Progress Energy

10 CFR 50, Appendix E

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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, Progress Energy Carolinas, Inc. (PEC), is transmitting revisions to H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2, Emergency Implementing Procedures. The procedure revisions and effective dates are listed in the attachment to this letter.

A description of the procedure changes are provided on the "Summary of Changes" page for the emergency procedures. Please replace the superseded procedures with the enclosed revisions.

If you have any questions concerning this matter, please contact me.

Sincerely,

C. T. Baucom
Supervisor – Licensing/Regulatory Programs

CAC/cac

Attachment

Enclosures

c: L. A. Reyes, NRC, Region II (2 copies)
NRC Resident Inspector, HBRSEP
C. P. Patel, NRC, NRR (w/o Attachment and Enclosures)

A045

Progress Energy Carolinas, Inc.
Robinson Nuclear Plant
3581 West Entrance Road
Hartsville, SC 29550

Procedure Revisions and Effective Dates

Procedure	Revision No.	Effective Date
EPCLA-01, "Emergency Control"	15	11/06/03
EPNOT-00, "Notification and Emergency Communications"	2	11/06/03
EPNOT-01, "CR/EOF Emergency Communicator"	14	11/06/03
EPNOT-02, DELETED – Remove tab and procedure from books	3	11/06/03
EPNOT-05, DELETED – Remove tab and procedure from books	2	11/06/03
EPPRO-00, "Emergency Preparedness Program and Testing"	7	11/06/03
EPPRO-02, "Maintenance and Testing"	19	11/06/03
EPTSC-07, "Damage Assessment"	5	11/06/03
EPEOF-07, "Assistant to the Emergency Response Manager"	4	11/07/03
EPNOT-01, "CR/EOF Emergency Communicator"	15	11/07/03
EPEOF-03, "Administrative and Logistics Manager"	9	11/13/03

Progress Energy	R Reference Use

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

PLANT OPERATING MANUAL

VOLUME 2

PART 5

EPCLA-01

EMERGENCY CONTROL

REVISION 15

SUMMARY OF CHANGES
PRR 96981

Step	Description of Change
8.1.3.7.d.2	Changed the location of the alternate EOF assembly area from the National Guard Armory to the Darlington County Emergency Operations Center.

TABLE OF CONTENTS

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.

NOTE: The development of the Emergency Notification Form should include the status of the fission product barriers.

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 or sheltering.

   b. If evacuation or administration of potassium iodide is necessary, implement EPSPA-01, Evacuation and Accountability, or EPSPA-03, Administration of Potassium Iodide, respectively. If sheltering is required onsite (such as for external gas hazard); Make a plant announcement directing personnel to shelter in the nearest facility. Ensure ventilation is isolated/secured in the OSC and other facilities/buildings that are not equipped with emergency/re-circulation modes (Control Room, TSC/EOF). (AR #57330)

   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.

8.1.3.6 (Continued)

c. Contact other agencies as necessary, selected offsite agency numbers are maintained in the Emergency Response Organization (ERO) phone book.

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 or above activate TSC, EOF, OSC and JIC.

   d. Consider the following when choosing facilities to activate.

      1. Alternate TSC is Control Room
      2. Alternate EOF Assembly Area is the Darlington County Emergency Operations Center, 1625 Harry Byrd Highway (Highway 151), Darlington, SC.
      3. Alternate/Back-up OSC is as defined in EPOSC-01.
      4. Remote Facility may be activated for any event, normally for Security Events where reporting to the site may not be safe for the ERO.

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 Emergency Response Facilities.

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.**"

NOTE: Discretion should be exercised when announcing the cause of the emergency due to a security event.

The cause of the emergency is _____
_____
_____
_____.

If Emergency Response Facilities are being activated, then announce:

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

If external hazards require sheltering on site, then announce directions for taking shelter and isolating and/or placing the facility ventilation in the emergency mode.

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

11. If a Site Area Emergency or General Emergency has been declared, then 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.**

    - Repeat announcement(s) and alarm (if sounded).
    - If a site evacuation has been ordered at an earlier event declaration, it is not necessary to order another site evacuation. To avoid confusion, a site evacuation should only be initiated once.

8.1.3.11 (Continued)

- 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.

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. Use guidance in Attachment 8.1.5.5, Plant -Based Protective Action Recommendations, to recommend extended protective action recommendations based on plant conditions.

    c. 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.

    d. If conditions indicate the PAR needs upgrading, then 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.

8.1.3 14 (Continued)

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.

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.

8.1.3 (Continued)

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.

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

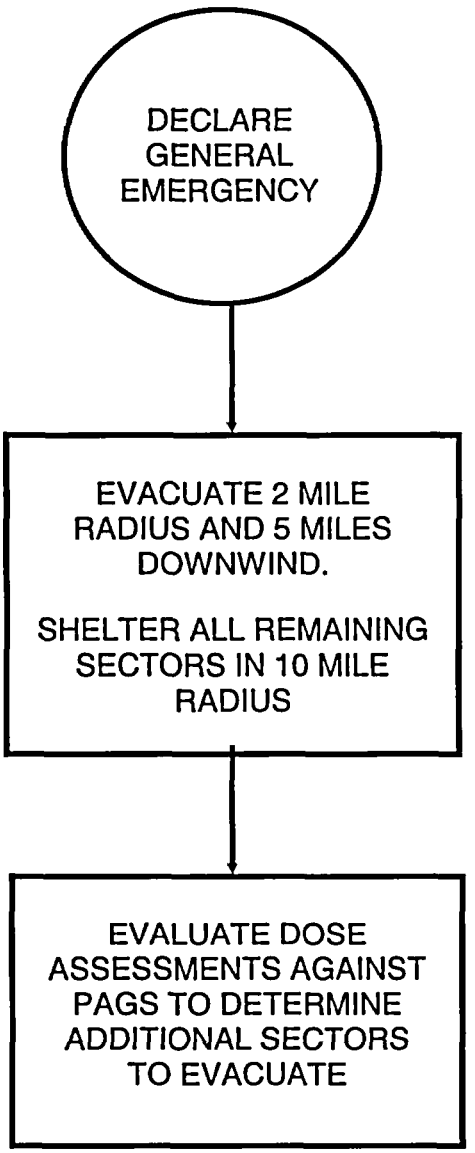
8.1.5.3 PAR Affected Zones Based on Wind Direction

8.1.5.4 Turnover Checklist

8.1.5.5 Plant-Based Protective Action Recommendations

ATTACHMENT 8.1.5.1
Page 1 of 2

INITIAL PROTECTIVE ACTION RECOMMENDATION FLOWCHART



ATTACHMENT 8.1.5.1
Page 2 of 2

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 /DATE@TIME: _____ / _____ @ _____
RCD OR RCM

APPROVED BY /DATE@TIME: _____ / _____ @ _____
SEC OR ERM

ATTACHMENT 8.1.5.2
Page 1 of 1

EPA PROTECTIVE ACTION GUIDE (PAGS)

FOR THE EARLY PHASE*

PROTECTIVE ACTION	PAG	COMMENTS
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

ATTACHMENT 8.1.5.3
Page 1 of 1

PAR AFFECTED ZONES BASED ON WIND DIRECTION

(EVACUATION TIME IN MINUTES)[2]

WIND FROM	POTENTIALLY[1] AFFECTED SECTORS	WINTER WEEKDAY, FAIR WEATHER	WINTER WEEKNIGHT, FAIR WEATHER	SUMMER WEEKDAY, FAIR WEATHER	WINTER WEEKDAY, ADVERSE WEATHER
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.

A. 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.

3. Review status of offsite assistance requested for the site. _____

   a. Fire Department

   b. Rescue Squad

   c. Local Law Enforcement Agency

B. OFFSITE SITUATION

1. Review Status of Offsite Notifications. _____

   – State and County initial and any follow-up messages

   – NRC (including status of ERDS activation)

   – 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. _____

TURNOVER CHECKLIST

C. 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. _____

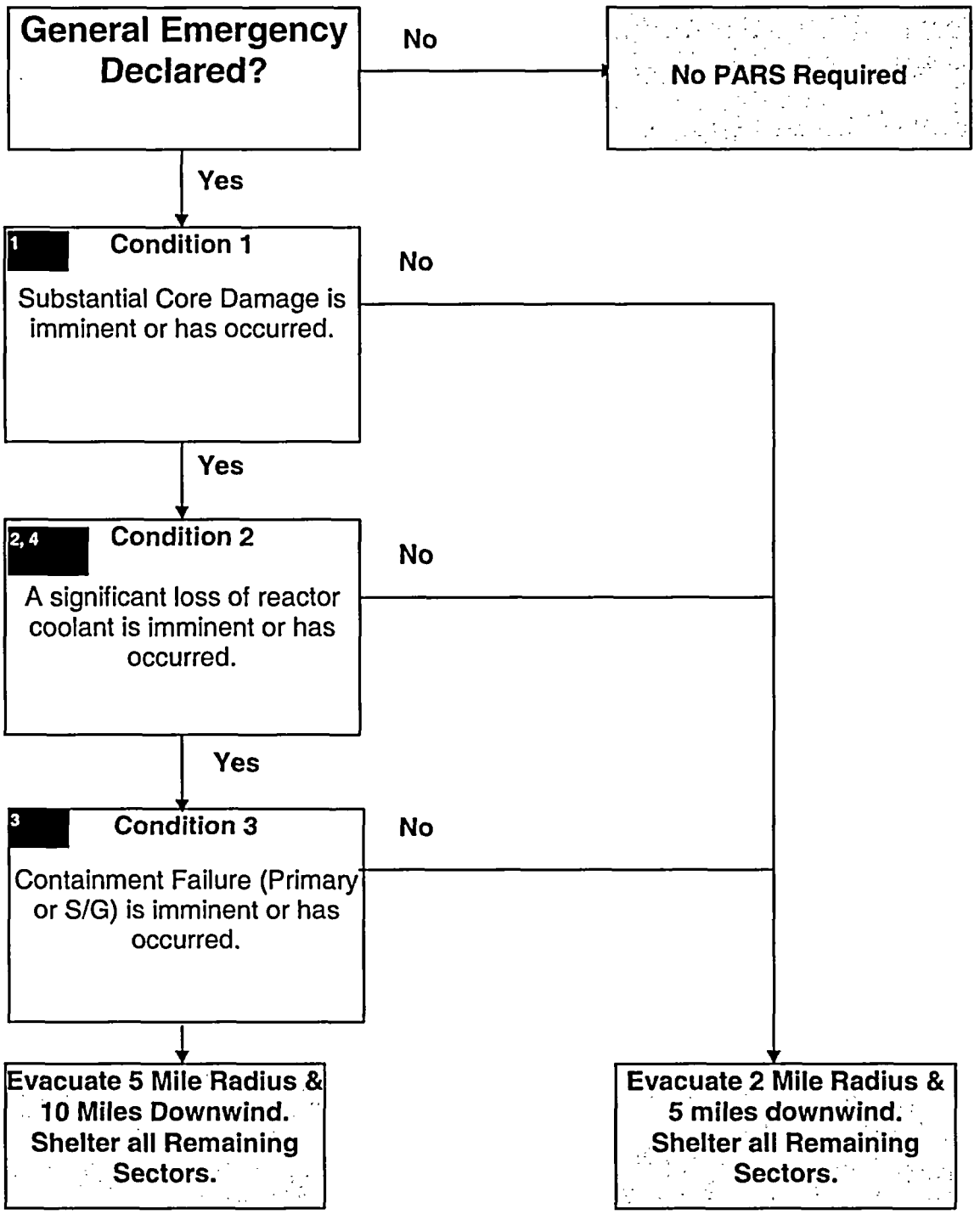
2. Review outside organizations requested to mobilize. _____

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. _____

D. TURNOVER COMPLETED _____

ATTACHMENT 8.1.5.5
Page 1 of 2
Plant-Based Protective Action Recommendations



Plant-Based Protective Action Recommendations

1. Substantial core damage is imminent or has occurred. Indications that substantial core damage is imminent or has occurred include:
   a. Core damage estimates greater than 1% Melt.
   b. Core Exit Thermocouples readings > 2300 degrees F°.
   c. Core uncovered > 30 minutes.

2. A significant loss of reactor coolant is imminent or has occurred. Indications that a significant loss of reactor coolant is imminent or has occurred include:
   a. Containment Radiation Monitors reading >10,000 R/hr with no containment spray or >4,000 R/hr with containment spray on.
   b. Containment hydrogen gas concentration >1%.
   c. Rapid vessel depressurization.
   d. A large break loss of coolant accident.

3. Containment failure (primary or S/G) is imminent or has occurred. Indications that containment failure (primary or S/G) is imminent or has occurred include:
   a. A release of radioactivity cannot be maintained below General Emergency EAL criteria.
   b. Primary Containment pressure cannot be maintained below the design basis pressure of 42 psig.
   c. Primary containment H_2 gas concentration cannot be maintained below combustible limits of 4% by volume.
   d. Faulted/ruptured steam generator with a relief valve open.

4. Accidents which result in a direct release pathway to the environment (for example, a faulted and ruptured S/G with water level below the tube bundles, S/G Narrow Range < 25% normal containment conditions or < 40% adverse containment conditions, and a relief valve open would provide such a pathway) will most likely be thyroid dose limiting. For circumstances involving this type of accident sequence:

   a. Consider **any** Fuel Breach sufficient to warrant the determination that substantial core damage has occurred.

   b. Consider **any** RCS Breach sufficient to warrant the determination that a significant loss of reactor coolant has occurred.

Containment monitors can provide indication of both core damage and RCS breach. Monitor values used to determine a specific amount of core damage are dependent on plant conditions, power history and time after shutdown. Monitor readings used to quantify an amount of damage or coolant leakage should be complimented by other indications and engineering judgment.

Progress Energy	I Information Use

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

PLANT OPERATING MANUAL

VOLUME 2

PART 5

EPNOT-00

NOTIFICATION AND EMERGENCY COMMUNICATIONS

REVISION 2

SUMMARY OF CHANGES

PRR 98800

SECTION	REVISION COMMENTS
All	Converted to XP and the Progress Energy cover sheet.
All	Incorporated EPNOT-05 and updated to support the upgrade to Dialogic.
Use	Changed the procedure use to Information Use

TABLE OF CONTENTS

1.0 PURPOSE

1.1 To provide support for emergency communications, notifications, and personnel call-out.

2.0 REFERENCES

2.1 The Communicator, Users Guide to the Software

2.2 PLP-007, Robinson Emergency Plan

2.3 SEC-NGGC-2141, Fitness For Duty Unscheduled Work Call Outs

3.0 RESPONSIBILITIES

3.1 See individual support procedures.

4.0 PREREQUISITES

4.1 An emergency has been declared, a drill/exercise is being conducted, **OR** practice is requested from either the Simulated Control Room, or the Control Room.

5.0 PRECAUTIONS AND LIMITATIONS

Use of the Manual Activation sequence for the ERO pagers will notify all ERO beepered personnel.

6.0 SPECIAL TOOLS AND EQUIPMENT

N/A

7.0 ACCEPTANCE CRITERIA

N/A

8.0 INSTRUCTIONS

8.1 Procedure steps which have been previously implemented as the result of earlier classifications need not be repeated unless warranted by changing conditions.

8.2 **SIGN IN** upon your arrival at the facility.

8.3 **VERIFY** equipment needed for a response is operable.

8.4 **MAINTAIN** a written **OR** electronic log of significant emergency response activities.

8.5 Position turnover should be coordinated within and between facilities.

8.6 Portions of EPNOT Procedures may be implemented from the Control Room, Technical Support Center, or Emergency Operations Facility.

8.7 Dynamic situations which arise in an emergency condition may require that steps be performed out of sequence or alternate methods devised to accomplish the intent of the step.

8.7.1 Deviations which do not violate license requirements may be approved by the SEC or ERM.

8.7.2 Deviations which violate license requirements shall be implemented per 10 CFR 50.54 (x, y, and z). Time permitting SEC or ERM approval shall also be obtained.

8.7.3 Deviations shall be reported to the NRC within 1 hour.

8.8 **ARRANGE** for 24 hour coverage with personnel available to respond.

8.9 Support Procedures

8.9.1 Specific responsibilities and instructions for communicator positions can be found in the following support procedures:

1. EPNOT-01, CR/EOF Emergency Communicator
2. EPNOT-03, EOF Public Information Emergency Communicator
3. EPNOT-04, TSC NRC Emergency Communicator

9.0 RECORDS

All documents created as a result of implementation of this and supporting procedures shall be forwarded to the Emergency Preparedness Group.

10.0 ATTACHMENTS

N/A

Progress Energy	R Reference Use

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

PLANT OPERATING MANUAL

VOLUME 2

PART 5

EPNOT-01

CR/EOF EMERGENCY COMMUNICATOR

REVISION 14

SUMMARY OF CHANGES
PRRs 98802, 100899

SECTION	REVISION COMMENTS
All	Layout changed to match AP-007
Quick Start Guides	Moved to the last two attachments (10.13 & 10.14)
All	Created NOTES and CAUTIONS as applicable
All	Updated all information pertaining to the upgrade of the Dialogic System
Attachment 10.11	Added approval line
8.2	Added applicable steps from EPNOT-02

TABLE OF CONTENTS

SECTION PAGE

TABLE OF CONTENTS

SECTION PAGE

1.0 PURPOSE

Direct the activities of the Emergency Communicator(s).

2.0 REFERENCES

As per EPNOT-00.

3.0 RESPONSIBILITIES

3.1 The Control Room (CR) Emergency Communicators:

3.1.1 Overall coordination of communications to ensure that required notifications are made per requirements of this procedure until relieved by another qualified individual.

3.1.2 Ensure that appropriate ERO staff is augmented via Dialogic or other means.

1. Dialogic may be initiated by any individual trained on the operation of the system.

3.2 The EOF Emergency Communicators:

3.2.1 Overall coordination of communications to ensure that required notifications are made per requirements of this procedure until relieved by another qualified individual.

3.2.2 Keep the ERM and EOF staff informed of communications activities and needs of the communications staff.

4.0 PREREQUISITES

As per EPNOT-00.

5.0 PRECAUTIONS AND LIMITATIONS

As per EPNOT-00.

6.0 SPECIAL TOOLS AND EQUIPMENT

As per EPNOT-00.

7.0 ACCEPTANCE CRITERIA

As per EPNOT-00.

8.0 INSTRUCTIONS

8.1 Staffing the Emergency Communicator Functions

8.1.1 Control Room

1. 1 Emergency Communicator.
2. **IF** ERFIS is OOS, **THEN ASSIGN** 1 person for SPDS data communication. Attachment 10.5.

8.1.2 EOF

1. 1 Emergency Communicator.
2. 1 State/County Emergency Communicator.
3. 1 Public Information Emergency Communicator.

8.1.3 TSC

1. 1 NRC Emergency Communicator.
2. **IF** ERFIS is OOS, **THEN ASSIGN** 1 person for SPDS data communication. Attachment 10.5.

8.1.4 Practice

1. As desired, **USE** the appropriate Attachment, 10.9, Dialogic Practice -Control Room **OR** 10.10, Dialogic Practice - Simulator Dialogic, for the Control Room **OR** the Simulator.

8.2 State and County Agencies Emergency Notifications

NOTE: **IF** resources allow, **THEN** notification of offsite agencies **AND** the ERO augmentation should be performed simultaneously. Section 8.4 provides guidance on ERO augmentation.

NOTE: An optional checklist for required notification is available as Attachment 10.2, Communications Checklist.

NOTE: Off site phone numbers are available in the ERO phone book.

8.2.1 Electronic Display System (EDS)

1. **IF** EDS is operable, **THEN PERFORM** the following:

NOTE: Control Room staff should use the Control Room Shift Supervisor (CRSS) position login for appropriate access to forms and approval authority.

   a. **LOG ON** the system.

   b. For first notification only, **DECLARE** an event on EDS.

2. **IF** the EDS is not operable, **THEN PERFORM** the following:

   a. **COMPLETE** emergency notification forms manually **AND FAX** forms using a stand alone fax machine.

   b. Manual log **AND** notification forms are included as Attachments 10.1, Emergency Notification Form and Instructions and 10.3, Communications Log.

   c. SPDS sheets are in Attachment 10.5.

8.2.2 Emergency Notification Form Completion

CAUTION

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.

CAUTION

Initial notifications are to be made within 15 minutes. Follow up notifications shall be made within 30-60 minutes from the completion of the previous notification.

1. Instructions for completing the form are included in Attachment 10.1 to this procedure.

8.2.3 Transmit State and County Notifications.

1. All agencies shall be contacted for each initial and follow-up notification. Agencies that do not respond shall be contacted by any means available, as soon as possible.

2. **ESTABLISH** communications with the State and County agencies using any of the following:

CAUTION

The SSS 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.

a. Use Selective Signaling System (SSS), **OR**

1) **DIAL** A1 on Selective Signaling phone to simultaneously conference all parties.

2) The press-to-talk bar must be depressed for other personnel to hear your voice.

b. Northern Telecommunications (Meridian), **OR**

1) Instructions for use of the Northern Telecommunications phone are included as Attachment 10.7.

8.2.3 Transmit State and County Notifications (Continued)

c. ESSX phone system.

1) Emergency communications protocols and instructions as well as ESSX instructions are provided as Attachments 10.6, Emergency Communications Equipment Instructions/Protocol and 10.8, ESSX Telephone Service Off-Site Communications System.

3. **DOCUMENT** time of the first voice contact made after Notification Form approval.

NOTE: Roll call is to determine that at least one representative from each agency is on line.

4. **CONDUCT** a roll call by agency to determine locations on line **AND PLACE** a check next to locations contacted on the Notification Form (Attachment 10.1).

5. **REVIEW** the Notification Form with offsite agencies, **AND ASK** if there are any questions.

6. **VERIFY** the fax was received **AND** is legible.

7. **ENTER** names, titles, times, and date of personnel on line (items D 1-4). This time will be the "start" time for the follow up notification.

8. **ONCE** notifications have been made **AND IF** any of the agencies had questions, **THEN OBTAIN** responses to the questions from offsite agencies **AND NOTIFY** them, as applicable.

9. Information not contained on status boards or concerning future status of the plant must be approved by the SEC **OR** ERM depending on facility activation status.

8.3 Other Off-Site Notifications and Follow-up Notifications

NOTE: Off site phone numbers are available in the ERO phone book.

8.3.1 NRC Notification

CAUTION Immediately, upon completion of State and County notifications **AND** within 60 minutes of declaration of the emergency, notify the NRC.

1. **INITIATE AND COMPLETE** the NRC notification by using the following:

   a. Forms are included as Attachment 10.12, Event Notification Worksheet.

   b. **USE** ETS (primary) or Meridian phone for notification.

   c. Additional information is available in EPNOT-04, TSC NRC Emergency Communicator.

   d. **RECORD** the contact information on Attachment 10.1.

8.3.2 Follow up Notifications to the State and County Agencies:

CAUTION Follow up notifications shall be made within 30-60 minutes from the completion of the previous notification.

a. **PERFORM** applicable steps in Section 8.2.

8.3.3 ANI and INPO Notifications

CAUTION Notifications are required within 2 hours for an Alert or higher emergency classification.

1. **MAKE** notifications to American Nuclear Insurers (ANI) **AND** the Institute of Nuclear Power Operations (INPO).

8.4 Emergency Response Organization (ERO) Augmentation

8.4.1 Emergency Augmentation

CAUTION

Active scenarios of lower priority need to be **STOPPED PRIOR** to starting additional scenarios. Initiating additional scenarios simultaneously, will suspend the lower priority scenario until the higher one is completed. **Once the higher priority is completed, the lower priority scenario will automatically start where it left off. This may cause a lower emergency classification notice to be sent after the declaration of the higher classification.**

1. **OBTAIN** Attachment 10.4, Automated ERO Notification Form (Dialogic):

NOTE: Dialogic will automatically enter the beeper event code once the scenario is chosen and activated.

2. **COMPLETE** the information on the attachment **AND INITIATE** the Dialogic scenario as requested by the ERM, SEC, **OR** their designee.

8.4.2 Training/Drill Augmentation.

1. For training not associated with ERO training exercises, **USE** Attachment 10.9 **OR** 10.10 for the Control Room **OR** the Simulator, respectively.

2. For ERO training exercises **USE** Attachment 10.4 **OR** the method specified by Controller/Evaluator staff. Scenarios 301-309 may be used to call out ERO personnel for training exercises (drills).

8.4.3 Dialogic will print the appropriate report(s) on the Dialogic System printer. This should be included in the paperwork package that is sent to EP.

8.4.4 Turnover and Termination

1. **IF** the TSC and EOF are activating, **THEN** perform a turnover with NRC **AND** EOF Emergency Communicators.

2. **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.

3. Once the turnover is completed, the EOF EC should send a notification to the off-site agencies that advises the change in call back numbers and any other information that is needed to support the turnover. The CR EC should stay on station until the EOF EC has sent the updated notification.

4. Upon event termination, **ENSURE** notification of off site agencies which have activated.

5. ERO Augmentation **OR** spurious activations may be terminated by manually initiating the beepers with a 0*0*0 code.

6. **INFORM** the EP Group to notify 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.

9.0 RECORDS

Documentation generated by this procedure shall be forwarded to the Emergency Preparedness Group.

10.0 ATTACHMENTS

10.1 Emergency Notification Form

10.2 Communications Checklist

10.3 Communications Log

10.4 Automated ERO Notification Form (Dialogic)

10.5 Manual Initiation of the ERO Beepers

10.6 Safety Parameter Display System/Plant Status Data Sheet

10.7 Emergency Communications Equipment Instructions/Operating Protocol

10.8 Back-up Method for TeleConferencing With State and County Warning Points (WPs)

10.9 ESSX Telephone Service Off-Site Communications System

10.10 Dialogic Practice - Control Room

10.11 Dialogic Practice - Simulator Control Room

10.12 Reactor Plant Event Notification Worksheet

10.13 CR Emergency Notifications Quick Start Guide

10.14 EOF Emergency Communicator Quick Start Guide

ATTACHMENT 10.1
Page 1 of 8

MESSAGE NUMBER _____

EMERGENCY NOTIFICATION FORM

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] TERMINATION AT TIME/DATE: _____ (Eastern) ___/___/___ mm dd yy (If B, go to number 16)
7. EMERGENCY DESCRIPTION /REMARKS: _____
8. PLANT CONDITION: [A] IMPROVING [B] STABLE [C] DEGRADING
9. REACTOR STATUS: [A] SHUTDOWN TIME/DATE: _____ (Eastern) ___/___/___ mm dd yy [B] ____% POWER
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 _____ (Eastern Time) ___/___/___ mm dd yy STOPPED _____ (Eastern Time) ___/___/___ mm dd yy
    [B] LIQUID: STARTED _____ (Eastern Time) ___/___/___ mm dd yy STOPPED _____ (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 mrem	Thyroid CDE mrem
SITE BOUNDARY		
2 MILES		
5 MILES		
10 MILES		

PROJECTION TIME: _____ (Eastern)
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: _____ (Name) _____ (Title) TIME/DATE: _____ (Eastern) ___/___/___ mm dd yy

** Information may not be available on Initial notifications.

MESSAGE NUMBER _____

7. EMERGENCY DESCRIPTION /REMARKS (Continued)

Additional Remarks.

MESSAGE NUMBER _____

EMERGENCY NOTIFICATION FORM

PERSONS AND AGENCIES ALERTED

TIME FIRST VOICE CONTACT IS MADE AFTER ENF APPROVAL: _____

A) Perform agency 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) Ask if there are any questions concerning the information on the ENF.

D) AFTER the ENF is read, THEN record the agency representative's name, title, and date/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 earliest "final" time listed will become the "start" time for subsequent follow-up notifications.**

EMERGENCY NOTIFICATION FORM

INSTRUCTIONS FOR COMPLETION

CAUTION

Initial notifications are to be made within 15 minutes. Follow up notifications shall be made within 30-60 minutes from the completion of the previous notification.

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, **THEN** "to be provided" should be placed in the applicable blank(s). **IF** an upgrade in classification occurs when the follow-up message is due, **THEN** "upgraded ENF forthcoming" should be annotated in the description. This information is to be promptly 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 NUMBER: 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.

Line 1: **INDICATE** whether the message is to support a drill **OR** an actual emergency **AND INDICATE** if it is an initial notification **OR** follow-up notification. See the criteria below for assistance.

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.

Messages that contain a change in emergency classification, a termination, **OR** a change in Protective Action Recommendations (PAR) are INITIAL notifications. All other messages are considered FOLLOW-UP notifications.

EMERGENCY NOTIFICATION FORM

INSTRUCTIONS FOR COMPLETION (continued)

Line 2: **VERIFY** "H. B. Robinson" is in the SITE space **AND** "2" is in the UNIT space.

INDICATE the person who will be reading the message to the State and County personnel in the REPORTED BY: space. Normally, this individual will be the State/County Communicator when messages are transmitted from the EOF.

CAUTION

Item 3 should be the last time entered. 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.

Line 3: "TRANSMITTAL TIME/DATE:" is automatically placed on electronic form once the form is auto-faxed. **IF** the form is being completed manually, **THEN RECORD** the time of first voice contact with any offsite agency as verified on the phone by roll call.

CONFIRMATION PHONE 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)

Line 4: AUTHENTICATION is not required but the State/County representatives should be asked, "Would anyone like to authenticate this message?" **IF** yes, **THEN** 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 to be 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.

EMERGENCY NOTIFICATION FORM

INSTRUCTIONS FOR COMPLETION (continued)

Line 5: **INDICATE** the EMERGENCY CLASSIFICATION that is being declared. See criteria below for assistance:

> **IF** this is an initial message, **THEN INDICATE** the current emergency classification.
>
> **IF** this is a follow-up message **OR** a termination message, **THEN INDICATE** the same classification as the previous notification.

Any plant conditions/events which trigger other emergency classifications shall be listed in the DESCRIPTION section (Item 7), but only the highest classification shall be marked.

Line 6: **INDICATE** EMERGENCY DECLARATION AT **OR** TERMINATION AT **AND** the TIME/DATE the classification in Item 5 was declared (see CAUTION above item 3). This time should not change unless the classification has changed **OR** the event has been terminated. **IF** termination is chosen, **THEN** only Steps 1 through 6 and 16 should be completed.

Line 7: EMERGENCY DESCRIPTION/REMARKS should contain a short narrative of the event in progress. Individually, all three Fission Product Barriers should be addressed as "intact", "jeopardized", or "breached" in the narrative. The narrative should be in layman's terms and not include any slang or acronyms, i.e., ATWS, RCP, WGDT, that are commonly used at the plant. This description must be easily understood by individuals without nuclear industry experience.

Line 8: **INDICATE** the appropriate PLANT CONDITION. The Site Emergency Coordinator, 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, **THEN** indicate the condition DEGRADING.

Line 9: **INDICATE** current REACTOR STATUS. See below for assistance.

> **IF** the reactor is SHUTDOWN, **SELECT** this choice **AND COMPLETE** the time and date of the shutdown.
>
> **IF** the reactor is at power, **THEN INDICATE** the current reactor power.

Line 10: **INDICATE** the EMERGENCY RELEASE(S). **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, **THEN** POTENTIAL should be marked.

EMERGENCY NOTIFICATION FORM

INSTRUCTIONS FOR COMPLETION (continued)

Line 11: **INDICATE** TYPE OF RELEASE, whether the release is AIRBORNE or LIQUID, **AND RECORD** the time **AND** date STARTED and STOPPED of the actual release. The release location will be determined by the RCM. For multiple release locations, the majority contributor is used for the determination of location. See below for assistance.

> **IF** the release location is unknown **OR** a release is from any location other than the stack, **THEN** assume a GROUND LEVEL release.
>
> **IF** the release is from the stack, **THEN** mark ELEVATED regardless of wind speed.
>
> **IF** the release is underway, **THEN WRITE** N/A in the block for time release stopped.

Line 12: **INDICATE** the RELEASE MAGNITUDE in units of CURIES **AND INDICATE** whether they are BELOW **OR** ABOVE the NORMAL OPER. LIMITS (Technical Specification limits).

RECORD the TEDE Equivalent release magnitude for Xe^{133} as the NOBLE GASSES value, **RECORD** the CDE Equivalent release magnitude for I^{131} as the IODINES value, **AND RECORD** "N/A" in the blanks for PARTICULATES **AND** OTHER. The values for Xe^{133} TEDE Equivalent and I^{131} 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.

Line 13: **INDICATE** the appropriate ESTIMATE OF PROJECTED OFF-SITE DOSE. See below for assistance.

> **IF** this is the first dose projection **OR IF** the release/release rate has changed significantly (approximately 15%), **THEN INDICATE** NEW, otherwise **INDICATE** UNCHANGED.

RECORD the TEDE mrem **AND** Thyroid CDE mrem values for each distance away from site, in the dose columns. Ensure that units are in mrem, and do not change the units on the form.

RECORD the ESTIMATED DURATION as advised by the SEC, Plant Operations Director, **OR** the Technical Analysis Manager. The estimated duration must start from the beginning of the release until the estimated (or actual) end of the release. **IF** expected duration of the release is not yet available, **THEN RECORD** "1" hour in the space.

RECORD the time that the dose projection data was collected (check computer output) in the space for PROJECTION TIME.

EMERGENCY NOTIFICATION FORM

INSTRUCTIONS FOR COMPLETION (continued)

CAUTION

Ensure the wind direction is recorded as the "from" direction, if it is obtained from a source other than ERFIS

Line 14: **RECORD** the METEOROLOGICAL DATA from ERFIS **OR** the National Weather Service Office (see ERO Telephone Book), as available.

> **IF** ERFIS is unavailable, **THEN RECORD** the STABILITY CLASS from procedure EPRAD-03 for dose projection.

Line 15: **INDICATE** the appropriate RECOMMENDED PROTECTIVE ACTIONS. **IF** evacuate or shelter in place are chosen, **THEN RECORD** the sectors for which the recommendation is applicable, i.e., A-0, A-1, B-1. **IF** the General Emergency is declared, **THEN** NO RECOMMENDED PROTECTIVE ACTION cannot be indicated.

Line 16: **COMPLETE** the APPROVED BY section. **IF** the message is to be transmitted from the Control Room **OR** TSC, **THEN** it must be approved and signed by the Site Emergency Coordinator. **IF** the message is to be transmitted from the EOF, **THEN** it shall be approved (see CAUTION above item 3) by the Emergency Response Manager **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.

ATTACHMENT 10.2
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 10.3
Page 1 of 1
COMMUNICATIONS LOG

Location: _____ Device: _____

Date: _____

Time		User Initials	Party Contacted	Remarks (include data transmitted and decisions or recommendations made)
Start	End			

ATTACHMENT 10.4
Page 1 of 2
AUTOMATED ERO NOTIFICATION FORM (DIALOGIC)

CAUTION
Active scenarios of lower priority need to be **STOPPED PRIOR** to starting additional scenarios. Initiating additional scenarios simultaneously, will suspend the lower priority scenario until the higher one is completed. **Once the higher priority is completed, the lower priority scenario will automatically start where it left off. This may cause a lower emergency classification notice to be sent after the declaration of the higher classification.**

1. **INDICATE** the desired scenario for activation (see page 2), **AND OBTAIN** approval to activate.

Desired Scenario ID: _____

Approved by: _____ Date/Time: _____
SEC or ERM or EP Supervisor (for EP use only)

NOTE: Passwords are provided in pre-designated locations.

2. Using a site phone contact the Dialogic System by dialing x1003 or (843) 857-1003.
3. Dialogic will answer and request the activation password followed by #, **ENTER** the password + #. **IF** the incorrect password is entered, **THEN** the system will prompt you to enter it again or you can hang-up and call again.
4. Dialogic will ask you to enter the Scenario ID followed by #.
5. Dialogic will ask you press 3 to start a scenario or press # for more options. **INPUT** the desired response(s) at the system prompt(s). (Repeat steps 2 through 4 as necessary to review, activate, or stop the Dialogic System scenario.)

NOTE: Initiation of the Dialogic System should also activate the Control Room, Simulator, **OR** EP verification beepers, with the previously entered scenario event code.

6. **IF** the Dialogic System activation failed, **THEN ACTIVATE** the ERO beepers manually (Attachment 10.11) **AND** use the Control Room instructions in the ERO Phonebook to **CONTACT** NREC "A" for required call out of beepered and non-beepered personnel, as applicable.

Activation performed by: _____ Date/ Time: _____

AUTOMATED ERO NOTIFICATION FORM (DIALOGIC)

Check Choice	Scenario Number	Description	Event Code[2]	Scenario Priority	Run Time (min)
EMERGENCY SCENARIOS					
	101	General Emergency (GE)	4*1*1	1	90
	102	GE – Staffing RERF.[1]	4*2*1	1	90
	103	Site Area Emergency (SAE)	3*1*1	2	90
	104	SAE – Staffing RERF.[1]	3*2*1	2	90
	105	Alert	2*1*1	3	90
	106	Alert – Staffing RERF.[1]	2*2*1	3	90
	107	Unusual Event (UE) – Activation	1*1*1	4	90
	108	UE – **NO** Activation	1*0*1	5	90
	109	UE – Staffing RERF.[1]	1*2*1	4	90
	110	RERF Supplemental Staffing (GE)[1]	N/A	10	90
	111	RERF Supplemental Staffing (SAE)[1]	N/A	10	90
	112	RERF Supplemental Staffing (Alert)[1]	N/A	10	90
	113	RERF Supplemental Staffing (UE)[1]	N/A	10	90
	201	Beeper Failure	N/A	10	90
	202	Beeper Returned to Service	N/A	10	90
DRILL/TRAINING SCENARIOS					
	301	Drill – GE	4*1*2	6	90
	302	Drill – GE – Staffing RERF.[1]	4*2*2	6	90
	303	Drill – SAE	3*1*2	7	90
	304	Drill – SAE – Staffing RERF.[1]	3*2*2	7	90
	305	Drill – Alert	2*1*2	8	90
	306	Drill – Alert – Staffing RERF[1]	2*2*2	8	90
	307	Drill – UE – Facility Activation	1*1*2	9	90
	308	Drill – UE – **NO** Activation	1*0*2	9	90
	309	Drill – UE – Staffing RERF.[1]	1*2*2	9	90
	310	Augmentation Drill	0*1*2	10	90
	311	Quarterly Communication Drill	0*0*3	10	90
	401	ERO Training (EP use ONLY)	0*0*0	10	10
	402	Control Rm. Pract. (Ops use ONLY)	0*0*0	10	10
	403	Sim. Practice (Trng. use ONLY)	0*0*0	10	10
	404	Weekly Pager Test	0*0*0	10	10
	601	Phonelst.txt Test (EP use ONLY)	0*0*0	10	15

[1] The Remote Emergency Response Facility (RERF) should be activated for the following events:

- A security event has made the site inaccessible.
- The EOF/TSC facilities are NOT habitable due to flooding, fire, loss of power, etc.
- If an extended evacuation is made as part of the initial Protective Action Recommendation (PAR)
- As Directed by the SEC or ERM.

[2] Event Code Descriptions

CLASSIFICATION	FACILITY	INFORMATION
0 = none	0 = none	0 = test
1 = U.E.	1 = normal	1 = Real
2 = Alert	2 = Remote	2 = Drill/Exercise
3 = S.A.E.		3 = Communications Test Call 843-857-1777
4 = G.E.		

ATTACHMENT 10.5
Page 1 of 1

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.

For additional assistance the beeper codes are listed with the Dialogic scenarios on Attachment 10.4.

