# Arkansas Nuclear One - Administrative Services Document Control Thursday, May 01, 2003

### **Document Update Notification**

COPYHOLDER NO:	103
TO:	ANO-NRC (EMERGENCY RESPONSE COORD.) - WASHINGTON
ADDRESS:	OS-DOC CNTRL DESK MAIL STOP OP1- 17 WASHINGTON DC 20555-DC
DOCUMENT NO:	OP-1903.010
TITLE:	EMERGENCY ACTION LEVEL CLASSIFICATION
CHANGE NO:	037-01-0
ADDITIONAL INFO:	
☐ ← If this box is check	xed, please sign, date, and return within 5 days.
This transmittal must be	ANO-1 Docket 50-313  ANO-2 Docket 50-368
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### ENTERGY OPERATIONS INCORPORATED ARKANSAS NUCLEAR ONE

RM TITLE:		COVER SHEET		FORM NO. 1000.006	CHANGE NO. 050-00-0
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TITLE:EMERGENCY ACTION LEVEL CLASSIFICATION		19	MENT NO. 903.010	Page CHANGE NO. 037-01-0
☑ UNIT 1 ☑ UNIT 2 ☐ WORK PLAN, EXF	ELECTRONIC DOO P. DATE		SAFETY-R  YES	RELATED NO
TYPE OF CHANGE:           □ NEW         ☑ PC           □ REVISION         □ EZ	☐ TC EXP	P. DATE:	DELETION	
DOES THIS DOCUMENT:				
Supersede or replace another procedure?     (If YES, complete 1000.006B for deleted procedure.) (0C/	AN058107)		☐ YES	⊠ NO
Alter or delete an existing regulatory commitment?     (If YES, coordinate with Licensing before implementing.) (If		)49803)	☐ YES	⊠ NO
3. Require a 50.59 review per LI-101? (See also 1000.006, A (If 50.59 evaluation, OSRC review required.)	•		⊠ YES	□ NO
4. Cause the MTCL to be untrue? (See Step 8.5 for details.) (If YES, complete 1000.009A) (1CAN108904, 0CAN09900		AN049803)	☐ YES	⊠ NO
5. Create an Intent Change? (If YES, Standard Approval Process required.)			☐ YES	⊠ NO
6. Implement or change IPTE requirements? (If YES, complete 1000.143A. OSRC review required.)			☐ YES	⊠ NO
7. Implement or change a Temporary Alteration? (If YES, then OSRC review required.)			☐ YES	⊠ NO
Was the Master Electronic File used as the source document?			⊠ YES	□NO
INTERIM APPROVAL PROCESS	STA	NDARD APP	PROVAL PROCE	
ORIGINATOR SIGNATURE: (Includes review of Att. 13) DATE:	ORIGINATOR SIGNA	TURE: (Include:	s review of Att. 13)	DATE: 4/2/2003
Print and Sign name: PHONE #:	Print and Sign name:	John Hanson A	1 m/l	PHONE #: 6878
SUPERVISOR APPROVAL: * DATE:	INDEPENDENT REVI	IEWER:	^	DATE:
SRO UNIT ONE :** DATE:	RL Fowler ENGINEERING:	7223m	le_	4/88/03
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SRO UNIT TWO:** DATE:	QUALITY:	NIA		DATE:
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Standard Approval required for intent changes or changes requiring a 50,59 evaluation.	SECTION LEADER:	tolaste	<i>D</i>	DATE: 4/22/03
*If change not required to support work in progress, Department Head must sign.	QUALITY ASSURANCE	XVA		DATE:
**If both units are affected by change, both SRO signatures are required. (SRO signature required for safety related	OTHER SECTION LE	Lodney	Cat	DATE: 4/3/2003
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PROCEDURE/WORK PLAN APPRO				

### ENTERGY OPERATIONS INCORPORATED ARKANSAS NUCLEAR ONE

TITLE:Emergency A	action Level Classification	DOCUMENT NO. 1903.010	- 1	GE NO. 037-01-0
⊠PROCEDURE	☐WORK PLAN, EXP. DATE	N/A_	PAGE_	OF
☐ ELECTRONIC DOCU	JMENT			
TYPE OF CHANGE:	⊠ PC	□тс	☐ DELETIC	ON
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AFFECTED SECTION: (Include step # if applicable)	DESCRIPTION OF CHANGE: (For eac reason for the change.)	h change made, includ	e sufficient det	ail to describe
Throughout	Modified formatting and renumbered ste	eps as necessary.		
Page 1	Removed note referencing Improved Te implemented.	echnical Specifications	since ITS have	) been
Page 2	Added reference 3.1.7, NEI 99-01, Meth	hodology for Developm	ent of Emerger	ncy Action Levels.
Page 7	Modified definition 4.14, Normal Makeu	ıp Capacity. Current de	finition is inacc	curate.
Page 8	Added definition of RCS leakage.			
Pages 13, 16, 26-29, 81-83	Added a note containing RCS Leakage RCS Leakage EALs and to the individual 2.1-2.4) and 4 (Unit 2 EALs 2.1-2.3).	definition to Attachmen al RCS leakage EALs in	its 1 & 2 prior to n Attachments	o the listing of the 3 ( Unit 1 EALs
Page 27, 28	Modified Attachment 3, EAL 2.2 and 2.3 capacity is exceeded)."	3 criteria to "RCS Leaka	ige is >50 gpm	(Batch Controller
Attachment 3	Removed "old" Tech Spec modes and le	left Improved Tech Sper	c modes where	applicable.
Pages 34, 87	Modified Caution to remove ambiguities criteria to above Related EALs	s in utilization of the cau	ition and moved	d from above
Pages 32-34, 86, 87	Added from either or both steam gener EALs 3.3-3.5 and Unit 2 EALs 3.3 & 3.4 factor in determining whether an EAL ap	4 to clarify that the source		
Pages 32-34	Added "(other than for normal post trip r	response)" to "MSSVs n	naintaining OT	SG pressure*
Pages 47, 48	Modified criteria to take credit for a successful Diverse Scram System trip when RPS fails to trip the unit.			
Pages 127, 128	Deleted note on Attachments 5 & 6 which Attachments 7 & 8 of1903.011 have been		ints 7 & 8 of 19	03.011.
FORM TITLE:			FORM NO.	CHANGE NO.
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PROC./WORK PLAN NO. 1903.010 PROCEDURE/WORK PLAN TITLE:

**EMERGENCY ACTION LEVEL CLASSIFICATION** 

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#### 1.0 PURPOSE

This procedure establishes criteria for detection and classification of plant events into the four standard Emergency Classes.

#### 2.0 SCOPE

This procedure is applicable to Units 1 and 2 in all modes; it does not include specific plant casualty procedures or systems operations requirements, but rather provides administrative processes only.

#### 3.0 REFERENCES

- 3.1 REFERENCES USED IN PROCEDURE PREPARATION:
  - 3.1.1 ANO Emergency Plan
  - 3.1.2 ANO's EAL Bases Document
  - 3.1.3 NUREG-0654/FEMA-REP-1, Rev. 1
  - 3.1.4 10 CFR 50
  - 3.1.5 NRC Branch Position on Acceptable Deviations to Appendix 1 to NUREG-0654/FEMA-REP-1, July 11, 1994
  - 3.1.6 OCNA080005 Allow for 1% fuel cladding failure to be determined by radiation dose readings. Step 4.10.1.A.2, 4.10.1.B.2, Attachment 3 EALs 1.2 and 1.3, Attachment 4 EALs 1.2 and 1.3, Attachment 7 and 8.
  - 3.1.7 NEI 99-01 Methodology for Development of Emergency Action Levels
- 3.2 REFERENCES USED IN CONJUNCTION WITH THIS PROCEDURE:
  - 3.2.1 1000.104, "Condition Reporting and Corrective Actions"
  - 3.2.2 1903.011, "Emergency Response/Notifications"
  - 3.2.3 1903.064, "Emergency Response Facility Control Room"
  - 3.2.4 1903.065, "Emergency Response Facility Technical Support Center (TSC)"
  - 3.2.5 1903.066, "Emergency Response Facility Operational Support Center (OSC)"
  - 3.2.6 1903.067, "Emergency Response Facility Emergency Operations Facility (EOF)"
  - 3.2.7 1203.025, "Natural Emergencies"
  - 3.2.8 2203.008, "Natural Emergencies"
  - 3.2.9 1202.XXX, "Emergency Operating Procedures"
  - 3.2.10 2202.XXX, "Emergency Operating Procedures"

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				l	
	3.2.11	1404.016, Measureme	"Post Earthquake Data acquisitint"	on and	
	3.2.12	1904.002,	"Offsite Dose Projections-RDACS	Method"	
	3.2.13		ion Paper on "Timeliness of Clas Conditions" dated August 17, 19		of
	3.2.14	1607.001,	"Reactor Coolant System Sampling	g"	
	3.2.15	2607.001,	"Unit 2 Reactor Coolant System	Sampling"	
3.3	RELATED AN	NO PROCEDUF	RES:		
	3.3.1	1043.042,	"Response to Security Contingen	cies"	
	3.3.2	1502.004,	Attachment H	•	. •
	3.3.3	1903.023,	"Personnel Emergency"		
	3.3.4	ANO Secur	ity Plan/Security Procedures		•
	3.3.5	1015.007,	"Fire Brigade Organization and	Responsibi	lities"
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	3.3.7	1903.043,	"Duties of the Emergency Radiat	ion Team"	
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3.4	REGULATOR	Y CORRESPON	NDENCE CONTAINING NRC COMMITMENTS	WHICH AR	E

#### 4.0 DEFINITIONS

3.4.1

4.1 <u>Core Damage</u> - A failure of fuel cladding integrity to the extent that any of the following happen:

IMPLEMENTED IN THIS PROCEDURE ARE DENOTED IN LEFT HAND MARGIN:

OCAN068320 (P-10766) - Section 4.3

- 4.1.1 Fission product activity in the coolant exceeds the limits in the technical specifications.
- 4.1.2 Fuel is no longer in the original geometry.
- 4.1.3 A major portion of the core cannot be operated for its design cycle length.
- 4.2 Courtesy Call A notification to the Arkansas Department of Health and follow-up notification to the NRC for conditions/events other than those constituting an Emergency Class as listed in procedure 1903.11, "Emergency Response/Notifications", Section 6.3.

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Emergency Action Level - Alarms, instrument readings or visual sightings that have exceeded pre-determined limits which would categorize the situation into an initiating condition of one of the following four Emergency Classes:

Notification of Unusual Event Alert Site Area Emergency General Emergency

- 4.3.1 Notification of Unusual Event Unusual events are in progress or have occurred which indicate a potential degradation of the level of safety of the plant. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs.
- 4.3.2 Alert Events are in progress or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant. Any releases are expected to be limited to small fractions of the EPA Protective Action Guideline exposure levels.
- 4.3.3 Site Area Emergency Events are in progress or have occurred which involve actual or likely major failures of plant functions needed for protection of the public. Any releases are not expected to exceed EPA Protective Action Guideline exposure levels except near the site boundary.
- 4.3.4 General Emergency Events are in progress or have occurred which involve actual or imminent substantial core degradation or melting with the potential for loss of containment integrity. Releases can be reasonably expected to exceed EPA Protective Action Guideline exposure levels off site for more than the immediate site area.
- Emergency Direction and Control Overall direction of facility response which must include the non-delegable responsibilities for the decision to notify and to recommend protective actions to Arkansas Department of Health personnel and other authorities responsible for offsite emergency measures. With activation of the EOF, the EOF Director typically assumes the responsibility for Emergency Direction and Control. The management of on-site facility activities to mitigate accident consequences remains with the TSC Director in the Technical Support Center. The Shift Manager retains responsibility for the Control Room and plant systems operation.
  - Emergency Operations Facility (EOF) A nearsite emergency response facility located approximately 0.65 miles northeast of the reactor buildings (the ANO Training Center).
  - Emergency Planning Zone (EPZ) The EPZ considered by this procedure is the inhalation zone and is that area within approximately a 10 mile radius of ANO.

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- 4.7 Emergency Response Organization (ERO) The organization which is composed of the Initial Response Staff (IRS), the EOF staff, the TSC staff, the OSC staff, and the Emergency Team members. It has the capability to provide manpower and other resources necessary for immediate and long-term response to an emergency situation.
- 4.8 EPA Protective Action Guideline (PAG) Exposure Levels The projected dose to reference man, or other defined individual, from an unplanned release of radioactive material at which a specific protective action to reduce or avoid that dose is recommended (i.e., 1 Rem TEDE or 5 Rem Child Thyroid (CDE)).
- 4.9 Exclusion Area: That area surrounding ANO within a minimum radius of 0.65 miles of the reactor buildings, but outside the protected area and controlled to the extent necessary by ANO during periods of emergency.
- 4.10 FISSION PRODUCT BARRIER FAILURE
  - 4.10.1 <u>Fuel Cladding Failure</u> Condition where the fuel rod cladding becomes defective and cannot contain the fission gases that have accumulated between the fuel pellet and the fuel rod cladding (commonly referred to as the gap).
    - A. <u>Unit 1</u> Greater than 1% fuel cladding failure as indicated by ANY of the following:
      - Nuclear Chemistry analysis of RCS sample yields > 400 uCi/gm specific I-131.
      - Radiation levels that indicate >1% fuel cladding failure per Unit 1 Fuel Cladding Failure Radiation Plot (Att 7)
      - Failed Fuel Iodine process monitor (RE 1237S) indicates > 8.2 x 10<sup>5</sup> CPM.
      - 4. Containment Radiation Levels correspond to a Site Area Emergency from Containment Radiation EAL Plot (Attachment 5).
      - 5. Engineering assessment of core damage indicates>1% fuel cladding failure.
    - B. <u>Unit 2</u> Greater than 1% fuel cladding failure as indicated by <u>ANY</u> of the following:
      - Nuclear Chemistry analysis of RCS sample yields > 378 uCi/gm specific I-131.
      - Radiation levels that indicate >1% fuel cladding failure per Unit 2 Fuel Cladding Failure Radiation Plot (Att 8).]
      - Containment Radiation Levels correspond to a Site Area Emergency from Containment Radiation EAL Plot (Attachment 6).

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(4.10.1 cont.)

Engineering assessment of core damage indicates
 1% fuel cladding failure.

#### 4.10.2 RCS Boundary Failure

- A. <u>Unit 1</u> RCS leakage greater than normal makeup capacity (50 gpm).
- B. <u>Unit 2</u> RCS leakage greater than 44 gpm (capacity of a single Charging Pump).

#### 4.10.3 Containment Integrity Failure

- A. Abnormally high Containment High Range Radiation Monitor readings (RE-8060 or 8061 for Unit 1; 2RY-8925-1 or 2RY-8925-2 for Unit 2) and indications of radiological effluents outside of the Reactor Building that are not attributable to any other source.
- B. In the judgement of the SM/TSC Director/EOF Director, a breach of the Reactor Building exists. The variety of possible Reactor Building integrity failure scenarios precludes the development of an all inclusive list. In the absence of the conditions described in 4.10.3.A above, the SM/TSC Director/EOF Director must judge the potential for an offsite release to occur based on a current status of Reactor Building isolation systems and structural integrity.

#### 4.10.4 Inability to Monitor a Fission Product Barrier

A. Following the failure of two fission product barriers, the inability to monitor the third barrier is to be regarded as equivalent to a failure of that barrier.

#### 4.11 FISSION PRODUCT BARRIER CHALLENGE

- 4.11.1 Challenge to Fuel Cladding: any event or condition which in the judgement of the SM/TSC Director/EOF Director presents the potential for greater than 1% fuel cladding failure; for example:
  - A. RCS temperature and pressure indicates superheated conditions.
  - B. Indications of the core being uncovered.
  - C. Exceeding safety limits (e.g. DNBR or Local Power Distribution)
- 4.11.2 Challenge to RCS Boundary: any event or condition which, in the judgement of the SM/TSC Director/EOF Director could result in RCS leakage in excess of normal makeup capacity (i.e., 50 gpm for Unit 1 or 44 gpm for Unit 2); for example:
  - A. RCS pressure > 2450 psig and not decreasing.
  - B. Two out of three seal stages failed on any RCP (U-1).

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- (4.11.2 cont.)
- C. Three out of four seal stages failed on any RCP (U-2).
- D. Failure of any component resulting in RCS leakage greater than Tech. Spec. limits and approaching normal make up capacity; (50 gpm) for Unit 1 or (44 gpm) for Unit 2.
- 4.11.3 Challenge to Containment Building Integrity: any event or condition which in the judgement of the SM/TSC Director/EOF Director significantly increases the potential for failure of containment integrity; for example:
  - A. Containment pressure > Reactor Building spray actuation setpoint and increasing with no available RB spray or cooling.
  - B. Hydrogen concentrations in containment > 3.5%.
  - C. Occurrence of system or component failure which degrades the capability to maintain containment integrity as defined by Technical Specifications.
- 4.12 <u>Fuel Overheat</u> Condition in which fission products trapped within the fuel pellet are released at an accelerated rate due to increasing temperature. Fuel overheating temperatures typically range from 1600 °F to 3600 °F cladding temperature.
- 4.13 <u>Initial Response Staff (IRS)</u> The emergency organization composed of plant personnel which must be able to respond to the site in accordance with Table B-1 of the Emergency Plan.
- 4.14 Normal Makeup (MU) Capacity
  - <u>Unit 1</u>: Normal makeup capacity is defined as 50 gpm. 50 gpm approximates a leak size for which the ability to make additions to the makeup tank is no longer adequate to maintain makeup tank level.
  - <u>Unit 2</u>: Normal makeup capacity is defined as 44 gpm. 44 gpm is the capacity of a single charging pump.
- 4.15 Offsite Those areas not covered by Section 4.13.
- 4.16 Onsite The area within the Exclusion Area Boundary.
- 4.17 Operational Support Center (OSC) Emergency response center within the ANO Maintenance Facility where support is coordinated for the following functions:

Onsite Radiological Monitoring Maintenance Nuclear Chemistry Emergency Medical Support Fire Fighting Support

The OSC also serves as the briefing area for repair and damage control teams and is located in the Maintenance Facility.

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#### 4.18 PLANT TRANSIENT

- 4.18.1 Any unplanned reactor trip from criticality.
- 4.18.2 A planned reactor trip in which the expected post-trip response did not occur.
- 4.18.3 Any event resulting in an automatic ESAS (Unit 1) or ESF (Unit 2) actuation or any event requiring manual initiation of these systems where automatic initiation would likely have occurred.
- 4.18.4 Any turbine-generator power change in excess of 100 MWe in less than one (1) minute other than a momentary spike due to a grid disturbance or a manually initiated runback.
- 4.18.5 Any unplanned main turbine or main feedwater pump turbine trip which results in a significant plant transient (change in excess of 100 MWe).
- 4.19 <u>Protected Area</u>: The area encompassed by physical barriers (i.e., the security fence) and to which access is controlled.
- 4.20 Reactor Coolant System (RCS) Leakage: Loss of RCS inventory due to a leak in the RCS or a supporting system that is not or cannot be isolated within 10 minutes.
- 4.21 Technical Support Center (TSC) The location within the ANO Administration Building equipped with instrumentation and communication systems and facilities useful in monitoring the course of an accident; this center is located in the 3rd Floor of the ANO Administration Building.

#### 5.0 RESPONSIBILITY AND AUTHORITY

- 5.1 The responsibility for event classification is assigned to the individual with responsibility for Emergency Direction and Control (i.e., The Shift Manager, TSC Director, or EOF Director).
- 5.2 The Control Room Supervisor (CRS) will assume Emergency Direction and Control responsibilities whenever the SM is not available to assume this responsibility (e.g. the SM becomes incapacitated and a replacement has not yet arrived).
- Any individual who observes an initiating condition which warrants an emergency class declaration, as described in Attachments 3 and 4, shall immediately notify the person with current responsibility for Emergency Direction and Control (i.e. SM/TSC Director/EOF Director).

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#### 6.0 INSTRUCTIONS

#### NOTE

On emergencies that effect both units such as earthquakes, tornado's, etc., the unit with the highest Emergency Action Level Classification should be the one that is declaring the emergency.

#### 6.1 CLASSIFYING EMERGENCIES:

#### NOTE

NRC guidelines recommend that once indications are available to ANO staff that an EAL has been exceeded, a 15 minute goal is a reasonable period of time for assessing and classifying an emergency.

- 6.1.1 When indications of abnormal occurrences are received by the Control Room staff, the SM/TSC Director/EOF Director shall:
  - A. Verify the indications of the off-normal event or reported sighting.
  - B. Ensure that the immediate actions (e.g., use of Emergency and Abnormal Operating Procedures) are taken for the safe and proper operation of the plant.
  - C. Compare the abnormal conditions with those listed in the "Index Of Emergency Action Levels" (Blue Tabs - Unit 1; Green Tabs - Unit 2).
  - D. Turn to the appropriate tab which corresponds to the condition picked from the Index Of EALs.

