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Jerry C. Roberts Director Nuclear Safety Assurance

June 29, 2000

U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Attention: Document Control Desk

Subject: Grand Gulf Nuclear Station Unit 1 Docket No. 50-416 License No. NPF-29 Changes to Emergency Plan Implementing Procedure

GNRO-2000/00051

Gentlemen:

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

The following Emergency Plan Procedure is attached:

Procedure No.

Issue Date

10-S-01-1, Rev. 107

05/31/00

Should you have any questions or concerns regarding the attachment, please contact Mr. W. B. Abraham at (601) 437-2319.

Yours truly,

JCR/WBA/amt

attachment:

10-S-01-1, Rev. 107. "Activation of the Emergency Plan" (See Next Page)

A045

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CC:

,

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ATTN: ADDRESSEE ONLY

#### PLANT OPERATIONS MANUAL

Volume 10

Section 01

10-S-01-1

Revision: 107

Date: 5/31/00

EMERGENCY PLAN PROCEDURE ACTIVATION OF THE EMERGENCY PLAN AFETY RELATED Prepared: Reviewed: Concurred: Operations PSRC: Approved: General Manager Plant Manager/ Emergency Preparedness List of Effective Pages: Pages 1-11 Attachments I, II GGNS EPP 01-02 (Flowchart) Dated 5/17/00 List of TCNs Incorporated: Document Control Revision TCN 1 - 4None 5 1,2 6 3 7 4 8 5,6 9 None # 10 7,8 11 None 12 Q, 13 10 14,15 None 16 11 17 None 18 12 19 None 20 None 21 None 22 13,14 23 None ş. 100 15 101 None 102 16 103 None 104 None 105 None 106 None 107 None

EMERGENCY PLAN PROCEDURE

Title: Activation of the	No.:	10-S-01-1	Revision:	107	Safety
Emergency Plan					Evaluation

Facility:	GRAND GULF		
SIGNATURE	S , , , A M		
Preparer:	K. M-Dengl	K.M: Danald	5/16/00
•	Signature	Name (print)	Date
Reviewer:	WA Kussel	W.A. Russell	5/23/02
	Signature	Name (print)	Date

# II. OVERVIEW

Document Evaluated: (Include document number, revision, and title)

10-S-01-1 Activation of the Emergency Plan

Brief Description of the Proposed Change: Adds section 6.6 that details the process for EPP 01-02 (Flow Chart) revision to ensure that EPP 01-02 is revised and copies distributed if changes are made to Attachment I of 10-S-01-1. Adds a statement referencing EP form EMP 01-03 for the documentation of the revision process.

Replaces EPP 01-02 (Flow Chart) dated 4/5/00 with EPP 01-02 (Flow Chart) dated 5/17/00 The wording was changed in the Security Threats EAL for the General Emergency Classification to read "Physical Attack on the Plant has resulted in unauthorized personnel occupying the Control Room or Remote Shutdown Panel or controlling Decay Heat Removal, Reactor Water Level, or Reactivity Control capability", this wording matches the wording currently in Attachment I.

# III. PRE-SCREENING

Check the applicable boxes below. If any of the boxes are checked, neither a Screening nor a 50.59 Evaluation is necessary. Provide supporting documentation or references as appropriate.

The change is editorial as defined in either Section 5.3.4 \_\_\_\_ or Section 5.4.1.1\_\_\_\_\_ of this procedure. (Insert item # from Section 5.3.4 or Section 5.4.1.1). Provide document change request to the appropriate department, if required.

- The change is a substitute part per Section 5.4.1.2.
- The change will be controlled in its entirety under 10CFR50.54 instead of 10CFR50.59 per Section 5.4.1.3 of this procedure.
- An approved, valid Screening or 50.59 Evaluation covering all aspects of the change already exists per Section 5.4.1.4. Reference 50.59 Evaluation # \_\_\_\_\_or attach documentation. Verify the previous Screening or 50.59 Evaluation remains valid.
- The proposed change, in its entirety, has been approved by the NRC per Section 5.4.1.5. Reference:
- The change is being made to conform to the SAR per Sections 5.4.1.6.

BASIS: (Discuss how the activity meets the Pre-Screening criteria.) Procedure 10-S-01-1 is an emergency

Preparedness procedure and is evaluated under 10CFR 50:54.

