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CALLAWAY PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURE
EIP-ZZ-A0020
MAINTAINING EMERGENCY PREPAREDNESS

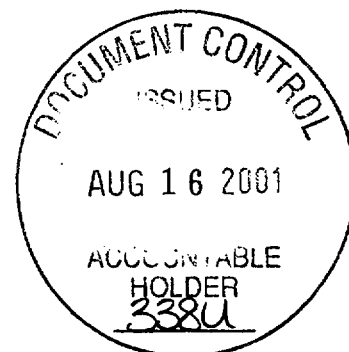
RESPONSIBLE DEPARTMENT Emergency Preparedness

PROCEDURE OWNER G. R. Pendergraff

WRITTEN BY G. R. Pendergraff

PREPARED BY G. R. Pendergraff

APPROVED BY Warren A. Witt



DATE ISSUED 8-17-01

This procedure contains the following:

Pages	<u>1</u>	through	<u>11</u>
Attachments	<u>1</u>	through	<u>6</u>
Tables	<u> </u>	through	<u> </u>
Figures	<u> </u>	through	<u> </u>
Appendices	<u> </u>	through	<u> </u>
Checkoff Lists	<u> </u>	through	<u> </u>

This procedure has checkoff list(s) maintained in the mainframe computer.

Conversion of commitments to TRS reference/hidden text completed by Revision Number:

Non-T/S Commitments 018

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MAINTAINING EMERGENCY PREPAREDNESS

1 PURPOSE AND SCOPE

This procedure provides guidance for the review and maintenance of the Emergency Preparedness Program. This should include:

- Annual review of the Radiological Emergency Response Plan (RERP);
- Annual review of the Emergency Implementing Procedures;
- Oversight of the RERP Training Program; and
- An independent annual review of the Emergency Preparedness Program.

2 RESPONSIBILITIES

2.1 NUCLEAR SAFETY REVIEW BOARD (NSRB) (COMN 2681)

The Nuclear Safety Review Board is responsible for providing an independent annual review of the Radiological Emergency Preparedness Program.

2.2 SUPERINTENDENT, PROTECTIVE SERVICES

2.2.1 The Superintendent, Protective Services is responsible for ensuring an effective integrated program is maintained to provide for protection of the health and safety of the public in the event of a radiological emergency at the Callaway Plant. These responsibilities include:

2.2.1.1 Identification of candidates to become Emergency Response Personnel.

2.2.1.2 Notifying the Training Department of changes to the Emergency Response Organization (ERO), procedures, or equipment that effect RERP training activities.

2.2.1.3 Approval of RERP training objectives and review of substantial content changes to RERP training material.

2.2.1.4 Approval of changes to the RERP Training Program.

2.2.1.5 Development and conduct of Drills and Exercises.

2.3 EMERGENCY PREPAREDNESS (EP)

Emergency Preparedness (EP) is responsible for identifying the Emergency Response Organization and for maintaining the Radiological Emergency Response Plan, Emergency Implementing Procedures, and Emergency Response Facilities for use by the Callaway Plant staff in responding to a radiological emergency. EP is also responsible for supporting State and Local government agencies with technical and training assistance to ensure their plans, procedures, facilities and personnel are prepared for response to a radiological emergency at the Callaway Plant.

2.4 TRAINING DEPARTMENT

The Training Department is responsible for preparation and conduct of periodic training as identified in **EIP-ZZ-A0066**, RERP Training Program, including assisting in the development of radiological emergency response drills.

2.4.1 SUPERINTENDENT, TRAINING

The Superintendent, Training is responsible for the overall administration of the RERP Training Program, as delineated in **EIP-ZZ-A0066**.

3 PROCEDURE

3.1 ANNUAL REVIEW (COMN 2681)

3.1.1 An independent review of the Emergency Preparedness Program SHALL be performed at least once every twelve (12) months under the direction and cognizance of the Nuclear Safety Review Board. Each review SHALL include an evaluation for adequacy of interfaces with State and local governments and of plant emergency drills, exercises, capabilities, and procedures.

3.1.2 Open findings identified SHALL be reviewed, investigated, and resolved in accordance with **APA-ZZ-00500**, Corrective Action Program.

3.1.3 Any portion of the review involving an evaluation for the adequacy of interfaces with State and local governments SHALL be made available to the affected governmental agency.

- 3.1.4 The results of the review of the Emergency Preparedness Program, along with recommendations for improvement, SHALL be documented and reported to Plant and company management, and retained for a period of 5 years.
- 3.2 RADIOLOGICAL EMERGENCY RESPONSE PLAN (RERP) AND EMERGENCY IMPLEMENTING PROCEDURES (EIP)S MODIFICATIONS
- 3.2.1 The RERP and the letters of agreement/purchase orders listed in the RERP SHALL be reviewed annually and periodically updated as needed. (COMN 3924)
- 3.2.1.1 If the RERP is not revised as a result of the annual review, the review should be documented by placing a letter into the EP RERP file stating that the RERP was reviewed and no changes were needed.
- 3.2.1.2 The annual review of the Letters of Agreement/Purchase Orders should be documented by placing a letter in the EP RERP Letters of Agreement file. This letter should describe either how each letter was verified current or that the letter was updated as a result of the review.
- 3.2.1.3 All revisions and change notices to the RERP are prepared, reviewed, and processed in accordance with **KDP-ZZ-00400**, Emergency Preparedness 10CFR50.54(q) Evaluations, and **KDP-ZZ-00410**, Radiological Emergency Response Plan (RERP) Change Notice/Revision Process.
- 3.2.1.4 All changes to the RERP SHALL be made available to the State and appropriate local government emergency response agencies. (COMN 43392)
- 3.2.2 The EIPs SHALL be reviewed annually. (COMN 42346)
- 3.2.2.1 Modification or revisions to EIPs are reflected in the periodic update of the RERP.
- 3.2.2.2 Any changes or revision to the EIPs that affects the interface with State and/or local government emergency response plans should be made available to the affected governmental agency.
- 3.2.2.3 Telephone numbers listed in the EIPs SHALL be reviewed and updated at least quarterly as per the Plant's Surveillance Program. (COMN 3925)

- 3.2.3 The RERP and the EIP distribution lists SHALL be reviewed annually to ensure that the proper personnel, departments, and agencies are included on the lists as per the Plant's Surveillance Program. (COMN 20409)
- 3.3 EMERGENCY RESPONSE FACILITY AND EQUIPMENT MODIFICATION
- 3.3.1 When necessary changes, repairs, or modifications to Emergency Response Facilities are identified, the work should be accomplished by the appropriate Plant department following the procedures outlined in APA-ZZ-00320, Initiating and Processing Work Requests.
- 3.3.2 If the change or modification is of such a degree as to require a design change to the Emergency Response Facility, the change or modification MUST be accomplished following the guidance of APA-ZZ-00600, Design Change Control.
- 3.4 ON-SITE EMERGENCY RESPONSE TRAINING (COMN 3907)
- On-site emergency response training is conducted in accordance with EIP-ZZ-A0066. It covers the training provided for both Emergency Response Personnel and Non-Emergency Response Personnel.
- 3.4.1 NON-EMERGENCY RESPONSE PERSONNEL
- Non-Emergency Response Personnel are those personnel who are granted unescorted access to the Callaway Plant, but who do not have designated responsibilities in the Emergency Response Organization. Non-Emergency Response Personnel SHALL successfully complete GET training (Callaway Orientation – T8.0030.6/8). This training includes duties and responsibilities of emergency response and non-emergency response personnel, emergency classifications, assembly areas, alarms, emergency response actions and accountability/evacuation. (COMN 3905)
- 3.4.2 EMERGENCY RESPONSE PERSONNEL (COMN 42658)
- Emergency Response Personnel are selected and assigned to a position in the Emergency Response Organization per EIP-ZZ-A0001, Emergency Response Organization. Prior to assuming a position in the Emergency Response Organization (ERO), each individual will complete required initial training.

