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SOUTHERN COMPANY
Energy to Serve Your World℠

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50-366

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Edwin I. Hatch Nuclear Plant
Emergency Implementing Procedure Revisions

Ladies and Gentlemen:

In accordance with 10 CFR 50, Appendix E, Section V, Southern Nuclear Operating Company hereby submits the following revisions to the Plant Hatch Emergency Implementing Procedures (EIPs):

EIP No.	Revision	Effective Date	Comments
73EP-EIP-001-0S	14.2	10/31/2001	Editorial Change
73EP-EIP-013-0S	2.2	10/31/2001	Editorial Change
73EP-EIP-022-0S	2.2	11/01/2001	Editorial Change

By copy of this letter, Mr. L. A. Reyes, NRC Region II Administrator, will receive two copies of the revised procedures.

Should you have any questions in this regard, please contact this office.

Respectfully submitted,

Lewis Sumner

H. L. Sumner, Jr.

CKB/eb

Enclosures:
1. 73EP-EIP-001-0S, Emergency Classification and Initial Actions
2. 73EP-EIP-013-0S, Contaminated Injury and First Aid
3. Alternate Emergency Operations Facility (EOF) Activation

A045

cc: Southern Nuclear Operating Company (w/o)
Mr. P. H. Wells, Nuclear Plant General Manager
SNC Document Management (R-Type A02.001)

U.S. Nuclear Regulatory Commission, Washington, D.C.(w/o)
Mr. L. N. Olshan, Project Manager - Hatch

U.S. Nuclear Regulatory Commission, Region II
Mr. L. A. Reyes, Regional Administrator (with 2 copies)
Mr. J. T. Munday, Senior Resident Inspector – Hatch (w/o)

1.0 OBJECTIVE

This procedure establishes the methodology for emergency classification. Specific Emergency Action Levels (EALs) and minimum initial actions to respond to a given emergency are established in this procedure.

2.0 APPLICABILITY

This procedure applies to emergency classification determinations and associated initial responses. This procedure is performed as required.

3.0 REFERENCES

3.1 10AC-MGR-006-0S, Hatch Emergency Plan

3.2 73EP-EIP-004-0S, Duties of Emergency Director

3.3 73EP-EIP-005-0S, On-Shift Operations Personnel Emergency Duties

3.4 73EP-EIP-015-0S, Offsite Dose Assessment

3.5 73EP-EIP-018-0S, Prompt Dose Assessment

3.6 73EP-EIP-073-0S, Offsite Emergency Notifications

3.7 Hatch Unit 1 Technical Specifications (TS), Sections 2.0, 3.2 through 3.9, 3.11

3.8 Hatch Unit 2 Technical Specifications (TS), Sections 2.0, 3.2 through 3.9, 3.11

3.9 Edwin I. Hatch Nuclear Plant Unit 1 and Unit 2 System Evaluation Document

4.0 REQUIREMENTS

4.1 PERSONNEL REQUIREMENTS

4.1.1 Any personnel trained and qualified as an Emergency Director (ED) may use this procedure.

4.1.2 The Emergency Director may modify emergency plan implementing procedures and staffing to meet the needs of emergency response.

4.1.3 Personnel who have received instruction in applicable emergency procedures are required to perform this procedure.

4.1.4 Initially, the Emergency Director position is filled by the Superintendent of Shift (SOS). If the SOS is unavailable, then the affected unit's Shift Supervisor (SS) will become the Emergency Director. IF the SOS is unavailable and the event involves both units, the Unit 1 Shift Supervisor (SS) will become the Emergency Director. Any of these persons will assume the position of Emergency Director in the Control Room until a qualified relief, as specified in step 4.1.4, can arrive on site and receive an adequate turnover.

4.1.5 Any one of the following persons may assume the Emergency Director (ED) duties after he is given proper turnover from the off going ED.

- Nuclear Plant - General Manager
- Plant Operations - Assistant General Manager (POAGM)
- Plant Support - Assistant General Manager (PSAGM)
- Vice President - Plant Hatch
- Other qualified Emergency Director

4.2 MATERIAL AND EQUIPMENT

N/A - Not applicable to this procedure

4.3 SPECIAL REQUIREMENTS

4.3.1 Portions of this procedure require the results from calculations of projected doses at or beyond the site boundary to determine the appropriate emergency classification. Refer to procedures 73EP-EIP-015-0S and 73EP-EIP-018-0S.

4.3.2 Portions of this procedure will require actual dose measurements (onsite OR off-site) to determine the appropriate emergency classification. Refer to procedures 73EP-EIP-015-0S and 73EP-EIP-018-0S.

5.0 PRECAUTIONS/LIMITATIONS

5.1 PRECAUTIONS

The value of non-essential personnel evacuation must be judged against any threat to personnel or nuclear safety.

5.2 LIMITATIONS

5.2.1 The Operating Facility is defined to be areas within the Protected Area and the 230 Kv and 500 Kv switchyards.

5.2.2 Onsite is defined to be anywhere within the Owner Controlled Area.

7.0 PREREQUISITES

This procedure will be utilized for drills, exercises and actual emergencies.

REFERENCE

7.0 PROCEDURE

7.1 EMERGENCY CLASSIFICATION AND INITIAL ACTIONS

7.1.1 Upon notification of an abnormal condition OR observation of abnormal instrument readings, notify the Unit Shift Supervisor immediately.

7.1.2 Confirm abnormal conditions by comparing redundant instrument channels OR other related parameters, observation AND field reports, as applicable.

7.1.3 Assess the abnormal condition and classify the emergency by referring to subsection 7.2, Emergency Classification Chart.

CAUTION

THE REVIEW OF ALL EMERGENCY CLASSES ASSOCIATED WITH A GIVEN CONDITION IS ESSENTIAL. FAILURE TO DO SO COULD RESULT IN A LOWER CLASSIFICATION THAN WARRANTED.

7.1.3.1 The Emergency Classification Chart details abnormal plant conditions that meet specific emergency class entrance requirements. These emergency classes are defined, in theory, in steps 7.1.3.1.1 through 7.1.3.1.4.

CAUTION

IN THE UNLIKELY EVENT AN ABNORMAL CONDITION MEETS THE DEFINITIONS STATED IN 7.1.3.1.1 THROUGH 7.1.3.1.4 BUT ARE NOT COVERED IN THE EMERGENCY CLASSIFICATION CHART, OR THE INITIATING CONDITION IS MET BUT EQUIPMENT STATUS PARAMETERS VALUES ARE NOT, THE SOS/ED WILL USE HIS JUDGMENT, BASED ON THE AVAILABLE INFORMATION, TO DECLARE THE APPROPRIATE LEVEL OF EMERGENCY.

7.1.3.1.1 NOTIFICATION OF UNUSUAL EVENT (NUE)

Unusual events are in progress OR have occurred which 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 occurs.

7.1.3.1.2 ALERT EMERGENCY

Events are in progress OR have occurred which involve an actual OR potential substantial degradation of the level of safety of the plant. Any releases are expected to be limited to small fractions of the Environmental Protection Agency (EPA) Protective Action Guideline (PAG) exposure levels.

7.1.3.1.3 SITE AREA EMERGENCY

Events are in progress OR have occurred which involve actual OR likely major failures of plant functions needed for protection of the public. Any releases are NOT expected to exceed PAG exposure levels, except near the site boundary.

7.1.3.1.4 GENERAL EMERGENCY

Events are in progress OR have occurred which involve actual OR imminent substantial core degradation OR melting with potential for loss of containment integrity. Releases can be reasonably expected to exceed PAG exposure levels offsite for more than the immediate site area.

7.1.4 IF a potentially declarable emergency exists, inform the SOS immediately. The SOS will evaluate the abnormal condition and operator actions.

7.1.5 IF a declarable emergency exists, the SOS shall assume the duties of the Emergency Director in accordance with 73EP-EIP-004-0S, Duties of Emergency Director AND declare the appropriate emergency classification within 15 minutes of the condition requiring the classification.

7.2 EMERGENCY CLASSIFICATION CHART

Refer to the applicable section of the emergency classification chart to assess an abnormal condition and classify the emergency. An index of each emergency action level in the chart is listed on the next page for reference. The key words of an initiating condition are indicated in **BOLD** print. The supporting data / parameters are listed below each emergency action level. The logical connectors (**AND** and **OR**) used in the supporting data / parameters are to be used as described in Technical Specification section 1.0 "Use and Application", part 1.2 "Logical Connectors."

