

CENTRAL FILE
FARLEY NUCLEAR PLANT
DOCUMENT NOTIFICATION LETTER

February 9, 2000

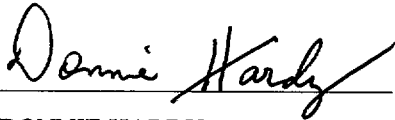
DIRECTOR, OFFICE OF NUCLEAR REACTOR REGULATION
ATT: DOCUMENT CONTROL DESK
C/O JIM MCKNIGHT
US NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555

DEAR SIR,

ATTACHED YOU WILL FIND THE NEW REVISION TO THE PROCEDURE LISTED BELOW.
IF YOU HAVE QUESTIONS PLEASE CALL ME AT 334-899-5156 EXTENSION 3402.

FNP-0-EIP-9.0 (3 Copies)

SINCERELY,

A handwritten signature in cursive script that reads "Donnie Hardy". The signature is written in black ink and is positioned above a horizontal line.

DONNIE HARDY

DOCUMENT CONTROL SUPERVISOR

CC: FILE

A045

FARLEY NUCLEAR PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURE 9.0
FNP-0-EIP-9.0


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EMERGENCY CLASSIFICATION AND ACTIONS

PROCEDURE USAGE REQUIREMENTS PER FNP-0-AP-6	SECTIONS
Continuous Use	
Reference Use	ALL
Information Use	

Approved:



 Nuclear Plant General Manager

Date Issued 2-8-2000

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LIST OF EFFECTIVE PAGES

PAGE NO.	REVISION NO.										
	REV	42	43	44	45	46	47	48	49	50	51
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LOEP ii	36	X	X	X							
LOEP iii	38	X	X	X							
TOC iv		X	X	X							
TOC v		X	X	X							
1	36	X	X	X							
2	36	X	X	X							
3	36	X	X	X							
4	36	X	X	X							
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GUIDELINE 2:											
PG.1	35	X	X	X							
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LIST OF EFFECTIVE PAGES

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PG.8	38	X	X	X							
PG.9	38	X	X	X							
PG.10	36	X	X	X							
PG.11	36	DEL									
GUIDELINE 3:											
PG.1	35	X	X	X							
PG.2	41	X	X	X							
PG.3	38	X	X	X							
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GUIDELINE 4:											
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EMERGENCY CLASSIFICATION AND ACTIONS

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EMERGENCY CLASSIFICATION AND ACTIONS

1.0 Purpose

The purpose of this procedure is to provide a method for rapid projection of estimated offsite radiation exposures as a result of a release of radioactive material, to provide the basis for classifying emergencies based on plant conditions and automatic dose calculations, to provide guidance for determining protective action recommendations, to provide guidelines for actions, and for notification guidance.

2.0 References

See Table 1.

3.0 General:

3.1 This procedure provides criteria for the classification of an emergency based on plant status and radiological hazards (i.e., direct radiation and inhalation hazards which may result from the passage of a cloud of radioactive material released from the plant).

3.2 Assessment of radioactive liquid releases will be made using the offsite Dose Calculation Manual.

3.3 Release time is defined as follows:

3.3.1 EDCM Calculations: The period of time from the most recent projection to the estimated time of release termination.

3.3.2 ODCM Calculations: The period of the release in which Technical Specification limits are exceeded.

3.4 Definitions:

TOTAL EFFECTIVE DOSE EQUIVALENT (TEDE)

means the sum of the deep dose equivalent (for external exposures) and the committed effective dose equivalent (for internal exposures).

DEEP DOSE EQUIVALENT (DDE)

which applies to external whole body exposure, is the dose equivalent at a tissue depth of 1 cm.

COMMITTED DOSE EQUIVALENT (CDE)

means the dose equivalent to organs or tissues of reference that will be received from an intake of radioactive material by an individual during the 50-year period following the intake.

COMMITTED EFFECTIVE DOSE EQUIVALENT (CEDE)

is the sum of the products of the weighting factors applicable to each of the body organs or tissues that are irradiated and the committed dose equivalent to these organs of tissues.

- 3.5 Protective action recommendation guidance is provided to aid in establishing protective action recommendations. The Emergency Director will exercise his own judgment in recommending protective actions to offsite agencies.
- 3.6 If steam generator water level falls below the break point during a steam generator tube rupture, off-site dose rate may be significantly higher (up to 10 times) due to volatilization of iodine.
- 3.7 Initial Notification or upgrade should be made from the Control Room or TSC. It is not necessary to transfer the information to the EOF to make the upgrade notification. The EOF, if staffed, should be informed as soon as possible.
- 3.8 Communication guidance for making the initial notification is on side 2 of the Emergency Notification Form, Figure 6 of this procedure.
- 3.9 Guidance for when the emergency response facilities should be manned and the level of manning required is included in Table 2. It is recommended that the TSC and the EOF be fully staffed initially at the ALERT level. If the full staff is not required, individuals can be released on a case-by-case basis.
- 3.10 At the NOUE level or below, it may be desirable to partially staff the TSC in order to relieve the Control Room staff of offsite communications and notifications. FNP-0-EIP-6.0 provides a listing of positions that should be considered for partial TSC activation.
- 3.11 EIP-6, Figure 3, provides a list of information that should be considered when updating plant staff over the public address system.

4.0 Classify emergency based on the most severe plant conditions OR projected off-site dose/dose rate conditions, WHICHEVER results in the higher emergency classification. Figure 2 provides a flowpath for dose assessment methods and plant conditions criteria.

4.1 Plant Conditions

While performing the remainder of step 4.1, have the Shift Radio Chemist (SRC) commence performing the calculations for dose assessment per step 4.2. Use the following guidelines to determine the highest indicated emergency classification based on plant conditions:

Guideline 1, Section I, General Emergency Classification Criteria

Guideline 2, Section I, Site Area Emergency Classification Criteria

Guideline 3, Section I, Alert Criteria

Guideline 4, Section I, NOUE Criteria

4.2 Dose Assessment

CAUTION: DOSE CALCULATIONS FROM EIP-9.1 OR EIP-9.3 ARE NOT TO BE USED TO DECLARE A NOUE OR ALERT SINCE EIP-9.1 AND EIP-9.3 ARE BASED ON EDCM METHODOLOGY, AND NOUE AND ALERT LIMITS ARE BASED ON ODCM METHODOLOGY.

NOTE: Due to the differences in the met data used for EDCM and ODCM calculations, the following sequence of step 4.2 substeps must be followed. The Top Down approach must be used for dose assessment (OR 99595).

NOTE: EDCM dose assessment can only be done from an ERDS terminal or a MIDAS terminal. The only location in the power block where these terminals are available is in the TSC.

NOTE: All of the step 4.2 substeps will normally be accomplished by the SRC with the exception of steps 4.2.8 and 4.2.11. Steps 4.2.8 and 4.2.11 must be performed by the Shift Supervisor or Emergency Director.

4.2.1 For initial dose assessment from the TSC, proceed to step 4.2.4.

4.2.2 For dose assessment from the EOF or long term dose assessment from the TSC, go to EIP-9.3, PERSONNEL COMPUTER-AUTOMATED DOSE ASSESSMENT and perform dose assessment using the MIDAS program.

Return to step 4.2.8 for evaluation of dose information and continue with step 4.2.9.

- 4.2.3 If the MIDAS program is inoperable, then for dose assessment from the EOF or from the TSC, go to EIP-9.1, AUTOMATED DOSE ASSESSMENT and perform dose assessment using the ARDA program to obtain dose information. Return to step 4.2.8 for evaluation of dose information and continue with step 4.2.9.
- 4.2.4 If ARDA is operable and has been automatically activated, then go to EIP-9.1, AUTOMATED DOSE ASSESSMENT and perform dose assessment using the ARDA program to obtain dose information. Return to step 4.2.8 for evaluation of dose information and continue with step 4.2.9.
- 4.2.5 If the AUTOMATED DOSE ASSESSMENT system per EIP 9.1 is operable, has not automatically activated, and one of the following rad monitors has alarmed:
- R-29
 - R-15C
 - R-60 A, B, C, or D
 - R-14
 - R-21
 - R-22

Then go to EIP-9.1, AUTOMATED DOSE ASSESSMENT, manually start ARDA and perform dose assessment using the ARDA program to obtain dose information. Return to step 4.2.8 for evaluation of dose information and continue with step 4.2.9.

- 4.2.6 If the ARDA system per EIP 9.1, AUTOMATED DOSE ASSESSMENT is NOT operable, then go to EIP-9.3, PERSONAL COMPUTER-AUTOMATED DOSE ASSESSMENT and perform dose assessment using the MIDAS program. Return to step 4.2.8 for evaluation of dose information and continue with step 4.2.9.
- 4.2.7 If the ARDA system per EIP 9.1 AUTOMATED DOSE ASSESSMENT is operable, has not automatically activated, and none of the alarms listed in step 4.2.5 have alarmed then go to EIP-9.5, EMERGENCY CLASSIFICATION BASED ON ODCM to perform dose assessment. Return to step 4.2.11 for evaluation of doserate information.

NOTE: Step 4.2.8 for evaluating the required emergency classification must be performed by the Shift Supervisor, Emergency Director in the Control Room or TSC, the DAD or Recovery Manager in the EOF.

- 4.2.8 Using the dose information obtained from EIP-9.1 or EIP-9.3, determine the highest indicated emergency classification from the "High Effluent" criteria in Guideline 1, Section I, or Guideline 2, Section I.

NOTE: If a General Emergency or site area emergency is indicated in the following step, the Shift Supervisor or the Emergency Director should consider directing long term dose assessment be performed from the TSC per step 4.2.2.

- 4.2.9 If a General Emergency or Site Area Emergency was indicated from step 4.2.8, then go to step 4.3.
- 4.2.10 If a General Emergency or Site Area Emergency was not indicated in step 4.2.8, then go to EIP-9.5, EMERGENCY CLASSIFICATION BASED ON ODCM. Return to step 4.2.11 for evaluation of dose rate information.

NOTE: Step 4.2.11 for evaluating the required emergency classification must be performed by the Shift Supervisor, Emergency Director in the Control Room or TSC, the DAD or Recovery Manager in the EOF.

- 4.2.11 Using the dose rate information obtained from EIP-9.5, determine the highest indicated emergency classification from the "High Effluent" criteria in Guideline 3, Section I, and Guideline 4, Section I.
- 4.3 Determine the correct emergency classification, the required protective action recommendations, and complete Figure 6. Do not wait for dose assessment results from step 4.2 to classify the event if plant conditions require an initial classification or an upgrade classification. As soon as a criteria for classification has been met, the event should be classified and an upgrade can be done later if required.

NOTE: THE EMERGENCY DECLARATION CANNOT BE MADE UNTIL THE REQUIRED PROTECTIVE ACTION RECOMMENDATIONS HAVE BEEN DETERMINED.

- 4.3.1 Compare the emergency classifications determined from steps 4.1 and 4.2 to determine the highest required emergency classification.

- 4.3.2 Using section L of the guideline for the highest emergency classification determined in step 4.3.1, determine the required protective action recommendations.
- 4.3.3 Declare the emergency and complete figure 6. The declaration time on line 6 and the approved time on line 16 are the same time. The transmitted time on line 3 is the time when starting to read the message over the ENN. EIP 8.3, step 15, may be used for guidance when completing figure 6, the emergency notification form.
- 5.0 Perform actions and initial notification to offsite authorities upon initial entry or upgrade into a classification using the applicable guideline:
- Guideline 1, Section II - General Emergency
- Guideline 2, Section II - Site Area Emergency
- Guideline 3, Section II - Alert
- Guideline 4, Section II - Notification of Unusual Event
- 6.0 Continue reassessment of emergency classification per step 4.0 or 7.0, as appropriate, and transmit follow-up message/periodic update message as follows:
- 6.1 Transmit Follow-up Messages:
- 6.1.1 Transmit a follow up message as soon as possible following an initial or upgrade notification. Refer to step 6.2 for time limits.
- 6.1.2 Use, if desired, EIP-8.3, Step 15, for guidance in completing and transmitting the "Emergency Message" for Follow Up/Periodic Update (Figure 6).
- 6.1.3 When performing dose assessment, transcribe dose information from the form being printed on a blank Figure 6 or use the form being printed. Fill in the remaining information. Transmit follow up message by telecopy.

NOTE: EFFORTS WILL BE MADE TO TRANSMIT FOLLOW-UP REPORTS EVERY HALF HOUR.

- 6.2 Transmit subsequent "Follow Up Message/Periodic Update Message" reports per one of the methods listed in steps 6.1.1 or 6.1.2.

- 6.2.1 At a minimum of once per hour. The hourly requirement may be waived while in a NOUE declaration, if this is agreed to by the state and local agencies.
 - 6.2.2 Following a significant change in dose rate that does not require a change in emergency classification.
 - 6.2.3 Following a significant change in plant conditions that does not require a change in emergency classification.
- 7.0 Downgrade or closeout an emergency classification after determining, through the use of the guidelines, that the current emergency classification is no longer required. FNP-0-EIP-28.0 will be used to downgrade or closeout an emergency class

GUIDELINE 1**GENERAL EMERGENCY****I. Criteria For Classification**

The classification of General Emergency applies to those events which are in progress or have occurred which involve actual or imminent substantial core degradation or melting with potential loss of containment integrity. The potential for release of radioactive material for the General Emergency classification is more than 1000 Ci of I-131 equivalent or more than 10^6 Ci of Xe-133 equivalent.

The purpose of the declaration of a General Emergency is to:

- (a) Initiate predetermined protective actions for the public.
- (b) Provide continuous assessment of information from licensee and offsite measurement.
- (c) Initiate additional measures as indicated by event releases or potential releases and,
- (d) Provide current information for and consultation with offsite authorities and the public.

A General Emergency would be declared for any of the following:

1.0 HIGH EFFLUENT

Projected exposure at site boundary or for projected peak dose location within the plume for EDCM calculation:

- (a) Greater than or equal to 1.0 REM (1000 MREM) TEDE exposure

OR

- (b) Greater than or equal to 5.0 REM (5000 MREM) thyroid CDE exposure

GUIDELINE 1**GENERAL EMERGENCY****2.0 FISSION PRODUCT BARRIERS**

2.1 Figure 8 may be used to help evaluate if Dose Equivalent I-131 (DEI) is > 300 $\mu\text{Ci}/\text{gram}$.

- Loss of two of three fission product barriers with a potential loss of the third. The following describe indication of loss of these boundaries:

(a) Fuel cladding damage indicated by:

1. RCS activity > 300 $\mu\text{Ci}/\text{gram}$ dose equivalent I-131.

OR

2. Loss of core geometry is indicated by ΔT between RCS wide range hot leg and cold leg temperature of $>64^\circ\text{F}$ and core exit temperature (incore thermocouples) reading greater than 1200°F .

(b) Loss of primary coolant boundary as indicated by:

1. Containment pressure reaching 27 psig **AND**
2. High containment radiation (R-2, R-22 and R-12, reaching their alarm setpoint) **AND**,
3. High containment humidity.

(c) Loss or potential loss of containment integrity is indicated by:

1. Containment pressure greater than 54 psig, **OR**
2. A rapid decrease in containment pressure, **OR**
3. Failure of the containment isolation system resulting in a direct path from containment to the environment.

(d) Other plant conditions exist, from whatever source, that make release of large amounts of radioactivity in a short time period possible, such as any core melt situation.

GUIDELINE 1

GENERAL EMERGENCY

3.0 SECURITY/EVACUATION

3.1 If the basis for declaring this emergency classification is based on security concerns then refer to table 3 prior to taking actions that will cause people to report to the site or change locations on site.

- Loss of physical control of the facility.

GUIDELINE 1

GENERAL EMERGENCY

II. Emergency Director Actions

NOTE: THE SHIFT SUPERVISOR SHALL PERFORM THE DUTIES OF THE EMERGENCY DIRECTOR UNTIL HIS ARRIVAL AND ASSUMPTION OF DUTIES.

The Emergency Director shall perform or direct the following:

NOTE: ACTIVATION OF THE TSC AND EOF STAFFS, PER STEPS E1 AND E2, SHOULD BE DONE IN PARALLEL WITH NOTIFICATION OF THE STATE AND LOCAL AGENCIES BY A SEPARATE INDIVIDUAL, NORMALLY THE SHIFT CLERK.

Initials

- ___ A. Sound the Plant Emergency Alarm, if not already sounded.
- ___ B. Announce the condition and give needed evacuation instructions over plant public address system.

NOTE: IF POSSIBLE AND TIME PERMITTING, CONFER WITH ARCD AND GEMA ABOUT THE PARs PRIOR TO ANNOUNCING THEM OVER THE ENN.

THE "APPROVED BY" TIME AND DATE (LINE 16, FIG. 6) AND THE "DECLARATION" TIME AND DATE (LINE 6, FIG. 6) SHOULD ALWAYS BE THE SAME TIME. THE TIME OF DECLARATION MUST BE AFTER THE EMERGENCY DIRECTOR HAS APPROVED THE EMERGENCY CLASSIFICATION AND PROTECTIVE ACTION RECOMMENDATIONS.

THE TRANSMITTAL TIME AND DATE (LINE 3, FIG. 6) SHOULD BE THE TIME THAT FIGURE 6 IS READ OVER THE ENN.

- ___ C. Fill in the emergency notification form (Fig. 6), including developing protective action recommendations per step L. Take into account the zones and evacuation time estimates shown in Figure 1.

CAUTION: FOR GENERAL EMERGENCY, BOTH STATE AND LOCAL AGENCIES ARE TO BE NOTIFIED.

GUIDELINE 1

GENERAL EMERGENCY

NOTE: INITIAL NOTIFICATION WILL NORMALLY BE MADE BY THE NON-AFFECTED UNIT SHIFT FOREMAN. NOTIFICATIONS CAN BE MADE BY AN EXTRA SHIFT SUPERVISOR, SHIFT FOREMAN, OPERATIONS SHIFT CLERK, TSC STAFF OR OTHER QUALIFIED PERSON USING FIGURE 6.

INITIAL AND UPGRADE NOTIFICATIONS AND CLASSIFICATIONS SHOULD BE DONE FROM THE CONTROL ROOM OR THE TSC, WITH THE EOF INFORMED AS SOON AS POSSIBLE.

___ D. Initial Notifications

Using the ENN, notify the following state and local agencies, using Figure 6 (Emergency Notification) within 15 minutes. EIP-8.3, step 15, may be used as guidance if required. If at least one agency in each state (state level preferred) and one agency in each county has not acknowledged in 10 minutes, THEN notify at least one agency in any state or county that has not acknowledged, using the telephone numbers on Figure 6, or in EIP-8.1, steps 12 or 13.

Verify notifications complete and documented on the Emergency Notification form (Fig 6, side 2).

NOTE: PERFORM THE FOLLOWING STEPS IN PARALLEL TO THE MAXIMUM EXTENT POSSIBLE.

E. Emergency Organization Notifications

NOTE: STEPS E.1 AND E.2, NOTIFYING THE TSC AND EOF STAFF, WILL NORMALLY BE ACCOMPLISHED BY HAVING THE SHIFT CLERK OR OTHER QUALIFIED INDIVIDUAL ACTIVATE THE COMMUNITY ALERT NETWORK (CAN) PER FNP-0-EIP-8.3, TABLE 2, AND STEP 11.

- ___ 1. TSC Staff (full activation required)
- ___ 2. EOF Staff (full activation required)
- ___ 3. On-call Emergency Director
- ___ 4. On-call Recovery Manager

GUIDELINE 1**GENERAL EMERGENCY**

- ___ 5. Emergency Support Manager
- ___ 6. Notify Security of Emergency, incoming personnel, access restrictions and to setup the EOF (pax 4611).

F. Other Notifications

- ___ 1. NRC (Perform immediately after state notification and within one hour of declaration per Figure 6, side 2).
- ___ 2. Have Regulatory ERDS activated to transmit data to the NRC within one hour of the declaration of the emergency (EIP-8-3, step 10).
- ___ 3. If personnel injury or fire is involved, refer to FNP-0-EIP-11.0 and 13.0 respectively for additional actions and EIP-8.0 steps 5.0 and 6.0 for additional notification requirements.
- ___ 4. U.S. Army EOD group at Fort Benning, GA, if necessary.
- ___ 5. Savannah River Operations Office, if necessary.

G. In Plant Protective Actions

- ___ 1. Ensure personnel accountability per EIP-10.0.
- ___ 2. Plan and initiate reentry's per EIP-14.0.
- ___ 3. Ensure proper Control Room response.
- ___ 4. Assign an individual to provide periodic plant status updates.
- ___ 5. Assign an individual to maintain a log of important Emergency Director activities.
- ___ 6. Assign an individual to keep a record of all off-site communications.

H. Off-Site Support

- ___ 1. Ensure Radiation Monitoring teams have been dispatched per EIP-4.0.
- ___ 2. Provide information to the Recovery Manager for use in press releases and recovery planning.

GUIDELINE 1

GENERAL EMERGENCY

I. Information to Off Site Authorities

- ___ 1. Provide periodic plant status updates, meteorological and dose estimates and release projections based on plant conditions and foreseeable contingencies.

J. Re-Assess plant conditions

- ___ 1. Continue to assess plant and radiological conditions to ensure the correct emergency classification is declared.
- ___ 2. If plant and radiological conditions no longer require the current emergency classification downgrade or close out the emergency class using FNP-0-EIP-28.0.

K. Long term staffing

- ___ 1. Within 8 hours, provide for full TSC and OSC reliefs.
- ___ 2. Within 16 hours, provide for 24 hour TSC and OSC coverage.

L. Protective action recommendation guidance

CAUTION 1 THE PROTECTIVE ACTION RECOMMENDATION SECTION OF THE EMERGENCY NOTIFICATION FORM (FIGURE 6) MUST BE COMPLETED FOR ALL INITIAL AND FOLLOWUP MESSAGES.

CAUTION 2 RECOMMENDATIONS OF A PARTIAL EVACUATION OR SHELTERING OF A ZONE IS NOT ALLOWED.

CAUTION 3 IF BOTH PLANT CONDITIONS AND DOSE PROJECTION INDICATE THAT CRITERIA FOR A GENERAL EMERGENCY ARE MET, PROTECTIVE ACTION RECOMMENDATIONS LISTED IN SECTION 1 AND 2 SHALL BE CONSIDERED, OTHERWISE ONLY THE APPROPRIATE SECTION SHOULD BE USED.

NOTE 1 RECOMMENDATIONS SHOULD SPECIFY EVACUATION DISTANCES 2 MILES, 5 MILES, OR 10 MILES, AND SPECIFIC EVACUATION ZONES.

NOTE 2 WHEN SPECIFYING EVACUATION ZONES, CONSIDERATION SHOULD BE GIVEN TO SECTION ADJACENT TO THE PLUME LOCATION.

GUIDELINE 1**GENERAL EMERGENCY**

- NOTE 3 WIND VARIABILITY SHOULD BE CONSIDERED WHEN SELECTING THE WIDTH OF EVACUATION ZONES.**
- NOTE 4 EVACUATION TIME ESTIMATES INDICATED ON FIGURE 1 FOR THE EFFECTED ZONES SHOULD BE CONSIDERED WHEN MAKING EVACUATION RECOMMENDATIONS.**
- NOTE 5 CONTINUE TO ASSESS PROTECTIVE ACTION RECOMMENDATIONS AND MODIFY AS NECESSARY.**
- NOTE 6 ONLY THE PROTECTIVE ACTIONS SPECIFIED BY PLANT PROCEDURES SHOULD BE RECOMMENDED, UNLESS THERE ARE OBVIOUS RELEVANT FACTORS (E.G., SEVERE NATURAL PHENOMENA) THAT PROBABLY WERE NOT ANTICIPATED WHEN THE PARS WERE DEVELOPED, AND THAT WOULD MAKE THE STANDARD PAR RECOMMENDATIONS IMPRACTICAL OR OBVIOUSLY NON-CONSERVATIVE. IN SUCH EVENTS, THE EMERGENCY DIRECTOR SHOULD USE HIS OWN JUDGMENT AS APPROPRIATE.**

CAUTION: IF THE EMERGENCY CLASSIFICATION IS BASED ON DOSE PROJECTIONS, THE RECOMMENDATIONS OF STEP 2 ON THE FOLLOWING PAGE SHOULD BE USED.

1. Use the recommendations below if the Emergency Classification is based solely on Plant Conditions and not on dose projections:

Recommendations

- a. **EVACUATE AND CONTROL ACCESS IN DOWNWIND ZONES**

Recommend immediate evacuation for all of the general population and controlling access within a two mile radius of FNP (Zone A) and 5 miles downwind of FNP (Zones B-5,C-5,...K-5) (When evacuating 5 mile downwind zones, disregard portions of the 10 mile zones, D-10 through G10 and I-10 through K-10, which fall within 5 miles of FNP).

GUIDELINE 1**GENERAL EMERGENCY****b. SHELTER AND CONTROL ACCESS IN DOWNWIND ZONES**

Recommend immediate sheltering of the general population and controlling access in the 10 mile downwind zones(B-10,C-10,...K-10), unless more extensive protective actions are known to be required.

2. Use the recommendations below if the Emergency Classification is based on dose projections:**Recommendations:****a. EVACUATE AND CONTROL ACCESS IN DOWNWIND ZONES**

Recommend immediate evacuation for all of the general population and controlling access within a two mile radius of FNP (Zone A) and 5 miles downwind of FNP (Zones B-5,C-5,...K-5) (When evacuating 5 mile downwind zones, disregard portions of the 10 mile zones, D-10 through G10 and I-10 through K-10, which fall within 5 miles of FNP).

b. SHELTER AND CONTROL ACCESS IN DOWNWIND ZONES

Recommend immediate sheltering of the general population and controlling access in the 10 mile downwind zones (B-10,C-10,...K-10), unless more extensive protective actions are known to be required.

c. Recommend locating and evacuating hot spots.

d. Recommend implementing control of food and water supplies pending sampling and analysis and possible confiscation in certain areas.

e. Recommend monitoring of environmental radiation levels.

f. Recommend to consider evacuation of children and pregnant women.

GUIDELINE 2**SITE AREA EMERGENCY****I. Criteria For Classification**

The classification of Site Area Emergency applies to those events which are in progress or have occurred involving actual or likely major failures of plant functions needed for protection of the public from radiation or contamination. The potential for release of radioactive material for the Site Area Emergency classification is up to 1000 Ci of I-131 equivalent, or 10^4 to 10^6 Ci of Xe-133 equivalent. The purpose of the declaration of a Site Area Emergency is to:

- (a) Assure that response centers are manned,
- (b) Assure that monitoring teams are dispatched,
- (c) Assure that personnel involved in an evacuation effort of near site areas are at their duty stations if the situation worsens, and,
- (d) Provide current information for and consultation with offsite authorities and the public.
- (e) A Site Area Emergency would be declared for plant conditions that warrant activation of emergency centers and monitoring teams.

A Site Area Emergency would be declared for any of the following:

1.0 RCS FAULT

- A major loss of primary coolant as indicated by:
 - (a) Decreasing pressurizer pressure and possible level, **AND**
 - (b) Near normal steam pressure in all steam generators accompanied by,
 - (1) Containment pressure reaching 27 psig, **AND**
 - (2) High containment radiation (R-2, R-11, and R-12 reaching their alarm setpoint), **AND**
 - (3) High containment sump (recirculation) level **AND**
 - (4) High containment humidity.

GUIDELINE 2**SITE AREA EMERGENCY**

- Rupture of a control rod mechanism housing as indicated by the following:
 - (a) Rod position indication, **AND**
 - (b) High RCS pressure surge, **AND**
 - (c) Momentary nuclear power surge, **AND**
 - (d) Subsequent behavior indicating a loss of primary coolant.

2.0 SG FAULT OR RUPTURE

- A loss of offsite power and a steam generator tube rupture as indicated by:
 - (a) ECCS actuation, **AND**
 - (b) High secondary coolant activity (R-15 or R-19 reach full scale)
 - Greater than 50 gpm primary to secondary leak, fuel damage as evidenced by a reactor coolant activity greater than technical specifications, and a steam line break outside containment as indicated by:
 - (a) Abnormally low steam pressure on one or all steam generators with one or more of the following:
 - (1) Steam line high flow,
 - (2) Steam line high differential pressure,
 - (3) Steam flow greater than feed flow
- AND**
- (b) No abnormal temperature or humidity increase in containment,

GUIDELINE 2SITE AREA EMERGENCY**3.0 DEGRADED CORE/FUEL FAULT**

3.1 Figure 8 may be used to help evaluate if Dose Equivalent I-131 (DEI) is > 300 $\mu\text{Ci}/\text{gram}$.

- RCS activity > 300 $\mu\text{Ci}/\text{gram}$ dose equivalent I-131 with potential excessive RCS leakage or potential loss of containment.
- Degraded core conditions with possible loss of core geometry as indicated by:

(a) ΔT between RCS wide range hot leg and cold leg temperature >64°F and core exit temperature (in core thermocouples) reading greater than 800°F and increasing, **OR**

(b) Core exit temperature (in core thermocouples) >1200°F.

- Spent fuel handling accident for which sampling or radiation monitors indicate a projected lower limit of offsite individual exposure to be:

100 mrem (.1 rem) TEDE **OR**

500 mrem (.5 rem) thyroid CDE

As a result of one of the following:

(a) Dropped spent fuel assembly, **OR**

(b) An object is dropped onto a spent fuel assembly, **OR**

(c) A cask containing a spent fuel assembly is dropped exposing the assembly, **OR**

(d) A spent fuel assembly is deformed as a result of any manipulation, **OR**

(e) Spent fuel pool water level below top of assemblies.

GUIDELINE 2**SITE AREA EMERGENCY****4.0 HIGH EFFLUENT**

- Projected exposure at site boundary or projected peak dose location within the plume for EDCM calculation:
 - (a) Greater than or equal to 100 mrem (.1 rem) TEDE exposure

OR

- (b) Greater than or equal to 500 mrem (.5 rem) thyroid CDE exposure

5.0 EQUIPMENT/STRUCTURE FAILURE

- Loss of functions for achieving hot standby.
- Transients requiring operation of shutdown systems with failure to trip (continued power generation but no core damage immediately evident).

6.0 ELECTRICAL/INSTRUMENTATION FAULT

- Loss of offsite power with a failure of all emergency AC power for more than 15 minutes.
- Loss of both trains of auxiliary building DC power for more than 15 minutes.
- Loss of all main control board annunciator capability for more than 15 minutes while:
 - (a) Plant is not in cold shutdown, OR
 - (b) Significant plant transient is initiated while all alarms lost.

GUIDELINE 2**SITE AREA EMERGENCY****7.0 SITE HAZARDS**

- A fire affecting ECCS.
- Severe natural phenomena being experienced or projected with plant not in cold shutdown:
 - (a) Earthquake greater than SSE levels
 - (b) Flood, low river water, or hurricane surge greater than design levels.
 - (c) Winds in excess of 115 mph.
- Other hazards being experienced with the plant not in cold shutdown as follows:
 - (a) Aircraft crash affecting vital structures by fire or impact, **OR**
 - (b) Severe damage to safe shutdown equipment from missiles or explosion, **OR**
 - (c) Entry of toxic or flammable gases into vital areas(s)

8.0 SECURITY/EVACUATION

- 8.1 If the basis for declaring this emergency classification is based on security concerns, then refer to table 3 prior to taking actions that will cause people to report to the site or change locations on site.
- Imminent loss of physical control of the plant (i.e., takeover by terrorists, anti-nuclear factions, etc.).
- Evacuation of the control room and control of shutdown systems not established from local stations in 15 minutes.

GUIDELINE 2

SITE AREA EMERGENCY

II. Emergency Director Actions

NOTE: THE SHIFT SUPERVISOR SHALL PERFORM THE DUTIES OF THE EMERGENCY DIRECTOR UNTIL HIS ARRIVAL AND ASSUMPTION OF DUTIES.

The Emergency Director shall perform or direct the following:

NOTE: ACTIVATION OF THE TSC AND EOF STAFFS, PER STEPS E1 AND E2 SHOULD BE DONE IN PARALLEL WITH NOTIFICATION OF THE STATE AND LOCAL AGENCIES BY A SEPARATE INDIVIDUAL, NORMALLY THE SHIFT CLERK.

Initials

- ___ A. Sound the Plant Emergency Alarm, if not already sounded.
- ___ B. Announce the condition and give needed evacuation instructions over plant public address system.

NOTE: THE "APPROVED BY" TIME AND DATE (LINE 16, FIG. 6) AND THE "DECLARATION" TIME AND DATE (LINE 6, FIG. 6) SHOULD ALWAYS BE THE SAME TIME. THE TIME OF DECLARATION MUST BE AFTER THE EMERGENCY DIRECTOR HAS APPROVED THE EMERGENCY CLASSIFICATION AND PROTECTIVE ACTION RECOMMENDATIONS.

THE TRANSMITTAL TIME AND DATE (LINE 3, FIG. 6) SHOULD BE THE TIME AT WHICH FIGURE 6 IS READ OVER THE ENN.

- ___ C. Fill in the emergency notification form (FIG 6), including developing protective action recommendations per step L. Take into account the zones and evacuation time estimates shown in figure 1.

NOTE: INITIAL NOTIFICATION WILL NORMALLY BE MADE BY THE NON-AFFECTED UNIT SHIFT FOREMAN. NOTIFICATIONS CAN BE MADE BY AN EXTRA SHIFT SUPERVISOR, SHIFT FOREMAN, OPERATIONS SHIFT CLERK, TSC STAFF OR OTHER QUALIFIED PERSON USING FIGURE 6.

NOTE: INITIAL AND UPGRADE NOTIFICATIONS AND CLASSIFICATIONS SHOULD BE DONE FROM THE CONTROL ROOM OR THE TSC, WITH THE EOF INFORMED AS SOON AS POSSIBLE.

GUIDELINE 2SITE AREA EMERGENCY

___ D. Initial Notifications

Using the ENN, notify at least one agency in each state (state level preferred) within 15 minutes using Figure 6 (Emergency Notification). EIP 8.3, step 15, may be used as guidance if required. If at least one agency in each state (state level preferred) has not acknowledged in 10 minutes, THEN notify at least one agency in any state that has not acknowledged, using the telephone numbers on Figure 6, or in EIP 8.1, steps 12 or 13.

Verify notifications complete and documented on the Emergency Notification form (fig 6, side 2).

NOTE: PERFORM THE FOLLOWING STEPS IN PARALLEL TO THE MAXIMUM EXTENT POSSIBLE.

E. Emergency Organization Notifications

NOTE: TABLE 2 PROVIDES GUIDANCE AS TO THE REQUIRED LEVEL OF ACTIVATION OF THE TSC AND EOF. FULL ACTIVATION INITIALLY IS RECOMMENDED, THEN USE TABLE 2 FOR GUIDANCE IN DOWNSIZING.

STEPS E1 AND E2, NOTIFYING THE TSC AND EOF STAFF WILL NORMALLY BE ACCOMPLISHED BY HAVING THE SHIFT CLERK OR OTHER QUALIFIED INDIVIDUAL ACTIVATE THE COMMUNITY ALERT NETWORK (CAN) PER FNP-0-EIP-8.3, TABLE 2 AND STEP 11).

