



Serial: RNP-RA/01-0141

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United States Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261/LICENSE NO. DPR-23

TRANSMITTAL OF EMERGENCY PROCEDURE REVISIONS

Ladies and Gentlemen:

In accordance with 10 CFR 50.4(b)(5) and Appendix E to 10 CFR 50, Carolina Power & Light (CP&L) Company is transmitting revisions to the H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2, Emergency Implementing Procedures. A list of the procedure revisions and the effective dates is provided in Attachment I.

Descriptions of the procedure changes are provided on the "Summary of Changes" page for each emergency procedure. Please replace the superseded procedures with the attached revisions.

If you have any questions concerning this matter, please contact Mr. H. K. Chernoff.

Sincerely,

B. L. Fletcher III
Manager - Regulatory Affairs

A045

CAC/cac

Attachments:

- I. List of Procedure Revisions and Effective Dates
 - II. EPCLA-01, "Emergency Control"
 - III. EPEOF-02, "Environmental Monitoring Team Leader"
 - IV. EPNOT-01, "CR/EOF Emergency Communicator"
 - V. EPNOT-04, "TSC NRC Emergency Communicator"
 - VI. EPPRO-01, "Program and Responsibilities"
 - VII. EPRAD-01, "Environmental Monitoring"
 - VIII. EPTSC-01, "Site Emergency Coordinator"
 - IX. EPTSC-02, "Plant Operations Director"
- c: L. A. Reyes, NRC, Region II (2 copies)
NRC Resident Inspector, HBRSEP
R. Subbaratnam, NRC, NRR (w/o Attachments)

List of Procedure Revisions and Effective Dates

Procedure	Revision No.	Effective Date
EPCLA-01, "Emergency Control"	11	08/15/2001
EPEOF-02, "Environmental Monitoring Team Leader"	5	08/27/2001
EPNOT-01, "CR/EOF Emergency Communicator"	10	08/15/2001
EPNOT-04, "TSC NRC Emergency Communicator"	5	08/27/2001
EPPRO-01, "Program and Responsibilities"	9	08/20/2001
EPRAD-01, "Environmental Monitoring"	10	08/27/2001
EPTSC-01, "Site Emergency Coordinator"	4	08/15/2001
EPTSC-02, "Plant Operations Director"	4	08/20/2001

United States Nuclear Regulatory Commission
Attachment II to Serial RNP-RA/01-0141
19 Pages

EPCLA-01
EMERGENCY CONTROL
Revision 11

CAROLINA POWER & LIGHT COMPANY
H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

PLANT OPERATING MANUAL

VOLUME 2
PART 5

EMERGENCY PROCEDURE

EPCLA-01
EMERGENCY CONTROL

REVISION 11

SUMMARY OF CHANGES

Step	Description of Change
8.1.3.10a	Revised site emergency declaration announcement, the time of the event was added, the cause description was removed from the announcement. This does not change the announcement of the classification or announcement of protective actions. (AR 44135)
8.1.3.15	Corrected the procedure location for the manual transfer of plant data forms.
Attach 8.1.5.4	Added guidance to suspend turnover activities if plant event changes for classifications. Also added clarification that the CR-SEC maintains responsibilities for updating the TSC of changing plant conditions. (AR 43473)

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CR EMERGENCY CONTROL QUICK START GUIDE

NOTE: This is a summary level guide and does not replace the procedure steps. EPCLA-01 is to be used with this guide.

1. Implement EALs as necessary. It is the expectation that the time between exceeding an EAL and declaration of event will not exceed 15 minutes unless extraordinary conditions prevail. Annotate time of the off normal condition on the top of the EAL board. Continue through the flowpath until a general Emergency has been identified or until the end of the flowpath.
2. Direct an Emergency Communicator to report to the Control Room at this time. This will support communication activities and augmentation of the ERO.
3. The EAL board will direct you to EPCLA-01, "Emergency Control" or to AP-030 if there is no event classification. EPCLA-01 section 8.1.3 provides guidance for classifying emergencies and control.
4. Declare the highest event classification identified by announcing the event to the Control Room and your assuming role as the SEC. This ends the 15 minute clock for the event declaration, and starts the 15 minute clock to notify the appropriate State and County agencies. Announce classification to the Site per EPCLA-01.
5. Develop, approve, and FAX/communicate the Emergency Notification Form. Notify State and County agencies via Selective Signaling System or an alternate means. The notification clock stops after the first voice contact is established with an approved form. This is the time entered on Attachment 8.1.5.1 of EPNOT-01 page 2 of 7.
6. Fill out the Emergency Notification Form. Detailed instructions are in EPNOT-01, Attachment 8.1.5.1, page 3 through 7.
 - Click on "Emergency Preparedness Function Menu.
 - Click on "Log into Network data Base and log in as CRSS.
 - Click on Declare Event, then OK.
 - At top of screen type ER to bring up Environmental Data and print screen.
 - Click on Event Notification Form (ENF)
 - Click "ADD" on ENF
7. Assess EALs for changing plant conditions. Attachment 8.1.5.4 in EPCLA-01 contains the checklist for turnover to the TSC.

8.1.1 PURPOSE

1. To provide consolidated guidance for classifying emergencies from the Control Room or Technical Support Center (TSC).

8.1.2 RESPONSIBILITIES

1. The Site Emergency Coordinator (SEC) has immediate and unilateral authority to implement this procedure.
2. The SEC may not delegate:
 - a. The decision to notify offsite authorities;
 - b. Making offsite Protective Action Recommendations (PAR); and
 - c. Reclassifying or terminating the emergency.
3. The responsibility to notify offsite authorities and making offsite Protective Action Recommendations transfer to the Emergency Response Manager (ERM) upon activation of the Emergency Operations Facility (EOF).
4. The SEC may authorize exposure in excess of routine yearly limits for saving of life or protecting valuable equipment per EPOSC-04, Emergency Work Control.

8.1.3 INSTRUCTIONS

1. Enter the Emergency Action Level (EAL) flowpath, EAL-1, at the first step and determine the appropriate classification.
2. Declare or validate the highest classification of emergency determined.
 - a. Announce to Control Room or TSC personnel that you are assuming the position of SEC.

8.1.3 (Continued)

3. Direct the Emergency Communicator to prepare for communication activities in accordance with EPNOT-01, CR/EOF Emergency Communicator.
4. Determine if there are any personnel injuries;
 - a. Give priority to lifesaving activities over radiological exposure control, authorize exposures in excess of normal limits if required.
 - b. Refer to EPSPA-02, First Aid and Medical Care, for additional guidance on first aid and transportation of contaminated injured personnel.
5. Determine if onsite protective actions are necessary;
 - a. Evaluate radiological, chemical and other situations which may require evacuation.
 - b. If evacuation or administration of potassium iodide is necessary, implement EPSPA-01, Evacuation and Accountability, or EPSPA-03, Administration of Potassium Iodide, respectively.
 - c. Evaluate possible severe weather protective actions.
(CR 22292)
6. Request any offsite assistance necessary;
 - a. The Unit 2 Control Room should contact Darlington County 911 Center for fire, police or ambulance service.
 - b. Logistics personnel may contact the 911 Center if Control Room staff are unable to request assistance.
 - c. Contact other agencies as necessary, selected offsite agency numbers are maintained in the Emergency Response Organization (ERO) phone book.

8.1.3 (Continued)

7. Activate appropriate Emergency Response Facilities (ERFs) as noted below:

a. **IF** all of the following occurs;

- The Start-up Transformer is lost.
- Backfeed through the Auxiliary Transformer is possible.
- Only 1 (one) Emergency Diesel is powering its respective bus.

THEN staff all of the **onsite** Emergency Response Facilities to assist with back feed logistics.

b. For Unusual Event - no activation is required, facilities may be activated at SEC discretion.

c. For Alert - activate TSC, EOF and OSC. Joint Information Center (JIC) activation is at SEC or ERM discretion.

d. For Site Area and General Emergency - Activate all onsite and offsite facilities.

- If the initial classification was an Alert or below and has escalated to Site Area Emergency or above, initiate scenario 41 to call out JIC non-beeper personnel per EPNOT-01.

8. Determine habitability of facilities for directing ERO personnel to the primary or alternate location via PA, pager code, etc.

9. For an Alert only, if the casualty has abated prior to or during notification of offsite agencies, ERO pagers and facilities need not be activated.

a. If no facility activation is desired, modify the upcoming Public Address (PA) announcement with do not activate the Technical Support Center (TSC), Emergency Operations Facility (EOF), or Operations Support Center (OSC).

8.1.3 (Continued)

10. Sound applicable alarms and perform a PA announcement with the "VLC" switch in "Emergency" position;

- a. Announce "**Attention all personnel, attention all personnel, at (state time of declaration) a(n) (give emergency declared) has been declared.**

If Emergency Response Facilities are being activated
announce

"All EOF/TSC/OSC personnel report to your designated facility."

- b. Repeat announcement(s) and alarm (if sounded).

11. If a Site Area or General Emergency has been declared a site evacuation is mandatory unless doing so will jeopardize the safety of plant personnel. To evacuate the site, sound the site evacuation alarm for approximately 15 seconds, and announce "**All Non-Emergency Response personnel report to (give appropriate upwind location) immediately. All Joint Information Center personnel report to your facility.**"

- Repeat announcement(s) and alarm (if sounded).
- To avoid confusion site evacuation should only be initiated once.
- Designated locations are: (others may be used if necessary)

East - Building 110 next to Lake Robinson or parking lot.

West - Unit 2 Administrative Building Cafeteria or parking lot.

8.1.3 (Continued)

12. If a General Emergency has been declared, formulate a protective Action Recommendation (PAR).
 - a. Use guidance in Attachments 8.1.5.1, Initial Protective Action Recommendation Flowchart and Attachment 8.1.5.3, PAR Affected Zones Based on Wind Direction to formulate the initial recommendation and zones to be evacuated based on wind direction.
 - b. Subsequent PARs are made by comparing dose projections and environmental monitoring results to Attachment 8.1.5.2, Protective Action Guidelines (PAG) and upgrading the initial recommendations as necessary.
 - c. If conditions indicate the PAR needs upgrading, the 15 minute notification standard applies as this will be a new initial message.
13. Develop and transmit an initial Emergency Notification Form to at least one State and County agency within 15 minutes of emergency declaration.
 - a. Follow up notifications are required at least every 30-60 minutes.
14. Within one hour of an Alert (or above) declaration, activate the Emergency Response Data System (ERDS) as noted below:
 - a. If the ERDS is not currently operational (ERDS = NORMAL is not displayed at the bottom of an ERFIS terminal), the SEC will ensure that ERDS is activated. Any problems should be reported to Information Technology personnel.
 - b. Display the ERDS activation screen by:
 - Depressing the ERDS key on the ERFIS keyboard, or
 - Typing the Turn-On-Code “ERDS” at the input field, or
 - Selecting ERDS from the EP Menu.

8.1.3.14 (Continued)

- c. When the ERDS Control and Status Display window appears, click on the green "Start ERDS" button.
 - An "Are You Sure" message is displayed. Click yes to initiate ERDS, click no to cancel.
 - Observe the "Start ERDS" button changes to a yellow "Starting..." button.
 - When ERDS connects to the NRC Operations Center the yellow "Starting..." button will change to a red "Stop ERDS" button.
 - Other buttons are provided to review system status and data transmissions.
 - It may take several minutes for the system status in the Control and Status Display window or at the bottom of the screen to update.
 - d. Within five minutes after activation, the ERDS function should become operational. This is determined by ERDS = NORMAL message displayed at the bottom of an ERFIS terminal.
 - e. If ERDS fails to become operational (ERDS = NORMAL is not displayed on an ERFIS Terminal) within five minutes, stop the ERDS function by clicking the red "Stop ERDS" button and notify onsite Information Technology.
15. If the Emergency Response Facility Information System/Electronic Display System (ERFIS/EDS) is out of service initiate manual transfer of safety parameter and other relevant data.
- a. Forms for recording data are located in EPNOT-01, "Notification and Emergency Communications.

8.1.3 (Continued)

16. Continue to assess the plant status against the EALs to confirm, upgrade or downgrade the emergency classification.
 - a. If the State and County facilities have been activated, they should be consulted prior to any downgrade of emergency classification.
17. If the TSC is activating, perform a turnover with the TSC SEC.
 - a. A turnover checklist is provided as Attachment 8.1.5.4, Turnover Checklist.
18. Perform PA announcements periodically to update personnel in the field of any changing plant conditions.
19. When appropriate based on plant conditions, coordinate with any offsite agencies which have activated and terminate the emergency.
 - a. Direct the Emergency Communicator to make termination notifications to all agencies.
 - Termination, as a change in classification, has a 15 minute time requirement.
 - b. If not previously terminated by the Nuclear Regulatory Commission (NRC), coordinate the termination of ERDS.

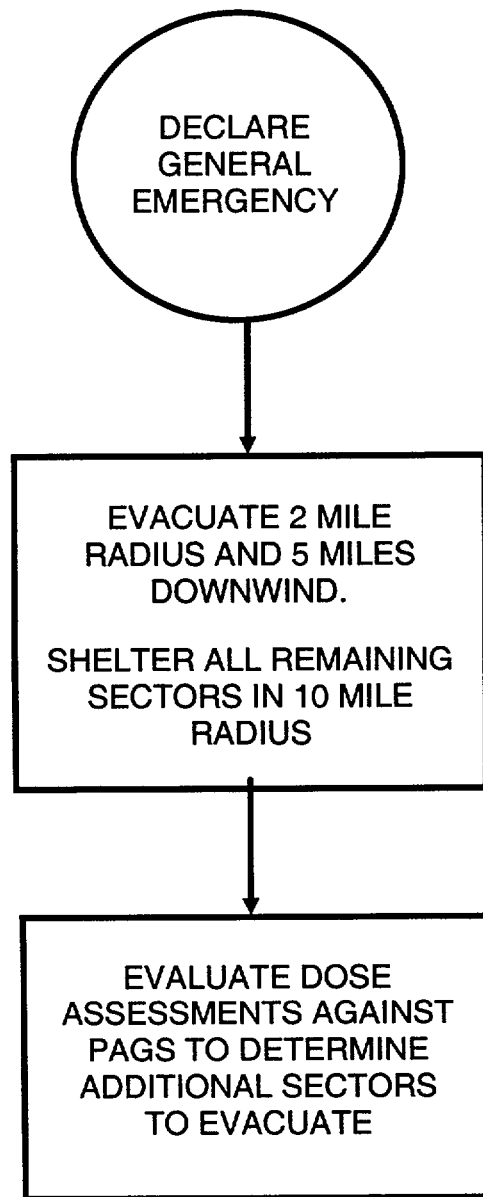
8.1.4 RECORDS

N/A

8.1.5 ATTACHMENTS

- | | |
|---------|--------------------------------------------------------|
| 8.1.5.1 | Initial Protective Action Recommendation Flowchart |
| 8.1.5.2 | EPA Protective Action Guide (PAGs) for the Early Phase |
| 8.1.5.3 | PAR Affected Zones Based on Wind Direction |
| 8.1.5.4 | Turnover Checklist |

INITIAL PROTECTIVE ACTION RECOMMENDATION FLOWCHART



INITIAL PROTECTIVE ACTION RECOMMENDATION FLOWCHART
PAR REFERENCE GUIDE AND DOCUMENTATION FORM

RULES FOR PROTECTIVE ACTION RECOMMENDATIONS

1. SHELTER ALL REMAINING SECTORS IN THE 10 MILE RADIUS NOT EVACUATED.
2. A PROTECTIVE ACTION RECOMMENDATION MAY NOT BE REDUCED FROM THE INITIAL RECOMMENDATION FOR ANY SECTOR UNTIL THE RELEASE IS TERMINATED AND THE DECISION IS COORDINATED WITH THE STATE AND COUNTIES.
3. A PROTECTIVE ACTION REQUIRED FOR ANY PORTION OF A SECTOR REQUIRES THAT ACTION BE IMPLEMENTED FOR THE ENTIRE SECTOR.

RECOMMENDATION

PLACE A ✓ IN THE APPROPRIATE BLANK FOR EACH SECTOR.

-----2 MILE RADIUS-----

EVACUATE	SHELTER	SECTOR
_____	_____	A-0
-----5 MILE RADIUS-----		
_____	_____	A-1
_____	_____	B-1
_____	_____	C-1
_____	_____	D-1
_____	_____	E-1

-----10 MILE RADIUS-----

EVACUATE	SHELTER	SECTOR
_____	_____	A-2
_____	_____	B-2
_____	_____	C-2
_____	_____	D-2
_____	_____	E-2

RECOMMENDED BY / TIME: _____ /
 RCD OR RCM

APPROVED BY / TIME: _____ /
 SEC OR ERM

ATTACHMENT 8.1.5.2
Page 1 of 1
EPA PROTECTIVE ACTION GUIDE (PAGS)
FOR THE EARLY PHASE*

<u>PROTECTIVE ACTION</u>	<u>PAG</u>	<u>COMMENTS</u>
Evacuate	1 Rem TEDE	Change any sheltering subzones/sectors to evacuate if the Total Effective Dose Equivalent dose within any area exceeds PAG.
Evacuate	5 Rem CDE	Change any sheltering subzones/sectors to evacuate if the Committed Dose Equivalent dose to the thyroid within any area exceeds PAG.

*The Early Phase is the time between the beginning of an incident and when the incident source and releases have been brought under control.

Reference: EPA 400-R-92-001, "Manual of Protective Action Guides and Protective Actions for Nuclear Incidents," U.S. Environmental Protection Agency, Washington, D.C., May 1992

PAR AFFECTED ZONES BASED ON WIND DIRECTION(EVACUATION TIME IN MINUTES)²

<u>WIND FROM</u>	<u>POTENTIALLY¹ AFFECTED SECTORS</u>	<u>WINTER WEEKDAY, FAIR WEATHER</u>	<u>WINTER WEEKNIGHT, FAIR WEATHER</u>	<u>SUMMER WEEKDAY, FAIR WEATHER</u>	<u>WINTER WEEKDAY, ADVERSE WEATHER</u>
North (338° - 022°)	A-0, B-1, B-2, C-1, C-2, D-1, D-2	225	180	210	295
Northeast (023° - 067°)	A-0, C-1, C-2, D-1, D-2, E-1, E-2	225	180	210	295
East (068° - 112°)	A-0, D-1, D-2, E-1, E-2	225	180	210	295
Southeast (113° - 157°)	A-0, A-1, A-2, D-1, E-1, E-2	225	180	210	295
South (158° - 202°)	A-0, A-1, A-2, B-1, B-2, E-1, E-2	225	180	210	295
Southwest (203° - 247°)	A-0, A-1, A-2, B-1, B-2, E-1, E-2	225	180	210	295
West (248° - 292°)	A-0, A-1, A-2, B-1, B-2, C-1, C-2	225	180	210	295
Northwest (293° - 337°)	A-0, B-1, B-2, C-1, C-2, D-2	225	180	210	295
	ALL ZONES (10 MILE RADIUS)	240	180	215	315

1. Minimum recommendation for General Emergency is A-0 (2 mile radius) and affected (downwind) 5 mile radius sectors. Shelter all remaining sectors in the 10 mile radius.
2. Times listed are estimates based on evacuation times listed in the Emergency Plan.

NOTE: Conditions identified represent most limiting conditions.

ATTACHMENT 8.1.5.4
Page 1 of 3
TURNOVER CHECKLIST

This checklist is guidance for turning over Emergency Response activities from one facility to another or between personnel holding Emergency Response positions.

NOTE:	Blanks are provided for place keeping ✓'s only, logs are the official record.
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A. SYNCHRONIZE CLOCKS to ERFIS/EDS TIME _____

B. ONSITE SITUATION

1. Review Emergency Classification, basis for declaration, and mitigating actions. Suspend turnover if plant conditions exist that change the classification, notification, or PARs. _____
 - a. Review status of safety equipment and systems.
 - b. Review status of fission product barriers.
 - c. Review condition/stability of reactor.
 - d. Review any Emergency Action Levels exceeded.
 - e. Review cause, history, initiating events leading to declaration of emergency.
2. Review onsite protective actions taken. _____
 - a. Assembly
 - b. Shelter
 - c. Evacuations (Local, Protected Area, Site, Exclusion Area)

NOTE:	If there is a Site Evacuation, Unit 1 may need to continue operating.
--------------	-----------------------------------------------------------------------

- d. Potassium Iodide Administration
- e. Complete PLP-015 Overtime Form for ERO as appropriate.

ATTACHMENT 8.1.5.4
Page 2 of 3
TURNOVER CHECKLIST

3. Review status of offsite assistance requested for the site. _____
- a. Fire Department
 - b. Rescue Squad
 - c. Local Law Enforcement Agency

C. OFFSITE SITUATION

1. Review Status of Offsite Notifications. _____
- State and County initial and any follow-up messages
 - NRC
 - Other: ANI, INPO, Westinghouse
 - Any needed notifications that have not been made
2. Review Protective Action Recommendations made and notifications made to the State and Counties. _____
3. Review any status received from the State or Counties regarding activation, readiness, protective actions, or requests for information. _____
4. Review data on any projected or actual radiological releases. _____
5. Review the time and content of any press releases or media briefing. _____

ATTACHMENT 8.1.5.4
Page 3 of 3
TURNOVER CHECKLIST

D. EMERGENCY RESPONSE

1. Review status of Emergency Response Organization Activation. _____
- Notifications made to off-duty and offsite personnel. _____
- Emergency Response Facilities that are activated. _____
- Emergency Response Facilities that will be activated. _____
- Other notifications needed. _____
2. Review outside organizations requested to mobilize. _____
3. Review assistance needed. _____
4. After the TSC-SEC assumes responsibilities for the event
 declaration, the CR-SEC maintains responsibility to keep
 the TSC updated of changing conditions and the urgency
 of declaring events based on the changing conditions. _____

E. TURNOVER COMPLETED _____

United States Nuclear Regulatory Commission
Attachment III to Serial RNP-RA/01-0141
16 Pages

EPEOF-02
ENVIRONMENTAL MONITORING TEAM LEADER
Revision 5

CAROLINA POWER & LIGHT COMPANY
H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

PLANT OPERATING MANUAL

VOLUME 2
PART 5

EMERGENCY PROCEDURE

EPEOF-02
ENVIRONMENTAL MONITORING TEAM LEADER

REVISION 5

SUMMARY OF CHANGES

Step	Revision Comments
8.2.3.2	Restructured step for new EnMon radio system directions.
8.2.3.5	Added guidance to allow charcoal iodine cartridges during drills.
Attach 8.2.5.2	Deleted attachment for old EnMon radio system. This attachment was no longer necessary. Instruction for new radio in body of procedure.

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ENVIRONMENTAL MONITORING TEAM LEADER (ENMON TL) QUICK START GUIDE

NOTE: Blanks are provided for place keeping ✓'s only, logs are the official record. This is a summary level guide and does not replace the procedure steps.

1. If Dialogic was used for callout, upon arrival at the Facility, notify Dialogic at X 1777. _____
2. Verify team members are assembled in Room 420 (Library) of the TSC/EOF for an initial briefing. _____
3. Assign personnel to teams for environmental monitoring activities. _____
4. Conduct a briefing of Environmental Monitoring Teams to include: _____
 - Prioritize field monitoring assignments.
 - Provide assignments.
 - Verify Enmon Team members have read (or heard, if dispatched) and understand their RWP
5. Establish radio communications. _____
6. Switch R-38, TSC/EOF ventilation radiation monitor, from "Auto" to "Hand". _____
7. Monitor wind direction/speed data. _____
8. Discuss with the Dose Projection Team Leader (DPTL) or the Radiological Control Manager (RCM) the initial field monitoring locations. _____
9. Deploy teams prior to an actual release when possible. _____
10. Initiate logs and prepare to monitor missions. _____
11. Refer to procedure steps. _____

8.2 ENVIRONMENTAL MONITORING TEAM LEADER

8.2.1 PURPOSE

1. This procedure describes the functional responsibilities and procedure steps for the Environmental Monitoring Team Leader (ENMON TL).

8.2.2 RESPONSIBILITIES

1. Provide technical and administrative direction to the Environmental Monitoring Teams (Enmon Team). Monitor field missions.
2. Provide field data to the Dose Projection Team Leader (DPTL).
3. Interface with and provide necessary information to the Radiological Control Manager (RCM).