3.4.2.1 RERP INITIAL TRAINING

RERP Initial Training required for each ERO position is identified in **EIP-ZZ-A0066. (COMN 3905)**

3.4.2.2 RERP CONTINUING TRAINING

RERP Continuing Training should be based, as appropriate, on changes to applicable procedures and processes, Plant and industry experiences, and the results of previous drills and Exercises.

3.4.2.2.1 Drills and Exercises may be utilized as training activities where familiarity with specific RERP duties and/or functions can be demonstrated.

3.4.2.2.2 The applicable provisions of **EIP-ZZ-A0066** MUST be met when utilizing drills and Exercises to meet training requirements.

3.5 OFF-SITE EMERGENCY RESPONSE TRAINING

3.5.1 Callaway Plant coordinates with SEMA in emergency planning and emergency response with four (4) counties which partially lie within the Plume Exposure Pathway (10-mile EPZ) and the city of Fulton. The county jurisdictions are Callaway, Gasconade, Montgomery and Osage Counties. (**COMN 42673**)

3.5.2 Off-site emergency response training is the responsibility of the Missouri State Emergency Management Agency (SEMA) in conjunction with the Missouri Department of Health (DOH), and local county agencies. Callaway Plant provides support to these agencies as requested.

3.5.3 Training for off-site fire fighting personnel includes radiological hazards, which may be encountered while fighting fires in the Plume Exposure Pathway. (**COMN 42508**)

3.5.4 For those local support services who may enter the site, Callaway Plant provides training which also includes site access procedures and the identity (by position title) of the individual who requests the services. (**COMN 42722**)

3.6 DRILLS AND EXERCISES

3.6.1 Emergency Preparedness has overall responsibility for conducting RERP drills and exercises on site. Additional guidance on conducting RERP drills and exercises is contained in **KDP-ZZ-02001, Drill and Exercise Program. (COMN 3917)**

- 3.6.2 Periodic drills SHALL be conducted in accordance with Attachment 1, Drill and Exercise Descriptions and Frequencies, to evaluate emergency response capabilities and to test specific aspects of emergency response plans, implementing procedures, and equipment. These drills may be incorporated with the RERP Continuing Training when the situation allows. **(COMN 3916)**
- 3.6.3 Unannounced drills MUST have prior approval.
 - 3.6.3.1 Approval should be obtained from departments most affected by the drill.
 - 3.6.3.2 Approval MUST be obtained from a Manager or above.
 - 3.6.3.3 Approval from the Shift Supervisor (SS) that is on shift at the time of the drill should be obtained for drills when on-shift personnel in the power block are expected to actively participate. If the on-shift Shift Supervisor is to actively participate, then prior approval should be obtained from a different Shift Supervisor.
- 3.6.4 To maintain the confidentiality of unannounced drills and exercises, personnel requiring knowledge of the drill or exercise should sign the Unannounced RERP Drill and Exercise Security Agreement (CA-#2553), Attachment 6. This includes controllers and evaluators from outside the EP Department. This also includes pre-staged personnel who have knowledge that could affect the evaluation of the drill or exercise.
- 3.6.5 Drills are not required to be conducted independently and may be conducted as part of an integrated drill or exercise.
- 3.6.6 Actual events that may cause the activation of the Radiological Emergency Response Plan (RERP) may not be substituted for a required drill or exercise.
- 3.6.7 Some drills are scheduled while others are unannounced. **(COMN 3916)**
- 3.6.8 Periodically arrangements SHALL be made for federal agencies to participate in Exercises. **(COMN 3967)**
- 3.6.9 Provisions SHALL be made to start an Exercise between 1800 and 0400 once every six (6) years. **(COMN 3968)**

3.7 DRILL AND EXERCISE DEVELOPMENT

Radiological Emergency Response Drills and Exercises are developed using **KDP-ZZ-02001** and the guidance in Attachment 2, Exercise Development Items, and the following guidelines:

- 3.7.1 Objectives SHALL be selected to include those listed in Attachment 3, Drill and Exercise Objectives, as necessary to meet the stated frequency requirements for each objective. **(COMN 3918)**
- 3.7.2 Development of off-site objectives and guidelines should be coordinated with appropriate State and local agencies, if applicable.
- 3.7.3 Exercises should include mobilization of appropriate Callaway Plant, State and local organizations to verify their ability to respond to an accident scenario, which requires implementation of on-site and off-site radiological emergency response plans.
- 3.7.4 Exercise and drill scenarios SHALL be varied to assure that all the major elements of on-site and off-site emergency response plans and organizations are tested within a six-year period. **(COMN 3917)**
- 3.7.5 Exercise objectives, extent of play, and scenarios are submitted to the Nuclear Regulatory Commission (NRC) and Federal Emergency Management Agency (FEMA) in accordance with **KDP-ZZ-00510**, Exercise Submittals to NRC/FEMA.
- 3.7.6 A Lead Controller, as designated by the Superintendent, Protective Services, SHALL be responsible for the overall conduct of Radiological Emergency Response Drills and Exercises. Utility provided controllers and evaluators SHALL be trained and briefed prior to the drill/exercise. **(COMN 3919)**
- 3.7.7 No actions should be performed during a drill or exercise which have the potential for affecting Plant operations.
- 3.7.8 Drill/exercise activities should be placed on hold or suspended, if an actual emergency arises.

