

WOLF CREEK

NUCLEAR OPERATING CORPORATION

Kevin J. Moles
Manager Regulatory Affairs

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

Subject: Docket No. 50-482: Changes to Wolf Creek Generating
Station Radiological Emergency Response Plan Implementing
Procedures and Forms

Gentlemen:

In accordance with 10 CFR 50, Appendix E, enclosed are revisions to Wolf Creek
Generating Station Radiological Emergency Response Plan implementing procedures
and forms. The following is a list of the specific enclosures.

PROCEDURES

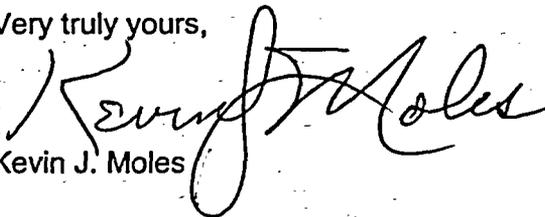
Effective October 10, 2003
EPP 06-002, Revision 10
EPP 06-003, Revision 8
EPP 06-007, Revision 7
EPP 06-017, Revision 3

FORMS

Effective October 10, 2003
EPF 06-007-01, Revision 7
EPF 06-018-09, Revision 2

If you have any questions concerning this submittal, please contact me at (620) 364-
4126 or Ms. Jennifer Yunk at (620) 364-4272.

Very truly yours,



Kevin J. Moles

KJM/rlg

Enclosures

cc: J. N. Donohew (NRC), w/e
D. N. Graves (NRC), wo/e
B. S. Mallett (NRC), w/e (2)
T. W. Pruett (NRC), w/e
Senior Emergency Preparedness Inspector (NRC), w/e
Senior Resident Inspector (NRC), wo/e

A045



EPP 06-002

TECHNICAL SUPPORT CENTER OPERATIONS

Responsible Manager

Superintendent Emergency Planning

Revision Number	10
Use Category	Reference
Administrative Controls Procedure	No
Infrequently Performed Procedure	No
Program Number	06

DC50 10-10-2003

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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

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.

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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.

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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.

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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.

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- 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

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).
- 7.3.7 Evaluate and authorize radiation exposure levels for site personnel.

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

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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.

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.

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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.
- 7.6.11 Ensure Emergency Response Teams are informed of changing plant conditions, emergency classifications and protective action recommendations that may affect the team's ability to complete assigned activities.

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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. Ensure all AIR LOCK DOORS are closed.
[Commitment Step 3.2.2]
2. 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.
 - o 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.
3. Take responsibility for the iodine monitor and perform the following:
 - a. Change the iodine monitor filters before the unit is placed in operation.
 - b. WHEN the iodine monitor is started, THEN log flow rate in the Facility Technician log.
 - c. Check the Ventilation Iodine Monitor hourly for proper operation and log the cpm reading in the Facility Technician log.

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d. IF the 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 TSC Radiological Coordinator.

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

7.7.3 Identify and label inoperable equipment.

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

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

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

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

7.7.8 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.

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- 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.
- 7.8.9 IF requested, THEN provide the key to the lock box located in the kit room. The key is located in your procedure binder.

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.
- 7.9.5 IF requested, THEN provide the key to the lock box located in the kit room. The key is located in your procedure binder.

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.

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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.

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.

7.11.4 Provide assistance to the Site Emergency Manager by performing the following:

1. Maintain EPF 06-002-03, SEQUENCE OF EVENTS, log. The following are examples of items that should be recorded in the log:
 - o Time of classifications
 - o Time PARs are made
 - o Time protective actions are implemented
 - o Time protective actions are completed
 - o Time events in the plant happened
 - o Time accountability was completed
 - o Time augmentation was determined complete
 - o Anything the Manager determines important
2. Answer the phone as needed.
3. Provide log keeping assistance for the Site Emergency Manager as directed.

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. EPF 06-002-03, SEQUENCE OF EVENTS, to the EOF
3. 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.

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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.
 - c. Provide to Security the names of people coming to the site, the time they are expected and any other information to assist in getting the off-site support through Main Gate North.

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.
- 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.

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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.

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

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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.
- 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.

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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.

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 -

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 the Facility Technician has changed the filters prior to starting the iodine monitor.
- A.2.2 Ensure "PWR ON" indicator is lit.
- A.2.3 Close Purge valve.
- A.2.4 Verify inlet valve is throttled open.
- A.2.5 Press and hold START button.
1. Verify green "ON" light comes on.

ATTACHMENT A

(Page 2 of 2)

HEPA FILTRATION AND IODINE MONITORING OPERATIONS

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.

A.2.6 Verify LIMIT light is extinguished.

A.2.7 Verify air flow is between 1.8 and 2.2 cfm.

A.2.8 Ensure the Facility Technician has logged the flow rate in the Facility Technician log.

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 Ensure the Facility Technician has logged the flow rate in the Facility Technician log.

A.4.2 Secure the monitor by pushing and releasing the STOP button.

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 -

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.

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.

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 -

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 -

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 -



EPP 06-003

EMERGENCY OPERATIONS FACILITY OPERATIONS

Responsible Manager

Superintendent Emergency Planning

Revision Number	8
Use Category	Reference
Administrative Controls Procedure	No
Infrequently Performed Procedure	No
Program Number	06

DC50 10-10-2003

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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

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.

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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.

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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 anytime conditions in the facility would impede the functions of the facility staff during an emergency.

6.1.1 The following are examples of when facility evacuation should be considered:

- o If there is an actual or projected dose of 5 REM TEDE, unless the Off-site Emergency Manager authorizes exposures up to 25 REM
- o The facility is on fire
- o The facility has no electrical power
- o The facility HVAC is not functioning properly

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.

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.

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- 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

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.

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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.

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.

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- 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 Monitor and determine if facility conditions warrant facility evacuation.
- 7.3.16 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 IF a radioactive release is in progress or imminent, THEN 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 signs.
 - 1. One sign in the EOF proper and one sign in the hallway next to the copier.
- 7.4.5 Obtain plant status from the TSC Operations Coordinator and brief the Off-site Emergency Manager.
 - 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.

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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.

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.

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- 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 EPP 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.
- 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. Take responsibility for the iodine monitor and perform the following:
 - a. Change the iodine monitor filters before the unit is placed in operation.
 - b. Log the flow rate in the Facility Technician log after the iodine monitor is started.
 - c. Check the Ventilation Iodine Monitor hourly for proper operation and log the cpm reading in the Facility Technician log.
 - d. 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.

7.7.3 Inform the EOF Radiological Coordinator of all facility habitability surveys.

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7.7.4 Identify and label inoperable equipment.

7.7.5 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:

- 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.

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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.

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).

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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 EPF 06-002-03, SEQUENCE OF EVENTS, log. The following are examples of items that should be recorded in the log:
 - o Time of classifications
 - o Time PARs are made
 - o Time protective actions are implemented
 - o Time protective actions are completed
 - o Time events in the plant happened
 - o Time accountability was completed
 - o Time augmentation was determined complete
 - o Anything the Manager determines important
2. Answer the phone as needed.
3. Provide log keeping assistance for the Off-site Emergency Manager as directed.

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. EPF 06-002-03, SEQUENCE OF EVENTS, to the TSC.
3. Operations and Radiological Status Boards information to the following:
 - o Off-Site Public Information Coordinator

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.

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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.
 - c. Provide to Security the names of people coming to the site, the time they are expected and any other information to assist in getting the off-site support through Main Gate North.

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.
- 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.

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

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7.14.3 Furnish radiological data as requested that may include:

- o dose projections off-site
- o sub zones 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

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.

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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

- END -

ATTACHMENT A
(Page 1 of 3)
ALTERNATE EOF OPERATIONSA.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.

ATTACHMENT A
(Page 2 of 3)
ALTERNATE EOF OPERATIONSNOTE

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 radio logically 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.

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 -

ATTACHMENT B
(Page 1 of 2)
EOF DIESEL OPERATIONNOTES

- 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.

ATTACHMENT B
(Page 2 of 2)
EOF DIESEL OPERATIONNOTE

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 cool down.

