

WOLF CREEK

NUCLEAR OPERATING CORPORATION

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DEC 13 2002

WO 02-0062

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

Subject: Docket No. 50-482: Changes to Wolf Creek Generating Station (WCGS) Radiological Emergency Response Plan, Implementing Procedures and Form

Gentlemen:

In accordance with 10 CFR 50, Appendix E, the enclosures provide revisions to the Wolf Creek Generating Station (WCGS) Radiological Emergency Response Plan, implementing procedures, and a form. The following is a list of the specific enclosures. The attachment provides a summary of changes to the WCGS Radiological Emergency Response Plan.

PROCEDURES

AP 06-002, Revision 5
Effective date December 13, 2002

EPP 06-002, Revision 7
Effective date, December 6, 2002

EPP 06-003, Revision 5
Effective date December 6, 2002

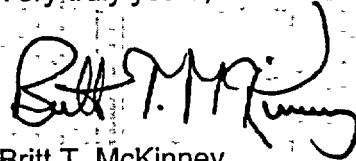
FORM

APF 06-002-01, Revision 3
Effective date December 6, 2002

A045

If you have any questions concerning this submittal, please contact me at (620) 364-4112, or Mr. Tony Harris at (620) 364-4038.

Very truly yours,



Britt T. McKinney

BTM/pb

Attachment

Enclosures

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**CHANGE SUMMARY for the WCGS RADIOLOGICAL EMERGENCY RESPONSE PLAN
AP 06-002, REVISION 5**

- 1) Step 4.28, added new step to define Owner Controlled Area; renumbered remaining steps.
- 2) Steps 6.1.4 and 6.1.7; combined steps into one step at 6.1.4 and renumbered remaining steps. This clarified the description of the EPZ.
- 3) Step 6.3.3.3, combine bullets "Affected subzones, if any" and "Recommended Protective Actions" into one bullet to state, "Subzones recommended for protective actions." As stated in the plan, evacuation is the normal anticipated action, unless circumstances dictate sheltering would be better. The State and County agree that WC should make a protective action recommendation for the subzones, but that they are in a better position to know conditions outside the plant that would dictate sheltering versus evacuation.
- 4) Step 6.3.4.1, changed the last sentences to state that WC will make PARs beyond the 10 mile EPZ and that the County and State have the authority to take protective actions offsite. This will show that WC has responsibility for PAR for releases beyond the 10 mile EPZ and provides better definition of the County and State's authority.
- 5) Step 6.3.12.1; changed "laboratory area" to "garage." The laboratory has been moved to site, and the decon area will be done in the garage of the EOF.
- 6) Step 6.3.16; changed from "Control Room, the Team Directors" to "Control Room, the Radiological Coordinators." The Rad Coordinators have the most knowledge and overall responsibility for radiological issues during an emergency.
- 7) Step 6.4.5, changed all the substeps to provide better direction for the PI facilities. Changed the activation from part being performed at an NUE and the rest at an Alert or when the PIO determines it is necessary for the PI organization to activate at an Alert or higher classification and will activate in Topeka. This change makes the organization activate automatically at an Alert and by going to Topeka makes the process faster to activate and function without the need to make a move to Topeka if a release requires the evacuation of the CTR subzone. At an NUE, Corporate Communications will provide information to the public in the normal information release method used by the plant on an everyday basis. Added "Joint" to "Information Clearinghouse". The State, County and WC PIO all work together to release news to the public.
- 8) Step 6.6.10, added bullet to provide information during team briefs, which concern rad conditions that may be encountered by the teams during their deployment.
- 9) Step 6.6.12, changed who the Team Director reports to from "Radiological" to "Maintenance" Coordinator, and the Team Director's task of only providing advice on rad safety matters, to all matters.
- 10) Step 6.9, added new step 6.9.1 to discuss the activation of the PI organization at an Alert or higher classification. Also added the option to staff the PI organization if the PIO determines the need during an NUE to help release information to the public. This provides a better description of how the PI organization activates and provides the

**CHANGE SUMMARY for the WCGS RADIOLOGICAL EMERGENCY RESPONSE PLAN
AP 06-002, REVISION 5**

- opportunity to staff the organization when needed. Renumbered remaining steps and substeps.
- 11) Step 6.9.2.2, deleted step describing WC PIO position activation. The addition of step 6.9.1 covers activation of the PI organization. Renumbered remaining substep.
 - 12) Step 6.9.3.1, deleted first sentence describing activation of the PI Manager position due to addition of new step 6.9.1, added "is located in the JIC and"; removed the word "the" in three places; added "News Writer"; and changed "staff" to "positions" to provide better direction and description of where and who the PIM works with.
 - 13) Step 6.9.3.3, deleted the step that discussed activation; included in new step 6.9.1. Renumbered remaining steps.
 - 14) Step 6.9.4, clarified step to remove reference to activation; included in new step 6.9.1.
 - 15) Step 6.9.5, clarified step, and removed reference to activation; included in new step 6.9.1.
 - 16) Step 6.9.6, added "AV Support" and "Joint". The manager provides leadership for the AV Support position and the IC is a joint location for the State, County and WC PIOs.
 - 17) Steps 6.9.8 and 6.9.11, moved the words "updating the status log, maintaining the media status board" from step 6.9.8 to step 6.9.11 because the Tech Support position performs these tasks. Also clarified step 6.9.11.
 - 18) Step 6.14.7.2, replaced the words "at the EOF" with the words "on site" because the lab has been moved to a facility on site.
 - 19) Attachment A, updated and matched population numbers and census year for towns.
 - 20) Attachment B, updated and matched population numbers and census year.
 - 21) Attachment C, sections G, I, and K, changed referenced steps due to step number re-arrangement in the body of this procedure.
 - 22) Attachment D, in the "On-shift" column, changed from "Tech Spec" to "TRM (TR5.2.1.b)" because fire fighting requirements were moved from Technical Specifications to the Technical Requirements Manual.
 - 23) Attachment E, step E.1, changed from "25 Rem" to "5 Rem"; and step E.3, changed from "25 Rem" to "10 Rem" to make this plan the same as the State Protective Action Guides. The State has changed the PAGs and commented that the numbers in this plan no longer match.



EPP 06-002

TECHNICAL SUPPORT CENTER OPERATIONS

Responsible Manager

Superintendent Emergency Planning

Revision Number	7
Use Category	Reference
Administrative Controls Procedure	No
Infrequently Performed Procedure	No
Program Number	06

DC2 12/06/02

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 1 of 31

TABLE OF CONTENTS

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
1.0	PURPOSE	2
2.0	SCOPE	2
3.0	REFERENCES AND COMMITMENTS	2
4.0	DEFINITIONS	3
5.0	RESPONSIBILITIES	4
6.0	PRECAUTIONS/LIMITATIONS	5
7.0	PROCEDURE	6
7.1	Facility Activation	6
7.2	Facility Deactivation	6
7.3	Site Emergency Manager	7
7.4	TSC Operations Coordinator	9
7.5	TSC Administrative Coordinator	10
7.6	TSC Radiological Coordinator	11
7.7	TSC Facility Technician	12
7.8	Maintenance Coordinator	13
7.9	Engineering Coordinator	14
7.10	TSC Operations Recorder	14
7.11	TSC Administrative Assistant	15
7.12	TSC Team Director	17
7.13	TSC Team Communicators	18
7.14	TSC Emergency Notification System (ENS) Communicator	18
7.15	Engineering Team	19
7.16	Emergency Response Team	19
7.17	Maintenance Assistant	20
7.18	Maintenance Planner	20
7.19	Warehouse Support	21
7.20	Security Coordinator	21
8.0	RECORDS	21
9.0	FORMS	21
ATTACHMENT A	HEPA FILTRATION AND IODINE MONITORING OPERATIONS	22
ATTACHMENT B	OSC RELOCATION SUPPLIES AND EQUIPMENT	24
ATTACHMENT C	TSC DIESEL OPERATIONS	25
ATTACHMENT D	EMERGENCY RESPONSE DATA SYSTEM (ERDS) OPERATIONS	28
ATTACHMENT E	POSITIONS REQUIRED FOR AUGMENTATION	29
ATTACHMENT F	FAX NUMBERS	30
FIGURE 1	TSC ORGANIZATION	31

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 2 of 31

1.0 PURPOSE

1.1 This procedure provides guidelines for the activation of the Technical Support Center (TSC), and the responsibilities and guidance for Emergency Response Organization (ERO) personnel assigned to the TSC.

2.0 SCOPE

2.1 This procedure is implemented following the declaration of an Alert or higher emergency classification. The Shift Manager may request the Site Emergency Manager to activate the TSC during a Notification of Unusual Event.

2.2 This procedure provides direction for positions assigned to the Operations Support Center (OSC) also. Since the OSC is housed in the TSC, for the purpose of this procedure the OSC is part of the TSC.

3.0 REFERENCES AND COMMITMENTS

3.1 References

3.1.1 Code of Federal Regulations 10 CFR 20

3.1.2 RADIOLOGICAL EMERGENCY TELEPHONE DIRECTORY (RETD)

3.1.3 RADIOLOGICAL EMERGENCY RESPONSE PLAN (RERP)

3.1.4 PIR 2000-3534, TSC Diesel Generator failed to satisfy the requirements of STN KAT-001.

3.2 Commitments

3.2.1 Deleted

3.2.2 RCMS 91-142, Failure to Establish and Maintain Habitability in the Emergency Response Facilities

3.2.3 RCMS 92-188, Timely Notification of an Emergency and Timely Activation of the TSC and OSC

3.2.4 RCMS 97-067, Maintain Priority Board Information Up-To-Date

3.2.5 RCMS 97-066, DED To Inform Personnel Of Information Needed To Escalate Classification

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 3 of 31

4.0 DEFINITIONS

4.1 Callout

4.1.1 The methodology which is implemented to provide proper staffing of the ERO.

4.2 Emergency Action Levels (EALs)

4.2.1 Specific parameters or conditions that may be used as thresholds for declaring a particular emergency classification.

4.3 Emergency Classification

4.3.1 A system used to define the severity of emergencies into one of four categories based upon projected or confirmed emergency action levels. Classifications listed in order of increasing severity are as follows:

- o Notification of Unusual Event
- o Alert
- o Site Area Emergency
- o General Emergency

4.4 Emergency Conditions

4.4.1 Situations occurring which cause or may threaten to cause radiological hazards affecting the health and safety of employees or the public, or which may result in damage to property.

4.5 Facility Activation

4.5.1 A facility is considered activated when the designated positions are present, the Emergency Manager determines the facility is ready to activate, and declares the facility activated.

4.6 Habitability

4.6.1 Habitable - Radiological / environmental conditions within the facility are not challenged. There are no stay time restrictions for environmental or radiological circumstances.

4.6.2 Degraded - Conditions within the facility do not meet normal facility conditions. This could be due to radiological, environmental, or equipment conditions which may cause some type of hardship for personnel working in the facility.

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 4 of 31

4.7 Operations Support Center (OSC)

4.7.1 A staging area located in the TSC for emergency teams to support the emergency response effort.

4.8 Records

4.8.1 Documents such as calculation worksheets, computer printouts, forms, logs, memos, checklists, or any paper used to record data or information during an emergency, drill or exercise which may be used for event reconstruction.

4.9 Technical Support Center (TSC)

4.9.1 The TSC serves as a center outside of the Control Room that acts in support of the command-and-control function and houses the OSC organization. Plant status and diagnostic information are available at this location for use by technical and management personnel in support of control room command-and-control functions.

5.0 RESPONSIBILITIES

5.1 Site Emergency Manager

5.1.1 Coordinate and direct on-site emergency response.

5.1.2 Classify/terminate the emergency in accordance with the Emergency Action Levels (EALs).

5.1.3 Approve radiation exposure greater than the limits of 10CFR20 for on-site ERO personnel.

5.1.4 Establish priorities for accident mitigation and emergency repair.

5.1.5 Declare the TSC activated and establish priorities for TSC personnel.

5.1.6 Approve Emergency Notifications and Protective Action Recommendations until the EOF is activated.

5.2 TSC Operations Coordinator

5.2.1 Coordinate overall emergency response activities with the Control Room staff.

5.3 TSC Administrative Coordinator

5.3.1 Provide support for TSC personnel as needed and direction for the TSC Administrative Assistants.

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 5 of 31

5.4 TSC Radiological Coordinator

5.4.1 Provide direction for radiological conditions associated with activities controlled by the TSC.

5.5 TSC Facility Technician

5.5.1 Perform radiological duties in the TSC as directed.

5.6 Maintenance Coordinator

5.6.1 Determine the need for and appoint members to Emergency Response Teams.

5.7 Engineering Coordinator

5.7.1 Directs the assessment and evaluation tasks of the Engineering Team.

6.0 PRECAUTIONS/LIMITATIONS

6.1 The assigned Site Emergency Manager will assume command-and-control functions and will be the top line manager responsible for the emergency until the EOF is activated. TSC activation will be performed as soon as practical and within the times as stated in the following: [**Commitment Step 3.2.3**]

6.1.1 During off-normal working hours, it is the goal to activate the TSC within 75 minutes of a declaration of an Alert or higher classification.

6.1.2 During normal working hours, it is the goal to activate the TSC within 30 minutes of a declaration of an Alert or higher classification.

6.2 Personnel entering the TSC may be required to perform a whole body frisk at a designated frisking station.

6.3 Teams dispatched from on-site locations may not require an HP Technician as part of the team. However, approval must be obtained from the TSC Radiological Coordinator prior to leaving for the initial and each additional destination.

6.4 Facility evacuation should be considered if there is an actual or projected dose greater than or equal to 5 REM TEDE, unless the Site Emergency Manager authorizes exposures up to 25 REM.

6.5 Personnel in the TSC may be directed to relocate to another suitable location in the event emergency conditions preclude activation or warrant evacuation of the TSC.

6.6 Emergency Response Data System (ERDS) must be activated within 60 minutes of a declaration of an Alert or higher emergency.

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 6 of 31

7.0 PROCEDURE

7.1 Facility Activation

7.1.1 Upon notification of an Alert or higher emergency or at the discretion of the Shift Manager during an NUE, assigned ERO team members report to and establish TSC operations as follows:

1. Insert ACAD badge into TSC card reader for accountability.
2. Obtain the position name tag for the assigned position from the TSC or OSC Staffing Board.
3. Print name and ACAD badge number on the Staffing Board where the position badge was located.
4. Proceed to assigned work station and commence with position functions as directed by this procedure.

7.1.2 Personnel should log/record significant emergency response information.

7.1.3 The TSC may be activated when the following positions are present and the Site Emergency Manager determines the facility is ready to activate:

- o Site Emergency Manager
- o TSC Operations Coordinator
- o TSC Administrative Coordinator
- o TSC Radiological Coordinator
- o Maintenance Coordinator

7.1.4 WHEN TSC equipment problems or failures are identified, THEN these problems or failures should be reported to the TSC Administrative Coordinator.

7.1.6 IF the TSC personnel are required to relocate, THEN refer to ATTACHMENT B, OSC RELOCATION SUPPLIES/EQUIPMENT, for a list of supplies to be considered for transport to the relocation area.

7.2 Facility Deactivation

7.2.1 The Site Emergency Manager should inform personnel in the TSC to deactivate.

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 7 of 31

- 7.2.2 Each TSC position holder should transmit logs and any other documentation generated during the emergency to the TSC Administrative Coordinator.
- 7.2.3 The TSC Administrative Coordinator should transmit all documentation collected to Emergency Planning.
- 7.2.4 Each TSC position holder should evaluate the condition of equipment and supplies.
- 7.2.5 Each TSC position holder should return equipment and supplies to pre-activation status.
- 7.2.6 Each TSC position holder should report any deficiencies in facility equipment or supplies to the TSC Administrative Coordinator.
- 7.2.7 The TSC Administrative Coordinator should notify Emergency Planning of any damaged or missing facility equipment.

7.3 Site Emergency Manager

- 7.3.1 Obtain a turnover briefing from the Shift Manager. EPF 06-002-01, EMERGENCY MANAGERS TURNOVER SHEET, may be used as an aid for this turnover.
- 7.3.2 Ensure the following positions have been filled and are ready for TSC activation: **[Commitment Step 3.2.3]**
 - o TSC Operations Coordinator
 - o TSC Administrative Coordinator
 - o TSC Radiological Coordinator
 - o Maintenance Coordinator

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 8 of 31

CAUTIONS

The following responsibilities are those of the Emergency Managers and may NOT be delegated. These responsibilities may be divided between the Site and Off-site Emergency Managers:

- o Emergency Classification
- o Protective action recommendations
- o Authorization for notification of off-site authorities
- o Authorization of Emergency Exposures on-site in excess of 10CFR20 Limits

- 7.3.3 Assume command-and-control of site emergency response activities from the Shift Manager.
1. IF the EOF is not activated, THEN assume the Notification and Protective Action Recommendations duties until the EOF is activated.
 2. Inform the staff in the TSC you have assumed command-and-control and that the TSC is declared activated.
 3. Direct the TSC Administrative Coordinator to make a plant announcement that the TSC is activated and the name of the Site Emergency Manager.
- 7.3.4 Conduct initial and periodic briefings for the TSC staff focusing upon the highest priority items and key parameters which are likely to lead to an escalated emergency classification. [Commitment Step 3.2.5]
- 7.3.5 Assess plant conditions and evaluate the need to reclassify the emergency in accordance with EPP 06-005, EMERGENCY CLASSIFICATION.
1. Direct the Control Room to make appropriate plant announcements for changing classifications.
 2. Direct the Control Room to initiate callout as necessary for the declared emergency.
- 7.3.6 Coordinate with the TSC Radiological Coordinator on the need to authorize exposure limits in excess of 10CFR20 limits, with NRC concurrence if practical, and the need to recommend ingestion of potassium iodide (KI).

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 9 of 31

7.3.7 Evaluate and authorize radiation exposure levels for site personnel.

1. Approve exposures exceeding 2 REM (TEDE).
2. Approve exposures in excess of 10 CFR 20 limits.

7.3.8 Ensure the Shift Manager is updated with status changes and decisions as they happen.

7.3.9 Coordinate shift relief for Control Room and TSC personnel with the EOF.

7.3.10 IF downgrading or terminating an emergency, THEN perform in accordance with EPP 06-008, RECOVERY OPERATIONS.

7.4 TSC Operations Coordinator

7.4.1 Ensure the normal power supply to the TSC is available. IF unavailable, THEN ensure the Diesel Generator is started in accordance with ATTACHMENT C, TSC DIESEL OPERATIONS.

7.4.2 Ensure the facility clock is synchronized with the Control Room clock.

7.4.3 Post the appropriate Emergency Classification sign.

7.4.4 Inform the Site Emergency Manager of readiness for TSC activation.

7.4.5 Coordinate overall emergency response activities with the Control Room staff.

7.4.6 IF a radioactive release is in progress or imminent, THEN ensure HEPA Filtration and the Iodine Monitor are placed in service in accordance with ATTACHMENT A, HEPA FILTRATION AND IODINE MONITORING STARTUP.

NOTE

Emergency Response Data System (ERDS) must be activated within 60 minutes of the declaration of an Alert or higher emergency.

7.4.7 Ensure the Emergency Response Data System (ERDS) has been activated.

1. Instructions for initiating ERDS activation are contained in ATTACHMENT D, EMERGENCY RESPONSE DATA SYSTEM (ERDS) OPERATIONS.

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 10 of 31

7.4.8 Monitor plant conditions for changes which could affect the emergency classification and notify the Site Emergency Manager of the conditions.

7.4.9 Evaluate actual or potential radiological releases based on plant conditions. Discuss evaluation with the Site Emergency Manager and TSC Radiological Coordinator.

7.5 TSC Administrative Coordinator

7.5.1 Ensure the Control Room is contacted for status of notifications.

7.5.2 Notify the Site Emergency Manager of readiness for TSC activation.

7.5.3 Ensure TSC accountability is being performed and maintained.

7.5.4 Ensure the State and County are notified that the TSC is activated and that the Site Emergency Manager has assumed command-and-control of the emergency.

7.5.5 Ensure Immediate and Follow-up Notifications are performed in accordance with EPP 06-007, EMERGENCY NOTIFICATIONS.

CAUTION

Augmentation must be completed within 60 minutes of the time an Alert or higher emergency has been declared.

7.5.6 Ensure site augmentation has been met. Refer to Attachment E, POSITIONS REQUIRED FOR AUGMENTATION, for augmentation requirements. Call out additional persons as necessary to complete augmentation.

7.5.7 Ensure initial TSC staffing is adequate. IF staffing is not adequate, THEN call out additional personnel.

- o For off-hours activation use the ADS report OR the NRECs report to evaluate staffing.

7.5.8 Make arrangements for shift relief and meals.

7.5.9 Ensure the TSC Administrative Assistants are briefed on Site Emergency Manager's updates and emergency status.

7.5.10 Ensure the Security Shift Lieutenant is briefed on plant and radiological conditions that may impact Security operations.

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 11 of 31

7.5.11 IF a Site Area or General Emergency has been declared, THEN determine from the Security Shift Lieutenant the status of an Exclusion Area Boundary evacuation.

7.6 TSC Radiological Coordinator

7.6.1 Obtain current radiological status and Protective Action Recommendations made.

7.6.2 Ensure the TSC Facility Technician and one other person to make a team are available. [Commitment Step 3.2.3]

7.6.3 Ensure facility habitability has been established.

7.6.4 Notify the Site Emergency Manager of readiness for facility activation.

7.6.5 Ensure dosimetry devices are placed in the facility or issued to personnel as appropriate in accordance with EPP 06-013, EXPOSURE CONTROL AND PERSONNEL PROTECTION.

7.6.6 Ensure the Site Emergency Manager is briefed on radiological status for the development of Protective Action Recommendations.

7.6.7 Initiate surveys in accordance with EPP 06-011, EMERGENCY TEAM FORMATION AND CONTROL.

7.6.8 WHEN a Site Area or General Emergency has been declared, THEN direct the west entrance into the TSC be closed and signs posted to prevent entry through that entrance.

7.6.9 Provide the Site Emergency Manager with an evaluation of the conditions potentially requiring personnel exposure in excess of 10 CFR 20 limits.

o IF time permits, THEN initiate EPF 06-013-01, EMERGENCY EXPOSURE AUTHORIZATION.

7.6.10 For actual or projected doses perform the following:

1. IF an actual or projected dose in the facility is 5 REM TEDE, THEN inform the Site Emergency Manager of the need to evacuate the facility. [Commitment Step 3.2.2]

2. IF projected thyroid dose is greater than or equal to 25 REM, THEN recommend the ingestion of KI in accordance with EPP 06-013, EXPOSURE CONTROL AND PERSONNEL PROTECTION.

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 12 of 31

- 7.6.11 Ensure Emergency Response Teams are informed of changing plant conditions, emergency classifications and protective action recommendations which may affect the team's ability to complete assigned activities.
- 7.6.12 Complete the Plant Status and Radiological Conditions sections on EPF 06-011-01, PLANT TEAM BRIEFING CHECKLIST. Provide radiological information to the TSC Team Director to be used for Plant Team briefs.
- 7.6.13 IF off-site medical assistance is needed, THEN ensure Health Physics support requirements are met.
- 7.6.14 Assist in personnel evacuation by performing the following:
1. Dispatch an HP Technician to the Security Building to establish radiological control and conduct personnel monitoring, if required.
 2. Inform Security Shift Lieutenant of appropriate radiological plant data and direction of the plume for dissemination to evacuating personnel.

7.7 TSC Facility Technician

- 7.7.1 Establish and maintain facility habitability.
1. IF readings greater than 100 cpm above background on the general area frisker or greater than background on the General Atomics iodine monitor are noted, THEN an air sample will be taken in accordance with RPP 02-210, RADIATION SURVEY METHODS.
 2. IF the General Atomics iodine monitor at the TSC is inoperable during HEPA filter operation, THEN initiate portable iodine sampling at least hourly in accordance with RPP 02-210, RADIATION SURVEY METHODS.
 3. Ensure all AIR LOCK DOORS are closed. [**Commitment Step 3.2.2**]
 4. Position a frisker in the facility for habitability monitoring. IF the frisker alarms, THEN take an air sample of the TSC.
 - o Lead bricks are available for shielding.
 5. Record the Iodine Monitor cpm reading in the Facility Technician log.

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 13 of 31

6. Record the Area Radiation Monitor mR/hr reading in the Facility Technician log.

- o IF the area radiation monitor exceeds 20 mR/hr, THEN notify the TSC Radiological Coordinator.

7.7.2 Inform the TSC Radiological Coordinator of all facility habitability surveys.

7.7.3 Check the Ventilation Iodine Monitor hourly for proper operation.

- o IF inoperable, THEN initiate portable iodine sampling at least hourly.

7.7.4 Identify and label inoperable equipment.

7.7.5 Ensure 10 sets of 0-500 mR and 0-5 R dosimeters are functional and ready for use.

7.7.6 Determine dose margin and respirator qualifications of personnel assigned to Emergency Response Teams.

7.7.7 Ensure the logging in and analysis of all incoming radiological samples.

7.7.8 Review and document dosimetry results of emergency response activities in accordance with EPP 06-013, EXPOSURE CONTROL AND PERSONNEL PROTECTION.

7.7.9 Discuss the decontamination of on-site personnel with the TSC Radiological Coordinator.

1. Perform decontamination in accordance with RPP 02-310, PERSONNEL DECONTAMINATION.

2. Collect all RPP forms associated with the decontamination activity.

7.8 Maintenance Coordinator

7.8.1 Verify personnel are present and ready to perform Emergency Response Team tasks. **[Commitment Step 3.2.3]**

7.8.2 Provide the Site Emergency Manager with an assessment of pre-emergency maintenance activities.

7.8.3 Coordinate with the Site Emergency Manager to determine what information to list on the Priority Board and maintain the board up-to-date. **[Commitment Step 3.2.4]**

7.8.4 Obtain the status of and evaluate teams dispatched by the Control Room from the TSC Operations Recorder.

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 14 of 31

- 7.8.5 Direct the Maintenance Planners to develop a repair plan for equipment repair.
- 7.8.6 Determine the scope of Emergency Response Team activities to be performed.
- 7.8.7 Initiate EPF 06-011-01, PLANT TEAM BRIEFING CHECKLIST, and coordinate with Maintenance Assistant on field team assignment.
- 7.8.8 Advise the Site Emergency Manager of Emergency Response Team status.

7.9 Engineering Coordinator

- 7.9.1 Coordinate and direct the efforts of the Engineering Team to technically assess plant status and the severity of the emergency conditions.
- 7.9.2 Direct accident assessment and mitigation activities to be performed in accordance with EPP 06-016, ACCIDENT ASSESSMENT AND MITIGATION.
- 7.9.3 Advise the TSC Operations Coordinator on technical matters relating to fuel integrity, plant systems, equipment, and instrumentation.
- 7.9.4 Support maintenance items assigned to Emergency Response Teams.

7.10 TSC Operations Recorder

- 7.10.1 Ensure NPIS is operable by verifying time and date in the upper right-hand corner are updating.

