

Entergy Operations, Inc. Waterloo Road P.O. Box 756 Port Gibson, MS 39150 Tel 601 437 6299

Charles A. Bottemiller Manager Plant Licensing

August 12, 2002

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

Subject:

Changes to Emergency Plan Implementing Procedures - August 12, 2002

Grand Gulf Nuclear Station

Docket No. 50-416 License No. NPF-29

GNRO-2002/00068

Ladies & Gentlemen:

Entergy Operations, Inc. submits in accordance with 10CFR50 Appendix E, Section V changes to the following Emergency Plan Implementing Procedure:

10-S-01-1 Rev. 109

This letter does not contain any commitments.

Yours truly,

Charles A. Bottemiller, Licensing Manager

MJL

attachment:

1. Procedure 10-S-01-1

CC:

(See Next Page)

August 12, 2002 GNRO-2002/00068 Page 2 of 2 cc:

Hoeg	T. L.	(GGNS Senior Resident)	(w/a)
Levanway	D. E.	(Wise Carter)	(w/a)
Reynolds	N. S.		(w/a)
Smith	L. J.	(Wise Carter)	(w/a)
Thomas	H. L.		(w/o)

U.S. Nuclear Regulatory Commission	ALL LETTERS
ATTN: Mr. E. W. Merschoff (w/2)	
611 Ryan Plaza Drive, Suite 400	
Arlington, TX 76011-4005	
U.S. Nuclear Regulatory Commission	ALL LETTERS – U.S. POSTAL
ATTN: Mr. David H. Jaffe NRR/DLPM (w/2)	SERVICE MAIL DELIVERY
ATTN: FOR ADDRESSEE ONLY	ADDRESS ONLY
ATTN: U.S. Postal Delivery Address Only	
Mail Stop OWFN/7D-1	
Washington, D.C. 20555-0001	

PLANT OPERATIONS MANUAL

Volume 10

Section 01

10-S-01-1

Revision: 109

Date: 7/31/02

EMERGENCY PLAN PROCEDURE

ACTIVATION OF THE EMERGENCY PLAN

SAFETY RELATED

Prepared:

Reviewed:

Technical

Concurred: _

Manager,

OSRC:

Approved:

Manager, Emergency Preparedness

List of Effective Pages:

Pages 1-11

Attachments I, II

EPP 01-02 (Flowchart) Dated 7/29/02

List of TCNs Incorporated:

Revision	TCN	Revision	TCN
1-4 5 6 7 8 9 10 11 12 13 14,15 16 17 18 19 20 21 22 23 100 101 102 103 104 105 106	None 1,2 3 4 5,6 None 7,8 None 9 10 None 11 None 12 None None 13,14 None 15 None 16 None None None	109	None
107 108	None None		

Ti	tle: Activation of the Emergency Plan	No.:	10-S-01-1	Revision: 109	Safety Evaluation			
Fac	OVERVIEW/SIGNATURES				un G			
	Document Reviewed: 10-5-01-1 Change/Rev. 109 System Designator(s)/Description: ACTIVATION OF EMERGENCY Plans							
sys	Description of Proposed Change AND 7/402 THIS CHANGE IMPLEMENTS DO ADDITIONAL SITE SPECIFIC CREDIBLE THREAT EAL PER NRC ORDER WHICH IS CONTROLLED UNDER ID CFRED. SH. ADDITIONAL EDITORIAL) TYPOGRAPHICAL (NANGES AM INCluded.							
che and	the proposed activity, in its entire ck the appropriate box, provide a forward to a Reviewer. No further teria is applicable, continue with	justifi 50.59	cation/basi Review is	s in the Descript required. If no	tion above,			
	The proposed activity is editorial/typographica				,,			
	The proposed activity represents an "FSAR-c item # from Section 5.2.2.2).	only" char	ige as allowed	in Section 5.2.2.2	(Insert			
A	The proposed activity is controlled by another	r regulation	on per Section	5.2.2.3.				
	further 50.59 Review is required, cions indicated must be included in the			ole review(s): (C	mly the			
	SCREENING		Sec	ctions I, II, and III requi	red			
	50.59 EVALUATION EXEMPTION			ctions I, II, III required	, and			
	50.59 EVALUATION (#:	_) Sec	ctions I, II, III, and V re	quired			
Pre	Pparer: Wase / Signature	/ Comp.	ohy / Depar	25 7/28/3 tment / Date	2			
Rev	Name (print) / Signature	mdl / Compa	EOI/E/ any / Depar	7/29/02 tment / Date				
osi	OSRC: Chairman's Name (print) / Signature / Date [Required only for Programmatic Exclusion Screenings (see Section 5.8) and 50.59 Evaluations.]							
N	List of Assisting/Contributing Personnel: Name: Scope of Assistance:							

Title:	Activation of the	No.:	10-S-01-1	Revision: 109	Page: i	
=	Emergency Plan				_	}

RPTS FORM

10CFR50.59 Review Required?	(X) Yes	If Yes,	attach 50.59 Review Form				
	() No Not required per LI-101						
Cross-Discipline review required? (X) Yes (Note affected Departments Below)							
Cross-Discipline review requi	red?	() No	(Note directed Departments Delow)				
Preparer Initi							
Department Cross-Discipline	Reviews	Needed	Signoff (signed, electronic, telcon)				
OPELATIONS			WA Kusself				
-							
			,				

