



Entergy Nuclear Northeast  
Entergy Nuclear Operations, Inc.  
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Tel 315-342-3840

JAFP-16-0025  
February 23, 2016

James D. Jones  
Manager Emergency Planning

United States Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555

SUBJECT: Transmittal of Emergency Plan Updates  
James A. FitzPatrick Nuclear Power Plant  
Docket No.50-333  
License No. DPR-059

Dear Sir or Madam:

The documents enclosed with this letter are changes to the James A. FitzPatrick Nuclear Power Plant's (JAF) Emergency Plan made pursuant to 10 CFR 50.54(q). This transmittal fulfills the requirements of 10 CFR 50.54(q), 10 CFR 50 Appendix E Section V, 10 CFR 70.32(i), and 10 CFR 72.44(f) to inform the commission of changes that have been made which do not decrease the effectiveness of the Emergency Plan.

The following documents (including change documentation, evaluation and screening) are attached:

- EAP-4C, Rev. 1

This letter contains no new regulatory commitments.

If you should have any questions, please contact Mr. James D. Jones at (315) 349-6030.

Sincerely,

A handwritten signature in black ink, appearing to read "James D. Jones", written over a horizontal line.

James D. Jones  
Manager Emergency Planning

JDJ:cfv

Enclosure(s):

Including change documentation, evaluation and screening:

- EAP-4C, Rev. 1

AX45  
NRR

cc w/o procedure documentation, evaluation and screening:


USNRC (I&E) Regional Administrator, Region I – Controlled – 2 Copies  
NRC Resident Inspector – Controlled – 1 Copy  
NRC Director NMSS – Uncontrolled – 1 Copy  
NRC Director Division of Spent Fuel Storage and Transportation – Uncontrolled - 1 Copy  
NRC Director, Division of Security Policy – Uncontrolled – 1 Copy  
NYSEMO – Controlled – 1 Copy  
OCEMO – Controlled – 1 Copy

**JAFP-16-0025**

**Enclosures**

Including change documentation, evaluation and screening:

- EAP-4C, Rev. 1

	<b>NUCLEAR MANAGEMENT MANUAL</b>	QUALITY RELATED	EN-LI-106	REV. 13
		INFORMATIONAL USE		
NRC Correspondence				

ATTACHMENT 9.4

NRC SUBMITTAL REVIEW

Sheet 1 of 2

**Letter #:** JAFP-16-0025

**Response Due:** 2/26/16

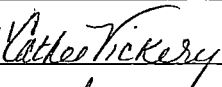
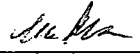
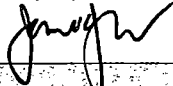
**Subject:** Transmittal of Emergency Plan Updates

**Date Issued for Review:** 2/17/16

**Correspondence Preparer / Phone #:** Cathee Vickery 315-349-6777

**Section I**


**Letter Concurrence and Agreement to Perform Actions**

POSITION / NAME	Action (concurrence, certification, etc.)	Signature (sign, interoffice memo, e-mail, or telecom)
Emergency Planning Dept.	Preparer/Reviewer	Cathee Vickery 
Licensing Department	Concurrence	Mark Hawes / 
Emergency Preparedness Manager	Approver	James Jones / 
<b>COMMENTS</b>		
- EAP-4C, Revision 1		

**Section II**

**Correspondence Screening**

Does this letter contain commitments? If "yes," identify the commitments with due dates in the submittal and in Section III. When fleet letters contain commitments, a PCRS LO (e.g., LO-LAR, LO-WT) should be initiated with a CA assigned to each applicable site to enter the commitments into the site's commitment management system.	Yes No	<input type="checkbox"/> <input checked="" type="checkbox"/>
Does this letter contain any information or analyses of new safety issues performed at NRC request or to satisfy a regulatory requirement? If "yes," reflect requirement to update the UFSAR in Section III.	Yes No	<input type="checkbox"/> <input checked="" type="checkbox"/>
Does this letter require any document changes (e.g., procedures, DBDs, FSAR, TS Bases, etc.), if approved? If "yes," indicate in Section III an action for the responsible department to determine the affected documents. (The Correspondence Preparer may indicate the specific documents requiring revision, if known or may initiate an action for review.)	Yes No	<input type="checkbox"/> <input checked="" type="checkbox"/>
Does this letter contain information certified accurate? If "yes," identify the information and document certification in an attachment. (Attachment 9.5 must be used.)	Yes No	<input type="checkbox"/> <input checked="" type="checkbox"/>

	<b>NUCLEAR MANAGEMENT MANUAL</b>	QUALITY RELATED	EN-LI-106	REV. 13
		INFORMATIONAL USE		
<b>NRC Correspondence</b>				

ATTACHMENT 9.4

NRC SUBMITTAL REVIEW

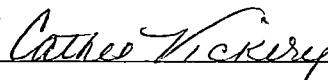
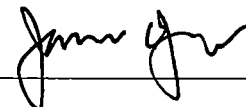
Sheet 2 of 2

**Section III**

**Actions and Commitments**

<b>Required Actions</b> <i>Note: Actions needed upon approval should be captured in the appropriate action tracking system</i>	<b>Due Date</b>	<b>Responsible Dept.</b>
N/A		
<b>Commitments</b> <i>Note: When fleet letters contain commitments, a PCRS LO should be initiated with a CA assigned to each applicable site to enter the commitments into the site's commitment management system.</i>	<b>Due Date</b>	<b>Responsible Dept.</b>
N/A		

**Section IV Final Document Signoff for Submittal**

<b>Correspondence Preparer</b>	Cathee Vickery / 
<b>Final Submittal Review (optional)</b>	N/A
<b>Responsible Department Head</b>	James Jones / 

**ENTERGY NUCLEAR NORTHEAST  
JAMES A. FITZPATRICK NUCLEAR POWER PLANT  
DOCUMENT TRANSMITTAL AND RECEIPT ACKNOWLEDGEMENT FORM**

TO: EP Admin  
DEPT.: Emergency Planning  
LOCATION: USNRC Document Control Center, Washington  
DC/RockvilleMD

**SPECIAL NOTES:** JAFP Memo & EN-LI-106 form required.  
Include 10CFR50.54(q) Screen and Evaluation (EN-EP-305 Attach  
9.1 & 9.2)

CONTROL MANUAL NUMBER 34

FROM: KELLY SAWYER  
DEPT.: ADMINISTRATIVE SERVICES  
LOCATION: JAF  
DATE: February 16, 2016

**APPLICABLE MANUAL: E-PLAN PROCEDURES**

DOCUMENT NUMBER	DOCUMENT TITLE	REV	EFFECTIVE DATE
UPDATE LIST	UPDATE LIST - VOLUME 2	N/A	2/23/2016
EAP-4C	PROTECTIVE ACTION RECOMMENDATIONS	1	2/23/2016

**INSTRUCTIONS:**

1. Insert the attached revised documents, and withdraw any noted WITHDRAWN documents from your controlled copy.
2. **DISCARD ALL SUPERCEDED DOCUMENTS, as applicable. DISCARD THIS TRANSMITTAL.**

**NOTE**

Failure to incorporate these documents into your controlled manual  
will result in cancellation of the subject controlled documents.