Index of Emergency Action Levels

1.0 - AUTOMATIC INITIATION OF ECCS

Emergency conditions exist WHEN: **AUTOMATIC INITIATION, OR DEMAND FOR ECCS, TO RECOVER WATER LEVEL** as indicated by:	NUE	ALERT	SAE	GEN
HPCI, Core Spray, or LPCI Automatic Initiation has occurred. **AND** HPCI, Core Spray, or LPCI is discharging to the vessel. **AND** Reactor Water Level < - 113 inches **OR** Drywell Pressure > 1.92 PSIG (TS)	■			
See Section 20.0, Loss of Coolant, for determination of Site Area Emergency Classification.			■	
See Section 22.0, Multiple Symptoms and Other Conditions, for determination of the General Emergency Classification.				■

END
AUTOMATIC INITIATION OF ECCS

2.0 - RADIOLOGICAL EFFLUENTS

Emergency conditions exist WHEN:	NUE	ALERT	SAE	GEN
LIMITS FOR GASEOUS EFFLUENT RELEASES BEYOND THE SITE BOUNDARY HAVE EXCEEDED TS as indicated by either actual field measurements OR effluent monitor readings corresponding to: ≥ 0.057 mR (TEDE) in an hour* (*TS yearly limit divided by the number of hours in a year) **OR** ≥ 500 mR (TEDE) in a year (TS)	■			
LIMITS FOR LIQUID EFFLUENTS HAVE BEEN EXCEEDED [as given in the Offsite Dose Calculation Manual (ODCM)] as indicated by Chemistry analysis as follows: ≥ 1.5 mR to the total body in a quarter **OR** ≥ 3.0 mR to the total body in a year	■			
A GASEOUS EFFLUENT RELEASE IS UNDERWAY WITH OFFSITE DOSE RATES BEYOND THE SITE BOUNDARY, as indicated by either field measurements OR effluent monitor readings corresponding to: ≥ 0.57 mR (TEDE) in an hour** (** 10 times the TS yearly limit divided by the number of hours in a year.) **OR** ≥ 5000 mR (TEDE) in a year (10 X T.S.)		■		

→ → **[CONTINUE TO THE NEXT PAGE]** → →

2.0 - RADIOLOGICAL EFFLUENTS (continued)

Emergency conditions exist WHEN:	NUE	ALERT	SAE	GEN
NOTE Adverse meteorological conditions is defined as Stability Class F AND 1m/sec (≈ 2 mph) wind speed, OR inclement weather. **A GASEOUS EFFLUENT RELEASE IS UNDERWAY WITH OFFSITE DOSE AT THE SITE BOUNDARY,** as indicated by either field measurements OR effluent monitor readings (using adverse meteorological conditions) corresponding to: ≥ 50 mR (TEDE)in an hour for > 1/2 hr but< 1000 mR (TEDE) in an hour **OR** ≥ 500 mR (TEDE)in an hour for 2 min. but < 1000 mR (TEDE) in an hour **OR** ≥ 250 mR (CDE thyroid) in an hour for 1/2 hr but < 5 REM (CDE thyroid) in an hour **OR** ≥ 2500 mR (CDE thyroid) in an hour for 2 min. but < 5 REM (CDE thyroid) in an hour				
DOSE BEYOND THE SITE BOUNDARY IS PROJECTED TO BE > EPA PAGs based on dose projections from plant parameters as follows: ≥ 1 REM (TEDE) **OR** ≥ 5 REM (CDE thyroid)				

→ → [CONTINUE TO THE NEXT PAGE] → →

2.0 - RADIOLOGICAL EFFLUENTS (continued)

Emergency conditions exist WHEN:	NUE	ALERT	SAE	GEN
A GASEOUS EFFLUENT RELEASE IS UNDERWAY WITH OFFSITE DOSE BEYOND THE SITE BOUNDARY, as indicated by either field measurements OR effluent monitor readings (using actual meteorological conditions) corresponding to: ≥ 1 REM (TEDE) in an hour **OR** ≥ 5 REM(CDE thyroid) in an hour				
DOSE BEYOND THE SITE BOUNDARY IS PROJECTED TO BE > EPA PAGS based on dose projections from plant parameters as follows: A gaseous release is ongoing or imminent **AND** ≥ 1 REM (TEDE) **OR** ≥ 5 REM (CDE thyroid)				

END
RADIOLOGICAL EFFLUENTS

3.0 - CORE DAMAGE

Emergency conditions exist WHEN:	NUE	ALERT	SAE	GEN
CORE DAMAGE IS INDICATED BY HIGH OFF-GAS ACTIVITY WITH PRETREAT MONITOR (D11-K601) AT HI ALARM PLUS Pretreat Monitor reading exceeding either of following as indicated on pretreat graph located in Unit 1 OR Unit 2 OFF-GAS Release Curve book. ≥ 500,000 μCi/sec **OR** ≥ 100,000 μCi/sec increase WITHIN a 30 minute period	■			
CORE DAMAGE IS INDICATED BY HIGH OFF-GAS ACTIVITY WITH PRETREAT MONITOR (D11-K601) AT HI-HI ALARM PLUS > 5 CI/SEC as indicated on pretreat graph located in Unit 1 OR Unit 2 Off-Gas Release Curve book		■		
CORE DAMAGE IS INDICATED BY HIGH COOLANT ACTIVITY LAB SAMPLE WITH I-131 DOSE EQUIVALENT COOLANT ACTIVITY > 100 μCi/gm	■			
CORE DAMAGE IS INDICATED BY HIGH COOLANT ACTIVITY LAB SAMPLE WITH I-131 DOSE EQUIVALENT COOLANT ACTIVITY > 300 μCi/gm		■		
CORE DAMAGE IS INDICATED BY DEGRADED CORE WITH POSSIBLE LOSS OF CORE GEOMETRY as indicated by the following: Containment Post LOCA Hi Rad Alarm > 138 REM/hr (TS) **AND** Reactor Low, Low, Low, Level Alarm < -113 inches **OR** Noble Gas Fission Product Monitor (D11-K630) upscale (7.0 x 10^5cpm) **OR** Noble Gas Fission Product Monitor (D11-K630) (variable setpoint) Hi-Hi Radiation Alarm			■	
See Section 22.0, Multiple Symptoms and Other Conditions for determination of General Emergency Classification.				■

END
CORE DAMAGE

4.0 - STEAM LINE BREAK OR SAFETY RELIEF VALVE (SRV) FAILURE

Emergency conditions exist WHEN:	NUE	ALERT	SAE	GEN
A MAIN STEAM LINE RELIEF VALVE FAILED TO CLOSE WHEN system pressure is reduced below setpoint of safety relief valve (S/RV) and fuses pulled as indicated by: S/RV tailpipe temperature remaining > 230° F **AND** S/RV tailpipe pressure switch remaining > 80 psig **AND** Temperature continuing to increase on any suppression pool local water temperature indicator	■			
A PRIMARY SYSTEM (AS DEFINED BY EOPs) STEAM LINE BREAK OCCURS OUTSIDE CONTAINMENT WITH significant isolation valve leakage as indicated by the following: Any valid Reactor or Turbine Bldg. leak detection indication **OR** Hi MSL Tunnel Temperature ≥ 194° F (TS) **AND** Any Reactor Bldg. ARM above maximum Normal Operating Values AND increasing **OR** Any Turbine Bldg. ARM above alarm setpoint AND increasing		■		

→ → **[CONTINUE TO THE NEXT PAGE]** → →

4.0 - STEAM LINE BREAK OR SAFETY RELIEF VALVE (SRV) FAILURE (continued)

Emergency conditions exist WHEN:	NUE	ALERT	SAE	GEN
AN UNISOLABLE PRIMARY SYSTEM (AS DEFINED BY THE EOPS) BREAK OUTSIDE CONTAINMENT as indicated by: A primary containment isolation failure (cannot be isolated automatically OR manually) has occurred on the affected primary system. **AND** Entry conditions into Secondary Containment Control Emergency Operating Procedures **OR** Any indications of significant leakage into the Turbine Bldg. from the Main Steam system WITH Turbine Bldg. ARMs above alarm setpoint AND increasing. **OR** SOS/ED judgment				
See Section 22.0, Multiple Symptoms and Other Conditions, for determination of General Emergency Classification.				

END
STEAM LINE BREAK OR SAFETY RELIEF VALVE (SRV) FAILURE

5.0 - LOSS OF AC POWER

Emergency conditions exist WHEN: **A LOSS OF OFFSITE POWER OR LOSS OF ONSITE AC POWER CAPABILITY HAS OCCURRED** and is indicated as follows:	NUE	ALERT	SAE	GEN
LOSS OF OFFSITE POWER is indicated by: Zero voltage on all 500 kV incoming lines **AND** Zero voltage on all 230 kV incoming lines **OR** Loss of startup transformers (SUTs) 1C AND 1D **OR** Loss of startup transformers (SUTs) 2C AND 2D	■			
LOSS OF ONSITE AC POWER CAPABILITY is indicated by: Loss of all emergency diesel generators on Unit One **OR** Unit Two for any reason	■			
LOSS OF OFFSITE POWER WITH LOSS OF ALL ONSITE AC POWER ≤15 MINUTES (on Unit One OR Unit Two) is indicated by: All 4.16 kV buses (Unit One OR Unit Two) reading zero volts AC **AND** The inability to energize at least one Unit One **AND** one Unit Two 4.16 kV bus WITH diesel generators		■		
LOSS OF OFFSITE POWER WITH LOSS OF ALL ONSITE AC POWER >15 MINUTES (on Unit One OR Unit Two) is indicated by: All 4.16 KV buses (Unit One **OR** Unit Two) reading zero volts AC **AND** The inability to energize at least one Unit One **AND** one Unit Two 4.16 kV bus WITH diesel generators			■	
See Section 22.0, Multiple Symptoms and Other Conditions, for Determination of General Emergency Classification.				■

