

50-302

Document Transmittal #: 149347

Date: 07/26/2001

Page 1

To: DC DESK

MAC: N/A

Destination:

Description: NRC

Document:	Revision:	Comment:	Select Copy Totals
EM0102	42	MINOR CHANGE	1

**Instructions to the Addressee: Please verify the document(s) received agrees with the above information. Notify Document Control if changes are required to addressee information.**

Engineering managers are required by NEP-121 to determine if new, revised, or temporary changes to procedures affect job functions of their personnel. Managers will communicate change information appropriately and provide documentation of any training conducted to the Engineering Training Coordinator.

**NO ACKNOWLEDGEMENT REQUIRED**

(End of Page)

A045

FLORIDA POWER CORPORATION

CRYSTAL RIVER UNIT 3

PLANT OPERATING MANUAL

EMERGENCY PLAN IMPLEMENTING PROCEDURE

**EM-102**

***OPERATION OF THE TECHNICAL SUPPORT CENTER***

## TABLE OF CONTENTS

SECTION	PAGE
<b>1.0 PURPOSE.....</b>	<b>3</b>
<b>1.2 GENERAL INFORMATION.....</b>	<b>3</b>
<b>2.0 DEVELOPMENTAL REFERENCES .....</b>	<b>3</b>
<b>3.0 PERSONNEL INDOCTRINATION.....</b>	<b>4</b>
<b>3.1 DEFINITIONS .....</b>	<b>4</b>
<b>3.2 RESPONSIBILITIES .....</b>	<b>4</b>
<b>3.3 LIMITS &amp; PRECAUTIONS .....</b>	<b>6</b>
<b>3.4 TSC/OSC EQUIPMENT AND SUPPLIES .....</b>	<b>7</b>
3.4.1 Emergency Kits and Equipment.....	7
3.4.2 Reference Materials .....	7
3.4.3 Controlled Procedures and Drawings .....	7
3.4.4 Supplies .....	7
3.4.5 Communications Equipment.....	8
<b>4.0 INSTRUCTIONS.....</b>	<b>9</b>
<b>4.1 EMERGENCY COORDINATOR .....</b>	<b>9</b>
4.1.1 Activation.....	9
4.1.2 Operation .....	9
4.1.3 Evacuation .....	11
4.1.4 Deactivation.....	11
<b>4.2 DOSE ASSESSMENT COORDINATOR .....</b>	<b>12</b>
4.2.1 Activation.....	12
4.2.2 Operation .....	12
<b>4.3 ACCIDENT ASSESSMENT COORDINATOR.....</b>	<b>15</b>
4.3.1 Activation.....	15
4.3.2 Operation .....	15
<b>4.4 REPAIRS COORDINATOR.....</b>	<b>16</b>
4.4.1 Activation.....	16
4.4.2 Operation .....	16
<b>4.5 COMMUNICATION/REPORT COORDINATOR.....</b>	<b>17</b>
4.5.1 Activation.....	17
4.5.2 Operation .....	17
<b>4.6 SECURITY COORDINATOR .....</b>	<b>19</b>
4.6.1 Activation.....	19
4.6.2 Operation .....	19

### ENCLOSURES

1	TSC/OSC Floor Plan .....	20
2	TSC/OSC Organizational Chart/ TSC/OSC Staffing .....	21
3	Possible NRC Incident Response Team Members at TSC/OSC .....	23
4	Facility Turnover/Briefing Worksheet (Optional Record Non Quality).....	24
5	Contingency Plans for Securing & Establishing Alternate TSC/OSC .....	25
6	Alternate TSC/OSC Control Complex Area Setup and Staffing Guidelines.....	26

## **1.0 PURPOSE**

- 1.1** Provide instructions for the activation, operation, evacuation and deactivation of the Technical Support Center (TSC).

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. [NOCS 1031]

The TSC functions as a point of assembly for experienced plant personnel, in the planning and re-entry/recovery operation.

## **1.2 General Information**

- 1.2.1** The 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. [NOCS 1068]
- 1.2.2** 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.
- 1.2.3** Notification for activation of the TSC is by PA announcement, activation of the emergency group pagers and telephone notification. Enclosure 1 illustrates the setup for functional areas described in this procedure.
- 1.2.4** Personnel fulfilling the functions to declare the TSC operational should have the capability of responding within 45 minutes of notification. Enclosure 2 illustrates the organizational structure of the TSC. [NOCS 1137]

## **2.0 DEVELOPMENTAL REFERENCES**

- 2.1** 10CFR50.47, Appendix E, Emergency Planning and Preparedness for Production and Utilization Facilities
- 2.2** 10CFR50.47, Emergency Plans
- 2.3** CR-3 Severe Accident Guideline
- 2.4** EM-202, Duties of the Emergency Coordinator
- 2.5** Health Physics Basis Document (HPB) 98-16, Potassium Iodide Use Guidelines for Radiation Emergency Workers
- 2.6** NEI 91-04, Rev. 1, Severe Accident Issue Closure Guidelines
- 2.7** NUREG-0654, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants
- 2.8** Radiological Emergency Response Plan
- 2.9** RSP-600, ALARA Program
- 2.10** RTM-96, Response Technical Manual, Section J, Use of Potassium Iodide and Thyroid Monitoring

## 3.0 PERSONNEL INDOCTRINATION

### 3.1 Definitions

#### NOTE

A Safety Assessment was performed for this procedure. A determination was made that this procedure is outside the scope of 10CFR50.59.