NOTES

- o The Operations Status Board has a goal of being updated at 15 minute intervals.

- 7.10.2 Maintain the Operations Status Board current by using NPIS Turn-On-Codes SB1 and SB2 OR with data obtained from the Operations Communicator on EPF 06-002-02, OPERATIONS STATUS.

- 1. Maintain a hard-copy of the NPIS printouts or completed EPF 06-002-02, OPERATIONS STATUS.

- 7.10.3 Monitor plant status for adverse trends and inform the TSC Operations Coordinator of changes in plant status which could affect the emergency classification.

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 15 of 31

7.10.4 Track procedure progress, list the procedure being performed by the Control Room.

7.10.5 WHEN transitions are made to the next procedure, THEN notify the TSC Operations Coordinator.

7.10.6 Communicate information, concerning emergency teams dispatched from the Control Room, directly to the TSC Maintenance Coordinator.

7.11 TSC Administrative Assistant

7.11.1 Ensure the operability of phones and radios to be used for County and State notifications. Conduct an initial radio check with Coffey County and the State of Kansas.

7.11.2 Ensure the verification phone is plugged in and operable by checking for a dial tone.

1. The verification phone should only be answered in this facility when it is activated and responsible for notifications.

NOTE

Accountability must be completed within 30 minutes from the time the Site Evacuation Alarm is sounded.

7.11.3 Maintain TSC accountability by performing the following:

1. Maintain EPF 06-010-01, ACCOUNTABILITY LOG, OR ensure personnel entering or leaving the TSC use the card reader for tracking all persons not assigned to an Emergency Response Team.
 - a. Coordinate with the Security Coordinator to obtain accountability reports.
2. Ensure personnel entering and exiting the TSC close the airlock door. [Commitment Step 3.2.2]
3. Monitor the staffing boards for positions not filled and inform the Administrative Coordinator of these positions.
4. WHEN informed that access is being denied to the west entrance of the TSC, THEN ensure the airlock door is closed and relocate to an area appropriate to maintain accountability of the TSC.

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 16 of 31

- 7.11.4 Provide assistance to the Site Emergency Manager by performing the following:
1. Maintain a log book.
 2. Maintain the TSC Sequence of Events and Protective Action Recommendation Board.
 3. Answer the phone as needed.
 4. Complete EPF 06-002-03, SEQUENCE OF EVENTS.

NOTE

Distribution of documents should be to the maroon baskets titled with the appropriate position.

- 7.11.5 Perform faxing, copying, and distribution as requested. Use a Fax coversheet for each Fax sent. FAX numbers are listed in ATTACHMENT F, FAX NUMBERS. Perform distribution of the listed documents as follows:
1. EPF 06-007-01, WOLF CREEK GENERATING STATION EMERGENCY NOTIFICATION to the following:
 - o Topeka Information Clearinghouse
 - o State of Kansas Public Information Officer
 - o Coffey County EOC
 - o Site Emergency Manager
 - o Administrative Coordinator
 - o Nuclear Regulatory Commission (NRC)
 - o Emergency Notification System (ENS) Communicator
 - o Onsite Public Information Coordinator
 - o EOF.
 2. News Statements to the following:
 - o Site Emergency Manager
 - o Administrative Coordinator
 - o Emergency Notification System (ENS) Communicator
 - o Nuclear Regulatory Commission (NRC)

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 17 of 31

- o Onsite Public Information Coordinator
- 3. EPF 06-002-03, SEQUENCE OF EVENTS, to the EOF
- 4. Operations and Radiological Status Boards information to the following:
 - o Onsite Public Information Coordinator
 - o Emergency Notification System (ENS) Communicator
- 7.11.6 Provide Off-site communications by performing the following:
 1. Contact the Control Room Off-site Communicator to verify the status of notifications.
 - o Verify the code word, type and time of all notifications and any communication problems
 - o Request faxes of all prior notifications.
 2. IF requested by the Administrative Coordinator, THEN notify Coffey County and the State of Kansas that the TSC is activated. Provide the name of the Site Emergency Manager who has assumed command-and-control and the time of activation.
 3. Verify that all information has been completed on Notification forms prior to transmitting.
 4. Perform Emergency Notifications in accordance with EPP 06-007, EMERGENCY NOTIFICATIONS.
 5. Conduct calls for off-site support as directed by the TSC Administrative Coordinator.
 - a. Unless the call for off-site support is to obtain assistance for a life threatening situation, do not interrupt the Immediate Notifications. Such calls shall be made coincidentally with Immediate Notifications.
 - b. Calls for immediate off-site support take precedence over Follow-up Notifications.

7.12 TSC Team Director

7.12.1 Assume control of all teams dispatched from the Control Room except on-shift Nuclear Station Operators.

1. On-shift Nuclear Station Operators remain under Control Room control and are not assigned a team identifier.

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 18 of 31

- 7.12.2 Assign each Emergency Response Team with a team identifier.
- 7.12.3 Inform the TSC Team Communicator of the formation of Emergency Response Teams.
- 7.12.4 Evaluate the need for Health Physics support for all dispatched teams.
 - 1. Health Physics Technicians will provide the necessary radiological guidance for the task which the team will perform.
 - 2. Health Physics Technicians should provide status updates to the Radiological Coordinator during the time the team is in the field.
- 7.12.5 Coordinate with the Maintenance Assistant to complete a brief for Emergency Response Teams.
 - 1. Consider areas to evacuate to, stay times, and possible hazards the team may encounter while performing their task.

7.13 TSC Team Communicators

- 7.13.1 Ensure that the radio is turned on and selected to the correct channel.
- 7.13.2 Establish and maintain communications with site Emergency Response Teams.
- 7.13.3 Verify team identification and membership when Emergency Response Teams establish radio communications.
- 7.13.4 Inform the teams of changes to plant status and emergency classifications.
- 7.13.5 Ensure all pertinent directions to the teams from the TSC Team Director are logged.

7.14 TSC Emergency Notification System (ENS) Communicator

- 7.14.1 Inform the TSC Operations Coordinator that ENS communications are ready to be established.
- 7.14.2 Establish and maintain continuous communications with the NRC via the ENS Emergency Telecommunications System (ETS) telephone. IF the NRC determines that continuous communications or contact with all facilities is not necessary, THEN communications may be terminated as directed by the NRC.

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 19 of 31

1. Use of the ETS phone is in accordance with EPP 06-007, EMERGENCY NOTIFICATIONS.

7.14.3 Provide the following information to the NRC:

- o Any further degradation in the level of safety of the plant or other worsening plant conditions
- o The results of ensuing evaluations or assessments of plant conditions
- o The effectiveness of response or protective measures taken
- o Any information related to plant behavior that is not understood

7.15 Engineering Team

- 7.15.1 The Engineering Team should monitor NPIS primary plant display for adverse trends.
- 7.15.2 The Engineering Team should assist with troubleshooting and restoration of equipment.
- 7.15.3 The Engineering Team should monitor on-site and off-site electric distribution and sources.
- 7.15.4 The Engineering Team should assess plant status and the severity of the emergency conditions in accordance with EPP 06-016, ACCIDENT ASSESSMENT AND MITIGATION.
- 7.15.5 Nuclear Engineer should assess the degree of fuel damage in accordance with EPP 06-017, CORE DAMAGE ASSESSMENT METHODOLOGY.

7.16 Emergency Response Team

- 7.16.1 Sign your name and position on the Task Board.
- 7.16.2 Obtain Protective clothing and stage in bag for readiness.
- 7.16.3 Obtain most recent dose update and respirator qualifications.
- 7.16.4 Perform operability checks on equipment and instruments before leaving the TSC.
- 7.16.5 WHEN Chemistry Technicians perform chemical sampling, THEN provide analysis results to the TSC Radiological Coordinator.

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 20 of 31

- 7.16.6 Immediately report major anomalies encountered in the plant to the TSC Team Communicator.
- 7.16.7 Upon return to the TSC, report any anomalies to the TSC Team Director.
- 7.16.8 Track Emergency Response Team exposure in accordance with EPP 06-013, EXPOSURE CONTROL AND PERSONNEL PROTECTION.
- 7.16.9 Team formation and control is in accordance with EPP 06-011, EMERGENCY RESPONSE TEAM FORMATION AND CONTROL.

7.17 Maintenance Assistant

- 7.17.1 Assign personnel to Emergency Response Teams for equipment repair, surveys, or search and rescue.
- 7.17.2 Coordinate with the TSC Team Director and brief Emergency Response Teams on team objectives.
 - 1. Complete EPF 06-011-01, PLANT TEAM BRIEFING CHECKLIST.
- 7.17.3 IF the team has a search and rescue mission, THEN include the following information in the briefing:
 - o Number and last known location(s) of missing individual(s)
 - o Possible physical condition of missing individual(s)
- 7.17.4 Brief the Maintenance Coordinator on the status of Emergency Response Teams.
- 7.17.5 Consider the necessity of conducting additional briefings of teams dispatched to additional locations once the team has left the TSC.
- 7.17.6 Debrief Emergency Response Teams in accordance with EPP 06-011, EMERGENCY TEAM FORMATION AND CONTROL.

7.18 Maintenance Planner

- 7.18.1 Assist in the briefing of Emergency Response Teams and provide maintenance support as appropriate to the Maintenance Coordinator.
- 7.18.2 Develop repair plans for equipment repairs as directed.

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 21 of 31

7.19 Warehouse Support

7.19.1 Locate and secure parts and equipment from the warehouse as directed.

7.20 Security Coordinator

7.20.1 Ensure the safety of Security personnel is maintained by coordinating Security activities with activities of the TSC.

7.20.2 Provide coordination of activities including, but not limited to the following:

- o Emergency vehicle arrival
- o Search and rescue outside the PAB
- o Access to vital areas
- o EMT support
- o Activities concerning Security

8.0 RECORDS

8.1 Records generated by this procedure during an actual emergency are considered lifetime QA records and shall be forwarded to Emergency Planning at the termination of the emergency.

8.2 Records generated by this procedure during drills or exercises are considered non-QA records and shall be forwarded to Emergency Planning at the termination of the drill or exercise.

9.0 FORMS

9.1 EPF 06-002-01, EMERGENCY MANAGER TURNOVER SHEET

9.2 EPF 06-002-02, OPERATIONS STATUS

9.3 EPF 06-002-03, SEQUENCE OF EVENTS

- END -

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 22 of 31

ATTACHMENT A
(Page 1 of 2)
HEPA FILTRATION AND IODINE MONITORING OPERATIONS

NOTES

- o The HEPA filtration startup panels are located in the northwest corner of the TSC Equipment Room.
- o The air handling heater switch is located on top of the HEPA unit directly in front of the Iodine Monitoring Control Panel.

A.1 HEPA FILTRATION STARTUP INSTRUCTIONS

- A.1.1 On Panel PB-1, Toggle the FILTER/NORMAL switch to FILTER.
1. Verify dampers D-1 and D-2 closed status lights indicate CLOSED.
 2. Verify damper D-3 open status light indicates OPEN.
 3. IF dampers D-1 and D-2 fail to close or D-3 fails to open, THEN use manual damper controls located in the ductwork to position the dampers. Damper D-1 is located in Janitor Supply Room. Dampers D-2 and D-3 are located in the TSC Equipment Room in the overhead above the Iodine Monitor.
- A.1.2 On Disconnect Box next to Panel PB-1, turn HEPA filtration FAN SWITCH to HAND position to start fan.
- A.1.3 Turn air handling heater to ON.

A.2 IODINE MONITORING STARTUP INSTRUCTIONS

- A.2.1 Ensure "PWR ON" indicator is lit.
- A.2.2 Close Purge valve.
- A.2.3 Verify inlet valve is throttled open.
- A.2.4 Press and hold START button.
1. Verify green "ON" light comes on.
 2. IF vacuum is not between 3" and 10" Hg on the vacuum gauge, THEN adjust the inlet valve to obtain between 3" to 10" Hg on the vacuum gauge.

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 23 of 31

ATTACHMENT A

(Page 2 of 2)

HEPA FILTRATION AND IODINE MONITORING OPERATIONS

3. WHEN vacuum is between 3" to 10" Hg on the gauge, THEN release the "START" button.

A.2.5 Verify LIMIT light is extinguished.

A.2.6 Verify air flow is between 1.8 and 2.2 cfm.

A.3 HEPA FILTRATION SHUTDOWN INSTRUCTIONS

A.3.1 Turn air handling heater to OFF.

A.3.2 On Disconnect Box next to Panel PB-1, turn HEPA filtration FAN SWITCH to OFF position to secure fan.

A.3.3 On Panel PB-1, Toggle the FILTER/NORMAL switch to NORMAL.

1. Verify dampers D-1 and D-2 status lights indicate OPEN.

2. Verify damper D-3 status light indicates CLOSED.

3. IF damper D-1 fails to open, THEN ensure exhaust fan EXF-1 located in Janitor Supply Room is running.

4. IF damper D-2 fails to open or damper D-3 fails to close, THEN use manual damper controls located in the ductwork to position the dampers. Dampers D-2 and D-3 are located in the TSC Equipment Room in the overhead above the Iodine Monitor.

A.4 IODINE MONITORING SHUTDOWN INSTRUCTIONS

A.4.1 Secure the monitor by pushing and releasing the STOP button.

- END -

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 24 of 31

ATTACHMENT B
(Page 1 of 1)
OSC RELOCATION SUPPLIES AND EQUIPMENT

- B.1 Air Samplers, Friskers, and Survey Meters for Portable Survey Instruments
- B.2 TLDs, SRD (PICs), Issue Logs, and Dosimeter Chargers for Personnel Dosimetry
- B.3 Emergency Procedures/Forms
- B.4 Protective Clothing and Tape
- B.5 Decontamination Kit
- B.6 First Aid and Medical Response Kits
- B.7 Communication Equipment
- B.8 Step Off Pads, Radiation Signal Ropes and Signs for Radiation Control Area Supplies
- B.9 SCBA and Full Face (spare cartridges) Respiratory Protection
- B.10 Zeolite Cartridges, Smears, and A/S Filters for Health Physics Survey Supplies
- B.11 KI Tablets
- B.12 Office Supplies, Flashlights, and Batteries

- END -

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 25 of 31

ATTACHMENT C
(Page 1 of 3)
TSC DIESEL OPERATIONS

C.1 IF the normal power supply to the TSC is not available, THEN ensure the TSC diesel generator is started as follows:

C.1.1 Ensure EMERG GENERATOR INTAKE DAMPER D6 is OPEN OR that the damper actuator arm is loosened allow the damper to fall open.

NOTES

- o To prevent permanent cranking motor damage, do not crank the diesel for more than thirty seconds continuously. If the diesel does not start within the first thirty seconds, wait one to two minutes before re-cranking.
- o Frequency requirements apply only during steady-state conditions with the diesel under a constant load.

C.1.2 At the Diesel Control Panel, start the diesel generator by placing the MANUAL START toggle switch to the PERMISSIVE START position.

1. Verify the following parameters: (Reference 3.1.4)

- o Oil Pressure GREATER THAN 50 psig
- o Voltage 450 to 500 volts (all phases)
- o Frequency 58.8 Hz to 61.2 Hz

C.1.3 At the Main Distribution Panel, place breakers for circuits 1 through 14 OFF.

C.1.4 At the MANUAL TRANSFER SWITCH, place the MAIN breaker to OFF.

C.1.5 At the MANUAL TRANSFER SWITCH, place the D/GEN breaker to ON.

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 26 of 31

ATTACHMENT C
(Page 2 of 3)
TSC DIESEL OPERATIONS

NOTES

- o Allow several seconds for generator load to stabilize before placing the next breaker to the ON position.
- o Machine voltage may be adjusted as necessary by use of rheostat adjacent to the diesel generator field breaker located on the D/G.
- o Diesel generator coolant temperature should be greater than or equal to 120 F prior to loading the diesel generator.

C.1.6 At the Main Distribution Panel, place breakers 1 through 14 to ON.

NOTE

Frequency requirements apply only during steady-state conditions with the diesel under a constant load.

C.1.7 WHEN the diesel is operating under load, THEN the following parameters should be maintained.
(Reference 3.1.4)

- o Oil Pressure GREATER THAN 50 psig
- o Voltage 450 to 500 volts (all phases)
- o Frequency 58.8 Hz to 61.2 Hz

C.2 IF the TSC Diesel Generator is no longer needed, THEN shutdown the diesel generator as follows:

- C.2.1 At the Main Distribution Panel, place breakers for circuits 1 through 14 OFF.
- C.2.2 At the MANUAL TRANSFER SWITCH, place the D/GEN breaker to OFF.
- C.2.3 At the MANUAL TRANSFER SWITCH, place the MAIN breaker to ON.
- C.2.4 At the Main Distribution Panel, place breakers for circuits 1 through 14 to ON.

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 27 of 31

ATTACHMENT C
(Page 3 of 3)
TSC DIESEL OPERATIONS

NOTE

The Diesel should be allowed to run unloaded for 3 to 5 minutes to cool down.

- C.2.5 At the Diesel Control Panel, stop the diesel by placing the MANUAL START toggle switch to OFF.
- C.2.6 Ensure the EMERG. GENERATOR INTAKE DAMPER D6 is closed.
- C.2.7 Notify the Control Room to perform STN KAT-001, TECHNICAL SUPPORT CENTER DIESEL GENERATOR OPERATION, to ensure the diesel is ready for operation.

- END -

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 28 of 31

ATTACHMENT D
(Page 1 of 1)
EMERGENCY RESPONSE DATA SYSTEM (ERDS) OPERATIONS

D.1 ERDS Activation

D.1.1 In the TSC computer room, perform one of the following using the NPIS Computer:

- o Select the E-Plan Menu, then touch the ERDS block on the screen

OR

- o Type the Turn-On code "ERDS" and press the "Return/Enter" key

D.1.2 Follow the prompts until the ERDS is activated.

D.1.3 Notify the TSC Operations Coordinator that ERDS is activated.

D.2 ERDS Deactivation

D.2.1 IF directed by the NRC to deactivate ERDS, THEN press "F3" key and follow the prompts.

- END -

Revision: 7	TECHNICAL SUPPORT CENTER OPERATIONS	EPP 06-002
Reference Use		Page 29 of 31

ATTACHMENT E
 (Page 1 of 1)
 POSITIONS REQUIRED FOR AUGMENTATION

E.1 Augmentation

E.1.1 The following 25 positions are required to be filled within 60 minutes of the determination that augmentation is needed:

- 1 Radiological Coordinator
- 1 Chemistry Technician
- 1 Nuclear Engineer
- 1 Electrical Engineer
- 1 Mechanical Engineer
- 1 I&C Technician
- 2 Mechanical Maintenance
- 2 Electrical Maintenance
- 3 Communicators (Any combination from Administrative Assistant, ENS, or HPN positions to make three)
- 4 Off-site Health Physics Technicians
- 8 On-site Health Physics Technicians

E.1.2 The following 5 positions are required to be filled within 90 minutes of the determination that augmentation is needed:

- 1 Off-site Emergency Manager
- 1 Operations Coordinator
- 1 Radiological Coordinator
- 1 Administrative Coordinator
- 1 Facility Technician

- END -

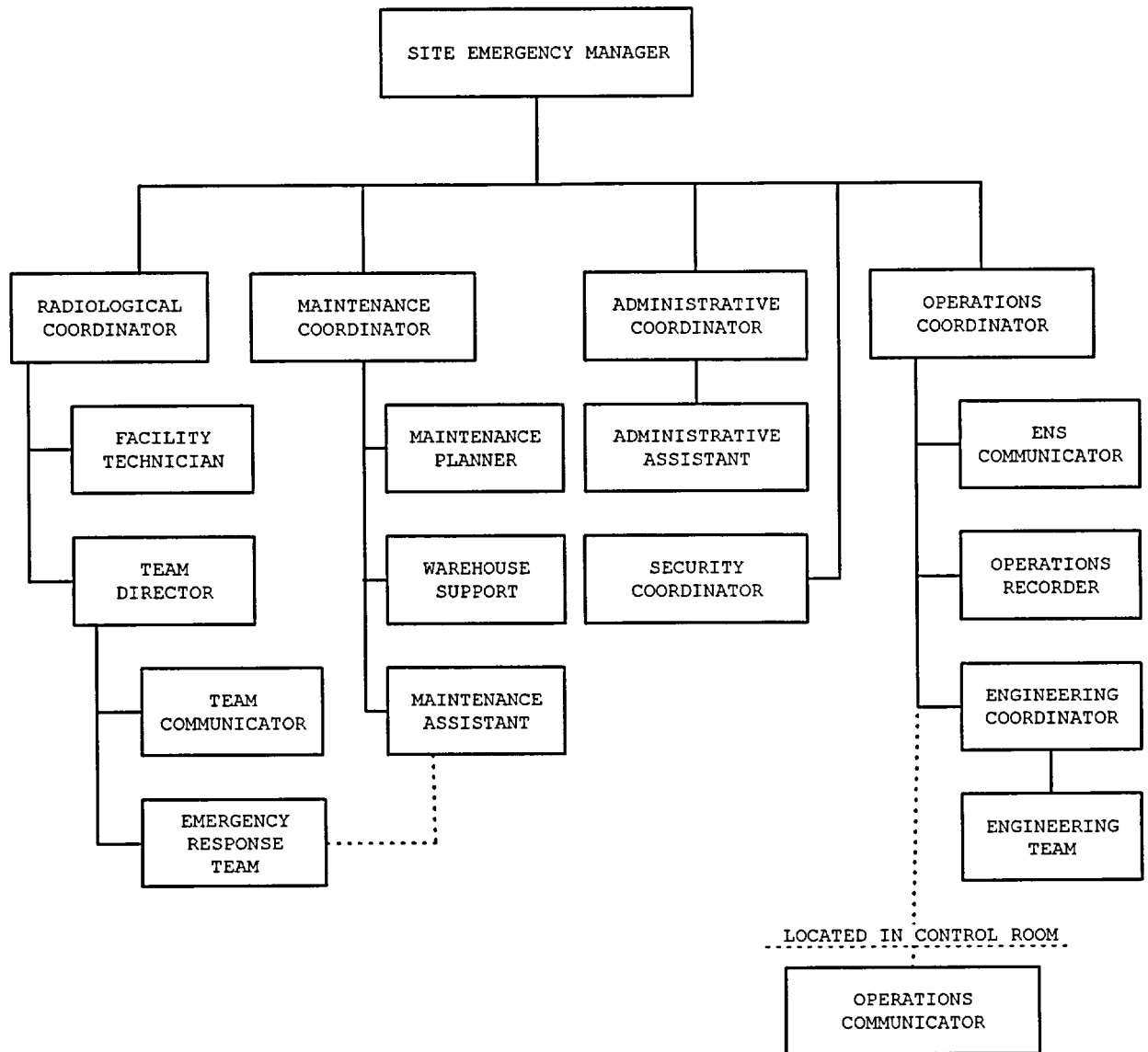
ATTACHMENT F
(Page 1 of 1)
FAX NUMBERS

F.1 FAX to the desired location by using the appropriate number from the table below.

LOCATION	WHEN	FAX	VERIFICATION
Coffey County Dispatcher	Prior to County EOC activation:	364-5758	364-2123
Coffey County EOC	After County EOC activation:	364-8643	364-2721
State of Kansas		(785) 274-1487	(785) 296-3176 (785) 274-1422 (785) 274-1425 OR State Radio
State of Kansas PIO		(785) 274-1622	(785) 274-1192
NRC Resident Inspector		364-8735	Ext. 4575
Topeka System Dispatch		(785) 575-6010	(785) 575-6078
ANI		(860) 561-4655	(860) 561-3433
INPO		(770) 644-8549	(800) 321-0614
EOF		Ext. 5101	Ext. 5100
TSC		Ext. 4051	Ext. 4053
Information Clearinghouse - Topeka	Prior to activation:	(785) 274-1622	(785) 274-1190
	After activation:	(785) 267-0742	(785) 267-0603

- END -

FIGURE 1
TSC ORGANIZATION





EPP 06-003

EMERGENCY OPERATIONS FACILITY OPERATIONS

Responsible Manager

Superintendent Emergency Planning

Revision Number	5
Use Category	Reference
Administrative Controls Procedure	No
Infrequently Performed Procedure	No
Program Number	06

DC2 12/06/02

TABLE OF CONTENTS

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
1.0	PURPOSE	2
2.0	SCOPE	2
3.0	REFERENCES AND COMMITMENTS	2
4.0	DEFINITIONS	3
5.0	RESPONSIBILITIES	4
6.0	PRECAUTIONS/LIMITATIONS	5
7.0	PROCEDURE	6
7.1	EOF Activation	6
7.2	EOF Deactivation	6
7.3	Off-site Emergency Manager	7
7.4	EOF Operations Coordinator	9
7.5	EOF Administrative Coordinator	10
7.6	EOF Radiological Coordinator	11
7.7	EOF Facility Technician	12
7.8	Dose Assessment Coordinator	13
7.9	Dose Assessment Technician	13
7.10	EOF Operations Recorder	14
7.11	EOF Administrative Assistant	14
7.12	EOF Team Director	17
7.13	EOF Team Communicator	18
7.14	HPN Communicator	18
7.15	Survey Team Technician	19
7.16	Representative at County	20
8.0	RECORDS	20
9.0	FORMS	20
ATTACHMENT A	ALTERNATE EOF OPERATIONS	21
ATTACHMENT B	EOF DIESEL OPERATION	24
ATTACHMENT C	HEPA FILTRATION AND IODINE MONITORING OPERATION	26
ATTACHMENT D	FAX NUMBERS	28
FIGURE 1	EMERGENCY OPERATIONS FACILITY ORGANIZATION	29

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 2 of 29

1.0 PURPOSE

1.1 This procedure describes responsibilities and provides guidance for Emergency Response Organization (ERO) personnel, located in the Emergency Operations Facility (EOF), for the activation of the EOF following the declaration of an Alert, Site Area Emergency, General Emergency.

2.0 SCOPE

2.1 This procedure provides direction for ERO positions required to activate and staff the EOF and the Alternate EOF.

3.0 REFERENCES AND COMMITMENTS

3.1 References

- 3.1.1 Code of Federal Regulations 10CFR20
- 3.1.2 Code of Federal Regulations 10CFR50
- 3.1.3 Kansas State Emergency Operations Plan, Appendix 12 to Annex N.
- 3.1.4 Letter CO 94-0024, Request for Alternate Emergency Operations Center Information, Docket No. 50-482
- 3.1.5 PIR TE 91-0676, QA Surveillance TE: 53359 S-1892, Radiological Status Board not Updated to Show Which Protective Action Recommendations were Completed.
- 3.1.6 PIR 2000-3534; TSC Diesel Generator failed to satisfy the requirements of STN KAT-001.