END
LOSS OF AC POWER

6.0 - LOSS OF ONSITE DC POWER

Emergency conditions exist WHEN: **A LOSS OF ALL VITAL ONSITE DC POWER OCCURS** and is indicated as follows:	NUE	ALERT	SAE	GEN
A LOSS OF ALL VITAL ONSITE DC POWER OCCURS FOR ≤ 15 MINUTES as indicated by: Low voltage AND/OR fuse trouble on ALL the affected unit's 125v/250v station batteries **AND** Low voltage AND/OR fuse trouble on the affected unit's 125v D/G batteries (including the swing D/G)				
A LOSS OF ALL VITAL ONSITE DC POWER OCCURS FOR > 15 MINUTES as indicated by: Low voltage AND/OR fuse trouble on ALL the affected unit's 125v/250v station batteries **AND** Low voltage AND/OR fuse trouble on the affected unit's 125v D/G batteries (including the swing D/G)				

END
LOSS OF ONSITE DC POWER

7.0 - LOSS OF CONTAINMENT

Emergency conditions exist WHEN:	NUE	ALERT	SAE	GEN
NOTE NUE is to be declared upon commencing Load Reduction. **A LOSS OF PRIMARY OR SECONDARY CONTAINMENT INTEGRITY OCCURS** as indicated by the inability to meet any one of the requirements WITHIN the time limit established by the applicable unit's TS.	■			
See Section 11.0, Hazards to Plant Operation, for determination of Alert Classification.		■		
See Section 11.0, Hazards to Plant Operation for determination of Site Area Emergency Classification.			■	
See Section 22.0, Multiple Symptoms and Other Conditions, for determination of General Emergency Classification.				■

END
LOSS OF CONTAINMENT

8.0 - FIRE IN PLANT

Emergency conditions exist WHEN:	NUE	ALERT	SAE	GEN
A FIRE CONTINUING > 10 MINUTES (AFTER DISCOVERY) EXISTS WITHIN THE PROTECTED AREA, INCLUDING 230 KV AND 500 KV SWITCHYARDS, as indicated by: Fire Alarm WITH visual confirmation **OR** SOS/ED judgment	■			
NOTE Refer to the System Evaluation Document (SED) for a listing of safety systems. **A FIRE CONTINUING > 10 MINUTES (AFTER DISCOVERY) EXISTS POTENTIALLY AFFECTING SAFETY SYSTEMS,** required for the present mode of operation, as indicated by: Fire Alarm **AND** Location, observation AND judgment of SOS/ED		■		
A FIRE CONTINUING > 10 MINUTES (AFTER DISCOVERY) COMPROMISING THE FUNCTIONS OF SAFE SHUTDOWN SYSTEMS as indicated by: Fire defeating redundant safety system trains required for the current mode of operation **OR** Loss of safety system due to fire that affects shutdown capability by the inability to perform ONE of the following functions: • Prevent excessive reactor pressurization • Provide adequate makeup inventory • Depressurize the reactor • Remove decay heat from the reactor **OR** Location, observation AND judgment of SOS/ED			■	
See Section 22.0, Multiple Symptoms and Other Conditions for determination of General Emergency Classification.				■

END
FIRE IN PLANT

9.0 - SECURITY EVENT

CAUTION

The value of any emergency actions, which may require movement of plant personnel, must be judged against the danger to personnel or nuclear safety.

Emergency conditions exist WHEN:	NUE	ALERT	SAE	GEN
A SECURITY ALERT OCCURS as indicated by Nuclear Security Shift Supervisor advises SOS/ED of Security Alert condition **AND** SOS/ED judgment	■			
A SECURITY EMERGENCY OCCURS as indicated by: Nuclear Security Shift Supervisor advises the SOS/ED of a Security Emergency condition **AND** SOS/ED judgment		■		
A LOSS OF PHYSICAL CONTROL OF THE PLANT IS IMMINENT as indicated by: Loss of physical barrier capability or control of the protected area **OR** Attempted unauthorized entry into the protected area by force or covert action **AND** SOS/ED judgment based on Nuclear Security Shift Supervisor advice			■	

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9.0 - SECURITY EVENT (continued)

CAUTION

The value of any emergency actions, which may require movement of plant personnel, must be judged against the danger to personnel or nuclear safety.

Emergency conditions exist WHEN:	NUE	ALERT	SAE	GEN
A LOSS OF PHYSICAL CONTROL OF THE PLANT IS IMMINENT as indicated by: Loss of physical barrier capabilities of any vital building **OR** Loss of control of any vital area including: • Intake Structure • Main Control Room • Diesel Generator Bldg. • CAS/SAS • Power Block **AND** SOS/ED judgment based on Nuclear Security Shift Supervisor advice				

END
SECURITY EVENT

10.0 - NATURAL PHENOMENON

Emergency conditions exist WHEN: **EARTHQUAKE DETECTED:**	NUE	ALERT	SAE	GEN
ANY EARTHQUAKE IS DETECTED WITHIN THE PLANT as indicated by: Felt by Personnel **OR** Confirmed "Seismic Instrumentation Triggered" (Unit 1) alarm indicating horizontal acceleration > 0.005 g	■			
ANY EARTHQUAKE IS DETECTED WITHIN THE PLANT as indicated by: "Seismic Instrumentation Triggered" (Unit 2) alarm indicating horizontal acceleration ≥ 0.08g Operating Basis Earthquake (OBE Level) **OR** Any horizontal (N-S, E-W) peak shock annunciator 12.7 hz **AMBER** light illuminated indicates 100% OBE actuated on Panel 1H11-P701 **AND** "Seismic Instrumentation Triggered" (Unit 1) alarm indicating horizontal acceleration > 0.005g **OR** Unit 1 AND/OR Unit 2 Seismic Peak Shock Recorder High "G" Alarm **OR** Unit 1 AND Unit 2 Time-History Recorders start		■		

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10.0 - NATURAL PHENOMENON, (continued)

Emergency conditions exist WHEN:	NUE	ALERT	SAE	GEN
EARTHQUAKE DETECTED: (continued)				
NOTE The actual maximum g acceleration may be determined by having I & C play back the Time-History Recorder's tapes per the Earthquake Response Manual, SX18271 (located in Document Control) and the applicable I & C procedure(s).				
ANY EARTHQUAKE IS DETECTED WITHIN THE PLANT as indicated by: Same parameters as in the Alert classification **AND** Any horizontal (N-S, E-W) peak shock annunciator, 12.7 hz **RED** light illuminated on Panel 1H11-P701 indicating maximum g level measured by Time-History Recorders as ¤ 0.15g Design Basis Earthquake (DBE) **AND** EITHER unit NOT in Cold Shutdown				
AN EARTHQUAKE THAT COULD CAUSE MASSIVE DAMAGE TO ANY PLANT SYSTEM WHICH COULD LEAD TO CORE DEGRADATION OR CORE MELT as indicated by: Loss of systems needed to maintain integrity of all three fission product barriers: • Fuel Integrity • RCS Integrity • Containment Integrity **OR** Observation and judgment of SOS/ED.				

END - EARTHQUAKE

→ [NATURAL PHENOMENON - CONTINUED TO NEXT PAGE] →

10.0 - NATURAL PHENOMENON, (continued)

CAUTION

The value of any emergency actions, which may require movement of plant personnel, must be judged against the danger to personnel or nuclear safety.

Emergency conditions exist WHEN: **HIGH WINDS EXIST:**	NUE	ALERT	SAE	GEN
HIGH WINDS are indicated by: Any tornado observed onsite **OR** Any hurricane force winds projected onsite with windspeed > 75 mph	■			
Any tornado observed striking the operating facility (areas within the protected area and the 230 Kv and 500 Kv switchyards) **OR** Any hurricane observed onsite with sustained windspeeds at design level (≥ 94.5 mph) **OR** SOS/ED judgment		■		
The observation of damage from an onsite tornado with windspeed in excess of meteorological instruments range (>100 mph) **OR** Sustained windspeeds in excess of meteorological instruments range (>100 mph) **AND** Either unit NOT in Cold Shutdown			■	

END - HIGH WINDS

→ [NATURAL PHENOMENON - CONTINUED TO NEXT PAGE] →

10.0 - NATURAL PHENOMENON, (continued)

Emergency conditions exist WHEN: **HIGH / LOW RIVER WATER LEVEL INDICATED:**	NUE	ALERT	SAE	GEN
HIGH RIVER WATER LEVEL is indicated by: Plant Service Water Intake Pump well level indication ≥ 88.6 ft Mean Sea Level (MSL)	■			
Plant Service Water Intake Pump well level indication ≥ 100 ft MSL		■		
Plant Service Water Intake Pump well level indication ≥ 120 ft MSL **OR** Actual OR projected hurricane surge OR flood levels ≥ 120 ft MSL **AND** Either unit NOT in Cold Shutdown			■	
LOW RIVER WATER LEVEL is indicated by: Plant Service Water Intake Pump well level indication < 60.7 Mean Sea Level (MSL)	■			
Plant Service Water Intake Pump well level indication < 59.9 ft MSL		■		
Plant Service Water Intake Pump well level indication < 57.2 ft MSL **AND** Either unit NOT in Cold Shutdown			■	

