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EIP-ZZ-00102
Revision 029
February 15, 2002

CALLAWAY PLANT

EMERGENCY PLAN IMPLEMENTING PROCEDURE

EIP-ZZ-00102

EMERGENCY IMPLEMENTING ACTIONS

RESPONSIBLE DEPARTMENT **EMERGENCY PREPAREDNESS**

PROCEDURE OWNER **W. R. Bevard**

WRITTEN BY **W. R. Bevard**

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APPROVED BY Warren A. Witt

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This procedure contains the following:

Pages	1	through	7
Attachments	1	through	5
Tables		through	
Figures		through	
Appendices		through	
Checkoff Lists		through	

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

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

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TABLE OF CONTENTS

Section		Page Number
1	PURPOSE AND SCOPE	1
2	DEFINITIONS	1
3	RESPONSIBILITIES	1
4	PROCEDURE	2
5	REFERENCES	6
6	RECORDS	7

Attachment 1 – Emergency Announcement	1 Page
Attachment 2 – Operations Personnel Emergency Actions	1 Page
Attachment 3 – Set-Up and Operation of the Model 177 Ratemeter	1 Page
Attachment 4 – Off Site Notification Form	1 Page
Attachment 5 – Procedure Flow Chart	2 Pages

EMERGENCY IMPLEMENTING ACTIONS

1 PURPOSE AND SCOPE

1.1 This procedure provides guidance to the Emergency Coordinator for implementing emergency actions when an emergency has been classified or reclassified per **EIP-ZZ-00101**, Classification of Emergencies. **(COMN 3312)**

2 DEFINITIONS

2.1 RELEASE- Any unplanned, discharge to the environment of radioactive effluent attributable to a declared emergency event.

2.1.1 UNPLANNED- The release is related to an event that was not planned or scheduled.

2.1.2 ENVIRONMENT- The area outside the confines of the Protected Area.

NOTE:	If, as a result of the declared emergency, a PORV or Safety is opened, or the TDAFP is operated, or any other steam release occurs and we know any primary to secondary leak exists, those actions would be considered to be "attributable to a declared emergency event" and therefore a release will have occurred.

3 RESPONSIBILITIES

3.1 EMERGENCY COORDINATOR

3.1.1 Responsible for implementing this procedure and directing emergency response as follows: **(COMN 42570)**

NOTE:	The responsibilities that the Emergency Coordinator may delegate are indicated with an asterisk (*).

3.1.1.1 Classifying and declaring emergencies.

3.1.1.2 Authorizing personnel exposure in excess of 10CFR20 limits.

3.1.1.3 Assumes decision-making responsibilities for implementing strategies identified in the Severe Accident Management Guidelines.

3.1.1.4 *Directing operations of emergency response organizations.

3.1.1.5 *Requesting the formation of emergency teams.

3.1.1.6 *Initiating the implementation of on-site protective actions.

3.1.1.7 *Ensuring that on-site and off-site emergency response organizations are kept up to date on emergency conditions.

3.1.1.8 *Ensuring that site-wide announcements are made on the plant Public Address (PA) system.

3.2 SHIFT SUPERVISOR

3.2.1 Until relieved, the Shift Supervisor acts as the Emergency Coordinator. **(COMN 3314)**

4 PROCEDURE

NOTE:	Monitor Emergency Action Levels (EALs) throughout this procedure.
NOTE:	The flowchart Attachment 5 may be use to assist in the performance of this procedure.

4.1 **Notify Facility Personnel:**

4.1.1 Announce the Emergency Classification and the time of declaration.

4.1.2 Announce the Cause.

4.2 **Manually Initiate ERFIS** from Main Control Board and Do Not "Reset" until instructed by Tech Assessment Staff.

4.3 **Notify On-Site Personnel:**

CAUTION:	If CODE RED or CODE BLACK is in progress, on-site emergency announcements should be held to a minimum and prohibit movement of personnel until CODE condition is secured.