3.2 Commitments

- 3.2.1 ITIP 01963, NRC Information Notice 92-32, Problems Identified With Emergency Ventilation Systems For Near Site (Within 10 Miles) Emergency Operations Facilities And Technical Support Centers.
- 3.2.2 Deleted
- 3.2.3 PIR TE 91-0715, Failure to Establish and Maintain Habitability in the Emergency Response Facilities.
- 3.2.4 RCMS Number 91-142, Letter WM 91-0145, Closure of air lock door, NRC Inspection Report 91-19.
- 3.2.5 RCMS Number 92-188, Letter WM 92-0179, Restructure assignment of responsibilities on activation checklists, NRC Inspection Report Weakness 9214-01

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 3 of 29

4.0 DEFINITIONS

4.1 Alternate Emergency Operations Facility

4.1.1 The alternate EOF is located in Emporia, Kansas at the KPL District Office, 210 E. 2nd Street. The alternate EOF is where management of the overall Wolf Creek Generating Station (WCGS) emergency response will be conducted if the primary EOF has been evacuated.

4.2 Callout

4.2.1 The methodology which is implemented to provide proper staffing of the ERO.

4.3 Emergency Action Levels (EALs)

4.3.1 Specific parameters or conditions that may be used as thresholds for declaring a particular emergency classification.

4.4 Emergency Classification

4.4.1 A system used to define the severity of emergencies into one of four categories based upon projected or confirmed emergency action levels. Classifications listed in order of increasing severity are as follows:

- o Notification of Unusual Event
- o Alert
- o Site Area Emergency
- o General Emergency

4.5 Emergency Conditions

4.5.1 Situations occurring which cause or may threaten to cause radiological hazards affecting the health and safety of employees or the public, or which may result in damage to property.

4.6 Emergency Operations Facility (EOF)

4.6.1 The organization represented by FIGURE 1, EMERGENCY OPERATIONS FACILITY ORGANIZATION. The EOF is the near-site emergency response facility from which the management of the overall Wolf Creek Generating Station (WCGS) emergency response is conducted. The EOF is located 2.8 miles northwest of WCGS.

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 4 of 29

4.7 Facility Activation

4.7.1 A facility is considered activated when the designated positions are ready to assume the responsibilities assigned to that position and the facility is declared activated.

4.8 Habitability

4.8.1 Habitable - Radiological / environmental conditions within the facility are not challenged. There are no stay time restrictions for environmental or radiological circumstances.

4.8.2 Degraded - Conditions within the facility do not meet normal facility conditions. This could be due to radiological, environmental, or equipment conditions which may cause some type of hardship for personnel working in the facility.

4.9 Operations Support Center (OSC)

4.9.1 A staging area located in the TSC for emergency teams to support the emergency response effort.

4.10 Records

4.10.1 Documents such as calculation worksheets, computer printouts, forms, logs, memos, checklists, or any paper used to record data or information during an emergency, drill or exercise which may be used for event reconstruction.

5.0 RESPONSIBILITIES

5.1 Off-site Emergency Manager

5.1.1 Coordinate and direct off-site emergency response.

5.1.2 Approve radiation exposure greater than the limits of 10CFR20 for off-site ERO personnel.

5.1.3 Direct off-site protective actions.

5.1.4 Declare the EOF activated and establish priorities for EOF personnel.

5.1.5 Approve Protective Action Recommendations.

5.1.6 Approve emergency notifications

5.1.7 Has authority to supplement or reduce staff.

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 5 of 29

5.2 EOF Administrative Coordinator

5.2.1 Provide administrative support for the facility.

5.3 EOF Facility Technician

5.3.1 Establish and monitor facility habitability.

5.4 EOF Radiological Coordinator

5.4.1 Provide direction for radiological conditions associated with activities controlled by the EOF.

5.5 EOF Operations Coordinator

5.5.1 Monitors on site emergency response activities.

6.0 PRECAUTIONS/LIMITATIONS

6.1 Facility evacuation should be considered if there is an actual or projected dose of 5 REM TEDE, unless the Off-site Emergency Manager authorizes exposures up to 25 REM.

6.2 It is the goal to activate the EOF within 90 minutes of a declaration of an Alert or higher emergency. The assigned Off-site Emergency Manager will assume command-and-control functions and will be the top line manager responsible for the emergency.

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 6 of 29

7.0 PROCEDURE

CAUTION

IF radiological conditions threaten the EOF operation based on actual or projected doses or other hazardous conditions, THEN ensure the EOF is evacuated and the Alternate EOF is staffed and activated.

7.1 EOF Activation

7.1.1 Upon notification of a Alert, or a more severe classification, EOF personnel proceed to and establish operations at the Emergency Operations Facility as follows:

1. Obtain the position name tag for the assigned position from the Staffing Board.
2. Print name and ACAD badge number on the Staffing Board where the position badge was located.
3. Proceed to assigned work station and commence with position functions as directed by this procedure.

7.1.2 Personnel should log/record significant emergency response information.

7.1.3 WHEN the following personnel are present and ready to assume their duties and the facility has been declared activated THEN the EOF is considered activated:

- o Off-site Emergency Manager
- o EOF Operations Coordinator
- o EOF Radiological Coordinator
- o EOF Administrative Coordinator
- o EOF Facility Technician

7.1.4 WHEN equipment problems or failures are identified THEN personnel should report to the EOF Administrative Coordinator.

7.2 EOF Deactivation

7.2.1 The Off-site Emergency Manager should inform personnel in the EOF to deactivate.

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 7 of 29

- 7.2.2 EOF personnel should forward logs and all other documentation generated during the emergency to the EOF Administrative Coordinator.
- 7.2.3 The EOF Administrative Coordinator should transmit all documentation collected to Emergency Planning.
- 7.2.4 Each EOF position holder should return equipment and supplies to pre-activation status.
- 7.2.5 Each EOF position holder should report any deficiencies in equipment or supplies to the EOF Administrative Coordinator.
- 7.2.6 The EOF Administrative Coordinator should notify Emergency Planning of any damaged or missing equipment.

7.3 Off-site Emergency Manager

- 7.3.1 Obtain a turnover briefing from the Site Emergency Manager. EPF 06-002-01, EMERGENCY MANAGER TURNOVER SHEET, may be used as an aid for this turnover.
- 7.3.2 Ensure the following positions have been filled and are ready for EOF activation:
 - o EOF Administrative Coordinator
 - o EOF Operations Coordinator
 - o EOF Radiological Coordinator
 - o Facility Technician

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 8 of 29

CAUTION

The following responsibilities are those of the Emergency Managers and may NOT be delegated. These responsibilities may be divided between the Site and Off-site Emergency Managers:

- o Emergency Classification
- o Protective action recommendations
- o Authorization for notification of off-site authorities
- o Authorization of Emergency Exposures on-site in excess of 10CFR20 Limits

- 7.3.3 Assume command-and-control of off-site emergency response activities from the Site Emergency Manager.
1. Inform the staff in the EOF you have assumed command-and-control and that the EOF is declared activated.
 2. Direct the EOF Administrative Coordinator to make a plant announcement that the EOF is activated and the name of the Off-site Emergency Manager.
- 7.3.4 Ensure that communications are established and maintained with the State of Kansas and Coffey County Emergency Operations Centers (EOCs).
- 7.3.5 Evaluate plant/radiological status for changes in Emergency Classification per EPP 06-005, EMERGENCY CLASSIFICATION.
- 7.3.6 Based on plant/radiological evaluation, issue Protective Action Recommendations per EPP 06-006, PROTECTIVE ACTION RECOMMENDATION.
- 7.3.7 Ensure notifications are made in accordance with EPF 06-007-01, WOLF CREEK GENERATING STATION EMERGENCY NOTIFICATION.
- 7.3.8 Ensure the EOF, Security, Control Room, TSC, and Wolf Creek Public Information Organization staffs are informed of classification or Protective Action Recommendations changes.
1. Ensure ADS, pagers, and announcements are initiated when required.

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 9 of 29

NOTE

Protective Action Recommendations must be consistent with the dose information.

- 7.3.9 Coordinate with the EOF Radiological Coordinator on the need to authorize exposure limits in excess of 10CFR20 limits (with NRC concurrence if practical) and the need to recommend ingestion of potassium iodide (KI).
- 7.3.10 Brief EOF personnel on emergency status.
- 7.3.11 Interface with the Off-site Public Information Coordinator to provide technical input for news statements.
- 7.3.12 Coordinate with the EOF Administrative Coordinator the need to procure materials, equipment, personnel to support emergency actions.
- 7.3.13 Brief the WCGS Executive Management on plant conditions and any action being carried out to control the emergency.
- 7.3.14 IF necessary, THEN request Federal Assistance through State officials.
- 7.3.15 IF downgrading or terminating an emergency, THEN perform in accordance with EPP 06-008, RECOVERY OPERATIONS.
- 7.4 EOF Operations Coordinator
 - 7.4.1 Ensure the normal power supply to the EOF is available. IF unavailable, THEN ensure that the Diesel Generator is started in accordance with Attachment B, EOF DIESEL OPERATIONS.
 - 7.4.2 Ensure the HEPA Filtration and the Iodine Monitor are placed in service in accordance with Attachment C, HEPA FILTRATION AND IODINE MONITORING OPERATION.
 - 7.4.3 Ensure the facility clocks are synchronized to the Control Room clock.
 - 7.4.4 Post the appropriate Emergency Classification sign.
 - 7.4.5 Obtain plant status from the TSC Operations Coordinator and brief the Off-site Emergency Manager.

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 10 of 29

a. Advise the Off-site Emergency Manager on technical data and trend analysis relating to fuel integrity, plant systems, equipment and instrumentation.

7.4.6 Inform the Off-site Emergency Manager of readiness for EOF activation.

7.4.7 Monitor plant conditions for changes which could affect the emergency classification and notify the Off-site Emergency Manager of the conditions.

7.4.8 Evaluate actual or potential radiological releases based on plant conditions. Discuss evaluation with the Off-site Emergency Manager and EOF Radiological Coordinator.

7.5 EOF Administrative Coordinator

7.5.1 Contact TSC Administrative Coordinator for the status of notifications.

7.5.2 Inform the Off-site Emergency Manager of readiness for EOF activation.

7.5.3 Ensure the State and County are notified that the EOF is activated and has taken over command-and-control of the emergency.

7.5.4 Ensure EOF Administrative Assistants perform notifications in accordance with EPP 06-007, EMERGENCY NOTIFICATIONS.

7.5.5 Ensure initial EOF staffing is adequate. IF staffing is not adequate, THEN call out additional personnel.

o For off-hours activation use the ADS report OR the NRECs report to evaluate staffing.

7.5.6 Make arrangements for shift relief and meals.

7.5.7 Provide support to the EOF staff as required, including:

o Clerical and administrative support personnel

o Warehouse support, procurement and expediting personnel

o Additional communications support and equipment repair services

o Personnel, support contractors, etc.

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 11 of 29

7.6 EOF Radiological Coordinator

- 7.6.1 Obtain current radiological status and Protective Action Recommendations.
- 7.6.2 Ensure the Facility Technician is available.
[Commitment Step 3.2.3]
- 7.6.3 Ensure facility habitability has been established.
- 7.6.4 Notify the Off-site Emergency Manager of readiness for facility activation.
- 7.6.5 Ensure dosimetry devices are placed in the facility or issued to personnel as appropriate in accordance with EPP 06-013, EXPOSURE CONTROL AND PERSONNEL PROTECTION.
- 7.6.6 Ensure the Off-site Emergency Manager is briefed on radiological status for the development of Protective Action Recommendations.
- 7.6.7 Provide the Off-site Emergency Manager with an evaluation of the conditions potentially requiring personnel exposure in excess of 10CFR20 limits.
 - o IF time permits, THEN initiate EPF 06-013-01, EMERGENCY EXPOSURE AUTHORIZATION.
- 7.6.8 For actual or projected doses perform the following:
 - 1. IF an actual or projected dose in the facility is greater than or equal to 5 REM TEDE, THEN inform the Off-site Emergency Manager of the need to evacuate the facility.
 - 2. IF projected thyroid dose is greater than or equal to 25 REM, THEN recommend the ingestion of KI in accordance with EPP 06-013, EXPOSURE CONTROL AND PERSONNEL PROTECTION.
- 7.6.9 Review and evaluate radiological and meteorological data to assess the consequences of any release of radioactive materials including:
 - o chemical and radiochemical analysis results
 - o off-site monitoring results
 - o dose projection data
- 7.6.10 Verify that radiological status information is being provided to dose assessment personnel and that the information is accurate and updated.

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 12 of 29

7.6.11 Coordinate matters associated with off-site radiological assessment activities with representatives of County, State and Federal Agencies.

1. Brief personnel on incoming data
2. Ensure there are consistent dose calculations between the State and WCNO
3. Confer with State on directing the placement of Joint Radiological Monitoring Teams (Field Teams)

7.7 EOF Facility Technician

7.7.1 Establish and maintain facility habitability.

1. Ensure all AIR LOCK DOORS are closed. [Commitment Step 3.2.4]
2. Position a frisker in the facility for habitability monitoring. IF the frisker alarms, THEN take an air sample of the EOF.
 - o Lead bricks are available for shielding.
 - o IF general area frisker readings are greater than 100 cpm above background, or readings on the General Atomics iodine monitor are greater than background, THEN an air sample will be taken in accordance with RPP 02-210, RADIATION SURVEY METHODS.
3. Record the Iodine Monitor cpm reading in the Facility Technician log.
 - o IF the General Atomics iodine monitor is inoperable during HEPA filter operation, THEN initiate portable iodine sampling at least hourly in accordance with RPP 02-210, RADIATION SURVEY METHODS.
4. Record the Area Radiation Monitor mR/hr reading in the Facility Technician log.
 - o IF the area radiation monitor exceeds 20 mR/hr, THEN notify the EOF Radiological Coordinator.
5. IF a release is in progress OR as directed, THEN place a frisker at the facility entrance for personnel monitoring.

7.7.2 Inform the Off-site Emergency Manager of readiness for facility activation.

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 13 of 29

- 7.7.3 Inform the EOF Radiological Coordinator of all facility habitability surveys.
- 7.7.4 Check the Ventilation Iodine Monitor hourly for proper operation.
 - o IF inoperable, THEN initiate portable iodine sampling at least hourly.
- 7.7.5 Identify and label inoperable equipment.
- 7.7.6 Ensure that the Environmental Garage Area is designated and posted as a radiological controlled area in accordance with RPP 02-215, POSTING OF RADIOLOGICAL CONTROLLED AREAS.

7.8 Dose Assessment Coordinator

- 7.8.1 Ensure dose assessment equipment is in place and functional (i.e., Computer, etc.)
- 7.8.2 Review the current Protective Action Recommendations and inform the EOF Radiological Coordinator of any changes based on radiological or meteorological conditions.
- 7.8.3 Consult with the EOF Operations Coordinator to obtain information regarding actual or potential release paths, sources, and duration.
- 7.8.4 Implement the requirements of EPP 06-012, DOSE ASSESSMENT, comparing TEDE and thyroid estimates with values in EPP 06-006, PROTECTIVE ACTION RECOMMENDATIONS.
- 7.8.5 Compare inputs and results with the State dose assessment staff.
- 7.8.6 Inform the EOF Radiological Coordinator of calculated results.
- 7.8.7 Assist in the formulation of Protective Action Recommendations.
- 7.8.8 Review, evaluate and trend off-site radiological monitoring data and off-site dose projections, then brief the EOF Radiological Coordinator.

7.9 Dose Assessment Technician

- 7.9.1 Ensure Dose Assessment Program is operable.
- 7.9.2 Determines:

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 14 of 29

- o meteorological conditions
- o System status
- o Radiological Monitoring System and Meteorological data for changes or indications of a release.
- o Possible radioactive release pathways.
- o An estimate of off-site dose

7.9.3 Inform Dose Assessment Coordinator of results.

7.10 EOF Operations Recorder

7.10.1 Ensure NPIS is operable by verifying time and date in the upper right-hand corner are updating.

NOTES

o There is a goal of updating the Operations Status Board at 15 minute intervals.

7.10.2 Maintain the Operations Status Board current by using NPIS Turn-On-Codes SB1 and SB2 OR with data obtained from the Operations Communicator on EPF 06-002-02, OPERATIONS STATUS BOARD.

1. Maintain a hard-copy of the NPIS printouts or completed EPF 06-002-02, OPERATIONS STATUS BOARD.

7.10.3 Monitor plant status for adverse trends and inform the EOF Operations Coordinator of changes in plant status which could affect the emergency classification.

7.10.4 Track procedure progress, list the procedure being performed by the Control Room.

7.10.5 Notify the EOF Operations Coordinator when transitions are made to the next procedure.

7.11 EOF Administrative Assistant

7.11.1 Ensure the operability of phones and radios to be used for County and State notifications. Conduct an initial radio check with Coffey County and the State of Kansas.

7.11.2 Ensure the verification phone is plugged in and operable by checking for a dial tone.

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 15 of 29

1. The verification phone should only be answered in this facility when it is activated and responsible for notifications.

7.11.3 Maintain EOF accountability by performing the following: [Commitment Step 3.2.3]

1. Lock all outside doors to the building except the door on the southwest side of the building (the one next to the garage door).
2. Ensure airlock doors to the simulator are closed.
3. Ensure personnel entering or exiting the EOF, who are not listed on a staffing board or a JRMT, are logged on EPP 06-010-01, ACCOUNTABILITY LOG.
4. Obtain approval from the EOF Administrative Coordinator for personnel without identification or unknown personnel prior to them entering the EOF.
5. Perform breath analyzer tests as needed for personnel entering the EOF.

7.11.4 Provide assistance to the Off-site Emergency Manager by performing the following:

1. Maintain the EOF Sequence of Events and Protective Action Recommendation Board.
2. Answer the phone as needed.
3. Provide log keeping assistance for the Off-site Emergency Manager as directed.

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 16 of 29

NOTE

Distribution of documents should be to the maroon baskets at EOF workstations.

7.11.5 Perform faxing, copying, and distribution as requested. Use a Fax coversheet for each Fax sent. FAX numbers are listed in ATTACHMENT D, FAX NUMBERS. Perform distribution of the listed documents as follows:

1. EPF 06-007-01, WOLF CREEK GENERATING STATION EMERGENCY NOTIFICATION to the following:
 - o Topeka Information Clearinghouse
 - o State of Kansas Public Information Officer
 - o Coffey County EOC
 - o Administrative Coordinator
 - o Nuclear Regulatory Commission (NRC)
 - o Emergency Notification System (ENS) Communicator
 - o Onsite Public Information Coordinator
 - o TSC
2. News Statements to the following:
 - o Off-Site Emergency Manager
 - o Administrative Coordinator
 - o Health Physics Network (HPN) Communicator
 - o Nuclear Regulatory Commission (NRC)
 - o Off-Site Public Information Coordinator
 - o Kansas Division of Emergency Management (KDEM)
 - o Kansas Department of Health & Environment (KDHE)
 - o Coffey County Commissioner
3. EPF 06-002-03, SEQUENCE OF EVENTS, to the TSC.

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 17 of 29

4. Operations and Radiological Status Boards information to the following:
 - o Off-Site Public Information Coordinator
 - o Information Clearinghouse

7.11.6 Provide Off-site communications by performing the following:

1. Contact the TSC to verify the status of notifications.
2. Perform call-out of EOF positions as necessary to complete staffing for the emergency.
3. Perform Emergency Notifications in accordance with EPP 06-007, EMERGENCY NOTIFICATIONS.
 - a. Verify that all information has been completed on Notification forms prior to transmitting.
4. Conduct calls for off-site support as directed by the EOF Administrative Coordinator.
 - a. Unless the call for off-site support is to obtain assistance for a life-threatening situation, do not interrupt the Immediate Notifications. Such calls shall be made coincidentally with Immediate Notifications.
 - b. Calls for immediate off-site support take precedence over Follow-up Notifications.

7.12 EOF Team Director

7.12.1 Establish and control field teams in accordance with EPP 06-011, EMERGENCY TEAM FORMATION AND CONTROL.

7.12.2 Obtain and monitor radiological data that may affect the Field Team's ability to complete assigned activities.

1. IF a vehicle needs decontamination, THEN inform the Radiological Coordinator:
 - o Make arrangements with the Coffey County Radiological Officer (see RETD Section I-E) for decontamination at the County Shop.
 - o Direct the Team to proceed to the Coffey County Shop, located at 1510 South 6th, Burlington, Kansas, for decontamination.

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 18 of 29

- 7.12.3 Assign each Emergency Response Team with a team identifier.
- 7.12.4 Ensure the logging in and analysis of all incoming radiological samples.
- 7.12.5 Review and document dosimetry results of emergency response activities in accordance with EPP 06-013, EXPOSURE CONTROL AND PERSONNEL PROTECTION.

7.13 EOF Team Communicator

- 7.13.1 Ensure that the radio is turned on and selected to the correct channel.
- 7.13.2 Notify the EOF Team Director when the Teams are ready to depart.
- 7.13.3 One communicator should establish and maintain communications with the off-site radiological monitoring teams.
 - 1. Verify team identification and membership when Field Teams establish radio communications.
 - 2. Record survey data taken by Field Teams.
- 7.13.4 One communicator should maintain the field team status boards, plot the locations of the teams, affix the appropriate stability class isopleth to the map and provide any needed assistance in maintaining the Radiological Status Board.
- 7.13.5 Communicate directions from the Team Director, maintaining a record of all transmissions.
- 7.13.6 Inform the teams of changes to plant status and emergency classifications.
- 7.13.7 Record team data in accordance with EPP 06-011, EMERGENCY TEAM FORMATION AND CONTROL.
- 7.13.8 Submit data to EOF Team Director for review and calculation verification.

7.14 Health Physics Network Communicator

- 7.14.1 Inform the EOF Radiological Coordinator that HPN communications is ready to be established.
- 7.14.2 WHEN requested by the NRC, THEN establish and maintain continuous communications with the NRC via the Emergency Telecommunications System (ETS).

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 19 of 29

1. Directions for using the ETS are in EPP 06-007, EMERGENCY NOTIFICATIONS.

7.14.3 Furnish radiological data as requested which may include:

- o dose projections off-site
- o subzones affected
- o Protective Action Recommendations

7.14.4 Inform EOF Radiological Coordinator of NRC's areas of concern.

7.15 Survey Team Technician

7.15.1 Establish and maintain communications with the EOF Team Communicator.

7.15.2 Perform monitoring duties in accordance with EPP 06-011, EMERGENCY TEAM FORMATION AND CONTROL

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 20 of 29

7.16 Representative at County

NOTES

- o It is acceptable to initially report to the TSC/EOF to gather information.
- o Do not make any commitments to the County without the approval of an Emergency Manager.

7.16.1. At the emergency classification of Alert or higher emergency, report to the County EOC in the basement of the County Courthouse, at 6th and Neosho in Burlington.

7.16.2 Respond to requests from personnel in the County EOC, which may include:

- o Clarification of plant, technical and radiological data
- o Verification of plant, technical, meteorological and radiological data
- o Justification for Protective Action Recommendations
- o General inquiries

7.16.3 Keep the Off-site Emergency Manager apprised of the status of the implementation of Protective Action Recommendations.

8.0 RECORDS

8.1 Records generated by this procedure during an actual emergency are considered lifetime QA records and shall be forwarded to Emergency Planning at the termination of the emergency.

8.2 Records generated by this procedure during drills or exercises are considered non-QA records and shall be forwarded to Emergency Planning at the termination of the drill or exercise.

9.0 FORMS

9.1 EPF 06-003-01, RADIOLOGICAL STATUS

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 21 of 29

ATTACHMENT A
(Page 1 of 3)
ALTERNATE EOF OPERATIONS

A.1 EOF Evacuation

- A.1.1 Off-site Emergency Manager determines when the EOF must be evacuated, based on actual or projected plant, radiological, or other conditions.
- A.1.2 The Off-site Emergency Manager determines
1. Staff needed for the Alternate EOF and the staff to transfer to the TSC
 2. Excess staff to be released
 3. Supplies or equipment to be relocated to the Alternate EOF
 4. Preferred routing
- A.1.3 Off-site Emergency Manager directs all responsibilities of the EOF staff to revert back to the control of the TSC staff until the Off-site Emergency Manager declares the Alternate EOF activated.
- o Dose projections and field team control transfers to, and remains with, the TSC after Alternate EOF activation.

NOTE

Phone service may take up to 24 hrs. to be fully functional. Phones existing in KPL office may be used/shared with the KPL business until Wolf Creek lines are operational.

- A.1.4 The EOF Administrative Coordinator should initiate activation of phone service for the Alternate EOF.
- o Call Southwestern Bell at 800-734-7630 to request immediate activation of phone lines.
- A.1.5 The EOF Administrative Coordinator should dispatch an EOF person to open the Alternate EOF OR Call KPL at 800-794-4780 to request that the Duty Supervisor unlock the Emporia office.
- o A key for the Alternate EOF is in the E-Plan Cabinet in the EOF Kit Room.

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 22 of 29

ATTACHMENT A
(Page 2 of 3)
ALTERNATE EOF OPERATIONS

NOTE

All evacuation routes will be determined based on the current conditions.

- A.1.6 The EOF Radiological Coordinator should determine preferred routing for those traveling to:
- o TSC
 - o Alternate EOF
 - o Home or Host County Shelter
- A.1.7 The EOF Radiological Coordinator should discuss with State dose assessment personnel equipment needed for relocation to the Alternate EOF and inform EOF Administrative Coordinator.
- A.1.8 The EOF Radiological Coordinator shall verify that it is radiologically prudent to proceed to the TSC.
- A.1.9 The EOF Team Director should ensure extra sampling supplies from the EOF cabinets are delivered to the Forward Staging Area.
- A.1.10 Environmental samples will be taken to the State Forward Staging Area when the EOF is deactivated.
- A.1.11 The HPN Communicator shall inform the NRC of the deactivation of the EOF and request instructions for re-establishing communications after re-locating to the TSC.
- o At the direction of the TSC Radiological Coordinator re-establish HPN contact with the NRC.
- A.1.12 The EOF Administrative Assistant shall fax copies of Sequence of Events boards to the TSC/OSC.
- A.1.13 The EOF Administrative Assistant shall reconcile accountability as personnel leave the facility.
- A.1.14 The Wolf Creek Representative to the County remains at the County Emergency Operations Center (CEOC) and reports to the Site Emergency Manager after EOF deactivation.

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 23 of 29

ATTACHMENT A

(Page 3 of 3)

ALTERNATE EOF OPERATIONS

A.2 Alternate EOF Activation

- A.2.1 Alternate EOF positions may be staffed through a callout of staff for the next shift.
- A.2.2 EOF staffing will be directed by the EOF Administrative Coordinator who may alter assignments as needed.
- A.2.3 Personnel and equipment arriving at the Alternate EOF from within the 10-mile EPZ are surveyed for radiological contamination and decontaminated prior to full access to the Alternate EOF as directed by the EOF Radiological Coordinator.
- A.2.4 The Off-site Emergency Manager declares the Alternate EOF activated when the following positions are present and a level of readiness has been achieved which allows for the assumption of Alternate EOF responsibilities.
 - o EOF Administrative Coordinator
 - o EOF Facility Technician
 - o EOF Operations Coordinator
 - o EOF Radiological Coordinator

NOTE

The numbering system for the Alternate EOF will be a continuation of the sequential number last used in the EOF.