- ___ 1. TSC Staff (full activation recommended initially)
- ___ 2. EOF Staff (full activation recommended initially)
- ___ 3. On-call Emergency Director
- ___ 4. On-call Recovery Manager
- ___ 5. Emergency Support Manager
- ___ 6. Notify Security of Emergency, incoming personnel, access restrictions and to setup the EOF (pax 4611).

GUIDELINE 2SITE AREA EMERGENCY

F. Other Notifications

- ___ 1. NRC (Perform immediately after state notification and within one hour of declaration per figure 6, side 2.)
- ___ 2. Have Regulatory ERDS activated to transmit data to the NRC within one hour of the declaration of the emergency (EIP 8.3, step 10).
- ___ 3. If personnel injury or fire is involved, refer to FNP-0-EIP-11.0 and 13.0 respectively for additional actions and EIP-8.0 steps 5.0 and 6.0 for additional notifications.
- ___ 4. U.S. Army EOD group at Fort Benning, GA, if necessary.
- ___ 5. Savannah River Operations Office, if necessary.

G. In Plant Protective Actions

- ___ 1. Ensure personnel accountability per EIP-10.0.
- ___ 2. Plan and initiate reentries per EIP-14.0.
- ___ 3. Ensure proper Control Room response.
- ___ 4. Assign an individual to provide periodic plant status updates.
- ___ 5. Assign an individual to maintain a log of important Emergency Director activities.
- ___ 6. Assign an individual to keep a record of all off site communications.

H. Off Site Support

- ___ 1. Ensure Radiation Monitoring teams have been dispatched per EIP-4.0.
- ___ 2. Provide information to the Recovery Manager for use in press releases and recovery planning.

GUIDELINE 2

SITE AREA EMERGENCY

I. Information to Off Site Authorities

- _____ 1. Provide periodic plant status updates, meteorological and dose estimates and release projections based on plant conditions and foreseeable contingencies.

J. Re-Assess plant conditions

- _____ 1. Continue to assess plant and radiological conditions to ensure the correct emergency classification is declared.
- _____ 2. If a higher emergency classification is required immediately go to the appropriate guideline.
- _____ 3. If plant and radiological conditions no longer require the current emergency classification downgrade or close out the emergency class using FNP-0-EIP-28.0.

K. Long term staffing

- _____ 1. Within 8 hours, provide for full TSC and OSC reliefs.
- _____ 2. Within 16 hours, provide for 24 hour TSC and OSC coverage.

L. Protective action recommendation guidance

CAUTION 1: THE PROTECTIVE ACTION RECOMMENDATION SECTION OF THE EMERGENCY NOTIFICATION FORM (FIGURE 6) MUST BE COMPLETED FOR ALL INITIAL AND FOLLOWUP MESSAGES.

NOTE 1: CONTINUE TO ASSESS PROTECTIVE ACTION RECOMMENDATIONS AND MODIFY AS NECESSARY.

GUIDELINE 2

SITE AREA EMERGENCY

NOTE 2: ONLY THE PROTECTIVE ACTIONS SPECIFIED BY PLANT PROCEDURES SHOULD BE RECOMMENDED, UNLESS THERE ARE OBVIOUS RELEVANT FACTORS (E.G., SEVERE NATURAL PHENOMENA) THAT WERE PROBABLY NOT ANTICIPATED WHEN THE PARs WERE DEVELOPED, AND THAT WOULD MAKE THE STANDARD PAR RECOMMENDATIONS IMPRACTICAL, OR OBVIOUSLY NON-CONSERVATIVE. IN SUCH EVENTS, THE EMERGENCY DIRECTOR SHOULD USE HIS OWN JUDGMENT AS APPROPRIATE.

1. Protective Action Recommendations are not required; however, they may (at the discretion of the Emergency Director) be made as a precautionary measure, depending on the severity of the plant condition or if the site boundary dose is approaching the General Emergency limit. Refer to note 2 above.

If it is determined that PARs are required then use the guidance of Guideline 1, Section L when making the recommendations

GUIDELINE 3**ALERT****I. Criteria For Classification**

The classification of Alert applies to situations in which events are in process or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant. The potential for release of radioactive material for the Alert classification is up to 10 curies of I-131 equivalent, or up to 10^4 curies of Xe-133 equivalent. The purpose of offsite alert is to assure that emergency personnel are readily available to respond if the situation becomes more serious or to perform confirmatory radiation monitoring, if required, and to provide offsite authorities current status information for possible further action.

- (a) An Alert would be declared for plant conditions that warrant precautionary activation of the technical support center, operations support centers, and the emergency operations facility (at the discretion of the Recovery Manager).

An Alert would be declared for any of the following:

1.0 RCS FAULT

- A primary coolant leak greater than 50 gpm. Indications of such a leak will include high charging flow **AND**
 - (a) High containment radiation (R 2, R 22, and R 12) **AND**
 - (b) High containment humidity
- **OR**
 - (c) Pressurizer relief or safety valve discharge line temperature high **AND**
 - (d) Pressurizer relief tank level, pressure or temperature increasing or above normal.
- Single rod cluster control assembly withdrawal at power as detected by:
 - (a) Rod position indicator, **AND**
 - (b) Increasing core power, **AND**
 - (c) Increasing Tavg.

GUIDELINE 3**ALERT****2.0 SG FAULT OR RUPTURE**

- Steam generator tube rupture indicated by:
 - (a) ECCS actuation, **AND**
 - (b) High secondary coolant activity (R-15, R-19, R-23A, or R-23B reach full scale).

- Greater than 10 gpm primary to secondary leak as indicated by high secondary coolant activity (R-15, R-19, R-23A, or R-23B alarming) **WITH** a steam line break outside containment indicated by:
 - (a) Abnormally low steam pressure on one or all steam generators with one or more of the following:
 - (1) Steam line high flow, **OR**
 - (2) Steam line high differential pressure, **OR**
 - (3) Steam flow greater than feedwater flow

 - AND**
 - (b) No abnormal temperature, or humidity increase in containment.

- A steam or feed line break inside containment as indicated by abnormally low pressure on one steam generator with the following:
 - (a) Steam line high differential pressure, **OR**
 - (b) Steam flow greater than feed flow, **OR**
 - (c) Steam line high flow, **AND**
 - (d) Containment high temperature.

GUIDELINE 3**ALERT****3.0 DEGRADED CORE/FUEL FAULT**

- 3.1 Figure 8 may be used to help evaluate if Dose Equivalent I-131 (DEI) is > 300 $\mu\text{Ci}/\text{gram}$:
- Severe loss of fuel cladding as indicated by a reactor coolant activity equal to or greater than 300 $\mu\text{Ci}/\text{gram}$ equivalent I-131.
 - Spent fuel handling accident in which an increase in radiation level (i.e., alarm condition or off scale reading) is observed on R-2, R-11, R-12, R-5, **OR** R-25 as a result of one of the following:
 - (a) Dropped spent fuel assembly, **OR**
 - (b) An object is dropped onto a spent fuel assembly, **OR**
 - (c) A cask containing a spent fuel assembly is dropped, **OR**
 - (d) A spent fuel assembly is deformed as a result of any manipulation, **OR**
 - (e) Low spent fuel pool water level.

4.0 HIGH EFFLUENT

- Radiological effluent at the site boundary (combined effect from both units) greater than 10 times the radiological technical specification instantaneous limits (based on ODCM) as follows, per EIP-9.5:
 - (a) Liquids: 10 times 10CFR20 Appendix B, Table 2, Column 2
 - (b) Liquids: Dissolved or entrained noble gases: 0.001 mCi/ml
 - (c) Noble gases (whole body) 5.7E-4 Rem/hr (5.7E-1 mrem/hr)
 - (d) Noble gases (skin): 3.4E-3 Rem/hr (3.4 mrem/hr)
 - (e) Airborne radioiodine and particulates other than noble gases: 1.7E-3 Rem/hr (1.7 mrem/hr)

GUIDELINE 3**ALERT**

- High radiation levels or high airborne contamination indicative of a severe degradation in the control of radioactive materials as indicated by:
 - (a) Readings on R-14 (stack gas monitor), R-21 (stack particulate monitor) **OR** R-22 (stack gas monitor) reading off scale,

AND
 - (b) Sampling on R-27 high range containment monitor confirms direct readings.

5.0 EQUIPMENT/STRUCTURE FAILURE

- Loss of:
 - (a) All auxiliary feedwater (Modes 1-3), **OR**
 - (b) Both trains of RHR (All modes), **OR**
 - (c) Both trains of CCW (Modes 1-4), **OR**
 - (d) Both trains of Service Water (Modes 1-4)
- Failure of the reactor protection system to initiate and complete a trip which brings the reactor subcritical.

6.0 ELECTRICAL/INSTRUMENTATION FAULT

- Loss of offsite power with a failure of all emergency AC power for less than 15 minutes.
- Loss of both trains of auxiliary building DC power for less than 15 minutes.
- Loss of all main control board annunciator capability.

GUIDELINE 3**ALERT****7.0 SITE HAZARDS**

- Severe natural phenomena being experienced or projected as follows:
 - (a) Earthquake greater than OBE levels. (ARP-1.12 LOC MK5)
 - (b) Flood, low river water or hurricane surge near design levels that could impact plant operations.
 - (c) Any tornado striking facility
 - (d) Hurricane winds near design basis level (115 mph)
- Hazards experienced onsite which affect plant operation such as
 - (a) Aircraft crash
 - (b) Release of toxic gas
 - (c) Release of flammable gas
- Fire or explosion potentially affecting ECCS

8.0 SECURITY/EVACUATION

- 8.1 If the basis for declaring this emergency classification is based on security concerns, then refer to Table 3 prior to taking actions that will cause people to report to the site or change locations on site.
- A security emergency involving the occurrence of or imminent threat of sabotage.
 - Evacuation of control room anticipated or required with control of shutdown systems established from local stations.

GUIDELINE 3

ALERT

II. Emergency Director Actions

NOTE: THE SHIFT SUPERVISOR SHALL PERFORM THE DUTIES OF THE EMERGENCY DIRECTOR UNTIL HIS ARRIVAL AND ASSUMPTION OF DUTIES.

Initials

The Emergency Director shall perform or direct the following:

NOTE: ACTIVATION OF THE TSC AND EOF STAFFS PER STEPS E1 AND E2 SHOULD BE DONE IN PARALLEL WITH NOTIFICATION OF THE STATE AND LOCAL AGENCIES BY A SEPARATE INDIVIDUAL, NORMALLY THE SHIFT CLERK.

- ___ A. Announce the condition and give needed evacuation instructions over plant public address system.
- ___ B. Evacuate affected areas of the plant as appropriate.
- ___ C. Fill in the emergency notification form (FIG 6), including developing protective action recommendations per step L. Take into account the zones and evacuation time estimates shown in figure 1.

GUIDELINE 3ALERT

NOTE: INITIAL NOTIFICATION WILL NORMALLY BE MADE BY THE NON-AFFECTED UNIT SHIFT FOREMAN. NOTIFICATIONS CAN BE MADE BY AN EXTRA SHIFT SUPERVISOR, SHIFT FOREMAN, OPERATIONS SHIFT CLERK, TSC STAFF OR OTHER QUALIFIED PERSON USING FIGURE 6.

NOTE: INITIAL AND UPGRADE NOTIFICATIONS AND CLASSIFICATIONS SHOULD BE DONE FROM THE CONTROL ROOM OR THE TSC, WITH THE EOF INFORMED AS SOON AS POSSIBLE.

___ D. Initial Notifications

1. **IF** an ALERT was declared due to radiological effluents greater than or equal to ALERT limits which are 10 times Technical Specification limits, **THEN** enter the following information on the Emergency Notification form (figure 6, line 7):
 - a. ODCM site boundary dose rates from EIP-9.5.
 - and
 - b. The following note:

"Dose rate at site boundary has been calculated using the ODCM as required by the FNP Technical Specification. EDCM calculation is not appropriate."
2. Using the ENN, notify within 15 minutes at least one agency in each state (state level preferred), utilizing Figure 6 (Emergency Notification). EIP-8.3, step 15, may be used as guidance if required. **IF** at least one agency in each state (state level preferred) has not acknowledged within 10 minutes, **THEN** notify at least one agency in any state that has not acknowledged, using the telephone numbers in Figure 6 or in EIP-8.1, steps 12 or 13.

Verify notifications complete and documented on the Emergency Notification form (fig 6, side 2)

GUIDELINE 3

ALERT

NOTE: PERFORM THE FOLLOWING STEPS IN PARALLEL TO THE MAXIMUM EXTENT POSSIBLE.

E. Emergency Organization Notifications

NOTE: TABLE 2 PROVIDES GUIDANCE AS TO THE REQUIRED LEVEL OF ACTIVATION FOR THE TSC AND EOF. FULL ACTIVATION INITIALLY IS RECOMMENDED, THEN USE TABLE 2 FOR GUIDANCE IN DOWNSIZING.

STEPS E.1 AND E.2, NOTIFYING THE TSC AND EOF STAFF, WILL NORMALLY BE ACCOMPLISHED BY HAVING THE SHIFT CLERK OR OTHER QUALIFIED INDIVIDUAL ACTIVATE THE COMMUNITY ALERT NETWORK (CAN) PER FNP-0-EIP-8.3, TABLE 2 AND STEP 11.

- ___ 1. TSC Staff (full activation recommended initially)
- ___ 2. EOF Staff (full activation recommended initially)
- ___ 3. On-call Emergency Director
- ___ 4. On-call Recovery Manager
- ___ 5. Emergency Support Manager
- ___ 6. Notify Security of Emergency, incoming personnel, access restrictions and to setup the EOF (PAX 4611)

F. Other Notifications

- ___ 1. NRC (Perform immediately after state notification and within one hour of declaration per figure 6, side 2)
- ___ 2. Have Regulatory ERDS activated to transmit data to the NRC within one hour of the declaration of the emergency (EIP-8.3, step 10)
- ___ 3. If personnel injury or fire is involved, refer to FNP-0-EIP-11.0 and 13.0 respectively for additional actions and EIP-8.0 steps 5.0 and 6.0 for additional notifications

GUIDELINE 3

ALERT

- ___ 4. U.S. Army EOD group at Fort Benning, GA, if necessary
- ___ 5. Savannah River Operations Office, if necessary

G. In Plant Protective Actions

- ___ 1. Ensure personnel accountability per EIP-10.0, if any areas of the plant were evacuated due to hazardous conditions
- ___ 2. Plan and initiate re-entries per EIP-14.0, if any areas of the plant were evacuated due to hazardous conditions
- ___ 3. Ensure proper Control Room response
- ___ 4. Assign an individual to provide periodic plant status updates
- ___ 5. Assign an individual to maintain a log of important Emergency Director activities
- ___ 6. Assign an individual to keep a record of all off site communications

H. Off Site Support

- ___ 1. Ensure Radiation Monitoring teams have been dispatched per EIP 4.0.
- ___ 2. Provide information to the Recovery Manager for use in press releases and recovery planning

I. Information to Off Site Authorities

- ___ 1. Provide periodic plant status updates, meteorological and dose estimates and release projections based on plant conditions and foreseeable contingencies.

GUIDELINE 3

ALERT

J. Re-Assess plant conditions

- ___ 1. Continue to assess plant and radiological conditions to ensure the correct emergency classification is declared.
- ___ 2. If a higher emergency classification is required immediately go to the appropriate guideline
- ___ 3. If plant and radiological conditions no longer require the current emergency classification downgrade or close out the emergency class using FNP-0-EIP-28.0.

K. Long term staffing

- ___ 1. Within 8 hours, provide for full TSC and OSC reliefs
- ___ 2. Within 16 hours, provide for 24 hour TSC and OSC coverage

GUIDELINE 3

ALERT

L. Protective action recommendation guidance

CAUTION 1: THE PROTECTIVE ACTION RECOMMENDATION SECTION OF THE EMERGENCY NOTIFICATION FORM (FIGURE 6) MUST BE COMPLETED FOR ALL INITIAL AND FOLLOWUP MESSAGES.

NOTE 1: CONTINUE TO ASSESS PROTECTIVE ACTION RECOMMENDATIONS AND MODIFY AS NECESSARY.

NOTE 2: ONLY THE PROTECTIVE ACTIONS SPECIFIED BY PLANT PROCEDURES SHOULD BE RECOMMENDED UNLESS THERE ARE OBVIOUS RELEVANT FACTORS (E.G., SEVERE NATURAL PHENOMENA) THAT WERE NOT ANTICIPATED WHEN THE PARs WERE DEVELOPED, AND THAT WOULD MAKE THE STANDARD PAR RECOMMENDATIONS IMPRACTICAL OR OBVIOUSLY NON-CONSERVATIVE. IN SUCH EVENTS, THE EMERGENCY DIRECTOR SHOULD USE HIS OWN JUDGMENT AS APPROPRIATE.

1. Protective Action Recommendations are not required. Block A of Line 15 on Figure 6 should be checked.

GUIDELINE 4**NOTIFICATION OF UNUSUAL EVENT****I. Criteria For Classification**

The classification of Notification of Unusual Event applies to situations in which events are in process or have occurred which could indicate a potential degradation of the level of safety of the plant. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occur.

- (a) A NOTIFICATION OF UNUSUAL EVENT would be required for any plant condition that warrants increased awareness on the part of state and/or local offsite authorities or involve other than normal plant shutdown.

A Notification Of Unusual Event would be declared for any of the following:

1.0 RCS FAULT

- Failure of any of the following valves to close:
 - (a) Pressurizer safety valve.
 - (b) Pressurizer power operated relief valve and its remote motor operated isolation valve.
- Initiation of safety injection either automatically or manually as a result of plant parameters approaching or reaching their setpoint.
- Complete loss of forced RCS flow as indicated by RCS flow indicators on all three RCS loops.

2.0 SG FAULT OR RUPTURE

- Failure of any of the following valves to close:
 - (a) A steam generator safety valve
 - (b) A steam generator power operated relief valve
- Loss of secondary coolant outside containment concurrent with ECCS activation.

GUIDELINE 4**NOTIFICATION OF UNUSUAL EVENT****3.0 DEGRADED CORE/FUEL FAULT**

- Indicated subcooling (margin to saturation) decreased below 10°F.
- Inadvertent loading of a fuel assembly into an improper position which causes F_q to be greater than the Technical Specification limit.
- RCS activity exceeds Tech. Spec. limit that requires shutdown.

4.0 HIGH EFFLUENT

- Radiological effluents at the site boundary (combined effluent from both units) in excess of the radiological technical specifications instantaneous limits (based on ODCM) as follows:
 - (a) Liquids 10CFR20 Appendix B, Table 2 Column 2
 - (b) Liquids: Dissolved or entrained noble gases $1.0 \text{ E-4 } \mu\text{Ci/ml}$
 - (c) Noble gases (whole body) 5.7E-5 Rem/hr (5.7E-2 mrem/hr)
 - (d) Noble gases (skin) 3.4E-4 Rem/hr (3.4E-1 mrem/hr)
 - (e) Airborne radioiodine and particulates other than noble gases: 1.7E-4 Rem/hr (1.7E-1 mrem/hr)

5.0 EQUIPMENT/STRUCTURE FAILURE

- Loss of containment integrity requiring shutdown to HOT SHUTDOWN.

6.0 ELECTRICAL/INSTRUMENTATION FAULT

- Loss of both trains of offsite power OR loss of all onsite emergency power (diesel generators and auxiliaries).
- Loss of control room indication or annunciation to an extent requiring shutdown.

GUIDELINE 4**NOTIFICATION OF UNUSUAL EVENT****7.0 SITE HAZARDS**

- Natural phenomena being experienced or projected to affect the plant site as follows:
 - (a) Any earthquake.
 - (b) Unusual river water level caused by flood, low water or hurricane surge.
 - (c) Any tornado onsite.
 - (d) Any threatening hurricane.
- Hazards experienced onsite or within one mile of the site boundary which could affect plant operations, such as:
 - (a) Aircraft crash.
 - (b) Explosion.
 - (c) Fire affecting a safety related or a non-safety related nuclear process system.
 - (d) Fire or explosion affecting safe shutdown capability.
 - (e) Release of toxic gas.
 - (f) Release of flammable gas.

8.0 SECURITY/EVACUATION

- 8.1 If the basis for declaring this emergency classification is based on security concerns then refer to table 3 prior to taking actions that will cause people to report to the site or change locations on site.
- Attempted unauthorized entry into a vital area or attempted sabotage of vital equipment.

GUIDELINE 4**NOTIFICATION OF UNUSUAL EVENT****II. Emergency Director Actions**

NOTE: THE SHIFT SUPERVISOR SHALL PERFORM THE DUTIES OF THE EMERGENCY DIRECTOR UNTIL HIS ARRIVAL AND ASSUMPTION OF DUTIES.

The Emergency Director shall perform or direct the following:

Initials

- ___ A. Announce the condition and give needed evacuation instructions over plant public address system.
- ___ B. Evacuate affected areas of the plant as appropriate.

NOTE: THE "APPROVED BY" TIME AND DATE (LINE 16, FIG. 6) AND THE "DECLARATION" TIME AND DATE (LINE 6, FIG. 6) SHOULD ALWAYS BE THE SAME TIME. THE TIME OF DECLARATION MUST BE AFTER THE EMERGENCY DIRECTOR HAS APPROVED THE EMERGENCY CLASSIFICATION AND PROTECTIVE ACTION RECOMMENDATIONS.

THE TRANSMITTAL TIME AND DATE (LINE 3, FIG. 6) SHOULD BE THE TIME AT WHICH FIG. 6 IS READ OVER THE ENN.

- ___ C. Fill in the emergency notification form (FIG 6), including developing protective action recommendations per step L. Take into account the zones and evacuation time estimates shown in figure 1.

NOTE: INITIAL NOTIFICATION WILL NORMALLY BE MADE BY THE NON-AFFECTED UNIT SHIFT FOREMAN. NOTIFICATIONS CAN BE MADE BY AN EXTRA SHIFT SUPERVISOR, SHIFT FOREMAN, OPERATIONS SHIFT CLERK, TSC STAFF OR OTHER QUALIFIED PERSON USING FIGURE 6.

INITIAL AND UPGRADE NOTIFICATIONS AND CLASSIFICATIONS SHOULD BE DONE FROM THE CONTROL ROOM OR THE TSC, WITH THE EOF INFORMED AS SOON AS POSSIBLE.

GUIDELINE 4**NOTIFICATION OF UNUSUAL EVENT****___ D. Initial Notifications**

1. **IF** a NOUE was declared due to radiological effluents greater than the NOUE limits which are the Technical Specification limits, **THEN** enter the following information on the Emergency Notification form (Figure 6, line 7):

- a. ODCM site boundary dose rates from EIP 9.5.

and

- b. The following note:

"Dose rate at site boundary has been calculated using the ODCM as required by the FNP Technical Specification. EDCM calculation is not appropriate."

2. Using the ENN, notify within 1 hour at least one agency in each state (state level preferred), utilizing Figure 6 (Emergency Notification). EIP-8.3, step 15, may be used as guidance if required. **IF** at least one agency in each state (state level preferred) has not acknowledged within 10 minutes, **THEN** notify at least one agency in any state that has not acknowledged, using the telephone numbers in Figure 6 or in EIP-8.1, steps 12 or 13.

Verify notifications complete and documented on the Emergency Notification form (Fig 6, side 2).

NOTE: PERFORM THE FOLLOWING STEPS IN PARALLEL TO THE MAXIMUM EXTENT POSSIBLE.

E. Emergency Organization Notifications

NOTE: TABLE 2 PROVIDES GUIDANCE AS TO THE REQUIRED LEVEL OF ACTIVATION OF THE TSC AND EOF. LEVEL OF ACTIVATION, IF ANY, IS AT THE DISCRETION OF THE ED/RM. SEE EIP-6/27 FOR GUIDANCE.

- ___ 1. TSC Staff, if activated by the ED
- ___ 2. EOF Staff, if activated by the RM

GUIDELINE 4**NOTIFICATION OF UNUSUAL EVENT**

- ___ 3. On-call Emergency Director
- ___ 4. On-call Recovery Manager
- ___ 5. Emergency Support Manager
- ___ 6. Notify Security of Emergency, incoming personnel and access restrictions (PAX 4611).

F. Other Notifications

- ___ 1. NRC (Perform immediately after state notification and within one hour of declaration per Figure 6, side 2).
- ___ 2. If personnel injury or fire is involved, refer to FNP-0-EIP-11.0 and 13.0 respectively for additional notifications.
- ___ 3. U.S. Army EOD group at Fort Benning, GA, if necessary
- ___ 4. Savannah River Operations Office, if necessary

G. In Plant Protective Actions

- ___ 1. Ensure personnel accountability per EIP-10.0, if any areas of the plant were evacuated due to hazardous conditions.
- ___ 2. Plan and initiate re entries per EIP-14.0, if any areas of the plant were evacuated due to hazardous conditions.
- ___ 3. Ensure proper Control Room response.
- ___ 4. Assign an individual to provide periodic plant status updates.
- ___ 5. Assign an individual to maintain a log of important Emergency Director activities.
- ___ 6. Assign an individual to keep a record of all off site communications.

GUIDELINE 4**NOTIFICATION OF UNUSUAL EVENT****H. Off- Site Support**

- ___ 1. Ensure Radiation Monitoring teams have been dispatched per EIP-4.0.
- ___ 2. Provide information to the Recovery Manager for use in press releases and recovery planning.

I. Information to Off-Site Authorities

- ___ 1. Provide periodic plant status updates, meteorological and dose estimates and release projections based on plant conditions and foreseeable contingencies.

J. Re-Assess plant conditions

- ___ 1. Continue to assess plant and radiological conditions to ensure the correct emergency classification is declared.
- ___ 2. If a higher emergency classification is required immediately go to the appropriate guideline.
- ___ 3. If plant and radiological conditions no longer require the current emergency classification downgrade or close out the emergency class using FNP-0-EIP-28.0.

K. Long term staffing

- ___ 1. Within 8 hours, provide for full TSC and OSC reliefs.
- ___ 2. Within 16 hours, provide for 24 hour TSC and OSC coverage.

GUIDELINE 4

NOTIFICATION OF UNUSUAL EVENT

- L. Protective action recommendation guidance

CAUTION 1: THE PROTECTIVE ACTION RECOMMENDATION SECTION OF THE EMERGENCY NOTIFICATION FORM (FIGURE 6) MUST BE COMPLETED FOR ALL INITIAL AND FOLLOW-UP MESSAGES.

NOTE: CONTINUE TO ASSESS PROTECTIVE ACTION RECOMMENDATIONS AND MODIFY AS NECESSARY.

ONLY THE PROTECTIVE ACTIONS SPECIFIED BY PLANT PROCEDURES SHOULD BE RECOMMENDED UNLESS THERE ARE OBVIOUS RELEVANT FACTORS (E.G., SEVERE NATURAL PHENOMENA) THAT PROBABLY WERE NOT ANTICIPATED WHEN THE PARs WERE DEVELOPED, AND THAT WOULD MAKE THE STANDARD PAR RECOMMENDATIONS IMPRACTICAL OR OBVIOUSLY NON-CONSERVATIVE. IN SUCH EVENTS, THE EMERGENCY DIRECTOR SHOULD USE HIS OWN JUDGMENT, AS APPROPRIATE.

1. Protective Action Recommendations are not required. Block A of Line 15 on Figure 6 should be checked.

SHARED

TABLE 1

REFERENCES

- Joseph M. Farley Nuclear Plant Emergency Plan
- FNP-0-RCP-25, Health Physics Activities During a Radiological Accident
- FNP-0-EIP-29, Long Term Dose Assessment
- FNP-0-EIP-20, Chemistry and Environmental Support to the Emergency Plan
- FNP-0-M-007, Emergency Dose Calculation Method
- FNP-0-M-011, Offsite Dose Calculation Manual
- EPA "Manual of Protective Action Guides and Protective Actions for Nuclear Incidents"
- NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants"
- FNP-0-CCP-641, "Operation of the Plant Vent Stack Monitoring System"
- NT-86-0014, Gaseous Releases, Emergency Classifications
- NT-87-0543, Protective Action Recommendation Policy
- ALA 88-694, Westinghouse "Potential Radiological Impact of Steam Generator Tube Uncover"
- FNP-0-CCP-1300, Chemistry and Environmental Activities During a Radiological Accident
- SCS letter File: ENG 15 94-0466 Log: FP 94-0364, Containment Dose R-27 to DEI Conversion

SHARE

TABLE 2

EMERGENCY FACILITY ACTIVATION

	Unusual Event	Alert	Site Area Emergency	General
Technical Support Center	*	Activate #	Activate #	Activate
Operations Support Center	*	Activate #	Activate #	Activate
Emergency Operations Facility	**	***	Activate #	Activate
Emergency Operations Center	**	***	Activate #	Activate
Public Information Corporate Offices	**	***	Activate #	Activate
News Media Center ##	N/A	****	***	Activate

NOTE: (It is recommended that the full TSC and EOF staffs be called in at the ALERT level. After evaluating plant conditions, staff may be released below a GENERAL EMERGENCY (at the discretion of the RM/ED).)

- * NO ACTION, STANDBY OR ACTIVATE AT THE DISCRETION OF THE EMERGENCY DIRECTOR
- ** NO ACTION, STANDBY OR ACTIVATE AT THE DISCRETION OF THE RECOVERY MANAGER
- *** STANDBY OR ACTIVATE AT THE DISCRETION OF THE RECOVERY MANAGER
- **** ACTIVATION DEPENDENT ON LEVEL OF MEDIA INTEREST OR EOF ACTIVATION
- # ACTIVATION WILL BE TO THE EXTENT DEEMED NECESSARY BY THE EMERGENCY DIRECTOR AND RECOVERY MANAGER
- ## AUTOMATICALLY ACTIVATED UPON EOF ACTIVATION

TABLE 3**CONSIDERATIONS FOR EMERGENCY CLASSIFICATION BASED
ON SECURITY EVENTS**

IF THERE IS A POTENTIAL HAZARD TO THE SAFETY OF PERSONNEL DUE TO THE SECURITY EVENT THAT IS IN PROGRESS, THE PROVISIONS OF THE EIPs MAY HAVE TO BE MODIFIED TO ENSURE THAT PLANT PERSONNEL ARE PROTECTED. CONSIDERATION SHOULD BE GIVEN TO THE SAFETY OF PERSONNEL WHO ARE ON SITE AND THOSE WHO WILL BE REPORTING TO THE SITE. THE FOLLOWING LIST DESCRIBES SOME OF THE ACTIONS THAT MIGHT BE DIFFERENT:

1. Do not delay declaring the emergency, some specific actions in the guidelines may have to be altered.
2. Contact security for recommendations to determine hazardous areas prior to taking any actions that would move people to different areas of the plant.
3. Ensure that control room or other supervisory personnel do not dispatch personnel to areas of the plant until it has been determined that those areas are safe.
4. If activating the plant emergency alarm (PEA) would put personnel at risk while proceeding to assembly areas, do not activate the alarm. In lieu of the PEA, consider making an appropriate announcement over the plant page with specific instructions such as to remain inside buildings, evacuate specific areas or other appropriate announcements based on security recommendations.
5. If having the TSC and EOF staffs report to the plant site would put them at risk, consider a manual callout of a minimum staff with specific instructions identifying where to report in lieu of using the CAN to activate.
6. Consider use of alternate facilities for the TSC and EOF staffs.
7. If the CAN is used to activate the TSC and EOF staffs, have the security force member at the plant access direct them to specific locations as they arrive on site.
8. After security reports that the security hazards have been eliminated, return to full implementation of the EIPs as appropriate.

TABLE 4**INFORMATION LIKELY TO BE REQUESTED BY THE NRC IF AN EMERGENCY IS DECLARED
(NRC INFORMATION NOTICE 98-08)**

1. Is there any change to the classification of the event? If so, what is the reason?
2. What is the ongoing/imminent damage to the facility, including affected equipment and safety features?
3. Have toxic or radiological releases occurred or been projected, including changes in the release rate? If so, what is the projected onsite and offsite releases, and what is the basis of assessment?
4. What are the health effect/consequences to onsite/offsite people? How many onsite/offsite people are/will be affected and to what extent?
5. Is the event under control? When was control established, or what is the planned action to bring the event under control? What is the mitigative action underway or planned?
6. What onsite protective measures have been taken or planned?
7. What offsite protective actions have been recommended to state/local officials?
8. What is the status of State/local/other Federal agencies' responses, if known?
9. If applicable, what is the status of public information activities, such as alarm, broadcast, or press releases (regulatee/state/local/other federal agencies)? Has a Joint Information Center (News Media Center) been activated?

10 MILE EMERGENCY PLANNING ZONE

The boxes in each quadrant and at the top of the drawing, represent the time in minutes that it would take to evacuate the zones in that quadrant during a **WD** (week day), **WN** (week night), **WE** (week end) and **AW** (adverse weather conditions). The time includes a 15 minute allowance for notification.