EMERGENCY PLAN PROCEDURE

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					Evaluation

#### EVALUATION OF EMERGENCY PREPAREDNESS PROCEDURE

Procedure Number: 10-S-01-1

Procedure Name: Activation of Emergency Plan

Revision / TCN Number: Revision 107

Does the procedure Revision / TCN require an Emergency Plan change?

() Yes (X) No

NOTE: IF YES, THIS PROCEDURE CAN NOT BE ISSUED UNTIL THE EMERGENCY PLAN IS CHANGED / REVISED.

Reason for 'No' response:

The change adds section 6.6 which is administrative in nature. Section 6.6 details the process for ensuring that EP form EPP 01-02 (Flow Chart) is revised and distributed if a revision to Attachment I of 10-S-01-1, Activation of the Emergency Plan is approved.

The Security Threats EAL for the General Emergency classification of EPP 01-02 (Flow Chart) was changed to match the wording in the Security Threats EAL in Attachment I of 10-S-01-1 revision 106.

EPP 01-02 (Flow Chart) is not contained in the Emergency Plan. All changes were evaluated and found not to affect the Emergency Plan.

Prepared:

Approved:

Manager, Emergency Preparedness

GRAND GULF NUCLEAR STATION				EMERGENCY PI	LAN PROCEDURE
Title:	Activation of the Emergency Plan	No.:	10-S-01-1	Revision: 107	Page: i
	c Review Required: S (✔) NO	I	f Yes, list i	frequency:	Year
If No, r and fill	efer to Attachment XIX of in the appropriate letter	01-S-02-3 r(s) below;	for a list o if "Other,"	of procedure revi ' specify method.	iew methods
Method(s	s) of ReviewM				
10CFR50.	59 Review Required: ( ) Y (X) N	No - Not re	equired per s tion 6.3.2(b)	).59 Review. section <u>6.3.2.1</u> or 6.3.2(c) of	procedure
Cross-di () YES Reviewed			Tech Revie	ewer's Initials _	Initials
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	ented by Directive	Directive Paragraph Number
Name	Paragraph Number	That Implements Requirement
ANSI N18.7	5.3.9.2.51	*
GGNS Emer Plan	2.4.53	1.1.1
GGNS Emer Plan	3.3.51	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	4.1.53	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	5.4.56	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

REQUIREMENTS CROSS-REFERENCE LIST

\* Covered by directive as a whole or by various paragraphs of the directive.

Current Revision Statement

Revision 107:

- Adds Section 6.6 titled, EP Form EPP 01-02 (Flow Chart) Revision Process. This section details the steps to be taken to ensure that EPP 01-02(Flow Chart) is revised and distributed if a revision occurs to Attachment I. A list is included that specifies the number of color laminated controlled copies of EPP 01-02(Flow Chart) for specific Emergency Response facilities.
- Changes the wording for the Security Threats EAL in EPP 01-02 (Flow Chart) for a General Emergency to match that in Attachment I.

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# 1.0 <u>PURPOSE AND DISCUSSION</u>

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 <u>RESPONSIBILITIES</u>

- 2.1 <u>Shift Superintendent</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 Superintendent 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 Superintendent 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.
- 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 Superintendent.
- 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
- 4.3 Deleted
- 4.4 Deleted

#### 5.0 DEFINITIONS

- 5.1 <u>Alert</u> 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>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.

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- 5.5 <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.
- 5.6 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.
- 5.7 <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>.
- 5.8 <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
- 5.9 Emergency Operations Facility (EOF) A near-site emergency center from which the offsite emergency support activities are controlled
- 5.10 EPP Emergency Plan Procedure
- 5.11 <u>Emergency Planning Zone (EPZ)</u> 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 ESC Energy Services Center
- 5.13 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
- 5.14 <u>General Emergency</u> 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.
- 5.15 ERDS Emergency Response Data System
- 5.16 LOCA Loss of Coolant Accident
- 5.17 OEC Offsite Emergency Coordinator
- 5.18 Offsite For accountability purposes, any area outside the GGNS protected area
- 5.19 OMT Offsite Monitoring Team
- 5.20 <u>Onsite</u> For accountability purposes, the area within the GGNS protected area