END - HIGH / LOW RIVER WATER LEVEL

END
NATURAL PHENOMENON

11.0 - HAZARDS TO PLANT OPERATION

Emergency conditions exist WHEN: **AIRCRAFT ACTIVITY**	NUE	ALERT	SAE	GEN
UNUSUAL AIRCRAFT ACTIVITY IS OBSERVED over the operating facility (areas within the protected area and the 230 Kv and 500 Kv switchyards) **OR** **AIRCRAFT CRASH OCCURS** within the owner controlled area **AND** SOS/ED judgment	■			
AIRCRAFT CRASH OCCURS WITHIN THE OPERATING FACILITY (areas within the protected area and the 230 Kv and 500 Kv switchyards)		■		
AIRCRAFT CRASH OCCURS AFFECTING VITAL OPERATING PLANT STRUCTURES by impact OR fire including: • Intake Structure • Main Control Room • Diesel Generator Bldg. • CAS/SAS • Power Block **AND** Either unit NOT in Cold Shutdown **OR** SOS/ED judgment			■	

END - AIRCRAFT ACTIVITY

→ [HAZARDS TO PLANT OPERATION - CONTINUED TO NEXT PAGE]→

11.0 - HAZARDS TO PLANT OPERATION, (continued)

Emergency conditions exist WHEN: **EXPLOSIONS**	NUE	ALERT	SAE	GEN
ANY EXPLOSION OBSERVED WITHIN THE OPERATING FACILITY (areas within the protected area and the 230 Kv and 500 Kv switchyards)	■			
KNOWN EXPLOSION DAMAGE TO FACILITY (ONSITE) AFFECTING PLANT OPERATION		■		
SEVERE DAMAGE TO SAFE SHUTDOWN EQUIPMENT FROM MISSILES OR EXPLOSION THAT AFFECTS SHUTDOWN CAPABILITY by the inability to perform ONE of the following functions: Prevent excessive reactor pressurization **OR** Provide adequate makeup inventory **OR** Depressurize the reactor **OR** Remove decay heat from the reactor **AND** Either unit NOT in Cold Shutdown			■	

END - EXPLOSIONS

→ [HAZARDS TO PLANT OPERATION - CONTINUED TO NEXT PAGE]→

11.0 - HAZARDS TO PLANT OPERATION, (continued)

Emergency conditions exist WHEN:	NUE	ALERT	SAE	GEN
TOXIC GAS RELEASED:				
NOTE Toxic gas releases may hamper the ability of personnel to perform activities related to plant safety. Releases within the protected area of the plant may jeopardize the operation of equipment or safety functions necessary to establish or maintain cold shutdown. Releases which may fall into this category include, but are NOT limited to Carbon Dioxide, Nitrogen and Chlorine.				
CAUTION DO NOT LIMIT EVALUATION OF THE CONDITION BASED ON THE CHEMICAL DEFINITION OF THE MATERIAL IN QUESTION. THE WORD "TOXIC" IN THESE EALS IS A BROAD CATEGORY OF MATERIALS WHICH HAVE THE POTENTIAL FOR LIMITING THE ABILITY OF PERSONNEL TO PERFORM WORK ACTIVITES ASSOCIATED WITH PLANT SAFETY.				
OBSERVATION OF SIGNIFICANT TOXIC GAS RELEASE WITHIN the operating facility (areas within the protected area and the 230 Kv and 500 Kv switchyards) **AND** SOS/ED judgment	■			
UNCONTROLLED TOXIC GAS ENTRY INTO PROTECTED AREA FACILITY ENVIRONS		■		
UNCONTROLLED TOXIC GAS ENTRY INTO A VITAL AREA restricting access and constituting a safety problem: • Intake Structure • Main Control Room • Diesel Generator Bldg. • CAS/SAS • Power Block **AND** Either unit NOT in Cold Shutdown			■	

END - TOXIC GAS

→ [HAZARDS TO PLANT OPERATION - CONTINUED TO NEXT PAGE]→

11.0 - HAZARDS TO PLANT OPERATION, (continued)

Emergency conditions exist WHEN:	NUE	ALERT	SAE	GEN
FLAMMABLE GAS RELEASED:				
NOTE Flammable gas releases may jeopardize the operation of equipment or safety functions necessary to establish or maintain cold shutdown.				
OBSERVATION OF SIGNIFICANT FLAMMABLE GAS RELEASE WITHIN the operating facility (areas within the protected area and the 230 Kv and 500 Kv switchyards) **OR** **PIPING RUPTURE IN ANY FLAMMABLE GAS SYSTEM** (i.e., hydrogen, propane, etc.) **OR** SOS/ED judgment	■			
UNCONTROLLED FLAMMABLE GAS ENTRY into any Protected Area facility environs		■		
UNCONTROLLED FLAMMABLE GAS ENTRY INTO VITAL AREAS INCLUDING: • Intake Structure • Main Control Room • Diesel Gen. Bldg. • CAS/SAS • Power Block **AND** Either unit not in cold shutdown			■	

END - FLAMMABLE GAS

→ [HAZARDS TO PLANT OPERATION - CONTINUED TO NEXT PAGE]→

11.0 - HAZARDS TO PLANT OPERATION, (continued)

Emergency conditions exist WHEN: **TURBINE FAILURE/MISSILE IMPACT**	NUE	ALERT	SAE	GEN
A TURBINE FAILURE GENERATING PROJECTILES is indicated by: Main Turbine Trip **AND** Confirmation of rotating component failure **OR** SOS/ED judgment	■			
A TURBINE FAILURE GENERATING PROJECTILES is indicated by: Main turbine trip **AND** Turbine casing penetration by internal components **OR** Projectile from any source, affects plant operation **OR** SOS/ED judgment		■		

END - TURBINE FAILURE/MISSILE IMPACT

END
HAZARDS TO PLANT OPERATION

12.0 – THIS SECTION INTENTIONALLY LEFT BLANK

13.0 - CONTROL ROOM EVACUATION

Emergency conditions exist WHEN: **AN EVACUATION OF THE MAIN CONTROL ROOM IS IMMINENT** as indicated by:	NUE	ALERT	SAE	GEN
Entry into the Remote Shutdown procedures used to shutdown the plant from outside the Control Room.		■		
An evacuation of the Main Control Room is ordered **AND** Control of shutdown systems from local stations is NOT established within 15 minutes after Main Control Room evacuation.			■	

END
CONTROL ROOM EVACUATION

14.0 - CONTROL ROD DROP

Emergency conditions exist WHEN: **A CONTROL ROD DROP ACCIDENT OCCURS** as indicated by:	NUE	ALERT	SAE	GEN
Local power range monitors (LPRM) indicate abnormal neutron flux in the vicinity of the suspected dropped rod **AND** MSL high rad monitors > 3X normal background **OR** Average power range monitor (APRM) upscale trip of RPS channels "A" and/or "B" • Unit 1 > 120% RTP • Unit 2 > 120% RTP **OR** Intermediate range monitor (IRM) upscale trip of RPS channels "A" and/or "B" Either unit ≥ 120/125 divisions of full scale		■		

END
CONTROL ROD DROP

15.0 - FAILURE OF REACTOR PROTECTION SYSTEM

Emergency conditions exist WHEN:	NUE	ALERT	SAE	GEN
A FAILURE OF THE REACTOR PROTECTION SYSTEM (RPS) TO INITIATE A SCRAM as indicated by: Valid automatic scram signal **AND** Reactor NOT subcritical OR subcriticality cannot be maintained	■			
A FAILURE OF THE REACTOR PROTECTION SYSTEM (RPS) TO INITIATE AND COMPLETE A SCRAM which brings the reactor subcritical, is indicated by: Valid automatic AND manual scram signal **AND** Reactor NOT subcritical OR subcriticality cannot be maintained		■		
A TRANSIENT REQUIRING OPERATION OF SHUTDOWN SYSTEMS WITH FAILURE TO SCRAM (continued power generation but no core damage immediately evident) is indicated by Valid automatic AND manual scram signal **AND** < 3% power generation cannot be achieved OR maintained **AND** Standby Liquid Control initiation required			■	
See section 22.0, Multiple Systems and Other Conditions, for determination of the General Emergency Classification				■

END
FAILURE OF REACTOR PROTECTION SYSTEM

16.0 - LOSS OF CONTROL ROOM INDICATION/ALARMS/ANNUNCIATORS

Emergency conditions exist WHEN:	NUE	ALERT	SAE	GEN
ANY SIGNIFICANT LOSS OF ANY ONE OF THE FOLLOWING MAIN CONTROL ROOM INDICATION OR ALARMS, THAT REDUCE ASSESSMENT CAPABILITY TO THE EXTENT REQUIRING PLANT SHUTDOWN BY TS: • Plant Process Computer • Safety Parameter Display System • Radioactive Effluent Instrumentation **AND** The plant NOT shut down WITHIN the time limit specified by TS	■			
MOST OR ALL MAIN CONTROL ROOM ALARMS (ANNUNCIATORS) LOST as indicated by: Observation OR failure in alarm check **OR** SOS/ED judgment		■		
MOST OR ALL MAIN CONTROL ROOM ALARM (ANNUNCIATORS) LOST WITH PLANT TRANSIENT INITIATED OR IN PROGRESS as indicated by: Observation of plant transient (i.e., reactor trip, turbine trip, loss of feedwater, etc.) **OR** SOS/ED judgment			■	