Zones	WD	WN	WE	AW
2 Mile Zone A	95	80	90	95
10 Mile All Sectors	140	115	115	150

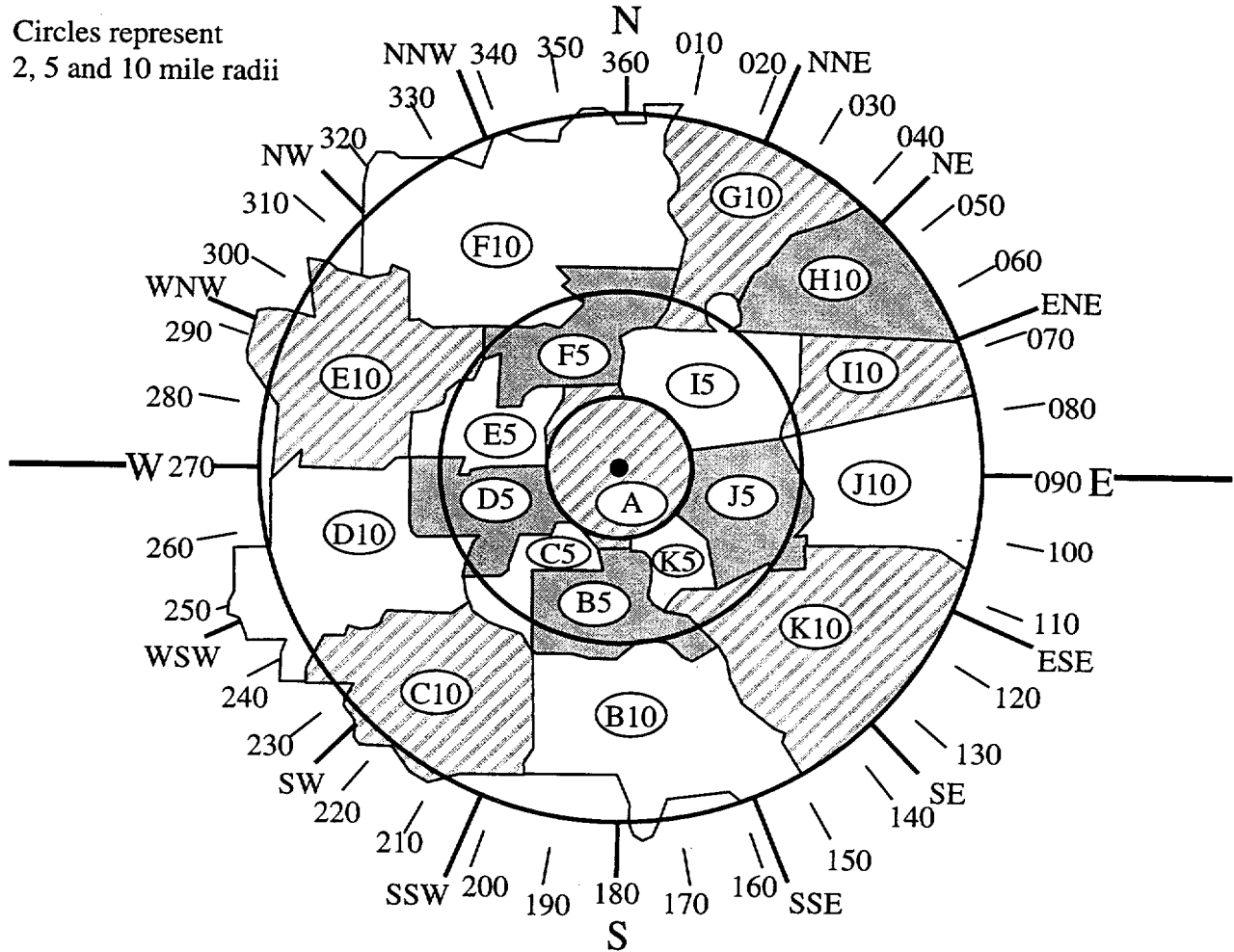
270-360 Quadrant, 100%
Evacuation Times

Zones	WD	WN	WE	AW
5 Mile	105	90	95	110
10 mile	115	100	105	120

000-090 Quadrant, 100%
Evacuation Times

Zones	WD	WN	WE	AW
5 Mile	105	95	100	110
10 mile	110	105	110	120

Circles represent
2, 5 and 10 mile radii



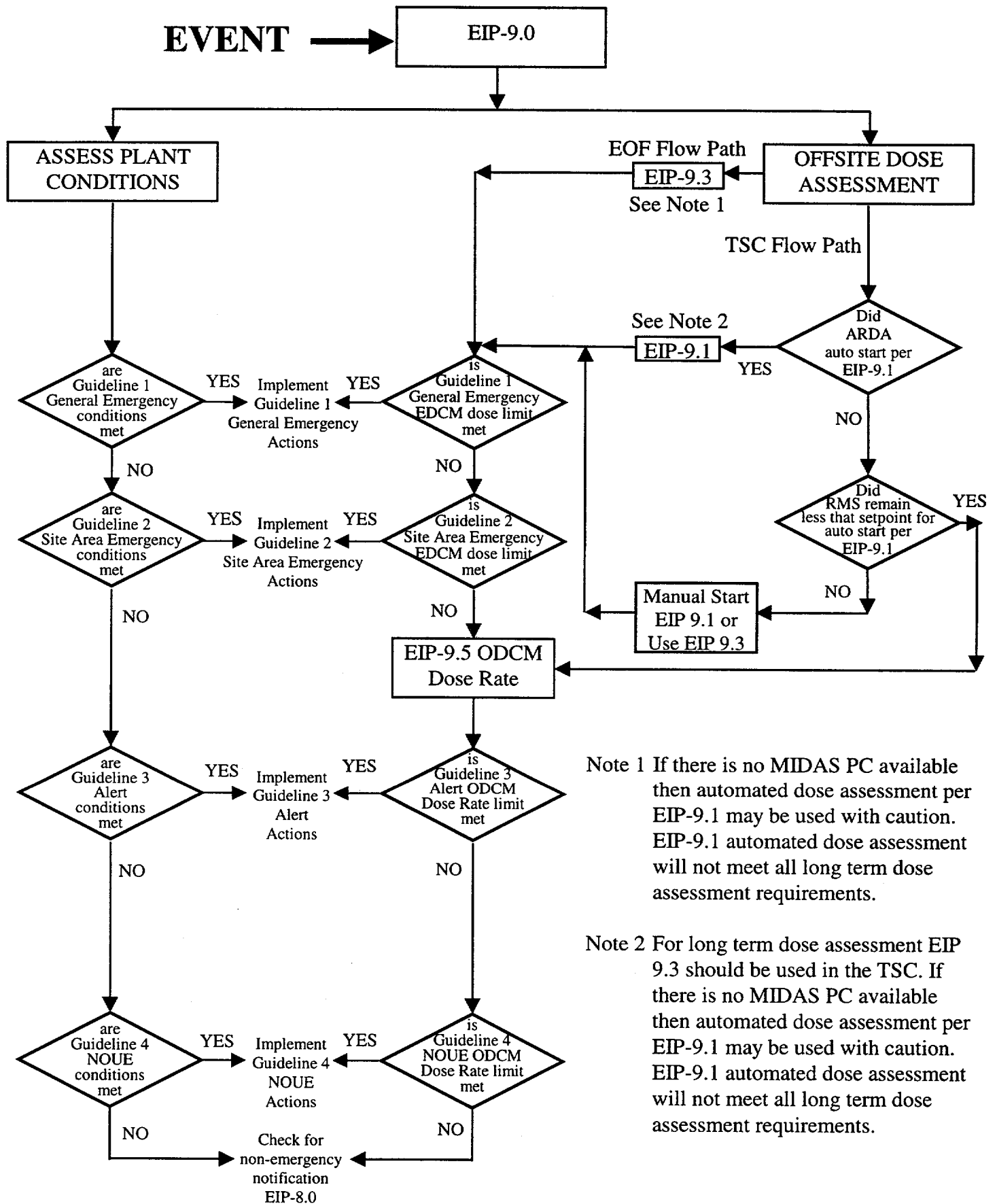
180-270 Quadrant, 100%
Evacuation Times

Zones	WD	WN	WE	AW
5 Mile	100	95	95	105
10 mile	140	110	115	150

090-180 Quadrant, 100%
Evacuation Times

Zones	WD	WN	WE	AW
5 Mile	105	95	100	110
10 mile	110	100	105	115

FIGURE 1



Note 1 If there is no MIDAS PC available then automated dose assessment per EIP-9.1 may be used with caution. EIP-9.1 automated dose assessment will not meet all long term dose assessment requirements.

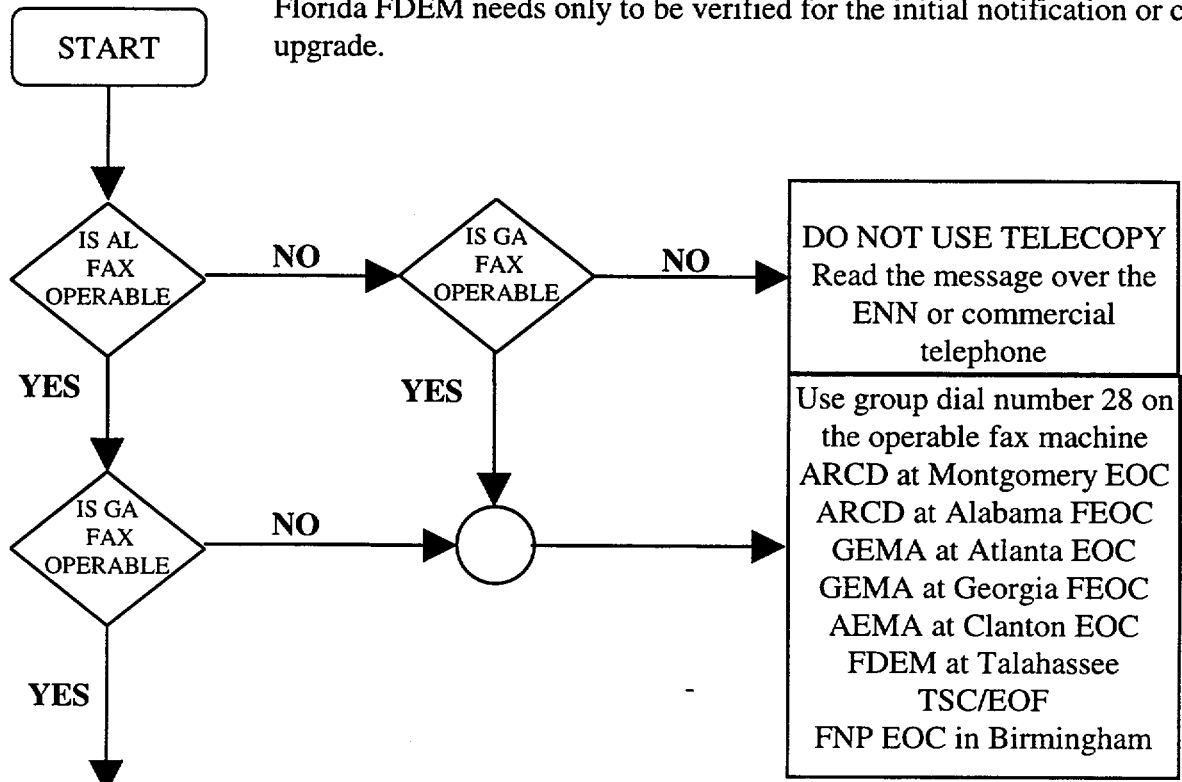
Note 2 For long term dose assessment EIP 9.3 should be used in the TSC. If there is no MIDAS PC available then automated dose assessment per EIP-9.1 may be used with caution. EIP-9.1 automated dose assessment will not meet all long term dose assessment requirements.

FIGURE 2

TELECOPY GROUP DIAL NUMBERS

Telecopy (fax) the initial or followup emergency notification form (Fig. 6) to all of the locations using the group dial numbers listed on the below flow chart. When the activity report is received retransmit the form to any location that did not receive the form using the individual speed dial numbers listed below. Verify that the form has been received at all locations through the ENN, OPX or commercial phone number. The telecopy to the

Florida FDEM needs only to be verified for the initial notification or classification upgrade.



Use group dial number 25 on both the Al. and Ga. fax	
AL. FAX MACHINE group dial number 25 ARCD at Montgomery EOC ARCD at Al. FEOC AEMA at Clanton EOC TSC/EOF	GA. FAX MACHINE group dial number 25 GEMA at Atlanta EOC GEMA at GA FEOC FDEM at Tallahassee FNP EOC in Birmingham

Refer to FNP-0-EIP-8.1 or FIG. 6 for OPX/commercial numbers.

LOCATION	FAX IND SPEED DIAL	ENN PHONE NUMBER
Alabama Radiation Control Division At Montgomery EOC	1	11
Alabama Radiation Control Division At Alabama Forward EOC	3	13
Alabama Emergency Management Agency at Clanton EOC	7	51
FNP TSC	5	62
FNP EOF (from opposite location)	5	63
Georgia Emergency Management Agency at Atlanta EOC	2	21
Georgia Emergency Management Agency at Georgia Forward EOC	4	22
Florida Department of Emergency Management at Tallahassee	8	none
FNP EOC in Birmingham	6	65

FIGURE 3

THIS FIGURE HAS BEEN DELETED

FIGURE 4

THIS FIGURE HAS BEEN DELETED

FIGURE 5

EMERGENCY NOTIFICATION

1. A This is a Drill B Actual Emergency C Initial D Follow-up* Message Number _____
2. Site: Farley Nuclear Plant Unit: _____ Reported By: _____
3. Transmittal Time/Date: _____ / _____ / _____ Confirmation Phone Numbers: (334)899-5156 or (334)794-0800 Ext. _____
(central) mm dd yy
- Teletype Phone Number: (205) 257-1155 (205) 257-1035 _____
TSC EOF Other
4. Authentication (if required): N/A N/A
(Number) (Codeword)
5. Emergency Classification:
 A Notification Of Unusual Event B Alert C Site Area Emergency D General Emergency
6. A Emergency Declaration At: B Termination At: Time/Date _____ / _____ / _____ (If B go to item 16)
(central) mm dd yy
7. Emergency Description/Remarks: _____

- Problems Include: A RCS Leaking B Containment Leaking C Fuel Damage Indicated D Heat Removal Systems Inadequate E Additional comments on following page
8. Plant Condition: A Improving B Stable C Degrading D RMTs Dispatched E Site Evacuation
9. Reactor Status: A Shutdown Time/Date: _____ / _____ / _____ B _____ % Power
(central) mm dd yy
10. Emergency Releases:
 A None (go to item 14) B Potential (go to item 14) C Is Occurring D Has Occurred
- **11. Type of Release A Ground Level B Mixed Mode
 C Airborne: Started: _____ / _____ / _____ Stopped: _____ / _____ / _____
Time (central) Date Time (central) Date
 E Liquid: Started: _____ / _____ / _____ Stopped: _____ / _____ / _____
Time (central) Date Time (central) Date
- **12. Release Magnitude A μ Curie per Sec. B Curies Tech. Specification Limits C Below D Above
 E Noble Gases F Iodines
 G Particulates H Other
- **13 Estimate Of Projected Off Site Dose A New B Unchanged C Estimated Duration: _____ Hrs.
TEDE (mrem) Thyroid CDE (mrem)
- | | | |
|---------------|----------------------------------|----------------------------------|
| Site Boundary | <input type="checkbox"/> D _____ | <input type="checkbox"/> E _____ |
| 2 miles | <input type="checkbox"/> F _____ | <input type="checkbox"/> G _____ |
| 5 miles | <input type="checkbox"/> H _____ | <input type="checkbox"/> I _____ |
| 10 miles | <input type="checkbox"/> J _____ | <input type="checkbox"/> K _____ |
- **14. Meteorological Data A Wind Direction (from) _____ ° B Speed(mph) _____
 C Stability Class _____ D Precipitation (type) _____
15. Actions:
 A There are no recommended protective actions.
 B We would like to discuss recommended protective actions.

Not to be read over the ENN except for initial notifications and notifications of General Emergency

Recommended Protective Actions:

C Evacuate and control access in down wind zone(s) _____

D Shelter and control access in down wind zone(s) _____

E In all affected areas: Monitor environmental radiation levels, locate and evacuate hot spots and implement control and possible confiscation of food and water supplies and consider evacuation of children and pregnant women.

F Other _____

16. Approved By: _____ Time/Date _____ / _____ / _____
(Name) (Title) (central) mm dd yy

* If items 8 - 14 have not changed, only items 1 - 7 and 15 - 16 are required to be completed
 ** Information may not be available on initial notifications.

DO NOT TELECOPY THIS SIDE

COMMUNICATIONS MEANS

17.0 Telecopy side one of this form to State and Local Agencies per figure 3 while performing the remaining steps of this form

18.0 Make Initial/Upgrade ENN Emergency Notification using the following message:

18.1 DIAL ** on the ENN, wait 10 seconds and announce "This is name/title at Farley Nuclear Plant. Please be prepared to initiate your radiological notification procedure and manning of the ENN."

NOTE: When the first agency at the state level for each state, and the County level for each County (if required) acknowledge, no further acknowledgment is required.

18.2 For all Emergency declarations, request a state level agency for Alabama (step 21.1) and Georgia (step 21.2) acknowledge manning of the ENN. As a courtesy notification request AEMA acknowledge manning of the ENN.

18.3 If a State level agency in step 21.1 or 21.2 does not acknowledge manning of the ENN, contact a county level agency in step 21.5 or 21.6 to acknowledge for the state.

NOTE: If ARCD has moved to the Forward EOC in Houston County, then HCEMA will be notified of the General Emergency at the same time in step 18.2. Additional notification of HC EMA is not required
If GEMA has moved to the Forward EOC in Early County, then ECEMA will be notified of the General Emergency at the same time in step 18.2. Additional notification of ECEMA is not required

18.4 For a General Emergency request a county level agency for Houston County (step 21.5) and a county level agency for Early county (step 21.6) acknowledge manning of the ENN.

18.5 Announce on the ENN "Please prepare to receive an initial notification message with acknowledgment."

18.6 Slowly read side one of this form

18.7 Have the agencies that acknowledged in steps 18.2, 3 and 4, acknowledge receipt of the message.

19.0 If at least one agency in each state (State Level Preferred) has not acknowledged receipt, contact them through other means, such as OPX, commercial, etc using numbers listed below or in EIP-8.1, and read side one of the message to them.

20.0 **Notify NRC Headquarters. Read side one of this form.** (Immediately after State Notification, within one hour of Declaration.)

ENS (301-816-5100; 301-951-0550; 301-415-0550)

Commercial (1-301-816-5100; 1-301-951-0550; 1-301-415-0550) Person Contacted _____ Date/Time _____

NOTE: Only the underlined phones and phone numbers listed below are manned 24 hours a day. The other numbers listed below are for use during dayshift hours and for when the facilities are staffed during an emergency.

21.0 State agencies to be notified

Required for all declarations

STATE LEVEL AGENCIES

21.1 ALABAMA

Alabama Radiation Control Division at Montgomery EOC

ENN (11) OPX (6628) Telecopy (334-264-4396)

Commercial (334-242-4378)

Person contacted _____

Date/Time _____

OR

State Troopers in Montgomery

ENN (12) Commercial (334-242-4378, 4379)

Person contacted _____

Date/Time _____

OR

Alabama Radiation Control Division at Alabama Forward EOC

ENN (13) OPX 6621) Telecopy (8-257-1535)

Commercial (334-793-1565)

Person contacted _____

Date/Time _____

21.4 AEMA COURTESY NOTIFICATION

This is an ENN courtesy notification only and is not required to be completed in the time specified by the Guideline.

CAUTION: This Notification does not meet the requirements for notifying a state level agency in the State of Alabama

AEMA ENN (51)

Person contacted _____

Date/Time _____

21.2 GEORGIA

Georgia Emergency Management Agency at Atlanta EOC

ENN (21) OPX (6629) Telecopy (404-627-4850)

Commercial (404-635-7200)

Person contacted _____

Date/Time _____

OR

Georgia Emergency Management Agency at Georgia Forward EOC

ENN (22) OPX (6626) Telecopy (8-257-2455)

Commercial (912-723-4764, 4826,4956)

Person contacted _____

Date/Time _____

21.3 FLORIDA

This is a Telecopy notification only to be followed up by a phone call to verify that the telecopy was received. Verification is not required for follow-up messages.

This notification is not required to be completed in the time in the guideline for the declared classification.

Telecopy to be sent at the same time as message is sent to other states

Florida Department of Emergency Management

Telecopy (850-488-7841)

Verification (800-320-0519) (850-413- 9911)

Person contacted _____

Date/Time _____

Required for General Emergency declarations

LOCAL LEVEL AGENCIES

Contact if state agencies cannot be contacted

21.5 HOUSTON COUNTY

Houston County EMA or Sheriff in Dothan

ENN(31) ENN(13) OPX (6621) Telecopy (8-257-1535)

Commercial (334-794-9720, 793-9655, 334-677-4807, 4808)

Person contacted _____

Date/Time _____

21.6 EARLY COUNTY

Early County EMA in Early Co. EOC or Early Co. Sheriff in Blakely

ENN(42) ENN(41) OPX (6622) Telecopy (8-257-2455)

ENN(22) Commercial (912-723-3577, 3578, 4746, 4826, 4956)

Person contacted _____

Date/Time _____

NOTE: Checking box indicates acknowledgment and telecopy received

Dose Equivalent Iodine Estimation

The below graph and table can be used to estimate if dose equivalent iodine (DEI) is above 300 microcuries per gram. When using this figure the following rules must be used:

1. The only radiation monitors that can be used to enter the graph or table are R-27A or B.
2. The leak rate is assumed to be constant for the time period specified.
3. The bottom of the scale for the R-27 monitors is 1 REM/hr.
4. Any R-27 reading greater than 1 REM/hr for a leak rate of 50 gpm or less is an indication of DEI being greater than or equal to 300 microcuries per gram.
5. Enter the graph with the R-27 reading and the length of time that the leak has been in progress. If the intersection of R-27 and time is above and to the left of the curve for the specific leak rate the DEI is likely to be greater than 300 microcuries per gram.
6. Enter the table with the number of minutes since the start of the leak and the leak rate. If the actual R-27 dose rate is above the value listed in the table the DEI is likely to be greater than 300 microcuries per gram.

	TIME (MIN)	5 MIN	10 MIN	30 MIN	60 MIN	120 MIN	180 MIN	240 MIN
LEAK RATE [GPM]	1000	1.66	3.1	7.41	11.9	18.1	22.3	25
	500		1.55	3.7	5.93	9.06	11.1	12.5
	100				1.19	1.81	2.23	2.5

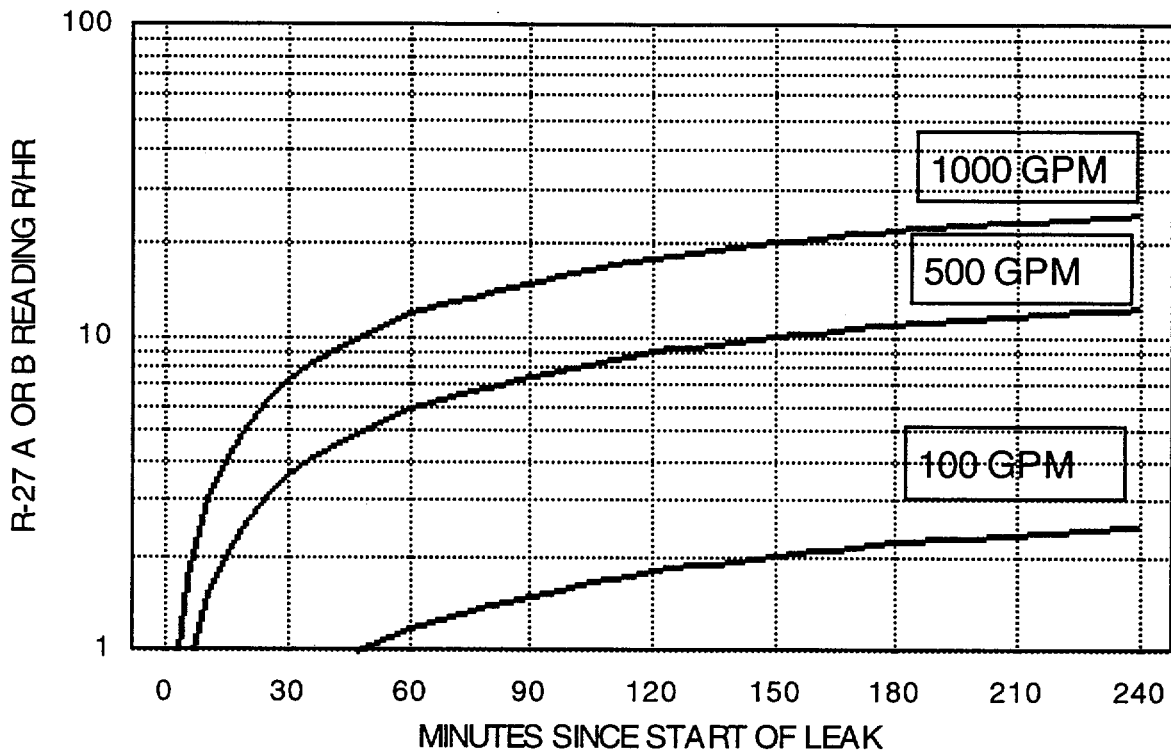


FIGURE 8
REVISION 44

FARLEY NUCLEAR PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURE 9.0
FNP-0-EIP-9.0

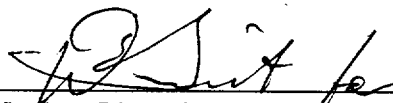
S
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D

EMERGENCY CLASSIFICATION AND ACTIONS

PROCEDURE USAGE REQUIREMENTS PER FNP-0-AP-6	SECTIONS
Continuous Use	
Reference Use	ALL
Information Use	

Approved:



 Nuclear Plant General Manager

Date Issued 2-8-2000

UNCONTROLLED COPY
CAUTION: This copy is not maintained
 Current. Do not use in a Safety Related Activity.

SHARED

LIST OF EFFECTIVE PAGES

PAGE NO.	REVISION NO.										
	REV	42	43	44	45	46	47	48	49	50	51
LOEP i	41	X	X	X							
LOEP ii	36	X	X	X							
LOEP iii	38	X	X	X							
TOC iv		X	X	X							
TOC v		X	X	X							
1	36	X	X	X							
2	36	X	X	X							
3	36	X	X	X							
4	36	X	X	X							
5	36	X	X	X							
6	36	X	X	X							
7	37	DEL		X							
GUIDELINE 1:											
PG.1	38	X	X	X							
PG.2	38	X	X	X							
PG.3	38	X	X	X							
PG.4	38	X	X	X							
PG.5	38	X	X	X							
PG.6	38	X	X	X							
PG.7	38	X	X	X							
PG.8	38	X	X	X							
PG.9	38	X	X	X							
PG.10	38	DEL									
GUIDELINE 2:											
PG.1	35	X	X	X							
PG.2	35	X	X	X							
PG.3	38	X	X	X							

SHARED

LIST OF EFFECTIVE PAGES

PAGE NO.	REVISION NO.										
	REV	42	43	44	45	46	47	48	49	50	51
PG.4	38	X	X	X							
PG.5	38	X	X	X							
PG.6	39	X	X	X							
PG.7	35	X	X	X							
PG.8	38	X	X	X							
PG.9	38	X	X	X							
PG.10	36	X	X	X							
PG.11	36	DEL									
GUIDELINE 3:											
PG.1	35	X	X	X							
PG.2	41	X	X	X							
PG.3	38	X	X	X							
PG.4	36	X	X	X							
PG.5	38	X	X	X							
PG.6	35	X	X	X							
PG.7	35	X	X	X							
PG.8	38	X	X	X							
PG.9	38	X	X	X							
PG.10	35	X	X	X							
PG.11	35	DEL	X	X							
GUIDELINE 4:											
PG.1	41	X	X	X							
PG.2	36	X	X	X							
PG.3	41	X	X	X							
PG.4	35	X	X	X							
PG.5	36	X	X	X							
PG.6	38	X	X	X							
PG.7	38	X	X	X							
PG.8	35	X	X	X							
PG.9	35	DEL									
TABLE 1	38	X	X	X							
TABLE 2	35	X	X	X							
TABLE 3	38	X	X	X							

EMERGENCY CLASSIFICATION AND ACTIONS

TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
1.0	Purpose	1
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3.1	Provides Criteria	1
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EMERGENCY CLASSIFICATION AND ACTIONS

1.0 Purpose

The purpose of this procedure is to provide a method for rapid projection of estimated offsite radiation exposures as a result of a release of radioactive material, to provide the basis for classifying emergencies based on plant conditions and automatic dose calculations, to provide guidance for determining protective action recommendations, to provide guidelines for actions, and for notification guidance.

2.0 References

See Table 1.

3.0 General:

3.1 This procedure provides criteria for the classification of an emergency based on plant status and radiological hazards (i.e., direct radiation and inhalation hazards which may result from the passage of a cloud of radioactive material released from the plant).

3.2 Assessment of radioactive liquid releases will be made using the offsite Dose Calculation Manual.

3.3 Release time is defined as follows:

3.3.1 EDCM Calculations: The period of time from the most recent projection to the estimated time of release termination.

3.3.2 ODCM Calculations: The period of the release in which Technical Specification limits are exceeded.

3.4 Definitions:

TOTAL EFFECTIVE DOSE EQUIVALENT (TEDE)

means the sum of the deep dose equivalent (for external exposures) and the committed effective dose equivalent (for internal exposures).

DEEP DOSE EQUIVALENT (DDE)

which applies to external whole body exposure, is the dose equivalent at a tissue depth of 1 cm.

COMMITTED DOSE EQUIVALENT (CDE)

means the dose equivalent to organs or tissues of reference that will be received from an intake of radioactive material by an individual during the 50-year period following the intake.

COMMITTED EFFECTIVE DOSE EQUIVALENT (CEDE)

is the sum of the products of the weighting factors applicable to each of the body organs or tissues that are irradiated and the committed dose equivalent to these organs of tissues.

- 3.5 Protective action recommendation guidance is provided to aid in establishing protective action recommendations. The Emergency Director will exercise his own judgment in recommending protective actions to offsite agencies.
- 3.6 If steam generator water level falls below the break point during a steam generator tube rupture, off-site dose rate may be significantly higher (up to 10 times) due to volatilization of iodine.
- 3.7 Initial Notification or upgrade should be made from the Control Room or TSC. It is not necessary to transfer the information to the EOF to make the upgrade notification. The EOF, if staffed, should be informed as soon as possible.
- 3.8 Communication guidance for making the initial notification is on side 2 of the Emergency Notification Form, Figure 6 of this procedure.
- 3.9 Guidance for when the emergency response facilities should be manned and the level of manning required is included in Table 2. It is recommended that the TSC and the EOF be fully staffed initially at the ALERT level. If the full staff is not required, individuals can be released on a case-by-case basis.
- 3.10 At the NOUE level or below, it may be desirable to partially staff the TSC in order to relieve the Control Room staff of offsite communications and notifications. FNP-0-EIP-6.0 provides a listing of positions that should be considered for partial TSC activation.
- 3.11 EIP-6, Figure 3, provides a list of information that should be considered when updating plant staff over the public address system.

- 4.0 Classify emergency based on the most severe plant conditions OR projected off-site dose/dose rate conditions, WHICHEVER results in the higher emergency classification. Figure 2 provides a flowpath for dose assessment methods and plant conditions criteria.
- 4.1 Plant Conditions
While performing the remainder of step 4.1, have the Shift Radio Chemist (SRC) commence performing the calculations for dose assessment per step 4.2. Use the following guidelines to determine the highest indicated emergency classification based on plant conditions:
- Guideline 1, Section I, General Emergency Classification Criteria
- Guideline 2, Section I, Site Area Emergency Classification Criteria
- Guideline 3, Section I, Alert Criteria
- Guideline 4, Section I, NOUE Criteria
- 4.2 Dose Assessment

CAUTION: DOSE CALCULATIONS FROM EIP-9.1 OR EIP-9.3 ARE NOT TO BE USED TO DECLARE A NOUE OR ALERT SINCE EIP-9.1 AND EIP-9.3 ARE BASED ON EDCM METHODOLOGY, AND NOUE AND ALERT LIMITS ARE BASED ON ODCM METHODOLOGY.

NOTE: Due to the differences in the met data used for EDCM and ODCM calculations, the following sequence of step 4.2 substeps must be followed. The Top Down approach must be used for dose assessment (OR 99595).

NOTE: EDCM dose assessment can only be done from an ERDS terminal or a MIDAS terminal. The only location in the power block where these terminals are available is in the TSC.

NOTE: All of the step 4.2 substeps will normally be accomplished by the SRC with the exception of steps 4.2.8 and 4.2.11. Steps 4.2.8 and 4.2.11 must be performed by the Shift Supervisor or Emergency Director.

- 4.2.1 For initial dose assessment from the TSC, proceed to step 4.2.4.
- 4.2.2 For dose assessment from the EOF or long term dose assessment from the TSC, go to EIP-9.3, PERSONNEL COMPUTER-AUTOMATED DOSE ASSESSMENT and perform dose assessment using the MIDAS program.

Return to step 4.2.8 for evaluation of dose information and continue with step 4.2.9.

- 4.2.3 If the MIDAS program is inoperable, then for dose assessment from the EOF or from the TSC, go to EIP-9.1, AUTOMATED DOSE ASSESSMENT and perform dose assessment using the ARDA program to obtain dose information. Return to step 4.2.8 for evaluation of dose information and continue with step 4.2.9.
- 4.2.4 If ARDA is operable and has been automatically activated, then go to EIP-9.1, AUTOMATED DOSE ASSESSMENT and perform dose assessment using the ARDA program to obtain dose information. Return to step 4.2.8 for evaluation of dose information and continue with step 4.2.9.
- 4.2.5 If the AUTOMATED DOSE ASSESSMENT system per EIP 9.1 is operable, has not automatically activated, and one of the following rad monitors has alarmed:
- R-29
 - R-15C
 - R-60 A, B, C, or D
 - R-14
 - R-21
 - R-22

Then go to EIP-9.1, AUTOMATED DOSE ASSESSMENT, manually start ARDA and perform dose assessment using the ARDA program to obtain dose information. Return to step 4.2.8 for evaluation of dose information and continue with step 4.2.9.

- 4.2.6 If the ARDA system per EIP 9.1, AUTOMATED DOSE ASSESSMENT is NOT operable, then go to EIP-9.3, PERSONAL COMPUTER-AUTOMATED DOSE ASSESSMENT and perform dose assessment using the MIDAS program. Return to step 4.2.8 for evaluation of dose information and continue with step 4.2.9.
- 4.2.7 If the ARDA system per EIP 9.1 AUTOMATED DOSE ASSESSMENT is operable, has not automatically activated, and none of the alarms listed in step 4.2.5 have alarmed then go to EIP-9.5, EMERGENCY CLASSIFICATION BASED ON ODCM to perform dose assessment. Return to step 4.2.11 for evaluation of doserate information.

NOTE: Step 4.2.8 for evaluating the required emergency classification must be performed by the Shift Supervisor, Emergency Director in the Control Room or TSC, the DAD or Recovery Manager in the EOF.

- 4.2.8 Using the dose information obtained from EIP-9.1 or EIP-9.3, determine the highest indicated emergency classification from the "High Effluent" criteria in Guideline 1, Section I, or Guideline 2, Section I.

NOTE: If a General Emergency or site area emergency is indicated in the following step, the Shift Supervisor or the Emergency Director should consider directing long term dose assessment be performed from the TSC per step 4.2.2.

- 4.2.9 If a General Emergency or Site Area Emergency was indicated from step 4.2.8, then go to step 4.3.
- 4.2.10 If a General Emergency or Site Area Emergency was not indicated in step 4.2.8, then go to EIP-9.5, EMERGENCY CLASSIFICATION BASED ON ODCM. Return to step 4.2.11 for evaluation of dose rate information.

NOTE: Step 4.2.11 for evaluating the required emergency classification must be performed by the Shift Supervisor, Emergency Director in the Control Room or TSC, the DAD or Recovery Manager in the EOF.

- 4.2.11 Using the dose rate information obtained from EIP-9.5, determine the highest indicated emergency classification from the "High Effluent" criteria in Guideline 3, Section I, and Guideline 4, Section I.
- 4.3 Determine the correct emergency classification, the required protective action recommendations, and complete Figure 6. Do not wait for dose assessment results from step 4.2 to classify the event if plant conditions require an initial classification or an upgrade classification. As soon as a criteria for classification has been met, the event should be classified and an upgrade can be done later if required.

NOTE: THE EMERGENCY DECLARATION CANNOT BE MADE UNTIL THE REQUIRED PROTECTIVE ACTION RECOMMENDATIONS HAVE BEEN DETERMINED.

- 4.3.1 Compare the emergency classifications determined from steps 4.1 and 4.2 to determine the highest required emergency classification.

