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10 CFR 50.4(b)(5)(ii)
10 CFR 50.54(q)(5)

Serial: RA-16-0026
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U.S. Nuclear Regulatory
Attn: Document Control Desk
Washington, DC 20555-0001

CATAWBA NUCLEAR STATION, UNITS 1 AND 2
DOCKET NOS. 50-413 AND 50-414 / RENEWED LICENSE NOS. NPF-35 AND NPF-52

MCGUIRE NUCLEAR STATION, UNITS 1 AND 2
DOCKET NOS. 50-369 AND 50-370 / RENEWED LICENSE NOS. NPF-9 AND NPF-17

OCONEE NUCLEAR STATION, UNIT NOS. 1, 2 AND 3
DOCKET NOS. 50-269, 50-270 AND 50-287 / RENEWED LICENSE NOS. DPR-38, DPR-47
AND DPR-55

**Subject: TRANSMITTAL OF EMERGENCY PLAN IMPLEMENTING PROCEDURE:
SR/0/A/2000/003 REVISION 9**

In accordance with 10 CFR 50.4(b)(5)(iii), 10 CFR 50.54(q)(5) and 10 CFR 50, Appendix E, Section V, Duke Energy is submitting revised Fleet Emergency Plan Implementing Procedure SR/0/A/2000/003 (Activation of the Emergency Operations Facility) Revision 9 for Catawba Nuclear Station, Units 1 and 2, McGuire Nuclear Station, Units 1 and 2 and Oconee Nuclear Station, Units 1, 2 and 3. The effective date of SR/0/A/2000/003, Revision 9 was June 29, 2016.

Duke Energy has evaluated this procedure revision in accordance with 10 CFR 50.54(q), and determined that the revision does not constitute a reduction in the effectiveness of the Emergency Plan for Catawba Nuclear Station, Units 1 and 2, McGuire Nuclear Station, Units 1 and 2 and Oconee Nuclear Station, Units 1, 2 and 3 and that the Emergency Plan, as changed, continue to meet the standards of 10 CFR 50.47(b) and the requirements of 10 CFR 50, Appendix E.

Enclosure 1 provides a 10 CFR 50.54(q)(5) summary for procedure SR/O/A/2000/003, Revision 9. Enclosure 2 contains a copy of procedure SR/O/A/2000/003, Revision 9.

This document contains no regulatory commitments. Please refer any questions regarding this submittal to Mr. Art Zaremba at 980-373-2062.

Sincerely,

A handwritten signature in black ink, appearing to read 'M. Christopher Nolan', written in a cursive style.

M. Christopher Nolan
Director - Nuclear Regulatory Affairs

Enclosures:

1. 10 CFR 50.54(q)(5) Summary
2. Copy of Fleet Emergency Preparedness Procedure

U.S. Nuclear Regulatory Commission

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10 CFR 50.54(q)(5) Summary

In accordance with 10 CFR 50.54(q)(5), Duke Energy is providing a summary of the Fleet Emergency Plan Implementing Procedure being submitted with this letter.

SR/0/A/2000/003, Activation of the Emergency Operations Facility, Revision 9

The proposed changes reflected in SR/0/A/2000/003, Revision 9 are clarifications and do not result in a reduction in effectiveness of the Emergency Plan, as written and approved for Catawba, McGuire and Oconee. The changes will ensure that the EOF is returned to a state of readiness after a drill and/or actual event. The procedure revision continues to comply with the requirements of 10 CFR 50.47(b) and 10 CFR 50, Appendix E and the activity does not constitute a reduction in effectiveness or change in the current Emergency Action Level (EAL) scheme.

RA-16-0022
Enclosure 2

Copy of Fleet Emergency Preparedness Procedure

<div>Duke Energy</div> <div>Standard Procedure for CNS, MNS & ONS</div> <div>Activation of the Emergency Operations Facility</div> <div>Reference Use</div>	Procedure No.
	SR/ 0 /A/2000/003
	Revision No. 009
	Electronic Reference No. SHR0005P

Activation of the Emergency Operations Facility

1. PURPOSE

- 1.1 This procedure describes the emergency responsibilities and duties of the Emergency Operations Facility Emergency Response Organization (ERO) members.

2. DEFINITIONS

NOTE: The EOF must be operational using 75 minutes as a goal for the minimum staff to be in place following declaration of an Alert or higher classification. Turnover should occur with the TSC at a time that will not decrease the effectiveness of communications with the offsite agencies.

- 2.1 Operational: The Emergency Response Facility (e.g., Technical Support Center, Operations Support Center, Emergency Operations Facility) is staffed, ready to receive turnover and ready to perform assigned emergency response functions.
- 2.2 Activated: The Emergency Response Facility (e.g., Technical Support Center, Operations Support Center, Emergency Operations Facility) has accepted turnover and has direction and control of assigned emergency response functions.

NOTE: The following definition is applicable to the Emergency Notification Form Line 6.

- 2.3 Emergency Release: An unplanned, quantifiable radiological release to the environment during an emergency event. {AD-EP-ALL-0002}

NOTE: The following definitions are applicable to the Emergency Notification Form, Line 8.

- 2.4 Degrading: Plant conditions involve at least one of the following:

Plant parameters (e.g., temperature, pressure, level, voltage, frequency) are trending unfavorably away from expected or desired values **AND** plant conditions could result in a higher classification or Protective Action Recommendation (PAR) before the next follow-up notification.

Site conditions (e.g., wind, ice/snow, ground tremors, hazardous/toxic/radioactive material leak, fire, security event) impacting plant operations or personnel safety are worsening **AND** plant conditions could result in a higher classification or Protective Action Recommendation (PAR) before the next follow-up notification.

2.5 Improving: Plant conditions involve at least one of the following:

Plant parameters (e.g., temperature, pressure, level, voltage, frequency) are trending favorably toward expected or desired values AND plant conditions could result in a lower classification or emergency termination before the next follow-up notification.

Site conditions (e.g., wind, ice/snow, ground tremors hazardous/toxic/radioactive material leak, fire, security events) have become less of a threat to plant operations or personnel safety AND plant conditions could result in a lower classification or emergency termination before the next follow-up notification.

2.6 Stable: Plant conditions are neither degrading nor improving.

3. PROCEDURE

- NOTES:**
- This procedure and the position specific enclosures are not intended to be followed in a serial step-by-step sequence.
 - Instructions and guidance steps are to be implemented as applicable for the specific needs of the event.
 - Use hard copy (paper) forms or electronic equivalents to complete all forms.
 - References to "Status Boards" may refer to physical displays mounted in the facility or electronic displays either projected, displayed on large monitors or on personal computer monitors.

3.1 General instructions for all ERO members.

3.1.1 Ensure appropriate checklist, logs and forms are completed.

3.1.2 Provide critical information to appropriate personnel upon receipt rather than waiting for a time out or roundtable discussion.

3.1.3 Use "Attention in the EOF" to announce critical information in the facility.

NOTE {IER L1-13-10}:

- The Emergency Response Organization structure is scalable and flexible, based on the size, complexity, and the specifics of the hazard environment created by the emergency event. Additional functional elements (e.g., ERO positions) can be established to enhance the management and coordination of the event.
 - When the emergency event's complexity increases, then the ERO can expand, as additional functional responsibilities are needed.
 - When the complexity decreases, then the ERO can contract, when those additional functional responsibilities are no longer needed.
- The makeup and structure of the EOF will be determined by the EOF Director.
- EOF staffing may be required for extended periods of time (e.g., greater than 10 days for BDBEEs, ELAP, etc.).

3.1.4 **IF** additional personnel are needed to support the emergency or for 24-hour coverage, **THEN** refer to the following for telephone numbers:

- ERO Member Contact Information notebook on the EOF Director's Area bookshelf (home, office and cell phone numbers).
- Duke Energy Enterprise Phone Book (office and cell phone numbers).
- Emergency Response Organization (ERO) database by contacting the EOF Emergency Planner.

3.1.5 **IF** equipment problems occur, **THEN** contact the following:

- Computer – EOF Data Coordinator
- Communications systems and other facility equipment – EOF Services Manager

NOTE: When using the OAC to trend plant data for decision purposes, please note that reducing the trend screen overall size can cause the plotted data to be suspect upon restoration to full size. It is recommended that trend plots be minimized using the standard windows button (the button in the top right that has the underbar). The software code is designed to refresh the trend screens upon restoration to full size from a minimized state. A second method is to have the OAC redraw the trend after restoring the trend screen to full size.

3.2 **IF** access to SDS data is desired, **THEN** login to system as follows:

- 3.2.1 From DAE main screen, select Search DAE tab.
- 3.2.2 Type SDS in Search box and press Enter.
- 3.2.3 Select **Catawba OAC SDS**, **McGuire OAC SDS**, or **Oconee OAC SDS** as applicable.
- 3.2.4 Select Run Application.
- 3.2.5 Logon with LAN ID and Password as follows:

NAM\UserID

Password

- 3.2.6 Select the desired OAC to access by checking the box and then clicking the Start button. You can start multiple sessions if desired.

CNS

- **C1 RT PRI**
- **C2 RT PRI**
- **C1 RT BAC**
- **C2 RT BAC**
- **ProDAC**
- **Simulator**
- **Spare Sim**
- **EP Sim**
- **EDS**

MNS

- **M1 RTS PRI**
- **M1 RTS BAC**
- **M2 RTS PRI**
- **M2 RTS BAC**
- **ProDaC**
- **Simulator**
- **Sim Backup**
- **EDS**

ONS

- **O1 OAC**
- **O2 OAC**
- **O3 OAC**
- **KHU OAC**
- **Simulator A**
- **Simulator B**
- **Simulator ICS**
- **Sim Develop**
- **ProDaC**

3.2.7 Access emergency response displays as follows:

Catawba/McGuire

Enter GD (space)"Group Display Name" in the white box at the upper right portion of the screen.

Catawba Specific

<u>Group Display Name</u>	<u>Group Display Description</u>
ERDS1	ERDS Group 1
ERDS2	ERDS Group 2
EROCONT	Selected values associated with containment.
EROCORE1	Incore temperature values
EROCORE2	Additional incore temperature values
EROCORE3	Additional incore temperature values
EROINJCT	Selected letdown/charging values
EROPLEAK	Selected primary to containment leakage values
EROSLEAK	Selected primary to secondary leakage values
EROPRIM	Selected primary system values
ERODOSE	Selected Dose Assessment Points
ERORXG	Selected Value for Reactor Engineer
EROSAMG	Selected SAMG Values
EROSSECND	Selected secondary system values
MET	Met Tower Points

McGuire Specific

<u>Group Display Name</u>	<u>Group Display Description</u>
ERO-1	Selected plant parameters
EROCONT	Emergency Response Containment
EROCORE	Emergency Response Incore
EROINJCT	Emergency Response Injection
EROPRIM	Emergency Response Primary
ERORD5	Selected Dose Assessment Points
EROSSECND	Emergency Response Secondary.
WEATHER	Weather Data

Oconee

Enter applicable Turn On code in the white box at the upper right portion of the screen.

Oconee Specific	
<u>Turn On Code Name</u>	<u>Turn On Code Description</u>
EROMENU	Menu Access for Oconee Data Screens
EROPRI	Selected Primary System values
EROSec	Selected Secondary System values
EROCONT	Selected Containment Condition values
EROAUX	Selected Radiation Monitor values
EROAREA	Selected Area Radiation Monitor values
EROPROC	Selected Process Radiation Monitor values
EROENV	Selected values for Dose Assessment and Field Monitoring use
EROECCS	Selected ECCS values
ERDSMENU	Menu Access for Oconee ERDS Data

- 3.2 The Emergency Plant Status application has also been established for Oconee emergency response use. This application is available from DAE.

3.2.1 To launch the Emergency Plant Status application, from DAE select *Search DAE* and type in *Emergency Plant Status*.

3.2.2 Select the *Emergency Plant Status - ONS*

3.2.3 Select Run Application

3.2.4 Enter your password and verify domain as NAM.

- 3.4 **IF** EOF facility in Energy Center is unavailable, **THEN** establish Alternate EOF at designated alternate location {IER L1-13-10}:

- Catawba Nuclear Station event - McGuire Administration Building per Enclosure 6.25
- McGuire Nuclear Station event - Catawba Administration Building per Enclosure 6.26
- Oconee Nuclear Station event - Catawba Administration Building per Enclosure 6.26

- 3.5 Perform the applicable actions for the event using instructions and guidance in the following enclosures:

ERO Position Title	Enclosure
EOF Director/Assistant EOF Director	6.1 EOF Director/Assistant EOF Director Checklist
Radiological Assessment Manager	6.6 Radiological Assessment Manager Checklist
EOF Dose Assessor	6.7 EOF Dose Assessor Checklist
Field Monitoring Coordinator	6.8 Field Monitoring Coordinator Checklist
Radio Operator	6.9 Radio Operator Checklist
EOF Offsite Agency Communicator	6.10 EOF Offsite Agency Communicator Checklist
EOF Services Administration/Commissary	6.11 EOF Services Administration/Commissary Checklist
Accident Assessment Manager	6.12 Accident Assessment Manager Checklist
Accident Assessment Interface	6.13 Accident Assessment Interface Checklist
Operations Interface Checklist	6.14 Operations Interface Checklist
Reactor Physics	6.15 Reactor Physics Checklist
EOF Emergency Planner	6.16 EOF Emergency Planner Checklist
EOF Log Recorder	6.17 EOF Log Recorder Checklist
EOF Data Coordinator	6.18 EOF Data Coordinator Checklist
EOF Services Manager	6.19 EOF Services Manager Checklist

4. REFERENCES

- 4.1 Catawba Nuclear Station (CNS) Emergency Plan
- 4.2 McGuire Nuclear Station (MNS) Emergency Plan
- 4.3 Oconee Nuclear Station (ONS) Emergency Plan

5. RECORDS

- 5.1 All logs, forms and records completed as the result of implementing this procedure during an actual declared event shall be retained as permanent plant records. Nuclear Generation Record Retention Rule Number 421734, "Procedures-Technical Completed."
- 5.2 All checklists, logs and forms completed as the result of implementing this procedure shall be collected at the end of the event and provided to the site Emergency Preparedness Manager.

6. Enclosures

- 6.1 EOF Director/Assistant EOF Director Checklist
- 6.2 Catawba Offsite Protective Actions
- 6.3 McGuire Offsite Protective Actions
- 6.4 Oconee Offsite Protective Actions
- 6.5 Emergency Classification Downgrade/Termination
- 6.6 Radiological Assessment Manager Checklist
- 6.7 EOF Dose Assessor Checklist
- 6.8 Field Monitoring Coordinator Checklist
- 6.9 Radio Operator Checklist
- 6.10 EOF Offsite Agency Communicator Checklist
- 6.11 EOF Services Administration/Commissary Checklist
- 6.12 Accident Assessment Manager Checklist
- 6.13 Accident Assessment Interface Checklist
- 6.14 Operations Interface Checklist
- 6.15 Reactor Physics Checklist
- 6.16 EOF Emergency Planner Checklist
- 6.17 EOF Log Recorder Checklist
- 6.18 EOF Data Coordinator Checklist
- 6.19 EOF Services Manager Checklist
- 6.20 Establishing Communications Links Between McGuire SAMG Evaluators
- 6.21 Oconee Recovery Guidelines
- 6.22 Keowee Hydro Dam/Dikes - Imminent Failure/Potential Failure Descriptions
- 6.23 EOF Evacuation Checklist
- 6.24 EOF Briefing Guideline
- 6.25 Setup of Catawba Alternate EOF in McGuire Admin Bldg.
- 6.26 Setup of McGuire or Oconee Alternate EOF in Catawba Admin Bldg.
- 6.27 NRC Response Team Briefing
- 6.28 Commitments for SR/0/B/2000/003

Enclosure 6.1
EOF Director/Assistant EOF Director
Checklist

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INITIAL

NOTE: Steps in this checklist may be performed in any order appropriate to the specific event conditions or they may be omitted if not applicable.

- _____ **IF** reporting to EOF outside your normal work hours, **THEN** complete a Fitness for Duty Questionnaire.
- _____ Don position badge.
- _____ Log in to PC
- _____ Log in to WebEOC.
- _____ Sign in on Sign In board.

NOTE: The EOF Log Recorder will maintain the official log for the EOF Director/Assistant EOF Director. The EOF Director/Assistant EOF Director may maintain an additional log if desired.

- _____ Establish Position Log of activities sufficient to conduct turnover for on-coming shift.
- _____ Establish communications with Emergency Coordinator or Assistant Emergency Coordinator in affected site's TSC:
 - Use affected site's EOF Director to Emergency Coordinator Ringdown phone (Catawba and McGuire only)
 - OR**
 - Catawba TSC, 9-803-701-5870
 - OR**
 - McGuire TSC, 9-980-875-4950
 - OR**
 - Oconee TSC, 9-1-864-873-3921

NOTE: EOF access is controlled through the use of a monitored card reader process.

- _____ Verify Energy Center Building Security personnel are monitoring the EOF entrance card reader.

NOTE: The following step is needed for EOF data display. The Accident Assessment Manager updates the Fission Product Barrier status board.

- _____ Establish Fission Product Barrier status board display as follows.
 - ☐ Log in to Assistant EOF Director computer.
 - ☐ Log in to WebEOC.
 - ☐ Click on Fission Product Barrier Status - SITE.
 - ☐ Drag to right monitor **AND** maximize.

Enclosure 6.1
EOF Director/Assistant EOF Director
Checklist

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INITIALS _____ PRINTED NAME _____ (EOF
Director)

INITIALS _____ PRINTED NAME _____ (Asst. EOF
Director)

Enclosure 6.1
EOF Director/Assistant EOF Director
Checklist

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- NOTE:**
1. **IF** the emergency situation prevents activating the TSC within 75 minutes of declaration, **THEN** the Control Room will:
 - Turn over responsibility for classification and state and county notification to EOF.
 - Maintain responsibility for NRC Event Notification until released by NRC Communicator in TSC.
 - Maintain responsibility for continuous phone communications to the NRC until relieved by the NRC Communicator in the TSC.
 2. **IF** TSC remains unavailable and EOF cannot take responsibility for classification and state and county notification, **THEN** the Control Room will maintain these responsibilities until one of the facilities is capable of turnover.

_____ **IF** emergency situation prevents activating TSC within 75 minutes of declaration, **THEN** contact affected Site's Control Room:

Person Notified/Date/Time

- | | |
|---|---------------|
| <input type="checkbox"/> Catawba Control Room, 9-803-701-5164 | _____ / _____ |
| <input type="checkbox"/> McGuire Control Room, 9-980-875-4138 | _____ / _____ |
| <input type="checkbox"/> Oconee Unit 1 and 2 Control Room, 9-1-864-873-2159 | _____ / _____ |
| <input type="checkbox"/> Oconee Unit 3 Control Room, 9-1-864-873-2160 | _____ / _____ |

_____ Verify EOF minimum staffing positions are prepared to assume their EOF duties prior to declaring the EOF operational:

- _____ EOF Director
- _____ Accident Assessment Manager
- _____ Radiological Assessment Manager
- _____ Off-Site Agency Communicator
- _____ Off-Site Agency Communicator.

OR

IF Less than the above listed minimum EOF positions are filled,

AND

The 75-minute EOF operational time requirement is near,

AND

An extra person(s) is available whom the EOF Director believes is capable of filling a missing position(s) based on the training, experience and skills required by the ERO training program - ETQS 7111.0, Emergency Response Training

AND

An appropriate log entry is made.

_____ Request Offsite Agency Communicator monitor EOF Fax 704-382-1825.

Enclosure 6.1
EOF Director/Assistant EOF Director
Checklist

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NOTE: For all drills, messages should be preceded with "This is a drill. This is a drill."

_____ Announce over EOF public address system:

"Anyone who is reporting to this facility outside of your normal work hours must complete a Fitness for the Duty Form. If you have consumed alcohol within the past five (5) hours or believe your work quality may be compromised due to fatigue, sickness, or other potentially impairing conditions, notify either the EOF Director, Assistant EOF Director, or the appropriate lead in your functional area."

_____ Declare EOF operational. EOF operational time: _____.

NOTE: For all drills, messages should be preceded with "This is a drill. This is a drill."

_____ Announce over EOF public address system:

"Attention all EOF personnel. This is _____ and as of _____ hours,
(EOF Director's Name)

the EOF is operational. Each EOF functional area should perform a Take a Minute in its work area."

_____ Notify Emergency Coordinator or Assistant Emergency Coordinator that the EOF is:

- Operational
- Gathering plant status information
- Ready to receive turnover at the Emergency Coordinator's convenience.

_____ Review definitions in Section 2 of this procedure.

NOTE: The following step may be accomplished by conducting a Time Out or by verifying the level of readiness with the individuals in the positions.

_____ Verify the following positions, at a minimum, are ready to activate and prepared to perform the next offsite agency notification.

- _____ Accident Assessment Manager
- _____ Radiological Assessment Manager
- _____ Lead Off-Site Agency Communicator

NOTE: The Emergency Coordinator or Assistant Emergency Coordinator should fax the Emergency Coordinator Turnover Checklist to the EOF. The "Emergency Coordinator Turnover Checklist" is provided on page 15 of this enclosure.

_____ **IF** a classification change occurs during turnover, **THEN** suspend turnover until CR OR TSC declares and transmits notification to offsite agencies.

Enclosure 6.1
EOF Director/Assistant EOF Director
Checklist

SR/0/A/2000/003
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_____ Receive turnover from Emergency Coordinator or Assistant Emergency Coordinator utilizing the "Emergency Coordinator Turnover Checklist" or equivalent.

_____ Prepare or delegate to Assistant EOF Director preparations for briefing NRC by completing job aid in Enclosure 6.27

NOTE: The EOF Director is responsible for determining Emergency Classifications, approving Protective Action Recommendations, and approving Offsite Agency Emergency Notification Forms after the EOF is activated. These responsibilities remain with the EOF Director and shall not be delegated.

_____ Inform Emergency Coordinator that EOF is ready to activate.

NOTE: For all drills, messages should be preceded with "This is a drill. This is a drill."

_____ Announce over the EOF public address system:

"Attention all EOF personnel. The EOF was activated at _____ hours. This is _____. I am the EOF Director and have taken responsibility for emergency management from the Emergency Coordinator in the Technical Support Center. At this time, the EOF has command and control for emergency classification, offsite notifications, protective action recommendations, field monitoring, and offsite agency interface. The current emergency classification is _____. The following is a summary of the plant status _____.

Additional information will be provided to you as conditions change. The next offsite agency notification shall be transmitted by _____ hours. The EOF staff shall prepare for a time-out and a roundtable discussion at _____ hours."

_____ **IF AT ANY TIME** there is a need to deviate from normal work practices, **THEN** refer to AD-OP-ALL-1000, Conduct of Operations, Attachment 7, Deviations from Normal Work Processes/Requirements Documentation, to document the deviation. {IER L1-13-10}

_____ Review current emergency classification with EOF staff and verify it meets criteria in:

- Catawba RP/0/A/5000/001
- OR**
- McGuire RP/0/A/5700/000
- OR**
- Oconee RP/0/A/1000/001.

_____ **IF** a Hostile Action Based (HAB) event **AND** an Incident Command Post (ICP) has been established, **THEN** ensure EOF communications with Control Room and Operations ICP Liaison as follows:

- Catawba Operations ICP Bridge Line 9- 803-701-5708 (Spare ICP Bridge Line 9-803-701-5800).
- McGuire Operations Bridge Line 9-980-875-4500.

Enclosure 6.1
EOF Director/Assistant EOF Director
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- Oconee Operations ICP Bridge Line 9-1-864-885-4908 (Spare ICP Bridge Line 9-1-864-873-4905).