- 3.1.1 **Activation** - to provide notification to emergency response personnel of the need to respond to the TSC/OSC for staffing and operation.
- 3.1.2 **Badge-in** – Present Security badge briefly to TSC Card Reader. This ensures accountability of TSC/OSC personnel during emergency.
- 3.1.3 **Operational** - the minimum functions are established, required equipment is in proper working order, and the EC has assumed responsibility and authority for the emergency condition.
- 3.1.4 **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.
- 3.1.5 **Ventilation System Emergency Mode** - recirculates air through charcoal and HEPA filters and makes the TSC/OSC habitable similar to the Control Room for postulated accident conditions. [NOCS 12030]

### 3.2 Responsibilities

- 3.2.1
  - a. Emergency Coordinator
    - o Turn-over from Control Room.
    - o Implement EC responsibilities as identified in EM-202 (classification, notification and Protective Action Recommendations).
    - o Coordinate and direct on-site emergency response.
    - o Classify/terminate the emergency in accordance with the Emergency Action Levels (EALs).
  - b. Dose Assessment (Chemistry and Radiation Protection)
    - o Brief the EC on radiation matters, especially those affecting Emergency Action Levels (EALs) and Protective Action Recommendations (PARs).
    - o Update Release Significant Category board.
    - o Administer Potassium Iodine (KI) in accordance with RTM-96, Section J and HPB-98-016 recommended dosage.
    - o Maintain a log of individuals taking KI.
  - c. Accident Assessment
    - o Brief the EC on plant status (items contained in EM-225, Enclosure 2), especially those impacting Emergency Action Levels or Protective Action Recommendations.
    - o Update Critical Safety Functions Status board.
    - o Provide communication path between TSC and Control Room.
    - o Implement Accident Assessment Team responsibilities as identified in EM-225.

- d. Repairs (Maintenance)
  - o Mobilize Maintenance Department resources to assist in emergency repairs.
  - o Ensure OSC activated
- e. Communications/Report Preparation
  - o Prepare Florida Nuclear Plant Emergency Notification Message Forms, and relay necessary information to State Warning Point Tallahassee.
  - o 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). [NOCS 3054]
- f. Security and Accountability
  - o Call in additional TSC support using Emergency Response Personnel Roster, as needed.
  - o 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.
  - o Provide Emergency Medical Technician (EMT) coverage
  - o Ensure notification of the injured personnel's family(s) is accomplished. This notification is normally made by the injured individual's Supervisor.

3.2.2 Functions managed from, but not required to declare the TSC operational, are as follows:

- a. NRC Liaison/Assistant Emergency Coordinator
  - o Coordinate entry of NRC Incident Response Team into TSC and Control Room.
  - o 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)
  - o Assist NRC during the emergency condition by providing logistic support and keeping the NRC continually informed of plant status and possible radiological consequences.
  - o Update NRC on plans for emergency and recovery actions and needs for assistance.
  - o Assist EC as needed.
- b. NRC Health Physics Network (HPN) Talker
  - o Provide radiological and meteorological data to the NRC when requested via HPN phone. This position requires someone with extensive Health Physics experience.

- c. Dose Assessment Status Board Keeper
  - o Maintain the "Radiological Emergency Conditions" status board.
  - o Update the following information and ensure it is current for reporting requirements:
    - Release Data
    - Weather Data
    - Affected Downwind Sectors
    - Recommended Protective Actions
  - o Update Release Significant board and other data, as needed.
- d. Administrative Support
  - o Ensure computer setup for TSC viewing and EOF access to log via computer.
  - o Log key events, equipment problems and radiological events.
  - o Ensure computer clock correct.
  - o Update clock message as needed for time and emergency classifications.
  - o Update team status as appropriate.
  - o Ensure EC holds briefings on hourly basis, at a minimum.
  - o Obtain State and NRC forms from Communications/Report Preparation when complete and fax to EOF, State, Bureau of Radiation Control, Citrus, Levy & Control Room as needed.
  - o Fax other pertinent information to EOF (e.g., signed copy of TSC logbook) as needed.
  - o Distribute incoming faxes as appropriate.

3.2.3 Nuclear Document Control maintains manuals, procedures, and drawings in the TSC/OSC.

### 3.3 Limits & Precautions

3.3.1 The TSC/OSC ventilation system, when in the emergency recirculation mode, supplies breathing air to support 50 people.

3.3.2 IF the occupancy of the TSC/OSC exceeds 50,  
AND the TSC/OSC ventilation is in the Emergency Recirculation Mode,  
THEN O<sub>2</sub> and CO<sub>2</sub> monitoring must be performed to ensure habitability.

3.3.3 Consideration should be given to the staffing levels outlined in Enclosure 2. [NOCS 63010]

3.3.4 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 should become the alternate TSC/OSC.

3.3.5 IF an exposure of greater than 25 REM to the thyroid is expected,  
THEN the administration of KI should be considered.

3.3.6 The TSC/OSC flood level is 101'6", raised to 103' or greater with flood protection.

### **3.4 TSC/OSC EQUIPMENT AND SUPPLIES**

#### **3.4.1 Emergency Kits and Equipment [NOCS 1126]**

##### **NOTE**

HPP-409 identifies the contents of the Kits a-d.

- a. TSC/OSC Emergency Kit
- b. Decontamination Kit [NOCS 15130, 24200]
- c. Radiation Monitoring Team Emergency Kit
- d. Environmental Survey Kit (located in Survey Vehicle and Nuclear Security Operations Center) [NOCS 24290]
- e. Portable Continuous Air Monitor
- f. Dose Assessment Computer (RADDOS)
- g. Plant parameters via computer (PICS) [NOCS 24120]
- h. Safety Parameter Display System (SPDS) [NOCS 24120]
- i. Sandpiper Pump (electric & manual)
- j. Printer/Viewer for microfiche
- k. CO<sub>2</sub>/O<sub>2</sub> Monitor
- l. Decontamination Shower and Sink
- m. Severe Accident fittings (2)
- n. Calculators (4)

#### **3.4.2 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 in a folder on the inside of the main TSC cabinet. In the event 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.

#### **3.4.3 Controlled Procedures and Drawings**

Most controlled procedures and drawings are located in file cabinets in the OSC, on the east wall. Various OP, EOP and other procedures are located in the Accident Assessment/Dose Assessment room files and in individual TSC files. Drawings not in hardcopy form are on microfiche in files in the Dosimetry room.

