

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

December 10, 2001

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

Serial No. 01-737
NAPS/MPW
Docket Nos. 50-338
50-339
License Nos. NPF-4
NPF-7

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION UNITS 1 AND 2
REVISION TO EMERGENCY PLAN IMPLEMENTING PROCEDURE

Our letter dated October 2, 2001 (Serial No. 01-562) included Revision 34 of Emergency Plan Implementing Procedure (EPIP) 1.01. The revision to EPIP-1.01 did not include marks showing where changes were made on selected pages. EPIP-1.01 was re-issued on December 3, 2001 to correct this administrative error. The content of the procedure was not changed. The revisions do not implement actions that decrease the effectiveness of our Emergency Plan. The Emergency Plan and Implementing Procedures continue to meet the standards of 10 CFR 50.47(b).

Please update your manual by performing the actions described in Attachment 1, Tabulation of Changes.

Very truly yours,



D. A. Heacock
Site Vice President

Commitments Stated or Implied: None.

Enclosures

cc: U.S. Nuclear Regulatory Commission (2 copies)
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Atlanta Federal Center
61 Forsyth St., SW, Suite 23T85
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Mr. M. J. Morgan
NRC Senior Resident Inspector
North Anna Power Station

A045

**ATTACHMENT 1
TABULATION OF CHANGES**

**VIRGINIA ELECTRIC AND POWER COMPANY
REVISION TO NORTH ANNA POWER STATION
EMERGENCY PLAN IMPLEMENTING PROCEDURE**

Enclosed is a re-issued revision to a North Anna Power Station Emergency Plan Implementing Procedure (EPIP). Please take the following actions in order to keep your manual updated.

REMOVE AND DESTROY	DATED	INSERT	EFFECTIVE DATE
EPIP-1.01, Rev. 34	09/13/01	EPIP-1.01, Rev. 34	09/13/01 (Re-issued 12/3/01)

Emergency Plan Privacy and Proprietary Material has been removed. Reference Generic Letter No. 81-27.

VIRGINIA POWER
NORTH ANNA POWER STATION
EMERGENCY PLAN IMPLEMENTING PROCEDURE

NUMBER EPIP-1.01	PROCEDURE TITLE EMERGENCY MANAGER CONTROLLING PROCEDURE (With 4 Attachments)	REVISION 34
		PAGE 1 of 7

PURPOSE

To assess potential emergency conditions and initiate corrective actions.

LEVEL 2 DISTRIBUTION
This Document Should Be Verified
And Annotated To A Controlled Source
As Required to Perform Work

ENTRY CONDITIONS

Any of the following:

1. Another station procedure directs initiation of this procedure.
2. A potential emergency condition is reported to the Shift Supervisor.

Approvals on File

Effective Date 09-13-01

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STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

CAUTION: Declaration of the highest emergency class for which an Emergency Action Level is exceeded shall be made.

NOTE: The ERFCS is potentially unreliable in the event of an earthquake. Therefore, ERFCS parameters should be evaluated for accuracy should this situation occur.

____ 1 EVALUATE EMERGENCY ACTION LEVELS:

- a) Determine event category using Attachment 1, EMERGENCY ACTION LEVEL TABLE INDEX
 - b) Review EAL Tab associated with event category
 - c) Use Control Room monitors, ERFCS, and outside reports to get indications of emergency conditions listed in the EAL Table
 - d) Verify EAL - CURRENTLY EXCEEDED
- d) IF basis for EAL no longer exists when discovered AND no other reasons exist for an emergency declaration, THEN do the following:
- RETURN TO procedure in effect.
 - GO TO VPAP-2802, NOTIFICATIONS AND REPORTS, to make one-hour, non-emergency reports for classification without declaration.

IF EAL was NOT exceeded, THEN RETURN TO procedure in effect.

(STEP 1 CONTINUED ON NEXT PAGE)

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STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

1 EVALUATE EMERGENCY ACTION LEVELS: (Continued)

e) Record procedure initiation:

- By: _____
- Date: _____
- Time: _____

f) Initiate a chronological log of events

g) Declare position of Station
Emergency Manager

NOTE: Assembly, accountability and/or initiation of facility staffing may not be desired during certain situations (e.g., security event, severe weather, anticipated grid disturbance) or may have already been completed. These activities should be implemented as quickly as achievable given the specific situation.

____ 2 CHECK - CONDITIONS ALLOW FOR
NORMAL IMPLEMENTATION OF EMERGENCY
RESPONSE ACTIONS

IF deviation from normal emergency
response actions warranted, THEN
do the following:

- a) Refer to Attachment 4,
Considerations for Operations
Response Under Abnormal
Conditions.
- b) Consider applicability of
50.54(x).
- c) IF classification/assembly
announcement deferred, THEN GO
TO Step 4.

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EPIP-1.01	EMERGENCY MANAGER CONTROLLING PROCEDURE	34
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STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
3	NOTIFY PLANT STAFF OF ALERT OR HIGHER CLASSIFICATION:	
	a) Check classification - ALERT OR HIGHER	a) GO TO Step 4.
	b) Check if emergency assembly and accountability - PREVIOUSLY CONDUCTED	b) Do the following: <ol style="list-style-type: none"> 1) Have Control Room sound EMERGENCY alarm and make announcement on station Gai-Tronics system as follows: <p>“(Emergency classification) has been declared as the result of _____” (event)</p> <p>“All Emergency Response personnel report to your assigned stations”</p> <p>“All contractor personnel not responding to the emergency and all visitors report to the Security Building”</p> <p>“All other personnel report to your Emergency Assembly Areas”</p> 2) Repeat RNO Step 3.b.1. 3) GO TO Step 4.
	c) Have Control Room sound EMERGENCY alarm and make announcement on station Gai-Tronics system as follows: <p>“(Emergency classification) has been declared as the result of _____” (event)</p>	
	d) Repeat Step 3.c	

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STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

CAUTION: Continue through this and all further instructions unless otherwise directed to hold.

_____ 4 INITIATE SUPPORTING PROCEDURES:

- a) Direct Emergency Communicators to initiate the following procedures:
 - 1) EPIP-2.01, NOTIFICATION OF STATE AND LOCAL GOVERNMENTS
 - 2) EPIP-2.02, NOTIFICATION OF NRC
- b) Direct HP to initiate EPIP-4.01, RADIOLOGICAL ASSESSMENT DIRECTOR CONTROLLING PROCEDURE
- c) Establish communications with Security Team Leader:
 - 1) Provide Security with current emergency classification
 - 2) Notify Security which Operations Shift is designated for coverage
 - 3) Direct Security to initiate EPIP-5.09, SECURITY TEAM LEADER CONTROLLING PROCEDURE

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STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
_____ 5	CHECK TSC - ACTIVATED	<p><u>IF</u> TSC <u>NOT</u> activated, <u>THEN</u> do the following:</p> <ul style="list-style-type: none"> a) Have STA report to the Control Room. b) Notify Superintendent Operations or Operations Manager On Call. c) Consider having Radiological Assessment Director report to the Control Room. d) <u>WHEN</u> relief SEM arrives, <u>THEN</u> perform turnover using EPIP-1.01, Attachment 3, Turnover Checklist.
_____ 6	<p>IMPLEMENT EPIP FOR EMERGENCY CLASSIFICATION IN EFFECT:</p> <ul style="list-style-type: none"> • Notification of Unusual Event - GO TO EPIP-1.02, RESPONSE TO NOTIFICATION OF UNUSUAL EVENT • Alert - GO TO EPIP-1.03, RESPONSE TO ALERT • Site Area Emergency - GO TO EPIP-1.04, RESPONSE TO SITE AREA EMERGENCY • General Emergency - GO TO EPIP-1.05, RESPONSE TO GENERAL EMERGENCY 	

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EPIP-1.01	EMERGENCY MANAGER CONTROLLING PROCEDURE	34
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STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
7	NOTIFY OFFSITE AUTHORITIES OF EMERGENCY TERMINATION: a) State and local governments (made by LEOF or CEOF when activated) b) NRC	
8	NOTIFY STATION PERSONNEL ABOUT THE FOLLOWING: • Emergency termination • Facility de-activation • Selective release of personnel • Completion and collection of procedures • Recovery	
9	TERMINATE EPIP-1.01: • Give completed EIPs, forms and other applicable records to Nuclear Emergency Preparedness (TSC Emergency Procedures Coordinator if TSC activated) • Completed By: _____ Date: _____ Time: _____	

-END-

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE	34
ATTACHMENT	INDEX	PAGE
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CAUTION: • Declaration of the highest emergency class for which an EAL is exceeded shall be made.