NOTE:

1. The first message from the EOF should include EOF activation time on Line 13.
2. **IF** data changes during review of the emergency notification form, it is a good practice to require the EOF staff to do a "clean sweep" through the form prior to approval.

Enclosure 6.1
EOF Director/Assistant EOF Director
Checklist

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_____ Notify Offsite Agency Communicator to make emergency notifications according to the following schedule:

Initial Notifications

1. Initial notifications to the State(s) and counties must be made within 15 minutes of the event declaration time using the Emergency Notification form (ENF).
2. For an upgrade in classification prior to or while transmitting an initial message:
 - The notification for the lesser emergency classification must be made within 15 minutes of the lesser classification declaration time.
 - The agencies must be informed that an upgrade in classification will be coming.
 - The upgraded classification message must be transmitted within 15 minutes of the upgraded classification declaration time.
3. Initial messages in the General Emergency classification that involve an upgrade in PARs must be communicated to the offsite agencies as soon as possible and within 15 minutes.

Follow-up Notifications

1. Follow-up notifications to the State(s) and Counties must be made according to the following schedule:

<u>Catawba</u> -For NOUE, ALERT, SAE, or GE, every hour until the emergency is terminated.	<u>McGuire</u> -For NOUE, every 4 hours until the emergency is terminated. -For ALERT, SAE, or GE, every hour until the emergency is terminated.	<u>Oconee</u> -For NOUE, a follow-up is not required. -For ALERT, SAE, or GE, every 60 minutes until the emergency is terminated.
OR		
<u>Catawba</u> -If there is any significant change to the situation (make notification as soon as possible).	<u>McGuire</u> -If there is any significant change to the situation (make notification as soon as possible).	<u>Oconee</u> -If there is any significant change to the situation (make notification as the change occurs). See NOTE* below for examples of changes.
OR		
<u>Catawba</u> -As agreed upon with an Emergency Management official from <u>each</u> individual agency. Documentation shall be maintained for any agreed upon schedule change. -The interval <u>shall not</u> be greater than 4 hours to any agency.	<u>McGuire</u> -As agreed upon with an Emergency Management official from each individual agency. Documentation shall be maintained for any agreed upon schedule change. -The interval for ALERT, SAE, or GE <u>shall not</u> be greater than 2 hours to any agency.	<u>Oconee</u> -Required every 60 minutes from the notification time on Line 2 for ALERT, SAE, or GE. -This frequency <u>may be</u> changed at the request of offsite agencies.

*NOTE (Oconee): Examples of significant plant changes include: evacuation/relocation of site personnel, fires onsite, MERT activation and/or injured personnel transported offsite, chemical spills, explosions, Condition "A" or "B" for Keowee Hydro Project Dams/Dikes, or any event that would cause or require offsite agency response.

2. If a follow-up is due and an upgrade to a higher classification is declared, there is no need to complete the follow-up ENF. In this case, the offsite agencies must be notified that the pending follow-up is being superseded by an upgrade to a higher classification and information will be provided.

Enclosure 6.1
EOF Director/Assistant EOF Director
Checklist

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_____ **IF AT ANY TIME** Site Area Emergency is declared, **THEN** consult Accident Assessment Manager and Radiological Assessment Manager to determine potential zones for protective action recommendations.

_____ **IF AT ANY TIME** General Emergency is declared, **THEN** EOF Director shall IMMEDIATELY (within 15 minutes) make Protective Action Recommendations to offsite agencies on Emergency Notification Form (ENF) using:

- ☐ Enclosure 6.2 - Catawba Offsite Protective Actions
- ☐ Enclosure 6.3 - McGuire Offsite Protective Actions
- ☐ Enclosure 6.4 - Oconee Offsite Protective Action

_____ **IF** changes to Protective Action Recommendations are approved by the EOF Director, **THEN** ensure changes are transmitted to offsite agencies within 15 minutes.

CAUTION: If a zone has been accurately selected for evacuation, it shall remain selected.
--

_____ Evaluate specific plant conditions, offsite dose projections, field monitoring team data, and determine need to update Protective Action Recommendations.

_____ Review dose projections with Radiological Assessment Manager to determine if Protective Action Recommendations are required beyond the 10-mile EPZ.

_____ **IF** Protective Action Recommendations are required beyond 10 miles, **THEN** notify the states and counties to consider sheltering/evacuation of general population beyond 10-mile EPZ.

NOTE: Descriptions of Keowee Hydro Dam/Dike Imminent Failure/Potential Failure are provided in Enclosure 6.22.

_____ **IF** Imminent Dam Failure (Keowee or Jocassee) exists, **THEN** make Protective Action Recommendations to Oconee County and Pickens County for imminent/actual dam failure on Emergency Notification Form Line 5E (Other):

*Move residents living downstream of the Keowee Hydro Project dams to higher ground.
Prohibit traffic flow across bridges identified on your inundation maps until the danger has passed.*

**EOF Director/Assistant EOF Director
Checklist**

_____ Communicate, or delegate to the Assistant EOF Director the responsibility to communicate, plant status to County Directors of Emergency Management , State Liaisons or State Directors of Emergency Management :

- EOF State Liaisons communicate information from EOF Director to County/State representatives using the Duke Emergency Management Network (DEMNET).

NOTE: 1. Detailed instructions for the use of the DEMNET Ethernet Phone are provided in AD-EP-ALL-0406, Duke Emergency Management Network (DEMNET).
 2. All agencies for a specific site can be contacted on DEMNET using the appropriate DEMNET Plant Name "DL-ALL Call" **OR** "DL-EOC Only" pre-designated group call.
 3. A specific agency for a particular site can be contacted using a DEMNET point-to-point call.
 4. State and County telephone numbers can be obtained from the appropriate site's Emergency Telephone Directory.

- Use DEMNET **OR** EOF Director/Assistant EOF Director telephone to contact appropriate states/counties.

Catawba Site Specific

_____ York _____
 _____ Mecklenburg _____
 _____ Gaston _____
 _____ NC _____
 _____ SC _____

McGuire Site Specific

_____ Mecklenburg _____
 _____ Gaston _____
 _____ Lincoln _____
 _____ Iredell _____
 _____ Catawba _____
 _____ Cabarrus _____
 _____ NC _____

Oconee Site Specific

_____ Oconee County _____
 _____ Pickens County _____
 _____ SC _____

Enclosure 6.1
EOF Director/Assistant EOF Director
Checklist

SR/0/A/2000/003
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_____ **IF** Protective Action Recommendations have been provided to the States and Counties, **THEN** request protective action decision information from the SDEPs **AND** CDEPs:

Zones Evacuated: _____

Zones Sheltered: _____

Information Received from: _____

_____ Inform Emergency Coordinator **OR** Assistant Emergency Coordinator of SDEPs and CDEPs protective action decisions and other offsite conditions.

NOTE: Wireless mikes are available for use during round tables/timeouts. {38}

_____ Perform the following steps as needed throughout the event:

- Conduct a time-out and hold a roundtable discussion approximately every hour, coordinated with the TSC, with the EOF staff using Enclosure 6.24 to discuss:
 - Emergency Classification
 - Protective Action Recommendations
 - Emergency Notification Form status
 - Offsite dose projections
 - Mitigation strategies
 - Termination criteria as defined in Enclosure 6.5.
- Ensure roundtables/time-outs enable EOF members to know what is going on, what to anticipate, and understand focus and priorities.
- Announce to the EOF the emergency classification, plant status, and priorities via the EOF public address system following EOF time-outs.
- Emergency Coordinator or Assistant Emergency Coordinator updates may be broadcast on EOF public address system.
- Advise Emergency Coordinator or Assistant Emergency Coordinator of:
 - All aspects of the emergency situation, including alternate strategies outside of procedures as plant conditions dictate
 - Emergency Classification changes
 - Protective Action Recommendations changes
 - Mitigation strategies
 - Contingency plans.

Enclosure 6.1
EOF Director/Assistant EOF Director
Checklist

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- NOTE:**
1. 10CFR50.54(x) states that a licensee may take reasonable action that departs from a license condition or technical specification in an emergency, when this action is immediately needed to protect the health and safety of the public and no action consistent with license conditions or technical specifications that can provide adequate or equivalent protection is immediately apparent. Ultimate responsibility for plant response in an emergency resides in the highest authority in the chain of command of the facility licensee available to make a decision about the response. The on duty OSM should be consulted and his concurrence obtained before invoking 10CFR50.54(x).
 2. Examples of potential 10CFR50.54(x) action items include:
 - Deviation from an Emergency Procedure.
 - Rerouting system piping to temporarily restore system flow.
 - Re-alignment of electrical power systems outside of procedural guidance.
 - Using mitigation strategies not established by the SAMG guidelines.
 3. **IF** the TSC is activated, the TSC Emergency Coordinator makes the decision to invoke 10CFR50.54(x).

- **WHEN** restoring power in a LOOP event, **THEN** have the risk significance of power restoration assessed for risk potential by Accident Assessment personnel.
- Authorize emergency worker extensions if the radiation exposure doses are expected to exceed the blanket dose extension limits authorized by the Radiation Protection Manager using:
 - Catawba RP/0/A/5000/018
 - McGuire RP/0/A/5700/020
 - Oconee RP/0/B/1000/011.

NOTE: The Emergency Action Level descriptions on Line 4 of the Emergency Notification Form have been pre-screened.

- **IF** the event involves a security threat, **THEN** consult the job aid, "Nuclear Security Approved Messages for Security Related Events/Issues," in the EOF Director's notebook for guidance in developing remarks for Line 13 of the Emergency Notification Form.

NOTE: Personnel without badge access will need to be escorted into the EOF by the Assistant EOF Director, EOF Emergency Planner, EOF Services Manager, or their Mentor. [61]

- Approve personnel with training deficiencies prior to their participation as EOF staff members. This approval shall be documented in the EOF Facility Log.
- Document personnel escorted into the EOF in the EOF Facility log.
- Turn over EOF Director duties to the Assistant EOF Director prior to leaving the EOF Director's Area.

Enclosure 6.1
EOF Director/Assistant EOF Director
Checklist

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- **IF** necessary to relieve Duke Energy personnel, **THEN** request environmental surveillance support personnel from DOE Radiological Assessment Plan by contacting DOE - Savannah River Site.
- Periodically review the staffing levels in the EOF to ensure adequate resources are in place to deal with response/recovery, and direct the EOF Services Manager to coordinate with the appropriate department, agency, or companies.
- **IF** events affect more than one nuclear site, **THEN** refer to the multi-site event staffing chart in the Oconee Emergency Plan, Figure B-11
- **IF** a beyond design basis external event (BDBEE) or extended loss of AC power (ELAP) event impacts multiple units at a single site, **THEN** evaluate the need for unit-specific responses (e.g., SAMG, EDMG, FSG, etc.) and unit-specific response teams. {IER L-1-10}

NOTE: The job aid, "Questions Corporate Communications may ask (based on initiating event)," is available in the EOF Director's notebook for guidance.

- Provide information to Corporate Communications for news releases.
- **IF** EOF needs to be evacuated, **THEN** refer to EOF Evacuation Checklist in Enclosure 6.23.

_____ Verify EOF Emergency Planner completes "EOF 24-Hour Staffing Log" in Enclosure 6.16.

_____ **IF** needed, **THEN** conduct turnover for on-coming shift.

_____ Assist TSC Emergency Coordinator or Assistant TSC Emergency Coordinator as a Decision Maker upon entry into Severe Accident Management Guidelines (SAMG). (Catawba and McGuire)

_____ Refer to Enclosure 6.5 (Emergency Classification Downgrade/Termination Criteria) for guidance to downgrade or terminate an emergency event.

NOTE: The offsite Recovery Organization will stay at the EOF and work with the counties and states if radiological conditions exist beyond the site boundary. The On-Site Recovery Organization will be established by the Emergency Coordinator.

_____ **IF** needed, **THEN** establish Recovery Organization:

- ☐ Catawba RP/0/A/5000/025
- ☐ McGuire RP/0/A/5700/024
- ☐ Oconee RP/0/B/1000/027 and guidance in Enclosure 6.21.

Enclosure 6.1
EOF Director/Assistant EOF Director
Checklist

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Terminate the emergency event in accordance with applicable procedure:

____ Notification of Unusual Event

- Catawba - RP/0/A/5000/002
- McGuire - RP/0/A/5700/001
- Oconee - Page 13 of this enclosure

____ Alert

- Catawba - RP/0/A/5000/003
- McGuire - RP/0/A/5700/002
- Oconee - Page 13 of this enclosure

____ Site Area Emergency

- Catawba - RP/0/A/5000/004
- McGuire - RP/0/A/5700/003
- Oconee - Page 13 of this enclosure

____ General Emergency

- Catawba - RP/0/A/5000/005
- McGuire - RP/0/A/5700/004.
- Oconee - Page 13 of this enclosure

NOTE: During declared emergencies, Duke Energy does not need to meet Fatigue Rule Work Hour Controls. Once the declared emergency or the unannounced drill has been terminated, **ALL HOURS worked during the declared emergency will be included in future work hour calculations, including the determination of minimum breaks between shifts.** {69}

____ Announce the following:

"Covered Workers need to ensure that all hours worked during an augmentation drill or a declared emergency are entered into MyTime prior to leaving the site. Supervisors should consider the need for to initiate a waiver in MyTime per NSD-200 Section 200.8."

____ Conduct a critique following termination of drill or actual event.

____ Provide all completed paperwork to Emergency Preparedness following termination of a drill or actual event.

Enclosure 6.1
EOF Director/Assistant EOF Director
Checklist

SR/0/A/2000/003
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Close out an Oconee emergency event as listed below:

_____ **IF** an event meets termination criteria for General Emergency in Enclosure 6.5, Emergency Classification Downgrade/Termination, **THEN** inform NRC Site Team Director (STD) and SDEM that termination criteria have been met.

- Secure agreement from the two directors to terminate the event.
- Document names and time decision made below.

	<u>Name</u>	<u>Telephone Number</u>	<u>Time</u>
SDEM	_____	<u>9-1-803-737-8500</u>	_____
NRCSTD	_____	(In person in EOF)	_____

- Request lead Offsite Agency Communicator to complete Termination Message and transmit it in accordance with SR/0/A/2000/004 (Notification to State and Counties from the Emergency Operations Facility) and terminate the emergency.

_____ **IF** terminating from an Unusual Event, Alert, or Site Area Emergency, **THEN**

- Request lead Offsite Agency Communicator to complete Termination Message and transmit it in accordance with SR/0/A/2000/004 (Notification to State and Counties from the Emergency Operations Facility) and terminate the emergency.
- Notify the following agencies:

	<u>Name</u>	<u>Telephone Number</u>
SDEM	_____	<u>9-1-803-737-8500</u>

OR, IF the SEOC has not been activated, the County Emergency Management Directors (CEMD)

	<u>Name</u>	<u>Telephone Number</u>
Oconee CDEM	_____	<u>9-1-864-638-4200</u>
Pickens CDEM	_____	<u>9-1-864-898-5943</u>

_____ **IF** terminating from an emergency involving dam failure (Keowee or Jocassee),

- Discuss termination with Hydro Central (Refer to Section 6 of the Oconee Emergency Telephone Directory, Keowee Hydro Project Dam/Dike Notification).

_____ Request Oconee Emergency Preparedness to provide a copy of the Licensee Event Report (LER) to state and county agencies at the time it is sent to the NRC.

Enclosure 6.1
EOF Director/Assistant EOF Director
Checklist

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() CATAWBA

() MCGUIRE

() OCONEE

UNIT(S) AFFECTED: {8}

() Unit 1

() Unit 2

() Unit 3

GENERAL	POWER LEVEL	REACTOR COOLANT TEMPERATURE		REACTOR COOLANT PRESSURE
	DATE: _____ TIME: _____	U-1 _____ U-2 _____ U-3 _____	_____	_____
EMERGENCY CLASSIFICATION	NOUE DECLARED AT: _____ TSC ACTIVATED AT: _____ ALERT DECLARED AT: _____ EOF ACTIVATED AT: _____ SAE DECLARED AT: _____ G.E. DECLARED AT: _____ REASON FOR EMER CLASS: _____ _____			
SITE ASSEMBLY SITE EVACUATION	YES	NO	TIME	LOCATION OR COMMENTS
	SITE ASSEMBLY _____			
	SITE EVAC. (NON-ESSEN.) _____			
	SITE EVAC. (ESSENTIAL) _____			
	OTHER OFFSITE AGENCY INVOLVEMENT _____			
	MEDICAL _____			
	FIRE _____			
	POLICE/SHERIFF _____			
RADIOLOGICAL	FIELD MON. TEAMS		NUMBER ASSEM. _____	NUMBER DEPLOYED _____
			ZONES EVACUATED	ZONES SHELTERED
	OFFSITE PARS		_____	_____
	RELEASE IN PROGRESS		YES ()	NO ()
	RELEASE PATHWAY		_____	
	CONTAINMENT PRESSURE		_____	PSIG
	WIND DIRECTION		_____	WIND SPEED _____
OFFSITE COMMUNICATIONS	NUMBER		TIME	
	LAST MESSAGE SENT: _____		_____	
	NEXT MESSAGE DUE: _____		_____	
NOTE: EOF COMMUNICATION CHECKS SHOULD BE COMPLETED PRIOR TO ACTIVATING THE EOF.				
OTHER NOTES RELATED TO THE ACCIDENT/EVENT/PLANT EQUIPMENT FAILED OR OUT OF SERVICE _____ _____ _____				

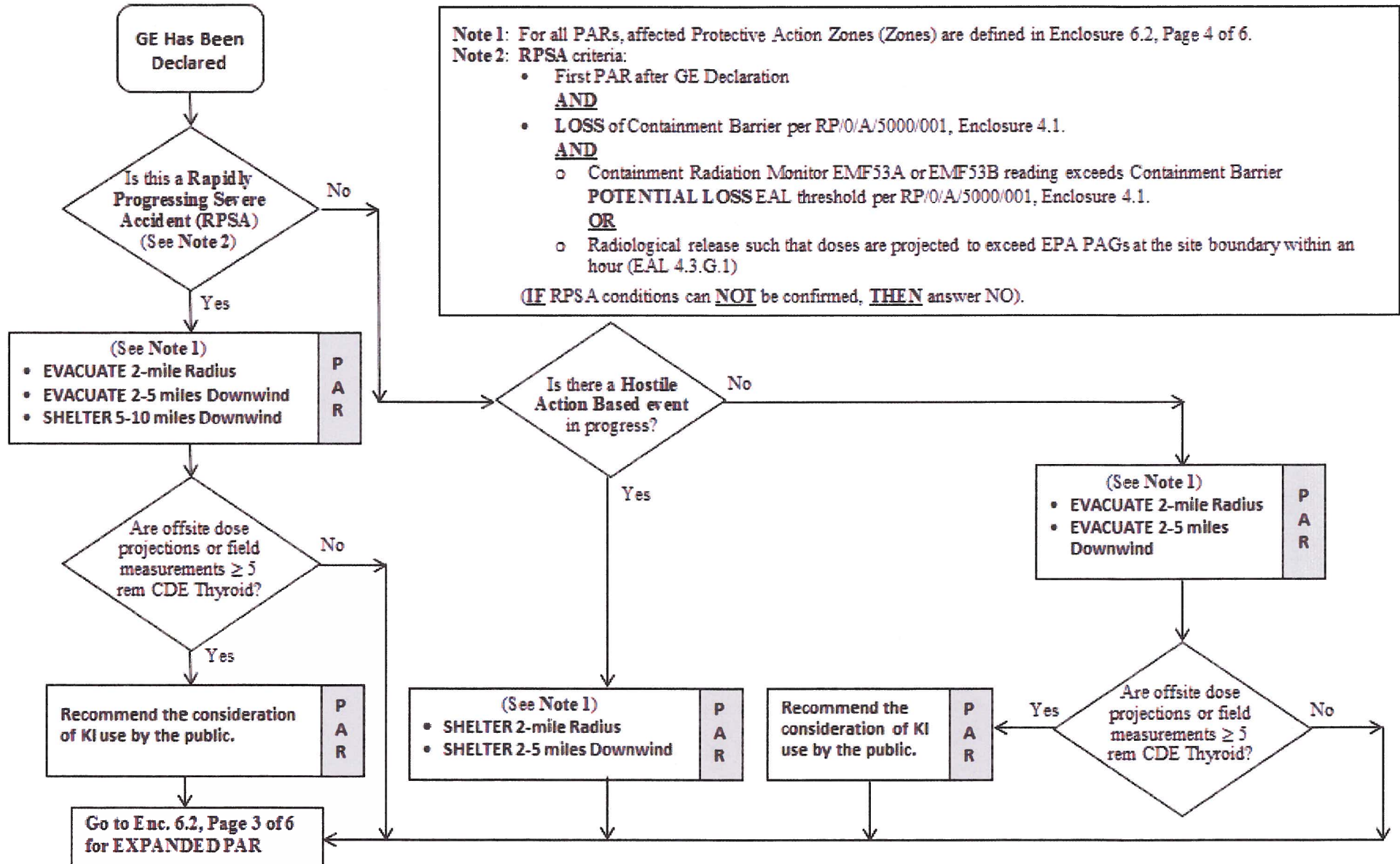
Protective Action Guides

Note: Protective Action Recommendations (PARs) for the public apply during a General Emergency, and include sheltering, evacuation and consideration of KI use. PARs are based on plant conditions independent of projected dose, and can also be based on projected dose. Protective Action Guides (PAGs) are levels of radiation dose at which prompt protective actions should be initiated and are based on EPA-400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents. The projected dose PARs specified in this enclosure are based on the PAGs listed below. The PAG for KI is taken from Potassium Iodide as a Thyroid Blocking Agent in Radiation Emergencies, FDA Guidance, November 2001 and Guidance for Industry, KI in Radiation Emergencies, Questions and Answers, FDA, December 2002. {23}

PROTECTIVE ACTION GUIDES (PAGs) (Projected Dose or Field Measurements)	
Total Effective Dose Equivalent (TEDE)	Committed Dose Equivalent (CDE) Thyroid
≥ 1 Rem	≥ 5 Rem

INITIALS _____ PRINTED NAME _____

Catawba Offsite Protective Actions Flowchart - INITIAL PAR



Note 1: For all PARs, affected Protective Action Zones (Zones) are defined in Enclosure 6.2, Page 4 of 6. IF a Zone has been accurately selected for evacuation, it shall remain selected.

Note 2: A short-term release is one that can be accurately projected to be < three hours and controlled by the licensee. This consideration would typically apply to controlled venting of containment.