#### **3.4.4 Supplies**

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



#### **3.4.5**

#### **Communications Equipment [NOCS 3053]**

- a. Commercial Telephone including two NRC lines [NOCS 10520, 24070]
- b. Company Microwave System
- c. Local Government Radio (LGR)
- d. Florida Emergency Satellite Communication (ESATCOM)
- e. Emergency Notification System (ENS) [NOCS 10520, 24070, 24080]
- f. Health Physics Network (HPN) [NOCS 10520, 24070, 24080]
- g. Public Address Exchange System (PAX)
- h. State Hot Ringdown System (SHRD)
- i. Portable Transceivers (as assigned)
- j. Telecopy Machine (FAX)
- k. High and Low Band Base Stations [NOCS 24110]
- l. TSC/EOF Ringdown System
- m. Dose Assessment Ringdown System
- n. Accident Assessment Ringdown (CR- TSC/OSC)
- o. Portable Satellite phone
- p. RSCL (Reactor Safety Counterpart Link) [NOCS 10520]
- q. PMCL (Protective Measure Counterpart Link) [NOCS 10520]
- r. Backup Quickpager Unit for notifying emergency personnel

**INSTRUCTIONS**

The steps under this section are not required to be performed in sequence.

Check the listing below for required TSC position and refer to the designated section for instructions. Positions not listed below perform job functions as needed to support TSC activities and as identified under responsibility Section, 3.2.2.

IF YOUR TSC POSITION IS:	REFER TO SECTION:
EMERGENCY COORDINATOR	4.1
DOSE ASSESSMENT COORDINATOR	4.2
ACCIDENT ASSESSMENT COORDINATOR	4.3
REPAIRS COORDINATOR	4.4
COMMUNICATIONS/REPORT COORDINATOR	4.5
SECURITY COORDINATOR	4.6

**4.1 Emergency Coordinator****4.1.1 Activation**

- 4.1.1.1 BADGE IN at TSC Card Reader and PLACE name on TSC Staffing Board.
- 4.1.1.2 OBTAIN turnover briefing on status of emergency from Control Room, using Enclosure 4.
- 4.1.1.3 DETERMINE TSC/OSC habitability (release in progress, wind direction). If necessary, ENSURE TSC/OSC ventilation is put into emergency recirculation mode. (EM-104, Enclosure 6)
- 4.1.1.4 OBTAIN needed procedures and logbook.
- 4.1.1.5 TEST operation of TSC/OSC Public Address (PA) system.

**4.1.2 Operation****NOTE**

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

- 4.1.2.1 ENSURE Functions required to declare the TSC operational include the following personnel with capability to perform minimum functions as identified in Section 3.2.1
  - o Emergency Coordinator
  - o Dose Assessment Coordinator
  - o Security Coordinator
  - o Accident Assessment Coordinator
  - o Communications/Report Coordinator (One required for initial operation)
  - o Repairs (Maintenance) Coordinator
- 4.1.2.2 DECLARE TSC operational within 60 minutes of declaration of an Alert, Site Area Emergency, or General Emergency. [NOCS 1137]
- 4.1.2.3 USE TSC PA for TSC announcements and briefings.
- 4.1.2.4 ANNOUNCE to staff that the TSC is Operational, and PROVIDE update on status of plant and times next state and NRC notifications are due.
- 4.1.2.5 CONSIDER announcing to plant staff that the TSC is operational.

- 4.1.2.6 INITIATE log of activities to document times, and results of significant actions.
- 4.1.2.7 ENSURE support functions are available as needed.
- 4.1.2.8 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 TSC.

**NOTE**

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 speaking is to speak into the microphone, identify themselves and what function they are representing.

- 4.1.2.9 CONDUCT initial and periodic briefings.
- 4.1.2.10 UPDATE the TSC on any of the following as it occurs:
- o Change in emergency classification
  - o Change in Protective Action Recommendations
  - o Significant plant evolutions, equipment failures, releases
  - o EOF operational (EOF assumes State notification, Protective Action Recommendations, Dose Assessment)
- 4.1.2.11 ENSURE classifications, notifications and PARs are performed as required, as the TSC staff becomes focused on accident assessment and mitigation activities.
- 4.1.2.12 ENSURE emergency teams are dispatched as needed.
- 4.1.2.13 APPROVE Emergency RWP and Emergency Team Authorization forms in accordance with EM-104 as needed.
- 4.1.2.14 OBTAIN guidance as needed on radiological and habitability matters, accident mitigation, repair and security functions.
- 4.1.2.15 ENSURE the Radiological Emergency Conditions Status Board has updated Protected Action Recommendations (PARs) for reports made to the NRC and State of Florida.
- 4.1.2.16 ENSURE TSC/OSC habitability is maintained. If necessary, EVACUATE to Alternate TSC and OSC areas in the Control Complex.
- 4.1.2.17 ENSURE the NRC and the EOF Director are informed of plant status.
- 4.1.2.18 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 50.54x. Once a Severe Accident is declared, only one notification to the NRC is required.

- 4.1.2.19 IMPLEMENT 10CFR50.54(x)(y) as required. DOCUMENT time entered and reason.
- 4.1.2.20 ENSURE Accident Assessment Team notifies the NRC and the Control Room of 10CFR50.54(x)(y) decisions.

#### **4.1.3 Evacuation**

##### **4.1.3.1 EVACUATE the TSC/OSC based on:**

- o Radiological data obtained by the Radiation Monitoring Team and recommendations of the Dose Assessment Coordinator.
- o Inadequate ventilation ( $\text{CO}_2/\text{O}_2$ ).
- o Violent weather conditions.
- o Other conditions warranting evacuation.