#### NOTE

Unit 1 EALs - Blue Tabs Unit 2 EALs - Green Tabs

- E. Assess the information available from valid indications or reports, then:
  - 1. Compare information to criteria given for EAL,
  - Review any Related EALs to determine if the abnormal conditions meet those criteria, and
  - 3. Declare the emergency classification that is indicated. If it appears that different classifications could be made for the current plant conditions, the highest classification indicated should be the one that is declared.

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#### NOTE

The emergency action levels described in this procedure are not intended to be used during maintenance and/or testing situations where abnormal temperature, pressure, equipment status, etc., is expected. In addition, each EAL contains information on the mode(s) of operation during which it is applicable.

- F. If the indications or reports do not match the given EALs, then refer to the Miscellaneous Tab and using appropriate judgement, determine if the plant status warrants an emergency declaration.
- Due to the speed in which events sometimes progress and the duty of the plant operators to take immediate corrective actions, an event may occur which was classifiable as an emergency, however, prior to offsite notifications the corrective actions taken may have removed the conditions that would have resulted in an emergency declaration. In this situation, it is not necessary to make an actual declaration of the emergency class, but an ENS notification to the NRC within one hour of the discovery of the undeclared event will provide an acceptable alternative. A courtesy call shall be made to ADH. Subsequent activation of response organization should be based upon the current plant conditions.
- 6.1.3 If no emergency declaration is required, then refer to procedure 1903.011, "Emergency Response/Notifications", Section 6.3 to determine if the event warrants a "For Information Only" notification to Entergy Management, NRC Resident Inspector and/or the Arkansas Department of Health.
- 6.1.4 Upon declaration of an emergency classification implement procedure, 1903.011, "Emergency Response Notifications", to ensure that immediate notification requirements are met and the proper Emergency Plan response is taken.
- 6.1.5 Upgrade the emergency classification if plant conditions degrade per steps 6.1.1.A through F.
- 6.1.6 Downgrade the emergency classification when plant conditions have improved and step 6.2 is applicable.

#### 6.2 DOWNGRADING THE EMERGENCY CLASSIFICATION:

- 6.2.1 Assess the current plant conditions, then perform the following:
  - A. Compare the abnormal conditions with those listed in the "Index Of Emergency Action Levels" (Blue Tabs - Unit 1; Green Tabs - Unit 2).
  - B. Turn to the appropriate tab which corresponds to the condition picked from the Index Of EALs.

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NOTE

Unit 1 EALs - Blue Tabs Unit 2 EALs - Green Tabs

- C. Assess the information available from valid indications or reports, compare it to the given EALs. Obtain concurrence from NRC and State officials that downgrading is appropriate (if their emergency response organizations have been activated as a result of this event). Downgrade to the emergency classification that is indicated.
- D. If the indications or reports do not match the given EALs, then refer to the Miscellaneous Tab and using appropriate judgement, determine if the plant status warrants downgrading the emergency classification.
- 6.2.2 Perform notifications to downgrade the emergency classification if appropriate per procedure 1903.011, "Emergency Response/Notifications".
- 6.2.3 If no emergency classification appears necessary, then terminate the emergency per step 6.3.
- 6.2.4 If the emergency classification is still required, repeat steps 6.2.1 through 6.2.3 whenever plant conditions again appear to have improved.

#### 6.3 TERMINATING THE EMERGENCY:

- 6.3.1 Compare the existing plant conditions with the following:
  - A. Plant conditions no longer meet the emergency action level criteria AND it appears unlikely that current conditions will degrade further requiring reinstitution of an emergency classification.
  - B. Non-routine releases of radioactive material to the environment are under control or terminated.
  - C. Any fire, flood, earthquake, or similar emergency condition is controlled or has ceased.
  - D. All specified corrective actions have occurred <u>OR</u> the plant has been placed in the appropriate operational mode.
  - E. All required notifications have been completed.
  - F. NRC and State officials are in agreement that termination or transition to the recovery phase is appropriate (if their emergency response organizations have been activated as a result of this event).
- 6.3.2 If the conditions of 6.3.1 A-F are met, terminate the emergency or proceed to the recovery phase.

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#### 7.0 ATTACHMENTS AND FORMS

7.1	Attachment 1 - Unit 1 Index of EALs
7.2	Attachment 2 - Unit 2 Index of EALs
7.3	Attachment 3 - Unit 1 Emergency Action Levels
7.4	Attachment 4 - Unit 2 Emergency Action Levels
7.5	Attachment 5 - Unit 1 Containment Radiation EAL Plot
7.6	Attachment 6 - Unit 2 Containment Radiation EAL Plot
7.7	Attachment 7 - Unit 1 Fuel Cladding Failure Radiation Plo

Attachment 8 - Unit 2 Fuel Cladding Failure Radiation Plot

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ATTACHMENT 1 UNIT 1 INDEX OF EALS

#### NOTE

Once available plant parameters reach an Emergency Action Level (EAL), classifications should be made within 15 minutes.

#### 1.0 PRIMARY SYSTEM EVENTS

1.1	RCS Activity Indicates >0.1% Fuel Cladding FailureNUE
1.2	RCS Activity Indicates > 1% Fuel Cladding FailureALERT
1.3	Core Damage Indicated with an Inadequate Core Cooling
	Condition SAE
1.4	Containment Radiation Reading which Indicates LOCA and >1%
	Fuel Cladding FailureSAE
1.5	Containment Radiation Reading which Indicates LOCA and
	>50% Fuel OverheatGE
1.6	Core MeltGE
1.7	Loss of or challenge to all 3 Fission Product BarriersGE

#### NOTE

RCS leakage is defined as a loss of RCS inventory due to a leak in the RCS or a supporting system that is not or cannot be isolated within 10 minutes.

#### 2.0 RCS LEAKAGE

2.1	RCS Deakage
2.2	RCS Leakage > Normal Makeup Capacity (50 gpm)ALERT
2.3	RCS Leakage > Normal Makeup Capacity (50 gpm) with >1.0%
	Fuel Cladding Failure Conditions
24	PCS Leakage > HDT Capacity

#### 3.0 SECONDARY SYSTEM EVENTS

3.1	Uncontrolled OTSG Depressurization Resulting in MSLI
	Actuation
3.2	OTSG Tube Leak > Tech Spec limitsNUE
3.3	OTSG Tube Leak >10gpm Concurrent with an On-going Steam
	Release, or loss of offsite power
3.4	OTSG Tube Rupture with Primary to Secondary Leakage >
	Normal Makeup Capacity (50 gpm) with ongoing steam release
	or loss of offsite power
3.5	OTSG Tube Leak >1 gpm with >1% Fuel Cladding Failure and
	on-going Steam Release

#### 4.0 ELECTRICAL POWER FAILURES

	aded Power	
4.3 Blac	kout for more than 15 minutes	AE
	of All Vital DC PowerA of All Vital DC Power for more than 15 minutesS	

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#### NOTE

Once available plant parameters reach an Emergency Action Level (EAL), classifications should be made within  ${\bf 15}$  minutes.

#### 5.0 RADIOLOGICAL EFFLUENTS

	5.1	Radiological Effluents > .05 mRem/hr TEDE or .15 mRem/hr	
		Child Thyroid CDE at Site Boundary or Liquid Radiological	
		Effluents exceed ODCM Limitations	. NUE
	5.2	Radiological Effluents > .5 mRem/hr TEDE or 1.5 mRem/hr	
		Child Thyroid CDE at Site Boundary or Liquid Radiological	
		Effluents exceed 10 times ODCM Limitations	ALERT
	5.3	Radiological Effluents >50 mRem/hr TEDE or 150 mRem/hr	
		Child Thyroid CDE at the Site Boundary	. SAE
	5.4	Radiological Effluents >250 mRem/hr TEDE or 500 mRem/hr	1 1 1 1
		Child Thyroid CDE at the Site Boundary	GE
	5.5	High Radiation/Airborne Levels	. ALERT
	5.6	Spent Fuel Accident	SAE
6.0	SAFETY	SYSTEM FUNCTION	•
	6.1	Deviation from T.S. action statements when required to	
	6.1	shutdown or cooldown or deviations pursuant to	
		shutdown or cooldown or deviations pursuant to 10CFR50.54(x)	
	6.2	shutdown or cooldown or deviations pursuant to 10CFR50.54(x)	ALERT
	6.2 6.3	shutdown or cooldown or deviations pursuant to 10CFR50.54(x)  RPS Failure to Complete an Automatic Trip  RPS Failure to Complete a Manual Trip	ALERT SAE
	6.2 6.3 6.4	shutdown or cooldown or deviations pursuant to 10CFR50.54(x)  RPS Failure to Complete an Automatic Trip  RPS Failure to Complete a Manual Trip  Loss of Dose Assessment Capabilities	ALERT SAE NUE
	6.2 6.3	shutdown or cooldown or deviations pursuant to 10CFR50.54(x)  RPS Failure to Complete an Automatic Trip  RPS Failure to Complete a Manual Trip  Loss of Dose Assessment Capabilities  Loss of Communications	ALERT SAE NUE NUE
	6.2 6.3 6.4	shutdown or cooldown or deviations pursuant to 10CFR50.54(x)  RPS Failure to Complete an Automatic Trip  RPS Failure to Complete a Manual Trip  Loss of Dose Assessment Capabilities  Loss of Communications  Loss of Control Room Annunciators	ALERT SAE NUE NUE
	6.2 6.3 6.4 6.5	shutdown or cooldown or deviations pursuant to 10CFR50.54(x)  RPS Failure to Complete an Automatic Trip  RPS Failure to Complete a Manual Trip  Loss of Dose Assessment Capabilities  Loss of Communications  Loss of Control Room Annunciators  Loss of Control Room Annunciators with Transient in	ALERT SAE NUE NUE ALERT
	6.2 6.3 6.4 6.5 6.6	shutdown or cooldown or deviations pursuant to 10CFR50.54(x)  RPS Failure to Complete an Automatic Trip  RPS Failure to Complete a Manual Trip  Loss of Dose Assessment Capabilities  Loss of Communications  Loss of Control Room Annunciators  Loss of Control Room Annunciators with Transient in Progress	ALERT SAE NUE NUE ALERT
	6.2 6.3 6.4 6.5 6.6	shutdown or cooldown or deviations pursuant to 10CFR50.54(x)  RPS Failure to Complete an Automatic Trip  RPS Failure to Complete a Manual Trip  Loss of Dose Assessment Capabilities  Loss of Communications  Loss of Control Room Annunciators  Loss of Control Room Annunciators with Transient in Progress  Control Room Evacuation	ALERT SAE NUE NUE ALERT
	6.2 6.3 6.4 6.5 6.6	shutdown or cooldown or deviations pursuant to 10CFR50.54(x)  RPS Failure to Complete an Automatic Trip  RPS Failure to Complete a Manual Trip  Loss of Dose Assessment Capabilities  Loss of Communications  Loss of Control Room Annunciators  Loss of Control Room Annunciators with Transient in Progress  Control Room Evacuation  Control Room Evacuation and control of shutdown systems	ALERT SAE NUE NUE ALERT SAE
	6.2 6.3 6.4 6.5 6.6 6.7	shutdown or cooldown or deviations pursuant to 10CFR50.54(x)  RPS Failure to Complete an Automatic Trip  RPS Failure to Complete a Manual Trip  Loss of Dose Assessment Capabilities  Loss of Communications  Loss of Control Room Annunciators  Loss of Control Room Annunciators with Transient in Progress  Control Room Evacuation	ALERT SAE NUE NUE ALERT SAE
	6.2 6.3 6.4 6.5 6.6 6.7	shutdown or cooldown or deviations pursuant to 10CFR50.54(x)  RPS Failure to Complete an Automatic Trip  RPS Failure to Complete a Manual Trip  Loss of Dose Assessment Capabilities  Loss of Communications  Loss of Control Room Annunciators  Loss of Control Room Annunciators with Transient in Progress  Control Room Evacuation  Control Room Evacuation and control of shutdown systems	ALERTSAENUENUEALERTSAEALERT
	6.2 6.3 6.4 6.5 6.6 6.7	shutdown or cooldown or deviations pursuant to 10CFR50.54(x)  RPS Failure to Complete an Automatic Trip  RPS Failure to Complete a Manual Trip  Loss of Dose Assessment Capabilities  Loss of Communications  Loss of Control Room Annunciators  Loss of Control Room Annunciators with Transient in Progress  Control Room Evacuation  Control Room Evacuation and control of shutdown systems not established in 15 minutes	ALERTSAENUENUEALERTSAEALERTSAE

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#### ATTACHMENT 1 UNIT 1 INDEX OF EALS

#### NOTE

Once available plant parameters reach an Emergency Action Level (EAL), classifications should be made within 15 minutes.

#### HAZARDS TO STATION OPERATION 7.0 Security Threat or Attempted Entry or Attempted Sabotage ... NUE 7.1 Ongoing Security Threat within Protected Area Security 7.2 Ongoing Security Threat Within Plant Building ...............SAE Ongoing Security Threat Within CR or Vital Area ...........GE 7.3 7.4 Fire or Explosion Onsite ......NUE 7.5 7.6 Fire or Explosion Onsite Affecting One Train of ANY ES Systems ......ALERT Fire or Explosion Onsite Affecting Both Trains of ANY ES 7.7 Systems ......SAE Aircraft Crash, Unusual Aircraft Activity, Train 7.8 Derailment, Turbine Failure, Toxic or Flammable Gas Release ......NUE Aircraft Crash, Missiles, Toxic or Flammable Gas Affecting 7.9 One Train of ANY ES Systems ......ALERT Aircraft Crash, Missiles, Toxic or Flammable Gas Affecting 7.10 Both Trains of ANY ES Systems ......SAE 8.0 NATURAL EVENTS Tornado, Flood, Loss of Dardanelle Reservoir, Earthquake ... NUE 8.1 Tornado, High Winds, Flood, Loss of Dardanelle Reservoir, 8.2 Earthquake ......ALERT Tornado, High Winds, Flood, Loss of Dardanelle Reservoir, 8.3 Earthquake .....SAE MISCELLANEOUS EVENTS 9.0 9.1 Plant Conditions Exist Which Require an Increased Awareness by Operations Staff and State and/or Local Authorities ......NUE Plant Conditions Exist that Warrant Activation of the TSC .. ALERT 9.2 Plant Conditions Exist that Warrant Activation of the 9.3 Emergency Response Facilities ......SAE Plant Conditions Exist That Make Release of Large Amount 9.4 of Radioactivity Possible ......GE

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ATTACHMENT 2 UNIT 2 INDEX OF EALS

#### NOTE

Once available plant parameters reach an Emergency Action Level (EAL), classifications should be made within 15 minutes.

#### 1.0 PRIMARY SYSTEM EVENTS

1.1	RCS Activity Indicates >0.1% Fuel Cladding FailureNUE
1.2	RCS Activity Indicates >1.0% Fuel Cladding FailureALERT
1:3	Core Damage Indicated with an Inadequate Core Cooling
	ConditionSAE
1.4	Containment Radiation Indicates LOCA and >1% Fuel Cladding
	FailureSAE
1.5	Containment Radiation Indicates LOCA and >50% Fuel
	OverheatGE
1.6	Core Melt with Containment Integrity Lost or ChallengedGE
1.7	Loss of or challenge to all 3 Fission Product BarriersGE

#### NOTE

RCS leakage is defined as a loss of RCS inventory due to a leak in the RCS or a supporting system that is not or cannot be isolated within 10 minutes.

#### 2.0 RCS LEAKAGE

3.0

	2.1	RCS	Leakage							 	 	NUE
	2.2	RCS	Leakage	>	44	gpm				 	 	ALERT
- 3	2.3	RCS	Leakage	>	44	gpm	with	ICC	Conditions	 	 	SAE

#### SECONDARY SYSTEM EVENTS

3.1	Uncontrolled S/G Depressurization Resulting in MSIS
	ActuationNUE
3.2	S/G Tube Leak > Tech. Spec. LimitsNUE
3.3	S/G Tube Leak >10gpm with an Ongoing Steam ReleaseALERT
3.4	S/G Tube Rupture >44 gpm With an Ongoing Steam Release and RCS Activity > 1.0 μCi/gm, but < 378 μci/gm (1% fuel
	cladding failure)SAE

#### 4.0 ELECTRICAL POWER FAILURES

4.1	Degraded Power	NUE
4.2	Station Blackout	ALERT
4.3	Loss of All Vital DC	ALERT
4.4	Blackout > 15 minutes	SAE
	Loss of All Vital DC for > 15 minutes	CAF

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#### NOTE

Once available plant parameters reach an Emergency Action Level (EAL), classifications should be made within 15 minutes.

#### 5.0 RADIOLOGICAL EFFLUENTS 5.1 Radiological Effluents > .05 mrem/hr TEDE or .15 Child Thyroid CDE at Site Boundary or Liquid Radiological Effluents exceed ODCM Limitations ......NUE 5.2 Radiological Effluents > .5 mrem/hr TEDE or 1.5 mrem/hr Child Thyroid CDE at Site Boundary or Liquid Radiological Effluents exceed 10 times ODCM Limitations ......ALERT 5.3 Radiological Effluents >50 mrem/hr TEDE or 150 mrem/hr Child Thyroid CDE at the Site Boundary ......SAE 5.4 Radiological Effluents >250 mrem/hr TEDE or 500 mrem/hr Child Thyroid CDE at the Site Boundary ......GE 5.5 High Radiation/Airborne Levels ......ALERT 5.6 Spent Fuel Accident ......SAE 6.0 SAFETY SYSTEM FUNCTION 6.1 Deviation from T.S. action statements when required to shutdown or cooldown or deviations pursuant to 10CFR50.54(X) ......NUE 6.2 RPS Failure to Complete an Automatic Trip ......ALERT 6.3 RPS Failure to Complete a Manual Trip ......SAE 6.4 Loss of Dose Assessment Capabilities ................NUE 6.5 6.6 Control Room Evacuation ......ALERT 6.7 Control Room Evacuation and control of shutdown systems not established in 15 minutes ......SAE 6.8 Loss of Decay Heat Removal Systems .......ALERT 6.9 Loss of Both S/Gs as a Heat Removal Method .................SAE 6.10 Loss of Control Room Annunciators ........................ALERT 6.11 Loss of Control Room Annunciators with a Transient in

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ATTACHMENT 2 UNIT 2 INDEX OF EALS

#### NOTE

Once available plant parameters reach an Emergency Action Level (EAL), classifications should be made within  ${\bf 15}$  minutes.