- 3.7.9 Upon completion of drills and exercises, critiques SHALL be conducted. The lead facility participant in each Emergency Response Facility (Recovery Manager, Emergency Coordinator, Shift Supervisor, etc.) is normally designated to conduct a critique with the controllers, evaluators, and participants. (**COMN 3920**, **COMN 42978**)
- 3.7.10 The NRC and, if applicable, FEMA SHALL be invited to evaluate and critique the exercise. (**COMN 3920**)
- 3.7.11 The facility lead controller should record or have recorded any programmatic comments or deficiencies identified.
- 3.7.12 Emergency Preparedness collects all facility critiques and dispositions deficiencies and areas for improvement in accordance with Plant procedures. (**COMN 3920**)
- 3.7.13 Upon completion of a drill or exercise, forward a copy of the Drill Approval Form (if applicable) and Drill/Exercise Objectives to Document Control as QA Records.
- 3.8 TESTS AND SURVEILLANCES
- 3.8.1 EMERGENCY EQUIPMENT KITS
- 3.8.1.1 Emergency equipment kits are located in various Emergency Response Facilities and contain supplies, equipment and procedures that may be utilized during an emergency.
- 3.8.1.2 Health Physics supplies and equipment contained in the emergency equipment kits are inventoried and maintained by the Health Physics Department, per **HTP-ZZ-05007**, Maintenance and Inventory of HPOPS Emergency Equipment Kits, and **HTP-ZZ-07003**, Maintenance and Inventory of Health Physics Technical Support Emergency Equipment Kits.
- 3.8.2 EMERGENCY PACKETS

Emergency packets containing copies of procedures, forms, and clerical supplies are maintained in accordance with **KDP-ZZ-00300**, Emergency Packet Maintenance.

3.8.3 EMERGENCY TELEPHONE DIRECTORY (ETD)

The ETD is part of the Callaway Plant Personnel Data Base System. A document copy of the ETD can be printed upon demand. The ETD is printed and distributed quarterly per the Plant's Surveillance Program.

3.8.4 PUBLIC ALERT SYSTEM

A Public Alert System is maintained to provide prompt notification of the public in the event of an emergency at the Callaway Plant. The system is tested monthly in accordance with the Plant's Surveillance Program.

3.8.5 PUBLIC INFORMATION PROGRAM

A Public Information Program, in cooperation with Corporate Communications, is maintained to ensure that the general public and news media in the Plume Exposure Pathway Emergency Planning Zone are provided with information regarding an emergency at the Callaway Plant on an annual basis. The Public Information Program is maintained in accordance with the Plant's Surveillance Program. (COMN 42507)

3.8.6 COMMUNICATION TESTS

Communications with Federal, State and local governments will be tested monthly. Once a quarter, this will be done transmitting a simulated emergency notification to ensure the content of the message is understood. Field monitoring team communications is tested annually from the EOF and Backup EOF. These tests are done from different sectors in the field in accordance with the Plant's Surveillance Program and also include the aspect of understanding message content.

3.8.7 EMERGENCY RESPONSE DATA SYSTEM (ERDS) TESTING

ERDS testing, involving actual Plant data transmission to the Nuclear Regulatory Commission, is an evolution that is scheduled with the NRC and performed quarterly in accordance with the Plant's Surveillance Program.

3.8.8 EMERGENCY ACTION LEVELS (EALs)

EALs SHALL be reviewed with State and local agencies on an annual basis and documented using Attachment 5, Annual EAL Review. (**COMN 43393**)

3.8.9 Tool kits are available in the Technical Support Center. They contain various mechanical, electrical, and instrument and control tools that may be used during an emergency. **CARS 200104423**

3.8.9.1 Work Control Electrical, Work Control Mechanical, and Instrument & Control (I&C) Departments maintain the tool kits in accordance with the Preventive Maintenance Program.

4 REFERENCES

4.1 10CFR50.47

4.2 10CFR50.54

4.3 10CFR50, Appendix E

4.4 NUREG 0654, FEMA-REP-1

4.5 **APA-ZZ-00320**, Initiating and Processing Work Requests

4.6 **APA-ZZ-00500**, Corrective Action Program

4.7 **APA-ZZ-00600**, Design Change Control

4.8 **EIP-ZZ-A0001**, Emergency Response Organization

4.9 **EIP-ZZ-A0066**, RERP Training Program

4.10 **FPP-ZZ-00009**, Fire Protection Training Program

4.11 **HTP-ZZ-05007**, Maintenance and Inventory of HPOPS
Emergency Equipment Kits

4.12 **HTP-ZZ-07003**, Maintenance and Inventory of Health Physics
Technical Support Emergency Equipment Kits

4.13 **KDP-ZZ-00300**, Emergency Packet Maintenance

4.14 **KDP-ZZ-00400**, Emergency Preparedness 10CFR50.54(q)
Evaluations

- 4.15 **KDP-ZZ-00410**, Radiological Emergency Response Plan (RERP)
Change/Revision Process
- 4.16 **KDP-ZZ-00510**, Exercise Submittals to NRC/FEMA
- 4.17 **KDP-ZZ-02001**, Drill and Exercise Program

5 RECORDS

5.1 QA RECORDS

- 5.1.1 Annual EP Review Records (File G170.0046)
- 5.1.2 Drills/Annual Exercises and Approval Form (File K235.0001)
- 5.1.3 Letter documenting annual review of RERP (File A210.0038)
- 5.1.4 Letter documenting annual review of RERP Letters of Agreement
(File K190.0011)
- 5.1.5 Annual EAL Review (File A190.0001)
- 5.1.6 Callout Tests/Drills (File K231.0024)
- 5.1.7 Pre-Exercise Drills (File K233.0000)
- 5.1.8 Medical Emergency Drills (File K234.0001)
- 5.1.9 Remedial Exercises (File K235.0002)
- 5.1.10 Other Drills (File K234.0000)

DRILL AND EXERCISE DESCRIPTIONS AND FREQUENCIES

These are minimum frequencies required. Additional drills may be held as determined by the Superintendent, Protective Services.

COMN	TYPE	DESCRIPTION	FREQUENCY	RESPONSIBLE DEPT.
3917	Exercise	The Exercise tests the integrated capability of the Callaway Plant emergency response organizations to respond to an emergency. (State and local emergency organizations are tested as required by Federal Guidelines.)	Biennial	Emergency Preparedness
3917		The Exercise SHALL provide for periodic participation by Federal Emergency Response agencies.	Periodic	Emergency Preparedness
3968		Provisions SHALL be made to start an exercise between 6:00 p.m. and 4:00 a.m.	At least once every 6 years.	Emergency Preparedness
20602	Call-Out Test	This test verifies the ability of the ERO to be contacted and estimate their arrival at their specific Emergency Response Facility.	Quarterly (Test)	Emergency Preparedness
	Call-Out Drill	This drill verifies the ability to actually augment the emergency response organization as specified in the RERP.	At least once every 6 years (Drill)	Emergency Preparedness
3921	Medical Emergency Drill	This drill involves the response to simulated contaminated injured/ill individuals providing for periodic participation by off-site ambulance services and medical treatment facilities.	Annually	Emergency Preparedness and SEMA
3921	Medical Emergency MERT Drill	This drill involves response to simulated medical emergencies providing participation by the onsite Medical Emergency Response Team (MERT). These drills are conducted in accordance with the Fire Protection Training Program, FPP-ZZ-00009 .	At least annually	Fire Protection
3923	Health Physics Drill	This drill involves the response to, and analyses of, simulated elevated airborne and liquid samples, and direct radiation measurements in the environment.	Semi-Annually	Emergency Preparedness
		Analysis of in-plant liquid samples with actual elevated radiation levels including use of the post-accident sampling system (PASS).	Annually	Emergency Preparedness
3922	Radiological Monitoring Drill	Plant environs and radiological monitoring drills (on and off site) are conducted annually. These drills include collection and analysis of all sample media (e.g., water, vegetation, soil, and air) and provisions for communications and record keeping.	Annually	Emergency Preparedness
	Fire Drills	These drills are conducted in accordance with the Fire Protection Program.	Periodically	Fire Protection