Does this directive contain Tech Spec Triggers? () YES ($\mbox{Y}\mbox{}$) NO

REQUIREMENTS CROSS-REFERENCE LIST

Requirement Implem	ented by Directive	Directive Paragraph Number
Name	Paragraph Number	That Implements Requirement
ANSI N18.7	5.3.9.2.S1	*
GGNS Emer Plan	2.4.S3	1.1.1
GGNS Emer Plan	3.3.S1	2.1.2
GGNS Emer Plan	6.2.2.S3 & S4	2.1.1, 6.1.2 S2
GGNS Emer Plan	5.4.5.a,b,c	2.2
GGNS Emer Plan	5.4.4	2.3
GGNS Emer Plan	3.1.S2	6.1.2
GGNS Emer Plan	6.2.2.S1 & S2	6.1.2 (Note)
GGNS Emer Plan	4.1.4.S3	Attachment I
GGNS Emer Plan	4.1.S3	6.1.4, 6.3
GGNS Emer Plan	4.1.S13	6.1.3 (Note)
GGNS Emer Plan	3.3.S6.b	6.1.3
GGNS Emer Plan	6.2.4.S11 & S12	6.1.4.i(1)
GGNS Emer Plan	6.2.4.S13	6.1.4.i(2)
GGNS Emer Plan	6.2.4.S14	6.1.4.i(3)
GGNS Emer Plan	4.1.4.S2	6.1.4.j(1)
GGNS Emer Plan	6.3.1.S1 & S2	6.2.1
GGNS Emer Plan	6.3.2	6.2.1a
GGNS Emer Plan	6.3.3, 6.3.4	6.2.1b
GGNS Emer Plan	9.3.S7	Attachment II (Note)
GGNS Emer Plan	Table 4-1	Attachment I
GGNS Emer Plan	7.5.3.a.2.e	5.30
GNRI-93/00171	93-13-01, Item 6	Attachment I, 17.1.1
GGNS Emer Plan	6.5.1.b.S5, S6	6.1.4.j(1)
GGNS Emer Plan	7.5.3.a.3.c	6.1.4.d
GGNS Emer Plan	6.2.4.S2	2.1.2
GGNS Emer Plan	6.2.4.S7 & S8	2.4
GGNS Emer Plan	5.4.S6	6.1.4.i(1),i(2),i(3)
GGNS Emer Plan	3.3.S3 & S4	2.4
GGNS Emer Plan	6.5.1.b	6.1.4
GGNS Emer Plan	6.5.1.A.1	6.1.4.g
GGNS Emer Plan	3.3.S5	2.1.2

^{*} Covered by directive as a whole or by various paragraphs of the directive.

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NOTE

The Component Database Change Request statement is applicable only to Volume 06 and 07 maintenance directives.

Component Database Change Request generated and the backup documentation available for setpoint and/or calibration data only \square Yes \nearrow N/A CDBCR #

Current Revision Statement

Revision 109:

- Implements NRC requested site specific credible threat EAL.
- Makes other administrative changes.

GRAND GULF NUCLEAR STATION EMERGENCY PLAN PROCEDURE

Title: Activation of the Emergency Plan No.: 10-S-01-1 Rev. 109 Emergency Plan Evaluation

10CFR50.54(q) Screening

1. DOCUMENT INFORMATION

Procedure/Document Number:10-S-01-1	Proc./Doc. Revision:109
Document Title: Activation of the Emerg	ency Plan
Brief Description of Proposed Revision	: Adds site specific credible
threat EAL to procedure as requested by	y the NRC. Other administrative
changes. This procedure revision impl	ements Revision 48 of the
Emergency Plan.	

2. SCREENING

A.) Does the proposed revision require a change to the Emergency Plan?
YesX_ No
B.)Does the proposed revision change the site Emergency Action Levels
(EALs)?
YesX_ No
If the answer to either question is YES, then a 50.54(q) evaluation
must be performed.

3. APPRO	JAVC		
Screening	Completed By:	Wanuel	7/29/02
	•	Signature	Date
Screening	Reviewed By: _	Tished fund to a M.Fo.	7/29/02
~	-	Signature	Date

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1.0 PURPOSE AND DISCUSSION

1.1 Purpose

- 1.1.1 This procedure provides guidance to:
 - a. Classify an emergency according to severity.
 - b. Assign responsibilities for emergency actions.
 - c. Establish lines of authority and communication.
 - d. Initiate emergency actions to safeguard the public and plant personnel.
 - e. Upgrade or terminate emergency classification when severity of event changes.

1.2 Discussion

- 1.2.1 Whenever plant conditions are identified that meet the Emergency Action Level Criteria in Attachment I or EPP 01-02 (Flowchart), this emergency plan procedure shall be implemented.
- 1.3 Changes required for implementation of 1994 TSIP were incorporated in Revision 100. For historical reference this statement should not be deleted.

2.0 RESPONSIBILITIES

- 2.1 <u>Shift Manager</u> Is responsible for determining if emergency declaration is required.
 - 2.1.1 If an Emergency Action Level (EAL) is reached or exceeded, the Shift Manager shall:
 - a. Classify the emergency and make the appropriate declaration if required.
 - b. Take action to ensure safe operation of plant and protection of plant personnel, the general public, and plant equipment.
 - c. Perform assessment actions.
 - d. Perform any other emergency actions as appropriate.
 - 2.1.2 The Shift Manager assumes the role of Emergency Director upon initial classification of an emergency, and becomes the Operations Coordinator, when relieved by the On-Call Manager (as Emergency Director), until relieved by the On-Call Operations Coordinator. When relieved by the On-Call Operations Coordinator, the Shift Manager resumes normal Control Room duties.
- 2.2 <u>Operations Coordinator</u> Reports directly to the Emergency Director and is responsible for:
 - 2.2.1 Coordinating all activities in the Control Room.

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- 2.2.2 Coordinating Operations activities outside of the Control Room with the TSC Coordinator.
- 2.2.3 Providing technical assistance to the Shift Manager.
- 2.3 <u>Security Coordinator</u> Reports directly to the Emergency Director and is responsible for managing the Security Force during an emergency.
- 2.4 On-Call Manager Is responsible for:
 - 2.4.1 Reporting to the site to assume the duties of Emergency Director upon notification of an Alert or higher classification.
 - 2.4.2 Assuming the duties of Emergency Director after the TSC is declared operational.
 - 2.4.3 Reporting to the site to assume duties of Emergency Director upon notification of an Unusual Event if he deems it necessary.
 - 2.4.4 Evaluating the accident conditions and verifying that the correct emergency classification has been made.

3.0 REFERENCES

- 3.1 NRC Memorandum dated July 11, 1994 concerning "Branch Position on Acceptable Deviations to Appendix 1 to NUREG-0654/FEMA-REP-1".
- 3.2 GGNS Emergency Plan

4.0 ATTACHMENTS

- 4.1 Attachment I Emergency Classifications
- 4.2 Attachment II Guidelines to Terminate Emergency

5.0 DEFINITIONS

- 5.1 Alert An emergency classification in which events are in progress or have occurred that 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 exposure levels.
- 5.2 <u>Assessment Action</u> Actions taken during or after an accident to obtain and process information necessary to make decisions to implement specific emergency measures.
- 5.3 CAS Central Alarm Station
- 5.4 <u>CDE</u> (Thyroid) (Committed Dose Equivalent) The radiation dose to the adult thyroid gland due to radioiodines over a fifty year period following inhalation or ingestion.