7.0	HAZARDS	TO STATION OPERATION
	7.1	Security Threat or Attempted Entry or Attempted Sabotage NUE
	7.2	Ongoing Security Threat Within Protected Area Security
	•	FenceALERT
	7.3	Ongoing Security Threat Within Plant BuildingsSAE
	7.4	Ongoing Security Threat Within CR or Vital AreaGE
	7.5	Fire or Explosion OnsiteNUE
	7.6	Fire or Explosion Onsite Affecting One Train of ESF
		SystemsALERT
	7.7	Fire or Explosion Onsite Affecting Both Trains of ESF
		SystemsSAE
	7.8	Aircraft Crash, Unusual Aircraft Activity, Train
		Derailment, Turbine Failure, Toxic or Flammable GasNUE
	7.9	Aircraft Crash, Missiles, Toxic or Flammable Gas Affecting
		One Train of ESF SystemsALERT
	7.10	Aircraft Crash, Missiles, Toxic or Flammable Gas Affecting
		Both Trains of ESF SystemsSAE
8.0	NATURAL	EVENTS
	8.1	Tornado, Flood, Loss of Dardanelle Reservoir, Earthquake NUE
	8.2	Tornado, High Winds, Flood, Loss of Dardanelle Reservoir,
		EarthquakeALERT
	8.3	Tornado, High Winds, Flood, Loss of Dardanelle Reservoir,
		EarthquakeSAE
9.0	MISCELI	ANEOUS EVENTS
	9.1	Plant Conditions Exist Which Require an Increased
		Awareness by Operations Staff and State and/or Local
		AUCHOITUTES
•	9.2	Plant Conditions Exist that Warrant Activation of the TSC ALERT
	9.3	Plant Conditions Exist that Warrant Activation of the Emergency Response FacilitySAE
	9.4	Plant Conditions Exist That Make Release of Large Amount
	2.3	of Radioactivity PossibleGE

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### ATTACHMENT 3 UNIT 1 PRIMARY SYSTEM EVENTS

1.1

CONDITION:		 		
RCS Activity indicates >0.1% fuel cladding failure	•		.* .	:

#### EMERGENCY CLASSIFICATION:

Notification of Unusual Event

MODES All

#### CRITERIA:

- 1. Greater than 0.1% fuel cladding failure as indicated by  $\overline{\text{EITHER}}$  of the following:
  - A. Nuclear Chemistry analysis of RCS sample yields >40.0 μCi/gm specific I-131

<u>OR</u>

B. Failed Fuel Iodine monitor (RE 1237S) indicates  $>3.3 \times 10^5$  CPM

RELATED EALS:	·	TAB
RCS Activity indicates >1% fuel cladding failure High Radiation / Airborne Levels Initiation of Plant S/D or C/D due to T.S. L.C.O.		1 5 6

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#### ATTACHMENT 3 UNIT 1 PRIMARY SYSTEM EVENTS

1.2

CONDITION:		
RCS Activity indicates >1% fuel cl	adding failure	
EMERGENCY CLASSIFICATION:		
Alert		
MODES All		

#### CRITERIA:

- 1. Greater than 1% fuel cladding failure is indicated by <u>Either</u> of the following:
  - A. Nuclear Chemistry analysis of RCS sample yields:
    - 1. >400 μCi/gm specific I-131

<u>or</u>

 Radiation levels that indicate >1% fuel cladding failure per Unit 1 Fuel Cladding Failure Radiation Plot (Att 7)

<u>OR</u>

B. Failed Fuel Iodine monitor (RE 1237S) indicates >8.2 x 10<sup>5</sup> CPM.

RELATED EALS:	TAB	1.0
RCS Activity indicates >0.1% fuel cladding failure Containment Radiation indicates LOCA and >1% fuel cladding failure Loss of or Challenge to 3 Fission Product Barriers Core Damage indicated with an ICC Condition High Radiation/Airborne Levels Initiation of Plant S/D or C/D due to T.S. L.C.O.	1 1 1 1 5 6	

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#### ATTACHMENT 3 UNIT 1 PRIMARY SYSTEM EVENTS

	1.3	•			*
ONDITION:					· 
ore Damage Indicated with an Inadequa	te Core Cool	ing Condi	tion		
TERGENCY CLASSIFICATION:					
site Area Emergency	-				
MODESAll					<u> </u>
RITERIA:					
. Inadequate core cooling capacity superheated conditions of Region	exists as on 3 of Figure	evidenced e 4 of EOP	by CETS 1202.01	indicatin 3.	ng
	—				
Greater than 1% fuel cladding fa following:				of the	
following:  A. Nuclear Chemistry analysis	of RCS sam			of the	
following:	of RCS sam			of the	
following:  A. Nuclear Chemistry analysis	of RCS sam			of the	
following:  A. Nuclear Chemistry analysis  1. >400 µCi/gm specific	of RCS sample: I-131	ole yields % fuel cla	: adding fa	ilure	
following:  A. Nuclear Chemistry analysis  1. >400 µCi/gm specific  OR  2. Radiation levels that	of RCS sample: I-131	ole yields % fuel cla	: adding fa	ilure	
following:  A. Nuclear Chemistry analysis  1. >400 µCi/gm specific  OR  2. Radiation levels that	of RCS same : I-131 indicate >1 ing Failure OR	ole yields % fuel cla Radiation	: adding fa Plot (At	ilure t 7)	10 <sup>5</sup> CP
following:  A. Nuclear Chemistry analysis  1. >400 µCi/gm specific  OR  2. Radiation levels that per Unit 1 Fuel Cladd	of RCS same : I-131 indicate >1 ing Failure OR	ole yields % fuel cla Radiation	: adding fa Plot (At	ilure t 7)	10 <sup>5</sup> CPN
following:  A. Nuclear Chemistry analysis  1. >400 µCi/gm specific  OR  2. Radiation levels that per Unit 1 Fuel Cladd	of RCS same : I-131 indicate >1 ing Failure OR	ole yields % fuel cla Radiation	: adding fa Plot (At	ilure t 7) >8.2 x	10° CPN
following:  A. Nuclear Chemistry analysis  1. >400 µCi/gm specific  OR  2. Radiation levels that per Unit 1 Fuel Cladd  B. Failed Fuel Iodine process	of RCS same : I-131 indicate >1 ing Failure OR	ole yields % fuel cla Radiation	: adding fa Plot (At	ilure t 7) >8.2 x	
A. Nuclear Chemistry analysis  1. >400 μCi/gm specific  OR  2. Radiation levels that per Unit 1 Fuel Cladd  B. Failed Fuel Iodine process	indicate >1 indicate >1 ing Failure  OR monitor (R	ole yields % fuel cla Radiation E 1237S) i	: adding fa Plot (At	ilure t 7) >8.2 x	'AB

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#### ATTACHMENT 3 UNIT 1 PRIMARY SYSTEM EVENTS

1.4

CONDITION:				
Containment Radiation reading which	indicates L(	OCA and >1	1% fuel cladd	ing failure
EMERGENCY CLASSIFICATION:				
Site Area Emergency  MODES All				
CRITERIA:				
Containment Radiation Levels of Determined from the Containment				y as
	AND			
2. LOCA occurring within the conta	ainment build	ling		
RELATED EALS:				TAB
Containment Radiation indicates LOCA Loss of or Challenge to 3 Fission Pr			heat	1 1 1

Radiological Effluents

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### ATTACHMENT 3

	1 6		,				
	1.5						• . •
ONDITION:							
Containment Radiation readings	s which indicat	e LOCA a	ınd >509	fuel	overhe	at	
		-					
MERGENCY CLASSIFICATION:							
						-	٠.
General Emergency							
MODES All							
NODEO AII			- 1				.*
					· .		
	1						
	evels correspon tainment Radiat	d to a G	eneral Plot ( <i>F</i>	Emerge	ency as		
. Containment Radiation Le	evels correspon tainment Radiat <u>AND</u>	d to a G	eneral Plot ( <i>I</i>	Emerge	ency as		
Containment Radiation Le determined from the Cont	tainment Radiat	ion EAL	eneral Plot ( <i>F</i>	Emerge	ency as		
Containment Radiation Le determined from the Cont	tainment Radiat	ion EAL	General Plot (A	Emerge	ency as		
Containment Radiation Le determined from the Cont	tainment Radiat	ion EAL	General Plot (A	Emerge	ency as		
Containment Radiation Le determined from the Cont	tainment Radiat	ion EAL	General Plot (A	Emerge	ency as		
Containment Radiation Le determined from the Cont	tainment Radiat	ion EAL	General Plot (A	Emerge	ency as		
Containment Radiation Le determined from the Cont	tainment Radiat	ion EAL	General Plot (A	Emerge	ency as		
Containment Radiation Le determined from the Cont	tainment Radiat	ion EAL	General Plot (7	Emerge	ency as		
Containment Radiation Le determined from the Cont	tainment Radiat	ion EAL	General Plot (A	Emerge	ency as		
Containment Radiation Le determined from the Cont	tainment Radiat	ion EAL	General Plot (A	Emerge	ency as		
Containment Radiation Le determined from the Containment from the Containment Radiation Le determined from the Containment Radiation Radiatio	tainment Radiat	ion EAL	General Plot (A	Emerge	ency as	TAE	
determined from the Conf	tainment Radiat  AND  e Containment B	ion EAL	eneral Plot (A	Emerge	ency as	TAE	
Containment Radiation Led determined from the Containment from the Containment Radiation Led determined from the Containment Radiation Led determined from the Containment Radiation Led Containment Radiation	tainment Radiat  AND  e Containment B	ion EAL	General Plot (A	Emerge	ency as	TAE	<u> </u>
Containment Radiation Le determined from the Containment Local Containment Radiation Le determined from the Containment Radiation Le determined from the Containment Radiation Le determined from the Containment Radiation Le	tainment Radiat  AND  e Containment B	ion EAL	General Plot (7	Emerge	ency as	TAE	<u>l</u>

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### ATTACHMENT 3 UNIT 1 PRIMARY SYSTEM EVENTS

1.6

CONDITION:		
Core Melt		
EMERGENCY CLASSIFICATION:		
General Emergency		
MODESAll	·	
CRITERIA:		
1. CETs indicate superheat conditi		
2. Cold indicate superiode condition	ons of Region 4 of P	Figure 4 of EOP 1202.013.
	ons of Region 4 of P	Figure 4 of EOP 1202.013.
RELATED EALS:	ons of Region 4 of R	TAB

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### ATTACHMENT 3 UNIT 1 PRIMARY SYSTEM EVENTS

1.7

$\sim$	דדא	۱TT	'T <i>r</i>	)N:
				/L1 .

Loss of or challenge to all 3 Fission Product Barriers

EMERGENCY CLASSIFICATION:	
General Emergency	
MODES All	

#### CRITERIA:

- Either of the following conditions exist:
  - A. Fuel Cladding Failure (refer to section 4.10.1)
  - B. Challenge to Fuel Cladding (refer to section 4.11.1)

#### AND

- 2. Either of the following conditions exist:
  - A. RCS boundary failure (refer to section 4.10.2)
  - B. Challenge to RCS boundary (refer to section 4.11.2)

#### AND

- 3. Either of the following conditions exist:
  - A. Containment Integrity failure (refer to section 4.10.3)
  - B. Challenge to Containment Integrity (refer to section 4.11.3)

TAB
1 1 5 8

PROC.WORK PLAN NO. PROCEDURE/WORK PLAN TITLE:

1903.010 EMERGENCY ACTION LEVEL CLASSIFICATION

CHANGE: 037-01-0

ATTACHMENT 3 UNIT 1 RCS LEAKAGE

CONDITION:			
RCS Leakage			
EMERGENCY CLASSIFICATION:			
Notification of Unusual Event			
MODES 1-4			
CRITERIA:		· · · · · · · · · · · · · · · · · · ·	
	OTE		
	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	
1. Unidentified or pressure boun		eater than 10	gpm.
	OR	eater than 10	gpm.
<ol> <li>Unidentified or pressure boun</li> <li>Identified RCS leakage greate</li> </ol>	OR	eater than 10	gpm.
	OR	eater than 10	gpm.
2. Identified RCS leakage greate	OR	eater than 10	gpm.
	OR	eater than 10	gpm.
2. Identified RCS leakage greate  RELATED EALS:  RCS Leakage > Normal Makeup Capacit TS LCO's	OR er than 25 gpm.	eater than 10	TAB26
2. Identified RCS leakage greate  RELATED EALS:  RCS Leakage > Normal Makeup Capacit	OR er than 25 gpm.	eater than 10	TAB

27 of 130 PAGE: PROC./WORK PLAN NO. PROCEDURE/WORK PLAN TITLE: **EMERGENCY ACTION LEVEL CLASSIFICATION** 1903.010 037-01-0 CHANGE:

ONDITION:  RCS Leakage > Normal Makeup Capacity (50 gpm)  MERGENCY CLASSIFICATION:  Alert  MODES 1-4  RCS leakage is defined as a loss of RCS inventory due to a leak in the RCS or a supporting system that is not or cannot be isolated within 10 minutes.  1. RCS Leakage is >50 gpm (Batch Controller capacity is exceeded).  RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions RCS Leakage > HPI Capacity  Containment Radiation High/Very High  Core Damage Indicated with an ICC Condition  Loss of or Challenge to 3 Fission Product Barriers  Radiological Effluents  5 core Melt  1 .		ATTACHMENT 3		
ONDITION:  RCS Leakage > Normal Makeup Capacity (50 gpm)  MERGENCY CLASSIFICATION:  Alert  MODES1-4_  RITERIA:  NOTE  RCS leakage is defined as a loss of RCS inventory due to a leak in the RCS or a supporting system that is not or cannot be isolated within 10 minutes.  1. RCS Leakage is >50 gpm (Batch Controller capacity is exceeded).  RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions		<del></del>		
CONDITION:  RCS Leakage > Normal Makeup Capacity (50 gpm)  MERGENCY CLASSIFICATION:  Alert  MODES1-4  RITERIA:  NOTE  RCS leakage is defined as a loss of RCS inventory due to a leak in the RCS or a supporting system that is not or cannot be isolated within 10 minutes.  1. RCS Leakage is >50 gpm (Batch Controller capacity is exceeded).  RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions RCS Leakage > HPI Capacity Containment Radiation High/Very High COTE Damage Indicated with an ICC Condition Loss of or Challenge to 3 Fission Product Barriers Radiological Effluents  5		RCS LEAKAGE	•	
CRCS Leakage > Normal Makeup Capacity (50 gpm)  MERGENCY CLASSIFICATION:  Alert  MODES1-4  RITERIA:  NOTE  RCS leakage is defined as a loss of RCS inventory due to a leak in the RCS or a supporting system that is not or cannot be isolated within 10 minutes.  1. RCS Leakage is >50 gpm (Batch Controller capacity is exceeded).  RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions RCS Leakage > HPI Capacity Containment Radiation High/Very High COTE Damage Indicated with an ICC Condition Loss of or Challenge to 3 Fission Product Barriers Ediclogical Effluents 5		2.2	4	
RCS Leakage > Normal Makeup Capacity (50 gpm)  MERGENCY CLASSIFICATION:  Alert  MODES1-4  RITERIA:  NOTE  RCS leakage is defined as a loss of RCS inventory due to a leak in the RCS or a supporting system that is not or cannot be isolated within 10 minutes.  1. RCS Leakage is >50 gpm (Batch Controller capacity is exceeded).  RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions RCS Leakage > HPI Capacity Containment Radiation High/Very High Core Damage Indicated with an ICC Condition Loss of or Challenge to 3 Fission Product Barriers Radiological Effluents  5		<u> </u>		
RCS Leakage > Normal Makeup Capacity (50 gpm)  MERGENCY CLASSIFICATION:  Alert  MODES1-4  RITERIA:  NOTE  RCS leakage is defined as a loss of RCS inventory due to a leak in the RCS or a supporting system that is not or cannot be isolated within 10 minutes.  1. RCS Leakage is >50 gpm (Batch Controller capacity is exceeded).  RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions RCS Leakage > HPI Capacity Containment Radiation High/Very High Core Damage Indicated with an ICC Condition Loss of or Challenge to 3 Fission Product Barriers Radiological Effluents  5				
RCS Leakage > Normal Makeup Capacity (50 gpm)  MERGENCY CLASSIFICATION:  Alert  MODES1-4  RITERIA:  NOTE  RCS leakage is defined as a loss of RCS inventory due to a leak in the RCS or a supporting system that is not or cannot be isolated within 10 minutes.  1. RCS Leakage is >50 gpm (Batch Controller capacity is exceeded).  RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions RCS Leakage > HPI Capacity Containment Radiation High/Very High Core Damage Indicated with an ICC Condition Loss of or Challenge to 3 Fission Product Barriers Radiological Effluents  5	ONDITION:			
MERGENCY CLASSIFICATION:  Alert  MODES1-4  RITERIA: NOTE  RCS leakage is defined as a loss of RCS inventory due to a leak in the RCS or a supporting system that is not or cannot be isolated within 10 minutes.  1. RCS Leakage is >50 gpm (Batch Controller capacity is exceeded).  RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions RCS Leakage > HFI Capacity				
RITERIA:  NOTE  RCS leakage is defined as a loss of RCS inventory due to a leak in the RCS or a supporting system that is not or cannot be isolated within 10 minutes.  1. RCS Leakage is >50 gpm (Batch Controller capacity is exceeded).  RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions RCS Leakage > HPI Capacity Containment Radiation High/Very High Core Damage Indicated with an ICC Condition Loss of or Challenge to 3 Fission Product Barriers Radiological Effluents 5	RCS Leakage > Normal Makeup Ca	pacity (50 gpm)		
RITERIA:  NOTE  RCS leakage is defined as a loss of RCS inventory due to a leak in the RCS or a supporting system that is not or cannot be isolated within 10 minutes.  1. RCS Leakage is >50 gpm (Batch Controller capacity is exceeded).  RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions RCS Leakage > HPI Capacity Containment Radiation High/Very High Core Damage Indicated with an ICC Condition Loss of or Challenge to 3 Fission Product Barriers Radiological Effluents 5				
MODES1-4				
MODES1-4				
RITERIA:  NOTE  RCS leakage is defined as a loss of RCS inventory due to a leak in the RCS or a supporting system that is not or cannot be isolated within 10 minutes.  1. RCS Leakage is >50 gpm (Batch Controller capacity is exceeded).  RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions RCS Leakage > HPI Capacity Containment Radiation High/Very High Core Damage Indicated with an ICC Condition Loss of or Challenge to 3 Fission Product Barriers Radiological Effluents 5	MERGENCY CLASSIFICATION:			<del></del>
RITERIA:  NOTE  RCS leakage is defined as a loss of RCS inventory due to a leak in the RCS or a supporting system that is not or cannot be isolated within 10 minutes.  1. RCS Leakage is >50 gpm (Batch Controller capacity is exceeded).  RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions RCS Leakage > HPI Capacity Containment Radiation High/Very High Core Damage Indicated with an ICC Condition Loss of or Challenge to 3 Pission Product Barriers Radiological Effluents 5	7.1	•		
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RITERIA:  NOTE  RCS leakage is defined as a loss of RCS inventory due to a leak in the RCS or a supporting system that is not or cannot be isolated within 10 minutes.  1. RCS Leakage is >50 gpm (Batch Controller capacity is exceeded).  RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions RCS Leakage > NFI Capacity Containment Radiation High/Very High Core Damage Indicated with an ICC Condition Loss of or Challenge to 3 Fission Product Barriers Radiological Effluents  NOTE  TAB	MODES 1-4			
NOTE  RCS leakage is defined as a loss of RCS inventory due to a leak in the RCS or a supporting system that is not or cannot be isolated within 10 minutes.  1. RCS Leakage is >50 gpm (Batch Controller capacity is exceeded).  TAB  RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions RCS Leakage > HPI Capacity Containment Radiation High/Very High Core Damage Indicated with an ICC Condition Radiological Effluents  TAB				
NOTE  RCS leakage is defined as a loss of RCS inventory due to a leak in the RCS or a supporting system that is not or cannot be isolated within 10 minutes.  1. RCS Leakage is >50 gpm (Batch Controller capacity is exceeded).  RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions RCS Leakage > HPI Capacity Containment Radiation High/Very High Core Damage Indicated with an ICC Condition Radiological Effluents  RCS leakage > Fission Product Barriers Radiological Effluents				
NOTE  RCS leakage is defined as a loss of RCS inventory due to a leak in the RCS or a supporting system that is not or cannot be isolated within 10 minutes.  1. RCS Leakage is >50 gpm (Batch Controller capacity is exceeded).  RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions RCS Leakage > HPI Capacity Containment Radiation High/Very High Core Damage Indicated with an ICC Condition Radiological Effluents  RCS leakage > Fission Product Barriers Radiological Effluents		•		
RCS leakage is defined as a loss of RCS inventory due to a leak in the RCS or a supporting system that is not or cannot be isolated within 10 minutes.  1. RCS Leakage is >50 gpm (Batch Controller capacity is exceeded).  TAB  RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions RCS Leakage > HPI Capacity Containment Radiation High/Very High Core Damage Indicated with an ICC Condition Loss of or Challenge to 3 Fission Product Barriers Radiological Effluents	n = = = 1 1			
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RELATED EALS:  RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions RCS Leakage > HPI Capacity Containment Radiation High/Very High Core Damage Indicated with an ICC Condition Loss of or Challenge to 3 Fission Product Barriers Radiological Effluents  TAB  1  1  1  1  1  1  1  1  1  1  1  1  1	PCS leakage is defined as a lo	ess of RCS inventory	due to a leak in the	e RCS or a
RELATED EALS:  RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions RCS Leakage > HPI Capacity Containment Radiation High/Very High Core Damage Indicated with an ICC Condition Loss of or Challenge to 3 Fission Product Barriers Radiological Effluents  TAB  1  1  1  1  1  1  1  1  1  1  1  1  1	PCS leakage is defined as a lo	ess of RCS inventory	due to a leak in the ed within 10 minutes	e RCS or a
RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions  RCS Leakage > HPI Capacity  Containment Radiation High/Very High  Core Damage Indicated with an ICC Condition  Loss of or Challenge to 3 Fission Product Barriers  Radiological Effluents	RCS leakage is defined as a lo supporting system that is not	ess of RCS inventory or cannot be isolat	ed within 10 minutes	e RCS or a
RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions  RCS Leakage > HPI Capacity  Containment Radiation High/Very High  Core Damage Indicated with an ICC Condition  Loss of or Challenge to 3 Fission Product Barriers  Radiological Effluents  2  2  1  5	RCS leakage is defined as a lo supporting system that is not	ess of RCS inventory or cannot be isolat	ed within 10 minutes	e RCS or a
RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions  RCS Leakage > HPI Capacity  Containment Radiation High/Very High  Core Damage Indicated with an ICC Condition  Loss of or Challenge to 3 Fission Product Barriers  Radiological Effluents  2  2  1  5	RCS leakage is defined as a lo supporting system that is not	ess of RCS inventory or cannot be isolat	ed within 10 minutes	e RCS or a
RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions  RCS Leakage > HPI Capacity  Containment Radiation High/Very High  Core Damage Indicated with an ICC Condition  Loss of or Challenge to 3 Fission Product Barriers  Radiological Effluents  2  2  1  5	RCS leakage is defined as a lo supporting system that is not	ess of RCS inventory or cannot be isolat	ed within 10 minutes	e RCS or a
RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions  RCS Leakage > HPI Capacity  Containment Radiation High/Very High  Core Damage Indicated with an ICC Condition  Loss of or Challenge to 3 Fission Product Barriers  Radiological Effluents  2  2  1  5	RCS leakage is defined as a lo supporting system that is not	ess of RCS inventory or cannot be isolat	ed within 10 minutes	e RCS or a
RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions  RCS Leakage > HPI Capacity  Containment Radiation High/Very High  Core Damage Indicated with an ICC Condition  Loss of or Challenge to 3 Fission Product Barriers  Radiological Effluents	RCS leakage is defined as a lo supporting system that is not	ess of RCS inventory or cannot be isolat	ed within 10 minutes	e RCS or a
RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions  RCS Leakage > HPI Capacity  Containment Radiation High/Very High  Core Damage Indicated with an ICC Condition  Loss of or Challenge to 3 Fission Product Barriers  Radiological Effluents	RCS leakage is defined as a lo supporting system that is not	ess of RCS inventory or cannot be isolat	ed within 10 minutes	e RCS or a
RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions  RCS Leakage > HPI Capacity  Containment Radiation High/Very High  Core Damage Indicated with an ICC Condition  Loss of or Challenge to 3 Fission Product Barriers  Radiological Effluents	RCS leakage is defined as a lo supporting system that is not	ess of RCS inventory or cannot be isolat	ed within 10 minutes	e RCS or a
RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions  RCS Leakage > HPI Capacity  Containment Radiation High/Very High  Core Damage Indicated with an ICC Condition  Loss of or Challenge to 3 Fission Product Barriers  Radiological Effluents	RCS leakage is defined as a lo supporting system that is not	ess of RCS inventory or cannot be isolat	ed within 10 minutes	e RCS or a
RCS Leakage > Normal M/U Capacity with Fuel Clad Failure Conditions  RCS Leakage > HPI Capacity  Containment Radiation High/Very High  Core Damage Indicated with an ICC Condition  Loss of or Challenge to 3 Fission Product Barriers  Radiological Effluents	RCS leakage is defined as a lo supporting system that is not	ess of RCS inventory or cannot be isolat	ed within 10 minutes	e RCS or a
RCS Leakage > HPI Capacity  Containment Radiation High/Very High  Core Damage Indicated with an ICC Condition  Loss of or Challenge to 3 Fission Product Barriers  Radiological Effluents  2 1 1 5	RCS leakage is defined as a lo supporting system that is not	ess of RCS inventory or cannot be isolat	ed within 10 minutes	
RCS Leakage > HPI Capacity  Containment Radiation High/Very High  Core Damage Indicated with an ICC Condition  Loss of or Challenge to 3 Fission Product Barriers  Radiological Effluents  2 1 1 5	RCS leakage is defined as a lo supporting system that is not	ess of RCS inventory or cannot be isolat	ed within 10 minutes	
Containment Radiation High/Very High  Core Damage Indicated with an ICC Condition  Loss of or Challenge to 3 Fission Product Barriers  Radiological Effluents	RCS leakage is defined as a lo supporting system that is not  1. RCS Leakage is >50 gpm (	ess of RCS inventory or cannot be isolat Batch Controller ca	pacity is exceeded).	TAB
Core Damage Indicated with an ICC Condition  Loss of or Challenge to 3 Fission Product Barriers  Radiological Effluents  1 5	RCS leakage is defined as a lo supporting system that is not  1. RCS Leakage is >50 gpm (  ELATED EALS:  RCS Leakage > Normal M/U Capac	ess of RCS inventory or cannot be isolat Batch Controller ca	pacity is exceeded).	TAB
Loss of or Challenge to 3 Fission Product Barriers  Radiological Effluents	RCS leakage is defined as a lo supporting system that is not  1. RCS Leakage is >50 gpm (  RELATED EALS:  RCS Leakage > Normal M/U Capace RCS Leakage > HPI Capacity	ess of RCS inventory or cannot be isolated.  Batch Controller cannot be isolated.	pacity is exceeded).	TAB
Radiological Effluents	RCS leakage is defined as a lo supporting system that is not  1. RCS Leakage is >50 gpm (  RCS Leakage > Normal M/U Capace RCS Leakage > HPI Capacity Containment Radiation High/Ver	ess of RCS inventory or cannot be isolated and the isolat	pacity is exceeded).	TAB  2 2 1
Core Melt	RCS leakage is defined as a lo supporting system that is not  1. RCS Leakage is >50 gpm (  RELATED EALS:  RCS Leakage > Normal M/U Capace RCS Leakage > HPI Capacity Containment Radiation High/Ver Core Damage Indicated with an	ess of RCS inventory or cannot be isolated.  Batch Controller cannot be isolated.  Batch Controller cannot be isolated.  Batch Controller cannot be isolated.	pacity is exceeded).	TAB  2 2 1 1
	RCS leakage is defined as a lo supporting system that is not  1. RCS Leakage is >50 gpm (  RCS Leakage is >50 gpm (  RCS Leakage > Normal M/U Capace RCS Leakage > HPI Capacity Containment Radiation High/Ver Core Damage Indicated with an Loss of or Challenge to 3 Fiss	ess of RCS inventory or cannot be isolated.  Batch Controller cannot be isolated.  Batch Controller cannot be isolated.  Batch Controller cannot be isolated.	pacity is exceeded).	TAB  2 2 1 1 1