END
LOSS OF CONTROL ROOM INDICATION/ALARM/ANNUNCIATORS

17.0 - LOSS OF SHUTDOWN FUNCTIONS

Emergency conditions exist WHEN:	NUE	ALERT	SAE	GEN
A COMPLETE LOSS OF ANY FUNCTION NEEDED FOR PLANT COLD SHUTDOWN is indicated by: Both trains of RHR shutdown cooling mode unavailable for any reason **AND** Loss of alternate shutdown cooling modes **AND** Inability to maintain reactor coolant temperature < 212° F, WHEN required.				
See section 22.0, Multiple Symptoms and Other Conditions, for determination of the General Emergency Classification				

END
LOSS OF SHUTDOWN FUNCTIONS

18.0 - FUEL DAMAGE BY FUEL HANDLING ACCIDENT

Emergency conditions exist WHEN:	NUE	ALERT	SAE	GEN
A FUEL HANDLING ACCIDENT WITH RELEASE OF RADIOACTIVITY TO REACTOR BUILDING is indicated by: Valid Refueling Floor ARM Hi Alarm > 50 mR/hr **OR** Valid "REFUELING FLOOR VENT EXHAUST RADIATION HI-HI" Alarm (601-403) **AND** Any of the following process radiation monitors indicating > 20 mR/hr • 1D11-K611A-D • 2D11-K611A-D • 2D11-K634A-D • 2D11-K635A-D **OR** Valid "REFUELING FLOOR VENT FLTR DISCH RADIATION HIGH" Alarm (601-42 **AND** Any of the following process radiation monitors indicating > 20 mR/hr • 1D11-K616A, B • 2D11-K616A, B				
MAJOR DAMAGE TO SPENT FUEL IN REACTOR BUILDING as indicated by: Spent Fuel Storage Pool Low Level Alarm **AND** More than one Refuel Floor ARM exceeding Max Safe Operating Value **OR** Large object damages spent fuel in pool **AND** SOS/ED judgment (based on refueling floor radiation levels)				

END
FUEL DAMAGE BY FUEL HANDLING ACCIDENT

19.0 - HIGH RADIATION OR AIRBORNE CONTAMINATION

Emergency conditions exist WHEN:	NUE	ALERT	SAE	GEN
HIGH RADIATION LEVELS OR HIGH AIRBORNE CONTAMINATION WHICH INDICATE A SEVERE DEGRADATION IN CONTROL OF RADIOACTIVE MATERIAL is indicated by: ARMs are offscale high (readings confirmed) **OR** An increase by factor of 1,000 in direct radiation readings				

END
HIGH RADIATION OR AIRBORNE CONTAMINATION

20.0 - LOSS OF COOLANT

Emergency conditions exist WHEN:	NUE	ALERT	SAE	GEN
NOTE NUE is to be declared based upon commencing Load Reduction. **ANY CONFIRMED REACTOR COOLANT SYSTEM (RCS) OPERATIONAL LEAKAGE AS DEFINED BY TS** is indicated by: Any RCS pressure boundary leakage	■			
ANY CONFIRMED REACTOR COOLANT SYSTEM (RCS) LEAK OR UNISOLABLE SYSTEM LEAK CAUSING THE DIRECT LOSS OF VESSEL INVENTORY GREATER THAN 50 GPM as indicated by: Calculation of RCS leak rate greater than 50 gpm using Drywell Equip AND/OR Floor Drain Sump level integrators on Panel H11-P613 **OR** SOS/ED judgment that an unisolable RCS leak greater than 50 GPM into the Reactor Building has occurred and may be indicated by one OR more of the following indications: • Reactor Building Equip AND/OR Floor Drain Sump level high alarms • Valid leak detection alarms • Any confirmed ARM in the Reactor Building above Max Normal Operating Values. **OR** SOS/ED judgment		■		
ANY CONFIRMED REACTOR COOLANT SYSTEM (RCS) LEAK is indicated by: RCS leak greater than all available ECCS pump capacities **AND** Reactor low, low, low level alarm < -113 inches AND level decreasing with available makeup pumps running and discharging to vessel **AND** Drywell High Temp Alarms AND Drywell temperature increasing **OR** Drywell high pressure initiation alarm > 1.92 psig AND increasing			■	
See section 22.0, Multiple Symptoms and Other Conditions for determination of the General Emergency Classification				■

END
LOSS OF COOLANT

21.0 - LOSS OF ENGINEERED SAFETY FEATURES

Emergency conditions exist WHEN:	NUE	ALERT	SAE	GEN
THE LOSS OF ENGINEERED SAFETY FEATURES (ESF) WITH CONTINUED OPERATION OF EITHER UNIT BEYOND THE TIMEFRAME SPECIFIED IN THE APPLICABLE TS REQUIRED ACTION STATEMENT (RAS): The following are engineered safety features (ESFs): • Automatic Depressurization System • Containment Heat Removal System • Containment Isolation System • Control Rod Velocity Limiters • Core Spray • CRD Housing Supports • Diesel Generators • High Pressure Coolant Injection System • Low Low Set Relief Logic System • Low Pressure Coolant Injection System • Main Control Room Environmental Control System • Main Steam Line Flow Restrictor • Main Steam Line Isolation Valves • Post LOCA Hydrogen Recombiner System (i.e., Combustible Gas Control System) • Reactor Protection System • Standby Gas Treatment System				

END
LOSS OF ENGINEERED SAFETY FEATURES

22.0 - MULTIPLE SYMPTOMS AND OTHER CONDITIONS

Emergency conditions exist WHEN: **TECHNICAL SPECIFICATION SAFETY LIMITS ARE EXCEEDED:**	NUE	ALERT	SAE	GEN
PLANT CONDITIONS THAT EXCEED ANY SAFETY LIMIT AS REQUIRED IN TS are indicated by the following categories: Thermal Power **OR** Minimum Critical Power Ratio (MCPR) **OR** Low reactor water level with irradiated fuel in the reactor vessel < -139" in Unit 1 OR < -158" in Unit 2 **OR** Reactor vessel steam dome pressure > 1325 psig with irradiated fuel in the reactor vessel **OR** Other condition that in the SOS/ED judgement warrant increased awareness of the plant operating staff or State and/or local authorities.				

END - TECHNICAL SPECIFICATION SAFETY LIMITS

→ → [MULTIPLE SYMPTOMS AND OTHER CONDITIONS - CONTINUED TO NEXT PAGE]→ →

22.0 - MULTIPLE SYMPTOMS AND OTHER CONDITIONS, (continued)

Emergency conditions exist WHEN: **PRECAUTIONARY ACTIVATION OF TSC IS WARRANTED:**	NUE	ALERT	SAE	GEN
Plant conditions exist that warrant precautionary activation of the TSC and placing the EOF AND other key emergency responders on standby, as indicated by the following: Observation **AND** SOS/ED judgment				

END - PRECAUTIONARY ACTIVATION OF TSC

→ → [MULTIPLE SYMPTOMS AND OTHER CONDITIONS - CONTINUED TO NEXT PAGE]→ →

22.0 - MULTIPLE SYMPTOMS AND OTHER CONDITIONS, (continued)

Emergency conditions exist WHEN: **PRECAUTIONARY ACTIVATION OF MONITORING TEAMS IS WARRANTED:**	NUE	ALERT	SAE	GEN
Plant conditions exist that warrant activation of emergency centers and monitoring teams, OR a precautionary notification to the public near the site, as indicated by the following: Observation **AND** SOS/ED judgment			■	

END - PRECAUTIONARY ACTIVATION OF MONITORING TEAMS

→ → [MULTIPLE SYMPTOMS AND OTHER CONDITIONS -

CONTINUED TO NEXT PAGE]→ →

22.0 - MULTIPLE SYMPTOMS AND OTHER CONDITIONS (continued)

Emergency conditions exist WHEN: **POTENTIAL LARGE RELEASE OF RADIOACTIVITY EXISTS:**	NUE	ALERT	SAE	GEN
PLANT CONDITIONS EXIST WHERE THE POTENTIAL RELEASE OF LARGE AMOUNTS OF RADIOACTIVITY IN A SHORT TIME PERIOD ARE POSSIBLE (e.g., any core melt situation) is indicated by the following conditions: Transient (e.g., scram, loss of offsite power, etc.) **AND** Failure of required core shutdown system (could lead to core melt in several hours) [e.g., CRD system, SLC system, RPS, ECCS, DG'S, RHRSW] **AND** Containment failure likely **OR** Small or large LOCA **AND** Failure of ECCS to perform (leading to core degradation or melt in minutes to hours) **AND** Loss of containment imminent **OR** Small or large LOCA **AND** Containment performance is unsuccessful (affecting longer term success of ECCS. Could lead to core degradation OR melt in hours)				

→ → [CONTINUE TO THE NEXT PAGE] → →

22.0 - MULTIPLE SYMPTOMS AND OTHER CONDITIONS (continued)