EXERCISE DEVELOPMENT ITEMS

Lead Controller Responsibilities

1. Drill Approval Form - Attachment 4 (if applicable)
2. Drill/Exercise Scenario Package Contents (**COMN 42506**)
 - a. On-site Objectives
 - b. On-site Guidelines and Extent of Play
 - c. Controllers Instructions
 - d. Controller List
 - e. Participant List
 - f. On-site Evaluation Material
 - g. Narrative Summary
 - h. Logs, Watch Turnover Material, Work Packages and RWPs etc.,
 - i. On-site Sequence of Events
 - j. Simulator Actions
 - k. Initial Conditions
 - l. On-site Messages
 - m. On-site Mini-scenarios
 - n. Plant parameters, Rad Monitor Data, Chemistry Data, and other Simulated Plant Data
 - o. Meteorological Data
 - p. In-Plant Survey, Perimeter, and Field Monitoring Rad Data
 - q. Ingestion Pathway Rad Data
3. Identify On-site Participants, Controllers, and Evaluators
4. Complete On-site Controller/Evaluator Briefings/Training
5. Schedule and Prepare Simulator
6. Scenario Printing and Distribution
7. Prepare and Distribute Accountability Exemption Lists
8. Provide for and Coordinate Controller Communications
9. Initial Condition Briefings

<p><u>NOTE:</u> Not every item listed is applicable for each drill or exercise.</p>

EXERCISE DEVELOPMENT ITEMS

Emergency Preparedness Department Off-Site Responsibilities

1. Drill/Exercise Scenario Package Contents
 - a. Off-site Objectives
 - b. Off-site Guidelines and Extent of Play
 - c. Off-site Evaluation Material
 - d. Off-site and Public Information Sequence of Events
 - e. Off-site, Public Information, Media Monitor, and Rumor Control Messages
 - f. Off-site Mini-Scenarios
2. Submittal of Objectives and Guidelines and Scenario to the NRC and FEMA.
3. Identify Off-site Controllers and Evaluators
4. Schedule Off-site Controller and Evaluator Briefing/Training
5. Schedule NRC and FEMA Entrance and Exit Meetings
6. Schedule Facilities (Except Simulator)
7. Place Drill/Exercise Meal Orders
8. Drill/Exercise Critiques

<p><u>NOTE:</u> Not every item is applicable for each drill or exercise.</p>
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DRILL AND EXERCISE OBJECTIVES

- I. Objectives That SHALL Be Met Each Year (COMN 3918)
 - A. Demonstrate the ability to perform accident detection and assessment.
 - B. Demonstrate the ability to classify an emergency.
 - C. Demonstrate the ability to notify on-site and off-site emergency response personnel.
 - D. Demonstrate primary communications between the plant, its various facilities, and other emergency response organizations.
 - E. Demonstrate emergency radiological controls.
 - F. Demonstrate the ability to make Protective Action Recommendations to off-site authorities.
 - G. Demonstrate the ability to augment emergency response organizations.
 - H. Demonstrate the ability to staff the On-Shift Emergency Response Organization.

II. Objectives That SHALL Be Met Over a 6-Year Period

- A. Demonstrate emergency response capabilities during varied conditions. (Off-hours staffing 6 p.m. to 4 a.m.; various weather conditions; unannounced). (COMN 3968)
- B. Demonstrate the activation of the Joint Public Information Center (JPIC) and dissemination of information to the public.
- C. Demonstrate the ability to use the Fire Brigade.
- D. Demonstrate the use of a Medical Emergency Response Team (MERT) and/or search and rescue teams.
- E. Demonstrate the ability to provide Emergency Medical Services (EMS) for contaminated injured individuals. (COMN 3921)
- F. Demonstrate that security can allow for prompt access of emergency equipment and support.
- G. Demonstrate the availability of backup communication capabilities.
- H. Assist the State of Missouri in performing rumor control.
- I. Demonstrate the use of emergency power (where not a part of plant safety systems, e.g. Technical Support Center (TSC)).
- J. Demonstrate the ability to evacuate Emergency Response Facilities (ERFs) and relocate to backup ERFs where applicable.
- K. Demonstrate the ability to provide support to off-site agencies for environmental sampling and analysis, and protective action recommendations for the Ingestion Pathway.
- L. Demonstrate the ability to perform field monitoring, including soil, vegetation, and water samples.
- M. Demonstrate the ability to determine the magnitude and impact of a radiological release.
- N. Demonstrate the capability of post accident coolant sampling and analysis.
- O. Demonstrate the ability to provide for the use of potassium iodide.
- P. Demonstrate the ability to account for site personnel.
- Q. Demonstrate the ability to perform plant recovery and plant re-entry.

UNANNOUNCED RERP DRILL APPROVAL FORM

Drill Type _____ Drill Date _____

Start Time _____

Expected Duration _____

Brief Drill Scenario:

Prepared By:

NameTitleDate

Approved by Responsible Department(s) _____
Signature Date_____
Signature Date_____
Signature DateManager Approval _____
Signature DateShift Supervisor Approval* _____
Signature Date

*Should be obtained if personnel on-shift in the power block are expected to participate.

Annual EAL Review

Date

____ EIP-ZZ-00101, Emergency Action Levels (EALs), have been reviewed with me and I understand this fulfills the annual review requirement.
(COMN 43393)

Callaway County

County Commissioner/EMD

Gasconade County

County Commissioner/EMD

Montgomery County

County Commissioner/EMD

Osage County

County Commissioner/EMD

State Emergency Management Agency

SEMA Director/State Representative

Unannounced RERP Drill and Exercise Security Agreement

I acknowledge that I have acquired specialized knowledge about the scheduled drill or Exercise indicated below. I agree that I will not knowingly divulge any information about this drill or Exercise scenario to any unauthorized person.

An unauthorized person is anyone that may be called upon to participate as a responder in the scheduled drill or Exercise. (Unannounced drills are considered scheduled drills or Exercises.)

I understand that as a controller, evaluator, pre-designated participant required to be staged, I will keep and control any scenario-related materials, including the dates for unannounced drills or Exercises, in a secured manner. Additionally, I acknowledge that if I allow disclosure of information or material of this nature to unauthorized persons, it could result in the failure of the drill or Exercise.