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EMERGENCY ACTION LEVEL CLASSIFICATION CHANGE: 037-01-0

ATTACHMENT 3 UNIT 1 RCS LEAKAGE

2.3

C				

RCS Leakage > Normal Makeup Capacity (50 gpm) with >1.0% Fuel Cladding Failure Conditions

#### EMERGENCY CLASSIFICATION:

Site Area Emergency

MODES \_\_1-4\_\_\_

#### CRITERIA:

#### NOTE

RCS leakage is defined as a loss of RCS inventory due to a leak in the RCS or a supporting system that is not or cannot be isolated within 10 minutes.

1. RCS Leakage is >50 gpm (Batch Controller capacity is exceeded) with  $\geq 1.0$ % Fuel Cladding Failure in the RCS (EAL 1.2)

#### NOTE

EAL 2.2 RCS Leakage > Normal Makeup Capacity (50 gpm)
EAL 1.2 RCS Activity Indicates >1% fuel cladding failure

RELATED EALS:	TAB
Containment Radiation indicates LOCA and fuel failure	<u> </u>
Core Damage Indicated with an ICC Condition	1
Loss of or Challenge to 3 Fission Product Barriers	1
Radiological Effluents	5
Core Melt	11

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#### **EMERGENCY ACTION LEVEL CLASSIFICATION**

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CHANGE:

037-01-0

ATTACHMENT 3 UNIT 1 RCS LEAKAGE

2.4

CONDITION:	
RCS Leakage > HPI Capacity	
EMERGENCY CLASSIFICATION:	
Site Area Emergency	
MODES1-4	
	The state of the s

#### CRITERIA:

#### NOTE

RCS leakage is defined as a loss of RCS inventory due to a leak in the RCS or a supporting system that is not or cannot be isolated within 10 minutes.

- RCS Leakage > HPI Capacity as indicated by:
  - A. Full available HPI being injected into the core

#### AND

B. RCS Pressure/Pressurizer Level continues to decrease or RCS Subcooling margin remains inadequate with no indication of recovery.

RELATED EALS:		TAB
Containment Radiation High/Very H		1
Core Damage Indicated with an ICC	Condition	1
Loss of or Challenge to 3 Fission	Product Barriers	1
Radiological Effluents		5
Core Melt		<u>1</u> _

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		CHANGE:	031-01-0

## ATTACHMENT 3 UNIT 1 SECONDARY SYSTEM EVENTS

<u>3.1</u>

CONDITION:			
Uncontrolled OTSG Depressurization F	Resulting in MSLI Ac	tuation	
EMERGENCY CLASSIFICATION:			
Notification of Unusual Event		•	
MODES 1-4	e e e e e e e e e e e e e e e e e e e		
CRITERIA:			
Any manual or automatic actuated depressurization.	tion of MSLI due to	uncontrolled OTS	G
RELATED EALS:			TAB
OTSG Tube Leak Radiological Effluents			3 5

PROC./WORK PLAN NO.	PROCEDURE/WORK PLAN TITLE:	PAGE:	31 of 130
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		CHANGE:	037-01-0

### ATTACHMENT 3 UNIT 1 SECONDARY SYSTEM EVENTS

<u>3.2</u>	•	
ONDITION:		
OTSG Tube Leakage > Tech. Spec. Limits		
MERGENCY CLASSIFICATION:		<u>:</u>
Notification of Unusual Event		
MODES 1-4		
RITERIA:		
<ol> <li>RCS Leak rate of &gt; 150 gallons per day more of the following:</li> </ol>	y (.104 gpm), coincident w	ith one or
more of the following:  a) Main Steam line N-16 alarm(s) b) Steam Line High Range RAD Monitors c) Condenser off gas process monitor co	Increase (RI-2681 or 2682) ount rate increase	
more of the following:  a) Main Steam line N-16 alarm(s) b) Steam Line High Range RAD Monitors	Increase (RI-2681 or 2682) ount rate increase	
more of the following:  a) Main Steam line N-16 alarm(s) b) Steam Line High Range RAD Monitors c) Condenser off gas process monitor co	Increase (RI-2681 or 2682) ount rate increase	
more of the following:  a) Main Steam line N-16 alarm(s) b) Steam Line High Range RAD Monitors c) Condenser off gas process monitor co	Increase (RI-2681 or 2682) ount rate increase	
more of the following:  a) Main Steam line N-16 alarm(s) b) Steam Line High Range RAD Monitors c) Condenser off gas process monitor co	Increase (RI-2681 or 2682) ount rate increase	
more of the following:  a) Main Steam line N-16 alarm(s) b) Steam Line High Range RAD Monitors c) Condenser off gas process monitor co	Increase (RI-2681 or 2682) ount rate increase	
more of the following:  a) Main Steam line N-16 alarm(s) b) Steam Line High Range RAD Monitors c) Condenser off gas process monitor co	Increase (RI-2681 or 2682) ount rate increase	
more of the following:  a) Main Steam line N-16 alarm(s) b) Steam Line High Range RAD Monitors c) Condenser off gas process monitor co	Increase (RI-2681 or 2682) ount rate increase	
more of the following:  a) Main Steam line N-16 alarm(s) b) Steam Line High Range RAD Monitors c) Condenser off gas process monitor co	Increase (RI-2681 or 2682) ount rate increase	
more of the following:  a) Main Steam line N-16 alarm(s) b) Steam Line High Range RAD Monitors c) Condenser off gas process monitor of d) Nuclear Chemistry sample indicating	Increase (RI-2681 or 2682) ount rate increase	TAB
more of the following:  a) Main Steam line N-16 alarm(s) b) Steam Line High Range RAD Monitors c) Condenser off gas process monitor of d) Nuclear Chemistry sample indicating	Increase (RI-2681 or 2682) ount rate increase	ak

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#### ATTACHMENT 3 UNIT 1 SECONDARY SYSTEM EVENTS

3.3

COI			

OTSG Tube Leakage > 10 gpm concurrent with ongoing steam release or loss of offsite power.

EMERGENCY CLASSIFICATION:	 		
Alert			
MODES1-4		•	

#### CRITERIA:

- 1. RCS Leakrate increase of >10 gpm, coincident with one of more of the following:
  - a. Main Steam line N-16 alarms(s)
  - b. Condenser Off Gas Process Monitor count rate increase
  - c. Steam Line High Range Rad Monitors increase (RI-2681 or RI-2682)
  - d. Nuclear Chemistry sample indicating primary-secondary tube leak

#### AND

- 2. ANY of the following occur:
  - A. Loss of offsite power
  - B. Steam release to the environment from either or both steam generator(s) indicated by:
    - Main Steam Safety Valve(s) maintaining OTSG pressure (other than for normal post trip response)
    - 2. Use of ADV(s) to control OTSG pressure
    - 3. P7A is in use and continued operation required to maintain OTSG levels
    - 4. Steam line break outside containment

RELATED EALS:	TAB
OTSG Tube Rupture >50 gpm with ongoing steam release	3
OTSG Tube Leak with fuel cladding failure	3
RCS Leakage	2
Radiological Effluents	5
High Radiation/Airborne Levels	5
Electrical Power Failures	4
Loss of or Challenge to 3 Fission Product Barriers	1

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CHANGE: 037-01-0

#### ATTACHMENT 3 UNIT 1 SECONDARY SYSTEM EVENTS

<u>3.4</u>

COND		

OTSG Tube Rupture with primary to secondary leakage >normal makeup capacity (50 gpm) with ongoing steam release or loss of offsite power.

EMERGENCY	CLASSIFICATION:

Site Area Emergency

MODES \_\_1-4\_\_

#### CRITERIA:

- 1. OTSG Tube Rupture as indicated by BOTH of the following:
  - A. RCS Leakage > Normal Makeup Capacity (50 gpm)
  - B. Coincident with one or more of the following:
    - a) Main Steam line N-16 alarm(s)
    - b) Steam Line High Range RAD Monitors Increase (RI-2681 or 2682)
    - c) Condenser off gas process monitor count rate increase
    - d) Nuclear Chemistry sample indicating Primary-Secondary tube leak

#### AND

- 2. ANY of the following occur:
  - A. Loss of offsite power
  - B. Steam release to the environment from either or both steam generator(s) indicated by:
    - Main Steam Safety Valve(s) maintaining OTSG pressure (other than for normal post trip response)
    - 2. Use of ADV(s) to control OTSG pressure
    - 3. P7A is in use and continued operation required to maintain OTSG levels
    - 4. Steam line break outside containment

RELATED EALS:	TAB
RCS Leakage	2
Radiological Effluents	5
Loss of or Challenge to 3 Fission Product Barriers	1
Electrical Power Failures	4

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1903.010 EMERGENCY ACTION LEVEL CLASSIFICATION

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#### ATTACHMENT 3 UNIT 1 SECONDARY SYSTEM EVENTS

3.5

CONT	וידדו	ON.

OTSG Tube Leak >1 gpm with >1% fuel cladding failure with ongoing steam release

EMERGENCY CLASSIFICATION:	
Site Area Emergency	
MODES1-4	

#### CRITERIA:

- OTSG Leakrate increase of ≥1 gpm, coincident with one or more of the following:
  - a) Main Steam line N-16 alarm(s)
  - b) Steam Line High Range RAD Monitors Increase (RI-2681 or 2682)
  - c) Condenser off gas process monitor count rate increase
  - d) Nuclear Chemistry sample indicating Primary-Secondary tube leak

#### AND

2. Greater than 1% fuel cladding failure indicated in the RCS (EAL 1.2)

#### AND

- 3. ANY of the following occur:
  - A. Loss of offsite power
  - B. Steam release to the environment from either or both steam generator(s) indicated by:
    - Main Steam Safety Valve(s) maintaining OTSG pressure (other than for normal post trip response)
    - 2. Use of ADV(s) to control OTSG pressure
    - 3. P7A is in use and continued operation required to maintain OTSG levels
    - 4. Steam line break outside containment

#### RELATED EALS:

#### CAUTION

If RCS leakage is  $\geq$  50 gpm, EAL 1.7 will apply. If RCS leakage is degrading and approaching 50 gpm consider EAL 1.7.

	TAB
RCS Leakage Radiological Effluents Loss of or Challenge to 3 Fission Product Barriers Electrical Power Failures	2 5 1 4

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# ATTACHMENT 3 UNIT 1 ELECTRICAL POWER FAILURES

CONDITION:			
Degraded Power			
EMERGENCY CLASSIFICATION:			:
Notification of Unusual Event			
MODES <u>All</u>			· · · · · · · · · · · · · · · · · · ·
CRITERIA:			
Only Diesel Generator (Station available to 4160V Buses (A3 a)	Blackout Dies	sel or Emergency Diese	l) power is
	AND		
2. No voltage indicated on 6.9 KV A1, and A2)	AND 4.16 KV 1	nonvital buses (H1, H2	•
RELATED EALS:			TAB
Blackout OTSG Tube Leak			4
		· ,	3

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# ATTACHMENT 3 UNIT 1 ELECTRICAL POWER FAILURES

CONDITION:		· · · · · · · · · · · · · · · · · · ·
Station Blackout		
EMERGENCY CLASSIFICATION:		
Alert MODES All		
CRITERIA:		
1. All 4160V buses de-energized.		
RELATED EALS:		TAB
Blackout more than 15 minutes Loss of Control Room Annunciators	-	4

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#### **EMERGENCY ACTION LEVEL CLASSIFICATION**

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### ATTACHMENT 3 UNIT 1 ELECTRICAL POWER FAILURES

Electrical Power Failures Loss of Control Room Annunciators Core Melt	4 6 1
RELATED EALS:	TAB
1. All 4160V buses de-energized for greater than 15 minute	; <b>0</b> •
CRITERIA:	
MODES <u>All</u>	
Site Area Emergency	
EMERGENCY CLASSIFICATION:	
Blackout for more than 15 minutes.	
CONDITION:	

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# ATTACHMENT 3 UNIT 1 ELECTRICAL POWER FAILURES

MERGENCY CL	ASSIFICATION:						1 1
Alert MODES	All						
CRITERIA:							
Α.	of voltage on D01 and D02 RA1 and RA2 D11 and D21	ALL of the	following	busses			
						•	
					•		

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	ATTACHMENT 3		

### UNIT 1

ELECTRICAL POWER FAILURE	es ·
4.5	
CONDITION:	
Loss of All Vital DC Power for more than 15 minutes	
EMERGENCY CLASSIFICATION:	
Site Area Emergency	
MODES All	
CRITERIA:	
1. Loss of voltage on ALL of the following busses	
A. D01 and D02	
B. RA1 and RA2 C. D11 and D21	
<u>AND</u>	
2. DC power is not restored within 15 minutes	
RELATED EALS:	TAB
Electrical Power Failures	4

RELATED EALS:	 ·	TAB
Electrical Power Failures Loss of Control Room Annunciators		<u>4</u> <u>6</u>

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### ATTACHMENT 3 UNIT 1 RADIOLOGICAL EFFLUENTS

<u>5.1</u>

			-		
7 Y 1	וואו	IT		171	•

Projected or measured activity at the Site Boundary, averaged over one hour, is greater than or equal to 0.05 mrem/hr TEDE or 0.15 mrem/hr Child Thyroid CDE or Liquid radiological effluents exceed ODCM Limitations.

EMERGENCY CLASSIFICATION:	
Notification of Unusual Event	٠
MODESAll	

#### CRITERIA:

- 1. Radiological Release which exceeds ANY of the following limits
  - A. Projected activity at the Site Boundary, as calculated by the RDACS method, indicate greater than or equal to 0.05 mrem/hr TEDE or 0.15 mrem/hr Child Thyroid CDE.

OR

B. Offsite monitoring teams report activity at the Site Boundary which, when averaged over the previous one hour, exceeds 0.05 mrem/hr TEDE or 0.15 mrem/hr Child Thyroid CDE.

<u>OR</u>

C. Liquid radiological effluents exceed ODCM Limitations.

RELATED EALS:		TAB
Radiological Effluents High Radiation/Airborne Le OTSG Tube Leak	vels	<u>5</u>

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#### ATTACHMENT 3 UNIT 1 RADIOLOGICAL EFFLUENTS

5.2

~~		-		
·co	עמו	1.1.	$\mathbf{I}\mathbf{C}$	N:

Projected or measured activity at the Site Boundary, averaged over one hour, is greater than or equal to 0.5 mrem/hr TEDE or 1.5 mrem/hr Child Thyroid CDE or Liquid radiological effluents exceed 10 times ODCM Limitations.

EMERGENCY CLASSIFICATION:		
Alert		
MODES All		
<u></u>		<del></del>

#### CRITERIA:

- 1. Radiological Release which exceeds ANY of the following limits
  - A. Projected activity at the Site Boundary, as calculated by the RDACS method, indicates greater than or equal to 0.5 mrem/hr TEDE or 1.5 mrem/hr Child Thyroid CDE.

<u>or</u>

B. Offsite monitoring teams report activity at the Site Boundary which, when averaged over the previous one hour, exceeds 0.5 mrem/hr TEDE or 1.5 mrem/hr Child Thyroid CDE.

OR

C. Liquid radiological effluents exceed 10 times ODCM Limitations.

RELATED EALS:	TAB	
Radiological Effluents OTSG Tube Leak Containment Radiation High	5 3 1	

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### ATTACHMENT 3 UNIT 1 RADIOLOGICAL EFFLUENTS

5.3

COND	TTT	OΝ	•

Radiological Effluents are greater than or equal to 50 mrem/hr TEDE or 150 mrem/hr Child Thyroid CDE at the Site Boundary.

PMPDCPNCV	CLASSIFICATION:
EMERGENCI	CTROOTLICATION:

Site Area Emergency

MODES \_\_All

#### CRITERIA:

- 1. Radiological Release which exceeds ANY of the following limits
  - A. Projected dose rates at the Site Boundary, as calculated by the RDACS method, indicate greater than or equal to 50 mrem/hr TEDE or 150 mrem/hr Child Thyroid CDE.

<u>OR</u>

B. Offsite monitoring teams report dose rates at the Site Boundary are greater than or equal to 50 mrem/hr TEDE or 150 mrem/hr Child Thyroid CDE.

TAB
5 1 1 1

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### ATTACHMENT 3 UNIT 1 RADIOLOGICAL EFFLUENTS

5.4

CO		

Radiological Effluents are greater than or equal to 250 mrem/hr TEDE or 500 mrem/hr Child Thyroid CDE at the Site Boundary.