1. Dial the Manual Beeper Initiation number as listed on password card.

EVENT CODES (DISPLAYED ON GROUP CALL PAGER)

CLASSIFICATION	FACILITY	INFORMATION
0 = none	0 = none	0 = test
1 = U.E.	1 = normal	1 = Real
2 = Alert	2 = Remote	2 = Drill/Exercise
3 = S.A.E.		3 = Communications Test Call 843-857-1777
4 = G.E.		

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

2. At the Beeper System prompt, enter the appropriate code to be displayed on Group Call Pager. **Do not enter the phone number from which the call is placed.**

Approved by: _____ Date/time: _____
SEC/ERM or EP Supervisor (for EP use only)

Initiated by: _____ Date/time: _____

3. Verify the beepers were initiated with the appropriate code via the Control Room verification beeper or Security beeper.

4. **IF** the Dialogic System activation failed, **THEN** use the Control Room instructions in the ERO Phonebook to contact NREC "A" for required call out of beepered and/or non-beepered personnel, as applicable.

ATTACHMENT 10.6
Page 1 of 1

SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS DATA SHEET

EMERGENCY CLASSIFICATION (CIRCLE)

Date/Time: _____/_____
Completed By: _____

UNUSUAL EVENT SITE AREA EMERGENCY
ALERT GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS		QUAL
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)		
R-24A N-16 MAIN STEAM LINE A		
R-24B N-16 MAIN STEAM LINE B		
R-24C N-16 MAIN STEAM LINE C		
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		QUAL
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)		
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/ml)		
I^{131} (Uci/ml)		
AVG 5 HOTTEST T/Cs (°F)		
BORON CONC. (PPM)		
SECONDARY SYSTEM		
S/G A		
LEV.-WR(%)		
LEV -NR(%)		
PRESS (PSIG)		
FEED (MPPH)		
STEAM (MPPH)		
ACT. (Uci/ml)		
S/G B		
LEV.-WR(%)		
LEV -NR(%)		
PRESS (PSIG)		
FEED (MPPH)		
STEAM (MPPH)		
ACT. (Uci/ml)		
S/G C		
LEV.-WR(%)		
LEV -NR(%)		
PRESS (PSIG)		
FEED (MPPH)		
STEAM (MPPH)		
ACT. (Uci/ml)		
PRI/SEC. LK. RT (GPM)		

ENGINEERED SAFETY FEATURES		QUAL
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

1.1 The RNP Selective Signaling System consists of equipment and circuits linking RNP with the offsite agencies involved in initial emergency notifications.

1.2 The Control Room, TSC, EOF and the Work Control Center have these phones.

1.3 This system can quickly conference the offsite agencies for notifications using the following:

1.3.1 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.

1.3.2 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 Progress Energy locations	A4
Decision Line	A5

For additional dialing codes, see EPPRO-02 "Maintenance and Testing", Attachment 8.2.32.2 "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.

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

1.3.4 When people are no longer coming on line, hold a roll call and proceed with the message/drill/test;

1.3.5 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.

1.3.6 If problems with this system occur during drills, exercises or emergencies, notify the Administrative and Logistics Manager.

1.3.7 If problems occur at any other time, notify Telecommunications.

1.3.8 If Selective Signaling System is inoperable, use the Northern Telephone System or the Corporate Telephone System as shown on ATTACHMENT 10.7, Back-up Method for Teleconferencing With State and County Warning Points (WPs).

2.0 RNP EMERGENCY TELEPHONE SYSTEM (NORTHERN TELECOM)

2.1 The RNP emergency telephone consists of dedicated lines between facilities at RNP and other Progress Energy locations. These lines are accessed via a Northern Telecom Meridian private branch exchange (PBX). This system supports the general plant environment as well.

2.2 The following are phone features used on the Meridian phones:

2.2.1 Volume Control - The adjustment for ringing, headset and speaker volume is accomplished through the rocking switch below the keypad.

2.2.2 Line/Feature Buttons - Located to right of keypad and have liquid crystal display (LCD) status indications.

2.2.3 KEYPAD - Centrally located to right of handset and used for call placement or feature usage.

2.2.4 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**.

2.2.5 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.

2.2.6 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.

2.2.7 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**.

2.2.8 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.

2.2.9 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.

2.2.10 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.

2.2.11 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.

2.2.12 PROGRAM - The **PROGRAM** key allows you to set seven attributes of the Meridian phone. To set attributes:

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

1) VOLUME - Press **PROGRAM**, Dial 00, use volume rocker switch to adjust down (<) or up (>), press **PROGRAM** to save.

2) CONTRAST ADJUSTMENT - Press **PROGRAM**, Dial 02, use volume rocker switch to adjust lighter (<) or darker (>), press **PROGRAM** to save.

3) 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**.

4) IDLE SCREEN FORMAT - Eight possible selections. Press **PROGRAM**, Dial 04, use volume rocker switch up (<) or down (>) to make selection, press **PROGRAM**.

5) 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**.

3.0 PROGRESS ENERGY CORPORATE TELEPHONE SYSTEM

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

3.2 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.

4.0 NRC TELEPHONE SYSTEMS

4.1 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.

4.2 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.

5.0 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:

5.1 Aerotron (Local Government Radio) - Base station located in the EOF Communications Equipment Room 416. Remote radios located in TSC, EOF, and EP staff area. Provides a means to communicate with the Counties and State of South Carolina.

5.2 Motorola GTX mobile radio -is a compact remote control console located in the EOF. This console provides point to point communications for: Environmental Monitoring/dose projection This console has hand held portable versions to be used in the field that function essentially the same.

5.2.1 Operating instructions:

1) Ensure GTX unit is plugged into AC wall circuit.

2) Motorola GTX unit has to be on to talk. Ensure indicated station matches selected station on portable units.

3) Check for channel activity by a green or yellow LED.

4) When clear, press PTT and speak into microphone area. The red LED will illuminate continuously while transmitting. Turn system off when not in use.

6.0 ESSX TELEPHONE SYSTEM

6.1 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 Progress Energy facilities, as well as Ebasco and Westinghouse.

7.0 EMERGENCY RADIO SYSTEM OPERATING PROTOCOL

7.1 Using a 2-way Radio: 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. Progress Energy 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.

7.2 Definitions

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

7.2.2 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.

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

7.2.4 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.

7.2.5 Authorization to use Radio - No person shall operate a Base Station or Mobile Unit Transmitter unless he/she is so authorized by the Company.

7.2.6 Authorized Messages - Messages dealing with safety of personnel or the protection of property or messages for the performance of work-related matters.

7.2.7 Forbidden messages - The following types of messages are not permitted:

1) Between Base Stations - Except for: Authorized radio tests or any other permitted messages when telephone facilities are inoperative.

2) Personal Messages - Except for: Messages concerning a family emergency may, at the discretion of a Base Station Radio Operator, be relayed to an employee.

3) Foul Language - No exceptions.

7.2.8 Secrecy of Message - Federal law requires you to keep secret all messages not directed to you which you overhear on any private radio system.

7.2.9 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.

7.3 Operating Procedures -

NOTE: During a drill/exercise, users should frequently use language announcing the transmission as such. Example: "This is a drill message".

7.3.1 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.

7.3.2 Base Station Operators:

1) Good microphone techniques pay off in better understanding and faster communication.

2) 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.

3) 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 or mobile and using either the word "clear" or "off".

For example: The base station operator may say "ENMON Control clear" or the mobile may say "ENMON Team A off".

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

4) 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.

5) The control marked VOLUME adjusts the loudness of the incoming signal. It has no effect on the outgoing signal.

6) 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.

8.0 MITSUBISHI SATELLITE PHONE

8.1 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.

8.2 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.

8.3 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.

8.4 Press and hold the PWR key for approximately one second.

8.5 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.

8.6 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.

8.7 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.

8.8 When NO SVC indication clears from the display and "ON" is displayed, the unit is ready for making or receiving calls.

8.9 To send call , always enter the area code and number, Then press the SEND key.

8.10 To receive a call, press any key except the PWR key.

8.11 To end a call, press END.

BACK-UP METHOD FOR TELECONFERENCING WITH STATE AND COUNTY WARNING POINTS (WPs)

The following instructions should be used for contacting the State and Counties using a Northern Telecom Meridian phone with the SYS SPEED feature or CONFERENCE feature:

> **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.

IF the phone is equipped with the SYS SPEED feature, **THEN**

1. Contact the Darlington County Warning Point.
   - A. Get dial tone, press SYS 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 Warning Point.
   - A. Press CONFERENCE, then press SYS 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 Warning Point (Lee County 911 Center).
   - A. Press CONFERENCE, then press SYS SPEED and dial 04. (See Emergency Response Phone Book for other phone numbers.)
   - B. Repeat Steps 2B, C, and D.
4. Contact State Warning Point.
   - 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, perform roll call and read the Emergency Notification Message.

BACK-UP METHOD FOR TELECONFERENCING WITH STATE AND COUNTY WARNING POINTS (WPs)

IF the phone is equipped with the CONFERENCE feature, **THEN**

1. Contact the Darlington County Warning Point.
   A. Get dial tone, dial the number as listed in the "OFFSITE ORGANIZATION AND CORPORATE COMMUNICATIONS. (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. (This action places the party on conference hold.)
2. Contact the Chesterfield Warning Point.
   A. Get dial tone, dial the number as listed in the "OFFSITE ORGANIZATION AND CORPORATE COMMUNICATIONS. (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. (This action places the party on conference hold.)
3. Contact Lee County Warning Point (Lee County 911 Center).
   A. Get dial tone, dial the number as listed in the "OFFSITE ORGANIZATION AND CORPORATE COMMUNICATIONS. (See Emergency Response Phone Book for other phone numbers.)
   B. Repeat Steps 2B, C, and D.
4. Contact State Warning Point.
   A. Get dial tone, dial the number as listed in the "OFFSITE ORGANIZATION AND CORPORATE COMMUNICATIONS. (See Emergency Response Phone Book for other phone numbers.)
   B. Repeat Steps 2B, C, and D.
5. Press Conference. (All parties should be on line).
6. Perform roll call and read the Emergency Notification Message.

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.

ATTACHMENT 10.10
Page 1 of 1

DIALOGIC PRACTICE – CONTROL ROOM

1. **OBTAIN** approval to activate Dialogic from the SSO or CRSS.

Desired Scenario ID: ___402_____

NOTE: Passwords are provided in pre-designated locations.

2. Using a site phone **CONTACT** the Dialogic System by dialing x1003 or (843) 857-1003.
3. Dialogic will answer and request the activation password followed by #, **ENTER** the password + #. **IF** the incorrect password is entered, **THEN** the system will prompt you to enter it again or you can hang-up and call again.
4. Dialogic will ask you to enter the Scenario ID followed by #, **ENTER** 402#.
5. Dialogic will ask you press 3 to start a scenario or press # for more options. **INPUT** the desired response(s) at the system prompt(s). (Repeat steps 2 through 4 as necessary to review, activate, or stop the Dialogic System scenario.)

NOTE: The Dialogic scenario should make notification calls and pages (up to 3 each) until the ID from step 6 is entered and qualified OR the 20 minute activation time expires. Once one of these is done the scenario will stop

6. Dialogic should initiate the Control Room verification beeper with the previously entered scenario's event code (0*0*0).
7. Dialogic should call extension 1530, request an identification number and ask questions to qualify the caller.
   a. **ENTER** 1333333333 (9 3's) as the identification number.
   b. **PROVIDE** responses to the system questions. **IF** you disqualify (e.g., answer no to fitness for duty or 60 minute response) in your responses, **THEN** it will not attempt to call you again.
8. **IF** the Verification Beeper did not activate, **THEN** verify proper operation by calling the individual beeper number and entering your phone number.
9. **IF** expected response is not received for verification of proper beeper operation, **THEN** report the deficiency to Emergency Preparedness for investigation.
10. **INFORM** Emergency Preparedness of system use (on next business day if weekend, holiday, or nightshift) so the reports can be reviewed for proper operation.
11. Dialogic should send an activation report to the printer located next to the system.

ATTACHMENT 10.11
Page 1 of 1

DIALOGIC PRACTICE – SIMULATOR CONTROL ROOM

1. **OBTAIN** approval to activate Dialogic from the SSO, CRSS, or Simulator Instructor.

Desired Scenario: ___403_____

NOTE: Passwords are provided in pre-designated locations.

2. Using a site phone **CONTACT** the Dialogic System by dialing x1003 or (843) 857-1003.
3. Dialogic will answer and request the activation password followed by #, **ENTER** the password + #. **IF** the incorrect password is entered, **THEN** the system will prompt you to enter it again or you can hang-up and call again.
4. Dialogic will ask you to enter the Scenario ID followed by #, **ENTER** 403#.
5. Dialogic will ask you press 3 to start a scenario or press # for more options. **INPUT** the desired response(s) at the system prompt(s). (Repeat steps 2 through 4 as necessary to review, activate, or stop the Dialogic System scenario.)

NOTE: The Dialogic scenario should make notification calls and pages (up to 3 each) until the ID from step 6 is entered and qualified OR the 20 minute activation time expires. Once one of these is done the scenario will stop

6. Dialogic should initiate the Simulator verification beeper with the previously entered scenario's event code (0*0*0).
7. Dialogic should call extension 6530, request an identification number and ask questions to qualify the caller.
   a. **ENTER** 1222222222 (9 2's) as your identification number.
   b. **PROVIDE** responses to the system questions.

   IF you disqualify (e.g., answer no to fitness for duty or 60 minute response) in your responses, **THEN** it will not attempt to call you again.
8. **IF** the Verification Beeper did not activate, **THEN** verify proper operation by calling the individual beeper number.
9. **IF** expected response is not received after verification of proper beeper operation, **THEN** report the deficiency to Emergency Preparedness for investigation.
10. **INFORM** Emergency Preparedness of system use (on next business day if weekend, holiday or nightshift) so the reports can be reviewed for proper operation.
11. Dialogic should send an activation report to the printer located next to the system.

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	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)			(v)(A) Safe S/D Capability AINA
GENERAL EMERGENCY	GEN/AAEC	TS Deviation		ADEV	(v)(B) RHR Capability AINB
SITE AREA EMERGENCY	SIT/AAEC	4-Hr. Non-Emergency 10 CFR 50.72(b)(2)			(v)(C) Control of Rad Release AINC
ALERT	ALE/AAEC	(i)	TS Required S/D	ASHU	(v)(D) Accident Mitigation AIND
UNUSUAL EVENT	UNU/AAEC	(iv)(A)	ECCS Discharge to RCS	ACCS	(xii) Offsite Medical AMED
50.72 NON-EMERGENCY (see next columns)		(iv)(B)	RPS Actuation (scram)	ARPS	(xiii) Loss Comm/Asmt/Resp ACOM
PHYSICAL SECURITY (73.71)	DDDD	(xi)	Offsite Notification	APRE	60-Day Optional 10 CFR 50.73(a)(1)
MATERIAL/EXPOSURE	B???	8-Hr. Non-Emergency 10CFR 50.72(b)(3)			Invalid Specified System Actuation AINV
FITNESS FOR DUTY	HFIT	(ii)(A)	Degraded Condition	ADEG	Other Unspecified Requirement (identify)
OTHER UNSPECIFIED REQMT. (see last column)		(ii)(B)	Unanalyzed Condition	AUNA	NONR
INFORMATION ONLY	NINF	(iv)(A)	Specified System Actuation	AESF	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
NRC RESIDENT			
STATE(s)			
LOCAL			
OTHER GOV AGENCIES			
MEDIA/PRESS RELEASE			

ANYTHING UNUSUAL OR NOT UNDERSTOOD? ☐ YES (EXPLAIN ABOVE) ☐ NO

DID ALL SYSTEMS FUNCTION AS REQUIRED? ☐ YES ☐ NO

MODE OF OPERATION UNTIL CORRECTED:

ESTIMATE FOR RESTART DATE:

ADDITIONAL INFO ON BACK ☐ YES ☐ NO

NRC FORM 361 (12-2000)

PRINTED ON RECYCLED PAPER

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 AND UNITS: PRIMARY	SECONDARY

LIST OF SAFETY RELATED EQUIPMENT NOT OPERATIONAL:

EVENT DESCRIPTION (continued from front)

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

ATTACHMENT 10.13
Page 1 of 1

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.

Equipment	Equipment	Copies:
Fax Machine	EP Procedures	10.1 (ENF and roll call form)
ERO Phonebook	CR SSO Terminal	10.2 (Communications Checklist)
Dialogic Password Card	Selective Signaling	10.3 (Communications Log)
NRC ETS Phone		10.4 (Dialogic)
CR Beeper		10.12 (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 10.1)* _____
   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 Teleconference Method (Attachment 10.7)
   - Use ESSX phones(Attachment 10.6)
   - Call Roll → Read Message and Authenticate if required

3. ERO Callout:* _____
   - Complete form (Attachment 10.4)
   - SSO/SEC approval

   Dialogic not functional? → Manual beeper initiation (Attachment 10.11)
   → Contact non-beeper staff using NREC instructions in the 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 _____

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

ATTACHMENT 10.14
Page 1 of 1

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. During turnover, determine if the South Carolina Department of Health and Environmental Control (DHEC) has called to confirm the emergency status. (AR #95238) _____
5.* Complete the Emergency Notification Form. _____
6. Obtain ERM 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.

Progress Energy	I Information Use

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

PLANT OPERATING MANUAL

VOLUME 2

PART 5

EPPRO-00

EMERGENCY PREPAREDNESS PROGRAM AND TESTING

REVISION 7

SUMMARY OF CHANGES
PRR 98808

Section	REVISION COMMENTS
Use	Changed the procedural use to Information Use
1.2	Moved to section 8.0
3.1.1.3	Changed wording of response protocol to "as directed".
3.1.1.3.a	Changed wording of response protocol to "as directed".
3.1.1.4	Clarified the wording
3.1.1.5	Deleted, it is same as 3.1.1.1
3.1.2.4	Changed wording of response protocol to "as directed".
3.2	Continued section numbering to include old section 3.3
3.2.2	Removed the instructions and referenced Attachment 10.1
8.0	Added the reference information for supporting EPPRO procedures
Att 10.1 and 10.2	Combined both together and inserted the information from the "talking papers".

TABLE OF CONTENTS

SECTION PAGE

1.0 PURPOSE

To instruct personnel on the Emergency Preparedness Program and provide the method of qualification for the Emergency Response Organization (ERO).

2.0 REFERENCES

2.1 PLP-007, Robinson Emergency Plan

2.2 NUREG-0654/FEMA-REP-1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants, January 1980

2.3 10 CFR 50, Licensing of Production and Utilization Facilities

2.4 H.B. Robinson response to NRC Inspection Report No. 50-261/97-13. Robinson File No 13510, Serial RNP-RA/98-0014, Dated Feb 12, 1998. (EPPRO-03)

2.5 NRC Regulatory Issue Summary 2002-12A, "Power Reactors NRC Threat Advisory and Protective Measures System"

2.6 PLP-122, Security Events

3.0 RESPONSIBILITIES

3.1 Emergency Response Organization Member

3.1.1 Each member of the ERO is responsible for:

1. Attending or performing the initial and continuing training required for their position(s) held in the ERO (i.e., respirator qualification).

2. Developing and maintaining adequate skills and knowledge to perform duties for the assigned position(s) within the ERO.

3. Responding as directed in the event of a drill/exercise or a real emergency.
   a. Response to real emergencies is required as directed by pager, Dialogic, or plant PA, regardless of your "on-call" status.

4. Keeping Emergency Preparedness (EP) informed of any changes (i.e., change of home phone number, moving to new location, etc.) which will affect their ability to contact you for a response to an emergency/drill.

5. Becoming familiar with, and proficient in, the implementation of applicable procedures.

6. Responding to security events in accordance with PLP-122, Security Events.

7. After being contacted by the Dialogic system, ERO members are required to respond to computer requests and report to the applicable facility.

3.1.2 ERO members who are assigned a pager (beeper), individual or rotational, are also responsible for the following functions:

1. Compliance with Fitness for Duty regulations during the period the ERO member is "ON CALL". "On Call" is generally rotated by Team and the specific position and time period assigned is documented by the "ON CALL" Roster that is maintained by EP.

2. Arranging a relief for any period when the "ON CALL" position holder will not be able to respond to the applicable facility within the required time.

    a. When a relief is arranged, the requesting individual is responsible for ensuring that relief personnel obtain an ERO beeper for the period of relief.

    b. If the relief period is less than one week it is not necessary to notify Emergency Preparedness or the Control Room.

    c. If the relief period is for the entire week, then the requesting individual is responsible for notifying EP by noon on Wednesday before the on-call week begins.

3. During real emergencies, ERO personnel who carry a pager are required to call Dialogic upon arrival at their facility unless directed by beeper code to do so prior to departure for the facility.

    a. This practice may be modified for conduct of drills and exercises.

4. Maintaining the beeper in close proximity and turned on at all times regardless of "ON-CALL" status, and responding as directed.

5. When notified of a real emergency, ERO members on vacation or not fit for duty should call their position or supervisor and make themselves available for relief.

6. In the event that a beeper is lost by an on call person during non-working hours, the individual should:

    a. Obtain the spare beeper from Security **OR,**

    b. Arrange for a qualified individual, with a beeper, to be on call **OR,**

    c. Remain near your phone until a new beeper is obtained.

3.1.3 Individuals who are "ON-CALL" and **DO NOT** hold a beeper must:

1. Remain fit for duty during their "ON-CALL" period and stay within 60-75 minutes of their facility.

   a. Joint Information Center (JIC) personnel are required to report to the applicable facility within 2 hours following notification to activate.

   b. Personnel assigned to teams are considered "ON-CALL" the week their designated team has coverage.

3.2 Emergency Preparedness (EP) Staff

3.2.1 Ensuring an ERO is staffed and prepared to respond to and mitigate any postulated emergency at H. B. Robinson Steam Electric Plant, Unit No. 2.

3.2.2 Notifying the ERO of required actions for an increase in the Homeland Security Threat Level in accordance with Attachment 10.1.

3.2.3 Develop and maintain the Robinson Emergency Plan and all required implementing procedures.

3.2.4 Tracking ERO Qualifications by maintaining a computer database.

3.2.5 Maintaining a roster of all qualified ERO personnel.

1. Declared Pregnant Women will be placed on inactive status for the duration of their pregnancy or reassigned. (NCR #47657)

3.2.6 Planning, scheduling, and administration of drills and exercises (except fire drills).

3.2.7 Coordination of the public education and information program.

3.2.8 Assuring the annual dissemination of safety information in the possible plume exposure Emergency Planning Zone (EPZ).

(3.2 continued)

3.2.9 Ensuring EP lesson plans are current based on changes made to procedures.

3.2.10 Coordinating initial and continuing training needs.

3.2.11 Maintaining ERO Qualification Checklists.

3.2.12 Evaluate training feedback reports for improvements to the training program.

3.2.13 Perform a needs or job analysis as required.

3.3 Line Management

3.3.1 Coaching of personnel assigned an ERO position on proper performance of that position.

3.3.2 Selection of personnel to staff the ERO positions and obtain EP concurrence on the selection.

1. Alternately, selecting personnel to fill ERO positions at the request of EP.

2. Notifying personnel selected for the ERO of their selection and the expectations for completion of qualification and ERO participation.

3.3.3 Ensuring the personnel in their area of responsibility maintain a current Progress Energy identification/security badge.

3.3.4 Ensuring that personnel under their supervision are technically qualified for their ERO position.

3.3.5 Submitting request for additions or changes of personnel on the ERO.

3.3.6 Ensuring EP is notified of personnel changes that may affect their ability to respond to an emergency.

3.3.7 During a site or local Evacuation, management personnel are responsible for the following:

1. Ensuring that Contractors or offsite personnel reporting to them know where to assemble during the evacuation.

2. Ensuring that designees accounting for personnel during an evacuation are briefed on ensuring safe passage from one location to another.

3. Ensuring that personnel participate in the site wide (Owner Controlled Area) evacuation drills unless specifically exempted by EP Management for critical work.

3.4 EP Training Program Committee (TPC)

3.4.1 Identify ERO continuing training needs.

3.4.2 Review Drill/Exercise critiques and EP related operating experience feedback items to identify ERO training needs.

3.4.3 Evaluate the effectiveness of ERO initial and continuing training.

3.4.4 Review/establish ERO training schedules.

4.0 PREREQUISITES

N/A

5.0 PRECAUTIONS AND LIMITATIONS

N/A

6.0 SPECIAL TOOLS AND EQUIPMENT

N/A

7.0 ACCEPTANCE CRITERIA

N/A

8.0 INSTRUCTIONS

8.1 For additional programs and testing reference the following support procedures:

8.1.1 EPPRO-01, Program and Responsibilities

8.1.2 EPPRO-02, Maintenance and Testing

8.1.3 EPPRO-03, Training and Qualification

8.1.4 EPPRO-04, EP Performance Indicators

8.1.5 EPPRO-05, Scenario Development and Drill Control Guidelines

9.0 RECORDS

Memoranda to file that are generated as a result of this procedure should be submitted for retention in the plant vault.

10.0 ATTACHMENTS

10.1 EP Staff Response to Increased Security Threat Level Guidelines

EP Staff Response to Increased Security Threat Level Guideline (EXAMPLE)

This attachment is a guideline and may or may not require all actions listed to be performed and may require additional actions that are not listed. These actions may be altered as directed by the EP Supervisor or designee.

Upon notification that the Attorney General has increased the National Advisory Threat Level to Red, Robinson EP will perform the following actions.

1. Contact the Unit 2 Control Room and remind them of the pager codes, the facilities available to activate, and the methods available to activate the ERO.
   a. **Notification:** The National Terrorism Threat Level has been elevated to _____ (insert designation). At this time, there is no known credible threat to the Robinson Plant. We are making this notification so you are aware of the change and that you need to be prepared to activate the ERO quickly and efficiently. The following information is being provided to assist you with the activations, if needed.
   b. **ERO Pager Codes:**

Classification	Facility	Information
0 = None	0 = None	0 = Test
1 = UE	1 = Normal	1 = Real
2 = Alert	2 = Remote (Rail	2 = Drill/Exercise
3 = SAE	Road Avenue)	3 = Communications
4 = GE		Test- Call 857-1777

   c. **Facilities available for activation:** The on-site facilities and the JIC, in Florence, will be activated in the event of a radiological emergency. If the threat is radiological and the normal facilities are uninhabitable or inaccessible, the ERO should be directed to report to the remote facility and determine actions to be taken and the JIC will activate as normal.
   d. **Methods for activation:** The ERO may be activated using any combinations of these: Dialogic activations, manual pager activations, or NREC call-out.
   e. **Communications:** Weekly – the Selective Signaling System needs to be tested to ensure contact can be made with Darlington, Chesterfield, and Lee Counties as well as the State of SC and all Warning Points. Use following message when conducting the test, "This is (your name) from the H.B.Robinson Plant. Because of the increased National Terror Threat Level, we will be testing these phones on a weekly basis. Currently, there is no known credible threat to the Robinson Plant and **no** response from you is expected or required of you at this time."

2. Distribute an alpha page with the following text message via the Emergency Response Organization (ERO) pagers:
    a. The National Terror Threat Level has been increased to (insert designation). There is no known credible threat to the Robinson Plant at this time. ERO Members should be sensitive to the possibility of activation.
3. Distribute a site-wide e-mail with the following text:
    a. The National Terror Threat Level has been elevated to (insert designation). Though there is no known credible threat to this site, we must be prepared at all times to quickly and efficiently respond to ERO callouts. Security events could cause us to activate our facilities with the same degree of urgency as the radiological scenarios that we commonly practice. All ERO members are reminded to have your company picture identification badges with you, when not at the site. The badges will be needed for rapid access to the site, facilities, and possibly through law enforcement traffic control points. If there is a security threat on plant site or your normal facility is inaccessible, then you may be directed to report to the Remote Facility on Railroad Avenue in Hartsville. JIC Staff Members will report to the Florence location under all conditions.
4. Contact the NRECs and read them the following message:
    a. As the National Terror Threat Level increases, so does the possibility of your position being needed to call members of the RNP ERO. Since you are qualified for the position of NREC, please ensure that you have a current copy of the ERO Phone Book. The correct revision is xx, dated xx/xx/xxxx. At this time, there is no known immediate threat to the Robinson Plant.

EP Staff Response to Increased Security Threat Level Guideline (EXAMPLE)

5. Provide the following information to the on-call personnel for ERO Key Positions:
    a. The National Terrorism Threat Level has been elevated to (insert designation). Your ERO position has been identified as a Key Position and you are being placed on **stand-by** for response. Please,
        i. Remain within your response time to your respective facility.
        ii. Keep your RNP security badge or Progress Energy security badge with you for quick response.
        iii. Respond as directed by pager, Dialogic or NREC instructions.
        iv. Remain fit for duty.
        v. Complete Attachment 1, SEC-NGGC-2141 upon arrival at the site.
6. **ERO Key Positions:**
    a. Emergency Preparedness Staff
    b. Control Room(CR) Site Emergency Coordinator (CR SEC)
    c. CR Emergency Communicator (CR EC)
    d. Technical Support Center (TSC) Site Emergency Coordinator (TSC SEC)
    e. Technical Analysis Director (TAD)
    f. Plant Operations Director (POD)
    g. NRC Emergency Communicator (NRC EC)
    h. Radiation Control Director (RCD)
    i. Emergency Security Team Leader (ESTL)
    j. Emergency Repair Director (RCD)
    k. Emergency Operations Facility (EOF) Emergency Response Manager (ERM)
    l. Administration and Logistics Manager (ALM)
    m. EOF Emergency Communicator (EOF EC)
    n. State/County Emergency Communicator (S/C EC)
    o. Dose Projection Team Leader (DPTL)
    p. Environmental Monitoring Team Leader (EMTL)
    q. Radiation Control Manager (RCM)
    r. Operations Support Center (OSC) Leader (OSCL)
    s. Joint Information Center (JIC) Company Spokesperson
    t. JIC Director

EP Staff Response to Increased Security Threat Level Guideline (EXAMPLE)

7. If there is a region-specific (SC) credible threat, then the on-call and one relief shift will be identified for staffing the ERO Facilities. As a minimum, the following will be notified to activate:
    i. Emergency Preparedness Staff
    ii. Emergency Response Manager
    iii. EOF Emergency Communicator
    iv. State/County Emergency Communicator
    v. Site Emergency Coordinator
    vi. NRC Emergency Communicator
    vii. Corporate/Site Communications
8. If there is a specific credible threat to RNP, then the Remote Facility and the Joint Information Center will be staffed and activated as conditions dictate. The remainder of the ERO will continue on standby until needed to respond.
9. Prepare a memo to file indicating the above actions have been accomplished.
10. Though there is no known credible threat to the Robinson site, the Emergency Response Organization needs to be prepared to respond as quickly as possible as the scenario dictates.

Progress Energy	R Reference Use

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

PLANT OPERATING MANUAL

VOLUME 2

PART 5

EPPRO-02

MAINTENANCE AND TESTING

REVISION 19

SUMMARY OF CHANGES
PRR 98810

SECTION	REVISION COMMENTS
All	Formatted to AP-007 and saved as XP
All	Changed "test" to "surveillance" or "check", as applicable
2.0	Added reference to NUREG 0654, N.2.a on communications
3.0	Removed frequencies and surveillance titles
3.1	Changed the wording to reflect "oversight or performance"
4.0	Removed prereqs and added new ones
5.11	Added explanation for frequencies
8.0	Added "frequency" to all sections
8.2.2	Clarified instructions
8.2.5	Added NOTE
8.2.6	Changed EPNOT-00 to EPNOT-01
8.2.8	Relocated NOTE
8.2.15	Clarified repair notifications
8.2.17.2	Included the Att.
8.3.11	New
8.3 - 8.7	Created individual sections for each phone system
8.8	Created individual sections for each activation and clarified instructions. Deleted the instructions on the monthly review (this is a KPI in EPPRO-04)
8.9	Changed EPNOT-00 to EPNOT-01 and clarified instructions
8.10	Corrected reference from EPPRO-01 to EPPRO-02
8.11	Updated the section to include Dialogic Call-out information and clarified instructions.
8.12 – 8.13	Clarified instructions
8.14	Added NOTE
8.29	Separated the sections and clarified the instructions
10.0	Corrected the titles
10.2	Arranged the table by location and shaded the empty cells
10.3	Corrected the ERDS section
10.4	Updated to support more accurate tracking of OOS sirens
10.5	Updated the table to provide information on each of the sirens

TABLE OF CONTENTS

SECTION PAGE

1.0 PURPOSE

To ensure periodic surveillance commitments of the Emergency Plan and 10 CFR 50 Appendix E are being met and properly documented.

2.0 REFERENCES

2.1 The Communicator, Users Guide to the Software

2.2 PLP-007, Robinson Emergency Plan

2.3 SEC-NGGC-2141, Fitness For Duty Unscheduled Work Call Outs

2.4 NUREG 0654, N.2.a., Communications Drills

3.0 RESPONSIBILITIES

3.1 The EP Staff is responsible for oversight or performance of the periodic surveillances

4.0 PREREQUISITES

4.1 Press releases should be distributed prior to the Siren Growl and Full Volume Activation Operational Checks. As a minimum the Public Information Postcard should contain the time, date, number of siren activations expected, and a sufficient time span to allow for activation operational checks and activation print outs. (example: 1300 to 1600).

5.0 PRECAUTIONS AND LIMITATIONS

5.1 Periodic surveillance scheduling will be as follows:

5.1.1 When a periodic surveillance is completed prior to the scheduled date the next scheduled date will be the early completion date plus the frequency.

5.1.2 When a periodic surveillance is completed on or after the scheduled date but before the overdue date, the next scheduled date will be the last scheduled date plus the frequency.

5.2 Emergency Preparedness (EP) personnel or Emergency Communicators may be used for communications drills.

5.3 A drill or exercise that uses the Selective Signaling System (SSS) to contact the State and Counties may be used to fulfill the requirements of the monthly communications surveillance.

5.3.1 The Superintendent - Shift Operations (SSO) is responsible for providing an emergency communicator for the off hours monthly communications drill.

5.4 If while performing a surveillance or drill and an offsite agency is involved in an actual emergency perform the following:

5.4.1 If the agency is a State or County Warning Point or EOC, excuse the agency from the remainder of the surveillance or drill, and annotate the situation in the surveillance or drill documentation.

5.4.2 If the agency is the NRC, perform that part of the surveillance at a later time.

5.5 A drill or exercise that begins between 6 p.m. and 4 a.m. or a weekend, that includes in the objectives, the conduct of an off hours augmentation of the ERO, may be used to satisfy the requirements of the Augmentation Drill.

5.6 Attachment 10.1, Certification and Review Form, may be used to document the completion of any surveillance, unless other documentation is specified in the procedure. If surveillance results are unsatisfactory, then determination should be included for follow up actions, for example increased surveillance frequency, AR, WR, etc.

5.7 When contacting the Control Room in the following procedure steps, it is desirable to contact the SSO, but not required

5.8 Integrated site wide drills will be scheduled in accordance with PLP-007, "Robinson Emergency Plan.

5.9 "The Early Warning Notification System is a computer system used and maintained by the EP Staff for monitoring and control of the Emergency Notification Sirens. The software owner will be the Emergency Preparedness Supervisor. Changes to the software will be controlled per CSP-NGGC-2505 with a software quality level of "C". A users guide is available for instruction on the use of this system. Revision to the manual are controlled through the Document Management System. (CR 11959)

5.10 The Dialogic computer system is used and maintained by the EP staff for the notification of ERO members of off normal conditions. The software owner will be the Supervisor - Emergency Preparedness. Changes to the software will be controlled per CSP-NGGC-2505 with a software quality level of "D". A users guide is available for instruction on the use of this system. Revision to the manual are controlled through the Document Management System. (CR 11959)

5.11 A monthly frequency of 28 days + 10 days is used to allow the EP surveillances to reoccur on the same day of the week. This frequency is more conservative than a 31 days + 7 days requirement.

6.0 SPECIAL TOOLS AND EQUIPMENT

6.1 N/A

7.0 ACCEPTANCE CRITERIA

7.1 See individual sections for applicable acceptance criteria.

8.0 INSTRUCTIONS

8.1 EMERGENCY FACILITY & EQUIPMENT CHECKS (CR 11968)

8.1.1 Frequency: Twice per week (Monday – Friday).

8.1.2 Surveillance: Walk down of the TSC and EOF Facilities should be performed to verify the equipment and facilities are in a condition to support activation of the Emergency Response Organization. Attachment 10.7 provides guidance for these checks. The JIC Operations Area is normally inventoried and locked after use. Periodic checks of the JIC and the Remote Facility are done during procedure updates or drills /exercises.

8.2 SELECTIVE SIGNALING SYSTEM COMMUNICATIONS DRILL

8.2.1 Frequency: Monthly (Once per 28 days, not to exceed 38 days).

> **NOTE:** Every third monthly drill should be performed off hours. This drill will normally be performed by Operations personnel.

8.2.2 During off-hour (1830 – 0630 hrs or weekends) drills, it is acceptable to hold the surveillance open until the following work day to complete the phone check portion of this drill. This will allow the County EOCs to be manned.

8.2.3 If not performed by Operations personnel, then contact the Control Room and inform them that a Selective Signaling System (SSS) Communications Operability Drill will be performed.

8.2.4 Provide information to the Emergency Communicator with sufficient detail to allow the Emergency Notification Form to be completed.

> **NOTE:** Use "This is a communication and equipment operational check, no further action is required," in the emergency description section of the Emergency Notification Form.

8.2.5 The Emergency Communicator uses the scenario information provided to fill out a notification form (EPNOT-01, CR/EOF Communicator).

8.2.6 Review the completed notification form to ensure that "THIS IS A DRILL" is checked, and that all required elements of the form are completed per EPNOT-01, CR/EOF Communicator.

8.2.7 The CRSS or SSO shall approve the notification form and instruct the Emergency Communicator to begin the notification.

NOTE: Chesterfield, Darlington, and Lee Counties have locations named, "Warning Point" and "Emergency Operating Center". The State does not station personnel in their EOC. Therefore, they have a Warning Point, and a Backup Warning Point. A repeat extension from the EOC is located in the State Warning Point.

8.2.8 The Emergency Communicator implements EPNOT-01 to notify Warning Points and EOCs. Instructions for using the RNP Selective Signaling System are contained in EPNOT-01, Attachment 10.6.

8.2.9 If all parties responded to the communications drill, then skip to Step 8.2.14.

8.2.10 If any Warning Points **or** Emergency Operations Centers fail to respond verify that the non-responding agencies can be contacted by commercial telephone, using the phone number from the ERO Phone Book. During this call, attempt to determine why they did not answer the Selective Signaling System telephone.

8.2.11 Contact the non-responding agency again using a Selective Signaling Telephone by dialing the specific dialing code for that agency. See Attachment 10.2, Selective Signaling System Dialing Codes.

8.2.12 If the agency called picks up and communications can be established, then consider the check successful.

8.2.13 If no agency can be contacted using the Selective Signaling System from any site location and via any method (including ESSX, Bell, etc.), then **immediately** inform the SSO **and** consult AP-030, NRC Reporting Requirements. Assist the SSO in making any necessary notifications.

8.2.14 Notify the CRSS or SSO that the Selective Signaling System Communications Drill has concluded and the status of the Selective Signaling System.

8.2.15 Arrange for any needed repairs to the Selective Signaling System by calling the Telecommunications Help Desk. Notify Emergency Preparedness of the problem for information purposes.