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- 5.5 <u>Downwind</u> An area located beyond a fixed point in the same direction the wind is blowing. The area covers <u>three sectors</u>, the sector containing the plume centerline, and the two adjacent sectors. If the plume is on a sector line, <u>four sectors</u> are used until the three sector criteria can be identified.
- 5.6 <u>Emergency</u> A sudden, urgent, usually unforeseen occurrence or occasion requiring immediate action. It may result from accidental causes, natural causes, or malicious man-made actions. There are four classes of emergencies considered: Unusual Event, Alert, Site Area Emergency, and General Emergency.
- 5.7 Emergency Action Levels (EALs) Radiological dose rates, specific contamination levels of airborne, waterborne, or surface-deposited concentrations of radioactive materials; or specific instrument indications (including their rates of change) that are used as thresholds for initiating such specific emergency measures as designated for a particular class of emergency, initiating a notification procedure, or initiating a particular protective action.
- 5.8 <u>Emergency Classification</u> Emergency conditions (four classes) covering the entire spectrum of possible situations from minor, local incidents to hypothetical, major radiological emergencies. The four classes are listed in increasing order of severity: <u>Unusual Event</u>, <u>Alert</u>, <u>Site Area Emergency</u> and <u>General Emergency</u>.
- 5.9 <u>Emergency Director</u> An individual designated onsite having the authority and responsibility to initiate the Emergency Plan and coordinate efforts to reduce the consequences of the event and bring it under control
- 5.10 Emergency Operations Facility (EOF) A near-site emergency center from which the offsite emergency support activities are controlled
- 5.11 Emergency Planning Zone (EPZ) Areas designated for which planning is provided to assure that prompt and effective action is initiated to protect the public in the event of an emergency
- 5.12 EPP Emergency Plan Procedure
- 5.13 <u>ERDS</u> Emergency Response Data System. A near real-time data link from the GGNS Balance of Plant computer to the NRC Operations Center. This system monitors specific data and is activated by the Shift Manager no later than one hour after an ALERT (or higher) declaration.
- 5.14 ESC Energy Services Center
- 5.15 Exclusion Area Area surrounding the plant, owned by the licensee, in which the licensee has the authority to determine all activities including exclusion or removal of personnel and/or property
- 5.16 General Emergency An emergency classification in which 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 EPA Protective Action Guideline exposure levels offsite for more than the immediate site area.
- 5.17 LOCA Loss of Coolant Accident
- 5.18 OEC Offsite Emergency Coordinator
- 5.19 Offsite For accountability purposes, any area outside the GGNS protected area
- 5.20 OMT Offsite Monitoring Team

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- 5.21 Onsite For accountability purposes, the area within the GGNS protected area
- 5.22 Operations Support Center (OSC) Location from which onsite non-Control Room activities are staged and implemented
- 5.23 PA Public Address System
- 5.24 PAG Protective Action Guide
- 5.25 PAR Protective Action Recommendation
- 5.26 SAS Secondary Alarm Station
- 5.27 <u>Site Area Emergency</u> An emergency classification in which events are in progress or have occurred which involve major failures of plant functions needed for protection of the public. Any releases are not expected to exceed EPA Protective Action Guideline exposure levels except near the site boundary.
- 5.28 SSW Standby Service Water
- 5.29 TEDE (Total Effective Dose Equivalent) Sum of the EDE and CEDE to nonpregnant adults from exposure and intake during an emergency situation.
- 5.30 TLD Thermo Luminescent Dosimeter
- 5.31 TSC Technical Support Center
- 5.32 <u>Unusual Event</u> An emergency classification in which 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. (This is the same as the Notification of Unusual Event defined in NUREG-0654; the two expressions are used interchangeably in the E-Plan and related procedures as appropriate.)
- 5.33 <u>Vital Areas</u>- Areas within the Protected Area that house safety-related equipment. The failure or destruction of this equipment could directly or indirectly endanger the public health and safety by exposure to radiation. The following areas are considered Vital Areas: Auxiliary Building (including Containment), Control Building (including Control Room Complex), Diesel Generator Building, Inverter Room (166' elevation Turbine Building), SSW Pump and Valve rooms.

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6.0 DETAILS

6.1 Activation of Emergency Plan

- 6.1.1 Any person having knowledge of abnormal plant conditions should notify the Shift Supervisor/Manager.
- 6.1.2 The Shift Supervisor/Manager, when notified of abnormal plant conditions, should refer to Attachment I or EPP 01-02 (Flowchart) to determine if an emergency action level has been reached. If an emergency action level has been reached, the emergency plan shall be implemented.

NOTE

The Shift Supervisor/Manager is responsible for determining if the declaration of an emergency is required. If a declaration is required, he is responsible for activating the emergency plan.

6.1.3 Whenever there is doubt as to the classification of the emergency condition or if more than one EAL is reached, the more conservative classification should be used.

NOTE

When EALs are observed in conjunction with plant or equipment status due to planned maintenance or testing activities, an emergency condition may or may not exist and the situation must be evaluated on a case-by-case basis.

6.1.4 Once an emergency classification is declared, the following actions are taken by the Shift Manager/Emergency Director:

NOTE

After becoming aware that an emergency condition exists, the Shift Manager/Emergency Director's first priorities are:

- Take actions to ensure safety of plant personnel and general public.
- · Take actions to ensure safe operation of plant.
- Other duties and responsibilities of the Emergency Director are contained in 10-S-01-30, Technical Support Center (TSC) Operations.
- a. Initiate Emergency Director's Checklist (EPP Form 01-1).

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6.1.4 (Cont.)

b. Announce to Control Room personnel that you are the Emergency Director.

NOTE

The NRC shall be notified of the declaration of the emergency IMMEDIATELY AFTER THE NOTIFICATION OF THE STATE AND LOCAL AGENCIES and not later than one hour after the emergency declaration.

c. Designate an individual as communicator to perform the initial notification in accordance with 10-S-01-6. The Shift Manager shall ensure that the primary or secondary state and local agencies are notified within 15 minutes of an emergency declaration or reclassification.

NOTE

In the event of Security emergencies, each Security related incident should be evaluated. Only those support groups and facilities which are needed should be activated, regardless of the emergency classification, so as to minimize the risk to personnel. Utilization of the ERO call tree rather than VIP 2000 may be required to inform responders of emergency situation and prevent manning of unneeded facilities.