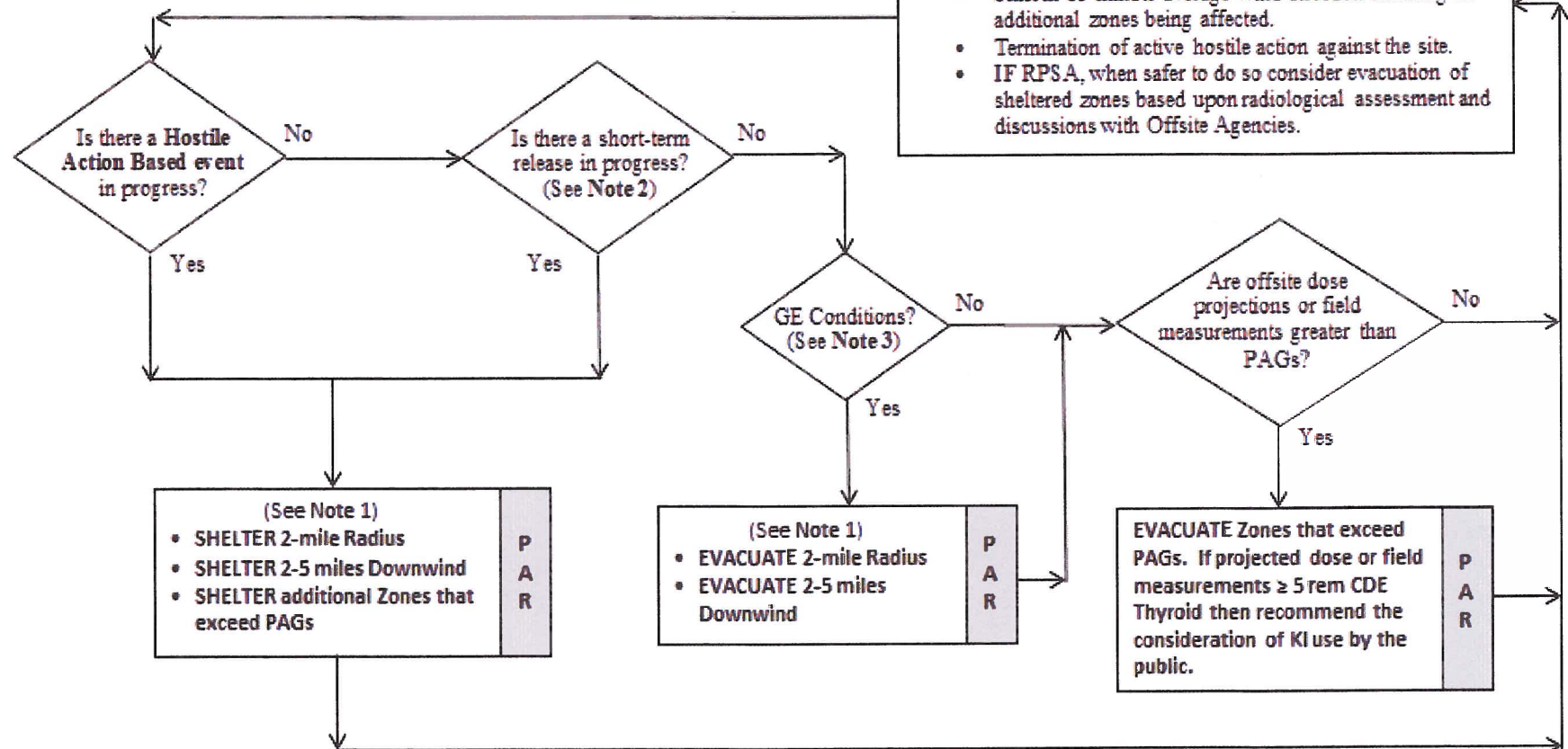
Note 3: Plant conditions exist which would require the classification of a General Emergency per the EALs. This does NOT include consideration of offsite dose-based EALs.

From INITIAL PAR
Enc. 6.2, Page 2 of 6

Continuous Assessment

Evaluate PAR based on changes in any of the following:

- Increase in dose assessment projected values.
- Increase in field measurement values.
- Shift in 15-minute average wind direction resulting in additional zones being affected.
- Termination of active hostile action against the site.
- IF RPSA, when safer to do so consider evacuation of sheltered zones based upon radiological assessment and discussions with Offsite Agencies.



Enclosure 6.2
Catawba Offsite Protective Actions

SR/0/A/2000/003
Page 4 of 6

INITIAL

CAUTION: A short term release is any release that can be projected to be 3 hours or less in duration. An example would be a "puff release". A controlled release is one that can be started and stopped at the licensee's discretion, such as the venting of Containment for pressure control. **IF** a release is short term **AND** controlled, sheltering in lieu of evacuation should be considered. {36}

NOTE: 1. If necessary, obtain needed data from one of the following sources in order of sequence:
A. Catawba SDS (Group Display "ERORD5")
B. Duke Energy Meteorologist (2-0139, 3-7896, **OR** 2-4316)
C. National Weather Service in Greer, S.C. (9-1-864-879-1085, 9-1-800-268-7785)

2. OAC/SDS wind direction can be displayed as greater than 360 degrees. To arrive at wind direction for table below, subtract 360 from wind direction indications greater than 360 degrees.

—— **IF AT ANY TIME** a General Emergency is declared, **THEN** make immediate PROTECTIVE ACTION RECOMMENDATIONS (PARs) within 15 minutes to be entered on Line 5 of the Emergency Notification Form (ENF). Determine the PARs based on the 15-minute average upper wind direction (OAC point C1P0250) as below:

Protective Action Zones			
Wind Direction	2-Mile Radius	2-5 Miles Downwind	5-10 Miles Downwind (RPSA Only)
348.75 - 11.25	A0	B1, C1, D1	B2, C2, D2
11.26 - 33.75	A0	C1, D1	C2, D2
33.76 - 56.25	A0	C1, D1, E1	C2, D2, E2
56.26 - 78.75	A0	C1, D1, E1, F1	C2, D2, E2, F2
78.76 - 101.25	A0	C1, D1, E1, F1	D2, E2, F2
101.26 - 123.75	A0	D1, E1, F1	D2, E2, F2, F3
123.76 - 146.25	A0	E1, F1	E2, F2, F3
146.26 - 168.75	A0	A1, E1, F1	A2, E2, F2, F3
168.76 - 191.25	A0	A1, E1, F1	A2, F2, F3
191.26 - 213.75	A0	A1, B1, E1, F1	A2, A3, B2, F2, F3
213.76 - 236.25	A0	A1, B1, F1	A2, A3, B2, F2, F3
236.26 - 258.75	A0	A1, B1, F1	A2, A3, B2, F3
258.76 - 281.25	A0	A1, B1, C1	A2, A3, B2, C2
281.26 - 303.75	A0	A1, B1, C1	A2, A3, B2, C2
303.76 - 326.25	A0	B1, C1	A3, B2, C2
326.26 - 348.74	A0	B1, C1, D1	B2, C2, D2

Enclosure 6.2
Catawba Offsite Protective Actions

SR/0/A/2000/003
Page 5 of 6

NOTE: **IF** changes to the initial Protective Action Recommendations are recommended, **THEN** these changes must be transmitted to the offsite agencies within 15 minutes.

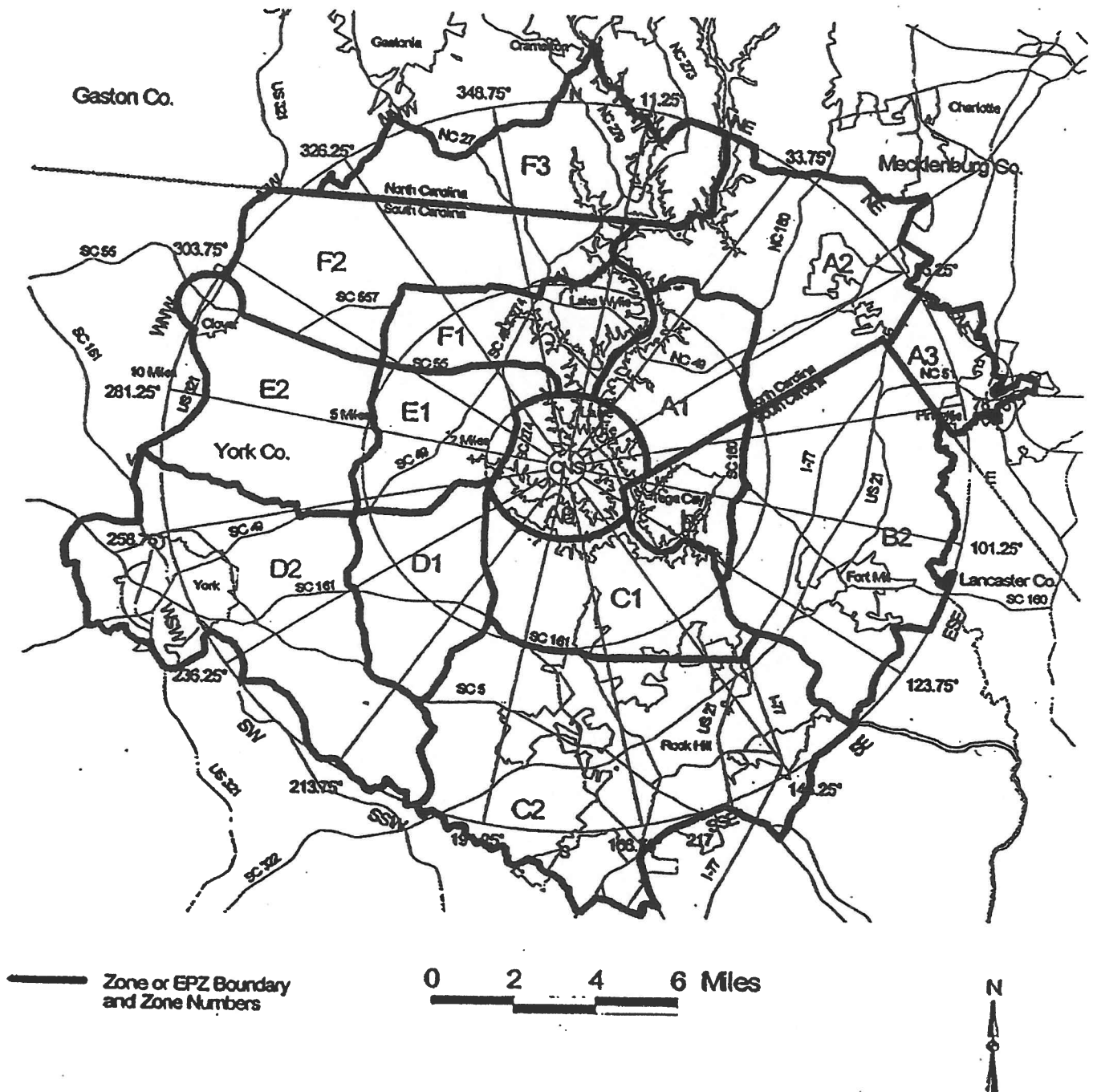
CAUTION: **IF** a zone has been accurately selected for evacuation, **THEN** it shall remain selected.

- _____ **IF** dose projections indicate that CDE Thyroid dose will be ≥ 5 Rem, **THEN** recommend KI use by the General Public in accordance with State Plans and Policy. {23}

- _____ Evaluate specific plant conditions, offsite dose projections, wind direction, field monitoring team data, and assess the need to update Protective Action Recommendations made to the states and counties in the previous notification throughout the event.

- _____ Review dose projections with the Radiological Assessment Manager to determine if Protective Action Recommendations are required beyond the 10-mile EPZ.

- _____ **IF** Protective Action Recommendations are required beyond 10 miles, **THEN** notify states and counties to consider sheltering/evacuating general population located beyond the affected 10-mile EPZ.



McGuire Offsite Protective Actions

Protective Action Guides

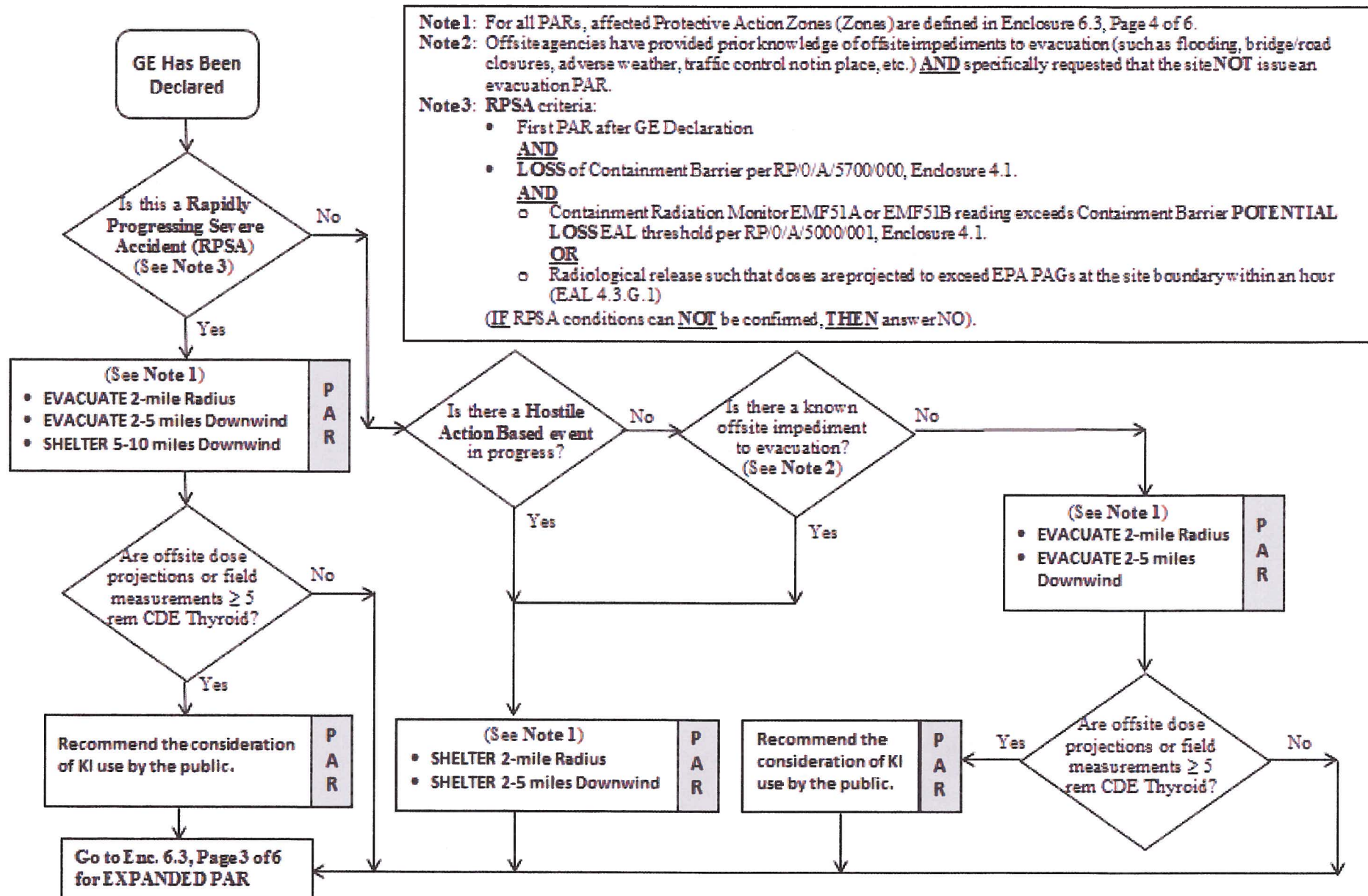
Note: Protective Action Recommendations (PARs) for the public apply during a General Emergency, and include sheltering, evacuation and consideration of KI use. PARs are based on plant conditions independent of projected dose, and can also be based on projected dose. Protective Action Guides (PAGs) are levels of radiation dose at which prompt protective actions should be initiated and are based on EPA-400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents. The projected dose PARs specified in this enclosure are based on the PAGs listed below. The PAG for KI is taken from Potassium Iodide as a Thyroid Blocking Agent in Radiation Emergencies, FDA Guidance, November 2001 and Guidance for Industry, KI in Radiation Emergencies, Questions and Answers, FDA, December 2002. {23}

PROTECTIVE ACTION GUIDES (PAGs) (Projected Dose or Field Measurements)	
Total Effective Dose Equivalent (TEDE)	Committed Dose Equivalent (CDE) Thyroid
≥ 1 Rem	≥ 5 Rem

INITIALS _____

PRINTED NAME _____

McGuire Offsite Protective Actions Flowchart - INITIAL PAR



McGuire Offsite Protective Actions Flowchart - EXPANDED PAR

Note 1: For all PARs, affected Protective Action Zones (Zones) are defined in Enclosure 6.3, Page 4 of 6. IF a Zone has been accurately selected for evacuation, then it shall remain selected.

Note 2: Offsite agencies have provided prior knowledge of offsite impediments to evacuation (such as flooding, bridge/road closures, adverse weather, traffic control not in place, etc.) AND specifically requested that the site NOT issue an evacuation PAR.

Note 3: A short-term release is one that can be accurately projected to be < three hours and controlled by the licensee. This consideration would typically apply to controlled venting of containment.

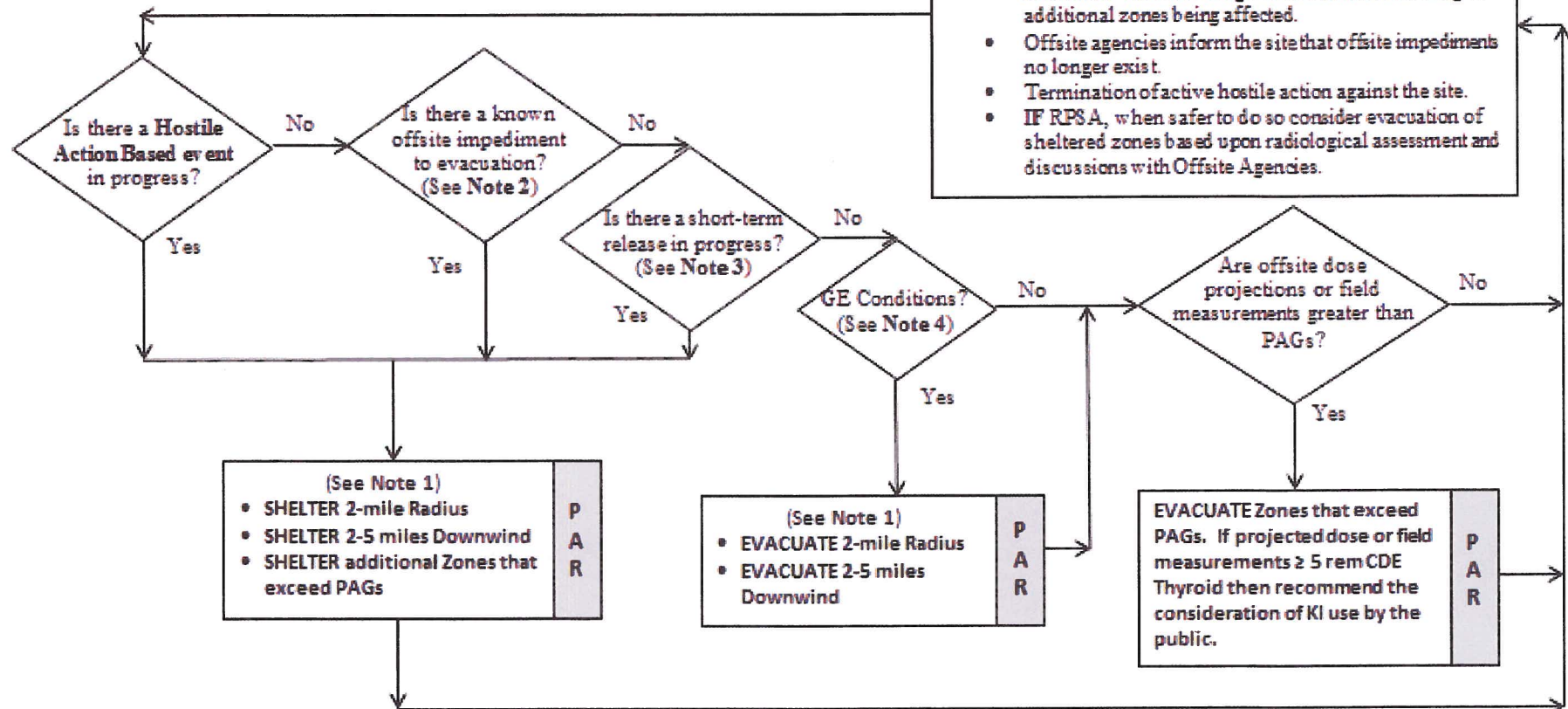
Note 4: Plant conditions exist which would require the classification of a General Emergency per the EALs. This does NOT include consideration of offsite dose-based EALs.

From INITIAL PAR
Enc. 6.3, Page 2 of 6

Continuous Assessment

Evaluate PAR based on changes in any of the following:

- Increase in dose assessment projected values.
- Increase in field measurement values.
- Shift in 15-minute average wind direction resulting in additional zones being affected.
- Offsite agencies inform the site that offsite impediments no longer exist.
- Termination of active hostile action against the site.
- IF RPSA, when safer to do so consider evacuation of sheltered zones based upon radiological assessment and discussions with Offsite Agencies.



Enclosure 6.3
McGuire Offsite Protective Actions

SR/0/A/2000/003
Page 4 of 6

INITIAL

CAUTION: A short term release is any release that can be projected to be 3 hours or less in duration. An example would be a "puff release". A controlled release is one that can be started and stopped at the licensee's discretion, such as the venting of Containment for pressure control. **IF** a release is short term **AND** controlled, **THEN** sheltering in lieu of evacuation should be considered. {36}

NOTE:{5} If necessary, obtain needed data from one of the following sources in order of sequence:
A. McGuire SDS (Group Display "ERORD5")
B. Duke Energy Meteorologist (2-0139, 3-7896, **OR** 2-4316)
C. National Weather Service in Greer, S.C. (9-1-864-879-1085, 9-1-800-268-7785)

— **IF AT ANY TIME** a General Emergency is declared, **THEN** make immediate PROTECTIVE ACTION RECOMMENDATIONS (PARs) within 15 minutes to be entered on Line 5 of the Emergency Notification Form (ENF). Determine the PARs based on the 15-minute average upper wind direction (OAC point M1P0847) as below:

Protective Action Zones			
Wind Direction	2-Mile Radius	2-5 Miles Downwind	5-10 Miles Downwind (RPSA Only)
0.1 - 22.5	B,C,L,M	D,O,R	E,F,S
22.6 – 45.0	B,C,L,M	D,O,R	E,Q,S
45.1 – 67.5	B,C,L,M	D,N,O,R	E,P,Q,S
67.6 – 90.0	B,C,L,M	D,N,O,R	P,Q,S
90.1 – 112.5	B,C,L,M	N,O,R	K,P,Q,S
112.6 – 135.0	B,C,L,M	A,N,O,R	I,K,P,Q,S
135.1 – 157.5	B,C,L,M	A,N,O	I,K,P,Q
157.6 – 180.0	B,C,L,M	A,N	H,I,J,K,P
180.1 – 202.5	B,C,L,M	A,N	G,H,I,J,K,P
202.6 – 225.0	B,C,L,M	A,D,N	G,H,I,J,K,P
225.1 – 247.5	B,C,L,M	A,D	F,G,H,I,J
247.6 – 270.0	B,C,L,M	A,D	F,G,H,I,J
270.1 – 292.5	B,C,L,M	A,D	E,F,G,H,J
292.6 – 315.0	B,C,L,M	A,D,R	E,F,G
315.1 – 337.5	B,C,L,M	D,R	E,F,G,S
337.6 – 360.0	B,C,L,M	D,R,O	E,F,S

NOTE: **IF** changes to the initial Protective Action Recommendations are recommended, **THEN** these changes must be transmitted to the offsite agencies within 15 minutes.

CAUTION: **IF** a zone has been accurately selected for evacuation, **THEN** it shall remain selected.

