

MANUAL HARD COPY DISTRIBUTION

DOCUMENT TRANSMITTAL 2003-19569

---

USER INFORMATION:

~~GERLACH\*ROSE/M~~ EMPL#:28401 CA#: 0363  
Address: NUCSA2  
Phone#: 254-3194

TRANSMITTAL INFORMATION:

TO: ~~GERLACH\*ROSE/M~~ 04/17/2003  
LOCATION: DOCUMENT CONTROL DESK  
FROM: NUCLEAR RECORDS DOCUMENT CONTROL CENTER  
(NUCSA-2)  
THE FOLLOWING CHANGES HAVE OCCURRED TO THE HARDCOPY  
OR ELECTRONIC MANUAL ASSIGNED TO YOU:

130 - 130 - HP II DOSE CALCULATOR: EMERGENCY PLAN-  
POSITION SPECIFIC PROCEDURE

REMOVE MANUAL TABLE OF CONTENTS DATE: 03/06/2003

ADD MANUAL TABLE OF CONTENTS DATE: 04/16/2003

CATEGORY: PROCEDURES TYPE: EP  
ID: EP-PS-130  
REMOVE: REV:15

ADD: REV: 16

UPDATES FOR HARD COPY MANUALS WILL BE DISTRIBUTED  
WITHIN 5 DAYS IN ACCORDANCE WITH DEPARTMENT  
PROCEDURES. PLEASE MAKE ALL CHANGES AND  
ACKNOWLEDGE COMPLETE IN YOUR NIMS INBOX UPON  
RECEIPT OF HARD COPY. FOR ELECTRONIC MANUAL USERS,  
ELECTRONICALLY REVIEW THE APPROPRIATE DOCUMENTS AND  
ACKNOWLEDGE COMPLETE IN YOUR NIMS INBOX.

A045

PROCEDURE COVER SHEET

PPL SUSQUEHANNA, LLC		NUCLEAR DEPARTMENT PROCEDURE	
HP II DOSE CALCULATOR: Emergency Plan Position Specific Instruction			EP-PS-130 Revision 16 Page 1 of 3
<u>QUALITY CLASSIFICATION:</u> ( ) QA Program    (X) Non-QA Program		<u>APPROVAL CLASSIFICATION:</u> ( ) Plant    ( ) Non-Plant (X) Instruction	
EFFECTIVE DATE: <u>4-16-2003</u> PERIODIC REVIEW FREQUENCY: <u>2 Years</u> PERIODIC REVIEW DUE DATE: <u>4-16-2005</u>			
<u>RECOMMENDED REVIEWS:</u> All			
Procedure Owner: <u>Nuclear Emergency Planning</u> Responsible Supervisor: <u>Radiation Protection Manager</u> Responsible FUM: <u>Supervisor-Nuclear Emergency Planning</u> Responsible Approver: <u>Vice President-Nuclear Operations</u>			

**HP II DOSE CALCULATOR:** Emergency Plan-Position Specific Instruction

---

**WHEN:** At request of Shift Manager

**HOW NOTIFIED:** Working hours - telephone call or plant page

**REPORT TO:** Shift Manager until TSC is activated, then TSC Dose Calculator

**WHERE TO REPORT:** Control Room initially.

**OVERALL DUTY:**

---

Perform, validate, and report dose calculations.

<b>MAJOR TASKS:</b>	<b>TAB:</b>	<b>REVISION:</b>
Report to the Control Room.	TAB A	6
Obtain briefing from Control Room personnel.	TAB B	2
Obtain meteorological data.	TAB C	4
Withdraw vent monitor data from SPING console.	TAB D	7
Perform dose calculations, then report results to those who request them.	TAB E	8
Initiate radio communications with and direct OSCAR until relieved by the Health Physics Radioman.	TAB F	7
Validate dose calculations with field reading from OSCAR and report.	TAB G	7
Once TSC is activated, maintain dose calculations and direct clerk.	TAB H	3