- d. Activate and verify activation of the VIP 2000 per 10-S-01-6.
- e. Activate ERDS within one hour of an Alert or higher declaration Per 10-S-01-6.
- f. Announce nature and classification of event:

NOTE

For security emergencies, inform all personnel to take shelter, to **NOT** move around in the plant, and to man only those emergency facilities which are necessary and that don't pose a risk to personnel.

- (1) Over Plant PA System or phone #6426.
- (2) Over Site Paging (#7929).
- g. If an evacuation of affected areas of the plant is required, perform in accordance with 10-S-01-11.

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6.1.4 (Cont.)

- h. Implement plant operating procedures and emergency plan procedures as required to perform emergency corrective and assessment actions.
- i. Activate emergency facilities as follows:
 - (1) If Unusual Event has been declared, no activation of facilities is required unless the Emergency Director feels there is a reasonable possibility of escalation of emergency to a higher classification.
 - (2) If an Alert has been declared, all emergency facilities must be activated.
 - (3) If a Site Area Emergency or General Emergency has been declared, a Site Evacuation should be seriously considered.
- j. If an Alert, Site Area Emergency, or General Emergency has been declared, determine offsite doses in accordance with 10-S-01-12.
 - (1) Protective actions <u>shall be recommended</u> to State and Local Agencies upon declaration of a General Emergency as follows:

Condition	Protective Action Recommendation
	EVACUATE: 2 Miles All Sectors
General Emergency	<u>and</u>
Declared	EVACUATE: 5 Miles in Downwind Sectors
	<u>and</u>
	SHELTER: Remainder of 10 Mile Emergency Planning Zone (EPZ)
General Emergency Declared	EVACUATE: 2 Miles All Sectors
	<u>and</u>
And	EVACUATE: 10 Miles in Downwind Sectors
Dose Projection or Field Measurement at ≥ 5 miles corresponds	<u>and</u>
to 1 Rem TEDE	SHELTER: Remainder of 10 Mile Emergency Planning Zone (EPZ)
<u>Or</u>	
5 Rem Thyroid.CDE	

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6.1.4 (Cont.)

k. Designate shift personnel to perform emergency corrective and assessment actions.

6.2 Supplemental Actions

- 6.2.1 Continuous assessment is necessary to effectively coordinate and direct emergency response. In any emergency situation, attention must be paid to parameters that may indicate a possible worsening of conditions (i.e., radioactive releases).
 - a. If an Alert condition is declared, the following assessment actions are required:
 - (1) Increased surveillance of applicable in-plant instrumentation.
 - (2) Visual observation of affected plant area.
 - (3) Onsite and offsite radiological monitoring if a release has taken place or is suspected.
 - (4) Determination of offsite doses if applicable.
 - b. In addition to the above, a Site Area Emergency or General Emergency would require these additional assessment actions.
 - (1) Monitor meteorological data.
 - (2) Dispatch offsite radiological monitoring teams down wind of the release in conjunction with state radiological monitoring efforts.
 - (3) Assess onsite and offsite radiation doses. (TEDE and Thyroid CDE).
- 6.2.2 Emergency Director should ensure that periodic announcements are made over the plant PA and site PA (#7929) concerning:
 - a. Nature and location of event.
 - b. Required personnel actions.
 - c. Any other information necessary.
- 6.2.3 The Emergency Director (while in the Control Room) logs all information in the Shift Manager/Control Room Operator Log as necessary for event reconstruction.
- 6.2.4 The Emergency Director (while in the TSC) may delegate to the TSC Coordinator and/or Radiation Protection Manager the responsibility for logging all information relative to the emergency (for event reconstruction).
- 6.2.5 The Offsite Emergency Coordinator may delegate to the Offsite Emergency Coordinator Technical Assistant the responsibility for logging all information relative to the emergency (for event reconstruction).

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- 6.2.6 Upon declaring the EOF operational, the following activities should be transferred to the OEC as soon as possible:
 - a. Notifications to offsite agencies
 - b. Offsite radiological and environmental surveys
 - c. Protective action recommendations to offsite agencies
 - d. Classification of the emergency
- 6.2.7 If extended emergency operations are necessary, the Emergency Director/Offsite Emergency Coordinator should authorize preparation of an emergency organization shift schedule to support 24-hour emergency operation.

6.3 Upgrading Emergency Classifications

- 6.3.1 If conditions worsen, refer to Attachment I or EPP 01-02 (Flowchart) to determine if the emergency classification requires upgrading. If the classification is upgraded, ensure the following steps are taken:
 - a. Declare appropriate emergency classification in accordance with Step 6.1.2.
 - b. Announce nature and classification of event in accordance with Step 6.1.4.f.
 - c. If an evacuation is required, notify Security if possible and evacuate affected areas in accordance with Step 6.1.4g.
 - d. Initiate plant operating procedures and emergency plan procedures as required.
 - e. Activate additional emergency facilities as necessary in accordance with Step 6.1.4i.
 - f. Determine offsite doses in accordance with Step 6.1.4j.
 - g. Conduct additional assessment actions as necessary in accordance with Step 6.2.

6.4 Terminating Emergency

6.4.1 Terminating

If EALs are no longer met or exceeded, the Emergency Director/Offsite Emergency Coordinator refers to Attachment II to determine whether or not to terminate emergency.

6.4.2 Reentry and Recovery

Once the corrective and protective actions taken have established effective control over the situation, the Emergency Director may refer to 10-S-01-23 and 10-S-01-22 to determine if reentry and recovery actions may be initiated. If the reentry/recovery criteria are met, the Emergency Director may advise the Offsite Emergency Coordinator that reentry/recovery may start.

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6.5 Records and Reports

- 6.5.1 The Manager, Emergency Preparedness is responsible for generating a report on the activation of the Emergency Plan. The report should include the following:
 - a. Copies of appropriate paperwork generated by the event including: notification forms, checklists, logbooks, survey maps, dose calculations etc.
 - b. Observations and comments from the personnel involved in the event.
- 6.5.2 The Manager, Emergency Preparedness is responsible for ensuring that all observations and comments are tracked in Emergency Preparedness Action Tracking System, in accordance with 01-S-10-3.