- A.2.5 The EOF Administrative Assistant should have the TSC Administrative Assistants fax all completed Immediate and Follow-up Notification Forms, copies of the TSC Sequence of Events board and any News Statements.

- END -

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 24 of 29

ATTACHMENT B
(Page 1 of 2)
EOF DIESEL OPERATION

NOTES

- o To prevent permanent cranking motor damage, do not crank the diesel for more than thirty seconds continuously. If the diesel does not start within the first thirty seconds, wait one to two minutes before re-cranking.
- o Frequency requirements apply only during steady-state conditions with the diesel under a constant load.

B.1 At the Remote Diesel Control Panel, start the diesel generator by placing the MANUAL START toggle switch to the PERMISSIVE START position. IF the diesel does not start within 30 seconds, THEN return the toggle switch to the OFF position for one to two minutes before re-cranking.

B.1.1 Verify the following parameters: (Reference Step 3.1.6)

- o Oil Pressure GREATER THAN 50 psig
- o Voltage 450 to 500 volts (all phases)
- o Frequency 58.8 Hz to 61.2 Hz

B.2 At the EOF Side Main Distribution Panel, place breakers for circuits 1 through 13 OFF.

NOTES

- o The diesel should be allowed to run unloaded for 3 to 5 minutes for warm-up.
- o Allow several seconds for generator load to stabilize before placing the next breaker to the ON position.

B.3 At the MANUAL TRANSFER SWITCH, place the NORMAL SUPPLY breaker to OFF.

B.4 At the MANUAL TRANSFER SWITCH, place the DIESEL GENERATOR breaker to ON.

B.5 At the EOF Side Main Distribution Panel, place breakers for circuits 1 through 13 to ON.

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 25 of 29

ATTACHMENT B
(Page 2 of 2)
EOF DIESEL OPERATION

NOTE

Frequency requirements apply only during steady-state conditions with the diesel under a constant load.

- B.6 WHEN the diesel is operating under load, THEN monitor the following parameters to ensure they are within acceptable range: (Reference Step 3.1.6)
- o Oil Pressure GREATER THAN 50 psig
 - o Voltage 450 to 500 volts (all phases)
 - o Frequency 58.8 Hz to 61.2 Hz
- B.7 IF the EOF Diesel Generator is no longer needed, THEN ensure shutdown the diesel generator as follows:
- B.7.1 At the EOF Side Main Distribution Panel, place breakers for circuits 1 through 13 OFF.
- B.7.2 At the MANUAL TRANSFER SWITCH, place the DIESEL GENERATOR breaker to OFF.
- B.7.3 At the MANUAL TRANSFER SWITCH, place the NORMAL SUPPLY breaker to ON.
- B.7.4 At the EOF Side Main Distribution Panel, place breakers for circuits 1 through 13 to ON.

NOTE

The diesel should be allowed to run unloaded for 3 to 5 minutes for cooldown.

- B.7.5 At the Remote Diesel Control Panel, stop the diesel generator by placing the MANUAL START toggle switch to OFF.
- B.7.6 Notify the Control Room to perform STN KAF-001, EOF DIESEL GENERATOR OPERATIONS, to ensure the diesel is ready for operation.

- END -

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 26 of 29

ATTACHMENT C

(Page 1 of 2)

HEPA FILTRATION AND IODINE MONITORING OPERATION

C.1 HEPA FILTRATION STARTUP INSTRUCTIONS

- C.1.1 At Power Distribution Panel P-1, located at the north end of the hall going to the Learning Center, turn breaker 22 for the Lunch Room Exhaust Fan to "OFF".
[Commitment 3.2.1]
- C.1.2 At Power Distribution Panel P-2, located on the south wall of the Mechanical Equipment Room, turn breaker 30 for the Toilet Exhaust Fan to "OFF".
[Commitment 3.2.1]
- C.1.3 At the HEPA Filtration Fan Control Box, located on the east wall of the Mechanical Equipment Room, start the fan by pulling the button out.

C.2 IODINE MONITOR STARTUP INSTRUCTIONS

NOTE

The iodine monitor startup panels are located on the iodine monitor skid in the Mechanical Equipment Room in the EOF.

- C.2.1 Ensure "PWR ON" indicator is lit.
- C.2.2 CLOSE Purge Valve.
- C.2.3 Verify inlet valve is throttled OPEN.
- C.2.4 Press and hold the "START" Button.
1. Verify green "ON" light comes on.
 2. IF vacuum is not between 3" and 10" Hg on the vacuum gauge, THEN adjust the inlet valve to obtain between 3" to 10" Hg on the vacuum gauge.
 3. WHEN vacuum is between 3" to 10" Hg on the gauge, THEN release the "START" button.
- C.2.5 Verify the "LIMIT" light is extinguished.
- C.2.6 IF the unit fails to start, THEN reset and try to restart the unit.
- C.2.7 Verify top of barrel indicates air flow is between 1.8 and 2.2 cfm.

Revision: 5	EMERGENCY OPERATIONS FACILITY OPERATIONS	EPP 06-003
Reference Use		Page 27 of 29

ATTACHMENT C

(Page 2 of 2)

HEPA FILTRATION AND IODINE MONITORING OPERATION

C.3 HEPA FILTRATION SHUTDOWN INSTRUCTIONS

- C.3.1 At the HEPA Filtration Fan Control Box, located on the east wall of the Mechanical Equipment Room, secure the fan by pushing the button in.
- C.3.2 At Power Distribution Panel P-1, located at the north end of the hall going to the Learning Center, turn breaker 22 for the Lunch Room Exhaust Fan to "ON".
[Commitment 3.2.1]
- C.3.3 At Power Distribution Panel P-2, located on the south wall of the Mechanical Equipment Room, turn breaker 30 for the Toilet Exhaust Fan to "ON". [Commitment 3.2.1]

C.4 IODINE MONITOR SHUTDOWN INSTRUCTIONS

- C.4.1 Secure the iodine monitor by pressing and releasing the "STOP" button.

- END -

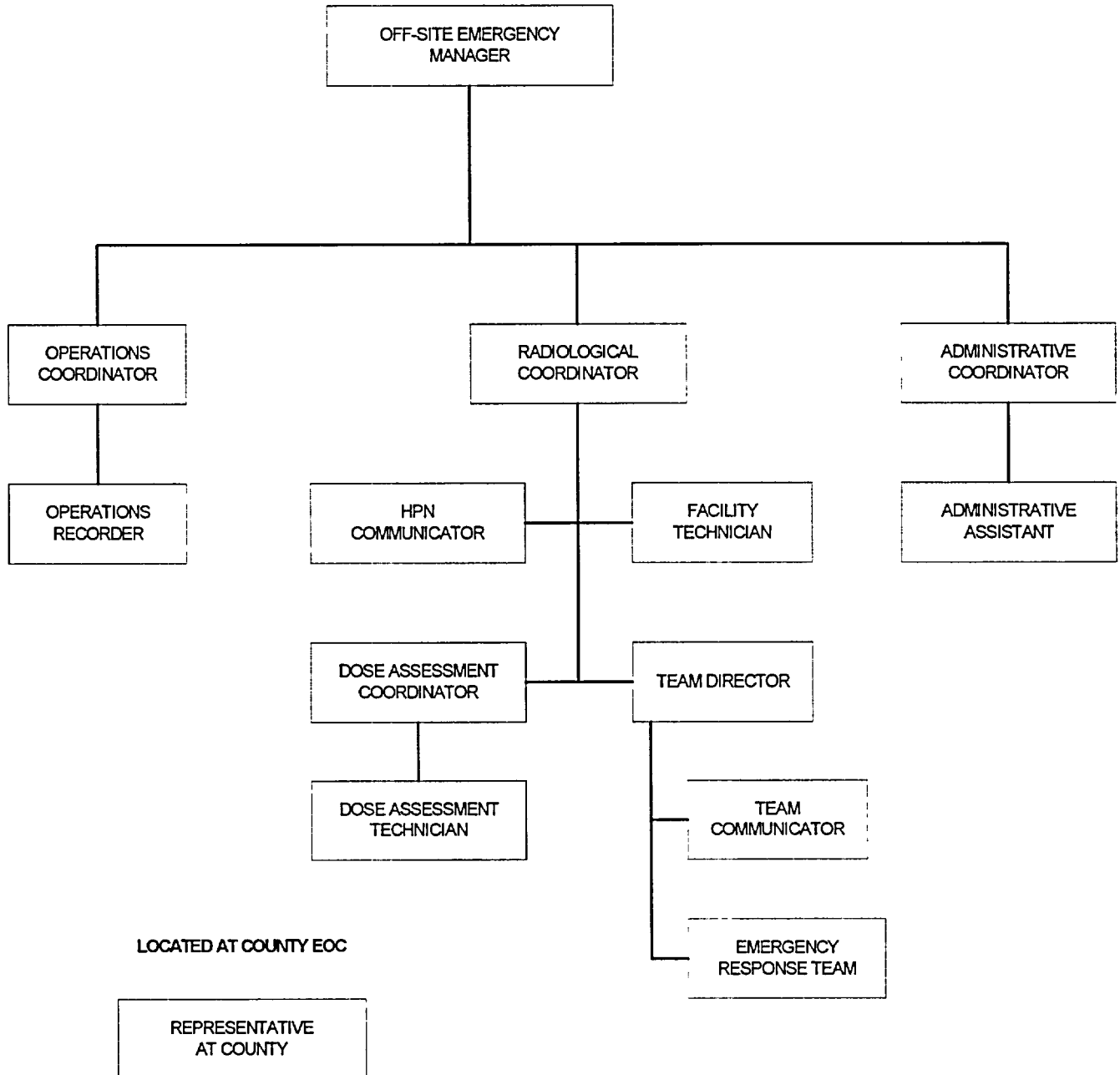
ATTACHMENT D
(Page 1 of 1)
FAX NUMBERS

D.1 FAX to the desired location by using the appropriate number from the table below.

LOCATION	WHEN	FAX	VERIFICATION
Coffey County Dispatcher	Prior to County EOC activation:	364-5758	364-2123
Coffey County EOC	After County EOC activation:	364-8643	364-2721
State of Kansas		(785) 274-1487	(785) 296-3176 (785) 274-1422 (785) 274-1425 OR State Radio
State of Kansas PIO		(785) 274-1622	(785) 274-1192
NRC Resident Inspector		364-8735	Ext. 4575
Topeka System Dispatch		(785) 575-6010	(785) 575-6078
ANI		(860) 561-4655	(860) 561-3433
INPO		(770) 644-8549	(800) 321-0614
EOF		Ext. 5101	Ext. 5100
TSC		Ext. 4051	Ext. 4053
Information Clearinghouse - Topeka	Prior to activation:	(785) 274-1622	(785) 274-1190
	After activation:	(785) 267-0742	(785) 267-0603

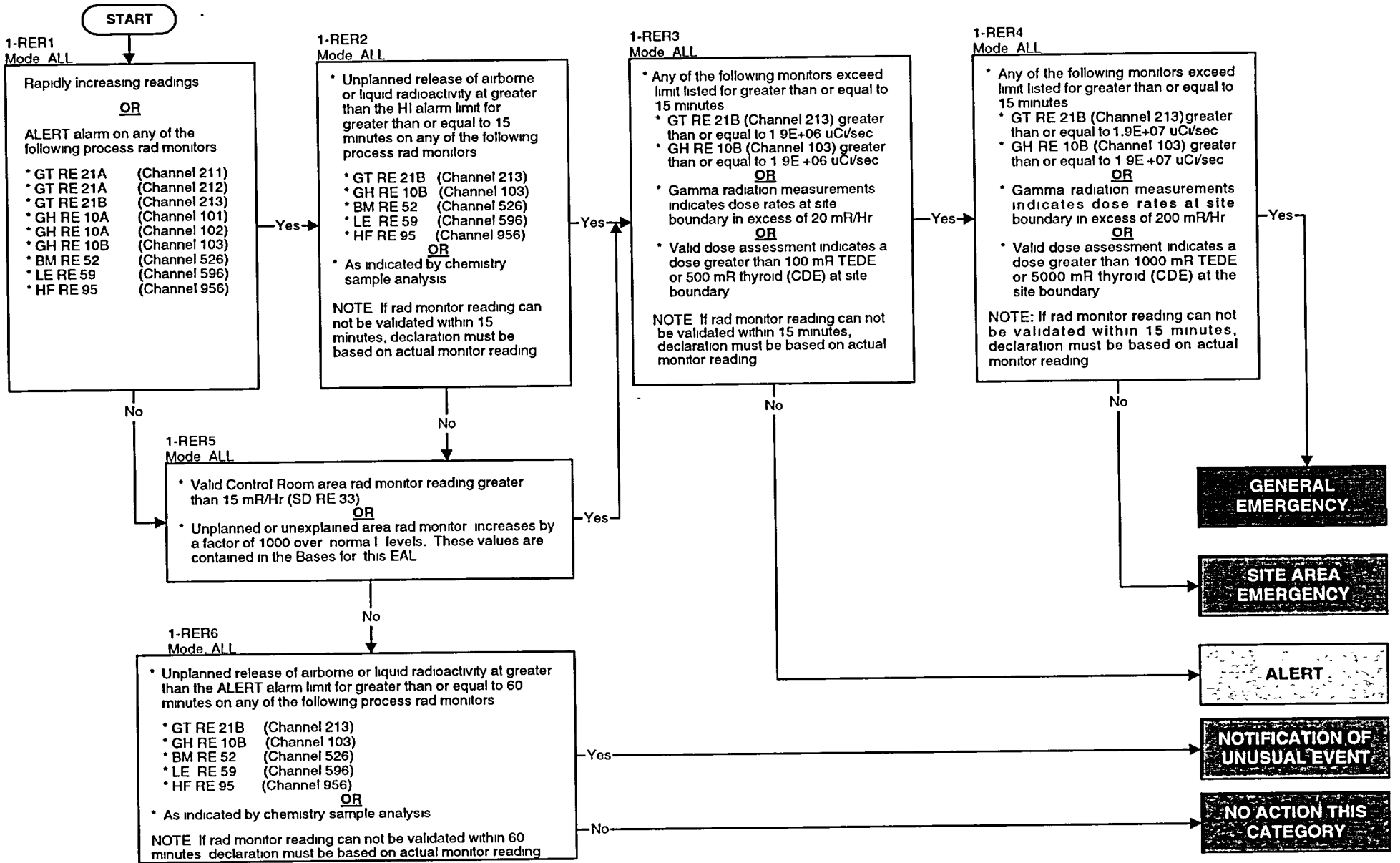
- END -

FIGURE 1
EMERGENCY OPERATIONS FACILITY ORGANIZATION



EMERGENCY ACTION LEVELS

EAL-1, RADIOACTIVE EFFLUENT RELEASE



EMERGENCY ACTION LEVELS**BASES-1, RADIOACTIVE EFFLUENT RELEASE****PROCESS RAD MONITORS**

GTRE 21B	Unit Vent WRGM
GHRE 10B	Rad Waste WRGM
GTRE 21A	Unit Vent P-I monitor
GHRE 10A	Rad Waste Vent P-I monitor
BMRE 52	SG Blowdown EFF monitor
LERE 59	Turbine Building Drain Effluent
HFRE 95	Disch to Waste Water Treatment

1-RER 1. - MODES: ALL

This box is used to indicate unexpected liquid and gaseous release rates or releases greater than ODCM allowable values.

1-RER 2. - MODES: ALL

Valid means that a radiation monitor reading has been confirmed by the operators. Validation is not limited to chemistry sampling, but may include methods such as radiation surveys or review of area radiation monitors.

Monitor indications are calculated on the basis of the methodology of the site Off-site Dose Calculation Manual (ODCM), or other site procedures that are used to demonstrate compliance with 10 CFR 20 and/or 10 CFR 50 Appendix I requirements. The High alarm setpoint is based on the 10CFR20 maximum radioisotopic release limit. Annual average meteorology is used where allowed.

1-RER 3. - MODES: ALL

Valid means that a radiation monitor reading has been confirmed by the operators. Validation is not limited to chemistry sampling, but may include methods such as radiation surveys or review of area radiation monitors.

The 100 mR TEDE in this initiating condition is based on the 10 CFR 20 annual average population exposure. This value also provides a desirable difference (one order of magnitude) between the Alert, Site Area Emergency, and General Emergency classes. It is deemed that exposures less than this limit are not consistent with the Site Area Emergency class description. The 500 mR thyroid (CDE) was established in consideration of the 1:5 ratio of the EPA Protective Action Guidelines for whole body and thyroid.

Integrated doses are generally not monitored in real-time. In establishing the emergency action levels, a duration of one hour was assumed, and that the EAL is based on a site boundary dose of 100 mR/hour TEDE or 500 mR/hour thyroid (CDE), whichever is more limiting.

Unit Vent and Radwaste Vent numbers were obtained using the WCGS Emergency Dose Calculation Program (EDCP). Meteorological data was obtained from Wolf Creek USAR Table 2.3-25 for wind speed and 2.3-37 for stability class. Ventilation flow rates selected are design flow rates.

1-RER 4. - MODES: ALL

Valid means that a radiation monitor reading has been confirmed by the operators. Validation is not limited to chemistry sampling, but may include methods such as radiation surveys or review of area radiation monitors.

The 1000 mR TEDE and the 5000 mR thyroid (CDE) dose are based on the EPA protective action guidance which indicates that public protective actions are indicated if the dose exceeds 1 Rem TEDE or 5 Rem thyroid (CDE). This is consistent with the emergency class description for a General Emergency. This level constitutes the upper level of the desirable difference for the Site Area Emergency. Actual meteorology is specifically identified in the initiating condition since it gives the most accurate dose assessment. Actual meteorology should be used whenever possible.

Integrated doses are generally not monitored in real-time. In establishing the emergency action levels, a duration of one hour was assumed, and that the EAL is based on site boundary doses for either TEDE or thyroid (CDE), whichever is more limiting.

Unit Vent and Radwaste Vent numbers were obtained using the WCGS Emergency Dose Calculation Program (EDCP). Meteorological data was obtained from Wolf Creek USAR Table 2.3-25 for wind speed and 2.3-37 for stability class. Ventilation flow rates selected are design flow rates.

EMERGENCY ACTION LEVELS**BASES-1, RADIOACTIVE EFFLUENT RELEASE****1-RER 5. - MODES: ALL**

Valid means that a radiation monitor reading has been confirmed by the operators to be correct.

This IC addresses increased radiation levels that impede necessary access to WCGS, or other areas containing equipment that must be operated locally, in order to maintain safe operation or perform a safe shutdown. It is this impaired ability to operate the plant that results in the actual or potential substantial degradation of the level of safety of the plant. The cause and/or magnitude of the increase in radiation levels is not a concern of this IC. Consider the source or cause of the increased radiation levels and determine if any other IC may be involved. For example, a dose rate of 15 mR/hr in the Control Room may be a problem in itself. However, the increase may also be indicative of high dose rates in the Containment Building due to a LOCA. In this latter case, an SAE or GE may be indicated by the fission product barrier matrix ICs. A "YES" answer to box 1-RER5 requires that the site area boundary be monitored and if limits are exceeded an SAE or GE should be declared.

Areas requiring continuous occupancy include the Control Room and the Central Alarm Station. Section III D.3 of NUREG-0737, "Clarification of TMI Action Plan Requirements", provides that the 15 mR/hr value can be averaged over 30 days. The value is used here without averaging, as a 30 day duration implies an event potentially more significant than an Alert.

For areas requiring infrequent access the value is based on radiation levels which could result in exposure control measures intended to maintain doses within normal occupational exposure guidelines and limits (i.e., 10 CFR 20), and in doing so, will impede necessary access.

The following is a list of the Area Rad Monitors and their average readings obtained by archive search for the period 12/1/94 - 5/31/95. The list also has a column indicating the x1000 mrem/hr reading.

<u>Instrument Number</u>	<u>Location</u>	<u>Average (mrem/hr)</u>	<u>x1000 (mrem/hr)</u>
0-SD-RE-1	Radwaste Building Corridor, Basement	.178	178.
0-SD-RE-2	Radwaste Building Corridor, Basement	.200	200.
0-SD-RE-3	Radwaste Building Corridor, Basement	.358	358.
0-SD-RE-4	Radwaste Building Corridor, Ground Flr	.211	211.
0-SD-RE-5	Radwaste Building Corridor, Ground Flr	.218	218.
0-SD-RE-6	Solid Radwaste Area	.742	742.
0-SD-RE-7	Truck Space	.240	240.
0-SD-RE-8	Sample Laboratory	.113	113.
0-SD-RE-9	RW Bldg Valve Room Corridor	.189	189.
0-SD-RE-10	RW Bldg Valve Room Corridor	.270	270.
0-SD-RE-11	RW Bldg HVAC Filter Unit	.151	151.
0-SD-RE-12	Aux Bldg Corridor Basement	.214	214.
0-SD-RE-13	Aux Bldg Corridor Basement	.223	223.
0-SD-RE-14	Aux Bldg Corridor Basement	.149	149.
0-SD-RE-15	Aux Bldg Corridor Basement	.228	228.
0-SD-RE-16	Aux Bldg Corridor Basement	.212	212.
0-SD-RE-17	Pipe Tunnel & Personnel Access	.282	282.
0-SD-RE-18	Aux Bldg Ground Floor Corridor	.206	206.
0-SD-RE-19	Aux Bldg Ground Floor Corridor	.327	327.
0-SD-RE-20	Aux Bldg Valve Room Corridor Ground Flr.	.455	455.
0-SD-RE-21	Aux Bldg Valve Room Corridor Ground Flr.	.169	169.
0-SD-RE-22	Aux Bldg Corridor Ground Floor	.225	225.
0-SD-RE-23	Aux Bldg Corridor Ground Floor	.236	236.
0-SD-RE-24	Sample Room	1.582	1582.
0-SD-RE-25	Filter Unit Aux Bldg	.163	163.
0-SD-RE-26	RHR Heat Exchanger Outside	.246	246.

(Continued)

EMERGENCY ACTION LEVELS**BASES-1, RADIOACTIVE EFFLUENT RELEASE****1-RER 5. - MODES: ALL**

<u>Instrument Number</u>	<u>Location</u>	<u>Average (mrem/hr)</u>	<u>x1000 (mrem/hr)</u>
0-SD-RE-27	Ctmt Purge Filter Unit	.158	158.
0-SD-RE-28	Personnel Hatch	.118	118.
0-SD-RE-29	Hot Machine Shop	.361	361.
0-SD-RE-30	Hot Instrument Shop	.176	176.
0-SD-RE-31	Hot Laboratory	.193	193.
0-SD-RE-32	Control Bldg Corridor	.180	180.
0-SD-RE-33	Control Room	.126	126.
0-SD-RE-34	Cask Handling Area	.205	205.
0-SD-RE-35	New Fuel Storage Area	.166	166.
0-SD-RE-36	New Fuel Storage Area	.171	171.
0-SD-RE-37	Spent Fuel Pool Area	.740	740.
0-SD-RE-38	Spent Fuel Pool Area	.735	735.
0-SD-RE-39 **	Seal Table Area	10.1	10000.
0-SD-RE-40	Personnel Access Hatch Area	5.210	5210.
0-SD-RE-41	Manipulator Bridge Crane	33.080	33080.
0-SD-RE-42	Containment Building	1.701	1701
0-SD-RE-43	Technical Support Center	N/A	N/A
0-SD-RE-44	Emergency Off-site Facility	N/A	N/A
0-SD-RE-47	Pass Sampling Room	12.466	12466.

** This data was modified from the above archive review to reflect changes made to the transmitter/indication system for this point.

1-RER 6. - MODES: ALL

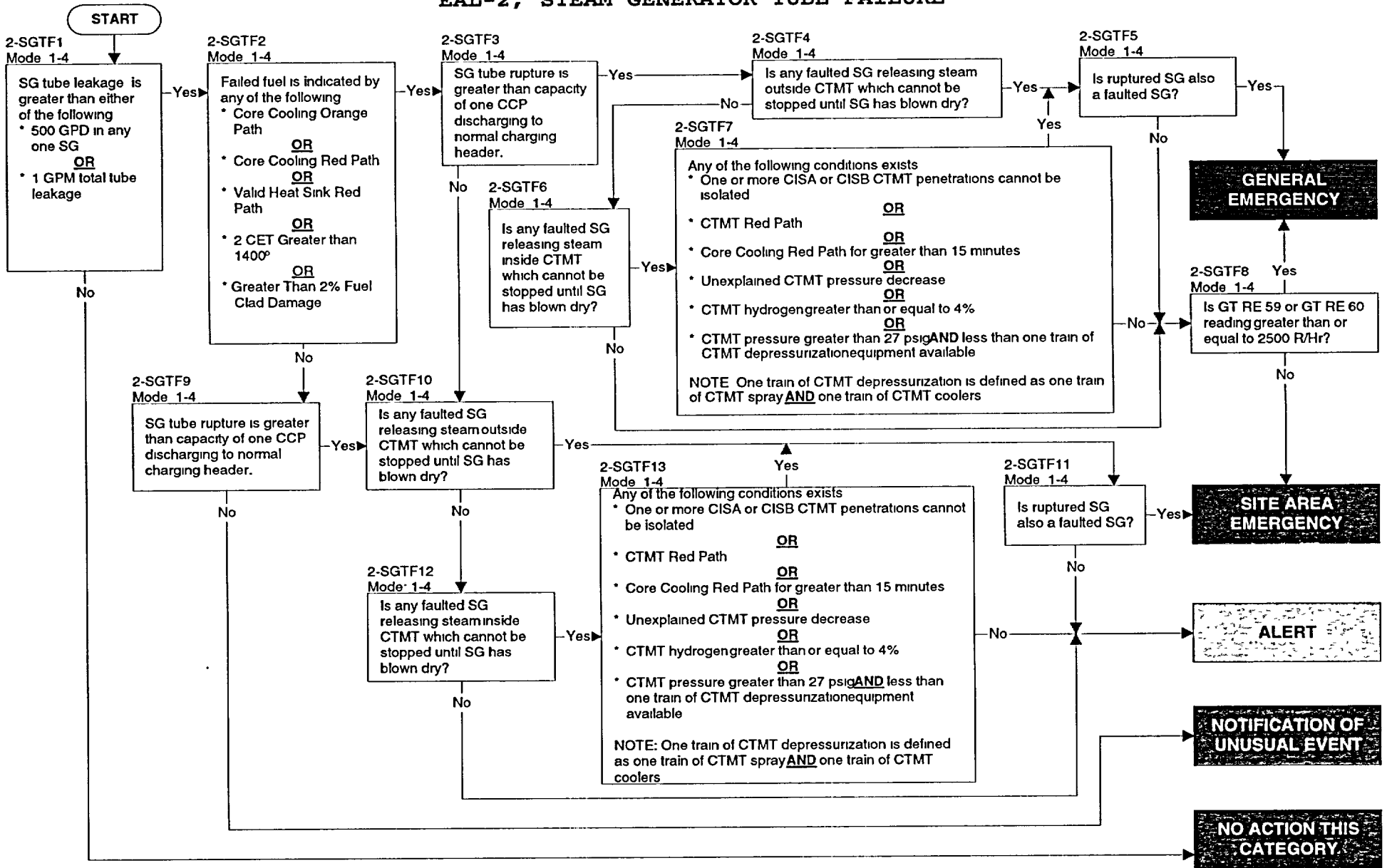
Valid means that a radiation monitor reading has been confirmed by the operators. Validation is not limited to chemistry sampling, but may include methods such as: radiation surveys or review of area radiation monitors.