4.3.1 Prepare Attachment 1. If an Alert or higher is being declared, the Emergency Response Organization SHALL be activated. **(COMN 42535) (COMN 3391)**

NOTE:	The Emergency Response Organization may be activated prior to an ALERT as necessary to provide additional support.

4.3.2 Sound the Plant Emergency Alarm from the Control Room.

4.3.3 Perform Attachment 1, making the emergency announcement applicable to the Emergency Classification. Include if there is a localized emergency (e.g., fire, flood), announcing the type and location, and instruct personnel to stand clear of the affected area.

NOTE:	Pager activation does not need to be done if the pagers have been activated already at a lower classification level.

4.4 **At an ALERT or higher classification** call out the emergency organization by having the SAS operator activate the Emergency Paging System per **KOA-ZZ-00200** for rapid responders using **MESSAGE #1**.

NOTE:	The Shift Supervisor has a Satellite Cellular Phone to be used as a last resort backup to the telephone and radio systems. If installed systems and backups fail the Satellite Cellular Phone may be used for offsite communications.

4.5 **Notify Off-Site Agencies:**

4.5.1 Shift Supervisor complete or direct completion of the SENTRY screen or complete Attachment 4 and give it to the Communicator.

NOTE:	If the condition or cause of the classification has already been corrected the form should be completed as prescribed for the emergency. A statement should then made in the Notes section, lower right hand side, "The condition that caused the (emergency classification) has been corrected and Event closeout has been declared. Also ensure NRC operations is notified within 1 hour. **CARS 199700852**

NOTE:	After the initial reporting, if the NRC Operations Center is activated, the NRC will request additional information. The personnel communicating with NRC should be knowledgeable with the facility's operation and with the event to provide and update information about the evolving incident. The level of communication will depend on the development and the significance of the event.

CAUTION:	As a minimum, the immediate protective action recommendation for a GENERAL EMERGENCY, is evacuation within a 2 mile radius and 5 miles downwind of the plant in affected sectors. **(COMN 3954)**

4.5.2 Incorporate protective action recommendations in accordance with **EIP-ZZ-00212**, Protective Action Recommendations.

4.5.3 Implement **EIP-ZZ-00201**, Notifications. Initial notifications to State and Local Authorities SHALL be initiated within **15 minutes** after declaration of an emergency. **(COMN 3946)**

NOTE:	Notifications should be initiated within 15 minutes if conditions change and approximately every 30 minutes if conditions are stable. When at an Unusual Event and conditions are stable the notification frequency may be extended with the concurrence of SEMA and the EPZ Counties.

4.6 Ensure **Attachment 2,** Operations Personnel Emergency Actions, is taken to the Field Office for use by the Field Supervisor or first available individual. Extra Operations personnel report to the Field Office at the first Emergency Announcement.

4.7 **Notify the Emergency Duty Officer** and discuss the following: **(COMN 3946)**

4.7.1 Emergency Classification.

4.7.2 Plant status and actions taken.

4.7.3 Callout of response organizations.

4.7.4 Notification of off-site agencies.

4.8 **Notify the Recovery Manager** of an Unusual Event. **(COMN 3946)**

NOTE:	Notification of the Recovery Manager is not required at an Alert or higher as this is accomplished using **EIP-ZZ-00200 and KOA-ZZ-00200**.

4.9 If a **Release is in progress or projected** ensure dose assessment and **EIP-ZZ-00212** is initiated.

NOTE:	Release defined as " Any unplanned discharge to the environment of radioactive effluent attributable to a declared emergency event" **NOTE:** If, as a result of the declared emergency, a PORV or Safety is opened, or the TDAFP is operated, or any other steam release occurs and we know any primary to secondary leak exists, those actions would be considered to be "attributable to a declared emergency event" and therefore a release will have occurred.

4.9.1 DISCUSS the need to dispatch the Rapid Plume Assessment Tech (RPAT) with the On Shift Dose Assessment Tech. ref (**KOA-ZZ-1212A**).

4.9.2 If Abnormal In-plant radiological conditions exist, set up a ratemeter at the door of the Control Room per Attachment 3.