8.2.3 INSTRUCTIONS

1. Brief Enmon Team members in Room 420 (Library) of the TSC/EOF Building, as a minimum include:
 - a. Plant status,
 - b. Exposure limits (see EPOSC-04, "Emergency Work Control"),
 - c. Anticipated radiation levels and suggested routes,
 - d. Required monitoring data per Attachment 8.2.5.5,
 - e. Requirement to wear a TLD and other required protective gear.
 - f. Verify Enmon Team members have read (or heard, if dispatched) and understand their RWP. An RWP may be located in the Emergency Kit for convenience.

8.2.3 (Continued)

2. Verify radio communications via Channel 1-A. Range of the Environment Monitoring Radios is approximately 20 miles.
 - a. Turn radio on using "Vol-Off" knob.
 - b. "t S t" for self test will appear, when finished a beep will be heard.
 - c. Verify channel 1-A is indicated. IF not, THEN press the up or down arrows (right hand side) until the 1-A appears.
 - d. To talk, key the desk set with the right button (with lightening bolt symbol), wait for tone , then speak.
3. Establish priority for field missions.
 - a. Priorities depend on plant conditions, the following order is intended as a guide.
 - Dose Confirmation
 - Offsite Monitoring
 - Other required missions
4. Establish with the RCM and the DPTL the initial field monitoring locations. Monitoring locations shall be based on:
 - a. Locations near the initial dose projection [i.e., site boundary, 1, 2, 5, 10 mile(s)]
 - b. Road locations within the wind direction
 - c. Prevailing wind directions

8.2.3 (Continued)

5. Verify Enmon Teams utilize silver zeolite cartridges for air sampling and ionization chamber detectors are utilized to monitor and track a radioactive plume. For drill purposes, a charcoal iodine cartridge may be used.
6. Monitor missions after team deployment.
 - a. Advise the team(s) when the wind direction shifts more than 45°.
 - b. Advise team members of expected radiological conditions and protective gear needed.
 - c. Provide initial and subsequent environmental surveys to the DPTL or the RCM per Attachment 8.2.5.5 Environmental Sample Data.
 - d. Verify sufficient sample volumes are collected to detect $10^{-7} \mu\text{Ci/cc}$ radioiodine using the curves in EPRAD-01, Environmental Monitoring.
 - Ten minutes at 2 CFM is adequate.
 - e. If recommended by the RCM, advise the Enmon Teams when to administer potassium iodide.
 - f. If Environmental Monitoring Teams (Enmon Teams) observe radiation levels at or beyond the site boundary or other indications in excess of the following conditions, inform the RCM that an Alert may be appropriate. Report actual measurements. Environmental Concentration (EC) values are as calculated by Operations for Table 5 of the Emergency Action Levels.
 - Gaseous release > 10 EC
 - Liquid release > 100 EC
 - Sustained lower wind speed > 90 mph
 - Lake level < 214 ft. above mean sea level

8.2.3.6 (Continued)

- g. If Enmon Teams observe radiation levels or I-131 equivalent concentrations in excess of the following values at or beyond the site boundary, inform the RCM that a Site Area Emergency may be appropriate. Report the actual measurements and the times when measurements were obtained.
 - 500 mrem/hr or I-131 equivalent concentration of $1.9\text{E-}6 \mu\text{Ci/cc}$ and surveys indicate the plume has been present > 2 minutes
 - 50 mrem/hr or I-131 equivalent concentration of $1.9\text{E-}7 \mu\text{Ci/cc}$ > 30 minutes
 - During plant operation, sustained lower wind speed > 100 mph
 - Lake level < 210 ft. above mean sea level.
- h. If Enmon Teams observe radiation levels or I-131 equivalent concentrations in excess of the following values at or beyond the site boundary, inform the RCM that a **General Emergency** may be appropriate. Report the actual measurements.
 - 1000 mrem/hr
 - I-131 equivalent concentration $3.9\text{E-}6 \mu\text{Ci/cc}$
- i. Verify exposure limits established in EPOSC-04, Emergency Work Control.

8.2.3.6 (Continued)

- j. Ensure Enmon Teams are maintaining their exposure below the established limits on their personnel dosimetry unless:

- A General Emergency has been declared, and
- All recommended offsite evacuations are complete, and
- A release is in progress.

If all three conditions are true, the exposure limit for the Enmon Teams shall be reduced by the Dosimeter Correction Factor to account for internal exposure dose.

- 7. Calculate the Dosimeter Correction Factor.
The factor is always ONE unless:
 - a. A General Emergency has been declared, and
 - b. All recommended offsite evacuations are complete, and
 - c. A release is in progress.
- 8. If the criteria in step 7 are met and adequate field data is available, calculate the Dosimeter Correction Factor using Attachment 8.2.5.3, Dosimeter Correction Factor Calculation Worksheet, otherwise go to item 9.
 - a. Complete the form
 - b. Obtain listed concurrences and approvals on the form.
 - c. Route the form to the Emergency Response Manager (ERM)

8.2.3 (Continued)

9. If adequate field data is not available and the criteria in step 7 are met, the Dosimeter Correction Factor shall be calculated utilizing the dose projection program.
 - a. Document the Dosimeter Correction Factor on Attachment, 8.2.5.4 , Dosimeter Correction Factor Calculated With Dose Projection Program. Include the time and date of calculation
 - b. Review the data used for the calculation and sign.
 - c. Obtain listed concurrences and approvals on the form.
 - d. Route the form to the ERM.
10. Utilize the following guidelines for Expanded Environmental Monitoring (per EPRAD-01, Environmental Monitoring)
 - a. Direct the initiation of the Expanded Environmental Monitoring based on release conditions (i.e., liquid releases: water and benthic organisms; radioiodine(s): grass and milk)
 - b. Direct the Environmental Monitoring Teams (Enmon Teams) to place additional TLD's along both sides of the plume centerline.
 - c. Arrange for samples to be transported to locations directed by the Radiological Control Manager (RCM).
11. Update the Enmon Teams until the teams have arrived onsite and been granted permission to disband.
12. Provide team logs and other documentation to the Assistant to Emergency Response Manager (AERM).

8.2.4 RECORDS

N/A

8.2.5 ATTACHMENTS

- 8.2.5.1 Communications Log
- 8.2.5.2 Dosimeter Correction Factor Calculation Sheet
- 8.2.5.3 Dosimeter Correction Factor Calculated with Dose
Projection Program
- 8.2.5.4 Environmental Sample Data

ATTACHMENT 8.2.5.1
Page 1 of 1
COMMUNICATIONS LOG

Location: _____

Device: _____

Date: _____

Telephone # or Call Sign

Page _____ of _____

Time	Call From	Call To	Remarks (include data transmitted and decisions or recommendations made)

This log is to be routed to the Assistant to the Emergency Response Manager upon event termination.

DOSIMETER CORRECTION FACTOR CALCULATION SHEET

1. Log the most current environmental monitoring data that is available from the centerline of the plume below.

Sample Date: _____ Time: _____ Location: _____

Iodine Activity: _____ $\mu\text{Ci/cc}$

Particulate Activity: _____ $\mu\text{Ci/cc}$

One Meter Closed Window Dose Rate: (#1) _____ mrem/hr DDE/hr

2. Using the Iodine and Particulate Activities from the previous step determine the CEDE per one hour exposure due to both Iodines and Particulates using Attachments in EPRAD-01. Record these values below in the appropriate blanks and sum them to determine the CEDE per one hour exposure to these iodine and particulate concentrations.

CEDE per one hour exposure due to Iodines: _____

CEDE per one hour exposure due to Particulates: _____

CEDE per one hour exposure (Part. and Iodines): (#2) _____
mrem per one hour exposure

3. Enter the CEDE per one hour exposure (Part. and Iodines) in the blank below which is labeled #2 and enter the one meter closed window dose rate in the blank labeled #1. The Dosimeter Correction Factor can then be calculated by dividing the **CEDE per one hour exposure #2** by the **one meter closed window dose rate DDE/hr (#1)** and adding the value of one to this quotient.

$$\frac{\#2 (\quad) \text{mrem per hour exposure}}{\#1 (\quad) \text{mrem/hr}} + 1 = \underline{\hspace{2cm}}$$

**DOSIMETER
CORRECTION FACTOR**

4. The TEDE limit shall be divided by the Dosimeter Correction Factor to determine the self reading dosimeter value that would result in the TEDE limit being received.

Completed By: _____
Environmental Monitoring Team Leader

Date/Time: _____

Reviewed By : _____
Dose Projection Team Leader

Date/Time: _____

Approved By : _____
Radiological Control Manager

Date/Time: _____

Upon approval route this form to the ERM.

ATTACHMENT 8.2.5.3
Page 1 of 1
**DOSIMETER CORRECTION FACTOR CALCULATED
WITH DOSE PROJECTION PROGRAM**

Dosimeter Correction Factor = _____

The TEDE limit shall be divided by the Dosimeter Correction Factor to determine the self reading dosimeter value that would result in the TEDE limit being received.

Performed By : _____ Date/Time: _____
Dose Projection Team Leader

Reviewed By: _____ Date/Time: _____
Environmental Monitoring Team Leader

Approved By : _____ Date/Time: _____
Radiological Control Manager

Upon approval route this form to the ERM.

ENVIRONMENTAL SAMPLE DATA

Environmental Sample Data for Dose Projection Program Entry					
Sample Location					
Distance from Plant (Miles)					
Direction from Plant (Degrees)					
Release Height: Mixed , -if Plant Vent, Otherwise- Ground					
Sample Date					
Sample Time					
Closed Window Gamma @ 1 meter (mrem/hr)					
Air Sample Volume (CF)					
Iodine Cartridge Dose Rate (mrem/hr)					
Iodine Cartridge Count Rate (cpm)					
Release Start Time					
Estimated Duration					
Release Stop Time					

United States Nuclear Regulatory Commission
Attachment IV to Serial RNP-RA/01-0141
44 Pages

EPNOT-01
CR/EOF EMERGENCY COMMUNICATOR
Revision 10

CAROLINA POWER & LIGHT COMPANY
H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

PLANT OPERATING MANUAL

VOLUME 2
PART 5

EMERGENCY PROCEDURE

EPNOT-01

CR/EOF EMERGENCY COMMUNICATOR

REVISION 10

SUMMARY OF CHANGES

STEP #	REVISION COMMENTS
Quick Start Guide for CR.	Deleted reference to the EC book. This book does not exist and was not a controlled document.
8.1.3.1a	Revised step to provide a generic reference for SPDS communications if ERFIS is OOS. This position does not exist in the CR (SPDS Communicator) and a person would be assigned as needed.
8.1.3.1c	Revised step to provide a generic reference for SPDS communications if ERFIS is OOS. The SPDS communicator position will be phased out. This statement allows the position to remain an option.
8.1.3.2a	Added reference to Attachment 8.1.5.5, Safety Parameter Display System/Plant status data Sheet. (AR 44134)
8.1.3.6c	Deleted Simulator Dialogic Scenario guidance. The Simulator phone no longer has the capability to perform this function outside EP drills. EP drill scenario guidance remains in this procedure.
8.1.3.8d through e	Reformatted steps for human factor concerns and to align with Attachment 8.1.5.1
Attach 8.1.5.1	Reformatted steps for human factor concerns and to align with steps 8.1.3.8d through e. Added "ESSX Phone" to the EOF phone number for additional clarification. (AR 44130)
Attach 8.1.5.6	Updated the term "Caronet" to "Voicenet"
Attach 8.1.5.8	Updated the term "Caronet" to "Voicenet"

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CR EMERGENCY NOTIFICATIONS QUICK START GUIDE

NOTE: Blanks are provided for place keeping ✓'s only, logs are the official record. This is a summary level guide and does not replace the procedure steps.

<u>Equipment</u>	<u>Equipment</u>	<u>Copies:</u>
Fax Machine	EP Procedures	8.1.5.1 (ENF and roll call form)
ERO Phonebook	CR SSO Terminal	8.1.5.2 (Communications Checklist)
Dialogic Password Card	Selective Signaling	8.1.5.3 (Communications Log)
NRC ETS Phone		8.1.5.4 (Dialogic)
CR Beeper		8.1.5.12 (Event Notification Worksheet)

1. Log on to an EDS terminal, If not operable then use manual Emergency Notification form and fax by hand. _____
 F3 → EP Functions → Login (as CRSS and name) → Declare Event

2. Complete EP Notification Form (Attachment 8.1.5.1) _____
 Primary Notification Process
 Fax to off site agencies by clicking on "FAX" on the form.
 Contact State and County agencies on Selective Signaling (Dial A1)
 Press to Talk
 Alternate Notification Process
 Use Northern Telecommunications Phones (Attachment 8.1.5.7)
 Use ESSX (Attachment 8.1.5.6)
 Call Roll → Read Message and Authenticate if required

3. ERO Callout: _____
 Complete form (Attachment 8.1.5.4)
 SSO/SEC approval
 Dialogic not functional? → Manual beeper initiation (Attachment 8.1.5.11)
 → Contact NREC for non-beeper staff (ERO phonebook)

4. Notify resident NRC inspector(s). _____

5. NRC Notification per EPNOT-04 _____

6. Alert or above? Notify ANI and INPO within 2 hours. _____

7. Terminate Beeper Callouts with 0*0*0 _____

EOF EMERGENCY COMMUNICATOR QUICK START GUIDE

NOTE: Blanks are provided for place keeping ✓'s only, logs are the official record.
This is a summary level guide and does not replace the procedure steps.

1. Check equipment operable. _____
2. Log on to EDS. _____
3. Declare an event. (First Notification Only) _____
4. Receive turnover from Control Room staff. _____
- 5.* Complete the Emergency Notification Form. _____
6. Obtain SEC approval. _____
7. Transmit to State and Counties. _____
8. Refer to procedure. _____

* These items may be performed in parallel or by multiple personnel to expedite notifications.

8.1.1 PURPOSE

1. Direct the activities of the Control Room and EOF Emergency Communicator.

8.1.2 RESPONSIBILITIES

1. The CR Emergency Communicator's responsibilities are:
 - a. Overall coordination of communications to ensure that required notifications are made per requirements of this procedure until relieved by another qualified individual.
 - b. Ensure that appropriate ERO staff is augmented via Dialogic or other means.
 - Dialogic may be initiated by any individual trained on the operation of the system.
2. The EOF Emergency Communicator's responsibilities are:
 - a. Overall coordination of communications to ensure that required notifications are made per requirements of this procedure until relieved by another qualified individual.
 - b. Keep the ERM and EOF staff informed of communications activities and needs of the communications staff.

8.1.3 INSTRUCTIONS

1. Staff the Emergency Communicator function as follows:
 - a. Control Room
 - 1 Emergency Communicator;
 - IF ERFIS is OOS, assign 1 person for SPDS data communication. Attachment 8.1.5.5.

8.1.3.1 (Continued)

b. EOF

- 1 Emergency Communicator;
- 1 State/County Emergency Communicator;
- 1 Public Information Emergency Communicator;

c. TSC

- 1 NRC Emergency Communicator;
- IF ERFIS is OOS, assign 1 person for SPDS data communication. Attachment 8.1.5.5.

d. Practice

- As desired, use appropriate Attachment, 8.1.5.9, Control Room Practice Scenario Use or 8.1.5.10, Simulator Dialogic Scenario Use for Control Room or Simulator.

2. If the Electronic Display System (EDS) is not operable:

- a. Complete emergency notification forms manually and fax forms using a stand alone fax machine.
- Manual log and notification forms are included as Attachments 8.1.5.1, Emergency Notification Form and Instructions and 8.1.5.3, Communications Log.
 - SPDS sheets are in Attachment 8.1.5.5

8.1.3 (Continued)

3. If EDS is operable, log on to the system.
 - a. Control Room staff should use the Control Room Shift Supervisor (CRSS) position login for appropriate access to forms and approval authority.
4. For first notification only, declare an event on EDS.

NOTE: If there are any means practical, notification of offsite agencies and the ERO should be performed simultaneously.

5. Complete the Emergency Notification Form.
 - a. Instructions for completing the manual form are included as an Attachment 8.1.5.1 to this procedure.
 - b. For electronic forms, avoid placing the cursor in the approval section of the form prior to actual approval of the form. Premature approval will not allow any SEC/ERM comments to be incorporated without clearing the entire form.
 - c. An optional checklist for required notification is available as Attachment 8.1.5.2, Communications Checklist.
6. If time allows, during SEC/ERM notification form approval, begin working on completing information required to initiate Dialogic.
 - a. Dialogic initiation forms are included as Attachment 8.1.5.4, Automated ERO Notification Form (Dialogic).
 - b. During EP supervised drills, Dialogic use will be specified. The ERO may be activated either by scenario, number 3333, or manual beeper initiation. (Attachment 8.1.5.11)

8.1.3.6 (Continued)

7. Obtain SEC/ERM approval for information on the emergency notification form and fax to offsite agencies.
8. Transmit notification form to offsite agencies:
 - a. Use Selective Signaling System, or
 - Dial A1 on Selective Signaling phone to simultaneously conference all parties.
 - The press-to-talk bar must be depressed for other personnel to hear your voice.
 - The external speaker is active for the first 10 seconds after a call is placed. Any sounds or conversation will be transmitted over the external speaker to offsite phones.
 - b. Northern Telecommunications (Meridian) or ESSX phone system.
 - Instructions for use of the Northern Telecommunications phone are included as Attachment 8.1.5.7, Back-up method for Tele-Conferencing State and County Warning Points using Northern Telecom Telephone System.
 - Emergency communications protocols and instructions as well as ESSX instructions are provided as Attachments 8.1.5.6, Emergency Communications Equipment Instructions/Protocol and 8.1.5.8, ESSX Telephone Service Off-Site Communications System.

8.1.3.8 (Continued)

- c. Notifications are required within:
 - 15 minutes of an initial classification, or
 - 30-60 minutes for a follow up notification.
 - d. Document time of first voice contact is made after Notification Form approval.
 - e. Conduct a roll call by agency to determine locations on line. Place a check next to locations contacted (items A 1-4) on page 2 of the Notification Form (Attachment 8.1.5.1).
 - Roll call is to determine that at least one representative from each agency is on line.
 - f. Review the Notification Form with offsite agencies and answer questions.
 - g. Enter names, titles, times, and date of personnel on line (items C 1-4). This time will be the "start" time for the follow up notification.
9. The Control Room Staff will augment the Emergency Response Organization, as appropriate, by:
- a. The assigned person will obtain a copy of Attachment 8.1.5.4, Automated ERO Notification Form (Dialogic) to initiate the system.
 - b. Enter the current date and time on the form.

8.1.3.9 (Continued)

- c. Check the box next to the appropriate scenario using information obtained from the SEC/ERM or designee.
 - For training not associated with ERO training exercises, use ONLY scenario 3334 or 3335 as these will only activate the Control Room or Simulator beeper respectively.
 - For ERO training exercises use the method specified by Controller/Evaluator staff
 - * Scenario 3333 may be used to call out ERO personnel for training exercises (drills).
 - Use of the Manual Initiation of the ERO Beepers attachment will initiate ALL ERO beepers.
- d. Choose the appropriate event code (numbers displayed in the group call beepers) using information obtained from the SSO/SEC or designee.
- e. Enter the event code in the spaces provided below the description of the choices.
- f. Dialogic will fax an execution report to the Control Room FAX machine. Include this report with all information sent to the EP Staff.
- g. If the beepers were not activated due to Dialogic System failure;
 - Indications of Dialogic System failure and information to be provided to NREC "A" is provided in the "NREC" section of the ERO Phonebook. See Control Room instructions for contacting NREC "A."
 - Manually initiate the beepers, per Attachment 8.1.5.11, Manual Initiation of the ERO Beepers, and
 - Contact NREC "A" to augment non-beeper personnel.

8.1.3 (Continued)

10. The Dialogic System should not be initiated a second time if ERO call out has already been initiated, except as noted below.
 - a. The exception to this is initiation of the manual JIC call out scenario.
 - JIC manual call out is required if the emergency escalates from a lower classification, to a Site Area Emergency or discretionary activation below Site Area Emergency is desired.
 - The JIC manual call out will only augment the non-beeper personnel. JIC beeper personnel receive the group page.
 - b. Escalation of the emergency classification after initial callout should be announced via manual beeper initiation. See manual activation Attachment 8.1.5.11, Manual Initiation of the ERO Beepers.
11. Immediately upon completion of State and County notifications and within 60 minutes of declaration of the emergency, notify the NRC.
 - a. Forms are included as Attachment 8.1.5.12, Event Notification Worksheet.
 - b. Use ETS (primary) or Meridian phone for notification.
 - c. Additional information is available in EPNOT-04, TSC NRC Emergency Communicator.
12. ERO augmentation or spurious activations may be terminated by manually initiating the beepers with a 0*0*0 code.

8.1.3 (Continued)

13. Make follow up notifications to the State and County agencies:
 - a. Follow up notifications are required:
 - Every 30 - 60 minutes, or
 - for any event which could increase or decrease public safety or affect protective action recommendations. Examples include fires, bomb threats, changes in release rate greater than 15% of previously reported value, site evacuations, entry into recovery operations, etc.
14. If the classification is Alert or higher, make notifications to American Nuclear Insurers (ANI) and the Institute of Nuclear Power Operations (INPO).
 - a. Notifications are required within 2 hours.
 - b. Off site phone numbers are available in the ERO phone book.
15. Obtain responses for questions from offsite agencies.
 - a. Information not contained on status boards or concerning future status of the plant must be approved by the SEC/ERM or ERM depending on facility activation status.
16. If the TSC and EOF are activating, perform a turnover with NRC and EOF Emergency Communicators.
 - a. Ensure completion times of the last notification (i.e., the Emergency Notification Form) are available, via fax or electronic means, for the EOF Communications Staff.
17. Upon event termination, ensure notification of off site agencies which have activated.
18. Inform the Information Technology group of system use (on next business day if weekend, holiday or nightshift) so the databases may be cleared. This maintains the system ready for the next use. This notification may be accomplished via e-mail or telephone.

8.1.4 RECORDS

N/A

8.1.5 ATTACHMENTS

1. Emergency Notification Form
2. Communications Checklist
3. Communications Log
4. Automated ERO Notification Form (Dialogic)
5. Safety Parameter Display System/Plant Status Data Sheet
6. Emergency Communications Equipment Instructions/Operating Protocol
7. Back-up Method for Tele-Conferencing State and County Warning Points (WP) Using Northern Telecom Telephone System
8. ESSX Telephone Service Off-Site Communications System
9. Control Room Practical Scenario Use
10. Simulator Dialogic Scenario Use
11. Manual Initiation of the ERO Pagers
12. Event Notification Worksheet

ATTACHMENT 8.1.5.1
Page 1 of 7
EMERGENCY NOTIFICATION FORM

MESSAGE NUMBER _____

1. ☐ A THIS IS A DRILL ☐ B ACTUAL EMERGENCY ☐ INITIAL ☐ FOLLOW-UP*
2. SITE: H.B. ROBINSON UNIT: 2 REPORTED BY: _____
3. TRANSMITTAL TIME/DATE: _____ / _____ / _____
(Eastern) mm dd yy CONFIRMATION PHONE NO.: _____
4. AUTHENTICATION (If Required): _____ (No.) _____ (Code)
5. EMERGENCY CLASSIFICATION:
☐ A NOTIFICATION OF UNUSUAL EVENT ☐ B ALERT ☐ C SITE AREA EMERGENCY ☐ D GENERAL EMERGENCY
6. ☐ A EMERGENCY DECLARATION AT ☐ B (If B, go to number 16) TERMINATION AT TIME/DATE: _____ / _____ / _____
(Eastern) mm dd yy
7. EMERGENCY DESCRIPTION /REMARKS: _____
8. PLANT CONDITION: ☐ A IMPROVING ☐ B STABLE ☐ C DEGRADING
9. REACTOR STATUS: ☐ A SHUTDOWN TIME/DATE: _____ / _____ / _____ ☐ B _____ % POWER
(Eastern) mm dd yy
10. EMERGENCY RELEASE(S): ☐ A NONE (Go to Item 14) ☐ B POTENTIAL (Go to Item 14)
☐ C IS OCCURRING ☐ D HAS OCCURRED
- **11. TYPE OF RELEASE: ☐ A ELEVATED ☐ B GROUND LEVEL
- ☐ A AIRBORNE: STARTED _____ / _____ / _____ STOPPED _____ / _____ / _____
(Eastern Time) mm dd yy (Eastern Time) mm dd yy
- ☐ B LIQUID: STARTED _____ / _____ / _____ STOPPED _____ / _____ / _____
(Eastern Time) mm dd yy (Eastern Time) mm dd yy
- **12. RELEASE MAGNITUDE: ☐ A CURIES/SEC. ☐ B CURIES NORMAL OPER. LIMITS: ☐ C BELOW ☐ D ABOVE
- ☐ A NOBLE GASES _____ ☐ B IODINES _____
- ☐ C PARTICULATES _____ ☐ D OTHER _____
- **13. ESTIMATE OF PROJECTED OFF-SITE DOSE: ☐ NEW ☐ UNCHANGED
- TEDE Thyroid CDE
mrem mrem
- PROJECTION TIME: _____
(Eastern)
- SITE BOUNDARY
- 2 MILES _____
- 5 MILES _____
- 10 MILES _____
- ESTIMATED DURATION: _____ HRS.
- **14. METEOROLOGICAL DATA: ☐ A WIND DIRECTION (from) _____ ☐ B SPEED (mph) _____
☐ C STABILITY CLASS _____ ☐ D PRECIPITATION (type) _____
15. RECOMMENDED PROTECTIVE ACTIONS:
☐ A NO RECOMMENDED PROTECTIVE ACTIONS ☐ B EVACUATE _____
☐ C SHELTER IN-PLACE _____ ☐ D OTHER _____
16. APPROVED BY: _____ TIME/DATE: _____ / _____ / _____
(Name) (Title) (Eastern) mm dd yy

* If items 8-14 have not changed, only items 1-7 and 15-16 are required to be completed.

