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10 CFR 50, Appendix E

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

SHEARON HARRIS NUCLEAR POWER PLANT  
DOCKET NO. 50-400/LICENSE NO. NPF-63  
CHANGE TO EMERGENCY PLAN IMPLEMENTING PROCEDURE

Dear Sir or Madam:

In accordance with 10 CFR 50, Appendix E, Carolina Power & Light Company is transmitting one copy of a recently revised Harris Nuclear Plant Emergency Plan implementing procedure. The enclosure to this letter identifies the revised emergency plan implementing procedure and the effective date.

If you should have any questions regarding this submittal, please do not hesitate to contact me at (919) 362-3137.

Sincerely,

John R. Caves  
Supervisor, Licensing/Regulatory Programs  
Harris Nuclear Plant

MGW

Enclosures

- c: Mr. J. B. Brady (NRC Senior Resident Inspector, HNP)  
Mr. L. A. Reyes (NRC Regional Administrator, Region II) two copies of procedure  
Mr. R. Subbaratnam (NRC Project Manager, HNP)

Harris Nuclear Plant  
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New Hill, NC 27562

A045

CHANGE TO EMERGENCY PLAN IMPLEMENTING PROCEDURE

<u>PROCEDURE NUMBER</u>	<u>TITLE</u>	<u>EFFECTIVE DATE</u>
PEP-110 Revision 10	Emergency Classification and Protective Action Recommendations	08/22/02



1  
INFORMATION USE

CAROLINA POWER & LIGHT COMPANY  
SHEARON HARRIS NUCLEAR POWER PLANT

PLANT OPERATING MANUAL

VOLUME 2

PART 5

PROCEDURE TYPE: Plant Emergency Procedure

NUMBER: PEP-110

TITLE: Emergency Classification and  
Protective Action Recommendations

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## 1.0 PURPOSE

1. The purpose of this procedure is to provide guidance on the use of Emergency Action Levels (EALs) for classifying an emergency. This implements Section 4.1 of PLP-201.
2. This procedure provides guidelines for determining Protective Action Recommendations (PARs) to be made to offsite authorities during a General Emergency. This implements Section 4.5 of PLP-201.
3. This procedure provides guidance for summarizing events and actions taken during an event for use during facility turnover and facility briefings. This implements Section 2.3 of PLP-201.
4. This procedure provides guidance for event termination and entry into Recovery. This implements Section 6.7 of PLP-201.

## 2.0 INITIATING CONDITIONS

1. Conditions exist which, in the judgment of the Superintendent-Shift Operations (S-SO), could be classified as an emergency.
2. Entry into the Emergency Action Level network has been directed by any of the Emergency Operating Procedures, Fire Protection Procedures, Abnormal Operating Procedures, or any other procedure.
3. A Critical Safety Function Status Tree (CSFST) on the Safety Parameter Display System has produced a valid red or orange output and monitoring of the CSFSTs has been authorized in accordance with an approved procedure.
4. Notification has been received from the senior member of the Security Organization, or his designee, that a "Security Alert" or "Security Emergency" has been initiated.
5. Entry into the Emergency Action Level (EAL) Flowpath has been made at the discretion of the Site Emergency Coordinator for the purposes of reclassification.
6. A General Emergency has been declared.
7. Conditions have been stabilized and the Site Emergency Coordinator is preparing to terminate the emergency and enter into Recovery as per PEP-500.

### 3.0 PROCEDURE STEPS

#### 3.1 Emergency Classification

NOTE: • Implementation of this Section does not constitute an emergency.

- This section serves as a guideline to assist in comparison of plant conditions with Emergency Action Levels to evaluate whether an emergency should be declared.
1. Once implemented, this section shall remain in effect until either:
    - a. The determination has been made by the Superintendent-Shift Operations or his designated alternate, that an Emergency Action Level has not been exceeded.
    - b. Conditions which resulted in declaration of an emergency have been resolved and the emergency has been terminated.
  2. Enter the Emergency Action Level (EAL) Flowpath at Entry Point X, unless directed to another entry point.
  3. The Flowpath may be entered at any time at the discretion of the Site Emergency Coordinator (SEC-CR) or Superintendent-Shift Operations or designee. The Flowpath can be reentered as appropriate in order to check the classification or to reclassify an event in progress.