# EMERGENCY PLAN IMPLEMENTING PROCEDURES/VOLUME 2 UPDATE LIST

Date of Issue: 2/23/2016

Procedure Number	Procedure Title	Revision Number	Date of Last Review	Use of Procedure
N/A	TABLE OF CONTENTS	REV. 22	07/15	Informational
IAP-1	EMERGENCY PLAN IMPLEMENTATION CHECKLIST	REV. 46	09/15	Informational
IAP-2	CLASSIFICATION OF EMERGENCY CONDITIONS	REV. 34 FLOWCHART REV. 10	07/15	Informational
EAP-1.1	OFFSITE NOTIFICATIONS	REV. 72	10/15	Informational
EAP-2	PERSONNEL INJURY	REV. 33	05/15	Informational
EAP-3	FIRE	REV. 26	01/13	Informational
EAP-4	WITHDRAWN (12/14)			
EAP-4A	ONSHIFT DOSE ASSESSMENT	REV. 0	12/14	Informational
EAP-4B	DETAILED DOSE ASSESSMENT	REV. 1	12/14	Informational
EAP-4C	PROTECTIVE ACTION RECOMMENDATIONS	REV. 1	12/14	Informational
EAP-4.1	RELEASE RATE DETERMINATION	REV. 24	12/14	Informational
EAP-5.1	DELETED (02/94)			
EAP-5.2	DELETED (04/91)			
EAP-5.3	ONSITE/OFFSITE DOWNWIND SURVEYS AND ENVIRONMENTAL MONITORING	REV. 21	06/12	Informational
EAP-6	IN-PLANT EMERGENCY SURVEY/ENTRY	REV. 19	02/14	Informational
EAP-7.1	DELETED (02/94)			
EAP-7.2	DELETED (02/94)			
EAP-8	PERSONNEL ACCOUNTABILITY	REV. 74	09/13	Informational
EAP-9	SEARCH AND RESCUE OPERATIONS	REV. 13	08/13	Informational
EAP-10	PROTECTED AREA EVACUATION	REV. 22	10/13	Informational
EAP-11	SITE EVACUATION	REV. 23	10/13	Informational
EAP-12	DOSE ESTIMATED FROM AN ACCIDENTAL RELEASE OF RADIOACTIVE MATERIAL TO LAKE ONTARIO	REV. 13	02/14	Informational
EAP-13	DAMAGE CONTROL	REV. 22	07/11	Informational



# EMERGENCY PLAN IMPLEMENTING PROCEDURES/VOLUME 2 UPDATE LIST

Date of Issue: 2/23/2016

Procedure Number	Procedure Title	Revision Number	Date of Last Review	Use of Procedure
EAP-14.1	WITHDRAWN (02/23/05)			
EAP-14.2	WITHDRAWN (02/23/15)			
EAP-14.5	WITHDRAWN (02/23/15)			
EAP-14.6	HABITABILITY OF THE EMERGENCY FACILITIES	REV. 18	04/14	Informational
EAP-14.7	REMOTE ASSEMBLY AREA ACTIVATION	REV. 3	12/14	Reference
EAP-14.8	ALTERNATE TSC/SC ACTIVATION AND OPERATION	REV. 1	12/14	Reference
EAP-15	EMERGENCY RADIATION EXPOSURE CRITERIA AND CONTROL	REV. 13	07/15	Informational
EAP-16	PUBLIC INFORMATION PROCEDURE	REV. 9	03/14	Informational
EAP-16.2	JOINT INFORMATION CENTER OPERATION	REV. 16	12/15	Informational
EAP-17	EMERGENCY ORGANIZATION STAFFING	REV. 124	09/15	Informational
EAP-18	DELETED (12/93)			
EAP-19	EMERGENCY USE OF POTASSIUM IODINE (KI)	REV. 29	10/11	Informational
EAP-20	POST ACCIDENT SAMPLE, OFFSITE SHIPMENT AND ANALYSIS	REV. 11	04/14	Informational
EAP-21	DELETED (12/85)			
EAP-22	DELETED (02/98)			
EAP-23	EMERGENCY ACCESS CONTROL	REV. 15	04/14	Informational
EAP-24	EOF VEHICLE AND PERSONNEL DECONTAMINATION	REV. 11	12/14	Informational
EAP-25	DELETED (02/94)			



ENTERGY NUCLEAR OPERATIONS, INC.  
JAMES A. FITZPATRICK NUCLEAR POWER PLANT  
EMERGENCY PLAN IMPLEMENTING PROCEDURE

PROTECTIVE ACTION RECOMMENDATIONS  
EAP-4C  
REVISION 1

EFFECTIVE DATE: February 23, 2016

*****	*****
*	*
* INFORMATIONAL USE	* QUALITY RELATED
*	*
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* ADMINISTRATIVE	
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**CONTROLLED**

PERIODIC REVIEW DUE DATE: \_\_\_\_\_

## REVISION SUMMARY SHEET

REV. NO.

- 1 Procedure change to section 6.1.3 to address Columbia Station OE on not requiring field team data prior to making PARs beyond 10 mile EPZ. (CR-HQN-2015-850 CA#2)
- Revise note 2 at beginning of Section 6.1.3 to include the words "When available, "
  - Delete Section 6.1.3.A, renumber sections accordingly.
  - Revise previous section 6.1.3.B to delete "IF field surveys verify the calculated dose assessment exposure rates, then"
  - Deleted word "the" for grammatical correctness.
  - Added section 6.1.3.A.1: "IF not already performed, THEN direct DISPATCH of Field Monitoring Teams to downwind areas outside the 10 mile EPZ to validate expanded PARs adequately bound the areas with PAGs exceeded."

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**1.0 PURPOSE**

This procedure provides guidelines for determining Protective Action Recommendations (PARs) to be made to offsite authorities during a General Emergency.

**2.0 REFERENCES****2.1 Performance References**

- 2.1.1 EAP-4A, Onshift Dose Assessment
- 2.1.2 EAP-4B, Detailed Dose Assessment
- 2.1.3 EAP-1.1, Offsite Notifications
- 2.1.4 EAP-5.3, Onsite/Offsite Downwind Surveys and Environmental Monitoring
- 2.1.5 EAP-42, Obtaining Meteorological Data
- 2.1.6 IAP-2, Classifications of Emergency Conditions

**2.2 Developmental References**

- 2.2.1 NEI 12-10 Guidelines for Developing a Licensee Protective Action Recommendation Procedure Using NUREG-0654 Supplement 3, Revision 0, April 2014
- 2.2.2 NUREG 0654/FEMA-REP-1, Supplements 3

**3.0 INITIATING EVENTS**

- 3.1 A General Emergency has been declared.

**4.0 RESPONSIBILITIES****4.1 Shift Manager/Emergency Director (SM/ED)**

When in Command and Control the SM/ED is responsible for ensuring that Protective Action Recommendations (PARs) are developed in accordance with this procedure and approves PARs prior to communicating the PARs to offsite agencies.

**4.2 TSC Radiological Coordinator**

The TSC Radiological Coordinator is responsible to the Emergency Director for managing the radiological monitoring and assessment aspects onsite and in plant during an emergency and of those functions specified in Step 4.3 until relieved of those functions by the EOF.