** Information may not be available on initial notifications.

EMERGENCY NOTIFICATION FORM**PERSONS AND AGENCIES ALERTED****TIME FIRST VOICE CONTACT IS MADE AFTER ENF APPROVAL: _____****A) Perform roll call.**

1. State of South Carolina Warning Point ____: Backup Warning Point ____:
2. Darlington County Warning Point ____: EOC ____:
3. Lee County Warning Point ____: EOC ____:
4. Chesterfield County Warning Point ____: EOC ____:

B) Read the Emergency Notification Form. (ENF)**C) After the ENF is read, record name, title, and time.**

1. State of South Carolina

		/
		/
Name	Title	Date Time*
2. Darlington County

		/
		/
Name	Title	Date Time*
3. Lee County

		/
		/
Name	Title	Date Time*
4. Chesterfield County

		/
		/
Name	Title	Date Time*
5. Nuclear Regulatory Commission (via ETS or Bell Phone)

		/
		/
Name	Title	Date Time
6. NRC Resident Inspector

		/
		/
Name	Title	Date Time

* This time will indicate final voice contact, the last time listed will become "start time" for subsequent follow up notifications.

ATTACHMENT 8.1.5.1
Page 3 of 7
EMERGENCY NOTIFICATION FORM
INSTRUCTIONS FOR COMPLETION

Initial notifications are to be made in 15 minutes. Follow-up notifications are required within 30 - 60 minutes.

All efforts should be expended to obtain information required for the Emergency Notification Form. However in instances where information is not available or known incorrect at the time a message is due, "to be provided" should be placed in the appropriate blank(s). This missing information is to be promptly retrieved or corrected and transmitted to the State and County agencies as soon as it is available.

Messages should include an up-to-date description of what is happening at the plant within the constraints of timely notifications. To ensure messages contain adequate and accurate information about current plant conditions, messages should be developed as promptly as possible and, if time permits, reviewed by the State/County Communicator prior to approval. This review will also allow the State/County Communicator a better understanding of the message and therefore should result in a more successful transmission. It may be necessary to determine a "cut off time" for new message information so that these reviews can be made.

Item

Instructions

Message # The message number is consecutive from the initial notification to the termination message. It does not begin again at 1 for any reason during the course of an emergency event.

1. To protect the health and safety of the public:

IF this event is **NOT** an actual event, **THEN** indicate **"THIS IS A DRILL"** on the Emergency Notification Form.

IF this event **IS** an actual event, **THEN** indicate **"ACTUAL EMERGENCY"** on the Emergency Notification Form.

All messages other than changes in classification are follow-up.

2. Verify "H. B. Robinson" and Unit 2 are on the form and the person who will be reading the message to the State and County personnel is the name to be written in the "reported by:" space. Normally this individual will be the State/County Communicator when messages are transmitted from the EOF.

ATTACHMENT 8.1.5.1
Page 4 of 7
EMERGENCY NOTIFICATION FORM

Item

Instructions

3. "Transmittal time/date:" Is automatically placed on electronic form. Time of first voice contact with any offsite agency is verified on the phone by roll call and is recorded on the notification form*.
- Confirmation number is a number that any offsite agency can call to verify the message is authentic. **Ensure the number given is a location where the phone will be answered. DHEC is required to verify the message by their procedure in 15 minutes.** Suggested confirmation numbers depend on the origin of the notification call:
- Control Room - 843-383-3685 (Shift Tech. Aide's Desk ESSX phone)
- EOF -843-383-3681 (EOF EC desk ESSX Phone)
- Simulator - Use the confirmation number established for this purpose. (843-857-5039)
4. Authentication is not required but the State/County representatives should be asked, "Would anyone like to authenticate this message?" If yes, they will pick a number and you respond with the corresponding word (see the authentication code list in each Communicator binder). Both the number and word are logged on the form or "N/A" if no authentication is required. This information will be entered after the form is initially developed and transmitted to off site agencies.
- * The times on the Emergency Notification Form should be in the proper chronological order. Item 6 (declaration time) should be the first time recorded followed by Item 16 (approval time) and the last should be Item 3 (transmittal time). For example Item 6 at 12:00 and Item 16 at 12:10 and Item 3 at 12:14. The first voice contact time should not be documented until an approved form is available.
5. Mark the classification that is being declared if it is an initial message for that classification, or the same classification as the last notification if it is a follow-up or a termination message. Any plant conditions/events which trigger emergency classifications shall be listed in the Description section (Item 7) but only the highest classification shall be marked.

ATTACHMENT 8.1.5.1
Page 5 of 7
EMERGENCY NOTIFICATION FORM

- | <u>Item</u> | <u>Instructions</u> |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6. | Emergency declaration or termination is to be marked with the time* the event in Item 5 was declared. This time should not change unless the classification has changed or the event has been terminated. If termination is chosen only Steps 1 through 6 and 16 should be completed. |
| 7. | Emergency description/remarks should contain a short narrative of the event in progress. This narrative should be in "layman's terms" and not include any slang or acronyms (i.e., ATWS, RCP, WGDT, etc.) commonly used at the plant. This description must be easily understood by individuals without nuclear industry experience. |
| 8. | The appropriate plant condition is to be marked. The Plant Operations Advisor, or the Technical Analysis Manager should be consulted if assistance is needed in making this determination. If there is any doubt about the condition of the plant, mark the status <u>degrading</u> . |
| 9. | If Reactor is shutdown, mark this choice and fill in the time and date of shutdown. If the Reactor is at power, "N/A" the time and date and indicate the current Reactor power. |
| 10. | Mark appropriate block for emergency release. Potential should be marked if, based on plant data, a trend can be observed that will predict when the final barrier to release will be breached and there are no systems capable of mitigating the trend. |
| 11. | Mark appropriate block for type of release. The release location will be determined by the RCM. For multiple release locations, the majority contributor is used for the determination of location. If the release location is unknown, assume a ground level release. If the release is from the stack, mark elevated regardless of wind speed. A release from any location other than the stack is considered a ground level release. Mark if the release is airborne or liquid. Record the start and stop time and date of ACTUAL RELEASE in the spaces provided. If the release is underway, put N/A in the block for time release stopped. |

ATTACHMENT 8.1.5.1
Page 6 of 7
EMERGENCY NOTIFICATION FORM

Item

Instructions

12. Check the release units as "CURIES." Check the block for "BELOW" or "ABOVE" beside "NORMAL OPER. LIMITS" if the release is below or above the Technical Specifications operating release limits. Enter the release magnitude as Xe¹³³ TEDE Equivalent in the "NOBLE GASES" blank and I¹³¹ CDE Equivalent in the "IODINES" blank. Enter "N/A" in the blanks for "PARTICULATES" and "OTHER." The values for Xe¹³³ TEDE Equivalent and I¹³¹ CDE Equivalent are provided by the Dose Projection Program and may be obtained from the Radiological Control Manager or the person performing the dose projection.
13. Mark the appropriate box for estimate of projected offsite dose. Mark the new box if this is the first dose projection or if the release/release rate has changed significantly (approximately 15%). Check with the SEC, Plant Operations Director, or the Technical Analysis Manager for an estimate of the release duration. The estimated duration must start from the beginning of the release until the estimated (or actual) end of the release. Use 1 hour if the expected duration of release is not yet available. Complete the dose columns in (mrem) for each distance away from the site. Ensure that units are in mrem, and do not change the units on the form. Enter the time that the dose projection data was collected (check computer output) in the blank for "PROJECTION TIME."
14. Obtain the required meteorological data from ERFIS, or the National Weather Service Office (see ERO Telephone Book), as available. Ensure the wind direction is "from" if it is obtained from a source other than ERFIS. Stability class is available in the procedure for dose projection (EPRAD-03) if ERFIS is not available.

ATTACHMENT 8.1.5.1
Page 7 of 7
EMERGENCY NOTIFICATION FORM

- | <u>Item</u> | <u>Instructions</u> |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 15. | Mark the appropriate box for the recommended protective action. If evacuate or shelter in place are chosen, list the sectors for which the recommendation is applicable (i.e., A-0, A-1, B-1, etc.). <u>If the General Emergency is declared you can not check "No Recommended Protective Action".</u> |
| 16. | The message is to be signed (approved) by the Site Emergency Coordinator if transmitted from the Control Room or TSC, or by the Emergency Response Manager if transmitted from the EOF. This approval* must be obtained prior to transmitting the notification to the State and County agencies. Any changes made between this signature and the release of the message must be initialed/approved by the SEC or ERM. |

NOTES: (at bottom)	If Items 8 through 14 (Plant Condition and Dose Projection Information) have not changed, then only Items 1 through 7 along with 15 and 16 are required to be completed on subsequent notifications. For initial notifications if the information in Items 11 through 14 is not available, it may be so noted on the form by writing "to be provided".
------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

- * The times on the Emergency Notification Form should be in the proper chronological order. Item 6 (Declaration Time) should be the first time recorded followed by Item 16 (Approval Time) and the last should be Item 3 (Transmittal Time). For example Item 6 at 12:00 and Item 16 at 12:10 and Item 3 at 12:14. The first voice contact time should not be documented until an approved form is available.

ATTACHMENT 8.1.5.2
Page 1 of 1
COMMUNICATIONS CHECKLIST

Event Classification:

☐ Unusual Event ☐ Alert ☐ Site Area Emergency ☐ General Emergency

Required Emergency Notifications

Time Declared	Maximum Contact Time (Min.)	Notif. Due By	Notif. Complete	Follow-up Due w/in	Agency	Phone/ Backup
_____	+ 15 = ASAP and no greater than 15	_____	_____ State _____ Darling _____ Lee _____ Chester	30-60 minutes	Counties WP & EOC State Warning Point & Backup Warning Point	Sel. Sig. A1 (See ERO Phone Book for back-up numbers)
_____	+ 60 = ASAP and no greater than 60	_____	_____	As needed	NRC	ETS See sticker or Emergency Response Phone Book

Recommended Emergency Notifications

Time Declared	Contact Time (Min.)	Notif. Due By	Notif. Complete	Follow-up Due w/in	Agency	Phone/ Backup
_____	+ 60 =	_____	_____	As Needed	NRC Site Inspector	See Emergency Response Phone Book
Following applicable to ALERT or higher classification only						
_____	+ 120 =	_____	_____	As Needed	ANI	See Emergency Response Phone Book
_____	+ 120 =	_____	_____	As Needed	INPO	See Emergency Response Phone Book

Instructions: This form may be used for each change in event classification.

ATTACHMENT 8.1.5.3
Page 1 of 1
COMMUNICATIONS LOG

Location: _____

Device: _____

Date: _____

[illegible]

ATTACHMENT 8.1.5.4

Page 1 of 1

AUTOMATED ERO NOTIFICATION FORM (DIALOGIC)

Date: _____ Time: _____

<u>Check Choice</u>	<u>Scenario Number</u>	<u>Description</u>	<u>Run Time</u>
<input type="checkbox"/>	30	Beeper Failure	45
<input type="checkbox"/>	31	GE approach - west	45
<input type="checkbox"/>	32	GE approach - east	45
<input type="checkbox"/>	33	GE approach - south	45
<input type="checkbox"/>	34	GE approach - north	45
<input type="checkbox"/>	35	GE no approach inst.	45
<input type="checkbox"/>	36	Site Area Emergency	45
<input type="checkbox"/>	37	Alert	45
<input type="checkbox"/>	38	UE with facility act.	45
<input type="checkbox"/>	39	UE no facility act.	15
<input type="checkbox"/>	41	JIC non-beeper personnel	60
<input type="checkbox"/>	3333	Training Exercise Scenario	75
<input type="checkbox"/>	3334	Ops Practice Scenario	10
<input type="checkbox"/>	3335	Sim. Dialogic Scenario	05

EVENT CODES (DISPLAYED ON GROUP CALL PAGER)

<u>CLASSIFICATION</u>	<u>FACILITY</u>	<u>INFORMATION</u>
0 = none	0 = none	0 = test
1 = U.E.	1 = all	1 = call 857-1777
2 = Alert	2 = alternate	2 = call 857-1778
3 = S.A.E.		3 = Real
4 = G.E.		4 = Drill/Exercise

Code chosen: _____ * _____ * _____
 (Enter No.) (star) (Enter No.) (star) (Enter No.)

Approved by: _____
 SEC/ERM

Time Dialogic was activated _____ by _____ (initials).
 (Time)

ATTACHMENT 8.1.5.5

Page 1 of 1

SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS DATA SHEET

EMERGENCY CLASSIFICATION (CIRCLE)
UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: _____ / _____

Completed By: _____

ALERT

GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

GROUND WIND SPEED (MPH) _____
ELEVATED WIND SPEED (MPH) _____
GROUND WIND DIR. (° FROM) _____
ELEVATED WIND DIR. (° FROM) _____
AIR TEMPERATURE (°F) _____
STABILITY CLASS _____

AREA RADIATION MONITORS

R-1 CONTROL ROOM (mrem/HR) _____
R-2 CONT. AREA (mrem/HR) _____
R-3 PASS PANEL AREA (mrem/HR) _____
R-4 CHG. PUMP RM (mrem/HR) _____
R-5 SPENT FUEL PIT (mrem/HR) _____
R-6 SAMPLING ROOM (mrem/HR) _____
R-7 IN-CORE INST (mrem/HR) _____
R-8 DRUM. RM. (mrem/HR) _____
R-9 FAILED FUEL (mrem/HR) _____
R-33 MON BLDG (mrem/HR) _____

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) _____
R-12 CV VENT GAS (CPM) _____
R-14A "P" PLT VNT (CPM) _____
R-14B "I" PLT VNT (CPM) _____
R-14C "NG" PLT VNT (CPM) _____
R-15 COND. AIR EJEC. (CPM) _____
R-16 CV FAN CW (CPM) _____
R-17 COMP. CW (CPM) _____
R-18 WASTE DISPOSAL (CPM) _____
R-19A S/G A BLOWDOWN (CPM) _____
R-19B S/G B BLOWDOWN (CPM) _____
R-19C S/G C BLOWDOWN (CPM) _____
R-20 FUEL HDLG BASE (CPM) _____
R-21 FUEL HDLG UPPER (CPM) _____

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (mrem/HR) _____
R-31A "A" MN STM (mrem/HR) _____
R-31B "B" MN STM (mrem/HR) _____
R-31C "C" MN STM (mrem/HR) _____
R-32A CV HI RG (REM/HR) _____
R-32B CV HI RG (REM/HR) _____
R-14D PLT VNT GAS (MID) (CPM) _____
R-14E PLT VNT GAS (HI) (CPM) _____
R-37 CONDENSATE POLISHER (CPM) _____

CONTAINMENT STATUS

PRESSURE (PSIG) _____
TEMPERATURE (°F) _____
HYDROGEN CONC. (%) _____
SUMP LEVEL (INCHES) _____
RWST LEVEL (%) _____

PRIMARY SYSTEM

RCS PRESSURE (PSIG) _____
PZR LEVEL (%) _____
TAVE (°F) _____
LOOP A TH (°F) _____
TC (°F) _____
ΔT (°F) _____
LOOP B TH (°F) _____
TC (°F) _____
ΔT (°F) _____
LOOP C TH (°F) _____
TC (°F) _____
ΔT (°F) _____
SUBCOOLING (°F) _____CHARGING FLOW (GPM) _____
LETDOWN FLOW (GPM) _____
REACTOR POWER (%) _____
ACTIVITY:
GROSS (Uci/mi) _____
¹³¹I (Uci/mi) _____
AVG 5 HOTTEST T/Cs (°F) _____
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) _____ NR(%) _____
PRESS (PSIG) _____
FEED (MPPH) _____
STEAM (MPPH) _____
ACT. (Uci/mi) _____
S/G B
LEV.-WR(%) _____ NR(%) _____
PRESS (PSIG) _____
FEED (MPPH) _____
STEAM (MPPH) _____
ACT. (Uci/mi) _____
S/G C
LEV.-WR(%) _____ NR(%) _____
PRESS (PSIG) _____
FEED (MPPH) _____
STEAM (MPPH) _____
ACT. (Uci/mi) _____
PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
RESET: TIME _____
CS ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
RESET: TIME _____
SPRAY ADD TANK LEVEL (%) _____
SI COLD-LEG FLOW (GPM) _____
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP A _____ B _____ C _____
CHG PUMP A _____ B _____ C _____
SI PUMP A _____ B _____ C _____
CS PUMP A _____ B _____
RHR PUMP A _____ B _____
HVH 1 _____ 2 _____ 3 _____ 4 _____

SECONDARY

CST LEVEL (%) _____
FEED PUMP A _____ B _____
COND PUMP A _____ B _____
AFW MOTOR A _____ B _____
AFW STEAM _____
MSIV A _____ B _____ C _____

ELECTRICAL

EDG A _____ B _____
DS/DG _____
OFFSITE _____
EMER. BUS E1 _____ E2 _____
FROM: OFFSITE _____ D.G. _____

FANS

HVE 1A _____ 1B _____
HVE 2A _____ 2B _____
HVE 5A _____ 5B _____
HVE 15 _____ 15A _____

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

EMERGENCY COMMUNICATIONS EQUIPMENT INSTRUCTIONS/OPERATING PROTOCOL

1.0 RNP SELECTIVE SIGNALING SYSTEM

- 1.0.1 The RNP Selective Signaling System consists of equipment and circuits linking RNP with the offsite agencies involved in initial emergency notifications.
- 1.0.2 The Control Room, TSC, EOF and the Work Control Center have these phones.
- 1.0.3 This system can quickly conference the offsite agencies for notifications using the following:
- 1.0.3.1 Lift the handset, NO dial tone will be heard;

NOTE: Tones will be heard on the handset when the keys are depressed on the key pad. No ringing will be heard.

- 1.0.3.2 Dial the appropriate number from the listing below for the agencies to be contacted;

TO DIAL

DIALING CODE

All WPs and EOCs	A1
All WPs	A2
All EOCs	A3
All CPL locations	A4
Decision Line	A5

For individual Dialing Codes, see EPPRO-02 "Maintenance and Testing", Attachment 8.2.30.2 "Selective Signaling System Dialing Codes".

NOTE: After dialing the phones being called will ring, flash a red light, and turn on the phone speaker for 10 seconds, or until answered. Do Not talk for the first 10 seconds except to address the people on the line.

- 1.0.3.3 When people answer, press the "Press to Talk" bar and ask them to hold for a message/drill/test;

**EMERGENCY COMMUNICATIONS EQUIPMENT INSTRUCTIONS/OPERATING
PROTOCOL**

- 1.0.3.4 When people are no longer coming on line, hold a roll call and proceed with the message/drill/test;
- 1.0.3.5 If a location did not answer or you need to add another party, dial the appropriate dialing code from above that is associated with those agencies.
- 1.0.3.6 If problems with this system occur during drills, exercises or emergencies, notify the Administrative and Logistics Manager.
- 1.0.3.7 If problems occur at any other time, notify Telecommunications.
- 1.0.3.8 If Selective Signaling System is inoperable, use the Northern Telephone System or the Corporate Telephone System as shown on ATTACHMENT 8.1.5.7, Back-up Method for Tele-Conferencing State Warning Points Using Northern Telecom Telephone System.
- 1.1 **RNP EMERGENCY TELEPHONE SYSTEM (NORTHERN TELECOM)**
 - 1.1.1 The RNP emergency telephone consists of dedicated lines between facilities at RNP and other CP&L locations. These lines are accessed via a Northern Telecom Meridian private branch exchange (PBX). This system supports the general plant environment as well.
 - 1.1.2 The following are phone features used on the Meridian phones:
 - 1.1.2.1 Volume Control - The adjustment for ringing, headset and speaker volume is accomplished through the rocking switch below the keypad.
 - 1.1.2.2 Line/Feature Buttons - Located to right of keypad and have liquid crystal display (LCD) status indications.
 - 1.1.2.3 KEYPAD - Centrally located to right of handset and used for call placement or feature usage.

**EMERGENCY COMMUNICATIONS EQUIPMENT INSTRUCTIONS/OPERATING
PROTOCOL**

- 1.1.3 The following are feature buttons used on the Meridian phones:
- 1.1.3.1 **HANDSFREE/MUTE** - The Handsfree/Mute key is located as the top left button of the Line/Feature button strip. It is used to alternate between full "speaker phone" capability. Receiving calls, press **HANDSFREE/MUTE** and speak. To place a call, press **HANDSFREE/MUTE** and dial number. To suppress microphone during handsfree call, press **HANDSFREE/MUTE**. To reconnect microphone, press **HANDSFREE/MUTE**.
- 1.1.3.2 **TRANSFER** - Allows calls to be transferred to another number. Press **TRANSFER**, dial number to transfer to, announce caller if desired, press **TRANSFER**, and hang up. Unannounced transfer is allowed.
- 1.1.3.3 **CONFERENCE CALLS** - Up to six parties can be included on one conference. Parties can be a combination of extensions and outside lines. Up to five outside lines. To establish a conference call: Dial first party and establish contact. Press **CONFERENCE**, dial next party, and press **CONFERENCE** to connect all parties. Repeat previous step for each successive party to be added.
- 1.1.3.4 **CALL FORWARD** - Call Forward allows incoming calls to be redirected to another phone. To forward your calls, press **FORWARD**, dial forward to number, press **FORWARD**. To cancel forwarding, press **FORWARD**.
- 1.1.3.5 **RING AGAIN** - Ring Again allows you to have the system monitor a busy extension or trunk and notify you when it is available to take your call. To activate Ring Again on busy signal, press **RING AGAIN**, press **RLS** or hang up. When target is free you will receive Ring Again tone. To establish call, press **RING AGAIN**. To cancel Ring Again, press **RING AGAIN** before receiving notification (Ring Again) tone.
- 1.1.3.6 **AUTODIAL** - This feature allows you to store and retrieve a frequently called number. To store a number, select and press an **AUTODIAL** key, dial number (up to 23 digits), press **AUTODIAL** key again. To place call, select and press **LINE** key, select and press **AUTODIAL** key

**EMERGENCY COMMUNICATIONS EQUIPMENT INSTRUCTIONS/OPERATING
PROTOCOL**

- 1.1.3.7 **LAST NUMBER REDIAL** - Allows most recently dialed number to be called again. To operate, select line where number was previously dialed and press **LINE** key twice.
- 1.1.3.8 **HOLD** - This button allows you to place a call on hold while you attend to another matter. To operate, press **HOLD**, press RLS or hang up. To retrieve call, press **LINE** key with slow flashing indicator.
- 1.1.3.9 **PROGRAM** - The **PROGRAM** key allows you to set seven attributes of the Meridian phone. To set attributes:
- A. **VOLUME** - Press **PROGRAM**, Dial 00, use volume rocker switch to adjust down («) or up (»), press **PROGRAM** to save.
 - B. **CONTRAST ADJUSTMENT** - Press **PROGRAM**, Dial 02, use volume rocker switch to adjust lighter («) or darker (»), press **PROGRAM** to save.
 - C. **CALL TIMER** - Enables time display of call duration. Press **PROGRAM**, Dial 03, use either side of volume rocker switch to turn on or off, press **PROGRAM**.
 - D. **IDLE SCREEN FORMAT** - Eight possible selections. Press **PROGRAM**, Dial 04, use volume rocker switch up («) or down (») to make selection, press **PROGRAM**.
 - E. **KEY CLICK** - Enables/Disables audible key click. Press **PROGRAM**, Dial 09, use either side of volume rocker switch to turn on or off, press **PROGRAM**.