**SUPPORTING INFORMATION:**

---

**TAB:**

Emergency Telephone Instructions	TAB 1
Emergency Organization	TAB 2
Intentionally Blank	TAB 3
Onsite Emergency Monitoring Locations	TAB 4
Emergency Facility Form Flow	TAB 5
Emergency Classification	TAB 6
Public Protective Action Recommendation Guide	TAB 7
PPL Emergency Personnel Dose Assessment and Protective Action Recommendation (PAR) Guide	TAB 8
Meteorological Data Acquisition	TAB 9
Vent Monitor Data Acquisition	TAB 10
MIDAS Dose Projection Computer Model Instructions	TAB 11
PAVSS Instructions	TAB 12
I-131 Frisker Measurement: Conversion Factors	TAB 13
Intentionally Blank	TAB 14
Remote Monitoring System Base Station Instructions	TAB 15
TSC Dose Assessment Flowchart	TAB 16

**REFERENCES:**

---

SSES Emergency Plan

NUREG-0654, Planning Standards and Evaluation Criteria

NUREG-0731, Guidelines for Utility Management Structure and Technical Resources,  
September 1980

**MAJOR TASK:**

---

Report to the Control Room.

**SPECIFIC TASKS:**

**HOW:**

---

1. Obtain RO-2/2A and master keys for locked doors/gates.

1a. Go to the Health Physics office. Obtain the following:

(1) High Radiation Area master keys.

(2) Source checked RO-2/2A.

2. Proceed to Control Room.

2a. Proceed to the Control Room when:

(1) Paged.

(2) Notified by phone.

(3) As directed by Supervision.

**MAJOR TASK:**

---

Obtain briefing from Control Room personnel.

**SPECIFIC TASKS:**

**HOW:**

---

- |    |  |     |   |
|----|--|-----|---|
| 1. | Inform Shift Manager/Unit Supervision of your arrival.             | 1a. | Identify yourself as the "Dose Calculator."   |
| 2. | Obtain briefing from person holding the briefing.                  | 2a. | Ask key questions, including:<br><br>(1) Is there a release in progress or is one imminent?<br><br>(2) Should I prepare for dose calculations?<br><br>(3) What is the cause or source of the release? |
| 3. | Support Control Room personnel, if not used for dose calculations. | 3a. | Provide Inplant Team coverage upon request.   |

**MAJOR TASK:**

---

Perform dose calculations, then report results to those who request them.

**SPECIFIC TASKS:**

**HOW:**

---

1. Log on and start up MIDAS.

**HELP**

---

**MIDAS Operation  
See TAB 11**

---

2. Report results to those who request them.

2a. Compare release rates and EPB projected dose/dose rates to EAL 15 limits.

**HELP**

---

**Emergency Classification  
See TAB 6**

---

**HELP**

---

**TSC Dose Assessment Flowchart  
See TAB 16 Page 2**

---

2b. Report results after each calculation to the Shift Manager, TSC Dose Calculator, or RPC.

2c. Report change in classification due to releases.

3. Notify the Shift Manager/ED if doses are projected to exceed 1 rem TEDE or 5 rem Thyroid CDE.

**NOTE:**

**The Control Room needs radiological data to evaluate entry conditions and action levels for EOP procedures. These procedures require operator actions such as rapid depressurization based on projected doses.**

**These procedures also require that projected doses be determined when containment venting is needed.**

3a. Discuss projection time with the Shift Manager/ED if unavailable from RPC or TSC Dose Calculator.

**SPECIFIC TASKS:**

**HOW:**

---

**NOTE:**

**This may differ from the default projection time being used in the dose projection model.**

- 3b. Consider the following:
- (1) Prognosis of event
  - (2) Time to cooldown to <200 deg.
  - (3) Duration & type of release
  - (4) Weather forecasts
  - (5) Protective measures already implemented
  - (6) Release pathway - possible filtration and/or monitoring

**MAJOR TASK:**

---

Validate dose calculations with field team readings from OSCAR and report.