Emergency conditions exist WHEN: **POTENTIAL LARGE RELEASE OF RADIOACTIVITY EXISTS: (continued)**	NUE	ALERT	SAE	GEN
OR Shutdown occurs **AND** Required decay heat removal systems (e.g., RHR) are rendered unavailable or non-safety systems heat removal capabilities are rendered unavailable **AND** Core degradation OR melt could occur in about ten hours WITH subsequent containment failure **OR** Any major internal OR external event which could cause massive damage to plant systems resulting in any of the conditions listed in multiple symptoms of potential larger releases of radioactivity **OR** SOS/ED judgment				

END - POTENTIAL LARGE RELEASE OF RADIOACTIVITY

→ → [MULTIPLE SYMPTOMS AND OTHER CONDITIONS - CONTINUED TO NEXT PAGE]→ →

22.0 - MULTIPLE SYMPTOMS AND OTHER CONDITIONS (continued)

Emergency conditions exist WHEN: **FIRE IN PLANT OCCURS:**	NUE	ALERT	SAE	GEN
A FIRE IN THE PLANT THAT COULD CAUSE MASSIVE DAMAGE TO ANY PLANT SYSTEM WHICH COULD LEAD TO CORE DEGRADATION OR CORE MELT as indicated by the following: Loss of systems due to fire, needed to maintain integrity of all three fission product barriers. • Fuel Integrity • RCS Integrity • Containment Integrity **OR** Location, observation AND judgment of SOS/ED (Based upon Fire Brigade Leader's report.)				

END - FIRE IN PLANT

→ [MULTIPLE SYMPTOMS AND OTHER CONDITIONS -

CONTINUED TO NEXT PAGE]→

22.0 - MULTIPLE SYMPTOMS AND OTHER CONDITIONS (continued)

Emergency conditions exist WHEN: **Any of the following are indicated, using the Parameter Assessment Table below:**	NUE	ALERT	SAE	GEN
A Failure of the Fuel Cladding AND Primary Containment with a potential loss of the Primary Coolant Boundary **OR** **A Failure of the Fuel Cladding AND Primary Coolant Boundary with a potential loss of Primary Containment** **OR** **A Failure of the Primary Coolant Boundary AND Primary Containment with a potential loss of the Fuel Cladding**				

A **General Emergency** should be declared when **TWO boundaries (cladding, coolant, or containment)** have an **ACTUAL failure AND** a **THIRD boundary** has an **ACTUAL** or **POTENTIAL failure**. IF a parameter is approaching emergency action level criteria and mitigation systems are unavailable, assume the barrier will be lost. **Exceeding ONE** of the parameters below is an **indication of an actual or potential loss of the associated boundary.**

PARAMETER ASSESSMENT TABLE

	CLADDING		COOLANT		CONTAINMENT
	Actual		**Actual**		**Actual**
☐	I-131 > 100µCi/cc	☐	Unisolable primary system break outside containment	☐	Integrity breached
☐	DWRRM > 500 R/hr	☐	Significant leakage in TB With TB ARMs above alarm setpoints and increasing.	☐	Drywell **OR** Torus ≥ 6% hydrogen with ≥ 5% oxygen
		☐	DW Pressure 25 psig	☐	SOS judgement that containment is lost **OR** loss is imminent
		☐	DW Temperature 300°F		
		☐	Gap activity in DW		
	Potential		**Potential**		**Potential**
☐	Failure of ECCS to maintain RWL	☐	Failure of SRVs to open with pressure high off-scale	☐	Containment pressure approaching 56 psig
☐	RWL < -158" for 3.5 min **AND** MCUTL	☐	All 4160/600 V buses deenergized	☐	Drywell **OR** Torus ≥ 6% hydrogen with ≥ 5% oxygen
☐	All 4160/600 V buses deenergized	☐	Failure of ECCS to maintain RWL	☐	SOS/ED judgement that containment loss is imminent

END
MULTIPLE SYMPTOMS AND OTHER CONDITIONS

23.0 - ISFSI OPERATIONS

Emergency conditions exist WHEN:	NUE	ALERT	SAE	GEN
A LOSS OF CASK CONFINEMENT BOUNDARY FOR ANY LOADED SPENT FUEL CASK OCCURS as indicated by: Direct Radiation levels outside the ISFSI protected area boundary exceed 2 mrem in an hour **AND** Contamination levels outside the ISFSI protected area boundary exceed the technical specification limits for spent fuel storage cask surface contamination **OR** Direct Radiation Readings for a Loaded Spent Fuel Cask exceed the technical specification limit for overpack average surface dose rates.				
DEGRADATION OF ANY SPENT FUEL CASK DUE TO AN OPERATIONAL EVENT as indicated by: Direct observation of a loaded spent fuel cask indicates cask confinement boundary or shielding damage due to an operational event • Cask handling • Cask drop • Cask tip-over **AND** SOS/ED judgment				

→ → **[ISFSI OPERATIONS - CONTINUED TO NEXT PAGE]** → →

23.0 - ISFSI OPERATIONS (continued)

Emergency conditions exist WHEN:	NUE	ALERT	SAE	GEN
A Loss of cask confinement boundary for any loaded spent fuel cask occurs as indicated by: **Degradation of any Spent Fuel Cask due to environmental phenomena or external events** Direct observation of a loaded spent fuel cask indicates cask confinement boundary or shielding damage due to environmental phenomena or external events • Tornado • Explosion • Lightning • Flooding • Earthquake • Extreme environmental temperatures • Burial under debris • Fire • Explosion • Aircraft Crash • Missile or projectile impact • Security Event **AND** SOS/ED judgment				

END
ISFSI OPERATIONS

1.0 OBJECTIVE

This procedure provides instruction for the handling of injured and/or overexposed personnel when the presence of radiation and/or contamination may complicate the situation. These instructions include:

- Assessment of situation and injury
- Immediate first aid action
- Notification of ambulance and hospital services and associated support by plant personnel
- Notification of Plant Management and contracted medical treatment service companies

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2.0 APPLICABILITY

This procedure will be performed for any of the following situations:

2.1 Treatment of any injury reported to have occurred in a Radiologically Control Area (RCA).

2.2 Any over exposure to radiation in excess of a Federal Limit, as determined by Health Physics management.

3.0 REFERENCES

3.1 Edwin I. Hatch Unit 1 and 2 Emergency Plan

3.2 10AC-MGR-006-0S, Hatch Emergency Plan

3.3 00AC-REG-001-0S, Federal and State Reporting Requirements

3.4 10CFR20

3.5 Plant Hatch Emergency Call List

3.6 60AC-HPX-003-0S, Bioassay Program

3.7 60AC-HPX-004-0S, Radiation and Contamination Control

3.8 62RP-RAD-004-0S, Personnel Decontamination

3.9 10AC-MGR-004-0S, Corrective Action Program

3.10 AG-SFT-11-0201N, First Responder Guidelines

3.11 FULL SIZE FORMS

- TRN-0124, Injury Report

4.0 REQUIREMENTS

4.1 PERSONNEL REQUIREMENTS

In the event of a medical injury, the most senior HP/Chem Department personnel will be responsible for commend and control at the scene to ensure that actions are performed and decisions are made.

4.1.1 Health Physics personnel will make radiological evaluations.

4.1.2 Medical personnel (nurse or EMT) will normally make medical evaluations. In the absence of medical personnel, a First Responder will make medical evaluations.

4.1.3 Control Room Shift Supervisor will ensure medical personnel are dispatched and Emergency Call List notifications are made.

4.1.4 Plant Management, in consultation with necessary experts, will make long term decisions concerning treatment of injured personnel with radiological complications and overexposed personnel.

4.2 MATERIAL AND EQUIPMENT

4.2.1 Emergency equipment maintained at Appling Health Care System

4.2.2 Emergency equipment maintained at Meadows Regional Medical Center

4.2.3 Emergency equipment maintained at the following locations:

4.2.3.1 Control Building Decontamination Room

4.2.3.2 Medical Building

4.3 SPECIAL REQUIREMENTS

4.3.1 IF necessary to transport a contaminated injured individual to the hospital, notifications must be made in accordance with the Emergency Call List.

4.3.2 WHEN notification of personnel by title, (e.g., Nuclear Plant General Manager), is directed by this procedure and those personnel are NOT on-site, the Plant Hatch Emergency Call List will be used to obtain home phone numbers. IF personnel are unable to be contacted, their designated alternates will be contacted.

4.3.3 Transport of a contaminated injured individual to an offsite medical facility for treatment will require NRC notifications in accordance with 10 CFR 50.72 (b) (xii).

5.0 PRECAUTIONS/LIMITATIONS

5.1 PRECAUTIONS

5.1.1 Medical attention to serious injuries shall take priority over the removal of contamination and over routine radiation protection measures. Serious injuries must NOT be aggravated by following normal dress out procedures or decontamination practices.

5.1.2 Removal of a dressing or splint for purposes of decontamination will normally be directed only by a physician.

5.1.3 Decontamination of serious wounds will normally be conducted/directed by a physician.

5.1.4 Form TRN-0124, Injury Report may be used to record vital information about injured personnel who are to be transported to an offsite medication facility for treatment.