4.10 **Implement EIP-ZZ-00217**, Emergency Response Data System Activation (ERDS) as soon as possible but in all cases **within one-hour** of an **ALERT or higher classification**. The Shift Supervisor may delegate this to Tech Assessment in the TSC.

4.11 **Evaluate Assembly/Evacuation** per **EIP-ZZ-00230**, Accountability. **(COMN 3983) (COMN 3986)**

NOTE:	Accountability SHALL occur within 30 minutes of an Assembly/Evacuation announcement. **(COMN 42531)**

4.12 **Form and/or Dispatch Emergency Teams** as necessary using **EIP-ZZ-00220**, Emergency Team Formation.

4.13 Contact Chemistry and **initiate Post-Accident Sampling** as required.

4.14 Implement the **Severe Accident Management Guidelines** as required.

4.14.1 The control room should implement **SACRG-1**, Severe Accident Control Room Guideline Initial Response.

4.14.2 The control room should implement **SACRG-2**, Severe Accident Control Room Guideline for Transients after the TSC is Functional.

4.15 If **non-Ameren support** is needed, direct the Admin Coordinator to implement the Additional Assistance section of their checklist.

4.16 **Event Reclassification/Plant Recovery/Event Closeout**

4.16.1 If emergency has been **reclassified** return to **Step 3.1** and perform the applicable steps.

4.16.2 Evaluate **EIP-ZZ-00260**, Event Closeout/Plant Recovery, to determine if plant recovery or closeout conditions have been met.

NOTE:	The NRC should be notified of the intent to declare recovery.

4.17 Return to Step 3.11 and continue assessment if emergency has not been reclassified or event closeout/plant recovery has not been declared.

5 REFERENCES

5.1 Callaway Plant Radiological Emergency Response Plan (RERP).

5.2 **APA-ZZ-00743**, Fire Team Organization and Duties

5.3 **EIP-ZZ-00200**, Augmentation of the Emergency Organization

5.4 **EIP-ZZ-00201**, Notifications

5.5 **EIP-ZZ-00211,** Field Monitoring

5.6 **EIP-ZZ-00212**, Protective Action Recommendations

5.7 **EIP-ZZ-00217**, Emergency Response Data System Activation

5.8 **EIP-ZZ-00230,** Accountability

5.9 **EIP-ZZ-00260**, Event Closeout/Plant Recovery

5.10 **KOA-ZZ-1212A,** Rapid Plume Assessment Tech.

5.11 NRC Correspondence 11/27/2000, Recording Emergency Notification System Telephone Conversations

6 RECORDS

6.1 All facility logs, SENTRY or MAGNEM screen prints, office memos, notes, etc., should be attached to the Coordinator checklist and turned in to the Admin Coordinator and/or Emergency Preparedness (EP)

NOTE:	Recordings of Emergency Notification System (ENS) and Health Physics Network (HPN) lines are available from the NRC recording system following the termination of an emergency event.

6.2 QA Records

6.2.1 Attachment 1, Emergency Announcement (File K171.0010)

Emergency Announcement

NOTE:	If CODE RED or CODE BLACK is in progress, on-site emergency announcements should be held to a minimum and prohibit movement of personnel until CODE condition is secured.

SOUND THE PLANT EMERGENCY ALARM

ATTENTION ALL PERSONNEL! ATTENTION ALL PERSONNEL!

A(N)	UNUSUAL EVENT ALERT SITE EMERGENCY GENERAL EMERGENCY	**HAS BEEN DECLARED AT ___:___** (time)

THE CAUSE OF THE EMERGENCY IS

_____

_____

Emergency Organization Activation	
☐ Unusual Event	ALL MEMBERS OF THE ON-SHIFT EMERGENCY ORGANIZATION REPORT TO YOUR STATIONS.
☐ Alert or Higher	ALL MEMBERS OF THE EMERGENCY RESPONSE ORGANIZATION REPORT TO YOUR STATIONS.