The term "Unplanned", as used in this context, includes any release for which a radioactive discharge permit was not prepared, or a release that exceeds the conditions (e.g., minimum dilution flow, maximum discharge flow, alarm setpoints, etc.) on the applicable permit.

Unplanned releases in excess of 10CFR50 limits that continue for 60 minutes or longer represent an uncontrolled situation and hence, a potential degradation in the level of safety. The final integrated dose (which is very low in the Unusual Event emergency class) is not the primary concern here; it is the degradation in plant control implied by the fact that the release was not isolated within 60 minutes. Therefore, it is not intended that the release be averaged over 60 minutes. For example, a release of 4 times T/S for 30 minutes does not exceed this initiating condition. The Emergency Manager should not wait until 60 minutes has elapsed, but should declare the event as soon as it is determined that the release duration has or will likely exceed 60 minutes.

EMERGENCY ACTION LEVELS

EAL-2, STEAM GENERATOR TUBE FAILURE



EMERGENCY ACTION LEVELS**BASES-2, STEAM GENERATOR TUBE FAILURE****2-SGTF 1 - MODES: 1 THROUGH 4**

This initiating condition indicates the SG tube leakage is at a point where Technical Specifications require a shutdown. As such, it is a precursor of a potentially worse condition

2-SGTF 2 - MODES: 1 THROUGH 4

1. This EAL is for using Critical Safety Function Status Tree (CSFST) monitoring and functional recovery procedures. RED path indicates an extreme challenge to the safety function. ORANGE path indicates a severe challenge to the safety function
Core Cooling - ORANGE indicates subcooling has been lost and that some clad damage may occur. Heat Sink - RED indicates the steam generator heat sink function is under extreme challenge and thus these two items indicate potential loss of the Fuel Clad Barrier. A "Valid" Heat Sink RED requires RCS Pressure greater than or equal to SG pressure.
Core Cooling - RED indicates significant superheating and core uncover and is considered to indicate loss of the Fuel Clad Barrier.
2. Two core exit thermocouples with valid readings greater than 1400°F indicates significant clad heating and thus the Fuel Clad Barrier is considered lost. The core exit thermocouples provide an adequate measure of core temperatures to estimate core temperatures at which potential cladding damage (i.e. 1400°F) and core over-temperature (above about 2400°F) may be occurring.
3. A core damage assessment (EPP 06-017) corresponding to about 2% to 5% fuel clad damage indicates significant degradation and thus the Fuel Clad Barrier is considered lost.

2-SGTF 3 - MODES: 1 THROUGH 4

RCS Leak Rate EAL is based on the inability to maintain normal liquid inventory within the Reactor Coolant System (RCS) by normal operation of the Chemical and Volume Control System which is considered as one centrifugal charging pump discharging to the charging header at maximum rate

2-SGTF 4 - MODES: 1 THROUGH 4

A check for SG fault is made to determine if the next fission product boundary is under challenge or lost. The release path looked for is either a faulted, ruptured SG or a faulted SG to a challenged Containment.

2-SGTF 5 - MODES: 1 THROUGH 4

Once a faulted SG has been determined, a release path via a faulted, ruptured SG is checked

2-SGTF 6 - MODES: 1 THROUGH 4

This box checks for an unisolable secondary side steam release to the Containment atmosphere.

2-SGTF 7 - MODES: 1 THROUGH 4

1. Containment Isolation Valve Status After Receipt of Automatic or Manual Phase A or B Containment Isolation: The failure to complete phase A or B isolation of each containment penetration by at least one device in each penetration, if by design that penetration is required to isolate, means the containment barrier must be considered breached. Note that ESW does not receive an automatic or manual isolation signal. The intent of this basis is only applicable to those penetrations designed to isolate by an automatic signal. Local isolation of one of the required devices in a timely manner would meet the intent and would be a "NO" answer for this box.
2. This EAL is for Using Critical Safety Function Status Tree (CSFST) Monitoring and Functional recovery procedures: RED path indicates an extreme challenge to the safety function derived from appropriate instrument readings and/or sampling results, and thus represents a potential loss of containment. Conditions leading to a containment RED path result from RCS barrier and/or Fuel Clad Barrier Loss. Thus, this EAL is primarily a discriminator between Site Area Emergency and General Emergency representing a potential loss of the third barrier.
In this EAL, the function restoration procedures are those emergency operating procedures that address the recovery of the core cooling critical safety functions. The procedure is considered effective if the core temperature is decreasing or if the vessel level is increasing.
The conditions in this potential loss EAL represent imminent melt sequence which, if not corrected, could lead to vessel failure and an increased potential for containment failure. In conjunction with the core exit thermocouple EALs in the Fuel and RCS barriers columns, this EAL would result in the declaration of a General Emergency - loss of two barriers and the potential loss of a third. If the function restoration procedures are ineffective, there is no "success" path.
Severe accident analyses (e.g., NUREG-1150) have concluded that function restoration procedures can arrest core degradation within the reactor vessel in a significant fraction of the core damage scenarios, and that the likelihood of CTMT failure is very small in these events. Given this, it is appropriate to provide a reasonable period to allow function restoration procedures to arrest the core melt sequence. Whether or not the procedures will be effective should be apparent within 15 minutes. The declaration should be made as soon as it is determined that the procedures have been, or will be ineffective.

(Continued)

EMERGENCY ACTION LEVELS**BASES-2, STEAM GENERATOR TUBE FAILURE****2-SGTF 7. - MODES: 1 THROUGH 4**

3. After the CTMT initially pressurized a sudden decrease can indicate loss of CTMT. However, care must be exercised here as action of CTMT Coolers and Sprays as well as RCS pressure decrease can cause slow decrease in CTMT pressure.
If containment integrity is in question other items to check to verify the presence of leakage are the area and process rad monitors for the auxiliary building to see if an unexplained increase in radiation readings is noted. Also the equipment and emergency escape hatches should be considered and checked for possible leakage.
Likewise, at the onset of an event determined to be inside Containment, failure of the containment to pressurize may be indicative of a significant leak path
This condition is to provide indication of loss of containment.
4. Existence of an explosive mixture means an H₂ Concentration greater than 4% and the potential for an explosive mixture and possible damage to Containment exists.
5. Having less than one train of CTMT Depressurization Systems is a potential loss of CTMT in that the heat removal/ depressurization system (i.e. CTMT Spray and CTMT Coolers) are either lost or performing in a degraded manner, as indicated by CTMT pressure greater than 27 PSIG (setpoint at which the equipment was supposed to operate). Having a Cooler set on one train and Spray Pump on the other train constitutes one train and does not yield a YES answer.

2-SGTF 8. - MODES: 1 THROUGH 4

This reading is a value which indicates significant fuel damage well in excess of the EALs associated with both loss of Fuel Clad and loss of RCS Barriers. A major release of radioactivity requiring offsite protective actions from core damage is not possible unless a major failure of fuel cladding allows radioactive material to be released from the core into the reactor coolant. Regardless of whether Containment is challenged, this amount of activity in Containment, if released, could have such severe consequences that it is prudent to treat this as a potential loss of Containment, such that a General Emergency declaration is warranted. NUREG-1228, "Source Estimations During Incident Response to Severe Nuclear Power Plant Accidents," indicates that such conditions do not exist when the amount of clad damage is less than 20%. Reading from AN 98-029, Basis for Wolf Creek Core Damage Assessment Guidance.

2-SGTF 9. - MODES: 1 THROUGH 4

RCS Leak Rate EAL is based on the inability to maintain normal liquid inventory within the Reactor Coolant System (RCS) by normal operation of the Chemical and Volume Control System which is considered as one centrifugal charging pump discharging to the charging header at maximum rate. For leakage less than the capacity of one centrifugal charging pump but greater than Technical Specification allowed leakage, an NUE is classified for increased awareness of a possible rapid loss of reactor coolant volume.

2-SGTF 10. - MODES: 1 THROUGH 4 See 2-SGTF 4.

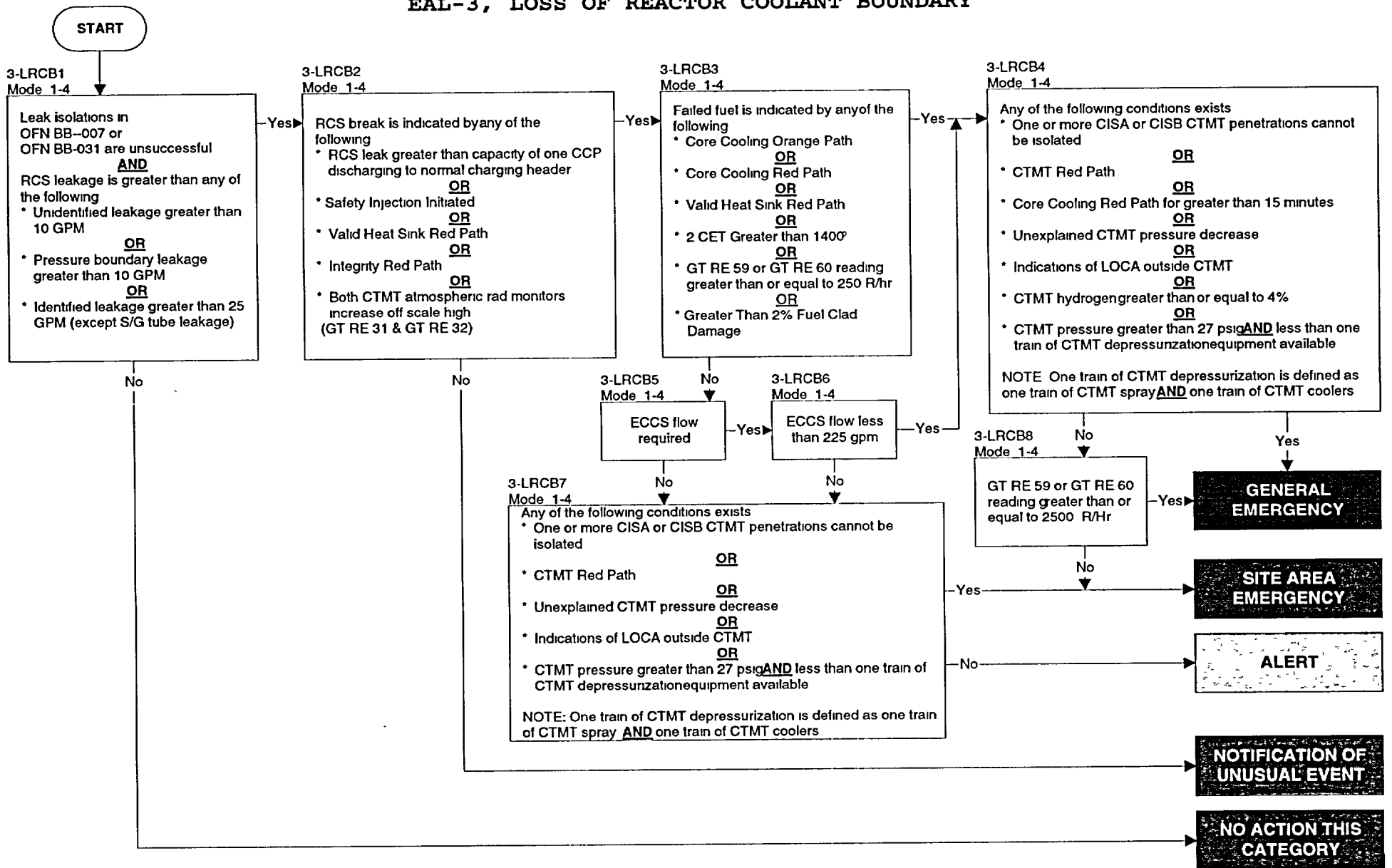
2-SGTF 11. - MODES: 1 THROUGH 4 See 2-SGTF 5.

2-SGTF 12. - MODES: 1 THROUGH 4 See 2-SGTF 6.

2-SGTF 13. - MODES: 1 THROUGH 4 See 2-SGTF 7.

EMERGENCY ACTION LEVELS

EAL-3, LOSS OF REACTOR COOLANT BOUNDARY



EMERGENCY ACTION LEVELS**BASES-3, LOSS OF REACTOR COOLANT BOUNDARY****3-LRCB 1.- MODES: 1 THROUGH 4**

This IC is included as an Unusual Event because it may be a precursor of more serious conditions and, as a result, is considered to be a potential degradation of the level of safety of the plant. The 10 gpm value for the unidentified and pressure boundary leakage was selected as it is observable with normal Control Room indications. The terms "unidentified", "pressure boundary", and "identified" are the same as those in the Definitions Section of the Technical Specifications. Lesser values must generally be determined through time-consuming surveillance tests. The value for "identified" leakage recognizes the allowable 10 gpm Technical Specification Limit, excluding S/G tube leakage, and the 25 gpm value is sufficiently above this to allow determination from normal indication. Since personnel would try to isolate the leak, a provision has been added to see if efforts were successful. Successful leak isolation results in "No Action" and is appropriate. S/G tube leakage is dealt with in EAL-2.

It is not intended that this tree be used during accident mitigation strategies where the operator induces the LOCA as part of the event mitigation (e.g. RCS bleed and feed in response to loss of all secondary heat sink).

3-LRCB 2.- MODES: 1 THROUGH 4

1. RCS Leak Rate: The "Potential Loss" EAL is based on the inability to maintain normal liquid inventory within the Reactor Coolant System (RCS) by normal operation of the Chemical and Volume Control System which is considered as one centrifugal charging pump discharging to the charging header at maximum rate. A Pressurizer vapor space leak could cause pressure to decrease to the Safety Injection setpoint which should be answered "YES" because this should be considered a loss of liquid inventory.
2. Critical Safety Function Status: This EAL is for using Critical Safety Function Status Tree (CSFST) monitoring and functional recovery procedures. RED path indicates an extreme challenge to the safety function derived from appropriate instrument readings, and these CSFs indicate a potential loss of RCS barrier. "Valid" Heat Sink RED requires RCS pressure greater than or equal to SG pressure.
3. Containment Radiation Monitoring: Containment Atmospheric monitors (GT RE 31 and 32) are used because they will sense an RCS leak before the CHARMS (GTRE 59 and 60). It is intended to include any of the monitor channels i.e. either Gas, Particulate or Iodine. With an RCS leak with RCS Activity at "Normal" values the CHARMS would not detect this leak in a timely fashion. Off-scale high readings on GT RE 31 & 32 monitors are as follows: Gas > 10E-2 $\mu\text{C}/\text{cm}^3$, Iodine > 10E-6 $\mu\text{C}/\text{cm}^3$, & Particulate > 10E-7 $\mu\text{C}/\text{cm}^3$

3-LRCB 3.- MODES: 1 THROUGH 4

1. Critical Safety Function Status : This EAL is for using Critical Safety Function Status Tree (CSFST) monitoring and functional recovery procedures. RED path indicates an extreme challenge to the safety function. ORANGE path indicates a severe challenge to the safety function.
Core Cooling - ORANGE indicates subcooling has been lost and that some clad damage may occur. Heat Sink - RED indicates the SG heat sink function is under extreme challenge and thus these two items indicate potential loss of the Fuel Clad Barrier. "Valid" Heat Sink RED requires RCS Pressure greater than or equal to SG pressure.
Core Cooling - RED indicates significant superheating and core uncover and is considered to indicate loss of the Fuel Clad Barrier.
2. Two core exit thermocouples with valid readings greater than 1400°F indicates significant clad heating and thus the Fuel Clad Barrier is considered lost. The core exit thermocouples provide an adequate measure of core temperatures to estimate core temperatures at which potential cladding damage (i.e. 1400°F) and core over-temperature (above about 2400°F) may be occurring.
3. Reading from EPP 06-017, Figure 3, Curve with "RCS Pressure >1600 psig with Containment Spray" (AN 98-029, Basis For Wolf Creek Core Damage Assessment Guidance, Appendix 6 CRM3 Case D (CRM3D): 2% @ 0 hours after reactor trip OR 5% @ 1 hour after reactor trip)
4. A core damage assessment (EPP 06-017) corresponding to about 2% to 5% fuel clad damage indicates significant degradation and thus the Fuel Clad Barrier is considered lost.

3-LRCB 4 - MODES: 1 THROUGH 4

1. CTMT Isolation Valve Status After Receipt of Automatic or Manual Phase A or B Isolation: The failure to complete phase A or B isolation of each CTMT penetration by at least one device in each penetration, if by design that penetration is assumed to isolate, means the CTMT barrier must be considered breached. Note that ESW does not receive an automatic or manual isolation signal. The intent of this basis is only applicable to those penetrations designed to isolate by an automatic signal. Local isolation of one of the required devices in a timely manner would meet the intent and would be a 'NO' answer for this box

(Continued)

EMERGENCY ACTION LEVELS**BASES-3, LOSS OF REACTOR COOLANT BOUNDARY****3-LRCB 4 - MODES: 1 THROUGH 4**

2. Using Critical Safety Function Status Tree (CSFST) Monitoring and Functional recovery procedures: RED path indicates an extreme challenge to the safety function derived from appropriate instrument readings and/or sampling results, and thus represents a potential loss of containment. Conditions leading to a containment RED path result from RCS barrier and/or Fuel Clad Barrier Loss. Thus, this EAL is primarily a discriminator between Site Area and General Emergency representing a potential loss of the third barrier.

In this EAL, the function restoration procedures are those emergency operating procedures that address the recovery of the core cooling critical safety function. The procedure is considered effective if the core temperature is decreasing or if the vessel level is increasing.

The conditions in this potential loss EAL represent imminent melt sequence which, if not corrected, could lead to vessel failure and an increased potential for containment failure. In conjunction with the core exit thermocouple EALs in the Fuel and RCS barriers, this EAL would result in the declaration of a General Emergency - loss of two barriers and the potential loss of a third. If the function restoration procedures are ineffective, there is no "success" path.

Severe accident analyses (e.g., NUREG-1150) have concluded that function restoration procedures can arrest core degradation within the reactor vessel in a significant fraction of the core damage scenarios, and that the likelihood of CTMT failure is very small in these events. Given this, it is appropriate to provide a reasonable period to allow function restoration procedures to arrest the core melt sequence. Whether or not the procedures will be effective should be apparent within 15 minutes. The declaration should be made as soon as it is determined that the procedures have been, or will be ineffective.
3. After the CTMT is initially pressurized a sudden decrease can indicate loss of CTMT. However, care must be exercised here as action of CTMT Coolers, Sprays, and RCS pressure decrease can cause slow decrease in CTMT pressure.

If CTMT integrity is in question other items to check to verify the presence of leakage are the area and process rad monitors for the auxiliary building to see if an unexplained increase in radiation readings is noted. Also the equipment and emergency escape hatches should be considered and checked for possible leakage.

Likewise, at the onset of an event determined to be inside CTMT, failure of the containment to pressurize may be indicative of a significant leak path. This condition is to provide indication of loss of containment.
4. "Indications of LOCA outside CTMT" is intended to allow the use of Area Radiation and Process Radiation Monitors, radiological surveys, sump level increase outside CTMT, etc. to determine loss of CTMT. It is not necessary to be in EMG C-12, although if that is where the plant status puts the operator then CTMT is lost.
5. Existence of an explosive mixture means an H₂ Concentration greater than 4% and the potential for an explosive mixture and possible damage to Containment exists.
6. Having less than one train of CTMT Depressurization Systems is a potential loss of CTMT in that the heat removal/ depressurization system (i.e. CTMT Spray and CTMT Coolers) are either lost or performing in a degraded manner, as indicated by CTMT pressure greater than 27 PSIG (setpoint at which the equipment was supposed to operate). Having a Cooler set on one train and Spray Pump on the other train constitutes one train and does not yield a YES answer.

3-LRCB 5 - MODES: 1 THROUGH 4

This indicates a need for ECCS flow based on actual automatic or manual signal

3-LRCB 6 - MODES: 1 THROUGH 4

This IC is used to determine if any ECCS system is capable of delivering a sufficient volume of water to the core for acceptable core cooling. 225 gpm was chosen because it is conservatively larger than Tech Spec delta P requirement of ≈210 gpm at 2400 PSID which is what a centrifugal charging pump could deliver to smallest size break. Seal injection flow should not be used as part of ECCS flow.

3-LRCB 7 - MODES: 1 THROUGH 4

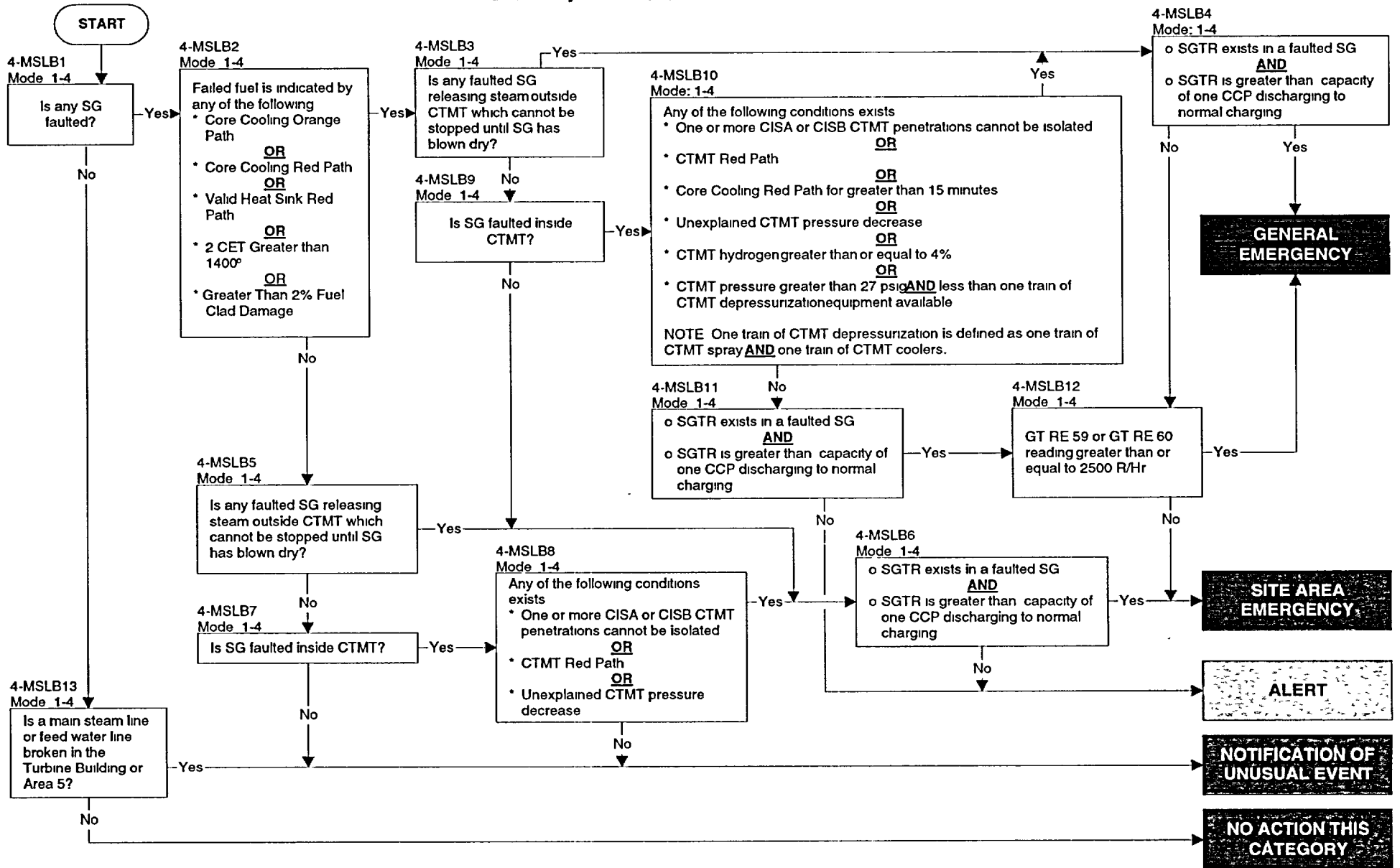
See 3-LRCB 4. Containment hydrogen is not applicable due to no Fuel Failure on this path.

3-LRCB 8 - MODES: 1 THROUGH 4

This reading is a value which indicates significant fuel damage well in excess of the EALs associated with both loss of Fuel Clad and loss of RCS Barriers. A major release of radioactivity requiring offsite protective actions from core damage is not possible unless a major failure of fuel cladding allows radioactive material to be released from the core into the reactor coolant. Regardless of whether Containment is challenged, this amount of activity in Containment, if released, could have such severe consequences that it is prudent to treat this as a potential loss of Containment, such that a General Emergency declaration is warranted. NUREG-1228, "Source Estimations During Incident Response to Severe Nuclear Power Plant Accidents," indicates that such conditions do not exist when the amount of clad damage is less than 20%. Reading from AN 98-029, Basis for Wolf Creek Core Damage Assessment.

EMERGENCY ACTION LEVELS

EAL-4, MAIN STEAM LINE BREAK



EMERGENCY ACTION LEVELS**BASES-4, MAIN STEAM LINE BREAK****4-MSLB 1. - MODES: 1 THROUGH 4**

This procedure provides actions to identify and isolate a faulted steam generator. A Main Steam Line break inside or outside containment could cause a potential degradation of the level of safety of the plant

4-MSLB 2. - MODES: 1 THROUGH 4

1. Critical Safety Function Status: This EAL is for using Critical Safety Function Status Tree (CSFST) monitoring and functional recovery procedures. RED path indicates an extreme challenge to the safety function. ORANGE path indicates a severe challenge to the safety function.
 - Core Cooling - ORANGE indicates subcooling has been lost and that some clad damage may occur.
 - Heat Sink - RED indicates the steam generator heat sink function is under extreme challenge and coupled with Core Cooling - ORANGE indicates potential loss of the Fuel Clad Barrier.
 - "Valid" Heat Sink RED requires that RCS pressure must be greater than or equal to intact SG pressure.
 - Core Cooling - RED indicates significant superheating and core uncover and is considered to indicate loss of the Fuel Clad Barrier
2. Two core exit thermocouples with valid readings greater than 1400°F indicates significant clad heating and thus the Fuel Clad Barrier is considered lost. The core exit thermocouples provide an adequate measure of core temperatures to estimate core temperatures at which potential cladding damage (i.e. 1400°F) and core over-temperature (above about 2400°F) may be occurring
3. A core damage assessment (EPP 06-017) corresponding to about 2% to 5% fuel clad damage indicates significant degradation and thus the Fuel Clad Barrier is considered lost.