#### EMERGENCY CLASSIFICATION:

General Emergency

MODES \_\_All\_\_

#### CRITERIA:

- 1. Radiological Release which exceeds ANY of the following limits
  - A. Projected dose rates at the Site Boundary, as calculated by the RDACS method, indicate greater than or equal to 250 mrem/hr TEDE or 500 mrem/hr Child Thyroid CDE.

<u>OR</u>

B. Offsite monitoring teams report dose rates at the Site Boundary are greater than or equal to 250 mrem/hr TEDE or 500 mrem/hr Child Thyroid CDE.

RELATED EALS:	 TAB
Core Melt Loss of or Challenge to 3 Fission Product Barriers Containment Radiation High / Very High	1 1 1

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#### ATTACHMENT 3 UNIT 1 RADIOLOGICAL EFFLUENTS

	<u>5.5</u>	•	. •
CONDITION:			
High Radiation/Airborne Levels			
		1.	
MERGENCY CLASSIFICATION:	· · · · · · · · · · · · · · · · · · ·		
Alert			
MODES <u>All</u>			
RITERIA:			
C. General area radiation		e of radiologically o	controlled
D. Airborne levels as	Follows:		
Auxiliary Building	ng >100 DAC (Gene	ral Area)	
• Turbine Building	- <b>-</b>		
• Turbine Building	≥10 DAC ll be defined as: ndries. (For Exa	ANY radioactive mat mple: spent resin sp	oill, RCS
Turbine Building  NOTE: "Loss of Control" shall its normal system bour	≥10 DAC ll be defined as: ndries. (For Exa	ANY radioactive mat mple: spent resin sp	oill, RCS
Turbine Building  NOTE: "Loss of Control" shall  its normal system bour  liquid spill, spent for	≥10 DAC ll be defined as: ndries. (For Exa	ANY radioactive mat mple: spent resin sp	oill, RCS
Turbine Building  NOTE: "Loss of Control" shall     its normal system bour	≥10 DAC ll be defined as: ndries. (For Exa	ANY radioactive mat mple: spent resin sp	oill, RCS ease, etc.)

Spent Fuel Accident

RCS Leakage

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# ATTACHMENT 3 UNIT 1 RADIOLOGICAL EFFLUENTS

<u>5.6</u>

CONDITION:				
Spent Fuel Accident				
		<del></del>		
EMERGENCY CLASSIFICATION:				
Site Area Emergency			•	
MODESAll		er.		
		ž -	-	
RITERIA:				
1. The loss of water <u>OR</u> damage Rx core (head removed), ref loading pit, fuel tilt pit movement or storage of spen	fueling canal, spent for or any plant area invo	uel pool, cas		
Rx core (head removed), ref	fueling canal, spent for or any plant area invo	uel pool, cas		
Rx core (head removed), ref loading pit, fuel tilt pit	fueling canal, spent fuel or any plant area invent fuel.  AND  to 10 R/hr on Area Rad	uel pool, cas olved in the	s <b>k</b>	
Rx core (head removed), ref loading pit, fuel tilt pit movement or storage of spen  2. Radiation levels increase t	fueling canal, spent fuel or any plant area invent fuel.  AND  to 10 R/hr on Area Rad	uel pool, cas olved in the	s <b>k</b>	
Rx core (head removed), ref loading pit, fuel tilt pit movement or storage of spen  2. Radiation levels increase t 10 Rem/hr HP Survey Report.	fueling canal, spent fuel or any plant area invent fuel.  AND  to 10 R/hr on Area Rad	uel pool, cas olved in the	s <b>k</b>	
Rx core (head removed), ref loading pit, fuel tilt pit movement or storage of spen  2. Radiation levels increase t 10 Rem/hr HP Survey Report.	fueling canal, spent fuel or any plant area invent fuel.  AND  to 10 R/hr on Area Rad	uel pool, cas olved in the	s <b>k</b>	TAB
Rx core (head removed), ref loading pit, fuel tilt pit movement or storage of spen  2. Radiation levels increase t 10 Rem/hr HP Survey Report.  RELATED EALS:  Radiological Effluents	fueling canal, spent fuel or any plant area invent fuel.  AND  to 10 R/hr on Area Rad	uel pool, cas olved in the	sk	TAB
Rx core (head removed), ref loading pit, fuel tilt pit movement or storage of spen  2. Radiation levels increase t 10 Rem/hr HP Survey Report.	fueling canal, spent fuel or any plant area invent fuel.  AND  to 10 R/hr on Area Rad	uel pool, cas olved in the	sk	TAB
Rx core (head removed), ref loading pit, fuel tilt pit movement or storage of spen  2. Radiation levels increase t 10 Rem/hr HP Survey Report.  RELATED EALS:  Radiological Effluents High Radiation/Airborne Levels	fueling canal, spent fuel or any plant area invent fuel.  AND  to 10 R/hr on Area Rad	uel pool, cas olved in the	sk	TAB 5 5

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#### ATTACHMENT 3 UNIT 1 SAFETY SYSTEM FUNCTION

6.1

~~		-	_	_	_	-		
CO	M	1				rı	NI.	
~~	ΔЧ.	_	_	_	_	v	7.4	٠

Deviation from T.S. action statements when required to shutdown or cooldown or deviations pursuant to 10CFR50.54(x)

#### EMERGENCY CLASSIFICATION:

Notification of Unusual Event

MODES 1-4

#### CRITERIA:

- 1. <u>EITHER</u> of the following conditions exist:
  - A. Inability to reach required mode within Tech. Spec. limits.
  - B. Deviation from Tech Specs authorized pursuant to 10CFR50.54(x)

RELATED EALS:	·	 	TAB
RCS Leakage			2
OTSG Tube Leak RCS Activity High			1

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# ATTACHMENT 3 UNIT 1 SAFETY SYSTEM FUNCTION

Reacto	r Protection	System F	ailure to	Complete an	n Automatic	Trip	
EMERGEN	CY CLASSIFIC	CATION:					
Alert N	ODES <u>1-2</u>						
CRITERI	<b>A:</b>						
1.	fails to ini	tiate and				channels and brings the	
	subcritical.			AND			

RELATED EALS:				TAB	
		· · · · · · · · · · · · · · · · · · ·			
RPS Failure to Complete a Manu	al Trip			6	
Core Melt	_			1	_
 Core Damage Indicated with an	ICC Condition			1	_
Loss of or Challenge to 3 Fiss				1	
			 	the second second	- 1

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CONDI'	PION:					
React	or Protection Sy	stem Failure (	to Complete	an Manual Tr	ip	
EMERG	ency classificati	ON:				
Site	Area Emergency MODES 1-2					
CRITE	RIA:					
1.	A valid RPS tri DSS fails to in subcritical.	p setpoint is itiate and cor	exceeded on mplete an au AND	ANY TWO RPS tomatic trip	that brings	the reacto
2.	DSS fails to in	itiate and con	Mplete an au  AND ion occurs.	tomatic trip	that brings	s the reacto
	DSS fails to in subcritical.  Failure of manu	itiate and con	Mplete an au  AND ion occurs.	tomatic trip	that brings	s the reacto
2.	DSS fails to in subcritical.  Failure of manu	itiate and con	Mplete an au  AND ion occurs.	tomatic trip	that brings	s the reacto
RELATI Loss Core	DSS fails to in subcritical.  Failure of manu Control Room; i	al trip function.e., must leave	AND ion occurs. we Control R	(Pailure to	that brings	eactor in th

# PROC.WORK PLAN NO. PROCEDURE/WORK PLAN TITLE: 1903.010 EMERGENCY ACTION LEVEL CLASSIFICATION CHANGE: 037-01-0

	SAFEII SISIE	M FUNCTION		
CONDITION:	<u>6.4</u>			
Loss of Dose Assessment Capa	bilities			
MERGENCY CLASSIFICATION:				
Notification of Unusual Even	it			
MODES <u>All</u>				
CRITERIA:				
1. The following conditio	ons exist in the	Low Level Rac	waste Building:	
A. SPING is inopera B. Compacting is in C. Inability to obt	progress AND	local grab sa	umples every 2 hours.	
	<u>OR</u>			
<ol><li>Reactor Building Purge isolable, and the appl</li></ol>			ation System is not	
	ÓD			
	<u>OR</u>			
3. All of the following c the Auxiliary Building	onditions exist	for any source	e of gaseous effluer ng ventilation syste	its in
the Auxiliary Building  A. Applicable SPING	conditions exist or Spent Fuel is inoperable	for any source Storage Buildi	ce of gaseous effluening ventilation systemmeles every 2 hours	ts in
the Auxiliary Building  A. Applicable SPING	conditions exist or Spent Fuel is inoperable	for any source Storage Buildi	ng ventilation syste	ems.

#### 

# ATTACHMENT 3 UNIT 1 SAFETY SYSTEM FUNCTION

CONDITION:				
Loss of Communica	ations			
EMERGENCY CLASSIF	ICATION:			
Notification of t				
CRITERIA:				
	oss of ANY TWO of the			
	t telephone systems ( ion Radio	Commercial lele	phones and witcrow	ave/
C. Emerg	gency Notification Sy	stem		
RELATED EALS:				TAB
None				

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CONDITION: Loss of Control Room Annunciators	<b>s</b>
EMERGENCY CLASSIFICATION:	
Alert	
MODES All	
CRITERIA:	
1. Loss of both AC and DC power	er to >50% of control room annunciators.
RELATED EALS:	TAB
Loss of Control Room Annunicators	s with Transient in Progress6

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Loss of Control Room Ann	nunciators with Trans	ient in Progress	
EMERGENCY CLASSIFICATION			
Site Area Emergency			
MODESAll			
RITERIA:			
	and DC power to >50% of AND		
2. A plant transient	AND	rogress. (See sectio	
2. A plant transient	AND is initiated or in p	rogress. (See sectio	
2. A plant transient procedure for the	AND is initiated or in p	rogress. (See sectio	
2. A plant transient	AND is initiated or in p	rogress. (See sectio	n 4.18 of this

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		6.8	. <b>J.</b> (2011		
CONDITION:					
Control Room Evacuation					
EMERGENCY CLASSIFICATION:					
Alert MODES <u>All</u>					
CRITERIA:					
1. Control Room evacuation	on is expec	ted to	occur <u>OR</u> ha	s already occu	ırred.
RELATED EALS:					TAB
Control Room Evacuation and	control of	shutdo	wn systems	not	6
established in 15 minutes Fire or explosion onsite aff	fecting bot	h train	s of any ES	Systems	<u> </u>
					1

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			<u>6.9</u>		
CONDITION:					
Control Roominutes.	m Evacuation	and control of	shutdown sys	tems not establi	shed in 15
EMERGENCY CL	ASSIFICATION:				
Site Area E	mergency				
MODES	All_				
CRITERIA:					
1. Contr	ol Room evacu	ation has occu	rred AND cont:	rol of shutdown	
1. Contr syste	ol Room evacu	ation has occu ablished from	rred <u>AND</u> cont local station	rol of shutdown s within 15 minu	ites.
syste	ms is not est	ation has occur ablished from	rred <u>AND</u> conti	rol of shutdown s within 15 minu	ites.
ELATED EALS	ms is not est	ablished from	local station	rol of shutdown swithin 15 minu	TAB  1 6 1

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#### ATTACHMENT 3 UNIT 1 SAFETY SYSTEM FUNCTION

CONDITION:	
Loss of De	ecay Heat Removal Capabilities
EMERGENCY (	CLASSIFICATION:
Alert MODES	3 <u>5-6</u>
CRITERIA:	
	s of Decay Heat Removal capabilities shall be identified as <u>ANY</u> of the lowing:  RCS indicates saturated conditions  Loss of both Decay Heat trains for >1 hr and OTSGs are not available for decay heat removal (NA if Fuel Transfer Canal is flooded)
c.	HPI is required for cooling the reactor core.
RELATED EAL	LS:
Core Damag	

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	SA	FETY SYSTEM FU	NCTION		
		6.11		er e	
CONDITION:					
CONDITION:					
Degraded H	ot Shutdown Capability				
EMERGENCY C	ASSIFICATION:				
Site Area					
MODES	1-4				
CRITERIA:					
<b>A.</b>	Loss of <u>ALL</u> steam rem Turbine Bypass Valves Valves)	noval capabili , Atmospheric	y on <u>BOTH</u> OTSGs Dump Valves, ar	s. (e.g., Lo nd Main Stea	ess of <u>ALL</u> m Safety
В.	Loss of <u>ALL</u> feedwater BOTH Main Feedwater T	supply capab rains and <u>BOT</u>	llity on <u>BOTH</u> OT EFW trains)	SGs. (e.g.,	Loss of
<b>c.</b>	BOTH HPI Trains are i reactor core.	noperable and	they are requir	red for cool	ing the
					TAB
Containmen Core Melt	e Indicated with an ICC Radiation Very High Challenge to 3 Fission		lers		1 1 1 1

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	HAZARDS TO	TTACHMENT UNIT 1 STATION			
		<u>7.1</u>			
Security threat onsite but attempted entry or sabotage	outside the which has	e Protect been sto	ed Area Secur pped outside	rity Fence (e the security	·g., fence).
MERGENCY CLASSIFICATION:					
Notification of Unusual Evo	ent				
MODES All					
RITERIA:  1. Security threat onsite attempted entry or sabo	but outside	the Prot	ected Area S	ecurity Fence	(e.g.,
attempted entry or sabo	tage which	nas been	scopped outs	ide the secur	ity rence).
		<u>OR</u>			
2. A Credible site-specif	ic security	threat n	otification.		
z. A credible bice-specif					
2. A Credible Site-Specia					

	RELATED	EALS:					<u> </u>		TAB
٠	Ongoing	security	Threat	Inside	Protected	Area I	Pence but	outside	<u> </u>
	plant b	uildings				4779			

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ATTACHMENT 3 UNIT 1	
HAZARDS TO STATION OPERATION.  7.2	
CONDITION:	
Ongoing security threat within the Protected Area Security Fence but ou plant buildings	tside of
EMERGENCY CLASSIFICATION:	
Alert	
MODES All	
CRITERIA:	
Same as the Condition stated above.	
RELATED EALS:	TAB
Ongoing security threat within plant buildings but not in Control Room or vital areas.	7

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### ATTACHMENT 3 UNIT 1 HAZARDS TO STATION OPERATION

	HAZARDS T					
	14 14	7.3				
ONDITION:		<u> </u>		<del></del>		
Ongoing security threat wi vital areas	thin plant	building	s but not	: withi	n the Contr	ol Room or
MERGENCY CLASSIFICATION:						
Site Area Emergency						
MODES All						
RITERIA:						
Same as the Condition stat	ed above.					
ELATED EALS:						TAB
Ongoing security Threat wi	thin Contro	ol Room o	r Vital i	Areas		7

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# ATTACHMENT 3 UNIT 1 HAZARDS TO STATION OPERATION

	HAZARDS TO	STATION OPE	RATION		
		7.4			
	e de Maria de Carlos de Carlos. Estados de Carlos de				
CONDITION:					
CONDITION:					
Ongoing security threat	within the Co	ntrol Room o	r vital area	s	
MERGENCY CLASSIFICATION	•				
WIERGENCT CHASSIFICATION					
General Emergency					
MODES All					
RITERIA:					
Same as the Condition s	tated above.				
					•
				medicinal section of the section of	
	<u> </u>				
ELATED EALS:					TAB
				3 34	
None					

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# ATTACHMENT 3 UNIT 1 HAZARDS TO STATION OPERATION.

Fire or Explosion Onsite  MERGENCY CLASSIFICATION:  Notification of Unusual Event  MODES All  RITERIA:  1. Fire within the Protected Area Security Fence which is not extinguished within 10 minutes.  OR  2. Explosion causing facility damage.  RELATED EALS:  TAB  Fire or Explosion Onsite Affecting One Train of an ES System  7	The state of the s	:	
Fire or Explosion Onsite  MERGENCY CLASSIFICATION:  Notification of Unusual Event  MODES All  Prire within the Protected Area Security Fence which is not extinguished within 10 minutes.  OR  2. Explosion causing facility damage.  TAB			
MERGENCY CLASSIFICATION:  Notification of Unusual Event  MODES All  RITERIA:  1. Fire within the Protected Area Security Fence which is not extinguished within 10 minutes.  OR  2. Explosion causing facility damage.	ONDITION:		
Notification of Unusual Event  MODES All  RITERIA:  1. Fire within the Protected Area Security Fence which is not extinguished within 10 minutes.  OR  2. Explosion causing facility damage.  TAB			
Notification of Unusual Event  MODES All  RITERIA:  1. Fire within the Protected Area Security Fence which is not extinguished within 10 minutes.  OR  2. Explosion causing facility damage.  RELATED EALS:  TAB			<u> </u>
Notification of Unusual Event  MODES All  RITERIA:  1. Fire within the Protected Area Security Fence which is not extinguished within 10 minutes.  OR  2. Explosion causing facility damage.  RELATED EALS:  TAB	MERGENCY CLASSIFICATION:		
TAB			
1. Fire within the Protected Area Security Fence which is not extinguished within 10 minutes.  OR  2. Explosion causing facility damage.  RELATED EALS:	MODES <u>All</u>		
1. Fire within the Protected Area Security Fence which is not extinguished within 10 minutes.  OR  2. Explosion causing facility damage.  RELATED EALS:			
within 10 minutes.  OR  2. Explosion causing facility damage.  RELATED EALS:  TAB	RITERIA:		
within 10 minutes.  OR  2. Explosion causing facility damage.  RELATED EALS:  TAB			
RELATED EALS:			
	<ol><li>Explosion causing facility damage</li></ol>		
			7 ·
	ELATED EALS:	TAB	

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		ATTACHMENT 3 UNIT 1	
	HAZARDS 1	TO STATION OPERATION	

на	AZARDS TO STA	ATION OPERAT	CION		
	7. <u>7</u>	<u>. 6</u>			
CONDITION:			· · · · · · · · · · · · · · · · · · ·		
Fire or Explosion Onsite Affe	cting One Tr	ain of ANV	ES System	: . •	
	* <u>.</u>	entra de la companya		•	
EMERGENCY CLASSIFICATION:		<del></del>			
Alert			and the second s		
MODES All					
CRITERIA:	·	•		<u> </u>	
1. Fire or explosion onsite	·				
	e se				
	<u>A</u>	<u>ND</u>			
2. A potential or actual lo	oss of a sing	gle train o	E ANY ES	system as	<b>a</b>
result of the fire or ex	xplosion		·		
		•			
RELATED EALS:					TAB
COLUMN DE LA COLUM	100				IAD
Fire or Explosion Onsite Affect	cting Both Tr	rains of AN	ES Syste	em .	7
Control Room Evacuation		$(-1)^{\frac{2}{2}}(x) = (-1)^{\frac{2}{2}}(x)^{\frac{2}{2}}$			6
			4.		taria de la companya

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### ATTACHMENT 3

		<u>.7</u>		
CONDITION:				
Fire or Explosion Onsite	Affecting Both Ti	ains of <u>ANY</u> ES Sy	stems	
MERGENCY CLASSIFICATION:				
Site Area Emergency				
MODESAll				
RITERIA:				
l. Fire or explosion	onsite			
	<u>A</u>	<u>ND</u>		
2. A potential or acturesult of the fire	or explosion	trains of ANY ES	system as a	
			The state of the state of the	
ELATED EALS:				TAB
ELATED EALS: Control Room Evacuation a established in 15 minutes	and control of shu	itdown systems not		TAB 6

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### ATTACHMENT 3 UNIT 1 HAZARDS TO STATION OPERATION

7.8

CO	N	וח	T	T	O	N	•

Aircraft Crash, Unusual Aircraft Activity, Train Derailment, Turbine Failure, Toxic or Flammable Gas Release

#### EMERGENCY CLASSIFICATION:

Notification of Unusual Event

MODES All

#### CRITERIA:

- 1. ANY of the following:
  - A. Aircraft crash onsite.
  - B. Unusual Aircraft activity over the facility.
  - C. Train derailment onsite.
  - D. Turbine rotating component failure causing rapid plant shutdown.
  - E. Toxic or flammable gas release which limits or restricts access to areas required for security or safe operation of the plant.

	RELATED EALS:	* 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<u></u>		TAB
:					
.i	Fire or Explosion Onsite				7
	Security Threat				7
	Aircraft Crash, Missiles,	Toxic or	Flammable Gas Af	fecting One Train	7
	of ANY ES System				

#### PROCEDURE/WORK PLAN TITLE:

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### ATTACHMENT 3 UNIT 1 HAZARDS TO STATION OPERATION.