Actions For Non-Essential Personnel		
☐ Unusual Event	ALL NON-ESSENTIAL PERSONNEL CONTINUE WITH YOUR NORMAL DUTIES UNLESS FURTHER INSTRUCTIONS ARE GIVEN.	
☐ Alert	ALL NON-ESSENTIAL PERSONNEL CONTINUE WITH YOUR NORMAL DUTIES UNLESS FURTHER INSTRUCTIONS ARE GIVEN, ALL NON-BADGED PERSONNEL WITHIN THE OWNER CONTROLLED AREA, AND THE EXCLUSION AREA BOUNDRY MUST EVACUATE THE PLANT SITE.	
☐ Site/General (Consider weather and radiological conditions PRIOR to making announcement.)	☐ Normal hours	ALL NON-ESSENTIAL PERSONNEL REPORT TO YOUR PRE-DESIGNATED ASSEMBLY AREAS IN THE CMB AND TRAINING CENTER. TAKE ALL PERSONAL BELONGINGS SUCH AS COATS, CAR KEYS AND PURSES. FOLLOW THE INSTRUCTIONS OF YOUR SUPERVISOR AND SECURITY OFFICERS. ACCOUNTABILITY WILL BE PERFORMED.
	☐ Off-normal hours	ALL NON-ESSENTIAL PERSONNEL PROCEED TO THE TSC AND AWAIT FURTHER INSTRUCTIONS. ACCOUNTABILITY WILL BE PERFORMED.

Special instructions, (i.e. special routes during releases. seek cover during storms)_____

_____

_____

PERSONNEL CAUTION (If required)	
☐ **Potential** Airborne Contamination	THERE WILL BE NO EATING, DRINKING, SMOKING, OR CHEWING UNTIL FURTHER NOTICE.

(REPEAT ALL ANNOUNCEMENTS)

_____
EC/RM APPROVAL

OPERATIONS PERSONNEL EMERGENCY ACTIONS

NOTE:	Pre-designated Personnel inside the Protected Area report to the Control Room/Field Office upon a Reactor Trip or at the first Emergency Announcement. All are Essential Personnel unless specifically released by the Shift Supervisor. Once released they do not report to the Field Office if accountability is declared, they respond as all other Non-Essential Personnel.

1 THE FIELD SUPERVISOR, OR DESIGNEE, PERFORMS THE FOLLOWING:

1.1 Prepare a list of personnel reporting to the Field Office along with their badge numbers. (Note: A Security officer is generally assigned to pick up a copy of the list for accountability). Include on-watch Equipment Operators, (EO's). Have all personnel card into the Field Office Conference Room card reader (The card reader is used for accountability only).

1.1.1 The Polisher and Primary EO's should report to the Control Room to provide assistance. They should return to the Field Office when relieved by I&C Technicians.

1.1.2 The formation and dispatch of Emergency Teams should use **EIP-ZZ-00220** as a guide.

1.1.3 Rad Chem Technician(s) report to the Control Room/Field Office to assist in personnel monitoring, team briefing and rapid dose assessment. Emergency Team Briefing Form in **EIP-ZZ-00220** may be used as a guide.

NOTE:	When personnel leave the Field Office on assignment they should sign out, card out and be tracked to maintain accountability.

1.2 Designate the Fire Brigade members using personnel not on watch if available. Refer to **APA-ZZ-00743** , Fire Team Organization and Duties.

1.3 All Field Office personnel should go to HP Access, obtain an Electronic Dosimeter (ED) and sign in on RWP 911. If released as Non-Essential Personnel, individuals should sign off of RWP 911 and return their ED prior to leaving the site. This is to ensure all personnel dispatched from the Control Room or Field Office have their dose tracked.

CAUTION:	Remain aware of plant radiological conditions and do not dispatch operators into areas where conditions may be changing without Health Physics support and briefings.

1.4 If radiological conditions are a potential hazard, set up a ratemeter at the door and allow entrance only through that door. Refer to Attachment 3.