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- 5.21 Operations Support Center (OSC) Location from which onsite non-Control Room activities are staged and implemented
- 5.22 PA Public Address System
- 5.23 PAG Protective Action Guide
- 5.24 PAR Protective Action Recommendation .
- 5.25 <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.
- 5.26 SAS Secondary Alarm Station
- 5.27 <u>TLD</u> Thermoluminescent Dosimeter
- 5.28 TSC Technical Support Center
- 5.29 Unusual Event 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.)
- 5.30 <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 GGNS Shift Superintendent no later than one hour after an ALERT (or higher) declaration.
- 5.31 <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.
- 5.32 <u>TEDE</u> (Total Effective Dose Equivalent) Sum of the EDE and CEDE to nonpregnant adults from exposure and intake during an emergency situation.
- 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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5.34 <u>SSW</u> Standby Service Water
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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/Superintendent.
  - 6.1.2 The Shift Supervisor/Superintendent, 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/Superintendent 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 Superintendent/Emergency Director:

#### NOTE

After becoming aware that an emergency condition exists, the Shift Superintendent/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 Superintendent 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:
    - 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, the TSC, OSC, ENMC and EIC must be activated.
    - (3) If a Site Area or General Emergency has been declared, all emergency facilities must be activated and 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.
    - Protective actions <u>shall be recommended</u> to State and Local Agencies upon declaration of a General Emergency as follows:

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

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6.1.4 (Cont.)

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

#### 6.2 <u>Supplemental Actions</u>

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 Superintendent/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 activation of the EOF, the following activities must be transferred to the OEC:
  - 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 <u>Terminating</u>

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-01-22 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.

[m. . . ]

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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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## 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	<ol> <li>Inability to reach required shutdown within Technical Specification time limits</li> </ol>	Failure to reach the required Plant Mode within Technical Specification action statement time frames for any of the following LCO's:	UNUSUAL EVENT
	- -	<ol> <li>Safety/relief Valves</li> <li>3.4.4</li> </ol>	
		or	
		2. ECCS - Operating 3.5.1	
		or	
		<ol> <li>Primary Containment</li> <li>3.6.1.1</li> </ol>	
		or	
•		<ol> <li>Primary Containment Airlocks 3.6.1.2 <u>or</u></li> </ol>	
		5. Primary Containment Isolation Valves 3.6.1.3	
		or	
		<ol> <li>Low Low Set Valves</li> <li>3.6.1.6</li> </ol>	
		or	
		<ol> <li>Residual Heat Removal Containment Spray 3.6.1.7</li> </ol>	
		or	
		8. Suppression Pool Average Temperature 3.6.2.1 <u>or</u>	
		9. Suppression Pool Level 3.6.2.2	
		(Continued)	

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# EMERGENCY CLASSIFICATIONS

CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	EMERGENCY CLASSIFICATION
1. Safety System Functions (Cont.)		<u>or</u> 10. Suppression Pool Makeup System 3.6.2.4	UNUSUAL EVENT
		or	· · · ·
		11. Second Containment 3.6.4.1	
		or	
		12. Second Containment Isolation Valve 3.6.4.2	
	· · ·	or	
		13. Standby Gas Treatment System 3.6.4.3	
		or	
		14. Drywell 3.6.5.1	
		or	
		15. Drywell Airlocks 3.6.5.2	
		or	
		16. Drywell Isolation Valves 3.6.5.3	
	<ol> <li>Failure of a safety/ relief valve to close following reduction of applicable pressure to below reset point</li> </ol>	<ol> <li>Shift Superintendent determines a SRV is stuck open in plant Mode 1, 2, or 3.</li> </ol>	

ECCS - Emergency Core Cooling System

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

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# EMERGENCY CLASSIFICATIONS

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

µCi - Micro Curies

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# EMERGENCY CLASSIFICATIONS

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

 $\mu$ Ci - micro Curies

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# EMERGENCY CLASSIFICATIONS

				EMERGENCY
	ATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	CLASSIFICATION
I	Core Fuel Damage (Cont.)	4. Loss of 2 of 3 fission product barriers with a potential loss of 3rd barrier	<ol> <li>Loss of any two of the following fission product boundaries with a potential for loss of the third:</li> </ol>	GENERAL EMERGENCY
			Fuel Cladding Loss	
			a. Coolant sample analysis indicates >300 µCi/ml dose equivalent I-131 <u>or</u>	
			b. >1000 R/Hr in Drywell	
			Potential Loss	
			a. RPV water level cannot be restored and maintained > -167 in. <u>or</u>	
			<ul> <li>b. RPV pressure cannot be restored and maintained</li> <li>&gt; 57 psig when in RPV flooding.</li> </ul>	
			c. >100 R/Hr in Drywell	
			Reactor Pressure Boundary Loss	
			<pre>a. Drywell pressure &gt;1.23     psig and indication of a     steam leak in the     drywell     <u>Or</u></pre>	
			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 Jeakage calculated to be >50 gpm	
	Micro Curie:		b. >10 R/hr in Containment	

