMERGENCY RADIATION WORK PERMIT** SAMPLE

EMERGENCY STATUS					
Unusual Event	Date	Time	Site Area Emergency	Date	Time
Alert	Date	Time	General Emergency	Date	Time
PLANT STATUS OR CONDITION CAUSING EMERGENCY					
RADIOLOGICAL STATUS					
INSTRUCTIONS					
1. <b>NO</b> entry into controlled access areas unless a member of an emergency team. (Security remains at posts until relieved.)					
2. Only personnel who are qualified emergency responders can be authorized for this ERWP.					
3. Report any unusual dose rates, equipment damage, etc., to the Operational Support Center.					
4. Specific radiological requirements are outlined on Emergency Team Authorization form.					
5. RMT member requirement to be on re-entry team can be waived by Health Physics Coordinator for stable or <b>NO</b> radiological hazards.					
6. OSC Health Physics Coordinator is authorized to fill out one ETA for RMT survey and monitoring activities up to and including 5 rem TEDE with attached list of RMT Members. This does <b>NOT</b> include EST members.					
7. Perform activity as discussed in Briefing.					
SUBMITTED BY OSC HEALTH PHYSICS COORDINATOR			APPROVED BY / EMERGENCY COORDINATOR OR DESIGNEE		

POTASSIUM IODIDE ADMINISTRATION FORM

NAME	BADGE NUMBER	DATE / TIME ISSUED	KI LOT NUMBER	KI EXPIRATION DATE	ARE YOU ALLERGIC TO IODINE? EXAMPLE - SHELLFISH

Radiation Controls Coordinator: \_\_\_\_\_ Date: \_\_\_\_\_

**Summary of Changes  
PRR 613737 (October, 2013)**

**NOTES:** Procedure Sponsor: If any changes are made to EM-104, step 9.3.2.6 (EM-210A, Section 4.2), EM-104, step 9.3.2.10 (EM-210A, Attachment 1), EM-104, step 3.4.2.12 (CH-632, Attachment 2), EM-104, step 9.5.1.4. (EM-103, Enclosure 1), EM-102, Enclosure 1, and EM-401, Enclosure 10, ensure appropriate PRRs are initiated as needed.

<u>Step/Section</u>	<u>Changes and Reason</u>
Throughout	<p>This revision implements Decommissioning Transition Organization (DTO) reductions to the TSC/OSC staff as summarized below and detailed in the changes for individual steps. Several changes unrelated to DTO are also addressed as noted.</p> <p>The OSC Maintenance Coordinator position is being eliminated and the OSC Manager will assume the functions.</p> <p>The OSC Chemistry Coordinator position is being eliminated and the Health Physics Coordinator will assume the functions.</p> <p>The OSC Administrative Support position is being eliminated and OSC Manager will assume the functions.</p> <p>The OSC Engineering Support position is being eliminated. This position provided engineering support to the OSC as needed. The TSC Accident Assessment Team can supply this support.</p> <p>The OSC Fire Assessment position is being eliminated and the Emergency Coordinator will assume the responsibility for relocating the Emergency Response Coordinator to the Control Complex with the Fire Brigade at a General Emergency. Other functions of providing support and briefing the TSC and OSC on fire-related conditions will be covered by knowledgeable personnel during the normal course of operations without the need for specific reassignment of responsibilities.</p> <p>Performed title and reporting updates .</p>
1.2.4	Deleted Fire Brigade and administrative support from the list of responders based and operating from the OSC as the DTO eliminates these positions.
4.0.1	Deleted statement that the OSC Manager is a Superintendent or Supervisor Maintenance and replaced with "qualified."
4.0.3	Deleted separate section 4.0.3 for the Maintenance Coordinator and rolled the responsibilities under the OSC Manager in section 4.0.1. The DTO eliminates this position. Renumbered remaining steps in the section.