HAZARDS TO STATION OPERATION.	
<u>7.9</u>	
ONDITION:	
Aircraft Crash, Missiles, Toxic or Flammable Gas Affecting One Train of	ANY ES
Systems	
MERGENCY CLASSIFICATION:	
Alert	
riteria:	
1. ANY of the following:	
A. Aircraft crash onsite.	
B. Missiles/Projectiles from any source	
C. Toxic or flammable gas release	
2. A potential <u>OR</u> actual loss of a single train of <u>ANY</u> ES system	
ELATED EALS:	TAB
Fire or Explosion Onsite Affecting One Train of an ES System	7
Aircraft Crash, Missiles, Toxic or Flammable Gas Affecting Both	7
Trains of ANY ES System	

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#### **EMERGENCY ACTION LEVEL CLASSIFICATION**

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### ATTACHMENT 3 UNIT 1 HAZARDS TO STATION OPERATION

			7.10				
CONDITION:					ing the state of t		
Aircraft Cr System	ash, Missiles	, Toxic or I	lammable G	as Affect:	ing <u>Both</u> Tr	ains of ANY E	ZS
MERGENCY CI	ASSIFICATION:						
Site Area E	mergency						
MODES	A11						
ERITERIA:							
1. <u>ANY</u> c	f the following Aircraft cras						
В.	Missiles/Pro		om any sour	rce			
c.	Toxic or flat	mmable gas ı	elease				
			AND				
2. A pot	ential <u>OR</u> act	ual loss of	<u>BOTH</u> train	s of ANY 1	ES system		
RELATED EALS						TAB	
Fire or Exp	losion Onsite	Affecting E	oth Trains	of an ES	System	7	
	the state of the s	and the second s					

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#### ATTACHMENT 3 UNIT 1 NATURAL EVENTS

8.1

Tornado, Fl	ood, Loss of Dardanelle Reservoir, Earthquake	
	기름을 하는 아이들은 사람이 이 아름다는 말을 들는 것이라고 있는 것이다.	
EMERGENCY CL	ASSIFICATION:	
Notificatio	on of Unusual Event	
MODES	A11	

#### CRITERIA:

- ANY of the following:
  - A. Tornado observed on the ground within the Exclusion Area
  - B. Flood Lake level >340' elev. and rising, with forecasted lake level >350' elev.
  - C. Low Level Lake level <337' elev. AND forecasted by U.S. Army Corp of Engineers to reach 335' elev.
  - D. Earthquake VERIFIED earthquake accompanied by .01g alarm.

RELATED	EALS:		<u>Marian da Parangana da Parangan da Pa</u>		TAB
***					
Tornad	o, High Winds,	Flood, Loss	of Dardanelle R	eservoir, Earthquake	8

CONDITION:

PROCEDURE/WORK PLAN TITLE:

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#### ATTACHMENT 3 UNIT 1 NATURAL EVENTS

8.2

: `	Tornado,	High Winds,	Flood, Loss	of Dardanelle	Reservoir,	Earthquake	
	EMERGENCY	CLASSIFICAT	ION:				
	23						

CRITERIA:

MODES

1. ANY of the following:

All

- A. Tornado striking vital facility structures (e.g. housing ES related equipment)
- B. High Winds Sustained winds of >60 mph (10 minute average as reported by RDACS from either the 10 or 57 meter instruments).
- C. Flood Flood waters ≥350' elev. and are forecasted by U.S. Army Corp of Engineers to reach or exceed 354' elev.
- D. Low Level Lake level <335' elev
- E. Earthquake VERIFIED earthquake accompanied by .1g alarm.

or

Any natural event resulting in the potential or actual loss of <u>ONE</u> train of <u>ANY</u> ES system.

RELATE	ED EALS:							TAB	
					* 1				
		Winds, Flood				, Earth	quake	8	
Loss	of or ch	nallenge to all	l 3 Fissi	on Product	Barriers	100		1	

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	NATURAL EVENTS
ONDITION:	
Tornado, 1	High Winds, Flood, Loss of Dardanelle Reservoir, Earthquake
MERGENCY	CLASSIFICATION:
Site Area	Emergency
MODE	S <u>1-4</u>
RITERIA:	
1. ANY	of the following:
<b>A</b> .	High Winds - Sustained winds of <a>_67 mph</a> (10 minute average as reported by RDACS from either the 10 or 57 meter instruments).
В.	Flood - Flood Water Level is >361' elev.
c.	Low Level Lake level <335' elev. and Emergency Cooling Pond not available
D.	<u>VERIFIED</u> Earthquake <u>&gt;</u> 0.2g
E.	Tornado, high wind, flood, low lake level or earthquake resulting in the potential or actual loss of BOTH trains of ANY ES system.
ELATED EA	T.S.:
	r challenge to all 3 Fission Product Barriers 1
DORR OF O	- Charlenge to all 3 Fission Flounce Balliers

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## ATTACHMENT 3 UNIT 1 MISCELLANEOUS EVENTS

9.1

COND	IT:	ION	:
------	-----	-----	---

Other plant conditions exist that warrant increased awareness on the part of the operating staff and state and/or local offsite authorities or involve other than normal controlled shutdown.

	EMERGENCY CLASSIFICATION:		
	Notification of Unusual Event		
, ,	MODES <u>All</u>		

## CRITERIA:

An event has occurred and the following conditions exist:

1. This event is not covered by any other EAL

## AND

2. This event does not challenge or cause the loss of a fission product barrier

## AND

3. In the judgement of the SM/TSC Director/EOF Director this event requires an increased awareness by the ANO staff and offsite authorities.

	RELATE	EALS:							TAB
	Plant	Conditions	Exist	that	Warrant	Precautionary	Activation	n of the	9
ż	TSC								

PROCEDURE/WORK PLAN TITLE:

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## ATTACHMENT 3

	UNIT 1 MISCELLANEOUS EVENTS	
	<u>9.2</u>	
ONDITION:		
	ist that warrant precautionary act g the near-site Emergency Operation n standby.	
MERGENCY CLASSIFICATION:		
Alert MODES <u>All</u>		
RITERIA:		
The following conditions  1. This event is not conditions	must exist  overed by any other EAL.  AND	
	her challenge or cause the loss of	E a fission product
barrier.	OR	
Plant conditions ex: Organization.	ist that warrant activation of the	e Emergency Response
RELATED EALS:		TAB
Plant Conditions Exist the Response Centers.	at Warrant Activation of the Emer	gency 9

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# ATTACHMENT 3 UNIT 1 MISCELLANEOUS EVENTS

9.3

COND	IT	'I(	NC	:
------	----	-----	----	---

Other plant conditions exist that warrant activation of the emergency response facilities and monitoring teams or a precautionary notification to the public near the site.

	EMERGENCY CLASSIFIC	ATION:		
	Site Area Emergency	Y		
	MODES All			
-				 519 8 3 8 8 8

## CRITERIA:

The following conditions must exist

1. This event is not covered by any other EAL.

## AND

- 2. The event must cause ANY of the following:
  - A. Challenge two fission product barriers
  - B. Failure of one fission product barrier and a challenge to another
  - C. Failure of Two fission product barriers

RE	LATE	D EALS:						<u> </u>		1 1 1 1 1 1 1	TAB
									•		
F	lant	Conditi	ons Ex	ist tha	t Make	Release	of La	rge Amou	nts of		9
R	adio	activity	Possi	ble	* 1				*		
			* 11.75								

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# ATTACHMENT 3

	MISCELI	LANEOUS EVENTS		
		9.4		
CONDITION:				
Plant Conditions Exis	st That Make Relea	se of Large Am	ounts of Radioact	tivity Possibl
MERGENCY CLASSIFICAT	TON:			
General Emergency				
MODESAll				
RITERIA:				
The following condit	ions must exist:			
1. This event is	not covered by any	OTNET EAL		
		<u>AND</u> · ·		
2. Events have oc	curred that make a	release of la	arge amounts of r	adioactivity :
	of time possible.			
ELATED EALS:				TAB
None				

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## ATTACHMENT 4 UNIT 2 PRIMARY SYSTEM EVENTS

1.1

CO			

RCS Activity indicates >0.1% fuel cladding failure

		CLA			

Notification of Unusual Event

MODES \_\_1-5\_\_

## CRITERIA:

- 1. Greater than 0.1% fuel cladding failure as indicated by EITHER of the following:
  - A. Selected isotope activity (I-131) >5.5E<sup>5</sup> CPM (2RR4806 on 2C14 or 2RITS 4806B on 2C22)
  - B. Specific I-131 sample results >37.8 µCi/gm

	RELATED EALS:		the state of the s		 IAD
			* * * * * * * * * * * * * * * * * * * *	•	
	RCS Activity				1
. :	T.S. L.C.O.'s				 66
÷	General Area Radi	ation/Airborne			5

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## ATTACHMENT 4 UNIT 2 PRIMARY SYSTEM EVENTS

1.2

CO			

RCS Activity indicates >1.0% fuel cladding failure

EMERGENC	Y CLASSIFICATION:			
Alert				
MO	DES <u>1-5</u>			

## CRITERIA:

- Greater than 1% fuel cladding failure as indicated by either of the following:
  - 1. RCS Sample Analysis >378 µCi/gm specific I-131

OR

 Radiation levels that indicate >1% fuel cladding failure per Unit 2 Fuel Cladding Failure Radiation Plot (Att 8)

RELATED EAL	s:							TA	В	
	1. 1 Tal. 1									77.7
General Ar	ea Radiat	ion/Airbo	rne						5	
Containmen	t Radiati	on							1	. 4
Loss of or	Challeng	e to 3 Fi	ssion Prod	uct Barrie	rs				1	
Core Damag							1	. <u> </u>	1	
						and the second				- 1

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## ATTACHMENT 4 UNIT 2 PRIMARY SYSTEM EVENTS

1.3

COND	ITI	ON:
------	-----	-----

Core Damage Indicated with an Inadequate Core Cooling Condition

		. ~		TOT	~= -	R T / O ST .	
EMED (	ZH:MI	Y ('I	. 4		L.W.		

Site Area Emergency

MODES \_\_1-5\_\_

#### CRITERIA:

- 1. Greater than 1% fuel cladding failure as indicated by either of the following:
  - 1. RCS Sample Analysis >378 µCi/gm specific I-131

OR

 Radiation levels that indicate >1% fuel cladding failure per Unit 2 Fuel Cladding Failure Radiation Plot (Att 8)

## AND

- 2. Inadequate core cooling capacity exists as indicated by ANY of the following:
  - A. Th RTD and average CET temperature indicates >10°F superheat AND RVLMS LVL 7 or Lower indicates Dry.
  - B. Th RTD and average CET temperature indicates >10°F superheat with both RVLMS Channels inoperable AND RCS temperatures increasing.
  - C. CET Temperatures indicate greater than 700°F.

. :	RELATED EALS:		TAB
		The state of the s	
.	Decay Heat Removal		6
	Containment Radiation		1
1	Core Melt		1
	RCS Leakage		2

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## ATTACHMENT 4 UNIT 2 PRIMARY SYSTEM EVENTS

1.4

-	Containment	Radiation	readings	which	indicate	LOCA a	and >1%	fuel	cladding	failure
.	• (1) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1.5		• •				
	CONDITION:									

?	EMERGENCY	CLASSIFICATION:	
	Site Area	a Emergency	
	MODE		
1			• • • • • • • • • • • • • • • • • • • •

## CRITERIA:

1. Containment Radiation Levels correspond to a Site Area Emergency as determined from the containment radiation EAL plot (Att 6)

AND

2. LOCA occurring within the Containment Building

 RELATED EALS:			• • •	TAB
Containment Radiation			1.	1
Loss of or challenge to	3 Fission Pr	oduct Barriers	1.	1
Radiological Effluents			1.	5
Core Melt				1 1 1 1 1 1 1

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					CHANGE:	037-01-0
		ATTACHMEN UNIT 2 PRIMARY SYSTEM				
		<u>1.5</u>				
CONDITION:			• • • • • • • • • • • • • • • • • • •			
Containment Ra	diation readings v	which indicate	E LOCA and >50	* fuel o	overheat	
EMERGENCY CLASS	IFICATION:					
	the state of the s					
General Emerge	ncy				•	
General Emerge						
MODESA						
MODES _ACRITERIA:		els correspond ation EAL plot AND	i to a General: (Att 6)	Emerger	ncy as de	termine
MODES A CRITERIA:  1. Contains from the	11 ent Radiation Leve	ation EAL plot	: (Att 6)	Emerger	ncy as de	termine
MODES A CRITERIA:  1. Contains from the	ent Radiation Leve containment radia	ation EAL plot	: (Att 6)	Emerger	ncy as de	termine
MODESA CRITERIA:  1. Containm from the	ent Radiation Leve containment radia	ation EAL plot	: (Att 6)	Emerger	ncy as de	termined
MODESA CRITERIA:  1. Containm from the	ent Radiation Leve containment radia	ation EAL plot	: (Att 6)	Emerger	ncy as de	termine
MODESA CRITERIA:  1. Containm from the	ent Radiation Leve containment radia	ation EAL plot	: (Att 6)	Emerger	ncy às de	termine
MODESA CRITERIA:  1. Containm from the	ent Radiation Leve containment radia	ation EAL plot	: (Att 6)	Emerger	ncy as de	termine
MODESA CRITERIA:  1. Containm from the	ent Radiation Leve containment radia	ation EAL plot	: (Att 6)	Emerger	ncy as de	termine
MODESA CRITERIA:  1. Containm from the	ent Radiation Leve containment radia	ation EAL plot	: (Att 6)	Emerger	ncy às de	termine

	RELATED EALS:					TAB
	Loss of or challer	nge to 3 Fi	ssion Produc	t Barriers		1
	Radiological Effl	uents				5
	Core Melt					<u> </u>
- '					:-	

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## ATTACHMENT 4 UNIT 2 PRIMARY SYSTEM EVENTS

1.6

	2220211	· .					
Coı	re Melt wi	th Contai	nment Integr	city Lost or	r Challenged	1	
EMEI	RGENCY CLA	ASSIFICATI	ON:				
Ger	neral Emer	gency All					

## CRITERIA:

- 1. ANY of the following events occur
  - A. Small or Large LOCA and a complete failure of ALL ECCS systems occurs.
  - B. Loss of <u>ALL</u> feedwater <u>AND</u> S/G Level in both S/G's is ≤70" (Wide Range) <u>AND</u> a complete failure of <u>ALL</u> ECCS Systems occurs.
  - C. Anticipated transient without a Rx trip

## AND

 Containment Integrity is lost <u>OR</u> challenged as defined by 4.10.3 or 4.11.3 (Definitions)

	RELATED EALS:	TAB
,		
٠٠	Loss of or challenge to 3 Fission Product Barriers	11
	Containment Radiation	1
٠.	Radiological Effluents	5
	[100] 16 20 16 16 16 16 16 16 16 16 16 16 16 16 16	

ROC.WORK PLAN NO.	PROCEDURE/WORK PLAN T		<del>-                                    </del>		PAGE:	80 of 130
1903.010	EMERGENCY AC	CTION LEVEL C	LASSIFICATION	<b>!</b>	CHANGE:	037-01-0
	PRI	ATTACHMENT UNIT 2 MARY SYSTEM				
CONDITION:		<u>1.7</u>				
Loss of or cha	llenge to all 3 Fiss	ion Product	Barriers			
EMERGENCY CLASS	IFICATION:					
General Emerge	ncy					
MODES A	<u>n</u>					

## CRITERIA:

- 1. Either of the following conditions exist:
  - A. Fuel Cladding Failure (refer to section 4.10.1)
  - B. Challenge to Fuel Cladding (refer to section 4.11.1)

## AND

- 2. Either of the following conditions exist:
  - A. RCS boundary failure (refer to section 4.10.2)
  - B. Challenge to RCS boundary (refer to section 4.11.2)

## AND

- Either of the following condition exist
  - A. Containment Integrity failure (refer to section 4.10.3)
  - B. Challenge to Containment Integrity (refer to section 4.11.3)

	RELATED EALS:			TAB
. :	Containment Radiation	n.		1
	Core Melt			1
	Radiological Effluent	ts		5
	Natural Events			8

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	ATTACHMENT 4 UNIT 2 RCS LEAKAGE	
CONDITION:	<u>2.1</u>	
RCS Leakage		
EMERGENCY CLASS	IFICATION:	
Notification o	f Unusual Event -4	
CRITERIA:		
RCS leakage is supporting sys	NOTE  defined as a loss of RCS inventory due to a leak in the tem that is not or cannot be isolated within 10 minutes.	RCS or a
1. Unidenti	fied or pressure boundary RCS leakage greater than 10 gr	om.
	OR .	
2. Identifi	ed RCS leakage greater than 25 gpm.	
RELATED EALS:		TAB
RCS Leakage T.S. L.C.O.'s Primary to Sec General Area R	ondary Leakage adiation/Airborne	2 6 3 5

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ATTACHMENT 4 UNIT 2 RCS LEAKAGE

		2.2		
ONDITION:				
RCS Leakage > 44 gpm				
MERGENCY CLASSIFICATION:				
\lert				
MODES				
KIIDRIA:				The second secon
RCS leakage is defined a	NOTE	inventory due to	a leak in the	e RCS or a
RCS leakage is defined a	s a loss of RCS	inventory due to be isolated with	a leak in the	e RCS or a
RCS leakage is defined a supporting system that i	s a loss of RCS s not or cannot	be isolated with	in 10 minutes.	
RITERIA:  RCS leakage is defined a supporting system that i	s a loss of RCS s not or cannot	be isolated with	in 10 minutes.	
RCS leakage is defined a supporting system that i	s a loss of RCS s not or cannot	be isolated with	in 10 minutes.	
RCS leakage is defined a supporting system that i	s a loss of RCS s not or cannot	be isolated with	in 10 minutes.	
RCS leakage is defined a supporting system that i	s a loss of RCS s not or cannot	be isolated with	in 10 minutes.	
RCS leakage is defined a supporting system that i	s a loss of RCS s not or cannot	be isolated with	in 10 minutes.	
RCS leakage is defined a supporting system that i	s a loss of RCS s not or cannot	be isolated with	in 10 minutes.	
RCS leakage is defined a supporting system that i	s a loss of RCS s not or cannot	be isolated with	in 10 minutes.	
RCS leakage is defined a supporting system that in the supporting system that in the system that it is not the system that	s a loss of RCS s not or cannot	be isolated with	in 10 minutes.	
RCS leakage is defined a supporting system that i	s a loss of RCS s not or cannot	be isolated with	in 10 minutes.	TAB

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## ATTACHMENT 4 UNIT 2 RCS LEAKAGE

2.3

CONE		

RCS Leakage > 44 gpm with ICC Conditions

## EMERGENCY CLASSIFICATION:

Site Area Emergency

MODES 1-4

#### CRITERIA:

#### NOTE

RCS leakage is defined as a loss of RCS inventory due to a leak in the RCS or a supporting system that is not or cannot be isolated within 10 minutes.

1. RCS Leakage is >44 gpm (Capacity of a single Charging Pump).

## AND

- 2. Inadequate Core Cooling conditions exist as indicated by <u>ANY</u> of the following:
  - A. Th RTD and average CET temperature indicates >10°F superheat AND RVLMS LVL 7 or Lower indicates Dry.
  - B. Th RTD and average CET temperature indicates >10°F superheat with both RVLMS Channels inoperable AND RCS temperature increasing.
  - C. CET Temperatures indicate greater than 700°F.

RELATED EALS:	일 전 하는 보다 다른 것이 <u>하는 때문을 하게 하는 것은 모든 것</u>	TAB
Core Damage/ICC		11
Radiological Effluents		5 .
Containment Radiation		<b>1</b>
Core Melt		1
Loss of or challenge to 3 Fis	ssion Product Barriers	1
Primary to Secondary Leakage		3

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**EMERGENCY ACTION LEVEL CLASSIFICATION** 

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## ATTACHMENT 4 UNIT 2 SECONDARY SYSTEM EVENTS

	<u>3.1</u>			
CONDITION:				
Uncontrolled S/G Depressuria	zation Resulting	in MSIS Actu	ation	
EMERGENCY CLASSIFICATION:				
Notification of Unusual Ever	a <b>t</b>			
CRITERIA:				
1. Any actuation of MSIS	due to uncontro	lled Steam Ge	nerator depress	urization:
RELATED EALS:				TAB
Primary to Secondary Leakage Radiological Effluents				3 5

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## ATTACHMENT 4 UNIT 2 SECONDARY SYSTEM EVENTS

3.2

	S/G Tube Leak > Tech Spec Limits
٠.	
	EMERGENCY CLASSIFICATION:
	Notification of Unusual Event
	MODES 1-4

#### CRITERIA:

CONDITION:

- 1. Primary to Secondary Leakage exceeds EITHER of the following limits
  - A. Total leakage through both S/G's is > 300 gallons per day (0.2083 gpm)

OR

B. Leakage to 1 S/G is > 150 gallons per day (0.1042 gpm)

RELATED EALS:	 TAB
RCS Leakage	2
Primary to Secondary Leakage	3
Radiological Effluents	5
네 있다다. 유민이네가 그렇게 되었다면 숙합에서서 하나 문 회문 가운데 보다라가 되었다.	

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## ATTACHMENT 4 UNIT 2 SECONDARY SYSTEM EVENTS

3.3

TTION:

S/G Tube Leak >10 gpm with an Ongoing Steam Release

EMERGENCY	CLASSIFICATION:		
Alert MODI	ES1-4		

## CRITERIA:

- S/G tube leak >10 gpm with a Steam Release in Progress from either or both steam generator(s) as indicated by <u>ANY</u> of the following:
  - A. Main Steam Safety Valves maintaining S/G Pressure
  - B. SDBCS Atmospheric Dump Valves in Use
  - C. Steam Line Break Outside of Containment
  - D. 2P7A is in use and continued operation is required to maintain S/G levels.