- 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 -

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ATTACHMENT C
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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 the Facility Technician has changed the filters prior to starting the iodine monitor.
- C.2.2 Ensure "PWR ON" indicator is lit.
- C.2.3 CLOSE Purge Valve.
- C.2.4 Verify inlet valve is throttled OPEN.
- C.2.5 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.2.6 Verify the "LIMIT" light is extinguished.
- C.2.7 IF the unit fails to start, THEN reset and try to restart the unit.

ATTACHMENT C

(Page 2 of 2)

HEPA FILTRATION AND IODINE MONITORING OPERATION

- C.2.8 Verify top of barrel indicates air flow is between 1.8 and 2.2 cfm.
- C.2.9 Ensure the Facility Technician has logged the flow rate in the Facility Technician log.

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 Ensure the Facility Technician has logged the flow rate in the Facility Technician log.
- C.4.2 Secure the iodine monitor by pressing and releasing the "STOP" button.

- END -

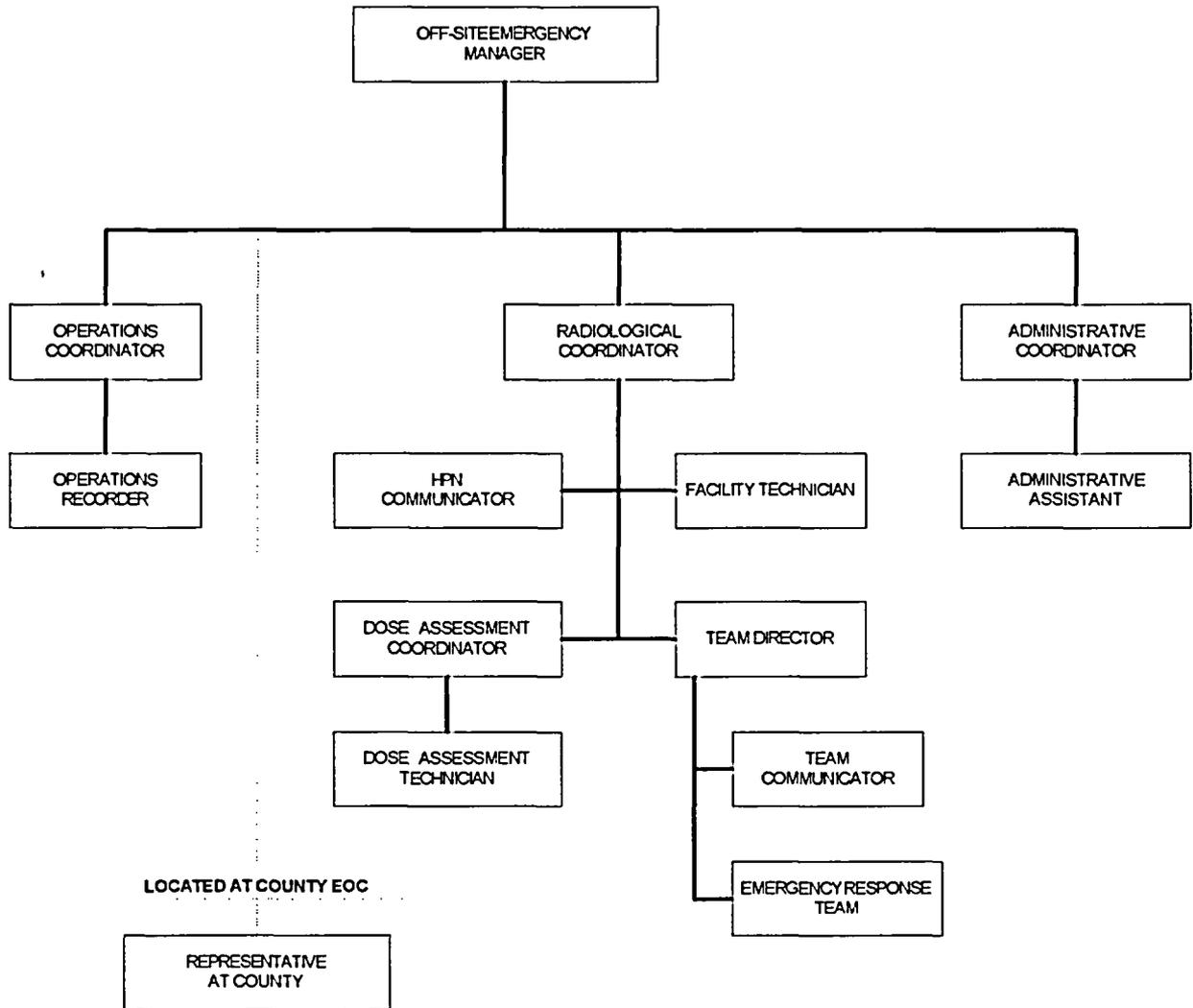
ATTACHMENT D
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FAX NUMBERS

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



- END -



EPP 06-007

EMERGENCY NOTIFICATIONS

Responsible Manager

Superintendent Emergency Planning

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

DC50 10-10-2003

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1.0 PURPOSE

1.1 This procedure provides guidance for conducting notifications to Federal, State of Kansas (State) and Coffey County (County) authorities in the event of a declared emergency condition at Wolf Creek Generating Station (WCGS).

2.0 SCOPE

2.1 This procedure is applicable to Emergency Response Organization (ERO) personnel responsible for the supervision and performance of Immediate and Follow-up Notifications in the Control Room, the Technical Support Center (TSC) and the Emergency Operation Facility (EOF).

3.0 REFERENCES AND COMMITMENTS

3.1 References

3.1.1 RADIOLOGICAL EMERGENCY RESPONSE PLAN (RERP)

3.2 Commitments

3.2.1 RCMS 95-091, Added comment section to Follow-up Notification form to allow space for explaining dose assessment information to prevent confusion regarding posted information.

4.0 DEFINITIONS

4.1 Code Word

4.1.1 An identifier used during emergency telephone notifications to authenticate communications between WCGS, the County, and the State.

4.2 Emergency Classification

4.2.1 A system used to define the severity of emergencies into one of four categories based upon Emergency Action Levels. Classifications listed in order of increasing severity are as follows:

1. Notification of Unusual Event (NUE)
2. Alert
3. Site Area Emergency (SAE)
4. General Emergency

4.3 Records

4.3.1 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.

4.4 Planned Release

4.4.1 A radioactive release in progress and can be stopped or controlled by Operator action.

4.5 Unplanned Release

4.5.1 A radioactive release in progress and cannot be stopped or controlled by Operator action.

4.6 Monitored Release

4.6.1 A radioactive release that passes within the detection range of a plant radiation monitor.

4.7 Unmonitored Release

4.7.1 A radioactive release that does not pass within the detection range of a plant radiation monitor.

4.8 Filtered Release

4.8.1 A radioactive release for which the entire volume is going through a filter unit before being discharged to the atmosphere.

5.0 RESPONSIBILITIES

5.1 Site Emergency Manager

5.1.1 For approving and ensuring notifications are made as described in this procedure from the time the TSC is activated until the EOF is activated.

5.2 Off-site Emergency Manager

5.2.1 For approving and ensuring notifications are made as described in this procedure after the EOF is activated.

5.3 Emergency Notification System (ENS) Communicator

5.3.1 For establishing and maintaining continuous communications with the Nuclear Regulatory Commission (NRC) to provide plant related information.

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5.4 Health Physics Network (HPN) Communicator

5.4.1 For establishing and maintaining continuous communications with the NRC to provide radiological and dose assessment information.

5.5 Off-site Communicator

5.5.1 For performing notifications to off-site agencies using EPF 06-007-01, WOLF CREEK GENERATING STATION EMERGENCY NOTIFICATION.

5.6 Shift Manager

5.6.1 For approving and ensuring notifications are made as described in this procedure, when an emergency has been classified prior to TSC activation.

6.0 PRECAUTIONS/LIMITATIONS

6.1 Coffey County and Kansas Division Of Emergency Management will be notified within fifteen minutes following an emergency classification, a change in emergency classification, issuing or changing protective action recommendations, entering Recovery or terminating the emergency.

6.2 The NRC Resident Inspector will be notified as soon possible after contacting the County and the State.

6.3 Topeka System Dispatch will be notified of each emergency classification or a change in the classification as soon as practical.

6.4 American Nuclear Insurers (ANI) and Institute of Nuclear Power Operations (INPO) will be notified of an Alert or higher emergency classification or a change in the classification as soon as practical.

6.5 The NRC Operations Center will be notified as soon as possible and no later than one hour following an emergency classification.