<b><u>Step/Section</u></b>	<b><u>Changes and Reason</u></b>
4.0.4	Deleted separate section 4.0.4 for the Chemistry Coordinator and rolled the responsibilities under the Health Physics Coordinator in new section 4.0.3. The DTO eliminates this position. Renumbered remaining steps in the section.  In new sub-step m, deleted reference to core damage assessments as all fuel permanently removed from the reactor vessel.
4.0.6	Deleted separate section 4.0.6 for the Administrative Support position and rolled the responsibility under the OSC Manager in 4.0.1. The DTO eliminates this position. Renumbered remaining steps in the section.
4.0.7	Deleted section 4.0.7 for Engineering Support as the DTO eliminates this position. This position provided engineering support to the OSC as needed. The TSC Accident Assessment Team can supply this support. Renumbered remaining steps in the section.
4.0.8	Deleted section 4.0.8 for Fire Assessment as the DTO eliminates this position. Rolled the responsibility to EM-102 to the Emergency Coordinator instructions for relocating the Emergency Response Coordinator to the Control Complex with the Fire Brigade at a General Emergency. Renumbered remaining steps in the section.
4.0.17	Deleted step 4.0.17 for the Repairs Coordinator as the DTO eliminates this position and the duties have been incorporated into the OSC Manager responsibilities.
6.0.10	Replaced Repairs Coordinator with OSC Manager for OSC Request Form co-approval.
9.0.2	Deleted Maintenance Coordinator and Chemistry Coordinator from the table as the DTO eliminates these positions.
9.1.1, 9.2.1.4 , 9.2.1.5, 9.2.6.	Moved OSC activation instructions from section 9.2.1 formerly performed by the Maintenance Coordinator to the OSC Manager activation section 9.1.1. The DTO eliminates the Maintenance Coordinator.
9.1.1.3	Replaced Repairs Coordinator with Emergency Coordinator as the position for the OSC Manager to notify upon arrival at the TSC.
9.1.1.6	Revised instruction to VERIFY operability of communication links to the TSC Repairs Coordinator to the VERIFY the link between the TSC and OSC as desired.
9.1.1.7	Replaced Repairs Coordinator with Emergency Coordinator as the position for the OSC Manager to report equipment problems/readiness.
9.1.1.8	To be consistent with EM-102, inserted note stating the OSC Manager may assign available personnel to functions until the designated personnel are available. (PRR 534563, IER L2 11-39). Also, changed step to Report staffing levels when "operational" and when "fully staffed" based on Enclosure 2, but clarified that Enclosure 2 lists staffing capability committed to in the Emergency Plan, not required staffing for every for every OSC activation. Only the OSC personnel necessary to complete TSC directives need to report.
9.1.1.10	Clarified wording to NOTIFY an adequate number of qualified ERT members per-to complete TSC directives.

<b><u>Step/Section</u></b>	<b><u>Changes and Reason</u></b>
9.1.2, 9.2.2.1, 9.2.2.2, 9.2.2.3, 9.2.2.5, 9.2.2.6, 9.2.2.7, 9.2.2.8, 9.2.2.9, 9.2.2.10, 9.2.2.11, 9.2.2.12, 9.2.2.13, 9.2.2.14, 9.2.2.15	Moved OSC operation instructions from section 9.2.2 formerly performed by the Maintenance Coordinator to OSC Manager operations section 9.1.2, deleting redundant instructions. The DTO eliminates the Maintenance Coordinator.
9.1.2.1, 9.1.2.2, 9.1.2.21 (new), 9.1.2.25 (new)	Replaced Repairs Coordinator with Emergency Coordinator as the position for the OSC Manager to notify of repair teams already in the field, to advise on future plant repairs, for coordination of Operator dispatch, and updating on the status of OSC activities.
9.1.2.2	Reworded step to IDENTIFY equipment priorities to clarify prioritization is performed with the Emergency Coordinator. This was originally a duty of the Repairs Coordinator.
9.1.2.3 – 9.1.2.6 (new)	Added steps that were removed from EM-102 describing the use of the OSC Request Form (EM-225, Attachment 11). This was formerly a duty of the Repairs Coordinator in EM-102. It will now be a duty of the OSC Manager. Renumbered the remaining steps in this section.
9.1.2.10 (new), 9.1.2.11 (new)	Replaced Maintenance Coordinator and Chemistry Coordinator with Maintenance Lead and Chemistry Lead as the positions the OSC Manager to interface with for coordinating their respective team activities.
9.1.2.19 (new)	Replaced “appropriate OSC Coordinator” with “Health Physics Coordinator, Maintenance Lead, or Chemistry Lead for coordination of team dispatch.
9.1.2.21 (new)	Replaced TSC Repairs Coordinator with Accident Assessment Coordinator as the position for the OSC Manager to contact for coordinating OSC operator dispatch. The DTO eliminates the Repairs Coordinator.
9.1.2.27 (new), 9.1.2.28 (new), 9.1.2.29 (new)	Reworded to “IF/THEN” statements
9.2.1.1 (new)	Added instruction for the Health Physics Coordinator to bring a plant radio to the OSC. This action was formerly assigned to the Chemistry Coordinator. The DTO eliminates the Chemistry Coordinator and the duties are assumed by the Health Physics Coordinator.
9.2.1.4 (new)	In the instruction for the Health Physics Coordinator to obtain procedures, specified HP and Chemistry. The DTO eliminates the Chemistry Coordinator and the duties are assumed by the Health Physics Coordinator.
9.2.1.5 (new)	In the instruction for the Health Physics Coordinator to notify RMT members to report, added to also notify Sampling Team members. The DTO eliminates the Chemistry Coordinator and the duties are assumed by the Health Physics Coordinator.
9.2.2.12 (new)	Change Enclosure reference 1 to Attachment 1 for EM-210A (PRR 516938)
Section 9..3	Section 9.3 OSC Health Physics Coordinator becomes section 9.2.