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#### CAUTION

The highest emergency class for which an Emergency Action Level was exceeded shall be declared.

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4. Complete the Flowpath, and if an emergency is declared, perform notifications in accordance with the highest level condition indicated on the EAL STATUS BOARD.
5. Implement PEP-230 and/or PEP-240 as appropriate.

#### 3.2 Plant Based Protective Action Recommendations (PARs)

1. Use Attachment 3, "Protective Action Recommendation Process" as an aid in determining the proper PAR.
2. At a minimum, evacuation of a 2 mile radius and 5 miles downwind (with sheltering of all other Subzones) will be recommended for a General Emergency declaration.

### 3.2 Plant Based Protective Action Recommendations (PARs) (continued)

3. Evacuation of a 5 mile radius and 10 miles downwind (with sheltering of all other Subzones) will be recommended for plant conditions in which:
  - a. Substantial core damage is imminent or has occurred. Indications that substantial core damage is imminent or has occurred include:
    - (1) Core damage estimations >1% Melt.
    - (2) Core Exit Thermocouple readings  $\geq 2300^{\circ}$  F.
    - (3) Core uncovered > 30 minutes.
  - b. A significant loss of reactor coolant is imminent or has occurred. Indications that a significant loss of reactor coolant is imminent or has occurred include:
    - (1) Containment Radiation Monitors reading:
      - >10,000 R/Hr with no containment spray.
      - >4,000 R/Hr with containment spray on.
    - (2) Containment hydrogen gas concentration >1%.
    - (3) Rapid vessel depressurization.
    - (4) A large break loss of coolant accident.
  - c. Containment failure (primary or S/G) is imminent or has occurred. Indications that containment failure (primary or S/G) is imminent or has occurred include:
    - (1) A release of radioactivity can not be maintained below the General Emergency EAL criteria.
    - (2) Primary containment pressure can not be maintained below design basis pressure which is 45 psig.
    - (3) Primary containment H<sub>2</sub> gas concentration can not be maintained below combustible limits which is 4% by volume.
    - (4) Faulted/Ruptured S/G with a relief valve open.
4. Containment monitors can provide indication of both core damage and RCS breach. Monitor values used to determine a specific amount of core damage are dependent on plant conditions, power history, and time after shutdown. Monitor readings used to quantify an amount of damage or coolant leakage should be complimented by other indications and engineering judgment.

### 3.2 Plant Based Protective Action Recommendations (PARs) (continued)

5. If a release is in progress:
  - a. Perform dose assessment as soon as possible to determine if PAGs are exceeded and if additional Subzones require evacuation.
  - b. Add any Subzones requiring evacuation as determined by dose assessment to the plant based PARs.
6. If no release is in progress:
  - a. Perform dose projections on possible conditions as time permits to determine if PAGs could be exceeded.
  - b. Consider adding any Subzones requiring evacuation as determined by dose projection to the plant based PARs.

### 3.3 Dose Assessment Based Protective Action Recommendations (PARs)

NOTE: Dose projections are not required to support the decision process in Attachment 3, "Protective Action Recommendation Process."

1. In the event dose assessment results indicate the need to recommend actions beyond the outer EPZ boundaries, that is past 10 miles:
  - a. Dispatch Environmental Teams to downwind areas to verify the calculated exposure rates prior to issuing PARs outside the EPZ.
  - b. Many assumptions exist in dose assessment calculations, involving both source term and meteorological factors, which make computer predictions over long distances highly questionable.
2. From the Control Room: If a release is in progress and time permits, perform offsite dose assessment in accordance with PEP-340 to determine whether the plant based protective actions of Attachment 3 are adequate.
3. From the Emergency Operations Facility: Conduct offsite dose assessment in accordance with PEP-340 to determine whether the plant based protective actions of Attachment 3 are adequate using the following methods as applicable:
  - a. Monitored Release:
    - (1) If a release is in progress, assess the calculated impact to determine whether the plant based PARs of Attachment 3 are adequate.