**4.3 EOF Radiological Assessment Coordinator**

The EOF Radiological Assessment Coordinator (RAC) is responsible to the Emergency Director for managing the

radiological monitoring and assessment aspects offsite during an emergency, in order to assess the radiological consequences to the public including providing PARs to the ED for timely review and approval.

#### 4.4 Onshift Chemistry Technician

When Command and Control is in the Control Room the Onshift Chemistry Technician is responsible to the Shift Manager for developing Protective Action Recommendations (PARs) in accordance with this procedure.

#### 5.0 DEFINITIONS AND TERMS

5.1 EPA Protective Action Guideline (PAG): Guidance developed by the Environmental Protection Agency regarding projected radiological dose or dose commitment values to individuals in the general population that warrant protective action following a release of radioactive materials. These levels have been established at 1 Rem TEDE or 5 Rem CDE Thyroid.

5.2 Emergency Planning Zones (EPZ): That area surrounding the plant in which emergency planning is conducted for the protection of the public. With respect to protecting the public from the plume exposure resulting from an incident, the EPZ is an area with a radius of about 10 miles surrounding the plant. With respect to the ingestion exposure pathway, the EPZ is an area with a radius of 50 miles.

5.3 Emergency Response Planning Area (ERPA): Pre-designated sub-area within the 10 mile Emergency Planning Zone used to more specifically target the recommendation of offsite protective actions. The FitzPatrick/Nine Mile Point Site utilizes 27 ERPAs based on geopolitical boundaries.

5.4 Initiating Condition (IC): one of a predetermined subset of plant conditions where either the potential exists for a radiological emergency, or such an emergency has occurred.

5.5 Potential: mitigation actions are not effective and trended information indicates that the parameters are outside desirable bands and not stable or improving.

5.6 Controlled Containment Vent (Puff Release): A venting of the containment that is anticipated to be terminated prior to exceeding 60 minutes in duration (short term release).

5.7 Protective Action Recommendations (PARs): In the context of this procedure, PARs are protective actions recommended to



government officials for the purpose of protecting the public from the effects of the release of radioactive materials from JAF. PARs are recommended based on EPA 400 Protective Action Guidelines and plant conditions.

- 5.8 Rapidly Progressing Severe Accident (RPSA): a General Emergency with a rapid loss of containment integrity and loss of the ability to cool the core.

6.0 PROCEDURE

6.1 Protective Action Recommendations

NOTE

INITIAL Protective Action Recommendations (PARs) can be made from any Emergency Facility where the Shift Manager (SM) OR the Emergency Director (ED) are in command and control.

- 6.1.1 DETERMINE PARs USING Attachment 1, FitzPatrick PAR Flowchart.
- 6.1.2 IF an evacuation recommendation for an ERPA has been given, Then DO NOT reduce it to shelter.

NOTES

1. Does Assessment performed in the Control Room (EAP-4A) can only be used for projections out to 10 miles. Therefore, step 6.1.3 will only apply to the EOF.
2. Beyond 10 miles the uncertainties in dose projection methods may result in significant inaccuracies in dose projection results. When available, field surveys results should be used in conjunction with dose projections to estimate doses beyond 10 miles.

- 6.1.3 IF dose assessment results indicate the need to recommend actions beyond 10 miles, then **PERFORM** the following steps:
- A. **EXPAND** the PAR to include areas outside the EPZ where PAGs have been exceeded using convenient geographic boundaries (i.e., townships).
    1. IF not already performed, **THEN** direct **DISPATCH** of Field Monitoring Teams to downwind areas outside the 10 mile EPZ to

validate expanded PARs adequately bound the areas with PAGs exceeded.

2. Continue monitoring beyond the current PAR areas to determine the need for further PAR expansion beyond 10 miles.

6.1.4 ENTER the PAR information on the Part 1 Form (EAP-1.1, Attachment 1).

6.1.5 The PAR **MUST** be provided to Oswego County and New York State via step 6.1.7 within 15 minutes of:

A. The classification of the General Emergency

OR

B. Any change in recommended actions

6.1.6 ALL PARs **SHALL** include the recommendation to implement the KI plan.

6.1.7 **COMPLETE** the PAR notification in accordance with EAP-1.1.

6.1.8 **CONTINUE** to evaluate applicable Flowchart entry points for PAR upgrades.

## 7.0 RECORDS

7.1 There are no records generated by this procedure that are subject to the requirements of EN-AD-103 - Document Control and Records Management Programs.

## 8.0 ATTACHMENTS

1. ATTACHMENT 1, FITZPATRICK PAR FLOWCHART  
(POSTED ATTACHMENT)



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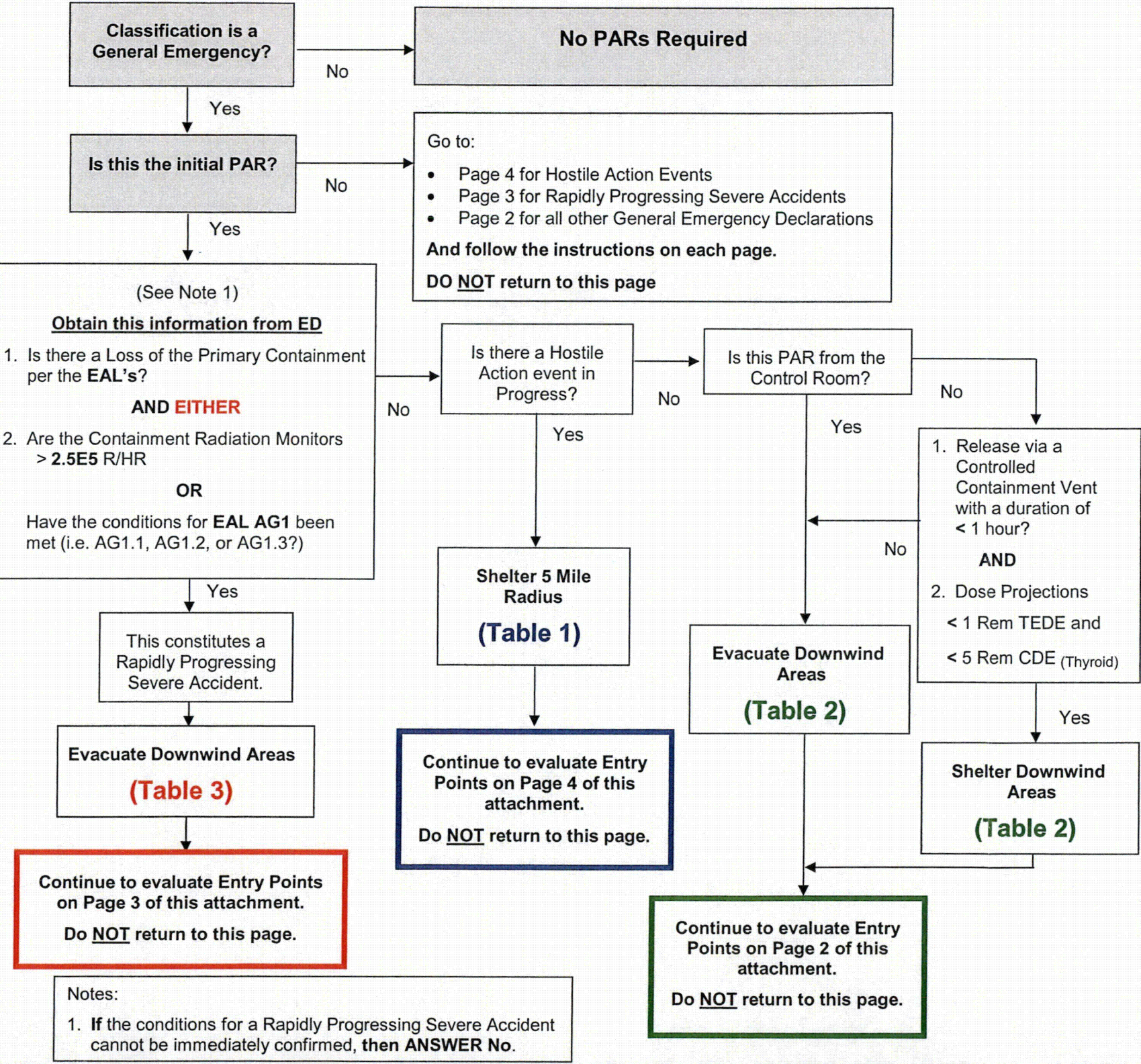