µCi - Micro Curies

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# EMERGENCY CLASSIFICATIONS

CATEGORY	INITIATING CONDITION		EMERGENCY
3. Core Fuel	4. Loss of 2 of 3	EMERGENCY ACTION LEVEL	CLASSIFICATION
Damage (Cont.)	fission Product	Primary Containment Loss	GENERAL EMERGENCY
•	Barriers with a Potential loss of 3rd	a. Primary Containment pressure >56 psig	
	barrier. (Cont.)	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	
		b. Operation in the Unsafe Region of HCTL <u>or</u> PSP Curve.	
		c. Operation in the Unsafe Region of HDOL Curve with Hydrogen Igniters	
		De-Energized	
4. Steam Leaks	<ol> <li>Main steam line break outside the containment with</li> </ol>	<ol> <li>Isolation initiated and abnormal leakage down stream of MSIVs</li> </ol>	ALERT
	significant MSIV leakage.	(> 10 gpm or 5000 lbm/hr)	
	<ol><li>RCIC steam line break outside the</li></ol>	<ol> <li>Isolation initiated and abnormal leakage down</li> </ol>	
	containment with significant isolation valve leakage	stream of isolation valves (> 10 gpm or 5000 lbm/hr)	
	<ol> <li>Main steam line break outside of</li> </ol>	<ol> <li>Isolation required due to confirmed steam</li> </ol>	SITE AREA EMERGENCY
	containment which cannot be isolated.	line break	
		<u>and</u> One or more main steam	
	4. RCIC steam line break	lines fail to isolate 1. Isolation required due	
	outside of containment which	to confirmed steam line break	
	cannot be isolated.	and	
CTU Main Ci		RCIC steam line fails to isolate	······
CIC - Reactor Co	re Isolation Cooling	- Pressure Suppression limit	
DOL - Hydrogen I	city Temperature Limít Deflagration Overpressure Li	imit .	

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## EMERGENCY CLASSIFICATIONS

CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	EMERGENCY CLASSIFICATION
5. Abnormal Effluent, GASEOUS	<ol> <li>Radiological effluent release rate exceeds TRM Spec limit</li> </ol>	<ol> <li>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</li> </ol>	UNUSUAL EVENT
	2. Radiological effluent >10 times TRM Spec limit	<ol> <li>High high radiation alarms on <u>ONE OR MORE</u> <u>monitors</u>:</li> </ol>	ALERT
		a. Radwaste Bldg vent exhaust	
	· · · ·	b. Fuel handling vent exhaust	
;		c. Containment vent exhaust	6 -
		d. Turbine Bldg vent exhaust	
		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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# EMERGENCY CLASSIFICATIONS

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

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

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

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

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

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

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# EMERGENCY CLASSIFICATIONS

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CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	EMERGENCY CLASSIFICATION
11. Plant Shutdown Function	<ol> <li>Complete loss of functions needed for plant <u>COLD</u> shutdown.</li> </ol>	1. All control rods fully inserted	ALERT
		and	
		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	<ol> <li>Scram conditions confirmed</li> </ol>	
	and complete a scram which brings the	and	
	reactor subcritical	2a. More than one rod is greater than position 02	
· ·		· <u>or</u>	
		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)	
	Power Range Monitor		

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# EMERGENCY CLASSIFICATIONS

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

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

CAM Continuous Air Monitor 、

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## EMERGENCY CLASSIFICATIONS

CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	EMERGENCY CLASSIFICATION
<pre>13. Fuel Handling Accident (Cont.)</pre>		<ul> <li>2. Any post accident effluent radiation monitor confirms Noble Gas, Iodine release rates corresponding to:</li> <li>a. 0.5 Ci/sec Noble Gas (30 minutes)</li> </ul>	SITE AREA EMERGENCY
		<u>or</u> b. 6.0 E-4 Ci/sec Iodine (30 minutes)	
		or	
		c. 5.0 Ci/sec Noble Gas (2 minutes)	
		or	
		d. 6.0 E-3 Ci/sec Iodine (2 minutes)	
		or	
		<ol> <li>Radiation monitoring teams report Radiation and/or Iodine concentration readings at the site boundary corresponding to:</li> </ol>	
		a. 50 mR/Hr (for 30 minutes) <u>or</u>	•
		b. 500 mR/Hr (for 2 minutes) <u>or</u>	
		c. 6.0 E-6 µCi/cc Iodine	