8.2.16 Contact IT and inform them of using ERFIS to generate the Emergency Notification Form. This allows them to reset ERFIS for future use. (CR 16476)

8.2.17 Acceptance Criteria:

1. Contact has been made with the Warning Point **and** EOC for each of the Counties and the State Warning Points, with the following conditions.

   a. By decision of the State of South Carolina the Backup Warning Point phone is left with the ringer off since the Warning Point is manned 24 hours per day. The Backup Warning Point phone would be checked prior to use.

   b. The message has been read to at least one of the locations for each of the agencies.

2. Documentation of the drill will consist of the Notification Form along with the page containing the contacts' names and a completed EPPRO-02 Attachment 10.1, Certification and Review Form.

3. Transmit the completed forms, to Records Storage in accordance with RDC-NGGC-0001. A copy of the record may be maintained in the EP files for the convenience of auditors.

8.3 LOCAL GOVERNMENT RADIO OPERATIONAL CHECK

8.3.1 Frequency: Monthly (Once per 28 days, not to exceed 38 days)

8.3.2 The State of South Carolina checks radio communications with various agencies and nuclear plants every Thursday starting at about 0900 hrs. Therefore, at approximately 0900 Thursday or other prearranged day during the grace period, listen to the Local Government Radio (LGR) set in the EP office.

8.3.3 The LGR Instruction Manual lists "10" codes on Page 33. The only "10" codes necessary for the radio checks are "10-1" (signal weak), "10-2" (signal good), and "10-97" (radio check).

8.3.4 Listen for the call from the State of South Carolina stating, "H.B. ROBINSON THIS IS SOUTH CAROLINA STATE WARNING POINT."

8.3.5 Pick up the handset, press the button on the handset, and acknowledge the transmission by saying: "THIS IS H.B. ROBINSON, I READ YOU 10-2", if the transmission is clear, *OR* "I READ YOU 10-1" if the transmission is weak, and inform the operator that two more radio sets need to be checked.

8.3.6 After your transmission is acknowledged, state: "THIS IS H.B. ROBINSON, SIGNING OFF."

8.3.7 After radio traffic on the channel has stopped, check the radio set in Rooms 425 TSC and 434 EOF as follows:" SOUTH CAROLINA STATE WARNING POINT. THIS IS H.B. ROBINSON FOR A 10-97 ON THE BACKUP RADIO", after the State operator responds answer with "THIS IS H.B. ROBINSON, I READ YOU 10-1 or 10-2" as appropriate.

8.3.8 After your transmission is acknowledged, state: " THIS IS H.B. ROBINSON SIGNING OFF."

8.3.9 Complete the third radio check as per steps 8.7and 8.8 and inform the State operator that the checks are complete.

8.3.10 If the radio communication is weak or not working, notify the Telecommunications Help Desk and the South Carolina Emergency Management Division.

8.3.11 Following the repairs, check the radio set(s) that required repairing.

8.3 Local Government Radio Operational Check (continued)

8.3.12 Acceptance Criteria: The monthly LGR check is acceptable when satisfactory communication has been completed with the State of South Carolina using the handsets at the TSC, EOF, and EP office.

8.3.13 Document the monthly check on Attachment 10.1, Certification and Review Form.

8.3.14 Transmit the completed form to Records Storage in accordance with RDC-NGGC-0001. A copy of the record may be maintained in the EP files for the convenience of auditors.

NOTE: Notifications to the Control Room can be one time for the NRC ETS, ESSX, and SSS System Operational Checks.

8.4 NRC EMERGENCY TELECOMMUNICATIONS SYSTEM (ETS) OPERATIONAL CHECKS

8.4.1 Frequency: Monthly, (Once per 28 days, not to exceed 38 days).

8.4.2 Contact the Control Room and inform them that an operational check of the NRC ETS Phone System will be performed **AND** request that the Control Room **not** answer the ETS telephone until notified again at the conclusion of this check.

8.4.3 From an available NRC ETS telephone in the TSC, EOF or NRC Office, dial one of the 10 digit telephone numbers listed in the ERO telephone book to contact the NRC Operations Center.

8.4.4 When the NRC Duty officer answers, inform him of your name, that you are calling from Robinson Plant, and that this is the monthly check of the Emergency Notification System (ENS). Request that the Duty Officer call back at the extension in use.

8.4.5 When the ETS phone rings, answer the telephone "ROBINSON NUCLEAR PLANT", request the name of the Duty Officer that answered, and advise him/her that no further check-calls will be required.

8.4.6 Record the name of the Duty Officer contacted on Attachment 10.3.

NOTE: The Control Room ETS phone is checked daily and will not be included in this check.

8.4.7 Use each of the ETS telephones listed on Attachment 10.3, NRC ETS, ESSX, & SSS Telephone Operational Check, to receive and originate calls to the others for the operational checks.

8.4.8 Acceptance Criteria: The operational check of the NRC ETS phones has verified that the dial tone, ringer, handset, and keypad functions for each are operating properly.

8.4 NRC ETS Operational Checks (continued)

8.4.9 Documentation of the phone checks will consist of Completed Attachment 10.3, NRC ETS, ESSX, & SSS Telephone Operational Checks, and Attachment 10.1, Certification and Review Form.

8.4.10 Transmit the completed forms to Records Storage in accordance with RDC-NGGC-0001. A copy of the record may be maintained in the EP files for the convenience of auditors.

8.4.11 If any problems are identified with the NRC ETS telephones, then notify the Telecommunications Help Desk to have the telephones repaired.

8.4.12 Notify the Control Room of the "Out of Service" condition and recommend they consult AP-030 for applicable notification requirements.

8.4.13 When the telephones are repaired and re-checked satisfactorily, then notify the Control Room that the telephones have been returned to service.

8.4.14 Notify the Control Room that the phone check is complete.

8.5 SELECTIVE SIGNALING SYSTEM (SSS) PHONE OPERATIONAL CHECKS

8.5.1 Frequency: Monthly, (Once per 28 days, not to exceed 38 days).

8.5.2 Contact the Control Room and inform them that an operational check of the SSS Phones will be performed.

8.5.3 Simulator SSS phone:

1. Notify Simulator Support Group that an operational check will be performed on the Simulator SSS Phone.

2. Plug "FOR EP DRILL USE ONLY" red-tagged cable into SSS phone.

3. Perform phone check by placing and receiving calls from another SSS phone.

4. Unplug "FOR EP DRILL USE ONLY" red-tagged cable from SSS phone. Plug "FOR SIMULATOR USE ONLY" green -tagged cable into SSS phone.

5. Notify Simulator Support upon completion of Simulator phone check and record the name of the person on Attachment 10.1.

8.5.4 All Other SSS Phones:

1. Use any combination of the SSS telephones listed on Attachment 10.3, NRC ETS, ESSX, & SSS Telephone Operational Checks, to receive and originate calls to all the others for the operational checks.

NOTE:	The SSS Phones **do not** have a dial tone.

8.5.5 Acceptance Criteria: The operational check of SSS phones has verified that the ringer, handset, and keypad functions for each are operating properly.

8.5 Selective Signaling System (continued)

8.5.6 Documentation of the phone check will consist of Completed Attachment 10.3, NRC ETS, ESSX, & SSS Telephone Operational Checks, and Attachment 10.1, Certification and Review Form.

8.5.7 Transmit the completed forms to Records Storage in accordance with RDC-NGGC-0001. A copy of the record may be maintained in the EP files for the convenience of auditors.

8.5.8 If any problems are identified with the SSS telephones notify the Telecommunications Help Desk to have the telephones repaired.

8.5.9 Notify the Control Room of the "Out of Service" condition and recommend they consult AP-030 for applicable notification requirements.

8.5.10 When the telephones are repaired and re-checked satisfactorily, then notify the Control Room that the telephones have been returned to service.

8.5.11 Notify the Control Room that the phone check is complete.

8.6 ERDS PHONE SYSTEM OPERATIONAL CHECKS

8.6.1 Frequency: Monthly, (Once per 28 days, not to exceed 38 days).

8.6.2 Plug an analog phone into the "telephone" jack, adjacent to the "line' jack that is located in the back of the computer cabinet in Rm 425, TSC Command Rm, and listen for a dial tone.

8.6.3 Acceptance Criteria: Dial tone is heard

8.6.4 Documentation of the phone check will consist of Completed Attachment 10.3, NRC ETS, ESSX, & SSS Telephone Operational Checks, and Attachment 10.1, Certification and Review Form.

8.6.5 Transmit the completed forms to Records Storage in accordance with RDC-NGGC-0001. A copy of the record may be maintained in the EP files for the convenience of auditors.

8.6.6 If any problems are identified with the SSS telephones notify the Telecommunications Help Desk to have the telephones repaired.

8.6.7 Notify the Control Room of the "Out of Service" condition and recommend they consult AP-030 for applicable notification requirements.

8.6.8 When the telephones are repaired and re-checked satisfactorily, then notify the Control Room that the telephones have been returned to service.

8.6.9 Notify the Control Room that the phone check is complete.

8.7 ESSX PHONE SYSTEM OPERATIONAL CHECKS

8.7.1 Frequency: Monthly, (Once per 28 days, not to exceed 38 days).

8.7.2 Contact the Control Room and inform them that a check of the ESSX Phone System will be performed.

8.7.3 Use any combination of the ESSX telephones listed on Attachment 10.3, NRC ETS, ESSX, & SSS Telephone Operational Checks, to receive and originate calls to all the others for the operational checks.

8.7.4 Acceptance Criteria: The operational check of ESSX phones has verified that the ringer, handset, and keypad functions for each are operating properly.

8.7.5 Documentation of the phone check will consist of Completed Attachment 10.3, NRC ETS, ESSX, & SSS Telephone Operational Checks, and Attachment 10.1, Certification and Review Form.

8.7.6 Transmit the completed forms to Records Storage in accordance with RDC-NGGC-0001. A copy of the record may be maintained in the EP files for the convenience of auditors.

8.7.7 If any problems are identified with the ESSX telephones notify the Telecommunications Help Desk to have the telephones repaired.

8.7.8 Notify the Control Room of the "Out of Service" condition and recommend they consult AP-030 for applicable notification requirements.

8.7.9 When the telephones are repaired and re-checked satisfactorily, then notify the Control Room that the telephones have been returned to service.

8.7.10 Notify the Control Room that the phone check is complete.

8.8 SIREN ACTIVATION OPERATIONAL CHECKS

NOTE: The Siren Control and Feedback System provides real time information on siren status. This data is reviewed as needed by a member of the EP staff.

8.8.1 Rotation (Silent) Activation Operational Check

1. Frequency: Weekly
2. The Siren Control and Feedback System is designed to automatically rotate each siren, interrogate each siren, and generate a results report. This is typically done early each Monday morning.
3. Skip to 8.8.4

8.8.2 Growl Activation Operational Check

1. Frequency: Quarterly (Once per 92 days, not to exceed 115 days)
2. Verify that all applicable prerequisites have been met and the system is operational.
3. Conduct an EP Pre-job Briefing.
4. Select the desired sirens and activate the Growl command. Additional guidance can be found in the siren technical manual. (AR 66214)
5. Once the activation is complete the system should produce a report on the status of the activation.
6. Skip to 8.8.4

8.8 Siren Activation Operational Checks (continued)

8.8.3 Full Volume Activation Operational Check

1. Frequency: Annually (Once per 364 days, not to exceed 455 days).

2. Verify that all applicable prerequisites have been met and the system is operational.

3. Prior to the end of January each year, schedule a Full Volume Siren Check (normally conducted in the 4th quarter) with the State, Counties, Transmission Maintenance, Telecommunications Maintenance, Site Communications and Corporate Communications.

4. An EP pre-job briefing should be conducted to discuss the sequence of events and lessons learned from previous checks. This should include as a minimum the following items:

   a. If local siren de-activation is necessary prior to the three minute time out, ensure sufficient time is allowed for the siren feed back sensors to register a good activation (30-45 seconds).

   b. Once the sirens are activated, allow the full three minutes to pass prior to any manipulation of command screens. This can lead to a premature siren shut down

   c. Allow 15 minutes between siren activation to allow printing of data in a consistent manner.

8.8 Siren Activation Operational Checks (continued)

NOTE: Site Communications will be notified of the Full Volume Check via a site surveillance system to prompt a public information plan to publicize the check.

5. Approximately six weeks before the scheduled Full Volume Check, perform the following:

   a. Arrange to have a volunteer siren watcher stationed at every siren or specific areas of concern for the check, or monitor the checks via the feedback system.

   b. If volunteers are used, send each a map, check form, and a set of watcher instructions. Ensure briefing on use of ear plugs.

   c. If volunteers are used, schedule personnel as telephone operators to take telephone calls from the watchers after the check is concluded.

   d. Coordinate with South Carolina Emergency Management Division to determine if the EAS system will be activated.

   e. If the EAS system will be activated during the annual siren check, inform Site Communications to ensure that this information is included in the public information plan.

6. If siren watchers are used conduct a pre-job brief on the day of the check or the day prior. Their expectations are to **(AR 66214)**:

   a. Be in place at least 15 minutes prior to the check start.

   b. Verify rotation and sound of the siren.

   c. Monitor other operation or appearance as requested.

   d. Report the results of observation promptly.

7. The full volume check will be conducted from the County Activation points or the RNP site activation computer, as appropriate. It is recommended to check both. Guidance for activation can be found in the system manual located at the control units.

8.8 Siren Activation Operational Checks (continued)

8. If the siren feedback system is used collect system activation reports for documentation.

9. When conducting the check ensure the system technical manual is available. Ensure repair/maintenance personnel availability **(AR 66214)**

10. Consult AP-030, NRC Reporting Requirements, assist the SSO in making any notifications if desired.

11. *Acceptance Criteria:*

    a. For the purpose of this procedure the Full Volume siren check will be considered acceptable when sirens have been activated from the site **OR** county activation points, failed sirens identified for repair, NRC notified if required, and any observation and/or feedback system check records collected. Corrective actions required will include schedule and completion dates as appropriate. Decisions on pass/fail have been documented on the computer generated summary sheet or equivalent. This should include problem resolutions and post maintenance testing results. (CR 99-01366)

12. Compile all check records and attach to a completed Attachment 10.1, Certification and Check Review.

13. Continue with step 8.8.5.

8.8 Siren Activation Operational Checks (continued)

8.8.4 EP personnel should obtain the report and review it for siren failures.

> **NOTE:** Attachment 10.5 may be used to assist in determining the power supplier for siren AC failures. These failures do not require the Telecommunications Helpdesk to be notified but, should be reported to the power supplier.

8.8.5 Any failures that will not clear, when acknowledged, need to be reported to the Telecommunications Helpdesk for repair(s) and recorded and tracked as out-of-service (OOS) on Attachment 10.4.

8.8.6 Notify the Control Room of the "Out of Service" condition and recommend they consult AP-030 for applicable notification requirements.

8.8.7 Notify the Emergency Management Director or Agency in the county the siren is located that the siren is out-of-service (OOS) and that repairs have been requested.

8.8.8 The check schedule will be entered into the site surveillance tracking system, or similar system, to provide prompts to interested parties such as Site Communications.

8.8.9 Acceptance Criteria:

1. All sirens have been activated successfully or listed as OOS.

2. Out-of-Service sirens have been repaired and rechecked to return them to service, the Control Room and County EM Agency has been notified of the return to service and the repair actions captured on Attachment 10.4.

3. Decisions on pass / fail have been documented on the computer generated summary sheet or equivalent. This should include problem resolutions and post maintenance testing results. (CR 99-01366)

8.8.10 Include the computer generated summary sheet or equivalent as attachments to the check documentation.

8.8.11 Complete Attachment 10.1, Certification and Review Form, and attach completed forms or Service Reports.

8.8.12 Transmit the completed forms to Records Storage in accordance with RDC-NGGC-0001. A copy of the record may be maintained in the EP files for the convenience of auditors.

8.9 IPZ STATE COMMUNICATIONS DRILL

8.9.1 Frequency: Quarterly (Once per 92 days, not to exceed 115 days).

8.9.2 Prepare two Emergency Notification Forms using EPNOT-01 for guidance. One form will be the initial notification and one form will be the termination notification.

8.9.3 Review the completed notification form to ensure that "THIS IS A DRILL" is checked, and that all required elements of the form are completed per EPNOT-01.

8.9.4 Implement EPNOT-01 to notify the NC Warning Point via commercial telephone at the number listed in the ERO Phone Book.

8.9.5 Verify the authentication code words if requested.

8.9.6 If the NC warning point fails to respond, then perform the following:

1. Contact N. C. Emergency Management at the number listed in the ERO telephone book and attempt to determine why the warning point did not answer the telephone and corrective actions are taken.

2. Make another attempt to contact the N. C. Warning Point via commercial telephone.

8.9.7 If contact can be made with the N. C. Warning Point and communications are established, consider the check successful.

8.9.8 If the N. C. Agencies identified above cannot be contacted the check is unsuccessful

1. Notify the Telecommunications Help Desk.

8.9.9 Acceptance Criteria:

1. The IPZ Communications Drill is satisfactory when contact has been made with the N. C. Warning Point for an initial drill notification and a termination notification.

8.9.10 The Emergency Notification Forms used and a completed Attachment 10.1, Certification and Review Form, will provide documentation of the drill.

8.9.11 Transmit the completed forms to Records Storage in accordance with RDC-NGGC-0001. A copy of the record may be maintained in the EP files for the convenience of auditors.

8.10 ERO PHONE BOOK REVIEW

NOTE: The EP Staff maintains a copy of the ERO Phone Book in the EP Office as a markup copy. When changes to the ERO are processed in accordance with this procedure, the markup copy is annotated with the changes.

8.10.1 Frequency: Quarterly (Once per 92 days, not to exceed 115 days).

8.10.2 Arrange to have each person on the ERO contacted to confirm their personal information. Copies of the phone book (on site directory portion) are routed to each work group onsite to verify the information. Corrections are then routed back to EP for revision.

8.10.3 Arrange to have each telephone number in the "Other Contacts (Offsite)" section of the ERO Phone Book called and confirm their listed information. This is typically accomplished by the EP staff.

8.10.4 Review the ERO Phone Book and update any changes.

8.10.5 Update and publish the new ERO Phone Book revision.

8.10.6 Change out the new ERO Phone Book revision in each copy on distribution. Copies for the Unit 2 Control Room, and the Outside Auxiliary Operator desk (Work Control Center) and other primary users are typically routed.

8.10.7 Acceptance Criteria: The ERO phone book review is satisfactory when the book has been reviewed, revised, and distributed, if required.

8.10.8 Document completion of the review of the ERO Phone Book by completion of Attachment 10.1, Certification and Review Form.

8.10.9 Transmit the completed records to Records Storage in accordance with RDC-NGGC-0001. A copy of the form may be maintained in the EP office for the convenience of auditors.

8.11 ERO NOTIFICATION AND BEEPER DRILL

8.11.1 Frequency: Quarterly (Once per 92 days, not to exceed 115 days).

8.11.2 The Beeper Drill may be conducted by using the Quarterly Communications Drill scenario contained in the Dialogic database, with code 0*0*3 or manual beeper activation, defined in EPNOT-01, using code 0*0*3.

8.11.3 The drill should be initiated by Emergency Preparedness (EP) personnel and scheduled with a different On-call Team each quarter.

8.11.4 If an actual callout occurs within the quarter, then credit may be taken for satisfying the quarterly drill criteria.

8.11.5 Notify the Control Room when a Beeper Drill is to be conducted.

8.11.6 On the day following the quarterly check, a site-wide e-mail should be sent out instructing ERO members not receiving a page during the check to contact EP.

8.11.7 ERO Notification via Dialogic:

NOTE: When the Dialogic scenario is used, then all ERO personnel should be contacted by Dialogic and have to respond to the qualification questions.

1. Initiate the Quarterly Communications Drill scenario. This should contact all ERO personnel first via phone lines and second via a group page on the beepers, as applicable, that includes the 0*0*3 beeper code.

2. Once the scenario has timed out or all positions have been filled, then Dialogic will provide printouts that will identify the response of the ERO personnel contacted. This report should include positions filled and provide names of those people who called the system during the drill but did not qualify.

8.11 ERO Notification and Beeper Drill (continued)

8.11.8 ERO Notification via On-call Beepers

NOTE: When the Manual Group Page is used via the ERO beepers, then only ERO positions that are assigned beepers will be contacted and have to call in to respond to qualification questions.

1. Initiate the ERO Group Page using the manual beeper activation instructions in EPNOT-01 and the beeper code of 0*0*3.

2. Beeper holders should complete Attachment 10.5, ERO Beeper Operational Check Results or respond to EP staff by e-mail or other communications that the ERO group page was received.

8.11.9 Acceptance Criteria:

1. For Full ERO Notification via Dialogic, 80% of the ERO personnel should respond and all positions should be filled by at least one person either on-call or not on-call.

2. For Partial ERO Notification via Beepers, greater than 80% of ERO personnel issued a pager and that are on-call are expected to respond and qualify. However, all ERO positions should be filled. The positions may be filled by ERO personnel not On-call.

8.11.10 On-call personnel not responding to either activation should be contacted and the reason for not responding documented on Attachment 10.1. EP should evaluate whether the appropriate management will be notified of the failures to respond, which are not due to extraordinary circumstances.

8.11.11 A NCR should be initiated to capture any problems, non-responses, and positions not filled.

8.11 ERO Notification and Beeper Drill (continued)

8.11.12 Additional Criteria: (not necessary to be satisfactory)

NOTE: 60 minutes is based on the standard Dialogic qualification questions.

1. Determine if personnel in the positions identified on the on-call roster have confirmed that their beeper functioned and they could have reported to the appropriate on-site facility in 60 minutes or less.

8.11.13 Document the completion of the Beeper Drill on Attachment 10.1, Certification and Review Form, and attach other supporting documentation.

8.11.14 Transmit the completed records to Records Storage in accordance with RDC-NGGC-0001. A copy of the form may be maintained in the EP files for the convenience of auditors.

8.12 EOF, TSC, OSC, JIC, & REMOTE FACILITY INVENTORIES

8.12.1 Frequency: Quarterly (Once per 92 days, not to exceed 115 days) and after each facility activation.

8.12.2 Perform an inventory using Attachment 10.6, EOF, TSC, OSC, JIC, & REMOTE FACILITY INVENTORY.

8.12.3 Facility inventories will be completed as soon as possible, not to exceed 3 working days following activation. ERO personnel should ensure that their facility is in neat order and contains sufficient supplies for future activations, report deficiencies to Emergency Preparedness (EP).

8.12.4 Acceptance Criteria: Inventory has been performed and supplies available.

8.12.5 Documentation will consist of completed Attachment 10.6, EOF, TSC, OSC, JIC, & REMOTE FACILITY INVENTORY and Attachment 10.1, Certification and Review Form.

8.12.6 Transmit the completed records to Records Storage in accordance with RDC-NGGC-0001. A copy of the form may be maintained in the EP Files for the convenience of auditors.

8.13 **ERO STATUS REPORT** (CR 99-01860)

8.13.1 Frequency: Quarterly (Once per 92 days, not to exceed 115 days).

8.13.2 This report lists the personnel on the ERO by position and team designation. The report includes:

1. Requalification data for position and respirator.
2. ERO on call schedule.
3. Performance charts.

8.14 **OFFSITE SELECTIVE SIGNALING SYSTEM PHONE OPERATIONAL CHECK (CR 19521)**

8.14.1 Frequency: Quarterly (Once per 92 days, not to exceed 115 days).

> **NOTE:** The State EOC/WP does not maintain all SSS phones active. They should be contacted to connect the phone(s) not active and test **all** of the phones in the facility. This testing requires the assistance of the State and County personnel.

8.14.2 **All** Offsite Selective Signaling System phones will be checked for proper operation.

8.14.3 Acceptance Criteria: Verification that the ringer, handset, and keypad functions for each are operating properly.

8.14.4 Documentation of the phone check will consist of Completed Attachment 10.3, NRC ETS, ESSX, & SSS Telephone Operational Checks, and Attachment 10.1, Certification and Review Form.

8.14.5 Transmit the completed forms to Records Storage in accordance with RDC-NGGC-0001. A copy of the record may be maintained in the EP files for the convenience of auditors.

8.14.6 If any problems are identified with the SSS telephones notify the Telecommunications Help Desk to have the telephones repaired.

8.14.7 Notify the Control Room of the "Out of Service" condition and recommend they consult AP-030 for applicable notification requirements.

8.14.8 When the telephones are repaired and re-checked satisfactorily, then notify the Control Room that the telephones have been returned to service.

8.15 HEALTH PHYSICS DRILLS {NRC Amendment No. 192}

8.15.1 Frequency: Semi-annual (Once per 184 days, not to exceed 230 days).

8.15.2 Health Physics drills will involve response to simulated elevated airborne releases, analysis of simulated air and liquid samples, and direct radiation measurements in the environment.

8.15.3 Acceptance Criteria: As established in EPPRO-01.

8.15.4 The completion of the Health Physics drills will be documented by memorandum and an Attachment 10.1, Certification and Review Form.

8.15.5 Transmit completed records to Records Storage per RDC-NGGC-0001, NGG Standard Records Management Program.

8.16 CONTRIBUTIONS TO EMERGENCY SUPPORT ORGANIZATIONS

8.16.1 Annual Contributions:

1. During January of each year a check request will be submitted for each of the listed organizations below in the amounts specified in the approved budget.

   a. Hartsville Rescue Squad

   b. Lake Robinson Rescue Squad

   c. Hartsville Fire Department

2. Deliver the contribution checks to each receiving organization. Complete an Attachment 10.1, Certification and Review Form, to document the contribution.

8.16.2 Quarterly Contributions:

1. Following the end of each quarter, contact the Lake Robinson Rescue Squad, and Hartsville Rescue Squad to determine the number of call-outs that were responded to by each organization. The amount of reimbursement will be based on the number of call-outs and the amount per call-out as specified in the approved budget.

2. Develop check requests in the appropriate amounts.

3. Deliver the contributions checks to each receiving organization. Complete an Attachment 10.1, Certification and Review From, to document the reimbursement

8.16.3 Acceptance Criteria: This task will be considered satisfactory when contributions and reimbursement checks (if required) have been delivered in a reasonable time.

8.16.4 Transmit copies of completed records to Records Storage per RDC-NGGC-0001, NGG Standard Records Management Program. An additional copy of the form may be maintained in the EP Files for the convenience of auditors.

8.17 SIREN ADEQUACY REVIEW

8.17.1 Frequency: Annual (Once per 364 days, not to exceed 455 days)

8.17.2 Perform a survey of areas within the 10 mile EPZ that have the lowest siren coverage, as per Attachment 10.10, to determine if a significant change in demographics has occurred.

8.17.3 Contact the Emergency Management Directors from Darlington, Chesterfield, and Lee counties to review the survey results and determine additional demographic change information. Have the Directors sign the survey form.

8.17.4 Compare the current survey results to the previous check results and initial study. If an area appears to need additional siren coverage, then notify EP Management and take action(s) as directed.

NOTE: All regularly scheduled silent, growl and the full volume check for each siren is considered a check.

8.17.5 Compile all check records for a yearly interval to determine the simple arithmetic average of total check successes divided by total checks performed.

8.17.6 Submit letters to the Federal Emergency Management Agency (FEMA) and the State of South Carolina informing them of the Check Results.

8.17.7 Acceptance Criteria:

1. The survey required above is completed, reviewed, and signed.

2. The report has been developed and issued. If the arithmetic average is less than 90%, resulting corrective actions will include schedules and completion dates.

8.17.8 Transmit copies of completed records to Records Storage per RDC-NGGC-0001, NGG Standard Records Management Program. An additional copy of the form may be maintained in the EP Files for the convenience of auditors.

8.18 EAL REVIEW

8.18.1 Frequency: Annual (Once per 364 days, not to exceed 455 days).

8.18.2 Arrangements shall be made to review the EALs with the State and County Emergency Preparedness representatives.

8.18.3 A memorandum will be generated by the EP staff documenting the review.

8.18.4 Acceptance Criteria: When the review is complete and the memorandum above is signed.

8.18.5 Complete Attachment 10.1, Certification and Review Form, and attach to the memorandum from above to document the review.

8.18.6 Transmit copies of completed records to Records Storage per RDC-NGGC-0001, NGG Standard Records Management Program. An additional copy of the form may be maintained in the EP Files for the convenience of auditors.

8.19 PNSC REVIEW OF EMERGENCY PLAN

8.19.1 Frequency: Annual (Once per 364 days, not to exceed 455 days).

8.19.2 The Emergency Preparedness staff will review the Robinson Emergency Plan annually. The purpose of this review is to determine if any revisions are required due to regulatory revisions, experiences of drills and exercises, or other requirements.

8.19.3 Following review, the Robinson Emergency Plan will be presented to the PNSC for review.

8.19.4 Revision to the Robinson Emergency Plan will be completed following PNSC review.

8.19.5 Acceptance Criteria: The Emergency Plan review and acceptance is completed by the PNSC.

8.19.6 The PNSC Minutes shall provide documentation of satisfactory completion of this activity.

8.20 MEDICAL EMERGENCY DRILL

8.20.1 Frequency: Annual (Once per 364 days, not to exceed 455 days).

8.20.2 The Medical Emergency Drill shall involve a simulated contaminated and injured individual and participation of the local offsite medical services agencies.

8.20.3 Acceptance Criteria: The acceptance criteria shall be in accordance with EPPRO-01.

8.20.4 The Medical Emergency Drill may be documented by sending a memo to file.

8.20.5 Transmit completed records to Records Storage per RDC-NGGC-0001, NGG Standard Records Management Program. A copy of the record may be maintained in the EP Files for the convenience of auditors.

8.21 ENVIRONMENTAL TEAM DRILLS

8.21.1 Frequency: Annual (Once per 364 days, not to exceed 455 days).

8.21.2 The Environmental Team shall demonstrate the collection and analysis of all sample media, (water, vegetation, soil, and air) and provisions for communications and record keeping. Communications shall be monitored to ensure that communications equipment is adequate and that the ability to communicate effectively is demonstrated.

8.21.3 The completion of the Environmental Team Drills shall be documented with a drill critique. The drill critique shall address, as a minimum, the sample collection, record keeping, the communication equipment, and the effectiveness of communications.

8.21.4 Acceptance Criteria: The acceptance criteria shall be as established in the Emergency Preparedness Scenario Objectives.

8.21.5 Complete an Attachment 10.1, Certification and Review Form, and attach a memo stating the date and time for the completion of this task. The memo shall also include a summary of the applicable drill objectives and the drill critique results.

8.21.6 Transmit completed records to Records Storage per RDC-NGGC-0001, NGG Standard Records Management Program. A copy of the record may be maintained in the EP Files for the convenience of auditors.

8.22 LAKE SIGN VERIFICATION

8.22.1 Frequency: Annual (Once per 364 days, not to exceed 455 days).

8.22.2 Perform an inspection of the Evacuation Warning signs posted at each public access to Lake Robinson and Lake Prestwood.

8.22.3 The signs are typically lettered with the following information:

1. IN THE EVENT OF AN IDENTIFIED EMERGENCY REQUIRING EVACUATION OF THE LAKE AREA YOU WILL BE NOTIFIED BY SIRENS. IF THIS SIGNAL IS OBSERVED PLEASE:

    a. LEAVE THE LAKE AREA IMMEDIATELY.

    b. TURN ON THE RADIO OR TELEVISION FOR INFORMATION AND INSTRUCTIONS.

8.22.4 Lake signs are located at the following locations:

1. Lake Robinson:

    a. Easterling Landing

    b. Johnson Landing

2. Chesterfield County:

    a. Morris Bridge Landing

3. Lake Prestwood:

    a. Sonovista Park Landing

8.22.5 Acceptance Criteria: The Evacuation Warning Sign inspection is considered satisfactory when they are found to be appropriately posted and clearly readable.

8.22.6 Complete Attachment 10.1, Certification and Review Form, to document the inspection and any corrective actions taken.

8.22.7 Transmit completed records to Records Storage per RDC-NGGC-0001, NGG Standard Records Management Program. A copy of the record may be maintained in the EP Files for the convenience of auditors.

8.23 AUDIT REQUIRED BY 10 CFR 50.54(t)

8.23.1 Frequency: As specified in the Code of Federal Regulations

8.23.2 A review of the Emergency Preparedness Program shall be accomplished by individuals who do not have any responsibility for implementation of the program.

8.23.3 This review shall include an evaluation of the adequacy of interfaces with State and County Emergency Preparedness organizations as well as Drills, Exercises, program capabilities, and procedure effectiveness.

8.23.4 The results of the review and evaluation, including recommendations for improvement, shall be documented in an appropriate report. The report shall be distributed to Plant and Corporate Management. Those portions of the report that concern the State and County Emergency Preparedness organizations shall be made available to them.

8.23.5 Acceptance Criteria: For the purpose of this procedure the Audit shall be considered acceptable when it is completed. Any resulting corrective actions shall include schedules and completion dates.

8.23.6 Copies of the report shall be distributed and filed as required by the reviewing organization(s).

8.24 LETTERS OF AGREEMENT UPDATE

8.24.1 Frequency: Annual (Once per 364 days, not to exceed 455 days).

8.24.2 A memorandum will be sent to each agreement organization requesting that they sign and return the document. This will indicate concurrence with the content of the respective Agreement Letter.

8.24.3 If necessary, new Agreement Letters will be negotiated. Changes to Letters of Agreement will be controlled by AP-021, Attachment 7.1 Licensing Document Change Request.

8.24.4 After changes are made, review the list of Letters in the E-Plan, and update as necessary.

8.24.5 Acceptance Criteria: The Agreement Letters shall be considered acceptable when the signed memorandum have been returned or new agreements negotiated, signed, and returned.

8.24.6 Complete an Attachment 10.1, Certification and Review Form, and attach to the signed memorandum.

8.24.7 Transmit completed records to Records Storage per RDC-NGGC-0001, NGG Standard Records Management Program. A copy of the record may be maintained in the EP Files for the convenience of auditors.

8.25 PUBLIC ALERT SIREN MAINTENANCE

8.25.1 Frequency: Annual (Once per 364 days, not to exceed 455 days).

8.25.2 Preventative maintenance will be performed by Transmission Maintenance or equivalent maintenance organization. The inspection should consist of the following: (CR 99-01257)

1. General area

    a. Clear weeds and brush from around the pole and controls. Clean area and spot paint as necessary.

2. Blower assembly

    a. Check all hardware for tightness, check belts and seal for condition and tension. Lubricate according to manufacturers published specifications. Clean and lubricate the relief valve.

3. Rotator and Chopper Assembly

    a. Check condition of blower pipe, fittings, mounting hardware, and conduit. Check turning gear for proper mesh, excessive wear, and lubricate according to manufacturers published specifications. Check Allen screws in pulleys for tightness.

4. Control Box

    a. Check cleanliness of control box. Check all hardware for tightness.

8.25.3 Return to service

1. Check for proper operation of blower, rotator, and chopper.

8.25 Public Alert Siren Maintenance (continued)

8.25.4 Acceptance Criteria: This maintenance shall be acceptable when the maintenance is complete, discrepancies corrected, and the growl check performed. The growl check may be performed locally or by the Emergency Preparedness Staff.

8.25.5 Emergency Preparedness shall be provided with documentation of satisfactory performance.

8.25.6 Complete an Attachment 10.1, Certification and Review Form, and attach the maintenance documentation.

8.25.7 Transmit completed records to Records Storage per RDC-NGGC-0001, NGG Standard Records Management Program. A copy of the record may be maintained in the EP Files for the convenience of auditors.

8.26 HOSPITAL AND RESCUE SQUAD TRAINING

8.26.1 Frequency: Annual (Once per 364 days, not to exceed 455 days).

8.26.2 A package of self directed training material will be prepared and sent to the Darlington County Rescue Squad, Carolina Pines Regional Medical Center, and Chesterfield General Hospital. At the same time actual training will also be offered.

8.26.3 Acceptance Criteria: The training shall be considered acceptable when the packages have been sent and training has been provided or refusal documented.

8.26.4 Complete an Attachment 10.1, Certification and Review Form, and attach to the memorandums, training material (if used), and documentation of training refusal if applicable.

8.26.5 Transmit completed records to Records Storage per RDC-NGGC-0001, NGG Standard Records Management Program. A copy of the record may be maintained in the EP Files for the convenience of auditors.

8.27 NRC EVALUATED EXERCISE

8.27.1 Frequency: As required by 10 CFR, Part 50, Appendix E.

8.27.2 The date of the exercise will be coordinated with the NRC, FEMA, State of South Carolina, Harris and Brunswick plants, and Chesterfield, Darlington, and Lee Counties.

8.27.3 The exercise scenario will be planned and developed to demonstrate the applicable Objectives from EPPRO-01, Program and Responsibilities.

8.27.4 The exercise is an event that checks the integrated capability of major response organizations and will include the attributes identified in PLP-007, Robinson Emergency Plan.

8.27.5 Acceptance Criteria: For the purpose of this procedure the exercise shall be considered acceptable when the exercise and critique are complete.

8.27.6 Records of the exercise shall consist of the Scenario, and Critique. Documentation such as NRC and other regulatory reports may also be included.

8.27.7 Transmit completed records to Records Storage per RDC-NGGC-0001, NGG Standard Records Management Program. A copy of the record may be maintained in the EP Files for the convenience of auditors.

8.28 AUGMENTATION DRILL

NOTE: The conduct of Augmentation Drills is one of the Objectives that is normally satisfied during a drill or exercise. However, an augmentation drill may be conducted separate from a regular scheduled drill as follows.

8.28.1 Frequency: Biennial (Once per 728 days, not to exceed 910 days).

8.28.2 Arrange with a member of senior management to conduct an unannounced off hours augmentation drill.

8.28.3 Access Dialogic to ensure individuals that should be listed from the ERO are entered in the database.

8.28.4 Station controllers in the TSC, OSC, and EOF to supervise the completion of augmentation forms.

8.28.5 Conduct the augmentation drill using the appropriate Dialogic scenario with the appropriate code, manual beeper activation, or other call-out methods, as necessary.

8.28.6 Contact the Control Room and request that they perform the following site-wide announcement over the plant PA (with VLC switch in the "EMERGENCY" position):

1. "ATTENTION ALL PERSONNEL. THIS IS A DRILL. EMERGENCY RESPONSE ORGANIZATION PERSONNEL REPORT TO YOUR DESIGNATED FACILITY".

8.28.7 Repeat the announcement.

8.28.8 ERO Members will respond to the site, comply with fitness for duty requirement, and respond to their designated emergency facility.

8.28.9 The controllers will ensure that the appropriate attachments from the EPOSC-01 and EPEOF-03 are completed, in their respective facilities, as each member of the ERO arrives.

8.28.10 ERO members may be dismissed once they have signed in on the attachments.

8.28.11 Document the completion of the augmentation drill using Attachment 10.1, Certification and Review Form. Include whether or not the requirements of Table 5.3.2-1, PLP-007, Robinson Emergency Plan, were met.

8.26 Augmentation Drill (continued)

8.28.12 Acceptance Criteria: This drill is satisfactory when the positions identified in PLP-007, Robinson Emergency Plan, Table 5.3.2-1 have been filled within the time specified in the table.

8.28.13 Transmit the completed records to Records Storage per RDC-NGGC-0001. A copy of check records may be maintained in EP files for the convenience of auditors.

8.29 PUBLIC SAFETY AND MEDIA INFORMATION

8.29.1 Safety Brochure Review

1. Frequency: Annual (Once per 364 days, not to exceed 455 days).

NOTE: This will normally be accomplished by contacting County Emergency Preparedness Directors.