Table 1 (5 Mile Radius)			
WD From		ERPA's	
0°	to 360°	1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 26, 27	

Table 2 (2 Mile Radius & 5 Miles Down Wind)			
WD From		ERPA's	
349°	to 011°	1, 2, 3, 4, 5, 6, 9, 10, 11, 26, 27	
012°	to 033°	1, 2, 3, 5, 6, 9, 10, 11, 26, 27	
034°	to 056°	1, 2, 3, 5, 6, 10, 11, 26, 27	
057°	to 078°	1, 2, 3, 5, 6, 10, 11, 26, 27	
079°	to 101°	1, 2, 3, 6, 11, 26, 27	
102°	to 124°	1, 2, 3, 6, 26, 27	
125°	to 146°	1, 2, 3, 26, 27	
147°	to 169°	1, 2, 3, 26, 27	
170°	to 191°	1, 2, 3, 26, 27	
192°	to 214°	1, 2, 3, 26, 27	
215°	to 236°	1, 2, 3, 4, 7, 26, 27	
237°	to 258°	1, 2, 3, 4, 7, 9, 26, 27	
259°	to 281°	1, 2, 3, 4, 5, 7, 9, 26, 27	
282°	to 303°	1, 2, 3, 4, 5, 7, 9, 10, 26, 27	
304°	to 326°	1, 2, 3, 4, 5, 7, 9, 10, 11, 26, 27	
327°	to 348°	1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 26, 27	

Table 3 (2 Mile Radius & 10 Miles Down Wind)			
WD From		ERPA's	
349°	to 011°	1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27	
012°	to 033°	1, 2, 3, 5, 6, 9, 10, 11, 12, 13, 18, 19, 20, 21, 22, 23, 24, 26, 27, 28	
034°	to 056°	1, 2, 3, 5, 6, 10, 11, 12, 13, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28	
057°	to 078°	1, 2, 3, 5, 6, 10, 11, 12, 13, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28	
079°	to 101°	1, 2, 3, 6, 11, 12, 13, 19, 21, 22, 23, 24, 26, 27, 28	
102°	to 124°	1, 2, 3, 6, 26, 27, 28	
125°	to 146°	1, 2, 3, 26, 27, 28, 29	
147°	to 169°	1, 2, 3, 26, 27, 28, 29	
170°	to 191°	1, 2, 3, 26, 27, 28, 29	
192°	to 214°	1, 2, 3, 14, 26, 27, 28, 29	
215°	to 236°	1, 2, 3, 4, 7, 14, 15, 26, 27, 28, 29	
237°	to 258°	1, 2, 3, 4, 7, 8, 9, 14, 15, 16, 17, 26, 27, 29	
259°	to 281°	1, 2, 3, 4, 5, 7, 8, 9, 14, 15, 16, 17, 18, 26, 27, 29	
282°	to 303°	1, 2, 3, 4, 5, 7, 8, 9, 10, 14, 15, 16, 17, 18, 19, 20, 26, 27, 29	
304°	to 326°	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, 26, 27, 29	
327°	to 348°	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27	



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All Other General Emergencies

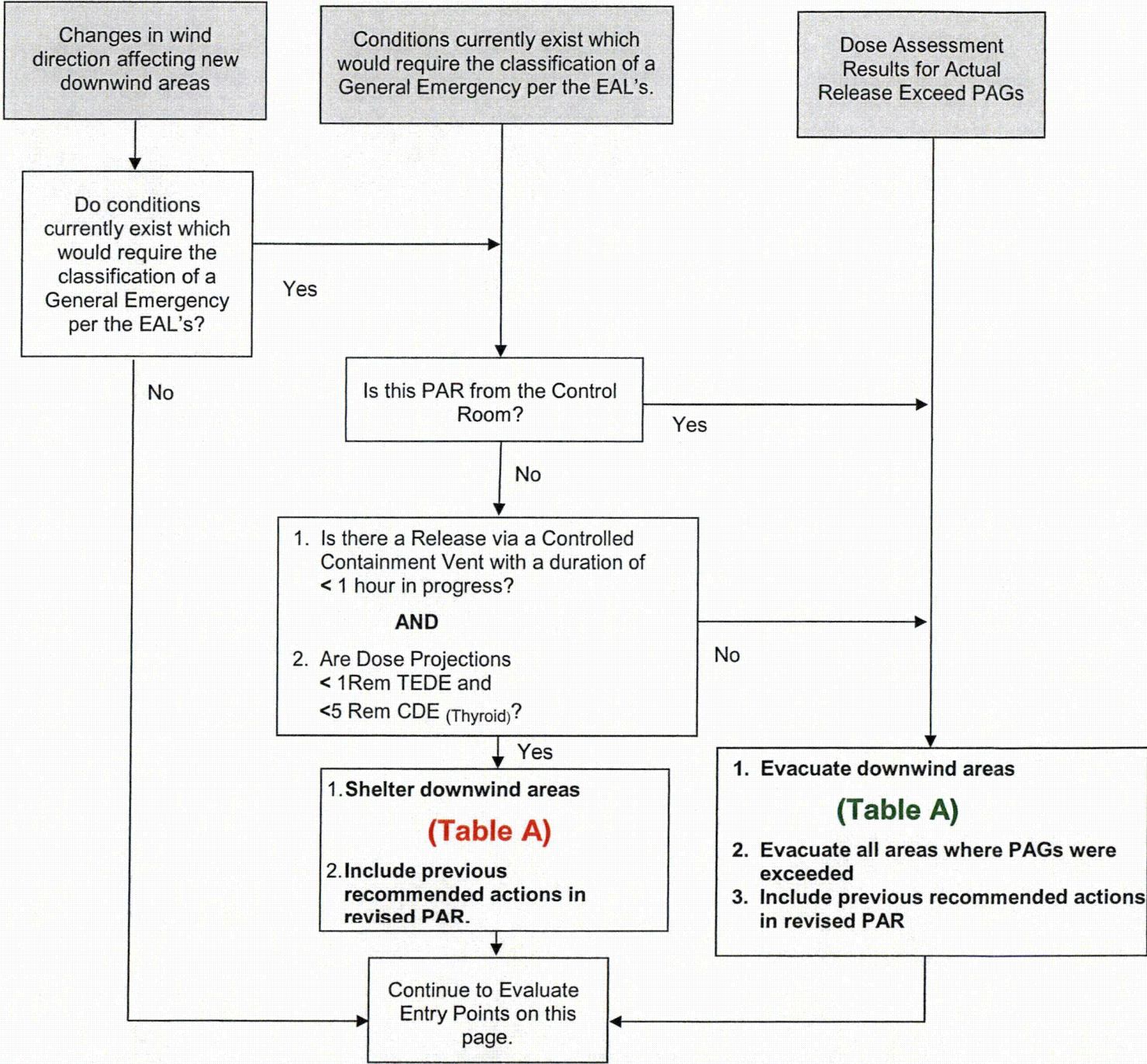


Table A (2 Mile Radius & 5 Miles Down Wind)