NOTE: Two other attributes (**LANGUAGE SELECTION** and **PREDIAL RECALL**) are seldom used. To alter these attributes, consult Meridian Quick Reference Card - Display Module.

**EMERGENCY COMMUNICATIONS EQUIPMENT INSTRUCTIONS/OPERATING
PROTOCOL****2.0 CP&L CORPORATE TELEPHONE SYSTEM**

2.1 Corporate Telephone System (Voicenet) - Interconnected through the plant PBX, the Corporate Telephone System provides a means to communicate with any other CP&L locations as well as off system locations. The system can use the public switched network or company owned circuits to complete calls.

2.2 Dedicated Telephone System to Load Dispatcher - This system provides links between the Control Room and the load dispatcher. Transmission facilities are microwave radio. These lines appear on several phones in the control room and are selected by pushing the appropriate button on a multi-button phone. The lines are automatically rung at the load dispatcher identifying Robinson as the caller.

3.0 NRC TELEPHONE SYSTEMS

3.1 NRC Emergency Telecommunication System (ETS)- Phones connected to a dedicated independent telephone system route. A 10 digit telephone number must be dialed to access the NRC Operations Center. NRC ETS phones are located in the Control Room, Technical Support Center, Emergency Operations Facility and the NRC Residents Office.

3.2 NRC Health Physics Network (ETS)
The NRC will also use the dedicated telephone system for communications to NRC regional and national offices. Telephones connected to this system are located for access by Health Physics, and NRC personnel.

**EMERGENCY COMMUNICATIONS EQUIPMENT INSTRUCTIONS/OPERATING
PROTOCOL**

- 4.0 RNP EMERGENCY RADIO SYSTEM - consists of commercial two-way radio transceivers that are used for onsite, in plant, offsite environmental monitoring and State of S.C. point to point radio communications. Those radio systems available are:
- 4.1 Motorola - is the FM two-way radio base station and remote consoles that provides a "Private Line" tone coded squelch. The console includes provisions for tone remote control operation of the private line. Equipment is identified as follows:
- 4.1.1 Motorola Base Station - located in the EOF Communications Equipment Room 417. Provides the capability of manually isolating communications for use as private lines, by selecting the switch inside the cabinet.
- 4.1.2 Motorola T1605 - are compact remote control console located in the EOF. These consoles provide point to point communications for:
- 4.1.2.1 EOF - Environmental Monitoring/dose projection
- 4.1.2.2 EOF - Communications Work Area with Paging Encoder
- 4.1.3 Operating instructions:
- 4.1.3.1 Ensure 100 unit is plugged into AC wall circuit.
- 4.1.3.2 Motorola Flexar unit has to be on Channel 6 to talk. Channel 6 is selected by depressing the F2 button and pushing in the button adjacent to the phone receiver. Pushing in the button adjacent to the phone receiver locks in the unit to Channel 6.
- 4.1.3.3 When this occurs, pick up the transmitter handset (transmitter looks like a phone) and depress the button adjacent to the receiver and give your message. The person with the beeper will hear your message.
- 4.1.3.4 Cut system off when not in use

**EMERGENCY COMMUNICATIONS EQUIPMENT INSTRUCTIONS/OPERATING
PROTOCOL****5.0 ESSX TELEPHONE SYSTEM**

5.1 ESSX Telephone System (Back-up) - Dark brown phones connected by Southern Bell using separate lines from all plant communication systems. This system allows communication with all outside agencies. The purpose of the ESSX Telephone System is to ensure that priority back-up communications are available for communications to emergency response personnel at the Federal, State, and local governments and other Carolina Power & Light facilities, as well as Ebasco and Westinghouse.

5.2 Motorola Series 90 Desk Top Controllers - are local control desk sets provided to state personnel in the TSC and the EOF to allow message transmittal to dedicated points.

5.2.1 All of base-station received messages can be monitored at the desk set.

5.2.2 The remote control desk set operator can transmit via the base-station switch.

5.2.3 May have a supervisory override switch.

5.2.4 The EOF desk set is located in the Command Room.

6.0 EMERGENCY RADIO SYSTEM OPERATING PROTOCOL

6.1 Using a 2-way Radio

6.1.1 A radio transceiver requires good operating techniques and consideration for other users. Quick and precise transmissions will enable the system to be used efficiently and effectively by all. This is vital during emergencies. Carolina Power & Light is licensed by the Federal Communications Commission (F.C.C) to transmit only those messages that are essential to the efficient conduct of the Company's business.

6.1.2 Definitions

6.1.2.1 Base Station - A transmitter-receiver station intended for operation at a permanent location.

6.1.2.2 Mobile Unit - A radio transceiver unit intended to be used while in motion or during halts at specified points. This includes pack and hand carried units as well as those installed in vehicles.

EMERGENCY COMMUNICATIONS EQUIPMENT INSTRUCTIONS/OPERATING PROTOCOL

6.1.2.3 Radio Operator - Any person authorized by the Company to operate a radio transceiver.

6.1.3 Microphone Procedure -

A transmission is generated by pressing the transmit button on the side of the portable unit or on the side of the microphone.

Every operator should be aware that the microphone button may be accidentally depressed, thereby keying the transmitter. In this condition every spoken word intentional or otherwise will be transmitted over the air. Be suspicious if everything gets too quiet. Check the red transmit light on mobile units frequently. There is no way for the base station to detect which transmitter is keyed in a large mobile net. Accidental keying of the mobile portable unit can severely disrupt the overall net operations and make communications very difficult.

6.1.4 Authorization to use Radio -

No person shall operate a Base Station or Mobile Unit Transmitter unless he/she is so authorized by the Company.

6.1.5 Authorized Messages -

- a) Messages dealing with safety of personnel or the protection of property.
- b) Messages for the performance of work-related matters.

6.1.6 Forbidden messages

The following types of messages are not permitted:

- a) Between Base Stations - Except for: Authorized radio tests or any other permitted messages when telephone facilities are inoperative.
- b) Personal Messages - Except for: Messages concerning a family emergency may, at the discretion of a Base Station Radio Operator, be relayed to an employee.
- c) Foul Language - No exceptions.

6.1.7 Secrecy of Message -

Federal law requires you to keep secret all messages not directed to you which you overhear on any private radio system.

6.1.8 Intentional Interruptions

Such as miscellaneous and unnecessary transmitter keying. These types of "horseplay" can be as dangerous as the physical kind. Emergency or urgent messages could be interrupted or masked out.

**EMERGENCY COMMUNICATIONS EQUIPMENT INSTRUCTIONS/OPERATING
PROTOCOL****6.1.9 Operating Procedures -****a) Operational Techniques****1. All Radio Operators:**

Talk in a normal tone of voice. Do not shout. Best results are obtained by using a normal speaking level with the microphone about one inch from the mouth. Good microphone technique requires a clear articulation and correct talking speed.

NOTE: During an exercise announce, "This is an exercise message," about every three (3) to five (5) minutes.

2. Base Station Operators:

Good microphone techniques pays off in better understanding and faster communication.

3. Brevity:

All communications regardless of their nature should be restricted to the minimum practical transmission time. Before transmitting - think. Keep it brief and to the point.

4. Identification and Channel Clearance:

Most of the base stations are shared by several control points. Because of the sharing, it is important for all base and mobile operators to indicate when they are finished with a contact. This is done by identifying the station with the station "call signs" or mobile call signs or either the word "clear" or "off".

For example: The base station operator may say "KGA825 clear" or the mobile may say "KA3664 off" (the mobile unit identification number).

REMEMBER - At the beginning of each transmission identify your unit - clearly and precisely.

Always give your complete call sign at the end of each total message.

EMERGENCY COMMUNICATIONS EQUIPMENT INSTRUCTIONS/OPERATING PROTOCOL

- b) The equipment is turned on by an "ON-OFF" or power switch. Allow about 30 seconds for new equipment and about two minutes for some of the older sets to warm-up before transmitting.
- c) The control marked VOLUME adjusts the loudness of the incoming signal. It has no effect on the outgoing signal.
- d) The control marked SQUELCH affects the sensitivity of the set. It cuts off the loudspeaker except when a signal is received, keeping the static from being heard in the absence of a signal. To set the squelch-control, rotate it to one side until a rushing noise is heard, then reverse it just far enough to cut off the noise. Sometimes, at extreme range, the signal is so weak that the squelch opens and closes rapidly, chopping up the incoming signal. To correct this, open the squelch manually. When through talking to a weak station, turn the squelch back until the noise ceases. Reduction of volume at this point may improve your reception.
- e) On all units having the dual channel feature, the operating frequency is controlled by either a two or four frequency selector control. When you transmit, your switch must be turned to the correct channel.

7.0 MITSUBISHI SATELLITE PHONE

- 7.1 The Mitsubishi Satellite Phone and power supply is normally stored in the Training Facility Library closet. It should only be used if all other normal and back up communication systems have failed. All controls are located on the handset. The top of the lid with the Mitsubishi symbol is the antenna.
- 7.1.1 Plug the power supply into the phone and/or install the battery. The plug is located under the handset. Place the phone in a window facing Old Camden Road on a flat surface.
- 7.1.2 Open the lid approximately halfway (45°) and aim the Mitsubishi symbol toward the satellite in the southern sky. A compass is available in the phone case.
- 7.1.3 Press and hold the PWR key for approximately one second.
- 7.1.4 The Beam number and the Signal Strength Level will be displayed as B**S** (numbers will be displayed in place of the **). NO SVC will be displayed until a signal is established per this procedure.

**EMERGENCY COMMUNICATIONS EQUIPMENT INSTRUCTIONS/OPERATING
PROTOCOL**

- 7.1.5 Slowly rotate the phone and adjust the antenna lid until the Received Signal Strength is at maximum. (00 = least, 80 = best). A minimum of 09 is required.
- 7.1.6 Momentarily press the * key to initiate satellite signal acquisition. This may take approximately 1 - 2 minutes. The NO SVC will disappear and ON will be displayed.
- 7.1.7 When NO SVC indication clears from the display and "ON" is displayed, the unit is ready for making or receiving calls.
1. To send call , always enter the area code and number, Then press the SEND key.
 2. To receive a call, press any key except the PWR key.
 3. To end a call, press END.

BACK-UP METHOD FOR TELE-CONFERENCING STATE AND COUNTY WARNING POINTS (WPs) USING NORTHERN TELECOM TELEPHONE SYSTEM

Using the specified Meridian phone in the Control Room (ext. 1530 or 1279) or EOF (ext. 5001):

1. Contact the Darlington County Warning Point (Darlington County Sheriff's Department).
 - A. Get dial tone, press SYSTEM SPEED and dial 06. (See Emergency Response Phone Book for other phone numbers.)
 - B. When party answers, identify yourself, and state purpose of your call (drill message or real emergency message).
 - C. Request party to standby while conference call is established.
2. Contact Chesterfield County WP (Chesterfield County Detention Center).
 - A. Press CONFERENCE, then press SYSTEM SPEED and dial 05. (See Emergency Response Phone Book for other phone numbers.)
 - B. When party answers, identify yourself, and state purpose of your call (drill message or real emergency message).
 - C. Request party to standby while conference call is established.
 - D. Press CONFERENCE to connect all parties.
3. Contact Lee County WP (Bishopville 911 Center).
 - A. Press CONFERENCE, then press SYSTEM SPEED and dial 04. (See Emergency Response Phone Book for other phone numbers.)
 - B. Repeat Steps 2B, C, and D.
4. Contact State WP.
 - A. Press CONFERENCE, then press SYSTEM SPEED and dial 09. (See Emergency Response Phone Book for other phone numbers.)
 - B. Repeat Steps 2B, C, and D.
5. When parties are in conference, begin transmitting Warning Message.

NOTE: If you make a mistake while dialing or receive a busy signal, press RLS to disconnect. To return to the call, press the key beside the fast flashing indicator.

ESSX TELEPHONE SERVICE OFF-SITE COMMUNICATIONS SYSTEM

ESSX service is provided by the local telephone carrier (Southern Bell). ESSX essentially provides PBX type service based out of a Southern Bell Central Office (CO). This service satisfies the off-site communications requirements. There are eight lines provided; two each in the Unit 2 Control Room, the TSC Command Room, the EOF Command Room, and the OSC. The numbers are: 383-3680, 383-3681, 383-3682, 383-3683, 383-3684, 383-3685, 383-3686, and 383-3687. The numbers are paired sequentially into pickup groups (i.e. 383-3680 and 383-3681).

1. OPERATION

- A. To place call between ESSX stations, dial the last four digits of the line (i.e., 3680 for 383-3680).
- B. To call an outside line, dial 9, then dial outside number (include "1" or 1 + Area Code for long distance calls).
- C. Calls to Plant Voicenet locations may be made via Direct Inward Dial (DID) service (i.e., 9 + Appropriate prefix and extension). Calls to other Voicenet locations may be made via Direct Inward System Access (DISA).
Dial
9+667-9132, wait for dial tone, dial 2868 (security code), wait for dial tone, dial number (i.e., 770-XXXX).

2. FEATURES

- A. **CALL TRANSFER** - To transfer a call, press hookswitch momentarily, wait for dial tone, dial number to transfer call, hangup or wait until answered to announce call (then hangup).
- B. **THREE WAY CALL (3-WAY CONFERENCE)** - To add third party to call, press hookswitch momentarily, wait for dial tone, dial number of third party, wait for answer and announce conference call, press hookswitch momentarily to reconnect first party.
- C. **CALL PICKUP** - To answer another ESSX call, dial #95.
- D. **CALL FORWARD** - Incoming calls can be forwarded to other ESSX lines or outside lines.
 - 1. To activate, dial #72, wait for dial tone, dial number to forward calls to, wait for confirmation tone (this may take 10 to 15 seconds), hang up.
 - 2. If calls are forwarded outside ESSX service, forwarded phone will ring once as a reminder.
 - 3. To cancel forwarding, dial #73, wait for stutter dial tone, hang up.

CONTROL ROOM PRACTICE SCENARIO USE

1. Obtain Shift Supervisors permission to utilize the Dialogic System for practice.
2. Using a phone in the Control Room dial 1003.
 - Be prepared to **immediately** enter the password when the system begins the greeting. Passwords are provided in pre-designated locations.
3. Immediately upon hearing the greeting (i. e., Hello, you have reached...) enter the password.
 - If the first digit of the password is not entered in time or an incorrect password is entered, the activation number must be called again.
4. Do not use any scenario number other than the one below as these will cause the system to begin actual call out of ERO personnel. When prompted for Scenario number, enter **3334**.
5. Input desired responses at the prompt from the system.
6. Dialogic should initiate the Control Room Verification Beeper with the previously entered "Event Code."
7. Dialogic should fax a System Execution Report to the Control Room fax machine.
8. Dialogic should call extension 1530 and request an identification number.
9. Enter 333-33-3333 as your identification number.
10. Provide responses to the system questions as desired.
 - The practice scenario will remain active for 10 minutes from initiation. If you disqualify (e.g., answer no to fitness for duty or 60 minute response) in your responses, it will not attempt to call you again.
11. If the Verification Beeper did not activate, verify proper operation by calling the individual beeper number.
12. If expected response is not received after verification of proper beeper operation, report the deficiency to Emergency Preparedness for investigation.
13. Inform Emergency Preparedness of system use (on next business day if weekend, holiday or nightshift) so that practice records may be purged from the system.

ATTACHMENT 8.1.5.10
Page 1 of 1
SIMULATOR DIALOGIC SCENARIO USE

1. Using the designated phone line in the Simulator Control Room, dial 1003.
 - Be prepared to **immediately** enter the password when the system begins the greeting. Passwords are provided in pre-designated locations.
2. Immediately upon hearing the greeting (i. e., Hello, you have reached...) enter the password.
3. If the first digit of the password is not entered in time or an incorrect password is entered, the activation number must be called again.

<p>NOTE: Use of the Manual Initiation of the ERO Beepers attachment bypasses the Dialogic System and will initiate <u>ALL</u> ERO beepers.</p>

4. Do not use any scenario number other than the one below as these will cause the system to begin actual call out of ERO personnel. When prompted for Scenario number, enter **3335**.
5. Input desired responses at the prompt from the system.
6. Dialogic should initiate the Simulator Control Room Verification Beeper with the previously entered "Event Code."
 - For drill purposes Controller/Evaluator staff may direct the use of the beeper system manual initiation.
 - The Simulator Dialogic scenario will remain active for 5 minutes from initiation.
7. If the verification Beeper did not activate, verify proper operation by calling the individual beeper number.
8. If expected response is not received after verification of proper beeper operation, report the deficiency to Emergency Preparedness for investigation.
9. Inform Emergency Preparedness of system use (on next business day if weekend, holiday or nightshift) so that practice records may be purged from the system.

MANUAL INITIATION OF THE ERO BEEPERS

NOTE: This section is not for use with the Control Room Practice or Simulator Dialogic Scenario, except for drills evaluated by Emergency Preparedness.

1. Dial the Manual Beeper Initiation number as listed on password card.
2. At the Beeper System prompt, enter the appropriate code from the Event Codes on ATTACHMENT 8.1.5.4. Do not enter the phone number from which the call is placed.
3. **VERIFY THE BEEPERS WERE INITIATED WITH THE APPROPRIATE CODE VIA THE CONTROL ROOM VERIFICATION BEEPER OR SECURITY BEEPER.**
4. Notify Non-Responding Emergency Communicator (NREC) of any required call out of beeper and/or non-beeper personnel.

NRC FORM 361 (12-2000)				U.S. NUCLEAR REGULATORY COMMISSION OPERATIONS CENTER			
REACTOR PLANT EVENT NOTIFICATION WORKSHEET							
EN #							
NRC OPERATION TELEPHONE NUMBER: PRIMARY -- 301-816-5100 or 800-532-3469*, BACKUPS -- [1st] 301-951-0550 or 800-449-3694*, [2nd] 301-415-0550 and [3rd] 301-415-0553 <small>*Licensees who maintain their own ETS are provided these telephone numbers.</small>							
NOTIFICATION TIME	FACILITY OR ORGANIZATION	UNIT	NAME OF CALLER	CALL BACK #			
	H. B. ROBINSON	2		843-857-			
EVENT TIME & ZONE	EVENT DATE	POWER/MODE BEFORE		POWER/MODE AFTER			
EVENT CLASSIFICATIONS		1-Hr. Non-Emergency 10 CFR 50.72(b)(1)					
GENERAL EMERGENCY	GEN/AAEC	TS Deviation		ADEV			
SITE AREA EMERGENCY	SIT/AAEC	4-Hr. Non-Emergency 10 CFR 50.72(b)(2)					
ALERT	ALE/AAEC	(i) TS Required S/D		ASHU			
UNUSUAL EVENT	UNU/AAEC	(iv)(A) ECCS Discharge to RCS		ACCS			
50.72 NON-EMERGENCY (see next columns)		(iv)(B) RPS Actuation (scram)		ARPS			
PHYSICAL SECURITY (73.71)		(xi) Offsite Notification		APRE			
MATERIAL/EXPOSURE		8-Hr. Non-Emergency 10CFR 50.72(b)(3)					
FITNESS FOR DUTY		(ii)(A) Degraded Condition		ADEG			
OTHER UNSPECIFIED REQMT. (see last column)		(ii)(B) Unanalyzed Condition		AUNA			
INFORMATION ONLY		(iv)(A) Specified System Actuation		AESF			
				(v)(A) Safe S/D Capability AINA			
				(v)(B) RHR Capability AINB			
				(v)(C) Control of Rad Release AINC			
				(v)(D) Accident Mitigation AIND			
				(xii) Offsite Medical AMED			
				(xiii) Loss Comm/Asmt/Resp ACOM			
				60-Day Optional 10 CFR 50.73(a)(1)			
				Invalid Specified System Actuation AINV			
				Other Unspecified Requirement (Identify)			
				NONR			
				NONR			
DESCRIPTION							
Include: Systems affected, actuations and their initiating signals, causes, effect of event on plant, actions taken or planned, etc. (Continue on back)							
NOTIFICATIONS	YES	NO	WILL BE	ANYTHING UNUSUAL OR <input type="checkbox"/> YES (EXPLAIN ABOVE) <input type="checkbox"/> NO			
NRC RESIDENT				NOT UNDERSTOOD?			
STATE(s)				DID ALL SYSTEMS <input type="checkbox"/> YES <input type="checkbox"/> NO			
LOCAL				FUNCTION AS REQUIRED?			
OTHER GOV AGENCIES				MODE OF OPERATION UNTIL CORRECTED:		ESTIMATE FOR RESTART DATE:	
MEDIA/PRESS RELEASE						ADDITIONAL INFO ON BACK <input type="checkbox"/> YES <input type="checkbox"/> NO	

ATTACHMENT 8.1.5.12

Page 2 of 2

ADDITIONAL INFORMATION

PAGE 2 OF 2

RADIOLOGICAL RELEASES: CHECK OR FILL IN APPLICABLE ITEMS <i>(specific details/explanations should be covered in event description)</i>							
<input type="checkbox"/> LIQUID RELEASE	<input type="checkbox"/> GASEOUS RELEASE	<input type="checkbox"/> UNPLANNED RELEASE	<input type="checkbox"/> PLANNED RELEASE	<input type="checkbox"/> ONGOING	<input type="checkbox"/> TERMINATED		
<input type="checkbox"/> MONITORED	<input type="checkbox"/> UNMONITORED	<input type="checkbox"/> OFFSITE RELEASE	<input type="checkbox"/> T. S. EXCEEDED	<input type="checkbox"/> RM ALARMS	<input type="checkbox"/> AREAS EVACUATED		
<input type="checkbox"/> PERSONNEL EXPOSED OR CONTAMINATED		<input type="checkbox"/> OFFSITE PROTECTIVE ACTIONS RECOMMENDED		<input type="checkbox"/> *State release path in description			

	Release Rate (Ci/sec)	% T. S. LIMIT	HOO GUIDE	Total Activity (Ci)	% T. S. LIMIT	HOO GUIDE
Noble Gas			0.1 Ci/sec			1000 Ci
Iodine			10 uCi/sec			0.01 Ci
Particulate			1 uCi/sec			1 mCi
Liquid (excluding tritium and dissolved noble gases)			10 uCi/min			0.1 Ci
Liquid (tritium)			0.2 Ci/min			5 Ci
Total Activity						

	PLANT STACK	CONDENSER/AIR EJECTOR	MAIN STEAM LINE	SG BLOWDOWN	OTHER
RAD MONITOR READINGS					
ALARM SETPOINTS					
% T. S. LIMIT (if applicable)					

RCS OR SG TUBE LEAKS: CHECK OR FILL IN APPLICABLE ITEMS *(specific details/explanations should be covered in event description)*

LOCATION OF THE LEAK (e.g., SG #, valve, pipe, etc.)

LEAK RATE:	UNITS: gpm/gpd	T.S. LIMITS:	SUDDEN OR LONG-TERM DEVELOPMENT:
LEAK START DATE	TIME	COOLANT ACTIVITY PRIMARY AND UNITS:	SECONDARY

LIST OF SAFETY RELATED EQUIPMENT NOT OPERATIONAL:

EVENT DESCRIPTION (continued from front)

NRC HEADQUARTERS
 DUTY OFFICER CONTACTED: _____ / _____ / _____ AM/PM

NAME
DATE
TIME

United States Nuclear Regulatory Commission
Attachment V to Serial RNP-RA/01-0141
10 Pages

EPNOT-04
TSC NRC EMERGENCY COMMUNICATOR
Revision 5



R
Reference
Use

CAROLINA POWER & LIGHT COMPANY
H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

PLANT OPERATING MANUAL

VOLUME 2
PART 5

EMERGENCY PROCEDURE

EPNOT-04

TSC NRC EMERGENCY COMMUNICATOR

REVISION 5

SUMMARY OF CHANGES

Step #	Revision Comments
Attach 8.4.5.1	Updated the Event Notification Worksheet

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8.4.2 RESPONSIBILITIES	4-5
8.4.3 INSTRUCTIONS	4-5
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8.4.5 ATTACHMENTS	4-6
8.4.5.1 Event Notification Worksheet	4-7

NRC EMERGENCY COMMUNICATOR QUICK START GUIDE

NOTE: Blanks are provided for place keeping ✓'s only, logs are the official record. This is a summary level guide and does not replace the procedure steps.