##### **4.1.3.2 REVIEW Enclosure 5 prior to evacuation.**

##### **4.1.3.3 DETERMINE required staff needed based on plant conditions and RELOCATE to rooms adjacent to the Control Room as identified in Enclosure 6.**

##### **4.1.3.4 IF emergency teams are designated to relocate to the Control Complex THEN DIRECT them to the 124' elevation of the Control Complex.**

##### **4.1.3.5 IF flooding is projected, THEN TAKE precautions as outlined in Enclosure 5 and in EM-220.**

#### **4.1.4 Deactivation**

##### **4.1.4.1 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.**

##### **4.1.4.2 DIRECT TSC/OSC staff to collect all documentation and submit to Emergency Planning staff.**

##### **4.1.4.3 DIRECT TSC/OSC staff to ensure equipment and materials are returned to their pre-activation status, if possible.**

##### **4.1.4.4 DIRECT TSC/OSC staff to identify equipment and supply deficiencies to Emergency Planning staff.**

## **4.2 Dose Assessment Coordinator**

### **4.2.1 Activation**

- 4.2.1.1 BADGE IN at TSC Card Reader and PLACE name on TSC Staffing Board.
- 4.2.1.2 DETERMINE TSC/OSC habitability (release in progress, met data, air monitoring system). If necessary, notify the EC to put the TSC/OSC ventilation into the emergency recirculation mode.
- 4.2.1.3 PERFORM the following as minimum functions to declare the TSC operational:
  - o DETERMINE Release Significant Category
  - o DETERMINE radiological and chemistry matters affecting EALs and PARs.
- 4.2.1.4 IF release in progress,  
THEN OBTAIN information on release and core status from REDAS, SPDS/RECALL,  
AND DETERMINE Release Significance Category.
- 4.2.1.5 OBTAIN logbook and procedures, as needed.
- 4.2.1.6 TEST push-to-talk headsets, as needed.
- 4.2.1.7 BRIEF the EC on radiation issues, especially those affecting EALs and PARs.
- 4.2.1.8 IF emergency occurs off hours,  
THEN ENSURE OSC Chemistry and Health Physics Coordinators staff the OSC,  
AND ENSURE an adequate number, as identified on page 2 of Enclosure 2, of qualified Radiation Monitoring Team, Dose Assessment Team and Sample Team members are notified to respond.

### **4.2.2 Operation**

- 4.2.2.1 ASSIGN an individual to the Dose Assessment Ringdown in the Control Room to monitor radiological and meteorological data.
- 4.2.2.2 NOTIFY OSC Health Physics and Chemistry Coordinators and the EST Dispatcher to determine availability of the Dose Assessment Team, Sample Team and Radiation Monitoring Teams and their readiness to perform:
  - Dose projection
  - Re-entry coverage
  - Chemistry
  - Environmental monitoring
  - Dosimetry
- 4.2.2.3 PROVIDE the Radiological Dose Assessment Data for the Supplemental Data Sheet of the Florida Nuclear Plant Emergency Notification Form to Communicator/Report Coordinator as requested.
- 4.2.2.4 REQUEST Sample Team dispatches through TSC Repairs Coordinator. Contact OSC Chemistry Coordinator, as needed, to discuss dispatch.
- 4.2.2.5 ENSURE the setup and testing of monitoring and counting equipment is taking place and qualified individuals are available to operate and interpret the data from this equipment.
- 4.2.2.5.1 ENSURE monitoring of TSC/OSC for radiological, O<sub>2</sub> and CO<sub>2</sub> (when TSC in Recirc) is accomplished and EVALUATE Total Risk associated with ventilating with outside air, in accordance with EM-210A, Section 4.2.
- 4.2.2.6 ENSURE Emergency Teams and security personnel have TLDs, and area TLD's are established throughout the TSC/OSC.
- 4.2.2.7 ASSIGN a Health Physics Supervisor or any Health Physics Technician with extensive H.P. experience to the Health Physics Network as a communicator when necessary

- 4.2.2.8 ENSURE Status Board keeper is available for Dose Assessment Status Boards.
- 4.2.2.9 ENSURE Release Significant Status is updated. REFER TO Enclosure 2 of EM-202 for Release Significance Guidance.
- 4.2.2.10 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 Dose Assessment Coordinator.

- 4.2.2.11 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 should not be issued KI.

- 4.2.2.12 ISSUE KI as needed when the calculated dose of 25 Rem to the thyroid is determined.
- 4.2.2.12.1 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.
- 4.2.2.12.2 DOCUMENT in TSC Dose Assessment 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 14 tablets is given to HP 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.
- 4.2.2.13 UPDATE Emergency Coordinator with the following information: [NOCS 13040]
- Radiological aspects of the event
  - TSC/OSC area dose rate information
  - Potential reclassification of the event based on radiological conditions
  - When TSC/OSC ventilation should be put into recirculation based on radiological, CO<sub>2</sub> or O<sub>2</sub> results
- 4.2.2.14 UPDATE Accident Assessment with the following information as plant conditions change:
- Radiation Monitor readings and assessments
  - Release status (magnitude, direction, relative severity)
  - PASS data
  - RCS
    - Radionuclide composition
    - Chloride concentration
    - pH
    - Dissolved Hydrogen concentration
    - Boron concentration
  - Containment Atmosphere - Radionuclide composition
  - Sample results for estimation of core damage
- 4.2.2.15 PROVIDE ongoing technical and administrative direction to OSC Chemistry and Health Physics Coordinators.
- 4.2.2.16 ENSURE TSC staff is aware of offsite radiological conditions and meteorological data.

- 4.2.2.17 REVIEW Enclosure 3 for possible NRC Incident Response personnel functions, and provide assistance as needed.
- 4.2.2.18 PROVIDE the Security representative with radiological conditions to ensure Security patrols are properly protected.
- 4.2.2.19 IF Security Personnel are required to evacuate,  
THEN DISCUSS suspension of Safeguards with EC.
- 4.2.2.20 ENSURE the status Board for Dose Assessment is updated.
- 4.2.2.21 ENSURE TLDs are issued to TSC/OSC personnel (non-team members) as time permits.
- 4.2.2.22 IF non-essential personnel are evacuated from the Site,  
AND personal vehicles are contaminated,  
THEN COORDINATE washdown stations with EOF.

### **4.3 Accident Assessment Coordinator**

#### **4.3.1 Activation**

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

4.3.1.2 PERFORM the following as minimum functions to declare the TSC operational:

- o DETERMINE Critical Safety Functions
- o Ability to BRIEF EC on plant status to include impact of EALs or PARs through use of either SPDS or phone link established with Control Room.