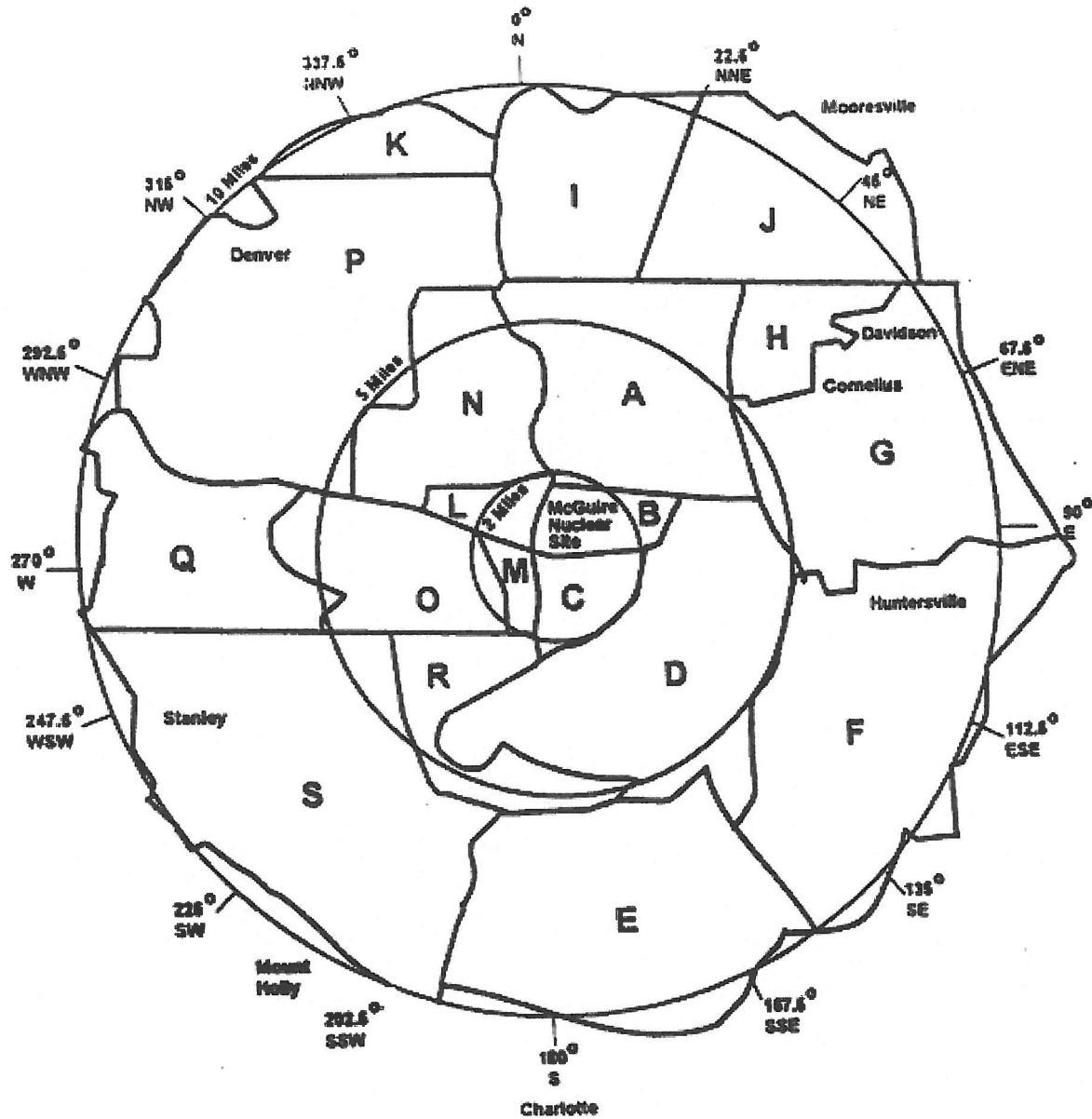
- _____ **IF** dose projections indicate that CDE Thyroid dose will be ≥ 5 Rem, **THEN** recommend KI use by the General Public in accordance with State Plans and Policy. {23}

- _____ Evaluate specific plant conditions, offsite dose projections, wind direction, field monitoring team data, and assess the need to update Protective Action Recommendations made to the states and counties in the previous notification throughout the event.

- _____ Review dose projections with the Radiological Assessment Manager to determine if Protective Action Recommendations are required beyond the 10-mile EPZ.

- _____ **IF** Protective Action Recommendations are required beyond 10 miles, **THEN** notify states and counties to consider sheltering/evacuating general population located beyond the affected 10-mile EPZ.

McGuire Offsite Protective Actions

McGuire Protective Action Zones - 10-mile EPZ
(2 and 5-mile radius, inner circles)

Enclosure 6.4
Oconee Offsite Protective Actions
Protective Action Guides

SR/0/A/2000/003
Page 1 of 7

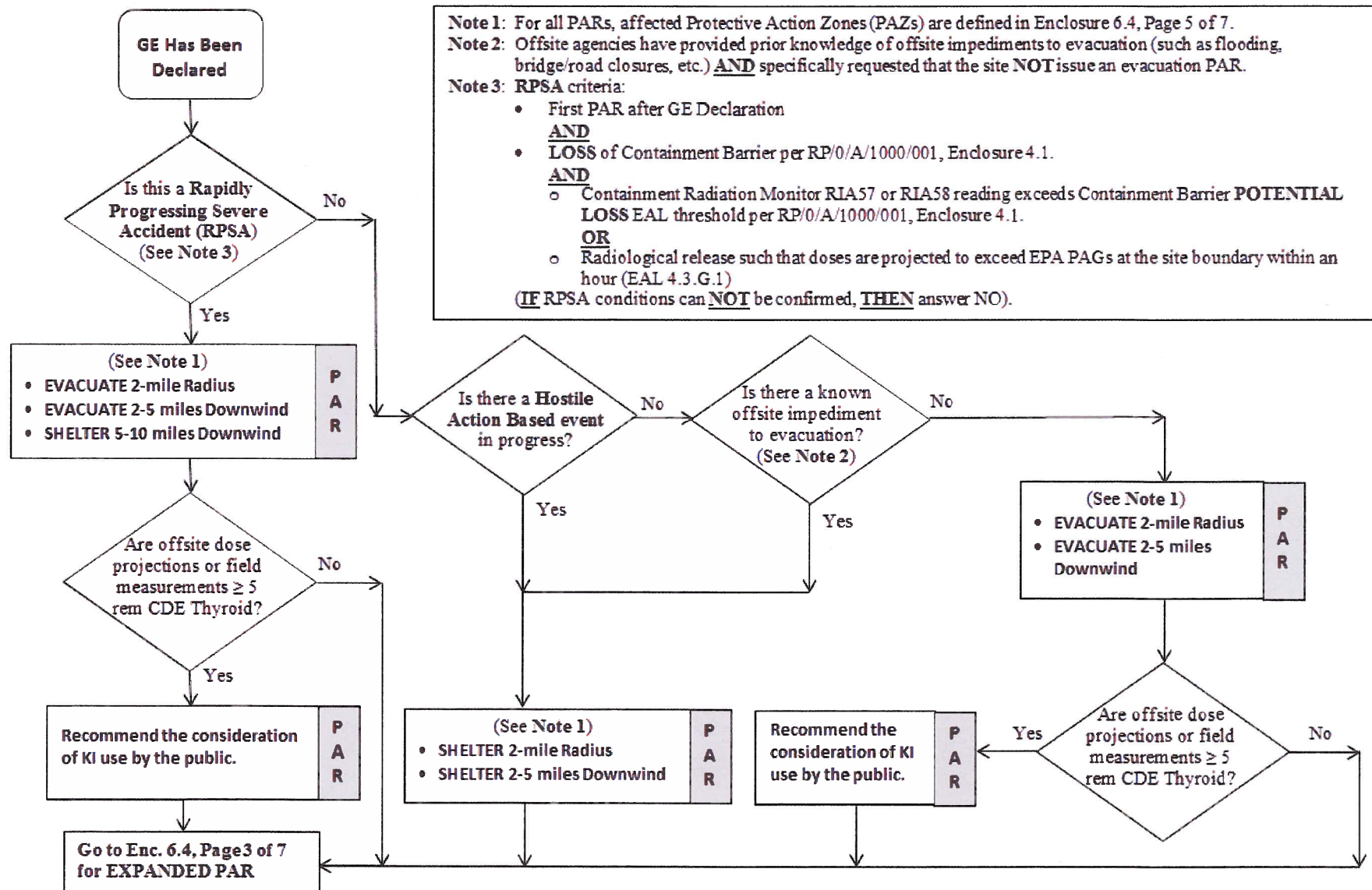
Note: Protective Action Recommendations (PARs) for the public apply during a General Emergency, and include sheltering, evacuation and consideration of KI use. PARs are based on plant conditions independent of projected dose, and can also be based on projected dose. Protective Action Guides (PAGs) are levels of radiation dose at which prompt protective actions should be initiated and are based on EPA-400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents. The projected dose PARs specified in this enclosure are based on the PAGs listed below. The PAG for KI is taken from Potassium Iodide as a Thyroid Blocking Agent in Radiation Emergencies, FDA Guidance, November 2001 and Guidance for Industry, KI in Radiation Emergencies, Questions and Answers, FDA, December 2002. {23}

PROTECTIVE ACTION GUIDES (PAGs) (Projected Dose or Field Measurements)	
Total Effective Dose Equivalent (TEDE)	Committed Dose Equivalent (CDE) Thyroid
≥ 1 Rem	≥ 5 Rem

INITIALS _____

PRINTED NAME _____

Oconee Offsite Protective Actions Flowchart - INITIAL PAR



Note 1: For all PARs, affected Protective Action Zones (PAZs) are defined in Enclosure 6.4, Page 5 of 7. **IF** a PAZ has been accurately selected for evacuation, it shall remain selected.

Note 2: Offsite agencies have provided prior knowledge of offsite impediments to evacuation (such as flooding, bridge/road closures, adverse weather, traffic control not in place, etc.) **AND** specifically requested that the site **NOT** issue an evacuation PAR.

Note 3: A short-term release is one that can be accurately projected to be < three hours and controlled by the licensee. This consideration would typically apply to controlled venting of containment.

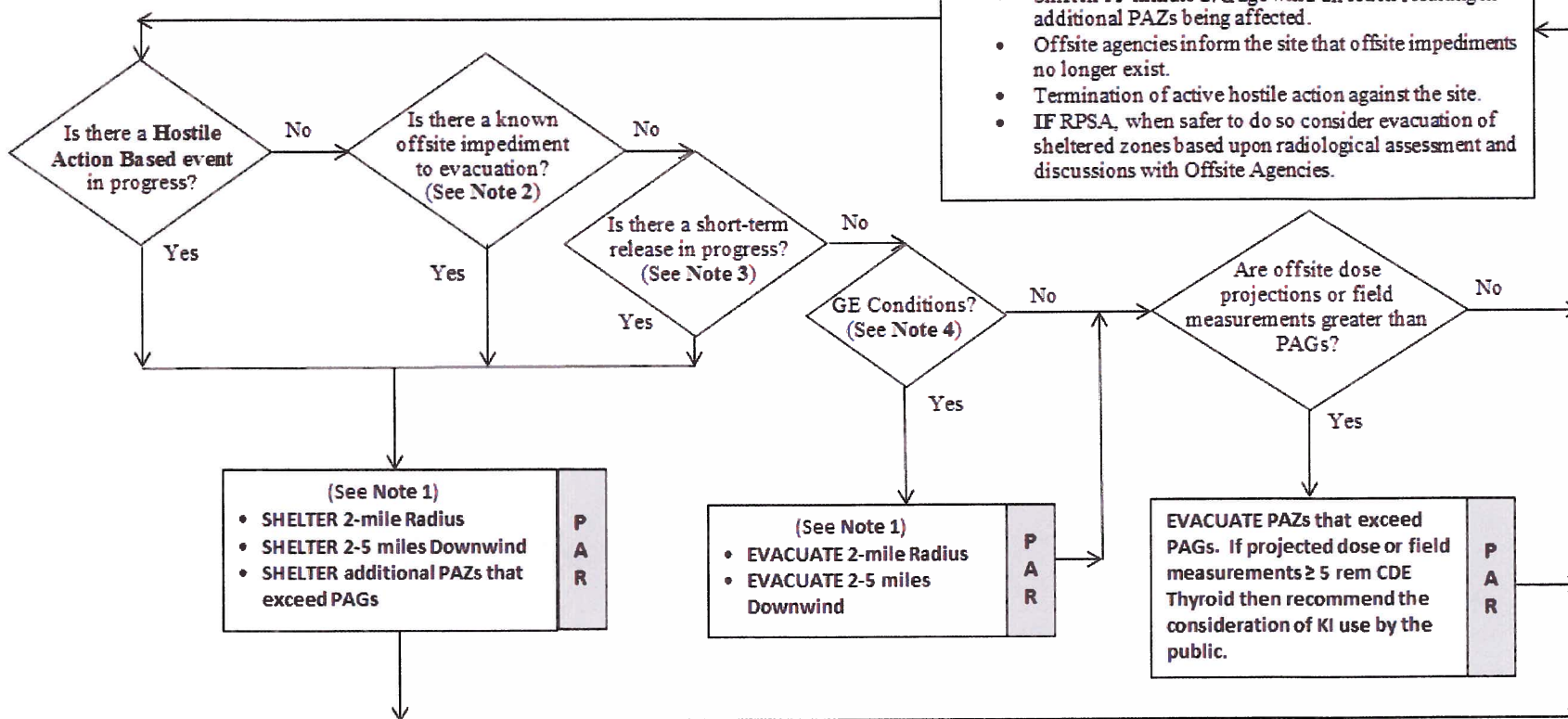
Note 4: Plant conditions exist which would require the classification of a General Emergency per the EALs. This does **NOT** include consideration of offsite dose-based EALs.

From INITIAL PAR
Enc. 6.4, Page 2 of 7

Continuous Assessment

Evaluate PAR based on changes in any of the following:

- Increase in dose assessment projected values.
- Increase in field measurement values.
- Shift in 15-minute average wind direction resulting in additional PAZs being affected.
- Offsite agencies inform the site that offsite impediments no longer exist.
- Termination of active hostile action against the site.
- IF RPSA, when safer to do so consider evacuation of sheltered zones based upon radiological assessment and discussions with Offsite Agencies.



Enclosure 6.4
Oconee Offsite Protective Actions

SR/0/A/2000/003
Page 4 of 7

INITIAL

CAUTION: A short term release is any release that can be projected to be 3 hours or less in duration. An example would be a "puff release". A controlled release is one that can be started and stopped at the licensee's discretion, such as the venting of Containment for pressure control. IF a release is short term AND controlled, THEN sheltering in lieu of evacuation should be considered. {36}

NOTE: If necessary, obtain needed data from one of the following sources in order of sequence:

- A. Oconee SDS (Turn On Code "EROENV")
- B. Duke Energy Meteorologist (2-0139, 3-7896, OR 2-4316)
- C. National Weather Service in Greer, S.C. (9-1-864-879-1085 OR 9-1-800-268-7785)

— **IF AT ANY TIME** a General Emergency is declared, **THEN** make immediate PROTECTIVE ACTION RECOMMENDATIONS (PARs) within 15 minutes to be entered on Line 5 of the Emergency Notification Form (ENF). Determine the meteorological parameters to use based on the 15-minute average wind direction (SDS "EROENV" screen) as determined from the following chart below:

Time of Day Conditions	Met Parameter	First Priority	Second Priority	Third Priority	Fourth Priority
1000 - 1600	Wind Direction	60M reading	10M reading	River Tower	NWS
1600 – 1000 and River Wind between 210° and 360° or 0° and 70°	Wind Direction	60M reading	10M reading	River Tower	NWS
1600 – 1000 and River Wind between 70° and 210°	Wind Direction	River Tower	60M reading	NWS	

Enclosure 6.4
Oconee Offsite Protective Actions

SR/0/A/2000/003
Page 5 of 7

_____ Determine affected zones from chart below based on the 15-minute average wind direction as determined in previous step:

Wind Direction	Protective Action Zones		
	0-2 miles;	2-5 miles;	5-10 miles (RPSA Only)
14.1°-27°	A0,	C1, D1, E1,	C2, D2, E2
27.1°-42°	A0,	C1, D1, E1,	D2, E2
42.1°-66°	A0,	D1, E1,	D2, E2
66.1°-85°	A0,	D1, E1,	D2, E2, F2
85.1°-104°	A0,	D1, E1, F1,	D2, E2, F2
104.1°-129°	A0,	E1, F1,	E2, F2
129.1°-156°	A0,	A1, E1, F1,	A2, E2, F2
156.1°-175°	A0,	A1, E1, F1,	A2, F2
175.1°-181°	A0,	A1, F1,	A2, F2
181.1°-219°	A0,	A1, B1, F1,	A2, B2, F2
219.1°-255°	A0,	A1, B1,	A2, B2,
255.1°-271°	A0,	A1, B1, C1,	A2, B2, C2
271.1°-297°	A0,	B1, C1,	B2, C2
297.1°-312°	A0,	B1, C1,	B2, C2, D2
312.1°-345°	A0,	B1, C1, D1,	B2, C2, D2
345.1°-14°	A0,	C1, D1,	C2, D2

NOTE: **IF** changes to the initial Protective Action Recommendations are recommended, **THEN** these changes must be transmitted to the offsite agencies within 15 minutes.

CAUTION: **IF** a zone has been accurately selected for evacuation, **THEN** it shall remain selected.

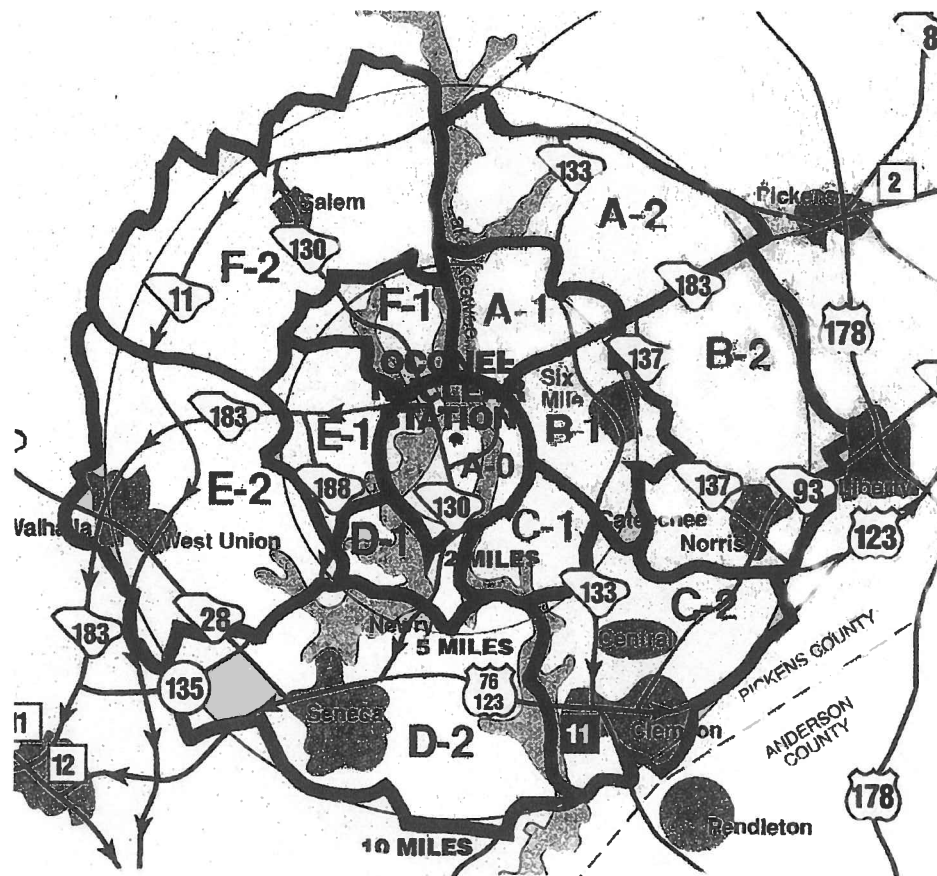
- _____ **IF** dose projections indicate that CDE Thyroid dose will be ≥ 5 Rem, **THEN** recommend KI use by the General Public in accordance with State Plans and Policy. {23}

- _____ Evaluate specific plant conditions, offsite dose projections, wind direction, field monitoring team data, and assess the need to update Protective Action Recommendations made to the states and counties in the previous notification throughout the event.

- _____ Review dose projections with the Radiological Assessment Manager to determine if Protective Action Recommendations are required beyond the 10-mile EPZ.

- _____ **IF** Protective Action Recommendations are required beyond 10 miles, **THEN** notify states and counties to consider sheltering/evacuating general population located beyond the affected 10-mile EPZ.

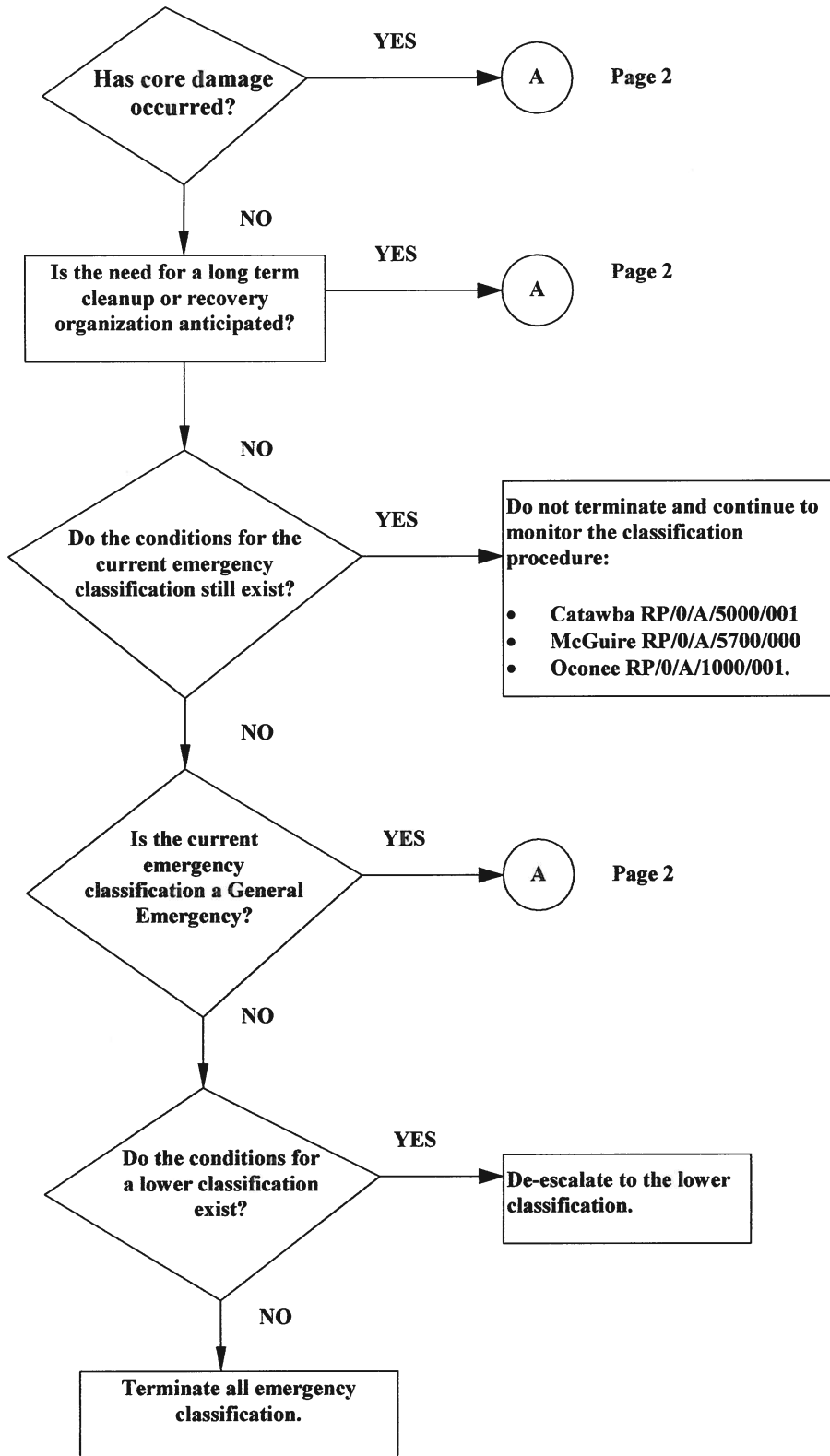
Oconee Protective Action Zones - 10-Mile EPZ
(2 and 5-mile radius, inner circles)



Radius From Site (miles)	Pickens County Zones	Oconee County Zones
0-2	A0	A0
2-5	A-1, B-1, C-1	D-1, E-1, F-1
5-10	A-2, B-2, C-2	D-2, E-2, F-2

Emergency Classification Downgrade/Termination Criteria

INITIAL



INITIALS _____

PRINTED NAME _____

Emergency Classification Downgrade/Termination Criteria

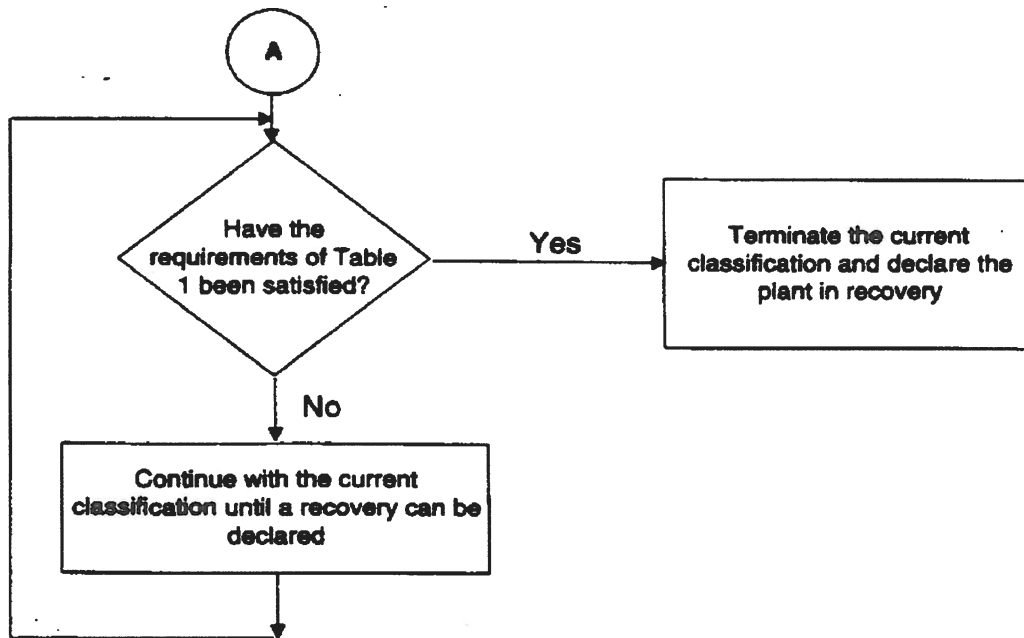


Table 1

___ Security threat has been contained.

___ No new evacuation or sheltering protective actions are anticipated.

___ Containment pressure is being maintained less than design pressure.

___ Containment hydrogen levels are less than 9% and stable or decreasing.

___ Decay heat rejection to the ultimate heat sink has been established and is stable. This is indicated by either of the following (circle one):

- Decay heat removal is considered stable if supported by redundancy or diversity

- Examples of a satisfactory state include:

- 2 trains of systems for sump recirculation.
- 2 trains of Decay Heat Removal (DHR)
- 1 train of DHR and the ability to cool with the steam generators.
- steam generator cooling with 2 trains of feed capability.