1. Sign in. _____
2. Check equipment status. _____
3. Log on to Electronic Display System (EDS). _____
4. Review previous emergency notifications and NRC notifications. _____
5. Notify Site Emergency Coordinator (SEC) and EOF Emergency Communicator when ready to assume duties. _____
6. Refer to procedure. _____

8.4.1 PURPOSE

1. To provide instructions for notifications by the NRC Emergency Communicator to the Nuclear Regulatory Commission (NRC).

8.4.2 RESPONSIBILITIES

1. Accurately transmit information to the NRC.

8.4.3 INSTRUCTIONS

1. Determine the status of NRC notifications with the Control Room.
 - a. If initial contact is required, use Attachment 8.4.5.1, Event Notification Worksheet.
 - b. Information subsequent to initial notifications is typically responding to questions and providing verbal feedback, as such, no specific form is required.
 - Records shall be maintained of responses which require approval by the SEC.
2. Notify the EOF Emergency Communicator and the SEC when you are ready to assume position duties.
3. Obtain SEC approval for information provided on the Event Notification Worksheet and responses to questions which do not contain information already approved for release.
 - a. Information posted on status boards and valid plant data from the Emergency Response Facility Information System (ERFIS) or Electronic Display System (EDS) are approved for release.
 - b. Any question which involves speculation about the future condition of the plant should be directed to appropriate personnel for an "official" response. This shall be approved by the SEC.

8.4.3 (Continued)

4. Establish contact with the NRC.
 - a. Use an Emergency Telecommunication System (ETS) phone and dial the number listed on the sticker on the phone, or
 - b. Meridian phone and number listed in the ERO phone book.
5. Respond to NRC questions and requests with latest available information.
 - a. Keep the EOF Emergency Communicator informed of issues which emerge.
6. Man the phone continuously when requested by the NRC.
7. Verify transmission of Emergency Response Data System (ERDS) data after activation of the system.
 - a. ERDS must be activated within 1 hour of the declaration of an Alert or higher.
8. Notify NRC personnel of drill or event termination as appropriate.

8.4.4 RECORDS

N/A

8.4.5 ATTACHMENTS

- 8.4.5.1 Event Notification Worksheet

NRC FORM 361
(12-2000)U.S. NUCLEAR REGULATORY COMMISSION
OPERATIONS CENTER**REACTOR PLANT
EVENT NOTIFICATION WORKSHEET**

EN #

NRC OPERATION TELEPHONE NUMBER: PRIMARY -- 301-816-5100 or 800-532-3469*, BACKUPS -- [1st] 301-951-0550 or 800-449-3694*,
[2nd] 301-415-0550 and [3rd] 301-415-0553 *Licensees who maintain their own ETS are provided these telephone numbers.

NOTIFICATION TIME	FACILITY OR ORGANIZATION H. B. ROBINSON	UNIT 2	NAME OF CALLER	CALL BACK # 843-857-
EVENT TIME & ZONE	EVENT DATE	POWER/MODE BEFORE	POWER/MODE AFTER	
EVENT CLASSIFICATIONS		1-Hr. Non-Emergency 10 CFR 50.72(b)(1)		
GENERAL EMERGENCY	GEN/AAEC	TS Deviation		ADEV
SITE AREA EMERGENCY	SIT/AAEC	4-Hr. Non-Emergency 10 CFR 50.72(b)(2)		
ALERT	ALE/AAEC	(i) TS Required S/D	ASHU	
UNUSUAL EVENT	UNU/AAEC	(iv)(A) ECCS Discharge to RCS	ACCS	
50.72 NON-EMERGENCY (see next columns)		(iv)(B) RPS Actuation (scram)	ARPS	
PHYSICAL SECURITY (73.71)	DDDD	(xi) Offsite Notification	APRE	
MATERIAL/EXPOSURE	B???	8-Hr. Non-Emergency 10CFR 50.72(b)(3)		
FITNESS FOR DUTY	HFIT	(ii)(A) Degraded Condition	ADEG	
OTHER UNSPECIFIED REQMT. (see last column)		(ii)(B) Unanalyzed Condition	AUNA	
INFORMATION ONLY	NINF	(iv)(A) Specified System Actuation	AESF	
		60-Day Optional 10 CFR 50.73(a)(1)		
		Invalid Specified System Actuation		
		Other Unspecified Requirement (identify)		
		NONR		
		NONR		

DESCRIPTION

Include: Systems affected, actuations and their initiating signals, causes, effect of event on plant, actions taken or planned, etc. (Continue on back)

NOTIFICATIONS	YES	NO	WILL BE	ANYTHING UNUSUAL OR NOT UNDERSTOOD?	<input type="checkbox"/> YES (EXPLAIN ABOVE)	<input type="checkbox"/> NO
NRC RESIDENT						
STATE(s)				DID ALL SYSTEMS FUNCTION AS REQUIRED?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
LOCAL						
OTHER GOV AGENCIES				MODE OF OPERATION UNTIL CORRECTED:	ESTIMATE FOR RESTART DATE:	ADDITIONAL INFO ON BACK
MEDIA/PRESS RELEASE						<input type="checkbox"/> YES <input type="checkbox"/> NO

NRC FORM 361 (12-2000)

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EPNOT-04

Rev. 5

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ADDITIONAL INFORMATION

PAGE 2 OF 2

RADIOLOGICAL RELEASES: CHECK OR FILL IN APPLICABLE ITEMS (specific details/explanations should be covered in event description)

LIQUID RELEASE	GASEOUS RELEASE	UNPLANNED RELEASE	PLANNED RELEASE	ONGOING	TERMINATED
MONITORED	UNMONITORED	OFFSITE RELEASE	T. S. EXCEEDED	RM ALARMS	AREAS EVACUATED
PERSONNEL EXPOSED OR CONTAMINATED		OFFSITE PROTECTIVE ACTIONS RECOMMENDED		*State release path in description	

	Release Rate (Ci/sec)	% T. S. LIMIT	HOO GUIDE	Total Activity (Ci)	% T. S. LIMIT	HOO GUIDE
Noble Gas			0.1 Ci/sec			1000 Ci
Iodine			10 uCi/sec			0.01 Ci
Particulate			1 uCi/sec			1 mCi
Liquid (excluding tritium and dissolved noble gases)			10 uCi/min			0.1 Ci
Liquid (tritium)			0.2 Ci/min			5 Ci
Total Activity						

	PLANT STACK	CONDENSER/AIR EJECTOR	MAIN STEAM LINE	SG BLOWDOWN	OTHER
RAD MONITOR READINGS					
ALARM SETPOINTS					
% T. S. LIMIT (if applicable)					

RCS OR SG TUBE LEAKS: CHECK OR FILL IN APPLICABLE ITEMS (specific details/explanations should be covered in event description)

LOCATION OF THE LEAK (e.g., SG #, valve, pipe, etc.)

LEAK RATE:	UNITS: gpm/gpd	T.S. LIMITS:	SUDDEN OR LONG-TERM DEVELOPMENT:
LEAK START DATE	TIME	COOLANT ACTIVITY PRIMARY AND UNITS:	SECONDARY

LIST OF SAFETY RELATED EQUIPMENT NOT OPERATIONAL:

EVENT DESCRIPTION (continued from front)

NRC HEADQUARTERS
 DUTY OFFICER CONTACTED: _____ / _____ : _____ AM/PM
 NAME DATE TIME

United States Nuclear Regulatory Commission
Attachment VI to Serial RNP-RA/01-0141
41 Pages

EPPRO-01
PROGRAM AND RESPONSIBILITIES
Revision 9

CAROLINA POWER & LIGHT COMPANY
H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

PLANT OPERATING MANUAL

VOLUME 2
PART 5

EMERGENCY PROCEDURE

EPPRO-01
PROGRAM AND RESPONSIBILITIES

REVISION 9

SUMMARY OF CHANGES

STEP #	REVISION COMMENTS
New Section 8.1.11	Added section on Drill/Exercise Cycle Self Evaluation (Significant AR #44128, CAPR (NAS Issue, R-EP-01-01-I2, Drill Objectives)
Attachment 8.1.14.7	Added guidelines for conducting a facilitated critique of the ERO.

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8.1 PROGRAM AND RESPONSIBILITIES

8.1.1 DRILL AND EXERCISE PARTICIPATION

1. ERO personnel are expected to drill/exercise with their designated team.
 - a. If they will be unavailable for the drill it is their responsibility to ensure some one from another team will fill their position.
 - b. Relief team personnel will participate in at least one team Drill, Exercise, or Tabletop each year.
 - c. Non-Team designated ERO personnel are expected to coordinate with the other persons qualified for their position to ensure the position is staffed for each drill/exercise and that each ERO member participates in at least one Drill per calendar year.
2. ERO personnel filling critical positions shall be observed at least once in a calendar year performing their ERO duties.
3. Unless otherwise directed by Emergency Preparedness (EP), ERO personnel should respond during augmentation for their facility.
 - a. Those personnel available to respond should establish 24 hour coverage for the position.
 - b. Personnel on night shift may be exempted from augmentation, but should be used to establish 24 hour coverage.
 - c. After the rotation is established, personnel may be simulated to be sent home and return to their place of work.
 - d. Personnel are required to keep the manager responsible for their accountability informed of their location should an evacuation be conducted at a later time.

8.1.2 DRILLS AND EXERCISES

1. Emergency Response Organization (ERO) personnel will participate in periodic drills at least once each calendar year. Additionally one team, on a rotational basis, will participate in the Graded Exercise. The purpose of conducting drills is to ensure that each team has the skills to successfully deal with a real emergency. The following are the types of drills conducted:
 - a. Medical Emergency Drills: Medical emergency drills will be conducted annually. They will involve a simulated contaminated and injured individual. Off-site portions of these drills may be conducted as part of an exercise.
 - b. HP/PASS Drills: Health Physics drills, including response to and analysis of simulated elevated airborne and liquid samples and direct radiation measurements, will be conducted semi-annually.
 - At least one of these radiation protection drills will involve the use of the Post Accident Sampling System.
 - These drills may also include the Medical Services drill.
 - c. Combined Functional Drills: Combined Functional Drills may include any of the required drills and serve as the primary method of practical training for new ERO members and continuing training for existing members.
2. An Exercise will be conducted as required by 10 CFR, Part 50, Appendix E.
 - a. The scenario which will ultimately escalate to at least a Site Area Emergency.

8.1.2.2 **DRILLS AND EXERCISES** (Continued)

- b. The scenario will be varied from year to year such that all elements of the Plant, County, and State Plans and emergency organizations are tested within a six (6)-year period.
 - c. Each Exercise scenario will include a list of performance objectives and a description of the expected responses. Specific tasks that should be evaluated are listed in Attachment 8.1.14.4 and 8.1.14.5, "Drill Objectives" and "Acceptance Criteria" respectively.
 - Attachments identify the Emergency Response facility where the activity is most likely to occur, however, the objective may be judged acceptable if performed in an alternate location.
 - Credit may be taken for objectives that are satisfactorily completed during actual events.
 - d. An off-hours exercise which starts between 6:00 p.m. and 4:00 a.m. will be conducted once every six (6) years.
 - e. Advance knowledge of the scenario content and the times of the exercises will be kept to a minimum to ensure a realistic participation by those involved.
3. The EP Staff is responsible for planning and conducting drills and exercises not addressed elsewhere (e.g., Fire Drills are addressed in the Fire Plan). They shall provide:
- a. The scenario including objectives for the drill/exercise.
 - From time to time "specific objectives" which are in addition to required performance objectives will be added to the Training Exercise Objectives. These may be in response to previous deficiencies, EP TPC items or require that normally simulated items be actually performed. A prompt to consider these items is contained in the pre-drill checklist.
 - An extent of play describing the degree of simulation for drill/exercise activities.

8.1.2.3 DRILLS AND EXERCISES (Continued)

- Qualified Controller/Evaluators to evaluate the drill/exercise.
- As a minimum, Controller/Evaluators should be available to evaluate the following:
 - each facility activating,
 - Environmental Monitoring Teams,
 - Mechanical Damage Control Missions (as applicable),
 - Electrical Damage Control Missions (as applicable),
 - Chemistry/Health Physics Missions,
 - Offsite functions to be simulated,
 - any special functions (e.g. fire, injury)
- b. A yearly plan for ERO exercises.
- c. A critique report noting strengths, deficiencies and comments on drill/exercise performance.
 - Critiques will be conducted after each drill/exercise in accordance with Attachment 8.1.14.7. (AR #44128,CAPR)
 - A Strength is an action or activity performed in an above average manner, or in a creative manner to resolve a problem without the violation of a requirement. These are items which all teams should consider adopting.
 - Deficiency will consist, for the purpose of critiques, as the action or actions which deviate from an approved or prescribed procedure, standard, specification, regulation or exercise/drill objective. Examples are procedure violation or a Technical Specification violation during the course of a drill or exercise.
 - A note worthy item which does not meet the requirement of a Strength or a Deficiency is a comment.
 - Comments will be screened by the EP staff for applicability.

8.1.2.3c DRILLS AND EXERCISES (Continued)

- Draft critique reports should be issued for comment to the participating ERO team members within seven working days following the post drill controller/evaluator meeting. Published drill comments will be limited to those that do not compromise the confidentiality of the scenario. If two teams are participating in drills that are scheduled within two weeks of each other, then the seven working day criteria will begin at the end of the second post drill controller/evaluator meeting.
- The critique report will normally consist of the following:
 1. Cover Letter and Summary
 - The Cover letter will consist of a brief statement containing the date on which the drill(s) was conducted, team(s) that participated, and be signed by the Supervisor of Emergency Preparedness.
 - The Summary will be a statement of overall drill performance.
 2. Objectives per facility
 - The objectives may be listed in their entirety in the critique but will also be listed in each section as they pertain to each facility.
 3. Status of Objective (Met or Not Met)
 - Each objective will be listed in the appropriate section and will be noted depending on whether the acceptance criteria has been met during the drill.
 - Satisfactory completion of an objective by any team will satisfy that requirement for the Site.
 - Any team failure to demonstrate an objective is a deficiency and will be handled as such. At the discretion of EP Supervision failure to demonstrate an objective(s) may require re-demonstration.
- Controller/Evaluator should justify failures as such in the critiques held after the drill and in the write-up given to Emergency Preparedness.

8.1.2.3c **DRILLS AND EXERCISES** (Continued)

- The final drill critique report will be documented as a self assessment per CAP-NGGC-0201.
- d. Ensure implementation of comments or changes to Emergency Procedures as identified on EP Improvement Forms or drill critiques.
- e. A pre-drill and post-drill review of items needed to prepare for the drill/exercise or return to normal following the drill/exercise (i.e., reset simulator telephones).
- f. Follow-up on drill identified deficiencies by initiating Condition Reports (CR) as needed.

8.1.3 **EP PROCEDURE MAINTENANCE AND PROGRAM IMPROVEMENTS**

1. Procedure improvements may be recommended by completing an Attachment 8.1.14.1, EP Improvement Form, or a DCF as specified in AP-022, Procedure Review and Approval Process, and routing it to the Supervisor Emergency Preparedness.
2. Procedure changes to the Robinson Emergency Plan and/or Emergency Procedures will be accomplished as required by AP-022, Procedure Review and Approval Process.
 - a. Emergency Preparedness will be responsible to maintain the Emergency Action Levels (EAL) and supporting basis documents, as well as the Emergency Procedures.
 - b. Documents will be developed and maintained to comply with applicable regulations.
 - c. The EAL basis document will be revised to reflect NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," or other management directives and policies.

8.1.3.2 EP PROCEDURE MAINTENANCE AND PROGRAM IMPROVEMENTS
(Continued)

- d. All Emergency Procedures, EALs, and the Emergency Plan shall receive a 10 CFR 50.54(q) review to ensure the effectiveness of the Emergency Plan is not inadvertently reduced.
- 3. For each drill or real event, EP improvement forms will be available. A record of items submitted will be maintained by the EP staff.
- 4. Items reported on EP improvement forms or drill critiques will be screened for entry into the Corrective Action Program.
- 5. Feedback regarding disposition of items will be provided to the individual who initiated the comment within ten working days and resolution will be documented on the improvement form.

8.1.4 INADVERTENT SIREN ACTIVATION

- 1. Upon receiving a report of an inadvertent siren activation:
 - a. If a real emergency or drill/exercise is in progress that involves sounding of the sirens, then direct the callers to tune to an Emergency Alerting System Station listed in the emergency public information distributed by CP&L.
 - b. If no event is in progress obtain information requested on attachment 8.1.14.2, Siren System Inadvertent Activation Report and ask the caller if a call back is desired once more information is known.

8.1.4 INADVERTENT SIREN ACTIVATION (Continued)

2. If an inadvertent siren activation has been confirmed, then notify the following:

- a. All County Emergency Operations Center or Warning Points concerning the plant status. This can be accomplished via Selective Signaling or the Bell lines.

Sirens are located as follows:

- Chesterfield County - 13 Siren Locations
Siren #'s - 01, 02, 03, 04, 05, 06, 09, 10, 11, 15, 16, 17, and 45
- Darlington County - 28 Siren Locations
Siren #'s - 07, 08, 12, 13, 14, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 30, 31, 32, 33, 34, 36, 37, 38, 39, 41, 42, 43, and 44
- Lee County - 4 Siren Locations
Siren #'s - 28, 29, 35, and 40

Total Sirens - 45 Siren Locations (All Counties)

- b. Notify the Telecommunication Help Desk (8-1-800-800-6200) that an inadvertent siren activation has occurred and request that repair personnel be dispatched to correct the problem. Request a work order Number and a return call when the sirens have been silenced.
- c. Notify Emergency Preparedness by phone or pager. The ERO Phone Book has the necessary information.
- d. Notify Robinson Communications of the inadvertent siren activation and request immediate notification if a press release is to be issued. A press release relating to this event is reportable to the NRC. Consult AP-030, NRC Reporting Requirements.

8.1.4 INADVERTENT SIREN ACTIVATION (Continued)

3. When the Unit 2 Control Room is notified that the siren(s) have been silenced ensure that:
 - a. Evaluate AP-030, NRC Reporting Requirements, for potential NRC reporting.
 - b. Notify the State and County Warning Points concerning the status of the sirens.
 - c. Notify Robinson Communications.
4. Forward information gathered and any completed Attachment 8.1.14.2 forms to Emergency Preparedness for retention as appropriate.

8.1.5 EMERGENCY RESPONSE ORGANIZATION BEEPER DISTRIBUTION

1. After qualifying as an ERO member, EP will arrange an ERO beeper for the positions identified in Attachment 8.1.14.3, ERO Beeper Distribution.
2. Beepers are to ensure that the plant has the ability to meet the 30-45 minute response staffing requirements.
3. Plant Public Address, Non-Responding Emergency Communicators, dialogic and/or beepers are used to contact the 60-75 minute staff, and other positions not required by NUREGs.

8.1.6 HURRICANE PREPARATION GUIDANCE (CR 16553)

OMM-021 "Operation During Adverse Weather Conditions", provides direction for hurricane/adverse weather preparations. Additional tasks for the EP staff to consider are:

- Establish the response teams.
- Designate and post sleeping areas.
- Set up and test the satellite telephone.

8.1.7 INTENTIONALLY BLANK

8.1.8 INTENTIONALLY BLANK

8.1.9 INTENTIONALLY BLANK

8.1.10 SCENARIO DEVELOPMENT

1. Scenario Development Team Composition

NOTE: Members of Training or other support units may substitute for one or more of the following, provided the individual has equivalent knowledge and experience and the substitution is approved by the Supervisor - Emergency Preparedness.

A core team (required) for scenario development should be selected according to the following guidance:

- a. The Drill and Exercise Coordinator will be a member of the EP Unit, as assigned by the Supervisor - Emergency Preparedness.
- b. Other members of the EP Unit staff will be responsible for coordination and completion of assigned areas of the scenario to include logistical support.
- c. One (1) analyst or other experienced member of E&RC, who will:
 - Provide calculations and in-plant expertise associated with chemistry and radiological aspects of the scenario.
 - Assist with radiological and/or chemical plume distribution and deposition aspects of the scenario.
- d. A minimum of two (2) experienced members of the Maintenance or work planning units, who work normal work week hours, will be assigned to the team. One member will have expertise in mechanical maintenance activities, the other in electrical and I&C activities. These individuals are to be experienced with the current work management processes and will:
 - Develop the materials necessary to simulate and evaluate plant assessment and damage control missions associated with the scenario.

8.1.10.1.d **SCENARIO DEVELOPMENT** (Continued)

- Assist with the development of equipment malfunction causes based on industry operating experience, NRPDS/EPIX, and so forth.
 - Manufacture or otherwise develop damage control mock-ups as needed.
- e. A member of Operations Support who holds or has held an SRO License or Certification at RNP. This individual will:
- Develop, with assistance from RNP Operations Training, equipment malfunction sequences that are required to achieve the scope and requirements of the exercise scenario.
 - Review plant response, procedures, and data to ensure achievement of the goals/requirements of the exercise.
 - Provide altered plant data or instructions needed to ensure that participants will proceed through the scenario as expected/required.
 - Validate the scenario on the simulator.
- f. A member of RNP Operations Training who is knowledgeable in the use of the training simulator. This individual will:
- Assist Operations with development of equipment malfunction sequences necessary to achieve the scope and requirements of the scenario(s).
 - Coordinate proposed event sequences and data within the capabilities of the training simulator.
 - Review plant data, procedure transitions and instructions as needed to provide a smooth running scenario.
- g. RNP Simulator Support group. These (this) individual(s) will:
- Provide support for parameter override capabilities and modeling to achieve the needed results for the scenario.
 - Provide data capture and download resources to aid in manipulation and dissemination of data points needed for others calculations, and for back-up scenario data.

8.1.10.1 **SCENARIO DEVELOPMENT** (Continued)

The core team may be augmented for specific scenarios to include the following disciplines:

- a. A member of Fire Protection who will provide exercise-specific assistance for fire fighting scenarios.
- b. A member of Information Technology who will provide interface for necessary set-up and preparations of telecommunications and computer equipment and software.
- c. A member of Engineering who will assist with equipment, maintenance, technical or analysis related aspects of the scenarios (such as Core Damage Assessment).
- d. A member of Security who will assist with scenarios pertaining to security related Emergency Action Levels (EALs) or for scenarios designed to evaluate or practice security force activities as an element of the scenario.
- e. Others as may be specifically requested through the Supervisor - Emergency Preparedness.
- f. Team Members are expected to perform the following tasks:
 - attend scheduled scenario development meetings, critiques, and self-assessment roll-up meetings.
 - function as a Controller/Evaluator in drills/exercises as requested,
 - maintain all scenario development materials confidential and promptly report to EP any compromise of scenario elements, and
 - develop scenario materials and mock-ups assigned.
- g. The Supervisor - Emergency Preparedness should obtain concurrence for scenario development team assignments and approve the team composition prior to the end of the calendar year. Attachment 8.1.14.4 or an equivalent form should be used to document concurrence/approval.

SCENARIO DEVELOPMENT (Continued)

2. Scenario Development Planning

- a. Annually, based on the scope and the required objective demonstration, a schedule for scenario development and drill/exercise planning for the upcoming year should be created. This schedule should take into account:

- Scenario content and complexity needed to accomplish drill or exercise requirements and goals.
- Availability of previously developed scenario materials.
- Scheduled plant outage and maintenance activities.
- Shared resource commitments to outages off-site.
- Plant personnel training schedules.
- Simulator availability.
- State and local government's needs based on their level of participation.
- NRC and FEMA materials submittal requirements (Evaluated Exercises only).

Days before Exercise	Activity
90	Exercise Objectives/Scenario Timeline Due to FEMA
45	Exercise Objectives/Scenario Timeline Due to NRC

- b. To the extent practical, scenarios should be validated using the following guidance:
- For NRC Evaluated Exercises, validation should utilize licensed individuals and be performed close to the actual date of the Exercise. This will ensure the simulator model and operator response is similar to expectations. Separate validation by team members is also desirable.

SCENARIO DEVELOPMENT (Continued)

- For Normal Training Exercises the “Operations” portion of the scenario is validated by training staff. The integrated scenario (operations combined with EP aspects) should be reviewed by the EP scenario development member and Training to verify adequate timing of events for EP purposes.
- c. Several months prior to the start of the routine training exercise schedule, perform the following:
 - Identify required objectives to be performed during that year.
 - Identify any “specific objectives” in addition to the required objectives.

3. Scenario Package Composition

To the extent practical, scenarios should contain the following information. The following sections are suggested for all graded and training exercises.