2. The EP Staff in conjunction with the county and state agencies will review the Safety Brochure information and provide feed back to the person(s) responsible for the update to the brochure. This shall include, but is not limited to, an updated list of area schools with in the 10 EPZ.

   a. Acceptance Criteria: This action will be considered acceptable when the list of area schools has been updated and provided to personnel who are responsible for production of the safety information.

8.29.2 Safety Information Distribution

1. Frequency: Quarterly (Once per 92 days, not to exceed 115 days).

2. During the last month of each calendar quarter Emergency Preparedness personnel will survey the local hotels/motels to ensure they have adequate supplies of literature for transient personnel.

8.29.2 Safety Information Distribution (continued)

3. By agreement, inventories should be as follows:

   a. Landmark - approximately 150

   b. Lakeview Motel - approximately 25

   c. Hartsville Motel - approximately 50

   d. Missouri Inn - approximately 50

   e. Comfort Inn - approximately 75

   f. Fairfield Inn - approximately 100

4. These numbers are to provide a reasonable inventory based on occupancy rates, maintaining an exact number is not required.

5. Acceptance Criteria: This item will be considered complete and acceptable when the results are documented via memorandum to Emergency Preparedness Management.

8.29.3 Media Information (CR 44135)

1. Frequency: Annual (Once per 364 days, not to exceed 455 days).

2. The media handbooks used at the Joint Information Center should be reviewed for technical accuracy by the EP Staff, reviewed for content by PGN Corporate Communications, and updated for distribution.

3. Acceptance Criteria: This item will be considered complete and acceptable when the reviews and updates are documented via memorandum to Emergency Preparedness Management.

9.0 RECORDS

See individual sections for applicable records keeping.

10.0 ATTACHMENTS

10.1 Certification and Review Form

10.2 Selective Signaling System Dialing Codes

10.3 NRC ETS, ESSX, & SSS Monthly Telephone Operational Checks

10.4 Siren Alarm Or Out of Service Notification

10.5 Siren Power Suppliers And Service Information

10.6 ERO Beeper Activation Results

10.7 EOF, TSC, OSC, JIC, & Remote Facility Inventory Form

10.8 Emergency Facility & Equipment Check Guidance

10.9 Offsite Selective Signaling Phone Check

10.10 Siren Adequacy Review

ATTACHMENT 10.1
Page 1 of 1

Certification and Review Form

Surveillance Performed: _____ Work Order No. _____

_____

_____

Scheduled/Unscheduled (Circle one)

(If unscheduled, state reason for check _____

_____

_____

	Initials	Name (Print)	Date
Performed by	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____

Surveillance Complete: Date _____ Time _____

Surveillance Satisfactory: Yes / No (Circle one)

Comments: (Required if results were unsatisfactory, including determination of follow up actions necessary for example increased Surveillance frequency, AR, WR)_____

_____

_____

_____

_____

Approved by: _____ Date _____
Supervisor - Emergency Preparedness

ATTACHMENT 10.2
Page 1 of 1

Selective Signaling System Dialing Codes

Location	Individual Phone Code	Group Dialing Code			
		A1	A2	A3	A4
Chesterfield County EOC #1	58	X		X	
Chesterfield County EOC #2	59	X		X	
Chesterfield County Warning Point	38	X	X		
Control Room	42				X
Darlington County EOC #1	56	X		X	
Darlington County EOC #2	57	X		X	
Darlington County Warning Point	36	X	X		
EOF Emergency Response Manager	47				
EOF State/County Communicator	45				X
Lee County EOC #1	54	X		X	
Lee County EOC #2	55	X		X	
Lee County Warning Point	34	X	X		
Simulator	46				X
State Backup Warning Point	32	X	X		
State EOC #1	51	X		X	
State EOC #2	51	X		X	
State Warning Point	50	X		X	
TSC	44				X
Work Control Center	43				X

ATTACHMENT 10.3
Page 1 of 2

NRC ETS, ESSX, & SSS Monthly Telephone Operational Checks

NOTE:	A single line instrument is required to check OCL and ERDS.

Location/Circuit	Time/Date	Person Contacted	***Results
EOF, Rm 434			
ETS (857-5066) (ENS)			
ETS (857-5069) (HPN)			
ETS (857-5066) (ENS)			
ETS (857-5063) (RSCL)			
ESSX (383-3680)			
ESSX (383-3681)			
SSS (45)			
SSS (47)			
EOF, Rm 435			
ETS (857-5068) (PMCL)			
EOF, Rm 412			
ETS (857-5069) (HPN)			
ETS (857-5064) (MCL)			
ETS (857-5067) (OCL)**			
TSC, Rm 421			
ETS (857-5069) (HPN)			
ETS (857-5064) (MCL)			
TSC, Rm 422			
ETS (857-5063) (RSCL)			
TSC, Rm 424			
ETS (857-5068) (PMCL)			
TSC, Rm 425			
ETS (857-5066) (ENS)			
ETS (857-5069) (HPN)			
ETS (857-5066) ENS)			
ESSX (383-3682)			
ESSX (383-3683)			
SSS (44)			

**Plug another ETS phone into the OCL jack (bottom jack near door by other ETS phones, labeled "OCL") and check similar to other phone circuits.

NRC ETS, ESSX, & SSS Monthly Telephone Operational Checks

NOTE:	A single line instrument is required to check OCL and ERDS.

TSC, Rm 425			
ERDS (857-5065)*	_____	_____	_____
CONTROL ROOM			
ESSX (383-3684)	_____	_____	_____
ESSX (383-3685)	_____	_____	_____
SSS (42)	_____	_____	_____
SIMULATOR			
SSS (46)	_____	_____	_____
ADMIN Building, NRC Office			
ETS (857-5066) (ENS)	_____	_____	_____
OSC			
ESSX (383-3686)	_____	_____	_____
ESSX (383-3687)	_____	_____	_____
WORK CONTROL CENTER			
SSS (43)	_____	_____	_____

* See section 8.6 for instructions.

ATTACHMENT 10.4
Page 1 of 1

Siren Alarm Or Out of Service Notification

Date	Siren #	Location- (County & Physical)	Notification	Name	Time	IN/OUT Service	Reported by
			U2 Control Rm County Rep Telecomm Rep Other				
			U2 Control Rm County Rep Telecomm Rep Other				
			U2 Control Rm County Rep Telecomm Rep Other				
			U2 Control Rm County Rep Telecomm Rep Other				
			U2 Control Rm County Rep Telecomm Rep Other				

Siren Power Supplier and Service Information

SIREN #	COUNTY	LOCATION FROM HARTSVILLE OPS CENTER	PGN OR COOP	DIS# OR POLE #	TRANSFORMER # OR METER # (Account #)	FEEDER	SUB
1	CHESTERFIELD	HWY 1, 4 MI NE OF HWY 145	PGN	HT83BW	BY96BW	MCBEE 12	BETHUNE
2	CHESTERFIELD	INT OF SR 491 AND HWY 1	PEE DEE	32V/110	21902	32	N/A
3	CHESTERFIELD	SR 491 , .5 MI NW OF SR29	PEE DEE	31F/3	21394	31F	N/A
4	CHESTERFIELD	SR 569, 0.3 MI E OF SR 81	PEE DEE	29M/43	21955	29M	N/A
5	CHESTERFIELD	JUNIPER AVE., MCBEE,SC	PGN	HP16BW	BZ43BW	MCBEE 12	BETHUNE
6	CHESTERFIELD	SR 346, 0.3 MI NE OF SR 46, LAKE ROBINSON RD	PEE DEE	32H/8	21956	32H	N/A
7	DARLINGTON	SR 20 @ CHESTERFIELD COUNTY LINE	PEE DEE	30/45	21968	30K	N/A
8	DARLINGTON	UNDERGROUND BRANCH RD.,1.7 MI NW OF 102	PEE DEE	29G/12	21974	29G	N/A
9	CHESTERFIELD	HWY 1.3 MI SW OF MCBEE	PGN	GX84BW	BX61BW	MCBEE 12	BETHUNE
10	CHESTERFIELD	SR 711, 0.5 MI SW OF HWY 151, SOWELL RD	PGN	HW43BW	HW40BW	PINERIDGE	SEGARS
11	CHESTERFIELD	SR 172, 1 MI S OF SR 346	PEE DEE	32J46	21984	32J	N/A

Siren Power Supplier and Service Information

SIREN #	COUNTY	LOCATION FROM HARTSVILLE OPS CENTER	PGN OR COOP	DIS# OR POLE #	TRANSFORMER # OR METER #	FEEDER	SUB
12	DARLINGTON	SR 21 @ CHESTERFIELD COUNTY LINE, LAKEVIEW BLVD	PEE DEE	32/27	21370	32	N/A
13	DARLINGTON	SR 51, 0.7 MI S OF SR 23	PEE DEE	30A-51/2	21469	30A	N/A
14	DARLINGTON	SR 50, 1.5 MI N OF SR 115	PGN	AP64BW	AP63BW	BYRDTOWN	HARTSVILLE
15	CHESTERFIELD	SR 294, 1.3 MI W OF SR 31, MCKENZIE RD	PEE DEE	33H1/17A	21962	33H	N/A
16	CHESTERFIELD	INT OF SR 150 & SR 173, NEW HOPE RD &B ANDREWS	PEE DEE	33B5	21859	33	N/A
17	CHESTERFIELD	SR 172, 0.2 MI W OF HWY 151, KING POND RD	PGN	HL15BW	HL13BW	PINERIDGE	SEGARS
18	DARLINGTON	SR 38, 1.5 MI NE OF ROBINSON NUCLEAR PL, NEW MARKET RD	PEE DEE	41G/52	20923	41	N/A
19	DARLINGTON	SR 21, 0.2 MI SE SR 23, GARDENVALLEY	PGN	FR52BW	FR51BW	CLUB COLONY	SEGARS
20	DARLINGTON	SR 115, 2.1 MI NE OF HWY 102	PEE DEE	30A/46	21981	30A	N/A
21	DARLINGTON	SR 10, 1.6 MI S OF HWY 15, CENTERVILLE COMM.	PEE DEE	36/42J	21990	36	N/A

Siren Power Supplier and Service Information

SIREN #	COUNTY	LOCATION FROM HARTSVILLE OPS CENTER	PGN OR COOP	DIS# OR POLE #	TRANSFORMER # OR METER #	FEEDER	SUB
22	DARLINGTON	SR 233, 1 MI S OF SR 23, RAINBOW VIEW	PEE DEE	34D/3A	21957	34D	N/A
23	DARLINGTON	SR 85, 2.3 MI N OF SR 14, CLYDE SCHOOL RD	PGN	GU35BW	GU34BW	KELLEYTOWN	SEGARS
24	DARLINGTON	SR 23, 0.5 MI W OF HWY 151, OLD CAMDEN RD	PEE DEE	41/10	21982	41	N/A
25	DARLINGTON	SR 1223, 0.5 MI S OF SR 53, HILLCREST RD	PEE DEE	40H/13	42157	40H	N/A
26	DARLINGTON	SR 39, 0.2 MI NE HWY 151, NEW MARKET & GOLF COURSE	PGN	FK91BW	FK88BW	CLUB COLONY	SEGARS
27	DARLINGTON	SR 21, 2 MI NW OF HARTSVILLE, SC, LAKEVIEW TIRE	PGN	AB07BW	ABO6BW	CLUB COLONY	SEGARS
28	LEE	INT SR 17 & SR 76, BEYOND ASHLAND	BLACK RIVER	28-15/T	NO MTR# CO-OP	N/A	N/A
29	LEE	INT SR 13 & SR 14, ASHLAND CROSROADS	PGN	GQ51BW	GQ52BW	KELLEYTOWN	SEGARS
30	DARLINGTON	INT SR 52 & SR 12	PGN	GN30BW	GN27BW	KELLEYTOWN	SEGARS
31	DARLINGTON	225 PECAN ST., HARTSVILLE, SC	PGN	GE36BW	GE34BW	W. CAROLINA	SEGARS

Siren Power Supplier and Service Information

SIREN #	COUNTY	LOCATION FROM HARTSVILLE OPS CENTER	PGN OR COOP	DIS# OR POLE #	TRANSFORMER # OR METER #	FEEDER	SUB
32	DARLINGTON	W. CAROLINA AVE., HARTSVILLE, SC	PGN	ET29BW	ET27BW	TENTH ST.	HARTSVILLE
33	DARLINGTON	402 CALHOUN AVE., HARTSVILLE, SC	PGN	FD64BW	FD61BW	LAURENS	HARTSVILLE
34	DARLINGTON	INT OF HWY 15 & SR 24, SKATE RINK	PGN	U44BW	R34BW	BYRDTOWN	HARTSVILLE
35	LEE	INT SR 26 & SR 13, STOKES BRIDGE	PGN	CU66BW	CU65BW	KELLEYTOWN	SEGARS
36	DARLINGTON	BURNT BRANCH RD., 1 MI NW OF SR 65	PEE DEE	BR10BW	BR09BW	LYDIA	HARTSVILLE
37	DARLINGTON	SR 65, 1.3 MI SW OF HWY 151, DAVID KINGS HWY	PGN	BN70BW	BN69BW	LYDIA	HARTSVILLE
38	DARLINGTON	0.1 MI W OF HWY 151 S OF HWY 15 BYPASS	PGN	EE66BW	DP15BW	TENTH ST.	HARTSVILLE 115
39	DARLINGTON	SR 14, 3.5 MI NE HWY 151, BILLY FARROW RD	PEE DEE	EE64BW	DL99BW	N/A	N/A
40	LEE	SR 80, 0.8 MI NW OF HWY 15,US 15 & WOODHAM RD	PGN	STZ21	STZ20	40 CHURCH ST	BISHOPVILLE

Siren Power Supplier and Service Information

SIREN #	COUNTY	LOCATION FROM HARTSVILLE OPS CENTER	PGN OR COOP	DIS# OR POLE #	TRANSFORMER # OR METER #	FEEDER	SUB
41	DARLINGTON	SR 66, 1 MI W OF SR 52, GALLOWAY TOWN RD	PEE DEE	25/107	21977	25	N/A
42	DARLINGTON	HWY 403, 1.2 MI S OF HWY 15, OATS HWY	PGN	CC82BW	CC83BW	LYDIA	SEGARS
43	DARLINGTON	SR 2, 0.2 MI NE OF HWY 34, FINKS CROSS ROADS	PGN	BU49BW	BU48BW	LYDIA	SEGARS
44	DARLINGTON	SR 25, 0.7 MI NE OF HWY 151, FLYNN'S AT HENRY KING RD	PGN	EE65BW	JQ98	TENTH ST.	HARTSVILLE 115
45	DARLINGTON	US 1 AT BRIDGE IN MCBEE	PGN	BY73BW	HS84BW	MCBEE 12	BETHUNE

Contact the appropriate power supplier using the following phone numbers and supply the siren number, county, and pole, transformer, meter, or account number.

Progress Energy, Carolinas: (800) 401-5401
Pee Dee Electric Coop: (800) 343-4070 or (843) 669-7877
Black River Coop.: (803) 469-8060

ATTACHMENT 10.6
Page 1 of 1

ERO Beeper Activation Results

NOTE: Report any beeper malfunctions to Emergency Preparedness for repair and/or replacement.

RESPONDER'S NAME	ERO POSITION	TIME RECEIVED	DUPLICATE YES/NO	ETA FACILITY	REMARKS

Reviewed by: _____

Route to Emergency Preparedness within two (2) working days of check

ATTACHMENT 10.7
Page 1 of 1

EOF, TSC, OSC, JIC, & Remote Facility Inventory Form

NOTE: Less than the suggested quantity does not make the inventory unsatisfactory, provided replacements are being obtained.

	EOF	TSC	OSC	JIC	TSC Rm 422	TSC Rm 420	Remote
Clerical supplies - Pens, Markers, Paper, etc. (Ensure adequate supply is available, there is no suggested quantity.)	( )	( )	( )	( )	( )	( )	( )
First Aid Kit (1)	( )	( )		( )			( )
Flash Lights (3)	( )	( )					( )
Facility - Emergency Procedures: EOF = 10 TSC = 7 OSC = 3 JIC = 4	( )	( )	( )	( )			( )
Full Set - Emergency Procedures (1 full set per facility, for TSC/EOF/Remote include SAMG procedures)	( ) ( )	( ) ( )	( )	( )			( )
Set - State Emergency Procedures (SCORERP) (only 1 set located in the EOF)	( )						( )
Telephones: Rm 422 = 8; Rm 420 = 2; Remote					( )	( )	( )
Cleanliness = Check facilities for trash, wall charts clean, and general housekeeping.	( )	( )	( )	( )	( )	( )	( )
Copier, fax, and printer ink/toner cartridges	( )	( )		( )			( )

Satisfactory (√) / Comment(*) Comments: _____

_____

Completed by: _____ Date: _____

Emergency Facility & Equipment Check Guidance

TSC

Check general housekeeping.
Boards/panels clean.
Computer terminals operational (responds to mouse movement)
Clocks operational
Verify radio station license current (Local Government Radio) (CR 25282)

EOF

Check general cleanliness and order.
Boards/panels clean.
Computer terminals operational (responds to mouse movement)
Clocks operational
Siren computer is operational and alarms are clear.
Verify radio station licenses current (Local Government Radio, Enmon) (CR 25282)

Equipment Room check (AB-1 key)

Check general cleanliness and order.
R-38 operating, (Contact EC with equipment concerns.)
Check ventilation dampers closed. (Normal position)
Building exhaust fan running. (courtesy check)
ENMON Boxes (4) and HP cabinet (1) seals intact.

PBX Room tour

Check general cleanliness and order.
Check operation of Dialogic Computer. (Check 1777 phone line pick up and transfer. Also check 1003 pick up)
Check for room integrity.

General building walk down

Check for work that would affect the integrity of the building.

ATTACHMENT 10.9
Page 1 of 1

Offsite Selective Signaling Phone Check

Location/Circuit	Time/Date	Person Contacted	*Results
STATE SSS			
State Back Up Warning Point (32)			
State Warning Point (50)			
State EOC 1 (51)			
State EOC 2 (51)			
LEE COUNTY SSS			
Warning Point (34)			
Directors Office (54)			
Lee County EOC (55)			
CHESTERFIELD COUNTY SSS			
Warning Point (38)			
Office area (58)			
Chesterfield County EOC (59)			
DARLINGTON COUNTY SSS			
Warning Point (36)			
Darlington County EOC (56)			
Darlington County EOC Office (57)			

Siren Adequacy Review
Northeast Quadrant

Each zone should be inspected for population density increases, industrial additions, permanent large noise sources which could increase ambient sound levels. Back ground noise sources should be compared to previous reports for comparison.

REGION	INT	BACKGROUND NOISE SOURCE
R3		
R4		
R5		
R6		
R7		
R8		
R9		
R10		
R11		
R12		
R13		
R14		
R15		
R16		
R17		
R18		
R19		
R20		
R21		
R22		

SIREN ADEQUACY REVIEW
Southeast Quadrant

Each zone should be inspected for population density increases, industrial additions, permanent large noise sources which could increase ambient sound levels. Back ground noise sources should be compared to previous reports for comparison.

REGION	INT	BACKGROUND NOISE SOURCE
R1		
R2		
R23		
R24		
R25		
R26		
R27		
R28		
R29		
R30		
R31		
R44		
R45		
R46		
R47		
R48		
R49		
R50		
R51		
R52		
R63		

SIREN ADEQUACY REVIEW
Southwest Quadrant

Each zone should be inspected for population density increases, industrial additions, permanent large noise sources which could increase ambient sound levels. Back ground noise sources should be compared to previous reports for comparison.

REGION	INT	BACKGROUND NOISE SOURCE
R32		
R33		
R34		
R35		
R36		
R37		
R38		
R39		
R40		
R41		
R42		
R43		
R56		
R57		
R58		

SIREN ADEQUACY REVIEW
Northwest Quadrant

Each zone should be inspected for population density increases, industrial additions, permanent large noise sources which could increase ambient sound levels. Back ground noise sources should be compared to previous reports for comparison.

REGION	INT	BACKGROUND NOISE SOURCE
R53		
R54		
R55		
R59		
R60		
R61		
R62		
R64		
R65		

SIREN ADEQUACY REVIEW

I have reviewed the survey data and discussed population changes with the H.B. Robinson Emergency Preparedness staff. I have also reviewed applicable county records or discussed with the appropriated individuals concerning population changes and industrial changes within my county.

I have / do not have siren coverage areas that warrant further study.

_____/_____
County EM Director Chesterfield County

I have / do not have siren coverage areas that warrant further study.

_____/_____
County EM Director Darlington County

I have / do not have siren coverage areas that warrant further study.

_____/_____
County EM Director Lee County

Progress Energy	R Reference Use

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

PLANT OPERATING MANUAL

VOLUME 2

PART 5

EPTSC-07

DAMAGE ASSESSMENT

REVISION 5

SUMMARY OF CHANGES
PRR 87646

STEP #	REVISION COMMENTS
Step 8.7.3 Note	Added statements to clarify when radioanalysis is the appropriate method for determining the status of the fuel fission product barrier.

TABLE OF CONTENTS

8.7 DAMAGE ASSESSMENT

8.7.1 PURPOSE

1. The purpose of this procedure is to provide guidance and direction to the Technical Analysis Director and the Accident Assessment Team in the evaluation of core damage and implementation of accident assessment actions of PLP-007, Robinson Emergency Plan.

   This procedure provides methods used to identify the four major fuel conditions using containment radiation monitor readings, core exit thermocouple readings, hydrogen concentration, and subcooling: 1) no damage; 2) clad damage; 3) fuel overtemperature; and, 4) fuel melt.

8.7.2 RESPONSIBILITIES

1. The Technical Analysis Director is responsible for ensuring appropriate Accident Assessment Team activation and utilization of this procedure.

2. The Accident Assessment Team is responsible for implementation of this procedure.

8.7.3 INSTRUCTIONS

NOTE: This procedure uses two methods of core damage assessment: direct interpretation of plant instrumentation and radionuclide analysis. If a loss of coolant accident (LOCA) into containment has not occurred, containment radiation monitors will not be indicative of the fuel fission product barrier status. Radioanalysis is recommended for events that do not introduce the reactor coolant system (RCS) inventory into containment. Consideration should be given to radioanalysis of the RCS for core damage assessment when there is a primary side Loose Parts Monitoring System (LPMS) indication.

1. This procedure is arranged into 8 Work Packages.
   Work Package 1 may be used for either core damage assessment method; however, it is not required when assessing core damage with Work Packages 5, 6, and 7.

8.7.3 (Continued)

2. Work Packages 2, 3, and 4 are based on sampling and subsequent analysis and are dependent on how long the reactor has been at a constant power level. This method may be used to confirm the assessment in Work Packages 5, 6, and 7.

3. Work Packages 5, 6, and 7 are plant instrument specific. These work packages should be used to initially determine core damage.

4. Work Package 8 is a summary of assessment activities, incorporating available information from the other work packages.

5. The following Attachments are provided as informational materials or as a summary of information contained within the work packages.

   a. Attachment 8.7.5.9, Characteristics of Categories of Fuel Damage,

   b. Attachment 8.7.5.10, Core Protection,

   c. Attachment 8.7.5.11, Functional Restoration Procedures,

   d. Attachment 8.7.5.12, Definitions.

8.7.4 **RECORDS**

Documentation generated as result of performance of this procedure should be forwarded to EP for retention.

8.7.5 ATTACHMENTS

8.7.5.1 Work Package 1 - General Information Needed for All Assessment Methods

8.7.5.2 Work Package 2 - Assessment Using Radionuclide Analysis - Reactor Power Constant 30 Days or More

8.7.5.3 Work Package 3 - Assessment Using Radionuclide Analysis - Reactor Power Constant 4-30 Days

8.7.5.4 Work Package 4 - Assessment Using Radionuclide Analysis - Reactor Power Constant Less Than 4 Days

8.7.5.5 Work Package 5 - High Level Core Damage Assessment

8.7.5.6 Work Package 6 - Fuel Rod Clad Damage

8.7.5.7 Work Package 7 - Fuel Overtemperature Damage

8.7.5.8 Work Package 8 - Summary of Assessments

8.7.5.9 Characteristics of Categories of Fuel Damage

8.7.5.10 Core Protection

8.7.5.11 Function Restoration Procedures

8.7.5.12 Definitions

WORK PACKAGE 1-GENERAL INFORMATION NEEDED FOR ALL ASSESSMENTS

Work Package 1 - General Information Needed for Assessment Methods.

1. Use this work package first when using Work Packages 2, 3, and 4 to determine core damage. Work Packages 5, 6, and 7 may be completed without completing this work package. The information required for Work Packages 5, 6, and 7 is recorded within each package.

2. Obtain plant data and radiochemistry sample data as necessary to complete this package.

3. Use an ERFIS/EDS Terminal to obtain Plant data, as follows:

   a. Access the group library function

      - Located under turn on core "Real," for real time data display on EDS.

   b. Select "COREDAMG"

   c. A copy of the group may be printed for convenience.

4. Record sample times, dates, temperatures, pressures and corrected system volumes on the worksheet.

5. Use this package to correct reactor coolant and RHR system density where requested.

6. Use this package to convert sump level to total gallons of RHR system volume in containment.

WORK PACKAGE 1-GENERAL INFORMATION NEEDED FOR ALL ASSESSMENTS

CORE DAMAGE ASSESSMENT
SAMPLE DATA WORKSHEET

1.0 CONTAINMENT ATMOSPHERE

A. Date and time sample drawn: ___/___/___, _____ hours

B. CV temperature @ time of sample: _____ °F + 460 = _____ °R

C. CV pressure @ time of sample: _____ psig + 14.7 = _____ psia

D. CV volume (corrected): (1.612 E09) x (Step B + Step C) = _____ cc @ STP

2.0 REACTOR COOLANT SYSTEM

A. Date and time sample drawn: ___/___/___, _____ hours

B. RCS temperature @ time of sample: _____ °F

C. Pressurizer level @ time of sample: _____% x .01 = _____

D. Water density ratio: _____ = $\rho(t)/\rho(@STP)$

E. RCS volume (corrected):

[(2.29 E08) + (Step C)(3.34 E07)] x (Step D) = _____ cc

3.0 RHR SYSTEM

A. Date and time sample drawn: ___/___/___/, _____ hours

B. CV sump level @ time of sample:

(LI-801 or LI-802)

_____ (gallons in sump) x 3785.6 cc/gal

= _____ cc

C. If the RHR System is used during a LOCA event, then the RHR volume is determined as:

Step B + 3.7856 E07 cc = _____ cc

If the RHR System is used in a cooldown mode with the RCS intact, then the RHR volume is determined as:

[(2.29 E08) + (Step C in Section 2.0) (3.34 E07)] cc +

3.7856 E07 cc = _____ cc

D. Water density ratio: _____ = $\rho(t)/\rho(@STP)$

E. RHR volume (corrected): (Step C) x (Step D) = _____ cc

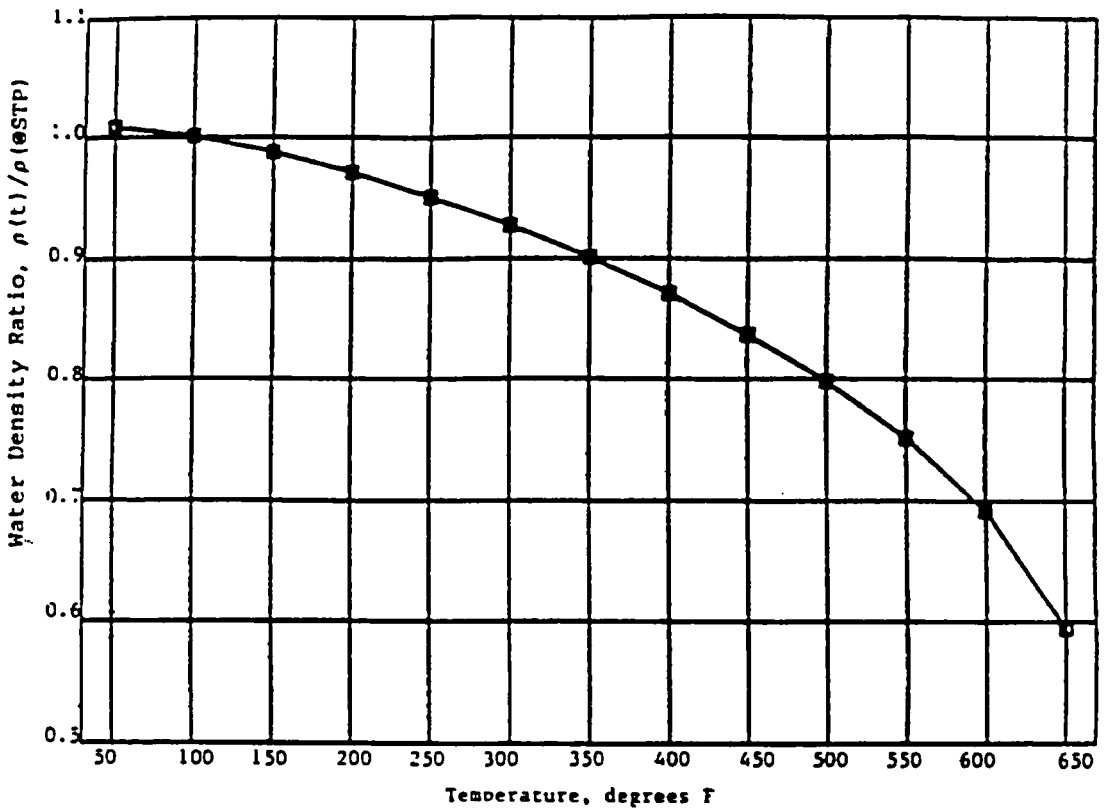
4.0 TIME OF REACTOR SHUTDOWN

A. Time _____ C. Percent power prior to shutdown _____

B. Date _____ D. Core Burnup _____EFPD

WORK PACKAGE 1-GENERAL INFORMATION NEEDED FOR ALL ASSESSMENTS

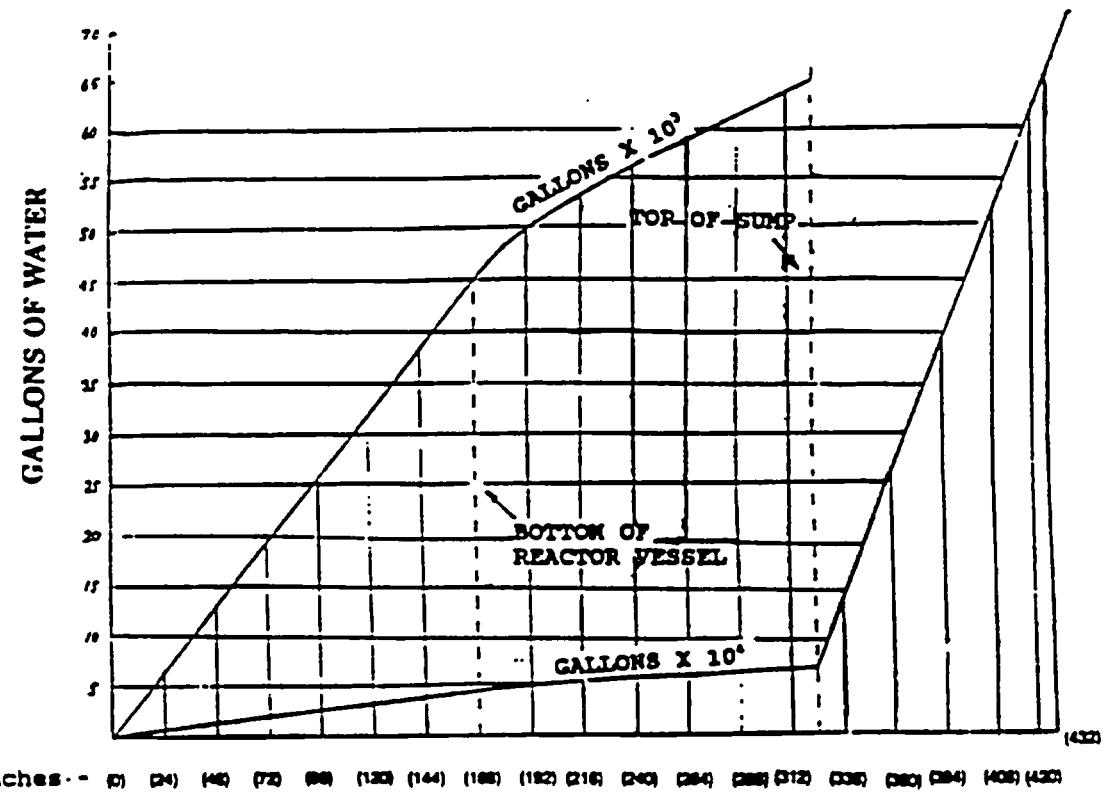
WATER DENSITY RATIO VS. TEMPERATURE



This graph assumes 2250 psia, however it can b used with lower pressures with a very small (<1%) error.

WORK PACKAGE 1-GENERAL INFORMATION NEEDED FOR ALL ASSESSMENTS

CONTAINMENT WATER VOLUME VS. SUMP LEVEL



WORK PACKAGE 2 - ASSESSMENT USING RADIONUCLIDE ANALYSIS - REACTOR POWER CONSTANT 30 DAYS OR MORE

NOTE: Constant reactor power is defined as the operating condition where there is less than 10% rated thermal power variation during the period.

1. Obtain the results of the radionuclide analysis from the Radiological Control Director and complete this package.

2. Enter the uCi/cc sample activity in the appropriate space (i.e., RCS, RHR, or CV) for each nuclide.

NOTE: Because of the long counting time associated with accurate strontium analysis, Ba-140 will serve as the initial fuel melt indicator until the strontium results are obtained and confirmed.

3. Using the decay constant provided in Column (2) for each isotope, divide the Column (1) sample activity by the Column (2) value which is the product of the decay constant and the time difference between sample time and reactor shutdown, to determine the corrected specific activity in Column (3).

NOTE: On this package, the sample activity in Column (1) is corrected during laboratory analysis back to the original activity at the time of sampling. To accurately assess core damage, this activity must be corrected to the specific activity at shutdown on Column (3) and the total activity in Column (5) which would have yielded that sample activity if the release had occurred at shutdown. This activity is compared to the adjusted power source term in Column (6) to estimate % of nuclide release. Columns (3) and (5) are representative activities if the release occurs at the instant of reactor shutdown. All total activities are corrected to time of shutdown to make calculations easier.

RCS pressure, temperature, or power transients may result in increased RCS iodine concentrations without clad damage (iodine spiking). Do not use iodine concentrations alone as evidence of fuel clad damage.

4. Record the specific system corrected volume from Work Package 1 in Column (4). Multiply the corrected specific activity from Column (3) by the volume in Column (4) to determine the corrected system total uCi content. Record the results in Column (5).

WORK PACKAGE 2 - ASSESSMENT USING RADIONUCLIDE ANALYSIS - REACTOR POWER CONSTANT 30 DAYS OR MORE

5. Obtain the percent constant reactor power prior to the incident and the Effective Full Power Days (EFPD) of fuel used in the cycle from the Plant Operations Director. Use this data where applicable to determine the correction terms identified in Column (6).

6. Divide Column (5) by Columns (6) and (7) and multiply by 100 to obtain the percent released per system in Column (8).

7. To obtain the total percent released, sum all three sample system results from Column (8) and record in Column (9).

8. Proceed to Work Package 8 - Summary of Assessments.

WORK PACKAGE 2 - ASSESSMENT USING RADIONCLIDE ANALYSIS - REACTOR POWER CONSTANT 30 DAYS OR MORE

>30 DAY NUCLIDE RELEASE WORKSHEET

NUCLIDE	SAMPLE	SAMPLE ACTIVITY uCi/cc +	$e^{-\lambda t}$ =	CORRECTED SPECIFIC ACTIVITY uCi/cc x	CORRECTED VOLUME cc =	CORRECTED SYSTEM TOTAL ACTIVITY uCi +	CORRECTION TERM + SOURCE[1] TERM uCi		x 100 =	PERCENT RELEASE	Σ TOTAL PERCENT RELEASED %
		(1) +	(2) =	(3) x	(4) =	(5) +	(6)	(7)		(8)	(9)
	RCS	+	e-.545t =	x	=	+	% power/100	+ 3.03E13	x 100 =		
Kr-87	RHR	+	e-.545t =	x	=	+	% power/100	+ 3.03E13	x 100 =		
	CV	+	e-.545t =	x	=	+	% power/100	+ 3.03E13	x 100 =		
	RCS	+	e-.244t =	x	=	+	% power/100	+ 4.20E13	x 100 =		
Kr-88	RHR	+	e-.244t =	x	=	+	% power/100	+ 4.20E13	x 100 =		
	CV	+	e-.244t =	x	=	+	% power/100	+ 4.20E13	x 100 =		
	RCS	+	e-.004t =	x	=	+	% power/100	+ 6.20E13	x 100 =		
I-131	RHR	+	e-.004t =	x	=	+	% power/100	+ 6.20E13	x 100 =		
	CV	+	e-.004t =	x	=	+	% power/100	+ 6.20E13	x 100 =		
	RCS	+	1 =	x	=	+	.9	+ 1.25E13	x 100 =		
Cs-134	RHR	+	1 =	x	=	+	.9	+ 1.25E13	x 100 =		
	CV	+	1 =	x	=	+	.9	+ 1.25E13	x 100 =		
	RCS	+	1 =	x	=	+	EFPD/1140	+ 8.87E12	x 100 =		
Cs-137	RHR	+	1 =	x	=	+	EFPD/1140	+ 8.87E12	x 100 =		
	CV	+	1 =	x	=	+	EFPD/1140	+ 8.87E12	x 100 =		
	RCS	+	e-.009t =	x	=	+	% power/100	+ 8.91E13	x 100 =		
Te-132	RHR	+	e-.009t =	x	=	+	% power/100	+ 8.91E13	x 100 =		
	CV	+	e-.009t =	x	=	+	% power/100	+ 8.91E13	x 100 =		
	RCS	+	1 =	x	=	+	EFPD/1140	+ 5.90E13	x 100 =		
Sr-89	RHR	+	1 =	x	=	+	EFPD/1140	+ 5.90E13	x 100 =		
	CV	+	1 =	x	=	+	EFPD/1140	+ 5.90E13	x 100 =		
	RCS	+	1 =	x	=	+	EFPD/1140	+ 6.16E12	x 100 =		
Sr-90	RHR	+	1 =	x	=	+	EFPD/1140	+ 6.16E12	x 100 =		
	CV	+	1 =	x	=	+	E FPD/1140	+ 6.16E12	x 100 =		
	RCS	+	e-.002t =	x	=	+	% power/100	+ 1.13E14	x 100 =		
Ba-140	RHR	+	e-.002t =	x	=	+	% power/100	+ 1.13E14	x 100 =		
	CV	+	e-.002t =	x	=	+	% power/100	+ 1.13E14	x 100 =		

REACTOR POWER LEVEL CONSTANT FOR 30 DAYS (LESS THAN 10% CHANGE)
t = (hours) time difference between sample time and reactor shutdown
EFPD = effective full power days
λ = (hours^{-1}) decay constant
(1) RNP-M/MECH-1742, Design Inputs for E-Plan Dose Assessment, Source Term Rad Monitor Information, Table 1

NOTE: Due to the long analysis time associated with Strontium analysis these columns will not be completed initially, but can be recorded upon receiving sample results.

WORK PACKAGE 3 - ASSESSMENT USING RADIONUCLIDE ANALYSIS - REACTOR POWER CONSTANT 4 - 30 DAYS

NOTE: Constant reactor power is defined as the operating condition where there is less than 10% rated thermal power variation during the period.