**SPECIFIC TASKS:**

**HOW:**

---

1. Compare the peak field measurements obtained by OSCAR during their traverse through the plume to the OSCAR EDE and thyroid CDE dose rates projected by MIDAS.

- 1a. Periodically determine the following ratios:

$$\frac{\text{OSCAR 3" closed window reading or RMS EDE dose rate}}{\text{MIDAS OSCAR EDE dose rate}}$$

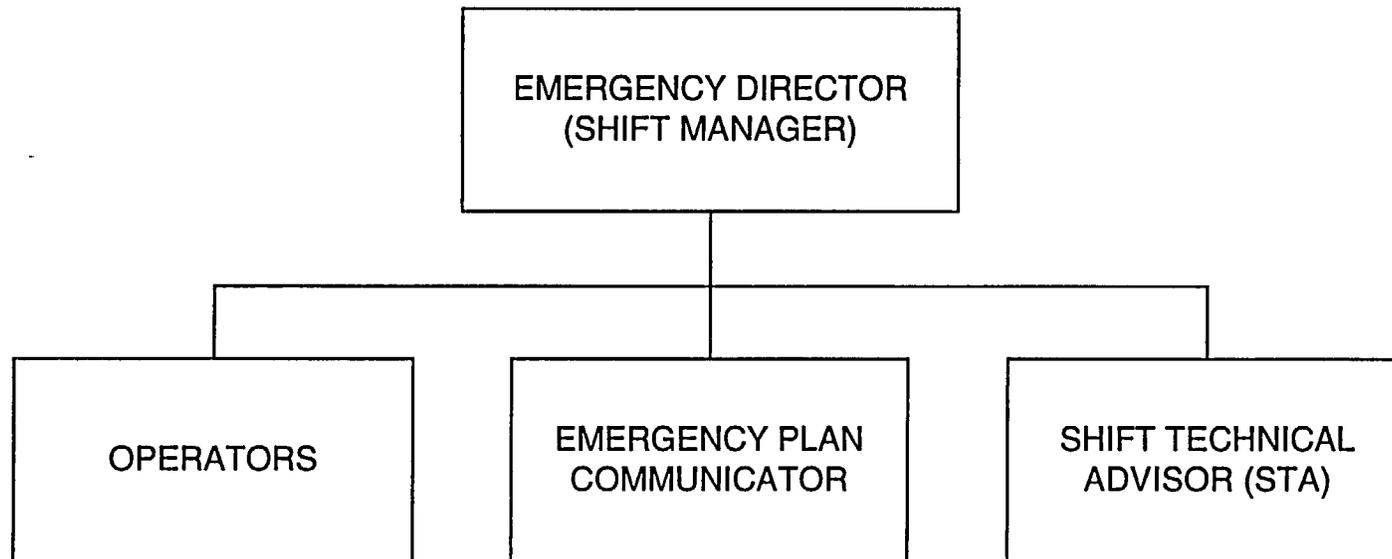
and

$$\frac{\text{OSCAR air sample NET CPM X 0.7 or RMS Thyroid CDE dose rate}}{\text{MIDAS OSCAR Thyroid CDE dose rate}}$$