1	TAB	
	Primary to Secondary Leakage	
	RCS Leakage	
	General Area Radiation/Airborne 5	
	Radiological Effluents 5	
	Electrical Power	
	그는 회사 교육 가는 하는 그 어린 사이는 가장 그를 생각되어 한 일반하다고 한 경찰 하게 되었습니까 그를 하다면 하다면 생각	

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## ATTACHMENT 4 UNIT 2 SECONDARY SYSTEM EVENTS

3.4

#### CONDITION:

Steam Generator Tube Rupture >44 gpm With an Ongoing Steam Release and RCS Activity > 1.0 µCi/gm, but < 378 µCi/gm (1% fuel cladding failure).

#### EMERGENCY CLASSIFICATION:

Site Area Emergency

MODES 1-4

#### CRITERIA:

- S/G tube leak >44 gpm with a Steam Release in Progress from either or both steam generator(s) as indicated by ANY of the following:
  - Main Steam Safety Valve(s) maintaining S/G Pressure A.
  - SDBCS Atmospheric Dump Valve(s) in Use В.
  - C ... Steam Line Break Outside of Containment
  - 2P7A is in use and continued operation is required to maintain S/G levels.

## AND

RCS Activity > 1.0  $\mu$ Ci/gm (T.S. 3.4.8), but < 378  $\mu$ Ci/gm (1% fuel cladding 2. failure).

## RELATED EALS:

## CAUTION

If fuel cladding failure is  $\geq$  1% ( $\geq$  378  $\mu$ Ci/gm I-131), EAL 1.7 will apply. If fuel cladding is degrading and failure approaches 1% (378  $\mu$ Ci/gm I-131), consider EAL 1.7.

RCS Leak					- 1	,
Loss of Core Mel	or Challenge to	3 Fission	Product	Barriers		5 1 1 4

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	ATTACHMENT 4 UNIT 2 ELECTRICAL POWER FAILURES		
CONDITION:			
Degraded Power			
EMERGENCY CLASS	ification:		
Notification o	f Unusual Event		
MODES A			
MODES A			
MODES A	11 Modes		
MODES A CRITERIA:  1. Temporar	11 Modes  y Loss of Normal Control Room Lighting  AND	222)	
MODES A CRITERIA:  1. Temporar	y Loss of Normal Control Room Lighting  AND  ge indicated on Both 4.16 KV nonvital busses (2A1 &	2A2)	
MODES A CRITERIA: 1. Temporar	11 Modes  y Loss of Normal Control Room Lighting  AND	2A2)	
MODES A  CRITERIA:  1. Temporar  2. No volta  3. At least	y Loss of Normal Control Room Lighting  AND  ge indicated on Both 4.16 KV nonvital busses (2A1 &		
MODES A  CRITERIA:  1. Temporar  2. No volta  3. At least	y Loss of Normal Control Room Lighting  AND  ge indicated on Both 4.16 KV nonvital busses (2A1 & AND  one Emergency Diesel or Station Blackout Diesel sta		
MODES A  CRITERIA:  1. Temporar  2. No volta  3. At least	y Loss of Normal Control Room Lighting  AND  ge indicated on Both 4.16 KV nonvital busses (2A1 & AND  one Emergency Diesel or Station Blackout Diesel sta	rted	TAB

Primary to Secondary Leak

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## ATTACHMENT 4 UNIT 2 ELECTRICAL POWER FAILURES

4.2

CONDITION:	
Station Blac	ckout
EMERGENCY CL	ASSIFICATION:
Alert MODES	All Modes
CRITERIA:	
1. Loss	of all Control Room Lighting except emergency DC Lights
2. No vo	Oltage indicated on <u>Both</u> 4.16 KV nonvital busses. (2A1 and 2A2) <u>AND</u>
3. No vo.	oltage indicated on <u>Both</u> 4.16 KV vital busses (2A3 and 2A4)
RELATED EALS	TAB:

	RELATED EALS:
	Electrical Power
•	Communications, Dose Assessment
Ż	Primary to Secondary Leak
	Decay Heat Removal
	Core Melt
	本権 지난 사람들은 학생들은 경우를 가는 사람들이 되었다. 그는 사람들이 하고 생각하는 것이 하는 학생들은 사람들이 되었다.

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# ATTACHMENT 4 UNIT 2 ELECTRICAL POWER FAILURES

CONDITION:		4.3		
Loss of All Vi	tal DC			
emergency class	SIFICATION:			
Alert MODES 1				
CRITERIA:				
A. 2D B. 2R C. 2D	All of the following the All of the following the All and 2D02 and 2D23 and 2D24	ng busses has o	curred:	
RELATED EALS:				TAB
Electrical Pow	ver s, Dose Assessment			4

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## ATTACHMENT 4 UNIT 2 ELECTRICAL POWER FAILURES

	용하다 등 발표로 제공하다. 	
CONDITION:		
Blackout	>15 minutes.	
EMERGENCY	CLASSIFICATION:	
	Emergency	
MODE		
CRITERIA:		
1. Bla	ckout has occurred as indicated by <u>ALL</u> of the following:  Loss of all Control Room lighting except emergency DC lights	
B. C.	No voltage indicated on Both 4.16 KV nonvital busses (2A1 and 2A2) Neither Vital 4.16 KV Buss energized (2A3 or 2A4)	
	and the state of t	
2. The	Blackout Condition exists for >15 minutes	

į.	RELATED EALS:	:
	Decay Heat Removal	٠
	Electrical Power	
• .	Primary to Secondary Leakage	
	Core Melt	
. •	Radiological Effluents 5	-
٠.		

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# ATTACHMENT 4

	ELECTRIC!	UNIT 2 AL POWER FAILURE:	S •	
		<u>4.5</u>		
CONDITION:				
NOTE TO A STATE OF THE STATE OF				
Loss of ALL Vital DC fo	or >15 minutes			
MERGENCY CLASSIFICATION				
Site Area Emergency				
MODES All				
RITERIA:	·			
RED TRAIN	GREEN TRAIN			
2D01	2D02			
2RA1	2RA2			
2D21	2D22			
2D23	2D24	AND		
2. Power is not resto	ored to at leas	st one train wit	hin 15 minutes	
RELATED EALS:				TAB
Communications, Dose Ass Decay Heat Removal	sessment			6
Core Melt				1
Radiological Effluents				5

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## ATTACHMENT 4 UNIT 2 RADIOLOGICAL EFFLUENTS

5.1

	TI	

Projected or measured activity at the Site Boundary, averaged over one hour, is greater than or equal to 0.05 mrem/hr TEDE or 0.15 mrem/hr Child Thyroid CDE or Liquid radiological effluents exceed ODCM Limitations.

## EMERGENCY CLASSIFICATION:

Notification of Unusual Event

MODES All

## CRITERIA:

- 1. Radiological Release which exceeds ANY of the following limits
  - A. Projected activity at the Site Boundary, as calculated by the RDACS method, indicate greater than or equal to 0.05 mrem/hr TEDE or 0.15 mrem/hr Child Thyroid CDE.

OR

B. Offsite monitoring teams report activity at the Site Boundary which, when averaged over the previous one hour, exceeds 0.05 mrem/hr TEDE or 0.15 mrem/hr Child Thyroid CDE.

<u>OR</u>

C. Liquid radiological effluents exceed ODCM Limitations.

	RELATED EALS:			TAB
	Radiological Effluents			5
ď	General Area Radiation/Airborne			5
	Primary to Secondary Leak			3
:			1	

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## ATTACHMENT 4 UNIT 2 RADIOLOGICAL EFFLUENTS

5.2

CO		

Projected or measured activity at the Site Boundary, averaged over one hour, is greater than or equal to 0.5 mrem/hr TEDE or 1.5 mrem/hr Child Thyroid CDE or Liquid radiological effluents exceed 10 times ODCM Limitations.

EMERGENCY CLASSIFICATION	<b>1:</b>		
Alert MODES <u>All</u>			

## CRITERIA:

- 1. Radiological Release which exceeds ANY of the following limits
  - A. Projected activity at the Site Boundary, as calculated by the RDACS method, indicate greater than or equal to 0.5 mrem/hr TEDE or 1.5 mrem/hr Child Thyroid CDE.

OR

B. Offsite monitoring teams report activity at the Site Boundary which, when averaged over the previous one hour, exceeds 0.5 mrem/hr TEDE or 1.5 mrem/hr Child Thyroid CDE.

<u>or</u>

C. Liquid radiological effluents exceed 10 times ODCM Limitations.

7	RELATED EALS:	TAB	
	Radiological Effluents	5	
24	Primary to Secondary Leak	3	
1	Containment Radiation	1	Ė
	<b>1</b> 4. 我们是我们的"我是是这个的"我们,是是什么"的"我们,我也是 <u>我们的,我们们就不会</u>		ľ

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## ATTACHMENT 4 UNIT 2 RADIOLOGICAL EFFLUENTS

5.3

		Ιī		

Radiological Effluents are greater than or equal to 50 mrem/hr TEDE or 150 mrem/hr Child Thyroid CDE at the Site Boundary.

## EMERGENCY CLASSIFICATION:

Site Area Emergency

MODES \_\_All\_

#### CRITERIA:

- 1. Radiological Release which exceeds ANY of the following limits
  - A. Projected dose rates at the Site Boundary, as calculated by the RDACS method, indicate greater than or equal to 50 mrem/hr TEDE or 150 mRem/hr Child Thyroid CDE.

OR

B. Offsite monitoring teams report dose rates at the Site Boundary are greater than or equal to 50 mrem/hr TEDE or 150 mrem/hr Child Thyroid CDE.

RELATED EALS:			TAB
Radiological Effluents			<u> </u>
Containment Radiation			1
Loss of or Challenge to	3 Fission Product	Barriers	1
Core Melt			1

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## ATTACHMENT 4 UNIT 2 RADIOLOGICAL EFFLUENTS

5.4

CON	DΙ	ΤI	ON	:

Radiological Effluents are greater than or equal to 250 mrem/hr TEDE or 500 mrem/hr Child Thyroid CDE at the Site Boundary.

EMERGENCY CLASSIFIC					
General Emergency					
MODES All					
	• 4				

#### CRITERIA:

- 1. Radiological Release which exceeds ANY of the following limits
  - A. Projected dose rates at the Site Boundary, as calculated by the RDACS method, indicate greater than or equal to 250 mrem/hr TEDE or 500 mrem/hr Child Thyroid CDE.

OR

B. Offsite monitoring teams report dose rates at the Site Boundary are greater than or equal to 250 mrem/hr TEDE or 500 mrem/hr Child Thyroid CDE.

	RELATED EALS:	TAB
	Core Melt	1
.:	Loss of or Challenge to 3 Fission Product Barriers	1
	Containment Radiation	

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## ATTACHMENT 4 UNIT 2

and the second second	
ONDITION:	
High Radi	ation/Airborne Levels
MERGENCY	CLASSIFICATION:
Alert	
MODE	S <u>All</u>
RITERIA:	
ı Ma	물금 살 하는 것 말하는 그 학생들에 가지 하는 것 같아 하는 사람들이 가지 않아 가지를 하지 않아 있다.
r. me	loss of control of radioactive material results in ANY of the following
A.	loss of control of radioactive material results in <u>ANY</u> of the following Containment radiation indicates >2R/hr
Α.	Containment radiation indicates >2R/hr  Area Radiation levels in controlled access (excluding containment)
A. B.	Containment radiation indicates >2R/hr  Area Radiation levels in controlled access (excluding containment) increase by 1 Rem/hr at 2 or more locations.  General area radiation levels outside of radiologically controlled
A. B. C.	Containment radiation indicates >2R/hr  Area Radiation levels in controlled access (excluding containment) increase by 1 Rem/hr at 2 or more locations.  General area radiation levels outside of radiologically controlled areas increase by 10 mRem/hr.  Airborne levels as follows:  • Auxiliary Building >100 DAC (General Area)
A. B. C.	Containment radiation indicates >2R/hr  Area Radiation levels in controlled access (excluding containment) increase by 1 Rem/hr at 2 or more locations.  General area radiation levels outside of radiologically controlled areas increase by 10 mRem/hr.  Airborne levels as follows:  • Auxiliary Building >100 DAC (General Area)  • Turbine Building >10 DAC  "Loss of Control" Shall be defined as: Any Radioactive material outside its normal system boundaries.  (For Example: Spent resin spill, RCS liquid spill, Spent fuel accident

	RELATED EALS:			* *	TAE	
		5 · · · · · · · · · · · · · · · · · · ·	 			
٠	Radiological Effluents					<u>•                                     </u>
	Containment Radiation		er i de la compa		]	
	Spent Fuel Damage					,
	RCS Leakage	•		1	2	
						7

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		ATTACHMENT 4 UNIT 2		
		RADIOLOGICAL EFFLUENTS		

	RADIOLOGICAL EFFLUENTS	
	<u>5.6</u>	
ONDITION:		
Spent Fuel Accident		
spent ruer accident		
MERGENCY CLASSIFICATION:		
Site Area Emergency		
MODES All		
RITERIA:		
	damage to a spent fuel as	
Rx core (head remove	d), refueling canal, spent	fuel pool, cask
Rx core (head remove loading pit, fuel ti	d), refueling canal, spent It pit or any plant area i	fuel pool, cask
Rx core (head remove	d), refueling canal, spent It pit or any plant area i	fuel pool, cask
Rx core (head remove loading pit, fuel ti	d), refueling canal, spent It pit or any plant area i	fuel pool, cask
Rx core (head remove loading pit, fuel ti movement or storage	d), refueling canal, spent lt pit or any plant area i of spent fuel.  AND	fuel pool, cask nvolved in the
Rx core (head remove loading pit, fuel ti movement or storage Radiation levels inc	d), refueling canal, spent lt pit or any plant area i of spent fuel.  AND  rease to 10 R/hr by Area R	fuel pool, cask nvolved in the
Rx core (head remove loading pit, fuel ti movement or storage	d), refueling canal, spent lt pit or any plant area i of spent fuel.  AND  rease to 10 R/hr by Area R	fuel pool, cask nvolved in the
Rx core (head remove loading pit, fuel ti movement or storage Radiation levels inc	d), refueling canal, spent lt pit or any plant area i of spent fuel.  AND  rease to 10 R/hr by Area R	fuel pool, cask nvolved in the
Rx core (head remove loading pit, fuel ti movement or storage Radiation levels inc	d), refueling canal, spent lt pit or any plant area i of spent fuel.  AND  rease to 10 R/hr by Area R	fuel pool, cask nvolved in the
Rx core (head remove loading pit, fuel ti movement or storage Radiation levels inc	d), refueling canal, spent lt pit or any plant area i of spent fuel.  AND  rease to 10 R/hr by Area R	fuel pool, cask nvolved in the
Rx core (head remove loading pit, fuel ti movement or storage Radiation levels inc	d), refueling canal, spent lt pit or any plant area i of spent fuel.  AND  rease to 10 R/hr by Area R	fuel pool, cask nvolved in the
Rx core (head remove loading pit, fuel ti movement or storage Radiation levels inc	d), refueling canal, spent lt pit or any plant area i of spent fuel.  AND  rease to 10 R/hr by Area R	fuel pool, cask nvolved in the
Rx core (head remove loading pit, fuel ti movement or storage  2. Radiation levels inc 10 Rem/hr HP survey	d), refueling canal, spent lt pit or any plant area i of spent fuel.  AND  rease to 10 R/hr by Area R	fuel pool, cask nvolved in the  adiation Monitors or
Rx core (head remove loading pit, fuel ti movement or storage  2. Radiation levels inc 10 Rem/hr HP survey	d), refueling canal, spent lt pit or any plant area i of spent fuel.  AND  rease to 10 R/hr by Area R	fuel pool, cask nvolved in the
Rx core (head remove loading pit, fuel ti movement or storage  2. Radiation levels inc 10 Rem/hr HP survey	d), refueling canal, spent lt pit or any plant area i of spent fuel.  AND  rease to 10 R/hr by Area R	fuel pool, cask nvolved in the  adiation Monitors or
Rx core (head remove loading pit, fuel ti movement or storage  2. Radiation levels inc 10 Rem/hr HP survey  ELATED EALS:	d), refueling canal, spent It pit or any plant area i of spent fuel.  AND  rease to 10 R/hr by Area R report.	fuel pool, cask nvolved in the  adiation Monitors or  TAB
Rx core (head remove loading pit, fuel ti movement or storage  2. Radiation levels inc 10 Rem/hr HP survey	d), refueling canal, spent It pit or any plant area i of spent fuel.  AND  rease to 10 R/hr by Area R report.	fuel pool, cask nvolved in the  adiation Monitors or

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## ATTACHMENT 4 UNIT 2 SAFETY SYSTEM FUNCTION

6.1

CON	דמ	TT	O	N	•
	$\boldsymbol{\nu}$		v	1.4	è

Deviation from T.S. action statements when required to shutdown or cooldown or deviations pursuant to 10CFR50.54(x)

## EMERGENCY CLASSIFICATION:

Notification of Unusual Event

MODES 1-4

## CRITERIA:

- 1. EITHER of the following conditions exist:
  - A. Inability to reach required mode within Tech. Spec. limits.
  - B. Deviation from Tech Specs authorized pursuant to 10CFR50.54(x)

RELATED EALS:			 14 to 11	IAD
		,		
RCS Leakage				2
 Primary to Secondary Leak	age			3
RCS Activity				11

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## ATTACHMENT 4

	UNIT	_		
	<u>6.</u>	2		
CONDITION:				
Reactor Protection System Fa	ilure to Compl	ere en Automati	C Trin	
Reactor Frotection System Fa	Trute to compr	ece an Adcomac		
EMERGENCY CLASSIFICATION:				
Alert				
MODES1-2				
CRITERIA:				
1. A valid RPS trip setpo	int is exceede	d		
	<b>A</b>	ND		
2. Ten (10) or more CEAs	fail to insert	as result of t	he automatic t	rip
	<u>Al</u>	<u>#D</u>		
3. CEAs are inserted eith	er by manual t	rip or DSS.		
RELATED EALS:				TAB
RPS Failure Core Melt				- 6 1
Core Damage/ICC				ī

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	ATTACHME UNIT			
	SAFETY SYSTEM	FUNCTION		
	<u>6.3</u>			
CONDITION:				• • • •
Reactor Protection System Fa	ailure to Complet	te a Manual Trip		
EMERGENCY CLASSIFICATION:				
Site Area Emergency				
MODES 1-2				
CRITERIA:				
1. A valid RPS trip setpo	oint is exceeded			
2. Ten (10) or more CEAs	fail to insert	after the RPS, D	SS and manual	trip
(Example: 2B7 & 2B8 a failure	feeder breakers of automatic and	opened to inser d manual RPS tri	t CEAs due to ps.)	
RELATED EALS:				TAB
Loss of or Challenge to 3 F: Core Melt Core Damage/ICC	ission Product Ba	arriers		1 1 1

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## ATTACHMENT 4

		UNIT SAPETY SYSTE			
		<u>6.4</u>			
CONDITION:					
Loss of Do	se Assessment Cap	abilities			
MERGENCY C	LASSIFICATION:				
	on of Unusual Eve	nt			
MODES	<u>All</u>				
RITERIA:					
			and the second second		
C.		tain and analyze			
	tor Building Purg G and the Process				applicable
		<u>OF</u>	₹		
the	of the following Auxiliary Buildin ding ventilation	conditions exist	for any sou		
the	Auxiliary Buildin ding ventilation Applicable SPIN Applicable Proc	conditions exist g, Auxiliary Ext systems.	t for any sou tension Build	ing, or Spent I	Tuel Storage
the Buil A. B.	Auxiliary Buildin ding ventilation Applicable SPIN Applicable Proc Inability to ob	conditions exist g, Auxiliary Ext systems. G is inoperable ess Radiation Mo	t for any sou tension Build	ing, or Spent I	Tuel Storage
the Buil A. B. C.	Auxiliary Buildin ding ventilation Applicable SPIN Applicable Proc Inability to ob	conditions exist g, Auxiliary Ext systems.  G is inoperable ess Radiation Motain and analyze	t for any sou tension Build	ing, or Spent I	Fuel Storage  2 hours.