<b><u>Step/Section</u></b>	<b><u>Changes and Reason</u></b>
9.3.3	Section 9.3.3 on Administration of KI becomes section 9.2.3.
New 9.2.3.1, new 9.2.3.2a, new 9.2.3.2.c	Rephrased steps in the form of instructions for the Health Physics Coordinator.
9.4.1.1, 9.4.1.5	Moved OSC activation instructions from section 9.4.1 formerly performed by the Chemistry Coordinator to the Health Physics Coordinator activation section 9.2.1. The DTO eliminates the Chemistry Coordinator.
9.4.2.1, 9.4.2.2, 9.4.2.3, 9.4.2.4, 9.4.2.6, 9.4.2.7, 9.4.2.8, 9.4.2.10, 9.4.2.11, 9.4.2.12, 9.4.2.13	Moved OSC operation instructions from section 9.4.2 formerly performed by the Chemistry Coordinator to the Health Physics Coordinator operation section 9.2.2.
New 9.2.1.1	Added instruction for the Health Physics Coordinator to bring a plant radio to the OSC.
New 9.2.1.4	In the instruction for the Health Physics Coordinator to obtain procedures, specified HP and Chemistry.
New 9.2.1.5	In the instruction for the Health Physics Coordinator to notify RMT members to report, added to also notify Sampling Team members
New 9.2.2.12	Changed Enclosure 1 to Attachment 1 for EM-210A (PRR 516938)
9.5, 9.5.1.1	Section 9.5 instructions Operations Personnel becomes new section 9.3. In the note for new step 9.3.1.1, replaced Repairs Coordinator with Emergency Coordinator as the position through which the OSC Manager coordinates Operator actions.
9.6, 9.6.1.4, 9.6.1.6	Section 9.6 instructions Emergency Team Members becomes new section 9.4. In new step 9.4.1.4, replaced "appropriate OSC coordinator" with OSC Manager as the position for team members to notify upon arrival. In new step 9.4.1.6, deleted "respective OSC coordinator" leaving only the OSC Manager providing instructions to arriving emergency team members.

<b><u>Step/Section</u></b>	<b><u>Changes and Reason</u></b>
Enclosure 1	Primary OSC Floor plan accordingly due to position deletions /changes
Enclosure 2 pg 1	Deleted from the OSC Staffing Table: OSC Chemistry Coordinator, OSC Maintenance Coordinator, Fire Assessment , Planning, Administrative Support, and Engineer as the DTO eliminates these positions . (Note: The 60 minute responder engineer required by the RERP is satisfied by the TSC Accident Assessment Coordinator.)
Enclosure 2	OSC Organization chart has been updated to reflect position deletions/changes.
Enclosure 3	Deleted Enclosure 3 containing the KI package insert and renumbered the remaining enclosures. New step 9.2.3.2.a still references the actual package insert.
New Enclosure 3	Step 4: Deleted "appropriate OSC coordinator" leaving only the OSC Manager phone number to be listed on the ETA form.
Attachment 2	<p>Step 2.0.1: Replaced appropriate "OSC Coordinator" with appropriate "Team Leader" as the position performing the pre-entry briefing.</p> <p>Step 3.0.5: Replaced "appropriate OSC coordinator" with HP Coordinator as the position the Team Leader provides information.</p> <p>Step 3.0.9: Replaced "appropriate OSC coordinator" with HP Coordinator as one of the positions with which the Team Leader may perform a post-job briefing.</p>
Attachment 3	<p>Steps 2.0.d and 2.0.e: Revised EM-220 reference to EM-0220A. (PRR 599417)</p> <p>Step 3.0.4: Replaced "OSC Coordinators" with "OSC HP Coordinator" as the positions to remain on Control Complex 124' elevation when the Alternate TSC/OSC is used.</p>
Attachment 4	Step 1.0.4: Replaced Maintenance Coordinator with OSC Manager as the position to notify if problems encountered with emergency recirc mode.
Attachment 5	Updated/corrected instructions for hooking-up and pumping into decontamination Shower storage tank. (PRR 573016)