4-MSLB 3. - MODES: 1 THROUGH 4

A check for SG fault outside containment is made to determine if the next fission product boundary is under challenge or lost. The release path looked for is either a faulted, ruptured SG or a faulted SG to a challenged Containment.

4-MSLB 4. - MODES: 1 THROUGH 4

Once a faulted SG has been determined, a release path via a faulted, ruptured SG is checked. Leakage greater than charging capacity of one CCP to a SG constitutes failure of the RCS fission product boundary.

4-MSLB 5. - MODES: 1 THROUGH 4 See 4-MSLB 3**4-MSLB 6. - MODES: 1 THROUGH 4** See 4-MSLB 4**4-MSLB 7. - MODES: 1 THROUGH 4** This box checks for an unisolable secondary side steam release to Containment**4-MSLB 8. - MODES: 1 THROUGH 4**

1. Containment Isolation Valve Status After Receipt of Automatic or Manual Phase A or B Isolation: The failure to complete phase A or B isolation of each containment penetration by at least one device in each penetration, if by design that penetration is required to isolate, means the containment barrier must be considered breached. Note that ESW does not receive an automatic or manual isolation signal. The intent of this basis is only applicable to those penetrations designed to isolate by an automatic signal. Local isolation of one of the required devices in a timely manner would meet the intent and would be a 'NO' answer for this box.
2. Using Critical Safety Function Status Tree (CSFST) Monitoring and Functional recovery procedures: RED path indicates an extreme challenge to the safety function derived from appropriate instrument readings and/or sampling results, and thus represents a potential loss of containment. Conditions leading to a containment RED path can result from RCS barrier and/or Fuel Clad Barrier Loss. In this box the main threat to Containment is from the energy of the steam, thus this box is primarily a discriminator between proceeding on or declaration of NUC.
3. After the Containment is initially pressurized a sudden decrease can indicate loss of Containment. However, care must be exercised here as action of Containment Coolers and Sprays as well as RCS pressure decrease can cause slow decrease in containment pressure.
 - If containment integrity is in question other items to check to verify the presence of leakage are the area and process rad monitors for the auxiliary building to see if an unexplained increase in radiation readings is noted. Also the equipment and emergency escape hatches should be considered and checked for possible leakage.
 - Likewise, at the onset of an event determined to be inside Containment, failure of the containment to pressurize may be indicative of a significant leak path
 - This condition is to provide indication of loss of containment

4-MSLB 9. - MODES: 1 THROUGH 4 See 4-MSLB-7

EMERGENCY ACTION LEVELS**BASES-4, MAIN STEAM LINE BREAK****4-MSLB 10. - MODES: 1 THROUGH 4**

1. Containment Isolation Valve Status After Receipt of Automatic or Manual Phase A or B Isolation: The failure to complete phase A or B isolation of each containment penetration by at least one device in each penetration if by design that penetration is assumed to isolate means the containment barrier must be considered breached. Note that ESW does not receive an automatic or manual isolation signal. The intent of this basis is only applicable to those penetrations designed to isolate by an automatic signal. Local isolation of one of the required devices in a timely manner would meet the intent and would be a 'NO' answer for this box.
2. Using Critical Safety Function Status Tree (CSFST) Monitoring and Functional recovery procedures: RED path indicates an extreme challenge to the safety function derived from appropriate instrument readings and/or sampling results, and thus represents a potential loss of containment. Conditions leading to a containment RED path result from RCS barrier and/or Fuel Clad Barrier Loss, thus this EAL is primarily a discriminator between Site Area Emergency and General Emergency representing a potential loss of the third barrier.

In this EAL, the function restoration procedures are those emergency operating procedures that address the recovery of the core cooling critical safety function. The procedure is considered effective if the core temperature is decreasing or if the vessel level is increasing.

The conditions in this potential loss EAL represent imminent melt sequence which, if not corrected, could lead to vessel failure and an increased potential for containment failure. In conjunction with the core exit thermocouple EALs in the Fuel and RCS barriers, this EAL would result in the declaration of a General Emergency - loss of two barriers and the potential loss of a third. If the function restoration procedures are ineffective, there is no "success" path.

Severe accident analyses (e.g., NUREG-1150) have concluded that function restoration procedures can arrest core degradation within the reactor vessel in a significant fraction of the core damage scenarios, and that the likelihood of containment failure is very small in these events. Given this, it is appropriate to provide a reasonable period to allow function restoration procedures to arrest the core melt sequence. Whether or not the procedures will be effective should be apparent within 15 minutes. The declaration should be made as soon as it is determined that the procedures have been, or will be ineffective.
3. After the Containment is initially pressurized a sudden decrease can indicate loss of Containment. However, care must be exercised here as action of Containment Coolers and Sprays as well as RCS pressure decrease can cause slow decrease in containment pressure.

If containment integrity is in question other items to check to verify the presence of leakage are the area and process rad monitors for the auxiliary building to see if an unexplained increase in radiation readings is noted. Also the equipment and emergency escape hatches should be considered and checked for possible leakage.

Likewise, at the onset of an event determined to be inside Containment, failure of the containment to pressurize may be indicative of a significant leak path.

This condition is to provide indication of loss of containment.
4. Existence of an explosive mixture means an H₂ Concentration greater than 4% and the potential for an explosive mixture and possible damage to Containment exists.
5. Having less than one train of Containment Depressurization Systems is a potential loss of Containment in that the heat removal/depressurization system (i.e. Containment Spray and Containment Coolers) are either lost or performing in a degraded manner, as indicated by Containment pressure greater than 27 PSIG (setpoint at which the equipment was supposed to operate). Having a Cooler set on one train and Spray Pump on the other train constitutes one train and does not yield a YES answer.

4-MSLB 11. - MODES: 1 THROUGH 4 See 4-MSLB 4.

4-MSLB 12. - MODES: 1 THROUGH 4

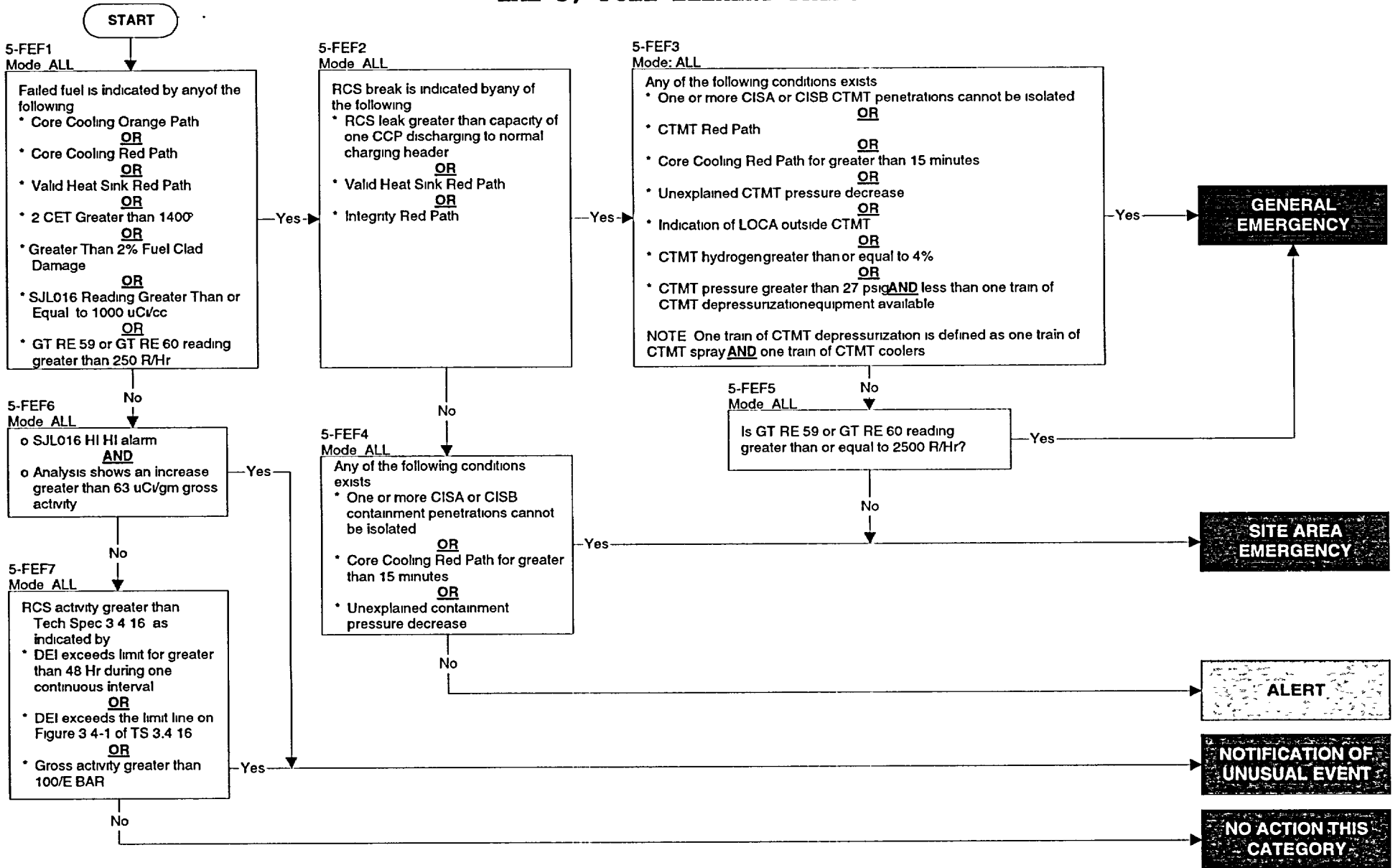
This reading is a value which indicates significant fuel damage well in excess of the EALs associated with both loss of Fuel Clad and loss of RCS Barriers. A major release of radioactivity requiring offsite protective actions from core damage is not possible unless a major failure of fuel cladding allows radioactive material to be released from the core into the reactor coolant. Regardless of whether Containment is challenged, this amount of activity in Containment, if released, could have such severe consequences that it is prudent to treat this as a potential loss of Containment, such that a General Emergency declaration is warranted. NUREG-1228, "Source Estimations During Incident Response to Severe Nuclear Power Plant Accidents," indicates that such conditions do not exist when the amount of clad damage is less than 20%. Reading was taken from EPP 06-017, CORE DAMAGE ASSESSMENT METHODOLOGY.

4-MSLB 13. - MODES: 1 THROUGH 4

Rapid depressurization of the secondary due to a MSL break which is isolable from the SG's (i.e. downstream of the MSIV's) A main steam line or feed water break in the Turbine Building or Area 5 could cause a potential degradation of the level of safety of the plant.

EMERGENCY ACTION LEVELS

EAL-5, FUEL ELEMENT FAILURE



EMERGENCY ACTION LEVELS**BASES-5, FUEL ELEMENT FAILURE****5-FEF 1. - MODES: ALL**

1. Critical Safety Function Status: This EAL is for using Critical Safety Function Status Tree (CSFST) monitoring and functional recovery procedures. RED path indicates an extreme challenge to the safety function. ORANGE path indicates a severe challenge to the safety function
 Core Cooling - ORANGE indicates subcooling has been lost and that some clad damage may occur.
 Core Cooling - RED indicates significant superheating and core uncover and is considered to indicate loss of the Fuel Clad Barrier.
 Heat Sink - RED indicates the steam generator heat sink function is under extreme challenge and thus these two items indicate potential loss of the Fuel Clad Barrier. "Valid" Heat Sink RED means to meet the requirements for entry into FR-H1.
2. Two core exit thermocouples with valid readings greater than 1400°F indicates significant clad heating and thus the Fuel Clad Barrier is considered lost. The core exit thermocouples provide an adequate measure of core temperatures to estimate core temperatures at which potential cladding damage (i.e. 1400°F) and core over-temperature (above about 2400°F) may be occurring.
3. A core damage assessment (EPP 06-017) corresponding to about 2% to 5% fuel clad damage indicates significant degradation and thus the Fuel Clad Barrier is considered lost
4. A reactivity excursion or mechanical damage event in and of itself may cause fuel damage that is first detected by the Letdown Radiation Monitor (SJL016). Use of a confirmed Letdown Radiation Monitor reading leads to an earlier Alert classification based upon the reactor core status, and therefore, earlier issuance of Protective Action Recommendations.
5. Reading from EPP 06-017, Figure 3, Curve with "RCS Pressure >1600 psig with Containment Spray" (AN 98-029, Basis For Wolf Creek Core Damage Assessment Guidance, Appendix 6 CRM3 Case D (CRM3D) 2% @ 0 hours after reactor trip OR 5% @ 1 hour after reactor trip).

5-FEF 2. - MODES: ALL

1. RCS Leak Rate: The "Potential Loss" EAL is based on the inability to maintain normal liquid inventory within the Reactor Coolant System (RCS) by normal operation of the Chemical and Volume Control System which is considered as one centrifugal charging pump discharging to the charging header at maximum rate.
2. Critical Safety Function Status: This EAL is for using Critical Safety Function Status Tree (CSFST) monitoring and functional recovery procedures. RED path indicates an extreme challenge to the safety function derived from appropriate instrument readings, and these CSFs indicate a potential loss of RCS barrier
 Heat Sink - RED indicates the steam generator heat sink function is under extreme challenge and thus the Fuel Clad and RCS are threatened. "Valid" Heat Sink RED means to meet the requirements for entry into FR-H1.
 Integrity - RED indicates the RCS boundary is extremely challenged and thus with Failed Fuel two barriers would be gone.

5-FEF 3. - MODES: ALL

1. Containment Isolation Valve Status After Receipt of Automatic or Manual Phase A or B Isolation: The failure to complete phase A or B isolation of each containment penetration by at least one device in each penetration if by design that penetration is assumed to isolate means the containment barrier must be considered breached. Note that ESW does not receive an automatic or manual isolation signal. The intent of this basis is only applicable to those penetrations designed to isolate by an automatic signal. Local isolation of one of the required devices in a timely manner would meet the intent and would be a 'NO' answer for this box
2. Using Critical Safety Function Status Tree (CSFST) Monitoring and Functional recovery procedures: RED path indicates an extreme challenge to the safety function derived from appropriate instrument readings and/or sampling results, and thus represents a potential loss of containment. Conditions leading to a containment RED path result from RCS barrier and/or Fuel Clad Barrier Loss. Thus, this EAL is primarily a discriminator between Site Area Emergency and General Emergency representing a potential loss of the third barrier.
 In this EAL, the function restoration procedures are those emergency operating procedures that address the recovery of the core cooling critical safety function. The procedure is considered effective if the core temperature is decreasing or if the vessel level is increasing.
 The conditions in this potential loss EAL represent imminent melt sequence which, if not corrected, could lead to vessel failure and an increased potential for containment failure. In conjunction with the core exit thermocouple EALs in the Fuel and RCS barriers, this EAL would result in the declaration of a General Emergency - loss of two barriers and the potential loss of a third. If the function restoration procedures are ineffective, there is no "success" path.
 Severe accident analyses (e.g., NUREG-1150) have concluded that function restoration procedures can arrest core degradation within the reactor vessel in a significant fraction of the core damage scenarios, and that the likelihood of containment failure is very small in these events. Given this, it is appropriate to provide a reasonable period to allow function restoration procedures to arrest the core melt sequence. Whether or not the procedures will be effective should be apparent within 15 minutes. The declaration should be made as soon as it is determined that the procedures have been, or will be ineffective.

(Continued)

EMERGENCY ACTION LEVELS**BASES-5, FUEL ELEMENT FAILURE****5-FEF 3. - MODES: ALL**

3. After the Containment is initially pressurized a sudden decrease can indicate loss of Containment. However, care must be exercised here as action of Containment Coolers and Sprays as well as RCS pressure decrease can cause slow decrease in containment pressure.
If containment integrity is in question other items to check to verify the presence of leakage are the area and process rad monitors for the auxiliary building to see if an unexplained increase in radiation readings is noted. Also the equipment and emergency escape hatches should be considered and checked for possible leakage.
Likewise, at the onset of an event determined to be inside Containment, failure of the containment to pressurize may be indicative of a significant leak path.
This condition is to provide indication of loss of containment.
4. "Indications of LOCA outside Containment" is intended to allow the use of Area Radiation and Process Radiation Monitors, radiological surveys, sump level increase outside containment, etc. to determine loss of containment. It is not necessary to be in EMG C-12, although if that is where the plant status puts the operator then containment is lost.
5. Existence of an explosive mixture means an H₂ Concentration greater than 4% and the potential for an explosive mixture and possible damage to Containment exists.
6. Having less than one train of Containment Depressurization Systems is a potential loss of Containment in that the heat removal/depressurization system (i.e. Containment Spray and Containment Coolers) are either lost or performing in a degraded manner, as indicated by Containment pressure greater than 27 PSIG (setpoint at which the equipment was supposed to operate). Having a Cooler set on one train and Spray Pump on the other train constitutes one train and does not yield a YES answer.

5-FEF 4. - MODES: ALL

1. Containment Isolation Valve Status After Receipt of Automatic or Manual Phase A or B Isolation: The failure to complete phase A or B isolation of each containment penetration by at least one device in each penetration if by design that penetration is assumed to isolate means the containment barrier must be considered breached. Note that ESW does not receive an automatic or manual isolation signal. So the intent of this basis is only applicable to those penetrations designed to isolate by an automatic signal. Local isolation of one of the required devices in a timely manner would meet the intent and would be a 'NO' answer for this box.
2. Using Critical Safety Function Status Tree (CSFST) Monitoring and Functional recovery procedures: RED path indicates an extreme challenge to the safety function derived from appropriate instrument readings and/or sampling results, and thus represents a potential loss of containment. Conditions leading to a containment RED path result from RCS barrier and/or Fuel Clad Barrier Loss, thus this EAL is primarily a discriminator between Site Area Emergency and General Emergency representing a potential loss of the third barrier.
In this EAL, the function restoration procedures are those emergency operating procedures that address the recovery of the core cooling critical safety function. The procedure is considered effective if the core temperature is decreasing or if the vessel level is increasing.
The conditions in this potential loss EAL represent imminent melt sequence which, if not corrected, could lead to vessel failure and an increased potential for containment failure. In conjunction with the core exit thermocouple EALs in the Fuel and RCS barriers, this EAL would result in the declaration of a General Emergency - loss of two barriers and the potential loss of a third. If the function restoration procedures are ineffective, there is no "success" path.
Severe accident analyses (e.g., NUREG-1150) have concluded that function restoration procedures can arrest core degradation within the reactor vessel in a significant fraction of the core damage scenarios, and that the likelihood of containment failure is very small in these events. Given this, it is appropriate to provide a reasonable period to allow function restoration procedures to arrest the core melt sequence. Whether or not the procedures will be effective should be apparent within 15 minutes. The declaration should be made as soon as it is determined that the procedures have been, or will be ineffective. The reactor vessel level chosen should be consistent with the emergency response procedures applicable to the facility.
3. After the Containment is initially pressurized a sudden decrease can indicate loss of Containment. However, care must be exercised here as action of Containment Coolers and Sprays as well as RCS pressure decrease can cause slow decrease in containment pressure.
At the onset of an event determined to be inside Containment, failure of the containment to pressurize may be indicative of a significant leak path. If containment integrity is in question other items to check to verify the presence of leakage are the area and process rad monitors for the auxiliary building to see if an unexplained increase in radiation readings is noted. Also the equipment and emergency escape hatches should be considered and checked for possible leakage. This condition is to provide indication of loss of containment.

5-FEF 5. - MODES: ALL

This reading is a value which indicates significant fuel damage well in excess of the EALs associated with both loss of Fuel Clad and loss of RCS Barriers. A major release of radioactivity requiring offsite protective actions from core damage is not possible unless a major failure of fuel cladding allows radioactive material to be released from the core into the reactor coolant. Regardless of whether Containment is challenged, this amount of activity in Containment, if released, could have such severe consequences that it is prudent to treat this as a potential loss of Containment, such that a General Emergency declaration is warranted. NUREG-1228, "Source Estimations During Incident Response to Severe Nuclear Power Plant Accidents," indicates that such conditions do not exist when the amount of clad damage is less than 20%. Reading was taken from EPP 06-017, CORE DAMAGE ASSESSMENT METHODOLOGY.

EMERGENCY ACTION LEVELS

BASES-5, FUEL ELEMENT FAILURE

5-FEF 6. - MODES: ALL

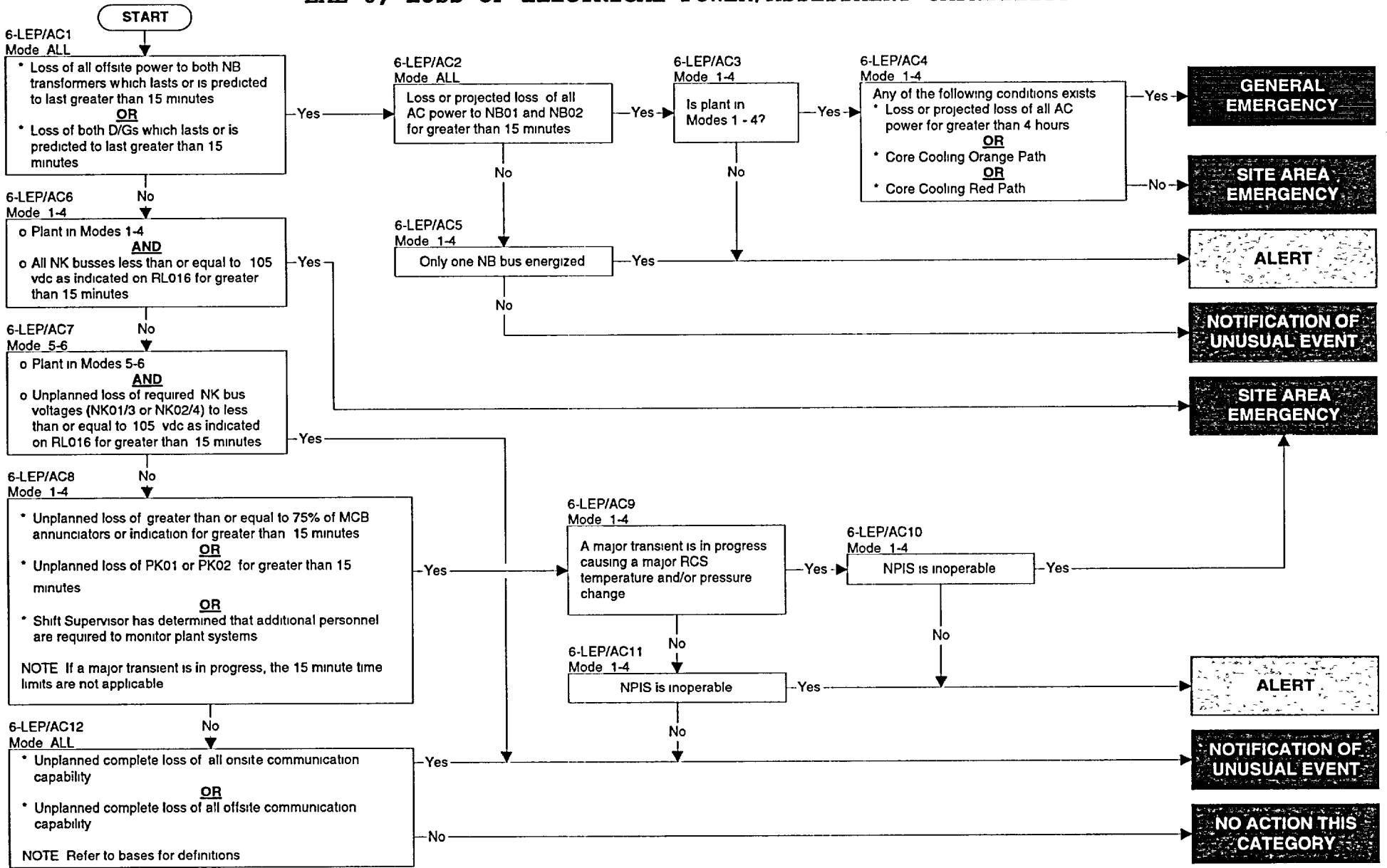
This IC is included as an Unusual Event because it is considered to be a potential degradation in the level of safety of the plant and a potential precursor of more serious problems. This IC addresses coolant samples exceeding coolant technical specifications for iodine spike. Escalation of this IC to the Alert level is via the Fission Product Barrier Degradation Monitoring ICs. An increase of greater than 63 uCi/gm on the RCS Sample with the HI HI alarm on the letdown monitor (SIL016) is to ensure the alarm is valid.

5-FEF 7. - MODES: ALL

This IC addresses RCS Technical Specification Activity Limits being exceeded as an indication of a precursor to possibly worse activity levels. Note that on some Reactor Trips towards end-of-life with activity levels elevated but less than Technical Specification limits spikes can occur above these limits. The intent is for the levels to remain above these limits for extended time intervals in order to classify an NUE.

EMERGENCY ACTION LEVELS

EAL-6, LOSS OF ELECTRICAL POWER/ASSESSMENT CAPABILITY



EMERGENCY ACTION LEVELS**BASES-6, LOSS OF ELECTRICAL POWER/ASSESSMENT CAPABILITY****6-LEP/AC 1 - MODES: ALL**

Prolonged partial loss of AC power reduces required redundancy and potentially reduces the level of safety by rendering the plant more vulnerable to a complete Loss of AC Power (Station Blackout). The first part of this block asks has a "loss of all off-site power to both NB transformers occurred"? If power is available to any NB transformer from any off site source and that power can be supplied to either NB bus within 15 minutes, then the answer is NO. The second part of the block asks has a "loss of both DG's occurred"? If DG is available and can energize either bus the answer is NO. Fifteen minutes was selected as a threshold to exclude transient or momentary power losses

6-LEP/AC 2 - MODES: ALL

Loss of all AC power compromises all plant safety systems requiring electric power, including RHR, ECCS, Containment Heat Removal, and the Ultimate Heat Sink. It also makes RCS leakage more likely due to failure of RCP seals. Prolonged loss of all AC power will cause core uncovering and loss of containment integrity, thus this event can escalate to a General Emergency. The 15 minute time duration was selected to exclude transient or momentary power loss.

6-LEP/AC 3 - MODES: 1 THROUGH 4

When in cold shutdown, refueling, or defueled mode the event can be classified as an Alert, because of the significantly reduced decay heat, lower temperature and pressure, increasing the time to restore one of the emergency busses, relative to that specified for the Site Area Emergency EAL. The RCP seals are not challenged as much due to lower RCS pressure and temperature. Escalating to Site Area Emergency, if appropriate, is by Radioactive Effluent Release, or Administrative ICs. Fifteen minutes was selected as a threshold to exclude transient or momentary power losses.

6-LEP/AC 4 - MODES: 1 THROUGH 4

The 4 hours to restore AC power was based on the site blackout coping analysis performed in conformance with 10 CFR 50.63 and Reg Guide 1.155, "Station Blackout". Although this IC may be viewed as redundant to the Fission Barrier Degradation IC, its inclusion is necessary to better assure timely recognition and emergency response.

This IC is specified to assure that in the unlikely event of a prolonged station blackout, timely recognition of the seriousness of the event occurs and that declaration of a General Emergency occurs as early as possible, based on a reasonable assessment of the event progression.