3.3. Dose Assessment Based Protective Action Recommendations (PARs)  
continued)

- (2) If a release is not in progress, use current meteorological and core damage data to project effluent monitor threshold values which would require 2, 5, and 10 mile evacuations (Attachment 3). Reestablish threshold values whenever meteorological conditions or core damage assessment values change.
  - b. Containment Leakage/Failure:
    - (1) If a release is in progress, assess the calculated impact to determine whether the plant based PARs of Attachment 3 are adequate.
    - (2) If a release is not in progress, use current meteorological and core damage data on various scenarios (design leakage, failure to isolate, catastrophic failure) to project the dose consequences.
      - Determine whether the plant based PARs of Attachment 3 are adequate.
      - Reestablish scenario values whenever meteorological conditions or core damage assessment values change.
  - c. Field Survey Analysis: Actual field readings from Environmental Teams should be compared to dose assessment results and used as a dose projection method to validate calculated PARs and to determine whether the plant or release based protective actions of Attachment 3 are adequate.
  - d. Release Point Analysis: Actual sample data from monitored or unmonitored release points should be utilized in conjunction with other dose assessment and projection methods to validate calculated PARs and to determine whether the plant based protective actions of Attachment 3 are adequate.
4. The Emergency Response Manager and the Radiological Control Manager shall discuss dose assessment and projection analysis results and evaluate their applicability prior to issuing PARs to the State if possible.

3.4 Downgrading the Emergency Classification Level

1. If the action level currently has abated to a lower declaration or the situation has been resolved prior to completion of off-site reporting:
  - a. Declare the highest classification for which an Emergency Action Level was exceeded, if not already done, and

### 3.4 Downgrading the Emergency Classification Level (continued)

- b. Downgrade immediately to the emergency classification appropriate for the present conditions.
2. Downgrading of an emergency is performed by issuing a notification to a lower emergency classification level whenever plant conditions improve to satisfy the affected Emergency Action Levels. However, the following guidelines apply:
    - a. If the Emergency Response Manager (ERM) position is activated, he shall be consulted before downgrading occurs.
    - b. If the NRC Director of Site Operations position is activated, he should be consulted before downgrading occurs.
    - c. If offsite Protective Action Recommendations have been made, the SEC-TSC shall consult with the ERM and with State and County authorities, prior to downgrading. It is recommended that any off-site Protective Action Recommendations be completed prior to downgrading of a General Emergency.
    - d. Where lasting damage has occurred to the fission product barriers or to safety systems, the ERM should transition to PEP-500 rather than a simple downgrade of the emergency.
    - e. For Alert or higher classifications, unless the conditions causing emergency action levels are very quickly resolved (less than approximately 30 minutes), downgrading should not occur until after the TSC and EOF are activated.

### 3.5 Emergency Termination and Transition to Recovery

1. If entering Recovery from an Unusual Event, determine the need for a Recovery Plan and support organization.
  - a. Generally, the activities following an Unusual Event will not require the formation of a Recovery Organization or a transition period prior to event termination and entry into Recovery.
  - b. Refer to PEP-500 for further guidance if recovery efforts following an Unusual Event extend beyond offsite notification and the generation of required reports.
2. Complete the Termination Checklist (Attachment 5).
  - a. If conditions will allow for the termination of the emergency and entry into Recovery, exit this procedure and enter PEP-500, "Recovery."

### 3.5 Emergency Termination and Transition to Recovery (continued)

- b. If conditions do not support termination of the emergency and entry into Recovery, continue following the guidance provided in Section 3.1.

## 4.0 GENERAL

### 4.1 Guidelines for Use of the EAL Flowpath

1. Equivalent parameters or redundant instrumentation, should be utilized whenever possible to confirm the validity of instrumentation response when evaluating Emergency Action Levels.
2. If, at any time, a General Emergency declaration is warranted, the SEC is to note the EAL Reference Number on the EAL status board. Immediately declare a General Emergency and carry out the appropriate actions.
3. If an event other than a General Emergency is warranted, the SEC is to circle the indicated level, note the EAL Reference Number on the EAL STATUS BOARD and continue through the Flowpath. Upon completion of the Flowpath the highest indicated level shall be declared.
4. The Flowpath can be entered or reevaluated at the discretion of the SEC.
5. The highest emergency class for which an Emergency Action Level was exceeded shall be declared.