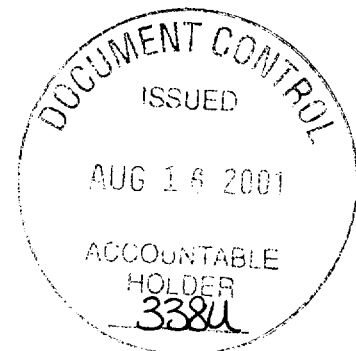
Scheduled drill/Exercise Date: _____

Printed Name	Signature	Date
_____	_____	_____
_____	_____	_____
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CALLAWAY PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURE

EIP-ZZ-00260

EVENT CLOSEOUT/PLANT RECOVERY

RESPONSIBLE DEPARTMENT EMERGENCY PREPAREDNESSPROCEDURE OWNER W. R. BevardWRITTEN BY W. R. BevardPREPARED BY W. R. BevardAPPROVED BY Warren A. WhitDATE ISSUED 8-17-01

This procedure contains the following:

Pages	<u>1</u>	through	<u>7</u>
Attachments	<u>1</u>	through	<u>3</u>
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This procedure has checkoff list(s) maintained in the mainframe computer.Conversion of commitments to TRS reference/hidden text completed by Revision Number:Non-T/S Commitments 010

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EVENT CLOSEOUT/PLANT RECOVERY

1 PURPOSE AND SCOPE

- 1.1 Provides guidelines for determining when Event Closeout can be declared.
- 1.2 Provides guidelines for directing plant recovery operations including:
 - Determining when plant recovery can be declared.
 - Establishing a recovery organization.
 - Directing initial and long term recovery operations.

2 DEFINITIONS

- 2.1 Event Closeout - The condition declared after Emergency Action Level (EAL) specific criteria has been met and initiates the transition from emergency operations back to normal operations. Event closeout is typically declared after response to an Unusual Event or Alert has been completed.
- 2.2 Recovery - The condition declared after the immediate hazards to life and safety have been removed and the following conditions exist. **COMN 42504**
 - a. In-plant radiation levels are stable or decreasing with time,
 - b. The reactor is stable with adequate core cooling capability,
 - c. Release of radioactive materials to the environment are controlled and within Radioactive Effluent Controls limits,
 - d. Fire, natural events, security threats or other similar emergency conditions are under control and plant effects assessed.

Recovery is typically declared after response to a Site or General Emergency has been completed.

3 RESPONSIBILITIES

3.1 EMERGENCY COORDINATOR

- 3.1.1 Assesses plant conditions and determines when those plant conditions warrant the declaration of plant Recovery or Event Closeout. **COMN 42504**

3.2 RECOVERY MANAGER

- 3.2.1 Assumes overall command and control of Callaway Plant Recovery operations. Coordinates the recovery with the Manager, Callaway Plant and off-site organizations utilizing their input. **COMN 42488**
- 3.2.2 Ensures that Plant personnel and off-site authorities are informed when the emergency has been closed out or recovery declared, as appropriate. **COMN 3931**
- 3.2.3 Establishes a recovery organization capable of maintaining the plant in a stable condition and directs recovery operations, in an effort to restore the plant to normal operating conditions.
- 3.2.4 Ensures that Plant recovery operations which have a potential for affecting off-site recovery operations are coordinated with off-site authorities.
- 3.2.5 Provides off-site authorities with recommendations for off-site recovery activities.
- 3.2.6 Evaluates and approves/disapproves requests for Plant support for off-site recovery activities. **COMN 3933**

4 PROCEDURE

4.1 EVENT CLOSEOUT DECLARATION

- 4.1.1 Assess plant conditions using Attachment 1 to determine if Event Closeout should be implemented when the criteria for the applicable EAL is met.
- 4.1.2 Notify site personnel of Event Closeout as follows:
- 4.1.2.1 Sound the plant emergency alarm

- 4.1.2.2 Announce the "Event Closeout" portion of Attachment 2 over the plant gai-tronics system.
- 4.1.2.3 Notify off-site agencies of the Event Closeout declaration in accordance with **EIP-ZZ-00201**, Notifications.
- 4.1.2.3.1 The Recovery Manager should provide a verbal summary of the event to the counties and SEMA upon closeout and extend an invitation to the ERT per the Event Review Team Checklist of **APA-ZZ-00542**, Event Review.
- 4.1.2.3.2 A written summary of the event should be provided to the counties and SEMA by Emergency Preparedness on the next working day.
- 4.1.3 Ensure that a CARS documenting the event which led to the emergency has been submitted in accordance with **APA-ZZ-00500**, Corrective Action Program.
- 4.1.4 Ensure that an in service inspection is conducted on all steam generators per the Callaway Plants' Technical Specifications, when any of the following have occurred:
 - a. Reactor Coolant System (RCS) to secondary tube leak greater than allowed by Technical Specification,
 - b. A seismic occurrence greater than Operating Basis Earthquake (OBE),
 - c. A Loss of Coolant Accident (LOCA) requiring activation of the Engineered Safety Features (ESF),
 - d. A Main Steam or Feedwater line break.
- 4.1.5 If the emergency was due to high winds/tornado hitting the plant site, ensure divers check the Ultimate Heat Sink (UHS) pond for debris.

4.2 PLANT RECOVERY DECLARATION

- 4.2.1 Assess plant conditions using Attachment 1 to determine if Plant Recovery can be declared when the criteria for the applicable EAL is met.

<p><u>NOTE:</u> Review APA-ZZ-00521, Government Agency Interface Instructions, if a NRC Incident Investigation Team is mobilized.</p>
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- 4.2.2 Discuss with the NRC the intent to declare Plant Recovery prior to the declaration if possible. **COMN 42504**
- 4.2.3 Notify site personnel of 'Plant Recovery' as follows: **COMN 3934**
- 4.2.3.1 Sound the plant emergency alarm.
- 4.2.3.2 Announce the 'Plant Recovery' portion of Attachment 2 over the plant gai-tronics system.
- 4.2.4 Notify off-site agencies of the declaration of Plant Recovery in accordance with **EIP-ZZ-00201**, Notifications. **COMN 3934**
- 4.2.4.1 The Recovery Manager should provide a verbal summary of the event to the counties and SEMA upon declaration of plant recovery and extend an invitation to the ERT per the Event Review Team Checklist of **APA-ZZ-00542**, Event Review.
- 4.2.4.2 A written summary of the event should be provided to the counties and SEMA by Emergency Preparedness on the next working day.
- 4.2.5 Determine the staffing requirements necessary to support recovery operations. **COMN 3932**
- ## 4.3 RECOVERY ACTIONS
- 4.3.1 RECOVERY ORGANIZATION
- 4.3.1.1 As recovery operations commence, the Recovery Manager should use Attachment 3 as a basic structure for an organization to support on-site and off-site recovery operations. This organization can be modified as necessary to provide 24 hr/day operations as required.

4.3.2 SHORT TERM OBJECTIVES **COMN 42496**

4.3.2.1 Maintain the plant in a safe and stable condition.

4.3.2.1.1 Assign individuals to close out Emergency Plan Implementing Procedures as conditions allow. Modify/revise normal plant procedures as necessary to facilitate recovery operations.