The likelihood of restoring at least one emergency bus should be based on a realistic appraisal of the situation since a delay in an upgrade decision based on only a chance of mitigating the event could result in a loss of valuable time in preparing and implementing public protective actions.

In addition, under these conditions, fission product barrier monitoring capability may be degraded. Although it may be difficult to predict when power can be restored, it is necessary to give a reasonable idea of how quickly to declare a General Emergency based on two major considerations:

1. Are there any present indications that core cooling is already degraded to the point that Loss or Potential Loss of Fission Product Barriers is IMMEDIATE? (CSFST shows Red or Orange path on Core Cooling)
2. If there are no present indications of such core cooling degradation, how likely is it that power can be restored in time to assure that a loss of two barriers with a potential loss of the third barrier can be prevented?

Thus, indication of continuing core cooling degradation must be based on Fission Product Barrier monitoring with particular emphasis on Emergency Manager judgment as it relates to IMMEDIATE Loss or Potential Loss of fission product barriers and degraded ability to monitor fission product barriers

6-LEP/AC 5 - MODES: 1 THROUGH 4

This IC and the associated EAL are intended to provide an escalation from LEP/AC 1. The condition indicated by this IC is the degradation of the offsite and onsite power systems such that any additional single failure would result in a station blackout. This condition could occur due to a loss of offsite power with a concurrent failure of one emergency generator to supply power to its emergency busses. The subsequent loss of this single power source would escalate the event to a Site Area Emergency in accordance with 6-LEP/AC 2.

EMERGENCY ACTION LEVELS**BASES-6, LOSS OF ELECTRICAL POWER/ASSESSMENT CAPABILITY****6-LEP/AC 6 - MODES: 1 THROUGH 4**

Loss of all Class IE DC power compromises ability to monitor and control plant safety functions. Prolonged loss of all DC power will cause core uncovering and possible loss of containment integrity when there is significant decay heat and sensible heat in the reactor system. Escalation to a General Emergency would occur due to Abnormal Rad Levels/ Radiological Effluent, Fission Product Barrier Degradation, or Administrative ICs. Fifteen minutes was selected as a threshold to exclude transient or momentary power losses.

105 VDC is based on the minimum bus voltage necessary for the operation of safety related equipment. This voltage value incorporates a margin of at least 15 minutes of operation before the onset of inability to operate those loads. This voltage is usually near the minimum voltage selected when battery sizing is performed. Typically the minimum value for the entire battery set is approximately 105 VDC. For a 60 cell string of batteries the cell voltage is 1.75 Volts per cell. Reading in the Control Room should be verified valid before declaration. Valid means that a reading has been confirmed by the operators to be correct.

6-LEP/AC 7 -MODES: 5 and 6

The purpose of this IC and its associated EALs is to recognize a loss of DC power compromising the ability to monitor and control the removal of decay heat during Cold Shutdown or Refueling operations. This EAL is intended to be anticipatory in as much as the operating crew may not have necessary indication and control of equipment needed to respond to the loss.

Unplanned is included in this IC and EAL to preclude the declaration of an emergency as a result of planned maintenance activities. Routinely plants will perform maintenance on a Train related basis during shutdown periods. It is intended that the loss of the operating (operable) train only is to be considered.

105 VDC is based on the minimum bus voltage necessary for the operation of safety related equipment. This voltage value incorporates a margin of at least 15 minutes of operation before the onset of inability to operate those loads. This voltage is usually near the minimum voltage selected when battery sizing is performed. Typically the minimum value for the entire battery set is approximately 105 VDC. For a 60 cell string of batteries the cell voltage is 1.75 Volts per cell. Reading in the Control Room should be verified valid before declaration. Valid means that a reading has been confirmed by the operators to be correct.

6-LEP/AC 8 - MODES: 1 THROUGH 4

This IC and its associated EAL are intended to recognize the difficulty associated with monitoring changing plant conditions without the use of a major portion of the annunciation or indication equipment.

Quantification is arbitrary, however, it is estimated that if approximately 75% of the Main Control Board annunciators or indicators are lost, there is an increased risk that a degraded plant condition could go undetected. It is not intended that plant personnel perform a detailed count of the annunciation lost but use the value as a judgment threshold for determining the severity of the plant conditions. This judgment is supported by the specific opinion of the Shift Supervisor that additional operating personnel will be required to provide increased monitoring of system operation to safely operate the unit.

While failure of a large portion of annunciators is more likely than a failure of a large portion of indications, the concern is included in this EAL due to difficulty associated with assessment of plant conditions. The loss of specific, or several, safety system indicators should remain a function of that specific system or component operability status. This will be addressed by the specific Technical Specification. The initiation of a Technical Specification imposed plant shutdown related to the instrument loss will be reported via 10 CFR 50.72. If the shutdown is not in compliance with the Technical Specification action, the Unusual Event is based on ADM 1 "Inability to Reach Required Shutdown Within Technical Specification Limits."

Fifteen minutes was selected as a threshold to exclude transient or momentary power losses.

"Unplanned" loss of annunciators or indicator excludes scheduled maintenance and testing activities.

6-LEP/AC 9 - MODES: 1 THROUGH 4

"Major Transient" includes response to automatic or manually initiated functions such as scrams, runbacks involving greater than 25% thermal power change, ECCS injections, or thermal power oscillations of 10% or greater. Monitoring of major transients is increasingly more difficult with large numbers of annunciators/indicators out of service.

6-LEP/AC 10 -MODES: 1 THROUGH 4

This IC and its associated EAL are intended to recognize the inability of the control room staff to monitor the plant response to a transient. A Site Area Emergency is considered to exist if the Control Room staff cannot monitor safety functions needed for protection of the public.

Indications needed to monitor safety functions necessary for protection of the public must include Control Room indications, computer generated indications and dedicated annunciation capability. The specific indications should be those used to determine such functions as the ability to shut down the reactor, maintain the core cooled and in a coolable geometry, to remove heat from the core, to maintain the reactor coolant system intact, and to maintain Containment intact.

EMERGENCY ACTION LEVELS**BASES-6, LOSS OF ELECTRICAL POWER/ASSESSMENT CAPABILITY****6-LEP/AC 11 -MODES:**

See 6-LEP/AC10. Since a major transient is not in progress, the inoperability of NPIS merits an ALERT classification.

6-LEP/AC 12 - MODES: ALL

Communications - The purpose of this IC and its associated EALs is to recognize a complete loss of communications capability that either defeats the plant operations staff ability to perform routine tasks necessary for plant operations or the ability to communicate problems with offsite authorities. The loss of offsite communications ability is expected to be significantly more comprehensive than the condition addressed by 10 CFR 50.72.

The onsite communications loss includes all of the following:

1. Complete failure of the plant telephone system.
2. Complete failure of the Gaitronics system
3. Complete failure of the plant radio system

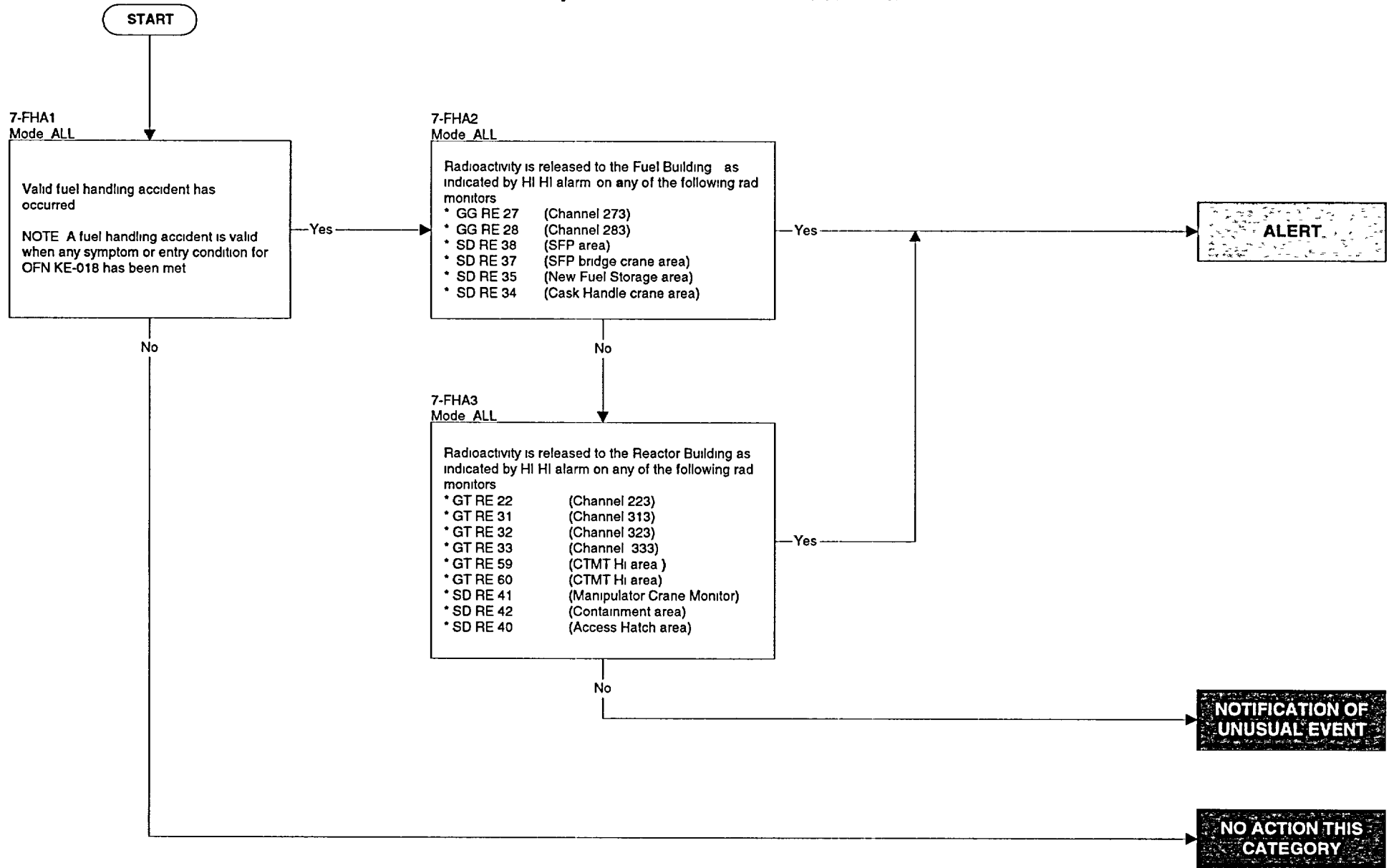
The offsite communications loss includes all of the following:

1. Complete failure of the ENS line.
2. Complete failure of offsite telephone service (inability to receive or call a location offsite)
3. Complete failure of onsite fax machines

This EAL is intended to be used only when extraordinary means are being utilized to make communications possible (relaying of information from radio transmissions, individuals being sent to offsite locations, the use of any cell phone, etc.)

EMERGENCY ACTION LEVELS

EAL-7, FUEL HANDLING ACCIDENT



EMERGENCY ACTION LEVELS

BASES-7, FUEL HANDLING ACCIDENT

7-FHA 1. - MODES: ALL

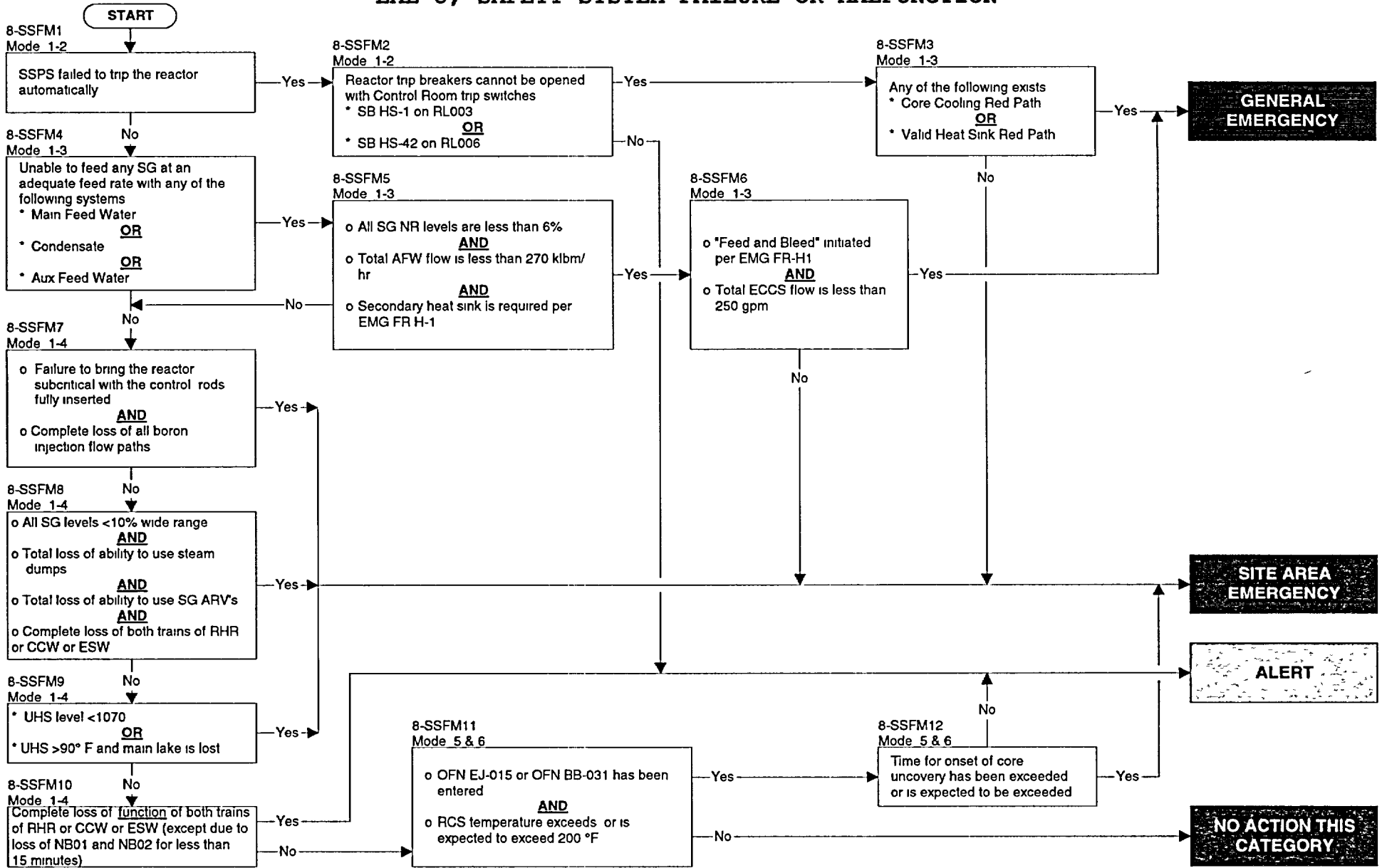
This procedure provides the necessary instructions to minimize the release of airborne activity following a fuel handling accident which indicates a potential degradation of the level of safety of the plant. In this case the specific symptoms/entry conditions of OFN KE-018 are used to answer YES or NO
Valid means that the Fuel Handling accident has been confirmed by the Operators

7-FHA 2 & 3. - MODES: ALL

NUREG-0818, "Emergency Action Levels for Light Water Reactors," forms the basis for these EALs. There is time available to take corrective actions, and there is little potential for substantial fuel damage. In addition, NUREG/CR-4982, "Severe Accident in Spent Fuel Pools in Support of Generic Safety Issue 82," July 1987, indicates that even if corrective actions are not taken, no prompt fatalities are predicted, and that risk of injury is low.
Thus, an Alert Classification for this event is appropriate. Escalation, if appropriate, would occur via Abnormal Rad Level/Radiological Effluent or Emergency Manager judgment ICs

EMERGENCY ACTION LEVELS

EAL-8, SAFETY SYSTEM FAILURE OR MALFUNCTION



EMERGENCY ACTION LEVELS**BASES-8, SAFETY SYSTEM FAILURE OR MALFUNCTION****8-SSFM 1. - MODE: 1 THROUGH 2**

This condition indicates failure of the automatic protection system to trip the reactor. This condition is more than a potential degradation of a safety system in that a front line automatic protection system did not function in response to a plant transient and thus the plant safety has been compromised, and design limits of the fuel may have been exceeded. An Alert is indicated because conditions exist that lead to potential loss of fuel clad or RCS. Reactor protection system setpoint being exceeded (rather than limiting safety system setpoint being exceeded) is specified here because failure of the automatic protection system is the issue

8-SSFM 2.- MODE: 1 THROUGH 2

Automatic and manual trip are not considered successful if action away from the reactor control or turbine control console was required to trip the reactor. A manual trip is any set of actions by the reactor operator(s) at the reactor control or turbine control console which causes control rods to be rapidly inserted into the core and brings the reactor subcritical (e.g., reactor trip switch). Failure of manual trip would escalate the event to a Site Area Emergency. Under these conditions, the reactor is producing more heat than the maximum decay heat load for which the safety systems are designed. A Site Area Emergency is indicated because conditions exist that lead to imminent loss or potential loss of both fuel clad and RCS. Although this IC may be viewed as redundant to the Fission Product Barrier Degradation IC, its inclusion is necessary to better assure timely recognition and emergency response. Escalation of this event to a General Emergency would be via Fission Product Barrier Degradation or Administrative ICs.

8-SSFM 3. - MODES: 1 THROUGH 3

The extreme challenge to the ability to cool the core is intended to mean that the core exit temperatures are at or approaching 1200°F or that the reactor vessel water level is below the top of active fuel. For CSFSTs, this EAL equates to a Core Cooling RED condition. Another consideration is the inability to initially remove heat during the early stages of this sequence. If emergency feedwater flow is insufficient to remove the amount of heat required by design from at least one steam generator, an extreme challenge should be considered to exist. This EAL equates to a Heat Sink RED condition on the CSFSTs. Note that the SG heat sink is required if RCS pressure is greater than SG pressure. In the event either of these challenges exist at a time that the reactor has not been brought below the power associated with the safety system design (typically 3 to 5% power) a core melt sequence exists. In this situation, core degradation can occur rapidly. For this reason, the General Emergency declaration is intended to be anticipatory of the fission product barrier matrix declaration to permit maximum offsite intervention time.

8-SSFM 4. - MODES: 1 THROUGH 3

A complete loss of SG heat sink is indicated. Adequate flow means enough flow is provided by any of the three systems to prevent entry onto FR-H1.

8-SSFM 5. - MODES: 1 THROUGH 3

In combination with a loss of all feedwater capability (addressed in box 8-SSFM 4) a complete loss of SG heat sink is indicated. A check to see if the heat sink is required was added because for larger LOCA break sizes, the RCS will depressurize below the intact steam generator pressures. The steam generators no longer function as a heat sink and the core decay heat is removed by the RCS break flow. For this range of LOCA break sizes, the SG heat sink is not required and actions to restore SG heat sink are not necessary. It is not necessary to be in EMG FR-H1 to answer the portion of the "AND" statement YES. For these cases, the operator transfers to EMG E-1, LOSS OF REACTOR OR SECONDARY COOLANT, to address a loss of reactor coolant. CSFST indicators are used as determining factors.

8-SSFM 6. - MODES: 1 THROUGH 3

This indicates a need for ECCS flow based on actual automatic or manual signal. 250 gpm is chosen because it is greater than the flow from one CCP at the Pressurizer PORV Lift setpoint. It is anticipated that conditions leading to this box will require operator initiation of RCS bleed and feed in accordance with EMG FR-H1. Functional Restoration Procedures should raise ECCS flow to the required value for adequate heat removal.

It is not intended that once the bleed and feed is initiated that the LRCB tree be used. While a LOCA has been induced it is part of planned mitigation strategy and is not unplanned or beyond the capability of the operator to control.

8-SSFM 7. - MODES: 1 THROUGH 4

This EAL addresses the loss of reactivity control required for hot shutdown with the reactor at pressure and temperature. Under these conditions, there is an actual major failure of a system intended for protection of the public, thus declaration of a Site Area Emergency is warranted. Escalation to a General Emergency would be via Abnormal Rad Levels/Radiological Effluent, Emergency Manager judgment, or Fission Product Barrier Degradation ICs.

EMERGENCY ACTION LEVELS**8-SSFM 8. - MODES: 1 THROUGH 4**

This EAL addresses complete loss of functions required for hot shutdown with the reactor at pressure and temperature. The loss of all of these functions would prevent core cooling which would lead to core boiling and possible core damage. Under these conditions, there is an actual major failure of systems intended for protection of the public, thus declaration of a Site Area Emergency is warranted.

8-SSFM 9. - MODES: 1 THROUGH 4

This EAL addresses the loss of design function of the UHS. With low level there is insufficient cooling or makeup water available to ensure core cooling. With temperature greater than 90°F there is insufficient heat sink to ensure core cooling, thus declaration of a Site Area Emergency is warranted.

8-SSFM 10. - MODES: 1 THROUGH 4

This EAL addresses complete loss of functions required to maintain cold shutdown for accidents starting in Modes 1 through 4. The complete loss of function means that the system can not pump water or remove heat. This does not apply if the system is inoperable but can still pump water and remove heat. The inability of RHR, CCW, or ESW to provide cooling for any reason which prevents the pumping of water or removal of heat in both trains of any of the three systems should cause an Alert classification. The exception for the loss of NB01 and NB02 is due to their loss being covered by the loss of electrical power EAL chart which allows for a fifteen minute delay. Steam Generators are still available to remove heat and UHS is still available as a source of water using alternate methods of supplying the water.

8-SSFM11. - MODES: 5 & 6

This EAL addresses complete loss of functions required for core cooling for accidents starting in Modes 5 and 6. Escalation to Site Area Emergency or General Emergency would be via Abnormal Rad Levels/Radiological Effluent, Emergency Manager judgment, or Fission Product Barrier Degradation ICs.

This IC and its associated EAL are based on concerns raised by Generic Letter 88-17, "Loss of Decay Heat Removal." A number of phenomena such as pressurization, vortexing, steam generator U-tube draining, RCS level differences when operating at a mid-loop condition, decay heat removal system design, and level instrumentation problems can lead to conditions where decay heat removal is lost and core uncover can occur. NRC analyses show that sequences exist which can cause core uncover in 15 to 20 minutes and severe core damage within an hour after decay heat removal is lost. Under these conditions, RCS integrity is lost and fuel clad integrity is lost or potentially lost, which is consistent with a Site Area Emergency.

"Uncontrolled" means that system temperature increase is not the result of planned actions by the plant staff.

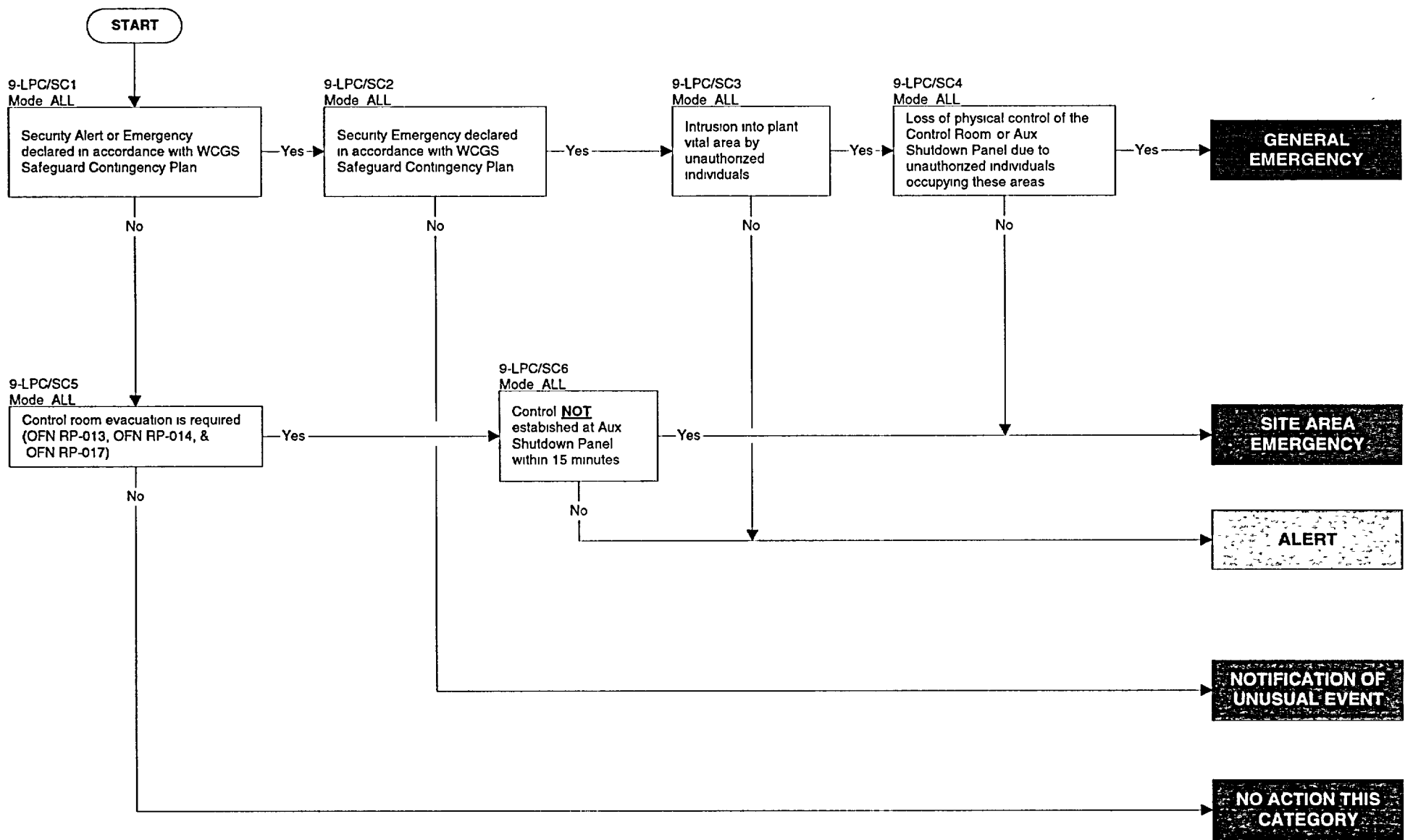
The EAL guidance related to uncontrolled temperature rise is necessary to preserve the anticipatory philosophy of NUREG-0654 for events starting from temperatures much lower than the cold shutdown temperature limit.

8-SSFM12. - MODES: 5&6

Under the conditions specified by this IC, severe core damage can occur and reactor coolant system pressure boundary integrity may not be assured. This IC covers sequences such as prolonged boiling following loss of decay heat removal, thus declaration of a Site Area Emergency is warranted under the conditions specified by the IC. Escalation to a General Emergency is via radiological effluent IC. Refer to OFN EJ-015 for guidance to determine times for core uncover.