WD From			ERPA's
349°	to	011°	1, 2, 3, 5, 6, 9, 10, 11, 26, 27
012°	to	033°	1, 2, 3, 5, 6, 10, 11, 26, 27
034°	to	056°	1, 2, 3, 5, 6, 10, 11, 26, 27
057°	to	078°	1, 2, 3, 6, 10, 11, 26, 27
079°	to	101°	1, 2, 3, 6, 26, 27
102°	to	124°	1, 2, 3, 26, 27
125°	to	146°	1, 2, 3, 26, 27
147°	to	169°	1, 2, 3, 26, 27
170°	to	191°	1, 2, 3, 26, 27
192°	to	214°	1, 2, 3, 26, 27
215°	to	236°	1, 2, 3, 26, 27
237°	to	258°	1, 2, 3, 4, 7, 26, 27
259°	to	281°	1, 2, 3, 4, 7, 9, 26, 27
282°	to	303°	1, 2, 3, 4, 5, 7, 9, 10, 26, 27
304°	to	326°	1, 2, 3, 4, 5, 7, 9, 10, 26, 27
327°	to	348°	1, 2, 3, 4, 5, 7, 9, 10, 11, 26, 27



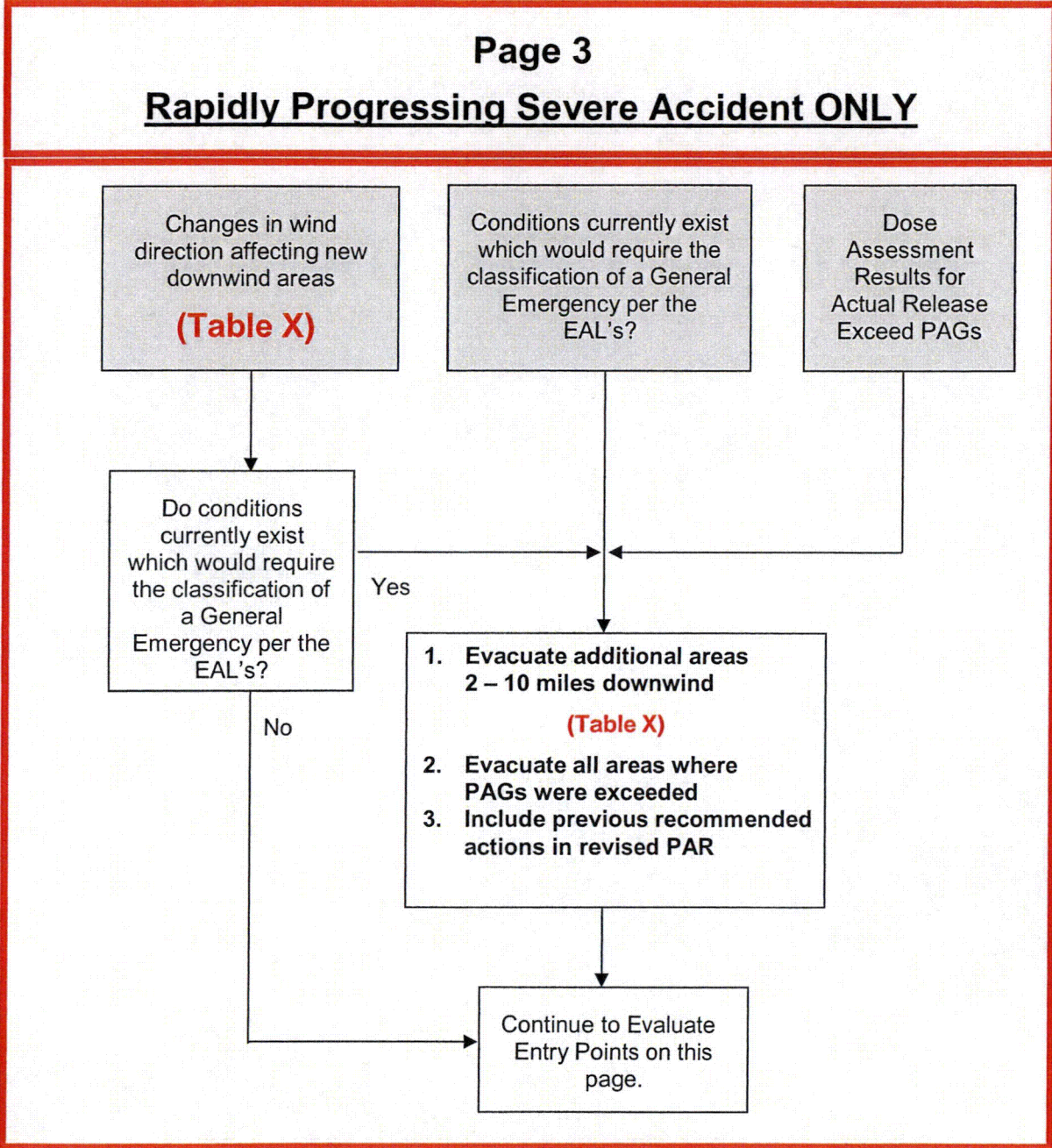


Table X (2 Mile Radius & 10 Miles Down Wind)			
WD From			ERPA's
349°	to	011°	1, 2, 3, 5, 6, 9, 10, 11, 12, 13, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27
012°	to	033°	1, 2, 3, 5, 6, 10, 11, 12, 13, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28
034°	to	056°	1, 2, 3, 5, 6, 10, 11, 12, 13, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28
057°	to	078°	1, 2, 3, 6, 10, 11, 12, 13, 19, 21, 22, 23, 24, 26, 27, 28
079°	to	101°	1, 2, 3, 6, 26, 27, 28
102°	to	124°	1, 2, 3, 26, 27, 28
125°	to	146°	1, 2, 3, 26, 27, 28
147°	to	169°	1, 2, 3, 26, 27, 28, 29
170°	to	191°	1, 2, 3, 26, 27, 28, 29
192°	to	214°	1, 2, 3, 26, 27, 28, 29
215°	to	236°	1, 2, 3, 14, 26, 27, 29
237°	to	258°	1, 2, 3, 4, 7, 14, 15, 26, 27, 29
259°	to	281°	1, 2, 3, 4, 7, 8, 9, 14, 15, 16, 17, 26, 27, 29
282°	to	303°	1, 2, 3, 4, 5, 7, 8, 9, 10, 14, 15, 16, 17, 18, 26, 27, 29
304°	to	326°	1, 2, 3, 4, 5, 7, 8, 9, 10, 14, 15, 16, 17, 18, 19, 20, 26, 27
327°	to	348°	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 15, 16, 17, 18, 19, 20, 21, 25, 26, 27