### 4.2 Specific Rules for Use of the EAL Flowpath

1. Entry into the EAL Flowpath will be via Entry Point X unless otherwise specifically directed by an approved plant procedure or by the EAL Flowpath itself.
2. The MOST RECENT information is to be utilized, when answering the questions asked in the EAL Flowpath. The information available may precede the event that is in progress, but it should be used until superseded by new information. As an example, the Flowpath asks if RCS activity is greater than 300  $\mu\text{Ci/cc}$ . The SEC is to use the last sample results (for example 10  $\mu\text{Ci/cc}$ ) until the on-duty chemist reports otherwise.
3. When new data is available, the SEC is to reenter the EAL Flowpath at entry point X, unless directed by an approved procedure to enter at Point T, U, V, or Y.
4. When the Fission Product Barrier Analysis states to "Indicate a Fission Product Barrier (FPB) to be Breached, Jeopardized, or Intact," the SEC is to indicate (for example, with an X or check mark) the status on the FPB Status Board, before continuing with the Flowpath.

#### 4.2 Specific Rules for Use of the EAL Flowpath (continued)

5. If any item on the EAL Flowpath cannot be answered, it is to be circled and assumed to be satisfactory until proven otherwise and evaluation of the remainder of the Flowpath is continued without delay. Samples/analysis are to be requested, if the information is unavailable or suspect. This is acceptable because sufficient backup instrumentation is available, and utilized, so that declaration of the proper EAL should not be impeded.

**NOTE:** The term "functional" should not be confused with the term "operable" (that is, if a component is declared inoperable per Technical Specifications, it may still be functional if it can fulfill its desired task under current conditions).

6. The "Functions Required For Shutdown" Table (EAL Table 3) list those items required for the plant to achieve and maintain shutdown and cooldown conditions.
  - a. If the plant is in Modes 1, 2, or 3, then both the Mode 3 and the Modes 4-5 columns apply.
  - b. If the plant is in Mode 4 or 5, then only the Mode 4-5 column applies.
7. If the plant is in Mode 5 and no charging pumps are available, an Alert should be declared only if other means of charging (that is, RHR from the RWST) are unavailable.
8. When a "Continuing Action" is encountered, record on the EAL Status Board:
  - a. The time that the event began.
  - b. The time that the time limit expires.
  - c. The required time duration.
  - d. The current EAL that will be affected when the time expires.

#### 4.3 Protective Action Recommendations (PARs) General Guidance

1. PARs are made by HNP personnel whenever a General Emergency is declared. Additionally, if in the opinion of the Emergency Response Manager, or the SEC-CR if the EOF is not yet activated, conditions warrant the issuance of PARs, a General Emergency will be declared (HNP will not issue PARs for any accident classified below a General Emergency).
2. PARs provided in response to a radioactive release include evacuation and taking shelter.

#### 4.3 Protective Action Recommendations (PARs) General Guidance (continued)

- a. Evacuation is the preferred action unless external conditions impose a greater risk from the evacuation than from the dose received.
  - b. HNP personnel do not have the necessary information to determine whether offsite conditions would require sheltering instead of an evacuation. Therefore, an effort to base PARs on external factors (such as road conditions, traffic/traffic control, weather or offsite emergency worker response) should not be attempted.
3. At a minimum, a plant condition driven PAR to evacuate a 2 mile radius and 5 miles downwind, and shelter all other Subzones, is issued at the declaration of a General Emergency. Depending on plant conditions, a 5 mile radius and 10 miles downwind, and shelter all other Subzones, may be issued instead of the minimum PAR.
- a. PARs are included with the initial and follow-up notifications issued at a General Emergency.
  - b. The PAR must be provided to the State within 15 minutes of (1) the classification of the General Emergency or (2) any change in recommended actions.
  - c. The PAR must be provided to the NRC as soon as possible and within 60 minutes of (1) the classification of the General Emergency or (2) any change in recommended actions.
4. The Emergency Response Manager, or the SEC-CR if the EOF is not yet activated, may elect to specify PARs for any combinations of Subzones or the entire EPZ (or beyond) regardless of plant and dose based guidance.
5. PARs should not be extended based on the results of dose projections unless the postulated release is likely to occur within a short period of time. Plant based PARs are inherently conservative such that expanding the evacuation zone as an added precaution would result in a greater risk from the evacuation than from the radiological consequences of a release. It also would dilute the effectiveness of the offsite resources used to accommodate the evacuation.
6. Protective actions taken in areas affected by plume deposition following the release are determined and controlled by offsite governmental agencies.
- a. HNP is not expected to develop offsite recommendations involving ingestion or relocation issues following plume passage.
  - b. HNP may be requested to provide resources to support the determination of post plume protective actions.