Ci - Curies µCi - Micro Curies

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CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	EMERGENCY CLASSIFICATION
14. Security Threat	<ol> <li>Security threat         <u>Or</u>         Attempted entry sabotage</li> </ol>	<ol> <li>Based upon the assessment of the alarm or the event reported by Security. Actual threat must be determined prior to establishing an emergency classification.</li> </ol>	UNUSUAL EVENT
	2. On-going Security compromise	1. Identification of adversaries attempting to command areas of the plant, <u>but not controlling</u> shutdown capability or vital areas.	ALERT
	3. 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
	4. 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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				EMERGENCY
ł	CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	CLASSIFICATION
	15. Hazards to Plant Operations	<ol> <li>Hazards being experienced or projected with the <u>potential for</u> degradation of the</li> </ol>	<ol> <li>Notification of an aircraft crash onsite outside the protected area</li> </ol>	UNUSUAL EVENT
		level of safety of the plant	or	
			<ol> <li>Notification of unusual aircraft activity over the facility</li> </ol>	
			or	
			<ol> <li>Notification of an onsite explosion (does not affect plant operation)</li> </ol>	
			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	
			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 <u>actual</u> or potential substantial degradation of the level of safety of the plant	<ol> <li>Notification of an air- craft crash onsite inside the protected area, no damage to plant vital areas</li> </ol>	ALERT
-		or	
		<ol> <li>Notification of missile impacts on plant non- vital structures</li> </ol>	
	•	or	
	-	<ol> <li>Notification of an onsite explosion affecting plant operation</li> </ol>	
		or	
		<ol> <li>Determination that the entry of toxic or flammable gases into facility structures has threatened to render Safety Related equipment Inoperable</li> </ol>	
		or	
		<ol> <li>Notification of a turbine failure that has resulted in casing penetration</li> </ol>	

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

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# EMERGENCY CLASSIFICATIONS

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

OBE - Operating Earthquake SSE - Safe Shutdown Earthquake

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# EMERGENCY CLASSIFICATIONS

	CATEGORY	INITIATING CONDITION	EMERGENCY ACTION LEVEL	EMERGENCY CLASSIFICATION
17.	Loss of assessment, communications, annunciators equipment	<ol> <li>Significant loss of vital accident assessment or communications capability</li> </ol>	<ol> <li>Total loss of vital accident assessment equipment such as:</li> </ol>	UNUSUAL EVENT
			a. All vessel level instruments	
			<u>or</u> ,	
			<pre>b. All containment monitoring instruments, etc.</pre>	
			or	
			2. Degradation of the offsite communication system to only one source	
		2. Loss of ALL annunciators	<ol> <li>Loss of <u>ALL</u> annunciators on the P680, P601, and P870 panels</li> </ol>	ALERT
18.	Discretionary	1. Other plant conditions exist that warrant increased awareness on the part of the plant operating staff. <u>AND/OR</u> State and Local Authorities	<ol> <li>Plant conditions exist that warrant a precautionary notification to local and state authorities.</li> </ol>	UNUSUAL EVENT
	- Technical Suppo	2. Other plant conditions warrant activation of TSC	<ol> <li>Plant conditions exist that warrant precautionary activation of the TSC and placing the EOF and key plant personnel on standby.</li> </ol>	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	<ol> <li>Plant conditions exist that warrant:         <ul> <li>a. The activation of the EOF</li> <li><u>or</u></li> <li>b. A precautionary notification to the public near the site</li> </ul> </li> </ol>	SITE AREA EMERGENCY
	4. Other plant conditions exist that make <u>release</u> of large amounts of <u>amounts of radio-</u> <u>activity</u> in a short time possible	<pre>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)         <u>and</u>      Containment pressure     is &gt; 22 psig or     containment is     breached</pre>	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.
    - 3. 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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# EMERGENCY PLAN PROCEDURE

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# GUIDELINES TO TERMINATE OF THE 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.	

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