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**Hostile Action ONLY**

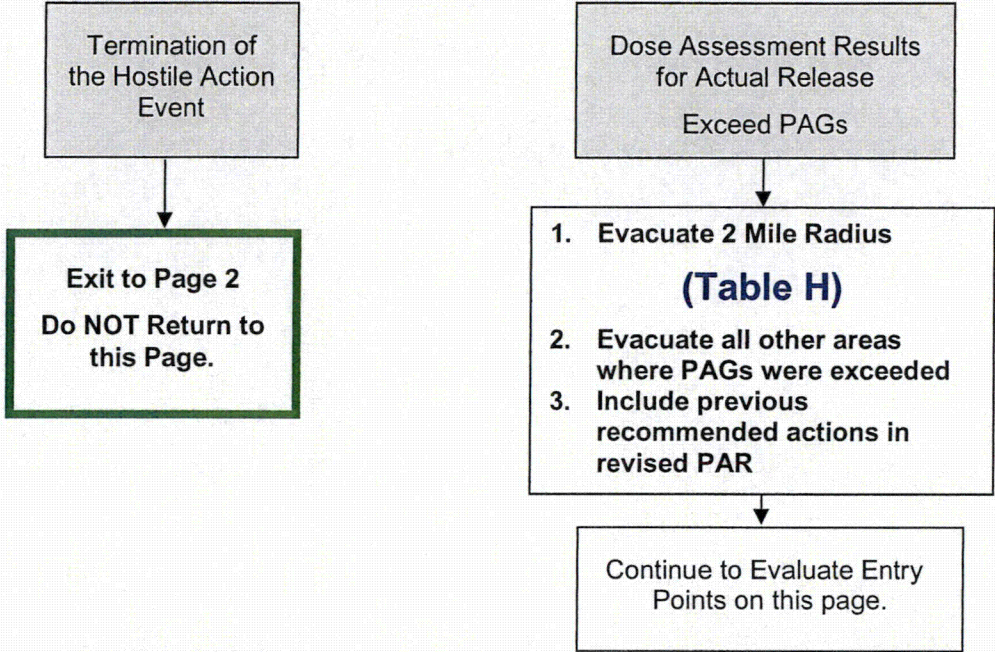
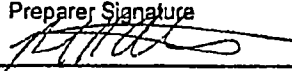
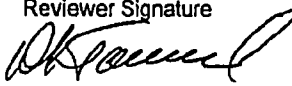
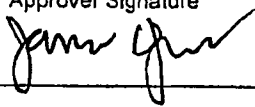


Table H (2 Mile Radius)				
WD From			ERPA's	
0°	to	360°	1, 2, 3, 26, 27	



<b>Procedure/Document Number: EAP-4C</b>		<b>Revision: 01</b>	
<b>Equipment/Facility/Other: N/A</b>			
<b>Title: Protective Action Recommendations.</b>			
<b>Part I. Description of Activity Being Reviewed</b> (event or action, or series of actions that may result in a change to the emergency plan or affect the implementation of the emergency plan):			
<p>The change removes a requirement to complete offsite monitoring prior to issuing PARs beyond 10 miles. The supporting details of the text changes to section 6.1.3 are as follows:</p> <ul style="list-style-type: none"><li>• Revise note 2 at beginning of Section 6.1.3 to include the words "When available, ..."</li><li>• Delete Section 6.1.3.A, renumber sections accordingly.</li><li>• Revise previous section 6.1.3.B to delete "IF field surveys verify the calculated dose assessment exposure rates, then"</li><li>• Deleted word "the" for grammatical correctness.</li><li>• Added section 6.1.3.A.1: "IF not already performed, THEN direct DISPATCH of Field Monitoring Teams to downwind areas outside the 10 mile EPZ to validate expanded PARs adequately bound the areas with PAGs exceeded."</li></ul>			
<b>Part II. Activity Previously Reviewed?</b> Is this activity fully bounded by an NRC approved 10 CFR 50.90 submittal or Alert and Notification System Design Report?		<input type="checkbox"/> YES 50.54(q)(3) Evaluation is NOT required. Enter justification below and complete Part VI.	<input checked="" type="checkbox"/> NO Continue to next part
<p>If YES, identify bounding source document number/approval reference and ensure the basis for concluding the source document fully bounds the proposed change is documented below:</p> <p><b>Justification:</b></p> <p><input type="checkbox"/> Bounding document attached (optional)</p>			
<b>Part III. Applicability of Other Regulatory Change Control Processes</b> Check if any other regulatory change processes control the proposed activity. (Refer to EN-LI-100) <b>NOTE:</b> For example, when a design change is the proposed activity, consequential actions may include changes to other documents which have a different change control process and are NOT to be included in this 50.54(q)(3) Screening.			
<b>APPLICABILITY CONCLUSION</b> <input checked="" type="checkbox"/> If there are no controlling change processes, continue the 50.54(q)(3) Screening. <input type="checkbox"/> One or more controlling change processes are selected, however, some portion of the activity involves the emergency plan or affects the implementation of the emergency plan; continue the 50.54(q)(3) Screening for that portion of the activity. Identify the applicable controlling change processes below. <input type="checkbox"/> One or more controlling change processes are selected and fully bounds all aspects of the activity. 50.54(q)(3) Evaluation is NOT required. Identify controlling change processes below and complete Part VI.			
<b>CONTROLLING CHANGE PROCESSES</b>  10CFR50.54(q)(3)			
<b>Part IV. Editorial Change</b> Is this activity an editorial or typographical change such as formatting, paragraph numbering, spelling, or punctuation that does not change intent? <b>Justification:</b>  Deleted word "the" for grammatical correctness is an editorial change and will not be screened further.		<input type="checkbox"/> YES 50.54(q)(3) Evaluation is NOT required. Enter justification and complete Part VI.	<input checked="" type="checkbox"/> NO Continue to next part