#### **4.3.2 Operation**

4.3.2.1 PROVIDE plant status for the Supplemental Data Sheet of the Florida Nuclear Plant Emergency Notification Form as required by Communication/Report Coordinator.

4.3.2.2 COORDINATE Accident Assessment Team activities in accordance with EM-225 to implement the following:

- o INITIATE log of activities to document times and results of significant actions.
- o ENSURE EC informed of AAT activities and developments in plant status, especially those that may impact Emergency Action Levels and Protective Action Recommendations.
- o ENSURE Control Room is informed of changing radiological conditions and ongoing TSC activities, including accident mitigation priorities.
- o PROVIDE engineering support to develop mitigation strategies.
- o ENSURE direct communications with AAT at the EOF is established as needed.
- o MAINTAIN Critical Safety Function Status Board.
- o ENSURE the EC and Dose Assessment Coordinator informed of core status.
- o ENSURE the effects of proposed maintenance activities and operational manipulations on plant equipment are evaluated.
- o REQUEST operator support through Repairs Coordinator once operators established in OSC.
- o EVALUATE and develop mitigation strategies using the CR-3 Severe Accident Guideline during a Severe Accident. [NOCS 100056]
- o REQUEST repair activities through TSC Repairs Coordinator.



#### **4.4 Repairs Coordinator**

##### **4.4.1 Activation**

- 4.4.1.1 BADGE IN at TSC Card Reader and PLACE name on TSC Staffing Board.
- 4.4.1.2 IF TSC/OSC needs to be put into emergency recirculation mode (per Emergency Coordinator, Dose Assessment Coordinator ),  
THEN ENSURE emergency recirculation mode is established by OSC.
- 4.4.1.3 PERFORM the following as minimum functions to declare the TSC operational:
  - o MOBILIZE OSC personnel
  - o DETERMINE on-going maintenance activities
- 4.4.1.4 OBTAIN Maintenance Logbook and procedures, as needed.
- 4.4.1.5 TEST push-to-talk headsets, as needed.
- 4.4.1.6 ESTABLISH communications with OSC Manager, and request status on emergency teams in the field.
- 4.4.1.7 IF emergency occurs off hours,  
THEN ENSURE OSC Maintenance Coordinator or OSC Manager staff the OSC,  
AND NOTIFY an adequate number, as identified on page 2 of Enclosure 2, of qualified Emergency Repair Team members to respond.
- 4.4.1.8 PERFORM as OSC Manager, as necessary, until relieved.

##### **4.4.2 Operation**

- 4.4.2.1 INITIATE log of activities to document times and results of repair activity.
- 4.4.2.2 MAINTAIN direct communications with OSC Manager
- 4.4.2.3 IDENTIFY equipment repair priorities as established by the TSC (EC and Accident Assessment) and COORDINATE with OSC Manager for implementation.
- 4.4.2.3.1 UPDATE TSC Priority and Equipment Out-of-Service board.
- 4.4.2.4 NOTIFY the OSC Manager for Repair Team, Sample Team, and Operator dispatch as requested by the TSC.
- 4.4.2.5 ENSURE requests for operator dispatch with Teams is cleared with the Accident Assessment Coordinator prior to dispatch.
- 4.4.2.6 ENSURE the Emergency Coordinator and Accident Assessment Coordinator are immediately aware of major plant repairs.
- 4.4.2.7 MAINTAIN awareness of OSC Team Activity and ensure OSC repair status is properly updated on the TSC display of Team status.
- 4.4.2.8 ENSURE the Emergency Coordinator concurs with Team dispatch.

## **4.5 Communication/Report Coordinator**

### **4.5.1 Activation**

- 4.5.1.1 BADGE IN at TSC Card Reader and PLACE name on TSC Staffing Board.
- 4.5.1.2 OBTAIN logbook.
- 4.5.1.3 OBTAIN necessary procedures.
- 4.5.1.4 PERFORM the following as minimum functions to declare the TSC operational:
  - o PREPARE Florida Nuclear Plant Emergency Notification Form, as necessary (also referred to as State Form).
  - o PREPARE Reactor Plant Event Notification Worksheet, as necessary.
- 4.5.1.5 Make copies of State and NRC Reactor Plant Event Notification form Enclosures from EM-202 for use as needed.
- 4.5.1.6 NOTIFY additional communicators, as identified on page 2 of Enclosure 2, for support. COMBINE functions as necessary.

### **4.5.2 Operation**

- 4.5.2.1 OBTAIN times of last State and NRC notification from EC and PREPARE next report.
- 4.5.2.2 OBTAIN copy of previous notifications made in Control Room from EC or Administrative Support.
- 4.5.2.3 MAINTAIN Notifications Board and ENSURE updates are timely.
- 4.5.2.4 REQUEST Supplemental Data for State Form from Accident Assessment and Dose Assessment.
- 4.5.2.5 ENSURE the State Form is prepared as required, following guidelines associated with form and faxing forms to Group 1.
- 4.5.2.6 PREPARE Reactor Plant Event Notification Worksheet, as needed.
- 4.5.2.7 ENSURE the following EM-202 notifications and updates are documented: [NOCS 21207]
  - State notification and updates (via SWPT, Commercial line, ESATCOM or LGR)
  - 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
  - Notification of Risk Management (to notify ANI and NEIL). It is acceptable to leave voice message and ask them to return call to (352) 795-5078.

#### NOTE

Once NRC is on ENS continuously, Reactor Plant Event Notification Worksheet forms are no longer required to be filled out.