OR

- Decay heat removal is considered stable if no additional fission product barrier challenges would be expected for at least 2 hours following interruption of core cooling.

(continued on next page)

___ The risks from recriticality are acceptably low.

Enclosure 6.5
Emergency Classification Downgrade/Termination
Criteria

SR/0/A/2000/003

Page 3 of 3

____ Radiation Protection is monitoring access to radiologically hazardous areas.

____ Offsite conditions do not limit plant access.

____ The Public Information Coordinator, NRC officials, and State representatives have been consulted to determine the effects of termination on their activities.

____ The recovery organization is ready to assume control of recovery operations:

- Catawba - RP/0/B/5000/025
- McGuire - RP/0/A/5700/024
- Oconee - RP/0/A/1000/027

Radiological Assessment Manager Checklist

INITIAL

NOTE: Steps in this checklist may be performed in any order appropriate to the specific event conditions or they may be omitted if not applicable.

_____ **IF** reporting to EOF outside your normal work hours, **THEN** complete a Fitness for Duty Questionnaire.

_____ Don position badge.

_____ Log in to RAM computer.

_____ Log into WebEOC.

_____ Sign in on Sign In board.

_____ Obtain copy of AD-EP-ALL-0202, Emergency Response Offsite Dose Assessment.

_____ **IF** Field Monitoring teams have been dispatched, **THEN** ensure FMC has established communication with Field Monitoring teams.

_____ Notify EOF Director that Radiological Assessment Manager (RAM) position is operational.

_____ Ensure all Radiation Protection personnel reporting to the EOF sign in on Sign In board.

_____ Ensure that EOF Dose Assessors are kept informed of pertinent plant information including, but not limited to:

- 1) Time of TSC activation
- 2) Time of EOF activation
- 3) Time of reactor trip
- 4) Status of safety injection
- 5) Status of onsite radiological conditions
- 6) Time next emergency notification message is due.

_____ Establish Position Log of activities sufficient to conduct turnover for on-coming shift.

_____ Communicate to EOF Director:

- 1) Any release in progress, including dose rates (especially at the site boundary)
- 2) Field Team status/data
- 3) On-site radiological concerns
- 4) Need to request the site pull a reactor coolant sample for Dose Equivalent Iodine to support emergency classification

INITIALS _____

PRINTED NAME _____

Enclosure 6.6
Radiological Assessment Manager Checklist

SR/0/A/2000/003
Page 2 of 6

_____ Review Criteria in "Classification of Emergency" procedure for emergency classification changes and discuss with Accident Assessment personnel plant conditions including power failures, valve closures, etc.

Catawba RP/0/A/5000/001

OR

McGuire RP/0/A/5700/000

OR

Oconee RP/0/A/1000/001.

NOTE:

- Microsoft Lync (Skype for Business) is an acceptable communications method.
- Oconee TSC Dose Assessment Liaison, 9-1-864-873-4902.
- Catawba/McGuire, Dose Assessment Bridge, 9-980-875-4980.

_____ Establish communications with dose assessment personnel at TSC. Compare information, projections and strategies with TSC.

NOTE: Descriptions of Keowee Hydro Dam/Dike Imminent Failure/Potential Failure are provided in Enclosure 6.22.

_____ **IF** Imminent Dam Failure (Keowee or Jocassee) exists, **THEN** make the following Protective Action Recommendations to Oconee County and Pickens County for imminent/actual dam failure and include on the Emergency Notification Form Line 5E (Other):

Move residents living downstream of the Keowee Hydro Project dams to higher ground.

Prohibit traffic flow across bridges identified on your inundation maps until the danger has passed.

Enclosure 6.6
Radiological Assessment Manager Checklist

SR/0/A/2000/003

Page 3 of 6

NOTE: Enclosure 6.2 (for CNS), Enclosure 6.3 (for MNS), and Enclosure 6.4 (for ONS) provide guidance for PARs and KI protective action recommendations.

_____ **IF** General Emergency is declared, **THEN** provide PAR information on Line 5 of the Emergency Notification Form:

CAUTION: **IF** a zone has been accurately selected for evacuation, **THEN** it shall remain selected.

- Zones for Evacuation
- Zones for Sheltering
- Use of KI for General Public. {23}
- Other PARs.

_____ Determine, with input from the Accident Assessment Manager (AAM), Protective Actions using

- ☐ Enclosure 6.2, Catawba Offsite Protective Actions
- ☐ Enclosure 6.3, McGuire Offsite Protective Actions
- ☐ Enclosure 6.4, Oconee Offsite Protective Actions

NOTE: **IF** changes to the initial Protective Action Recommendations, including KI, are recommended to and approved by the EOF Director, **THEN** these changes shall be transmitted to the offsite agencies within 15 minutes and the reason for the Protective Action Recommendation change be reported on Line 13 of the ENF.

_____ Review dose projections and determine if Protective Action Recommendations are required beyond 10-mile EPZ.

_____ Provide EOF Director Protective Action Recommendations.

Radiological Assessment Manager Checklist

_____ Evaluate Emergency Release Status:

- None - no release of radioactivity generated by the event and no release expected.
- Is Occurring - radioactivity generated during an event that is currently being released through any defined accident pathway, as indicated by **ANY** of the following:

McGuire/Catawba

- EMF-38, 39, 40, 51 (MNS), 53 (CNS) containment monitor reading(s) indicate an increase **AND** containment pressure is greater than 0.3 psig
- EMF-38, 39, 40, 51 (MNS), 53 (CNS) containment monitor reading(s) indicate an increase **AND** a known leak path exists from containment
- EMF-36 unit vent monitor reading indicates an increase in activity
- EMF-33 CSAE exhaust monitor reading or other alternate means indicates steam generator tube leakage
- A known unmonitored release path exists **AND** radioactive material exists
- Alternate method of release determination
- Field Monitoring Team results.

Oconee

- RIA-47, 48, 49, 49A, 57 or 58 containment monitor reading(s) indicate an increase **AND** containment pressure is greater than 1 psig
 - RIA-47, 48, 49, 49A, 57 or 58 containment monitor reading(s) indicate an increase **AND** a known leak path exists from containment
 - RIA-45 or 46 unit vent monitor reading(s) indicate an increase in activity
 - RIA-40 CSAE exhaust monitor reading or other alternate means indicates steam generator tube leakage
 - A known unmonitored release path exists, **AND** radioactive material exists
 - Alternate method of release determination
 - Field Monitoring Team results.
- Has Occurred - any radioactivity released to the environment during a declared emergency event, but has been stopped.

_____ Provide Emergency Release Status input for Line 6 of ENF.

Enclosure 6.6
Radiological Assessment Manager Checklist

SR/0/A/2000/003
Page 5 of 6

NOTE: The Site Boundary Normal Operating Limits in the Technical Specifications and SLCs are:

- EDE 5.70 E-2 mRem/hr (500 mRem/yr)
- CDE Thyroid 1.71E-1 mRem/hr (1500 mRem/yr)

_____ Evaluate **AND** provide Emergency Release Significance for ENF Line 7:

- **IF** no release in progress, **THEN** Not Applicable.
- **IF** release significance is known, **THEN** Within Normal Operating Limits **OR** Above Normal Operating Limits.
- **IF** release significance is unknown, **THEN** Under Evaluation.

NOTE: Stability Class versus Delta-T charts are contained in the URI Job aid located at <https://nuc.duke-energy.com/sites/RPJA/SitePages/Home.aspx>

_____ Provide on ENF Line 9:

- Wind Direction
- Wind Speed
- Precipitation Type
- Stability Class.

- NOTES:**
1. Emergency Release data are not required for initial Emergency Notification Forms **OR** notifications of changes in Protective Action Recommendations.
 2. It is inappropriate to provide information for liquid releases on ENF Lines 14, 15, and 16, as they cannot be quantified using URI and are not the basis for Protective Action Recommendations. It is appropriate to provide information about liquid releases on Line 13, Remarks.

_____ Provide on ENF Line 14:

- Release Characterization (Type, C (Ground) and Units, B (Ci/sec))
- Magnitude (Ci/Sec Release rates from Dose Assessment Report)
- Form **AND** start and/or stop time, as appropriate.

_____ Provide Projection Parameters on ENF Line 15:

- Projection period (forecast period in hours) from Dose Assessment Report.
- Estimated Release Duration by adding forecast period and time elapsed since release began.
- Date and time projection was performed.

Radiological Assessment Manager Checklist

_____ Provide Projected Dose information on ENF Line 16, by entering "Forecast Data" from Dose Assessment Report.

_____ Assist Public Affairs and/or Public Spokesperson with dose comparisons based on computer model or field data.

NOTE: **IF** necessary to relieve Duke Energy personnel, **THEN** environmental surveillance support personnel from the DOE Radiological Assistance Plan may be requested by the Radiological Assessment Manager through the EOF Director.

_____ **IF** needed, **THEN** conduct turnover for on-coming shift.

_____ Provide all completed paperwork to Emergency Preparedness upon deactivation of EOF.

Enclosure 6.7
EOF Dose Assessor Checklist

SR/0/A/2000/003
Page 1 of 4

INITIAL

NOTE: Steps in this checklist may be performed in any order appropriate to the specific event conditions or they may be omitted if not applicable.

- _____ **IF** reporting to EOF outside your normal work hours, **THEN** complete a Fitness for Duty Questionnaire.
- _____ Don position badge.
- _____ Log in to PC
- _____ Log in to WebEOC.
- _____ Sign in on Sign In board.
- _____ Obtain copy of AD-EP-ALL-0202, Emergency Response Offsite Dose Assessment.
- _____ Initiate Position Log of activities sufficient to conduct a turnover for on-coming shift.
- _____ Acquire necessary dose assessment and plant status information.
- _____ **IF** data acquisition programs are unavailable, **THEN** request SDS data from TSC or instrument readings from Control Room (EMF and Met data).

NOTE: Be aware of the effects of loss of power on critical EMFs (Catawba and McGuire) or RIAs (Oconee).

- _____ Verify operability and validity of EMFs (Catawba and McGuire) or RIAs (Oconee) through the TSC.
- _____ **IF** Catawba or McGuire event is in progress, **THEN** verify effluent discharge alignment with Shift Lab, Radiation Protection Manager (TSC), or Dose Assessors (TSC) as necessary.
- _____ **IF** Oconee event is in progress, **THEN** verify effluent discharge alignment with TSC Dose Assessment Liaison (gas tank), RP Manager (gas tank or liquid releases), or Chemistry Manager in the OSC (liquid releases).

INITIALS _____ PRINTED NAME _____

Enclosure 6.7
EOF Dose Assessor Checklist

SR/0/A/2000/003
Page 2 of 4

NOTE:

- Microsoft Lync (Skype for Business) is an acceptable communications method.
- Oconee, TSC Dose Assessment Liaison, 9-1-864-873-3705.
- Catawba/McGuire, Dose Assessment Bridge, 9-980-875-4980.

_____ Establish communications with dose assessment personnel at TSC. Compare information, projections and strategies with TSC.

_____ Obtain Dose Assessor turnover from TSC:

1. Release in progress: No: _____ Yes: _____

Is occurring _____ Has occurred _____ Time _____

Normal Operating Limits: Below _____ Above _____

2. Recommended Protective Actions:

☐ A No Recommended Protective Actions

☐ B Evacuate _____

☐ C Shelter-In-Place _____

☐ D Other _____

3. Additional pertinent information necessary to continue monitoring of release and dose assessment calculations.

Turnover complete date/time: _____

_____ Verify operability of Health Physics Network (HPN) phone by placing a call to the NRC using the number listed on HPN phone.

Enclosure 6.7
EOF Dose Assessor Checklist

SR/0/A/2000/003
Page 3 of 4

- NOTE:**
1. The NRC Regional Office will request activation of the HPN phone through Emergency Notification System (ENS) telephone if desired.
 2. Information that may be requested over the HPN line could include, but is not limited to the following:
 - Is there any change to the classification of the event? If so, what is the reason?
 - Have toxic or radiological releases occurred or been projected (including changes in the release rate)?
 - If so, what are the actual or currently projected onsite and offsite releases, and what is the basis for this assessment?
 - What are the health effects or consequences to onsite and offsite people?
 - How many onsite or offsite people are being or will be affected and to what extent?
 - Is the event under control? When was control established, or what is the planned action to bring the event under control?
 - What mitigative actions are currently underway or planned?
 - What onsite protective measures have been taken or are planned?
 - What offsite protective actions are being considered or have been recommended to state and local officials?
 - What are the current meteorological conditions?
 - What are the dose and dose rate readings onsite and offsite?

_____ **IF** requested during a drill or actual event, **THEN** activate HPN phone by calling NRC using number listed on HPN phone.

_____ Analyze source-term data, formulate source-term mitigation strategies, and provide information to Radiological Assessment Manager, EOF Staff, and TSC Dose Assessors as required.

_____ Perform dose projections as appropriate to plant conditions.

_____ Interact with Field Monitoring Coordinator to compare off-site dose projections to actual field readings.

Enclosure 6.7
EOF Dose Assessor Checklist

SR/0/A/2000/003
Page 4 of 4

NOTE: Emergency Release data are not required for initial Emergency Notification Forms **OR** notifications of changes in Protective Action Recommendations.

- _____ Evaluate dose projections and provide protective action recommendations to Radiological Assessment Manager and EOF Director.

- _____ **IF** SAMGs are implemented **AND** offsite releases approach or exceed 100mRem TEDE or 500mRem Thyroid CDE, **THEN** notify EOF SAMG Evaluator (in Accident Assessment Area). (Applicable to Catawba and McGuire).

- _____ **IF** SAMGs are implemented **AND** offsite releases approach or exceed 1Rem TEDE or 5 Rem Thyroid CDE, **THEN** notify EOF SAMG Evaluator (in Accident Assessment Area). (Applicable to Catawba and McGuire).

- _____ **IF** needed, **THEN** conduct turnover for on-coming shift.

- _____ Restore equipment to "Ready Status" and notify appropriate personnel of conditions that would cause a less than operational status.

- _____ Provide all completed paperwork to Emergency Preparedness upon deactivation of EOF.

Enclosure 6.8
Field Monitoring Coordinator Checklist

SR/0/A/2000/003
Page 1 of 2

INITIAL

NOTE: Steps in this checklist may be performed in any order appropriate to the specific event conditions or they may be omitted if not applicable.

- _____ **IF** reporting to EOF outside your normal work hours, **THEN** complete a Fitness for Duty Questionnaire.
- _____ Don position badge.
- _____ Log in to PC
- _____ Log in to WebEOC.
- _____ Sign in on Sign In board.

NOTE: Field Teams may be directed by the EOF Field Monitoring Coordinator (FMC) prior to activation of the EOF.

- _____ Obtain copy of AD-EP-ALL-0203, Protocol for the Field Monitoring Coordinator During Emergency Conditions.
- _____ Establish Position Log of activities sufficient enough to conduct a turnover for on-coming shift.

NOTE:

1. For drill or exercise met data, choose appropriate site simulator SDS resource.
2. For real time met data, choose the SDS resource for a specific site and unit.

- _____ Refer to Procedure Step 3.2 to access SDS.

INITIALS _____

PRINTED NAME _____

Field Monitoring Coordinator Checklist

____ **WHEN** EOF Radio Operator has established communications with field monitoring teams,
____ **THEN** notify TSC Dose Assessors and provide direction to field monitoring teams.

Catawba Specific

Perform duties as described in the following:

- HP/0/B/1009/004, "Environmental Monitoring for Emergency Conditions Within the Ten Mile Radius of CNS"
- HP/0/B/1009/019, "Emergency Radio System Operation, Maintenance, & Communication".

____ **IF** needed, **THEN** conduct turnover for on-coming shift.

____ Restore equipment to "Ready Status" and notify appropriate personnel of conditions that would cause a less than operational status.

____ Provide all completed procedures and copies of logs to Emergency Preparedness upon deactivation of EOF.

Enclosure 6.9
Radio Operator Checklist

SR/0/A/2000/003
Page 1 of 1

INITIAL _____

NOTE: Steps in this checklist may be performed in any order appropriate to the specific event conditions or they may be omitted if not applicable.

- _____ **IF** reporting to EOF outside your normal work hours, **THEN** complete a Fitness for Duty Questionnaire.
- _____ Don position badge.
- _____ Log in to PC
- _____ Log in to WebEOC.
- _____ Sign in on Sign In board.
- _____ Establish Position Log of activities sufficient to conduct turnover for on-coming shift.
- _____ Obtain copy of AD-EP-ALL-0203, Protocol for the Field Monitoring Coordinator During Emergency Conditions, Enclosure 5.3 (Field Monitoring Survey data Sheet) and Enclosure 5.4 (Meteorological Update for Field Monitoring Teams).
- _____ Establish contact with Field Teams.
- _____ Communicate instructions from Field Monitoring Coordinator to Field Teams.
- _____ Conduct turnover for on-coming shift, if needed.
- _____ Provide all completed paperwork to Emergency Preparedness upon deactivation of EOF.

INITIALS _____ PRINTED NAME _____

EOF Offsite Agency Communicator Checklist

INITIAL

NOTE: Steps in this checklist may be performed in any order appropriate to the specific event conditions or they may be omitted if not applicable.

- _____ **IF** reporting to EOF outside your normal work hours, **THEN** complete a Fitness for Duty Questionnaire.
- _____ Don position badge.
- _____ Log in to PC
- _____ Log in to WebEOC.
- _____ Sign in on Sign In board.

NOTE: The following step is for EOF Director's Area data display.

- _____ Establish Emergency Notification Form display using Offsite Agency Communicator's Computer in EOF Director's Area:
 - ☐ Open EN Form.
 - ☐ Drag to EN Form right monitor **AND** maximize.
- _____ Establish Position Log of activities sufficient to conduct turnover for on-coming shift.
- _____ Notify INPO for an Alert, Site Area Emergency, General Emergency, or any event expected to require significant industry support, including the name of the affected site(s) and a name and phone number to call for additional information at one of the following numbers: {IER L1-13-10}
 - 9-1-404-290-3977 (INPO Emergency Director)
 - 9-1-404-290-3980 (INPO Assistant Emergency Director)
- _____ **IF** requested, **THEN**:
 - Provide INPO Emergency Director with a brief description of the nature of the event.
 - Identify any equipment or support needed from INPO.
 - Respond when contacted for periodic updates.
- _____ Perform duties as described in procedure SR/0/A/2000/004 (Notification to States and Counties from the Emergency Operations Facility).
- _____ Ensure emergency notification times are satisfied.
- _____ Conduct turnover for on-coming shift, if needed.

_____ Provide all completed paperwork to Emergency Preparedness upon deactivation of EOF.

INITIALS _____

PRINTED NAME _____

Enclosure 6.11
EOF Services Administration/Commissary
Checklist

SR/0/A/2000/003

Page 1 of 2

NOTE: Steps in this checklist may be performed in any order appropriate to the specific event conditions or they may be omitted if not applicable.

INITIAL

- _____ **IF** reporting to EOF outside your normal work hours, **THEN** complete a Fitness for Duty Questionnaire.
- _____ Don position badge.
- _____ Log in to PC
- _____ Log in to WebEOC.
- _____ Sign in on Sign In board.
- _____ Establish Position Log of activities sufficient to conduct turnover for on-coming shift.
- _____ Ensure that the EOF Services Area is set up.
- _____ Provide administrative office support and supplies, such as:
 - Office supplies and equipment
 - Secretarial/clerical services
 - Copy center/fax services

NOTE: Personnel without badge access will need to be escorted into the EOF by the Assistant EOF Director, EOF Emergency Planner, EOF Services Manager, or their Mentor. [61]

- _____ Provide for personal needs of ERO, such as:
 - Food and beverage
 - Air travel, hotel, and car rental arrangements
 - Tables and chairs
 - Tents
 - Portable toilets
 - Trash receptacles
- _____ **IF** requested, **THEN** provide in-house craft resources.
- _____ **IF** needed, **THEN** contact additional personnel for support.
- _____ Provide all completed paperwork to Emergency Preparedness upon deactivation of EOF.

INITIALS _____ PRINTED NAME _____

Enclosure 6.11
EOF Services Administration/Commissary
Checklist

SR/0/A/2000/003
Page 2 of 2

EOF FACILITY POST-EVENT CHECKLIST

- _____ Secure the EOF Services Area.
- _____ Restock office supplies.
- _____ **IF** needed, **THEN**:
 - Ensure return of relocated office equipment.
 - Notify hotels/motels of release of rooms.
 - Assist personnel needing transportation home.
 - Notify vendors to pick up furniture and equipment not needed for recovery.
- _____ Notify vendors to discontinue food services to EOF.