4.3.2.1.2 Administrative controls imposed on normal operations should be maintained during the recovery phase as conditions allow. Procedures should be generated for each specific operation and maintenance evolution and be reviewed for nuclear safety concerns, personnel safety, and environmental impact by the Onsite Review Committee. **COMN 3974**

4.3.2.1.3 Ensure that applicable Limiting Conditions for Operations (LCO's) and surveillance requirements are complied with, to the extent practical, based on equipment availability and status and safety aspects of post-accident conditions.

4.3.2.2 Maintain control of the release of radioactive material to the environment within Radioactive Effluent Controls limits.

4.3.2.3 Maintain control of personnel exposures.

4.3.2.3.1 Exposure controls will be based upon ALARA considerations, plant conditions and 10CFR20 limits.

4.3.2.3.2 Establish reentry requirements for evacuated plant areas using **EIP-ZZ-00225**, Reentry, as guidance.

4.3.2.4 Maintain adequate communications with Federal, State and local agencies.

4.3.2.4.1 Provide Plant support to off-site agencies if requested (i.e. decontamination assistance, etc.).

4.3.2.4.2 The Plant will assist, if requested, the Department of Health (DOH) in evaluating and determining:

- The adequacy of existing off-site Protective Actions;
- The need for population relocation and/or return;
- The total population exposure due to radioactive releases from the plant. **COMN 42503**

- 4.3.2.5 Maintain adequate capability to provide timely and factual information to the general public.
- 4.3.3 LONG TERM OBJECTIVES COMN 42497
- 4.3.3.1 Restore the plant to its pre-emergency condition
- 4.3.3.1.1 Ensure that an in service inspection is conducted on all steam generators per the Callaway Plant's Technical Specifications, when any of the following have occurred:
- RCS to secondary tube leak greater than allowed by technical specification for operation.
 - A seismic occurrence greater than OBE,
 - A LOCA requiring activation of the engineered safety features,
 - A main steam or feedwater line break.
- 4.3.3.2 If the emergency was due to high winds/tornado hitting the plant site, ensure divers check the UHS Pond for debris.
- 4.3.3.3 Provide for the Storage and/or Disposal of Waste Materials Generated During the Emergency and Recovery Phase.
- 4.3.3.4 Evaluate the Cause of the Emergency, Response to the Emergency and Potential Effects on Future Plant Operations.

5 FINAL CONDITIONS

- 5.1 The plant has been restored to a safe operating condition and responsibilities of the Emergency/Recovery Organization have been assumed by the normal plant organization.

6 REFERENCES

- 6.1 Callaway Plant Radiological Emergency Response Plan (RERP)
- 6.2 Callaway Plant Technical Specifications
- 6.3 APA-ZZ-00500, Corrective Action Program
- 6.4 APA-ZZ-00521, Government Agency Interface Instructions

- 6.5 **APA-ZZ-00542**, Event Review
- 6.6 **APA-ZZ-01003**, Off-site Dose Calculation Manual
- 6.7 **EIP-ZZ-00201**, Notifications
- 6.8 **EIP-ZZ-00225**, Reentry
- 6.9 10CFR20

7 **RECORDS**

None

EVENT CLOSEOUT/RECOVERY CRITERIA

The following table should be used as guidance to determine when an emergency classification (based on a specific Emergency Action Level) can be closed out or when recovery should be declared.

Group 1 ABNORMAL RADIATION EVENTS
Offsite Events

<u>UNUSUAL EVENT</u>	<u>ALERT</u>	<u>SITE EMERGENCY</u>	<u>GENERAL EMERGENCY</u>
<p>A. Any Unplanned Release of Radioactivity to the Environment That Exceeds 2 Times the Radiological Effluent Control Limits in the ODCM, (APA-ZZ-01003) for ≥60 minutes.</p> <p>MODES: At All Times</p> <p><u>Closeout:</u></p> <p>ODCM Effluent Control Limit action statements complied with.</p>	<p>B. Any Unplanned Release of Radioactivity to the Environment That Exceeds 200 Times the Radiological Effluent Control Limits in the ODCM, (APA-ZZ-01003) for ≥15 minutes.</p> <p>MODES: At All Times</p> <p><u>Closeout:</u></p> <p>ODCM Effluent Control Limit action statements complied with.</p>	<p>C. EAB Dose Resulting From an Actual or Imminent Release of Gaseous Radioactivity Exceeds 100 mrem TEDE or 500 mrem CDE Thyroid for the Actual or Projected Duration of the Release.</p> <p>MODES: At All Times</p> <p><u>Recovery:</u></p> <p>Refer to Section 4.2</p>	<p>D. EAB Dose Resulting From an Actual or Imminent Release of Gaseous Radioactivity Exceeds 1000 mrem TEDE or 5000 mrem CDE Thyroid for the Actual or Projected Duration of the Release.</p> <p>MODES: At All Times</p> <p><u>Recovery:</u></p> <p>Refer to Section 4.2</p>

EVENT CLOSEOUT/RECOVERY CRITERIA

Group 1 ABNORMAL RADIATION EVENTS
Onsite Events

<u>UNUSUAL EVENT</u>	<u>ALERT</u>	<u>ALERT</u>
<p>E. An Unexpected Increase in Plant Radiation.</p> <p>MODES: At All Times</p> <p><u>Closeout:</u></p> <p>Cause determined and radiation levels are controlled. Actions are in progress to reduce radiation levels.</p>	<p>F. Major Damage to Irradiated Fuel or Loss of Water Level That Has or Will Result in the Uncovering of Irradiated Fuel Outside the Reactor Vessel.</p> <p>MODES: At All Times</p> <p><u>Closeout:</u></p> <p>Fuel in a safe condition, no increasing radiation levels and water level restored.</p>	<p>G. Release of Rad Material, or an Increase in Rad Level that <u>Either</u> Impedes Safe Operations or the Ability to Establish or Maintain Cold Shutdown.</p> <p><u>Closeout:</u></p> <p>Cause determined and radiation levels are controlled. Actions are in progress to reduce radiation levels.</p>

EVENT CLOSEOUT/RECOVERY CRITERIA**Group 2 FISSION PRODUCT BARRIERS**

A. <u>UNUSUAL EVENT</u>	B. <u>ALERT</u>	C. <u>SITE EMERGENCY</u>	D. <u>SITE EMERGENCY</u>	E. <u>GENERAL EMERGENCY</u>
Any <u>CONTAINMENT BARRIER</u> Indicator	Any <u>RCS BARRIER</u> Indicator <u>or</u> Any <u>FUEL CLAD BARRIER</u> Indicator	Any <u>RCS BARRIER</u> Indicator Indicator <u>and</u> Any <u>FUEL CLAD BARRIER</u>	A <u>CTMT BARRIER</u> <u>Loss</u> Indicator <u>and</u> Any <u>RCS or FUEL CLAD BARRIER</u> Indicator	A <u>Loss</u> Indicator from any two barriers <u>and</u> Any Indicator from the third
MODES: 1-4	MODES: 1-4	MODES: 1-4	MODES: 1-4	MODES: 1-4
<u>Closeout:</u> Restore the Containment barrier	<u>Closeout:</u> Restore the RCS <u>or</u> FUEL CLAD BARRIER	<u>Recovery:</u> Refer to Section 4.2	<u>Recovery:</u> Refer to Section 4.2	Recovery: Refer to Section 4.2