Section 1.0 Introduction

The introduction contains a description of time, date, and type of exercise. It also includes a description of the level of agency involvement and the agencies which will participate. The introduction also includes a description of each section contained in the scenario manual.

Section 2.0 Objectives

This section defines the exercise objectives.

Section 3.0 Scenario

This section describes the postulated sequence of events occurring at the H.B. Robinson Steam Electric Plant Unit 2 (HBRSEP) which will require the HBRSEP Emergency Preparedness Organization and various onsite and offsite organizations to respond. Included in this sections are copies of the exercise messages and pertinent data which will be utilized to control the progress of the exercise scenario.

SCENARIO DEVELOPMENT (Continued)**Subsection 3.1 Messages**

This subsection contains copies of the exercise messages which will be utilized to control the progression of the exercise scenario.

Subsection 3.2 Plant Parameters

This subsection contains time related information concerning the postulated plant conditions, which corresponds to the development of the exercise scenario.

Subsection 3.3 Meteorological Information

This subsection contains information and data concerning the postulated meteorological conditions to the site area which will be utilized in the development of the exercise scenario.

Subsection 3.4 Radiological and Damage Control Mission Information

This subsection contains information and data concerning the postulated radiological conditions and Damage Control missions. The radiological information is for onsite as well as offsite conditions due to the abnormal conditions of HBRSEP. The missions are for troubleshooting and repair of onsite damaged or out of service plant equipment needed for the operation of HBRSEP.

Section 4 Controller Instructions

This section contains information concerning the controller aspects of exercise participants and facilities.

Section 5 Evaluator Instructions

This section contains information concerning the evaluation of exercise participants and facilities.

Section 6 Supplementary Material

This section contains materials to be used by Controller/Evaluators for documenting strengths, deficiencies, and comments to be used in the individual critiques.

8.1.11 DRILL/EXERCISE SELF EVALUATION (AR #44128)

1. Evaluate the effectiveness of each of the following drill/exercise cycle phases at least once during the biennial exercise cycle:
 - a. Analysis
 - b. Design
 - c. Development
 - d. Implementation
2. Select one or more of the following self-evaluation programs to determine the effectiveness of a specific phase:
 - a. Corrective action
 - b. Operating experience
 - c. Self-assessment
 - d. Benchmarking
3. Probe to identify the following:
 - a. Flawed defenses
 - b. Error precursors
 - c. Weak organizational processes
4. Consider the following elements:
 - a. Results
 - b. Behaviors
 - c. Task demands
 - d. Work environment
 - e. Individual capabilities

8.1.12 PUBLIC EDUCATION AND INFORMATION

1. Emergency Preparedness and Site Communications shall perform the following actions:
 - a. In cooperation with the State of South Carolina, local governments and with corporate CP&L efforts, ensure that public education and information efforts are consistent and complementary.
 - b. Ensure that a public information program for persons living in the possible plume exposure Emergency Planning Zone includes the following elements:
 - Brochures or other media containing educational information on emergency preparedness, nuclear power and radiation, and how to contact CP&L for more information.
 - Coordination of speakers to address emergency preparedness when requested.
 - Supplying news material for the media.
 - c. Ensure that the public education program includes the following information:
 - The potential for occurrence of a radiological emergency.
 - How to recognize a radiological emergency notification.
 - What proper, immediate actions (e.g., return to home, close windows and turn on radio) should be taken upon notification.
 - Protective actions to be taken if shelter is prescribed.
 - General procedure to follow if an evacuation is required.
 - General education on radiation.
 - A contact for how to learn more about emergency preparedness.

8.1.13 RECORDS

1. Attachment 8.1.14.1 and Attachment 8.1.14.2 are to be maintained in the EP Unit files for a period of two years unless otherwise specified.
2. The following documents are to be submitted for retention as vital records in the plant vault per RDC-NGGC-0001:
 - Recurring drills/exercise maintenance and testing records documented per EPPRO-02.
 - NRC Biennial Graded Exercise scenario narrative/timeline, scope and objectives, and final critique report.
3. For Full Scale Drills/Exercises, copies of the scenario timeline, draft critique reports, attendance records, and final critique reports should be maintained by the EP Staff for a period of six (6) years.
4. For Small Scale Drills, copies of the covered topics, attendance records, and critique reports should be maintained by the EP Staff for a period of six (6) years.

8.1.14 ATTACHMENTS

- 8.1.14.1 EP Improvement Form
- 8.1.14.2 Siren System Inadvertent Activation Report
- 8.1.14.3 ERO Beeper Distribution
- 8.1.14.4 Scenario Development Team Assignments
- 8.1.14.5 EP Drill and Exercise Objectives
- 8.1.14.6 Acceptance Criteria
- 8.1.14.7 Guidelines for Emergency Response Organization (ERO) Critiques

ATTACHMENT 8.1.14.1
Page 1 of 1
EP IMPROVEMENT FORM

DATE: _____

ERO POSITION: _____

NAME: _____

RECOMMENDED CHANGE IS IN REFERENCE TO:

_____ EMERGENCY PLAN

_____ EMERGENCY FACILITY

_____ EP- _____
(Give Number)

_____ EP TRAINING

_____ EQUIPMENT

_____ OTHER (List) _____

I RECOMMEND THE FOLLOWING CHANGE, ADDITION OR IMPROVEMENT:

(Be specific - list all information) _____

For Emergency Preparedness Use

Date Received: _____

Date Originator Notified: _____

RESOLUTION _____

Completed documents to be maintained in EP Files for a period of two years.

ATTACHMENT 8.1.14.3
Page 1 of 1
ERO BEEPER DISTRIBUTION

All Team Members in the following positions.

SEC	OSC Leader	AERM
POD	ERM	NRC
TAD	A&LM	EP
ERD	TAM	JIC Director
RCD/RCM	POA	Reactor Engineer
ESTL	EC	Computer Support
Superintendent Shift Operations Desk	DPTL	Company Spokesperson
State/County Communicator		RC Tech-Damage Control
RC Tech Facilities (45 min)		En Mon Team (45 min)
JIC Technical Spokesperson		

Rotational Beeper positions

NRC Communicator	Environmental/Chemistry Tech
PI Communicator	Electrical Engineer
Security Lieutenant	Mechanical Engineer
Damage Control Leaders	RC Tech-Facilities (75 min)
(1) Mechanics	En Mon Team Leader
(1) I&C/Electricians	En Mon Team (75 min)

(1) Normally on shift, beepers available

This information is for resource allocation only. No record retention requirements apply.

SCENARIO DEVELOPMENT TEAM ASSIGNMENTS

The below named personnel are responsible for RNP Emergency Preparedness Scenario development for the time period _____ through _____ ①.

The responsibilities and expectations for the conduct of these duties are delineated in Section 8.1.10.1 of this procedure.

Core Team Responsibility:	Name:
Coordinator	
Lead Controller	
E&RC	
Plant Radiation	
Off-site Radiation	
Operations	
Operations Training	
Simulator Support	
Mechanical Maint.	
Elec/I&C Maint.	

Augment. Team Responsibility:	Name:
Fire Protection	
Info. Technology	
Engineering	
Security	
Public Information	
Other	

① A schedule of activities and tentative resource needs should be attached.

Team Composition Approval: _____

Signature: _____ Supervisor-Emergency Preparedness/Date

This information is for resource allocation only.

ATTACHMENT 8.1.14.5
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EP DRILL AND EXERCISE OBJECTIVES

	NUREG 0654	OBJECTIVE	CR	TSC	OSC	JIC	EOF	FREQ
1	A.1.e F.1.a	Provide 24 hour per day on shift emergency response personnel as required by the Emergency Plan including the capability of 24 hour per day manning of communications.	X					6 yr
2	A.4	Demonstrate ability to staff Emergency Response Facilities (ERF) 24 hours per day.		X	X	X	X	6 yr
3	B.5 H.4 B.7 ¹ b.2	Demonstrate the ability to augment shift staff and activate ERFs with Emergency Plan Table 5.3.2-1, "Capability for Additions" column for 30-45 min and 60-75 min.		X	X		X	2 yr
4	B.7.a B.7.b B.7.c B.7.d	Demonstrate the ability to augment shift staff with: -Logistics support personnel -Technical support for reentry/recovery operations -Management interface with governmental authorities -Corporate interface with news media		X			X X X	2 yr

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ATTACHMENT 8.1.14.5
Page 2 of 7
EP DRILL AND EXERCISE OBJECTIVES

	NUREG 0654	OBJECTIVE	CR	TSC	OSC	JIC	EOF	FREQ
5	B.8	Demonstrate the ability to contact Contractors and private organizations for technical assistance.					X	Ann
6	B.9 L.4 ¹ b.12	Demonstrate the ability to obtain assistance from law enforcement, medical, and fire-fighting organizations including assistance for contaminated personnel.	X					Ann
7	C.2.b	Demonstrate the ability to provide a representative to the SEOC (when activated) and County EOCs.					X	2 yr
8	C.3 ¹ b.9	Demonstrate the ability to coordinate radiological monitoring and analysis.					X	Ann
9	D.1 I.1 ¹ b.4	Demonstrate the ability to identify and properly classify events using appropriate procedures, plant system parameter values, and the EALs.	X	X				Ann
10	E.2 F.1.e ¹ b.2	Demonstrate the ability to alert, notify, and mobilize ERO personnel	X	X	X	X	X	Ann
11	E.3 ¹ b.5	Demonstrate the ability to make initial emergency notification to State and Chesterfield, Darlington, and Lee County Warning Points or EOCs within 15 minutes following declaration of each emergency classification.	X				X	Ann

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ATTACHMENT 8.1.14.5
Page 3 of 7
EP DRILL AND EXERCISE OBJECTIVES

	NUREG 0654	OBJECTIVE	CR	TSC	OSC	JIC	EOF	FREQ
12	E.4 ¹ b.5	Demonstrate the ability to make follow-up notifications to State and Chesterfield, Darlington, and Lee County Warning Points or EOCs within 60 minutes following initial and change of classification notifications.	X				X	Ann
13	E.7 J.7 ¹ b.10	Demonstrate the ability to formulate protective action recommendations and transmit to State and County personnel.					X	Ann
14	F.1 F.1.a F.1.b	Demonstrate the ability to communicate with State and County personnel using primary and backup communication systems.	X				X	Ann
15	F.1.c	Demonstrate the provisions to communicate with Federal emergency response organizations.	X	X				Ann
16	F.1.d ¹ b.6	Demonstrate the ability to communicate between the CR, TSC, EOF, OSC, and Enmon teams.	X	X	X		X	Ann
17	F.1.f	Demonstrate the ability to communicate with the NRC within 60 minutes following each emergency classification declaration.	X	X				Ann
18	G.3.a G.3.b	Demonstrate timely activation of the Joint Information Center.				X		2 yr

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ATTACHMENT 8.1.14.5
Page 4 of 7
EP DRILL AND EXERCISE OBJECTIVES

	NUREG 0654	OBJECTIVE	CR	TSC	OSC	JIC	EOF	FREQ
19	G.4.a ¹ b.7	Demonstrate the ability to obtain emergency related information.				X		2 yr
20	G.4.b G.4.c	Demonstrate the ability to disseminate timely, accurate, and appropriate emergency information including provisions for rumor control.				X		2 yr
21	H.6.a H.6.b I.5	Demonstrate the ability to obtain data from meteorological, hydrologic, seismic, radiological monitors, and sampling devices.	X				X	Ann
22	I.2 ¹ b.9	Demonstrate the ability to obtain samples and analyze data from the PASS and other post accident monitoring equipment.			X			Ann
23	I.3.a I.3.b	Demonstrate the ability to determine the source term and magnitude of releases.	X				X	Ann
24	I.8 I.9 J.7	Demonstrate the ability to project dosage to the public based on plant and field data.					X	Ann
25	J.1 ¹ b.2	Demonstrate the ability to alert and advise individuals who are visitors, contractors, and members of the public onsite.	X					Ann

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ATTACHMENT 8.1.14.5
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EP DRILL AND EXERCISE OBJECTIVES

	NUREG 0654	OBJECTIVE	CR	TSC	OSC	JIC	EOF	FREQ
26	J.3 K.7	Demonstrate the ability to evacuate non-essential personnel from site to be monitored and decontaminated at an offsite location.			X		X	6 yr
27	J.4	Demonstrate the ability to monitor, decontaminate and evacuate non-essential personnel from site.			X		X	6 yr
28	J.5	Demonstrate the ability to account for individuals in the protected area and identify the names of those unaccounted for within 30 minutes.		X				6 yr
29	J.6 K.3.a K.3.b	Demonstrate the ability to provide ERO personnel protective clothing, respiratory protection, dosimetry, and radioprotective drugs. This also includes determination of doses received and maintenance of dose records 24 hours per day.	X	X	X		X	2 yr
30	K.1 ¹ b.11	Demonstrate the ability to establish onsite exposure guidelines consistent with EPA emergency worker and lifesaving activities.		X				Ann
31	L.2	Demonstrate the ability to provide onsite first aid capability.			X			Ann

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ATTACHMENT 8.1.14.5
Page 6 of 7
EP DRILL AND EXERCISE OBJECTIVES

	NUREG 0654	OBJECTIVE	CR	TSC	OSC	JIC	EOF	FREQ
32	M.1 M.2 M.3 M.4	Demonstrate the ability to reassess plant conditions and evaluate recovery/reentry considerations.					X	6 yr
33	N.1.b	Demonstrate the ability to augment the ERO, during an Exercise, between 6:00 p.m. and 4:00 a.m. or any weekend hours.	X					6 yr
34	N.2.d	Perform Radiological Monitoring Drills which involve collection and analysis of all sample media (e.g., water, vegetation, soil and air), and provisions for communications and record keeping.					X	Ann
35	N.2.b	Perform fire drills which demonstrate the ability of the fire brigade to respond to a fire and interface with offsite fire assistance.	X					6 yr
36	N.2.c	Perform medical emergency drills which demonstrate the ability to deal with a medical emergency involving a simulated contaminated individual including participation of offsite medical treatment agencies.	X		X			Ann

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ATTACHMENT 8.1.14.5

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EP DRILL AND EXERCISE OBJECTIVES

	NUREG 0654	OBJECTIVE	CR	TSC	OSC	JIC	EOF	FREQ
37	N.2.e (1) ¹ b.9	Perform Health Physics Drills which involve response to, and analysis of, simulated elevated airborne and liquid samples and direct radiation measurements in the environment.			X			6 mo
38	ACR 94- 01156 CA .1	Perform an offsite hazards drill which will involve response to, and analysis of simulated offsite hazards (examples: chlorine, propane, hydrogen, gasoline or some other offsite hazard either natural man made). Samples and measurements as well as protective measures should be taken.	X	X	X		X	Ann
39	N.4	Perform a critique at the conclusion of an exercise to evaluate the ability of organizations to respond as required.	X	X	X	X	X	Ann
40		Demonstrate that NRC identified open items resulting from previous exercises are corrected.						
41	CR 98- 02026	Demonstrate actual use of SCBA's including field change out of spare cylinder.			X			Ann

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ATTACHMENT 8.1.14.6
Page 1 of 7
ACCEPTANCE CRITERIA

	OBJECTIVE	ACCEPTANCE CRITERIA
1	Provide 24 hour per day on shift emergency response personnel as required by the Emergency Plan including the capability of 24 hour per day manning of communications.	This objective is met as long as the staffing requirements of Technical Specifications, Emergency Plan Table 5.3.2-1 "Minimum Shift Size" column are satisfied.
2	Demonstrate ability to staff ERFs 24 hours per day.	This objective is met when the ERFs are staffed and a shift turnover is complete.
3	Demonstrate the ability to augment shift staff and activate ERFs with Emergency Plan Table 5.3.2-1, "Capability for Additions" column for 30-45 min and 60-75 min.	This objective is met when the staffing requirements of the Emergency Plan Table 5.3.2-1, "Capability for Additions" column is satisfied.
4	Demonstrate the ability to augment shift staff with: -Logistics support personnel -Technical support for reentry/recovery operations -Management interface with governmental authorities -Corporate interface with news media	This objective is met when facilities are capable of being activated.
5	Demonstrate the ability to contact Contractors and private organizations for technical assistance.	This objective is met when the ability to contact has been demonstrated. (Actual contact may be simulated.)
6	Demonstrate the ability to obtain assistance from law enforcement, medical, and fire-fighting organizations including assistance for contaminated personnel.	This objective is met when the ability to contact has been demonstrated. (Actual contact may be simulated.)

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ATTACHMENT 8.1.14.6
Page 2 of 7
ACCEPTANCE CRITERIA

	OBJECTIVE	ACCEPTANCE CRITERIA
7	Demonstrate the ability to provide a representative to the SEOC (when activated) and County EOCs.	This objective is met when the facilities are activated and an ERO representative is present.
8	Demonstrate the ability to coordinate radiological monitoring and analysis.	This objective is met when appropriate monitoring and analysis data are received. (May be simulated)
9	Demonstrate the ability to identify and properly classify events using appropriate procedures, plant system parameter values, and the EALs.	This objective is met when events are correctly classified in a timely manner.
10	Demonstrate the ability to alert, notify, and mobilize ERO personnel.	This objective is met when the ERFs are activated.
11	Demonstrate the ability to make initial emergency notification to State and Chesterfield, Darlington, and Lee County Warning Points or EOCs within 15 minutes following declaration of each emergency classification.	This objective is met when initial notifications are accomplished within the required 15 minutes. Time starts at emergency declaration and ends at first contact.
12	Demonstrate the ability to make follow-up notifications to State and Chesterfield, Darlington, and Lee County Warning Points or EOCs within 60 minutes following initial and change of classification notifications.	This objective is met when follow-up notifications are accomplished within the required 60 minutes. Time starts at completion of the previous notification and ends at first contact.

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ATTACHMENT 8.1.14.6
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ACCEPTANCE CRITERIA

	OBJECTIVE	ACCEPTANCE CRITERIA
13	Demonstrate the ability to formulate protective action recommendations and transmit to State and County personnel.	This objective is met when protective action recommendations are transmitted to the State and Counties within 15 minutes following the declaration of a General Emergency.
14	Demonstrate the ability to communicate with State and County personnel using primary and backup communication systems.	This objective is met when communications have been established using the Selective Signaling system and one of the backup systems.
15	Demonstrate the provisions to communicate with Federal emergency response organizations.	This objective is met by agreement letters.
16	Demonstrate the ability to communicate between the CR, TSC, EOF, OSC, and Enmon teams.	This objective is met when none of the other Objectives fail due to communications.
17	Demonstrate the ability to communicate with the NRC within 60 minutes following each emergency classification declaration.	This objective is met when communications are established within the required time. Time starts at emergency declaration and ends at first contact.
18	Demonstrate timely activation of the Joint Information Center.	This objective is met when the Company Spokesperson has declared the Joint Information Center activated and the information has been entered into the log.

¹10CFR50.47

ATTACHMENT 8.1.14.6
Page 4 of 7
ACCEPTANCE CRITERIA

	OBJECTIVE	ACCEPTANCE CRITERIA
19	Demonstrate the ability to obtain emergency related information.	This objective is met when facility briefings between the EOF and JIC have been conducted as appropriate.
20	Demonstrate the ability to disseminate timely, accurate, and appropriate emergency information, including provisions for rumor control.	This objective is met when a press conference has been conducted by a Company Spokesperson and false information has been corrected by responsible personnel.
21	Demonstrate the ability to obtain data from meteorological, hydrologic, seismic, radiological monitors, and sampling devices.	This objective is met when data has been obtained and provided to appropriate personnel.
22	Demonstrate the ability to obtain samples and analyze data from the PASS and other post accident monitoring equipment.	This objective is met when samples have been obtained and accurately analyzed.
23	Demonstrate the ability to determine the source term and magnitude of releases.	This objective is met when source term and release magnitude/dose protection have been accurately determined.
24	Demonstrate the ability to project dosage to the public based on plant and field data.	This objective is met when Dose Projection information is included in the General Emergency declaration notification or as a follow-up to the General Emergency notification.

¹10CFR50.47

ATTACHMENT 8.1.14.6
Page 5 of 7
ACCEPTANCE CRITERIA

	OBJECTIVE	ACCEPTANCE CRITERIA
25	Demonstrate the ability to alert and advise individuals who are visitors, contractors, and members of the public onsite.	This objective is met when individuals receive, understand, and respond as required to notifications provided by alarms and PA.
26	Demonstrate the ability to evacuate non-essential personnel from site to be monitored and decontaminated at an offsite location.	This objective is met when personnel are sent to an offsite location for decontamination. (May be simulated.)
27	Demonstrate the ability to monitor, decontaminate and evacuate non-essential personnel from site.	This objective is met when personnel are able to discuss decontamination procedures.
28	Demonstrate the ability to account for individuals in the protected area and identify the names of those unaccounted for within 30 minutes.	This objective is met when accountability is completed within 30 minutes.
29	Demonstrate the ability to provide ERO personnel protective clothing, respiratory protection, dosimetry, and radioprotective drugs. This also includes determination of doses received and maintenance of dose records 24 hours per day.	This objective is met when adequate supplies are available and dose records are maintained during the drill.

¹10CFR50.47

ATTACHMENT 8.1.14.6
Page 6 of 7
ACCEPTANCE CRITERIA

	OBJECTIVE	ACCEPTANCE CRITERIA
30	Demonstrate the ability to establish onsite exposure guidelines consistent with EPA emergency worker and lifesaving activities.	This objective is met when emergency worker and lifesaving exposure guidelines are implemented.
31	Demonstrate the ability to provide onsite first aid capability.	This objective is met when First Responders have provided initial treatment and the victim(s) have been delivered to the rescue squad. (Portions may be simulated.)
32	Demonstrate the ability to reassess plant conditions and evaluate recovery/reentry considerations.	This objective is met when a recovery plan and an organization is formulated. (May be simulated.)
33	Demonstrate the ability to augment the ERO, during an Exercise, between 6:00 p.m. and 4:00 a.m. or any weekend hours.	This objective is met when augmentation is successfully completed between the hours of 6:00 p.m. and 4:00 a.m. or any weekend hours.
34	Perform Radiological Monitoring Drills which involve collection and analysis of all sample media (e.g., water, vegetation, soil and air), and provisions for communications and record keeping.	This objective is met when environmental measurement through analysis of water, vegetation, soil, and air sample media have been completed, recorded and communicated.
35	Perform fire drills which demonstrate the ability of the fire brigade to respond to a fire and interface with offsite fire assistance.	This objective is met when the fire brigade arrives at the scene with appropriate equipment and offsite fire assistance is coordinated. (Portions may be simulated.)

¹10CFR50.47

ACCEPTANCE CRITERIA

	OBJECTIVE	ACCEPTANCE CRITERIA
36	Perform medical emergency drills which demonstrate the ability to deal with a medical emergency involving a simulated contaminated individual including participation of offsite medical treatment agencies.	This objective is met when first responders arrive at the scene and offsite assistance is coordinated. (Portions may be simulated.)
37	Perform Health Physics Drills which involve response to, and analysis of, simulated elevated airborne and liquid samples and direct radiation measurements in the environment.	This objective is met when response and analysis is made to simulated elevated airborne and liquid samples and direct radiation measurements in the environment.
38	Perform an offsite hazards drill which will involve response to and analysis of simulated offsite hazards (example chlorine, propane, hydrogen, gasoline or some other offsite hazard either natural or man made). Samples, measurements as well as protective measures should be taken.	This objective is met when an offsite hazard is included in a drill or exercise and protective measures are taken and the hazard is measured for the protective measures.
39	Perform a critique at the conclusion of an exercise to evaluate the ability of organizations to respond as required.	This objective is met when facility critiques have been conducted.
40	Demonstrate that NRC identified open items resulting from previous exercises are corrected.	This objective is met by successful demonstration of the task in the area(s) of concern.
41	Demonstrate use of SCBAs including field change out of spare cylinder.	This objective is met when actual use of SCBAs and change out of cylinder are demonstrated.

¹10CFR50.47

Guidelines for Emergency Response Organization (ERO) Critiques

Critiques are an important part of the process of self-identifying problems and improvements for the Emergency Response Organization. The following are guidelines for conducting a facilitated critique of the Emergency Response Organization.