4.3 Protective Action Recommendations (PARs) General Guidance (continued)

7. Throughout the duration of a General Emergency, assess plant conditions and effluent release status to ensure the established PARs are adequate.

5.0 REFERENCES

5.1 PLP-201, "Emergency Plan"

1. Section 4.1, "Emergency Classification"
2. Section 4.5.1, "Protective Action Guides"

5.2 Referenced Plant Emergency Procedures

1. PEP-230, "Control Room Operations"
2. PEP-240, "Activation and Operation of the Technical Support Center"
3. PEP-270, "Activation and Operation of the Emergency Operations Facility"
4. PEP-310, "Notifications and Communications"
5. PEP-500, "Recovery"

### 5.3 Other References

1. North Carolina Emergency Response Plan in Support of the Shearon Harris Nuclear Power Plant”
2. EPA 400-R-92-001, “Manual of Protective Action Guides and Protective Actions for Nuclear Incidents”
3. NUREG-0654 Supplement 3, “Criteria for Protective Action Recommendations for Severe Accidents”
4. NUREG/BR-0150, Vol. 4, Rev.4, US NRC, RTM-96 Response Technical Manual
5. Regulatory Guide 1.101 “Emergency Planning and Preparedness for Nuclear Power Plants”
6. EPPOS No.1 “Emergency Preparedness Position (EPPOS) on Acceptable Deviations to Appendix 1 to NUREG-0654/FEMA-REP-1”

### 6.0 SPECIAL TOOLS AND EQUIPMENT

1. EAL Flow Paths: Mounted EAL Flow Paths are maintained in the Main Control Room, TSC and EOF.
2. PAR Boards: Mounted PAR boards, based on Attachment 3, are maintained in the Main Control Room, TSC and EOF.

### 7.0 DIAGRAMS AND ATTACHMENTS

See Table of Contents

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**EAL FLOWPATH SIDE 1**

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A Folded Copy of the Emergency Action Level  
Flowpath (Rev. 02-1) is contained in the  
Plastic Sleeve Following This Hardcopy Page