- 4.5.2.8 IF NRC requests ENS/NRC Communicator to stay on the line for operational updates, THEN ENSURE the Accident Assessment Coordinator appoints someone who has extensive operational experience and is well versed on the emergency condition. [NOCS 96042]
- 4.5.2.9 ENSURE once EOF is operational, the TSC/EOF Ringdown between the EOF and TSC is established for communicating plant status, TSC actions, EOF actions, State and County actions. UPDATE the EC and boardkeeper on Protective Action, State and County actions, as significant information is received from the EOF.
- 4.5.2.10 ENSURE proper turnover to EOF for notifications.
- 4.5.2.11 INITIATE log of activities to document times and results of significant actions.
- 4.5.2.12 EVALUATE needs of Communications/Report Preparation personnel once EOF is operational and dismiss as necessary for future relief shift.

## **4.6 Security Coordinator**

### **4.6.1 Activation**

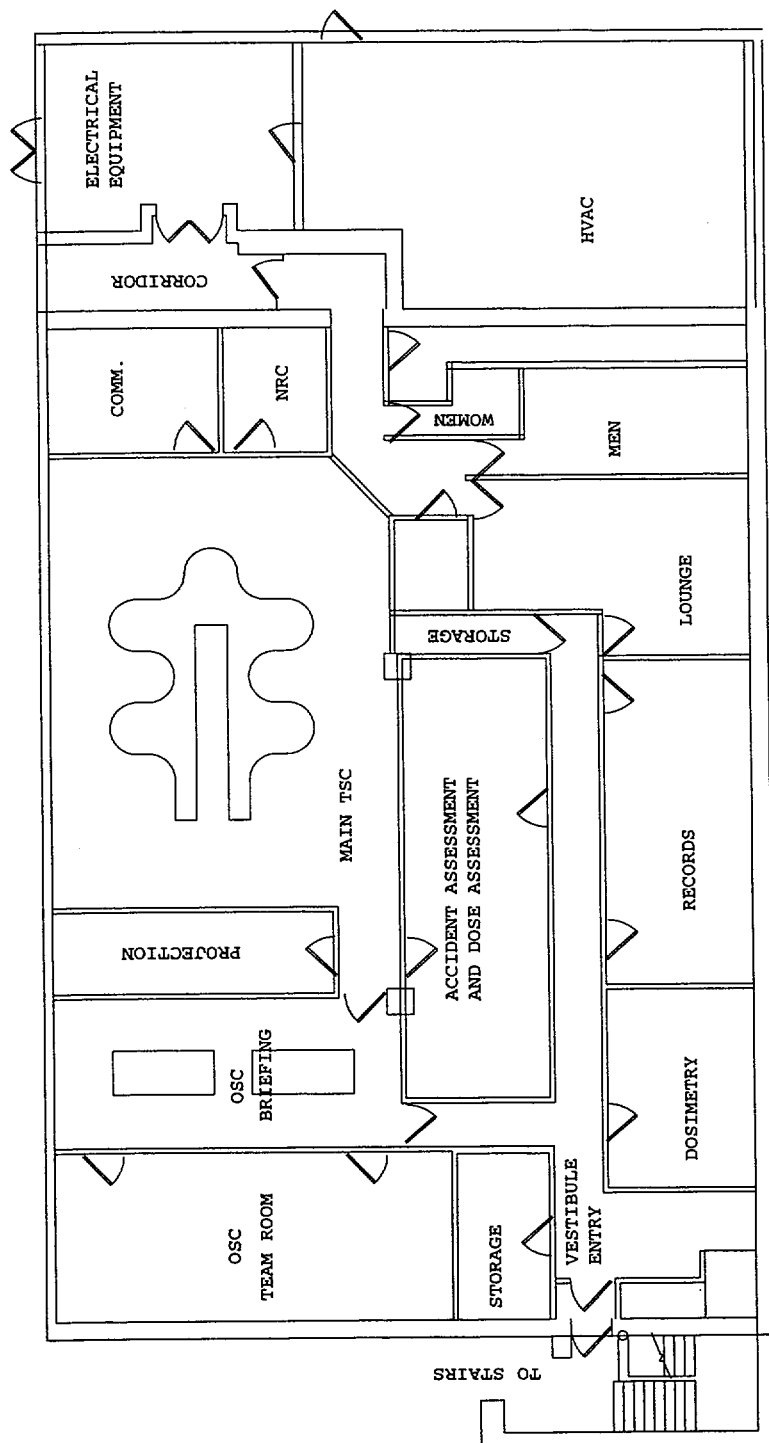
- 4.6.1.1 BADGE IN at TSC Card Reader and PLACE name on TSC Staffing Board.
- 4.6.1.2 ENSURE card readers are utilized upon entry and exit to TSC/OSC during emergency conditions to provide accurate accountability throughout the emergency.