- Emergency Action Levels shall be conservatively classified based on actual or anticipated plant conditions.

NOTE: Design Change Package 99-006, Replacement of Ventilation Radiation Monitors (NAPS Units 1 & 2), replaces KAMAN process and vent stack particulate, iodine and gaseous radiation monitors with a radiation monitor system manufactured by MGP Instruments (MGPI). Affected EALs are: B-4, B-7, C-7, C-9, E-3, E-5, G-1 and G-2. Both KAMAN and MGPI indications are provided for classification depending upon which system is in service. During the interim period when neither system is in service, indications are provided for classification based on HP monitoring and assessments.

EVENT CATEGORY:

TAB

1. Safety, Shutdown, or Assessment System Event.....A
2. Reactor Coolant System Event.....B
3. Fuel Failure or Fuel Handling Accident.....C
4. Containment Event.....D
5. Radioactivity Event.....E
6. DELETED
7. Loss of Secondary Coolant.....G
8. Electrical Failure.....H
9. Fire.....I
10. Security Event.....J
11. Hazard to Station Operation.....K
12. Natural Events.....L
13. Miscellaneous Abnormal Events.....M

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE	34
ATTACHMENT	(TAB A)	PAGE
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CONDITION/APPLICABILITY

INDICATION

CLASSIFICATION

CAUTION: EAL C.2 is duplicated below for cross-reference/comparison to EAL A.1:

C.2. Probable large radioactivity release initiated by loss of heat sink leading to core degradation

MODES 1, 2, 3 & 4

Loss of Main Feedwater System, Condensate System and Auxiliary Feedwater System

GENERAL
EMERGENCY

1. Loss of function needed for unit HSD condition

MODES 1, 2, 3 & 4

• Total loss of the Charging/SI System

OR

Total loss of the Main Feedwater and Auxiliary Feedwater systems

SITE AREA
EMERGENCY

2. Failure of the Reactor Protection System to initiate and complete a required trip while at power

MODES 1 & 2

• Reactor trip setpoint and coincidences - EXCEEDED

AND

• Automatic trip from RPS - FAILED

AND

• Manual trip from Control Room - FAILED

SITE AREA
EMERGENCY

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB A) SAFETY, SHUTDOWN, OR ASSESSMENT SYSTEM EVENT	34
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<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
3. Inability to monitor a significant transient in progress MODES 1, 2, 3 & 4	<ul style="list-style-type: none"> Most (>75%) or all annunciator alarms on panels "A" to "K" - NOT AVAILABLE <p><u>AND</u></p> <ul style="list-style-type: none"> All computer monitoring capability (e.g., plant computer, ERFCs) - NOT AVAILABLE <p><u>AND</u></p> <ul style="list-style-type: none"> Significant transient - IN PROGRESS (e.g., reactor trip, SI actuation, turbine runback >25% thermal reactor power, thermal power oscillations >10%) <p><u>AND</u></p> <ul style="list-style-type: none"> Inability to directly monitor any one of the following using Control Room indications: <ul style="list-style-type: none"> Subcriticality Core Cooling Heat Sink Vessel Integrity Containment Integrity 	SITE AREA EMERGENCY
4. Evacuation of Main Control Room with control not established within 15 minutes ALL MODES	Evacuation of the Control Room with local shutdown control not established within 15 minutes	SITE AREA EMERGENCY

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB A) SAFETY, SHUTDOWN, OR ASSESSMENT SYSTEM EVENT	34
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<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
5. Total loss of function needed for unit CSD condition MODES 5 & 6	<ul style="list-style-type: none"> Secondary system cooling capability - UNAVAILABLE <p><u>AND</u></p> <ul style="list-style-type: none"> Loss of any of the following systems: <ul style="list-style-type: none"> Service Water Component Cooling RHR <p><u>AND</u></p> <ul style="list-style-type: none"> RCS temperature GREATER THAN 140 °F 	ALERT
6. Failure of the Reactor Protection System to complete a trip which takes the Reactor Subcritical MODES 1 & 2	<ul style="list-style-type: none"> Reactor trip setpoint and coincidences - EXCEEDED <p><u>AND</u></p> <ul style="list-style-type: none"> Automatic trip from RPS - FAILED <p><u>AND</u></p> <ul style="list-style-type: none"> Manual trip - REQUIRED <p><u>AND</u></p> <ul style="list-style-type: none"> Manual trip from Control Room - SUCCESSFUL 	ALERT

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB A)	34
ATTACHMENT 1	SAFETY, SHUTDOWN, OR ASSESSMENT SYSTEM EVENT	PAGE 5 of 43

<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
7. Unplanned loss of safety system annunciators with compensatory indicators unavailable or a transient in progress MODES 1, 2, 3 & 4	<ul style="list-style-type: none"> Unplanned loss of most (>75%) or all annunciator alarms on panels "A" to "K" for GREATER THAN 15 minutes <p><u>AND</u></p> <ul style="list-style-type: none"> All computer monitoring capability (e.g., plant computer, ERFCs) - NOT AVAILABLE <p><u>OR</u></p> <p>Significant transient - INITIATED OR IN PROGRESS (e.g., reactor trip, SI, turbine runback > 25% thermal reactor power, thermal power oscillations > 10%)</p>	ALERT
8. Evacuation of Main Control Room required ALL MODES	Evacuation of the Control Room with shutdown control established within 15 minutes	ALERT
9. Inability to reach required mode within technical specification limits MODES 1, 2, 3 & 4	<ul style="list-style-type: none"> Intentional reduction in power, load or temperature IAW T.S. Action Statement - HAS COMMENCED <p><u>AND</u></p> <ul style="list-style-type: none"> T.S. Action Statement time limit for mode change - CANNOT BE MET 	NOTIFICATION OF UNUSUAL EVENT

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB A) SAFETY, SHUTDOWN, OR ASSESSMENT SYSTEM EVENT	34
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<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
10. Failure of a safety or relief valve to close after pressure reduction, which may affect the health and safety of the public MODES 1, 2, 3, 4 & 5	<ul style="list-style-type: none"> • <u>RCS</u> • RCS pressure - LESS THAN 2000 psig <u>OR</u> NDT Protection System - IN SERVICE <u>AND</u> • Any indication after lift or actuation that Pressurizer Safety or PORV - REMAINS OPEN <u>AND</u> • Flow - UNISOLABLE • <u>Main Steam</u> • Excessive Steam Generator Safety, PORV or Decay Heat Release flow as indicated by rapid RCS cooldown rate <u>AND</u> • Main Steam pressure greater than 100 psi below setpoint of affected valve 	NOTIFICATION OF UNUSUAL EVENT
11. Unplanned loss of most or all safety system annunciators for greater than 15 minutes MODES 1, 2, 3 & 4	<ul style="list-style-type: none"> • Unplanned loss of most (>75%) or all annunciators on panels "A" to "K" for GREATER THAN 15 minutes 	NOTIFICATION OF UNUSUAL EVENT