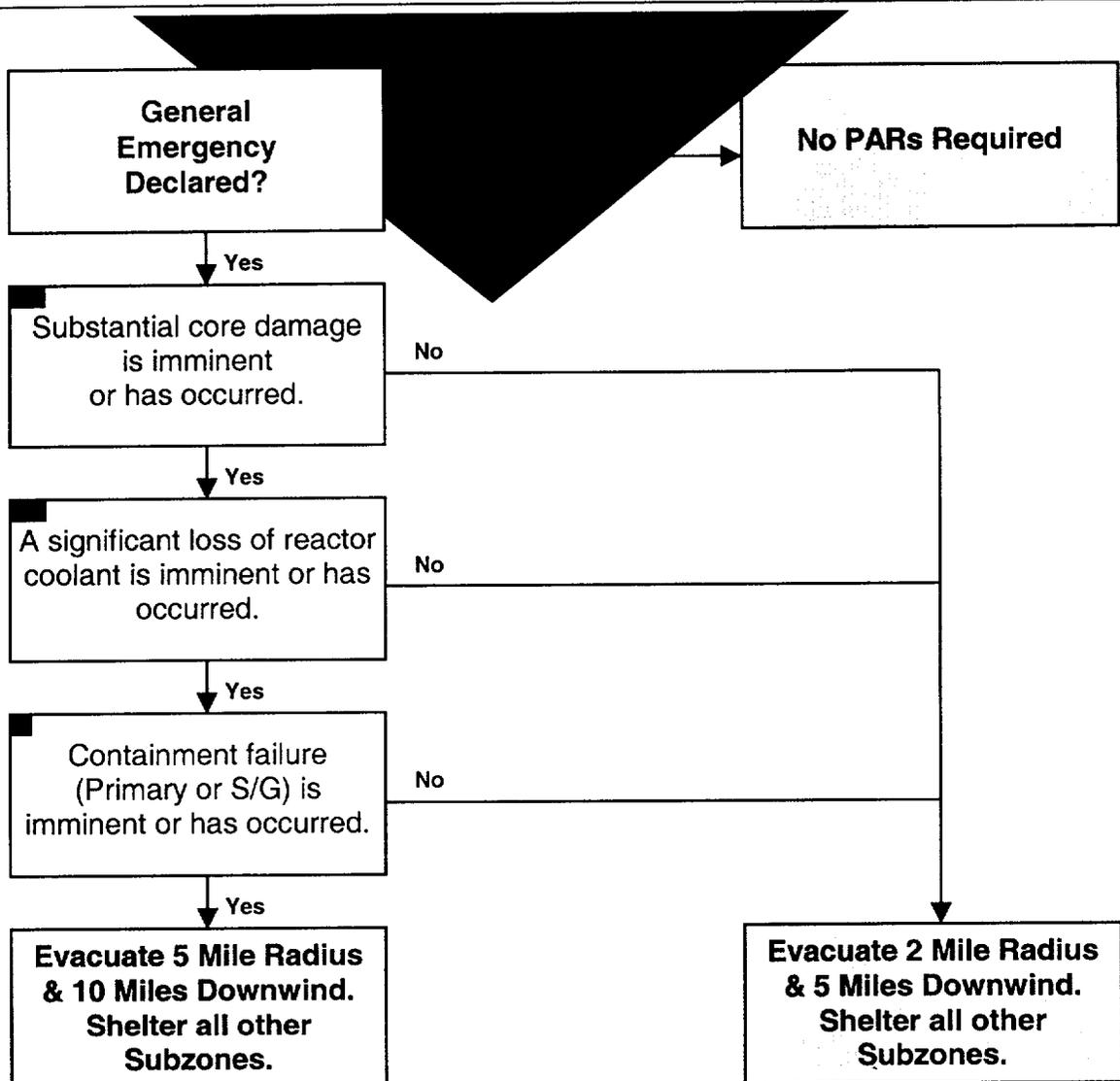
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**EAL FLOWPATH SIDE 2**

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A Folded Copy of the Emergency Action Level  
Flowpath (Rev. 02-1) is contained in the  
Plastic Sleeve Following This Hardcopy Page

**PROTECTIVE ACTION RECOMMENDATION PROCESS**



**5 Mile Radius, 10 Miles Downwind**

Wind Direction (From °)	Evacuate Subzones	Shelter Subzones
348° - 010°	A,B,C,D,H,I,K,L	E,F,G,J,M,N
011° - 034°	A,B,C,D,H,I,J,K,L	E,F,G,M,N
035° - 079°	A,B,C,D,I,J,K,L,M	E,F,G,H,N
080° - 101°	A,B,C,D,J,K,L,M	E,F,G,H,I,N
102° - 124°	A,B,C,D,J,K,L,M,N	E,F,G,H,I
125° - 146°	A,B,C,D,K,L,M,N	E,F,G,H,I,J
147° - 191°	A,B,C,D,E,K,L,M,N	F,G,H,I,J
192° - 214°	A,B,C,D,E,K,L,N	F,G,H,I,J,M
215° - 236°	A,B,C,D,E,F,K,L	G,H,I,J,M,N
237° - 259°	A,B,C,D,E,F,G,K,L	H,I,J,M,N
260° - 326°	A,B,C,D,F,G,H,K,L	E,I,J,M,N
327° - 347°	A,B,C,D,G,H,I,K,L	E,F,J,M,N

**2 Mile Radius 5 Miles Downwind**

Wind Direction (From °)	Evacuate Subzones	Shelter Subzones
327° - 010°	A,D,K	B,C,E,F,G,H,I,J,L,M,N
011° - 056°	A,K	B,C,D,E,F,G,H,I,J,L,M,N
057° - 124°	A,K,L	B,C,D,E,F,G,H,I,J,M,N
125° - 191°	A,B,L	C,D,E,F,G,H,I,J,K,M,N
192° - 214°	A,B	C,D,E,F,G,H,I,J,K,L,M,N
215° - 259°	A,B,C	D,E,F,G,H,I,J,K,L,M,N
260° - 281°	A,B,C,D	E,F,G,H,I,J,K,L,M,N
282° - 304°	A,C,D	B,E,F,G,H,I,J,K,L,M,N
305° - 326°	A,C,D,K	B,E,F,G,H,I,J,L,M,N