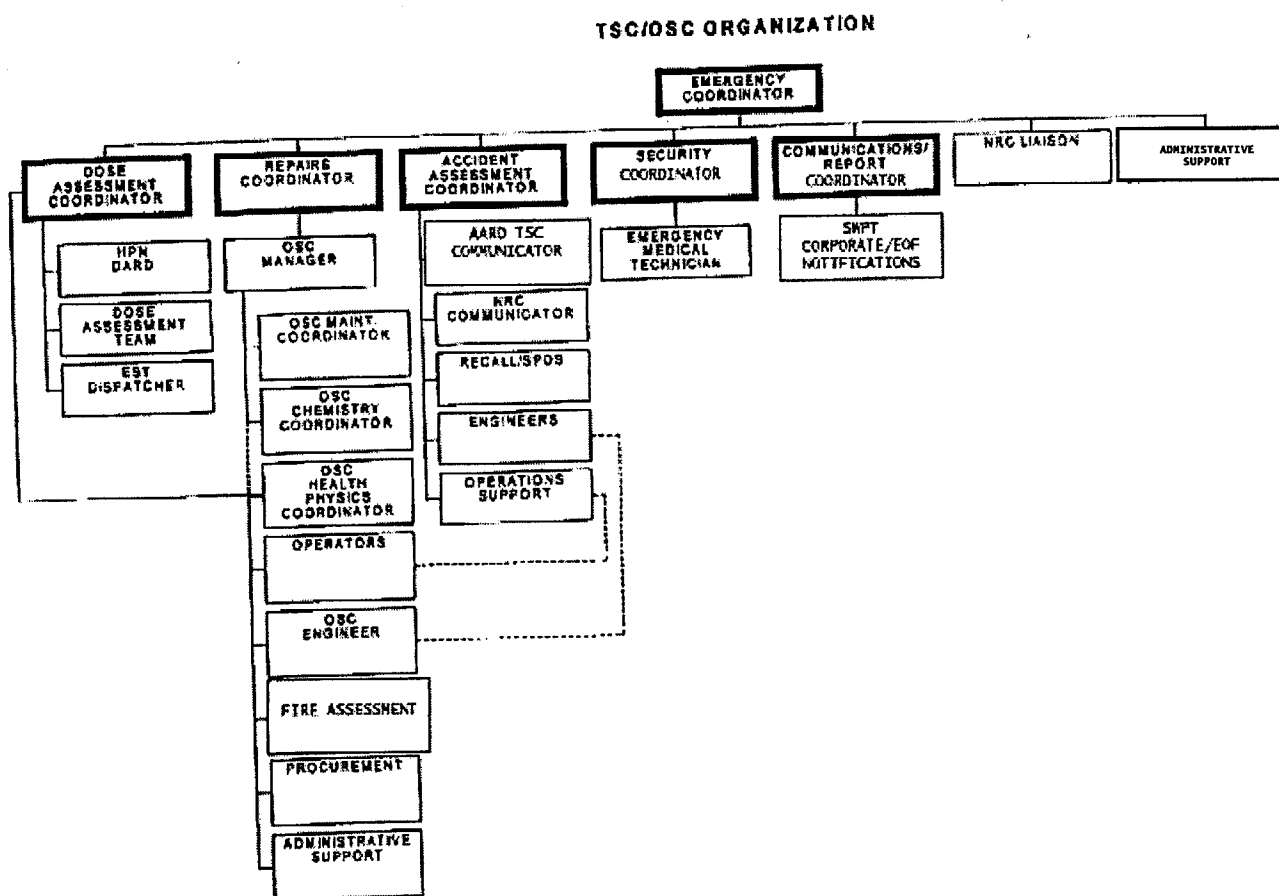
- 4.6.1.3 PERFORM the following as minimum functions to declare the TSC operational:
  - o CALL IN additional TSC/OSC support as requested.
  - o MOBILIZE Security personnel to perform personnel accountability and evacuation, as needed.

- 4.6.1.4 OBTAIN logbook and procedures as necessary.

### **4.6.2 Operation**

- 4.6.2.1 ENSURE proper Security staffing to perform access control, personnel accountability, and badging of external responders.
- 4.6.2.2 INITIATE log of activities to document times, actions and results.
- 4.6.2.3 ESTABLISH and MAINTAIN contact with Plant, Corporate Security and Main Assembly Area Supervisor, as appropriate.
- 4.6.2.4 NOTIFY Corporate Security immediately upon Site Area Emergency declaration.
- 4.6.2.5 ENSURE availability of EMT and possibility of calling additional qualified EMTs for standby.
- 4.6.2.6 NOTIFY EC of evacuation status and accountability of CR-3 and Units 1,2,4 and 5. Protected Area Accountability must be completed within 30 minutes of Site Area Emergency evacuation.
- 4.6.2.7 DETERMINE coordination efforts needed by Security supervision dispatched to perform functions associated with the Main Assembly Area Supervisor.
- 4.6.2.8 ENSURE Security personnel inform the TSC immediately when EMTs are dispatched.
- 4.6.2.9 ENSURE Security personnel (including EMTs) maintaining posts or responding to an emergency scene during radiological conditions are coordinated with the Dose Assessment Coordinator for RMT coverage.
- 4.6.2.10 INFORM Security personnel of the overall radiological conditions of the plant to include instrumentation, TLDs, and protective clothing as indicated by the Dose Assessment Coordinator.
- 4.6.2.11 IF suspension of Safeguards per Security Plan is required,  
THEN COORDINATE with EC,  
AND ENSURE 10CFR50.54(x)(y) is invoked.
- 4.6.2.12 IF suspension of Safeguards has been invoked,  
AND Security personnel have been evacuated,  
THEN OBTAIN key for OSC Team dispatch into locked plant areas.
- 4.6.2.13 IF Security personnel are evacuated,  
THEN ENSURE EMT reports to TSC/OSC.
- 4.6.2.14 DETERMINE if additional Personnel Protective Equipment (PPE) is needed by OSC personnel.
- 4.6.2.15 IF OSC Manager determines additional PPE is needed,  
THEN REQUEST Security to bring visitor PPE supplies to OSC.
- 4.6.2.16 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.

TSC/OSC Floor Plan  
(NOCS 10520, 20470)



NOTE: Dark-bordered boxes indicate minimum staff required to declare TSC/OSC operational.

**TSC/OSC Staffing**  
**[NOCS 24060, 63010]**

**TSC**

<u>FUNCTION</u>	<u>INDIVIDUALS</u>
Emergency Coordinator	1
Administrative Support	1
NRC Liaison/Assistant Emergency Coordinator	1
*Radiological Emergency Planning	1
*State/NRC Form Preparation	1
TSC/EOF Ringdown Communicator	1
*SWPT Communicator	1
Repairs/Maintenance	1
Dose Assessment	1
HPN Communicator	1
ESV Dispatcher 1	
*Dose Assessment Team	1-3
Accident Assessment	3
Accident Assessment Ringdown Communicator	1
Engineers	2
Security           1	
NRC Resident   1	
Other NRC (Not part of initial staffing)	5

**OSC**

Emergency Teams	
Radiation Monitoring Teams	12 (4 ESV)
Sampling Team	3
Emergency Repair Team (Elec, I/C, Mech)	7 (2 elec, 2 I/C, 3 mech)
Operators (when available)	2
OSC Manager	1
OSC Health Physics Coordinator	1
OSC Chemistry Coordinator	1
OSC Maintenance Coordinator	1
Fire Assessment	1
Procurement	1
Admin Support	1
Engineer (Engineering support as needed)	1
EMT	1

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

### 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/OSC 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, special instructions prior to 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 NRC Liaison or 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 Dose Assessment 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.