5.1.5 Authorization must be given by the Emergency Director in accordance with 73EP-EIP-017-0S, Emergency Exposure Control, prior to allowing rescue workers to exceed 10 CFR 20 limits, as necessary.

5.2 LIMITATIONS

N/A - NOT applicable to this procedure

6.0 PREREQUISITES

6.1 An individual has been injured in a radiologically controlled area (RCA).

6.2 The potential exists that an individual may have exceeded the exposure limits of 10CRF20.

REFERENCE

7.0 PROCEDURE

7.1 ACTIONS TO TAKE IN RESPONSE TO PERSONNEL INJURY

7.1.1 Any person who discovers an injured individual must inform the Control Room of his/her name, the name of the injured individual (if available), the location of the injured individual and the nature of the injury.

7.1.2 Immediately render life saving first aid, IF necessary, taking the appropriate actions based on your knowledge of first aid.

CAUTION

WHEN IT IS KNOWN OR SUSPECTED THAT AN INDIVIDUAL HAS RECEIVED A SERIOUS INJURY, AN AMBULANCE MUST BE SUMMONED WITHOUT DELAY.

7.1.3 Upon notification that an individual is injured, the affected unit's Control Room Shift Supervisor must dispatch a medically trained person [e.g., the site nurse, EMT or First Responder] to evaluate the severity of the injury and a HP representative to evaluate the radiological implications.

7.1.3.1 Upon arrival at the accident site, the most qualified medically trained person will take charge of rendering first aid and make recommendations to the Control Room on the necessity for off-site medical support, including ambulance service. IF the individual is severely injured, the medically trained person (in consultation with HP) will direct how, WHEN and where the injured person will be moved.

7.1.3.2 Upon arrival at the accident site, the most senior HP representative will assume command and control at the accident scene and :

7.1.3.2.1 Authorize immediate access to the injured individual without a Radiation Work Permit (RWP), as necessary. Continuous job coverage must be provided in accordance with 60AC-HPX-004-0S, Radiation and Contamination Control.

7.1.3.2.2 Make a prompt and realistic assessment of any radiological hazard to the injured person AND to the rescuers from the environment where the injury occurred and where first aid is being rendered.

7.1.3.2.3 Evaluate the potential for and determine the radiation exposure of the injured individual.

7.1.3.2.4 Evaluate the potential for and determine if the injured individual is externally and/or internally contaminated.

7.1.3.2.5 Request additional HP support to ensure appropriate contamination control measures are taken at the scene of the injury AND the route used to transport the injured individual.

7.1.4 IF the individual is seriously injured, normal radiological practices will be bypassed, as necessary, to expedite obtaining medical treatment.

7.1.5 IF the individual is not seriously injured, normal radiological practices will be followed to prevent the spread of contamination. HP personnel will provide any necessary assistance/guidance in removing protective clothing, frisking and decontamination. Follow-up medical attention may be provided in the Medical Building or the Health Physics Decon Room, as appropriate.

7.1.6 The HP representative in command of the accident scene must report the results of their response to AND treatment of the injured individual to the affected unit's Control Room Shift Supervisor as soon as possible. The affected unit's Shift Supervisor may record the information provided from the accident scene on TRN-0124, Injury Report. The Shift Supervisor must then refer to subsections 7.2, 7.3 or 7.4 to determine appropriate response actions.

7.2 SERIOUS INJURY - REQUIRING OFFSITE MEDICAL SUPPORT

> NOTE
>
> Injured individuals who are externally contaminated will initially be taken to the Radiation Emergency Area (REA) of either Appling Health Care System (Baxley - 14 miles) or Meadows Regional Medical Center (Vidalia - 24 miles). IF the individual is unable to provide preference or IF the preference expressed is considered detrimental to the injured individual's health, the choice of hospital will be based on distance or needed services.

7.2.1 IF offsite medical support is determined necessary, the affected unit's Control Room Shift Supervisor will:

7.2.1.1 Contact the appropriate county "911" Center, request an ambulance and hospital assistance and provide a detailed description of the injury/illness and any radiological complications.

7.2.1.2 Notify the Security Shift Supervisor that an ambulance will be coming on site and request their access is expedited.

7.2.1.3 Notify appropriate plant management personnel and a member of the Emergency Preparedness staff as denoted in the Emergency Call List as soon as time permits.

> NOTE
>
> Transporting a contaminated injured individual offsite for medical support requires a NRC notification within 8 hours.

7.2.1.7 Notify the NRC in accordance with REG-0024, Reporting Requirements (item 54).

7.2.2 HP supervision will ensure:

7.2.2.1 HP personnel are available and prepared to carry out the actions specified in subsection 7.5, HP Duties for Ambulance and Hospital.

7.2.2.2 As soon as the immediacy of the medical emergency has been eliminated and radiological conditions allow, ensure appropriate surveys, dose evaluations and supporting information is documented.

7.3 INJURY - NOT REQUIRING OFFSITE MEDICAL SUPPORT

7.3.1 IF offsite medical support is not necessary, the affected unit's Control Room Shift Supervisor will:

7.3.1.1 Make notifications to appropriate plant management personnel using the Emergency Call List.

7.3.1.2 Ensure information surrounding the incident is logged for future reference, if necessary.

7.3.1.3 Determine any necessary reporting requirements in accordance with 00AC-REG-001-0S, Federal and State Reporting Requirements.

7.3.2 HP supervision will ensure that normal radiological precautions are followed including personnel decontamination, survey documentation, and dose evaluation.

NOTE

Overexposed individuals will normally NOT require either fist aid or urgent transfer to an offsite medical facility. IF offsite medical support is determined necessary, refer to subsection 7.2.

7.4 EXCESSIVE RADIATION EXPOSURE - NO INJURY

7.4.1 Upon determination that an individual may have received an overexposure to radiation as determined by HP supervision, HP will perform the following:

7.4.1.1 Evaluate the extent and nature of the overexposure.

7.4.1.2 Provide a report to the affected unit's Control Room Shift Supervisor on the overexposed individual's internal and external exposure. Advise the Shift Supervisor of the urgency for offsite medical support, as necessary.

7.4.1.3 Initiate actions as outlined in 62RP-RAD-004-0S, Personnel Decontamination and 60AC-HPX-003-0S, Bioassay Program, as necessary.

7.4.1.4 Document the incident in the condition reporting system in accordance with 10AC-MGR-004-0S, Corrective Action Program.

7.4.1.5 Observe the individual for signs of overexposure (e.g., nausea, vomiting, fatigue, diarrhea, reddening of the skin), while awaiting results of consultation with medical and radiological consultants.

7.4.2 WHEN notified that an individual may have received an overexposure, the affected unit's Control Room Shift Supervisor will:

7.4.2.1 Make notifications to appropriate plant management personnel using the Emergency Call List.

7.4.2.2 Ensure that information surrounding the incident is logged for future reference, as necessary.

7.4.2.3 Determine any necessary reporting requirements in accordance with form REG-0024, Reporting Requirements.

7.4.2.4 Assist Health Physics in implementing plan for mitigating results of overexposure.

7.5 HP DUTIES FOR AMBULANCE AND HOSPITAL

HP personnel will be assigned to perform the following functions WHEN notified by the Control Room that an ambulance is in route and will be coming on site:

7.5.1 Meet the ambulance at the Plant Entry Security Building (PESB) AND brief the Emergency Medical Technicians (EMTs) on radiation protection procedures appropriate for the situation.

7.5.2 Provide each EMT with a TLD and Digital Alarming Dosimeter (DAD).

7.5.3 Provide continuous HP coverage from the time EMTs come on-site through the treatment/decontamination of the injured person at the hospital. HP will be responsible for ensuring that the EMT's exposure is minimized to As Low As Reasonably Achievable (ALARA).

7.5.4 Ensure that measures are taken to minimize the spread of contamination resulting from treatment/transport of the injured person.

7.5.5 The HP representative(s) that accompany the injured person to the hospital will be responsible for performing the following:

7.5.5.1 Advise hospital personnel concerning the injured person's radiation exposure and/or contamination status.

7.5.5.2 Provide HP support, as necessary, to ensure that exposure to hospital personnel is maintainedALARA.

7.5.5.3 Advise and assist in the decontamination of the injured individual.

7.5.5.4 Additional actions to be taken by available HP personnel include the following:

7.5.5.4.1 Monitor and supervise the decontamination of the EMTs and ambulance. IF the apparel of the EMTs is contaminated, a HP representative will collect the apparel and issue scrub clothes from the hospital.

7.5.5.4.2 . Advise and assist in the decontamination of the Radiation Emergency Area and its equipment at the completion of use in the area.

7.5.5.4.3 Ensure that all contaminated items are safely packaged and taken to the plant for decontamination or disposal.

7.5.5.4.4 Request additional support from the plant, as necessary, to assist in decontamination of the REA or ambulance, IF necessary.

1.0 OBJECTIVE

This procedure addresses AND delineates the actions required to deactivate the primary EOF AND activate the Alternate EOF to a state of readiness. It also provides guidelines for manning the facility.

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2.0 APPLICABILITY

This procedure is applicable to personnel AND activities regarding activation AND operation of the Alternate EOF during an emergency condition, drill AND/OR exercise. Frequency of use will be as necessary.