1. Obtain the results of the radionuclide analyses from the Radiological Control Director (RCD) and complete this package.

2. Complete Columns (1) through (5) in accordance with the instructions of Work Package 2.

3. Obtain the reactor power history for the 30 days prior to the incident and the Effective Full Power Days (EFPD) of fuel used in the cycle from the Plant Operations Director. As applicable, use the power history data, Pages 3 through 5 or the EFPD data to determine the correction terms identified in Column (6).

NOTE: If the thermal power has not been constant over the last 30 days prior to shutdown, then some isotopes have not reached equilibrium concentrations. If the power level has not been constant, adjustments for the effects of power changes must be made. Where core power levels have changed by more than 10% of rated thermal power, a separate line must be completed for I-131, Te-132, and Ba-140 at each power level.

RCS pressure, temperature, or power transients may result in increased RCS iodine concentrations without clad damage (iodine spiking). Do not use iodine concentrations alone as evidence of fuel clad damage.

4. Complete Columns (8) and (9) of this package.

5. Proceed to Work Package 8.

WORK PACKAGE 3 - ASSESSMENT USING RADIONUCLIDE ANALYSIS - REACTOR POWER CONSTANT 4 - 30 DAYS

≥4 DAY, <30 DAY NUCLIDE RELEASE WORKSHEET

NUCLIDE	SAMPLE	SAMPLE ACTIVITY uCi/cc	+	$e^{-\lambda t}$	=	CORRECTED SPECIFIC ACTIVITY uCi/cc	x	CORRECTED VOLUME cc	=	CORRECTED SYSTEM TOTAL ACTIVITY uCi	+	CORRECTION TERM + SOURCE[1] TERM uCi		x 100 =	PERCENT RELEASE	Σ	TOTAL PERCENT RELEASED %
		(1)		(2)		(3)		(4)		(5)		(6)	(7)		(8)		(9)
	RCS		+	e-.545t	=		x		=		+	% power/100	+ 3.03E13	x 100 =			
Kr-87	RHR		+	e-.545t	=		x		=		+	% power/100	+ 3.03E13	x 100 =			
	CV		+	e-.545t	=		x		=		+	% power/100	+ 3.03E13	x 100 =			
	RCS		+	e-.244t	=		x		=		+	% power/100	+ 4.20E13	x 100 =			
Kr-88	RHR		+	e-.244t	=		x		=		+	% power/100	+ 4.20E13	x 100 =			
	CV		+	e-.244t	=		x		=		+	% power/100	+ 4.20E13	x 100 =			
	RCS		+	e-.004t	=		x		=		+	Complete	6.20E13	x 100 =			
I-131	RHR		+	e-.004t	=		x		=		+	Att. 8.7.5.3	6.20E13	x 100 =			
	CV		+	e-.004t	=		x		=		+		6.20E13	x 100 =			
	RCS		+	1	=		x		=		+	9	+ 1.25E13	x 100 =			
Cs-134	RHR		+	1	=		x		=		+	9	+ 1.25E13	x 100 =			
	CV		+	1	=		x		=		+	9	+ 1.25E13	x 100 =			
	RCS		+	1	=		x		=		+	EFPD/1140	+ 8.87E12	x 100 =			
Cs-137	RHR		+	1	=		x		=		+	EFPD/1140	+ 8.87E12	x 100 =			
	CV		+	1	=		x		=		+	EFPD/1140	+ 8.87E12	x 100 =			
	RCS		+	e-.009t	=		x		=		+	Complete	8.91E13	x 100 =			
Te-132	RHR		+	e-.009t	=		x		=		+	Att. 8.7.5.3	8.91E13	x 100 =			
	CV		+	e-.009t	=		x		=		+		8.91E13	x 100 =			
	RCS		+	1	=		x		=		+	EFPD/1140	+ 5.90E13	x 100 =			
Sr-89	RHR		+	1	=		x		=		+	EFPD/1140	+ 5.90E13	x 100 =			
	CV		+	1	=		x		=		+	EFPD/1140	+ 5.90E13	x 100 =			
	RCS		+	1	=		x		=		+	EFPD/1140	+ 6.16E12	x 100 =			
Sr-90	RHR		+	1	=		x		=		+	EFPD/1140	+ 6.16E12	x 100 =			
	CV		+	1	=		x		=		+	EFPD/1140	+ 6.16E12	x 100 =			
	RCS		+	e-.002t	=		x		=		+	Complete	1.13E14	x 100 =			
Ba-140	RHR		+	e-.002t	=		x		=		+	Att. 8.7.5.3	1.13E14	x 100 =			
	CV		+	e-.002t	=		x		=		+		1.13E14	x 100 =			

REACTOR POWER LEVEL CONSTANT FOR ≥4 DAYS and <30 DAYS (LESS THAN 10% CHANGE)
t = (hours) time difference between sample time and reactor shutdown
EFPD = effective full power days
λ = (hours^{-1}) decay constant
(1) RNP-M/MECH-1742, Design Inputs for E-Plan Dose Assessment, Source Term Rad Monitor Information, Table 1

NOTE: Due to the long analysis time associated with Strontium analysis these columns will not be completed initially, but can be recorded upon receiving sample results.

WORK PACKAGE 3 - ASSESSMENT USING RADIONUCLIDE ANALYSIS - REACTOR POWER CONSTANT 4 - 30 DAYS

CORRECTION TERM WORKSHEET FOR I-131

	(C1)	(C2)	(C3)	(C4)	(C5)	(C6)
	P_j	t_j	t_{ji}	1-exp ($-\lambda t_j$)	exp($-\lambda t_{ji}$)	(C1)*(C4)*(C5)
Sum						

Sum (C2) = Must be equal to 720 hours.
Correction Term = Sum (C6)/100

P_j = % Average reactor power for period j
t_j = (hours) Duration of operation at P_j
t_{ji} = (hours) Duration from end of interval t_j to reactor shutdown

I-131 λ = 0.004 $HOURS^{-1}$

WORK PACKAGE 3 - ASSESSMENT USING RADIONUCLIDE ANALYSIS - REACTOR POWER CONSTANT 4-30 DAYS

CORRECTION TERM WORKSHEET FOR Te-132

	(C1)	(C2)	(C3)	(C4)	(C5)	(C6)
	P_j	t_j	t_{ji}	$1-\exp(-\lambda t_j)$	$\exp(-\lambda t_{ji})$	(C1)*(C4)*(C5)
Sum						

Sum (C2) = Must be equal to 720 hours.
Correction Term = Sum (C6)/100

P_j = % Average reactor power for period j
t_j = (hours) Duration of operation at P_j
t_{ji} = (hours) Duration from end of interval t_j to reactor shutdown

Te-132 $\lambda = 0.009$ HOURS^{-1}

WORK PACKAGE 3 - ASSESSMENT USING RADIONUCLIDE ANALYSIS - REACTOR POWER CONSTANT 4- 30 DAYS

CORRECTION TERM WORKSHEET FOR Ba-140

	(C1)	(C2)	(C3)	(C4)	(C5)	(C6)
	P_j	t_j	t_{ji}	1-exp ($-\lambda t_j$)	exp($-\lambda t_{ji}$)	(C1)*(C4)*(C5)
Sum						

Sum (C2) = Must be equal to 720 hours.
Correction Term = Sum (C6)/100

P_j = % Average reactor power for period j
t_j = (hours) Duration of operation at P_j
t_{ji} = (hours) Duration from end of interval t_j to reactor shutdown

Ba-140 λ = 0.002 $HOURS^{-1}$

WORK PACKAGE 4 - ASSESSMENT USING RADIONUCLIDE ANALYSIS - REACTOR POWER CONSTANT LESS THAN 4 DAYS

1. Obtain the results of the radionuclide analyses from the Radiological Control Director (RCD) and complete this package.

2. Complete Columns (1) through (5) in accordance with the instructions of Work Package 2.

3. Obtain the reactor power history for the 4 days prior to the incident and the Effective Full Power Days (EFPD) of fuel used in the cycle from the Plant Operations Director. As applicable, use the power history data and the EFPD data to determine the correction terms identified in Column (6).

NOTE: If the power level has not been constant, adjustments for the effects of power changes must be made. Where core power levels have changed by more than 10% of rated thermal power, a separate line must be completed for Kr-87, Kr-88, I-131, Te-132, and Ba-140 for each power level.

RCS pressure, temperature, or power transients may result in increased RCS iodine concentrations without clad damage (Iodine spiking). Do not use iodine concentrations alone as evidence of fuel clad damage.

4. Complete Columns (8) and (9) of this package.

5. Proceed to Work Package 8.

WORK PACKAGE 4 - ASSESSMENT USING RADIONUCLIDE ANALYSIS - REACTOR POWER CONSTANT LESS THAN 4 DAYS

<4 DAY NUCLIDE RELEASE WORKSHEET

NUCLIDE	SAMPLE	SAMPLE ACTIVITY uCi/cc +	$e^{-\lambda t}$ =	CORRECTED SPECIFIC ACTIVITY uCi/cc x	CORRECTED VOLUME cc =	CORRECTED SYSTEM TOTAL ACTIVITY uCi +	CORRECTION TERM + SOURCE[1] TERM uCi	x 100 =	PERCENT RELEASE	Σ TOTAL PERCENT RELEASED %
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	RCS	+	e-.545t =	x	=	+	Complete	+ 3.03E13	x 100 =	
Kr-87	RHR	+	e-.545t =	x	=	+	Att. 8.7.5.4	+ 3.03E13	x 100 =	
	CV	+	e-.545t =	x	=	+		+ 3.03E13	x 100 =	
	RCS	+	e-.244t =	x	=	+	Complete	+ 4.20E13	x 100 =	
Kr-88	RHR	+	e-.244t =	x	=	+	Att. 8.7.5.4	+ 4.20E13	x 100 =	
	CV	+	e-.244t =	x	=	+		+ 4.20E13	x 100 =	
	RCS	+	e-.004t =	x	=	+	Complete	6.20E13	x 100 =	
I-131	RHR	+	e-.004t =	x	=	+	Att. 8.7.5.4	6.20E13	x 100 =	
	CV	+	e-.004t =	x	=	+		6.20E13	x 100 =	
	RCS	+	1 =	x	=	+	.9	+ 1.25E13	x 100 =	
Cs-134	RHR	+	1 =	x	=	+	.9	+ 1.25E13	x 100 =	
	CV	+	1 =	x	=	+	.9	+ 1.25E13	x 100 =	
	RCS	+	1 =	x	=	+	EFPD/1140	+ 8.87E12	x 100 =	
Cs-137	RHR	+	1 =	x	=	+	EFPD/1140	+ 8.87E12	x 100 =	
	CV	+	1 =	x	=	+	EFPD/1140	+ 8.87E12	x 100 =	
	RCS	+	e-.009t =	x	=	+	Complete	8.91E13	x 100 =	
Te-132	RHR	+	e-.009t =	x	=	+	Att. 8.7.5.4	8.91E13	x 100 =	
	CV	+	e-.009t =	x	=	+		8.91E13	x 100 =	
	RCS	+	1 =	x	=	+	EFPD/1140	+ 5.90E13	x 100 =	
Sr-89	RHR	+	1 =	x	=	+	EFPD/1140	+ 5.90E13	x 100 =	
	CV	+	1 =	x	=	+	EFPD/1140	+ 5.90E13	x 100 =	
	RCS	+	1 =	x	=	+	EFPD/1140	+ 6.16E12	x 100 =	
Sr-90	RHR	+	1 =	x	=	+	EFPD/1140	+ 6.16E12	x 100 =	
	CV	+	1 =	x	=	+	EFPD/1140	+ 6.16E12	x 100 =	
	RCS	+	e-.002t =	x	=	+	Complete	1.13E14	x 100 =	
Ba-140	RHR	+	e-.002t =	x	=	+	Att. 8.7.5.4	1.13E14	x 100 =	
	CV	+	e-.002t =	x	=	+		1.13E14	x 100 =	

REACTOR POWER LEVEL CONSTANT FOR <4 DAYS (LESS THAN 10% CHANGE)
t = (hours) time difference between sample time and reactor shutdown
EFPD = effective full power days
λ = (hours^{-1}) decay constant
(1) RNP-M/MECH-1742, Design Inputs for E-Plan Dose Assessment, Source Term Rad Monitor Information, Table 1

NOTE: Due to the long analysis time associated with Strontium analysis these columns will not be completed initially, but can be recorded upon receiving sample results.

WORK PACKAGE 4 - ASSESSMENT USING RADIONUCLIDE ANALYSIS - REACTOR POWER CONSTANT LESS THAN 4 DAYS

CORRECTION TERM WORKSHEET FOR Kr-87

	(C1)	(C2)	(C3)	(C4)	(C5)	(C6)
	P_j	t_j	t_{ji}	1-exp ($-\lambda t_j$)	exp($-\lambda t_{ji}$)	(C1)*(C4)*(C5)
Sum						

Sum (C2) = Must be equal to 96 hours.
Correction Term = Sum (C6)/100

P_j = % Average reactor power for period j
t_j = (hours) Duration of operation at P_j
t_{ji} = (hours) Duration from end of interval t_j to reactor shutdown

Kr-87 $\lambda = 0.545$ hours^{-1}

WORK PACKAGE 4 - ASSESSMENT USING RADIONUCLIDE ANALYSIS - REACTOR POWER CONSTANT LESS THAN 4 DAYS

CORRECTION TERM WORKSHEET FOR Kr-88

	(C1)	(C2)	(C3)	(C4)	(C5)	(C6)
	P_j	t_j	t_{ji}	1-exp ($-\lambda t_j$)	exp($-\lambda t_{ji}$)	(C1)*(C4)*(C5)
Sum						

Sum (C2) = Must be equal to 96 hours.
Correction Term = Sum (C6)/100

P_j = % Average reactor power for period j
t_j = (hours) Duration of operation at P_j
t_{ji} = (hours) Duration from end of interval t_j to reactor shutdown

Kr-88 $\lambda = 0.244$ hours^{-1}

WORK PACKAGE 4 - ASSESSMENT USING RADIONUCLIDE ANALYSIS - REACTOR POWER CONSTANT LESS THAN 4 DAYS

CORRECTION TERM WORKSHEET FOR I-131

	(C1)	(C2)	(C3)	(C4)	(C5)	(C6)
	P_j	t_j	t_{ji}	1-exp ($-\lambda t_j$)	exp($-\lambda t_{ji}$)	(C1)*(C4)*(C5)
Sum						

Sum (C2) = Must be equal to 96 hours.
Correction Term = Sum (C6)/100

P_j = % Average reactor power for period j
t_j = (hours) Duration of operation at P_j
t_{ji} = (hours) Duration from end of interval t_j to reactor shutdown

I-131 λ = 0.004 $HOURS^{-1}$

WORK PACKAGE 4 - ASSESSMENT USING RADIONUCLIDE ANALYSIS - REACTOR POWER CONSTANT LESS THAN 4 DAYS

CORRECTION TERM WORKSHEET FOR Te-132

	(C1)	(C2)	(C3)	(C4)	(C5)	(C6)
	P_j	t_j	t_{ji}	1-exp ($-\lambda t_j$)	exp($-\lambda t_{ji}$)	(C1)*(C4)*(C5)
Sum						

Sum (C2) = Must be equal to 96 hours.
Correction Term = Sum (C6)/100

P_j = % Average reactor power for period j
t_j = (hours) Duration of operation at P_j
t_{ji} = (hours) Duration from end of interval t_j to reactor shutdown

Te-132 λ = 0.009 $HOURS^{-1}$

WORK PACKAGE 4 - ASSESSMENT USING RADIONUCLIDE ANALYSIS - REACTOR POWER CONSTANT LESS THAN 4 DAYS

CORRECTION TERM WORKSHEET FOR Ba-140

	(C1)	(C2)	(C3)	(C4)	(C5)	(C6)
	P_j	t_j	t_{ji}	$1-\exp(-\lambda t_j)$	$\exp(-\lambda t_{ji})$	(C1)*(C4)*(C5)
Sum						

Sum (C2) = Must be equal to 96 hours.
Correction Term = Sum (C6)/100

P_j = % Average reactor power for period j
t_j = (hours) Duration of operation at P_j
t_{ji} = (hours) Duration from end of interval t_j to reactor shutdown

Ba-140 $\lambda = 0.002$ HOURS^{-1}

WORK PACKAGE 5 - HIGH LEVEL CORE DAMAGE ASSESSMENT

1. Identify Current Plant Status.

a. Using the table and figures below, determine the possible status of the reactor core.

b. Go to the appropriate Work Package as indicated from the table.

High Level Core Damage Assessment	
Plant Status	**Fuel Rod Fission Product Status**
Core Exit Thermocouples LESS THAN 700°F *AND* Containment Radiation Levels LESS THAN Figure 1 mRad/hr	No Core Damage; Continue to Monitor Plant Parameters
Core Exit Thermocouples LESS THAN 2000°F *AND* Containment Radiation LESS THAN Figure 2 or Figure 3 mRad/hr	Possible Fuel Rod Clad Damage Go To Work Package 6
Core Exit Thermocouples GREATER THAN 2000°F *OR* Containment Radiation GREATER THAN Figure 2 or Figure 3 mRad/hr	Possible Fuel Overtemperature Damage Go To Work Package 7

WORK PACKAGE 5 - HIGH LEVEL CORE DAMAGE ASSESSMENT

Figure 1
Dose Rate vs. Time - (No Fuel Damage)

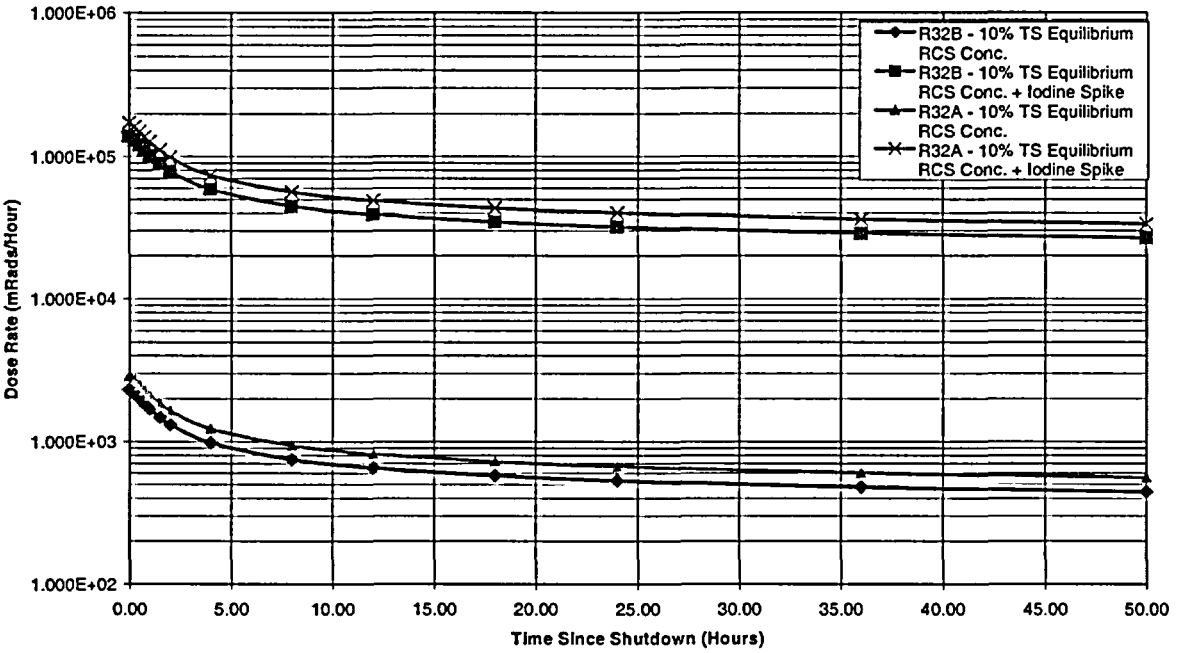
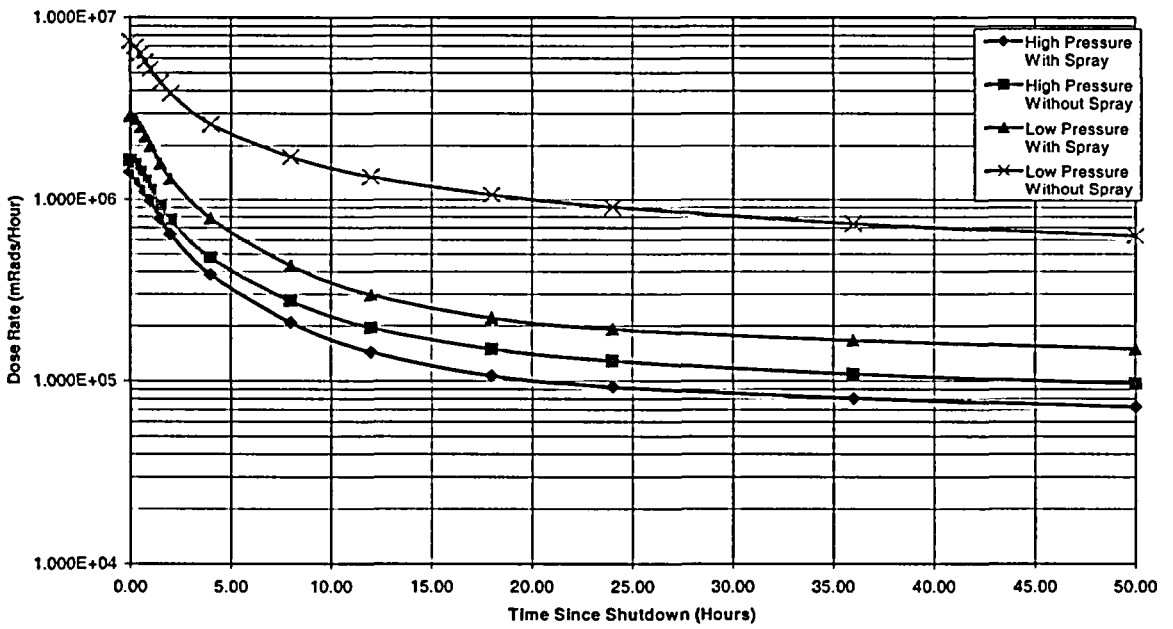


Figure 2 - Detector R-32A
Dose Rate vs. Time (1% Failed Fuel)



WORK PACKAGE 5 - HIGH LEVEL CORE DAMAGE ASSESSMENT

Figure 3 - Detector R-32B
Dose Rate vs. Time (1% Failed Fuel)

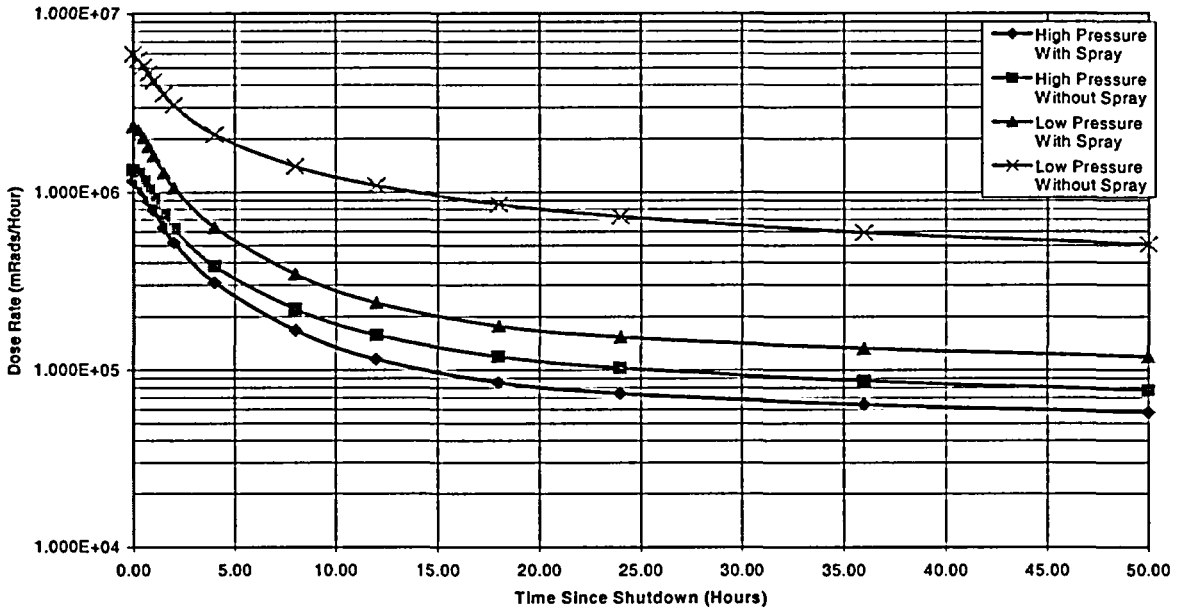
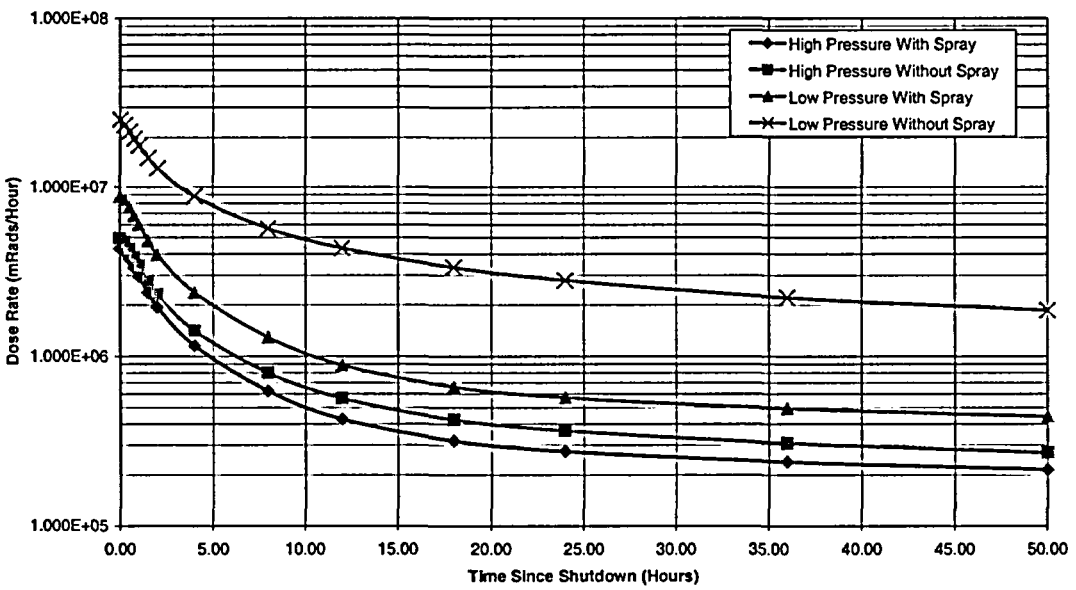


Figure 4 - Detector R-32A
(100% Failed Fuel, NUREG-1465 Short Term Release)



WORK PACKAGE 5 - HIGH LEVEL CORE DAMAGE ASSESSMENT

Figure 5 - Detector R-32B
(100% Failed Fuel, NUREG-1465 Short Term Release)

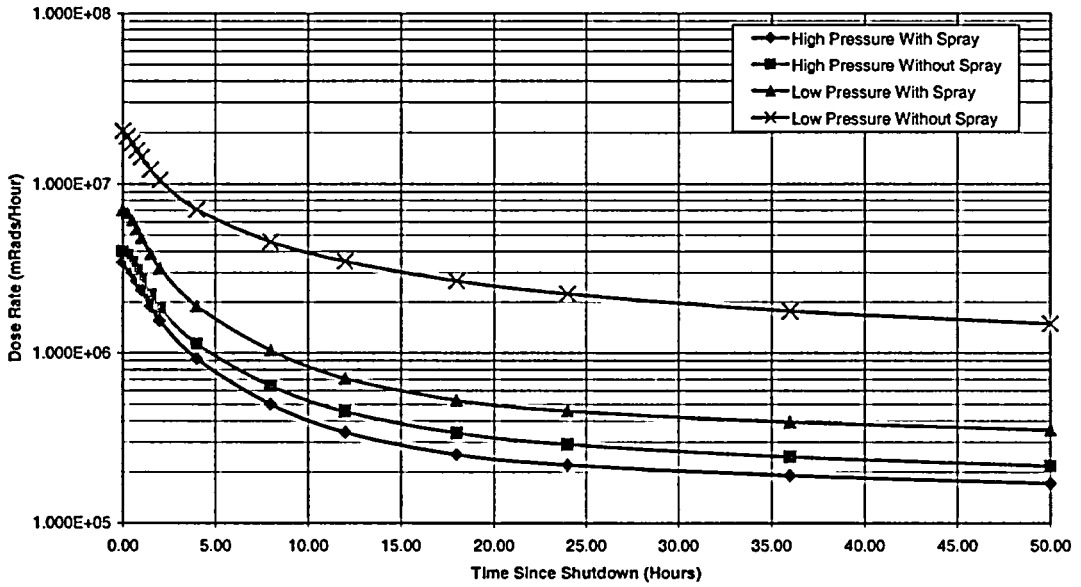
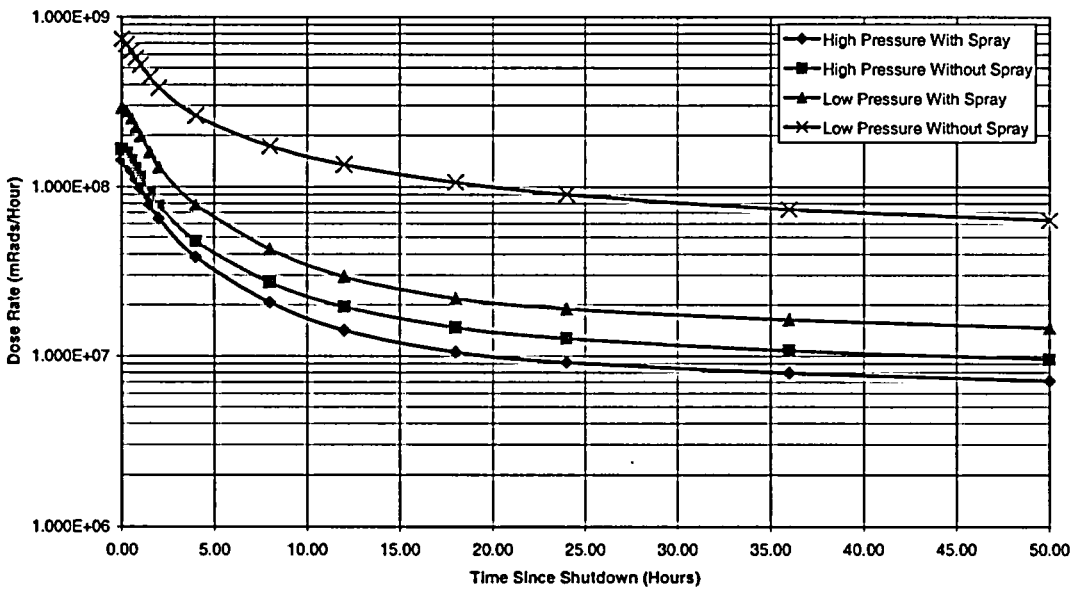
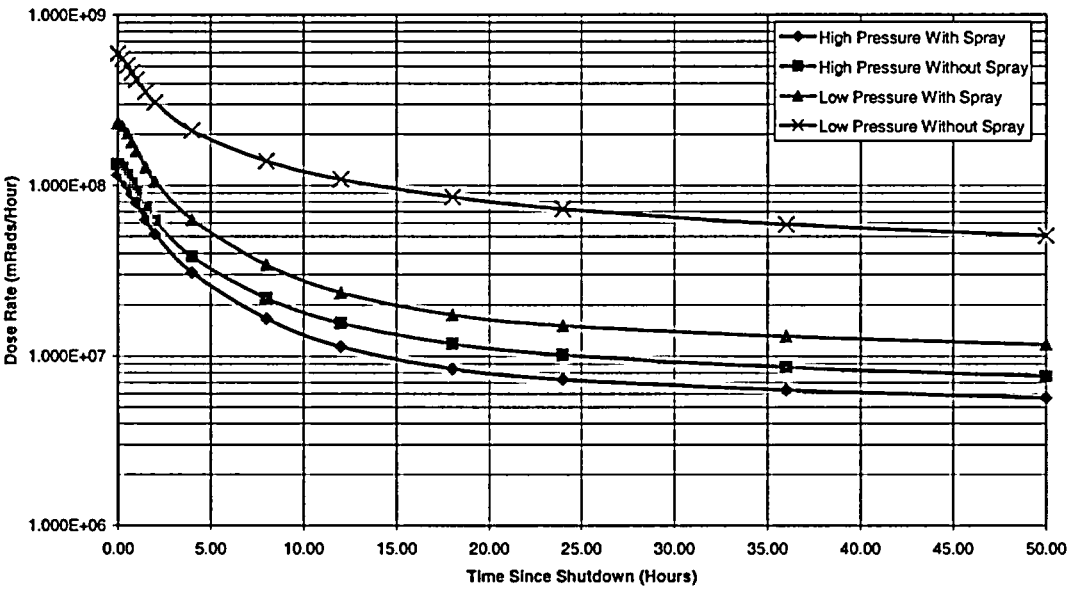


Figure 6 - Detector R-32A
(100% Failed Fuel, NUREG-1465 Release)



WORK PACKAGE 5 - HIGH LEVEL CORE DAMAGE ASSESSMENT

Figure 7 - Detector R-32B
(100% Failed Fuel, NUREG-1465 Release)



WORK PACKAGE 6 - FUEL ROD CLAD DAMAGE

1. Estimate Fuel Rod Clad Damage Based on Containment Radiation Levels.
   a. Find containment radiation level for 100% clad damage from Figure 4 or Figure 5 for the respective detector.
   b. Obtain current containment radiation level readings for R-32A or R-32B as applicable.
   c. Estimate clad damage using:

$$\%\ \text{Clad Damage}_{CRM} = \frac{\text{Current Containment Radiation Level}}{\text{Predicted Containment Radiation Level at 100\% Clad Damage}}$$

$$= \_\_\_\_\_$$

2. Estimate Fuel Rod Clad Damage Based on Core Exit Thermocouple Readings.
   a. With RCS Pressure GREATER THAN 1600 psig:

$$\%\ Clad\ Damage_{CET} = \frac{Number\ of\ CETs > 1400°F}{Total\ Number\ of\ Operable\ CETs}$$

$$= \_\_\_\_\_$$

   b. With RCS Pressure LESS THAN 1600 psig:

$$\%\ Clad\ Damage_{CET} = \frac{Number\ of\ CETs > 1200°F}{Total\ Number\ of\ Operable\ CETs}$$

$$= \_\_\_\_\_$$

3. Confirm Reasonableness of Clad Damage Estimates.
   a. Compare to expected response
      - Containment Hydrogen Concentration LESS THAN 0.4% volume percent
      - RVLIS LESS THAN 54% AND GREATER THAN 39%
      - Hot Leg RTD GREATER T_{sat} AND THAN LESS THAN 650°F
      - Source Range Monitor GREATER THAN 1000 cps
      - Difference in clad damage estimates from containment radiation and core exit thermocouples LESS THAN 50%, using

$$\text{ABSOLUTE VALUE} = \left[\frac{\%\ \text{Clad Damage}_{CRM} - \%\ \text{Clad Damage}_{CET}}{\%\ \text{Clad Damage}_{CRM}} \right]$$

$$= \_\_\_\_\_$$

WORK PACKAGE 6 - FUEL ROD CLAD DAMAGE

4. If the expected response is not obtained, determine if the deviation can be explained from the accident progression:

   - Injection of water to the RCS
   - Bleedpaths form the RCS
   - Direct radiation to the containment monitors

   or

   from conservatisms in the prediction model:

   - fuel burnup
   - fission product retention in the RCS
   - fission product removal from containment.

5. **IF** clad damage estimates have increased by more than 1% in the past 30 minutes **OR** estimates exceed 2% clad damage, **THEN** report the potential for an upgrade in classification to the Technical Analysis Director and the Plant Operations Director.

6. Complete appropriate sections of Work Package 8.

WORK PACKAGE 7 – FUEL OVERTEMPERATURE DAMAGE

CAUTION

As many TC's as possible should be used for evaluation of core temperature conditions. Caution must be used if a TC reads offscale - low or is reading considerably different from neighboring TC's as it may have failed.

1. Estimate Fuel Overtemperature Damage Based on Containment Radiation Levels.

   a. Find containment radiation level for 100% core overtemperature damage from Figure 6 or Figure 7.

   b. Obtain current containment radiation level readings for R-32A or R-32B as applicable.

   c. Estimate overtemperature damage using:

$$\%\ \text{Core Damage}_{CRM} = \frac{\text{Current Ctmt Radiation Level}}{\text{Predicted Ctmt Radiation Level at 100\% Overtemp Damage}}$$

$$= \_\_\_\_\_$$

2. Estimate Fuel Overtemperature Damage Based on Core Exit Thermocouple Readings.

   a. Obtain current core exit thermocouple temperature readings.

   b. Estimate overtemperature damage using:

$$\%\ Core\ Damage_{CET} = \frac{Number\ of\ CETs > 2000^{\circ}F}{Total\ Number\ of\ Operable\ CETs}$$

$$= \_\_\_\_\_$$

3. Confirm Reasonableness of Fuel Overtemperature Damage Estimates.

   a. Compare to expected response

   - RVLIS LESS THAN 39%
   - Hot Leg RTD GREATER THAN 650°F

- Source Range Monitor GREATER THAN 1000 cps
- Difference fuel overtemperature estimates from containment radiation and core exit thermocouples LESS THAN 50%, using:

$$\text{ABS}_{\text{L}}\ \text{ABSOLUTE VALUE} = \left[\frac{\%\ \text{Core Damage}_{\text{CRM}} - \%\ \text{Core Damage}_{\text{CET}}}{\%\ \text{Core Damage}_{\text{CRM}}}\right]$$

$$= \_\_\_\_\_$$

- Containment hydrogen concentration

NOTE:	Containment radiation monitor and core exit thermocouple estimates are not expected to deviate from hydrogen estimate by more than 25% damage.