6.6 For emergency conditions that require immediate off-site assistance such as an ambulance or fire fighting support, the request for assistance and the notification process should occur at the same time.

6.7 EPF 06-007-01, WOLF CREEK GENERATING STATION EMERGENCY NOTIFICATION, is approved by one of the following ERO personnel, prior to performing the notification:

- o Shift Manager prior to TSC activation
- o Site Emergency Manager after TSC activation but prior to EOF activation
- o Off-site Emergency Manager after EOF activation

7.0 PROCEDURE

7.1 Emergency Notifications

- 7.1.1 An Immediate Notification is made for each emergency classification, a change in emergency classification, issuance or change of protective action recommendations, entry into recovery, or termination of an emergency.
- 7.1.2 A Follow-up Notification is made to update the County and State on the status of an emergency situation.
1. Follow-up notifications should be made every hour, or at intervals agreed upon with the County and State depending on the sequence and pace of events, until such time that the plant has been placed in a safe, stable condition.
- 7.1.3 Notification forms are completed, approved, and issued from the facility responsible for the emergency at the time of the notification.
1. WHEN responsibility for the emergency transfers to the next activated facility, THEN forward copies of all completed, issued notification forms to that facility.
- 7.1.4 Message numbers for EPF 06-007-01, WOLF CREEK GENERATING STATION EMERGENCY NOTIFICATION, are created by using the two or three letters indicating the originating location in the first part, followed by sequential numbers of three digits starting with 001 in the second part. The following is an example of the numbering:
- o Control Room would start with CR-001.
 - o Technical Support Center would start with TSC-001
 - o Emergency Operations Facility would start with EOF-001.
- 7.1.5 Make Immediate Notifications to off-site authorities as follows:
1. Coffey County and Kansas Division Of Emergency Management within fifteen minutes of a classification

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2. Nuclear Regulatory Commission (NRC) Resident Inspector as soon after contacting the County and the State as possible
3. Topeka System Dispatch of each emergency classification or a change in the classification as soon as practical
4. American Nuclear Insurers (ANI) of an Alert or higher emergency classification or a change in the classification as soon as practical
5. Institute of Nuclear Power Operations (INPO) of an Alert or higher emergency classification or a change in the classification as soon as practical
6. NRC Operations Center as soon as possible and no later than one hour following an emergency classification

7.1.6 Notifications will be made by use of phones. IF phone contact can not be made, THEN use the backup radios in accordance with Attachment A, STATE AND COUNTY RADIO NOTIFICATION DIRECTIONS.

7.1.7 The verification phone in the Control Room and TSC should be disconnected after each subsequently activated facility has assumed notification responsibilities.

7.2 Notification Form Completion

NOTE

Data that is Not Applicable at the time the form is being completed should be marked N/A.

7.2.1 Notification forms should be completed as follows:

1. Ensure the message number is listed at the top of the form.
2. Check the Status box for the appropriate notification.

3. List the Code Word to be used for County and State telephone notifications.
 - a. The code word is obtained from the Off-site Communicator's manual.
4. Check the Type box for the appropriate notification and complete the steps as indicated after the selected type of notification.
5. List the time and date of the emergency classification.
6. Check the Emergency Classification box for the appropriate classification.
7. Check the Reason For Classification box for the appropriate EAL used and list the flow path used to make the classification.
 - a. IF a higher level EAL chart indicates the same level of classification at a later time, THEN list that flow path and make a note in the comments section that the same classification is now due to a higher level EAL.
8. List the meteorological data.
9. Check the Radiological Release Status boxes for the appropriate release status.
10. Check the box for each subzone for which a PAR is being made OR check the NONE box if no release is in progress.
 - a. IF only a Protective Action Recommendation is being made or changed, THEN list the time the PAR was made.
 - b. IF the PAR is due to a wind shift, THEN add the new affected areas to the existing areas already listed.
11. Check the Current Plant Condition box as appropriate and list the time the reactor tripped.
 - a. IF reactor is not tripped, THEN mark time reactor tripped N/A.

12. Complete Field Team Data if available. IF data is not available, THEN check the Not Available box.
13. List the Release Rate data as indicated.
14. Check the appropriate box for the method used to determine Centerline dose projection and list the centerline dose in the table.
15. Place information as needed in the comment section that would help explain information listed on the form.
16. Have the position responsible for the emergency sign approval of the completed form.

7.3 Performing Notifications

- 7.3.1 The facility responsible for the emergency performs notifications using the information listed on EPF 06-007-01, WOLF CREEK GENERATING STATION EMERGENCY NOTIFICATION.
- 7.3.2 Contact should be made with each agency by using the information at the bottom of the notification form. IF contact cannot be established with the primary contact, THEN use the next alternate contact for the notification.
 1. IF contact for a Follow-up Notification has not been established within four to six minutes from the initial attempt, THEN use the appropriate dedicated radio to request a call-back on the verification call-back line, in accordance with Attachment A, STATE AND COUNTY RADIO NOTIFICATION DIRECTIONS.
- 7.3.3 The time and person contacted at each agency should be logged at the start of the notification.
- 7.3.4 A Code Word is used for County and State Notifications only. IF the Code Word at the County or State is not the same as the one in the Control Room, THEN request the County or State to callback on the Verification Line.

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1. The code word is to be used for telephone notifications between the WCGS ERO, Coffey County and the State. The code word is placed in an envelope and placed in the two Off-site Communicator's Manuals in the Control Room, in the Coffey County Communications Centers and in the State Communications Centers. The same code word will be used throughout the emergency and will be replaced during recovery operations.
2. For the initial telephone contact with Coffey County and the State, the code word shall be provided to them at the beginning of the notification. The County and the State will verify that the Control Room code word corresponds to the County/State code word. The notification process will proceed as specified after this confirmation.
3. All subsequent telephone contacts with Coffey County and the State will use the code word at the beginning of the contact.
4. The code word will be passed on to the TSC and EOF Off-site Communicators for their use in telephone conversations with Coffey County and the State. The code word will still be passed on to the TSC and EOF Communicators even if initial County and/or State contact was made via radio and the code word was not needed.

7.3.5 For Immediate Notifications, information in steps one through eight and step 13 should be read to the contacted agency.

7.3.6 For Follow-up Notifications, all steps should be read to the contacted agency.

7.4 ENS Communications

7.4.1 Establish continuous ENS communications with the NRC Operations Center using an Emergency Telecommunications System (ETS) line from the Control Room and TSC. IF the NRC determines that continuous communication or contact with all facilities is not necessary, THEN communications may be terminated as directed by the NRC.

1. The position responsible for the emergency should be cognizant of the establishment of ENS communications.

7.5 HPN Communications

NOTE

HPN communications are established at the request of the NRC following facility activation.

7.5.1 Establish continuous HPN communications with the NRC Operations Center using an Emergency Telecommunications System (ETS) line when requested by the NRC. IF the NRC determines that continuous communication or contact with all facilities is not necessary, THEN communications may be terminated as directed by the NRC.

1. The position responsible for the emergency should be cognizant of the establishment of HPN communications.

7.6 NRC Emergency Telecommunications System (ETS) Instructions

7.6.1 The ETS utilizes dial tone for one of the ETS Service Nodes located throughout the United States. To place a call using the ETS, perform the following:

1. Lift the receiver on the telephone instrument and listen for dial tone.
2. After receiving dial tone, dial the first number listed on the sticker located on the telephone instrument. If the first number is busy, proceed on with the second, etc.

7.6.2 IF the ETS line is inoperable, THEN the notification may be made via commercial telephone or any other method to ensure that a report is made as soon as practical to the NRC Operations Center.

1. IF contact is made by commercial telephone, THEN dial the same numbers used for the ETS line.

7.6.3 The ETS ENS phones in the TSC are an extension of the ETS ENS phones in the Control Room. IF communications have already been established by the Control Room, THEN the TSC ENS Communicator needs only to pick up the handset to participate.

7.6.4 The ETS phones in the EOF are on separate lines from the ETS phones in the Control Room and TSC. Communicators in the EOF desiring to participate in communications already established by the TSC or Control Room must contact the NRC Operations Center.