Procedure/Document Number: EAP-4C		Revision: 01
Equipment/Facility/Other: N/A		
Title: Protective Action Recommendations		
Part V. Emergency Planning Element/Function Screen (Associated 10 CFR 50.47(b) planning standard function identified in brackets) Does this activity affect any of the following, including program elements from NUREG-0654/FEMA REP-1 Section II?		
1. Responsibility for emergency response is assigned. [1]		<input type="checkbox"/>
2. The response organization has the staff to respond and to augment staff on a continuing basis (24/7 staffing) in accordance with the emergency plan. [1]		<input type="checkbox"/>
3. The process ensures that on shift emergency response responsibilities are staffed and assigned. [2]		<input type="checkbox"/>
4. The process for timely augmentation of onshift staff is established and maintained. [2]		<input type="checkbox"/>
5. Arrangements for requesting and using off site assistance have been made. [3]		<input type="checkbox"/>
6. State and local staff can be accommodated at the EOF in accordance with the emergency plan. [3]		<input type="checkbox"/>
7. A standard scheme of emergency classification and action levels is in use. [4]		<input type="checkbox"/>
8. Procedures for notification of State and local governmental agencies are capable of alerting them of the declared emergency within 15 minutes after declaration of an emergency and providing follow-up notifications. [5]		<input type="checkbox"/>
9. Administrative and physical means have been established for alerting and providing prompt instructions to the public within the plume exposure pathway. [5]		<input type="checkbox"/>
10. The public ANS meets the design requirements of FEMA-REP-10, Guide for Evaluation of Alert and Notification Systems for Nuclear Power Plants, or complies with the licensee's FEMA-approved ANS design report and supporting FEMA approval letter. [5]		<input type="checkbox"/>
11. Systems are established for prompt communication among principal emergency response organizations. [6]		<input type="checkbox"/>
12. Systems are established for prompt communication to emergency response personnel. [6]		<input type="checkbox"/>
13. Emergency preparedness information is made available to the public on a periodic basis within the plume exposure pathway emergency planning zone (EPZ). [7]		<input type="checkbox"/>
14. Coordinated dissemination of public information during emergencies is established. [7]		<input type="checkbox"/>
15. Adequate facilities are maintained to support emergency response. [8]		<input type="checkbox"/>
16. Adequate equipment is maintained to support emergency response. [8]		<input type="checkbox"/>
17. Methods, systems, and equipment for assessment of radioactive releases are in use. [9]		<input type="checkbox"/>
18. A range of public PARs is available for implementation during emergencies. [10]		<input checked="" type="checkbox"/>
19. Evacuation time estimates for the population located in the plume exposure pathway EPZ are available to support the formulation of PARs and have been provided to State and local governmental authorities. [10]		<input type="checkbox"/>
20. A range of protective actions is available for plant emergency workers during emergencies, including those for hostile action events.[10]		<input type="checkbox"/>

Procedure/Document Number: EAP-4C		Revision: 01
Equipment/Facility/Other: N/A		
Title: Protective Action Recommendations		
21. The resources for controlling radiological exposures for emergency workers are established. [11]		<input type="checkbox"/>
22. Arrangements are made for medical services for contaminated, injured individuals. [12]		<input type="checkbox"/>
23. Plans for recovery and reentry are developed. [13]		<input type="checkbox"/>
24. A drill and exercise program (including radiological, medical, health physics and other program areas) is established. [14]		<input type="checkbox"/>
25. Drills, exercises, and training evolutions that provide performance opportunities to develop, maintain, and demonstrate key skills are assessed via a formal critique process in order to identify weaknesses. [14]		<input type="checkbox"/>
26. Identified weaknesses are corrected. [14]		<input type="checkbox"/>
27. Training is provided to emergency responders. [15]		<input type="checkbox"/>
28. Responsibility for emergency plan development and review is established. [16]		<input type="checkbox"/>
29. Planners responsible for emergency plan development and maintenance are properly trained [16]		<input type="checkbox"/>
<b>APPLICABILITY CONCLUSION</b> <input type="checkbox"/> If no Part V criteria are checked, a 50.54(q)(3) Evaluation is <u>NOT</u> required; document the basis for conclusion below and complete Part VI. <input checked="" type="checkbox"/> If any Part V criteria are checked, complete Part VI and perform a 50.54(q)(3) Evaluation.		
<b>BASIS FOR CONCLUSION</b>  Emergency planning element 10 in Part V of this form is affected by the change to remove a requirement to complete offsite monitoring prior to issuing PARs beyond 10 miles. A 10CFR50.54 (q) evaluation will be performed to determine whether or not the effectiveness of the emergency plan is reduced and prior NRC approval is required.		
<b>Part VI. Signatures:</b>		
Preparer Name (Print) Pete Cullinan	Preparer Signature 	Date: 2/12/16
(Optional) Reviewer Name (Print) N/A	Reviewer Signature N/A	Date:
Reviewer Name (Print) David Townsend Nuclear EP Project Manager	Reviewer Signature 	Date: 2/12/16
Approver Name (Print) James D. Jones EP manager or designee	Approver Signature 	Date: 2-12-2016

Procedure/Document Number: EAP-4C	Revision: 01
Equipment/Facility/Other: N/A	
Title: Protective Action Recommendations	
<p><b>Part I. Description of Proposed Change:</b></p> <p>The change removes a requirement to complete offsite monitoring prior to issuing PARs beyond 10 miles. The supporting details of the text changes to section 6.1.3 are as follows:</p> <ul style="list-style-type: none"> <li>• Revise note 2 at beginning of Section 6.1.3 to include the words "When available, ..."</li> <li>• Delete Section 6.1.3.A, renumber sections accordingly.</li> <li>• Revise previous section 6.1.3.B to delete "If field surveys verify the calculated dose assessment exposure rates, then"</li> <li>• Added section 6.1.3.A.1: "If not already performed, THEN direct DISPATCH of Field Monitoring Teams to downwind areas outside the 10 mile EPZ to validate expanded PARs adequately bound the areas with PAGs exceeded."</li> </ul>	
<p><b>Part II. Description and Review of Licensing Basis Affected by the Proposed Change:</b></p> <ol style="list-style-type: none"> <li>1. The FSAR, Tech Spec Amendments, TRM and Emergency Plan Section 6 were reviewed electronically with the following results: <ol style="list-style-type: none"> <li>a. FSAR – Protective Action, Emergency P Tech Specs – Protective Action, Emergency P TRM – Protective Action, Emergency P Emergency Plan Section 6 Rev 35 (Current revision) – PAR, Protective Action Emergency Plan Section 6 Rev 36 (Pending revision) – PAR, Protective Action Licensing Research System (commitments) – Protective Action</li> <li>b. List relevant sections of controlled electronic documents reviewed: FSAR: <ul style="list-style-type: none"> <li>• Chapter 13.8.5 Emergency Plans and Procedures – no relevant hits</li> <li>• Protective Action – no relevant hits throughout document</li> </ul> Tech Specs – No relevant hits throughout the document.  TRM – No relevant hits throughout the document.  Emergency Plan Section 6 Rev 35 (Current revision): <ul style="list-style-type: none"> <li>• 6.2.3 Dose Assessment Methods and Techniques - a general discussion of the dose assessment methods utilized to develop PARs, there is no requirement contained in this section to perform field surveys prior to issuing PARs beyond 10 miles.</li> <li>• 6.4.2 Offsite Protective Actions – the section states that dose projections will be compared to Protective Action Guidelines with no indication that field surveys are required to be performed prior to issuing PARs beyond 10 miles.</li> </ul> Emergency Plan Section 6 Rev 36 (Pending revision): <ul style="list-style-type: none"> <li>• 6.2.3 Dose Assessment Methods and Techniques - a general discussion of the dose assessment methods utilized to develop PARs, there is no requirement contained in this section to perform field surveys prior to issuing PARs beyond 10 miles.</li> <li>• 6.4.2 Offsite Protective Actions – the section states that dose projections will be compared to Protective Action Guidelines with no indication that field surveys are required to be performed prior to issuing PARs beyond 10 miles.</li> </ul> </li> </ol> </li> </ol>	



**Part III. Describe How the Proposed Change Complies with Relevant Emergency Preparedness Regulation(s) and Previous Commitment(s) Made to the NRC:**

10 CFR 50.47(b)(10)

A range of protective actions has been developed for the plume exposure pathway EPZ for emergency workers and the public. In developing this range of actions, consideration has been given to evacuation, sheltering, and, as a supplement to these, the prophylactic use of potassium iodide (KI), as appropriate. Evacuation time estimates have been developed by applicants and licensees. Licensees shall update the evacuation time estimates on a periodic basis. Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.