4. Obtain containment hydrogen concentration at 100% core overtemperature from table below:

Core Overtemperature Estimate Based on Containment Hydrogen Concentration		
RCS Pressure	Water injection to the RCS	Predicted Containment Hydrogen Concentration
Less Than 1050 psig	Yes	Obtain H_2 volume percent for 50% Zirc reaction line from CA-3, Figure 3-1
	No	Obtain H_2 volume percent for 25% Zirc reaction line from CA-3, Figure 3-1
Greater Than 1050 psig	Yes	Obtain H_2 volumes percent for 50% and 75% Zirc reaction line from CA-3, Figure 3-1 and obtain average
	No	Obtain H_2 volume percent for 25% Zirc reaction line from CA-3, Figure 3-1

5. Estimate overtemperature damage using:

$$\%\ \text{Core Damage}_{\text{Hyd}} = \frac{\text{Current } H_2 \text{ Concentration}}{\text{Predicted } H_2 \text{ Concentration at 100\% Overtemp Damage}}$$

$$= \_\_\_\_\_$$

6. If expected response is not obtained, determine if the deviation can explained from the accident progression:

   - Injection of water to the RCS
   - Bleed paths from the RCS
   - Direct radiation to the containment radiation monitors
   - Hydrogen burn in containment or operation of hydrogen igniters

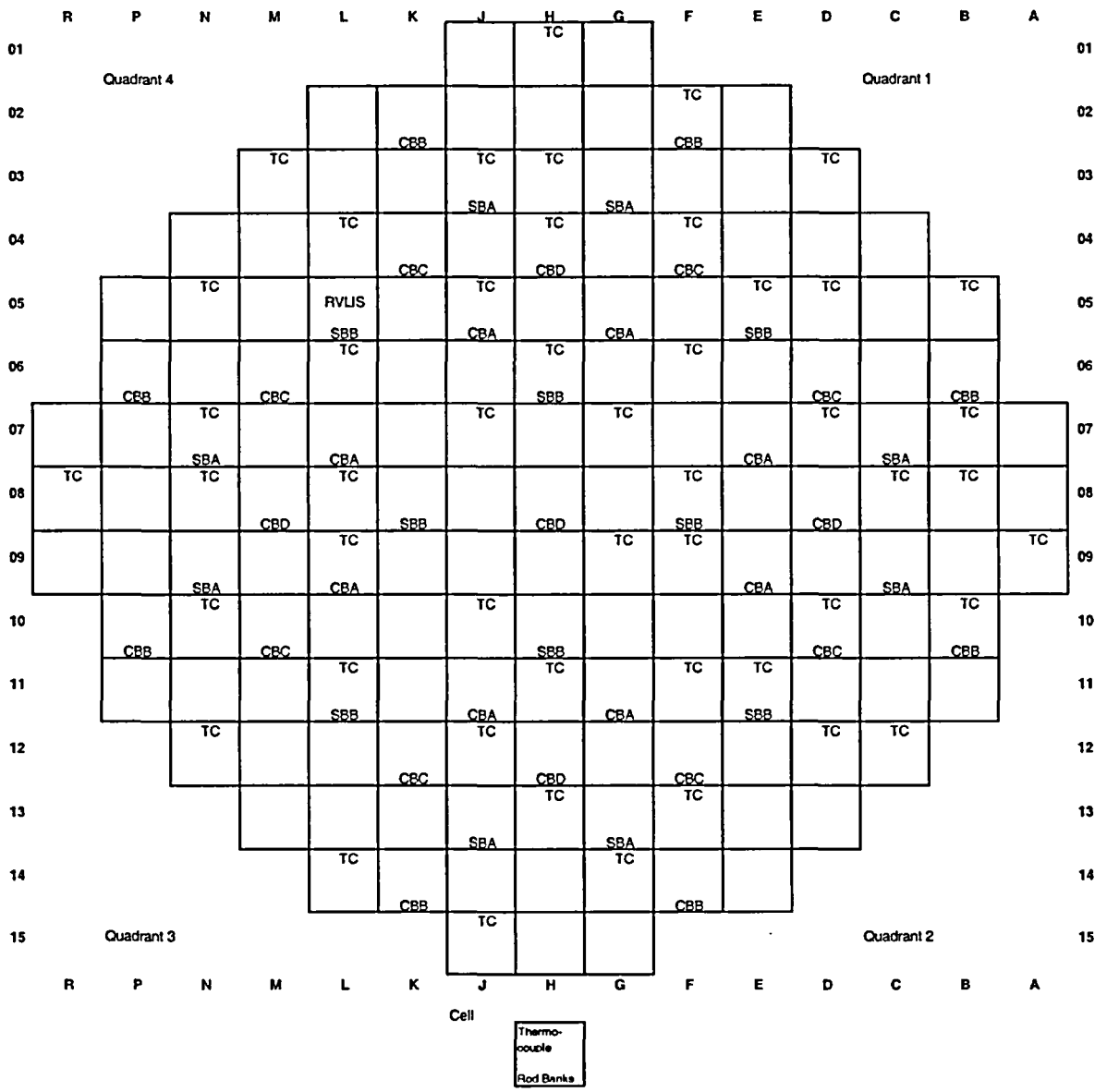
   or

   from conservatisms in the predictive model:

   - fuel burnup
   - fission product retention in the RCS
   - fission product removal from containment.

7. Report fuel overtemperature estimate to Technical Analysis Director and Plant Operations Director.

8. Complete appropriate sections of Work Package 8.


R P N M L K J H G F E D C B A
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
Quadrant 4
Quadrant 1
Quadrant 3
Quadrant 2
TC
CBB
CBC
CBD
SBA
SBB
CBA
RVLIS
Cell
Thermo-couple
Rod Banks

WORK PACKAGE 8 - SUMMARY OF ASSESSMENTS

1. Use this work package to prepare the Core Damage Assessment Summary Report (Page 2 and 3).

   a. Complete Sections 1, a, b, and c of this package.

   b. If available, convert results from Work Packages 2, 3, or 4, using this package.

2. Complete all sections for which data is available on previous work packages.

3. Transmit full or partial report to Technical Analysis Director and Plant Operations Director.

4. Repeat this procedure as directed.

5. Records of actions taken (work sheets and major communications) will be given to the Technical Analysis Director.

WORK PACKAGE 8 - SUMMARY OF ASSESSMENTS

CORE DAMAGE ASSESSMENT SUMMARY REPORT

1. The implementation of EPTSC-07 has been completed. Based on an analysis of specific indicators the core damage status is as follows:

Analytical Source

		NO	CLAD	OVER TEMP	MELT
_____ A.	CV CHRM R32 A or B				
_____ B.	Core Exit Thermocouples/RVLIS				
_____ C.	Hydrogen Levels				
_____ D.	Containment Atmosphere				
_____ E.	Reactor Coolant System				
_____ F.	RHR System				

2. Core Damage Assessment Definition - complete the appropriate section based on the above source and status.

   Since it is probable that more than one type of damage may have occurred in the core, it is best to predict a range of estimated core damage.

WORK PACKAGE 8 - SUMMARY OF ASSESSMENTS

a. Core degradation indicated by CV High Range Monitors R-32A/B

_____ No damage
_____ > RCS + Pre-existing Iodine Spike
_____ > 60% Gap Release
_____ > 5% Core Release

b. Core degradation identified by core exit thermocouples (CET/RCS Pressure

_____ CET <700°F
_____ CET <700°F - <1200°F
_____ CET >1200°F/RCS Pressure <1050 psig
_____ CET >1600°F/RCS Pressure >1050 psig
_____ CET >2300°F

c. Percent zirconium-water reaction based on hydrogen

Total Containment H_2 _____ cc
Total RCS H_2 _____ cc

_____% clad reacted (from CA-3, Figure 3-1)

d. Percent core damage indicated by isotope release fractions.

ISOTOPE	CLAD FAILURE %	FUEL OVERTEMP. %	FUEL MELT %
Kr-87			
Kr-88			
I-131			
Cs-134			
Cs-137			
Te-132			
Sr-89			
Ba-140			

WORK PACKAGE 8 - SUMMARY OF ASSESSMENTS

Comments: _____

_____

_____

_____

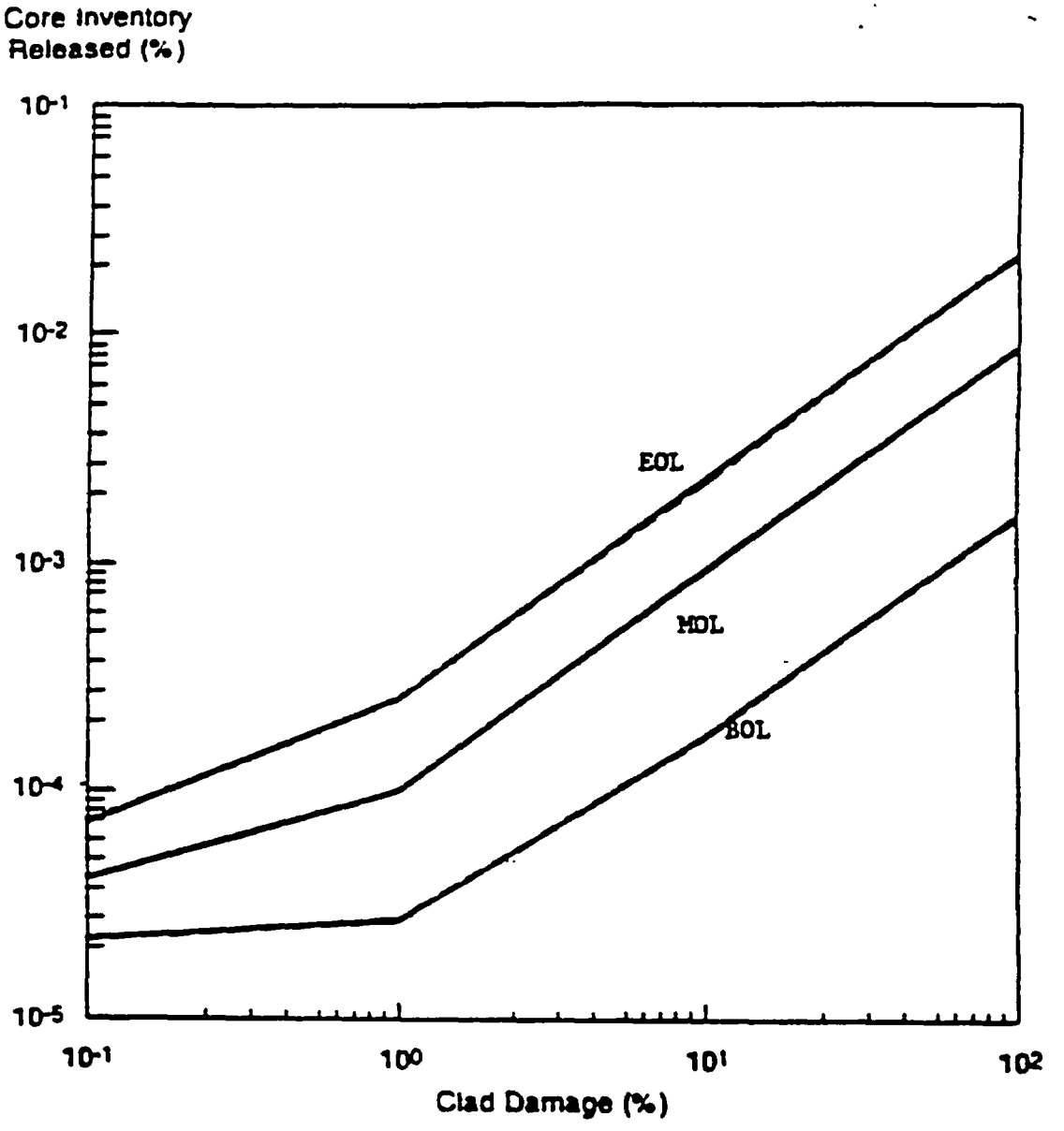
Initiated By: _____ Date: _____

Time: _____

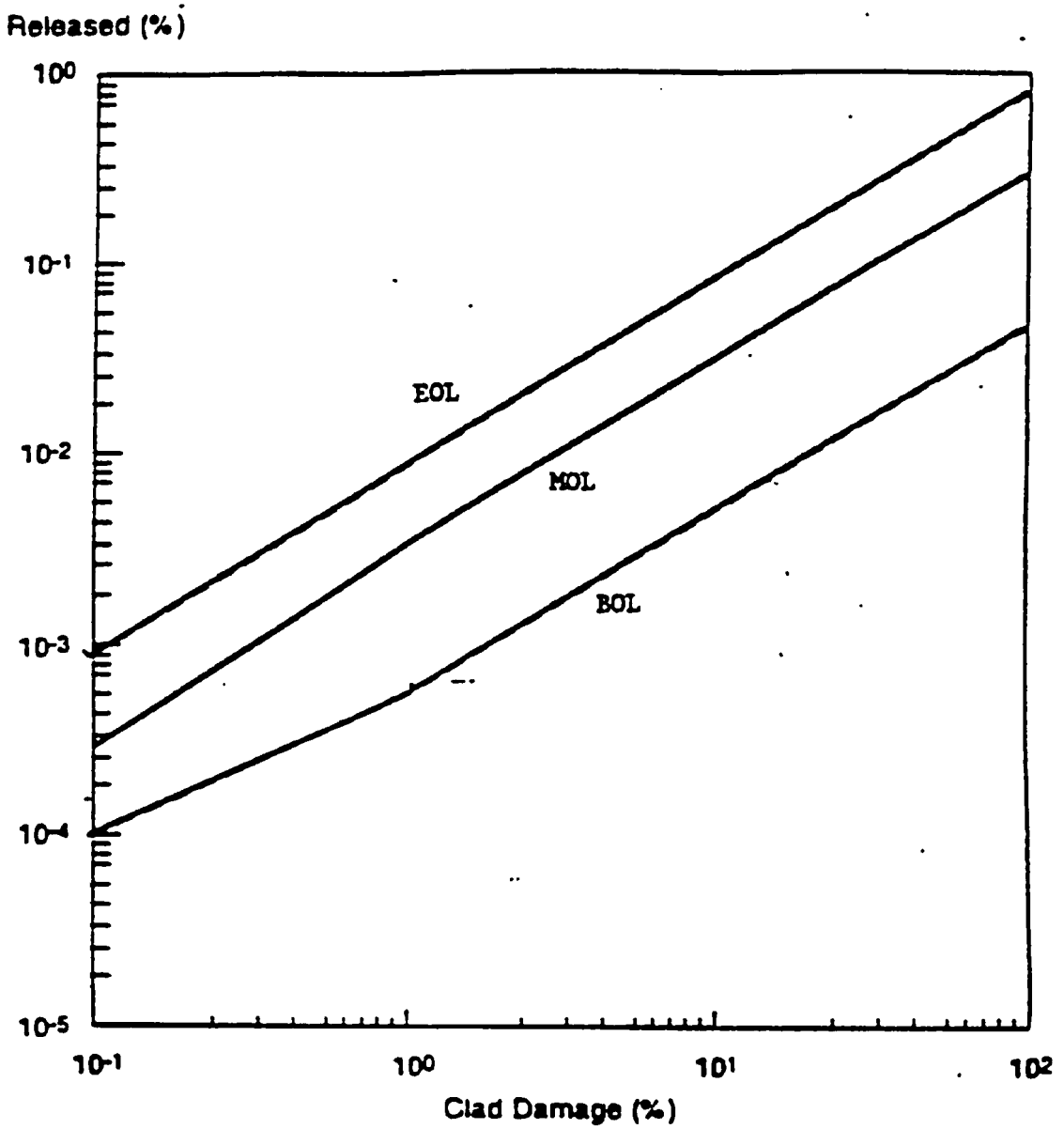
Reviewed By: _____ Date: _____
Technical Analysis Director

Approved By: _____ Date: _____
Plant Operations Director

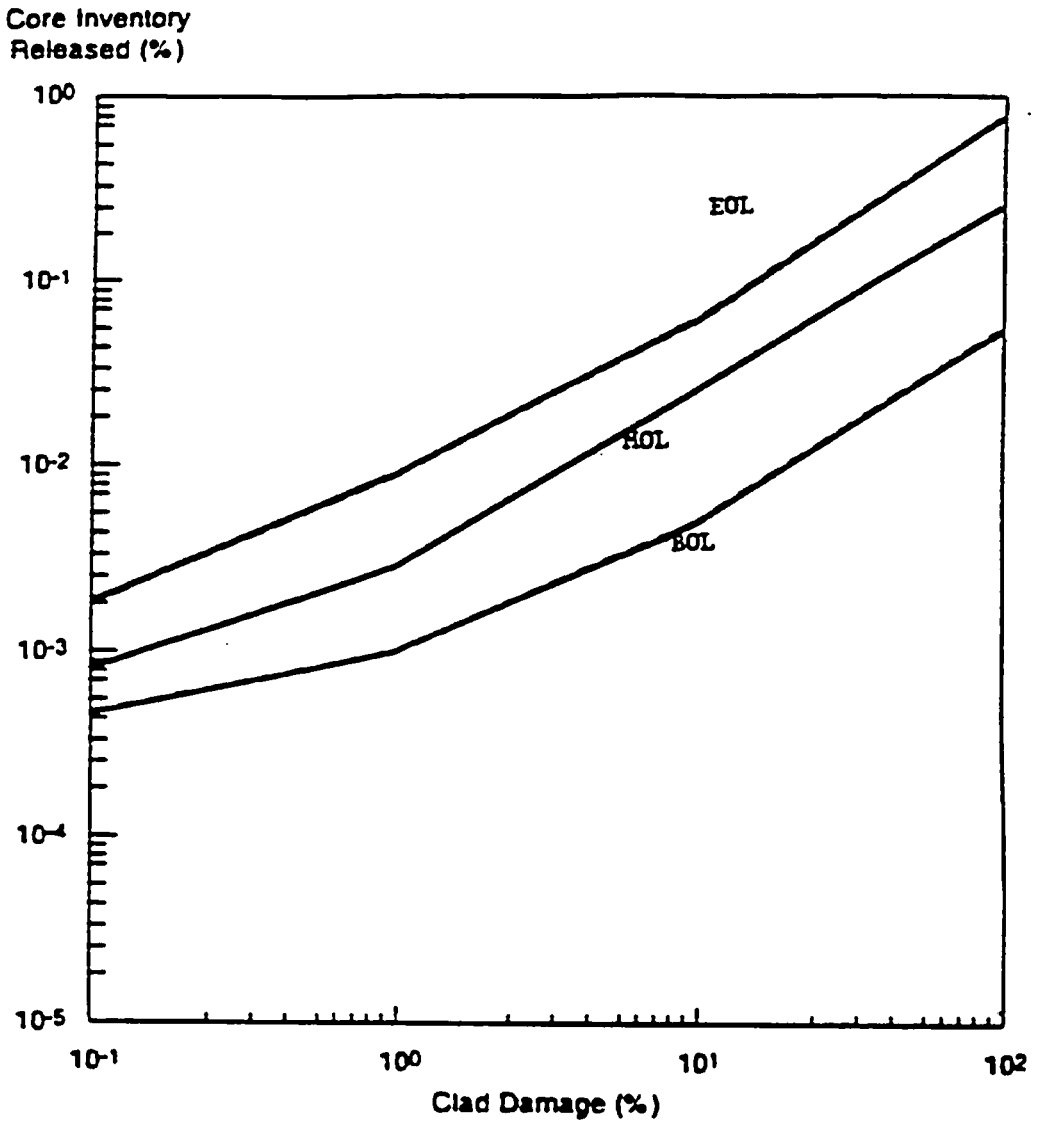
RELATIONSHIP OF % CLAD DAMAGE WITH
% CORE INVENTORY RELEASED OF Kr-87, Kr-88



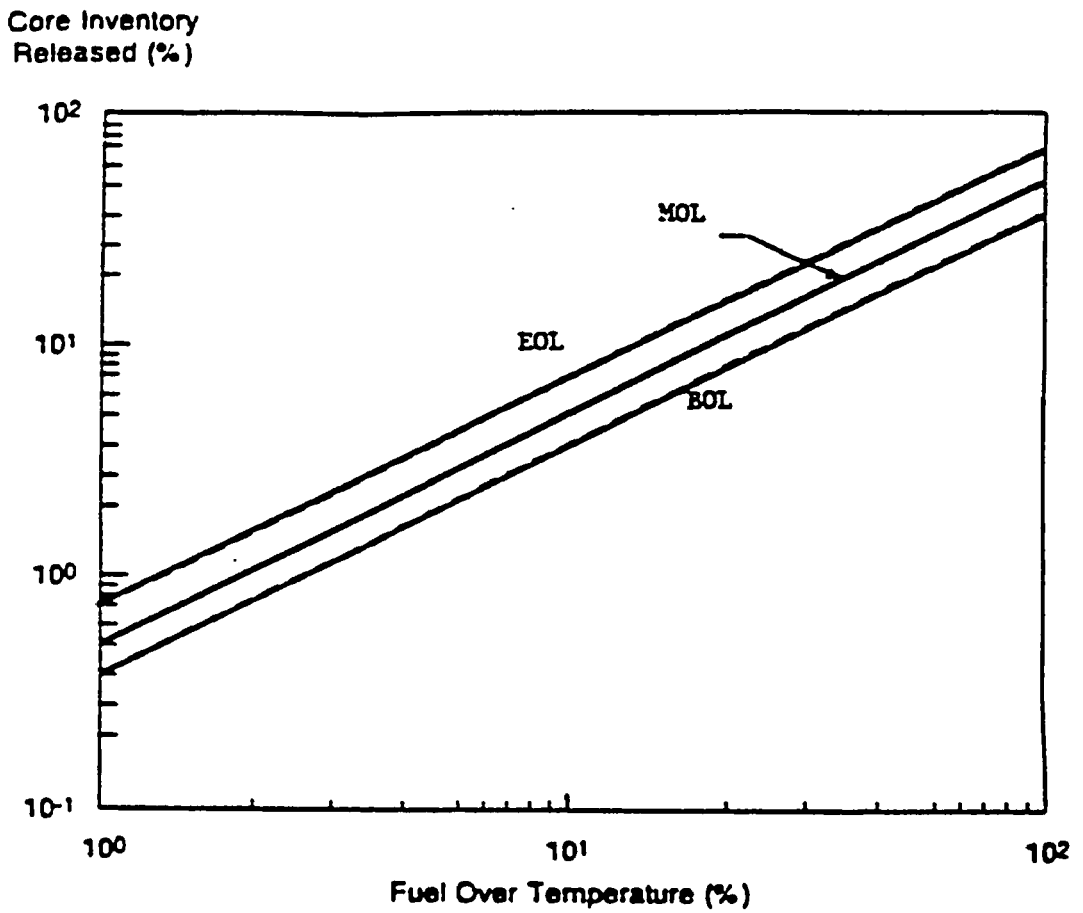
RELATIONSHIP OF % CLAD DAMAGE WITH
% CORE INVENTORY RELEASE OF I-131



RELATIONSHIP OF % CLAD DAMAGE WITH
% CORE INVENTORY RELEASE OF I-131
WITH SPIKING

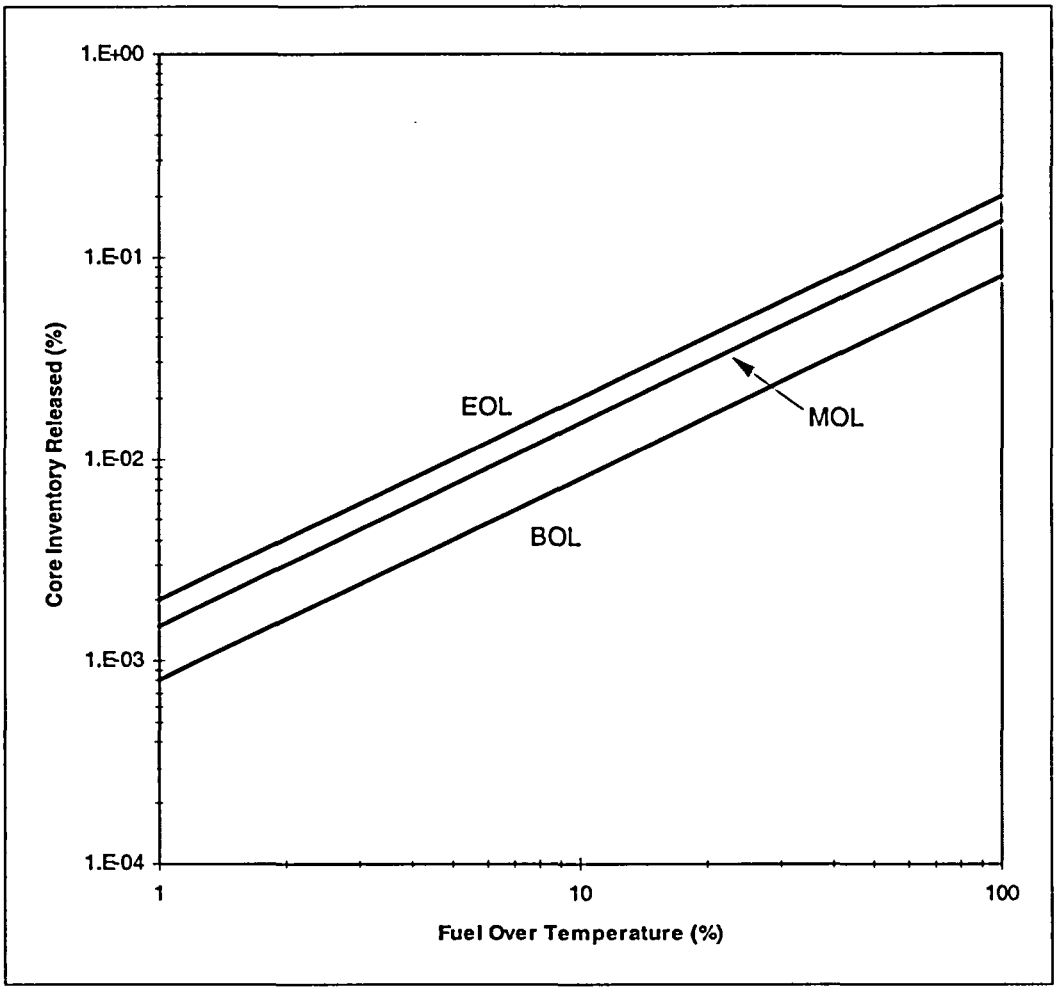


RELATIONSHIP OF % FUEL OVERTEMPERATURE
WITH % CORE INVENTORY RELEASED OF
Kr, I, Cs, OR Te

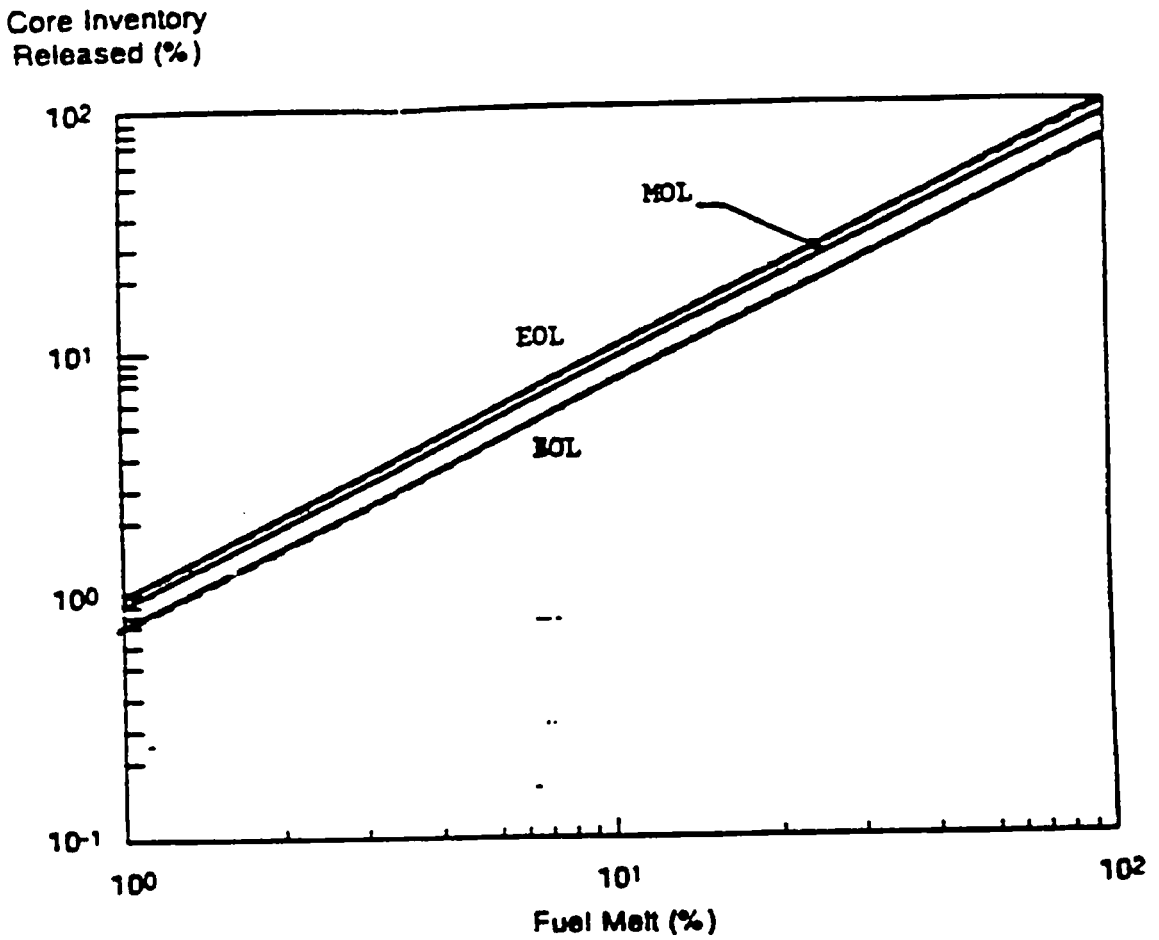


WORK PACKAGE 8 - SUMMARY OF ASSESSMENTS

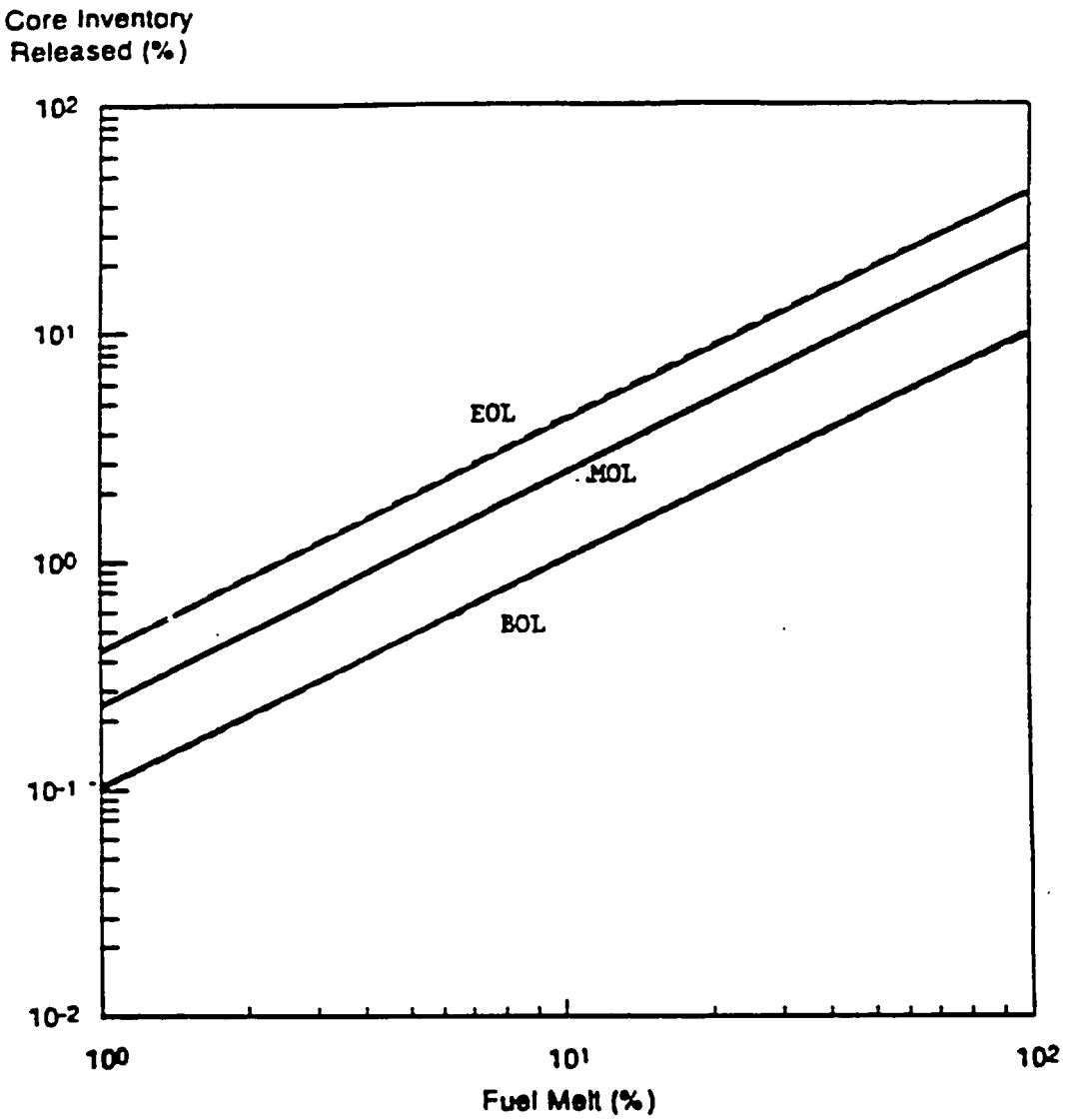
RELATIONSHIP OF % FUEL OVERTEMPERATURE
WITH % CORE INVENTORY RELEASED
OF Ba OR Sr



RELATIONSHIP OF % FUEL MELT WITH
% CORE INVENTORY RELEASED OF
Kr, I, Cs, OR Te



RELATIONSHIP OF % FUEL MELT WITH
% CORE INVENTORY RELEASED OF
Ba OR Sr



ATTACHMENT 8.7.5.9
Page 1 of 1

CHARACTERISTICS OF CATEGORIES OF FUEL DAMAGE

	No Fuel Damage	0-50% Cladding Failure	50-100% Cladding Failure	0-50% Fuel OverTemp	50-100% Fuel OverTemp	0-50% Core Melt	50-100% Core Melt
Fission Product Concentrations:							
Kr-87 (Kr)	<4E-5%	-0.005%	-0.01%	1-25%	-50%	-50%	>50%
Xe-131 (Xe)	<4E-3%	-0.08%	-0.1%	1-25%	-50%	-50%	>50%
Xe-133	<2E-3%	-0.05%	-0.1%				
I-131 (I)	<3E-4%	-0.01%	-0.3%	1-25%	-50%	-50%	>50%
I-132	<5E-5%	-0.02%	-0.03%				
I-133	<1E-4%	-0.05%	-0.1%				
I-135	<8E-5%	-0.03%	-0.05%				
(Cs)				1-25%	-50%	-50%	>50%
(Sr)				.001-.08%	-0.15%	-15%	>15%
(Ba)				.001-08%	-0.15%	-15%	>15%
(Te)						1-50%	>50%
(Pr)						0.1-0.8%	>0.8%
Activity Ratios:							
Kr-87/Xe-133		0.022	0.022	0.22	0.22	0.22	0.22
I-132/I-131		0.17	0.17	1.5	1.5	1.5	1.5
I-133/I-131		0.71	0.71	2.1	2.1	2.1	2.1
I-135/I-131		0.39	0.39	1.9	1.9	1.9	1.9
Core Exit Thermocouples:	<750%	1300°F	1650°F	>1650°F	>1650°F	>1650°F	>1650°F
RVLIS Indication:	>58%	<58%	<58%	<58%	<58%	<58%	<58%
Core Uncovery Begins						<41%	
Core Completely Uncovered							<25%
Containment Hydrogen Concentration:	Negligible	<10%	20%	20%	20%	20%	20%
Containment Radiation Monitors:	Background	<1500 R/hr	3000	2.7E5	5.3E5	7.8E5	>7.8E5

CORE PROTECTION

1. Critical Safety Function Status Tree (CSFST's)

   a. Subcriticality (FRP-S)

      - Verify Automatic Actions or Perform Manual Actions to Reduce Core Power
      - Emergency Borate
      - Check for Possible Sources of Positive Reactivity and Eliminate them
      - Verify Subcriticality

   b. Core Cooling (FRP-C)

      - Establish Safety Injection Flow to the RCS
      - Rapidly Depressurize SGs to Depressurize RCS
      - Start RCPs and Open All RCS Vent Paths to Containment

   c. Heat Sink (FRP-H)

      - Attempt Restoration of Feed Flow to Steam Generators
      - Initiation of RCS Bleed and Feed Heat Removal
      - Restore and Verify Secondary Heat Sink
      - Termination of RCS Bleed and Feed heat Removal

   d. Integrity (FRP-P)

      - Stop RCS Cooldown
      - Terminate SI if Criteria Satisfied
      - Depressurize RCS to Minimize Pressure Stress
      - Establish Normal Operating Conditions and Stable RCS Conditions
      - Soak if Necessary Prior to Further Restricted Cooldown

   e. Containment (FRP-J)

      - Verify Containment Isolation and Heat Removal
      - Check for and Isolate a Faulted Steam Generator
      - Check for Excessive Containment Hydrogen and Determine Appropriate Action

   f. Inventory (FRP-I)

      - Establish Charging and Letdown
      - Reduce PZR Pressure
      - Energize PZR Heaters and Control Charging and Letdown to Draw a Bubble

2. DBA Large Break LOCA (1 ft^2 total area up to double-ended break)
   a. Blowdown
      - Reactor Trip Signal and SI Signal in about 1 second
      - 2235 psig to atmosphere in about 24 seconds
      - Break flow 70,000 lbm/sec to zero by end of blowdown
      - SI accumulator flow initiates at 600 psig in about 16 seconds
   b. Refill
      - 2000 ppm water from RWST injected into RCS cold legs
   c. Reflood
      - Bottom of Core (BOC) recovery time about 45 seconds
      - Accumulator empties at about 58 seconds
   d. Long Term Recirculation
      - RHR pumps transferred when RWST level reach switchover setpoint
      - Cooling water backflushed from Containment Sump to the hot legs
      - Core maintained in shutdown state by borated water
3. Possible Consequences of the DBA
   a. Cladding Failure
   b. Fuel Overtemperature
   c. Core Melt
4. Instrument Errors/Malfunctions
   a. G-M tube saturation
   b. Steam voids
   c. Flooding of RTD connection blocks

FUNCTION RESTORATION PROCEDURES

1. Subcriticality (FRP-S)
   a. S.1 Response to Nuclear Power Generation/ATWS
   b. S.2 Response to Loss of Core Shutdown
2. Core Cooling (FRP-C)
   a. C.1 Response to Inadequate Core Cooling
   b. C.2 Response to Degraded Core Cooling
   c. C.3 Response to Saturated Core Cooling
3. Heat Sink (FRP-H)
   a. H.1 Response to Loss of Secondary Heat Sink
   b. H.2 Response to Steam Generator Overpressure
   c. H.3 Response to Steam Generator High Level
   d. H.4 Response to Loss of Normal Steam Release Capability
   e. H.5 Response to Steam Generator Low Level
4. Integrity (FRP-P)
   a. P.1 Response to Imminent Pressurized Thermal Shock
   b. P.2 Response to Anticipated Pressurized Thermal Shock
5. Containment (FRP-J)
   a. J.1 Response to High Containment Pressure
   b. J.2 Response to Containment Flooding
   c. J.3 Response to High Containment Radiation Level
6. Inventory (FRP-I)
   a. I.1 Response to High Pressurizer Level
   b. I.2 Response to Low Pressurizer Level
   c. I.3 Response to Voids in Reactor Vessel

FUNCTION RESTORATION PROCEDURES

ABNORMAL OPERATING PROCEDURES

AOP-001	Malfunction of Reactor Control System
AOP-003	Malfunction of Reactor Make-up Control
AOP-004	Control Room Inaccessibility
AOP-005	Radiation Monitoring System
AOP-010	Main Feedwater/Condensate Malfunction
AOP-013	Fuel Handling Accident
AOP-018	Reactor Coolant Pump Abnormal Conditions
AOP-019	Malfunction of RCS Pressure Control
AOP-020	Loss of Residual heat Removal (Shutdown Cooling)
AOP-021	Seismic Disturbances
AOP-023	Loss of Containment Integrity
AOP-024	Loss of Instrument Bus
AOP-028	ISFSI Abnormal Events
AOP-033	Shutdown LOCA
AOP-035	S/G Tube Leak

ANNUNCIATOR PANEL PROCEDURES

APP-001	Miscellaneous NSSS
APP-002	Engineering Safeguards
APP-003	RCS & Makeup Systems
APP-004	First Out Reactor Trips
APP-005	NIS & Reactor Control

DEFINITIONS

1. Gap Activity- volatile fission products (noble gases, halogens, cesiums) produced during operation which migrate into the gap region of the fuel pin.