- 4.3.2 Using section L of the guideline for the highest emergency classification determined in step 4.3.1, determine the required protective action recommendations.
- 4.3.3 Declare the emergency and complete figure 6. The declaration time on line 6 and the approved time on line 16 are the same time. The transmitted time on line 3 is the time when starting to read the message over the ENN. EIP 8.3, step 15, may be used for guidance when completing figure 6, the emergency notification form.
- 5.0 Perform actions and initial notification to offsite authorities upon initial entry or upgrade into a classification using the applicable guideline:
- Guideline 1, Section II - General Emergency
- Guideline 2, Section II - Site Area Emergency
- Guideline 3, Section II - Alert
- Guideline 4, Section II - Notification of Unusual Event
- 6.0 Continue reassessment of emergency classification per step 4.0 or 7.0, as appropriate, and transmit follow-up message/periodic update message as follows:
- 6.1 Transmit Follow-up Messages:
- 6.1.1 Transmit a follow up message as soon as possible following an initial or upgrade notification. Refer to step 6.2 for time limits.
- 6.1.2 Use, if desired, EIP-8.3, Step 15, for guidance in completing and transmitting the "Emergency Message" for Follow Up/Periodic Update (Figure 6).
- 6.1.3 When performing dose assessment, transcribe dose information from the form being printed on a blank Figure 6 or use the form being printed. Fill in the remaining information. Transmit follow up message by telecopy.

NOTE: EFFORTS WILL BE MADE TO TRANSMIT FOLLOW-UP REPORTS EVERY HALF HOUR.

- 6.2 Transmit subsequent "Follow Up Message/Periodic Update Message" reports per one of the methods listed in steps 6.1.1 or 6.1.2.

- 6.2.1 At a minimum of once per hour. The hourly requirement may be waived while in a NOUE declaration, if this is agreed to by the state and local agencies.
 - 6.2.2 Following a significant change in dose rate that does not require a change in emergency classification.
 - 6.2.3 Following a significant change in plant conditions that does not require a change in emergency classification.
- 7.0 Downgrade or closeout an emergency classification after determining, through the use of the guidelines, that the current emergency classification is no longer required. FNP-0-EIP-28.0 will be used to downgrade or closeout an emergency class

GUIDELINE 1**GENERAL EMERGENCY****I. Criteria For Classification**

The classification of General Emergency applies to those events which are in progress or have occurred which involve actual or imminent substantial core degradation or melting with potential loss of containment integrity. The potential for release of radioactive material for the General Emergency classification is more than 1000 Ci of I-131 equivalent or more than 10^6 Ci of Xe-133 equivalent.

The purpose of the declaration of a General Emergency is to:

- (a) Initiate predetermined protective actions for the public.
- (b) Provide continuous assessment of information from licensee and offsite measurement.
- (c) Initiate additional measures as indicated by event releases or potential releases and,
- (d) Provide current information for and consultation with offsite authorities and the public.

A General Emergency would be declared for any of the following:

1.0 HIGH EFFLUENT

Projected exposure at site boundary or for projected peak dose location within the plume for EDCM calculation:

- (a) Greater than or equal to 1.0 REM (1000 MREM) TEDE exposure

OR

- (b) Greater than or equal to 5.0 REM (5000 MREM) thyroid CDE exposure

GUIDELINE 1**GENERAL EMERGENCY****2.0 FISSION PRODUCT BARRIERS**

2.1 Figure 8 may be used to help evaluate if Dose Equivalent I-131 (DEI) is > 300 $\mu\text{Ci}/\text{gram}$.

- Loss of two of three fission product barriers with a potential loss of the third. The following describe indication of loss of these boundaries:

(a) Fuel cladding damage indicated by:

1. RCS activity > 300 $\mu\text{Ci}/\text{gram}$ dose equivalent I-131.

OR

2. Loss of core geometry is indicated by ΔT between RCS wide range hot leg and cold leg temperature of $>64^\circ\text{F}$ and core exit temperature (incore thermocouples) reading greater than 1200°F .

(b) Loss of primary coolant boundary as indicated by:

1. Containment pressure reaching 27 psig **AND**
2. High containment radiation (R-2, R-22 and R-12, reaching their alarm setpoint) **AND**,
3. High containment humidity.

(c) Loss or potential loss of containment integrity is indicated by:

1. Containment pressure greater than 54 psig, **OR**
2. A rapid decrease in containment pressure, **OR**
3. Failure of the containment isolation system resulting in a direct path from containment to the environment.

(d) Other plant conditions exist, from whatever source, that make release of large amounts of radioactivity in a short time period possible, such as any core melt situation.

GUIDELINE 1

GENERAL EMERGENCY

3.0 SECURITY/EVACUATION

3.1 If the basis for declaring this emergency classification is based on security concerns then refer to table 3 prior to taking actions that will cause people to report to the site or change locations on site.

- Loss of physical control of the facility.

GUIDELINE 1

GENERAL EMERGENCY

II. Emergency Director Actions

NOTE: THE SHIFT SUPERVISOR SHALL PERFORM THE DUTIES OF THE EMERGENCY DIRECTOR UNTIL HIS ARRIVAL AND ASSUMPTION OF DUTIES.

The Emergency Director shall perform or direct the following:

NOTE: ACTIVATION OF THE TSC AND EOF STAFFS, PER STEPS E1 AND E2, SHOULD BE DONE IN PARALLEL WITH NOTIFICATION OF THE STATE AND LOCAL AGENCIES BY A SEPARATE INDIVIDUAL, NORMALLY THE SHIFT CLERK.

Initials

- ___ A. Sound the Plant Emergency Alarm, if not already sounded.
- ___ B. Announce the condition and give needed evacuation instructions over plant public address system.

NOTE: IF POSSIBLE AND TIME PERMITTING, CONFER WITH ARCD AND GEMA ABOUT THE PARs PRIOR TO ANNOUNCING THEM OVER THE ENN.

THE "APPROVED BY" TIME AND DATE (LINE 16, FIG. 6) AND THE "DECLARATION" TIME AND DATE (LINE 6, FIG. 6) SHOULD ALWAYS BE THE SAME TIME. THE TIME OF DECLARATION MUST BE AFTER THE EMERGENCY DIRECTOR HAS APPROVED THE EMERGENCY CLASSIFICATION AND PROTECTIVE ACTION RECOMMENDATIONS.

THE TRANSMITTAL TIME AND DATE (LINE 3, FIG. 6) SHOULD BE THE TIME THAT FIGURE 6 IS READ OVER THE ENN.

- ___ C. Fill in the emergency notification form (Fig. 6), including developing protective action recommendations per step L. Take into account the zones and evacuation time estimates shown in Figure 1.

CAUTION: FOR GENERAL EMERGENCY, BOTH STATE AND LOCAL AGENCIES ARE TO BE NOTIFIED.

GUIDELINE 1

GENERAL EMERGENCY

NOTE: INITIAL NOTIFICATION WILL NORMALLY BE MADE BY THE NON-AFFECTED UNIT SHIFT FOREMAN. NOTIFICATIONS CAN BE MADE BY AN EXTRA SHIFT SUPERVISOR, SHIFT FOREMAN, OPERATIONS SHIFT CLERK, TSC STAFF OR OTHER QUALIFIED PERSON USING FIGURE 6.

INITIAL AND UPGRADE NOTIFICATIONS AND CLASSIFICATIONS SHOULD BE DONE FROM THE CONTROL ROOM OR THE TSC, WITH THE EOF INFORMED AS SOON AS POSSIBLE.

___ D. Initial Notifications

Using the ENN, notify the following state and local agencies, using Figure 6 (Emergency Notification) within 15 minutes. EIP-8.3, step 15, may be used as guidance if required. If at least one agency in each state (state level preferred) and one agency in each county has not acknowledged in 10 minutes, THEN notify at least one agency in any state or county that has not acknowledged, using the telephone numbers on Figure 6, or in EIP-8.1, steps 12 or 13.

Verify notifications complete and documented on the Emergency Notification form (Fig 6, side 2).

NOTE: PERFORM THE FOLLOWING STEPS IN PARALLEL TO THE MAXIMUM EXTENT POSSIBLE.

E. Emergency Organization Notifications

NOTE: STEPS E.1 AND E.2, NOTIFYING THE TSC AND EOF STAFF, WILL NORMALLY BE ACCOMPLISHED BY HAVING THE SHIFT CLERK OR OTHER QUALIFIED INDIVIDUAL ACTIVATE THE COMMUNITY ALERT NETWORK (CAN) PER FNP-0-EIP-8.3, TABLE 2, AND STEP 11.

- ___ 1. TSC Staff (full activation required)
- ___ 2. EOF Staff (full activation required)
- ___ 3. On-call Emergency Director
- ___ 4. On-call Recovery Manager

GUIDELINE 1**GENERAL EMERGENCY**

___ 5. Emergency Support Manager

___ 6. Notify Security of Emergency, incoming personnel, access restrictions and to setup the EOF (pax 4611).

F. Other Notifications

___ 1. NRC (Perform immediately after state notification and within one hour of declaration per Figure 6, side 2).

___ 2. Have Regulatory ERDS activated to transmit data to the NRC within one hour of the declaration of the emergency (EIP-8-3, step 10).

___ 3. If personnel injury or fire is involved, refer to FNP-0-EIP-11.0 and 13.0 respectively for additional actions and EIP-8.0 steps 5.0 and 6.0 for additional notification requirements.

___ 4. U.S. Army EOD group at Fort Benning, GA, if necessary.

___ 5. Savannah River Operations Office, if necessary.

G. In Plant Protective Actions

___ 1. Ensure personnel accountability per EIP-10.0.

___ 2. Plan and initiate reentry's per EIP-14.0.

___ 3. Ensure proper Control Room response.

___ 4. Assign an individual to provide periodic plant status updates.

___ 5. Assign an individual to maintain a log of important Emergency Director activities.

___ 6. Assign an individual to keep a record of all off-site communications.

H. Off-Site Support

___ 1. Ensure Radiation Monitoring teams have been dispatched per EIP-4.0.

___ 2. Provide information to the Recovery Manager for use in press releases and recovery planning.

GUIDELINE 1

GENERAL EMERGENCY

I. Information to Off Site Authorities

- _____ 1. Provide periodic plant status updates, meteorological and dose estimates and release projections based on plant conditions and foreseeable contingencies.

J. Re-Assess plant conditions

- _____ 1. Continue to assess plant and radiological conditions to ensure the correct emergency classification is declared.
- _____ 2. If plant and radiological conditions no longer require the current emergency classification downgrade or close out the emergency class using FNP-0-EIP-28.0.

K. Long term staffing

- _____ 1. Within 8 hours, provide for full TSC and OSC reliefs.
- _____ 2. Within 16 hours, provide for 24 hour TSC and OSC coverage.

L. Protective action recommendation guidance

CAUTION 1 THE PROTECTIVE ACTION RECOMMENDATION SECTION OF THE EMERGENCY NOTIFICATION FORM (FIGURE 6) MUST BE COMPLETED FOR ALL INITIAL AND FOLLOWUP MESSAGES.

CAUTION 2 RECOMMENDATIONS OF A PARTIAL EVACUATION OR SHELTERING OF A ZONE IS NOT ALLOWED.

CAUTION 3 IF BOTH PLANT CONDITIONS AND DOSE PROJECTION INDICATE THAT CRITERIA FOR A GENERAL EMERGENCY ARE MET, PROTECTIVE ACTION RECOMMENDATIONS LISTED IN SECTION 1 AND 2 SHALL BE CONSIDERED, OTHERWISE ONLY THE APPROPRIATE SECTION SHOULD BE USED.

NOTE 1 RECOMMENDATIONS SHOULD SPECIFY EVACUATION DISTANCES 2 MILES, 5 MILES, OR 10 MILES, AND SPECIFIC EVACUATION ZONES.

NOTE 2 WHEN SPECIFYING EVACUATION ZONES, CONSIDERATION SHOULD BE GIVEN TO SECTION ADJACENT TO THE PLUME LOCATION.

GUIDELINE 1**GENERAL EMERGENCY**

- NOTE 3 WIND VARIABILITY SHOULD BE CONSIDERED WHEN SELECTING THE WIDTH OF EVACUATION ZONES.**
- NOTE 4 EVACUATION TIME ESTIMATES INDICATED ON FIGURE 1 FOR THE EFFECTED ZONES SHOULD BE CONSIDERED WHEN MAKING EVACUATION RECOMMENDATIONS.**
- NOTE 5 CONTINUE TO ASSESS PROTECTIVE ACTION RECOMMENDATIONS AND MODIFY AS NECESSARY.**
- NOTE 6 ONLY THE PROTECTIVE ACTIONS SPECIFIED BY PLANT PROCEDURES SHOULD BE RECOMMENDED, UNLESS THERE ARE OBVIOUS RELEVANT FACTORS (E.G., SEVERE NATURAL PHENOMENA) THAT PROBABLY WERE NOT ANTICIPATED WHEN THE PARS WERE DEVELOPED, AND THAT WOULD MAKE THE STANDARD PAR RECOMMENDATIONS IMPRACTICAL OR OBVIOUSLY NON-CONSERVATIVE. IN SUCH EVENTS, THE EMERGENCY DIRECTOR SHOULD USE HIS OWN JUDGMENT AS APPROPRIATE.**

CAUTION: IF THE EMERGENCY CLASSIFICATION IS BASED ON DOSE PROJECTIONS, THE RECOMMENDATIONS OF STEP 2 ON THE FOLLOWING PAGE SHOULD BE USED.

1. Use the recommendations below if the Emergency Classification is based solely on Plant Conditions and not on dose projections:

Recommendations

- a. **EVACUATE AND CONTROL ACCESS IN DOWNWIND ZONES**

Recommend immediate evacuation for all of the general population and controlling access within a two mile radius of FNP (Zone A) and 5 miles downwind of FNP (Zones B-5,C-5,...K-5) (When evacuating 5 mile downwind zones, disregard portions of the 10 mile zones, D-10 through G10 and I-10 through K-10, which fall within 5 miles of FNP).

GUIDELINE 1**GENERAL EMERGENCY****b. SHELTER AND CONTROL ACCESS IN DOWNWIND ZONES**

Recommend immediate sheltering of the general population and controlling access in the 10 mile downwind zones(B-10,C-10,...K-10), unless more extensive protective actions are known to be required.

2. Use the recommendations below if the Emergency Classification is based on dose projections:

Recommendations:**a. EVACUATE AND CONTROL ACCESS IN DOWNWIND ZONES**

Recommend immediate evacuation for all of the general population and controlling access within a two mile radius of FNP (Zone A) and 5 miles downwind of FNP (Zones B-5,C-5,...K-5) (When evacuating 5 mile downwind zones, disregard portions of the 10 mile zones, D-10 through G10 and I-10 through K-10, which fall within 5 miles of FNP).

b. SHELTER AND CONTROL ACCESS IN DOWNWIND ZONES

Recommend immediate sheltering of the general population and controlling access in the 10 mile downwind zones (B-10,C-10,...K-10), unless more extensive protective actions are known to be required.

c. Recommend locating and evacuating hot spots.

d. Recommend implementing control of food and water supplies pending sampling and analysis and possible confiscation in certain areas.

e. Recommend monitoring of environmental radiation levels.

f. Recommend to consider evacuation of children and pregnant women.

GUIDELINE 2**SITE AREA EMERGENCY****I. Criteria For Classification**

The classification of Site Area Emergency applies to those events which are in progress or have occurred involving actual or likely major failures of plant functions needed for protection of the public from radiation or contamination. The potential for release of radioactive material for the Site Area Emergency classification is up to 1000 Ci of I-131 equivalent, or 10^4 to 10^6 Ci of Xe-133 equivalent. The purpose of the declaration of a Site Area Emergency is to:

- (a) Assure that response centers are manned,
- (b) Assure that monitoring teams are dispatched,
- (c) Assure that personnel involved in an evacuation effort of near site areas are at their duty stations if the situation worsens, and,
- (d) Provide current information for and consultation with offsite authorities and the public.
- (e) A Site Area Emergency would be declared for plant conditions that warrant activation of emergency centers and monitoring teams.

A Site Area Emergency would be declared for any of the following:

1.0 RCS FAULT

- A major loss of primary coolant as indicated by:
 - (a) Decreasing pressurizer pressure and possible level, **AND**
 - (b) Near normal steam pressure in all steam generators accompanied by,
 - (1) Containment pressure reaching 27 psig, **AND**
 - (2) High containment radiation (R-2, R-11, and R-12 reaching their alarm setpoint), **AND**
 - (3) High containment sump (recirculation) level **AND**
 - (4) High containment humidity.

GUIDELINE 2**SITE AREA EMERGENCY**

- Rupture of a control rod mechanism housing as indicated by the following:
 - (a) Rod position indication, **AND**
 - (b) High RCS pressure surge, **AND**
 - (c) Momentary nuclear power surge, **AND**
 - (d) Subsequent behavior indicating a loss of primary coolant.

2.0 SG FAULT OR RUPTURE

- A loss of offsite power and a steam generator tube rupture as indicated by:
 - (a) ECCS actuation, **AND**
 - (b) High secondary coolant activity (R-15 or R-19 reach full scale)
 - Greater than 50 gpm primary to secondary leak, fuel damage as evidenced by a reactor coolant activity greater than technical specifications, and a steam line break outside containment as indicated by:
 - (a) Abnormally low steam pressure on one or all steam generators with **one or more** of the following:
 - (1) Steam line high flow,
 - (2) Steam line high differential pressure,
 - (3) Steam flow greater than feed flow
- AND**
- (b) **No** abnormal temperature or humidity increase in containment,

GUIDELINE 2SITE AREA EMERGENCY**3.0 DEGRADED CORE/FUEL FAULT**

- 3.1 Figure 8 may be used to help evaluate if Dose Equivalent I-131 (DEI) is > 300 $\mu\text{Ci}/\text{gram}$.
- RCS activity > 300 $\mu\text{Ci}/\text{gram}$ dose equivalent I-131 with potential excessive RCS leakage or potential loss of containment.
 - Degraded core conditions with possible loss of core geometry as indicated by:
 - (a) ΔT between RCS wide range hot leg and cold leg temperature >64°F and core exit temperature (in core thermocouples) reading greater than 800°F and increasing, OR
 - (b) Core exit temperature (in core thermocouples) >1200°F.
 - Spent fuel handling accident for which sampling or radiation monitors indicate a projected lower limit of offsite individual exposure to be:
100 mrem (.1 rem) TEDE OR
500 mrem (.5 rem) thyroid CDE
As a result of one of the following:
 - (a) Dropped spent fuel assembly, OR
 - (b) An object is dropped onto a spent fuel assembly, OR
 - (c) A cask containing a spent fuel assembly is dropped exposing the assembly, OR
 - (d) A spent fuel assembly is deformed as a result of any manipulation, OR
 - (e) Spent fuel pool water level below top of assemblies.

GUIDELINE 2

SITE AREA EMERGENCY

4.0 HIGH EFFLUENT

- Projected exposure at site boundary or projected peak dose location within the plume for EDCM calculation:
 - (a) Greater than or equal to 100 mrem (.1 rem) TEDE exposure

OR

- (b) Greater than or equal to 500 mrem (.5 rem) thyroid CDE exposure

5.0 EQUIPMENT/STRUCTURE FAILURE

- Loss of functions for achieving hot standby.
- Transients requiring operation of shutdown systems with failure to trip (continued power generation but no core damage immediately evident).

6.0 ELECTRICAL/INSTRUMENTATION FAULT

- Loss of offsite power with a failure of all emergency AC power for more than 15 minutes.
- Loss of both trains of auxiliary building DC power for more than 15 minutes.
- Loss of all main control board annunciator capability for more than 15 minutes while:
 - (a) Plant is not in cold shutdown, OR
 - (b) Significant plant transient is initiated while all alarms lost.

GUIDELINE 2**SITE AREA EMERGENCY****7.0 SITE HAZARDS**

- A fire affecting ECCS.
- Severe natural phenomena being experienced or projected with plant not in cold shutdown:
 - (a) Earthquake greater than SSE levels
 - (b) Flood, low river water, or hurricane surge greater than design levels.
 - (c) Winds in excess of 115 mph.
- Other hazards being experienced with the plant not in cold shutdown as follows:
 - (a) Aircraft crash affecting vital structures by fire or impact, **OR**
 - (b) Severe damage to safe shutdown equipment from missiles or explosion, **OR**
 - (c) Entry of toxic or flammable gases into vital areas(s)

8.0 SECURITY/EVACUATION

- 8.1 If the basis for declaring this emergency classification is based on security concerns, then refer to table 3 prior to taking actions that will cause people to report to the site or change locations on site.
- Imminent loss of physical control of the plant (i.e., takeover by terrorists, anti-nuclear factions, etc.).
 - Evacuation of the control room and control of shutdown systems not established from local stations in 15 minutes.

GUIDELINE 2

SITE AREA EMERGENCY

II. Emergency Director Actions

NOTE: THE SHIFT SUPERVISOR SHALL PERFORM THE DUTIES OF THE EMERGENCY DIRECTOR UNTIL HIS ARRIVAL AND ASSUMPTION OF DUTIES.

The Emergency Director shall perform or direct the following:

NOTE: ACTIVATION OF THE TSC AND EOF STAFFS, PER STEPS E1 AND E2 SHOULD BE DONE IN PARALLEL WITH NOTIFICATION OF THE STATE AND LOCAL AGENCIES BY A SEPARATE INDIVIDUAL, NORMALLY THE SHIFT CLERK.

Initials

- ___ A. Sound the Plant Emergency Alarm, if not already sounded.
- ___ B. Announce the condition and give needed evacuation instructions over plant public address system.

NOTE: THE "APPROVED BY" TIME AND DATE (LINE 16, FIG. 6) AND THE "DECLARATION" TIME AND DATE (LINE 6, FIG. 6) SHOULD ALWAYS BE THE SAME TIME. THE TIME OF DECLARATION MUST BE AFTER THE EMERGENCY DIRECTOR HAS APPROVED THE EMERGENCY CLASSIFICATION AND PROTECTIVE ACTION RECOMMENDATIONS.

THE TRANSMITTAL TIME AND DATE (LINE 3, FIG. 6) SHOULD BE THE TIME AT WHICH FIGURE 6 IS READ OVER THE ENN.

- ___ C. Fill in the emergency notification form (FIG 6), including developing protective action recommendations per step L. Take into account the zones and evacuation time estimates shown in figure 1.

NOTE: INITIAL NOTIFICATION WILL NORMALLY BE MADE BY THE NON-AFFECTED UNIT SHIFT FOREMAN. NOTIFICATIONS CAN BE MADE BY AN EXTRA SHIFT SUPERVISOR, SHIFT FOREMAN, OPERATIONS SHIFT CLERK, TSC STAFF OR OTHER QUALIFIED PERSON USING FIGURE 6.

NOTE: INITIAL AND UPGRADE NOTIFICATIONS AND CLASSIFICATIONS SHOULD BE DONE FROM THE CONTROL ROOM OR THE TSC, WITH THE EOF INFORMED AS SOON AS POSSIBLE.

GUIDELINE 2**SITE AREA EMERGENCY****___ D. Initial Notifications**

Using the ENN, notify at least one agency in each state (state level preferred) within 15 minutes using Figure 6 (Emergency Notification). EIP 8.3, step 15, may be used as guidance if required. If at least one agency in each state (state level preferred) has not acknowledged in 10 minutes, THEN notify at least one agency in any state that has not acknowledged, using the telephone numbers on Figure 6, or in EIP 8.1, steps 12 or 13.

Verify notifications complete and documented on the Emergency Notification form (fig 6, side 2).

NOTE: PERFORM THE FOLLOWING STEPS IN PARALLEL TO THE MAXIMUM EXTENT POSSIBLE.

E. Emergency Organization Notifications

NOTE: TABLE 2 PROVIDES GUIDANCE AS TO THE REQUIRED LEVEL OF ACTIVATION OF THE TSC AND EOF. FULL ACTIVATION INITIALLY IS RECOMMENDED, THEN USE TABLE 2 FOR GUIDANCE IN DOWNSIZING.

STEPS E1 AND E2, NOTIFYING THE TSC AND EOF STAFF WILL NORMALLY BE ACCOMPLISHED BY HAVING THE SHIFT CLERK OR OTHER QUALIFIED INDIVIDUAL ACTIVATE THE COMMUNITY ALERT NETWORK (CAN) PER FNP-0-EIP-8.3, TABLE 2 AND STEP 11).

- ___ 1. TSC Staff (full activation recommended initially)
- ___ 2. EOF Staff (full activation recommended initially)
- ___ 3. On-call Emergency Director
- ___ 4. On-call Recovery Manager
- ___ 5. Emergency Support Manager
- ___ 6. Notify Security of Emergency, incoming personnel, access restrictions and to setup the EOF (pax 4611).

GUIDELINE 2**SITE AREA EMERGENCY****F. Other Notifications**

- 1. NRC (Perform immediately after state notification and within one hour of declaration per figure 6, side 2.)
- 2. Have Regulatory ERDS activated to transmit data to the NRC within one hour of the declaration of the emergency (EIP 8.3, step 10).
- 3. If personnel injury or fire is involved, refer to FNP-0-EIP-11.0 and 13.0 respectively for additional actions and EIP-8.0 steps 5.0 and 6.0 for additional notifications.
- 4. U.S. Army EOD group at Fort Benning, GA, if necessary.
- 5. Savannah River Operations Office, if necessary.

G. In Plant Protective Actions

- 1. Ensure personnel accountability per EIP-10.0.
- 2. Plan and initiate reentries per EIP-14.0.
- 3. Ensure proper Control Room response.
- 4. Assign an individual to provide periodic plant status updates.
- 5. Assign an individual to maintain a log of important Emergency Director activities.
- 6. Assign an individual to keep a record of all off site communications.

H. Off Site Support

- 1. Ensure Radiation Monitoring teams have been dispatched per EIP-4.0.
- 2. Provide information to the Recovery Manager for use in press releases and recovery planning.

GUIDELINE 2

SITE AREA EMERGENCY

I. Information to Off Site Authorities

- ___ 1. Provide periodic plant status updates, meteorological and dose estimates and release projections based on plant conditions and foreseeable contingencies.

J. Re-Assess plant conditions

- ___ 1. Continue to assess plant and radiological conditions to ensure the correct emergency classification is declared.
- ___ 2. If a higher emergency classification is required immediately go to the appropriate guideline.
- ___ 3. If plant and radiological conditions no longer require the current emergency classification downgrade or close out the emergency class using FNP-0-EIP-28.0.

K. Long term staffing

- ___ 1. Within 8 hours, provide for full TSC and OSC reliefs.
- ___ 2. Within 16 hours, provide for 24 hour TSC and OSC coverage.

L. Protective action recommendation guidance

CAUTION 1: THE PROTECTIVE ACTION RECOMMENDATION SECTION OF THE EMERGENCY NOTIFICATION FORM (FIGURE 6) MUST BE COMPLETED FOR ALL INITIAL AND FOLLOWUP MESSAGES.

NOTE 1: CONTINUE TO ASSESS PROTECTIVE ACTION RECOMMENDATIONS AND MODIFY AS NECESSARY.

GUIDELINE 2

SITE AREA EMERGENCY

NOTE 2: ONLY THE PROTECTIVE ACTIONS SPECIFIED BY PLANT PROCEDURES SHOULD BE RECOMMENDED, UNLESS THERE ARE OBVIOUS RELEVANT FACTORS (E.G., SEVERE NATURAL PHENOMENA) THAT WERE PROBABLY NOT ANTICIPATED WHEN THE PARs WERE DEVELOPED, AND THAT WOULD MAKE THE STANDARD PAR RECOMMENDATIONS IMPRACTICAL, OR OBVIOUSLY NON-CONSERVATIVE. IN SUCH EVENTS, THE EMERGENCY DIRECTOR SHOULD USE HIS OWN JUDGMENT AS APPROPRIATE.

1. Protective Action Recommendations are not required; however, they may (at the discretion of the Emergency Director) be made as a precautionary measure, depending on the severity of the plant condition or if the site boundary dose is approaching the General Emergency limit. Refer to note 2 above.

If it is determined that PARs are required then use the guidance of Guideline 1, Section L when making the recommendations

GUIDELINE 3**ALERT****I. Criteria For Classification**

The classification of Alert applies to situations in which events are in process or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant. The potential for release of radioactive material for the Alert classification is up to 10 curies of I-131 equivalent, or up to 10^4 curies of Xe-133 equivalent. The purpose of offsite alert is to assure that emergency personnel are readily available to respond if the situation becomes more serious or to perform confirmatory radiation monitoring, if required, and to provide offsite authorities current status information for possible further action.

- (a) An Alert would be declared for plant conditions that warrant precautionary activation of the technical support center, operations support centers, and the emergency operations facility (at the discretion of the Recovery Manager).

An Alert would be declared for any of the following:

1.0 RCS FAULT

- A primary coolant leak greater than 50 gpm. Indications of such a leak will include high charging flow **AND**
 - (a) High containment radiation (R 2, R 22, and R 12) **AND**
 - (b) High containment humidity
- **OR**
 - (c) Pressurizer relief or safety valve discharge line temperature high **AND**
 - (d) Pressurizer relief tank level, pressure or temperature increasing or above normal.
- Single rod cluster control assembly withdrawal at power as detected by:
 - (a) Rod position indicator, **AND**
 - (b) Increasing core power, **AND**
 - (c) Increasing Tavg.

GUIDELINE 3**ALERT****2.0 SG FAULT OR RUPTURE**

- Steam generator tube rupture indicated by:
 - (a) ECCS actuation, **AND**
 - (b) High secondary coolant activity (R-15, R-19, R-23A, or R-23B reach full scale).

- Greater than 10 gpm primary to secondary leak as indicated by high secondary coolant activity (R-15, R-19, R-23A, or R-23B alarming) **WITH** a steam line break outside containment indicated by:
 - (a) Abnormally low steam pressure on one or all steam generators with one or more of the following:
 - (1) Steam line high flow, **OR**
 - (2) Steam line high differential pressure, **OR**
 - (3) Steam flow greater than feedwater flow

 - AND**
 - (b) No abnormal temperature, or humidity increase in containment.

- A steam or feed line break inside containment as indicated by abnormally low pressure on one steam generator with the following:
 - (a) Steam line high differential pressure, **OR**
 - (b) Steam flow greater than feed flow, **OR**
 - (c) Steam line high flow, **AND**
 - (d) Containment high temperature.

GUIDELINE 3**ALERT****3.0 DEGRADED CORE/FUEL FAULT**

- 3.1 Figure 8 may be used to help evaluate if Dose Equivalent I-131 (DEI) is > 300 $\mu\text{Ci}/\text{gram}$:
- Severe loss of fuel cladding as indicated by a reactor coolant activity equal to or greater than 300 $\mu\text{Ci}/\text{gram}$ equivalent I-131.
 - Spent fuel handling accident in which an increase in radiation level (i.e., alarm condition or off scale reading) is observed on R-2, R-11, R-12, R-5, **OR** R-25 as a result of one of the following:
 - (a) Dropped spent fuel assembly, **OR**
 - (b) An object is dropped onto a spent fuel assembly, **OR**
 - (c) A cask containing a spent fuel assembly is dropped, **OR**
 - (d) A spent fuel assembly is deformed as a result of any manipulation, **OR**
 - (e) Low spent fuel pool water level.

4.0 HIGH EFFLUENT

- Radiological effluent at the site boundary (combined effect from both units) greater than 10 times the radiological technical specification instantaneous limits (based on ODCM) as follows, per EIP-9.5:
 - (a) Liquids: 10 times 10CFR20 Appendix B, Table 2, Column 2
 - (b) Liquids: Dissolved or entrained noble gases: 0.001 mCi/ml
 - (c) Noble gases (whole body) 5.7E-4 Rem/hr (5.7E-1 mrem/hr)
 - (d) Noble gases (skin): 3.4E-3 Rem/hr (3.4 mrem/hr)
 - (e) Airborne radioiodine and particulates other than noble gases: 1.7E-3 Rem/hr (1.7 mrem/hr)

GUIDELINE 3**ALERT**

- High radiation levels or high airborne contamination indicative of a severe degradation in the control of radioactive materials as indicated by:

(a) Readings on R-14 (stack gas monitor), R-21 (stack particulate monitor) **OR** R-22 (stack gas monitor) reading off scale,

AND

(b) Sampling or R-27 high range containment monitor confirms direct readings.

5.0 EQUIPMENT/STRUCTURE FAILURE

- Loss of:
 - (a) All auxiliary feedwater (Modes 1-3), **OR**
 - (b) Both trains of RHR (All modes), **OR**
 - (c) Both trains of CCW (Modes 1-4), **OR**
 - (d) Both trains of Service Water (Modes 1-4)
- Failure of the reactor protection system to initiate and complete a trip which brings the reactor subcritical.

6.0 ELECTRICAL/INSTRUMENTATION FAULT

- Loss of offsite power with a failure of all emergency AC power for less than 15 minutes.
- Loss of both trains of auxiliary building DC power for less than 15 minutes.
- Loss of all main control board annunciator capability.

GUIDELINE 3**ALERT****7.0 SITE HAZARDS**

- Severe natural phenomena being experienced or projected as follows:
 - (a) Earthquake greater than OBE levels. (ARP-1.12 LOC MK5)
 - (b) Flood, low river water or hurricane surge near design levels that could impact plant operations.
 - (c) Any tornado striking facility
 - (d) Hurricane winds near design basis level (115 mph)
- Hazards experienced onsite which affect plant operation such as
 - (a) Aircraft crash
 - (b) Release of toxic gas
 - (c) Release of flammable gas
- Fire or explosion potentially affecting ECCS

8.0 SECURITY/EVACUATION

- 8.1 If the basis for declaring this emergency classification is based on security concerns, then refer to Table 3 prior to taking actions that will cause people to report to the site or change locations on site.
- A security emergency involving the occurrence of or imminent threat of sabotage.
 - Evacuation of control room anticipated or required with control of shutdown systems established from local stations.

GUIDELINE 3

ALERT

II. Emergency Director Actions

NOTE: THE SHIFT SUPERVISOR SHALL PERFORM THE DUTIES OF THE EMERGENCY DIRECTOR UNTIL HIS ARRIVAL AND ASSUMPTION OF DUTIES.

Initials

The Emergency Director shall perform or direct the following:

NOTE: ACTIVATION OF THE TSC AND EOF STAFFS PER STEPS E1 AND E2 SHOULD BE DONE IN PARALLEL WITH NOTIFICATION OF THE STATE AND LOCAL AGENCIES BY A SEPARATE INDIVIDUAL, NORMALLY THE SHIFT CLERK.

- ___ A. Announce the condition and give needed evacuation instructions over plant public address system.
- ___ B. Evacuate affected areas of the plant as appropriate.
- ___ C. Fill in the emergency notification form (FIG 6), including developing protective action recommendations per step L. Take into account the zones and evacuation time estimates shown in figure 1.

GUIDELINE 3ALERT

NOTE: INITIAL NOTIFICATION WILL NORMALLY BE MADE BY THE NON-AFFECTED UNIT SHIFT FOREMAN. NOTIFICATIONS CAN BE MADE BY AN EXTRA SHIFT SUPERVISOR, SHIFT FOREMAN, OPERATIONS SHIFT CLERK, TSC STAFF OR OTHER QUALIFIED PERSON USING FIGURE 6.

NOTE: INITIAL AND UPGRADE NOTIFICATIONS AND CLASSIFICATIONS SHOULD BE DONE FROM THE CONTROL ROOM OR THE TSC, WITH THE EOF INFORMED AS SOON AS POSSIBLE.