1. The NRC will bridge all ENS or HPN parties together as each facility is activated.

8.0 RECORDS

8.1 The following records generated during an actual emergency are considered QA records and are forwarded to Emergency Planning at the termination of the emergency:

8.1.1 EPF 06-007-01, WOLF CREEK GENERATING STATION EMERGENCY NOTIFICATION

8.2 The following records generated during drills and exercises are considered non-QA records and are forwarded to Emergency Planning at the termination of the drill or exercise:

8.2.1 EPF 06-007-01, WOLF CREEK GENERATING STATION EMERGENCY NOTIFICATION

9.0 FORMS

9.1 EPF 06-007-01, WOLF CREEK GENERATING STATION EMERGENCY NOTIFICATION

ATTACHMENT A
(Page 1 of 1)
STATE AND COUNTY RADIO NOTIFICATION DIRECTIONS

NOTES

- o Repeat the steps for the desired process until contact is made with either the County or the State.
- o Handset for State radio is located in the credenza on the west wall of the Control Room.

A.1 County Notification From Control Room Zetron Console

- A.1.1 Select "SHERIF" on the radio console.
- A.1.2 Depress and holding the number 5 button until you hear three beeps, then depress the 1 and 4 numbers.
- A.1.3 Wait for tone signal to clear, depress the push-to-talk button to transmit and release to receive.
- A.1.4 WHEN the notification is complete, THEN select the desired channel for continued operations.

A.2 State Notification From Control Room Handset

- A.2.1 Pickup handset, depress the handset talk button, wait for three beeps, then transmit, and release to receive.

A.3 County Notification From TSC Or EOF

- A.3.1 Ensure the radio is turned "ON", selected to "SHERIF", and volume control is adjusted to a comfortable level.
- A.3.2 Pickup handset, push the "Monitor" button, listen for three beeps, and the wait for the "XMIT" light to extinguish.
- A.3.3 Depress the handset talk button to transmit and release to receive.

A.4 State Notification From TSC or EOF

- A.4.1 Ensure the radio is turned "ON", selected to "STATE", and volume control is adjusted to a comfortable level.
- A.4.2 Pickup handset, depress the handset talk button, wait for three beeps, then transmit, and release to receive.

- END -



EPP 06-017

CORE DAMAGE ASSESSMENT METHODOLOGY

Responsible Manager

Superintendent Emergency Planning

Revision Number	3
Use Category	Reference
Administrative Controls Procedure	No
Infrequently Performed Procedure	No
Program Number	06

DC50 10-10-2003

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1.0 PURPOSE

- 1.1 This guideline provides information for the assessment of the degree of core damage during an accident. Specifically, the information contained in this guideline relates to:
- o Determination of the degree of damage to the fuel rod cladding that results in the release of the fission product inventory in the fuel rod gap space
 - o Determination of the degree of core overheating that results in the release of the fission product inventory in the fuel pellets
- 1.2 This guideline also contains a best estimate dose assessment for high activity sample collection.

2.0 SCOPE

- 2.1 This procedure is applicable to the Engineering Team in the Technical Support Center (TSC) for use during a declared emergency.

3.0 REFERENCES AND COMMITMENTS

3.1 References

- 3.1.1 WCAP-14696-A, Westinghouse Owner's Group Core Damage Assessment Guidance, November 1999
- 3.1.2 Nuclear Engineering Calculation, AN-98-029 Revision 1, Basis for Wolf Creek Core Damage Assessment Guidance (CDAG)

3.2 Commitments

- 3.2.1 RCMS 00-034, WCNOG Has Developed Contingency Plans For Obtaining And Analyzing Highly Radioactive Samples.
- 3.2.2 RCMS 00-035, Capability For Classifying Fuel Damage Events At The Alert Level For 2-5% Fuel Clad Damage.

4.0 DEFINITIONS

4.1 No Core Damage

- 4.1.1 A core state in which the integrity of the fuel rod cladding is intact and the only release of fission products to the reactor coolant system is that due to pre-existing fuel rod defects and iodine spiking. (Reference Step 3.1.1)

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4.2 Fuel Rod Clad Damage

4.2.1 A core state in which the fuel rod cladding of some fraction of the fuel rods in the core has failed, resulting in the release of the fission products in the fuel rod gap space of the failed fuel rods to the reactor coolant system. (Reference Step 3.1.1)

4.3 Fuel Over-temperature Damage

4.3.1 A core state in which the fuel pellets have reached a temperature where there is a rapid movement of fission products from the fuel pellet matrix to the reactor coolant system. (Reference Step 3.1.1)

4.4 Wet Hydrogen Measurement System

4.4.1 A wet measurement system determines the hydrogen fraction of a mixture of air, steam, and hydrogen. The measurement is a ratio of moles of hydrogen to moles of air, steam, and hydrogen. An inherent characteristic of the wet measurement system is that fixed numbers of hydrogen and air moles will result in different hydrogen concentrations for varying moles of steam.

4.5 Dry Hydrogen Measurement System

4.5.1 A dry measurement system determines the hydrogen fraction of a mixture of hydrogen and dry air. Any vapor or moisture in the sample atmosphere is removed by heating before the hydrogen concentration is measured. The measurement is a ratio of moles of hydrogen to moles of hydrogen and air.

5.0 RESPONSIBILITIES

5.1 TSC Engineering Team

5.1.1 Assess the degree of fuel damage in accordance with this procedure.

6.0 PRECAUTIONS/LIMITATIONS

6.1 Fuel clad damage of 2-5% is an alternative to 300 $\mu\text{Ci/cc}$ dose equivalent iodine (DEI). Fuel clad damage is specifically associated with an Alert Emergency Action Level trigger, historically, dose equivalent iodine. "Fuel clad damage" of 2-5% is not to be confused with 2-5% "core over-temperature damage". (Reference 3.1.2)

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6.2 Detectors GTRE0059 and GTRE0060 view different locations and air volumes within containment. It is anticipated that physical processes during severe accident conditions may cause higher levels of radioactivity in certain regions of containment. The conditions described below would increase a detector channel indication:

- o Operation of Atmosphere Control Filter Absorbers (FGR01A/B) which are located in close proximity to GTRE0059
- o Rain-out of fission products may collect on the floor areas surrounding GTRE0060

6.3 Figures 1 through 4 are intended to be a best estimate rather than conservative or bounding values. The results can be affected by:

- o Uncertainties in total core inventory
- o Fractional migration of fission products from the core to the containment
- o Integrity of the fuel matrix above 40 GWD/MTU
- o Changes in the density of the containment atmosphere
- o Fission product plate-out during accident conditions
- o Fission product accumulation in operating equipment

6.4 Figures 5 and 6 contain a best estimate of personnel exposure to obtain a sample of reactor coolant, containment sump liquid, or containment atmosphere during the recovery phase of a severe core damage accident. No ALARA techniques are credited in the dose estimates. Actual sampling is performed in accordance with Chemistry procedures. (Reference Step 3.1.2) [Commitment Step 3.2.1]

7.0 PROCEDURE [Commitment Step 3.2.2]

7.1 Identify Current Plant Status

- 7.1.1 Using the table below, determine the possible status of the reactor core. Use EPP 06-017-02, CORE DAMAGE ASSESSMENT DATA, to record data.
- 7.1.2 Go to the appropriate section of this procedure as indicated from the table below.