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE	34
ATTACHMENT	(TAB A)	PAGE
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<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
12. Loss of communications capability	<ul style="list-style-type: none"> Station PBX phone system - FAILED 	NOTIFICATION OF UNUSUAL EVENT
ALL MODES	<p style="text-align: center;"><u>AND</u></p> <ul style="list-style-type: none"> Station Gai-tronics system - FAILED <p style="text-align: center;"><u>AND</u></p> <ul style="list-style-type: none"> Station UHF radio system - FAILED 	

NUMBER	ATTACHMENT TITLE	REVISION
EP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB B) REACTOR COOLANT SYSTEM EVENT	34
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<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
1. Loss of 2 of 3 fission product barriers with potential loss of 3rd barrier ALL MODES	Any two of a), b) or c) exist and the third is imminent: a) Fuel clad integrity failure as indicated by any of the following: • RCS specific activity greater than or equal to 300.0 $\mu\text{Ci/gram}$ dose equivalent I-131 <u>OR</u> 5 or more core exit thermocouples greater than 1200 °F <u>OR</u> Containment High Range Radiation Monitor <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"><div>RM-RMS-165, -166 or RM-RMS-265, -266 GREATER THAN 1.88x10² R/hr</div></div> b) Loss of RCS integrity as indicated by any of the following: • RCS pressure greater than 2735 psig <u>OR</u> Loss of Reactor Coolant in progress c) Loss of containment integrity as indicated by any of the following: • Containment pressure greater than 60 psia and not decreasing <u>OR</u> Release path to environment -EXISTS	GENERAL EMERGENCY

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB B)	34
ATTACHMENT 1	REACTOR COOLANT SYSTEM EVENT	PAGE 9 of 43

<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
2. Fuel failure with steam generator tube rupture ALL MODES	Any two of a), b) or c) exist and the third is imminent: a) Fuel clad integrity failure as indicated by any of the following: • RCS specific activity greater than 300 $\mu\text{Ci/gram}$ dose equivalent I-131 <u>OR</u> 5 or more core exit thermocouples GREATER THAN 1200 °F <u>OR</u> High Range Letdown radiation monitor <div style="border: 1px solid black; padding: 2px; display: inline-block;">1-CH-RI-128 or 2-CH-RI-228 GREATER THAN 5.9×10^4 mR/hr</div> b) Steam Generator tube rupture as indicated by both of the following: • SI coincidence - SATISFIED <u>AND</u> • Steam Generator tube rupture -IN PROGRESS c) Loss of secondary integrity associated with ruptured steam generator pathway as indicated by any of the following: • Steam Generator PORV - OPEN <u>OR</u> Main Steam Code Safety Valve - OPEN <u>OR</u> Loss of secondary coolant outside containment - IN PROGRESS	GENERAL EMERGENCY

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE	34
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<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
3. RCS leak rate limit - EXCEEDED MODES 1, 2, 3, & 4	<ul style="list-style-type: none"> Loss of Reactor Coolant in progress and inventory balance indicates leakage GREATER THAN 300 gpm <p><u>AND</u></p> <ul style="list-style-type: none"> Pressurizer level cannot be maintained with two (2) or more Charging/SI pumps in operation 	SITE AREA EMERGENCY

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EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB B) REACTOR COOLANT SYSTEM EVENT	34
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<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
4. Gross primary to secondary leakage with loss of offsite power MODES 1, 2, 3, & 4	<ul style="list-style-type: none"> Steam Generator Tube Rupture - IN PROGRESS <u>AND</u> Safety Injection - REQUIRED <u>AND</u> Vent Vent A Kaman Monitor <div>RM-VG-179 GREATER THAN 1.3 x 10⁸ µCi/sec</div> <u>OR</u> HP determines Site Boundary DDE GREATER THAN 50 mrem/hr <u>OR</u> Vent Vent A MGPI Monitor <div>RM-VG-179 GREATER THAN 1.25 x 10⁸ µCi/sec</div> <u>OR</u> Steam Generator Blowdown monitor on affected pathway <div>RM-SS-122, -222 RM-SS-123, -223 RM-SS-124, -224 GREATER THAN 1x10⁶ cpm</div> <u>AND</u> A subsequent loss of offsite power indicated by zero volts on voltmeters for 4160V buses D, E, & F 	SITE AREA EMERGENCY

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB B) REACTOR COOLANT SYSTEM EVENT	34
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<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
5. RCS leak rate limit - EXCEEDED MODES 1, 2, 3, & 4	<ul style="list-style-type: none"> Pressurizer level cannot be maintained greater than 20% with one (1) Charging/SI pump in operation <p><u>AND</u></p> <ul style="list-style-type: none"> RCS inventory balance indicates leakage - greater than 50 gpm 	ALERT
6. Gross primary to secondary leakage MODES 1, 2, 3, & 4	<p>Steam Generator Tube Rupture - IN PROGRESS</p> <p><u>AND</u></p> <p>Safety Injection - REQUIRED</p>	ALERT

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB B) REACTOR COOLANT SYSTEM EVENT	34
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<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
7. Excessive primary to secondary leakage with loss of offsite power MODES 1, 2, 3, & 4	<ul style="list-style-type: none"> Intentional reduction in power, load or temperature because the unit has entered an Action Statement or will exceed an LCO <p><u>AND</u></p> <ul style="list-style-type: none"> Vent Vent A Kaman Monitor <div style="border: 1px solid black; padding: 2px; margin: 5px 0;">RM-VG-179 GREATER THAN 1.83 x 10⁶ µCi/sec</div> <p><u>OR</u></p> <p>HP assessment of sample results indicates GREATER THAN 10 times ODCM allowable limit (Alert per EAL E-3)</p> <p><u>OR</u></p> <p>Vent Vent A MGPI Monitor</p> <div style="border: 1px solid black; padding: 2px; margin: 5px 0;">RM-VG-179 GREATER THAN 1.73 x 10⁶ µCi/sec</div> <p><u>OR</u></p> <p>Steam Generator Blowdown monitor on affected pathway</p> <div style="border: 1px solid black; padding: 2px; margin: 5px 0;">RM-SS-122, -222 RM-SS-123, -223 RM-SS-124, -224 GREATER THAN 1x10⁵ cpm</div> <p><u>AND</u></p> <ul style="list-style-type: none"> A subsequent loss of offsite power indicated by zero volts on voltmeters for 4160V buses D, E, & F 	ALERT

NUMBER	ATTACHMENT TITLE	REVISION
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<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
8. RCS leak rate requiring plant shutdown IAW T.S. 3.4.6.2 or 3.4.6.3 MODES 1, 2, 3, & 4	<ul style="list-style-type: none"> Intentional reduction in power, load or temperature because the unit has entered an action statement or will exceed an LCO <p><u>AND</u></p> <ul style="list-style-type: none"> Unidentified RCS leakage - greater than 1 gpm <p><u>OR</u></p> <p>Identified leakage - greater than 10 gpm</p> <p><u>OR</u></p> <p>Controlled leakage to RCP Seals - greater than 30 gpm total</p> <p><u>OR</u></p> <p>Any pressure boundary leakage - EXISTS</p>	NOTIFICATION OF UNUSUAL EVENT
9. Primary to Secondary leakage - greater than 1 gpm MODES 1, 2, 3, & 4	<ul style="list-style-type: none"> Intentional reduction in power, load or temperature because the unit has entered an action statement or will exceed an LCO <p><u>AND</u></p> <ul style="list-style-type: none"> Primary to Secondary leakage greater than 1 gpm <p><u>OR</u></p> <p>N-16 monitor indicates primary to secondary leakage greater than T. S. allowable limits</p>	NOTIFICATION OF UNUSUAL EVENT