EVENT CLOSEOUT/RECOVERY CRITERIA

**Group 3 HAZARDS AFFECTING PLANT SAFETY
Security Events**

<u>UNUSUAL EVENT</u>	<u>ALERT</u>	<u>SITE EMERGENCY</u>	<u>GENERAL EMERGENCY</u>
<p>A. Confirmed Security Event Which Indicates a Potential Degradation in the Level of Safety of the Plant.</p> <p>MODES: At All Times</p> <p><u>Closeout:</u></p> <p>Event terminated.</p>	<p>B. Security Event in the Plant Protected Area.</p> <p><u>Closeout:</u></p> <p>Event terminated.</p>	<p>C. Security Event in a Safe Shutdown Area.</p> <p>MODES: At All Times</p> <p><u>Recovery:</u></p> <p>Refer to Section 4.2</p>	<p>D. Security Event Resulting in a Loss of the Ability to Reach and Maintain Cold Shutdown.</p> <p>MODES: At All Times</p> <p><u>Recovery:</u></p> <p>Refer to Section 4.2</p>

EVENT CLOSEOUT/RECOVERY CRITERIA

Group 3 HAZARDS AFFECTING PLANT SAFETY

Fires

<u>UNUSUAL EVENT</u>	<u>ALERT</u>
<p>E. Fire Within Protected Area Boundary Not Extinguished Within 15 Minutes of Verification. MODES: At All Times</p> <p><u>Closeout:</u> Fire extinguished.</p>	<p>F. Fire Affecting the Operability of Plant Safety Systems Required to Establish or Maintain Safe Shutdown. MODES: At All Times</p> <p><u>Closeout:</u> Fire extinguished and systems operable or Tech Spec actions complied with.</p>

Natural Events

<u>UNUSUAL EVENT</u>	<u>ALERT</u>
<p>G. Natural and Destructive Phenomena Affecting the Protected Area. MODES: At All Times</p> <p><u>Closeout:</u> Natural or destructive event terminated or controlled.</p>	<p>H. Natural and Destructive Phenomena Affecting a Safe Shutdown Area. MODES: At All Times</p> <p><u>Closeout:</u> Natural or destructive event terminated or controlled.</p>

EVENT CLOSEOUT/RECOVERY CRITERIA

Group 3 HAZARDS AFFECTING PLANT SAFETY

Toxic Gas

<u>UNUSUAL EVENT</u>	<u>ALERT</u>
<p>I. Release of Toxic or Flammable Gases Deemed Detrimental to Safe Operation of the Plant.</p> <p>MODES: At All Times</p> <p><u>Closeout:</u></p> <p>HAZARDOUS ATMOSPHERE per CTP-ZZ-01200 eliminated.</p>	<p>J. Release of Toxic or Flammable Gases Within a Facility Structure Which Jeopardizes Operation of Systems Required to Establish or Maintain Cold Shutdown.</p> <p>MODES: At All Times</p> <p><u>Closeout:</u></p> <p>HAZARDOUS ATMOSPHERE per CTP-ZZ-01200 eliminated.</p>

Control Room Evacuation Events

<u>ALERT</u>	<u>SITE EMERGENCY</u>
<p>K. Control Room Evacuation Has Been Initiated.</p> <p>MODES: At All Times</p> <p><u>Closeout:</u></p> <p>Control re-established in Control Room or plant is stable and shutdown with control at the Aux Shutdown panel.</p>	<p>L. Control Room Evacuation Has Been Initiated and Plant Control Cannot Be Established.</p> <p>MODES: At All Times</p> <p><u>Recovery:</u></p> <p>Refer to Section 4.2</p>

EVENT CLOSEOUT/RECOVERY CRITERIA

Group 4 SYSTEM MALFUNCTIONS
Annunciator Events

<u>UNUSUAL EVENT</u>	<u>ALERT</u>	<u>SITE EMERGENCY</u>
<p>A. Unplanned Loss of Most or All Alarms (Annunciators) for Greater Than 15 Minutes.</p> <p>MODES: 1-4</p> <p><u>Closeout:</u></p> <p>Alarms restored and compensated for.</p>	<p>B. Unplanned Loss of Most or All Annunciators With Either a Transient In Progress, or the Plant Computer is Unavailable.</p> <p>MODES: 1-4</p> <p><u>Closeout:</u></p> <p>Alarms are restored and compensated for</p> <p><u>and</u></p> <p>The plant computer is restored <u>or</u> the transient is stabilized.</p>	<p>C. Inability to Monitor a Significant Transient in Progress.</p> <p>MODES: 1-4</p> <p><u>Closeout:</u></p> <p>Alarms are restored and compensated for</p> <p><u>and</u></p> <p>The plant computer is restored</p> <p><u>and</u></p> <p>The transient is stabilized.</p>

EVENT CLOSEOUT/RECOVERY CRITERIA

Group 4 SYSTEM MALFUNCTIONS

Electrical Events (Operating)					Electrical Events (Shutdown)		
<u>UNUSUAL EVENT</u>	<u>ALERT</u>	<u>SITE EMERGENCY</u>	<u>SITE EMERGENCY</u>	<u>GENERAL EMERGENCY</u>	<u>UNUSUAL EVENT</u>	<u>UNUSUAL EVENT</u>	<u>ALERT</u>
D. Loss of All Offsite Power to Essential Busses for Greater Than 15 Minutes.	E. Only One AC Source to Essential Busses for >15 Minutes Such That Any Additional Single Failure Would Result in Station Blackout.	F. Loss of All Offsite Power and Loss of All Onsite AC Power to Essential Busses.	G. Loss of All Vital DC Power	H. Prolonged Loss of All Offsite Power and Prolonged Loss of All Onsite AC Power.	I. Loss of Required DC Power During Cold Shutdown or Refueling Mode for Greater Than 15 Minutes.	J. Loss of All offsite power to essential buses for greater than 15 minutes.	K. Loss of All Offsite Power and Loss of All Onsite AC Power to Essential Busses During Cold Shutdown or Refueling.
MODES: 1-4	MODES:1-4	MODES: 1-4	MODES: 1-4	MODES: 1-4	MODES: 5, 6	MODES: 5, 6	MODES: 5, 6
<u>Closeout:</u> When power is restored.	<u>Closeout:</u> When power is restored	<u>Recovery</u> Refer to Section 4	<u>Closeout:</u> When power is restored.	<u>Recovery</u> Refer to Section 4.2	<u>Closeout:</u> When power is restored.	<u>Closeout:</u> When power is restored.	<u>Closeout:</u> When power is restored.