6.6 EP Form EPP 01-02 (Flow Chart) Revision Process

- 6.6.1 The Manager, Emergency Preparedness is responsible for reviewing all changes to Attachment I, Emergency Classifications, for Impact on EPP 01-02 (Flow Chart).
 - a. If EPP 01-02 (Flow Chart) is changed, before procedure 10-S-01-1 is issued, the Manager, Emergency Preparedness is responsible for verifying the following and that documentation on EP Form EMP 01-03 is complete.
 - (1) All required training is complete.
 - (2) Color laminated copies of the revised EPP 01-02 (Flow Chart) are available and stamped with the correct controlled copy number for the following locations:

Control Room (1)
Simulator (1)
TSC (2)
EOF (2)
Back up TSC (1)
Back Up EOF (1)

- (3) Non-color copies of the revised EPP 01-02 (Flow Chart) are available and stamped with the correct controlled copy number for all controlled copies of procedure 10-S-01-1, Activation of the Emergency Plan.
- b. Once procedure revision for 10-S-01-1, Activation of the Emergency Plan is approved for issue, the distribution of color laminated copies of EPP 01-02 and 10-S-01-1, Activation of the Emergency Plan procedure from document control must be coordinated to ensure all required elements are issued concurrently.

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15.	Hazards to Plant Operations	20,21,22
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NOTE

Any changes made to information in Attachment I may require changes to EPP 01-02 (Flowchart).

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CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	EMERGENCY CLASSIFICATION
1. Safety System Functions	1. Inability to reach required shutdown within Technical Specification time limits	Failure to reach the required Plant Mode within Technical Specification action statement time frames for any of the following LCO's: 1. Safety/relief Valves 3.4.4	UNUSUAL EVENT
		<u>or</u>	
and the second s		2. ECCS - Operating 3.5.1	
		or	
		3. Primary Containment 3.6.1.1	
		<u>or</u>	
		4. Primary Containment Airlocks 3.6.1.2 <u>or</u>	
		5. Primary Containment Isolation Valves 3.6.1.3	
		or	
		6. Low Low Set Valves 3.6.1.6	
		<u>or</u>	
		7. Residual Heat Removal Containment Spray 3.6.1.7	
		or	
		8. Suppression Pool Average Temperature 3.6.2.1 or	
		9. Suppression Pool Level 3.6.2.2	
		(Continued)	

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1. Safety System Functions (Cont.) 1. Inability to reach required shutdown within Technical Specification time limits (Cont.) 10. Suppression Pool Makeup System 3.6.2.4 11. Second Containment 3.6.4.1 12. Second Containment Isolation Valve 3.6.4.2 13. Standby Gas Treatment System 3.6.5.1 14. Drywell 3.6.5.1 15. Drywell Airlocks 3.6.5.2 16. Drywell Isolation Valves 3.6.5.3 2. Failure of a safety/ relief valve to close following reduction of applicable pressure to below reset point 18. Suppression Pool Makeup System 3.6.2.4 19. Suppression Pool Makeup System 3.6.2.4 10. Suppression Pool Makeup System 3.6.2.4 11. Second Containment 3.6.4.1 9X 12. Second Containment 3.6.4.2 9X 13. Standby Gas Treatment System 3.6.5.1 9X 14. Drywell Airlocks 3.6.5.1 9X 15. Drywell Airlocks 3.6.5.3 16. Drywell Isolation Valves 3.6.5.3
, , , , , , , , , , , , , , , , , , , ,

ECCS - Emergency Core Cooling System

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CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	EMERGENCY CLASSIFICATION
2. Abnormal Primary Leak Rate/ Low Reactor Water Level	Exceeding primary coolant system leak rate	While in modes 1,2, or 3: 1. > 5 gpm unidentified leakage or	UNUSUAL EVENT
		2. > 30 gpm total leakage Averages over previous 24 hr period	
	2. Coolant leak rate > 50 gpm	1. Total leakage calculated to be > 50 gpm while in Plant Mode 1, 2 or 3	ALERT
	3. Known loss of coolant greater than makeup pump capacity	1. RPV water level < -167 inch	SITE AREA EMERGENCY
		2. Makeup capacity unable to increase reactor water level	

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CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	EMERGENCY CLASSIFICATION
3. Core Fuel Damage	1. Fuel damage indication	1. Increase of 285 mR/hr in 30 minutes on OFFGAS pretreatment monitor	UNUSUAL EVENT
		2. OFFGAS pretreatment monitor reading > 1,400 mR/Hr	
		or	
		3. Laboratory analysis of coolant sample indicates > 0.2 µCi/ml dose equivalent I-131 for more than 48 hours	
		or	
		4. Laboratory analysis of coolant sample indicates > 4.0 μCi/ml dose equivalent I-131	
	2. Severe loss of fuel		ALERT
	cladding	1. OffGAS pretreatment monitor reading > 14,000 mR/HR	
		<u>or</u>	
		2. Coolant sample analysis indicates >300 μCi/ml dose equivalent I-131	
		<u>or</u>	
		3. Main steam line radiation exceeds radiation monitor trip setpoint	

µCi - Micro Curies

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CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	EMERGENCY CLASSIFICATION
3. Core Fuel Damage (Cont.)	3. Degraded core with possible loss of coolant	1. RPV water level < -167" or cannot be determined	SITE AREA EMERGENCY
		and	
		2. a. High coolant activity indicated by analysis of sample > 300 µCi/ml dose equivalent I-131	
		or	
		b. Containment or Dry- well hydrogen concentration greater than 0.5%	

 μCi - micro Curies

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			EMERGENCY
CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	CLASSIFICATION
3. Core Fuel Damage (Cont.)	4. Loss of 2 of 3 fission product barriers with a potential loss of 3rd barrier	1. Loss of any two of the following fission product boundaries with a potential for loss of the third:	GENERAL EMERGENCY
		Fuel Cladding Loss	
		a. Coolant sample analysis indicates >300 µCi/ml dose equivalent I-131 or	
		b. >1000 R/Hr in Drywell	
		Potential Loss	
		a. RPV water level cannot be restored and maintained > -167 in. or	
		b. RPV pressure cannot be restored and maintained> 57 psig when in RPV flooding.	
		c. >100 R/Hr in Drywell	
		Reactor Pressure Boundary Loss	
		a. Drywell pressure >1.23 psig <u>and</u> indication of a steam leak in the drywell <u>or</u>	
	b. Main steam line not isolated <u>or</u>		
		c. RCIC steam line break outside containment with inability to isolate	
		Potential Loss	
		a. Total reactor coolant leakage calculated to be >50 gpm or	
		b. >10 R/hr in Containment	