## Facility Turnover/Briefing Worksheet

## A. STATUS OF EMERGENCY PLAN IMPLEMENTATION

1. TIME: Alert \_\_\_\_\_ Site Area Emergency \_\_\_\_\_ General Emergency \_\_\_\_\_
2. EALs met. \_\_\_\_\_  
\_\_\_\_\_
3. Time SWPT Notification Due: \_\_\_\_\_ Time NRC Notification Due: \_\_\_\_\_
4. Release Significance Category \_\_\_\_\_ EM-204A completed \_\_\_\_\_
5. EM-202 EC guide completed through step \_\_\_\_\_ (fax copy)
6. Energy Complex protective actions: \_\_\_\_\_
7. Offsite Protective Action Recommendations made: \_\_\_\_\_
8. EOP status: \_\_\_\_\_  
\_\_\_\_\_

## B. PLANT STATUS:      Degrading \_\_\_\_\_ Stable \_\_\_\_\_ Improving \_\_\_\_\_

1. Is the reactor shutdown? \_\_\_\_\_
2. Is the core adequately cooled? \_\_\_\_\_
3. Fission product barriers Assessment:  

Fuel clad	<input type="checkbox"/> Intact	<input type="checkbox"/> Challenged	<input type="checkbox"/> Lost	<input type="checkbox"/> Regained
RCS	<input type="checkbox"/> Intact	<input type="checkbox"/> Challenged	<input type="checkbox"/> Lost	<input type="checkbox"/> Regained
Containment	<input type="checkbox"/> Intact	<input type="checkbox"/> Challenged	<input type="checkbox"/> Lost	<input type="checkbox"/> Regained
4. Electrical Power Status:

Off-Site Power Available?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
ES Buses Energized?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Emergency Diesel Generator's Available?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
DC Power Available?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
5. Control Complex Status:

Ventilation/Cooling Available?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Necessary instrumentation Available?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
6. Other Conditions/Challenges: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# Contingency Plan for Securing TSC/OSC and Establishing An Alternate TSC/OSC

## EQUIPMENT AVAILABLE IN CONTROL ROOM:

**CHECK**

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

## BEFORE GOING TO ALTERNATE LOCATION (ADJACENT TO CONTROL ROOM)

- a. IDENTIFY minimum staff necessary based on plant conditions. \_\_\_\_\_
- b. CONSIDER taking items identified with "\*" on list inside TSC cabinet. \_\_\_\_\_
- c. TAKE satellite phone(s) (located in TSC cabinet) if conditions warrant. \_\_\_\_\_
- d. TAKE LGR to alternate location and connect in office outside Control Room. \_\_\_\_\_
- e. TAKE Quickpager to alternate location. \_\_\_\_\_

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

- a. PLACE high value items on tables:
  - Computers and peripherals \_\_\_\_\_
  - Communication equipment \_\_\_\_\_
  - Anything else that can be placed on tables \_\_\_\_\_
- b. VERIFY flood protection is placed around TSC/OSC (EM-220). \_\_\_\_\_
- c. ENSURE appropriate TSC equipment is de-energized (EM-220, Encl. 2). \_\_\_\_\_
- d. DISABLE auto start on diesel by selecting the "Auto/Test" switch to the center "Off" position on the generator Kohler Controller, AND notify Security. \_\_\_\_\_
- e. RELOCATE to Alternate TSC and ENSURE plant personnel/Security is informed of new TSC/OSC location. \_\_\_\_\_

**Alternate TSC/OSC Control Complex Area Setup and Staffing Guidelines**  
**[NOCS 24130]**

**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 in accordance with 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. Traffic into the Control Room must be kept to a minimum.

This enclosure identifies areas outside the Control Room for Alternate TSC operation. Minimum requirements as identified in Section 3.2.1 must be maintained. Additional responsibilities as identified in Section 4.0 are implemented as necessary.

**OPERATIONS BREAK AREA**

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

**PERSONNEL** - Emergency Coordinator, Dose Assessment Coordinator, Accident Assessment Coordinator, Repairs Coordinator, Report Preparation/Communications, Security Coordinator, Accident Assessment Ringdown Communicator and NRC representative.

**SETUP** - Arrange TSC functions around the table, adding chairs as needed. The Accident Assessment Ringdown telephone must be connected.

**OPERATION** - Required TSC function personnel will 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 by the EOF Accident Assessment Team.

**AREA ADJACENT TO THE BREAK ROOM**

**ACTIVITY** - Communication by PAX with emergency team personnel located on 124' elevation. Possible work area for Accident Assessment personnel.

**SETUP** - No setup required. PICS is on computer in this area. One PAX phone in area.

**OPERATION** - Repairs Coordinator 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.

**ADMIN. SUPPORT OFFICE OUTSIDE OF CONTROL ROOM**

**ACTIVITY** - Dose assessment, dispatch of EST

**PERSONNEL** - Dose Assessment Team and EST Dispatcher

**SETUP** - REDAS and RADDOSE IV are installed on computer in room

**OPERATION** - Perform dose projections until the EOF DAT is operational. The phone will 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.

**NUCLEAR SHIFT MANAGER OFFICE**

**PERSONNEL** - To be used as needed by TSC personnel.

**SETUP** - No setup required. REDAS is on this computer. Office is location for backup LGR connection.

**124' ELEVATION**

**ACTIVITY** - Team Staging Area.

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

**SETUP** - Setup 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 in accordance with EM-104. OSC Coordinators may be on 124' with teams or may reside across from the Control Room, as needed.

**CONTROL ROOM** - (See Enclosure 5 for available communication/equipment)

**ACTIVITY** - State Warning Point 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.

**SETUP** - 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 Dose Assessment responsibilities transfer. Accident Assessment personnel observe plant parameters on the SPDS computer in Computer Main Cabinet #5 or on the main control board as accessible.