Plant Status	Fuel Rod Fission Product Status
Core Exit Thermocouples LESS THAN 712°F <u>AND</u> Containment Dose Rate LESS THAN Figure 1	No Core Damage Continue to Monitor Plant Parameters
Core Exit Thermocouples LESS THAN 2000°F <u>AND</u> Containment Dose Rate LESS THAN Figure 2	Possible Fuel Rod Clad Damage Go To Step 7.2
Core Exit Thermocouples GREATER THAN 2000°F <u>OR</u> Containment Dose Rate GREATER THAN Figure 2	Possible Fuel Over-temperature Damage Go To Step 7.3

7.2 Fuel Rod Clad Damage

7.2.1 Estimate Fuel Rod Clad Damage Based on Containment Radiation Levels.

1. Find containment radiation level for 100% clad damage from Figure 3.
2. Obtain current containment dose rate.
3. Estimate clad damage using:

$$\% \text{Clad Damage}_{CRM} = \frac{\text{Current Containment Dose Rate}}{\text{Predicted Containment Radiation Level at 100\% Clad Damage}} (100)$$

7.2.2 Estimate Fuel Rod Clad Damage Based on Core Exit Thermocouple (CET) Readings.

1. With RCS Pressure GREATER THAN 1600 psig:

$$\% \text{Clad Damage}_{CET} = \frac{\text{Number of CETs} > 1400^{\circ}\text{F}}{\text{Total Number of Operable CETs}} (100)$$

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2. With RCS Pressure LESS THAN 1600 psig:

$$\% \text{Clad Damage}_{CET} = \frac{\text{Number of CETs} > 1200^{\circ}F}{\text{Total Number of Operable CETs}} (100)$$

7.2.3 Confirm Reasonableness of Clad Damage Estimates.

1. Compare actual values to expected response.

- o Containment Hydrogen Concentration LESS THAN 0.2 (DRY) volume percent
- o RVLIS LESS THAN 56% AND GREATER THAN 40%
- o Hot Leg RTD GREATER THAN T_{sat} AND THAN LESS THAN 650°F
- o Source Range Monitor GREATER THAN 8000 Counts per Second
- o Difference in clad damage estimates from containment radiation (CRM) and core exit thermocouples (CET) LESS THAN 50%, using

$$ABSOLUTE \ VALUE \left[\frac{\% \text{Clad Damage}_{CRM} - \% \text{Clad Damage}_{CET}}{\% \text{Clad Damage}_{CRM}} \right]$$

2. If expected responses are not obtained, determine if the deviations can result from the accident progression or from the following:

- o Injection of water to the RCS
- o Bleed paths from the RCS
- o Direct radiation to the containment radiation monitors
- o Conservative assumptions in the predictive model
- o Fuel burnup
- o Fission product retention in the RCS
- o Fission product removal from containment

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CAUTION

An increase of greater than 1% clad damage in 30 minutes OR greater than 2% clad damage may require an upgrade of the emergency classification.

7.2.4 Report clad damage estimate to the Engineering Coordinator.

7.2.5 Return to Step 7.1 in Plant Status Section.

NOTE

The hydrogen analyzers, SGS02A and SGS02B, provide wet hydrogen measurements. The wet hydrogen percentage is the actual moles of hydrogen compared to the total moles of steam, air and hydrogen. The dry hydrogen percentage does not include the presence of steam, and is only a comparison of hydrogen to dry air and hydrogen. The use of the wet versus dry figures differs, since a fixed amount (moles) of hydrogen appears as a constant horizontal line on the dry figure, while it appears as a curved line on the wet figure. Therefore the user must understand that as the containment depressurizes, the hydrogen percentage will remain the same on a dry measurement basis, but it will increase on a wet measurement basis.

7.3 Fuel Over-temperature Damage

7.3.1 Estimate Fuel Over-temperature Damage Based on Containment dose rates.

1. Find containment dose rate for 100% core over-temperature damage from Figure 4.
2. Obtain current containment dose rate.
3. Estimate over-temperature damage using:

$$\% \text{ Core Damage}_{CRM} = \frac{\text{Current CTMT DoseRate}}{\text{Predicted CTMT DoseRate at 100\% Overtemp Damage}} (100)$$

7.3.2 Estimate Fuel Over-temperature Damage Based on Core Exit Thermocouple Readings.

1. Obtain current core exit thermocouple temperature readings.
2. Estimate over-temperature damage using:

$$\% \text{ Core Damage}_{CET} = \frac{\text{Number of CETs} > 1400^{\circ}F}{\text{Total Number of Operable CETs}} (100)$$

7.3.3 Estimate Fuel Over-temperature Damage Based on Containment Hydrogen concentration.

RCS Pressure	Water Injection To The RCS	Predicted Containment Hydrogen Concentration (Volume %)
LESS THAN 1050 psig	Yes	50% zirc reaction line on either SAM CA-01 Figure 3-1a (Wet) <u>OR</u> 7.4 (Dry) volume percent
	No	5% zirc reaction line on either SAM CA-01 Figure 3-1a (Wet) <u>OR</u> 3.8 (Dry) volume percent
GREATER THAN 1050 psig	Yes	½ Hydrogen concentration using 75% zirc reaction line on either SAM CA-01 Figure 3-1a (Wet) <u>OR</u> 5.4 (Dry) volume percent
	No	½ Hydrogen concentration using 50% zirc reaction line on either SAM CA-01 Figure 3-1a (Wet) <u>OR</u> 3.7 (Dry) volume percent

1. Obtain containment hydrogen concentration at 100% core over-temperature from table below.
2. Obtain current containment hydrogen concentration (e.g., GS02A/GS02B).
3. Estimate over-temperature damage using:

$$\% \text{ Core Damage}_{H_2} = \frac{\text{Current } H_2 \text{ Concentration}}{\text{Predicted } H_2 \text{ Concentration at 100\% Overtemp Damage}} (100)$$

7.3.4 Difference of fuel over-temperature estimates from containment radiation and core exit thermocouples LESS THAN 50%, using:

$$\text{ABSOLUTE VALUE} \left[\frac{\% \text{ Core Damage}_{CRM} - \% \text{ Core Damage}_{CET}}{\% \text{ Core Damage}_{CRM}} \right]$$

7.3.5 Containment radiation monitor estimates should not deviate from hydrogen estimate by more than 25% damage.

$$ABSOLUTE VALUE \left[\frac{\% Core Damage_{H_1} - \% Core Damage_{CRM}}{\% Core Damage_{H_1}} \right]$$

- 7.3.6 Core exit thermocouple estimates should not deviate from hydrogen estimate by more than 25% damage.

$$ABSOLUTE VALUE \left[\frac{\% Core Damage_{H_2} - \% Core Damage_{CET}}{\% Core Damage_{H_2}} \right]$$

- 7.3.7 Confirm Reasonableness of Fuel Over-temperature Damage Estimates.

1. Compare actual values to expected response
 - o RVLIS LESS THAN 40%
 - o Hot Leg RTD GREATER THAN 650°F
 - o Source Range Monitor GREATER THAN 8000 CPS
 - o Containment radiation damage
 - o Core Exit Thermocouples damage
 - o Containment hydrogen concentration damage
 - d. Containment radiation monitor and core exit thermocouple estimates should not deviate from hydrogen estimate by more than 25% damage.
2. If expected response is not obtained, determine if the deviation can be explained from the accident progression
 - o Injection of water to the RCS
 - o Bleed paths from the RCS
 - o Direct radiation to the containment radiation monitors
 - o Hydrogen burn in containment or operation of hydrogen igniters or from conservatisms in the predictive model
 - o Fuel burnup
 - o Fission product retention in the RCS
 - o Fission product removal from containment

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o Recent RCS/containment pressure changes

7.3.8 Report fuel over-temperature damage estimate to the Engineering Coordinator.

7.3.9 Return to Step 7.1 in Plant Status Section.

8.0 RECORDS

8.1 The calculations generated by this procedure during an actual emergency are considered lifetime QA records.

8.2 The calculations generated by this procedure during a drill or exercise are non-QA records and should be retained by Emergency Planning for a period of one year.