ACTION LIST FOR CHANGING FROM EMERGENCY TO RECOVERY MODE

- _____ Replenish supplies.
- _____ Determine additional space requirements.
- _____ Prepare weekly work schedules.
- _____ Determine hotel/motel accommodations and travel requirements and contact Travel Services for securing these requirements.
- _____ Notify food vendors to arrange shift operations to support recovery efforts for meals and breaks (snacks) with times and locations for serving.
- _____ Notify chairs and table suppliers for appropriate needs and quantities.
- _____ Notify tent suppliers for appropriate needs and quantities.
- _____ Notify portable toilet suppliers for appropriate needs and quantities.
- _____ Notify trash receptacle suppliers for appropriate needs and quantities.
- _____ Establish shift coverage of commissary personnel to support total recovery efforts.

Enclosure 6.12
Accident Assessment Manager Checklist

SR/0/A/2000/003
Page 1 of 4

INITIAL

NOTE: Steps in this checklist may be performed in any order appropriate to the specific event conditions or they may be omitted if not applicable.

_____ **IF** reporting to EOF outside your normal work hours, **THEN** complete a Fitness for Duty Questionnaire.

_____ Don position badge.

_____ Log in to PC

_____ Log in to WebEOC.

_____ Sign in on Sign In board.

_____ Establish Position Log of activities sufficient to conduct turnover for on-coming shift.

NOTE: The following step is needed for EOF Director's Area data display.

_____ Establish SDS data display.

- ☐ Refer to Step 3.2 in procedure body to access SDS for affected site and unit.
- ☐ Drag SDS display to right monitor **AND** maximize.

_____ **IF** needed to support emergency, **THEN** request staffing by Reactor Physics.

_____ Obtain copy of applicable "Classification of Emergency" procedure.

- Catawba: RP/0/A/5000/001
- McGuire: RP/0/A/5700/000
- Oconee: RP/0/A/1000/001

_____ **IF** Oconee is affected, **THEN** obtain copy of "Oconee Nuclear Site Emergency Action Level Description Guidelines" Manual.

_____ Ensure PC is on and displaying plant status.

_____ Post changes in Fission Product Barrier status on Fission Product Barrier Status Board..

_____ Provide I/C number and description for ENF Line 4 to Offsite Agency Communicators.

_____ Assist the Radiological Assessment Manager (RAM) in determining Protective Actions using:

- ☐ Enclosure 6.2, Catawba Offsite Protective Actions
- ☐ Enclosure 6.3, McGuire Offsite Protective Actions
- ☐ Enclosure 6.4, Oconee Offsite Protective Actions

NOTE: Definitions for ENF Line 8 are in Steps 2.4, 2.5, and 2.6 in the body of this procedure.

- _____ Provide Event Prognosis for ENF Line 8 to Offsite Agency Communicators. {1}
- _____ Provide appropriate information for ENF Line 10 to Offsite Agency Communicator.

INITIALS _____ PRINTED NAME _____

Enclosure 6.12
Accident Assessment Manager Checklist

SR/0/A/2000/003
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NOTE: The Affected Unit on Line 11 is tied to the I/C on Line 4. Examples may not be all inclusive of events that may affect all units.

_____ Provide Affected Unit(s) for ENF Line 11 to Offsite Agency Communicators:

- Evaluate the following for classification for both units (CNS and MNS) or all three units (ONS).
 - Security event
 - Seismic event
 - Tornado on site
 - Hurricane force winds on site
 - Loss of both switch yards
 - Fire in SSF
 - Fire affecting shared safety related equipment
 - Imminent Failure for Keowee Hydro Project Dam/Dike (ONS).
- **IF** event at Catawba or McGuire affects both units equally, **THEN** check All.
- **IF** event at Oconee affects more than one unit equally, **THEN** check All.
- **IF** event only affects one (1) unit **OR** one unit has a higher classification, **THEN** check appropriate unit.

_____ Provide Unit Status for ENF Line 12 to Offsite Agency Communicators.

_____ **IF** an upgrade in classification occurs, **THEN** notify Offsite Agency Communicator.

_____ Coordinate the following functions:

- Accident Assessment Interface
- Operations Interface
- Reactor Physics (as needed)

- _____ Prepare for EOF Briefings using Enclosure 6.24 (EOF Briefing Guideline).
- _____ Assist TSC Emergency Coordinator as requested upon entry into Severe Accident Management Guidelines (SAMGs).
- _____ Conduct turnover for on-coming shift, if needed.
- _____ Provide all completed paperwork to Emergency Preparedness upon deactivation of EOF.

Enclosure 6.13
Accident Assessment Interface Checklist

SR/0/A/2000/003
Page 1 of 5

INITIAL

NOTE: Steps in this checklist may be performed in any order appropriate to the specific event conditions or they may be omitted if not applicable.

- _____ **IF** reporting to EOF outside your normal work hours, **THEN** complete a Fitness for Duty Questionnaire.
- _____ Don position badge.
- _____ Log in to PC
- _____ Log in to WebEOC.
- _____ Sign in on Sign In board.
- _____ Notify Accident Assessment Manager that position is staffed.
- _____ Establish Position Log of activities sufficient enough to conduct turnover for on-coming shift.
- _____ Ensure PCs are on and displaying affected station and unit plant status.

NOTE: Communications are established after the beep.

- _____ Establish bridge line for Operations Loop for affected station:
 - ☐ Catawba: 9-803-701-3994
 - ☐ McGuire: 9-980-875-4500
 - ☐ Oconee: 9-1-864-873-4908
- _____ **IF** needed for McGuire, **THEN** establish communications link with Engineering Manager, 9-980-875-4954.
- _____ **IF** Oconee event, **THEN** establish communications with Operations Interface, 9-1-864-873-3696.
- _____ Obtain copy of Classification of Emergency procedure for affected station.
 - ☐ Catawba: RP/0/A/5000/001
 - ☐ McGuire: RP/0/A/5700/000
 - ☐ Oconee: RP/0/A/1000/001

INITIALS _____ PRINTED NAME _____

Enclosure 6.13
Accident Assessment Interface Checklist

SR/0/A/2000/003

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_____ Obtain copy of Core Damage Assessment procedure for affected station.

- ☐ Catawba: RP/0/A/5000/015
- ☐ McGuire: RP/0/A/5700/019
- ☐ Oconee: RP/0/B/1000/018.

_____ Gather plant status information using Accident Assessment Initial Information Request Form on page 4 or 5 of this enclosure.

_____ **IF AT ANY TIME** General Emergency is declared, **THEN RECOMMEND IMMEDIATELY** to Accident Assessment Manager **AND** RAM protective actions using:

- ☐ Enclosure 6.2 - Catawba Offsite Protective Actions
- ☐ Enclosure 6.3 - McGuire Offsite Protective Actions
- ☐ Enclosure 6.4 - Oconee Offsite Protective Actions

_____ Perform the following steps as needed throughout event:

_____ **IF** condition warrants, **THEN** determine analysis of reactor core and containment conditions in regard to:

- Core sub-cooling
- Decay heat generation
- Heat removal capabilities (core and containment)
- Fission product release potential (core and containment).

_____ **IF** condition warrants, **THEN** provide:

- Estimates of core uncover times
- Interpretations of reactor water level data.

_____ Monitor status of Emergency Operations Procedures (EOPs) and discuss with Accident Assessment Manager.

_____ Confer with Radiological Assessment group in EOF.

_____ Consult with Operations Interface on anticipated course of events.

_____ Update status board in Accident Assessment room.

_____ Confer with Accident Assessment Manager on the following:

- Anticipated course of events
- Diagnosis of the accident and mitigation strategies
- Analysis of core and containment
- Core damage and fission product release potential
- Background information of system design
- Emergency classifications.

Enclosure 6.13
Accident Assessment Interface Checklist

SR/0/A/2000/003
Page 3 of 5

- _____ Support Engineering Manager in TSC in accident and mitigation strategies.
- _____ Assist TSC as an evaluator upon entry into Severe Accident Management Guidelines (SAMG) (as requested).
- _____ **IF** SAMGs are entered, **THEN** update SAMG status board.
- _____ **IF** McGuire has entered SAMG, **THEN REFER TO** Enclosure 6.20 (Establishing Communications Links between McGuire SAMG Evaluators).
- _____ Conduct turnover for on-coming shift, if needed.
- _____ Provide all completed paperwork to Emergency Preparedness upon deactivation of EOF.

Catawba or McGuire Initial Information Request

Initial Information Request	Results
Emergency Classification Status	
EAL Declaration Chronology	
Protective Actions Status	
Reactor/Turbine Status	
Power Level	
Time of Trip & On What Signal	
Any Abnormal Response	
NC Pump Status	
Core Cooling Status (subcooled margin/ RVLIS/natural circulation)	
Orange or Red CSFs Alarms Received	
Safety Injection	
When Actuated & on What Signal	
NV, NI, ND, Ice Condenser Status	
Feedwater	
CF and CA Status	
Main Steam	
Isolation Status	
SMSV, SM PORV, SB Status	
Electric Power	
600V, 4160V, D/G Status	
Containment	
Isolation Status	
NS and VX Status	
Security/Fire/Flooding/HAZMAT/Other Hazards	
Plant Conditions Status	
Off-site Releases	
Status	

Accident Assessment Interface Checklist

Oconee Initial Information Request

Initial Information Request	Results
Emergency Classification Status	
EAL Declaration Chronology	
Protective Actions Status	
Reactor/Turbine Status	
Power Level	
Time of Trip & On What Signal	
Any Abnormal Response	
Reactor Coolant Pump Status	
Core Cooling Status (subcooled margin/ RVLIS/natural circulation)	
Safety Injection	
When Actuated & on What Signal	
HPI, LPI Status	
Feedwater	
Feedwater and Emergency Feedwater Status	
Main Steam	
Isolation Status	
MSSV Status	
Electric Power	
600V, 4160V, Keowee, Lee Status	
Containment	
Isolation Status	
RBS, RBCU Status	
Security/Fire/Flooding/HAZMAT/Other Hazards	
Plant Conditions Status (Keowee Hydro Dam status)	
Off-site Releases	
Status	

Enclosure 6.14
Operations Interface Checklist

SR/0/A/2000/003
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INITIAL

NOTE: This enclosure does not apply to Oconee.

NOTE: Steps in this checklist may be performed in any order appropriate to the specific event conditions or they may be omitted if not applicable.

- _____ **IF** reporting to EOF outside your normal work hours, **THEN** complete a Fitness for Duty Questionnaire.
- _____ Don position badge.
- _____ Log in to PC
- _____ Log in to WebEOC.
- _____ Sign in on Sign In board.
- _____ Establish Position Log of activities sufficient to conduct turnover for on-coming shift.
- _____ Perform following steps, as needed, throughout event:
 - _____ Provide communications interface between Accident Assessment Group and TSC Operations Group.
 - _____ Advise Accident Assessment Group on the following:
 - Emergency Operations Procedures (EOPs)
 - Diagnosis of accident and mitigation strategies
 - Emergency classification.
 - _____ Advise TSC of anticipated course of events.
- _____ Conduct turnover for on-coming shift, if needed.
- _____ Provide all completed paperwork to Emergency Preparedness upon deactivation of EOF.

INITIALS _____

PRINTED NAME _____

Enclosure 6.15
Reactor Physics Checklist

SR/0/A/2000/003
Page 1 of 1

INITIAL

NOTE: Steps in this checklist may be performed in any order appropriate to the specific event conditions or they may be omitted if not applicable.

- _____ **IF** reporting to EOF outside your normal work hours, **THEN** complete a Fitness for Duty Questionnaire.
- _____ Don position badge.
- _____ Log in to PC
- _____ Log in to WebEOC.
- _____ Sign in on Sign In board.
- _____ Establish Position Log of activities sufficient to conduct turnover for on-coming shift.
- _____ Obtain any applicable nuclear design calculations from Nuclear Engineering office area.
- _____ Establish communications with TSC Reactor Engineer.
- _____ **IF** conditions warrant, **THEN** determine analysis of reactor core and fuel with respect to:
 - Reactor Physics parameters
 - Core subcriticality.
- _____ Provide Accident Assessment Manager with information concerning any abnormal core conditions.
- _____ Conduct turnover for on-coming shift, if needed.
- _____ Provide all completed paperwork to Emergency Preparedness upon deactivation of EOF.

INITIALS _____ PRINTED NAME _____

Enclosure 6.16
Emergency Planner Checklist

SR/0/A/2000/003
Page 1 of 14

INITIAL

NOTE: Steps in this checklist may be performed in any order appropriate to the specific event conditions or they may be omitted if not applicable.

_____ **IF** reporting to EOF outside your normal work hours, **THEN** complete a Fitness for Duty Questionnaire.

_____ Don position badge.

_____ Log in to PC

_____ Log in to WebEOC.

_____ Set up WebEOC content for display.

- ☐ Click on Sign In board.
- ☐ Drag Sign In board to right monitor **AND** maximize.
- ☐ Log in to Side Bar.
- ☐ Double click on Content PC 1 Remote Control on Sources list.
- ☐ Double click on Log In screen.
- ☐ Depress CTRL and F4 simultaneously.
- ☐ Click Okay.
- ☐ Log in using LAN ID and Password.
- ☐ Log in to WebEOC.
- ☐ Click Offsite Notifications **AND** maximize.
- ☐ Click red X in top right corner to exit.

_____ Sign in on Sign In board.

_____ Establish Position Log of activities sufficient to conduct turnover for on-coming shift.

_____ (MNS and CNS only) Obtain Emergency Planner wireless phone and headset from Emergency Planner Desk area and access EP bridge line, 9-803-701-4010.

NOTE: Have on hand all emergency notification forms (ENFs) transmitted to state and local agencies up to this time. Be prepared to answer questions concerning information on the ENFs as well as any other information requested by ECOC Director when called back.

_____ Contact the Enterprise Crisis Operations Center (ECOC) Director by email at ECOCDirectors@duke-energy.com **OR** by phoning the Enterprise Security Console at 2-8851 or 9-1-800-943-7584, ask them to contact the ECOC Director about the EOF activation, and provide your call back number. {IER L1-13-10} {77}

Enclosure 6.16
Emergency Planner Checklist

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NOTE: Personnel without badge access will need to be escorted into the EOF by the Assistant EOF Director, EOF Emergency Planner, EOF Services Manager, or their Mentor. [61]

_____ Support EOF Director with the following:

_____ Document Onsite Protective Measures in WebEOC.

_____ Provide escorted access to EOF for personnel without badge access. [61]

_____ Document names of personnel escorted in EOF Facility log.

_____ Complete EOF Director Checklist items as requested.

_____ Clarify Emergency Plan and Emergency Plan Implementing Procedure information.

_____ Interface with federal, state and local agencies.

_____ Assist Off-Site Agency Communicators in preparation of emergency notifications.

INITIALS _____ PRINTED NAME _____

Enclosure 6.16
Emergency Planner Checklist

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Page 3 of 14

- _____ **IF** a security event at MNS requires assembling MNS TSC/OSC ERO at EOF, **THEN** complete "MNS Security Event, TSC/OSC Assembled at EOF Checklist," page 12 of 14 of this enclosure.
- _____ **IF** a Beyond Design Basis External Event (BDBEE) or Extended Loss of Offsite AC Power (ELAP) event at MNS requires assembling TSC/OSC ERO at the EOF, **THEN** complete "MNS BDBEE/ELAP, TSC/OSC Assembled at EOF Checklist," page 12 of 14 of this enclosure. {76}
- _____ **IF** a security event at CNS requires assembling the duty CNS TSC ERO at the EOF, **THEN** complete "CNS Security Event, TSC ERO Assembled at EOF Checklist," page 13 of 14 of this enclosure.

NOTE: 1. EOF Duty Roster is available on DAE using Nuclear Generation Duty Roster application. EOF information is under General Office location.

2. Consider hours previously worked prior to ERO activation in determining shift turnover schedules for 24-hour staffing.

- _____ Complete 24-Hour Staffing Log for each EOF position, pages 5 through 10 of this enclosure.
- _____ Ensure that 24-hour staffing plans are established and maintained for all EOF positions for the duration of the entire emergency. {IER L1-13-10}
- _____ **IF** EPZ roadblocks have been established, **THEN** prepare for emergency worker re-entry using page 14 of this enclosure.
- _____ Verify Public Affairs personnel have considered 24-hour staffing by calling the JIC Admin. Manager at 2-0548.
- _____ Record EOF Exercise/Drill/Event Duke Energy employee participation as follows:
 - ☐ **IF** scheduled drill, **THEN** activate eRoster program and scan **OR** enter Duke Energy employee ID number.
 - ☐ **IF** not a scheduled drill **OR** scanner-inoperable, **THEN** request participants sign Exercise/Drill/Event/Training Attendance Sheet. [61]

Enclosure 6.16
Emergency Planner Checklist

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- _____ Request Duke Energy participants sign Drill and Event Participation Roster (AD-EP-ALL-0802, Conducting Drills and Exercises, Attachment 4, Drill and Event Participation Roster). [61]
- _____ Conduct turnover for on-coming shift, if needed.
- _____ Upon deactivation of the EOF, forward a copy of the Drill and Event Participation Roster (AD-EP-ALL-0802, Conducting Drills and Exercises, Attachment 4, Drill and Event Participation Roster) to each DEC site's Emergency Preparedness Manager.
- _____ Upon deactivation of EOF, collect all completed paperwork and forward to appropriate Emergency Preparedness Manager.
- _____ Upon deactivation of EOF, complete "EOF Post Event Checklist," page 11 of this enclosure.

Enclosure 6.16
Emergency Planner Checklist

SR/0/A/2000/003
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EOF DIRECTOR AREA
24-HOUR POSITION EOF STAFFING LOG

	Primary		Relief	
Position	Name	*Shift Schedule	Name	*Shift Schedule
EOF Director				
Assistant EOF Director				
EOF Log Recorder				
EOF Emergency Planner				
Radiological Assessment Manager				
Accident Assessment Manager				

* List hours of coverage: i.e., 0800-2000, or 8am -8pm.

Enclosure 6.16
Emergency Planner Checklist

SR/0/A/2000/003
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DOSE ASSESSMENT AREA
24-HOUR POSITION EOF STAFFING LOG

	Primary		Relief	
Position	Name	*Shift Schedule	Name	*Shift Schedule
EOF Dose Assessor				
EOF Dose Assessor				
EOF Dose Assessor				
EOF Dose Assessor (HPN)				
Field Monitoring Coordinator				
Radio Operator				

* List hours of coverage: i.e., 0800-2000, or 8am -8pm.

Enclosure 6.16
Emergency Planner Checklist

SR/**0**/A/2000/003
Page 7 of 14

ACCIDENT ASSESSMENT AREA
24-HOUR POSITION EOF STAFFING LOG

Position	Primary		Relief	
	Name	*Shift Schedule	Name	*Shift Schedule
Accident Assessment Interface				
Reactor Physics (As Needed)				
Operations Interface (MNS and CNS only)				

* List hours of coverage: i.e., 0800-2000, or 8am -8pm.

Enclosure 6.16
Emergency Planner Checklist

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OFFSITE AGENCY COMMUNICATOR

24-HOUR POSITION EOF STAFFING LOG

	Primary		Relief	
Position	Name	*Shift Schedule	Name	*Shift Schedule
Lead EOF Off-Site Agency Communicator				
EOF Off-Site Agency Communicator				
EOF Off-Site Agency Communicator				

* List hours of coverage: i.e., 0800-2000, or 8am -8pm.

Enclosure 6.16
Emergency Planner Checklist

SR/**0**/A/2000/003
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EOF SERVICES AREA
24-HOUR POSITION EOF STAFFING LOG

	Primary		Relief	
Position	Name	*Shift Schedule	Name	*Shift Schedule
EOF Services Manager				
EOF Services Admin/Commissary				
EOF Data Coordinator				

* List hours of coverage: i.e., 0800-2000, or 8am -8pm.

Enclosure 6.16

Emergency Planner Checklist

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[illegible]

Enclosure 6.16
Emergency Planner Checklist

SR/0/A/2000/003
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EOF FACILITY POST EVENT CHECKLIST

- _____ Obtain copy of TSC/EOF Log Printout.
- _____ Retrieve:
 - Completed Procedures
 - Notes
 - Log Sheets
- _____ Log in to Side Bar.
- _____ Double click on Content PC 1 Remote Control on Sources List.
- _____ Double click on Content PC 1 Remote Control screen to take control of the screen.
- _____ Log off of the computer using the Start menu in the bottom left hand corner of the screen.
- _____ Click red X in top right corner to exit.
- _____ Turn off video wall board using Supervisor XPanel (System power-OFF).

NOTE: EOF Services completes Enclosures 13.4 and 13.5 from procedure ST/0/A/4600/086.
--

- _____ Complete applicable enclosures of ST/0/A/4600/086 to replenish procedure inventories
- _____ Clean tables off
- _____ Put all trash in containers
- _____ Erase status boards
- _____ Verify all multifunction machines have paper supply replenished
- _____ Verify cordless phones are left in cradles to be charged.

Replenish Position Specific Notebooks (1 copy of procedure body and minimum 3 copies of applicable enclosures, checklists and log sheets):

- _____ EOF Director (also include minimum 3 copies each of Enclosure 6.2, 6.3 and 6.4)
- _____ Radiological Assessment Manager (also include minimum 3 copies each of Enclosures 6.2, 6.3, and 6.4).
- _____ EOF Dose Assessor
- _____ Field Monitoring Coordinator
- _____ Radio Operator
- _____ EOF Offsite Agency Communicator (also include 1 copy of EP FAM 3.15 Attachment 3.15.3.3)
- _____ Accident Assessment Manager (also include minimum 3 copies each of Enclosures 6.2, 6.3, and 6.4).
- _____ Accident Assessment Interface
- _____ EOF Operations Interface
- _____ Reactor Physics
- _____ EOF Emergency Planner
- _____ EOF Log Recorder (also include 1 copy of EP FAM 3.15 Attachment 3.15.3.2)
- _____ EOF Data Coordinator
- _____ EOF Services Manager

Enclosure 6.16
Emergency Planner Checklist

SR/0/A/2000/003
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MNS SECURITY EVENT, TSC/OSC ASSEMBLED AT EOF CHECKLIST

- ____ Notify Energy Center Building Security, 2-1234, that TSC/OSC offsite responders are assembling at EOF. [61]
- ____ Request that TSC/OSC responders assemble in EOF videoconferencing room.
- ____ Coordinate selection of first response team that will activate TSC/OSC when Security Event is terminated.
- ____ Move first response team into EOF work area to obtain plant status and recovery strategies.
- ____ **IF** needed, **THEN** obtain copies of RP/0/A/5700/012, Activation of the Technical Support Center, (TSC) and RP/0/A/5700/020, Activation of the Operations Support Center (OSC), from the McGuire procedure cabinet.
- ____ Determine 24-hour staffing for each TSC/OSC position.
- ____ **IF** EOF videoconferencing room is too crowded, **THEN** determine whether to send TSC/OSC relief members to Energy Center Cafeteria.
- ____ **WHEN** Security Event is terminated and onsite TSC/OSC is to be activated, **THEN** ensure that first response team to TSC/OSC is briefed prior to dispatch to site.
- ____ Send relief TSC/OSC members home, if possible, with their assigned relief time.

MNS BDBEE/ELAP EVENT, TSC/OSC ASSEMBLED AT EOF CHECKLIST {76}

- ____ Notify Energy Center Building Security at 2-1234 that TSC/OSC offsite responders are assembling at EOF.
- ____ Request that TSC/OSC responders assemble in EOF videoconferencing room.
- ____ Assist TSC Emergency Planner in establishing priorities for transport of MNS ERO personnel to the site.
- ____ Assist TSC Emergency Planner in determining 24-hour staffing for each TSC/OSC and alternate TSC/OSC position.
- ____ **IF** needed, **THEN** obtain copies of RP/0/A/5700/012, Activation of the Technical Support Center, (TSC) and RP/0/A/5700/020, Activation of the Operations Support Center (OSC), from the McGuire procedure cabinet.
- ____ **IF** EOF videoconferencing room is too crowded, **THEN** determine whether to send TSC/OSC relief members to Energy Center Cafeteria.