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB C) FUEL FAILURE OR FUEL HANDLING ACCIDENT	34
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<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
1. Probable large radioactivity release initiated by LOCA with ECCS failure leading to core degradation ALL MODES	<ul style="list-style-type: none"> Loss of reactor coolant in progress <p><u>AND</u></p> <ul style="list-style-type: none"> RCS specific activity - greater than 300 $\mu\text{Ci/gram}$ dose equivalent I-131 <p><u>OR</u></p> <p>Containment High Range Radiation Monitor</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> RM-RMS-165, -166 or RM-RMS-265, -266 GREATER THAN 1.88×10^2 R/hr </div> <p><u>AND</u></p> <ul style="list-style-type: none"> High or low head ECCS flow not being delivered to the core (if expected by plant conditions) 	GENERAL EMERGENCY

CAUTION: EAL A.1 is duplicated below for cross-reference/comparison to EAL C.2:

A.1. Loss of function needed for unit HSD condition MODES 1, 2, 3 & 4	<ul style="list-style-type: none"> Total loss of the Charging/SI System <p><u>OR</u></p> <p>Total loss of the Main Feedwater and Auxiliary Feedwater systems</p>	SITE AREA EMERGENCY
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2. Probable large radioactivity release initiated by loss of heat sink leading to core degradation MODES 1, 2, 3 & 4	Loss of Main Feedwater System, Condensate System and Auxiliary Feedwater System	GENERAL EMERGENCY
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NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB C)	34
ATTACHMENT 1	FUEL FAILURE OR FUEL HANDLING ACCIDENT	PAGE 16 of 43

<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
3. Probable large radioactivity release initiated by failure of protection system to bring Rx subcritical and causing core degradation ALL MODES	<ul style="list-style-type: none"> Rx nuclear power after a trip - greater than 5% <p style="text-align: center;"><u>AND</u></p> <ul style="list-style-type: none"> RCS pressure greater than or equal to 2485 psig <p style="text-align: center;"><u>OR</u></p> <p>Containment pressure and temperature rapidly increasing</p>	GENERAL EMERGENCY
4. Probable large radioactivity release initiated by loss of AC power and all feedwater ALL MODES	<ul style="list-style-type: none"> Loss of all onsite and offsite AC power <p style="text-align: center;"><u>AND</u></p> <ul style="list-style-type: none"> Turbine Driven Auxiliary Feedwater Pump not operable <p style="text-align: center;"><u>AND</u></p> <ul style="list-style-type: none"> Restoration of either of the above not likely within 2 hours 	GENERAL EMERGENCY

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB C) FUEL FAILURE OR FUEL HANDLING ACCIDENT	34
ATTACHMENT		PAGE
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<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
5. Probable large radioactivity release initiated by LOCA with loss of ECCS and containment cooling ALL MODES	<ul style="list-style-type: none"> Loss of reactor coolant in progress <p><u>AND</u></p> <ul style="list-style-type: none"> High or low head ECCS flow not being delivered to the core (if expected by plant conditions) <p><u>AND</u></p> <ul style="list-style-type: none"> Containment RS sump temperature greater than 190°F and NOT decreasing <p><u>OR</u></p> <p>All Quench Spray and Recirculation Spray systems - NOT OPERABLE</p>	GENERAL EMERGENCY

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB C) FUEL FAILURE OR FUEL HANDLING ACCIDENT	34
ATTACHMENT		PAGE
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<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
6. Core damage with possible loss of coolable geometry MODES 1, 2, 3, & 4	<p>a) Fuel clad failure as indicated by any of the following:</p> <ul style="list-style-type: none"> RCS Specific activity greater than 60 $\mu\text{Ci}/\text{gram}$ dose equivalent I-131 <p><u>OR</u></p> <p>High Range Letdown radiation monitor</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> 1-CH-RI-128 or 2-CH-RI-228 GREATER THAN 1.2×10^4 mR/hr </div> <p><u>AND</u></p> <p>b) Loss of cooling as indicated by any of the following:</p> <ul style="list-style-type: none"> 5 confirmed core exit thermocouples greater than 1200 °F <p><u>OR</u></p> <p>Core delta T - zero</p> <p><u>OR</u></p> <p>Core delta T - rapidly diverging</p>	SITE AREA EMERGENCY

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB C) FUEL FAILURE OR FUEL HANDLING ACCIDENT	34
ATTACHMENT		PAGE
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CONDITION/APPLICABILITY	INDICATION	CLASSIFICATION
<p>7. Major fuel damage accident with radioactivity release to containment or fuel buildings</p> <p>ALL MODES</p>	<ul style="list-style-type: none"> Water level in Rx vessel during refueling below the top of core <p><u>OR</u></p> <p>Water level in spent fuel pool below top of spent fuel</p> <p><u>AND</u></p> <ul style="list-style-type: none"> Verified damage to irradiated fuel resulting in readings on Vent Vent "B" Kaman monitor <div style="border: 1px solid black; padding: 2px; width: fit-content;"> RM-VG-180 GREATER THAN $2.74 \times 10^8 \mu\text{Ci/sec}$ </div> <p><u>OR</u></p> <p>HP determines Site Boundary DDE GREATER THAN 50 mrem/hr</p> <p><u>OR</u></p> <p>Verified damage to irradiated fuel resulting in readings on Vent Vent "B" MGPI monitor</p> <div style="border: 1px solid black; padding: 2px; width: fit-content;"> RM-VG-180 GREATER THAN $2.69 \times 10^8 \mu\text{Ci/sec}$ </div>	<p>SITE AREA EMERGENCY</p>
<p>8. Severe Fuel Clad Damage</p> <p>MODES 1, 2, 3, & 4</p>	<ul style="list-style-type: none"> High Range Letdown radiation monitor <div style="border: 1px solid black; padding: 2px; width: fit-content;"> 1-CH-RI-128 or 2-CH-RI-228 Increases to GREATER THAN Hi Hi Alarm setpoint within 30 minutes and remains for at least 15 minutes </div>	<p>ALERT</p>

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB C)	34
ATTACHMENT 1	FUEL FAILURE OR FUEL HANDLING ACCIDENT	PAGE 20 of 43

<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
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- | | | |
|--|---|-------|
| 9. Fuel damage accident with release of radioactivity to containment or fuel buildings | <ul style="list-style-type: none"> Verified accident involving damage to irradiated fuel | ALERT |
|--|---|-------|

ALL MODES

AND

- Health Physics confirms fission product release from fuel

OR

Vent Vent "B" Kaman monitor

RM-VG-180 GREATER THAN $1.83 \times 10^6 \mu\text{Ci/sec}$

OR

HP assessment of sample results indicates GREATER THAN 10 times ODCM allowable limit (Alert per EAL E-3)

OR

Vent Vent "B" MGPI monitor

RM-VG-180 GREATER THAN $1.99 \times 10^6 \mu\text{Ci/sec}$

- | | | |
|---|--|-------|
| 10. Potential for fuel damage to occur during refueling | Continuing uncontrolled decrease of water level in Reactor Refueling Cavity or Spent Fuel Pool | ALERT |
|---|--|-------|

MODE 6

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB C)	34
ATTACHMENT 1	FUEL FAILURE OR FUEL HANDLING ACCIDENT	PAGE 21 of 43