9.0 FORMS

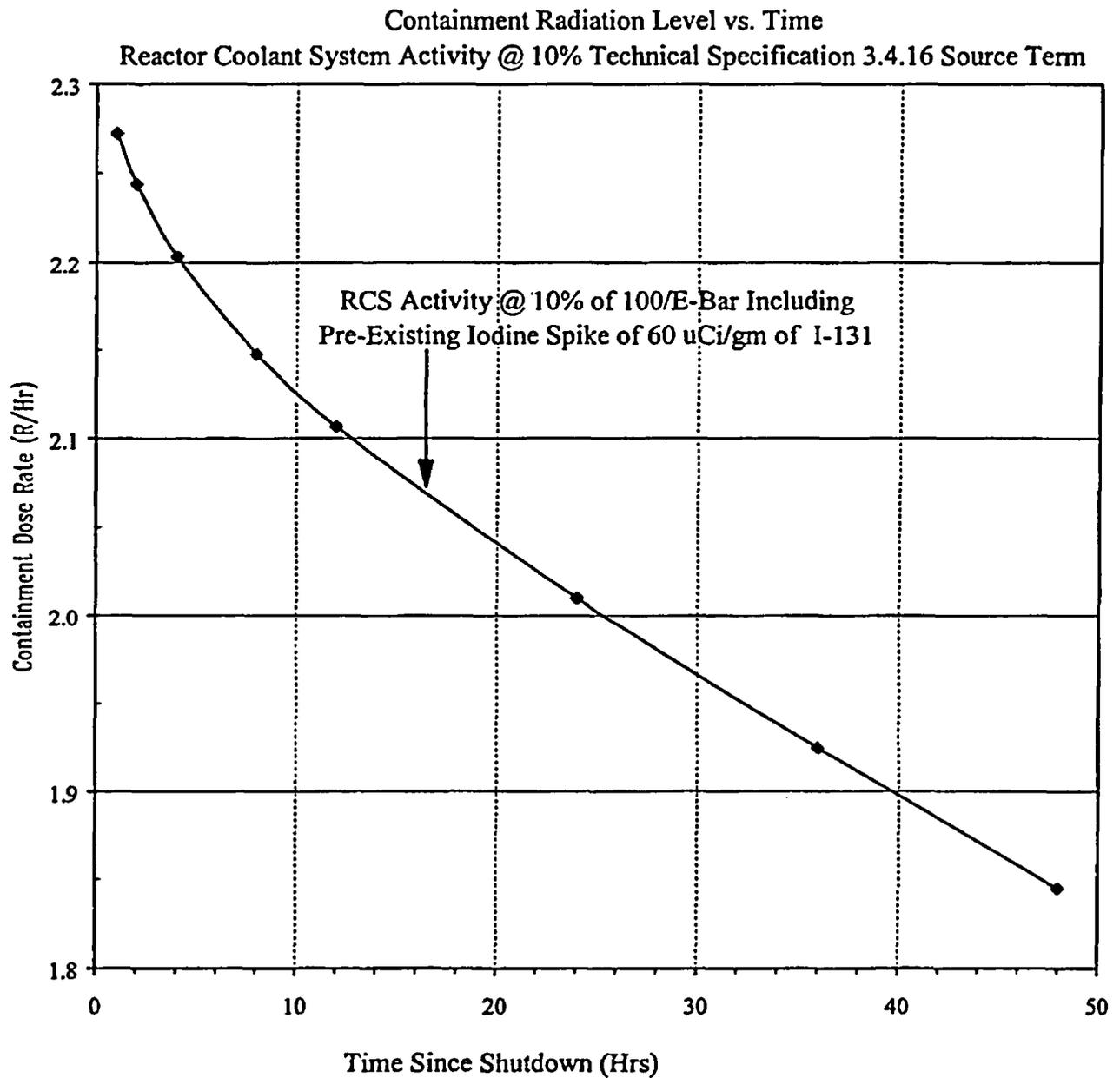
9.1 EPF 06-017-02, CORE DAMAGE ASSESSMENT DATA

- END -

FIGURE 1
RCS @10% TECHNICAL SPECIFICATION 3.4.16

NOTE

This chart is referred to as Setpoint identifier CRM1 in Reference 3.1.1.



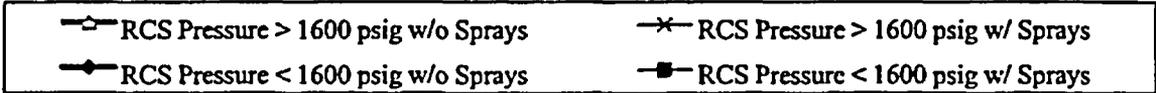
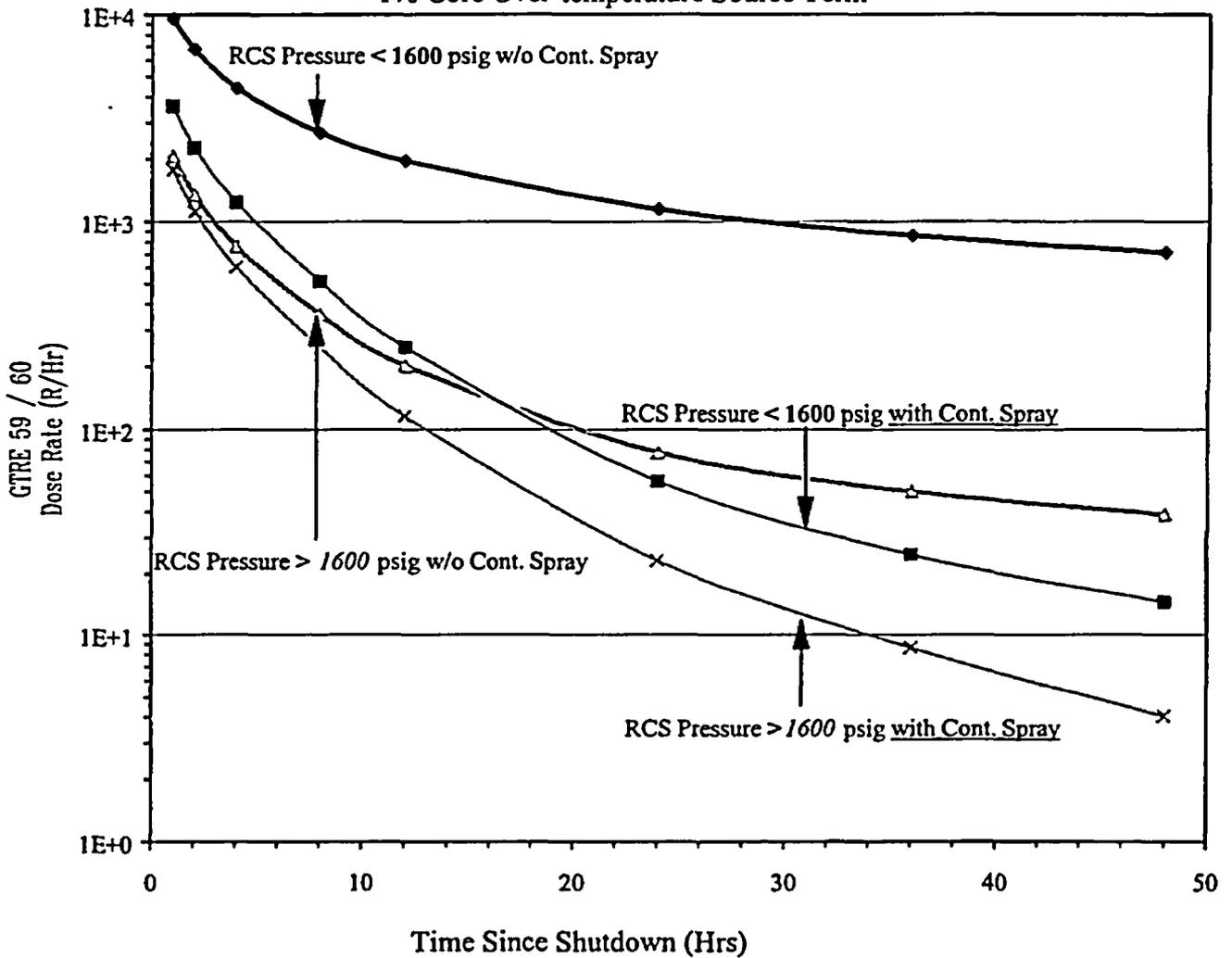
- END -

FIGURE 2
1% CORE OVER-TEMPERATURE

NOTE

This chart is referred to as Setpoint identifier CRM2 in Reference 3.1.1.