___ D. Initial Notifications

1. **IF** an ALERT was declared due to radiological effluents greater than or equal to ALERT limits which are 10 times Technical Specification limits, **THEN** enter the following information on the Emergency Notification form (figure 6, line 7):
 - a. ODCM site boundary dose rates from EIP-9.5.
 - and
 - b. The following note:

"Dose rate at site boundary has been calculated using the ODCM as required by the FNP Technical Specification. EDCM calculation is not appropriate."
2. Using the ENN, notify within 15 minutes at least one agency in each state (state level preferred), utilizing Figure 6 (Emergency Notification). EIP-8.3, step 15, may be used as guidance if required. **IF** at least one agency in each state (state level preferred) has not acknowledged within 10 minutes, **THEN** notify at least one agency in any state that has not acknowledged, using the telephone numbers in Figure 6 or in EIP-8.1, steps 12 or 13.

Verify notifications complete and documented on the Emergency Notification form (fig 6, side 2)

GUIDELINE 3**ALERT**

NOTE: PERFORM THE FOLLOWING STEPS IN PARALLEL TO THE MAXIMUM EXTENT POSSIBLE.

E. Emergency Organization Notifications

NOTE: TABLE 2 PROVIDES GUIDANCE AS TO THE REQUIRED LEVEL OF ACTIVATION FOR THE TSC AND EOF. FULL ACTIVATION INITIALLY IS RECOMMENDED, THEN USE TABLE 2 FOR GUIDANCE IN DOWNSIZING.

STEPS E.1 AND E.2, NOTIFYING THE TSC AND EOF STAFF, WILL NORMALLY BE ACCOMPLISHED BY HAVING THE SHIFT CLERK OR OTHER QUALIFIED INDIVIDUAL ACTIVATE THE COMMUNITY ALERT NETWORK (CAN) PER FNP-0-EIP-8.3, TABLE 2 AND STEP 11.

- ___ 1. TSC Staff (full activation recommended initially)
- ___ 2. EOF Staff (full activation recommended initially)
- ___ 3. On-call Emergency Director
- ___ 4. On-call Recovery Manager
- ___ 5. Emergency Support Manager
- ___ 6. Notify Security of Emergency, incoming personnel, access restrictions and to setup the EOF (PAX 4611)

F. Other Notifications

- ___ 1. NRC (Perform immediately after state notification and within one hour of declaration per figure 6, side 2)
- ___ 2. Have Regulatory ERDS activated to transmit data to the NRC within one hour of the declaration of the emergency (EIP-8.3, step 10)
- ___ 3. If personnel injury or fire is involved, refer to FNP-0-EIP-11.0 and 13.0 respectively for additional actions and EIP-8.0 steps 5.0 and 6.0 for additional notifications

GUIDELINE 3

ALERT

- ___ 4. U.S. Army EOD group at Fort Benning, GA, if necessary
- ___ 5. Savannah River Operations Office, if necessary

G. In Plant Protective Actions

- ___ 1. Ensure personnel accountability per EIP-10.0, if any areas of the plant were evacuated due to hazardous conditions
- ___ 2. Plan and initiate re-entries per EIP-14.0, if any areas of the plant were evacuated due to hazardous conditions
- ___ 3. Ensure proper Control Room response
- ___ 4. Assign an individual to provide periodic plant status updates
- ___ 5. Assign an individual to maintain a log of important Emergency Director activities
- ___ 6. Assign an individual to keep a record of all off site communications

H. Off Site Support

- ___ 1. Ensure Radiation Monitoring teams have been dispatched per EIP 4.0.
- ___ 2. Provide information to the Recovery Manager for use in press releases and recovery planning

I. Information to Off Site Authorities

- ___ 1. Provide periodic plant status updates, meteorological and dose estimates and release projections based on plant conditions and foreseeable contingencies.

GUIDELINE 3

ALERT

J. Re-Assess plant conditions

- ___ 1. Continue to assess plant and radiological conditions to ensure the correct emergency classification is declared.
- ___ 2. If a higher emergency classification is required immediately go to the appropriate guideline
- ___ 3. If plant and radiological conditions no longer require the current emergency classification downgrade or close out the emergency class using FNP-0-EIP-28.0.

K. Long term staffing

- ___ 1. Within 8 hours, provide for full TSC and OSC reliefs
- ___ 2. Within 16 hours, provide for 24 hour TSC and OSC coverage

GUIDELINE 3

ALERT

L. Protective action recommendation guidance

CAUTION 1: THE PROTECTIVE ACTION RECOMMENDATION SECTION OF THE EMERGENCY NOTIFICATION FORM (FIGURE 6) MUST BE COMPLETED FOR ALL INITIAL AND FOLLOWUP MESSAGES.

NOTE 1: CONTINUE TO ASSESS PROTECTIVE ACTION RECOMMENDATIONS AND MODIFY AS NECESSARY.

NOTE 2: ONLY THE PROTECTIVE ACTIONS SPECIFIED BY PLANT PROCEDURES SHOULD BE RECOMMENDED UNLESS THERE ARE OBVIOUS RELEVANT FACTORS (E.G., SEVERE NATURAL PHENOMENA) THAT WERE NOT ANTICIPATED WHEN THE PARs WERE DEVELOPED, AND THAT WOULD MAKE THE STANDARD PAR RECOMMENDATIONS IMPRACTICAL OR OBVIOUSLY NON-CONSERVATIVE. IN SUCH EVENTS, THE EMERGENCY DIRECTOR SHOULD USE HIS OWN JUDGMENT AS APPROPRIATE.

1. Protective Action Recommendations are not required. Block A of Line 15 on Figure 6 should be checked.

GUIDELINE 4**NOTIFICATION OF UNUSUAL EVENT****I. Criteria For Classification**

The classification of Notification of Unusual Event applies to situations in which events are in process or have occurred which could indicate a potential degradation of the level of safety of the plant. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occur.

- (a) A NOTIFICATION OF UNUSUAL EVENT would be required for any plant condition that warrants increased awareness on the part of state and/or local offsite authorities or involve other than normal plant shutdown.

A Notification Of Unusual Event would be declared for any of the following:

1.0 RCS FAULT

- Failure of any of the following valves to close:
 - (a) Pressurizer safety valve.
 - (b) Pressurizer power operated relief valve and its remote motor operated isolation valve.
- Initiation of safety injection either automatically or manually as a result of plant parameters approaching or reaching their setpoint.
- Complete loss of forced RCS flow as indicated by RCS flow indicators on all three RCS loops.

2.0 SG FAULT OR RUPTURE

- Failure of any of the following valves to close:
 - (a) A steam generator safety valve
 - (b) A steam generator power operated relief valve
- Loss of secondary coolant outside containment concurrent with ECCS activation.

GUIDELINE 4**NOTIFICATION OF UNUSUAL EVENT****3.0 DEGRADED CORE/FUEL FAULT**

- Indicated subcooling (margin to saturation) decreased below 10°F.
- Inadvertent loading of a fuel assembly into an improper position which causes F_q to be greater than the Technical Specification limit.
- RCS activity exceeds Tech. Spec. limit that requires shutdown.

4.0 HIGH EFFLUENT

- Radiological effluents at the site boundary (combined effluent from both units) in excess of the radiological technical specifications instantaneous limits (based on ODCM) as follows:
 - (a) Liquids 10CFR20 Appendix B, Table 2 Column 2
 - (b) Liquids: Dissolved or entrained noble gases $1.0 \text{ E-4 } \mu\text{Ci/ml}$
 - (c) Noble gases (whole body) 5.7E-5 Rem/hr (5.7E-2 mrem/hr)
 - (d) Noble gases (skin) 3.4E-4 Rem/hr (3.4E-1 mrem/hr)
 - (e) Airborne radioiodine and particulates other than noble gases: 1.7E-4 Rem/hr (1.7E-1 mrem/hr)

5.0 EQUIPMENT/STRUCTURE FAILURE

- Loss of containment integrity requiring shutdown to HOT SHUTDOWN.

6.0 ELECTRICAL/INSTRUMENTATION FAULT

- Loss of both trains of offsite power OR loss of all onsite emergency power (diesel generators and auxiliaries).
- Loss of control room indication or annunciation to an extent requiring shutdown.

GUIDELINE 4**NOTIFICATION OF UNUSUAL EVENT****7.0 SITE HAZARDS**

- Natural phenomena being experienced or projected to affect the plant site as follows:
 - (a) Any earthquake.
 - (b) Unusual river water level caused by flood, low water or hurricane surge.
 - (c) Any tornado onsite.
 - (d) Any threatening hurricane.
- Hazards experienced onsite or within one mile of the site boundary which could affect plant operations, such as:
 - (a) Aircraft crash.
 - (b) Explosion.
 - (c) Fire affecting a safety related or a non-safety related nuclear process system.
 - (d) Fire or explosion affecting safe shutdown capability.
 - (e) Release of toxic gas.
 - (f) Release of flammable gas.

8.0 SECURITY/EVACUATION

- 8.1 If the basis for declaring this emergency classification is based on security concerns then refer to table 3 prior to taking actions that will cause people to report to the site or change locations on site.
- Attempted unauthorized entry into a vital area or attempted sabotage of vital equipment.

GUIDELINE 4

NOTIFICATION OF UNUSUAL EVENT

II. Emergency Director Actions

NOTE: THE SHIFT SUPERVISOR SHALL PERFORM THE DUTIES OF THE EMERGENCY DIRECTOR UNTIL HIS ARRIVAL AND ASSUMPTION OF DUTIES.

The Emergency Director shall perform or direct the following:

Initials

- _____ A. Announce the condition and give needed evacuation instructions over plant public address system.
- _____ B. Evacuate affected areas of the plant as appropriate.

NOTE: THE "APPROVED BY" TIME AND DATE (LINE 16, FIG. 6) AND THE "DECLARATION" TIME AND DATE (LINE 6, FIG. 6) SHOULD ALWAYS BE THE SAME TIME. THE TIME OF DECLARATION MUST BE AFTER THE EMERGENCY DIRECTOR HAS APPROVED THE EMERGENCY CLASSIFICATION AND PROTECTIVE ACTION RECOMMENDATIONS.

THE TRANSMITTAL TIME AND DATE (LINE 3, FIG. 6) SHOULD BE THE TIME AT WHICH FIG. 6 IS READ OVER THE ENN.

- _____ C. Fill in the emergency notification form (FIG 6), including developing protective action recommendations per step L. Take into account the zones and evacuation time estimates shown in figure 1.

NOTE: INITIAL NOTIFICATION WILL NORMALLY BE MADE BY THE NON-AFFECTED UNIT SHIFT FOREMAN. NOTIFICATIONS CAN BE MADE BY AN EXTRA SHIFT SUPERVISOR, SHIFT FOREMAN, OPERATIONS SHIFT CLERK, TSC STAFF OR OTHER QUALIFIED PERSON USING FIGURE 6.

INITIAL AND UPGRADE NOTIFICATIONS AND CLASSIFICATIONS SHOULD BE DONE FROM THE CONTROL ROOM OR THE TSC, WITH THE EOF INFORMED AS SOON AS POSSIBLE.

GUIDELINE 4**NOTIFICATION OF UNUSUAL EVENT****___ D. Initial Notifications**

1. **IF** a NOUE was declared due to radiological effluents greater than the NOUE limits which are the Technical Specification limits, **THEN** enter the following information on the Emergency Notification form (Figure 6, line 7):

- a. ODCM site boundary dose rates from EIP 9.5.

and

- b. The following note:

"Dose rate at site boundary has been calculated using the ODCM as required by the FNP Technical Specification. EDCM calculation is not appropriate."

2. Using the ENN, notify within 1 hour at least one agency in each state (state level preferred), utilizing Figure 6 (Emergency Notification). EIP-8.3, step 15, may be used as guidance if required. **IF** at least one agency in each state (state level preferred) has not acknowledged within 10 minutes, **THEN** notify at least one agency in any state that has not acknowledged, using the telephone numbers in Figure 6 or in EIP-8.1, steps 12 or 13.

Verify notifications complete and documented on the Emergency Notification form (Fig 6, side 2).

NOTE: PERFORM THE FOLLOWING STEPS IN PARALLEL TO THE MAXIMUM EXTENT POSSIBLE.

E. Emergency Organization Notifications

NOTE: TABLE 2 PROVIDES GUIDANCE AS TO THE REQUIRED LEVEL OF ACTIVATION OF THE TSC AND EOF. LEVEL OF ACTIVATION, IF ANY, IS AT THE DISCRETION OF THE ED/RM. SEE EIP-6/27 FOR GUIDANCE.

- ___ 1. TSC Staff, if activated by the ED
- ___ 2. EOF Staff, if activated by the RM

GUIDELINE 4**NOTIFICATION OF UNUSUAL EVENT**

- ___ 3. On-call Emergency Director
- ___ 4. On-call Recovery Manager
- ___ 5. Emergency Support Manager
- ___ 6. Notify Security of Emergency, incoming personnel and access restrictions (PAX 4611).

F. Other Notifications

- ___ 1. NRC (Perform immediately after state notification and within one hour of declaration per Figure 6, side 2).
- ___ 2. If personnel injury or fire is involved, refer to FNP-0-EIP-11.0 and 13.0 respectively for additional notifications.
- ___ 3. U.S. Army EOD group at Fort Benning, GA, if necessary
- ___ 4. Savannah River Operations Office, if necessary

G. In Plant Protective Actions

- ___ 1. Ensure personnel accountability per EIP-10.0, if any areas of the plant were evacuated due to hazardous conditions.
- ___ 2. Plan and initiate re entries per EIP-14.0, if any areas of the plant were evacuated due to hazardous conditions.
- ___ 3. Ensure proper Control Room response.
- ___ 4. Assign an individual to provide periodic plant status updates.
- ___ 5. Assign an individual to maintain a log of important Emergency Director activities.
- ___ 6. Assign an individual to keep a record of all off site communications.

GUIDELINE 4

NOTIFICATION OF UNUSUAL EVENT

H. Off- Site Support

- ___ 1. Ensure Radiation Monitoring teams have been dispatched per EIP-4.0.
- ___ 2. Provide information to the Recovery Manager for use in press releases and recovery planning.

I. Information to Off-Site Authorities

- ___ 1. Provide periodic plant status updates, meteorological and dose estimates and release projections based on plant conditions and foreseeable contingencies.

J. Re-Assess plant conditions

- ___ 1. Continue to assess plant and radiological conditions to ensure the correct emergency classification is declared.
- ___ 2. If a higher emergency classification is required immediately go to the appropriate guideline.
- ___ 3. If plant and radiological conditions no longer require the current emergency classification downgrade or close out the emergency class using FNP-0-EIP-28.0.

K. Long term staffing

- ___ 1. Within 8 hours, provide for full TSC and OSC reliefs.
- ___ 2. Within 16 hours, provide for 24 hour TSC and OSC coverage.

GUIDELINE 4

NOTIFICATION OF UNUSUAL EVENT

L. Protective action recommendation guidance

CAUTION 1: THE PROTECTIVE ACTION RECOMMENDATION SECTION OF THE EMERGENCY NOTIFICATION FORM (FIGURE 6) MUST BE COMPLETED FOR ALL INITIAL AND FOLLOW-UP MESSAGES.

NOTE: CONTINUE TO ASSESS PROTECTIVE ACTION RECOMMENDATIONS AND MODIFY AS NECESSARY.

ONLY THE PROTECTIVE ACTIONS SPECIFIED BY PLANT PROCEDURES SHOULD BE RECOMMENDED UNLESS THERE ARE OBVIOUS RELEVANT FACTORS (E.G., SEVERE NATURAL PHENOMENA) THAT PROBABLY WERE NOT ANTICIPATED WHEN THE PARs WERE DEVELOPED, AND THAT WOULD MAKE THE STANDARD PAR RECOMMENDATIONS IMPRACTICAL OR OBVIOUSLY NON-CONSERVATIVE. IN SUCH EVENTS, THE EMERGENCY DIRECTOR SHOULD USE HIS OWN JUDGMENT, AS APPROPRIATE.

1. Protective Action Recommendations are not required. Block A of Line 15 on Figure 6 should be checked.

SHARED

TABLE 1

REFERENCES

- Joseph M. Farley Nuclear Plant Emergency Plan
- FNP-0-RCP-25, Health Physics Activities During a Radiological Accident
- FNP-0-EIP-29, Long Term Dose Assessment
- FNP-0-EIP-20, Chemistry and Environmental Support to the Emergency Plan
- FNP-0-M-007, Emergency Dose Calculation Method
- FNP-0-M-011, Offsite Dose Calculation Manual
- EPA "Manual of Protective Action Guides and Protective Actions for Nuclear Incidents"
- NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants"
- FNP-0-CCP-641, "Operation of the Plant Vent Stack Monitoring System"
- NT-86-0014, Gaseous Releases, Emergency Classifications
- NT-87-0543, Protective Action Recommendation Policy
- ALA 88-694, Westinghouse "Potential Radiological Impact of Steam Generator Tube Uncover"
- FNP-0-CCP-1300, Chemistry and Environmental Activities During a Radiological Accident
- SCS letter File: ENG 15 94-0466 Log: FP 94-0364, Containment Dose R-27 to DEI Conversion

TABLE 2

EMERGENCY FACILITY ACTIVATION

	Unusual Event	Alert	Site Area Emergency	General
Technical Support Center	*	Activate #	Activate #	Activate
Operations Support Center	*	Activate #	Activate #	Activate
Emergency Operations Facility	**	***	Activate #	Activate
Emergency Operations Center	**	***	Activate #	Activate
Public Information Corporate Offices	**	***	Activate #	Activate
News Media Center ##	N/A	****	***	Activate

NOTE: (It is recommended that the full TSC and EOF staffs be called in at the ALERT level. After evaluating plant conditions, staff may be released below a GENERAL EMERGENCY (at the discretion of the RM/ED)).

- * NO ACTION, STANDBY OR ACTIVATE AT THE DISCRETION OF THE EMERGENCY DIRECTOR
- ** NO ACTION, STANDBY OR ACTIVATE AT THE DISCRETION OF THE RECOVERY MANAGER
- *** STANDBY OR ACTIVATE AT THE DISCRETION OF THE RECOVERY MANAGER
- **** ACTIVATION DEPENDENT ON LEVEL OF MEDIA INTEREST OR EOF ACTIVATION
- # ACTIVATION WILL BE TO THE EXTENT DEEMED NECESSARY BY THE EMERGENCY DIRECTOR AND RECOVERY MANAGER
- ## AUTOMATICALLY ACTIVATED UPON EOF ACTIVATION

TABLE 3**CONSIDERATIONS FOR EMERGENCY CLASSIFICATION BASED
ON SECURITY EVENTS**

IF THERE IS A POTENTIAL HAZARD TO THE SAFETY OF PERSONNEL DUE TO THE SECURITY EVENT THAT IS IN PROGRESS, THE PROVISIONS OF THE EIPs MAY HAVE TO BE MODIFIED TO ENSURE THAT PLANT PERSONNEL ARE PROTECTED. CONSIDERATION SHOULD BE GIVEN TO THE SAFETY OF PERSONNEL WHO ARE ON SITE AND THOSE WHO WILL BE REPORTING TO THE SITE. THE FOLLOWING LIST DESCRIBES SOME OF THE ACTIONS THAT MIGHT BE DIFFERENT:

1. Do not delay declaring the emergency, some specific actions in the guidelines may have to be altered.
2. Contact security for recommendations to determine hazardous areas prior to taking any actions that would move people to different areas of the plant.
3. Ensure that control room or other supervisory personnel do not dispatch personnel to areas of the plant until it has been determined that those areas are safe.
4. If activating the plant emergency alarm (PEA) would put personnel at risk while proceeding to assembly areas, do not activate the alarm. In lieu of the PEA, consider making an appropriate announcement over the plant page with specific instructions such as to remain inside buildings, evacuate specific areas or other appropriate announcements based on security recommendations.
5. If having the TSC and EOF staffs report to the plant site would put them at risk, consider a manual callout of a minimum staff with specific instructions identifying where to report in lieu of using the CAN to activate.
6. Consider use of alternate facilities for the TSC and EOF staffs.
7. If the CAN is used to activate the TSC and EOF staffs, have the security force member at the plant access direct them to specific locations as they arrive on site.
8. After security reports that the security hazards have been eliminated, return to full implementation of the EIPs as appropriate.

TABLE 4**INFORMATION LIKELY TO BE REQUESTED BY THE NRC IF AN EMERGENCY IS DECLARED
(NRC INFORMATION NOTICE 98-08)**

1. Is there any change to the classification of the event? If so, what is the reason?
2. What is the ongoing/imminent damage to the facility, including affected equipment and safety features?
3. Have toxic or radiological releases occurred or been projected, including changes in the release rate? If so, what is the projected onsite and offsite releases, and what is the basis of assessment?
4. What are the health effect/consequences to onsite/offsite people? How many onsite/offsite people are/will be affected and to what extent?
5. Is the event under control? When was control established, or what is the planned action to bring the event under control? What is the mitigative action underway or planned?
6. What onsite protective measures have been taken or planned?
7. What offsite protective actions have been recommended to state/local officials?
8. What is the status of State/local/other Federal agencies' responses, if known?
9. If applicable, what is the status of public information activities, such as alarm, broadcast, or press releases (regulatee/state/local/other federal agencies)? Has a Joint Information Center (News Media Center) been activated?

10 MILE EMERGENCY PLANNING ZONE

The boxes in each quadrant and at the top of the drawing, represent the time in minutes that it would take to evacuate the zones in that quadrant during a **WD** (week day), **WN** (week night), **WE** (week end) and **AW** (adverse weather conditions). The time includes a 15 minute allowance for notification.

Zones	WD	WN	WE	AW
2 Mile Zone A	95	80	90	95
10 Mile All Sectors	140	115	115	150

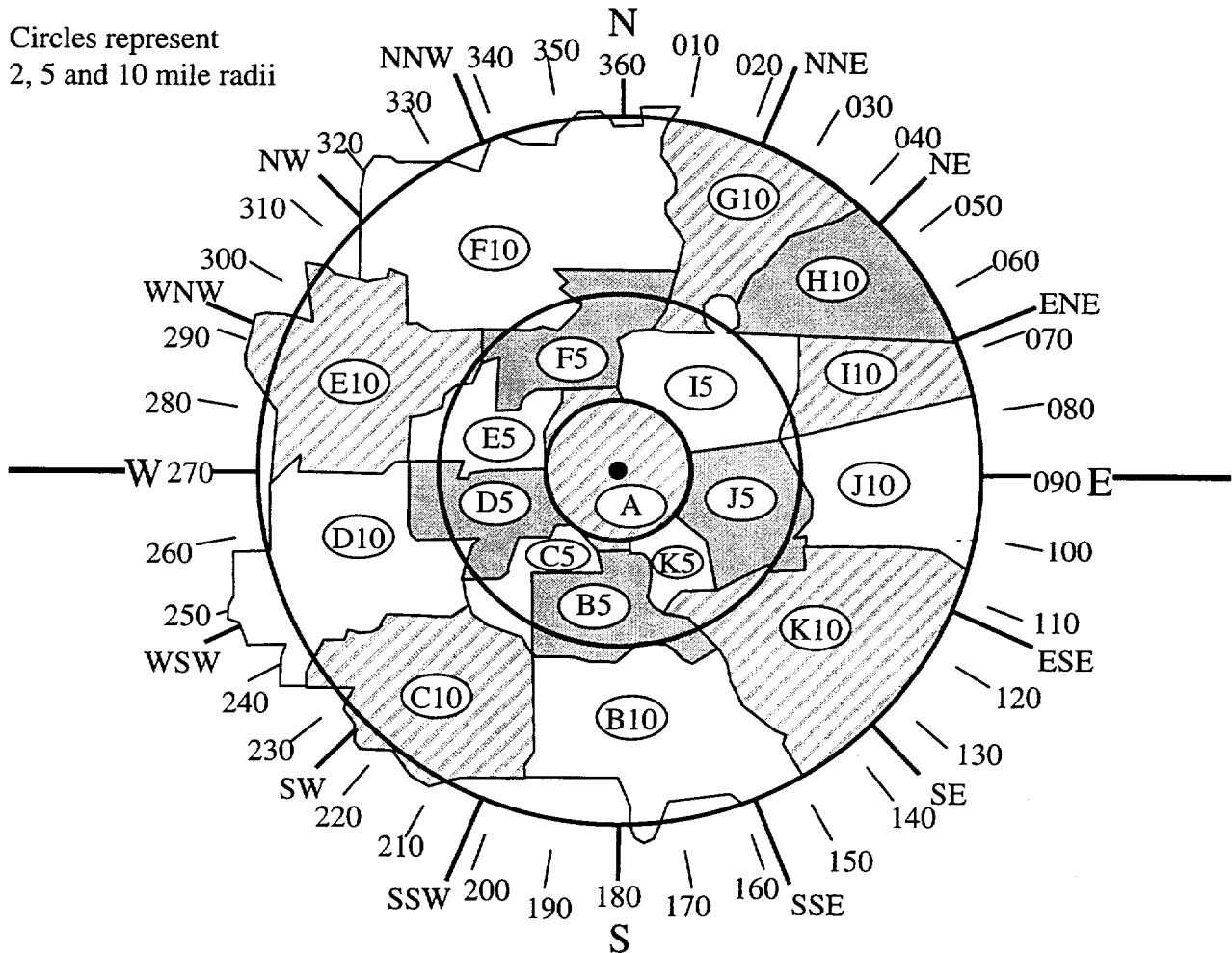
270-360 Quadrant, 100%
Evacuation Times

Zones	WD	WN	WE	AW
5 Mile	105	90	95	110
10 mile	115	100	105	120

000-090 Quadrant, 100%
Evacuation Times

Zones	WD	WN	WE	AW
5 Mile	105	95	100	110
10 mile	110	105	110	120

Circles represent
2, 5 and 10 mile radii



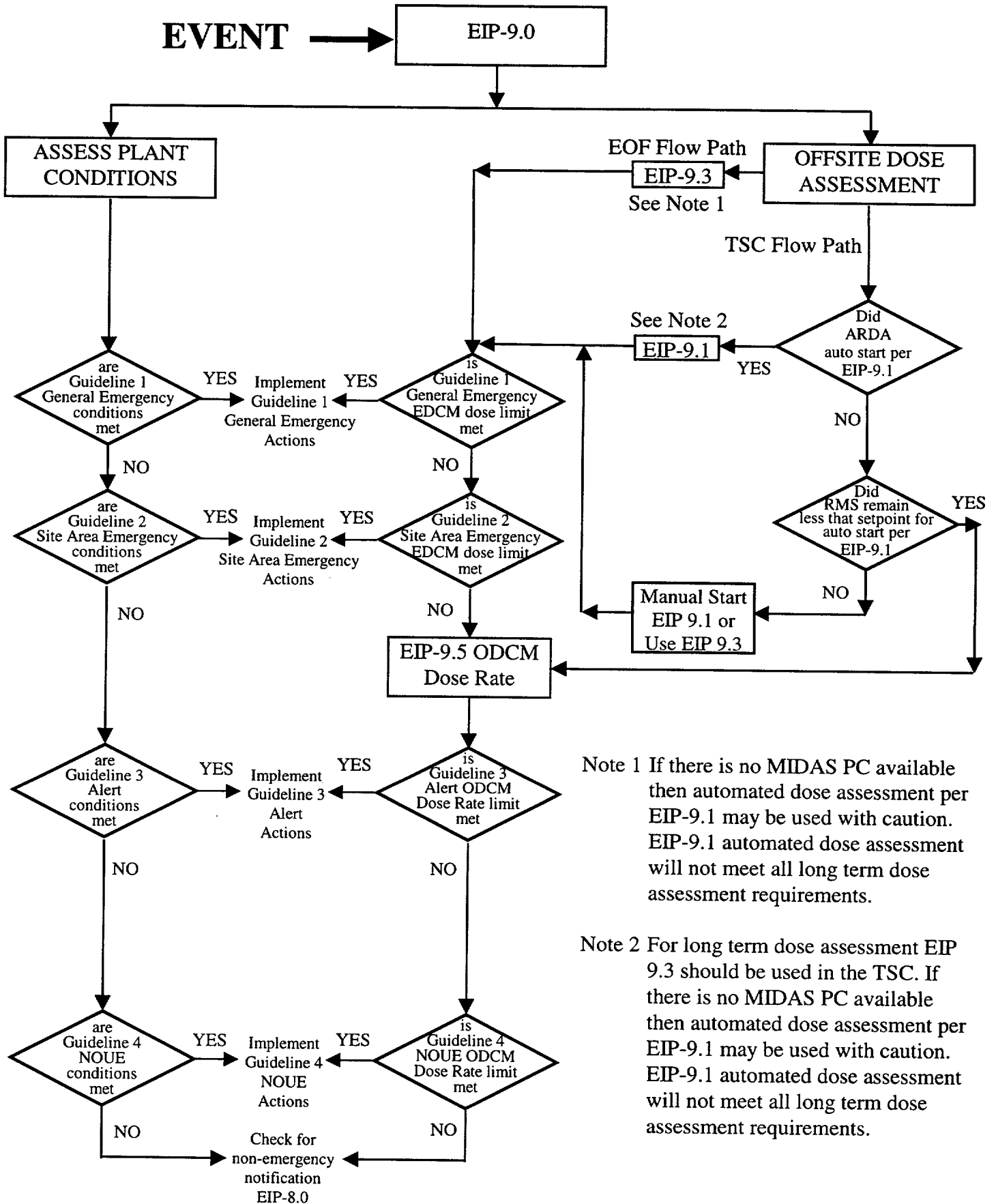
180-270 Quadrant, 100%
Evacuation Times

Zones	WD	WN	WE	AW
5 Mile	100	95	95	105
10 mile	140	110	115	150

090-180 Quadrant, 100%
Evacuation Times

Zones	WD	WN	WE	AW
5 Mile	105	95	100	110
10 mile	110	100	105	115

FIGURE 1



Note 1 If there is no MIDAS PC available then automated dose assessment per EIP-9.1 may be used with caution. EIP-9.1 automated dose assessment will not meet all long term dose assessment requirements.

Note 2 For long term dose assessment EIP 9.3 should be used in the TSC. If there is no MIDAS PC available then automated dose assessment per EIP-9.1 may be used with caution. EIP-9.1 automated dose assessment will not meet all long term dose assessment requirements.

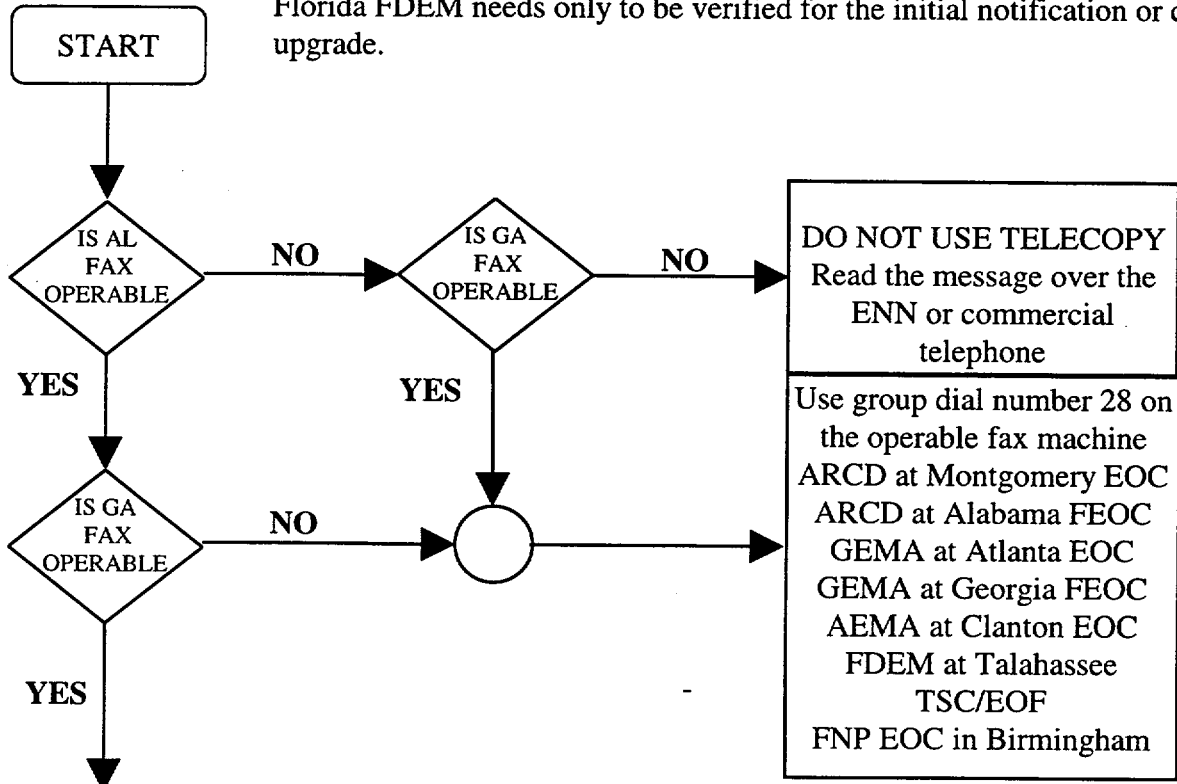
FIGURE 2

SHARED

TELECOPY GROUP DIAL NUMBERS

Telecopy (fax) the initial or followup emergency notification form (Fig. 6) to all of the locations using the group dial numbers listed on the below flow chart. When the activity report is received retransmit the form to any location that did not receive the form using the individual speed dial numbers listed below. Verify that the form has been received at all locations through the ENN, OPX or commercial phone number. The telecopy to the

Florida FDEM needs only to be verified for the initial notification or classification upgrade.



Use group dial number 25 on both the Al. and Ga. fax	
AL. FAX MACHINE group dial number 25 ARCD at Montgomery EOC ARCD at Al. FEOC AEMA at Clanton EOC TSC/EOF	GA. FAX MACHINE group dial number 25 GEMA at Atlanta EOC GEMA at GA FEOC FDEM at Tallahassee FNP EOC in Birmingham

Refer to FNP-0-EIP-8.1 or FIG. 6 for OPX/commercial numbers.