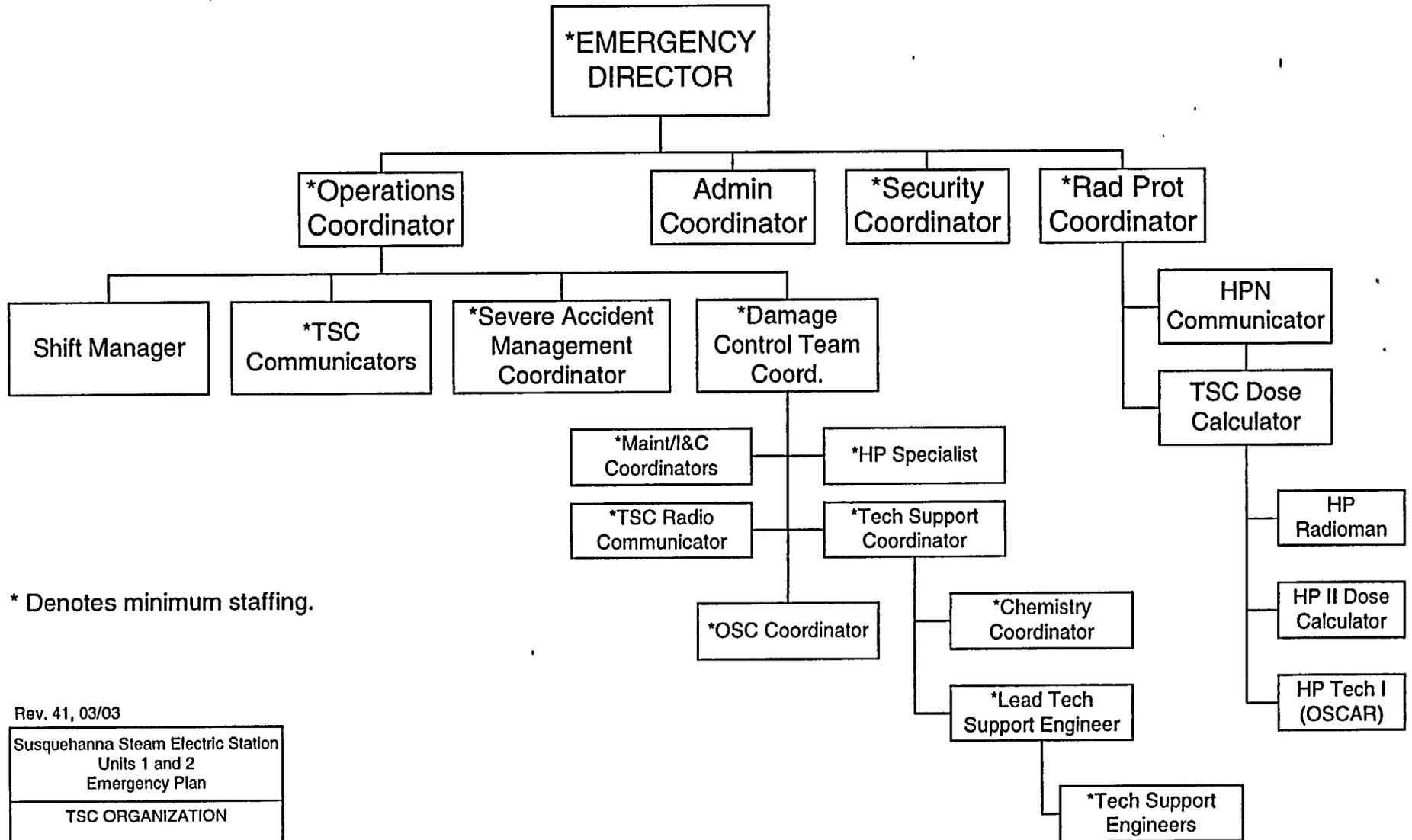
- 1b. If field readings are low (ratio < 0.1), the peak conditions may exist elsewhere. Continue search for higher field conditions.
- 1c. If field readings are higher than the MIDAS projected dose rates (ratio > 1), initiate a Back Calculation and utilize the more conservative of the results.
- 1d. If field results are considerably higher than the MIDAS projections (ratio > 5), an unmonitored release pattern may exist.

2. Report findings to Shift Manager/ED or RPC.

## EMERGENCY ORGANIZATION CONTROL ROOM



## TSC ORGANIZATION



\* Denotes minimum staffing.