μCi - Micro Curies

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		I	EMERGENCY
CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	CLASSIFICATION
3. Core Fuel Damage (Cont.)	4. Loss of 2 of 3 Fission product Barriers with a Potential loss of 3 rd barrier. (Cont.)	Primary Containment Loss a. Primary Containment pressure >56 psig or b. Loss of ability to isolate Drywell or primary containment Leakage into Areas Outside the Primary Containment Potential Loss a. Primary containment pressure >22 psig or b. Operation in the Unsafe Region of HCTL or PSP Curve. c. Operation in the Unsafe Region of HDOL Curve with Hydrogen Igniters De-Energized	GENERAL EMERGENCY
4. Steam Leaks	1. Main steam line break outside the containment with significant MSIV leakage.	1. Isolation initiated and abnormal leakage down stream of MSIVs (> 10 gpm or 5000 1bm/hr)	ALERT
	2. RCIC steam line break outside the containment with significant isolation valve leakage	1. Isolation initiated and abnormal leakage down stream of isolation valves (> 10 gpm or 5000 lbm/hr)	
	3. Main steam line break outside of containment which cannot be isolated.	Isolation required due to confirmed steam line break and	SITE AREA EMERGENCY
	A POTG shows like 3	One or more main steam lines fail to isolate	
	4. RCIC steam line break outside of containment which cannot be isolated.	 Isolation required due to confirmed steam line break and 	
		RCIC steam line fails to isolate	

MSIV - Main Steam Isolation Valve

PSP - Pressure Suppression limit

RCIC - Reactor Core Isolation Cooling HCTL - Heat Capacity Temperature Limit HDOL - Hydrogen Deflagration Overpressure Limit

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CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	EMERGENCY CLASSIFICATION
5. Abnormal Effluent, GASEOUS	1. Radiological effluent release rate exceeds TRM Spec limit	1. Entering the action statement of the following LCOs in the Radioactive Gaseous Effluent section of the TRM Specs 6.11.4, 6.11.5, and 6.11.6	UNUSUAL EVENT
	2. Radiological effluent >10 times TRM Spec limit	1. High high radiation alarms on ONE OR MORE monitors: a. Radwaste Bldg vent exhaust b. Fuel handling vent exhaust c. Containment vent exhaust d. Turbine Bldg vent exhaust	ALERT
		and Summation of monitors (including SGTS A and B) exceeds 10 times TRM Spec limit (6.11.4)	·

LCO - Limited Condition for Operation SGTS - Standby Gas Treatment System TRM - Technical Requirements Manual

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		T	TWED CONTOX
CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	EMERGENCY CLASSIFICATION
5. Abnormal Effluent, GASEOUS (Cont.)	3. Effluent monitors detect levels corresponding to site boundary exposure of: a. ≥ 50 mR/Hr (for 30 minutes) Whole Body Or b. ≥ 500 mR/Hr (for 2 minutes) Whole Body Or c. ≥ 250 mR/hr (for 30 min) to the Thyroid.	1. Any post accident effluent radiation monitor confirm release rates corresponding to: a. 0.5 Ci/sec Noble Gas for 30 minutes or b. 6.0 E-4 Ci/sec Iodine for 30 minutes or c. 5.0 Ci/sec Noble Gas for 2 minutes or d. 6.0 E-3 Ci/sec	SITE AREA EMERGENCY
	NOTE "Adverse Meteorology" -Stability Class F, wind speed 1 m/sec, site boundary X/Q 1080 E-6 sec/m³ (FSAR Table 15 6-12)	Iodine for 2 minutes Or 2. Radiation monitoring teams report radiation and/or Iodine concentration readings at the site boundary corresponding to: a. 50 mR/Hr for 30 minutes Or b. 500 mR/Hr for 2 minutes Or c. 6.0E-6 µCi/cc Iodine 3. Containment Post Accident Radiation Monitor: a. >330 R/HR for 30 minutes Or b. >3300 R/HR for 2 minutes	

FSAR - Final Safety Analysis Report μCi - micro Curies
Ci - Curies

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CAMECODY	TNITETATING CONDITETON	EMERGENOV ACOTON LEVEL	EMERGENCY
CATEGORY 5. Abnormal Effluent, GASEOUS (Cont.)	INITIATING CONDITION 4. Effluent monitor(s) (UNDER ACTUAL METEORO-LOGICAL CONDITIONS) detect levels corresponding to site boundary exposure of: 1000 mRem Dose Commitment Whole Body Or 5000 mRem Dose Commitment Thyroid	EMERGENCY ACTION LEVEL 1. Effluent monitor(s) (UNDER ACTUAL METEORO- LOGICAL CONDITIONS) confirms release rates corresponding to site boundary exposure of: a. 1000 mRem TEDE OT b. 5000 mRem Thyroid CDE OT 2. Radiation monitoring teams report radiation and/or iodine concentrations readings (at the site boundary) corresponding to: a. 1000 mRem TEDE	EMERGENCY CLASSIFICATION GENERAL EMERGENCY
		b. 1.2E-5 μCi/cc Iodine	
6. Abnormal Effluent, LIOUID	1.Radiological Effluent Release Rate <u>exceeds</u> TRM Spec limit	1. Entering the action statement of TRM Spec 6.11.1, in the Radioactive Liquid Effluent section of TRM Spec	UNUSUAL EVENT
	2.Radiological Effluent >10 times TRM Spec limit	1. Liquid release > 10 times the limit of TRM Spec 6.11.1 in the Radioactive Liquid Effluent section of TRM Spec	ALERT

TEDE - Total Effective Dose Equivalent CDE - Committed Dose Equivalent TRM - Technical Requirements Manual

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			EMERGENCY
CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	CLASSIFICATION
7. Major Electrical Failures	1. Total loss of offsite power	1. Loss of offsite power to:	UNUSUAL EVENT
(AC)	<u>or</u>	a. 15AA	
	Loss of onsite AC power capability	and	
		b. 16AB	
		and	
		c. 17AC	
		<u>or</u>	
		2. Loss of ALL three divisional diesel generators while in Plant Operational Condition 1, 2 or 3	
		Condition 1, 2 of 5	
	2. Total loss of offsite power	1. Loss of offsite power to:	ALERT
	and	a. 15AA	
	Loss of ALL onsite power ≤ 15 minutes	and	
	power i is mindees	b. 16AB	
		<u>and</u>	
		c. 17AC	
		<u>and</u>	
		 Loss of all three divisional diesel generators 	
		<u>and</u>	
		3. ≤15 minutes	