LOCATION	FAX IND SPEED DIAL	ENN PHONE NUMBER
Alabama Radiation Control Division At Montgomery EOC	1	11
Alabama Radiation Control Division At Alabama Forward EOC	3	13
Alabama Emergency Management Agency at Clanton EOC	7	51
FNP TSC	5	62
FNP EOF (from opposite location)	5	63
Georgia Emergency Management Agency at Atlanta EOC	2	21
Georgia Emergency Management Agency at Georgia Forward EOC	4	22
Florida Department of Emergency Management at Tallahassee	8	none
FNP EOC in Birmingham	6	65

FIGURE 3

THIS FIGURE HAS BEEN DELETED

FIGURE 4

THIS FIGURE HAS BEEN DELETED

FIGURE 5

EMERGENCY NOTIFICATION

1. A This is a Drill B Actual Emergency C Initial D Follow-up* Message Number _____

2. Site: Farley Nuclear Plant Unit: _____ Reported By: _____

3. Transmittal Time/Date: _____ / _____ / _____ Confirmation Phone Numbers: (334)899-5156 or (334)794-0800 Ext. _____
(central) mm dd yy

Teletcopy Phone Number: (205) 257-1155 (205) 257-1035 _____
TSC EOF Other

4. Authentication (if required): N/A N/A
(Number) (Codeword)

5. Emergency Classification:
 A Notification Of Unusual Event B Alert C Site Area Emergency D General Emergency

6. A Emergency Declaration At: B Termination At: Time/Date _____ / _____ / _____ (If B go to item 16)
(central) mm dd yy

7. Emergency Description/Remarks: _____

Problems Include: A RCS Leaking B Containment Leaking C Fuel Damage Indicated D Heat Removal Systems Inadequate E Additional comments on following page

8. Plant Condition: A Improving B Stable C Degrading D RMTs Dispatched E Site Evacuation

9. Reactor Status: A Shutdown Time/Date: _____ / _____ / _____ B _____ % Power
(central) mm dd yy

10. Emergency Releases:
 A None (go to item 14) B Potential (go to item 14) C Is Occurring D Has Occurred

**11. Type of Release A Ground Level B Mixed Mode
 C Airborne: Started: _____ / _____ / _____ D Stopped: _____ / _____ / _____
Time (central) Date Time (central) Date

E Liquid: Started: _____ / _____ / _____ F Stopped: _____ / _____ / _____
Time (central) Date Time (central) Date

**12. Release Magnitude A μ Curie per Sec. B Curies Tech. Specification Limits C Below D Above
 E Noble Gases F Iodines
 G Particulates H Other

**13 Estimate Of Projected Off Site Dose A New B Unchanged C Estimated Duration: _____ Hrs.
TEDE (mrem) Thyroid CDE (mrem)

Site Boundary D _____ E _____
 2 miles F _____ G _____
 5 miles H _____ I _____
 10 miles J _____ K _____

**14. Meteorological Data A Wind Direction (from) _____ ° B Speed(mph) _____
 C Stability Class _____ D Precipitation (type) _____

15. Actions:
 A There are no recommended protective actions.
 B We would like to discuss recommended protective actions.

Not to be read over the ENN except for initial notifications and notifications of General Emergency

Recommended Protective Actions:
 C Evacuate and control access in down wind zone(s) _____
 D Shelter and control access in down wind zone(s) _____
 E In all affected areas: Monitor environmental radiation levels, locate and evacuate hot spots and implement control and possible confiscation of food and water supplies and consider evacuation of children and pregnant women.
 F Other _____

16. Approved By: _____ Time/Date _____ / _____ / _____
(Name) (Title) (central) mm dd yy

* If items 8 - 14 have not changed, only items 1 - 7 and 15 - 16 are required to be completed
 ** Information may not be available on initial notifications.

DO NOT TELECOPY THIS SIDE

COMMUNICATIONS MEANS

17.0 Telecopy side one of this form to State and Local Agencies per figure 3 while performing the remaining steps of this form

18.0 Make Initial/Upgrade ENN Emergency Notification using the following message:

18.1 DIAL ** on the ENN, wait 10 seconds and announce "This is name/title at Farley Nuclear Plant. Please be prepared to initiate your radiological notification procedure and manning of the ENN."

NOTE: When the first agency at the state level for each state, and the County level for each County (if required) acknowledge, no further acknowledgment is required.

18.2 For all Emergency declarations, request a state level agency for Alabama (step 21.1) and Georgia (step 21.2) acknowledge manning of the ENN. As a courtesy notification request AEMA acknowledge manning of the ENN.

18.3 If a State level agency in step 21.1 or 21.2 does not acknowledge manning of the ENN, contact a county level agency in step 21.5 or 21.6 to acknowledge for the state.

NOTE: If ARCD has moved to the Forward EOC in Houston County, then HCEMA will be notified of the General Emergency at the same time in step 18.2. Additional notification of HC EMA is not required
If GEMA has moved to the Forward EOC in Early County, then ECEMA will be notified of the General Emergency at the same time in step 18.2. Additional notification of ECEMA is not required

18.4 For a General Emergency request a county level agency for Houston County (step 21.5) and a county level agency for Early county (step 21.6) acknowledge manning of the ENN.

18.5 Announce on the ENN "Please prepare to receive an initial notification message with acknowledgment."

18.6 Slowly read side one of this form

18.7 Have the agencies that acknowledged in steps 18.2, 3 and 4, acknowledge receipt of the message.

19.0 If at least one agency in each state (State Level Preferred) has not acknowledged receipt, contact them through other means, such as OPX, commercial, etc using numbers listed below or in EIP-8.1, and read side one of the message to them.

20.0 **Notify NRC Headquarters. Read side one of this form.** (Immediately after State Notification, within one hour of Declaration.)

ENS (301-816-5100; 301-951-0550; 301-415-0550)

Commercial (1-301-816-5100; 1-301-951-0550; 1-301-415-0550) Person Contacted _____ Date/Time _____

NOTE: Only the underlined phones and phone numbers listed below are manned 24 hours a day. The other numbers listed below are for use during dayshift hours and for when the facilities are staffed during an emergency.

21.0 State agencies to be notified

Required for all declarations

STATE LEVEL AGENCIES

21.1 ALABAMA

Alabama Radiation Control Division at Montgomery EOC

ENN (11) OPX (6628) Telecopy (334-264-4396)

Commercial (334-242-4378)

Person contacted _____

Date/Time _____

OR

State Troopers in Montgomery

ENN (12) Commercial (334-242-4378, 4379)

Person contacted _____

Date/Time _____

OR

Alabama Radiation Control Division at Alabama Forward EOC

ENN (13) OPX 6621) Telecopy (8-257-1535)

Commercial (334-793-1565)

Person contacted _____

Date/Time _____

21.4 AEMA COURTESY NOTIFICATION

This is an ENN courtesy notification only and is not required to be completed in the time specified by the Guideline.

CAUTION: This Notification does not meet the requirements for notifying a state level agency in the State of Alabama

AEMA ENN (51)

Person contacted _____

Date/Time _____

Required for General Emergency declarations

LOCAL LEVEL AGENCIES

Contact if state agencies cannot be contacted

21.5 HOUSTON COUNTY

Houston County EMA or Sheriff in Dothan

ENN(31) ENN(13) OPX (6621) Telecopy (8-257-1535)

Commercial (334-794-9720, 793-9655, 334-677-4807, 4808)

Person contacted _____

Date/Time _____

21.2 GEORGIA

Georgia Emergency Management Agency at Atlanta EOC

ENN (21) OPX (6629) Telecopy (404-627-4850)

Commercial (404-635-7200)

Person contacted _____

Date/Time _____

OR

Georgia Emergency Management Agency at Georgia Forward EOC

ENN (22) OPX (6626) Telecopy (8-257-2455)

Commercial (912-723-4764, 4826,4956)

Person contacted _____

Date/Time _____

21.3 FLORIDA

This is a Telecopy notification only to be followed up by a phone call to verify that the telecopy was received. Verification is not required for follow-up messages.

This notification is not required to be completed in the time in the guideline for the declared classification.

Telecopy to be sent at the same time as message is sent to other states

Florida Department of Emergency Management

Telecopy (850-488-7841)

Verification (800-320-0519) (850-413- 9911)

Person contacted _____

Date/Time _____

21.5 HOUSTON COUNTY

Houston County EMA or Sheriff in Dothan

ENN(31) ENN(13) OPX (6621) Telecopy (8-257-1535)

Commercial (334-794-9720, 793-9655, 334-677-4807, 4808)

Person contacted _____

Date/Time _____

21.6 EARLY COUNTY

Early County EMA in Early Co. EOC or Early Co. Sheriff in Blakely

ENN(42) ENN(41) OPX (6622) Telecopy (8-257-2455)

ENN(22) Commercial (912-723-3577, 3578, 4746, 4826, 4956)

Person contacted _____

Date/Time _____

NOTE: Checking box indicates acknowledgment and telecopy received

Dose Equivalent Iodine Estimation

The below graph and table can be used to estimate if dose equivalent iodine (DEI) is above 300 microcuries per gram. When using this figure the following rules must be used:

1. The only radiation monitors that can be used to enter the graph or table are R-27A or B.
2. The leak rate is assumed to be constant for the time period specified.
3. The bottom of the scale for the R-27 monitors is 1 REM/hr.
4. Any R-27 reading greater than 1 REM/hr for a leak rate of 50 gpm or less is an indication of DEI being greater than or equal to 300 microcuries per gram.
5. Enter the graph with the R-27 reading and the length of time that the leak has been in progress. If the intersection of R-27 and time is above and to the left of the curve for the specific leak rate the DEI is likely to be greater than 300 microcuries per gram.
6. Enter the table with the number of minutes since the start of the leak and the leak rate. If the actual R-27 dose rate is above the value listed in the table the DEI is likely to be greater than 300 microcuries per gram.

	TIME (MIN)	5 MIN	10 MIN	30 MIN	60 MIN	120 MIN	180 MIN	240 MIN
LEAK	1000	1.66	3.1	7.41	11.9	18.1	22.3	25
RATE	500		1.55	3.7	5.93	9.06	11.1	12.5
[GPM]	100				1.19	1.81	2.23	2.5

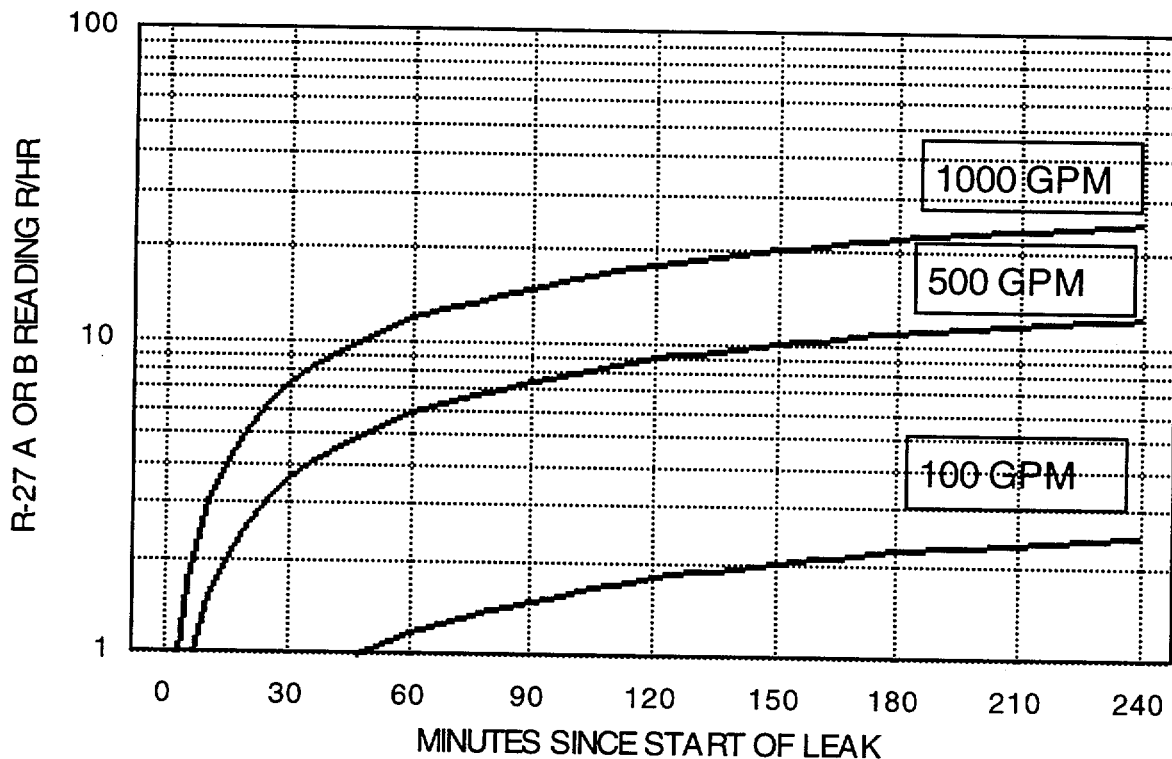


FIGURE 8
REVISION 44

FARLEY NUCLEAR PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURE 9.0
FNP-0-EIP-9.0


S
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EMERGENCY CLASSIFICATION AND ACTIONS

PROCEDURE USAGE REQUIREMENTS PER FNP-0-AP-6	SECTIONS
Continuous Use	
Reference Use	ALL
Information Use	

Approved:



 Nuclear Plant General Manager

Date Issued 2-8-2000

UNCONTROLLED COPY
CAUTION: This copy is not maintained
 Current. Do not use in a Safety Related Activity.

SHARED

LIST OF EFFECTIVE PAGES

PAGE NO.	REVISION NO.										
	REV	42	43	44	45	46	47	48	49	50	51
LOEP i	41	X	X	X							
LOEP ii	36	X	X	X							
LOEP iii	38	X	X	X							
TOC iv		X	X	X							
TOC v		X	X	X							
1	36	X	X	X							
2	36	X	X	X							
3	36	X	X	X							
4	36	X	X	X							
5	36	X	X	X							
6	36	X	X	X							
7	37	DEL		X							
GUIDELINE 1:											
PG.1	38	X	X	X							
PG.2	38	X	X	X							
PG.3	38	X	X	X							
PG.4	38	X	X	X							
PG.5	38	X	X	X							
PG.6	38	X	X	X							
PG.7	38	X	X	X							
PG.8	38	X	X	X							
PG.9	38	X	X	X							
PG.10	38	DEL									
GUIDELINE 2:											
PG.1	35	X	X	X							
PG.2	35	X	X	X							
PG.3	38	X	X	X							

SHARED

LIST OF EFFECTIVE PAGES

PAGE NO.	REVISION NO.										
	REV	42	43	44	45	46	47	48	49	50	51
PG.4	38	X	X	X							
PG.5	38	X	X	X							
PG.6	39	X	X	X							
PG.7	35	X	X	X							
PG.8	38	X	X	X							
PG.9	38	X	X	X							
PG.10	36	X	X	X							
PG.11	36	DEL									
GUIDELINE 3:											
PG.1	35	X	X	X							
PG.2	41	X	X	X							
PG.3	38	X	X	X							
PG.4	36	X	X	X							
PG.5	38	X	X	X							
PG.6	35	X	X	X							
PG.7	35	X	X	X							
PG.8	38	X	X	X							
PG.9	38	X	X	X							
PG.10	35	X	X	X							
PG.11	35	DEL	X	X							
GUIDELINE 4:											
PG.1	41	X	X	X							
PG.2	36	X	X	X							
PG.3	41	X	X	X							
PG.4	35	X	X	X							
PG.5	36	X	X	X							
PG.6	38	X	X	X							
PG.7	38	X	X	X							
PG.8	35	X	X	X							
PG.9	35	DEL									
TABLE 1	38	X	X	X							
TABLE 2	35	X	X	X							
TABLE 3	38	X	X	X							

EMERGENCY CLASSIFICATION AND ACTIONS

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EMERGENCY CLASSIFICATION AND ACTIONS

1.0 Purpose

The purpose of this procedure is to provide a method for rapid projection of estimated offsite radiation exposures as a result of a release of radioactive material, to provide the basis for classifying emergencies based on plant conditions and automatic dose calculations, to provide guidance for determining protective action recommendations, to provide guidelines for actions, and for notification guidance.

2.0 References

See Table 1.

3.0 General:

3.1 This procedure provides criteria for the classification of an emergency based on plant status and radiological hazards (i.e., direct radiation and inhalation hazards which may result from the passage of a cloud of radioactive material released from the plant).

3.2 Assessment of radioactive liquid releases will be made using the offsite Dose Calculation Manual.

3.3 Release time is defined as follows:

3.3.1 EDCM Calculations: The period of time from the most recent projection to the estimated time of release termination.

3.3.2 ODCM Calculations: The period of the release in which Technical Specification limits are exceeded.

3.4 Definitions:

TOTAL EFFECTIVE DOSE EQUIVALENT (TEDE)

means the sum of the deep dose equivalent (for external exposures) and the committed effective dose equivalent (for internal exposures).

DEEP DOSE EQUIVALENT (DDE)

which applies to external whole body exposure, is the dose equivalent at a tissue depth of 1 cm.

COMMITTED DOSE EQUIVALENT (CDE)

means the dose equivalent to organs or tissues of reference that will be received from an intake of radioactive material by an individual during the 50-year period following the intake.

COMMITTED EFFECTIVE DOSE EQUIVALENT (CEDE)

is the sum of the products of the weighting factors applicable to each of the body organs or tissues that are irradiated and the committed dose equivalent to these organs of tissues.

- 3.5 Protective action recommendation guidance is provided to aid in establishing protective action recommendations. The Emergency Director will exercise his own judgment in recommending protective actions to offsite agencies.
- 3.6 If steam generator water level falls below the break point during a steam generator tube rupture, off-site dose rate may be significantly higher (up to 10 times) due to volatilization of iodine.
- 3.7 Initial Notification or upgrade should be made from the Control Room or TSC. It is not necessary to transfer the information to the EOF to make the upgrade notification. The EOF, if staffed, should be informed as soon as possible.
- 3.8 Communication guidance for making the initial notification is on side 2 of the Emergency Notification Form, Figure 6 of this procedure.
- 3.9 Guidance for when the emergency response facilities should be manned and the level of manning required is included in Table 2. It is recommended that the TSC and the EOF be fully staffed initially at the ALERT level. If the full staff is not required, individuals can be released on a case-by-case basis.
- 3.10 At the NOUE level or below, it may be desirable to partially staff the TSC in order to relieve the Control Room staff of offsite communications and notifications. FNP-0-EIP-6.0 provides a listing of positions that should be considered for partial TSC activation.
- 3.11 EIP-6, Figure 3, provides a list of information that should be considered when updating plant staff over the public address system.

4.0 Classify emergency based on the most severe plant conditions OR projected off-site dose/dose rate conditions, WHICHEVER results in the higher emergency classification. Figure 2 provides a flowpath for dose assessment methods and plant conditions criteria.

4.1 Plant Conditions

While performing the remainder of step 4.1, have the Shift Radio Chemist (SRC) commence performing the calculations for dose assessment per step 4.2. Use the following guidelines to determine the highest indicated emergency classification based on plant conditions:

Guideline 1, Section I, General Emergency Classification Criteria

Guideline 2, Section I, Site Area Emergency Classification Criteria

Guideline 3, Section I, Alert Criteria

Guideline 4, Section I, NOUE Criteria

4.2 Dose Assessment

CAUTION: DOSE CALCULATIONS FROM EIP-9.1 OR EIP-9.3 ARE NOT TO BE USED TO DECLARE A NOUE OR ALERT SINCE EIP-9.1 AND EIP-9.3 ARE BASED ON EDCM METHODOLOGY, AND NOUE AND ALERT LIMITS ARE BASED ON ODCM METHODOLOGY.

NOTE: Due to the differences in the met data used for EDCM and ODCM calculations, the following sequence of step 4.2 substeps must be followed. The Top Down approach must be used for dose assessment (OR 99595).

NOTE: EDCM dose assessment can only be done from an ERDS terminal or a MIDAS terminal. The only location in the power block where these terminals are available is in the TSC.

NOTE: All of the step 4.2 substeps will normally be accomplished by the SRC with the exception of steps 4.2.8 and 4.2.11. Steps 4.2.8 and 4.2.11 must be performed by the Shift Supervisor or Emergency Director.

4.2.1 For initial dose assessment from the TSC, proceed to step 4.2.4.

4.2.2 For dose assessment from the EOF or long term dose assessment from the TSC, go to EIP-9.3, PERSONNEL COMPUTER-AUTOMATED DOSE ASSESSMENT and perform dose assessment using the MIDAS program.

Return to step 4.2.8 for evaluation of dose information and continue with step 4.2.9.

- 4.2.3 If the MIDAS program is inoperable, then for dose assessment from the EOF or from the TSC, go to EIP-9.1, AUTOMATED DOSE ASSESSMENT and perform dose assessment using the ARDA program to obtain dose information. Return to step 4.2.8 for evaluation of dose information and continue with step 4.2.9.
- 4.2.4 If ARDA is operable and has been automatically activated, then go to EIP-9.1, AUTOMATED DOSE ASSESSMENT and perform dose assessment using the ARDA program to obtain dose information. Return to step 4.2.8 for evaluation of dose information and continue with step 4.2.9.
- 4.2.5 If the AUTOMATED DOSE ASSESSMENT system per EIP 9.1 is operable, has not automatically activated, and one of the following rad monitors has alarmed:
- R-29
 - R-15C
 - R-60 A, B, C, or D
 - R-14
 - R-21
 - R-22

Then go to EIP-9.1, AUTOMATED DOSE ASSESSMENT, manually start ARDA and perform dose assessment using the ARDA program to obtain dose information. Return to step 4.2.8 for evaluation of dose information and continue with step 4.2.9.

- 4.2.6 If the ARDA system per EIP 9.1, AUTOMATED DOSE ASSESSMENT is NOT operable, then go to EIP-9.3, PERSONAL COMPUTER-AUTOMATED DOSE ASSESSMENT and perform dose assessment using the MIDAS program. Return to step 4.2.8 for evaluation of dose information and continue with step 4.2.9.
- 4.2.7 If the ARDA system per EIP 9.1 AUTOMATED DOSE ASSESSMENT is operable, has not automatically activated, and none of the alarms listed in step 4.2.5 have alarmed then go to EIP-9.5, EMERGENCY CLASSIFICATION BASED ON ODCM to perform dose assessment. Return to step 4.2.11 for evaluation of doserate information.

NOTE: Step 4.2.8 for evaluating the required emergency classification must be performed by the Shift Supervisor, Emergency Director in the Control Room or TSC, the DAD or Recovery Manager in the EOF.

- 4.2.8 Using the dose information obtained from EIP-9.1 or EIP-9.3, determine the highest indicated emergency classification from the "High Effluent" criteria in Guideline 1, Section I, or Guideline 2, Section I.

NOTE: If a General Emergency or site area emergency is indicated in the following step, the Shift Supervisor or the Emergency Director should consider directing long term dose assessment be performed from the TSC per step 4.2.2.

- 4.2.9 If a General Emergency or Site Area Emergency was indicated from step 4.2.8, then go to step 4.3.

- 4.2.10 If a General Emergency or Site Area Emergency was not indicated in step 4.2.8, then go to EIP-9.5, EMERGENCY CLASSIFICATION BASED ON ODCM. Return to step 4.2.11 for evaluation of dose rate information.

NOTE: Step 4.2.11 for evaluating the required emergency classification must be performed by the Shift Supervisor, Emergency Director in the Control Room or TSC, the DAD or Recovery Manager in the EOF.

- 4.2.11 Using the dose rate information obtained from EIP-9.5, determine the highest indicated emergency classification from the "High Effluent" criteria in Guideline 3, Section I, and Guideline 4, Section I.

- 4.3 Determine the correct emergency classification, the required protective action recommendations, and complete Figure 6. Do not wait for dose assessment results from step 4.2 to classify the event if plant conditions require an initial classification or an upgrade classification. As soon as a criteria for classification has been met, the event should be classified and an upgrade can be done later if required.

NOTE: THE EMERGENCY DECLARATION CANNOT BE MADE UNTIL THE REQUIRED PROTECTIVE ACTION RECOMMENDATIONS HAVE BEEN DETERMINED.

- 4.3.1 Compare the emergency classifications determined from steps 4.1 and 4.2 to determine the highest required emergency classification.

- 4.3.2 Using section L of the guideline for the highest emergency classification determined in step 4.3.1, determine the required protective action recommendations.
- 4.3.3 Declare the emergency and complete figure 6. The declaration time on line 6 and the approved time on line 16 are the same time. The transmitted time on line 3 is the time when starting to read the message over the ENN. EIP 8.3, step 15, may be used for guidance when completing figure 6, the emergency notification form.
- 5.0 Perform actions and initial notification to offsite authorities upon initial entry or upgrade into a classification using the applicable guideline:
- Guideline 1, Section II - General Emergency
- Guideline 2, Section II - Site Area Emergency
- Guideline 3, Section II - Alert
- Guideline 4, Section II - Notification of Unusual Event
- 6.0 Continue reassessment of emergency classification per step 4.0 or 7.0, as appropriate, and transmit follow-up message/periodic update message as follows:
- 6.1 Transmit Follow-up Messages:
- 6.1.1 Transmit a follow up message as soon as possible following an initial or upgrade notification. Refer to step 6.2 for time limits.
- 6.1.2 Use, if desired, EIP-8.3, Step 15, for guidance in completing and transmitting the "Emergency Message" for Follow Up/Periodic Update (Figure 6).
- 6.1.3 When performing dose assessment, transcribe dose information from the form being printed on a blank Figure 6 or use the form being printed. Fill in the remaining information. Transmit follow up message by telecopy.

NOTE: EFFORTS WILL BE MADE TO TRANSMIT FOLLOW-UP REPORTS EVERY HALF HOUR.

- 6.2 Transmit subsequent "Follow Up Message/Periodic Update Message" reports per one of the methods listed in steps 6.1.1 or 6.1.2.

- 6.2.1 At a minimum of once per hour. The hourly requirement may be waived while in a NOUE declaration, if this is agreed to by the state and local agencies.
 - 6.2.2 Following a significant change in dose rate that does not require a change in emergency classification.
 - 6.2.3 Following a significant change in plant conditions that does not require a change in emergency classification.
- 7.0 Downgrade or closeout an emergency classification after determining, through the use of the guidelines, that the current emergency classification is no longer required. FNP-0-EIP-28.0 will be used to downgrade or closeout an emergency class

GUIDELINE 1**GENERAL EMERGENCY****I. Criteria For Classification**

The classification of General Emergency applies to those events which are in progress or have occurred which involve actual or imminent substantial core degradation or melting with potential loss of containment integrity. The potential for release of radioactive material for the General Emergency classification is more than 1000 Ci of I-131 equivalent or more than 10^6 Ci of Xe-133 equivalent.

The purpose of the declaration of a General Emergency is to:

- (a) Initiate predetermined protective actions for the public.
- (b) Provide continuous assessment of information from licensee and offsite measurement.
- (c) Initiate additional measures as indicated by event releases or potential releases and,
- (d) Provide current information for and consultation with offsite authorities and the public.

A General Emergency would be declared for any of the following:

1.0 HIGH EFFLUENT

Projected exposure at site boundary or for projected peak dose location within the plume for EDCM calculation:

- (a) Greater than or equal to 1.0 REM (1000 MREM) TEDE exposure
- OR
- (b) Greater than or equal to 5.0 REM (5000 MREM) thyroid CDE exposure

GUIDELINE 1**GENERAL EMERGENCY****2.0 FISSION PRODUCT BARRIERS**

2.1 Figure 8 may be used to help evaluate if Dose Equivalent I-131 (DEI) is > 300 $\mu\text{Ci}/\text{gram}$.

- Loss of two of three fission product barriers with a potential loss of the third. The following describe indication of loss of these boundaries:

(a) Fuel cladding damage indicated by:

1. RCS activity > 300 $\mu\text{Ci}/\text{gram}$ dose equivalent I-131.

OR

2. Loss of core geometry is indicated by ΔT between RCS wide range hot leg and cold leg temperature of $>64^\circ\text{F}$ and core exit temperature (incore thermocouples) reading greater than 1200°F .

(b) Loss of primary coolant boundary as indicated by:

1. Containment pressure reaching 27 psig **AND**
2. High containment radiation (R-2, R-22 and R-12, reaching their alarm setpoint) **AND**,
3. High containment humidity.

(c) Loss or potential loss of containment integrity is indicated by:

1. Containment pressure greater than 54 psig, **OR**
2. A rapid decrease in containment pressure, **OR**
3. Failure of the containment isolation system resulting in a direct path from containment to the environment.

(d) Other plant conditions exist, from whatever source, that make release of large amounts of radioactivity in a short time period possible, such as any core melt situation.

GUIDELINE 1

GENERAL EMERGENCY

3.0 SECURITY/EVACUATION

3.1 If the basis for declaring this emergency classification is based on security concerns then refer to table 3 prior to taking actions that will cause people to report to the site or change locations on site.

- Loss of physical control of the facility.

GUIDELINE 1

GENERAL EMERGENCY

II. Emergency Director Actions

NOTE: THE SHIFT SUPERVISOR SHALL PERFORM THE DUTIES OF THE EMERGENCY DIRECTOR UNTIL HIS ARRIVAL AND ASSUMPTION OF DUTIES.

The Emergency Director shall perform or direct the following:

NOTE: ACTIVATION OF THE TSC AND EOF STAFFS, PER STEPS E1 AND E2, SHOULD BE DONE IN PARALLEL WITH NOTIFICATION OF THE STATE AND LOCAL AGENCIES BY A SEPARATE INDIVIDUAL, NORMALLY THE SHIFT CLERK.

Initials

- ___ A. Sound the Plant Emergency Alarm, if not already sounded.
- ___ B. Announce the condition and give needed evacuation instructions over plant public address system.

NOTE: IF POSSIBLE AND TIME PERMITTING, CONFER WITH ARCD AND GEMA ABOUT THE PARs PRIOR TO ANNOUNCING THEM OVER THE ENN.

THE "APPROVED BY" TIME AND DATE (LINE 16, FIG. 6) AND THE "DECLARATION" TIME AND DATE (LINE 6, FIG. 6) SHOULD ALWAYS BE THE SAME TIME. THE TIME OF DECLARATION MUST BE AFTER THE EMERGENCY DIRECTOR HAS APPROVED THE EMERGENCY CLASSIFICATION AND PROTECTIVE ACTION RECOMMENDATIONS.

THE TRANSMITTAL TIME AND DATE (LINE 3, FIG. 6) SHOULD BE THE TIME THAT FIGURE 6 IS READ OVER THE ENN.

- ___ C. Fill in the emergency notification form (Fig. 6), including developing protective action recommendations per step L. Take into account the zones and evacuation time estimates shown in Figure 1.

CAUTION: FOR GENERAL EMERGENCY, BOTH STATE AND LOCAL AGENCIES ARE TO BE NOTIFIED.

GUIDELINE 1

GENERAL EMERGENCY

NOTE: INITIAL NOTIFICATION WILL NORMALLY BE MADE BY THE NON-AFFECTED UNIT SHIFT FOREMAN. NOTIFICATIONS CAN BE MADE BY AN EXTRA SHIFT SUPERVISOR, SHIFT FOREMAN, OPERATIONS SHIFT CLERK, TSC STAFF OR OTHER QUALIFIED PERSON USING FIGURE 6.

INITIAL AND UPGRADE NOTIFICATIONS AND CLASSIFICATIONS SHOULD BE DONE FROM THE CONTROL ROOM OR THE TSC, WITH THE EOF INFORMED AS SOON AS POSSIBLE.

___ D. Initial Notifications

Using the ENN, notify the following state and local agencies, using Figure 6 (Emergency Notification) within 15 minutes. EIP-8.3, step 15, may be used as guidance if required. If at least one agency in each state (state level preferred) and one agency in each county has not acknowledged in 10 minutes, THEN notify at least one agency in any state or county that has not acknowledged, using the telephone numbers on Figure 6, or in EIP-8.1, steps 12 or 13.

Verify notifications complete and documented on the Emergency Notification form (Fig 6, side 2).

NOTE: PERFORM THE FOLLOWING STEPS IN PARALLEL TO THE MAXIMUM EXTENT POSSIBLE.

E. Emergency Organization Notifications

NOTE: STEPS E.1 AND E.2, NOTIFYING THE TSC AND EOF STAFF, WILL NORMALLY BE ACCOMPLISHED BY HAVING THE SHIFT CLERK OR OTHER QUALIFIED INDIVIDUAL ACTIVATE THE COMMUNITY ALERT NETWORK (CAN) PER FNP-0-EIP-8.3, TABLE 2, AND STEP 11.

- ___ 1. TSC Staff (full activation required)
- ___ 2. EOF Staff (full activation required)
- ___ 3. On-call Emergency Director
- ___ 4. On-call Recovery Manager

GUIDELINE 1**GENERAL EMERGENCY**

- ___ 5. Emergency Support Manager
- ___ 6. Notify Security of Emergency, incoming personnel, access restrictions and to setup the EOF (pax 4611).

F. Other Notifications

- ___ 1. NRC (Perform immediately after state notification and within one hour of declaration per Figure 6, side 2).
- ___ 2. Have Regulatory ERDS activated to transmit data to the NRC within one hour of the declaration of the emergency (EIP-8-3, step 10).
- ___ 3. If personnel injury or fire is involved, refer to FNP-0-EIP-11.0 and 13.0 respectively for additional actions and EIP-8.0 steps 5.0 and 6.0 for additional notification requirements.
- ___ 4. U.S. Army EOD group at Fort Benning, GA, if necessary.
- ___ 5. Savannah River Operations Office, if necessary.

G. In Plant Protective Actions

- ___ 1. Ensure personnel accountability per EIP-10.0.
- ___ 2. Plan and initiate reentry's per EIP-14.0.
- ___ 3. Ensure proper Control Room response.
- ___ 4. Assign an individual to provide periodic plant status updates.
- ___ 5. Assign an individual to maintain a log of important Emergency Director activities.
- ___ 6. Assign an individual to keep a record of all off-site communications.

H. Off-Site Support

- ___ 1. Ensure Radiation Monitoring teams have been dispatched per EIP-4.0.
- ___ 2. Provide information to the Recovery Manager for use in press releases and recovery planning.

GUIDELINE 1**GENERAL EMERGENCY****I. Information to Off Site Authorities**

- ___ 1. Provide periodic plant status updates, meteorological and dose estimates and release projections based on plant conditions and foreseeable contingencies.

J. Re-Assess plant conditions

- ___ 1. Continue to assess plant and radiological conditions to ensure the correct emergency classification is declared.
- ___ 2. If plant and radiological conditions no longer require the current emergency classification downgrade or close out the emergency class using FNP-0-EIP-28.0.

K. Long term staffing

- ___ 1. Within 8 hours, provide for full TSC and OSC reliefs.
- ___ 2. Within 16 hours, provide for 24 hour TSC and OSC coverage.

L. Protective action recommendation guidance

CAUTION 1 THE PROTECTIVE ACTION RECOMMENDATION SECTION OF THE EMERGENCY NOTIFICATION FORM (FIGURE 6) MUST BE COMPLETED FOR ALL INITIAL AND FOLLOWUP MESSAGES.

CAUTION 2 RECOMMENDATIONS OF A PARTIAL EVACUATION OR SHELTERING OF A ZONE IS NOT ALLOWED.

CAUTION 3 IF BOTH PLANT CONDITIONS AND DOSE PROJECTION INDICATE THAT CRITERIA FOR A GENERAL EMERGENCY ARE MET, PROTECTIVE ACTION RECOMMENDATIONS LISTED IN SECTION 1 AND 2 SHALL BE CONSIDERED, OTHERWISE ONLY THE APPROPRIATE SECTION SHOULD BE USED.

NOTE 1 RECOMMENDATIONS SHOULD SPECIFY EVACUATION DISTANCES 2 MILES, 5 MILES, OR 10 MILES, AND SPECIFIC EVACUATION ZONES.