Site Compliance

The proposed change and subsequent adjustments to EAP-4C section 6.1.3 remove the need to verify dose projections with field readings prior to making a Protective Action Recommendation to the offsite authorities. The proposed changes remain compliant with the rule because it does not affect; 1) the licensees ability to recommend a range of Protective Action Recommendations to offsite officials including evacuation, sheltering and prophylactic use of KI as appropriate, 2) the evacuation time estimates or the ability to update evacuation time estimates on a periodic basis, or 3) the ability to modify or revise the choice of protective actions available during an emergency or the ingestion exposure pathway EPZ. Specifically:

- Revise note 2 at beginning of Section 6.1.3 to include the words "When available, ...":
  - This change directs the use of field survey data when it is available when developing PARs. Adding the words "when available" does not remove or inhibit the ability to recommend PARs, and under certain circumstances ensures that PARs can be provided to offsite agencies without undue wait for field survey results.
- Delete Section 6.1.3.A, renumber sections accordingly.
  - This change removes the requirement to obtain survey readings prior to issuing PARs beyond 10 miles. Removing this section combined with the other clarifying changes ensures that PARs can be issued in a timely manner without undue delay awaiting field survey information.
- Revise previous section 6.1.3.B to delete "IF field surveys verify the calculated dose assessment exposure rates, then":
  - Removing this wording combined with the other clarifying changes ensures that PARs can be issued in a timely manner without undue delay awaiting field survey information.
- Added section 6.1.3.A.1: "IF not already performed, THEN direct DISPATCH of Field Monitoring Teams to downwind areas outside the 10 mile EPZ to validate expanded PARs adequately bound the areas with PAGs exceeded."
  - Addition of this section ensures field teams are dispatched to areas previously identified for PARs to validate the PARs recommended are adequate, or if necessary can be modified in a timely manner based on field survey assessment.

Previous NRC Commitments -

The Licensing Research System (commitments) and Section 6 of the Emergency Plan were reviewed for potential NRC commitment changes as a result of the procedure revision. There were no identified conflicts with this procedure revision and the current listing of NRC commitments associated with Protective Action Recommendations. All current NRC commitments that relate to dose assessment and protective actions continue to be maintained with the proposed procedure revision.

**Part IV. Description of Emergency Plan Planning Standards, Functions and Program Elements Affected by the Proposed Change:**

10 CFR 50.47(b)(10) - Emergency Protective Actions

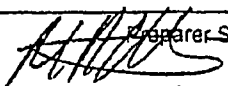
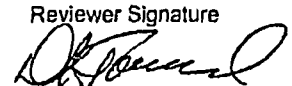
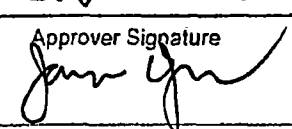
- A range of public PARs is available for implementation during emergencies.
- Evacuation time estimates for the population located in the plume exposure pathway EPZ are available to support the formulation of PARs and have been provided to State and local governmental authorities.
- A range of protective actions is available for plant emergency workers during emergencies, including those for hostile action events.

## **Part V. Description of Impact of the Proposed Change on the Effectiveness of Emergency Plan Functions:**

The change removes a procedure requirement to complete offsite monitoring prior to issuing PARs beyond 10 miles. The change enhances the timeliness of PAR issuance to the offsite agencies based on removing a delay in situations where downwind survey teams are not in the field or in the area projected to be affected by the plume based on the URI dose assessment software. Removal of the requirement to await survey results removes unnecessary delay for PAR issuance based on the use of the URI model. The impact of the supporting text changes to section 6.1.3 are as follows:

- Revise note 2 at beginning of Section 6.1.3 to include the words "When available, ...":
  - This statement makes the use of field survey data permissive rather than required, thus allowing the field data to be used if available but not delaying the ability to issue PARs when field data is not available. This change does not affect the Emergency Plan as the ability to issue PARs in a timely manner is maintained and no longer dependent on survey team transit to the indicated areas.
- Delete Section 6.1.3.A, renumber sections accordingly:
  - The change removes a procedure requirement to complete offsite monitoring prior to issuing PARs beyond 10 miles. The change enhances the timeliness of PAR issuance to the offsite agencies based on removing a delay in situations where downwind survey teams are not in the field or in the area projected to be affected by the plume based on the URI dose assessment software. Removal of the requirement to await survey results removes unnecessary delay for PAR issuance based on the use of the URI model. This change does not affect the Emergency Plan as the ability to issue PARs in a timely manner is maintained.
- Revise previous section 6.1.3.B to delete "IF field surveys verify the calculated dose assessment exposure rates, then":
  - This change directs that PARs are to be issued based on dose assessment results and no longer require the field survey information as a confirmatory, thus providing for a timely PAR issuance. Removal of the requirement to await survey results removes unnecessary delay for PAR issuance based on the use of the URI model. This change does not affect the Emergency Plan as the ability to issue PARs in a timely manner is maintained.
- Added section 6.1.3.A.1: "IF not already performed, THEN direct DISPATCH of Field Monitoring Teams to downwind areas outside the 10 mile EPZ to validate expanded PARs adequately bound the areas with PAGs exceeded." :
  - This change maintains the ability to verify PARs are adequate and revised if necessary by directing field survey verification of previously recommended PAR areas. Addition of this section ensures the Emergency Plan continues to be able to revise PARs as necessary based on field data when warranted. This change does not affect the Emergency Plan as the ability to issue PARs in a timely manner is maintained.

The proposed changes to EAP-4C, Protective Action Recommendations, continue to meet the planning standards outlined in 10 CFR 50.47(10). This revision does not require a change to the emergency plan or represent a reduction in the effectiveness to the emergency plan and can be incorporated without prior NRC approval.

Procedure/Document Number:EAP-4C		Revision: 01
Equipment/Facility/Other: N/A		
Title: Protective Action Recommendations		
<b>Part VI. Evaluation Conclusion</b> Answer the following questions about the proposed change.		
1. Does the proposed change comply with 10 CFR 50.47(b) and 10 CFR 50 Appendix E?		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
2. Does the proposed change maintain the effectiveness of the emergency plan (i.e., no reduction in effectiveness)?		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
3. Does the proposed change constitute an emergency action level scheme change?		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
If questions 1 or 2 are answered NO, or question 3 answered YES, reject the proposed change, modify the proposed change and perform a new evaluation or obtain prior NRC approval under provisions of 10 CFR 50.90. If questions 1 and 2 are answered YES, and question 3 answered NO, implement applicable change process(es). Refer to step 5.6[8].		
<b>Part VII. Signatures</b>		
Preparer Name (Print) Pete Cullinan		Preparer Signature  Date: 2/12/16
(Optional) Reviewer Name (Print)		Reviewer Signature Date:
Reviewer Name (Print) David K. Townsend Nuclear EP Project Manager		Reviewer Signature  Date: 2/12/16
Approver Name (Print) EP Manager or designee		Approver Signature  Date: 2-12-2016