CONDITION/APPLICABILITY	INDICATION	CLASSIFICATION
11. Fuel clad damage indication MODES 1, 2, 3, & 4	<ul style="list-style-type: none"> Intentional reduction in power, load or temperature IAW reactor coolant activity T.S. Action Statement - HAS COMMENCED <p style="text-align: center;"><u>OR</u></p> <p>High Range Letdown radiation monitor</p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <p>1-CH-RI-128 or 2-CH-RI-228 Increases to GREATER THAN Hi Alarm setpoint within 30 minutes and remains for at least 15 minutes</p> </div>	NOTIFICATION OF UNUSUAL EVENT
12. Independent Spent Fuel Storage Installation (ISFSI) event ALL MODES	<ul style="list-style-type: none"> Verified Sealed Surface Storage Cask (SSSC) seal leakage <p style="text-align: center;"><u>OR</u></p> <p>Sealed Surface Storage Cask (SSSC) dropped or mishandled</p>	NOTIFICATION OF UNUSUAL EVENT

NUMBER	ATTACHMENT TITLE EMERGENCY ACTION LEVEL TABLE (TAB D) CONTAINMENT EVENT	REVISION
EPIP-1.01		34
ATTACHMENT 1		PAGE 22 of 43

<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
1. Extremely high containment radiation, pressure and temperature MODES 1, 2, 3, & 4	<ul style="list-style-type: none"> Containment High Range radiation monitor <div>RM-RMS-165, -166 or RM-RMS-265, -266 GREATER THAN 3.76×10^2 R/hr</div> <p><u>AND</u></p> <ul style="list-style-type: none"> Containment pressure greater than 45 psia and not decreasing <p><u>OR</u></p> <p>Containment temperature greater than 2800F</p>	GENERAL EMERGENCY
2. High-high containment radiation, pressure, and temperature MODES 1, 2, 3, & 4	<ul style="list-style-type: none"> Containment High Range radiation monitor <div>RM-RMS-165, -166 or RM-RMS-265, -266 GREATER THAN 1.88×10^2 R/hr</div> <p><u>AND</u></p> <ul style="list-style-type: none"> Containment pressure - greater than 27.75 psia and not decreasing <p><u>OR</u></p> <p>Containment temperature - greater than 200 °F</p>	SITE AREA EMERGENCY

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB D) CONTAINMENT EVENT	34
ATTACHMENT		PAGE
1		23 of 43

<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
3. High Containment radiation, pressure and temperature MODES 1, 2, 3, & 4	<ul style="list-style-type: none"> Containment High Range radiation monitor <div> RM-RMS-165, -166 or RM-RMS-265, -266 GREATER THAN 81.5 R/hr </div> <p><u>AND</u></p> <ul style="list-style-type: none"> Containment pressure - greater than 17 psia <p><u>OR</u></p> <ul style="list-style-type: none"> Containment temperature - greater than 150°F 	ALERT

NUMBER	ATTACHMENT TITLE EMERGENCY ACTION LEVEL TABLE (TAB E) RADIOACTIVITY EVENT	REVISION
EPIP-1.01		34
ATTACHMENT 1		PAGE 24 of 43

CONDITION/APPLICABILITY

INDICATION

CLASSIFICATION

1. Release imminent or in progress and site boundary doses projected to exceed 1.0 Rem TEDE or 5.0 Rem Thyroid CDE

- HP assessment indicates actual or projected doses at or beyond site boundary greater than 1.0 Rem TEDE or 5.0 Rem Thyroid CDE

GENERAL
EMERGENCY

ALL MODES

2. Release imminent or in progress and site boundary doses projected to exceed 0.1 Rem TEDE or 0.5 Rem Thyroid CDE

- HP assessment indicates actual or projected dose at or beyond Site Boundary exceeds 0.1 Rem TEDE or 0.5 Rem Thyroid CDE

SITE AREA
EMERGENCY

ALL MODES

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB E) RADIOACTIVITY EVENT	34
ATTACHMENT		PAGE
1		25 of 43

<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
3. Effluent release greater than 10 times ODCM allowable limit ALL MODES	<p>a) Any of the following monitors indicate valid readings above the specified values for greater than 15 minutes</p> <ul style="list-style-type: none"> Clarifier Effluent RM-LW-111 GREATER THAN 4.8×10^5 cpm Discharge Canal RM-SW-130 or -230 GREATER THAN 5×10^4 cpm Vent Vent A Kaman RM-VG-179 GREATER THAN 1.83×10^6 $\mu\text{Ci/sec}$ Vent Vent A MGPI RM-VG-179 GREATER THAN 1.73×10^6 $\mu\text{Ci/sec}$ Vent Vent B Kaman RM-VG-180 GREATER THAN 1.83×10^6 $\mu\text{Ci/sec}$ Vent Vent B MGPI RM-VG-180 GREATER THAN 1.99×10^6 $\mu\text{Ci/sec}$ Process Vent Kaman RM-GW-178 GREATER THAN 2.0×10^7 $\mu\text{Ci/sec}$ Process Vent MGPI RM-GW-178 GREATER THAN 1.35×10^7 $\mu\text{Ci/sec}$ <p>OR</p> <p>b) HP assessment (sample results or dose projections) indicate greater than 10 times ODCM allowable limit</p>	ALERT

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE	34
ATTACHMENT	(TAB E)	PAGE
1	RADIOACTIVITY EVENT	26 of 43

<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
<p>4. High radiation or airborne contamination levels indicate a severe degradation in control of radioactive material</p> <p>ALL MODES</p>	<p>Valid readings on any of the following monitors have increased by a factor of 1000 and remain for at least 15 minutes:</p> <ul style="list-style-type: none"> Ventilation Vent Multi-sample gaseous or particulate monitor <div>RM-VG-106 or -105</div> Control Room Area <div>RMS-157</div> Aux. Bldg. Control Area <div>RMS-154</div> Decon. Bldg. Area <div>RMS-151</div> Fuel Pool Bridge Area <div>RMS-153</div> New fuel storage Area <div>RMS-152</div> Laboratory Area <div>RMS-158</div> Sample Room Area <div>RMS-156</div> 	<p>ALERT</p>

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB E) RADIOACTIVITY EVENT	34
ATTACHMENT		PAGE
1		27 of 43

CONDITION/APPLICABILITY

5. Effluent release
greater than ODCM
allowable limit

ALL MODES

INDICATION

a) Any of the following
monitors indicate valid
readings above the
specified value for more
than 1 hour:

- Clarifier Effluent

RM-LW-111 GREATER THAN 4.8×10^4 cpm

- Discharge Canal

RM-SW-130 or -230 GREATER THAN 5×10^3 cpm

- Vent Vent A Kaman

RM-VG-179 GREATER THAN 1.83×10^5 $\mu\text{Ci/sec}$

- Vent Vent A MGPI

RM-VG-179 GREATER THAN 1.73×10^5 $\mu\text{Ci/sec}$

- Vent Vent B Kaman

RM-VG-180 GREATER THAN 1.83×10^5 $\mu\text{Ci/sec}$

- Vent Vent B MGPI

RM-VG-180 GREATER THAN 1.99×10^5 $\mu\text{Ci/sec}$

- Process Vent Kaman

RM-GW-178 GREATER THAN 2.0×10^6 $\mu\text{Ci/sec}$

- Process Vent MGPI

RM-GW-178 GREATER THAN 1.35×10^6 $\mu\text{Ci/sec}$

OR

b) HP assessment (sample
results or dose
projections) indicates
greater than ODCM
allowable limit

CLASSIFICATION

NOTIFICATION
OF UNUSUAL
EVENT

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE	34
ATTACHMENT	(TAB G)	PAGE
1	LOSS OF SECONDARY COOLANT	28 of 43

<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
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1. Major secondary line break with significant primary to secondary leakage and fuel damage indicated	Conditions a) and b) exist with c): a) Uncontrolled loss of secondary coolant - IN PROGRESS <u>AND</u>	SITE AREA EMERGENCY
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MODES 1, 2, 3, & 4	b) RCS specific activity exceeds limits of T.S. Figure 3.4-1 (See Attachment 2) <u>OR</u>	
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High Range Letdown radiation monitor