NOTE 2 WHEN SPECIFYING EVACUATION ZONES, CONSIDERATION SHOULD BE GIVEN TO SECTION ADJACENT TO THE PLUME LOCATION.

GUIDELINE 1**GENERAL EMERGENCY**

- NOTE 3 WIND VARIABILITY SHOULD BE CONSIDERED WHEN SELECTING THE WIDTH OF EVACUATION ZONES.**
- NOTE 4 EVACUATION TIME ESTIMATES INDICATED ON FIGURE 1 FOR THE EFFECTED ZONES SHOULD BE CONSIDERED WHEN MAKING EVACUATION RECOMMENDATIONS.**
- NOTE 5 CONTINUE TO ASSESS PROTECTIVE ACTION RECOMMENDATIONS AND MODIFY AS NECESSARY.**
- NOTE 6 ONLY THE PROTECTIVE ACTIONS SPECIFIED BY PLANT PROCEDURES SHOULD BE RECOMMENDED, UNLESS THERE ARE OBVIOUS RELEVANT FACTORS (E.G., SEVERE NATURAL PHENOMENA) THAT PROBABLY WERE NOT ANTICIPATED WHEN THE PARS WERE DEVELOPED, AND THAT WOULD MAKE THE STANDARD PAR RECOMMENDATIONS IMPRACTICAL OR OBVIOUSLY NON-CONSERVATIVE. IN SUCH EVENTS, THE EMERGENCY DIRECTOR SHOULD USE HIS OWN JUDGMENT AS APPROPRIATE.**

CAUTION: IF THE EMERGENCY CLASSIFICATION IS BASED ON DOSE PROJECTIONS, THE RECOMMENDATIONS OF STEP 2 ON THE FOLLOWING PAGE SHOULD BE USED.

1. Use the recommendations below if the Emergency Classification is based solely on Plant Conditions and not on dose projections:

Recommendations

- a. **EVACUATE AND CONTROL ACCESS IN DOWNWIND ZONES**

Recommend immediate evacuation for all of the general population and controlling access within a two mile radius of FNP (Zone A) and 5 miles downwind of FNP (Zones B-5,C-5,...K-5) (When evacuating 5 mile downwind zones, disregard portions of the 10 mile zones, D-10 through G10 and I-10 through K-10, which fall within 5 miles of FNP).

GUIDELINE 1**GENERAL EMERGENCY****b. SHELTER AND CONTROL ACCESS IN DOWNWIND ZONES**

Recommend immediate sheltering of the general population and controlling access in the 10 mile downwind zones(B-10,C-10,...K-10), unless more extensive protective actions are known to be required.

2. Use the recommendations below if the Emergency Classification is based on dose projections:**Recommendations:****a. EVACUATE AND CONTROL ACCESS IN DOWNWIND ZONES**

Recommend immediate evacuation for all of the general population and controlling access within a two mile radius of FNP (Zone A) and 5 miles downwind of FNP (Zones B-5,C-5,...K-5) (When evacuating 5 mile downwind zones, disregard portions of the 10 mile zones, D-10 through G10 and I-10 through K-10, which fall within 5 miles of FNP).

b. SHELTER AND CONTROL ACCESS IN DOWNWIND ZONES

Recommend immediate sheltering of the general population and controlling access in the 10 mile downwind zones (B-10,C-10,...K-10), unless more extensive protective actions are known to be required.

- c. Recommend locating and evacuating hot spots.
- d. Recommend implementing control of food and water supplies pending sampling and analysis and possible confiscation in certain areas.
- e. Recommend monitoring of environmental radiation levels.
- f. Recommend to consider evacuation of children and pregnant women.

GUIDELINE 2**SITE AREA EMERGENCY****I. Criteria For Classification**

The classification of Site Area Emergency applies to those events which are in progress or have occurred involving actual or likely major failures of plant functions needed for protection of the public from radiation or contamination. The potential for release of radioactive material for the Site Area Emergency classification is up to 1000 Ci of I-131 equivalent, or 10^4 to 10^6 Ci of Xe-133 equivalent. The purpose of the declaration of a Site Area Emergency is to:

- (a) Assure that response centers are manned,
- (b) Assure that monitoring teams are dispatched,
- (c) Assure that personnel involved in an evacuation effort of near site areas are at their duty stations if the situation worsens, and,
- (d) Provide current information for and consultation with offsite authorities and the public.
- (e) A Site Area Emergency would be declared for plant conditions that warrant activation of emergency centers and monitoring teams.

A Site Area Emergency would be declared for any of the following:

1.0 RCS FAULT

- A major loss of primary coolant as indicated by:
 - (a) Decreasing pressurizer pressure and possible level, **AND**
 - (b) Near normal steam pressure in all steam generators accompanied by,
 - (1) Containment pressure reaching 27 psig, **AND**
 - (2) High containment radiation (R-2, R-11, and R-12 reaching their alarm setpoint), **AND**
 - (3) High containment sump (recirculation) level **AND**
 - (4) High containment humidity.

GUIDELINE 2**SITE AREA EMERGENCY**

- Rupture of a control rod mechanism housing as indicated by the following:
 - (a) Rod position indication, **AND**
 - (b) High RCS pressure surge, **AND**
 - (c) Momentary nuclear power surge, **AND**
 - (d) Subsequent behavior indicating a loss of primary coolant.

2.0 SG FAULT OR RUPTURE

- A loss of offsite power and a steam generator tube rupture as indicated by:
 - (a) ECCS actuation, **AND**
 - (b) High secondary coolant activity (R-15 or R-19 reach full scale)
- Greater than 50 gpm primary to secondary leak, fuel damage as evidenced by a reactor coolant activity greater than technical specifications, and a steam line break outside containment as indicated by:
 - (a) Abnormally low steam pressure on one or all steam generators with **one or more** of the following:
 - (1) Steam line high flow,
 - (2) Steam line high differential pressure,
 - (3) Steam flow greater than feed flow
 - AND**
 - (b) **No** abnormal temperature or humidity increase in containment,

GUIDELINE 2**SITE AREA EMERGENCY****3.0 DEGRADED CORE/FUEL FAULT**

3.1 Figure 8 may be used to help evaluate if Dose Equivalent I-131 (DEI) is > 300 $\mu\text{Ci}/\text{gram}$.

- RCS activity > 300 $\mu\text{Ci}/\text{gram}$ dose equivalent I-131 with potential excessive RCS leakage or potential loss of containment.
- Degraded core conditions with possible loss of core geometry as indicated by:

(a) ΔT between RCS wide range hot leg and cold leg temperature >64°F and core exit temperature (in core thermocouples) reading greater than 800°F and increasing, **OR**

(b) Core exit temperature (in core thermocouples) >1200°F.

- Spent fuel handling accident for which sampling or radiation monitors indicate a projected lower limit of offsite individual exposure to be:

100 mrem (.1 rem) TEDE **OR**

500 mrem (.5 rem) thyroid CDE

As a result of one of the following:

(a) Dropped spent fuel assembly, **OR**

(b) An object is dropped onto a spent fuel assembly, **OR**

(c) A cask containing a spent fuel assembly is dropped exposing the assembly, **OR**

(d) A spent fuel assembly is deformed as a result of any manipulation, **OR**

(e) Spent fuel pool water level below top of assemblies.

GUIDELINE 2**SITE AREA EMERGENCY****4.0 HIGH EFFLUENT**

- Projected exposure at site boundary or projected peak dose location within the plume for EDCM calculation:
 - (a) Greater than or equal to 100 mrem (.1 rem) TEDE exposure

OR

- (b) Greater than or equal to 500 mrem (.5 rem) thyroid CDE exposure

5.0 EQUIPMENT/STRUCTURE FAILURE

- Loss of functions for achieving hot standby.
- Transients requiring operation of shutdown systems with failure to trip (continued power generation but no core damage immediately evident).

6.0 ELECTRICAL/INSTRUMENTATION FAULT

- Loss of offsite power with a failure of all emergency AC power for more than 15 minutes.
- Loss of both trains of auxiliary building DC power for more than 15 minutes.
- Loss of all main control board annunciator capability for more than 15 minutes while:
 - (a) Plant is not in cold shutdown, OR
 - (b) Significant plant transient is initiated while all alarms lost.

GUIDELINE 2**SITE AREA EMERGENCY****7.0 SITE HAZARDS**

- A fire affecting ECCS.
- Severe natural phenomena being experienced or projected with plant not in cold shutdown:
 - (a) Earthquake greater than SSE levels
 - (b) Flood, low river water, or hurricane surge greater than design levels.
 - (c) Winds in excess of 115 mph.
- Other hazards being experienced with the plant not in cold shutdown as follows:
 - (a) Aircraft crash affecting vital structures by fire or impact, **OR**
 - (b) Severe damage to safe shutdown equipment from missiles or explosion, **OR**
 - (c) Entry of toxic or flammable gases into vital areas(s)

8.0 SECURITY/EVACUATION

- 8.1 If the basis for declaring this emergency classification is based on security concerns, then refer to table 3 prior to taking actions that will cause people to report to the site or change locations on site.
- Imminent loss of physical control of the plant (i.e., takeover by terrorists, anti-nuclear factions, etc.).
 - Evacuation of the control room and control of shutdown systems not established from local stations in 15 minutes.

GUIDELINE 2

SITE AREA EMERGENCY

II. Emergency Director Actions

NOTE: THE SHIFT SUPERVISOR SHALL PERFORM THE DUTIES OF THE EMERGENCY DIRECTOR UNTIL HIS ARRIVAL AND ASSUMPTION OF DUTIES.

The Emergency Director shall perform or direct the following:

NOTE: ACTIVATION OF THE TSC AND EOF STAFFS, PER STEPS E1 AND E2 SHOULD BE DONE IN PARALLEL WITH NOTIFICATION OF THE STATE AND LOCAL AGENCIES BY A SEPARATE INDIVIDUAL, NORMALLY THE SHIFT CLERK.

Initials

- ___ A. Sound the Plant Emergency Alarm, if not already sounded.
- ___ B. Announce the condition and give needed evacuation instructions over plant public address system.

NOTE: THE "APPROVED BY" TIME AND DATE (LINE 16, FIG. 6) AND THE "DECLARATION" TIME AND DATE (LINE 6, FIG. 6) SHOULD ALWAYS BE THE SAME TIME. THE TIME OF DECLARATION MUST BE AFTER THE EMERGENCY DIRECTOR HAS APPROVED THE EMERGENCY CLASSIFICATION AND PROTECTIVE ACTION RECOMMENDATIONS.

THE TRANSMITTAL TIME AND DATE (LINE 3, FIG. 6) SHOULD BE THE TIME AT WHICH FIGURE 6 IS READ OVER THE ENN.

- ___ C. Fill in the emergency notification form (FIG 6), including developing protective action recommendations per step L. Take into account the zones and evacuation time estimates shown in figure 1.

NOTE: INITIAL NOTIFICATION WILL NORMALLY BE MADE BY THE NON-AFFECTED UNIT SHIFT FOREMAN. NOTIFICATIONS CAN BE MADE BY AN EXTRA SHIFT SUPERVISOR, SHIFT FOREMAN, OPERATIONS SHIFT CLERK, TSC STAFF OR OTHER QUALIFIED PERSON USING FIGURE 6.

NOTE: INITIAL AND UPGRADE NOTIFICATIONS AND CLASSIFICATIONS SHOULD BE DONE FROM THE CONTROL ROOM OR THE TSC, WITH THE EOF INFORMED AS SOON AS POSSIBLE.

GUIDELINE 2**SITE AREA EMERGENCY****___ D. Initial Notifications**

Using the ENN, notify at least one agency in each state (state level preferred) within 15 minutes using Figure 6 (Emergency Notification). EIP 8.3, step 15, may be used as guidance if required. If at least one agency in each state (state level preferred) has not acknowledged in 10 minutes, THEN notify at least one agency in any state that has not acknowledged, using the telephone numbers on Figure 6, or in EIP 8.1, steps 12 or 13.

Verify notifications complete and documented on the Emergency Notification form (fig 6, side 2).

NOTE: PERFORM THE FOLLOWING STEPS IN PARALLEL TO THE MAXIMUM EXTENT POSSIBLE.

E. Emergency Organization Notifications

NOTE: TABLE 2 PROVIDES GUIDANCE AS TO THE REQUIRED LEVEL OF ACTIVATION OF THE TSC AND EOF. FULL ACTIVATION INITIALLY IS RECOMMENDED, THEN USE TABLE 2 FOR GUIDANCE IN DOWNSIZING.

STEPS E1 AND E2, NOTIFYING THE TSC AND EOF STAFF WILL NORMALLY BE ACCOMPLISHED BY HAVING THE SHIFT CLERK OR OTHER QUALIFIED INDIVIDUAL ACTIVATE THE COMMUNITY ALERT NETWORK (CAN) PER FNP-0-EIP-8.3, TABLE 2 AND STEP 11).

- ___ 1. TSC Staff (full activation recommended initially)
- ___ 2. EOF Staff (full activation recommended initially)
- ___ 3. On-call Emergency Director
- ___ 4. On-call Recovery Manager
- ___ 5. Emergency Support Manager
- ___ 6. Notify Security of Emergency, incoming personnel, access restrictions and to setup the EOF (pax 4611).

GUIDELINE 2SITE AREA EMERGENCY

F. Other Notifications

- ___ 1. NRC (Perform immediately after state notification and within one hour of declaration per figure 6, side 2.)
- ___ 2. Have Regulatory ERDS activated to transmit data to the NRC within one hour of the declaration of the emergency (EIP 8.3, step 10).
- ___ 3. If personnel injury or fire is involved, refer to FNP-0-EIP-11.0 and 13.0 respectively for additional actions and EIP-8.0 steps 5.0 and 6.0 for additional notifications.
- ___ 4. U.S. Army EOD group at Fort Benning, GA, if necessary.
- ___ 5. Savannah River Operations Office, if necessary.

G. In Plant Protective Actions

- ___ 1. Ensure personnel accountability per EIP-10.0.
- ___ 2. Plan and initiate reentries per EIP-14.0.
- ___ 3. Ensure proper Control Room response.
- ___ 4. Assign an individual to provide periodic plant status updates.
- ___ 5. Assign an individual to maintain a log of important Emergency Director activities.
- ___ 6. Assign an individual to keep a record of all off site communications.

H. Off Site Support

- ___ 1. Ensure Radiation Monitoring teams have been dispatched per EIP-4.0.
- ___ 2. Provide information to the Recovery Manager for use in press releases and recovery planning.

GUIDELINE 2

SITE AREA EMERGENCY

I. Information to Off Site Authorities

- _____ 1. Provide periodic plant status updates, meteorological and dose estimates and release projections based on plant conditions and foreseeable contingencies.

J. Re-Assess plant conditions

- _____ 1. Continue to assess plant and radiological conditions to ensure the correct emergency classification is declared.
- _____ 2. If a higher emergency classification is required immediately go to the appropriate guideline.
- _____ 3. If plant and radiological conditions no longer require the current emergency classification downgrade or close out the emergency class using FNP-0-EIP-28.0.

K. Long term staffing

- _____ 1. Within 8 hours, provide for full TSC and OSC reliefs.
- _____ 2. Within 16 hours, provide for 24 hour TSC and OSC coverage.

L. Protective action recommendation guidance

CAUTION 1: THE PROTECTIVE ACTION RECOMMENDATION SECTION OF THE EMERGENCY NOTIFICATION FORM (FIGURE 6) MUST BE COMPLETED FOR ALL INITIAL AND FOLLOWUP MESSAGES.

NOTE 1: CONTINUE TO ASSESS PROTECTIVE ACTION RECOMMENDATIONS AND MODIFY AS NECESSARY.

GUIDELINE 2

SITE AREA EMERGENCY

NOTE 2: ONLY THE PROTECTIVE ACTIONS SPECIFIED BY PLANT PROCEDURES SHOULD BE RECOMMENDED, UNLESS THERE ARE OBVIOUS RELEVANT FACTORS (E.G., SEVERE NATURAL PHENOMENA) THAT WERE PROBABLY NOT ANTICIPATED WHEN THE PARs WERE DEVELOPED, AND THAT WOULD MAKE THE STANDARD PAR RECOMMENDATIONS IMPRACTICAL, OR OBVIOUSLY NON-CONSERVATIVE. IN SUCH EVENTS, THE EMERGENCY DIRECTOR SHOULD USE HIS OWN JUDGMENT AS APPROPRIATE.

1. Protective Action Recommendations are not required; however, they may (at the discretion of the Emergency Director) be made as a precautionary measure, depending on the severity of the plant condition or if the site boundary dose is approaching the General Emergency limit. Refer to note 2 above.

If it is determined that PARs are required then use the guidance of Guideline 1, Section L when making the recommendations

GUIDELINE 3**ALERT****I. Criteria For Classification**

The classification of Alert applies to situations in which events are in process or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant. The potential for release of radioactive material for the Alert classification is up to 10 curies of I-131 equivalent, or up to 10^4 curies of Xe-133 equivalent. The purpose of offsite alert is to assure that emergency personnel are readily available to respond if the situation becomes more serious or to perform confirmatory radiation monitoring, if required, and to provide offsite authorities current status information for possible further action.

- (a) An Alert would be declared for plant conditions that warrant precautionary activation of the technical support center, operations support centers, and the emergency operations facility (at the discretion of the Recovery Manager).

An Alert would be declared for any of the following:

1.0 RCS FAULT

- A primary coolant leak greater than 50 gpm. Indications of such a leak will include high charging flow **AND**
 - (a) High containment radiation (R 2, R 22, and R 12) **AND**
 - (b) High containment humidity
- **OR**
 - (c) Pressurizer relief or safety valve discharge line temperature high **AND**
 - (d) Pressurizer relief tank level, pressure or temperature increasing or above normal.
- Single rod cluster control assembly withdrawal at power as detected by:
 - (a) Rod position indicator, **AND**
 - (b) Increasing core power, **AND**
 - (c) Increasing Tavg.

GUIDELINE 3**ALERT****2.0 SG FAULT OR RUPTURE**

- Steam generator tube rupture indicated by:
 - (a) ECCS actuation, **AND**
 - (b) High secondary coolant activity (R-15, R-19, R-23A, or R-23B reach full scale).
- Greater than 10 gpm primary to secondary leak as indicated by high secondary coolant activity (R-15, R-19, R-23A, or R-23B alarming) **WITH** a steam line break outside containment indicated by:
 - (a) Abnormally low steam pressure on one or all steam generators with one or more of the following:
 - (1) Steam line high flow, **OR**
 - (2) Steam line high differential pressure, **OR**
 - (3) Steam flow greater than feedwater flow
 - AND**
 - (b) No abnormal temperature, or humidity increase in containment.
- A steam or feed line break inside containment as indicated by abnormally low pressure on one steam generator with the following:
 - (a) Steam line high differential pressure, **OR**
 - (b) Steam flow greater than feed flow, **OR**
 - (c) Steam line high flow, **AND**
 - (d) Containment high temperature.

GUIDELINE 3**ALERT****3.0 DEGRADED CORE/FUEL FAULT**

- 3.1 Figure 8 may be used to help evaluate if Dose Equivalent I-131 (DEI) is > 300 μ Ci/gram:
- Severe loss of fuel cladding as indicated by a reactor coolant activity equal to or greater than 300 μ Ci/gram equivalent I-131.
 - Spent fuel handling accident in which an increase in radiation level (i.e., alarm condition or off scale reading) is observed on R-2, R-11, R-12, R-5, **OR** R-25 as a result of one of the following:
 - (a) Dropped spent fuel assembly, **OR**
 - (b) An object is dropped onto a spent fuel assembly, **OR**
 - (c) A cask containing a spent fuel assembly is dropped, **OR**
 - (d) A spent fuel assembly is deformed as a result of any manipulation, **OR**
 - (e) Low spent fuel pool water level.

4.0 HIGH EFFLUENT

- Radiological effluent at the site boundary (combined effect from both units) greater than 10 times the radiological technical specification instantaneous limits (based on ODCM) as follows, per EIP-9.5:
 - (a) Liquids: 10 times 10CFR20 Appendix B, Table 2, Column 2
 - (b) Liquids: Dissolved or entrained noble gases: 0.001 mCi/ml
 - (c) Noble gases (whole body) 5.7E-4 Rem/hr (5.7E-1 mrem/hr)
 - (d) Noble gases (skin): 3.4E-3 Rem/hr (3.4 mrem/hr)
 - (e) Airborne radioiodine and particulates other than noble gases: 1.7E-3 Rem/hr (1.7 mrem/hr)

GUIDELINE 3**ALERT**

- High radiation levels or high airborne contamination indicative of a severe degradation in the control of radioactive materials as indicated by:

(a) Readings on R-14 (stack gas monitor), R-21 (stack particulate monitor) **OR** R-22 (stack gas monitor) reading off scale,

AND

(b) Sampling or R-27 high range containment monitor confirms direct readings.

5.0 EQUIPMENT/STRUCTURE FAILURE

- Loss of:
 - (a) All auxiliary feedwater (Modes 1-3), **OR**
 - (b) Both trains of RHR (All modes), **OR**
 - (c) Both trains of CCW (Modes 1-4), **OR**
 - (d) Both trains of Service Water (Modes 1-4)
- Failure of the reactor protection system to initiate and complete a trip which brings the reactor subcritical.

6.0 ELECTRICAL/INSTRUMENTATION FAULT

- Loss of offsite power with a failure of all emergency AC power for less than 15 minutes.
- Loss of both trains of auxiliary building DC power for less than 15 minutes.
- Loss of all main control board annunciator capability.

GUIDELINE 3**ALERT****7.0 SITE HAZARDS**

- Severe natural phenomena being experienced or projected as follows:
 - (a) Earthquake greater than OBE levels. (ARP-1.12 LOC MK5)
 - (b) Flood, low river water or hurricane surge near design levels that could impact plant operations.
 - (c) Any tornado striking facility
 - (d) Hurricane winds near design basis level (115 mph)
- Hazards experienced onsite which affect plant operation such as
 - (a) Aircraft crash
 - (b) Release of toxic gas
 - (c) Release of flammable gas
- Fire or explosion potentially affecting ECCS

8.0 SECURITY/EVACUATION

- 8.1 If the basis for declaring this emergency classification is based on security concerns, then refer to Table 3 prior to taking actions that will cause people to report to the site or change locations on site.
- A security emergency involving the occurrence of or imminent threat of sabotage.
 - Evacuation of control room anticipated or required with control of shutdown systems established from local stations.

GUIDELINE 3

ALERT

II. Emergency Director Actions

NOTE: THE SHIFT SUPERVISOR SHALL PERFORM THE DUTIES OF THE EMERGENCY DIRECTOR UNTIL HIS ARRIVAL AND ASSUMPTION OF DUTIES.

Initials

The Emergency Director shall perform or direct the following:

NOTE: ACTIVATION OF THE TSC AND EOF STAFFS PER STEPS E1 AND E2 SHOULD BE DONE IN PARALLEL WITH NOTIFICATION OF THE STATE AND LOCAL AGENCIES BY A SEPARATE INDIVIDUAL, NORMALLY THE SHIFT CLERK.

- A. Announce the condition and give needed evacuation instructions over plant public address system.
- B. Evacuate affected areas of the plant as appropriate.
- C. Fill in the emergency notification form (FIG 6), including developing protective action recommendations per step L. Take into account the zones and evacuation time estimates shown in figure 1.

GUIDELINE 3**ALERT**

NOTE: INITIAL NOTIFICATION WILL NORMALLY BE MADE BY THE NON-AFFECTED UNIT SHIFT FOREMAN. NOTIFICATIONS CAN BE MADE BY AN EXTRA SHIFT SUPERVISOR, SHIFT FOREMAN, OPERATIONS SHIFT CLERK, TSC STAFF OR OTHER QUALIFIED PERSON USING FIGURE 6.

NOTE: INITIAL AND UPGRADE NOTIFICATIONS AND CLASSIFICATIONS SHOULD BE DONE FROM THE CONTROL ROOM OR THE TSC, WITH THE EOF INFORMED AS SOON AS POSSIBLE.

___ D. Initial Notifications

1. **IF** an ALERT was declared due to radiological effluents greater than or equal to ALERT limits which are 10 times Technical Specification limits, **THEN** enter the following information on the Emergency Notification form (figure 6, line 7):
 - a. ODCM site boundary dose rates from EIP-9.5.

and
 - b. The following note:

"Dose rate at site boundary has been calculated using the ODCM as required by the FNP Technical Specification. EDCM calculation is not appropriate."
2. Using the ENN, notify within 15 minutes at least one agency in each state (state level preferred), utilizing Figure 6 (Emergency Notification). EIP-8.3, step 15, may be used as guidance if required. **IF** at least one agency in each state (state level preferred) has not acknowledged within 10 minutes, **THEN** notify at least one agency in any state that has not acknowledged, using the telephone numbers in Figure 6 or in EIP-8.1, steps 12 or 13.

Verify notifications complete and documented on the Emergency Notification form (fig 6, side 2)

GUIDELINE 3**ALERT**

NOTE: PERFORM THE FOLLOWING STEPS IN PARALLEL TO THE MAXIMUM EXTENT POSSIBLE.

E. Emergency Organization Notifications

NOTE: TABLE 2 PROVIDES GUIDANCE AS TO THE REQUIRED LEVEL OF ACTIVATION FOR THE TSC AND EOF. FULL ACTIVATION INITIALLY IS RECOMMENDED, THEN USE TABLE 2 FOR GUIDANCE IN DOWNSIZING.

STEPS E.1 AND E.2, NOTIFYING THE TSC AND EOF STAFF, WILL NORMALLY BE ACCOMPLISHED BY HAVING THE SHIFT CLERK OR OTHER QUALIFIED INDIVIDUAL ACTIVATE THE COMMUNITY ALERT NETWORK (CAN) PER FNP-0-EIP-8.3, TABLE 2 AND STEP 11.

- ___ 1. TSC Staff (full activation recommended initially)
- ___ 2. EOF Staff (full activation recommended initially)
- ___ 3. On-call Emergency Director
- ___ 4. On-call Recovery Manager
- ___ 5. Emergency Support Manager
- ___ 6. Notify Security of Emergency, incoming personnel, access restrictions and to setup the EOF (PAX 4611)

F. Other Notifications

- ___ 1. NRC (Perform immediately after state notification and within one hour of declaration per figure 6, side 2)
- ___ 2. Have Regulatory ERDS activated to transmit data to the NRC within one hour of the declaration of the emergency (EIP-8.3, step 10)
- ___ 3. If personnel injury or fire is involved, refer to FNP-0-EIP-11.0 and 13.0 respectively for additional actions and EIP-8.0 steps 5.0 and 6.0 for additional notifications

GUIDELINE 3**ALERT**

___ 4. U.S. Army EOD group at Fort Benning, GA, if necessary

___ 5. Savannah River Operations Office, if necessary

G. In Plant Protective Actions

___ 1. Ensure personnel accountability per EIP-10.0, if any areas of the plant were evacuated due to hazardous conditions

___ 2. Plan and initiate re-entries per EIP-14.0, if any areas of the plant were evacuated due to hazardous conditions

___ 3. Ensure proper Control Room response

___ 4. Assign an individual to provide periodic plant status updates

___ 5. Assign an individual to maintain a log of important Emergency Director activities

___ 6. Assign an individual to keep a record of all off site communications

H. Off Site Support

___ 1. Ensure Radiation Monitoring teams have been dispatched per EIP 4.0.

___ 2. Provide information to the Recovery Manager for use in press releases and recovery planning

I. Information to Off Site Authorities

___ 1. Provide periodic plant status updates, meteorological and dose estimates and release projections based on plant conditions and foreseeable contingencies.

GUIDELINE 3

ALERT

J. Re-Assess plant conditions

- 1. Continue to assess plant and radiological conditions to ensure the correct emergency classification is declared.
- 2. If a higher emergency classification is required immediately go to the appropriate guideline
- 3. If plant and radiological conditions no longer require the current emergency classification downgrade or close out the emergency class using FNP-0-EIP-28.0.

K. Long term staffing

- 1. Within 8 hours, provide for full TSC and OSC reliefs
- 2. Within 16 hours, provide for 24 hour TSC and OSC coverage

GUIDELINE 3

ALERT

L. Protective action recommendation guidance

CAUTION 1: THE PROTECTIVE ACTION RECOMMENDATION SECTION OF THE EMERGENCY NOTIFICATION FORM (FIGURE 6) MUST BE COMPLETED FOR ALL INITIAL AND FOLLOWUP MESSAGES.

NOTE 1: CONTINUE TO ASSESS PROTECTIVE ACTION RECOMMENDATIONS AND MODIFY AS NECESSARY.

NOTE 2: ONLY THE PROTECTIVE ACTIONS SPECIFIED BY PLANT PROCEDURES SHOULD BE RECOMMENDED UNLESS THERE ARE OBVIOUS RELEVANT FACTORS (E.G., SEVERE NATURAL PHENOMENA) THAT WERE NOT ANTICIPATED WHEN THE PARs WERE DEVELOPED, AND THAT WOULD MAKE THE STANDARD PAR RECOMMENDATIONS IMPRACTICAL OR OBVIOUSLY NON-CONSERVATIVE. IN SUCH EVENTS, THE EMERGENCY DIRECTOR SHOULD USE HIS OWN JUDGMENT AS APPROPRIATE.

1. Protective Action Recommendations are not required. Block A of Line 15 on Figure 6 should be checked.

GUIDELINE 4**NOTIFICATION OF UNUSUAL EVENT****I. Criteria For Classification**

The classification of Notification of Unusual Event applies to situations in which events are in process or have occurred which could indicate a potential degradation of the level of safety of the plant. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occur.

- (a) A NOTIFICATION OF UNUSUAL EVENT would be required for any plant condition that warrants increased awareness on the part of state and/or local offsite authorities or involve other than normal plant shutdown.

A Notification Of Unusual Event would be declared for any of the following:

1.0 RCS FAULT

- Failure of any of the following valves to close:
 - (a) Pressurizer safety valve.
 - (b) Pressurizer power operated relief valve and its remote motor operated isolation valve.
- Initiation of safety injection either automatically or manually as a result of plant parameters approaching or reaching their setpoint.
- Complete loss of forced RCS flow as indicated by RCS flow indicators on all three RCS loops.

2.0 SG FAULT OR RUPTURE

- Failure of any of the following valves to close:
 - (a) A steam generator safety valve
 - (b) A steam generator power operated relief valve
- Loss of secondary coolant outside containment concurrent with ECCS activation.

GUIDELINE 4**NOTIFICATION OF UNUSUAL EVENT****3.0 DEGRADED CORE/FUEL FAULT**

- Indicated subcooling (margin to saturation) decreased below 10°F.
- Inadvertent loading of a fuel assembly into an improper position which causes F_q to be greater than the Technical Specification limit.
- RCS activity exceeds Tech. Spec. limit that requires shutdown.

4.0 HIGH EFFLUENT

- Radiological effluents at the site boundary (combined effluent from both units) in excess of the radiological technical specifications instantaneous limits (based on ODCM) as follows:
 - (a) Liquids 10CFR20 Appendix B, Table 2 Column 2
 - (b) Liquids: Dissolved or entrained noble gases $1.0 \text{ E-}4 \text{ } \mu\text{Ci/ml}$
 - (c) Noble gases (whole body) $5.7\text{E-}5 \text{ Rem/hr}$ ($5.7\text{E-}2 \text{ mrem/hr}$)
 - (d) Noble gases (skin) $3.4\text{E-}4 \text{ Rem/hr}$ ($3.4\text{E-}1 \text{ mrem/hr}$)
 - (e) Airborne radioiodine and particulates other than noble gases: $1.7\text{E-}4 \text{ Rem/hr}$ ($1.7\text{E-}1 \text{ mrem/hr}$)

5.0 EQUIPMENT/STRUCTURE FAILURE

- Loss of containment integrity requiring shutdown to HOT SHUTDOWN.

6.0 ELECTRICAL/INSTRUMENTATION FAULT

- Loss of both trains of offsite power OR loss of all onsite emergency power (diesel generators and auxiliaries).
- Loss of control room indication or annunciation to an extent requiring shutdown.

GUIDELINE 4**NOTIFICATION OF UNUSUAL EVENT****7.0 SITE HAZARDS**

- Natural phenomena being experienced or projected to affect the plant site as follows:
 - (a) Any earthquake.
 - (b) Unusual river water level caused by flood, low water or hurricane surge.
 - (c) Any tornado onsite.
 - (d) Any threatening hurricane.
- Hazards experienced onsite or within one mile of the site boundary which could affect plant operations, such as:
 - (a) Aircraft crash.
 - (b) Explosion.
 - (c) Fire affecting a safety related or a non-safety related nuclear process system.
 - (d) Fire or explosion affecting safe shutdown capability.
 - (e) Release of toxic gas.
 - (f) Release of flammable gas.

8.0 SECURITY/EVACUATION

- 8.1 If the basis for declaring this emergency classification is based on security concerns then refer to table 3 prior to taking actions that will cause people to report to the site or change locations on site.
- Attempted unauthorized entry into a vital area or attempted sabotage of vital equipment.

GUIDELINE 4

NOTIFICATION OF UNUSUAL EVENT

II. Emergency Director Actions

NOTE: THE SHIFT SUPERVISOR SHALL PERFORM THE DUTIES OF THE EMERGENCY DIRECTOR UNTIL HIS ARRIVAL AND ASSUMPTION OF DUTIES.

The Emergency Director shall perform or direct the following:

Initials

- _____ A. Announce the condition and give needed evacuation instructions over plant public address system.
- _____ B. Evacuate affected areas of the plant as appropriate.

NOTE: THE "APPROVED BY" TIME AND DATE (LINE 16, FIG. 6) AND THE "DECLARATION" TIME AND DATE (LINE 6, FIG. 6) SHOULD ALWAYS BE THE SAME TIME. THE TIME OF DECLARATION MUST BE AFTER THE EMERGENCY DIRECTOR HAS APPROVED THE EMERGENCY CLASSIFICATION AND PROTECTIVE ACTION RECOMMENDATIONS.

THE TRANSMITTAL TIME AND DATE (LINE 3, FIG. 6) SHOULD BE THE TIME AT WHICH FIG. 6 IS READ OVER THE ENN.

- _____ C. Fill in the emergency notification form (FIG 6), including developing protective action recommendations per step L. Take into account the zones and evacuation time estimates shown in figure 1.

NOTE: INITIAL NOTIFICATION WILL NORMALLY BE MADE BY THE NON-AFFECTED UNIT SHIFT FOREMAN. NOTIFICATIONS CAN BE MADE BY AN EXTRA SHIFT SUPERVISOR, SHIFT FOREMAN, OPERATIONS SHIFT CLERK, TSC STAFF OR OTHER QUALIFIED PERSON USING FIGURE 6.

INITIAL AND UPGRADE NOTIFICATIONS AND CLASSIFICATIONS SHOULD BE DONE FROM THE CONTROL ROOM OR THE TSC, WITH THE EOF INFORMED AS SOON AS POSSIBLE.