2. Clad Damage- structural deformation of the zirconium clad housing the UO_2 fuel allowing the escape of fission products to the reactor coolant. Usually predominate with core temperatures > 1300°F - 2000°F.

3. Fuel Overtemperature- refers to the release of fission products from the grain boundary during fuel overtemperature conditions >2000°F - 3450°F.

4. Fuel Melt- refers to fission product release from the fuel associated with melting temperatures >3450°F.

5. Spiking Phenomena Spiking is an increase in the normal primary coolant iodine activity due to Reactor Coolant System pressure, temperature or power transients, where in fact no clad damage has occurred.

6 Oxygen Concentration in the Containment A decrease in oxygen concentration may indicate a hydrogen burn has occurred. This should be considered during the evaluation of percent containment hydrogen.

7. Steam Generator Tube Rupture or Outside Containment Loss of Coolant If core activity has been released to other systems (e.g. secondary system, component cooling water), this procedure will not accurately reflect actual core damage. This will be identified by auxiliary methods which estimate more severe damage than the isotopic analysis. If accurate samples of these systems are available as well as reasonable estimates of the sample space volume or mass, the methods in this procedure may be applied to improve the accuracy of the nuclide release estimate of core damage.

Progress Energy	R Reference Use

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

PLANT OPERATING MANUAL

VOLUME 2

PART 5

EPEOF-07

ASSISTANT TO THE EMERGENCY RESPONSE MANAGER

REVISION 4

SUMMARY OF CHANGES
PRR 109399

Step	Revision Comments
Entire Procedure	Changed CP&L logo on cover sheet. Reformatted procedure to comply with AP-007 requirements for procedure sections and page numbering.
Quick start guide	Renumbered Quick Start Guide as Attachment 10.1. Deleted Dialogic phone number. Revised steps for set-up of audio-visual equipment in the TSC. Added step to update the Offsite Status board.
Table of Contents	Revised table of contents to reflect procedure format.
Instructions	Step 8.3 Added instructions to update Offsite Status Board Step 8.5 Revised step to contact EOC representatives for the state and counties. Step 8.6 Included existing text on siren activation into a note and added a step to activate sirens as directed. Deleted Step 8.7.3.8 (old) for securing audio-visual equipment in the TSC.

TABLE OF CONTENTS

1.0 PURPOSE

This procedure describes the functional responsibilities and procedure steps for the Assistant Emergency Response Manager (AERM).

2.0 REFERENCES

N/A

3.0 RESPONSIBILITIES

3.1 Provide assistance and support to the Emergency Response Manager (ERM) in the operation of the Emergency Operations Facility (EOF).

3.2 Notify, support and interface with the Unit 1 Control Room (CR) and the Darlington County Plant in the event of an emergency.

4.0 PREREQUISITES

N/A

5.0 PRECAUTIONS AND LIMITATIONS

N/A

6.0 SPECIAL TOOLS AND EQUIPMENT

N/A

7.0 ACCEPTANCE CRITERIA

N/A

8.0 INSTRUCTIONS

8.1 Assist the ERM with operation of the EOF as necessary.

8.2 Maintain the emergency classification level display up-to-date.

8.3 Monitor the Date/Time/Event display board and Offsite Status display board to ensure they are current.

8.3.1 Provide information to Facility Administrative personnel if assistance is required.

8.0 **INSTRUCTIONS** (Continued)

8.4 Contact the Facility Administrative Assistants to set up the audio-visual equipment in the TSC.

8.5 Contact the EOC Representatives for the State and Counties:

8.5.1 Provide plant status briefings.

8.5.2 Obtain answers for any questions.

8.5.3 Get responses approved by the ERM for any information not pre-approved for release.

8.6 Log in to siren computer and monitor siren status.

NOTE: Activation of county sirens will be performed only upon request of the County Emergency Preparedness Director through the on duty Emergency Response Manager.

8.6.1 If requested, activate the sirens at the direction of the on-duty ERM.

8.6.2 Provide feedback to offsite officials after activation of system.

8.7 Notify, support, and interface with the Unit 1 Control Room and the Darlington County Plant.

NOTE: The ERO Telephone Directory provides a listing of contact telephone numbers.

8.7.1 Notify each location and provide the following information:

- Plant status
- Actions to be taken
- Radiological release(s) in progress
- Wind direction
- Evacuations initiated

8.0 **INSTRUCTIONS** (Continued)

8.7.2 Provide updates as the emergency progresses.

8.7.3 In the event of an evacuation, coordinate with the ERM to determine if Unit 1 and the Darlington County Plant should evacuate or continue to operate in support of the emergency.

8.7.4 Notify each location regarding the necessary actions.

8.7.4.1 After receiving notification from Unit 1 that the Unit is off line, the AERM shall be responsible for placing the Unit 1 turbine on turning gear at 0 RPM.

8.7.4.2 Coast down requires approximately 20 minutes.

8.7.4.3 Coordinate Health Physics and other coverage as necessary to support required activities.

8.7.4.4 Coordinate Security as necessary.

8.7.4.5 If deemed necessary, the AERM shall request a Unit 1 operator assemble in the EOF to instruct the Unit 2 Responders for Unit 1 shutdown activities via telephone or radio.

8.8 Coordinate shift change with the Administrative & Logistics Manager (ALM).

9.0 **RECORDS**

Records generated as a result of the performance of this procedure should be forwarded to Emergency Preparedness for retention.

10.0 **ATTACHMENTS**

10.1 Assistant to the Emergency Response Manager (AERM) Quick Start Guide

Attachment 10.1
Page 1 of 1

ASSISTANT TO THE EMERGENCY RESPONSE MANAGER (AERM)
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 the facility sign-in board. Log on the Electronic Display System (EDS). _____

2. If Dialogic was used for callout, upon arrival at the Facility, notify Dialogic. _____

3. Obtain plant status briefing from the Emergency Response Manager (ERM). _____

4. Contact the Facility Administrative Assistants to set up the audio-visual equipment in the TSC. _____

5. Update the Date/Time/Event status board by posting the date and time of the current emergency classification. _____

6. Update the Offsite Status Board, as necessary. _____

7. Ensure the Emergency Classification Display is turned on and current. _____

8. Notify Unit 1 Control Room (CR) and the Darlington County Plant of the emergency situation. _____

9. Assist the ERM in preparation to activate the EOF. _____

10. Notify the ERM as the readiness to activate. _____

11. Refer to procedure steps. _____

Progress Energy	R Reference Use

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

PLANT OPERATING MANUAL

VOLUME 2

PART 5

EPNOT-01

CR/EOF EMERGENCY COMMUNICATOR

REVISION 15

SUMMARY OF CHANGES
PRR 110094

SECTION	REVISION COMMENTS
All	Corrected the references to Attachment numbers in the body of the procedure.

TABLE OF CONTENTS

SECTION PAGE

TABLE OF CONTENTS

SECTION PAGE

1.0 PURPOSE

Direct the activities of the Emergency Communicator(s).

2.0 REFERENCES

As per EPNOT-00.

3.0 RESPONSIBILITIES

3.1 The Control Room (CR) Emergency Communicators:

3.1.1 Overall coordination of communications to ensure that required notifications are made per requirements of this procedure until relieved by another qualified individual.

3.1.2 Ensure that appropriate ERO staff is augmented via Dialogic or other means.

1. Dialogic may be initiated by any individual trained on the operation of the system.

3.2 The EOF Emergency Communicators:

3.2.1 Overall coordination of communications to ensure that required notifications are made per requirements of this procedure until relieved by another qualified individual.

3.2.2 Keep the ERM and EOF staff informed of communications activities and needs of the communications staff.

4.0 PREREQUISITES

As per EPNOT-00.

5.0 PRECAUTIONS AND LIMITATIONS

As per EPNOT-00.

6.0 SPECIAL TOOLS AND EQUIPMENT

As per EPNOT-00.

7.0 ACCEPTANCE CRITERIA

As per EPNOT-00.

8.0 INSTRUCTIONS

8.1 Staffing the Emergency Communicator Functions

8.1.1 Control Room

1. 1 Emergency Communicator.

2. **IF** ERFIS is OOS, **THEN ASSIGN** 1 person for SPDS data communication. Attachment 10.6.

8.1.2 EOF

1. 1 Emergency Communicator.

2. 1 State/County Emergency Communicator.

3. 1 Public Information Emergency Communicator.

8.1.3 TSC

1. 1 NRC Emergency Communicator.

2. **IF** ERFIS is OOS, **THEN ASSIGN** 1 person for SPDS data communication. Attachment 10.6.

8.1.4 Practice

1. As desired, **USE** the appropriate Attachment, 10.10, Dialogic Practice -Control Room **OR** 10.11, Dialogic Practice - Simulator Control Room, for the Control Room **OR** the Simulator.

8.2 State and County Agencies Emergency Notifications

NOTE: **IF** resources allow, **THEN** notification of offsite agencies **AND** the ERO augmentation should be performed simultaneously. Section 8.4 provides guidance on ERO augmentation.

NOTE: An optional checklist for required notification is available as Attachment 10.2, Communications Checklist.

NOTE: Off site phone numbers are available in the ERO phone book.

8.2.1 Electronic Display System (EDS)

1. **IF** EDS is operable, **THEN PERFORM** the following:

NOTE: Control Room staff should use the Control Room Shift Supervisor (CRSS) position login for appropriate access to forms and approval authority.

a. **LOG ON** the system.

b. For first notification only, **DECLARE** an event on EDS.

2. **IF** the EDS is not operable, **THEN PERFORM** the following:

a. **COMPLETE** emergency notification forms manually **AND FAX** forms using a stand alone fax machine.

b. Manual log **AND** notification forms are included as Attachments 10.1, Emergency Notification Form and Instructions and 10.3, Communications Log.

c. SPDS sheets are in Attachment 10.6.

8.2.2 Emergency Notification Form Completion

CAUTION

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.

CAUTION

Initial notifications are to be made within 15 minutes. Follow up notifications shall be made within 30-60 minutes from the completion of the previous notification.

1. Instructions for completing the form are included in Attachment 10.1 to this procedure.

8.2.3 Transmit State and County Notifications.

1. All agencies shall be contacted for each initial and follow-up notification. Agencies that do not respond shall be contacted by any means available, as soon as possible.

2. **ESTABLISH** communications with the State and County agencies using any of the following:

CAUTION

The SSS 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.

a. Use Selective Signaling System (SSS), **OR**

1) **DIAL** A1 on Selective Signaling phone to simultaneously conference all parties.

2) The press-to-talk bar must be depressed for other personnel to hear your voice.

b. Northern Telecommunications (Meridian), **OR**

1) Instructions for use of the Northern Telecommunications phone are included as Attachment 10.8.

8.2.3 Transmit State and County Notifications (Continued)

c. ESSX phone system.

1) Emergency communications protocols and instructions as well as ESSX instructions are provided as Attachments 10.7, Emergency Communications Equipment Instructions/Protocol and 10.8, ESSX Telephone Service Off-Site Communications System.

3. **DOCUMENT** time of the first voice contact made after Notification Form approval.

NOTE: Roll call is to determine that at least one representative from each agency is on line.

4. **CONDUCT** a roll call by agency to determine locations on line **AND PLACE** a check next to locations contacted on the Notification Form (Attachment 10.1).

5. **REVIEW** the Notification Form with offsite agencies, **AND ASK** if there are any questions.

6. **VERIFY** the fax was received **AND** is legible.

7. **ENTER** names, titles, times, and date of personnel on line (items D 1-4). This time will be the "start" time for the follow up notification.

8. **ONCE** notifications have been made **AND IF** any of the agencies had questions, **THEN OBTAIN** responses to the questions from offsite agencies **AND NOTIFY** them, as applicable.

9. Information not contained on status boards or concerning future status of the plant must be approved by the SEC **OR** ERM depending on facility activation status.

8.3 Other Off-Site Notifications and Follow-up Notifications

NOTE: Off site phone numbers are available in the ERO phone book.

8.3.1 NRC Notification

CAUTION

Immediately, upon completion of State and County notifications **AND** within 60 minutes of declaration of the emergency, notify the NRC.

1. **INITIATE AND COMPLETE** the NRC notification by using the following:

   a. Forms are included as Attachment 10.12, Event Notification Worksheet.

   b. **USE** ETS (primary) or Meridian phone for notification.

   c. Additional information is available in EPNOT-04, TSC NRC Emergency Communicator.

   d. **RECORD** the contact information on Attachment 10.1.

8.3.2 Follow up Notifications to the State and County Agencies:

CAUTION

Follow up notifications shall be made within 30-60 minutes from the completion of the previous notification.

a. **PERFORM** applicable steps in Section 8.2.

8.3.3 ANI and INPO Notifications

CAUTION

Notifications are required within 2 hours for an Alert or higher emergency classification.

1. **MAKE** notifications to American Nuclear Insurers (ANI) **AND** the Institute of Nuclear Power Operations (INPO).

8.4 Emergency Response Organization (ERO) Augmentation

8.4.1 Emergency Augmentation

CAUTION

Active scenarios of lower priority need to be **STOPPED PRIOR** to starting additional scenarios. Initiating additional scenarios simultaneously, will suspend the lower priority scenario until the higher one is completed. **Once the higher priority is completed, the lower priority scenario will automatically start where it left off. This may cause a lower emergency classification notice to be sent after the declaration of the higher classification.**

1. **OBTAIN** Attachment 10.4, Automated ERO Notification Form (Dialogic):

NOTE: Dialogic will automatically enter the beeper event code once the scenario is chosen and activated.

2. **COMPLETE** the information on the attachment **AND INITIATE** the Dialogic scenario as requested by the ERM, SEC, **OR** their designee.

8.4.2 Training/Drill Augmentation.

1. For training not associated with ERO training exercises, **USE** Attachment 10.10 **OR** 10.11 for the Control Room **OR** the Simulator, respectively.

2. For ERO training exercises **USE** Attachment 10.4 **OR** the method specified by Controller/Evaluator staff. Scenarios 301-309 may be used to call out ERO personnel for training exercises (drills).

8.4.3 Dialogic will print the appropriate report(s) on the Dialogic System printer. This should be included in the paperwork package that is sent to EP.

8.4.4 Turnover and Termination

1. **IF** the TSC and EOF are activating, **THEN** perform a turnover with NRC **AND** EOF Emergency Communicators.

2. **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.

3. Once the turnover is completed, the EOF EC should send a notification to the off-site agencies that advises the change in call back numbers and any other information that is needed to support the turnover. The CR EC should stay on station until the EOF EC has sent the updated notification.

4. Upon event termination, **ENSURE** notification of off site agencies which have activated.

5. ERO Augmentation **OR** spurious activations may be terminated by manually initiating the beepers with a 0*0*0 code.

6. **INFORM** the EP Group to notify 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.

9.0 RECORDS

Documentation generated by this procedure shall be forwarded to the Emergency Preparedness Group.

10.0 ATTACHMENTS

10.1 Emergency Notification Form

10.2 Communications Checklist

10.3 Communications Log

10.4 Automated ERO Notification Form (Dialogic)

10.5 Manual Initiation of the ERO Beepers

10.6 Safety Parameter Display System/Plant Status Data Sheet

10.7 Emergency Communications Equipment Instructions/Operating Protocol

10.8 Back-up Method for TeleConferencing With State and County Warning Points (WPs)

10.9 ESSX Telephone Service Off-Site Communications System

10.10 Dialogic Practice - Control Room

10.11 Dialogic Practice - Simulator Control Room

10.12 Reactor Plant Event Notification Worksheet

10.13 CR Emergency Notifications Quick Start Guide

10.14 EOF Emergency Communicator Quick Start Guide

ATTACHMENT 10.1
Page 1 of 8

MESSAGE NUMBER _____

EMERGENCY NOTIFICATION FORM

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] TERMINATION AT TIME/DATE: _____ (Eastern) ___/___/___ mm dd yy (If B, go to number 16)
7. EMERGENCY DESCRIPTION /REMARKS: _____
8. PLANT CONDITION: [A] IMPROVING [B] STABLE [C] DEGRADING
9. REACTOR STATUS: [A] SHUTDOWN TIME/DATE: _____ (Eastern) ___/___/___ mm dd yy [B] ____% POWER
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 _____ (Eastern Time) ___/___/___ mm dd yy STOPPED _____ (Eastern Time) ___/___/___ mm dd yy

[B] LIQUID: STARTED _____ (Eastern Time) ___/___/___ mm dd yy STOPPED _____ (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 mrem	Thyroid CDE mrem
SITE BOUNDARY		
2 MILES		
5 MILES		
10 MILES		

PROJECTION TIME: _____ (Eastern)

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: _____ (Name) _____ (Title) TIME/DATE: _____ (Eastern) ___/___/___ mm dd yy

** Information may not be available on initial notifications.

MESSAGE NUMBER _____

7. EMERGENCY DESCRIPTION /REMARKS (Continued)

Additional Remarks.

MESSAGE NUMBER _____

EMERGENCY NOTIFICATION FORM

PERSONS AND AGENCIES ALERTED

TIME FIRST VOICE CONTACT IS MADE AFTER ENF APPROVAL: _____

A) Perform agency 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) Ask if there are any questions concerning the information on the ENF.

D) AFTER the ENF is read, THEN record the agency representative's name, title, and date/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 earliest "final" time listed will become the "start" time for subsequent follow-up notifications.**

EMERGENCY NOTIFICATION FORM

INSTRUCTIONS FOR COMPLETION

CAUTION

Initial notifications are to be made within 15 minutes. Follow up notifications shall be made within 30-60 minutes from the completion of the previous notification.

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, **THEN** "to be provided" should be placed in the applicable blank(s). **IF** an upgrade in classification occurs when the follow-up message is due, **THEN** "upgraded ENF forthcoming" should be annotated in the description. This information is to be promptly 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 NUMBER: 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.

Line 1: **INDICATE** whether the message is to support a drill **OR** an actual emergency **AND INDICATE** if it is an initial notification **OR** follow-up notification. See the criteria below for assistance.

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.

Messages that contain a change in emergency classification, a termination, **OR** a change in Protective Action Recommendations (PAR) are INITIAL notifications. All other messages are considered FOLLOW-UP notifications.

EMERGENCY NOTIFICATION FORM

INSTRUCTIONS FOR COMPLETION (continued)

Line 2: **VERIFY** "H. B. Robinson" is in the SITE space **AND** "2" is in the UNIT space.

INDICATE the person who will be reading the message to the State and County personnel in the REPORTED BY: space. Normally, this individual will be the State/County Communicator when messages are transmitted from the EOF.

CAUTION

Item 3 should be the last time entered. 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.

Line 3: "TRANSMITTAL TIME/DATE:" is automatically placed on electronic form once the form is auto-faxed. **IF** the form is being completed manually, **THEN RECORD** the time of first voice contact with any offsite agency as verified on the phone by roll call.

CONFIRMATION PHONE 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)

Line 4: AUTHENTICATION is not required but the State/County representatives should be asked, "Would anyone like to authenticate this message?" **IF** yes, **THEN** 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 to be 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.

EMERGENCY NOTIFICATION FORM

INSTRUCTIONS FOR COMPLETION (continued)

Line 5: **INDICATE** the EMERGENCY CLASSIFICATION that is being declared. See criteria below for assistance:

> **IF** this is an initial message, **THEN INDICATE** the current emergency classification.
>
> **IF** this is a follow-up message **OR** a termination message, **THEN INDICATE** the same classification as the previous notification.

Any plant conditions/events which trigger other emergency classifications shall be listed in the DESCRIPTION section (Item 7), but only the highest classification shall be marked.

Line 6: **INDICATE** EMERGENCY DECLARATION AT **OR** TERMINATION AT **AND** the TIME/DATE the classification in Item 5 was declared (see CAUTION above item 3). This time should not change unless the classification has changed **OR** the event has been terminated. **IF** termination is chosen, **THEN** only Steps 1 through 6 and 16 should be completed.

Line 7: EMERGENCY DESCRIPTION/REMARKS should contain a short narrative of the event in progress. Individually, all three Fission Product Barriers should be addressed as "intact", "jeopardized", or "breached" in the narrative. The narrative should be in layman's terms and not include any slang or acronyms, i.e., ATWS, RCP, WGDT, that are commonly used at the plant. This description must be easily understood by individuals without nuclear industry experience.

Line 8: **INDICATE** the appropriate PLANT CONDITION. The Site Emergency Coordinator, 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, **THEN** indicate the condition DEGRADING.

Line 9: **INDICATE** current REACTOR STATUS. See below for assistance.

> **IF** the reactor is SHUTDOWN, **SELECT** this choice **AND COMPLETE** the time and date of the shutdown.
>
> **IF** the reactor is at power, **THEN INDICATE** the current reactor power.

Line 10: **INDICATE** the EMERGENCY RELEASE(S). **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, **THEN** POTENTIAL should be marked.

EMERGENCY NOTIFICATION FORM

INSTRUCTIONS FOR COMPLETION (continued)

Line 11: **INDICATE** TYPE OF RELEASE, whether the release is AIRBORNE or LIQUID, **AND RECORD** the time **AND** date STARTED and STOPPED of the actual release. The release location will be determined by the RCM. For multiple release locations, the majority contributor is used for the determination of location. See below for assistance.

> **IF** the release location is unknown **OR** a release is from any location other than the stack, **THEN** assume a GROUND LEVEL release.
>
> **IF** the release is from the stack, **THEN** mark ELEVATED regardless of wind speed.
>
> **IF** the release is underway, **THEN WRITE** N/A in the block for time release stopped.

Line 12: **INDICATE** the RELEASE MAGNITUDE in units of CURIES **AND INDICATE** whether they are BELOW **OR** ABOVE the NORMAL OPER. LIMITS (Technical Specification limits).

RECORD the TEDE Equivalent release magnitude for Xe^{133} as the NOBLE GASSES value, **RECORD** the CDE Equivalent release magnitude for I^{131} as the IODINES value, **AND RECORD** "N/A" in the blanks for PARTICULATES **AND** OTHER. The values for Xe^{133} TEDE Equivalent and I^{131} 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.

Line 13: **INDICATE** the appropriate ESTIMATE OF PROJECTED OFF-SITE DOSE. See below for assistance.

> **IF** this is the first dose projection **OR IF** the release/release rate has changed significantly (approximately 15%), **THEN INDICATE** NEW, otherwise **INDICATE** UNCHANGED.

RECORD the TEDE mrem **AND** Thyroid CDE mrem values for each distance away from site, in the dose columns. Ensure that units are in mrem, and do not change the units on the form.

RECORD the ESTIMATED DURATION as advised by the SEC, Plant Operations Director, **OR** the Technical Analysis Manager. The estimated duration must start from the beginning of the release until the estimated (or actual) end of the release. **IF** expected duration of the release is not yet available, **THEN RECORD** "1" hour in the space.

RECORD the time that the dose projection data was collected (check computer output) in the space for PROJECTION TIME.

EMERGENCY NOTIFICATION FORM

INSTRUCTIONS FOR COMPLETION (continued)

CAUTION

Ensure the wind direction is recorded as the "from" direction, if it is obtained from a source other than ERFIS

Line 14: **RECORD** the METEOROLOGICAL DATA from ERFIS **OR** the National Weather Service Office (see ERO Telephone Book), as available.

> **IF** ERFIS is unavailable, **THEN RECORD** the STABILITY CLASS from procedure EPRAD-03 for dose projection.

Line 15: **INDICATE** the appropriate RECOMMENDED PROTECTIVE ACTIONS. **IF** evacuate or shelter in place are chosen, **THEN RECORD** the sectors for which the recommendation is applicable, i.e., A-0, A-1, B-1. **IF** the General Emergency is declared, **THEN** NO RECOMMENDED PROTECTIVE ACTION cannot be indicated.

Line 16: **COMPLETE** the APPROVED BY section. **IF** the message is to be transmitted from the Control Room **OR** TSC, **THEN** it must be approved and signed by the Site Emergency Coordinator. **IF** the message is to be transmitted from the EOF, **THEN** it shall be approved (see CAUTION above item 3) by the Emergency Response Manager **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.

ATTACHMENT 10.2
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 10.3
Page 1 of 1
COMMUNICATIONS LOG

Location: _____ Device: _____

Date: _____

Time		User Initials	Party Contacted	Remarks (include data transmitted and decisions or recommendations made)
Start	End			

ATTACHMENT 10.4
Page 1 of 2
AUTOMATED ERO NOTIFICATION FORM (DIALOGIC)

CAUTION
Active scenarios of lower priority need to be **STOPPED PRIOR** to starting additional scenarios. Initiating additional scenarios simultaneously, will suspend the lower priority scenario until the higher one is completed. **Once the higher priority is completed, the lower priority scenario will automatically start where it left off. This may cause a lower emergency classification notice to be sent after the declaration of the higher classification.**

1. **INDICATE** the desired scenario for activation (see page 2), **AND OBTAIN** approval to activate.

Desired Scenario ID: _____

Approved by: _____ Date/Time: _____
SEC or ERM or EP Supervisor (for EP use only)

NOTE: Passwords are provided in pre-designated locations.

2. Using a site phone contact the Dialogic System by dialing x1003 or (843) 857-1003.
3. Dialogic will answer and request the activation password followed by #, **ENTER** the password + #. **IF** the incorrect password is entered, **THEN** the system will prompt you to enter it again or you can hang-up and call again.
4. Dialogic will ask you to enter the Scenario ID followed by #.
5. Dialogic will ask you press 3 to start a scenario or press # for more options. **INPUT** the desired response(s) at the system prompt(s). (Repeat steps 2 through 4 as necessary to review, activate, or stop the Dialogic System scenario.)

NOTE: Initiation of the Dialogic System should also activate the Control Room, Simulator, **OR** EP verification beepers, with the previously entered scenario event code.

6. **IF** the Dialogic System activation failed, **THEN ACTIVATE** the ERO beepers manually (Attachment 10.5) **AND** use the Control Room instructions in the ERO Phonebook to **CONTACT** NREC "A" for required call out of beepered and non-beepered personnel, as applicable.

Activation performed by: _____ Date/ Time: _____

AUTOMATED ERO NOTIFICATION FORM (DIALOGIC)

Check Choice	Scenario Number	Description	Event Code[2]	Scenario Priority	Run Time (min)
EMERGENCY SCENARIOS					
	101	General Emergency (GE)	4*1*1	1	90
	102	GE – Staffing RERF.[1]	4*2*1	1	90
	103	Site Area Emergency (SAE)	3*1*1	2	90
	104	SAE – Staffing RERF.[1]	3*2*1	2	90
	105	Alert	2*1*1	3	90
	106	Alert – Staffing RERF.[1]	2*2*1	3	90
	107	Unusual Event (UE) – Activation	1*1*1	4	90
	108	UE – **NO** Activation	1*0*1	5	90
	109	UE – Staffing RERF.[1]	1*2*1	4	90
	110	RERF Supplemental Staffing (GE)[1]	N/A	10	90
	111	RERF Supplemental Staffing (SAE)[1]	N/A	10	90
	112	RERF Supplemental Staffing (Alert)[1]	N/A	10	90
	113	RERF Supplemental Staffing (UE)[1]	N/A	10	90
	201	Beeper Failure	N/A	10	90
	202	Beeper Returned to Service	N/A	10	90
DRILL/TRAINING SCENARIOS					
	301	Drill – GE	4*1*2	6	90
	302	Drill – GE – Staffing RERF.[1]	4*2*2	6	90
	303	Drill – SAE	3*1*2	7	90
	304	Drill – SAE – Staffing RERF.[1]	3*2*2	7	90
	305	Drill – Alert	2*1*2	8	90
	306	Drill – Alert – Staffing RERF[1]	2*2*2	8	90
	307	Drill – UE – Facility Activation	1*1*2	9	90
	308	Drill – UE – **NO** Activation	1*0*2	9	90
	309	Drill – UE – Staffing RERF.[1]	1*2*2	9	90
	310	Augmentation Drill	0*1*2	10	90
	311	Quarterly Communication Drill	0*0*3	10	90
	401	ERO Training (EP use ONLY)	0*0*0	10	10
	402	Control Rm. Pract. (Ops use ONLY)	0*0*0	10	10
	403	Sim. Practice (Trng. use ONLY)	0*0*0	10	10
	404	Weekly Pager Test	0*0*0	10	10
	601	Phonelst.txt Test (EP use ONLY)	0*0*0	10	15

[1] The Remote Emergency Response Facility (RERF) should be activated for the following events:

- A security event has made the site inaccessible.
- The EOF/TSC facilities are NOT habitable due to flooding, fire, loss of power, etc.
- If an extended evacuation is made as part of the initial Protective Action Recommendation (PAR)
- As Directed by the SEC or ERM.

[2] Event Code Descriptions

CLASSIFICATION	FACILITY	INFORMATION
0 = none	0 = none	0 = test
1 = U.E.	1 = normal	1 = Real
2 = Alert	2 = Remote	2 = Drill/Exercise
3 = S.A.E.		3 = Communications Test Call 843-857-1777
4 = G.E.		

ATTACHMENT 10.5
Page 1 of 1

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.

For additional assistance the beeper codes are listed with the Dialogic scenarios on Attachment 10.4.

1. Dial the Manual Beeper Initiation number as listed on password card.

EVENT CODES (DISPLAYED ON GROUP CALL PAGER)

CLASSIFICATION	FACILITY	INFORMATION
0 = none	0 = none	0 = test
1 = U.E.	1 = normal	1 = Real
2 = Alert	2 = Remote	2 = Drill/Exercise
3 = S.A.E.		3 = Communications Test Call 843-857-1777
4 = G.E.		

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

2. At the Beeper System prompt, enter the appropriate code to be displayed on Group Call Pager. **Do not enter the phone number from which the call is placed.**

Approved by: _____ Date/time: _____
SEC/ERM or EP Supervisor (for EP use only)

Initiated by: _____ Date/time: _____

3. Verify the beepers were initiated with the appropriate code via the Control Room verification beeper or Security beeper.

4. **IF** the Dialogic System activation failed, **THEN** use the Control Room instructions in the ERO Phonebook to contact NREC "A" for required call out of beepered and/or non-beepered personnel, as applicable.

ATTACHMENT 10.6
Page 1 of 1

SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS DATA SHEET

EMERGENCY CLASSIFICATION (CIRCLE)

Date/Time: _____/_____
Completed By: _____

UNUSUAL EVENT SITE AREA EMERGENCY
ALERT GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS		QUAL
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)		
R-24A N-16 MAIN STEAM LINE A		
R-24B N-16 MAIN STEAM LINE B		
R-24C N-16 MAIN STEAM LINE C		
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		QUAL
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)		
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/ml)		
I^{131} (Uci/ml)		
AVG 5 HOTTEST T/Cs (°F)		
BORON CONC. (PPM)		
SECONDARY SYSTEM		
S/G A		
LEV.-WR(%)		
LEV -NR(%)		
PRESS (PSIG)		
FEED (MPPH)		
STEAM (MPPH)		
ACT. (Uci/ml)		
S/G B		
LEV.-WR(%)		
LEV -NR(%)		
PRESS (PSIG)		
FEED (MPPH)		
STEAM (MPPH)		
ACT. (Uci/ml)		
S/G C		
LEV.-WR(%)		
LEV -NR(%)		
PRESS (PSIG)		
FEED (MPPH)		
STEAM (MPPH)		
ACT. (Uci/ml)		
PRI/SEC. LK. RT (GPM)		

ENGINEERED SAFETY FEATURES		QUAL
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

1.1 The RNP Selective Signaling System consists of equipment and circuits linking RNP with the offsite agencies involved in initial emergency notifications.

1.2 The Control Room, TSC, EOF and the Work Control Center have these phones.

1.3 This system can quickly conference the offsite agencies for notifications using the following:

1.3.1 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.

1.3.2 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 Progress Energy locations	A4
Decision Line	A5

For additional dialing codes, see EPPRO-02 "Maintenance and Testing", Attachment 10.2 "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.

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

1.3.4 When people are no longer coming on line, hold a roll call and proceed with the message/drill/test;

1.3.5 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.

1.3.6 If problems with this system occur during drills, exercises or emergencies, notify the Administrative and Logistics Manager.

1.3.7 If problems occur at any other time, notify Telecommunications.

1.3.8 If Selective Signaling System is inoperable, use the Northern Telephone System or the Corporate Telephone System as shown on ATTACHMENT 10.8, Back-up Method for Teleconferencing With State and County Warning Points (WPs).

2.0 RNP EMERGENCY TELEPHONE SYSTEM (NORTHERN TELECOM)

2.1 The RNP emergency telephone consists of dedicated lines between facilities at RNP and other Progress Energy locations. These lines are accessed via a Northern Telecom Meridian private branch exchange (PBX). This system supports the general plant environment as well.

2.2 The following are phone features used on the Meridian phones:

2.2.1 Volume Control - The adjustment for ringing, headset and speaker volume is accomplished through the rocking switch below the keypad.

2.2.2 Line/Feature Buttons - Located to right of keypad and have liquid crystal display (LCD) status indications.

2.2.3 KEYPAD - Centrally located to right of handset and used for call placement or feature usage.

2.2.4 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.**

2.2.5 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.

2.2.6 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.

2.2.7 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**.

2.2.8 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.

2.2.9 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.

2.2.10 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.

2.2.11 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.

2.2.12 PROGRAM - The **PROGRAM** key allows you to set seven attributes of the Meridian phone. To set attributes:

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

1) VOLUME - Press **PROGRAM**, Dial 00, use volume rocker switch to adjust down (<) or up (>), press **PROGRAM** to save.

2) CONTRAST ADJUSTMENT - Press **PROGRAM**, Dial 02, use volume rocker switch to adjust lighter (<) or darker (>), press **PROGRAM** to save.

3) 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**.

4) IDLE SCREEN FORMAT - Eight possible selections. Press **PROGRAM**, Dial 04, use volume rocker switch up (<) or down (>) to make selection, press **PROGRAM**.

5) 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**.

3.0 PROGRESS ENERGY CORPORATE TELEPHONE SYSTEM

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

3.2 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.

4.0 NRC TELEPHONE SYSTEMS

4.1 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.

4.2 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.

5.0 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:

5.1 Aerotron (Local Government Radio) - Base station located in the EOF Communications Equipment Room 416. Remote radios located in TSC, EOF, and EP staff area. Provides a means to communicate with the Counties and State of South Carolina.

5.2 Motorola GTX mobile radio -is a compact remote control console located in the EOF. This console provides point to point communications for: Environmental Monitoring/dose projection This console has hand held portable versions to be used in the field that function essentially the same.

5.2.1 Operating instructions:

1) Ensure GTX unit is plugged into AC wall circuit.

2) Motorola GTX unit has to be on to talk. Ensure indicated station matches selected station on portable units.

3) Check for channel activity by a green or yellow LED.

4) When clear, press PTT and speak into microphone area. The red LED will illuminate continuously while transmitting. Turn system off when not in use.

6.0 ESSX TELEPHONE SYSTEM

6.1 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 Progress Energy facilities, as well as Ebasco and Westinghouse.

7.0 EMERGENCY RADIO SYSTEM OPERATING PROTOCOL

7.1 Using a 2-way Radio: 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. Progress Energy 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.

7.2 Definitions

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

7.2.2 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.

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

7.2.4 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.

7.2.5 Authorization to use Radio - No person shall operate a Base Station or Mobile Unit Transmitter unless he/she is so authorized by the Company.

7.2.6 Authorized Messages - Messages dealing with safety of personnel or the protection of property or messages for the performance of work-related matters.

7.2.7 Forbidden messages - The following types of messages are not permitted:

1) Between Base Stations - Except for: Authorized radio tests or any other permitted messages when telephone facilities are inoperative.

2) Personal Messages - Except for: Messages concerning a family emergency may, at the discretion of a Base Station Radio Operator, be relayed to an employee.

3) Foul Language - No exceptions.

7.2.8 Secrecy of Message - Federal law requires you to keep secret all messages not directed to you which you overhear on any private radio system.

7.2.9 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.

7.3 Operating Procedures -

NOTE: During a drill/exercise, users should frequently use language announcing the transmission as such. Example: "This is a drill message".

7.3.1 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.

7.3.2 Base Station Operators:

1) Good microphone techniques pay off in better understanding and faster communication.

2) 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.

3) 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 or mobile and using either the word "clear" or "off".

For example: The base station operator may say "ENMON Control clear" or the mobile may say "ENMON Team A off".

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

4) 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.

5) The control marked VOLUME adjusts the loudness of the incoming signal. It has no effect on the outgoing signal.

6) 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.

8.0 MITSUBISHI SATELLITE PHONE

8.1 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.

8.2 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.

8.3 Open the lid approximately halfway (45^{o}) and aim the Mitsubishi symbol toward the satellite in the southern sky. A compass is available in the phone case.

8.4 Press and hold the PWR key for approximately one second.

8.5 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.

8.6 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.

8.7 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.

8.8 When NO SVC indication clears from the display and "ON" is displayed, the unit is ready for making or receiving calls.

8.9 To send call , always enter the area code and number, Then press the SEND key.

8.10 To receive a call, press any key except the PWR key.

8.11 To end a call, press END.

BACK-UP METHOD FOR TELECONFERENCING WITH STATE AND COUNTY WARNING POINTS (WPs)

The following instructions should be used for contacting the State and Counties using a Northern Telecom Meridian phone with the SYS SPEED feature or CONFERENCE feature:

> **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.

IF the phone is equipped with the SYS SPEED feature, **THEN**

1. Contact the Darlington County Warning Point.
   - A. Get dial tone, press SYS 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 Warning Point.
   - A. Press CONFERENCE, then press SYS 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 Warning Point (Lee County 911 Center).
   - A. Press CONFERENCE, then press SYS SPEED and dial 04. (See Emergency Response Phone Book for other phone numbers.)
   - B. Repeat Steps 2B, C, and D.
4. Contact State Warning Point.
   - 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, perform roll call and read the Emergency Notification Message.

BACK-UP METHOD FOR TELECONFERENCING WITH STATE AND COUNTY WARNING POINTS (WPs)

IF the phone is equipped with the CONFERENCE feature, **THEN**

1. Contact the Darlington County Warning Point.
   A. Get dial tone, dial the number as listed in the "OFFSITE ORGANIZATION AND CORPORATE COMMUNICATIONS. (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. (This action places the party on conference hold.)
2. Contact the Chesterfield Warning Point.
   A. Get dial tone, dial the number as listed in the "OFFSITE ORGANIZATION AND CORPORATE COMMUNICATIONS. (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. (This action places the party on conference hold.)
3. Contact Lee County Warning Point (Lee County 911 Center).
   A. Get dial tone, dial the number as listed in the "OFFSITE ORGANIZATION AND CORPORATE COMMUNICATIONS. (See Emergency Response Phone Book for other phone numbers.)
   B. Repeat Steps 2B, C, and D.
4. Contact State Warning Point.
   A. Get dial tone, dial the number as listed in the "OFFSITE ORGANIZATION AND CORPORATE COMMUNICATIONS. (See Emergency Response Phone Book for other phone numbers.)
   B. Repeat Steps 2B, C, and D.
5. Press Conference. (All parties should be on line).
6. Perform roll call and read the Emergency Notification Message.

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.