1-CH-RI-128 or 2-CH-RI-228
GREATER THAN Hi Alarm setpoint

AND

c) Vent Vent A Kaman Monitor

RM-VG-179 GREATER THAN $6.45 \times 10^7 \mu\text{Ci/sec}$

OR

HP determines Site Boundary DDE GREATER THAN 50 mrem/hr

OR

Vent Vent A MGPI Monitor

RM-VG-179 GREATER THAN $6.21 \times 10^7 \mu\text{Ci/sec}$

OR

Affected pathway Steam Generator Blowdown monitor

RM-SS-122, -123, -124, -222, -223, -224
GREATER THAN $1 \times 10^6 \text{ cpm}$

OR

Affected pathway Main Steam Line High Range monitor

RM-MS-170, -171, -172, -270, -271, -272
GREATER THAN 12.2 mR/hr

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB G) LOSS OF SECONDARY COOLANT	34
ATTACHMENT		PAGE
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CONDITION/APPLICABILITY

INDICATION

CLASSIFICATION

2. Major secondary line break with significant primary to secondary leakage

MODES 1, 2, 3, & 4

- Uncontrolled loss of secondary coolant - IN PROGRESS

AND

- Vent Vent A Kaman Monitor

RM-VG-179 GREATER THAN
1.83 x 10⁶ µCi/sec

OR

HP assessment of sample results indicates GREATER THAN 10 times ODCM allowable limit (Alert per EAL E-3)

OR

Vent Vent A MGPI Monitor

RM-VG-179 GREATER THAN
1.76 x 10⁶ µCi/sec

OR

Steam Generator Blowdown monitor on affected pathway

RM-SS-122, -123, -124
RM-SS-222, -223, -224
GREATER THAN 1x10⁵ cpm

OR

Main Steam Line High Range monitor on affected pathway

RM-MS-170, -171, -172
RM-MS-270, -271, -272
GREATER THAN 0.14 mR/hr

ALERT

3. Major secondary line break

MODES 1, 2, 3, & 4

Uncontrolled loss of secondary coolant - IN PROGRESS

NOTIFICATION
OF UNUSUAL
EVENT

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB H) ELECTRICAL FAILURE	34
ATTACHMENT		PAGE
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CONDITION/APPLICABILITY

INDICATION

CLASSIFICATION

1. Loss of offsite and onsite AC power for more than 15 minutes

ALL MODES

The following conditions exist for greater than 15 minutes:

- Ammeters for 4160V Reserve Station Service Buses D, E, & F all indicate - zero (0) amps

AND

- Ammeters for 4160V Station Service Buses A, B, & C all indicate - zero (0) amps

AND

- Ammeters for 4160V Emergency Buses H & J both indicate - zero (0) amps

SITE AREA
EMERGENCY

2. Loss of all onsite DC power for greater than 15 minutes

ALL MODES

The following conditions exist for greater than 15 minutes:

- All station battery voltmeters indicate zero (0) volts

AND

- No light indication available to Reserve Station Service breakers 15D1, 15E1 and 15F1

SITE AREA
EMERGENCY

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB H) ELECTRICAL FAILURE	34
ATTACHMENT		PAGE
1		31 of 43

<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
<p>CAUTION: EAL A.1 is duplicated below for cross-reference/comparison to EAL H.3:</p>		
<p>A.1. Loss of function needed for unit HSD condition</p> <p>MODES 1, 2, 3 & 4</p>	<ul style="list-style-type: none"> Total loss of the Charging/SI System <p><u>OR</u></p> <p>Total loss of the Main Feedwater and Auxiliary Feedwater Systems</p>	<p>SITE AREA EMERGENCY</p>
<p>3. Loss of all offsite and onsite AC power</p> <p>ALL MODES</p>	<ul style="list-style-type: none"> Ammeters for 4160V Reserve Station Service Buses D, E, & F all indicate - zero (0) amps <p><u>AND</u></p> <ul style="list-style-type: none"> Ammeters for 4160V Station Service Buses A, B, & C all indicate - zero (0) amps <p><u>AND</u></p> <ul style="list-style-type: none"> Ammeters for 4160V Emergency Buses H and J both indicate - zero (0) amps 	<p>ALERT</p>
<p>4. Loss of all onsite DC power</p> <p>ALL MODES</p>	<ul style="list-style-type: none"> All station battery voltmeters indicate - zero (0) volts <p><u>AND</u></p> <ul style="list-style-type: none"> No light indication available to Reserve Station Service Breakers 15D1, 15E1 and 15F1 	<p>ALERT</p>

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB H) ELECTRICAL FAILURE	34
ATTACHMENT 1		PAGE 32 of 43

<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
5. Loss of offsite power or onsite AC power capability ALL MODES	<ul style="list-style-type: none"> Unit main generator and both emergency diesel generators out of service <p><u>OR</u></p> <p>Loss of all 34.5 KV reserve station service buses</p>	NOTIFICATION OF UNUSUAL EVENT

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB I) FIRE	34
ATTACHMENT		PAGE
1		33 of 43

<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
1. Fire resulting in degradation of safety systems MODES 1, 2, 3, & 4	<ul style="list-style-type: none"> Fire which causes major degradation of a safety system function required for protection of the public <p><u>AND</u></p> <ul style="list-style-type: none"> Affected systems are caused to be <u>NOT</u> operable as defined by Tech. Specs. 	SITE AREA EMERGENCY
2. Fire potentially affecting station safety systems MODES 1, 2, 3, & 4	Fire which has potential for causing a safety system not to be operable as defined by Tech. Specs.	ALERT
3. Fire lasting greater than 10 minutes in Protected Area or Service Water Pump/Valve House ALL MODES	Fire within the Protected Area or Service Water Pump/Valve House which is not under control within 10 minutes after Fire Brigade - DISPATCHED	NOTIFICATION OF UNUSUAL EVENT

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB J) SECURITY EVENT	34
ATTACHMENT		PAGE
1		34 of 43

<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
1. Loss of physical Station control ALL MODES	<ul style="list-style-type: none"> Shift Supervisor has been informed that the security force has been neutralized by attack, resulting in loss of physical control of station <p style="text-align: center;"><u>OR</u></p> <p>Shift Supervisor has been informed of intrusion into one or more Vital Areas which are occupied or controlled by an aggressor</p>	GENERAL EMERGENCY
2. Imminent loss of physical Station control ALL MODES	Security Shift Supervisor has notified the Operations Shift Supervisor of imminent intrusion into a Vital Area	SITE AREA EMERGENCY
3. Ongoing Security compromise ALL MODES	Security Shift Supervisor has notified the Operations Shift Supervisor of a confirmed unneutralized intrusion into the Protected Area	ALERT
4. Security threat, unauthorized attempted entry, or attempted sabotage ALL MODES	Security Shift Supervisor has recommended that the Operations Shift Supervisor declare a Notification of Unusual Event IAW applicable Security Contingency Plan Implementing Procedures	NOTIFICATION OF UNUSUAL EVENT

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE	34
ATTACHMENT	(TAB K)	PAGE
1	HAZARD TO STATION OPERATION	35 of 43

<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
1. Aircraft damage to vital plant systems MODES 1, 2, 3, & 4	Aircraft crash which affects vital structures by impact or fire	SITE AREA EMERGENCY
2. Severe explosive damage MODES 1, 2, 3, & 4	Explosion which results in severe degradation of any of the following systems required for safe shutdown: <ul style="list-style-type: none"> CVCS System <u>OR</u> ECCS System <u>OR</u> Main/Auxiliary Feedwater System 	SITE AREA EMERGENCY
3. Entry of toxic or flammable gases into plant vital areas other than the Control Room MODES 1, 2, 3, & 4	<ul style="list-style-type: none"> Uncontrolled release of toxic or flammable agents greater than life threatening or explosive limits in Vital Areas <u>AND</u> Evacuation of Vital Area other than Control Room - REQUIRED <u>OR</u> Significant degradation of plant safety systems resulting in loss of a safety system function required for protection of the public 	SITE AREA EMERGENCY