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## PROTECTIVE ACTION RECOMMENDATION PROCESS

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1. Indications that substantial core damage is imminent or has occurred include:
  - a) Core damage > 1% Melt.
  - b) Core Exit Thermocouple readings  $\geq 2300^{\circ}$  F.
  - c) Core uncovered > 30 minutes.
2. Indications that a significant loss of reactor coolant is imminent or has occurred include:
  - a) Containment radiation reading > 10,000 R/Hr without spray or > 4,000 R/Hr with spray.
  - b) Containment hydrogen gas concentration > 1%.
  - c) Rapid vessel depressurization.
  - d) A large break loss of coolant accident.
3. Indications that containment failure (primary or S/G) is imminent or has occurred include:
  - a) A release of radioactivity can not be maintained below the General Emergency EAL criteria.
  - b) Primary containment pressure can not be maintained below design basis pressure which is 45 psig.
  - c) Primary containment H<sub>2</sub> gas concentration can not be maintained below combustible limits which is 4% by volume.
  - d) Faulted/Ruptured S/G with a relief valve open.
4. Accidents which result in a direct release pathway to the environment (for example, a faulted and ruptured S/G with water level below the tube bundles and a relief valve open would provide such a pathway) will most likely be thyroid dose limiting. For circumstances involving this type of accident sequence:
  - a) Consider **any** Fuel Breach sufficient to warrant the determination that substantial core damage has occurred.
  - b) Consider **any** RCS Breach sufficient to warrant the determination that a significant loss of reactor coolant has occurred.

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

If a release is in progress:

- Perform dose assessment as soon as possible to determine if PAGs are exceeded and if additional Subzones require evacuation.
- Add any Subzones requiring evacuation as determined by dose assessment to the plant based PARs.

If no release is in progress:

- Perform dose projection on possible conditions as time permits to determine if PAGs could be exceeded.
- Consider adding any Subzones requiring evacuation as determined by dose projection to the plant based PARs.



**EVENT INFORMATION WORKSHEET**

**H) Onsite Protective Actions**

- None
- Assembly/Accountability
- Local Area(s) Evacuated
- Protected Area Evacuated
- Exclusion Area Evacuated
- Potassium Iodide Issued
- Employee Info Phone #: \_\_\_\_\_

**I) Offsite Notifications (last issued)**

State/County	Time: _____ (24 hr)
NRC	Time: _____ (24 hr)
News Release	Time: _____ (24 hr)
Hospital	Time: _____ (24 hr)
INPO	Time: _____ (24 hr)
ANI	Time: _____ (24 hr)

**J) CP&L PARs**

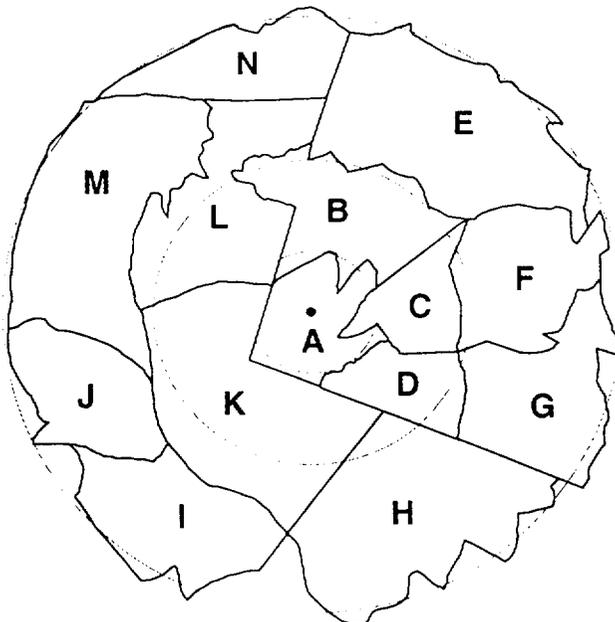
- None Issued, or
    - Evac: A B C D E F G H I J K L M N
    - Shelter: A B C D E F G H I J K L M N
- (circle the affected subzones)