CNS SECURITY EVENT, TSC ERO ASSEMBLED AT EOF CHECKLIST

- _____ Notify Energy Center Building Security, 2-1234, that CNS TSC duty responders are assembling at EOF. [61]

- _____ Have CNS TSC responders assemble in EOF videoconferencing room.

- _____ Obtain RP/0/A/5000/020 Enclosure 4.20 from CNS procedure cabinet and distribute to assembled TSC ERO.

- _____ **IF** CNS TSC Emergency Planner does not respond within 75 minutes of declaration, **THEN** assist Assistant TSC Emergency Coordinator with assigned tasks.

- _____ **WHEN** decision is made to access Catawba and staff the TSC and OSC, **THEN** ensure choice of facility (normal or alternate) TSC and OSC is known prior to TSC staff departure.

Enclosure 6.16
Emergency Planner Checklist

SR/0/A/2000/003
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**EMERGENCY WORKER/SPECIAL EQUIPMENT RE-ENTRY AFTER ROAD BLOCKS ARE
ESTABLISHED IN THE EPZ**

NOTE: TSC Emergency Planner is to work with RP to determine if off going shift will need to leave their personnel vehicles onsite and leave in the relief bus.

- 1.0 **IF** roadblocks are in place in 10 mile EPZ **AND** affected site's Emergency Planner has asked the EOF to prepare for emergency worker re-entry for on site relief, **THEN** perform the following:
 - 1.1 Request EOF Services Manager obtain bus(es) to be used for re-entry of relief workers.
 - 1.2 Coordinate with TSC Emergency Planner to verify re-entry path to be used, working with Field Monitoring Coordinator and Radiological Assessment Manager to ensure the path selected avoids the plume foot print.
 - 1.3 Coordinate with State representative at EOF to contact re-entry county EOC to obtain Highway Patrol escorts for bus.
 - 1.4 Ensure State representative requests county EOC to notify roadblock selected for re-entry with Estimated Time of Arrival for the bus(es) with Highway Patrol escort.
- 2.0 **IF** roadblocks are **NOT** established, **THEN** inform TSC Emergency Planner access will be normal.
- 3.0 **IF** roadblocks are in place when special equipment is to be brought to plant, **THEN** use process in step 1.0 for equipment to pass through roadblock.

Enclosure 6.17
EOF Log Recorder Checklist

SR/0/A/2000/003
Page 1 of 6

NOTE: Steps in this checklist may be performed in any order appropriate to the specific event conditions or they may be omitted if not applicable.

INITIAL

_____ **IF** reporting to EOF outside your normal work hours, **THEN** complete a Fitness for Duty Questionnaire.

_____ Don position badge

_____ Log in to PC

_____ Start Up main video wall

- ☐ Double-click Supervisor XPanel on desktop
- ☐ Click Duke Energy Logo
- ☐ Click System Power
- ☐ Click Power On
- ☐ Click Wall Presets
- ☐ Click Center Preset 1

_____ Log in to WebEOC

_____ Sign in on Sign In board

_____ Refer to EP FAM Section 3.15, Attachment 3.15.3.2, for WebEOC Logging instructions.

_____ Set up WebEOC content for display.

- ☐ Click on SITE PAR EPZ.
- ☐ Drag SITE PAR EPZ to right monitor **AND** maximize.
- ☐ Log in to Side Bar.
- ☐ Double click on Content PC 2 Remote Control on Sources list.
- ☐ Double click on Log In screen.
- ☐ Depress CTRL and F4 simultaneously.
- ☐ Click Okay.
- ☐ Log in using LAN ID and Password.
- ☐ Log in to WebEOC.
- ☐ Click Significant Events Log and maximize.
- ☐ Click red X in top right corner to exit.

NOTE:

- This is a template for initial set up of the video knowledge wall.
- Views may be changed at the EOF Director's discretion.
- Remove EOF Sign-in after full staffing is met.

Enclosure 6.17
EOF Log Recorder Checklist

SR/0/A/2000/003
Page 2 of 6

Site 1 (Main Video Wall):

ENF	SDS	Significant Events Log	PARs
	Fission Product Barrier Matrix		Offsite Notification Status
	Sign In Board		

_____ Make ticker for Classification

- ☐ Log in to Sidebar
- ☐ Click on Perspectives
- ☐ Double-Click Center_Preset_1 (Enlarge as necessary but do **NOT** maximize)
- ☐ Click on Decorators
- ☐ Drag appropriate Site and Classification to Significant Events Log screen on the Center_Preset_1 window

_____ Make ticker for Next Time Out

- ☐ Log in to Sidebar
- ☐ Click on Perspectives
- ☐ Double-Click Center_Preset_1 (Enlarge as necessary but do **NOT** maximize)
- ☐ Click on Decorators
- ☐ Drag Next Time Out to Significant Events Log screen on Center_Preset_1 window (screen will show large gap between tickers; do **NOT** close gap)
- ☐ Right-Click Next Time Out and select Properties
- ☐ Click on Text tab in Properties
- ☐ Highlight time (time only) and enter time for Next Time Out
- ☐ Click Apply
- ☐ Click OK

_____ **IF** classification changes, **THEN** update tickers for Classification and Next Time Out

- ☐ Right-Click Site and Classification ticker on Center_Preset_1 screen and delete ticker
- ☐ Drag new Site and Classification to Significant Events Log screen on the Center_Preset_1 window

_____ Update ticker for Next Time Out as requested by EOF Director

- ☐ Right-Click Next Time Out and select Properties
- ☐ Click on Text tab in Properties
- ☐ Highlight time (time only) and enter time for Next Time Out
- ☐ Click Apply
- ☐ Click OK

Enclosure 6.17
EOF Log Recorder Checklist

SR/0/A/2000/003
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NOTE: These steps would be performed by additional Log Recorders for Site 2 or Site 3.

IF needed, THEN set up display for Site 2 or Site 3

- ☐ Log in to PC
- ☐ Click Supervisor XPanel on desktop
- ☐ Click Duke Energy Logo
- ☐ Click System Power
- ☐ Click Power On
- ☐ Click Wall Presets
- ☐ Click Right Preset 1 (Site 2) OR Left Preset 1 (Site 3)

ENF	SDS
	Significant Events Log

Log in to WebEOC

Sign in on Sign In board

Refer to EP FAM Section 3.15, Attachment 3.15.3.2, for WebEOC Logging instructions.

Set up WebEOC content for display.

- ☐ Click Significant Events Log
- ☐ Drag to right screen and maximize

Make ticker for Classification

- ☐ Log in to Sidebar
- ☐ Click Perspectives
- ☐ Double-Click Right_Preset_1 (Site 2) OR Left_Preset_1 (Site 3) (Enlarge as necessary but do NOT maximize)
- ☐ Click on Decorators
- ☐ Drag appropriate Site and Classification to EN Form screen on the Right_Preset_1 (Site 2) OR Left_Preset_1 (Site 3) window

Make ticker for Next Time Out

- ☐ Log in to Sidebar
- ☐ Click on Perspectives
- ☐ Double-Click Right_Preset_1 (Site 2) OR Left_Preset_1 (Site 3) (Enlarge as necessary but do NOT maximize)
- ☐ Click on Decorators
- ☐ Drag Next Time Out to EN Form screen on Right_Preset_1 (Site 2) OR Left_Preset_1 (Site 3) window (screen will show large gap between tickers; do NOT close gap)

Enclosure 6.17
EOF Log Recorder Checklist

SR/0/A/2000/003
Page 4 of 6

- ☐ Right-Click Next Time Out and select Properties
- ☐ Click on Text tab in Properties
- ☐ Highlight time (time only) and enter time for Next Time Out
- ☐ Click Apply
- ☐ Click OK

_____ **IF** classification changes, **THEN** update tickers for Classification and Next Time Out

- ☐ Right-Click Site and Classification ticker on Right_Preset_1 (Site 2) **OR** Left_Preset_1 (Site 3) screen and delete ticker
- ☐ Drag new Site and Classification to Significant Events Log screen on the Right_Preset_1 (Site 2) **OR** Left_Preset_1 (Site 3) window

_____ Update ticker for Next Time Out as requested by EOF Director

- ☐ Right-Click Next Time Out and select Properties
- ☐ Click on Text tab in Properties
- ☐ Highlight time (time only) and enter time for Next Time Out
- ☐ Click Apply
- ☐ Click OK

INITIALS _____ PRINTED NAME _____

- NOTE:**
1. Incorrect log entries may be corrected by making the needed correction for the specific entry and flagging it as a "corrected item".
 2. The EOF Log Recorder should enter EOF specific information and other information as directed by the EOF Director or Assistant EOF Director.
 3. Log activities must be detailed enough to "tell the story" if necessary to reconstruct events for the NRC and to have an effective turnover to EOF staff.

_____ Establish official log of all significant EOF activities and EOF Director decisions using WebEOC computer program sufficient to conduct turnover for the on-coming shift. {IER 13-10 Rec. 11.a}

_____ Log entries should include, but are not limited to, the following examples:

- EOF Director and any change in EOF Director (staffing)
- Time of EOF activation
- Emergency classification, changes in classification, time of declaration
- Protective Action Recommendations
- Approval/transmittal of Emergency Notification Forms
- Approval/distribution of News Releases
- Plant Conditions (Unit 1, 2, and 3):

Enclosure 6.17
EOF Log Recorder Checklist

SR/0/A/2000/003
Page 5 of 6

- Core Cooling information (i.e., Time To Boiling, etc.)
- Safety Systems Degraded
- Power Supply Status
- Fission Product Barrier Degradation
- Radiation Releases.

- Procedures in effect and any transition to another procedure
- Actions taken that are not part of an approved procedure
- Any abnormal or unexpected plant response
- Major equipment manipulations
- Major mitigation actions taken
- Site assembly, relocation, or evacuation of all or any part of the plant
- Personnel Injuries
- Facility priorities
- Recovery Action(s) in Progress
- Summary of facilities briefings
- Expected time of next Time-Out
- Any parameter that shows how drill/event is managed (ex. releases, time, communication)

_____ **IF** WebEOC computer program is not available, **THEN** establish manual log of all significant EOF activities and EOF Director decisions.

_____ **IF** requested by EOF Director, **THEN** prepare sequence of events list and revise it as necessary.

_____ Maintain EOF Director's Area displays and status boards as directed or needed.

_____ Record established priorities on EOF status board as requested by EOF Director.

_____ Conduct turnover for on-coming shift, if needed.

_____ Remove ticker for classification/next time-out and log off of Content PC 2 Remote Control.

- ☐ Log in to Side Bar
- ☐ Click on Perspectives
- ☐ Double-Click Center_Preset_1
- ☐ Right click the classification and click delete
- ☐ Right click the Next Time Out and click delete
- ☐ Double click on Content PC 2 Remote Control on Sources list
- ☐ Double click on Content PC 2 Remote Control screen to take control of the screen
- ☐ Log off of the computer using the Start menu in the bottom left hand corner of the screen
- ☐ Click red X in top right corner to exit

Enclosure 6.17
EOF Log Recorder Checklist

SR/0/A/2000/003
Page 6 of 6

_____ Shut Down main video wall

- ☐ Double-click Supervisor XPanel on desktop
- ☐ Click Duke Energy Logo
- ☐ Click System Power
- ☐ Click Power Off

_____ Print copy of Incident Event Log.

_____ Provide all completed paperwork to Emergency Preparedness upon deactivation of EOF.

Enclosure 6.18
EOF Data Coordinator Checklist

SR/0/A/2000/003
Page 1 of 1

NOTE: Steps in this checklist may be performed in any order appropriate to the specific event conditions or they may be omitted if not applicable.

INITIAL

- _____ **IF** reporting to EOF outside your normal work hours, **THEN** complete a Fitness for Duty Questionnaire.
- _____ Don position badge.
- _____ Log in to PC
- _____ Log in to WebEOC.
- _____ Sign in on Sign In board.
- _____ Establish Position Log of activities sufficient to conduct turnover for on-coming shift.
- _____ Verify EOF computer hardware, software, and data display equipment is operational per EP FAM 3.8, EOF Data Coordinator's Reference Manual.
- _____ Provide computer support as required:
 - Software and hardware applications support
 - Data acquisition support
 - Communication with TSC Data Coordinator
- _____ **IF** another site declares an emergency requiring activation of the EOF for support, **THEN** obtain three additional computers (laptop or PC) within one hour for use by Accident Assessment Manager, Radiological Assessment Manager, and Offsite Agency Communicators.
- _____ Conduct turnover for on-coming shift, if needed.
- _____ Provide all completed paperwork to Emergency Preparedness upon deactivation of EOF.

INITIALS _____

PRINTED NAME _____

Enclosure 6.19
EOF Services Manager Checklist

SR/0/A/2000/003
Page 1 of 3

NOTE: Steps in this checklist may be performed in any order appropriate to the specific event conditions or they may be omitted if not applicable.

INITIAL

- _____ **IF** reporting to EOF outside your normal work hours, **THEN** complete a Fitness for Duty Questionnaire.
- _____ Don position badge.
- _____ Log in to PC.
- _____ Log in to WebEOC.
- _____ Sign in on Sign In board.
- _____ Establish Position Log of activities sufficient to conduct turnover for on-coming shift.
- _____ Obtain contact information for Global Risk Management and Insurance duty person to provide to American Nuclear Insurers (ANI).
- _____ Obtain copy of most recent Emergency Notification Form.
- _____ Notify ANI at 9-1-877-680-2644 within 120 minutes of an Alert or higher event declaration and provide answers to the following:
 - What is your name (please spell your last name)?
 - What is the telephone number for immediate callback?
 - What is the name of your facility?
 - What is the name of your organization?
 - What is the date and time of the event?
 - What is the extent of damage?
 - Briefly describe the nature of the event that you are reporting.
 - Please provide contact person information (including the contact person's direct telephone number(s) and their position within the organization) for ANI follow-up.
- _____ Document ANI notification in Position Log, including time and summary of information provided.

INITIALS _____ PRINTED NAME _____

Enclosure 6.19
EOF Services Manager Checklist

SR/0/A/2000/003
Page 2 of 3

_____ Activate the EOF Services Function by establishing duty function contacts for EOF service areas and post in EOF Service area:

- Administration/Commissary [SR/0/A/2000/003, Enclosure 6.11, EOF Services Administration/Commissary Checklist]
- Communications (24-hour number is 2-1961) [AD-EP-ALL-0107, Emergency Operations Facility (EOF) Services, Section 4.1 and Step 5.1]
- Transportation Services [AD-EP-ALL-0107, Emergency Operations Facility (EOF) Services, Section 4.2 and Step 5.2]
- Global Risk Management and Insurance [AD-EP-ALL-0107, Emergency Operations Facility (EOF) Services, Section 4.3]
- Procurement [AD-EP-ALL-0107, Emergency Operations Facility (EOF) Services, Section 4.4 and Step 5.3]

_____ Provide general administrative support and office supplies.

_____ Ensure office equipment is functioning properly.

NOTE: Personnel without badge access will need to be escorted into the EOF by the Assistant EOF Director, EOF Emergency Planner, EOF Services Manager, or their Mentor. [61]

_____ **IF** needed, **THEN** provide escorted access to EOF for personnel without badge access, and document names of personnel escorted in log.

_____ Provide food and beverages to meet nutritional needs.

_____ Provide facilities to meet personal needs (dining facilities, toilets, trash receptacles and disposal) as required.

NOTE:

1. The INPO phone number may be obtained from the Consolidated Emergency Phone Directory for the Emergency Operations Facility (EOF).
2. The INPO Emergency Resources Manual provides a list of contacts at each US commercial nuclear power site, and an emergency equipment list. The INPO Emergency Resources Manual can be found on the INPO Website or the bookcase in the EOF Director's Area.

_____ **IF** needed, **THEN** perform the following:

- Request Communications to troubleshoot and repair telephone systems, mobile radios and cell phones.
- Request Transportation Services or others arrange for necessary equipment for movement of materials and personnel.
- Request Transportation Services or others to arrange necessary equipment and personnel for debris removal in order to access the DEC nuclear sites. {IER L1-11-14}
- Obtain accommodations for personnel.

Enclosure 6.19
EOF Services Manager Checklist

SR/0/A/2000/003
Page 3 of 3

- Request Global Risk Management and Insurance serve as liaison between Duke Energy and insurance companies in gathering data and establishing claims offices to disburse emergency assistance funds to evacuees.
- Request Procurement coordinate all activities related to the purchase of materials, equipment and services from outside supplies including arranging for transportation and receiving as required.
- Contact INPO for additional resources (human resources, emergency equipment, technical expertise). {75} {IER L1-13-10}
- **IF** a Beyond Design Basis External Event (BDBEE)/Extended Loss of Offsite AC Power (ELAP) event at MNS, **THEN** request Transportation Services implement the MNS BDBEE/ELAP ERO Transportation Plan insert to the Fleet Storm EOF Manual. {76}

_____ **IF** 24-hour staffing is required, **THEN** perform the following:

- Notify additional personnel and arrange schedule for continuous support.
- Conduct turnover for on-coming shift.

_____ Ensure that all trash and left over food products are properly contained and arrange for disposal.

_____ Notify Facility Services to clean the EOF following deactivation.

_____ Obtain Procedure ST/0/A/4600/086, Standard Procedure for Periodic Verification of Communication Equipment Operation and Equipment/Supply Inventory, Enclosures 13.4 and 13.5 and complete checklists.

_____ Provide all completed paperwork to Emergency Preparedness upon deactivation of EOF.

_____ Notify duty functions contacts advising that the drill/event has been terminated.

_____ **IF** needed, **THEN** perform the following:

- Request Communications secure radio base stations.
- Request Communications return portable communications equipment to storage locations.
- Request Procurement transfer information on outstanding requisitions to normal procurement contacts.
- Request Transportation Services return relocated equipment to original location.
- Request Transportation Services provide transportation home for ERO personnel.
- Request Global Risk Management and Insurance notify insurance companies of change in drill/event status.

**ESTABLISHING COMMUNICATIONS
LINKS BETWEEN MCGUIRE SAMG
EVALUATORS**

INITIAL

NOTE: Operations Procedure Support in the TSC will serve as the lead SAMG evaluator and will be assisted by Reactor Engineer and Systems Engineer in the TSC, as well as Accident Assessment Interface in the EOF. OPS Procedure Support is expected to **direct** the other evaluators in what they should be looking at strategically, **plus** ensure that SAEG-1 is completed appropriately as directed by the guidelines.

_____ **ESTABLISH** communications links between the SAMG evaluators (TSC OPS Procedure Support, TSC Reactor Engineer, TSC System Engineering Manager, and EOF Accident Assessment Interface) by dialing RP spare bridge 9-980-875-4833 (6-party bridge line).

_____ **EVALUATE** using an alternate bridge line listed below if for some reason the RP spare bridge is unavailable or if other communications links are desired or needed. Dial the number listed as desired to determine if that bridge is currently being used. If the desired bridge line is not being used, then the appropriate parties may dial in to use it.

EP Controller bridge (12 - party) 9-980-875-4575
McGuire site bridge (6 - party) 9-980-875-3030
McGuire site bridge (6 - party) 9-980-875-3200

INITIALS _____

PRINTED NAME _____

1. Recovery Guidelines

The Recovery Manager shall be responsible for the following:

- ☐ 1.1 Initiate RP/0/B/1000/027, Reentry Recovery Procedure.
- ☐ 1.2 Announce as follows:

"Agreement has been reached between Duke Energy, the State of South Carolina and the NRC that the General Emergency classification is terminated. Recovery Operations are being initiated at the site. Actions are underway to determine when people who have been evacuated from their homes can return. As this information is made available, it will be released to the public."

NOTE: The offsite recovery organization will stay at the EOF and work with the counties and state if radiological Conditions exist beyond the ONS site boundary. The onsite recovery organization will be established by the Emergency Coordinator.

- ☐ 1.3 Establish Recovery Organization to handle offsite consequences.
- ☐ 1.4 Make the following assignments:
 - Recovery Manager _____
 - Radiological Assessment Manager _____
 - Field Monitoring Coordinator _____
 - Emergency Preparedness Manager _____
 - EOF Services Manager _____
- ☐ 1.5 Ensure staffing for long-term operation.

NOTE: Once recovery has been determined, the emergency notification message forms are no longer used.

- ☐ 1.6 Confer with SEMD (State Emergency Management Director) regarding work in progress at EOF and determine communication channels and notifications expected.

INITIALS _____ PRINTED NAME _____

Enclosure 6.21
Oconee Recovery

SR/0/A/2000/003
Page 2 of 2

- ☐ 1.7 Consult with each manager regarding activities in progress.
 - ☐ 1.7.1 Radiological Assessment Responsibilities
 - Provide ingestion pathway dose assessments
 - Provide ongoing communications with DHEC Nuclear Emergency Preparedness
 - Evaluate environmental concentrations within the radiological footprint
 - Provide technical assistance to Joint Information Center
 - Help plan for reactor building purge as needed
 - ☐ 1.7.2 Emergency Preparedness Responsibilities
 - Communications to the State and County Management Directors
 - ☐ 1.7.3. EOF Services Manager Responsibilities
 - Ensure ANI (insurance) is set up for public inquiry
 - Provide services as required
 - ☐ 1.7.4. Joint Information Center Responsibilities
 - Providing news releases
 - Work with media/public to reduce rumors
 - Monitoring information being released by news media
- ☐ 1.8 Maintain Emergency Operations Facility activated and staffed until consensus is reached by Duke Energy and State of South Carolina there is no basis for continuous staffing.
 - ☐ 1.8.1 Record time and date that Emergency Operations Facility/Joint Information Center were closed.
 - A. EOF/JIC Closed _____
Time/Date

**Keowee Hydro Project Dams/Dikes
Imminent Failure/Potential Failure
Descriptions**

- NOTE:**
- Duke Energy Hydro Group personnel are responsible for evaluation/inspection of Keowee Hydro Project Dams/Dikes **AND** determining if an Imminent Failure or Potential Failure exists.
 - Duke Energy Hydro Group personnel will communicate the results of evaluations/inspections to the Keowee Hydro Operator. The Keowee Hydro Operator will notify the SM.

1. Imminent Failure

The Imminent Failure emergency level indicates that time has run out, and the dam has failed, is failing, or is about to fail. Imminent Failure typically involves a continuing and progressive loss of material from the dam. It is not usually possible to determine how long a complete breach of a dam will take. Therefore, once a decision is made that there is no time to prevent failure, the Imminent Failure warning must be issued. For purposes of evacuation, emergency management authorities should assume the worst-case condition that failure has already occurred. (Duke Energy Hydro-Electric Plant EAP)

2. Potential Failure

The Potential Failure emergency level indicates that conditions are developing at the dam that could lead to a dam failure. Some examples are (1) rising reservoir levels that are approaching the top of the non-overflow section of the dam, (2) transverse cracking of an embankment, and (3) a verified bomb threat. Potential Failure should convey that time is available for analyses, decisions, and actions before the dam could fail. A failure may occur, but predetermined response actions may moderate or alleviate failure.

INITIALS _____

PRINTED NAME _____

EOF Evacuation Checklist

_____ **IF** conditions **DO NOT** allow for a controlled relocation of the facility, **THEN** perform immediate actions to protect personnel.