ATTACHMENT 10.10
Page 1 of 1

DIALOGIC PRACTICE – CONTROL ROOM

1. **OBTAIN** approval to activate Dialogic from the SSO or CRSS.

Desired Scenario ID: ___402_____

NOTE:	Passwords are provided in pre-designated locations.

2. Using a site phone **CONTACT** the Dialogic System by dialing x1003 or (843) 857-1003.
3. Dialogic will answer and request the activation password followed by #, **ENTER** the password + #. **IF** the incorrect password is entered, **THEN** the system will prompt you to enter it again or you can hang-up and call again.
4. Dialogic will ask you to enter the Scenario ID followed by #, **ENTER** 402#.
5. Dialogic will ask you press 3 to start a scenario or press # for more options. **INPUT** the desired response(s) at the system prompt(s). (Repeat steps 2 through 4 as necessary to review, activate, or stop the Dialogic System scenario.)

NOTE: The Dialogic scenario should make notification calls and pages (up to 3 each) until the ID from step 6 is entered and qualified OR the 20 minute activation time expires. Once one of these is done the scenario will stop

6. Dialogic should initiate the Control Room verification beeper with the previously entered scenario's event code (0*0*0).
7. Dialogic should call extension 1530, request an identification number and ask questions to qualify the caller.
    a. **ENTER** 1333333333 (9 3's) as the identification number.
    b. **PROVIDE** responses to the system questions. **IF** you disqualify (e.g., answer no to fitness for duty or 60 minute response) in your responses, **THEN** it will not attempt to call you again.
8. **IF** the Verification Beeper did not activate, **THEN** verify proper operation by calling the individual beeper number and entering your phone number.
9. **IF** expected response is not received for verification of proper beeper operation, **THEN** report the deficiency to Emergency Preparedness for investigation.
10. **INFORM** Emergency Preparedness of system use (on next business day if weekend, holiday, or nightshift) so the reports can be reviewed for proper operation.
11. Dialogic should send an activation report to the printer located next to the system.

ATTACHMENT 10.11
Page 1 of 1

DIALOGIC PRACTICE – SIMULATOR CONTROL ROOM

1. **OBTAIN** approval to activate Dialogic from the SSO, CRSS, or Simulator Instructor.

Desired Scenario: ___**403**_____

NOTE:	Passwords are provided in pre-designated locations.

2. Using a site phone **CONTACT** the Dialogic System by dialing x1003 or (843) 857-1003.
3. Dialogic will answer and request the activation password followed by #, **ENTER** the password + #. **IF** the incorrect password is entered, **THEN** the system will prompt you to enter it again or you can hang-up and call again.
4. Dialogic will ask you to enter the Scenario ID followed by #, **ENTER** 403#.
5. Dialogic will ask you press 3 to start a scenario or press # for more options. **INPUT** the desired response(s) at the system prompt(s). (Repeat steps 2 through 4 as necessary to review, activate, or stop the Dialogic System scenario.)

NOTE: The Dialogic scenario should make notification calls and pages (up to 3 each) until the ID from step 6 is entered and qualified OR the 20 minute activation time expires. Once one of these is done the scenario will stop

6. Dialogic should initiate the Simulator verification beeper with the previously entered scenario's event code (0*0*0).
7. Dialogic should call extension 6530, request an identification number and ask questions to qualify the caller.
   a. **ENTER** 1222222222 (9 2's) as your identification number.
   b. **PROVIDE** responses to the system questions.

   IF you disqualify (e.g., answer no to fitness for duty or 60 minute response) in your responses, **THEN** it will not attempt to call you again.
8. **IF** the Verification Beeper did not activate, **THEN** verify proper operation by calling the individual beeper number.
9. **IF** expected response is not received after verification of proper beeper operation, **THEN** report the deficiency to Emergency Preparedness for investigation.
10. **INFORM** Emergency Preparedness of system use (on next business day if weekend, holiday or nightshift) so the reports can be reviewed for proper operation.
11. Dialogic should send an activation report to the printer located next to the system.

PAGE 1 OF 2

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	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)			4-Hr. Non-Emergency 10 CFR 50.72(b)(2)			8-Hr. Non-Emergency 10CFR 50.72(b)(3)		
	GENERAL EMERGENCY GEN/AAEC		TS Deviation ADEV		(i) TS Required S/D ASHU			(ii)(A) Degraded Condition ADEG		
	SITE AREA EMERGENCY SIT/AAEC				(iv)(A) ECCS Discharge to RCS ACCS			(ii)(B) Unanalyzed Condition AUNA		
	ALERT ALE/AAEC				(iv)(B) RPS Actuation (scram) ARPS			(iv)(A) Specified System Actuation AESF		
	UNUSUAL EVENT UNU/AAEC				(xi) Offsite Notification APRE					
	50.72 NON-EMERGENCY (see next columns)									
	PHYSICAL SECURITY (73.71) DDDD									
	MATERIAL/EXPOSURE B???									
	FITNESS FOR DUTY HFIT									
	OTHER UNSPECIFIED REQMT. (see last column)									
	INFORMATION ONLY NINF									

	(v)(A) Safe S/D Capability AINA		60-Day Optional 10 CFR 50.73(a)(1)				
	(v)(B) RHR Capability AINB						
	(v)(C) Control of Rad Release AINC		Invalid Specified System Actuation AINV				
	(v)(D) Accident Mitigation AIND						
	(xii) Offsite Medical AMED		Other Unspecified Requirement (Identify)				
	(xiii) Loss Comm/Asmt/Resp ACOM			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)*

1

NOTIFICATIONS	YES	NO	WILL BE
NRC RESIDENT			
STATE(s)			
LOCAL			
OTHER GOV AGENCIES			
MEDIA/PRESS RELEASE			

ANYTHING UNUSUAL OR NOT UNDERSTOOD? ☐ YES (EXPLAIN ABOVE) ☐ NO

DID ALL SYSTEMS FUNCTION AS REQUIRED? ☐ YES ☐ NO

MODE OF OPERATION UNTIL CORRECTED:	ESTIMATE FOR RESTART DATE:	ADDITIONAL INFO ON BACK ☐ YES ☐ NO

NRC FORM 361 (12-2000)

PRINTED ON RECYCLED PAPER

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: _____ (NAME) ___/___/___ (DATE) ___:___ (TIME) AM/PM

ATTACHMENT 10.13
Page 1 of 1

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.

Equipment	Equipment	Copies:
Fax Machine	EP Procedures	10.1 (ENF and roll call form)
ERO Phonebook	CR SSO Terminal	10.2 (Communications Checklist)
Dialogic Password Card	Selective Signaling	10.3 (Communications Log)
NRC ETS Phone		10.4 (Dialogic)
CR Beeper		10.12 (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 10.1)* _____
   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 Teleconference Method (Attachment 10.8)
   - Use ESSX phones(Attachment 10.7)
   - Call Roll → Read Message and Authenticate if required

3. ERO Callout:* _____
   - Complete form (Attachment 10.4)
   - SSO/SEC approval

   Dialogic not functional? → Manual beeper initiation (Attachment 10.5)
   → Contact non-beeper staff using NREC instructions in the 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 _____

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

ATTACHMENT 10.14
Page 1 of 1

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. During turnover, determine if the South Carolina Department of Health and Environmental Control (DHEC) has called to confirm the emergency status. (AR #95238) _____
5.* Complete the Emergency Notification Form. _____
6. Obtain ERM 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.

Progress Energy

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

EPEOF-03

ADMINISTRATIVE AND LOGISTICS MANAGER

REVISION 9

SUMMARY OF CHANGES

PRR 0098832

STEP	REVISION COMMENTS
Old 8.3.3.10	Deleted step for obtaining the Hydrogen Recombiner.

TABLE OF CONTENTS

ADMINISTRATIVE AND LOGISTICS MANAGER 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 the facility sign-in board. Ensure copiers, fax machines, computers, phones are operable. _____

2. If Dialogic was used for callout, upon arrival at the Facility, notify Dialogic at X 1777. _____

3. Track EOF/TSC augmentation using Attachment 8.3.5.1, EOF Sign-in Roster and Attachment 8.3.5.5, TSC Sign-in Roster. _____

4. Assign an A&LM staff member to report to the TSC to verify set-up of the Accident Assessment Room, Support Services Room and the Environmental & Radiation Control (E&RC) Room Recommended Layout per Attachment 8.3.5.7, Attachment 8.3.5.8 and Attachment 8.3.5.9. _____

5. Contact the Operations Support Center (OSC) Leader to track OSC augmentation. _____

6. If necessary, assign a person to be the Evacuation Assembly Area Leader _____

7. At time of EOF activation synchronize clocks with the Emergency Response Facility Information System (ERFIS). _____

8. Establish an EOF overflow facility, if required. _____

9. Ensure that appropriate access controls (e.g., doors locked, guard stationed) for the EOF/TSC have been instituted. _____

10. Receive plant status briefing. Conduct briefing as appropriate with staff located in the EOF and TSC. _____

11. Notify the Emergency Response Manager as to readiness to activate.

12. Refer to procedure steps. _____

8.3 ADMINISTRATIVE & LOGISTICS MANAGER (A&LM)

8.3.1 PURPOSE

1. This procedure describes the functional responsibilities and procedure steps for the Administrative & Logistics Manager (ALM).

8.3.2 RESPONSIBILITIES

1. Plan, schedule and expedite emergency logistical support (including operability, locating, ordering, receiving of equipment, screening, orientation, badging, transportation and lodging of support personnel) as well as accountability of Emergency Response personnel in the Technical Support Center (TSC), Emergency Operations Facility (EOF), and the Operations Support Center (OSC).

2. Establish cost control/accounting system as needed. Determine the need for additional contracts, facilities and services.

3. Provide technical and administrative direction to the Emergency Security Team Leader (ESTL) and Support Services. If necessary, assign a person to be the Evacuation Assembly Area Leader (EAAL).

4. Serve as a liaison between the Emergency Response Manager (ERM) and the Legal Department.

5. Ensure claims processing by CP&L and contractor insurance personnel.

8.3.3 INSTRUCTIONS

1. Determine staffing requirements and shift change assignments. Utilize Attachments 8.3.5.2, Emergency Operations Facility (EOF) Four Day Work Schedule, and 8.3.5.6, Technical Support Center (TSC) Four Day Work Schedule.

8.3.3 (Continued)

2. For evacuations:

   a. In conjunction with the ERM and County Emergency Management officials determine appropriate shelter location for non-essential personnel.

   b. Appropriate evacuation routes.

   c. Coordinate Health Physics support.

   d. Provide evacuation vehicles (if necessary).

3. Assign an individual from the TSC or EOF to provide assembled evacuees with plant status, shelter location and travel information, relief shift times and a reminder to refer questions concerning activities to the Company Spokesperson.

   a. Release non-essential personnel as soon as possible.

4. Update the Emergency Security Team Leader (ESTL) on plant status as the Emergency progresses.

5. Notify the State and Counties regarding evacuation of personnel to their homes or shelter areas (if county shelters are open).

   a. Notifications to State or County agencies may be made by (in order of preference):

      - State/County Emergency Communicator (dedicated line)

      - Assistant ERM (Bell line)

      - ESTL (via radio)

6. Notify the ESTL of the names and affiliations of individuals requested to report to the plant and where they will report.

8.3.3 (Continued)

7. Provide a list of incoming personnel to State and County agencies to facilitate access to the plant after traffic control is established.

8. Initiate the Florence Staging Area if required. Refer to the ERO Telephone Directory for the telephone number.

9. Provide safe routes for personnel reporting to the plant.

10. Coordinate request for use of government facilities through the State of South Carolina.

11. Direct requests for materials or parts to the Unit 1 issue counter, Bulk Warehouse or Unit 2 stockroom.

12. Direct clerical support requests to the Manager, Site Support Services or designee.

13. Direct requests for installation, maintenance and operation of communications facilities to the Information Technology personnel or the Help Desk. Refer to the ERO Telephone Directory for telephone numbers.

14. Ensure planned exposure control for personnel under your supervision in accordance with EPOSC-04, Emergency Work Control.

15. Determine the need for and utilize the Institute of Nuclear Power Operations (INPO) Resource Book to request additional resources from neighboring utilities.

8.3.3 (Continued)

16. Arrange for food, drinks, snacks for Emergency Response Organization (ERO) augmentees.

    a. Determine number of personnel in each facility (TSC, EOF, OSC, Control Room, Joint Information Center).

        – For training exercises include Controller/Evaluator and Simulator staff.

    b. Orders should be placed at least 2 hours before meals to allow for vendor preparation and delivery.

17. Arrange for hotels, motels for personnel as required.

18. Upon notification that teams are deployed, set-up state/NRC support rooms per Attachment 8.3.5.3, EOF NRC Support Room Recommended Layout and Attachment 8.3.5.10, TSC NRC Support Room Recommended Layout.

19. Perform personnel accountability of people reporting to the EOF and for other facilities as requested.

    a. ERO personnel are accounted for by Emergency Facility.

8.3.4 **RECORDS**

N/A

8.3.5 ATTACHMENTS

8.3.5.1 Emergency Operations Facility (EOF) Sign In Roster

8.3.5.2 Emergency Operations Facility (EOF) Four Day Work Schedule

8.3.5.3 EOF NRC Support Room Recommended Layout

8.3.5.4 Emergency Operations Facility (EOF) Emergency Supply List

8.3.5.5 Technical Support Center (TSC) Sign-In Roster

8.3.5.6 Technical Support Center (TSC) Four Day Work Schedule

8.3.5.7 Accident Assessment Room Recommended Layout

8.3.5.8 Support Services Room Recommended Layout

8.3.5.9 Environmental & Radiological Control (E&RC) Support Room Recommended Layout

8.3.5.10 TSC NRC Support Room Recommended Layout

ATTACHMENT 8.3.5.1
Page 1 of 1

EMERGENCY OPERATIONS FACILITY (EOF) SIGN IN ROSTER

NOTE: The positions listed below are recommended for activation purposes, however, partial activation should be considered in order to relieve the Control Room or TSC as soon as practical.

	NAME (PLEASE PRINT) / TIME
_____EMERG. RESPONSE MGR. (B1-75)	_____/_____
_____ASST. EMERG. RESP. MGR.	_____/_____
_____EMERGENCY COMMUNICATOR*	_____/_____
_____PLANT OPERATIONS ADVISOR	_____/_____
_____DOSE PROJECTION LEADER (B1-45)	_____/_____
_____ENVIRON. MON. LEADER (B1-75)	_____/_____

****

EOF POSITIONS LISTED BELOW ARE NOT REQUIRED FOR INITIAL EOF ACTIVATION.

****

_____TECHNICAL ANALYSIS MGR.	_____/_____
_____ADMIN. & LOGISTICS MGR.	_____/_____
_____RADIOLOGICAL CONTROL MGR.	_____/_____
_____SPDS PLOTTER	_____/_____
_____ERM ADMIN. ASSISTANT	_____/_____
_____EMERG. COMM. ADMIN. ASSISTANT	_____/_____
_____SEOC REPRESENTATIVE	_____/_____
_____DARLINGTON EOC REPRESENTATIVE	_____/_____
_____CHESTERFIELD EOC REPRESENTATIVE	_____/_____
_____LEE EOC REPRESENTATIVE	_____/_____
_____STATE/COUNTY COMMUNICATOR*	_____/_____
_____PUBLIC INFORMATION COMMUNICATOR*	_____/_____
_____FACILITY ADMINISTRATIVE ASSISTANTS (2)	_____/_____
	_____/_____

OVERFLOW

ERO POSITION	
_____	_____/_____
_____	_____/_____
_____	_____/_____
_____	_____/_____
_____	_____/_____

* Of the 3 Communicator positions (TSC and EOF), 1 additional person is required in 45 minutes and 2 additional personnel are required in 75 minutes.

ATTACHMENT 8.3.5.2
Page 1 of 5

EMERGENCY OPERATIONS FACILITY (EOF) FOUR DAY WORK SCHEDULE

Position	Shift	Time*	Date / /	Date / /	Date / /	Date / /
Emergency Response Manager			Name	Name	Name	Name
	1					
	2					
	3					
Assistant Emergency Response Manager			Name	Name	Name	Name
	1					
	2					
	3					
Emergency Communicator			Name	Name	Name	Name
	1					
	2					
	3					
Plant Operations Advisor			Name	Name	Name	Name
	1					
	2					
	3					
Dose Projection Leader			Name	Name	Name	Name
	1					
	2					
	3					

* Shift times may vary - i.e., (2) 12-hour shifts, (3) 8-hour shifts
If (2) 12-hour shifts - use shift 1-shift 2 boxes
If (3) 8-hour shifts - use shift 1-shift 2 and shift 3 boxes

EMERGENCY OPERATIONS FACILITY (EOF) FOUR DAY WORK SCHEDULE

Position	Shift	Time*	Date / /	Date / /	Date / /	Date / /
Facility Administrative Assistant			Name	Name	Name	Name
	1					
	2					
	3					
Facility Administrative Assistant			Name	Name	Name	Name
	1					
	2					
	3					
Environmental Monitoring Leader			Name	Name	Name	Name
	1					
	2					
	3					
Technical Analysis Manager			Name	Name	Name	Name
	1					
	2					
	3					
Administrative & Logistics Manager			Name	Name	Name	Name
	1					
	2					
	3					
Radiological Control Manager			Name	Name	Name	Name
	1					
	2					
	3					

* Shift times may vary - i.e., (2) 12-hour shifts, (3) 8-hour shifts
If (2) 12-hour shifts - use shift 1-shift 2 boxes
If (3) 8-hour shifts - use shift 1-shift 2 and shift 3 boxes

EMERGENCY OPERATIONS FACILITY (EOF) FOUR DAY WORK SCHEDULE

Position	Shift	Time*	Date / /	Date / /	Date / /	Date / /
ERM Administrative Assistant			Name	Name	Name	Name
	1					
	2					
	3					
SEOC Representative			Name	Name	Name	Name
	1					
	2					
	3					
Darlington EOC Representative			Name	Name	Name	Name
	1					
	2					
	3					

* Shift times may vary - i.e., (2) 12-hour shifts, (3) 8-hour shifts
If (2) 12-hour shifts - use shift 1-shift 2 boxes
If (3) 8-hour shifts - use shift 1-shift 2 and shift 3 boxes

EMERGENCY OPERATIONS FACILITY (EOF) FOUR DAY WORK SCHEDULE

Position	Shift	Time*	Date / /	Date / /	Date / /	Date / /
Chesterfield EOC Representative			Name	Name	Name	Name
	1					
	2					
	3					
Lee EOC Representative			Name	Name	Name	Name
	1					
	2					
	3					
State/County Communicator			Name	Name	Name	Name
	1					
	2					
	3					
Public Information Communicator			Name	Name	Name	Name
	1					
	2					
	3					

* Shift times may vary - i.e., (2) 12-hour shifts, (3) 8-hour shifts
If (2) 12-hour shifts - use shift 1-shift 2 boxes
If (3) 8-hour shifts - use shift 1-shift 2 and shift 3 boxes

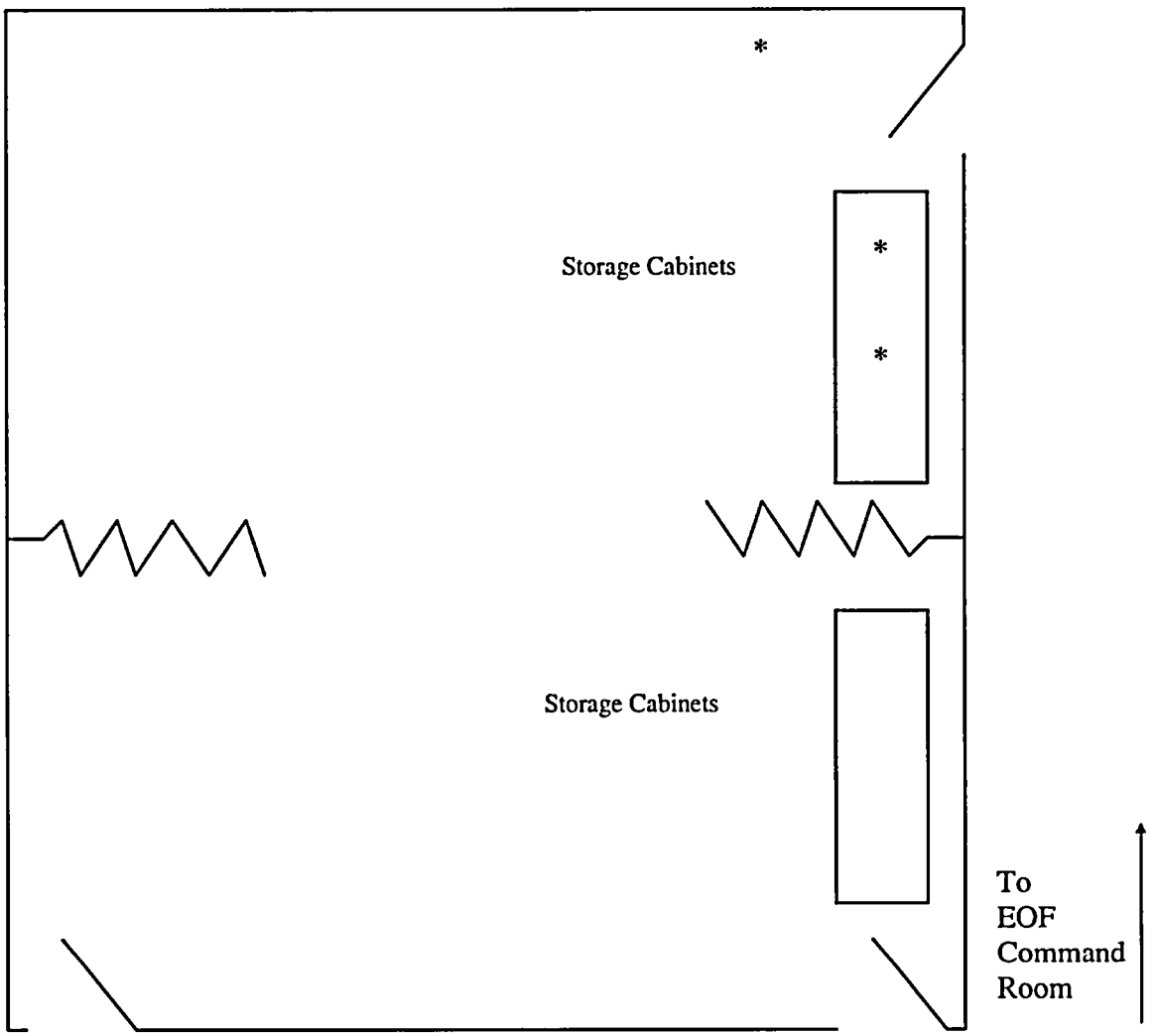
EMERGENCY OPERATIONS FACILITY (EOF) FOUR DAY WORK SCHEDULE

Position	Shift	Time*	Date / /	Date / /	Date / /	Date / /
Others:			Name	Name	Name	Name
	1					
	2					
	3					
			Name	Name	Name	Name
	1					
	2					
	3					
			Name	Name	Name	Name
	1					
	2					
	3					
			Name	Name	Name	Name
	1					
	2					
	3					

* Shift times may vary - i.e., (2) 12-hour shifts, (3) 8-hour shifts
If (2) 12-hour shifts - use shift 1-shift 2 boxes
If (3) 8-hour shifts - use shift 1-shift 2 and shift 3 boxes

ATTACHMENT 8.3.5.3
Page 1 of 1

EOF NRC SUPPORT ROOM RECOMMENDED LAYOUT



* NRC ETS Phones

To TSC Command Room

EMERGENCY OPERATIONS FACILITY (EOF) EMERGENCY SUPPLY LIST

	SUPPLIES	EOF LOCATION
1.	Telecopier	Training Library
2.	Xerox Machine	Copy Room 411
3.	Emergency Kit	EOF/TSC Mech. Room
4.	Clock	On Wall
5.	Emergency Resources Manual (INPO)	A&L/M
6.	Maps	
	a. 10 mile EPZ	Room 434
	b. 50 mile EPZ	Room 434
	c. Topo Map of Plant Environments	Room 434
7.	Mechanical Systems Drawings	Training Library
8.	Electrical Systems Drawings	Training Library
9.	FSAR	Training Library
10.	System Descriptions	Training Library
11.	Technical Specifications	Training Library
12.	Emergency Plans	
	a. Corporate Plan and Procedures	Room 434
	b. Plant Plan and Procedures	Training Library
	c. State and Local Plans	Room 434
13.	Emergency Notification Phone Lists	Emergency Phone Book
14.	CP&L Emergency Organization Chart	Room 434

ATTACHMENT 8.3.5.5
Page 1 of 2

TECHNICAL SUPPORT CENTER (TSC) SIGN IN ROSTER

NOTE:	The positions listed below are recommended for activation purposes, however, partial activation should be considered in order to relieve the Control Room as soon as possible.

NAME (PLEASE PRINT) / TIME

_____SITE EMERGENCY COORDINATOR (B1-75) _____ / _____

_____RADIOLOGICAL CONTROL DIRECTOR _____ / _____

_____PLANT OPERATIONS DIRECTOR _____ / _____

_____REACTOR ENGINEER (B1-45) _____ / _____

_____ELECTRICAL ENGINEER (B1-75) _____ / _____

_____MECHANICAL ENGINEER (B1-75) _____ / _____

_____EMERGENCY REPAIR DIRECTOR _____ / _____

_____ERFIS MAINTENANCE _____ / _____

_____EMERGENCY SECURITY LEADER _____ / _____

_____TECHNICAL ANALYSIS DIRECTOR _____ / _____

_____NRC COMMUNICATOR* _____ / _____

****

TSC POSITIONS LISTED BELOW ARE NOT REQUIRED FOR INITIAL TSC ACTIVATION.

****

_____SEC ADMINISTRATIVE ASSISTANT _____ / _____

_____SUPPORT SVS. COORDINATOR _____ / _____

_____FACILITY ADMINISTRATIVE ASSISTANT(S) (1) _____ / _____

(2) _____ /

*Of the 3 Communicator positions (TSC and EOF), 1 additional person is required in 45 minutes and 2 additional personnel are required in 75 minutes.

ATTACHMENT 8.3.5.5

Page 2 of 2

TECHNICAL SUPPORT CENTER (TSC) SIGN IN ROSTER

	ERO POSITION	NAME (PLEASE PRINT) / TIME
		/
		/
		/
		/
		/
		/
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		/

ATTACHMENT 8.3.5.6
Page 1 of 4

TECHNICAL SUPPORT CENTER (TSC) FOUR DAY WORK SCHEDULE

Position	Shift	Time*	Date / /	Date / /	Date / /	Date / /
Site Emergency Coordinator			Name	Name	Name	Name
	1					
	2					
	3					
Radiological Control Director			Name	Name	Name	Name
	1					
	2					
	3					
Plant Operations Director			Name	Name	Name	Name
	1					
	2					
	3					
Reactor Engineer			Name	Name	Name	Name
	1					
	2					
	3					

* Shift times may vary - i.e., (2) 12-hour shifts, (3) 8-hour shifts
If (2) 12-hour shifts - use shift 1-shift 2 boxes
If (3) 8-hour shifts - use shift 1-shift 2 and shift 3 boxes

TECHNICAL SUPPORT CENTER (TSC) FOUR DAY WORK SCHEDULE

Position	Shift	Time*	Date / /	Date / /	Date / /	Date / /
Facility Administrative Assistants (2)			Name	Name	Name	Name
	1					
	2					
	3					
	1					
	2					
	3					
Electrical Engineer			Name	Name	Name	Name
	1					
	2					
	3					
Mechanical Engineer			Name	Name	Name	Name
	1					
	2					
	3					
Emergency Repair Director			Name	Name	Name	Name
	1					
	2					
	3					
ERFIS Maintenance			Name	Name	Name	Name
	1					
	2					
	3					

* Shift times may vary - i.e., (2) 12-hour shifts, (3) 8-hour shifts
If (2) 12-hour shifts - use shift 1-shift 2 boxes
If (3) 8-hour shifts - use shift 1-shift 2 and shift 3 boxes

TECHNICAL SUPPORT CENTER (TSC) FOUR DAY WORK SCHEDULE

Position	Shift	Time*	Date / /	Date / /	Date / /	Date / /
Emergency Security Team Leader			Name	Name	Name	Name
	1					
	2					
	3					
Technical Analysis Director			Name	Name	Name	Name
	1					
	2					
	3					
NRC Communicator			Name	Name	Name	Name
	1					
	2					
	3					
SEC Administrative Assistant			Name	Name	Name	Name
	1					
	2					
	3					
Support Svs. Coordinator			Name	Name	Name	Name
	1					
	2					
	3					

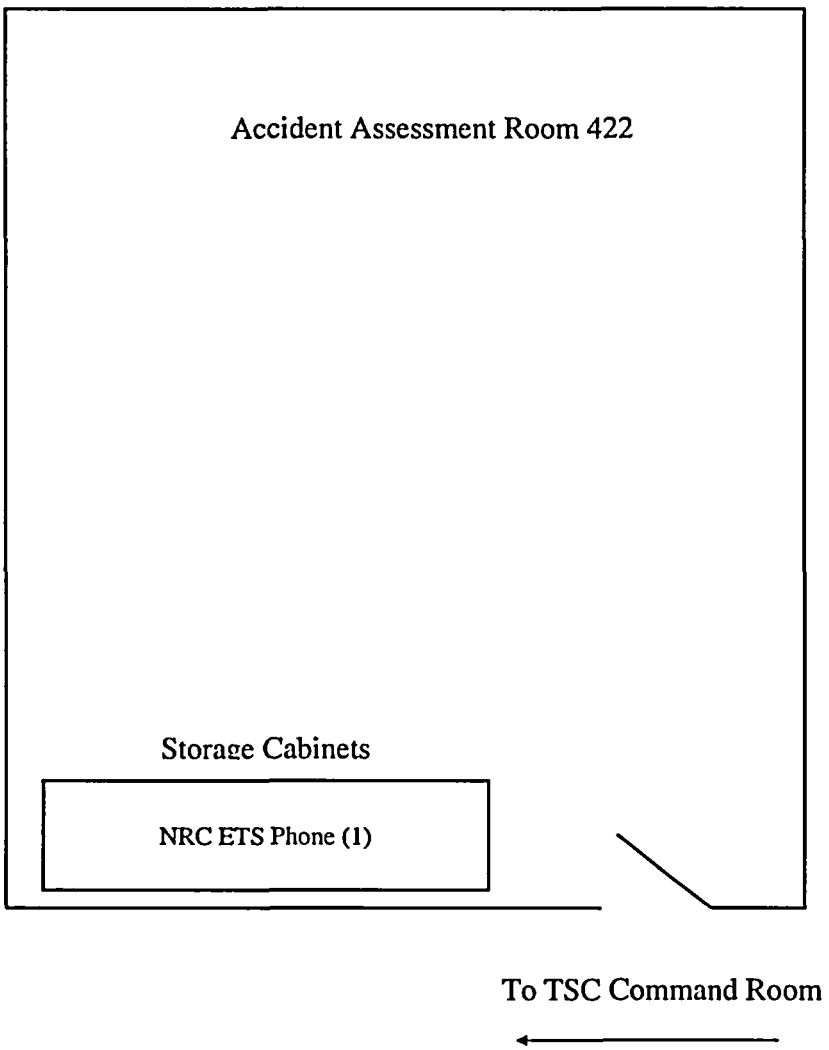
* Shift times may vary - i.e., (2) 12-hour shifts, (3) 8-hour shifts
If (2) 12-hour shifts - use shift 1-shift 2 boxes
If (3) 8-hour shifts - use shift 1-shift 2 and shift 3 boxes

TECHNICAL SUPPORT CENTER (TSC) FOUR DAY WORK SCHEDULE

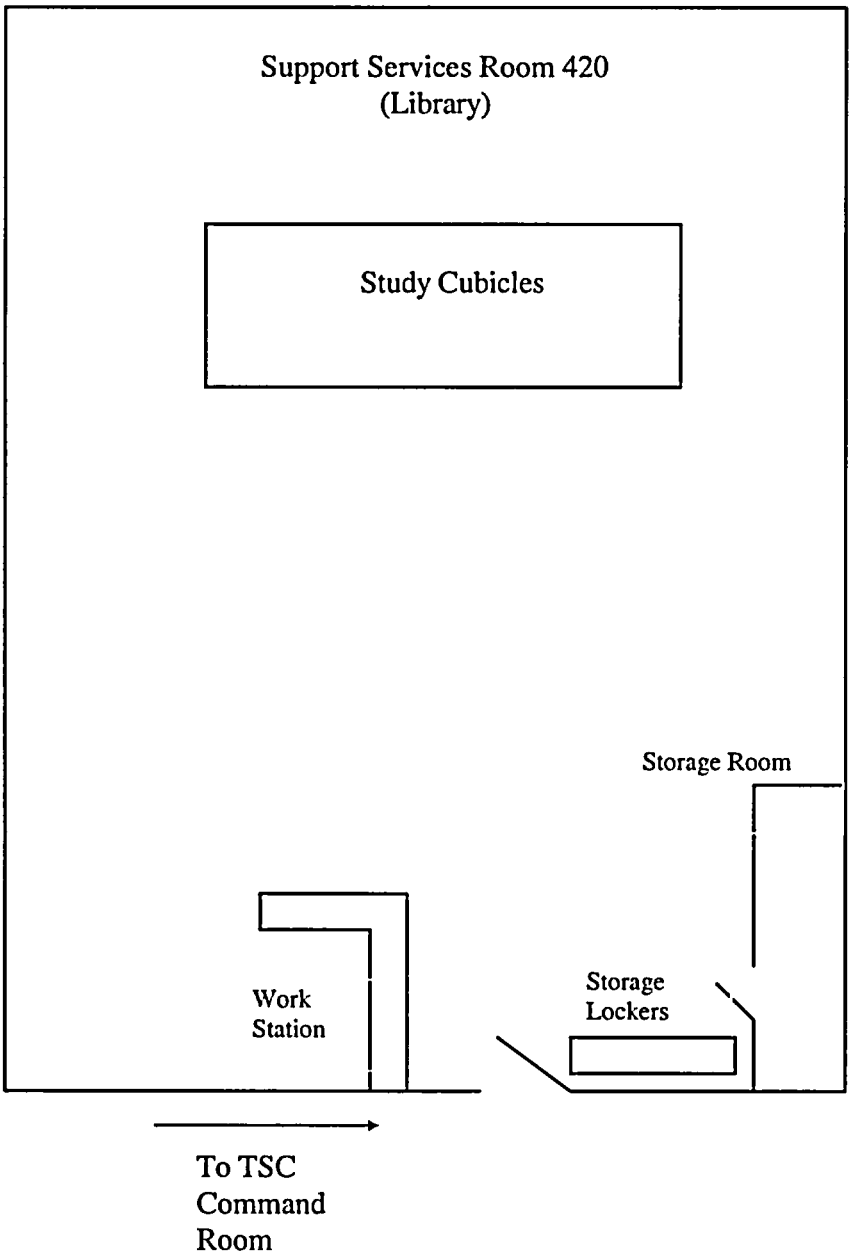
Position	Shift	Time*	Date / /	Date / /	Date / /	Date / /
Others:			Name	Name	Name	Name
	1					
	2					
	3					
			Name	Name	Name	Name
	1					
	2					
	3					
			Name	Name	Name	Name
	1					
	2					
	3					
			Name	Name	Name	Name
	1					
	2					
	3					
			Name	Name	Name	Name
	1					
	2					
	3					

* Shift times may vary - i.e., (2) 12-hour shifts, (3) 8-hour shifts
If (2) 12-hour shifts - use shift 1-shift 2 boxes
If (3) 8-hour shifts - use shift 1-shift 2 and shift 3 boxes

ACCIDENT ASSESSMENT ROOM RECOMMENDED LAYOUT



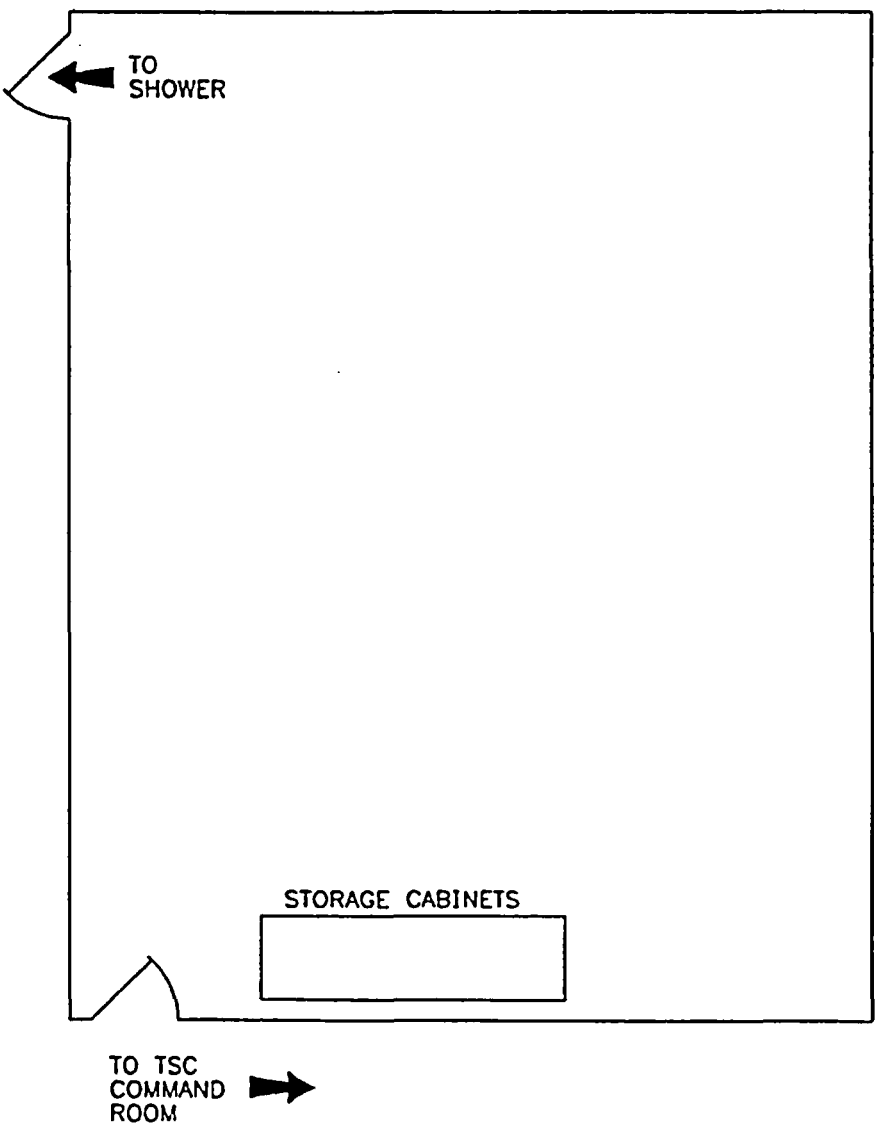
ATTACHMENT 8.3.5.8
Page 1 of 1
SUPPORT SERVICES ROOM RECOMMENDED LAYOUT



ATTACHMENT 8.3.5.9
Page 1 of 1

ENVIRONMENTAL & RADIOLOGICAL CONTROL SUPPORT ROOM RECOMMENDED LAYOUT

ENVIRONMENTAL AND RADIOLOGICAL CONTROLS
SUPPORT ROOM
ROOM 423



ATTACHMENT 8.3.5.10
Page 1 of 1

TSC NRC SUPPORT ROOM
RECOMMENDED LAYOUT