Containment Radiation Level vs. Time
1% Core Over-temperature Source Term



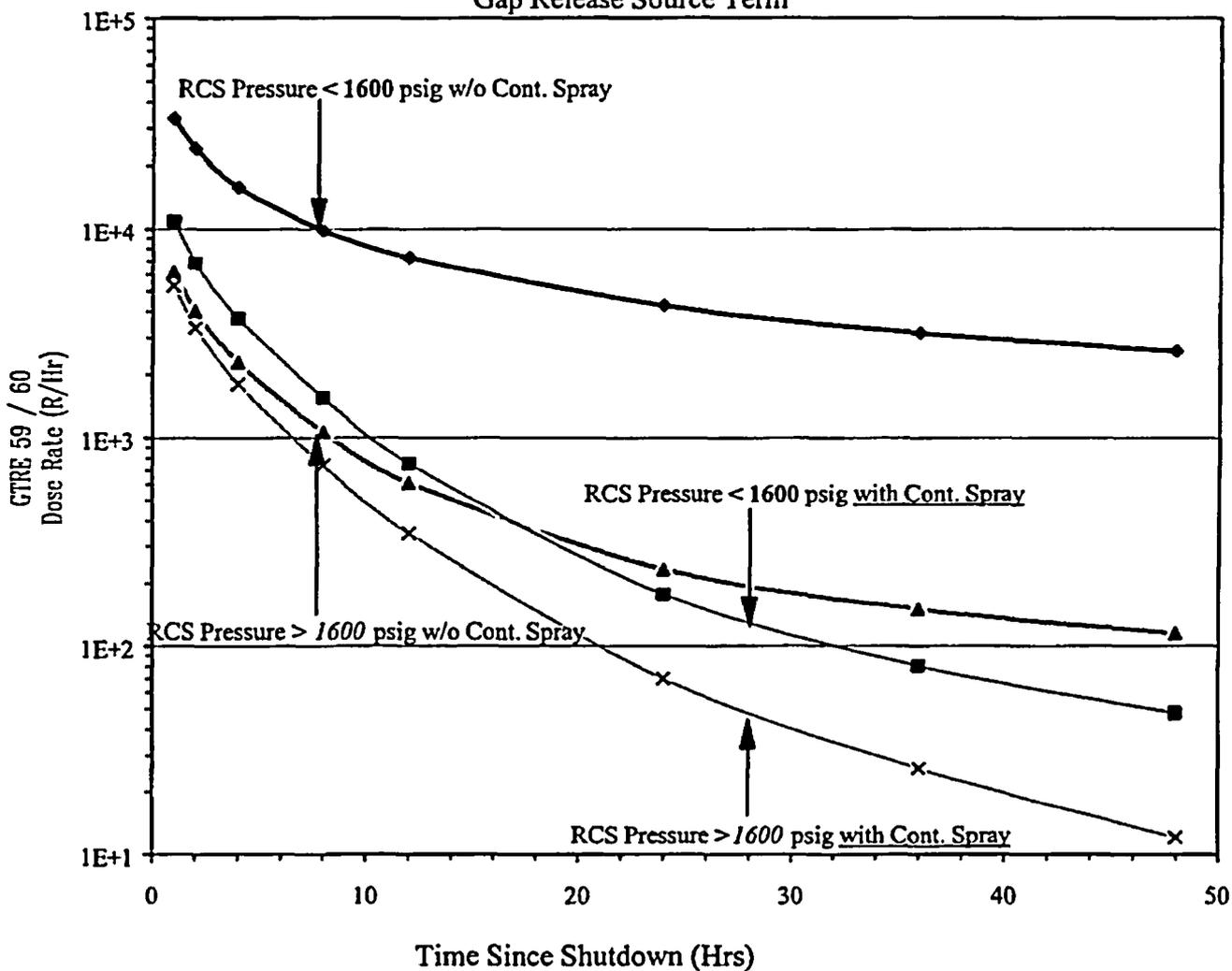
- END -

FIGURE 3
GAP RELEASE

NOTE

This chart is referred to as Setpoint identifier CRM3 in Reference 3.1.1.

Containment Radiation Level vs. Time
Gap Release Source Term



- ▲— RCS Pressure > 1600 psig w/o Sprays
- RCS Pressure < 1600 psig w/o Sprays
- x— RCS Pressure > 1600 psig w/ Sprays
- RCS Pressure < 1600 psig w/ Sprays