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB K) HAZARD TO STATION OPERATION	34
ATTACHMENT		PAGE
1		36 of 43

<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
4. Severe missile damage to safety systems MODES 1, 2, 3, & 4	Missile impact causing severe degradation of safety systems required for unit shutdown	SITE AREA EMERGENCY
5. Aircraft crash on the facility ALL MODES	Aircraft crash within the Protected Area or Switchyard	ALERT
6. Explosion damage to facility ALL MODES	Unplanned explosion resulting in damage to plant structure or equipment that affects plant operations	ALERT
7. Entry of toxic or flammable gases or liquids into plant facility ALL MODES	Notification of uncontrolled release of toxic or flammable agent which causes: <ul style="list-style-type: none"> Evacuation of personnel from plant areas <p style="text-align: center;"><u>AND</u></p> <ul style="list-style-type: none"> Safety related equipment is rendered inoperable 	ALERT
8. Turbine failure or missile impact MODES 1 & 2	Failure of turbine/generator rotating equipment resulting in casing penetration	ALERT

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB K)	34
ATTACHMENT 1	HAZARD TO STATION OPERATION	PAGE 37 of 43

<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
9. Missile damage to safety related equipment or structures MODES 1, 2, 3, & 4	Notification of missile impact causing damage to safety related equipment or structures	ALERT
10. Aircraft crash or unusual aircraft activity ALL MODES	<ul style="list-style-type: none"> Confirmed notification of aircraft crash within the site boundary <p style="text-align: center;"><u>OR</u></p> <p>Unusual aircraft activity in the vicinity of the site as determined by the Operations Shift Supervisor or the Security Shift Supervisor</p>	NOTIFICATION OF UNUSUAL EVENT
11. Train derailment within Protected Area ALL MODES	Confirmed report of train derailment within Protected Area	NOTIFICATION OF UNUSUAL EVENT
12. Explosion within Protected Area ALL MODES	Confirmed report of unplanned explosion within Protected Area	NOTIFICATION OF UNUSUAL EVENT
13. Onsite or nearsite release of toxic or flammable liquids or gases ALL MODES	Notification of unplanned release of toxic or flammable agents which may affect safety of station personnel or equipment	NOTIFICATION OF UNUSUAL EVENT

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE	34
ATTACHMENT	(TAB K)	PAGE
1	HAZARD TO STATION OPERATION	38 of 43

<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
14. Turbine rotating component failure with no casing penetration MODES 1 & 2	Failure of turbine/generator rotating equipment resulting in immediate unit shutdown	NOTIFICATION OF UNUSUAL EVENT

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB L) NATURAL EVENTS	34
ATTACHMENT		PAGE
1		39 of 43

<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
1. Earthquake greater than or equal to DBE levels ALL MODES	<ul style="list-style-type: none"> Confirmed earthquake which activates the Event Alarm on the Strong Motion Accelerograph <p><u>AND</u></p> <ul style="list-style-type: none"> Alarms on the Peak Shock Annunciator indicate a horizontal motion of greater than or equal to 0.12 g or a vertical motion of greater than or equal to 0.08g 	SITE AREA EMERGENCY
2. Sustained winds in excess of design levels experienced or projected MODES 1, 2, 3, & 4	Sustained winds 150 mph OR GREATER experienced or projected	SITE AREA EMERGENCY
3. Flood or low water level above design levels MODES 1, 2, 3, & 4	<p>Either condition a) or b) exists</p> <p>a) Flood in the Lake Anna Reservoir with indicated level - greater than 264 feet MSL</p> <p><u>OR</u></p> <p>b) Low water level in the Lake Anna Reservoir with indicated level - less than 244 feet MSL</p> <p><u>AND</u></p> <p>Inability to satisfy action requirements of T.S. 3.7.5.1 for Ultimate Heat Sink</p>	SITE AREA EMERGENCY

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<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
4. Earthquake greater than or equal to OBE levels ALL MODES	<ul style="list-style-type: none"> Confirmed earthquake which activates Event Alarm on the Strong Motion Accelerograph <p style="text-align: center;"><u>AND</u></p> <ul style="list-style-type: none"> Alarms on the Peak Shock Annunciator indicate a horizontal motion of greater than or equal to 0.06 g or a vertical motion of greater than or equal to 0.04g 	ALERT
5. Tornado striking facility ALL MODES	Tornado visually detected striking structures within the Protected Area or Switchyard	ALERT
6. Hurricane winds near design basis level experienced or projected ALL MODES	Hurricane winds 120 mph OR GREATER experienced or projected	ALERT
7. Flood or low water level near design levels ALL MODES	<ul style="list-style-type: none"> Flood in the Lake Anna Reservoir with indicated level - greater than 263 feet MSL <p style="text-align: center;"><u>OR</u></p> <p>Low water level in the Lake Anna Reservoir with indicated level - less than 244 feet MSL</p>	ALERT

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<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
8. Earthquake detected ALL MODES	Confirmed earthquake which activates the Event Alarm on the Strong Motion Accelerograph	NOTIFICATION OF UNUSUAL EVENT
9. Tornado within Protected Area or Switchyard ALL MODES	Tornado visually detected within Protected Area or Switchyard	NOTIFICATION OF UNUSUAL EVENT
10. Hurricane force winds projected onsite within 12 hours ALL MODES	<ul style="list-style-type: none"> Confirmation by Virginia Power Weather Center that hurricane force winds (greater than 73 mph) projected onsite within 12 hours 	NOTIFICATION OF UNUSUAL EVENT
11. 50 year flood or low water level ALL MODES	<ul style="list-style-type: none"> Flood in the Lake Anna Reservoir with indicated level - greater than 254 feet MSL <p style="text-align: center;"><u>OR</u></p> <p>Low water level in the Lake Anna Reservoir with indicated level less than 246 feet MSL</p>	NOTIFICATION OF UNUSUAL EVENT