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CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	EMERGENCY CLASSIFICATION
7. Major Electrical Failures (AC) (Cont.)	3. Total loss of offsite power and Loss of ALL onsite power >15 minutes	1. Loss of offsite power to: a. 15AA and b. 16AB and c. 17AC and 2. Loss of all three divisional diesel generators and 3. >15 minutes	SITE AREA EMERGENCY
8. Major Electrical Failures (DC)	1. Loss of onsite ESF DC power for ≤ 15 minutes	<pre>1. Loss of Division 1, 2 and 3 (125 Vdc for ≤15 minutes)</pre>	ALERT
	2. Loss of onsite ESF DC power for > 15 minutes	1. Loss of Division 1, 2 and 3 (125 Vdc for >15 MINUTES)	SITE AREA EMERGENCY

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G. T. GODI	TIVE TO COMPANY OF THE COMPANY		EMERGENCY
CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	CLASSIFICATION
9. Control Room Evacuation	1. Evacuation of the Control Room	1. Control Room evacuated	ALERT
	and	and	
	Control established at the remote shutdown panel	2. Control of shutdown systems established at the remote shutdown panel	
	2. Evacuation of the Control Room and Control not established at the remote shutdown panel within 15 minutes	1. Control Room evacuated and 2. Unable to establish control of shutdown systems at the remote shutdown panel within 15 minutes of evacuating the Control Room	SITE AREA EMERGENCY
10. Fire	1. Fire lasting > 10 minutes after discovery	1. A fire within the power block, fire water pump house or CO ₂ skid lasting >10 minutes from the time of notification	UNUSUAL EVENT
	2. Fire potentially affects safety systems	1. A fire defeating <u>ONE</u> safety system electrical division	ALERT
	3. Fire compromising the functions of ESF Systems	1. A fire defeating <u>MORE</u> <u>THAN ONE</u> safety system electrical division	SITE AREA EMERGENCY

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CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	EMERGENCY CLASSIFICATION
11. Plant Shutdown Function	1. Complete loss of functions needed for plant COLD shutdown.	All control rods fully inserted and	ALERT
		2. The determination that there are no longer enough systems functional to attain or maintain the reactor coolant <200°F	
	2. Failure of the Reactor Protection System to initiate and complete a scram which brings the reactor subcritical	1. Scram conditions confirmed and 2a. More than one rod is greater than position 02 or rod position is unknown for more than one rod and 2b. SRM's are either upscale or countrate is increasing (Assuming SRMs are full in) and	
		3. Reactor power <4% on APRM (APRM Downscale light on)	

APRM - Average Power Range Monitor

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CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	EMERGENCY CLASSIFICATION
11. Plant Shutdown Function (Cont.)	3. Complete loss of functions needed for plant HOT shutdown	1. HPCS and RCIC not functional and 2. Not able to depressurize with SRVs and 3. Main Condenser is not available	SITE AREA EMERGENCY
	4. Transient requiring operation of shutdown systems with failure to scram and continued power generation	1. Scram conditions confirmed and 2. All control rods NOT inserted to between 00 and 02 and 3. Reactor power ≥4% on APRM	

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CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	EMERGENCY CLASSIFICATION
12.Abnormal In-plant Radiation/ Airborne Contam- ination Levels	1. Radiation levels or airborne contamination indicate a severe degradation in the control of radioactive materials	Verification of area radiation monitor reading > 1000 times setpoint Or Verification of CAM	ALERT
		reading >1000 times setpoint	<u> </u>
13. Fuel Handling Accident	1. Fuel damage accident with release of radioactivity to Containment or Auxiliary Building	1. Notification of a spent fuel damaging accident and 2. High high radiation alarms on either a. Fuel handling vent exhaust or	ALERT
		b. Containment vent exhaust	
	2. Major damage to spent fuel assembly in Containment or Auxiliary Building	1.a. Notification of a spent fuel damaging accident or b. Low water level in spent fuel pool below top of spent fuel unable to restore level to above fuel.	SITE AREA EMERGENCY
		<u>and</u> (Continued)	

CAM - Continuous Air Monitor

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CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	EMERGENCY CLASSIFICATION
13. Fuel Handling Accident (Cont.)	2. Major damage to spent fuel assembly in Containment or Auxiliary Building (Cont.)	2. Any post accident effluent radiation monitor confirms Noble Gas, Iodine release rates corresponding to: a. 0.5 Ci/sec Noble Gas (30 minutes) Or b. 6.0 E-4 Ci/sec Iodine (30 minutes) or c. 5.0 Ci/sec Noble Gas (2 minutes)	SITE AREA EMERGENCY
		or d. 6.0 E-3 Ci/sec Iodine (2 minutes)	
		3. Radiation monitoring teams report Radiation and/or Iodine concentration readings at the site boundary corresponding to:	
		a. 50 mR/Hr (for 30 minutes) Or b. 500 mR/Hr (for 2 minutes) Or c. 6.0 E-6 µCi/cc	

Ci - Curies µCi - Micro Curies

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CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	EMERGENCY CLASSIFICATION
14. Security Threat	1. Security threat or Attempted entry or Attempted sabotage	1. Based upon the assessment of the alarm or the event reported by Security. Actual threat must be determined prior to establishing an emergency classification.	UNUSUAL EVENT
	2. A credible site - specific security threat notification	1. The Shift Manager determines that GGNS has received a credible threat against the site. Credible means the threat notification has been received from, or validated by, a trustworthy source (FBI, NRC, Claiborne County Sheriff's Office, Plant Management, etc.)	·
	3. On-going Security compromise	1. Identification of adversaries attempting to command areas of the plant, but not controlling shutdown capability or vital areas.	ALERT
	4. Imminent loss of physical control of the plant.	1. Physical attack on the plant involving imminent occupancy of the Control Room, Remote Shutdown Panel or Vital areas.	SITE AREA EMERGENCY
	5. Loss of physical control of the plant.	1. Physical attack on the plant has resulted in unauthorized personnel occupying the Control Room or the Remote Shutdown Panel or controlling Decay Heat Removal, Reactor Water Level or Reactivity Control capability.	GENERAL EMERGENCY

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CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	EMERGENCY CLASSIFICATION
15. Hazards to Plant Operations	1. Hazards being experienced or projected with the potential for degradation of the level of safety of the plant	1. Notification of an aircraft crash onsite outside the protected area Or 2. Notification of unusual aircraft activity over the facility Or 3. Notification of an onsite explosion (does not affect plant operation) Or 4. Determination that a release of toxic, oxygen displacing, or flammable gas will significantly hamper the ability of personnel to perform activities affecting plant safety Or	UNUSUAL EVENT
		5. A manual or automatic scram initiated because of a turbine blade failure that has not penetrated the casing	