Critique Process

The facility leader should conduct a facilitated critique as follows:

1. Assign someone to record the critique notes
2. Ask for input on each objective and the acceptance criteria on the facility listing.
3. Probe to identify
 - Flawed defenses
 - Error precursors
 - Weak organizational processes.
4. Consider the following elements:
 - Results
 - Behaviors
 - Task demands
 - Work environment
 - Individual capabilities
5. If problems are identified, prior to continuing, determine whether the problem should be:
 - a) identified in a Condition Report (CR),
 - b) identified on an EP Improvement Form (EPIF), or
 - c) included in the critique as a general comment.

If a Condition Report or EP Improvement Form is warranted, ensure critique participants identify who is responsible to initiate and evaluate the CR or EPIF , and document this in the critique notes.

6. Identify any remediation due to less than acceptable performance and document the recommended remediation in the critique notes.
7. After all of the objectives have been addressed, ask for any general comments from all participants.
8. After all participants have completed their input, ask for comments from controllers and evaluators.
9. After all controllers/evaluators complete their input, ask for comments from NAS.
10. After all NAS comments are complete, ask for comments from the NRC.
11. Instruct the note taker to electronically transmit the critique notes to EP prior to the Lead Evaluator /Controller Critique (roll-up).

United States Nuclear Regulatory Commission
Attachment VII to Serial RNP-RA/01-0141
26 Pages

EPRAD-01
ENVIRONMENTAL MONITORING
Revision 10

CAROLINA POWER & LIGHT COMPANY
H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

PLANT OPERATING MANUAL

VOLUME 2
PART 5

EMERGENCY PROCEDURE

EPRAD-01
ENVIRONMENTAL MONITORING

REVISION 10

SUMMARY OF CHANGES

STEP	REVISION COMMENTS
8.1.3.1.6	Deleted references for old radio system and replaced with new radio directions. Restructured section with direction for new radio system.
8.1.3.1.9	Added guidance for filter paper installation.
8.1.3.1.10	Removed reference to old radio equipment.
8.1.3.4	Added Attachment reference for TLD locations.
Attach 8.1.5.9	Deleted directions for old radios, new radio directions are in the body of procedure. Added an area dosimetry log sheet.

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8.1.1 PURPOSE

1. This procedure provides instructions for Radiological Assessment and Consequences. This procedure addresses in-plant/on-site monitoring and emergency off-site environmental monitoring.

8.1.2 RESPONSIBILITIES

1. The Environmental Monitoring Team Leader (EMTL) is responsible for the direction and completion of the applicable requirements of this procedure by the Environmental Monitoring Teams.
2. The Radiological Control Director (RCD) and the assigned Environmental & Radiation Control (E&RC) Supervisor or Lead Technician are responsible for the direction and completion of the applicable requirements of this procedure by the Radiation Monitoring Teams.

8.1.3 INSTRUCTIONS

8.1.3.1 Environmental Monitoring

1. The Emergency Environmental Monitoring teams shall report to the Emergency Operations Facility at the declaration of an Alert or higher emergency classification.
 - a. Report to Room 420, the Training Building Library
2. Immediate dispatch of the Emergency Environmental Monitoring Teams should be performed as soon as the need arises.
 - a. Activation of any facility need not be a precursor for team dispatch.

NOTE: Emergency Exposure limits are outlined in EPOSC-04, Emergency Work Control.

3. Obtain a briefing from the Site Emergency Coordinator (SEC) **OR** Radiological Control Manager (RCM) **OR**, RCD **OR** EMTL regarding the following:
 - a. Required monitoring data (plume tracking, dose projection confirmation, expanded environmental monitoring, etc.)
 - b. Anticipated levels of radiation

8.1.3.1 Environmental Monitoring (Continued)

- c. Suggested routes/sample points,
 - d. Required protective gear
 - e. Required dosimetry, TLD, and
 - f. Exposure limits allowed.
4. Obtain necessary calibrated monitoring and support equipment from designated areas:
- a. Environmental Monitoring emergency monitoring kits are located in the mechanical equipment room in the EOF/TSC.
 - The Environmental Monitoring team will ensure that R-38 ventilation has been switched from "Auto" to "Hand".
 - b. The portable emergency generators are located in the old equipment shop (building 440 east of the GET Bldg.)
5. Emergency Environmental Monitoring off site should proceed as follows:
- a. Obtain survey vehicles and emergency kits as needed.
 - b. Verify gas is available for survey vehicles and emergency generators.
 - c. Make quick visual check of the Emergency kit inventory.
 - Verify calibration dates on survey instruments and air samplers.
 - Battery check instruments

8.1.3.1 Environmental Monitoring (Continued)

6. Verify radio communications with Environmental Monitoring Team Leader (EMTL) via channel 1-A. Range of the Environmental radios is approximately 20 miles.
 - a. Turn radio on using the "Vol-Off" knob.
 - b. "SLF-t S t" for self test will appear, when finished a beep will be heard.
 - c. Verify channel 1-A is indicated. IF not, THEN press the up or down arrows until the 1-A appears.
 - d. To talk, key the radio, wait for the tone, then speak.
7. Issue dosimetry to each team member. Record TLD and SRPD numbers in the Personnel Dose Data on Attachment 8.1.5.2, Personnel Dose Data/Dose Rate Data.
8. Test start emergency generators to ensure proper operation.
 - Start outside building to avoid carbon monoxide hazard.
9. Load air samplers with Iodine Cartridge(Silver Zeolite) and a particulate filter. The rough surface of the filter paper should face the open side of the filter.
 - Charcoal iodine cartridge may be used in drills/exercises.

8.1.3.1 Environmental Monitoring (Continued)

10. Load emergency kits and generators into survey vehicle(s).
11. Locate the plume or confirm offsite doses as follows.
 - a. Obtain current information from the Environmental Monitoring Team Leader (EMTL).
 - Wind direction
 - Initial survey location
 - Expected radiation levels
 - Protective equipment required
 - b. Travel downwind to initial survey location.
 - c. Maintain contact with EMTL at least every 30 minutes via radio or phone.
 - Attachment 8.1.5.8, Communications Log may be used to document communications.
 - If desired, the EMTL may maintain all communications records.
 - d. At designated locations, travel at a right angle to the reported wind direction via most convenient roadway.
 - From designated locations, travel into the plume, record odometer readings coincident with entrance, maximum, and exit radiation levels as indicated by survey meter.

8.1.3.1 Environmental Monitoring (Continued)

- Maintain survey instruments on and near a window or windshield.
 - Report readings greater than or equal to 0.2 mRem/hr to the EMTL.
 - Drive slowly to ensure accurate readings and locations.
- e. Repeat survey traveling in the opposite direction.
- f. Proceed to the location of the maximum dose rate and collect, as a minimum, a 20 ft³ air sample.

NOTE: The sample period should be based on collecting sufficient volume to attain the sensitivity necessary to detect the radioactive concentration. A ten (10) minute air sample at 2 scfm flow rate provides sufficient volume to meet the minimum detectable limit of 1E-07 μ Ci/cc for radioiodines when using the appropriate curve.

- g. Place the air sampler so that the exhaust does not stir up loose contamination which would interfere with obtaining a representative sample.
- h. Record sample start and stop times to the nearest whole minute on Attachment 8.1.5.1, Environmental Data.
- If no suitable timing device is available, contact the EMTL for "marks" on start and stop times.
- i. While the air sample is being drawn, perform the following:
- Closed window radiation level at approximately waist level (1 meter from ground).
 - Open window radiation level at approximately waist level (1 meter from ground).

8.1.3.1 Environmental Monitoring (Continued)

- Open window radiation level at approximately six inches above ground.
- Record levels in the Dose Rate Data section on Attachment 8.1.5.2, Personal Dose/Dose Rate Data.
- j. Periodically read dosimeters **AND** report any off scale readings to the EMTL immediately.
- k. Proceed to a location outside the plume.
- l. Remove the particulate filter and iodine cartridge from the air sampler and place in separate, clean plastic bags.
 - Use tweezers or gloves to prevent cross contamination.
 - Leave the bags open to allow the samples to off-gas.
 - Mark the bags with sample start/stop times, sample flow rate, activity in ccpm, ambient radiation levels, date, location, volume, and initials of team member.
- m. Conduct a field estimate of the airborne iodine activity **AND** the airborne particulate activity using a frisker type instrument with pancake probe (such as LM-177/44-9 combination) as follows:
 - Move to a relatively low background area then measure **AND** record the background radiation levels.
 - Measure the initial activity of the iodine cartridge by placing the probe on contact with each side of the bag **AND** record the highest reading.

8.1.3.1 Environmental Monitoring (Continued)

- Determine the corrected counts per minute (ccpm) of the iodine cartridge by subtracting the background reading from the initial sample reading **AND** record the data.

NOTE: If the activity of the second measurement is within 25% of the initial measurement for the iodine cartridge, then it should be presumed that radioiodines are present, pending isotopic analysis.

- Obtain a second set of measurements of the iodine cartridge after five minutes have elapsed.
 - Repeat the measurement process for the particulate filter.
- n. Report field estimates in ccpm from Attachment 8.1.5.1 to the EMTL for entry into the dose projections program.

NOTE: Attachment 8.1.5.5, Thyroid Dose From Inhalation, and Attachment 8.1.5.6, Internal Dose From Inhalation, may be used to estimate internal and thyroid doses based on field readings.

- o. Determine the airborne concentration of radioiodines by plotting the highest calculated sample activity (ccpm) against the calculated sample volume using Attachment 8.1.5.3, Iodine Activity with a Frisker **AND** record the results in $\mu\text{Ci/cc}$ on Attachment 8.1.5.1.
- p. Determine the airborne concentration of particulates by plotting the highest calculated sample activity (ccpm) against the calculated sample volume using Attachment 8.1.5.4, Particulate Activity With a Frisker **AND** record the results in $\mu\text{Ci/cc}$ on Attachment 8.1.5.1.

8.1.3.1 Environmental Monitoring (Continued)

- q. Report field estimates of the airborne iodine and particulate concentrations in $\mu\text{Ci/cc}$ from Attachment 8.1.5.1 to the EMTL to aid in evaluation of field protective action considerations for team members.
 - r. After appropriate samples are collected, return the samples to the site or other designated location for further analysis as directed by the EMTL.
 - s. Perform expanded environmental monitoring as assigned by the EMTL.
 - Place additional environmental TLDs as directed by the EMTL. Environmental Monitoring Procedures contain locations for TLDs and routine monitoring. . Attachment 8.1.5.9 contains the log sheet for TLD locations.
12. Collect Environmental samples as directed by the EMTL.
- a. Attachment 8.1.5.7, Collection of Environmental Samples establishes the method for collecting various liquid, soil, and vegetation samples.
 - b. Environmental samples will be collected as conditions permit.
 - c. Additional sampling instructions, where required, should be requested from the EMTL.
 - d. All samples collected should be labeled as follows:
 - sample type,
 - location,
 - date and time,
 - activity upon collection,
 - initials and team designation of sample collector.

8.1.3.1 Environmental Monitoring (Continued)

- e. Deliver samples to the designated location as directed by the EMTL.
 - Ensure samples are properly labeled and the sample container is not externally contaminated. Sample may be placed in another "clean" bag/container.
 - Brief the sample recipient/courier on the radiological conditions of the samples.

8.1.3.2 In-Plant/On-site Radiological Monitoring

- 1. Obtain necessary calibrated monitoring and support equipment from designated areas.
 - a. Radiation monitoring equipment for on site monitoring is located in the OSC storage location.
 - b. Radiological monitoring teams use radio channel 1 or 2 as a default.
- 2. For Damage Control Teams entries, observe the following:
 - a. Use surveying and sampling practices as per the normal health physic practices.
 - Normal plant maps may be used for documentation of all surveys and air samples.
 - b. Under emergency conditions, monitor radiation levels continuously while proceeding to the requested locations.
 - Document any unanticipated high radiation levels incurred while in route.
 - c. Report any unanticipated high radiation levels incurred, while in route, to the E&RC Supervisor or Lead Technician.

8.1.3.2 In-Plant/On-site Radiological Monitoring (Continued)

- d. Samples are to be counted in the E&RC facility if available.
 - Assure adequate integrity of sample containers and strict handling to avoid contamination of the facilities.
 - All samples of greater than 2 Rem/hr will be handled as Very High Level Radioactive Samples (EPRAD-02, Processing Very High Level Radioactive Samples).
 - If Robinson facilities are not available consider:
 - The use of other CP&L sites, or
 - Request State/Federal assistance through the State of South Carolina.
- 3. Habitability will meet the following criteria unless other wise directed by the RCD.
 - a. Less than 5 mRem/hr direct radiation,
 - b. Less than 1000 dpm/100cm² contamination,
 - c. Less than .25 DAC airborne.
- 4. Perform surveys as per normal health physics practices in all areas which must remain habitable. Attachment 8.1.5.9 contains the log sheet for TLD locations. Consideration should be given to placing TLDS in the following areas:
 - a. OSC
 - b. TSC
 - c. EOF
 - d. Assembly Areas
 - e. Machine Shops
 - f. Counting Room
 - g. Administrative Building

8.1.3.2 In-Plant/On-site Radiological Monitoring (Continued)

5. As emergency facilities become inhabited, provisions for personnel monitoring at ingress/egress points must be set up in concert with Security Access Control.
 - a. See EPSPA-00, Site Protective Actions, for details on Access Control.

8.1.4 RECORDS

1. Forward documentation generated during an emergency or drill/exercise to the Emergency Preparedness Staff.
 - Attachments/documentation generated during an emergency will be maintained in the plant vault as vital records.
 - Attachments/documentation generated during a drill/exercise will be maintained in the EP files.

8.1.5 ATTACHMENTS

- | | |
|---------|-------------------------------------|
| 8.1.5.1 | Environmental Data |
| 8.1.5.2 | Personal Dose/Dose Rate Data |
| 8.1.5.3 | Iodine Activity With a Frisker |
| 8.1.5.4 | Particulate Activity With a Frisker |
| 8.1.5.5 | Thyroid Dose From Inhalation |
| 8.1.5.6 | Internal Dose From Inhalation |
| 8.1.5.7 | Collection of Environmental Samples |
| 8.1.5.8 | Communications Log |
| 8.1.5.9 | Area Dosimetry Log Sheet |

ATTACHMENT 8.1.5.1
Page 1 of 1
ENVIRONMENTAL DATA

SAMPLE LOCATION						
AIR SAMPLE START/STOP	/	/	/	/	/	/
AIR SAMPLE FLOWRATE (cfm)						
AIR SAMPLE VOLUME (ft ³)						
PART. FILTER READING (ccpm)*						
PART. FILTER READING (μCi/cc)**						
IODINE CARTRIDGE READING (ccpm) *						
IODINE CARTRIDGE READING (μCi/cc) **						
5 MIN. PART. FILTER READING (ccpm)						
5 MIN. PART. FILTER READING (μCi/cc)						
5 MIN. IODINE CART. READING (ccpm)						
5 MIN. IODINE CART. READING (μCi/cc)						
INSTRUMENT MODEL/SERIAL						
TECHNICIAN						

VOLUME (ft³) = FLOWRATE (CFM) X TIME (MIN.)

*Report field activity results in **ccpm** to the EMTL for entry into the Dose Projections program.

Report airborne concentration in **μCi/cc to the EMTL to aid in evaluation of field protective action considerations for team members.

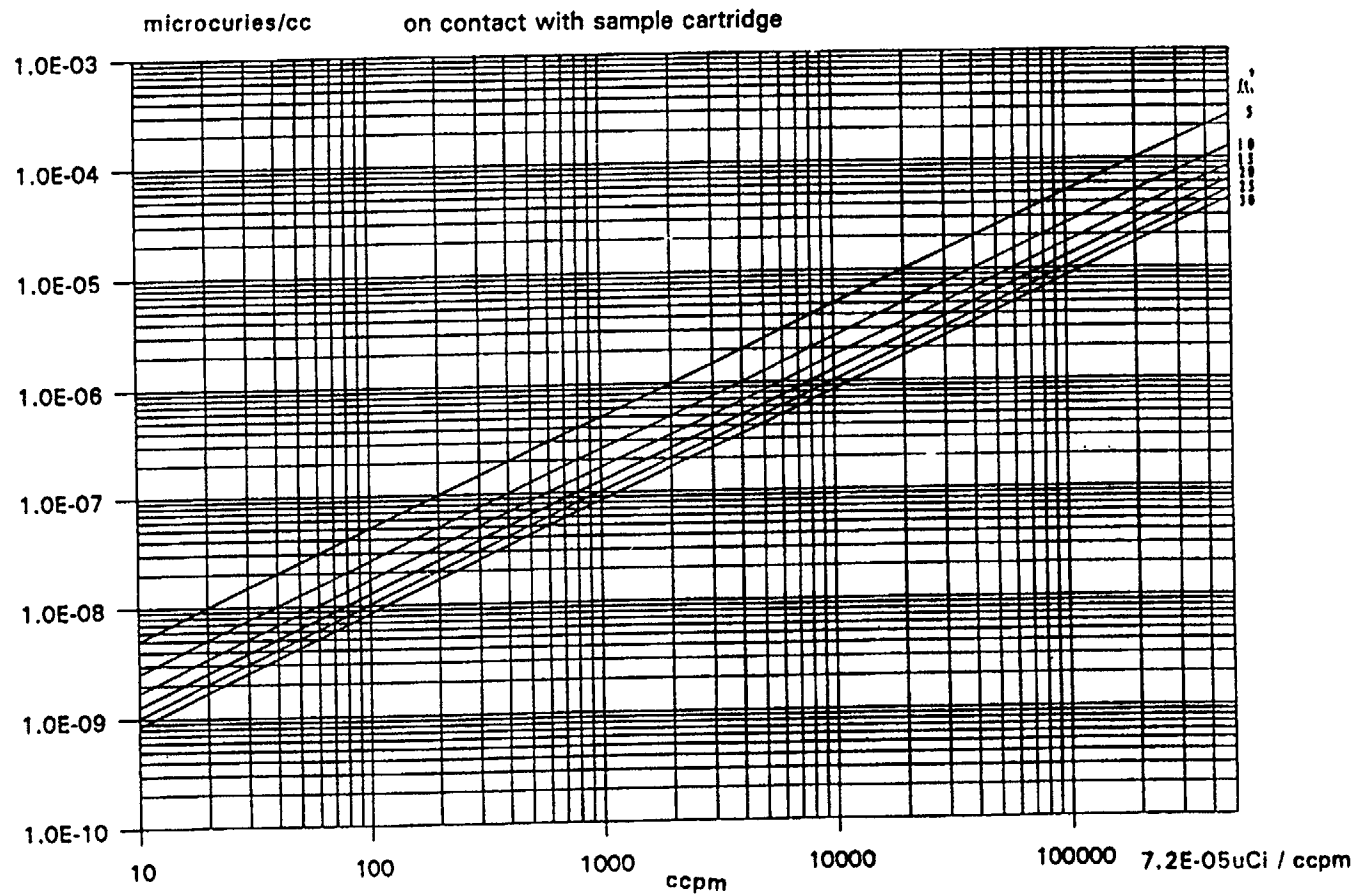
ATTACHMENT 8.1.5.2
Page 1 of 1
PERSONAL DOSE DATA

NAME	EMT#	TLD #	DOSIMETER#	INITIALDOSIMETER READING (mRem)	FINALDOSIMETER READING (mRem)	NET DEEP DOSE EQUIVALENT(mRem)

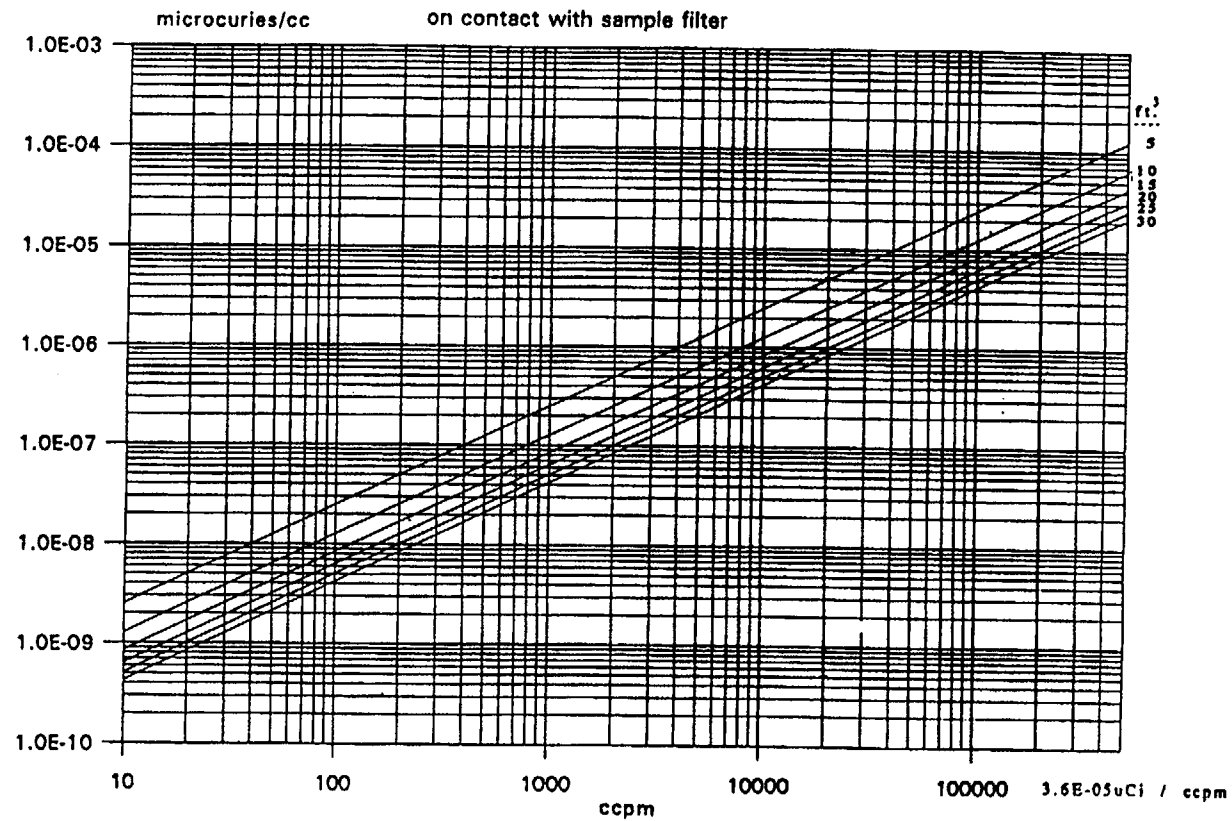
DOSE RATE DATA

LOCATION					
1 METER CLOSED WINDOW RADIATION LEVEL (mRem/hr)					
1 METER OPEN WINDOW RADIATION LEVEL (mRem/hr)					
6 INCH OPEN WINDOW RADIATION LEVEL (mRem/hr)					
INSTRUMENT MODEL/SERIAL NUMBER	/	/	/	/	/
DATE / TIME	/	/	/	/	/
TECHNICIAN					