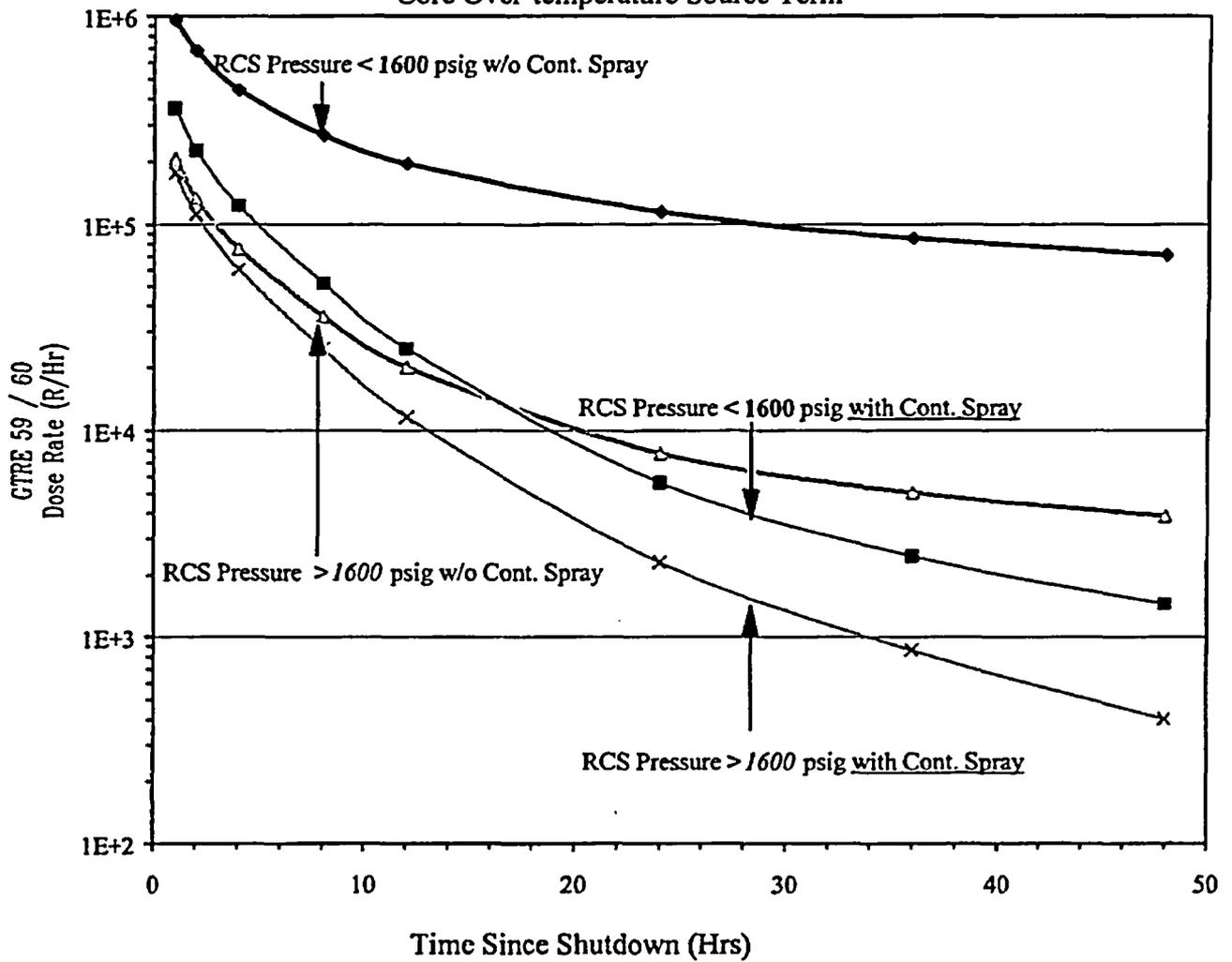
- END -

FIGURE 4
CORE OVER-TEMPERATURE

NOTE

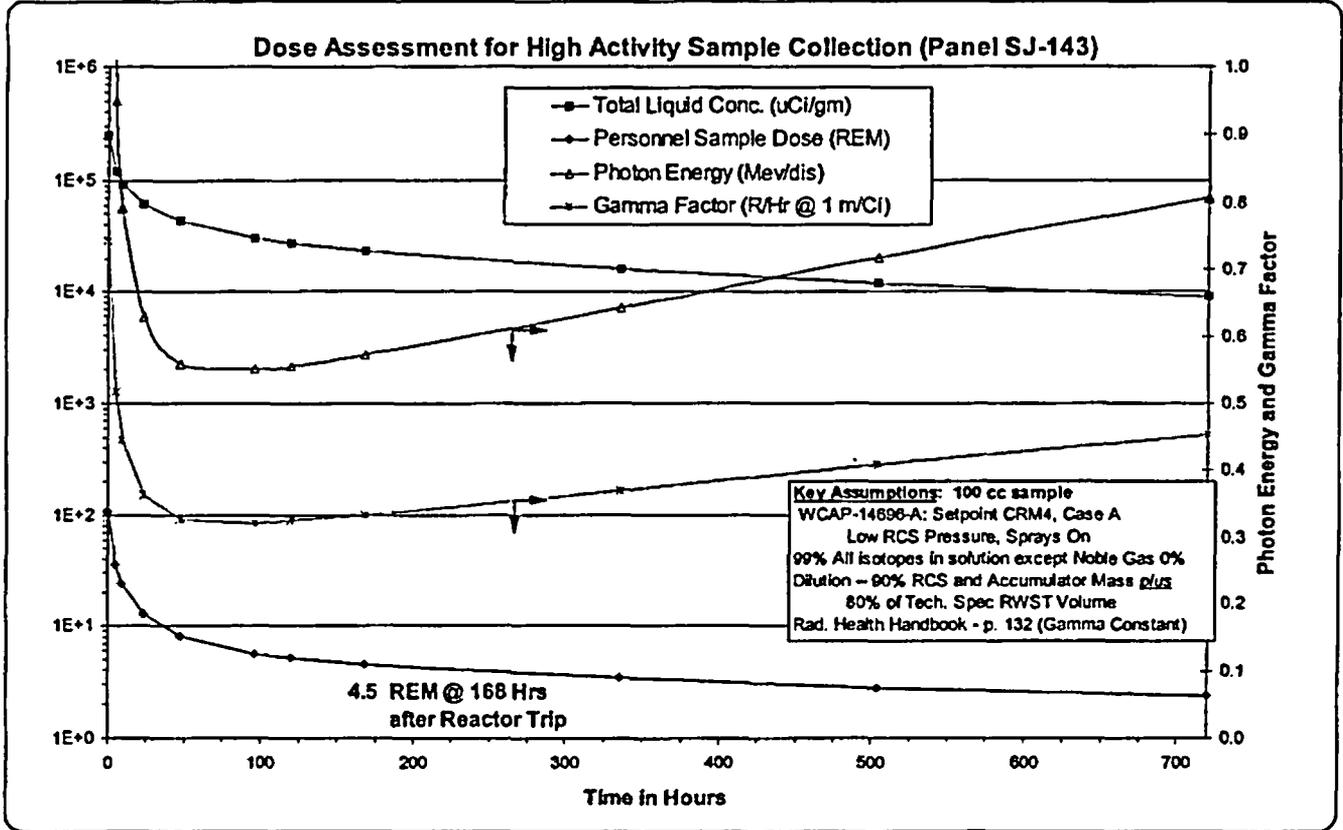
This chart is referred to as Setpoint identifier CRM4 in Reference 3.1.1.

Containment Radiation Level vs. Time
Core Over-temperature Source Term



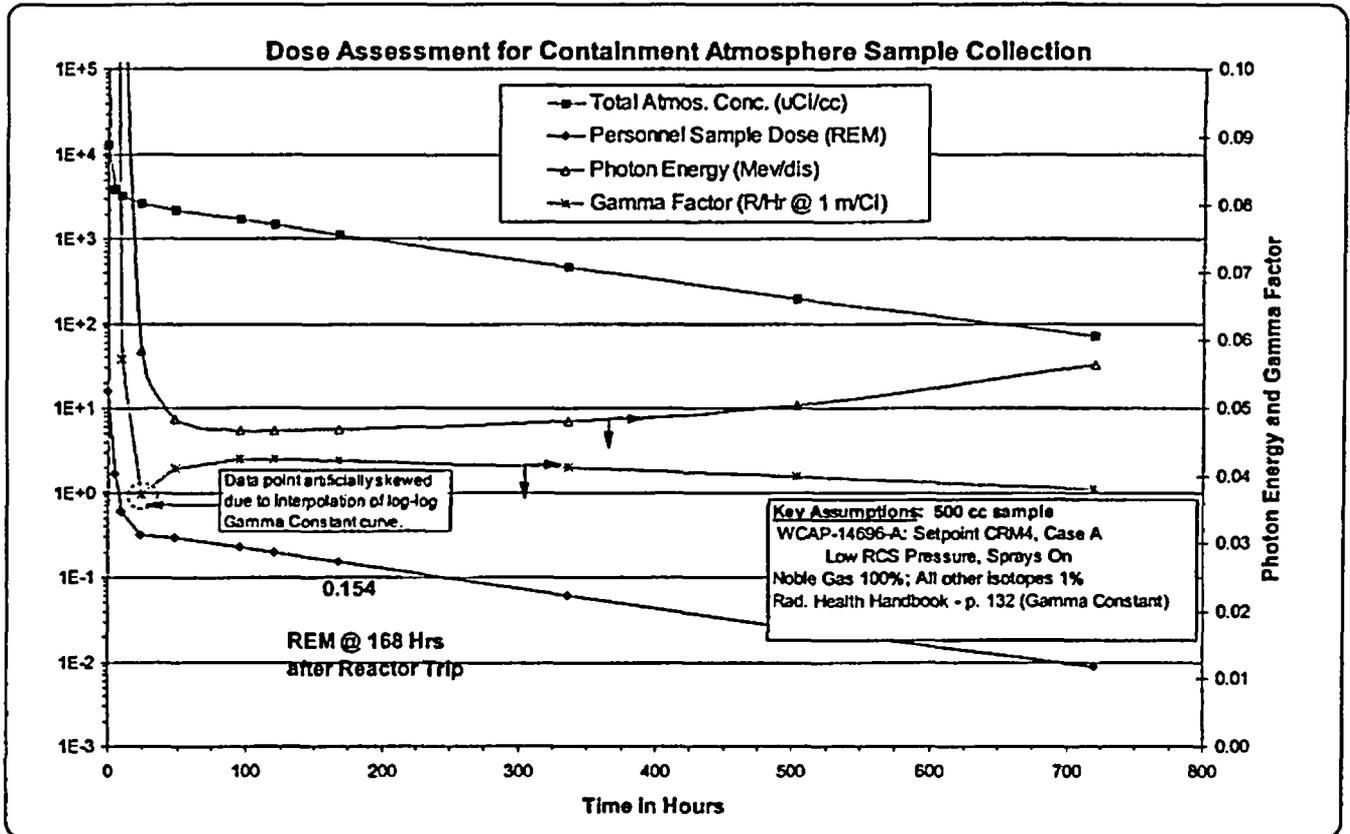
- END -

FIGURE 5
RCS/CTMT SUMP SAMPLE DOSE



- END -

FIGURE 6
CTMT ATMOSPHERE SAMPLE DOSE



- END -

OFF-SITE MONITORING INVENTORY CHECKLIST

REQUIREMENTS (REQ):

- | |
|--|
| 1. Inventory/Restock |
| 2. Check Seal Quarterly/Inventory Annually |
| 3. Operability Check |

Part I OFF-SITE MONITORING TEAM KIT				
Kit #:	Quarter:	Quantity		Date:
Item	REQ	Required	Present	Comments
Air Sampler Particulate Filters	1	1 Box (~100)		
Air Sampler Zeolite Filters	1	10		Must be sealed
9 Volt Batteries	1	~12		Expiration. Date _____
D Cell Batteries	1	~12		Expiration. Date _____
Calculator	1, 3	~1		
Check Source #: _____	1	1		
Compass	1	1		
Flashlights	1, 3	3		
B/G Survey Meter: Eberline RO-2 or RO-2A (Circle as appropriate) Cal Due Date: _____ WC #: _____	1, 3	1		
Frisker: Cal Due Date: _____ WC #: _____	1, 3	1		
Air Sampler-Lo Vol (SAIC Model H 809 V-I) Cal Due Date: _____ WC #: _____	1, 3	1		
10-Mile EPZ Map	1	1		
Rubber Gloves	1	3 pairs		
Masslin Cloth	1	5 towels		
Disposable Latex Gloves	1	~12 pairs		
Planchettes	1	~50		
Plastic Bags 6" x 8" or comparable	1	~25		
Sample Holder	1	1		
Dosimeter Charger	1, 3	1		
Smears	1	~150		
Air Sample Labels	1	~50		
Stopwatch	1, 3	1		
Tweezers	1	1		
Field Team Kit Manual EM# _____	1	1		
Potassium Iodide Tablets	1	Max Dose for 5 Individuals		Expiration Date: _____
Keys (lake gate, TLD boxes, Air Sampler, Met Tower)	1	1 each		
Quarters (\$)	1	~\$5.00		