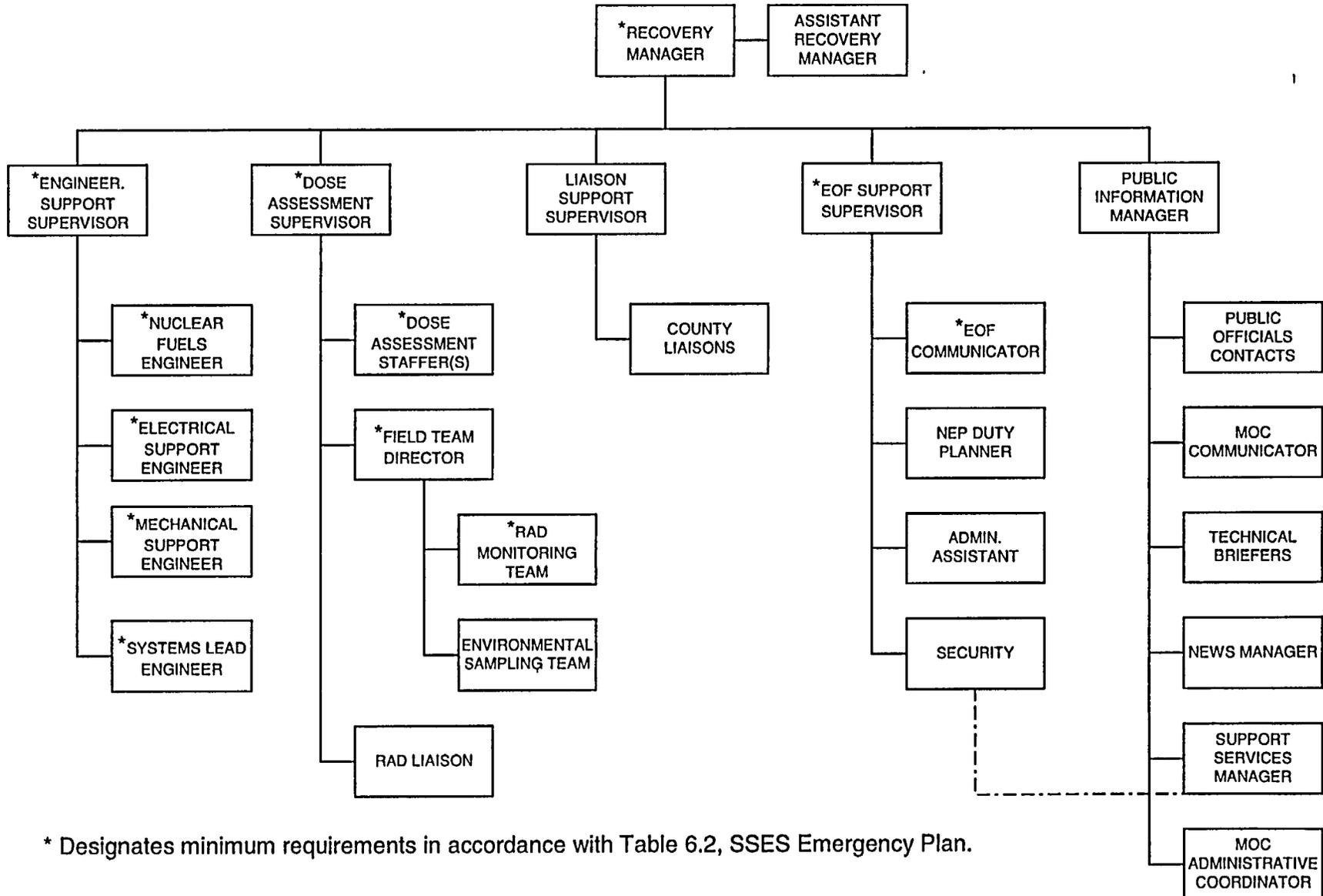
Rev. 41, 03/03

Susquehanna Steam Electric Station  
Units 1 and 2  
Emergency Plan

TSC ORGANIZATION

FIGURE 6 2

# EOF ORGANIZATION



\* Designates minimum requirements in accordance with Table 6.2, SSES Emergency Plan.