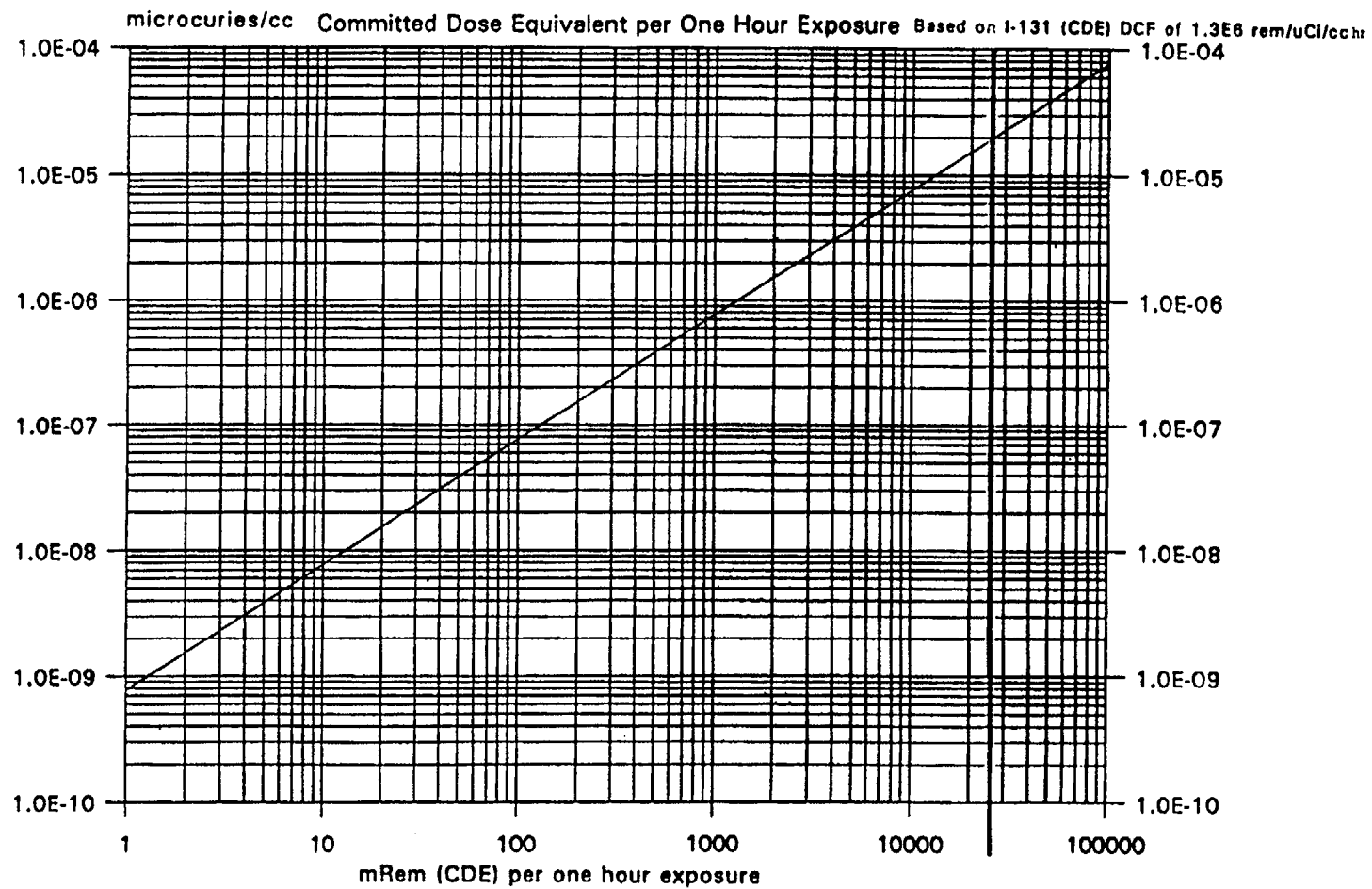
ATTACHMENT 8.1.5.3
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IODINE ACTIVITY WITH A FRISKER



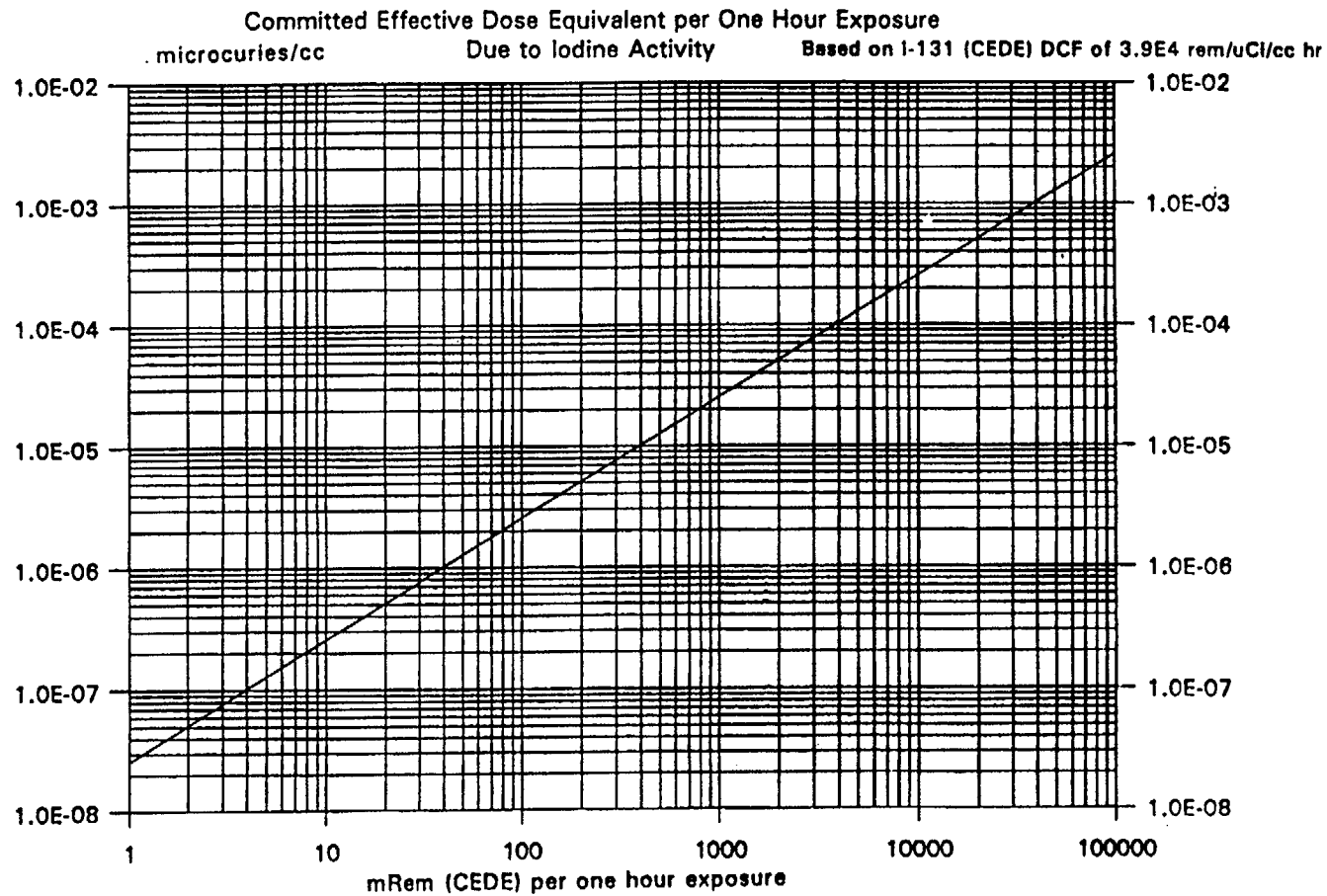
ATTACHMENT 8.1.5.4
Page 1 of 1
PARTICULATE ACTIVITY WITH A FRISKER



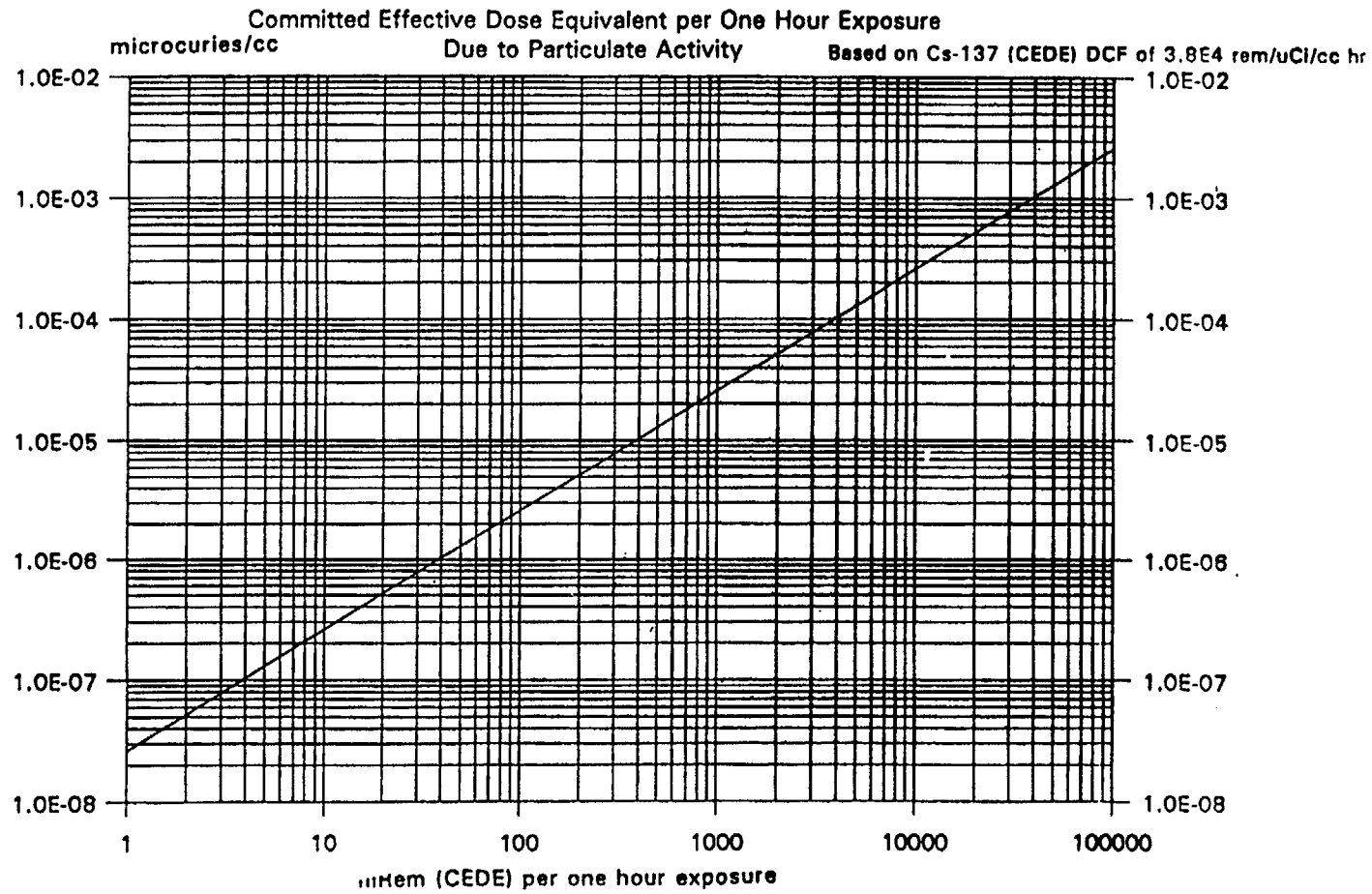
ATTACHMENT 8.1.5.5
Page 1 of 1
THYROID DOSE FROM INHALATION



ATTACHMENT 8.1.5.6
Page 1 of 2
INTERNAL DOSE FROM INHALATION



ATTACHMENT 8.1.5.6
Page 2 of 2
INTERNAL DOSE FROM INHALATION



COLLECTION OF ENVIRONMENTAL SAMPLES

SAMPLE TYPE	PRECAUTIONS	METHODS AND GUIDELINES
SOIL	<ol style="list-style-type: none"> 1. Assume ALL samples are contaminated and handle using techniques to prevent cross-contamination. 2. Do not seal the container of soil UNTIL the sample is delivered to the sample control point for transport/analysis. This will permit radon gases to off-gas. 	<ol style="list-style-type: none"> 1. When possible, select an open, level area for sampling. Avoid areas that are shielded by buildings, trees, bushes, or dense vegetation. Avoid areas that show evidence of erosion water runoff or poor drainage. 2. Clear an area 5" x 5" of rocks, litter, and non-soil items. 3. Using a scoop or trowel, evenly dig out enough soil (including any vegetation) from the 5" x 5" area to a depth of 1" (~5 cm). This should yield a sample of ~400 ml. 4. Place soil in container. 5. Label sample container.
POTABLE WATER	<ol style="list-style-type: none"> 1. Assume ALL samples are contaminated and handle using techniques to prevent cross-contamination. 	<ol style="list-style-type: none"> 1. Collect at least 1-gallon sample of drinking water. 2. Flush sample lines and rinse sample container before filling. 3. Cap and label sample container.
SURFACE WATER	<ol style="list-style-type: none"> 1. Assume ALL samples are contaminated and handle using techniques to prevent cross-contamination. 	<ol style="list-style-type: none"> 1. Surface water samples from the plant cooling water and discharge structures may be collected from the automatic samples (SW 40 & 41, refer to EMP-001, Attachment 11.1, for sample location.) 2. If samplers are out-of-service, obtain a grab sample from boat, bridge, or shore. Note: More specific sampling instructions will be provided by the EMT Leader. 3. If possible collect 1-gallon sample and secure tightly. 4. Label sample container.

COLLECTION OF ENVIRONMENTAL SAMPLES

SAMPLE TYPE	PRECAUTIONS	METHODS AND GUIDELINES
SNOW & ICE	1. Assume <u>ALL</u> samples are contaminated and handle using techniques to prevent cross-contamination.	1. Obtain the equivalent of 500 ml liquid of snow or ice samples for analysis. This may require collection in 4-liter sample containers. 2. Label the sample container.
VEGETATION & CROPS	1. Assume <u>ALL</u> samples are contaminated and handle using techniques to prevent cross-contamination.	1. Obtain small bag (~12"x12") samples of broad leaf vegetables and/or other vegetation as directed by the EMT Leader. 2. IF milk is to be collected, THEN collect 1000 gram samples of pasture grass as close to the roots as possible without including dirt in the sample. 3. If possible, tree leaves should be sampled from topmost part of tree. 4. Large, leafy vegetation is better than small. 5. Ground covers should be selected from open areas. 6. Label the sample container.
MILK	1. Assume <u>ALL</u> samples are contaminated and handle using techniques to prevent cross-contamination.	1. Sampling should begin the day after an atmospheric release of radioactive material and every 2 days thereafter until levels of I-131 return to normal. Note: Peak Iodine(I-131) activity is expected on Day 3 following the release. 2. If available, collect at minimum a 1-gallon sample from a thoroughly mixed tank OR from a single milk cow. 3. Collect approximately 1000 grams of pasture grass and/or feed whenever milk samples are collected. 4. Label the sample containers.

COMMUNICATIONS LOG

Location: _____

Device: _____

Include Telephone # or Radio
Call Sign

Date: _____

Time	Call From	Call To	Remarks (include data transmitted and decisions or recommendations made)

This log is to be routed to the Radiological Control Manager.

United States Nuclear Regulatory Commission
Attachment VIII to Serial RNP-RA/01-0141
11 Pages

EPTSC-01
SITE EMERGENCY COORDINATOR
Revision 4

CAROLINA POWER & LIGHT COMPANY
H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

PLANT OPERATING MANUAL

VOLUME 2
PART 5

EMERGENCY PROCEDURE

EPTSC-01
SITE EMERGENCY COORDINATOR

REVISION 4

SUMMARY OF CHANGES

STEP	REVISION COMMENTS
Attach 8.1.5.1	Added guidance for turnover suspension for changing emergency events and expectation for the CR-SEC to maintain responsibility for changing plant conditions affecting events. (AR 43473)

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SITE EMERGENCY COORDINATOR (SEC) QUICK START GUIDE

NOTE: Blanks are provided for place keeping ✓'s only, logs are the official record. This is a summary level guide and does not replace the procedure steps.

1. Sign in on Facility Sign-In Board. Log on Electronic Display System (EDS). _____
2. If Dialogic was utilized for callout, upon arrival at the Facility, notify Dialogic at X 1777. _____
3. Verify TSC staffing and resources available to prepare for facility activation. _____
4. Review Emergency Notification Forms and press releases issued. _____
5. Review Nuclear Regulatory Commission (NRC) Event Notification Worksheets issued. _____
6. Direct staff to prepare for initial plant status briefing. _____
7. Coordinate with EOF and JIC (if available) to receive initial Plant Status briefing. _____
8. Obtain initial plant status briefing from the Control Room (CR). _____
9. Activate the TSC as soon as possible. A minimum of the Site Emergency Coordinator (SEC) and the NRC Emergency Communicator shall be available. _____
10. Direct health physics activities until the arrival of the Radiological Control Director (RCD). _____
11. Refer to EPCLA-00, Emergency Classification and Protective Action Recommendations, for specific instructions to upgrade or downgrade the emergency. _____
12. Establish a briefing schedule with facility staff and the EOF. _____
13. Refer to procedure steps _____

8.1 SITE EMERGENCY COORDINATOR (SEC)

8.1.1 PURPOSE

1. This procedure describes the functional responsibilities and procedure steps for the Site Emergency Coordinator (SEC).

8.1.2 RESPONSIBILITIES

1. Maintain command and control of the Technical Support Center (TSC) and the onsite activities and response to the emergency.
2. Classify, terminate or downgrade the emergency using the Emergency Action Level (EALs) flowpaths.
3. Approve communications regarding the emergency with the Nuclear Regulatory Commission (NRC).
4. In the absence of the Plant General Manager (PGM) or the Radiological Control Director (RCD), authorize planned radiation exposures in excess of routine yearly exposure limits for lifesaving or equipment repair missions.
5. On an interim basis, assume the duties of the Emergency Response Manager. (CR 11968)

8.1.3 INSTRUCTIONS

1. Upon declaration of an emergency, the Control Room SEC shall determine the necessity for TSC activation.
 - a. TSC activation is required at an Alert or higher emergency classification level. Earlier activation is at the discretion of the SEC/CR or the Superintendent Shift Operations (SSO).
2. The TSC shall relieve the Control Room (CR) of emergency classification and NRC communications as soon as possible.
3. Direct the TSC staff to prepare for activation.
4. Complete Attachment 8.1.5.1, Turnover Checklist.

8.1.3 (Continued)

5. Brief the TSC staff regarding turnover if not performed on speaker phone or video.
6. Prioritize/establish strategies to prevent/limit core damage.
7. Continuously monitor and review the Emergency Action Level (EAL) flowpaths to determine changes in the emergency classification.
8. Advise TSC staff regarding eating and drinking requirements.
9. Schedule subsequent facility briefings. (30-60 minute time frame)
 - a. Coordinate briefings with EOF, CR, and OSC staff to preclude unnecessary interruptions.
10. Request personnel accountability for personnel reporting to the TSC from the Administration & Logistics Manager (ALM).
 - a. This will expedite the accountability process in the event of a site evacuation if not already required.
11. Review dose projections.
12. Approve administration potassium iodide (KI) to onsite emergency response personnel, as appropriate.
 - a. Radiation Control staff will make recommendations based on guidance in EPSPA-00.
13. In the absence of the Plant General Manager (PGM) approve planned radiation exposures > 5 REM whole body or entries into areas > 100 REM/HR.
14. Approve relocation/evacuation of the Operations Support Center (OSC).

8.1.3 (Continued)

15. Confer with the Emergency Response Manager (ERM) periodically to ensure continuity of operations, response, and information.
16. Control personnel during re-entry/recovery.

8.1.4 **RECORDS**

N/A

8.1.5 **ATTACHMENTS**

- 8.1.5.1 Turnover Checklist

ATTACHMENT 8.1.5.1
Page 1 of 3
TURNOVER CHECKLIST

This checklist is guidance for turning over Emergency Response activities from one facility to another or between personnel holding Emergency Response positions.

NOTE:	Blanks are provided for place keeping √'s only, logs are the official record.
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- A. SYNCHRONIZE CLOCKS to ERFIS/EDS TIME _____
- B. ONSITE SITUATION
 - 1. Review Emergency Classification, basis for declaration, and mitigating actions. Suspend turnover if plant conditions exist that change the classification, notification, or PARs. _____
 - a. Review status of safety equipment and systems.
 - b. Review status of fission product barriers.
 - c. Review condition/stability of reactor.
 - d. Review any Emergency Action Levels exceeded.
 - e. Review cause, history, initiating events leading to declaration of emergency.
 - 2. Review onsite protective actions taken. _____
 - a. Assembly
 - b. Shelter
 - c. Evacuations (Local, Protected Area, Site, Exclusion Area)

NOTE:	If there is a Site Evacuation, Unit 1 may need to continue operating.
--------------	-----------------------------------------------------------------------

- d. Potassium Iodide Administration
 - e. Complete PLP-015 Overtime Form for ERO as appropriate.

ATTACHMENT 8.1.5.1
Page 2 of 3
TURNOVER CHECKLIST

3. Review status of offsite assistance requested for the site. _____
- a. Fire Department
 - b. Rescue Squad
 - c. Local Law Enforcement Agency

C. OFFSITE SITUATION

1. Review Status of Offsite Notifications. _____
- State and County initial and any follow-up messages
 - NRC
 - Other: ANI, INPO, Westinghouse
 - Any needed notifications that have not been made
2. Review Protective Action Recommendations made and notifications made to the State and Counties. _____
3. Review any status received from the State or Counties regarding activation, readiness, protective actions, or requests for information. _____
4. Review data on any projected or actual radiological releases. _____
5. Review the time and content of any press releases or media briefing. _____

ATTACHMENT 8.1.5.1
Page 3 of 3
TURNOVER CHECKLIST

D. EMERGENCY RESPONSE

1. Review status of Emergency Response Organization Activation. _____
 - Notifications made to off-duty and offsite personnel. _____
 - Emergency Response Facilities that are activated. _____
 - Emergency Response Facilities that will be activated. _____
 - Other notifications needed. _____
2. Review outside organizations requested to mobilize. _____
3. Review assistance needed. _____
4. After the TSC-SEC assumes responsibilities for event declaration, the CR-SSO maintains responsibility to keep the TSC updated of changing conditions and the urgency of declaring events based on the changing conditions. _____

E. TURNOVER COMPLETED _____

United States Nuclear Regulatory Commission
Attachment IX to Serial RNP-RA/01-0141
7 Pages

EPTSC-02
PLANT OPERATIONS DIRECTOR
Revision 4

CAROLINA POWER & LIGHT COMPANY
H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

PLANT OPERATING MANUAL

VOLUME 2
PART 5

EMERGENCY PROCEDURE

EPTSC-02
PLANT OPERATIONS DIRECTOR

REVISION 4

SUMMARY OF CHANGES

STEP #	REVISION COMMENTS
Quick start guide 2e	Removed the ability to relieve the SSO as CR/SEC if necessary. It is not planned for the personnel in this position to be qualified to perform this function. (AR 27501)

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PLANT OPERATIONS DIRECTOR (POD) QUICK START GUIDE

NOTE: Blanks are provided for place keeping ✓'s only, logs are the official record. This is a summary level guide and does not replace the procedure steps.

1. If Dialogic was utilized for callout, upon arrival at the Facility, notify Dialogic at X 1777. _____
2. Proceed directly to the CR, perform the following:
 - a. Report your readiness to assist in the CR to the Superintendent Shift Operations (SSO) _____
 - b. Assess the overall emergency response and provide guidance and support to the SSO/Site Emergency Coordinator (SEC)/CR. _____
 - c. Assess the need for additional resources to assist with the emergency response. Assist the SEC/CR with obtaining these resources. _____
 - d. Facilitate CR activities by coordinating Emergency Communicator (EC) functions and assuring that the Emergency Action Levels (EALs) are continuously monitored. _____
3. Upon manning of the Technical Support Center (TSC), report to the TSC. _____
4. Sign in on the facility sign-in board. Log on the Electronic Display System (EDS). _____
5. Establish communications with the SSO. _____
6. Continuously assess plant conditions. _____
7. Notify the SEC of readiness to activate. _____
8. Refer to procedure steps. _____

8.2 PLANT OPERATIONS DIRECTOR (POD)

8.2.1 PURPOSE

1. This procedure describes the functional responsibilities and procedure steps for the Plant Operations Director (POD).

8.2.2 RESPONSIBILITIES

1. Continuously monitor the Emergency Action Levels (EALs) for potential changes in the emergency classification. Provide this information to the Site Emergency Coordinator (SEC).
2. Provide liaison with the Control Room (CR) Superintendent Shift Operations (SSO).
3. On an interim basis, assume the duties of the TSC Site Emergency Coordinator. (CR 11968)

8.2.3 INSTRUCTIONS

1. Assess plant conditions.
2. Advise the SEC of assessments and prognosis concerning plant conditions, changes in EAL classifications or the need for additional resources/personnel from internal or external sources.
 - a. The SPDS Communicator may be used to assist the POD during periods where ERFIS is operable.
3. Formulate priorities for accident assessment with the SEC, Emergency Repair Director (ERD), and Technical Analysis (TAD).
4. Keep the Control Room staff apprised of emergency response missions and priorities.
 - a. Coordinate operations support for missions.
5. Provide plant information, as requested, to the Plant Operations Advisor (POA).
6. Provide long term mitigation and recovery guidance to the Control Room staff.

8.2.3 (Continued)

7. In the event of a fire, request technical guidance and support from Fire Protection Program Engineers through the Accident Assessment Team.
 - a. Advise the SEC regarding the effects of the fire on plant safe shutdown equipment and/or the firefighting attempts.
8. Ensure planned exposure control in accordance with EPOSC-04, Emergency Work Control.

8.2.4 RECORDS

N/A

8.2.5 ATTACHMENTS

N/A