- A. Notify personnel to re-assemble
 - Mint Street Parking Deck (Primary)
 - Firebird Statue in front of Bechtler Museum (Alternate)
- B. Notify the TSC Emergency Coordinator of actions taken
 - Catawba 803-701-5870
 - McGuire 980-875-4950
 - Oconee 864-873-3921

_____ **IF** conditions allow for a controlled relocation of the facility, **THEN** determine alternate EOF location:

- ☐ Catawba Event - McGuire Alternate TSC
- ☐ McGuire Event - Catawba Alternate TSC
- ☐ Oconee Event - Catawba Alternate TSC

_____ Request EOF Emergency Planner to obtain the following:

- 24-Hour Position EOF Staffing Log
- EOF Business Continuity Plan
- Catawba, McGuire, and Oconee Emergency Telephone Directories
- ERO Member Contact Information notebook

_____ Announce to EOF personnel to exit EOF and move to assembly area (Location designated by EOF Director) with all their procedures and paperwork.

- Mint Street Parking Deck (Primary)
- Firebird Statue in front of Bechtler Museum (Alternate)

_____ Consider the need to escort NRC and offsite agency personnel from EOF to alternate EOF.

_____ Turn over command and control of event to TSC Emergency Coordinator.

- Notify TSC Emergency Coordinator that EOF is evacuating due to (state reason)
 - Catawba 803-701-5870
 - McGuire 980-875-4950
 - Oconee 864-873-3921
- Provide TSC Emergency Coordinator current emergency classification and EAL number, current Protective Action Recommendations, and status of Emergency Notifications: Message number _____ due at _____

_____ Request the EOF Emergency Planner call the TSC Emergency Planner to request he call the unaffected site's control room and make them aware of the EOF relocation.

NOTE: The following actions are taken after exiting the EOF.

_____ Request leads in each EOF functional area perform accountability of EOF personnel using 24 hour EOF Position Staffing Log.

_____ Consult with Enterprise Security console personnel at 704-382-1234 to determine expected duration of EOF evacuation.

_____ **IF** expected duration of evacuation is greater than 2 hours or unknown, **THEN** perform the following:

- Direct EOF Personnel to report to the Alternate EOF Location
 - Catawba Alternate TSC
Catawba Nuclear Station Administration Building (Building 7720)
4800 Concord Road
York, SC 29745-9635
 - McGuire Alternate TSC
McGuire Nuclear Station Administration Building (Building 7438)
12700 Hagers Ferry Road
Huntersville, NC 28078-9340
- Inform the TSC Emergency Coordinator that EOF is relocating to Alternate EOF Location
- Request TSC notify NRC of EOF relocation

_____ Direct EOF Emergency Planner to conduct actions required by EOF Business Continuity Plan.

_____ Return to Enclosure 6.1 of this procedure after reporting to Alternate EOF.

NOTE: Items listed here are suggested topics for routine update briefings (not all topics need be addressed at each briefing). Items actually selected should be based on existing or projected plant conditions and current priorities.

Attributes of Excellent Briefings	
<ul style="list-style-type: none"> • 5-10 minutes duration • Brief for status, not to solve problems • Crisp, focused and well controlled 	<ul style="list-style-type: none"> • Speak to be heard (use PA if needed) • Repeat back required actions • ALL personnel are attentive
<p>1. EOF Director (open and lead briefing)</p> <ul style="list-style-type: none"> • Pre-announce -- 5 minute warning brief is about to occur • Start Briefing by stating "Attention in the EOF," observe participants to confirm they are ready • Overview of emergency conditions • Station priorities • Offsite actions being taken • NRC activities related to emergency <p>Notes: _____</p>	
<p>2. Assistant EOF Director</p> <ul style="list-style-type: none"> • Facility staffing issues and status of additional support requested • Facility operations expectations (noise levels, procedure use, log keeping, etc.) • Status of offsite agency communications • Status of relief shift <p>Notes: _____</p>	
<p>3. Accident Assessment Manager</p> <ul style="list-style-type: none"> • Current Emergency Classification and EAL number/description • Key parameters/potential paths for Emergency Classification Upgrade • Reactor condition, core damage assessment. • Review of key plant conditions (power level, shutdown, trends) • Fission Product Barrier Status, trends, prognosis • Core Cooling System Status • Emergency/abnormal procedures entered or exited • Severe accident guideline status • Status of NRC Communications <p>Notes: _____</p>	

4. Radiological Assessment Manager <ul style="list-style-type: none">• Status of radiological release compared to EAL thresholds, dose projections, offsite radiological conditions, PARs.• Meteorological conditions• Field Monitoring Team reports• Radiation Protection problem areas being worked and/or needing resolution• Chemistry activities and results. (e.g. dose equivalent iodine, sample status) Notes: _____
5. Emergency Planner <ul style="list-style-type: none">• <u>IF</u> a security event is in progress, <u>THEN</u> plant access restrictions, status of site security, offsite Local Law Enforcement Agencies assistance requested and/or provided• <u>IF</u> a medical emergency response (MERT) is in progress, <u>THEN</u> number of victims, whether radiologically or chemically contaminated, offsite EMS response• <u>IF</u> a fire response is in progress, <u>THEN</u> status of fire, offsite FD response• Status of site assembly and site evacuation Notes: _____
6. Offsite Agency Communicator <ul style="list-style-type: none">• Status of offsite agency communications and time next message due• Status of INPO notification Notes: _____
7. EOF Log Recorder <ul style="list-style-type: none">• Items of interest from TSC Log• TSC Priorities Notes: _____
8. Corporate Communications <ul style="list-style-type: none">• Status of news releases and press conferences• Rumors being addressed• Internal/External notifications made (Duke Energy leadership team, ECOC, JIC, state government) Notes: _____
9. (<u>IF</u> present) Offsite Agencies <ul style="list-style-type: none">• Discuss status of offsite agency actions
10. EOF Director (close briefing) <ul style="list-style-type: none">• <u>IF</u> the NRC is present, <u>THEN</u> provide them with opportunity to contribute to brief• Ask if any others need to report "Important information"• Summarize priorities• Ask if there are any questions• State "END OF BRIEF"

**Setup of Catawba Alternate EOF in McGuire
Admin Bldg.**

INITIAL

_____ **IF** SpectraLink phones with headsets can be obtained from McGuire TSC, **THEN** take them to alternate EOF location (Administration Building layout on Page 3 of 3 of this enclosure).

_____ Locate assigned Administration Building area shown on the layout drawing on Page 3 of 3 of this enclosure

- NOTE:**
1. Alternate TSC phone sets are stored in the CRX Equipment Room, Room 112.
 2. The EOF Emergency Planner and EOF Data Coordinator can assist with phone and computer connections.
 3. **IF** a computer is needed, **THEN** a computer that is not being used for another ERO function (e.g., Regulatory Compliance section, Business Management group, Human Resources group) may be used.
 4. **IF** access to the CBX equipment Room, Room 112, is needed prior to the arrival of the EOF Emergency Planner, **THEN** a key to the door can be obtained from Security at the SAS.
 5. Printer paths for McGuire Nuclear Station Administration Building Mail Room Printers are MNADM106 and MNADMDP1.

_____ Set up assigned location as follows:

- _____ • Obtain phone equipment necessary to conduct ERO function at assigned location and connect to wall and ceiling outlets.
- _____ • **IF** a computer is needed, **THEN** request help from EOF Data Coordinator.
- _____ • **IF** necessary, **THEN** obtain copies of position procedure enclosure from procedure SR/0/B/2000/003, Activation of the EOF, located in Emergency Preparedness Procedures cabinet.
- _____ • **IF** printing capability is needed, **THEN** setup printers using DAE Printer Selector Program.

INITIALS _____

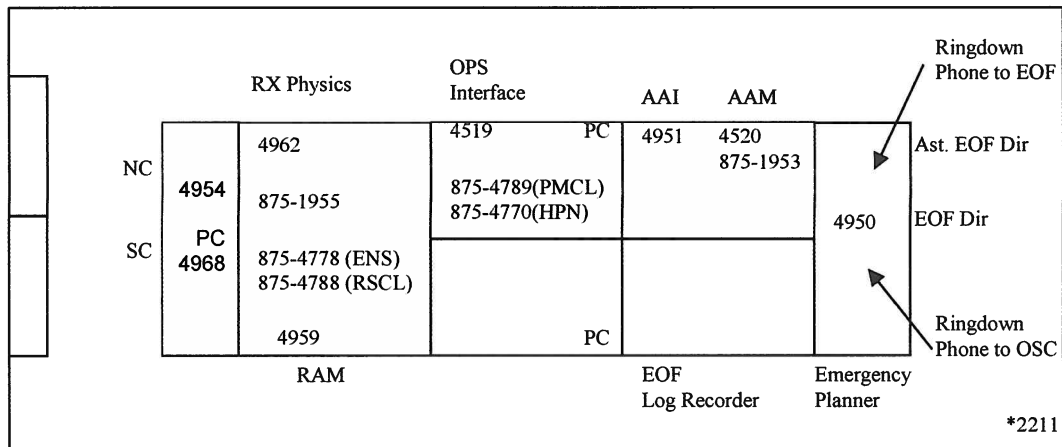
PRINTED NAME _____

**Setup of Catawba Alternate EOF in McGuire
Admin Bldg.**

- _____ • **IF** copies of plant procedures are required, **THEN** perform one of the following:
 - For Emergency Plan Implementing Procedures (RPs, SHs, and SRs), make copy from Control Copy located in Emergency Preparedness Procedures cabinet.
 - For all other procedures, print a copy from Fusion on DAE using McGuire Admin Building Mail Room printer MNADM106 or MNADMDP1.
- _____ • Assume or continue ERO role according to procedure SR/0/B/2000/003, Activation of the EOF.

**Setup of Catawba Alternate EOF in McGuire
Admin Bldg.**

(Executive Board Room 111, Admin. Building)



Other EOF Position Locations

- Others (EP Room 114) - *4458, *4977, *875-1951.
- Offsite Communicator (EP Room 115B -- *4970, *SSN 315, *Radio, *875-1951.
- Data Coordinator (CBX Equipment Room 112) -- *4999.
- Dose Assessor (SCR Room 100D) -- *4405.
- Offsite Monitoring (McGuire TSC) *4969, *4976
- Public Affairs (Rooms 118 and 141) -- *4400, *4402, *4233.
- NRC (NRC Office, Room 126) -- *875-1681.
- Other, use Jaguar Room as needed (Room 144, EOF Services Mgr.) -- *4826.

Office Equipment

- FAX (Mail Room, Room 116) -- *875-4506.
- FAX (EP Room 114) -- *875-4382.
- Copier (Mail Room, Room 116).
- Copier (SA Room 170).
- CBX (CBX Office in Admin. Building Lobby).

* Indicates existing phones. All others are to be plugged in when the Alternate TSC is activated.

**Setup of McGuire or Oconee Alternate EOF in
Catawba Admin Bldg.**

INITIAL

_____ **IF** SpectraLink phones with headsets can be obtained from Catawba TSC, **THEN** take them to alternate EOF location (Administration Building layout on Page 2 of 3 of this enclosure).

_____ Locate assigned Administration Building area shown on the layout drawing on Page 2 of 3 of this enclosure

- NOTE:**
1. The EOF Emergency Planner and EOF Data Coordinator can assist with computer connections.
 2. **IF** a computer is needed, **THEN** a computer that is not being used for another ERO function (e.g., Regulatory Compliance section, Performance Improvement Team, Human Resources group) may be used.
 3. Printer paths for Catawba Nuclear Station Administration Building Printers are CNSADM2 for Copier Room (Room 143) and CNADM127 for Room 127.

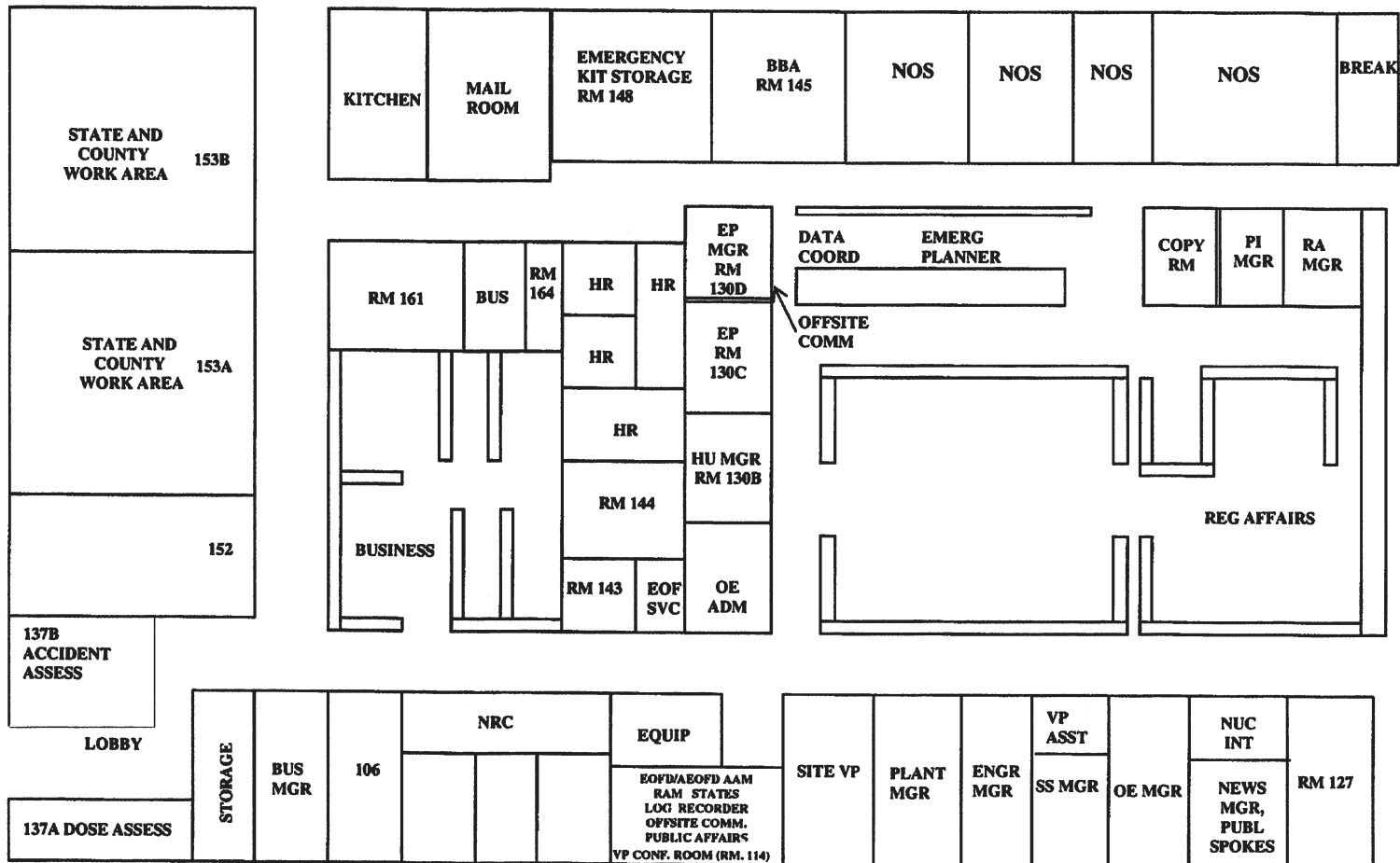
_____ Set up assigned location as follows:

- _____ • **IF** a computer is needed, **THEN** request help from EOF Data Coordinator.
- _____ • **IF** necessary, **THEN** obtain copies of position procedure enclosure from procedure SR/0/B/2000/003, Activation of the EOF, located in Emergency Preparedness procedures cabinet.
- _____ • **IF** printing capability is needed, **THEN** setup printers using DAE Printer Selector Program.
- _____ • **IF** copies of plant procedures are required, **THEN** perform one of the following:
 - For Emergency Plan Implementing Procedures (RPs, SHs, and SRs), make copy from Control Copy located in Emergency Preparedness Procedures cabinet.
 - For all other procedures, print a copy from Fusion on DAE using Catawba Admin Building Mail Room printer CNSADM2.
- _____ • Assume or continue ERO role according to procedure SR/0/B/2000/003, Activation of the EOF.

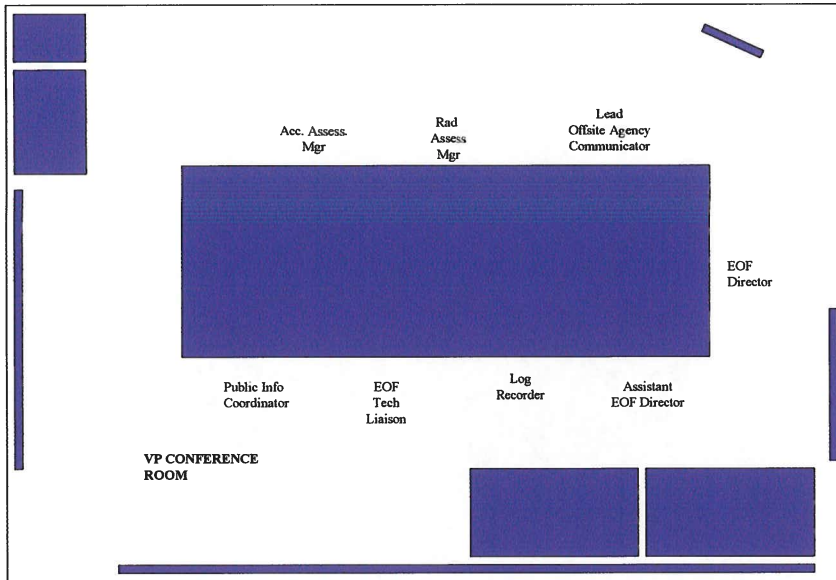
INITIALS _____

PRINTED NAME _____

ALTERNATE EOF IN THE CNS ADMIN BLDG



**Setup of McGuire or Oconee Alternate EOF in
Catawba Admin Bldg.**



EOF Functional Areas:

VP Conference Room – Command & Control Center (EOF Director, Accident Assessment Manager, Rad Assessment Manager, Lead Offsite Agency Communicator, EOF Log Recorder, EOF Emergency Planner EOF Tech Liaison, Public Information Coordinator, State EM Representatives)

EP Manager's Office – Offsite Communicators

EP Cubes – Data Coordinator

Touchdown Room 142 - EOF Services

PA Manager Office - News Manager, Public Spokesperson

Room 153 A/B - State and County Work Area

NRC Resident Inspector Offices - NRC Site Team

Room 137A - Dose Assessment

Room 137B - Accident Assessment

Catawba TSC (Not Shown) - Offsite Monitoring

Enclosure 6.27
NRC Response Team Briefing

SR/0/A/2000/003
Page 1 of 2

A) Emergency Classification

Time Declared: _____ am/pm (Current Class)

- ☐ Unusual Event ☐ Alert
☐ Site Area Emergency ☐ General Emergency
EAL Descriptor Text: _____

Provide a brief summary of the event and mitigating actions in progress: _____

B) Fission Product Barrier Status

	Fuel	RCS	CTMT
Intact:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Potential Loss:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lost:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

C) Plant Conditions

- ☐ Mode 1 - Power Operations _____ %
☐ Mode 2 - Startup
☐ Mode 3 - Hot Standby
☐ Mode 4 - Hot Shutdown
☐ Mode 5 - Cold Shutdown
☐ Mode 6 - Refueling
Time of shutdown: _____ am/pm
☐ Stable ☐ Improving
☐ Unstable ☐ Deteriorating

Briefly describe equipment, instrument or other problems: _____

D) Radiological Release

- ☐ None or
☐ Imminent ☐ Controlled
☐ In Progress ☐ Uncontrolled
☐ Terminated Start Time: _____ am/pm
Estimated Duration: _____

E) Onsite Protective Actions

- ☐ None or
☐ Site Assembly / Accountability
☐ Local Area Evacuation
☐ Protected Area Evacuated
☐ Site Evacuated
☐ Offsite Assembly
☐ Emergency Exposures Authorized
☐ Potassium Iodide Issued

F) Response Facilities Activated

- ☐ None or
☐ Technical Support Center
☐ Operations Support Center
☐ Emergency Operations Facility
☐ Joint Information Center

G) Offsite Assistance Requested

- ☐ None or
☐ Medical _____ am/pm
☐ Fire Department _____ am/pm
☐ Law Enforcement _____ am/pm

H) Offsite Notifications

- ☐ County ☐ INPO
☐ State ☐ ANI
☐ News Release

I) Protective Action Recommendations

- ☐ None or
☐ Evacuate: _____
☐ Shelter: _____

J) Offsite Actions/Response

- ☐ None issued, or:
☐ Schools ☐ Recreation Areas
☐ Other: _____

☐ Evacuate: _____
☐ Shelter: _____
☐ Underway -- OR -- ☐ Completed

K) Additional Notes

NOTE: This briefing is intended to provide general information related to the event. More detailed information will be available from individual licensee counterparts.

Additional Discussion Items:

1. Personnel safety (as applicable)
 - a. Personnel accountability requirements
 - b. Radiation protection requirements
 - c. Industrial safety requirements
 - d. Protective equipment requirements
 - e. Reporting emergency situation (e.g., fire/medical)
2. Emergency evacuation
 - a. Location of exits
 - b. Location of emergency assembly areas
3. Personal comfort
 - a. Location of restrooms
 - b. Location of water, beverages, and food
 - c. Location of quiet area
4. Facility specific information
 - a. Prohibited activities (e.g., use of cell phones, cameras, cordless phones, etc.)
 - b. Facility telephones (how to call outside the facility, reserve phones, etc.)
 - c. Telephone numbers (e.g., response facility phone directory/phone listing)
 - d. Reference locations and access
 - e. Making photo copies
 - f. Sending/receiving facsimiles
 - g. Logistical assistance/support

- {1} PIP 0-M97-4210 NRC-1, NRC Commitments per H.B. Barron's 11/6/97 response to exercise weakness.
- {2} Deleted
- {3} PIP 2-C96-0273, Unit 1 LOOP 2/6/1996 [10 CFR 50.54(x)/(y)]
- {4} Deleted
- {5} Deleted
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- {7} Deleted
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- {20} Deleted
- {21} Deleted
- {22} Deleted
- {23} PIP G-03-606, Final Rule, "Consideration of Potassium Iodide in Emergency Plans" (66 FR 5427)
- {24} Deleted
- {25} Deleted
- {26} Deleted

- {27} Deleted
- {28} Deleted
- {29} Deleted
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- {33} Deleted
- {34} Deleted
- {35} PIP-M-05-3631, Failure to update the Emergency Plan in accordance with evaluation of NRC RIS 2004-13, "Consideration of Sheltering in Licensee's Range of Protective Action Recommendations" and 2004-13 Supplement 1.
- {36} PIP-C-05-4854, Failure to update the Emergency Plan in accordance with evaluation of NRC RIS 2004-13, "Consideration of Sheltering in Licensee's Range of Protective Action Recommendations" and 2004-13 Supplement 1.
- {37} Deleted
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- {51} PIP M-09-4514, C.A. 19

- {52} Deleted
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- {60} Deleted
- [61] PIP G-11-1177, DocuTracks NGO-2012-000122, Catawba, McGuire, and Oconee
Emergency Plan Minimum Staffing License Amendment Request, approved 7/29/11
- {62} Deleted
- {63} Deleted
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- {73} Deleted
- {74} Deleted
- {75} PIP G-13-1461, C.A. 19, IER L1-13-10, "Nuclear Accident at the Fukushima Daiichi
Nuclear Power Station"
- {76} PIP M-12-2339, C.A. 34, NRC Near Term Task Force (NTTF) Recommendation 9.3
EP Staffing - Fukushima Dai-Ichi Accident

{77} IER L1-13-10, "Nuclear Accident at the Fukushima Daiichi Nuclear Power Station"

{78} IER L1-11-14

{79} Deleted

{80} Deleted

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