EVENT CLOSEOUT/RECOVERY CRITERIA

Group 4 SYSTEM MALFUNCTIONS

Shutdown Capability			
<u>UNUSUAL EVENT</u>	<u>ALERT</u>	<u>SITE EMERGENCY</u>	<u>SITE EMERGENCY</u>
L. Inability to Perform a Required Shutdown Within Technical Specification Limits. MODES: 1-4	M. Inability to Maintain Plant in Cold Shutdown. MODES: 5, 6	N. Loss of Water Level That Has or Will Uncover Fuel in the Reactor Vessel. MODES: 5, 6	O. Complete Loss of Function Needed to Achieve or Maintain Hot Shutdown. MODES: 1-4
<u>Closeout:</u> When the Tech. Spec. action statement is completed or exited.	<u>Closeout:</u> RHR, CCW and ESW restored and less than 200° on any valid incore thermocouple or Wide Range Hot Leg Indicator.	<u>Recovery:</u> Refer to Section 4.2	<u>Recovery:</u> Refer to Section 4.2

EVENT CLOSEOUT/RECOVERY CRITERIA

Group 4 SYSTEM MALFUNCTIONS

Communication Events		RCS/Fuel Events		Reactor Protection System		
<u>UNUSUAL EVENT</u>		<u>UNUSUAL EVENT</u>	<u>UNUSUAL EVENT</u>	<u>ALERT</u>	<u>SITE EMERGENCY</u>	<u>GENERAL EMERGENCY</u>
<p>P. Unplanned Loss of All Onsite or Offsite Communication Capabilities</p> <p>MODES: 1-6</p> <p><u>Closeout:</u></p> <p>When capability restored.</p>		<p>Q. Fuel Clad Degradation</p> <p>MODES: 1-6</p> <p><u>Closeout:</u></p> <p>When plant is in Hot Standby with Tave <500°F.</p>	<p>R. RCS Leakage</p> <p>MODES: 1-4</p> <p><u>Closeout:</u></p> <p>When plant is in Cold Shutdown or leak isolated.</p>	<p>S. Failure of Reactor Protection System Instrumentation to Complete or Initiate an Automatic Reactor Trip Once a Reactor Protection System Setpoint Has Been Exceeded and Manual Trip Was Successful.</p> <p>MODES: 1, 2</p> <p><u>Closeout:</u></p> <p>When ES-0.1 completed.</p>	<p>T. Failure of Reactor Protection System Instrumentation to Complete or Initiate an Automatic Reactor Trip Once a Reactor Protection System Setpoint Has Been Exceeded and Manual Trip Was NOT Successful.</p> <p>MODES: 1, 2</p> <p><u>Recovery:</u></p> <p>Refer to Section 4.2</p>	<p>U. Failure of the Reactor Protection System to Complete an Automatic Trip and Manual Trip Was NOT Successful and There Is Indication of an Extreme Challenge to the Ability to Cool the Core.</p> <p>MODES: 1, 2</p> <p><u>Recovery:</u></p> <p>Refer to Section 4.2</p>

EVENT CLOSEOUT/RECOVERY ANNOUNCEMENT

-- Sound the Plant Emergency Alarm --

ATTENTION ALL PERSONNEL! ATTENTION ALL PERSONNEL!

(Repeat All Announcements)

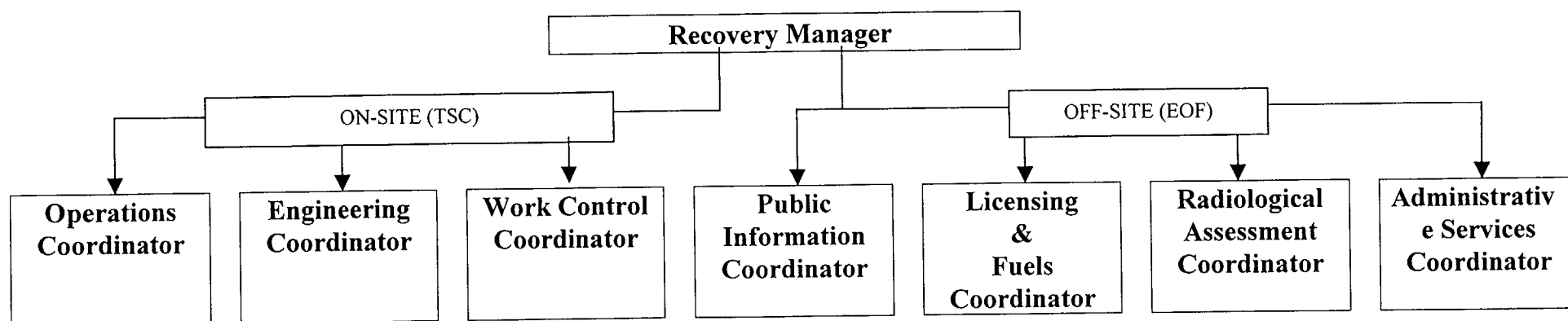
☐ CLOSEOUT OF EVENT

**CLOSEOUT OF EVENT HAS BEEN DECLARED. ALL
EMERGENCY RESPONSE PERSONNEL BEGIN DEACTIVATION
OF EMERGENCY FACILITIES. ALL OTHER PERSONNEL
RESUME NORMAL DUTIES.**

☐ PLANT RECOVERY

**PLANT RECOVERY HAS BEEN DECLARED. ALL EMERGENCY
RESPONSE PERSONNEL REMAIN AT YOUR STATIONS AND
AWAIT FURTHER INSTRUCTIONS.**

RECOVERY ORGANIZATION



Operations Coordinator- responsible for day-to-day plant operations and coordinates recovery operations within the plant to ensure that modifications and repairs performed in a safe and competent manner. Requirements for reentry into affected and evacuated areas of the plant during recovery would be established by the operations coordinator and evaluated and approved by the recovery manager. **COMN 42489**

Engineering Coordinator- Responsible for providing and coordinating technical support to operations and recovery activities. This support includes core physics, thermal hydraulics, design activities, procedure development, and also ensuring that specifications for procurement of materials and equipment are met. **COMN 42490**

Work Control Coordinator- Responsible for normal and outage planning and scheduling activities to support recovery. **COMN 42491**

Public Information Coordinator- Appointed by corporate communications to assist the recovery manager and the recovery effort. The position need not be physically located at the plant site. **COMN 42492**

Licensing & Fuels Coordinator- Responsible for providing licensing and technical support to the recovery effort in areas of reactor systems and fuel related concerns. The licensing and fuels coordinator would also be the liaison between Ameren UE and the NSSS supplier, A/E, and other contractors. **COMN 42493**

Radiological Assessment Coordinator- Responsible for coordinating activities involving plant personnel or equipment, assisting the state department of health in estimating and assessing population exposure calculations, coordinating off-site sampling total population exposure calculations, and coordinating off-site sampling and analysis. **COMN 42494**

Administrative Services Coordinator- Responsible for ensuring that administrative, logistical, and personnel support is available to support recovery operations. **COMN 42495**