**K) Offsite Facility Activation Status**

- Chatham County EOC: \_\_\_\_\_ (24 hr)
- Harnett County EOC: \_\_\_\_\_ (24 hr)
- Lee County EOC: \_\_\_\_\_ (24 hr)
- Wake County EOC: \_\_\_\_\_ (24 hr)
- State EOC: \_\_\_\_\_ (24 hr)
- NRC Incident Response Center: \_\_\_\_\_ (24 hr)

**L) Offsite Actions/Response**

- None Issued, or
    - Schools                       Daycare
    - Hospitals                       Rest Homes
    - Lake Evacuations
    - Other: \_\_\_\_\_
  - Evac: A B C D E F G H I J K L M N
  - Shelter: A B C D E F G H I J K L M N
- (circle the affected subzones)
- Sirens Activated: \_\_\_\_\_ (24 hr)
  - Tone Alerts Activated: \_\_\_\_\_ (24 hr)
  - EAS Activated: \_\_\_\_\_ (24 hr)



Notes: \_\_\_\_\_

\_\_\_\_\_

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\_\_\_\_\_

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\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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**TERMINATION CHECKLIST**

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- |   | <u>True</u>              | <u>False</u>             |
|---|--------------------------|--------------------------|
| 1. Conditions no longer meet an Emergency Action Level and it appears unlikely that conditions will deteriorate.  | <input type="checkbox"/> | <input type="checkbox"/> |
| List any EAL(s) which is/are still exceeded and a justification as to why a state of emergency is no longer applicable:   |                          |                          |
| <hr/>   |                          |                          |
| 2. Plant releases of radioactive materials to the environment are under control (within Tech Specs) or have ceased and the potential for a uncontrolled radioactive release is acceptably low.  | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. The radioactive plume has dissipated and plume tracking is no longer required. The only environmental assessment activities in progress are those necessary to determine the extent of deposition resulting from passage of the plume. | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. In-plant radiation levels are stable or decreasing, and acceptable given the plant conditions.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. The reactor is in a stable shutdown condition and long-term core cooling is available.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. The integrity of the Reactor Containment Building is within Technical Specification limits.  | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. The operability and integrity of radioactive waste systems, decontamination facilities, power supplies, electrical equipment and plant instrumentation including radiation monitoring equipment is acceptable.                         | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Any fire, flood, earthquake or similar emergency condition or threat to security no longer exists.   | <input type="checkbox"/> | <input type="checkbox"/> |



## Revision Summary for PEP-110 Rev. 10

<b>Pg/Section</b>	<b>Changes</b>
Pg. 14 / Attachment 1	The Emergency Action Level (EAL) flow path Side 1 was updated to remove loss of Erfis from unusual event matrix
Pg. 15 / Attachment 2	The Emergency Action Level (EAL) flow path Side 2 was updated to remove loss of Erfis from unusual event matrix

## Revision Summary for PEP-110 Rev. 9

<b>Pg/Section</b>	<b>Changes</b>
Pg. 14 / Attachment 1	<p>The Emergency Action Level (EAL) flow path Side 1 was updated to implement the first of two changes:</p> <ul style="list-style-type: none"><li>• In the first column; evaluation of Fission Product Barriers - Threshold value for detection of Fuel &amp; RCS Breach (into a Steam Generator) was lowered from 20 mR/HR to 10 mR/HR. <i>The reduction in the detection value corresponds to better analysis techniques and improved modeling of the detector geometry (ref. NCR 51390).</i></li></ul>
Pg. 15 / Attachment 2	<p>The Emergency Action Level (EAL) flow path Side 2 was updated to implement a 2<sup>nd</sup> change:</p> <p>Bottom of the figure; Unusual Event (EAL 7-1-1) CONFIRMED SECURITY EVENT WHICH INDICATES A POTENTIAL DEGRADATION IN THE LEVEL OF SAFETY OF THE PLANT AS INDICATED BY:</p> <ul style="list-style-type: none"><li>• A 4<sup>th</sup> bullet "CREDIBLE THREAT AGAINST THE HARRIS PLANT" was added <i>This additional example applicable to this EAL is an enhancement related to post 9/11/01 concerns (specifically, in response to 10/17/01 TMI threat).</i></li></ul>

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