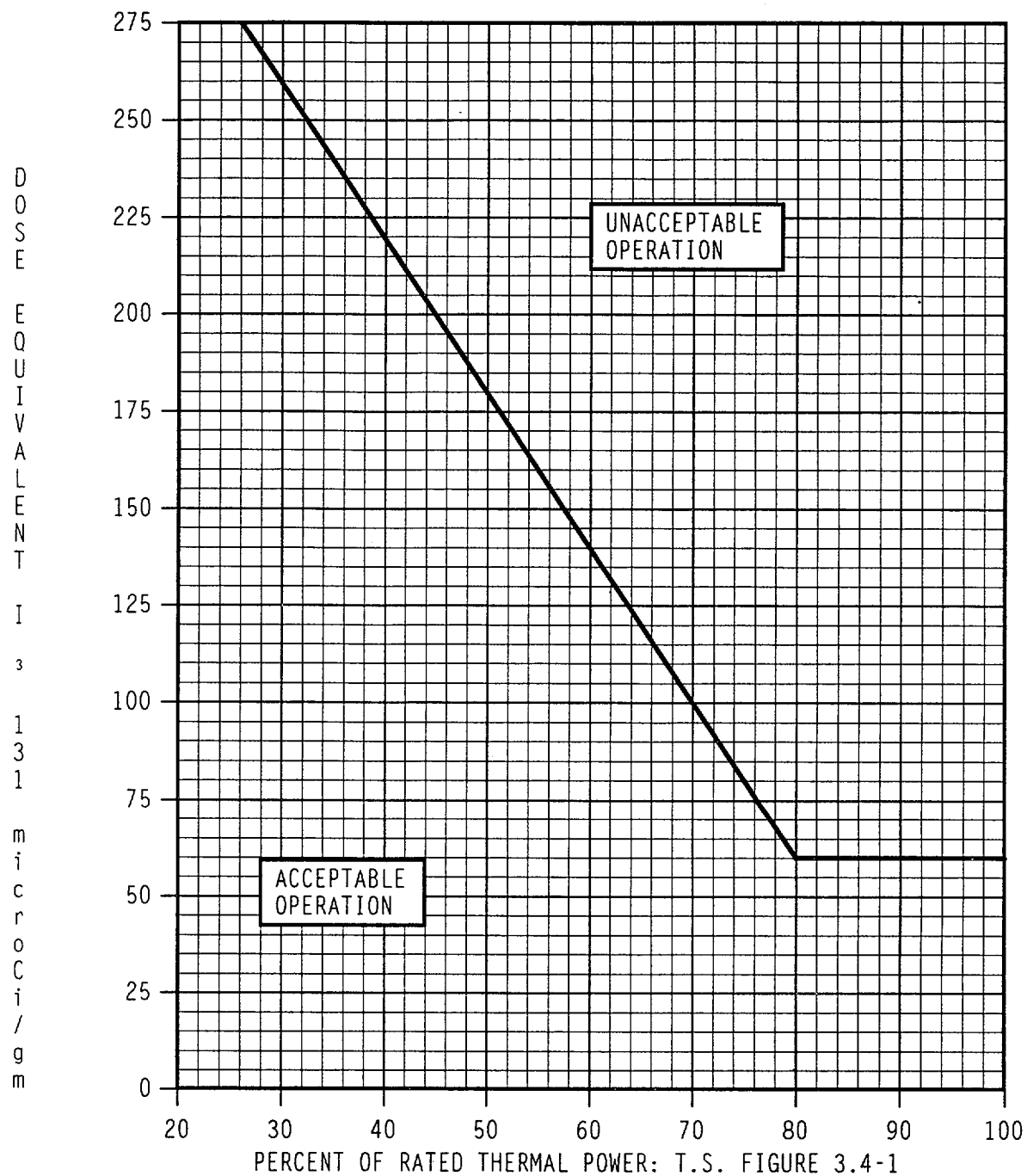
NUMBER	ATTACHMENT TITLE	REVISION
EPIP-1.01	EMERGENCY ACTION LEVEL TABLE (TAB M) MISCELLANEOUS ABNORMAL EVENTS	34
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<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
1. Any major internal or external events which singly or in combination cause massive damage to station facilities or may warrant evacuation of the public ALL MODES	Shift Supervisor/Station Emergency Manager judgement	GENERAL EMERGENCY
2. Station conditions which may warrant notification of the public near the site ALL MODES	Shift Supervisor/Station Emergency Manager judgement	SITE AREA EMERGENCY
3. Station conditions which have the potential to degrade or are actually degrading the level of safety of the station ALL MODES	Shift Supervisor/Station Emergency Manager judgement	ALERT

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<u>CONDITION/APPLICABILITY</u>	<u>INDICATION</u>	<u>CLASSIFICATION</u>
4. Station conditions which warrant increased awareness of state and/or local authorities ALL MODES	Shift Supervisor judgement that any of the following exist: <ul style="list-style-type: none"> Unit shutdown is other than a controlled shutdown <p style="text-align: center;"><u>OR</u></p> Unit is in an uncontrolled condition during operation <p style="text-align: center;"><u>OR</u></p> A condition exists which has the potential for escalation and therefore warrants notification	NOTIFICATION OF UNUSUAL EVENT

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DOSE EQUIVALENT I-131 PRIMARY COOLANT SPECIFIC ACTIVITY LIMIT Versus Percent of RATED THERMAL POWER with the Primary Coolant Specific Activity > 1.0 $\mu\text{Ci/gm}$ Dose Equivalent I-131

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Conduct a turnover between the onshift and relief SEM in accordance with the following checklist. Use placekeeping aid at left of item, "____", to track completion.

- ____ 1. Determine the status of primary responder notification.
- ____ 2. Determine the status of "Report of Emergency to State and Local Governments," EPIP-2.01, Attachment 2. Get completed copies if available.
- ____ 3. Determine status of the "Report of Radiological Conditions to the State," EPIP-2.01, Attachment 3. Get completed copy if available.
- ____ 4. Determine status of Emergency Notification System (ENS) communications and completion status of NRC Event Notification Worksheet (EPIP-2.02 Attachment 1).
- ____ 5. Review classification and initial PAR status.
- ____ 6. Review present plant conditions and status. Get copy of Critical Safety Functions form.
- ____ 7. Review status of station firewatches and re-establish if conditions allow.
- ____ 8. Determine readiness of TSC for activation.
- ____ 9. After all information is obtained, transfer location to TSC. (Consider direct transfer of State & local notifications to LEOF/CEOF.)
- ____ 10. Call the Control Room and assess any changes that may have occurred during transition to the TSC.
- ____ 11. When sufficient personnel are available, the relief SEM is to assume the following responsibilities from the onshift Station Emergency Manager:
 - a. Reclassification.
 - b. Protective Action Recommendations until LEOF activated.
 - c. Notifications (i.e., state, local, & NRC). Upon LEOF activation, transfer notification responsibilities except for the NRC ENS.
 - d. Site evacuation authorization.
 - e. Emergency exposure authorization.
 - f. Command/control of onsite response.
- ____ 12. Formally relieve the Interim SEM and assume control in the TSC. Announce name and facility activation status to facility.

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This attachment provides procedural guidance for controlling selected emergency response actions when their implementation would have adverse results.

Station Emergency Manager (SEM) approval is required before any required action is postponed, suspended or modified. The guidance below is not all-inclusive.

SECURITY EVENT RESPONSE:

IF implementation of emergency response facility activation or assembly of personnel for accountability could compromise Security Plan response strategies or create a personnel safety hazard due to movement of personnel, THEN consider postponing or suspending emergency response actions until threat has been resolved.

UNANTICIPATED HAZARDOUS CONDITIONS EXIST (e.g., tornado or toxic release):

IF assembling personnel for accountability or activating emergency response facilities could endanger plant personnel, THEN consider postponing emergency assembly. (Consider implementing alternative notification methods on an ad hoc basis, e.g., selectively notify personnel in unaffected areas or defer notifications until hazardous conditions are resolved.)

IF notifying augmentation could create a safety hazard for personnel coming to the station, THEN consider postponing augmentation notification. (Consider implementing alternative notification methods on an ad hoc basis, e.g., selectively notify personnel reporting to unaffected areas or defer notifications until the hazardous condition is resolved.)

ANTICIPATED SITUATION (e.g., forecasted severe weather or grid disturbance):

IF all or part of the ERO has been staged in anticipation of a predicted event, THEN notify Security to omit performance of augmentation notification (as described in EPIP-3.05, AUGMENTATION OF EMERGENCY RESPONSE ORGANIZATION).

IF adequate controls have been established to continually account for personnel staged in anticipation of a predicted event, THEN notify Security to omit performance of initial accountability (as described in EPIP-5.03, PERSONNEL ACCOUNTABILITY).

IF a decision has been made to staff the Central EOF in lieu of the LEOF, THEN notify Security that performance of EPIP-3.04, ACTIVATION OF LOCAL EMERGENCY OPERATIONS FACILITY, is not required.

IF environmental conditions are hazardous, THEN consult with Security Team Leader about suspending procedural requirements for staging road blocks (IAW EPIP-5.04, ACCESS CONTROL).