EMERGENCY ACTION LEVELS

EAL-9, LOSS OF PLANT CONTROL/SECURITY COMPROMISE



EMERGENCY ACTION LEVELS**BASES-9, LOSS OF PLANT CONTROL/SECURITY COMPROMISE****9-LPC/SC 1. - MODES: ALL**

This EAL is based on the WCGS Site Security Plan. Security events which do not represent at least a potential degradation in the level of safety of the plant, are reported under 10 CFR 73.71 or in some cases under 10 CFR 50.72. The plant Protected Area Boundary is typically that part within the security isolation zone and is defined in the WCGS security plan. Bomb devices discovered within the plant Vital Area could result in EAL escalation

9-LPC/SC 2. - MODES: ALL

This class of security events represents an escalated threat to plant safety above that contained in the Unusual Event For the purposes of this IC, a civil disturbance which penetrates the protected area boundary can be considered a hostile force. Intrusion into a vital area by a hostile force will escalate this event to a Site Area Emergency.

9-LPC/SC 3. - MODES: ALL

This class of security events represents an escalated threat to plant safety above that contained in the Unusual Event For the purposes of this IC, a civil disturbance which penetrates the protected area boundary can be considered a hostile force. Intrusion into a vital area by a hostile force will escalate this event to a Site Area Emergency.

9-LPC/SC 4. - MODES: ALL

This IC encompasses conditions under which a hostile force has taken physical control of vital area required to reach and maintain safe shutdown.

9-LPC/SC 5. - MODES: ALL

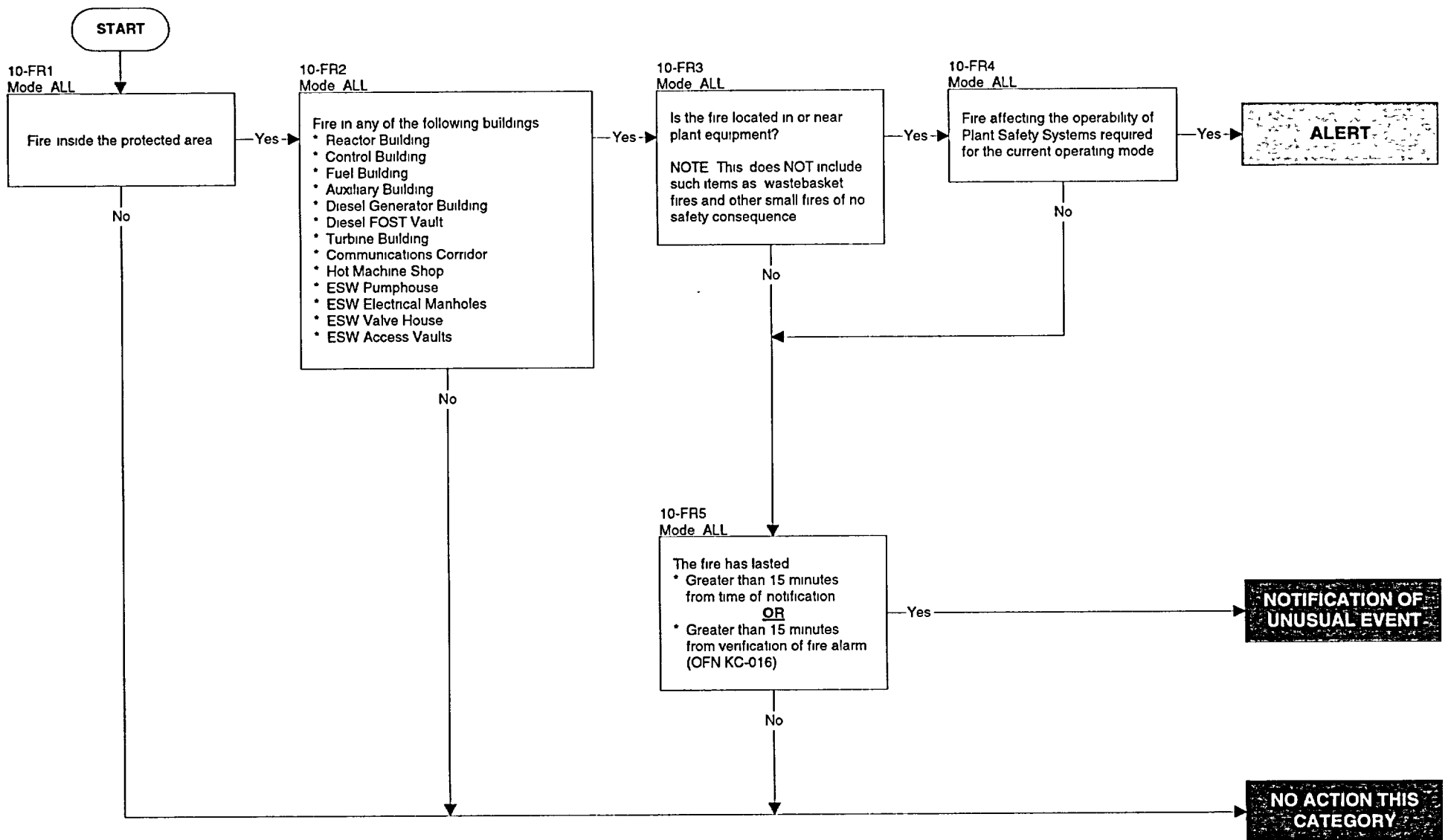
With the Control Room evacuated, additional support, monitoring and direction through the Technical Support Center and/or the Emergency Operations Facility is necessary. Inability to establish plant control from outside the Control Room will escalate this event to a Site Area Emergency While OFN RP-013, RP-014, RP-017 are governing procedures when the Control Room is evacuated, they need not be officially entered in order to answer YES.

9-LPC/SC 6. - MODES: ALL

Expeditious transfer of safety systems has not occurred but fission product barrier damage may not yet be indicated WCGS time for transfer based on analysis or assessments as to how quickly control must be reestablished without core uncovering and/or core damage. This time should not exceed 15 minutes In cold shutdown and refueling modes, operator concern is directed toward maintaining core cooling such as is discussed in Generic Letter 88-17, "Loss of Decay Heat Removal " In power operation, hot standby, and hot shutdown modes, operator concern is primarily directed toward maintaining critical safety functions and thereby assuring fission product barrier integrity Escalation of this event, if appropriate, would be by Fission Product Barrier Degradation, Abnormal Rad Levels/Radiological Effluent, or Administrative ICs.

EMERGENCY ACTION LEVELS

EAL-10, FIRE



EMERGENCY ACTION LEVELS**BASES-10, FIRE****10-FR 1. - MODES: ALL**

The purpose of this IC is to address the magnitude and extent of fires that may be potentially significant precursors to damage to safety-related systems which would render them non-functional. Hence, only the protected area is considered. Smoke from a fire is considered a part of this chart.

10-FR 2. - MODES: ALL

This IC is necessary to address fires in areas of the plant which could spread to vital areas or other significant areas. Transformers located next to the Turbine Building such as the NB, PB, MA, and MR are to be considered as part of the Turbine Building and classified as such. It is not intended to include warehouses, etc. not immediately adjacent to or connected to plant vital areas. The Radwaste Building has fire barriers at each end of the Radwaste tunnel and thus is not listed in this box

10-FR 3. - MODES: ALL This IC excludes fires of non-safety-related consequence.**10-FR 4. - MODES: ALL**

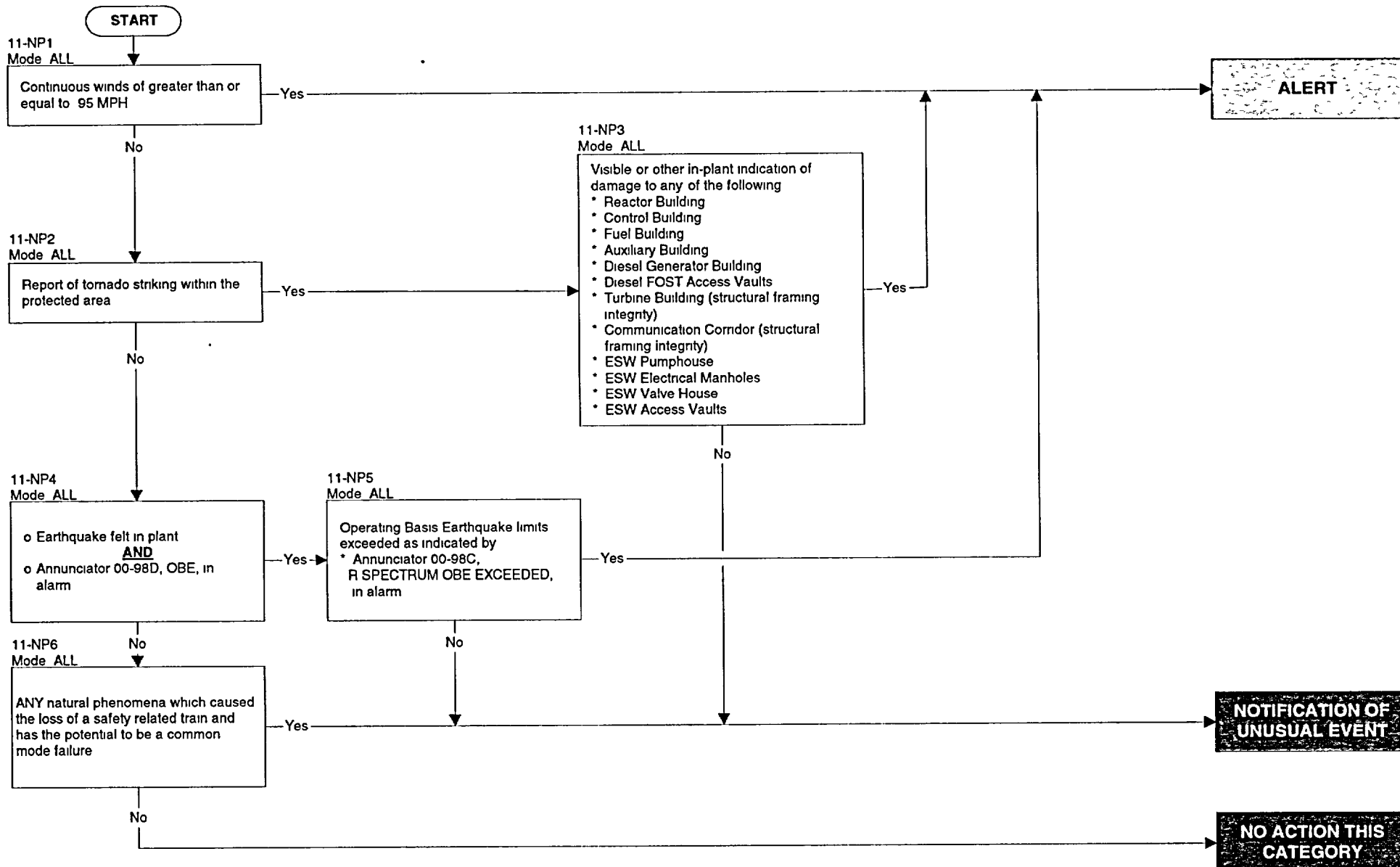
This IC is used to determine extent of damage to safety-related equipment to determine if the ALERT level of clarification is necessary. Fire in safety related equipment or it's support systems which cause the safety related equipment to be inoperable for a required mode will cause an Alert to be declared. As long as the affected NB bus is energized, fire affecting offsite power should not cause an escalation to an Alert on this tree. Whether the safety related equipment is operable or not at the time of the fire has no affect in making a determination to declare an Alert, only whether it is required for that mode.

10-FR 5. - MODES: ALL

This IC is necessary because fires inside the protected area located near equipment that last greater than 15 minutes can result in taxing the site Fire Brigade and also in the callout of local fire department. This represents a degradation in plant operational status

EMERGENCY ACTION LEVELS

EAL-11, NATURAL PHENOMENA



EMERGENCY ACTION LEVELS**BASES-11, NATURAL PHENOMENA****11-NP 1. - MODES: ALL**

NP 1 is based on WCGS USAR Section 3.3.1.1. Wind loads of this magnitude can cause damage to safety functions. Continuous wind is defined as the fastest observed one minute value.

11-NP 2. - MODES: ALL

NP 2 is based on the assumption that a tornado striking (touching down) within the protected boundary may have potentially damaged plant structures containing functions or systems required for safe shutdown of the plant. If such damage is confirmed visually or by other in-plant indications, the event may be escalated to Alert.

11-NP 3. - MODES: ALL

This EAL specifies structure containing systems and functions required for a safe shutdown of the plant. This list was obtained from WCGS USAR Table 3.3-1. A structure will have framing integrity when its main support features (I-Beams, Floors, Concrete Pedestals) are substantially intact.

11-NP 4. - MODES: ALL

NP 4 was developed on WCGS basis. Damage may be caused to some portions of the site, but should not affect ability of safety functions to operate. Method of detection can be based on instrumentation, validated by a reliable source, or operator assessment. As defined in the EPRI-sponsored "Guidelines for Nuclear Plant Response to an Earthquake", dated October 1989, a "felt earthquake" is: An earthquake of sufficient intensity such that: (a) the vibratory ground motion is felt at the nuclear plant site and recognized as an earthquake based on a consensus of Control Room operators on duty at the time, and (b) for plants with operable seismic instrumentation, the seismic switches of the plant are activated.

11-NP 5. - MODES: ALL

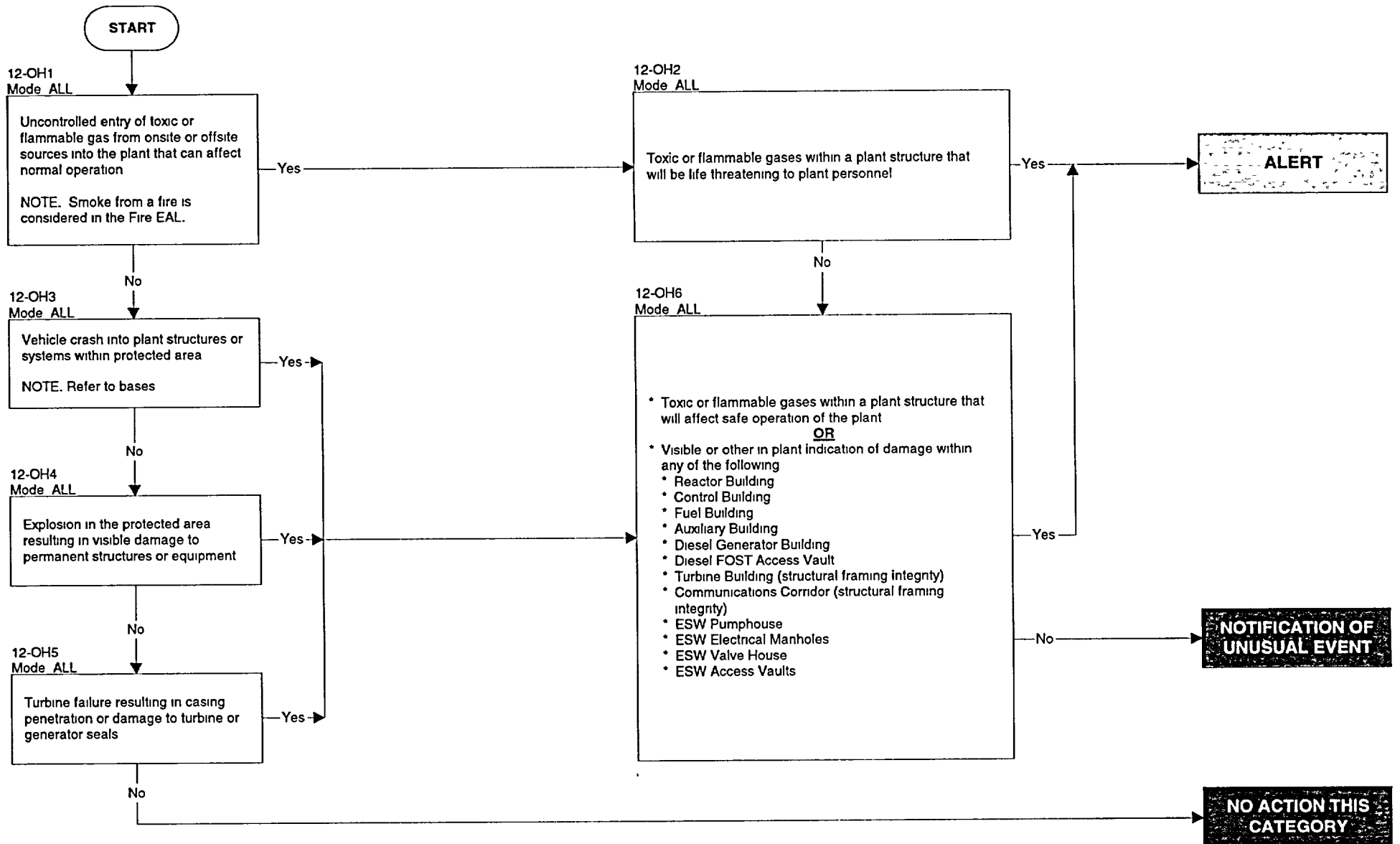
NP 5 based on WCGS USAR design basis. Seismic events of this magnitude can cause damage to safety functions.

11-NP-6 - MODES: ALL

Natural Phenomena can be any of the following but not limited to excessive wind, temperature extremes, excessive precipitation, icing, fish kill, vegetation problems, or other events of nature.

EMERGENCY ACTION LEVELS

EAL-12, OTHER HAZARDS



EMERGENCY ACTION LEVELS**BASES-12, OTHER HAZARDS****12-OH 1. - MODES: ALL**

This IC is based on releases in concentrations within the site boundary coming from onsite or offsite sources that will affect the health of plant personnel or affecting the safe operation of the plant. (i.e., tanker truck accident releasing toxic gases, etc.) Smoke from an onsite fire is covered in the fire EALs.

12-OH 2. - MODES: ALL

This IC is based on gases that have entered a plant structure affecting the safe operation of the plant. This IC applies to buildings and areas contiguous to plant Vital Areas or other significant buildings or areas (i.e., Service Water Pump house). The intent of this IC is not to include buildings (i.e., warehouses) or other areas that are not contiguous or immediately adjacent to plant Vital Areas. It is appropriate that increased monitoring be done to ascertain whether consequential damage has occurred. Escalation to a higher emergency class, if appropriate, will be based on System Malfunction, Fission Product Barrier Degradation, Abnormal Rad Levels/Radioactive Effluent, or Administrative ICs. Life threatening is defined as a IDLH "Immediately Dangerous to Life and Health" or explosive atmosphere.

12-OH 3. - MODES: ALL

This EAL is intended to address such items as plane or helicopter crash, or train derailment that may potentially damage plant structures containing functions and systems required for safe shutdown of the plant. If the crash is confirmed to affect a plant vital area, the event may be escalated to Alert. Minor vehicle accidents into plant structure (i.e. pickup backs into the CST) which causes minor damage to the structure are not applicable. Unauthorized vehicle intrusion and any resulting damage within the protected area is covered in Loss of Plant Control/Security Compromise flow charts.

12-OH 4. - MODES: ALL

For this EAL only those explosions of sufficient force to damage permanent structures or equipment within the protected area should be considered. As used here, an explosion is a rapid, violent, unconfined combustion, or a catastrophic failure of pressurized equipment, that potentially imparts significant energy to near-by structures and materials. No attempt is made in this EAL to assess the actual magnitude of the damage. The occurrence of the explosion with reports of evidence of damage (e.g., deformation scorching) is sufficient for declaration. All security aspects of the explosion also need to be considered, if applicable.

12-OH 5. - MODES: ALL

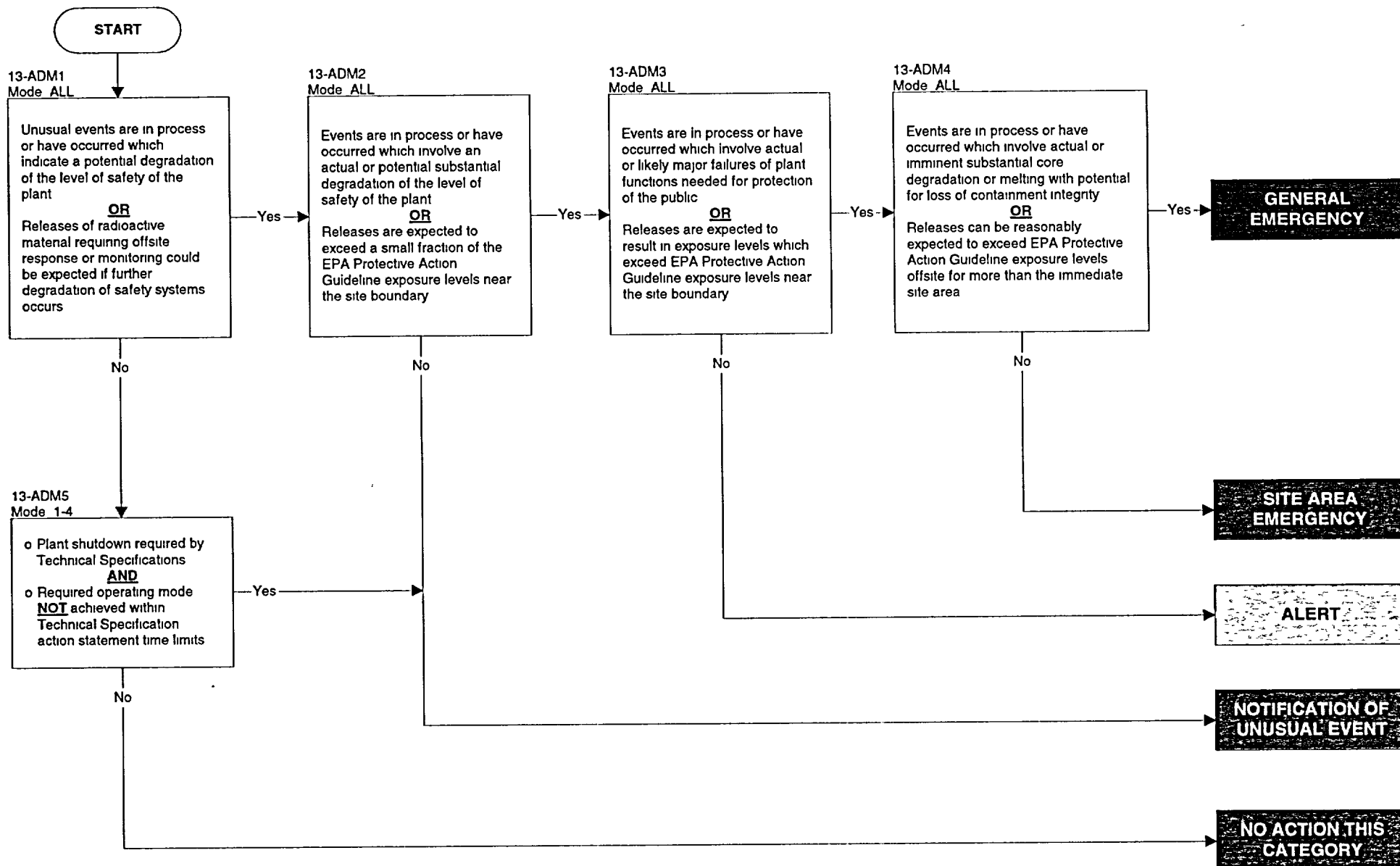
This EAL is intended to address main turbine rotating component failures of sufficient magnitude to cause observable damage to the turbine casing or to the seals of the turbine generator. Of major concern is the potential for leakage of combustible fluids (lubricating oils) and gases (hydrogen cooling) to the plant environs. Actual fires and flammable gas build up are appropriately classified under OH 1 or the Fire IC for Emergency Classification. This EAL is consistent with the definition of an Unusual Event while maintaining the anticipatory nature desired and recognizing the risk to non-safety related equipment. Escalation of the emergency classification is based on potential damage done by missiles generated by the failure, or in conjunction with a steam generator tube rupture. These latter events would be classified by the radiological ICs or Fission Product Barrier ICs.

12-OH 6. - MODES: ALL

This EAL specifies structures containing systems and functions required for safe shutdown of the plant. This list was obtained from WCGS USAR Table 3.3-1.

EMERGENCY ACTION LEVELS

EAL-13, ADMINISTRATIVE



EMERGENCY ACTION LEVELS**BASES-13, ADMINISTRATIVE****13-ADM 1. - MODES: ALL**

Potential degradation of the level of safety of the plant is indicated primarily by exceeding plant Technical Specification Limiting Condition of Operation (LCO) allowable action statement time for achieving required mode change. Precursors of more serious events should also be included because precursors do represent a potential degradation in the level of safety of the plant. Minor releases of radioactive materials are included. In this emergency class, however, releases do not require monitoring or offsite response (e.g. dose consequences of less than 10 millirem).

13-ADM 2. - MODES: ALL

Potential degradation of the level of safety of the plant is indicated primarily by exceeding plant Technical Specification Limiting Condition of Operation (LCO) allowable action statement time for achieving required mode change. Precursors of more serious events should also be included because precursors do represent a potential degradation in the level of safety of the plant. A determination that increased monitoring of plant functions is warranted due to safety system degradation requires an Alert. Minor releases of radioactive materials are included. In this emergency class, however, releases do not require monitoring or offsite response (e.g. dose consequences of less than 10 millirem).

13-ADM 3. - MODES: ALL

The discriminator (threshold) between Site Area and General Emergency is whether or not the EPA PAG plume exposure levels are expected to be exceeded outside the site boundary. This threshold, in addition to dynamic dose assessment considerations discussed in the EAL guidelines, clearly addresses NRC and offsite emergency response agency concerns as to timely declaration of a General Emergency.

13-ADM 4. - MODES: ALL

The bottom line for the General Emergency is whether evacuation or sheltering of the general public is indicated based on EPA PAGs, and therefore should be interpreted to include radionuclide release regardless of cause. In addition, it should address concerns as to uncertainties in systems or structures, such as CTMT, response; and also events such as waste gas tank releases and severe spent fuel pool events postulated to occur at high population density sites. To better assure timely notification, EALs in this category must primarily be expressed in terms of plant function status, with secondary reliance on dose projection. In terms of fission product barriers, loss of two barriers with potential loss of the third barrier constitutes a General Emergency.

13-ADM 5. - MODES: 1 THROUGH 4

Limiting Conditions of Operation (LCOs) require the plant to be brought to a required shutdown mode when the Technical Specification required configuration cannot be restored. Depending on the circumstances, this may or may not be an emergency or precursor to a more severe condition. In any case, the initiation of plant shutdown required by the site Technical Specifications requires a one hour report under 10 CFR 50.72 (b) Non-emergency events. The plant is within its safety envelope when being shut down within the allowable action statement time in the Technical Specifications. An immediate Notification of an Unusual Event is required when the plant is not brought to the required operating mode within the allowable action statement time in the Technical Specifications. Declaration of an Unusual Event is based on the time at which the LCO-specified action statement time period elapses under the site Technical Specifications and is not related to how long a condition may have existed. Other required Technical Specification shutdowns that involve precursors to more serious events are addressed by other System Malfunction, Hazards, or Fission Product Barrier Degradation ICs.