GUIDELINE 4

NOTIFICATION OF UNUSUAL EVENT

___ D. Initial Notifications

1. IF a NOUE was declared due to radiological effluents greater than the NOUE limits which are the Technical Specification limits, THEN enter the following information on the Emergency Notification form (Figure 6, line 7):
 - a. ODCM site boundary dose rates from EIP 9.5.
 - and
 - b. The following note:

"Dose rate at site boundary has been calculated using the ODCM as required by the FNP Technical Specification. EDCM calculation is not appropriate."
2. Using the ENN, notify within 1 hour at least one agency in each state (state level preferred), utilizing Figure 6 (Emergency Notification). EIP-8.3, step 15, may be used as guidance if required. IF at least one agency in each state (state level preferred) has not acknowledged within 10 minutes, THEN notify at least one agency in any state that has not acknowledged, using the telephone numbers in Figure 6 or in EIP-8.1, steps 12 or 13.

Verify notifications complete and documented on the Emergency Notification form (Fig 6, side 2).

NOTE: PERFORM THE FOLLOWING STEPS IN PARALLEL TO THE MAXIMUM EXTENT POSSIBLE.

E. Emergency Organization Notifications

NOTE: TABLE 2 PROVIDES GUIDANCE AS TO THE REQUIRED LEVEL OF ACTIVATION OF THE TSC AND EOF. LEVEL OF ACTIVATION, IF ANY, IS AT THE DISCRETION OF THE ED/RM. SEE EIP-6/27 FOR GUIDANCE.

- ___ 1. TSC Staff, if activated by the ED
- ___ 2. EOF Staff, if activated by the RM

GUIDELINE 4**NOTIFICATION OF UNUSUAL EVENT**

- 3. On-call Emergency Director
 - 4. On-call Recovery Manager
 - 5. Emergency Support Manager
 - 6. Notify Security of Emergency, incoming personnel and access restrictions (PAX 4611).
- F. Other Notifications
- 1. NRC (Perform immediately after state notification and within one hour of declaration per Figure 6, side 2).
 - 2. If personnel injury or fire is involved, refer to FNP-0-EIP-11.0 and 13.0 respectively for additional notifications.
 - 3. U.S. Army EOD group at Fort Benning, GA, if necessary
 - 4. Savannah River Operations Office, if necessary
- G. In Plant Protective Actions
- 1. Ensure personnel accountability per EIP-10.0, if any areas of the plant were evacuated due to hazardous conditions.
 - 2. Plan and initiate re entries per EIP-14.0, if any areas of the plant were evacuated due to hazardous conditions.
 - 3. Ensure proper Control Room response.
 - 4. Assign an individual to provide periodic plant status updates.
 - 5. Assign an individual to maintain a log of important Emergency Director activities.
 - 6. Assign an individual to keep a record of all off site communications.

GUIDELINE 4**NOTIFICATION OF UNUSUAL EVENT****H. Off- Site Support**

- ___ 1. Ensure Radiation Monitoring teams have been dispatched per EIP-4.0.
- ___ 2. Provide information to the Recovery Manager for use in press releases and recovery planning.

I. Information to Off-Site Authorities

- ___ 1. Provide periodic plant status updates, meteorological and dose estimates and release projections based on plant conditions and foreseeable contingencies.

J. Re-Assess plant conditions

- ___ 1. Continue to assess plant and radiological conditions to ensure the correct emergency classification is declared.
- ___ 2. If a higher emergency classification is required immediately go to the appropriate guideline.
- ___ 3. If plant and radiological conditions no longer require the current emergency classification downgrade or close out the emergency class using FNP-0-EIP-28.0.

K. Long term staffing

- ___ 1. Within 8 hours, provide for full TSC and OSC reliefs.
- ___ 2. Within 16 hours, provide for 24 hour TSC and OSC coverage.

GUIDELINE 4

NOTIFICATION OF UNUSUAL EVENT

- L. Protective action recommendation guidance

CAUTION 1: THE PROTECTIVE ACTION RECOMMENDATION SECTION OF THE EMERGENCY NOTIFICATION FORM (FIGURE 6) MUST BE COMPLETED FOR ALL INITIAL AND FOLLOW-UP MESSAGES.

NOTE: CONTINUE TO ASSESS PROTECTIVE ACTION RECOMMENDATIONS AND MODIFY AS NECESSARY.

ONLY THE PROTECTIVE ACTIONS SPECIFIED BY PLANT PROCEDURES SHOULD BE RECOMMENDED UNLESS THERE ARE OBVIOUS RELEVANT FACTORS (E.G., SEVERE NATURAL PHENOMENA) THAT PROBABLY WERE NOT ANTICIPATED WHEN THE PARs WERE DEVELOPED, AND THAT WOULD MAKE THE STANDARD PAR RECOMMENDATIONS IMPRACTICAL OR OBVIOUSLY NON-CONSERVATIVE. IN SUCH EVENTS, THE EMERGENCY DIRECTOR SHOULD USE HIS OWN JUDGMENT, AS APPROPRIATE.

1. Protective Action Recommendations are not required. Block A of Line 15 on Figure 6 should be checked.

SHARED

TABLE 1

REFERENCES

- Joseph M. Farley Nuclear Plant Emergency Plan
- FNP-0-RCP-25, Health Physics Activities During a Radiological Accident
- FNP-0-EIP-29, Long Term Dose Assessment
- FNP-0-EIP-20, Chemistry and Environmental Support to the Emergency Plan
- FNP-0-M-007, Emergency Dose Calculation Method
- FNP-0-M-011, Offsite Dose Calculation Manual
- EPA "Manual of Protective Action Guides and Protective Actions for Nuclear Incidents"
- NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants"
- FNP-0-CCP-641, "Operation of the Plant Vent Stack Monitoring System"
- NT-86-0014, Gaseous Releases, Emergency Classifications
- NT-87-0543, Protective Action Recommendation Policy
- ALA 88-694, Westinghouse "Potential Radiological Impact of Steam Generator Tube Uncover"
- FNP-0-CCP-1300, Chemistry and Environmental Activities During a Radiological Accident
- SCS letter File: ENG 15 94-0466 Log: FP 94-0364, Containment Dose R-27 to DEI Conversion

SHARE

TABLE 2

EMERGENCY FACILITY ACTIVATION

	Unusual Event	Alert	Site Area Emergency	General
Technical Support Center	*	Activate #	Activate #	Activate
Operations Support Center	*	Activate #	Activate #	Activate
Emergency Operations Facility	**	***	Activate #	Activate
Emergency Operations Center	**	***	Activate #	Activate
Public Information Corporate Offices	**	***	Activate #	Activate
News Media Center ##	N/A	****	***	Activate

NOTE: (It is recommended that the full TSC and EOF staffs be called in at the ALERT level. After evaluating plant conditions, staff may be released below a GENERAL EMERGENCY (at the discretion of the RM/ED).)

- * NO ACTION, STANDBY OR ACTIVATE AT THE DISCRETION OF THE EMERGENCY DIRECTOR
- ** NO ACTION, STANDBY OR ACTIVATE AT THE DISCRETION OF THE RECOVERY MANAGER
- *** STANDBY OR ACTIVATE AT THE DISCRETION OF THE RECOVERY MANAGER
- **** ACTIVATION DEPENDENT ON LEVEL OF MEDIA INTEREST OR EOF ACTIVATION
- # ACTIVATION WILL BE TO THE EXTENT DEEMED NECESSARY BY THE EMERGENCY DIRECTOR AND RECOVERY MANAGER
- ## AUTOMATICALLY ACTIVATED UPON EOF ACTIVATION

TABLE 3**CONSIDERATIONS FOR EMERGENCY CLASSIFICATION BASED
ON SECURITY EVENTS**

IF THERE IS A POTENTIAL HAZARD TO THE SAFETY OF PERSONNEL DUE TO THE SECURITY EVENT THAT IS IN PROGRESS, THE PROVISIONS OF THE EIPs MAY HAVE TO BE MODIFIED TO ENSURE THAT PLANT PERSONNEL ARE PROTECTED. CONSIDERATION SHOULD BE GIVEN TO THE SAFETY OF PERSONNEL WHO ARE ON SITE AND THOSE WHO WILL BE REPORTING TO THE SITE. THE FOLLOWING LIST DESCRIBES SOME OF THE ACTIONS THAT MIGHT BE DIFFERENT:

1. Do not delay declaring the emergency, some specific actions in the guidelines may have to be altered.
2. Contact security for recommendations to determine hazardous areas prior to taking any actions that would move people to different areas of the plant.
3. Ensure that control room or other supervisory personnel do not dispatch personnel to areas of the plant until it has been determined that those areas are safe.
4. If activating the plant emergency alarm (PEA) would put personnel at risk while proceeding to assembly areas, do not activate the alarm. In lieu of the PEA, consider making an appropriate announcement over the plant page with specific instructions such as to remain inside buildings, evacuate specific areas or other appropriate announcements based on security recommendations.
5. If having the TSC and EOF staffs report to the plant site would put them at risk, consider a manual callout of a minimum staff with specific instructions identifying where to report in lieu of using the CAN to activate.
6. Consider use of alternate facilities for the TSC and EOF staffs.
7. If the CAN is used to activate the TSC and EOF staffs, have the security force member at the plant access direct them to specific locations as they arrive on site.
8. After security reports that the security hazards have been eliminated, return to full implementation of the EIPs as appropriate.

TABLE 4**INFORMATION LIKELY TO BE REQUESTED BY THE NRC IF AN EMERGENCY IS DECLARED
(NRC INFORMATION NOTICE 98-08)**

1. Is there any change to the classification of the event? If so, what is the reason?
2. What is the ongoing/imminent damage to the facility, including affected equipment and safety features?
3. Have toxic or radiological releases occurred or been projected, including changes in the release rate? If so, what is the projected onsite and offsite releases, and what is the basis of assessment?
4. What are the health effect/consequences to onsite/offsite people? How many onsite/offsite people are/will be affected and to what extent?
5. Is the event under control? When was control established, or what is the planned action to bring the event under control? What is the mitigative action underway or planned?
6. What onsite protective measures have been taken or planned?
7. What offsite protective actions have been recommended to state/local officials?
8. What is the status of State/local/other Federal agencies' responses, if known?
9. If applicable, what is the status of public information activities, such as alarm, broadcast, or press releases (regulatee/state/local/other federal agencies)? Has a Joint Information Center (News Media Center) been activated?

10 MILE EMERGENCY PLANNING ZONE

The boxes in each quadrant and at the top of the drawing, represent the time in minutes that it would take to evacuate the zones in that quadrant during a **WD** (week day), **WN** (week night), **WE** (week end) and **AW** (adverse weather conditions). The time includes a 15 minute allowance for notification.

Zones	WD	WN	WE	AW
2 Mile Zone A	95	80	90	95
10 Mile All Sectors	140	115	115	150

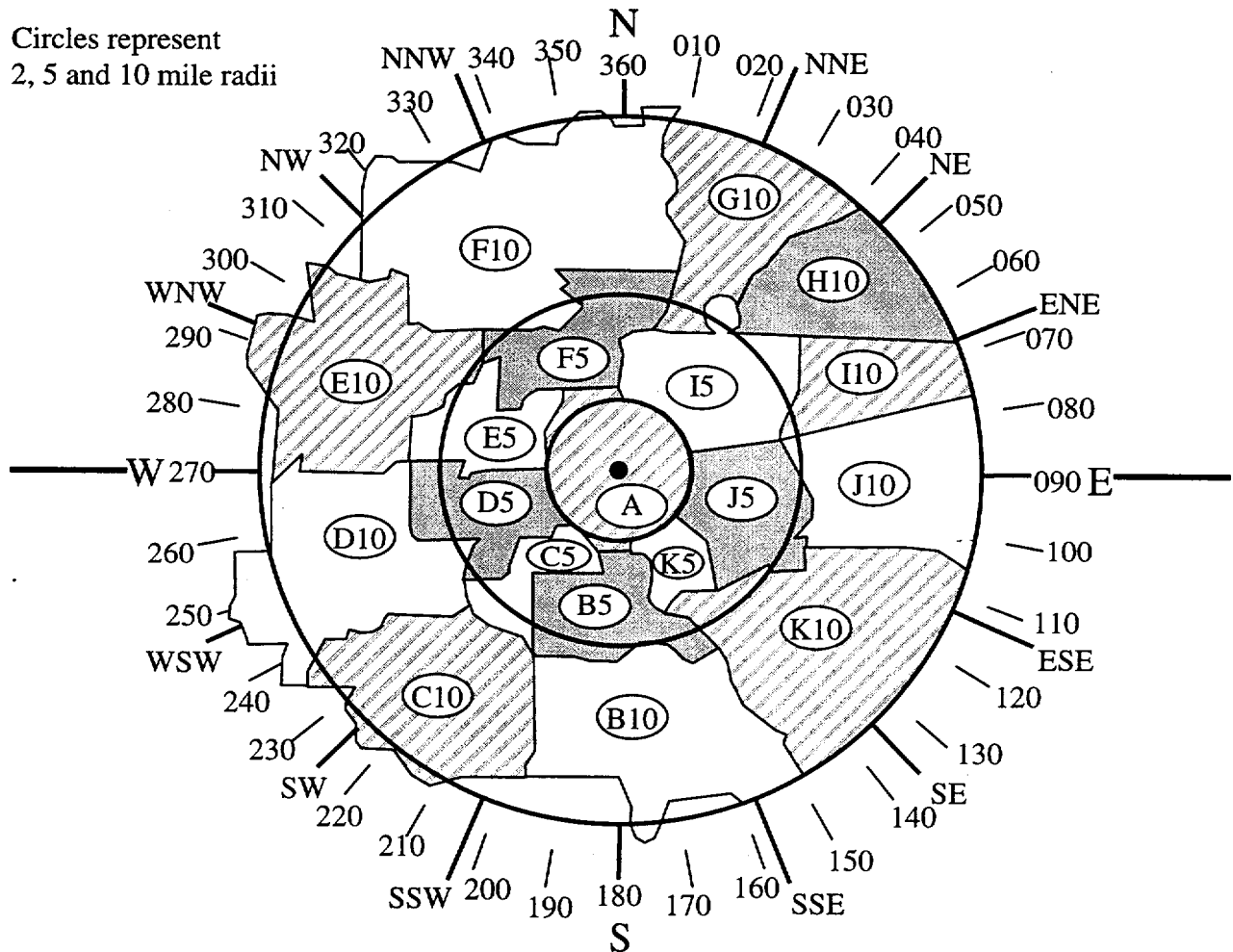
270-360 Quadrant, 100%
Evacuation Times

Zones	WD	WN	WE	AW
5 Mile	105	90	95	110
10 mile	115	100	105	120

000-090 Quadrant, 100%
Evacuation Times

Zones	WD	WN	WE	AW
5 Mile	105	95	100	110
10 mile	110	105	110	120

Circles represent
2, 5 and 10 mile radii



180-270 Quadrant, 100%
Evacuation Times

Zones	WD	WN	WE	AW
5 Mile	100	95	95	105
10 mile	140	110	115	150

090-180 Quadrant, 100%
Evacuation Times

Zones	WD	WN	WE	AW
5 Mile	105	95	100	110
10 mile	110	100	105	115

FIGURE 1

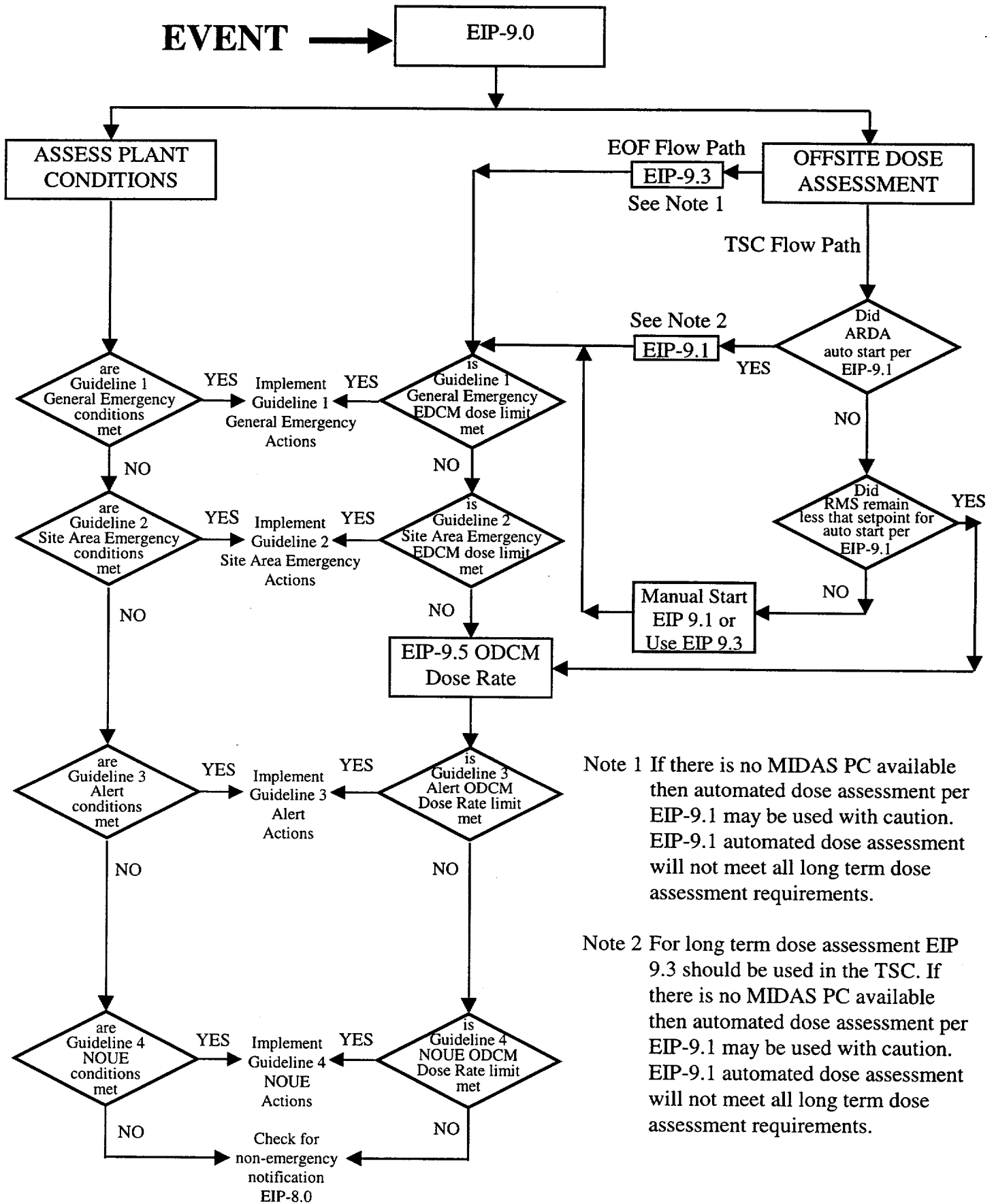
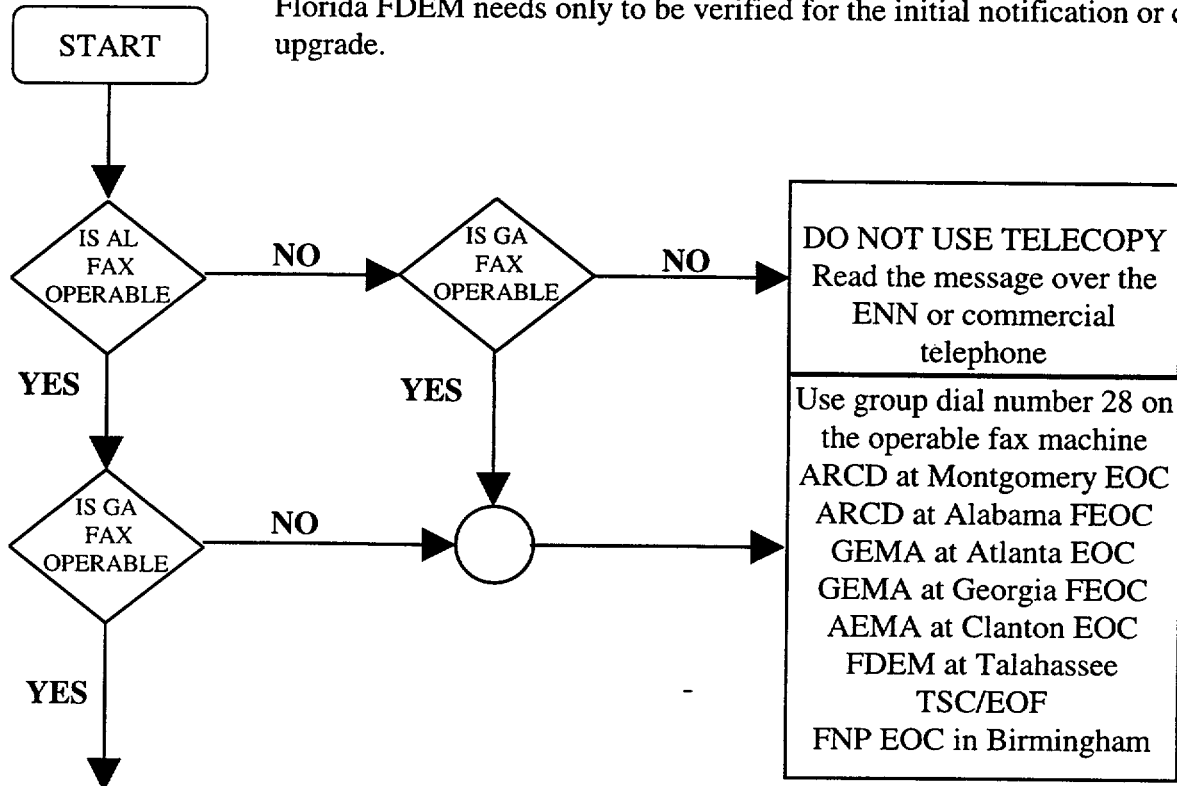


FIGURE 2

TELECOPY GROUP DIAL NUMBERS

Telecopy (fax) the initial or followup emergency notification form (Fig. 6) to all of the locations using the group dial numbers listed on the below flow chart. When the activity report is received retransmit the form to any location that did not receive the form using the individual speed dial numbers listed below. Verify that the form has been received at all locations through the ENN, OPX or commercial phone number. The telecopy to the

Florida FDEM needs only to be verified for the initial notification or classification upgrade.



Use group dial number 25 on both the Al. and Ga. fax	
AL. FAX MACHINE group dial number 25 ARCD at Montgomery EOC ARCD at Al. FEOC AEMA at Clanton EOC TSC/EOF	GA. FAX MACHINE group dial number 25 GEMA at Atlanta EOC GEMA at GA FEOC FDEM at Tallahassee FNP EOC in Birmingham

Refer to FNP-0-EIP-8.1 or FIG. 6 for OPX/commercial numbers.

LOCATION	FAX IND SPEED DIAL	ENN PHONE NUMBER
Alabama Radiation Control Division At Montgomery EOC	1	11
Alabama Radiation Control Division At Alabama Forward EOC	3	13
Alabama Emergency Management Agency at Clanton EOC	7	51
FNP TSC	5	62
FNP EOF (from opposite location)	5	63
Georgia Emergency Management Agency at Atlanta EOC	2	21
Georgia Emergency Management Agency at Georgia Forward EOC	4	22
Florida Department of Emergency Management at Tallahassee	8	none
FNP EOC in Birmingham	6	65

FIGURE 3

THIS FIGURE HAS BEEN DELETED

FIGURE 4

THIS FIGURE HAS BEEN DELETED

FIGURE 5

EMERGENCY NOTIFICATION

1. A This is a Drill B Actual Emergency C Initial D Follow-up* Message Number _____

2. Site: Farley Nuclear Plant Unit: _____ Reported By: _____

3. Transmittal Time/Date: _____ / _____ / _____ Confirmation Phone Numbers: (334)899-5156 or (334)794-0800 Ext. _____
(central) mm dd yy

Teletype Phone Number: (205) 257-1155 (205) 257-1035 _____
TSC EOF Other

4. Authentication (if required): N/A N/A
(Number) (Codeword)

5. Emergency Classification:
 A Notification Of Unusual Event B Alert C Site Area Emergency D General Emergency

6. A Emergency Declaration At: B Termination At: Time/Date _____ / _____ / _____ (If B go to item 16)
(central) mm dd yy

7. Emergency Description/Remarks: _____

Problems Include: A RCS Leaking B Containment Leaking C Fuel Damage Indicated D Heat Removal Systems Inadequate E Additional comments on following page

8. Plant Condition: A Improving B Stable C Degrading D RMTs Dispatched E Site Evacuation

9. Reactor Status: A Shutdown Time/Date: _____ / _____ / _____ B _____ % Power
(central) mm dd yy

10. Emergency Releases:
 A None (go to item 14) B Potential (go to item 14) C Is Occurring D Has Occurred

**11. Type of Release A Ground Level B Mixed Mode
 C Airborne: Started: _____ / _____ / _____ D Stopped: _____ / _____ / _____
Time (central) Date Time (central) Date
 E Liquid: Started: _____ / _____ / _____ F Stopped: _____ / _____ / _____
Time (central) Date Time (central) Date

**12. Release Magnitude A μ Curie per Sec. B Curies Tech. Specification Limits C Below D Above
 E Noble Gases _____ F Iodines _____
 G Particulates _____ H Other _____

**13 Estimate Of Projected Off Site Dose A New B Unchanged C Estimated Duration: _____ Hrs.
TEDE (mrem) Thyroid CDE (mrem)

Site Boundary	<input type="checkbox"/> D _____	<input type="checkbox"/> E _____
2 miles	<input type="checkbox"/> F _____	<input type="checkbox"/> G _____
5 miles	<input type="checkbox"/> H _____	<input type="checkbox"/> I _____
10 miles	<input type="checkbox"/> J _____	<input type="checkbox"/> K _____

**14. Meteorological Data A Wind Direction (from) _____ ° B Speed(mph) _____
 C Stability Class _____ D Precipitation (type) _____

15. Actions:
 A There are no recommended protective actions.
 B We would like to discuss recommended protective actions.

Not to be read over the ENN except for initial notifications and notifications of General Emergency
Recommended Protective Actions:
 C Evacuate and control access in down wind zone(s) _____
 D Shelter and control access in down wind zone(s) _____
 E In all affected areas: Monitor environmental radiation levels, locate and evacuate hot spots and implement control and possible confiscation of food and water supplies and consider evacuation of children and pregnant women.
 F Other _____

16. Approved By: _____ Time/Date _____ / _____ / _____
(Name) (Title) (central) mm dd yy

* If items 8 - 14 have not changed, only items 1 - 7 and 15 - 16 are required to be completed
 ** Information may not be available on initial notifications.

DO NOT TELECOPY THIS SIDE

COMMUNICATIONS MEANS

17.0 Telecopy side one of this form to State and Local Agencies per figure 3 while performing the remaining steps of this form

18.0 Make Initial/Upgrade ENN Emergency Notification using the following message:

18.1 DIAL ** on the ENN, wait 10 seconds and announce "This is name/title at Farley Nuclear Plant. Please be prepared to initiate your radiological notification procedure and manning of the ENN."

NOTE: When the first agency at the state level for each state, and the County level for each County (if required) acknowledge, no further acknowledgment is required.

18.2 For all Emergency declarations, request a state level agency for Alabama (step 21.1) and Georgia (step 21.2) acknowledge manning of the ENN. As a courtesy notification request AEMA acknowledge manning of the ENN.

18.3 If a State level agency in step 21.1 or 21.2 does not acknowledge manning of the ENN, contact a county level agency in step 21.5 or 21.6 to acknowledge for the state.

NOTE: If ARCD has moved to the Forward EOC in Houston County, then HCEMA will be notified of the General Emergency at the same time in step 18.2. Additional notification of HC EMA is not required
If GEMA has moved to the Forward EOC in Early County, then ECEMA will be notified of the General Emergency at the same time in step 18.2. Additional notification of ECEMA is not required

18.4 For a General Emergency request a county level agency for Houston County (step 21.5) and a county level agency for Early county (step 21.6) acknowledge manning of the ENN.

18.5 Announce on the ENN "Please prepare to receive an initial notification message with acknowledgment."

18.6 Slowly read side one of this form

18.7 Have the agencies that acknowledged in steps 18.2, 3 and 4, acknowledge receipt of the message.

19.0 If at least one agency in each state (State Level Preferred) has not acknowledged receipt, contact them through other means, such as OPX, commercial, etc using numbers listed below or in EIP-8.1, and read side one of the message to them.

20.0 Notify NRC Headquarters. Read side one of this form. (Immediately after State Notification, within one hour of Declaration.)

ENS (301-816-5100; 301-951-0550; 301-415-0550)

Commercial (1-301-816-5100; 1-301-951-0550; 1-301-415-0550) Person Contacted _____ Date/Time _____

NOTE: Only the underlined phones and phone numbers listed below are manned 24 hours a day. The other numbers listed below are for use during dayshift hours and for when the facilities are staffed during an emergency.

21.0 State agencies to be notified

Required for all declarations

STATE LEVEL AGENCIES

21.1 ALABAMA

Alabama Radiation Control Division at Montgomery EOC

ENN (11) OPX (6628) Telecopy (334-264-4396)

Commercial (334-242-4378)

Person contacted _____

Date/Time _____

OR

State Troopers in Montgomery

ENN (12) Commercial (334-242-4378, 4379)

Person contacted _____

Date/Time _____

OR

Alabama Radiation Control Division at Alabama Forward EOC

ENN (13) OPX 6621) Telecopy (8-257-1535)

Commercial (334-793-1565)

Person contacted _____

Date/Time _____

21.4 AEMA COURTESY NOTIFICATION

This is an ENN courtesy notification only and is not required to be completed in the time specified by the Guideline.

CAUTION: This Notification does not meet the requirements for notifying a state level agency in the State of Alabama

AEMA ENN (51)

Person contacted _____

Date/Time _____

Required for General Emergency declarations

LOCAL LEVEL AGENCIES

Contact if state agencies cannot be contacted

21.5 HOUSTON COUNTY

Houston County EMA or Sheriff in Dothan

ENN(31) ENN(13) OPX (6621) Telecopy (8-257-1535)

Commercial (334-794-9720, 793-9655, 334-677-4807, 4808)

Person contacted _____

Date/Time _____

21.2 GEORGIA

Georgia Emergency Management Agency at Atlanta EOC

ENN (21) OPX (6629) Telecopy (404-627-4850)

Commercial (404-635-7200)

Person contacted _____

Date/Time _____

OR

Georgia Emergency Management Agency at Georgia Forward EOC

ENN (22) OPX (6626) Telecopy (8-257-2455)

Commercial (912-723-4764, 4826,4956)

Person contacted _____

Date/Time _____

21.3 FLORIDA

This is a Telecopy notification only to be followed up by a phone call to verify that the telecopy was received. Verification is not required for follow-up messages.

This notification is not required to be completed in the time in the guideline for the declared classification.

Telecopy to be sent at the same time as message is sent to other states

Florida Department of Emergency Management

Telecopy (850-488-7841)

Verification (800-320-0519) (850-413-9911)

Person contacted _____

Date/Time _____

NOTE: Checking box indicates acknowledgment and telecopy received

Dose Equivalent Iodine Estimation

The below graph and table can be used to estimate if dose equivalent iodine (DEI) is above 300 microcuries per gram. When using this figure the following rules must be used:

1. The only radiation monitors that can be used to enter the graph or table are R-27A or B.
2. The leak rate is assumed to be constant for the time period specified.
3. The bottom of the scale for the R-27 monitors is 1 REM/hr.
4. Any R-27 reading greater than 1 REM/hr for a leak rate of 50 gpm or less is an indication of DEI being greater than or equal to 300 microcuries per gram.
5. Enter the graph with the R-27 reading and the length of time that the leak has been in progress. If the intersection of R-27 and time is above and to the left of the curve for the specific leak rate the DEI is likely to be greater than 300 microcuries per gram.
6. Enter the table with the number of minutes since the start of the leak and the leak rate. If the actual R-27 dose rate is above the value listed in the table the DEI is likely to be greater than 300 microcuries per gram.

	TIME (MIN)	5 MIN	10 MIN	30 MIN	60 MIN	120 MIN	180 MIN	240 MIN
LEAK	1000	1.66	3.1	7.41	11.9	18.1	22.3	25
RATE	500		1.55	3.7	5.93	9.06	11.1	12.5
[GPM]	100				1.19	1.81	2.23	2.5

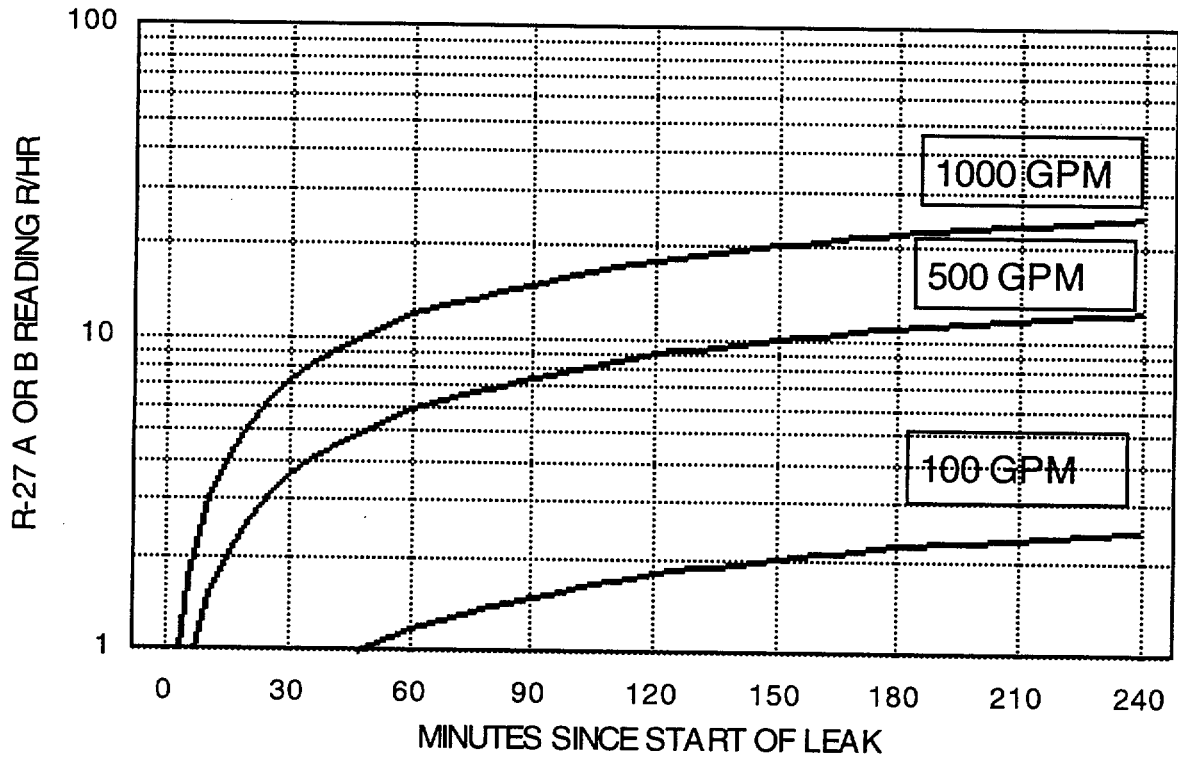


FIGURE 8
REVISION 44