3.0 REFERENCES

3.1 NUREG 0737, Supplement I, "Requirements for Emergency Response Capability"

3.2 10AC-MGR-006-0S, Hatch Emergency Plan

3.3 Edwin I. Hatch Unit 1 and Unit 2 Emergency Plan

3.4 FULL SIZE FORMS

- TRN-0016,Alternate EOF Communications Checks

4.0 REQUIREMENTS

4.1 PERSONNEL REQUIREMENTS

4.1.1 Qualified Emergency Response personnel who normally activate the primary EOF are required to perform this procedure.

4.1.2 The EOF Manager or designee will be responsible for ensuring completion of this procedure.

4.1.3 The Emergency Director may operate from the Control Room, the TSC, or the EOF at his discretion. Emergency Director duties may be transferred to the Alternate EOF as deemed appropriate by plant management.

4.2 MATERIALS AND EQUIPMENT

N/A – Not applicable to this procedure

4.3 SPECIAL REQUIREMENTS

The Alternate EOF is located in Vidalia, Ga. in the Emergency News Center Complex as shown in Attachment 1.

5.0 PRECAUTIONS/LIMITATIONS

5.1 PRECAUTIONS

5.1.1 This procedure is intended to be guidance for activating the Alternate EOF in an emergency situation. Deviations from the listed sequence are permitted when plant conditions warrant a more expedient order of completion.

5.1.2 A proper turnover is required prior to transferring any duty to/from any emergency response facility.

5.2 LIMITATIONS

N/A - Not applicable to this procedure

6.0 PREREQUISITES

The Emergency Director and/or EOF Manager has determined the primary EOF uninhabitable (for any reason) AND/OR facility operation from the Alternate EOF is desirable.

REFERENCE

7.0 PROCEDURE

7.1 DEACTIVATION OF THE PRIMARY EOF

7.1.1 The EOF Manager ensures the following activities are performed:

7.1.1.1 Announce to the EOF staff that the primary EOF is being deactivated (including the cause of the deactivation) AND that activation of the Alternate EOF will take place.

7.1.1.2 Notify the NRC, Corporate Emergency Operations Center (CEOC), State and local authorities and the Emergency News Center of current facility status.

7.1.1.3 Notify ED and TSC Manager that the primary EOF is being deactivated AND EOF activities are being relocated to the Alternate EOF.

7.1.1.4 Dispatch a Health Physics team to determine habitability of the Alternate EOF as necessary.

7.1.1.5 Transfer Emergency Director duties to the TSC in the event that the Emergency Director is located in the EOF.

7.1.1.6 Dispatch applicable emergency response personnel to the Alternate EOF to satisfy the following functions:

TASK/FUNCTION	PERSONNEL	# REQUIRED
Offsite Interface in the EOF	EOF Manager	(1)
Dose Assessment support to the Emergency Director	Dose Assessment	(2)

Additional emergency response personnel may be dispatched as directed by Facility Management to provide additional support, as needed.

7.1.2 The Dose Assessment Manager ensures the following activity is performed:

7.1.2.1 Transfer dose assessment responsibilities to the TSC. Appropriate Dose Assessment Staff members will be dispatched to assist the TSC in the tracking of field teams.

7.1.3 The Support Coordinator ensures the following activities are performed:

7.1.3.1 Obtain vehicles for transfer of equipment/personnel to the Alternate EOF.

7.1.3.2 The switchboard operator transfers incoming lines to the PESB prior to reporting to the PESB.

7.1.3.3 EOF personnel load equipment and supplies into vehicles. At a minimum, transfer the following items to the alternate EOF:

- Offsite Field Monitoring Kits (IF not already in use)
- Materials deemed necessary from the EOF storage Room and supply cabinets
- Dose assessment computer and printer
- Field Team Radio equipment

7.1.4 The Security Manager ensures the following activities are performed:

7.1.4.1 Maintain accountability of EOF personnel during the transfer by utilizing sign-in sheets. Personnel need to sign out upon exit from the EOF.

7.1.4.2 If Security Officers are not already at the Emergency News Center complex, dispatch Security Officers to establish access control for the Alternate EOF.

7.2 ACTIVATION OF THE ALTERNATE EOF

7.2.1 Ensure radiological monitoring of all incoming EOF personnel, as directed by the Dose Assessment Manager.

7.2.2 Set-up Alternate EOF using the space available (refer to posted typical layout of the Alternate EOF).

7.2.3 Perform communications check per TRN-0016, Alternate EOF Communications Checks.

7.2.4 Establish communications with TSC, NRC, Control Room and State and local authorities, as appropriate.

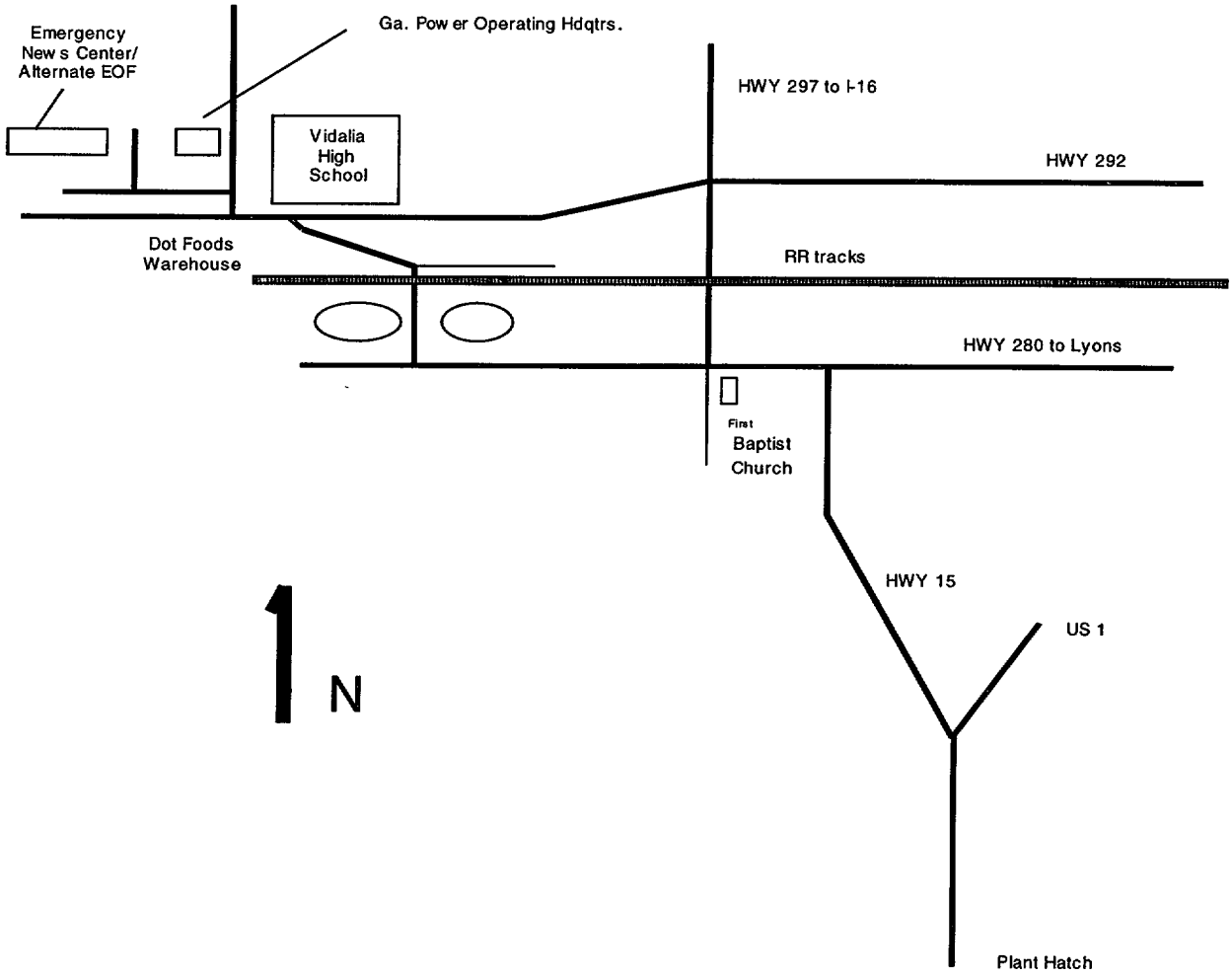
7.2.5 Ensure security access control is established for the Alternate EOF.

7.2.6 Synchronize all clocks with the Control Room.

7.2.7 Inform all parties that the Alternate EOF is activated.

7.2.8 Set-up the Dose Assessment computer in accordance with 73EP-EIP-015-0S, Dose Assessment, and establish operability. Resume dose assessment activities as directed by the Emergency Director.

7.2.9 IF desired, refer to the ERDS data link (located on the Engineering Support intranet page) to allow direct monitoring of critical plant parameters.


Emergency
News Center/
Alternate EOF
Ga. Power Operating Hdqtrs.
HWY 297 to I-16
Vidalia
High
School
HWY 292
Dot Foods
Warehouse
RR tracks
HWY 280 to Lyons
First
Baptist
Church
HWY 15
US 1
N
Plant Hatch