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CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	EMERGENCY CLASSIFICATION
15. Hazards to Plant Operations (Cont.)	2. Hazards being experienced or projected with actual or potential substantial degradation of the level of safety of the plant	1. Notification of an air- craft crash onsite inside the protected area, no damage to plant vital areas	ALERT
		<u>or</u>	
		2. Notification of missile impacts on plant non-vital structures	
		<u>or</u>	
		3. Notification of an onsite explosion affecting plant operation	
		or	
		4. Determination that the entry of toxic or flammable gases into facility structures has threatened to render Safety Related equipment Inoperable	`
		<u>or</u>	
		5. Notification of a turbine failure that has resulted in casing penetration	

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CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	EMERGENCY CLASSIFICATION
15. Hazards to Plant Operations	3. Hazards being experienced or projected with the functions needed for protection of the public	1. Notification of an aircraft crash into plant vital areas or 2. Notification of severe damage to safe shutdown equipment from missiles or explosion Or 3. Determination that the entry of toxic or flammable gases into vital areas	SITE AREA EMERGENCY

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			EMERGENCY
CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	CLASSIFICATION
16. Natural Events	Natural events being experienced or projected beyond usual levels	1. A verified earthquake detected by in-plant seismic instrumentation or	UNUSUAL EVENT
		<u> </u>	
		2. A tornado observed onsite <u>or</u>	
		3. A hurricane warning issued that includes the site area	
	2. Severe natural event near site being experienced or projected	1. A verified earthquake detected by in-plant seismic instrumentation ≥ OBE levels	ALERT
		<u>or</u>	
		2. A tornado causing damage to Safety Related structures	
		<u>or</u>	
		 Sustained winds ≥73 mph onsite 	
	3. Severe natural event near site being experienced or projected with plant in Modes 1, 2, or 3	1. A verified earthquake detected by in-plant seismic instrumentation ≥ SSE levels	SITE AREA EMERGENCY
		<u>or</u>	
		2. Sustained winds ≥90 mph onsite	
	4. Major internal <u>or</u> external events	1. Fires, earthquakes, etc., substantially beyond design basis which could or have caused massive common damage to plant systems	GENERAL EMERGENCY

OBE - Operating Earthquake SSE - Safe Shutdown Earthquake

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	T	EMERGENCY ACTION	EMERGENCY
CATEGORY	INITIATING CONDITION	LEVEL	CLASSIFICATION
17. Loss of assessment, communications, annunciators equipment	1. Significant loss of vital accident assessment or communications capability	1. Total loss of vital accident assessment equipment such as:	UNUSUAL EVENT
		a. All vessel level instruments	
		or,	
		b. All containment monitoring instruments, etc.	
		or	
		2. Degradation of the offsite communication system to only one source	
	2. Loss of ALL annunciators	1. Loss of <u>ALL</u> annunciators on the P680, P601, and P870 panels	ALERT
18. Discretionary	1. Other plant conditions exist that warrant increased awareness on the part of the plant operating staff. AND/OR	1. Plant conditions exist that warrant a precautionary notification to local and state authorities.	UNUSUAL EVENT
	State and Local Authorities		
	2. Other plant conditions warrant activation of TSC	1. Plant conditions exist that warrant precautionary activation of the TSC and placing the EOF and key plant personnel on standby.	ALERT

TSC - Technical Support Center EOF - Emergency Operations Facility

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CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	EMERGENCY CLASSIFICATION
18. Discretionary	3. Other plant conditions exist that warrant activation of Emergency Facilities	1. Plant conditions exist that warrant: a. The activation of the EOF Or b. A precautionary notification to the public near the site	SITE AREA EMERGENCY
	4. Other plant conditions exist that make release of large amounts of amounts of radio- activity in a short time possible	1. Plant conditions exist that make the release of large amounts of radioactivity in a short period of time likely. (Not limited to the following examples): Core damage is predicted to occur (within 2 hours) and Containment pressure is > 22 psig or containment is breached	GENERAL EMERGENCY

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GUIDELINES TO TERMINATE EMERGENCY

PURPOSE: To establish general guidelines to be followed should changing plant conditions warrant termination of an emergency classification.

NOTE

The Emergency Director/Offsite Emergency Coordinator must discuss existing offsite conditions with appropriated State officials prior to terminating an emergency.

I. Termination Guidelines

A. General

- 1. Conditions which caused the event have been terminated.
- Circumstances which have arisen from the event are under control and the results of any and all pertinent data are evaluated.
- All probability of recurrence of an event is removed, isolated or under control.

B. Specific Examples

CATEGORY	TERMINATION GUIDELINES
Fires	Removal/separation of any element of fire triangle. Fire under control/not spreading.
Spill	Tanks, pipes, valves, any other problem sources are empty, isolated, and out of service.
Airborne	Source identified and isolated and/or contained. Area controlled.
Explosion	Existing and potential hazards removed, destroyed and/or isolated.
Abnormal Effluent	Liquid discharge is terminated, sampling is completed, and statistics verified. Public exposure to Offsite radioactive material is reduced or eliminated.
	Airborne - Source identified and analysis complete. Release is terminated and its cause is under control. All Onsite and Offsite monitoring data is evaluated. Public exposure to Offsite radioactive material is reduced or eliminated.

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GUIDELINES TO TERMINATE EMERGENCY

B. Specific Examples (Cont.)

CATEGORY	TERMINATION GUIDELINES
Control Room Evacuation	Plant in normal emergency shutdown from remote stations. Cause of evacuation identified and under control. No radiological conditions exist which cause the Control Room to become uninhabitable.
Plant Shutdown Functions (not available or failed)	Unit is shut down by normal or emergency means. Unit is in cold shutdown and there is no potential for uncontrolled criticality.
Fuel Handling Accident - New or Spent Fuel Damage, Channeled or Unchanneled	Fuel elements, segments, pellets not in a critical configuration. Airborne activity has been evaluated and accountability of components complete.
Water Loss - LOCA Abnormal Primary Coolant Leak	Source of water loss is defined. Ability to restore or maintain water level adequate for proper cooling.
Earthquake or Other Natural Disaster	The plant has been returned to a safe condition. Threat of aftershock has passed and any damage has been evaluated as to risk, if any.
Security Threat	Threat to site is terminated. Probability of recurrence has been removed, with the concurrence of Security Supervisor and State, Local and Federal Officials.