RELATED	EALS:		14. to 1.	. <u></u>		TAB
 Communi	cations,	Dose Ass	essment			6

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# ATTACHMENT 4 UNIT 2 SAFETY SYSTEM FUNCTION

6.5

CONDITION:					
	mmunications				
EMERGENCY C	LASSIFICATION:				
Notificati	on of Unusual Event				
MODES	<u> All</u>				
CRITERIA:					
	lete loss of ANY T	WO of the fol	lowing:		
Α.	Plant telephone	systems (Comm	ercial telephon	es and microway	re)
В,	Station Radio				
c.	Emergency Notific	cation System			
RELATED EAL	s:				TAB
None					

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	ATTACHMEN UNIT 2 SAFETY SYSTEM		
	6.6		
CONDITION:  Control Room Evacuation			
Control Room Evacuation			
EMERGENCY CLASSIFICATION:			
Alert			
MODES <u>All</u>			
CRITERIA:			
1. Control Room evacuation	on is expected to	occur <u>OR</u> has already	occurred
RELATED EALS:			TAB
Control Room Evacuation			6
		A CONTRACTOR OF THE CONTRACTOR	

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### ATTACHMENT 4

		UNIT 2			
	SAFETY	SYSTEM FUI	NCTION		
		6.7			
CONDITION:					
			• •		
Control Room Evacuation an	nd control o	f shutdown	systems n	ot established	in 15
minutes.					
EMERGENCY CLASSIFICATION:					
EMERGENCI CHASSIFICATION:					
Site Area Emergency					
Monna					
MODES <u>1-4</u>					
		•			
CRITERIA:		<u> </u>			
	•				
RELATED EALS:					TAB
RELATED EALS:				1	IAD
Core Damage/ICC					<u> </u>
Decay Heat Removal					6
Core Melt					1
			- <del></del>		
			The second of the second of the second		and the state of t

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#### ATTACHMENT 4 UNIT 2 SAFETY SYSTEM FUNCTION

			<u>6.8</u>		
CONDITION:					
	cay Heat Ren	noval Capabili	ities		
EMERGENCY (	LASSIFICATIO	N:			
Alert					
MODES	5-6				
CRITERIA:					
1. Loss foll	owing: RCS indica	ites saturated	d conditions	ll be identified	
foll A. B.	owing:  RCS indica  Loss of bo for decay	ntes saturated oth shutdown o heat removal	d conditions cooling trains (NA if Fuel Tra	for >1 hr and S/ ansfer Canal >23	 G's not available
fol]	owing:  RCS indica  Loss of bo for decay	ntes saturated oth shutdown o heat removal	conditions	for >1 hr and S/ ansfer Canal >23	 G's not available
foll A. B.	owing:  RCS indicate  Loss of both for decay  HPSI inject	ntes saturated oth shutdown o heat removal	d conditions cooling trains (NA if Fuel Tra	for >1 hr and S/ ansfer Canal >23	 G's not available

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#### ATTACHMENT 4 UNIT 2 SAFETY SYSTEM FUNCTION

CONDI	TION:					
Loss	of Both S	/Gs as a Hea	t Removal	Method		
EMERG	ENCY CLASS	IFICATION:				
Site	Area Emer					
CRITE	RIA:					
1.		he following G level in <u>BC</u>				
	B. EC	AND CS Vent Syste	m is util:	ized		
RELAT	ED EALS:					TAB
Cont	ainment Rad Leakage Melt	diation				1 2 1

<u>Çava (Carata) ilkanı karılı en il</u>				
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			OIMIGE.	007-01-0
	ATTACHMENT	r 4		

### ATTACHMENT 4 UNIT 2 SAFETY SYSTEM FUNCTION

6.10

Loss of Control Room A	Annunciators		
EMERGENCY CLASSIFICATION	On:		
Alert			
MODES ALL			
RITERIA:			
	and DC power to 9	or more of the Control Room	m Annunciator
1. Loss of BOTH AC Panels.			
			TAB

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### ATTACHMENT 4 UNIT 2

		SAFETY SYSTEM	FUNCTION		
		<u>6.11</u>			
ONDITION:			·		
Loss of Control	Room Annunciat	ors with a Tra	ansient in Pro	ogress	
EMERGENCY CLASSI	FICATION:				
Site Area Emerg	ency				
MODES AL	<u> </u>				
CRITERIA:					
	OTH AC and DC p	ower to 9 or 1	more of the Co	ontrol Room Annu	ınciator
Panels.					
		AND			
2. A plant t	ransient is ini	tiated OR in	progress. (Se	ee Section 4.18	of this
procedure	for the defini	tion of a Pla	nt Transient)		
RELATED EALS:					TAB
Electrical Powe	r				4

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		MENT 4 T 2		
	HAZARDS TO STA	TION OPERAT	ION ·	
	<u> </u>	<u>.1</u>		
CONDITION:				
Security threat onsite but attempted entry or sabotage	outside the Prowhich has bee	otected Are n stopped o	a Security Fence utside the securi	(e.g. ty fence).
MERGENCY CLASSIFICATION:				
Notification of Unusual Eve	nt			
MODES <u>All</u>				
RITERIA:				
<ol> <li>Security threat onsite be attempted entry or sabot</li> <li>A credible site-specifi</li> </ol>	age which has	been stoppe <u>OR</u>	d outside the sec	nce (e.g., curity fence).
RELATED EALS:				TAB
RELATED EALS: Security Threat				TAB

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## ATTACHMENT 4 UNIT 2 HAZARDS TO STATION OPERATION

ONDITION:			
Ongoing security threat	within the Protec	ted Area Committy Renge	but outside of
plant buildings.	within the Protec	ted Area Security Fence	Dut outside of
MERGENCY CLASSIFICATION:			
Alert			
MODES 333			
MODES All			
RITERIA:			
Same as the Condition st	ated above.		
ELATED EALS:			TAB
Security Threat			7
Fire or Explosion			7

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	τ	ACHMENT 4 JNIT 2 STATION OPERAT	ion •	
		<u>7.3</u>		
CONDITION:				
Ongoing security threat vital areas.	within plant bu	ildings but no	ot within the Cont	rol Room or
MERGENCY CLASSIFICATION				
Site Area Emergency MODES All				
TRITERIA:				
Same as the Condition s	tated above,			
RELATED EALS:				TAB
Security Threat Fire/Explosion				7

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## ATTACHMENT 4 UNIT 2 HAZARDS TO STATION OPERATION

7.4

CONDITION:					
Ongoing security	threat within th	e Control Room	n or vital a	ceas.	
EMERGENCY CLASSIF	ICATION:				
General Emergency MODES <u>All</u>					
CRITERIA:					
Same as the Condi	ition stated abov				
RELATED EALS:					TAB
None					

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## ATTACHMENT 4 UNIT 2 HAZARDS TO STATION OPERATION

ONDI	rion:						
Fire	or Explosion (	nsite					
MERG	ENCY CLASSIFIC	ATION:					
Noti:	fication of Uni	sual Event					
RITE	RIA:						
	RIA: Fire within t within 10 mir	he Protected	l Area Secu	rity Fence v	hich is not	extinguis	hed
	Fire within t within 10 min	utes.	4	rity Fence v	hich is not	extinguis	hed
1.	Fire within t	utes.	4		hich is not	extinguis	hed
RITE	Fire within t within 10 min	utes.	4		hich is not	ėxtinguis	hed

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### ATTACHMENT 4 UNIT 2 HAZARDS TO STATION OPERATION

	<u>7.6</u>			
CONDITION:				
Fire or Explosion Onsite affe	ecting One Train	of ESF System	ns	
MERGENCY CLASSIFICATION:				
Alert MODES All				
CRITERIA:				
1. Fire or explosion onsit	.te			
2. A potential or actual the fire or explosion.	loss of a single	e train of ANY	ESF system as	a result of
RELATED EALS:				TAB
Fire or Explosion Communications, Dose Assessme Control Room Evacuation	ent			7 6 6

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	ATTACHMENT 4 UNIT 2		

		NIT 2 PATION OPERATIO	N ·	
		7.7		
CONDITION:				
Fire or Explosion Onsite	affecting Both	Trains of ESF	Systems	
EMERGENCY CLASSIFICATION:				
Site Area Emergency				
MODES <u>All</u>				
RITERIA:				
1. Fire or explosion	onsite			
AND				
2. A potential or act	ual loss of Both	trains of ANY	ESF system as	a result of
the fire or explos:	ion.			
				· ·

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### ATTACHMENT 4 UNIT 2 HAZARDS TO STATION OPERATION

7.8

CO	ND	TT	T	വ	v	•

Aircraft Crash, Unusual Aircraft Activity, Train Derailment, Turbine failure, Toxic or Flammable Gas

#### EMERGENCY CLASSIFICATION:

Notification of Unusual Event

MODES All

#### CRITERIA:

- 1. ANY of the following
  - A. Aircraft crash onsite
  - B. Unusual Aircraft activity over the facility
  - C. Train derailment onsite
  - D. Turbine rotating component failure causing rapid plant shutdown
  - E. Toxic or flammable gas release which limits or restricts access to areas required for security or safe operation of the plant.

1	RELATED EALS:	1.0	<u></u>		3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	 TAB
	Fire or Explos	ion				7
1	Security Threa	ıt				7
	MSIS					3
	Other Hazards					<u> </u>
		* * * * * *				

CONDITION:

#### PROCEDURE/WORK PLAN TITLE:

#### **EMERGENCY ACTION LEVEL CLASSIFICATION**

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### ATTACHMENT 4 UNIT 2 HAZARDS TO STATION OPERATION

7.9

ı						
1				그는 그는 사람이 잘 살아 되었다.		
ı	Aircraft	Crash, Missiles,	Toxic or	Flammable Gas	Affecting One	Train of ESF
ı		,,				
ı	Svstems					

E	MERGENCY	CLASSIFICA	TION:				A Section	
Γ								
	Alert						29.	
								٠.
	MODI	ES All		100				

#### CRITERIA:

- 1. ANY of the following
  - A. Aircraft crash onsite
  - B. Missiles/Projectiles from any source
  - C. Toxic or flammable gas release

#### AND

2. A potential OR actual loss of a single train of ANY ESF system

٠.,'	RELATED EALS:	TAB
	Fire or Explosion	7
	Other Hazards	7
٠,	le 그 그리는 한 경소 프로젝트 교육을 하는 것도 하는 한 경우를 하는 것은 것 같아 하는 것을 하는 것 없다.	

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## ATTACHMENT 4 UNIT 2 HAZARDS TO STATION OPERATION

	<u>7.10</u>
CONDITION:	
Aircraft ( Trains	Crash, Missiles, Toxic or Flammable Gas Affecting Both Redundant ESF
MERGENCY (	CLASSIFICATION:
Site Area	Emergency S All
CRITERIA:	
1. <u>ANY</u> A.	of the following Aircraft crash onsite
<b>B.</b>	Missiles/Projectiles from any source
c.	Toxic or flammable gas release <u>AND</u>

	RELATED	EALS:		TAB
٠			gustern garages	
	Fire or	Explosion		7

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#### ATTACHMENT 4 UNIT 2 NATURAL EVENTS

8.1

CO	ND	IT	10	Ν:

Tornado, Flood, Loss of Dardanelle Reservoir, Earthquake

#### EMERGENCY CLASSIFICATION:

Notification of Unusual Event

MODES \_\_All

#### CRITERIA:

- 1. ANY of the following
  - A. Tornado observed on the ground within the Exclusion Area
  - B. Flood Lake level >340' elev. and rising with forecasted lake level >350' elev.
  - C. Low Level Lake level <337' AND forecasted by U.S. Army Corp of Engineers to reach 335'
  - D. Earthquake VERIFIED earthquake accompanied by .01g alarm.

٠	RELATED	EALS:			TAB
1					
1	Natura]	Events			<u>           8                         </u>
ı					

*						
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		AT	TACHMENT 4			

	ATTACHMENT 4 UNIT 2 NATURAL EVENTS
CONDITION:	
Tornado, H	igh Winds, Flood, Loss of Dardanelle Reservoir, Earthquake
EMERGENCY C	LASSIFICATION:
Alert	
MODES	
CRITERIA:	
1. <u>ANY</u>	of the following
<b>A.</b>	Tornado striking vital facility structures (e.g. housing ES related equipment)
В.	High Winds - Sustained winds of $\geq 72$ mph (10 minute average as reported by RDACS from either the 10 or 57 meter instruments).
с.	Flood - Flood waters >350' and are forecasted by U.S. Army Corp of Engineers to reach or exceed 354'
D.	Low Level - Lake level <335' elevation
E.	Earthquake - VERIFIED Earthquake accompanied by .1g alarm.
	OR CORRECTION OF THE PROPERTY
	Any natural event resulting in the potential or actual loss of <u>ONE</u> train of <u>ANY</u> ES system
RELATED EAL	5; - 10; - 1
Natural Eve	

#### PROCEDURE/WORK PLAN TITLE:

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### ATTACHMENT 4 UNIT 2 VATURAL EVENTS

	NATURAL EVENTS  8.3	
CONDITION:		
Tornado, H	igh Winds, Flood, Loss of Dardanelle Reservoir, Earthquake	
EMERGENCY C	LASSIFICATION:	
Site Area		
MODES		
CRITERIA:	of the following	
<b>A.</b>	High Winds - Sustained winds of $\geq 80$ mph (10 minute average as report by RDACS from either the 10 or 57 meter instruments).	.ed
В.	Flood - Flood Water Level is >361' elev.	
<b>C.</b>	Low Level - Lake level <335' elev. and Emergency Cooling Pond not available.	
D.	<u>VERIFIED</u> Earthquake <u>&gt;</u> 0.2g	
E.	Tornado, high wind, flood, low lake level or earthquake resulting in the potential or actual loss of <u>BOTH</u> trains of <u>ANY</u> ESF system.	1
RELATED EAL	S:	

÷	RELATED	EALS:					TAB
	Loss of	or chall	enge to a	ll 3 Fiss	sion Product	: Barriers	1
			ing the great the				

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### ATTACHMENT 4 UNIT 2 MISCELLANEOUS EVENTS

<u>9.1</u>

	TT	

Other plant conditions exist that warrant increased awareness on the part of the operating staff and state and/or local offsite authorities or involve other than normal controlled shutdown.

#### EMERGENCY CLASSIFICATION:

Notification of Unusual Event

MODES \_\_A11

#### CRITERIA:

An event has occurred and the following conditions exist:

1. This event is not covered by any other EAL

#### AND

2. This event does not challenge or cause the loss of a fission product barrier

#### AND

3. In the judgement of the SM/TSC Director/EOF Director this event requires an increased awareness by the ANO Staff and offsite authorities.

٠.	RELATED EALS:
•	
	RCS Activity
	RCS Leakage
	Primary to Secondary Leak
	Radiological Effluents5
	T.S. L.C.O. 's
	Loss of Indications/Communications/Dose Assessment6
,	相关的 A.M. 1917年,1918年,1918年,1918年,1918年,1918年,1918年,1918年,1918年,1918年,1918年,1918年,1918年,1918年,1918年,1918年,1918年

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### ATTACHMENT 4 UNIT 2 MISCELLANEOUS EVENTS

9.2

CO			

Other plant conditions exist that warrant precautionary activation of the Technical Support Center and placing the near-site Emergency Operations Facility and other key emergency personnel on standby.

EMERGENCY	CLASSIFI	CATION:					
Alert							
MOD	ES All						

#### CRITERIA:

The following conditions must exist

1. This event is not covered by any other EAL

AND

2. This event must either challenge or cause the loss of a fission product barrier.

RELATED EALS:	n di kalangan di kalangan di kalangan kalangan di kalangan di kalangan di kalangan di kalangan di kalangan di k	TAB.
RCS Activity		<u> </u>
RCS Leakage		<u> </u>
Primary to Secondary Lea		
Radiological Effluents		
Decay Heat Removal		
	and the second of the contract	

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#### ATTACHMENT 4 UNIT 2 MISCELLANEOUS EVENTS

9.3

#### CONDITION:

Other plant conditions exist that warrant activation of emergency response facilities and monitoring teams or a precautionary notification to the public near the site.

#### EMERGENCY CLASSIFICATION:

Site Area Emergency

MODES All

#### CRITERIA:

The following conditions must exist

1. This event is not covered by any other EAL

AND

- 2. This event may cause ANY of the following:
  - A. Challenge to two fission product barriers
  - B. Failure of one fission product barrier and a challenge to another
  - C. Failure of 2 fission product barriers

RELATE	EALS:			1.5	garter the s	TAB	
Core I	Damage/ICC					1	
	inment Radiation					1	
Decay	Heat Removal					6	
	logical Effluent	В	1.0			5	<u> </u>
RCS Le						2	
	ry to Secondary	Leak				3	
			The state of				

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#### ATTACHMENT 4 UNIT 2 MISCELLANEOUS EVENTS

9.4

COMPTITUM.				 	
CONDITION:					

Plant	Conditions	Exist	That	Make	Release	of	Large	Amounts	of	Radioactivity	Possible
									٠.		

٠.	EMERGENCY CLASSIFICATION:		
	General Emergency		
	MODES All		

### CRITERIA:

The following conditions must exist

1. This event is not covered by any other EAL

#### AND

 Events have occurred that make a release of large amounts of radioactivity in a short period of time possible.

	RELATED EALS:			TAB
٠,	Core Melt			11
	Loss of or Challenge to	Fission Product	Barriers	1
:	Containment Radiation			1 1
,	Radiological Effluents		그 아이들 보고 있습니다. 이 얼룩하다 나다	5

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**EMERGENCY ACTION LEVEL CLASSIFICATION** 

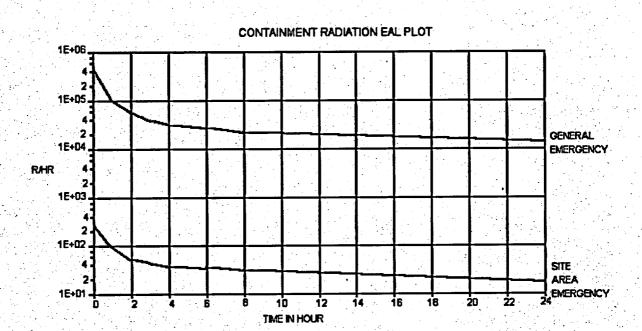
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#### ATTACHMENT 5 UNIT 1



#### **INSTRUCTIONS**

#### CAUTION

- \* In the absence of a significant containment temperature transient, monitor readings should be considered valid.
- \* In the event of a significant containment temperature transient, monitor readings may be erratic for a short duration (Ref.IN-97-45, Supplement 1)

#### A. Determine the containment radiation level.

- 1. If the plant has been operating at 100% for the past 30 days, use the reading from RE-8060 or RE-8061.
- 2. If the plant has been operating at less than 100% power for the past 30 days, determine the radiation level as follows:

- B. Determine the time after shutdown (in hours).
- C. Find the intersection of the values from A and B on the graph.
- D. Determine the emergency class.
  - 1. SITE AREA EMERGENCY intersection is between the two curves
  - 2. GENERAL EMERGENCY intersection is above the upper curve

PROCEDURE/WORK PLAN TITLE:

**EMERGENCY ACTION LEVEL CLASSIFICATION** 

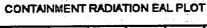
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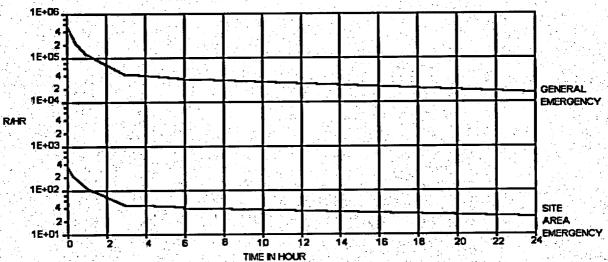
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#### ATTACHMENT 6 UNIT 2





#### **INSTRUCTIONS**

#### CAUTION

- In the absence of a significant containment temperature transient, monitor readings should be considered valid.
- In the event of a significant containment temperature transient, monitor readings may be erratic for a short duration (Ref. IN-97-45, Supplement 1)

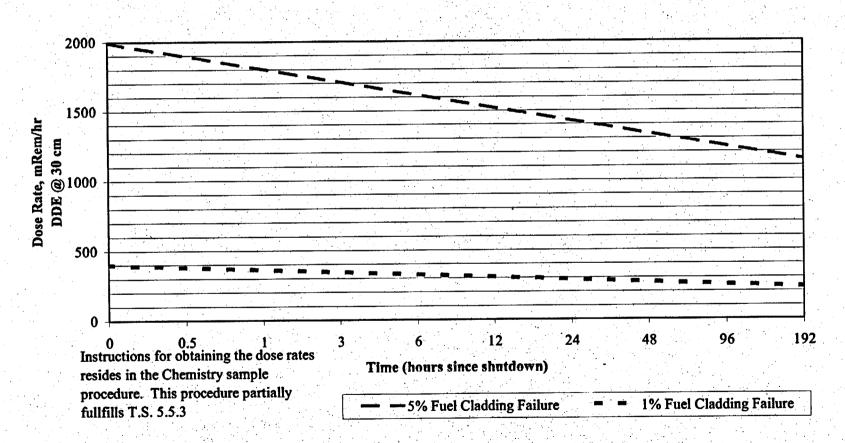
#### Determine the containment radiation level.

- If the plant has been operating at 100% for the past 30 days, use the reading from 2RY-8925-1 or 2RY-8925-2.
- If the plant has been operating at less than 100% power for the past 30 days, determine the 2. radiation level as follows:

Rad level = Reading from 2RY-8925-1 or 2RY-8925-2 X estimated ave. power for the past 30 days

- Determine the time after shutdown (in hours). В.
- Find the intersection of the values from A and B on the graph.
- Determine the emergency class.
  - SITE AREA EMERGENCY intersection is between the two curves
  - GENERAL EMERGENCY intersection is above the upper curve

# Attachment 7 (0CNA080005) Unit 1 Fuel Cladding Failure Radiation Plot mRem/hr at SA-229



Attachment 8 (0CNA080005)
Unit 2 Fuel Cladding Failure Radiation Plot
mRem/hr at 2TCD-19