1.5 If the Field Office is required to be evacuated, all personnel then report to the Control Room or TSC as needed.

1.6 Assign Operators to the TSC for emergency team support as required and available.

SET-UP AND OPERATION OF THE MODEL 177 RATEMETER

1. Remove Model 177 ratemeter, frisker probe, detector cable, power cord, and check source from the E-Kit cabinet located behind the control boards. There are two instruments, one for the door to the field office, one for the door to the Control Room.

2. Connect detector and power cords, if not already connected, to the Model 177 ratemeter and verify the following switch settings:

   Front Panel: ☐ On/Off switch in "ON" position.
   ☐ Volume adjusted to hear audible counts.
   ☐ Response switch in "slow" position.
   Rear Panel: ☐ Subtract switch in "Off" position (if meter has Subtract Switch.)

3. Prior to the first use of the day, perform response check as follows:

   ☐ Ensure instrument has a current calibration sticker.
   ☐ Set the range switch to the appropriate position and place the detector on the check source bracket.
   ☐ Verify the response is within the acceptable range as specified on the response value determination form/sticker for that check source.
   ☐ Check the instrument alarm by adjusting the ALARM SET switch so that it is slightly less than the count rate of the source.
   ☐ Remove the source from the detector.
   ☐ Depress the RESET button. The alarm condition should clear.
   ☐ If the pre-operational checks are satisfactory, complete the attached pre-operational check sticker. (If either the alarm or the response check failed, notify the Health Physics Coordinator and obtain an operational ratemeter.)
   ☐ Return the check source to the E-Kit cabinet.

4. Set up one ratemeter at the door to the Field Office and one rate meter at the door to the Control Room for use. For each:

   ☐ Connect detector and power cords, if not already connected, to the Model 177 ratemeter and verify the following switch settings:

   Front Panel: ☐ On/Off switch in "ON" position.
   ☐ Volume adjusted to hear audible counts.
   ☐ Response switch in "slow" position.
   ☐ Range switch to the value necessary to maintain "on scale" display. Normally, this should be the "X1" scale.
   Rear Panel: ☐ Alarm set at "5".
   ☐ Subtract switch in "Off" position if meter has Subtract Switch.

   ☐ Ensure the probe sets "face up" when not being used. (This allows the next user to frisk prior to handling the detector, and allows the detector to monitor area and airborne radiation levels.)

5. If the ratemeter background reading exceeds the "X1" scale (500 CPM) during use, notify the Health Physics Coordinator.

OFF SITE NOTIFICATION FORM

(FAX Copy to TSC-68604 & EOF-64900)

EIP-ZZ-00102
Rev. 029

GENERAL INFORMATION:

1) DRILL MESSAGE: O YES O NO

2) EMERGENCY CLASSIFICATION:

3) DATE/TIME DECLARED: / / :

4) EMERGENCY ACTION LEVEL:

5)

6) REACTOR STATUS:

PROTECTIVE ACTIONS:

19) PROTECTIVE ACTIONS RECOMMENDED: O YES O NO

20) BASED ON:

TYPE	LOCATION	SECTORS	SUBAREAS
21)	22)	23)	
24)	25)	26)	
27)	28)	29)	

30) Other PAR's:

RELEASE STATUS:

THERE 7) IS / WAS / WILL BE 8) NO / AIRBORNE / LIQUID RELEASE OF RADIOACTIVE MATERIAL.

9)RELEASE SIGNIFICANCE:

10) RELEASE START TIME: :

11) RELEASE DURATION: Hrs.

15) CURRENT WIND SPEED: MPH

12) WIND DIRECTION: From Degrees 13) To Degrees

14) AFFECTED SECTORS:

PLUME ARRIVAL TIME:

16) 2 Miles : 17) 5 Miles : 18) 10 Miles :

PROJECTED DOSES:

31) BASED ON:

Distance	TEDE (Rem)	Thyroid (Rem)
EAB	32)	36)
2 miles	33)	37)
5 miles	34)	38)
10 miles	35)	39)

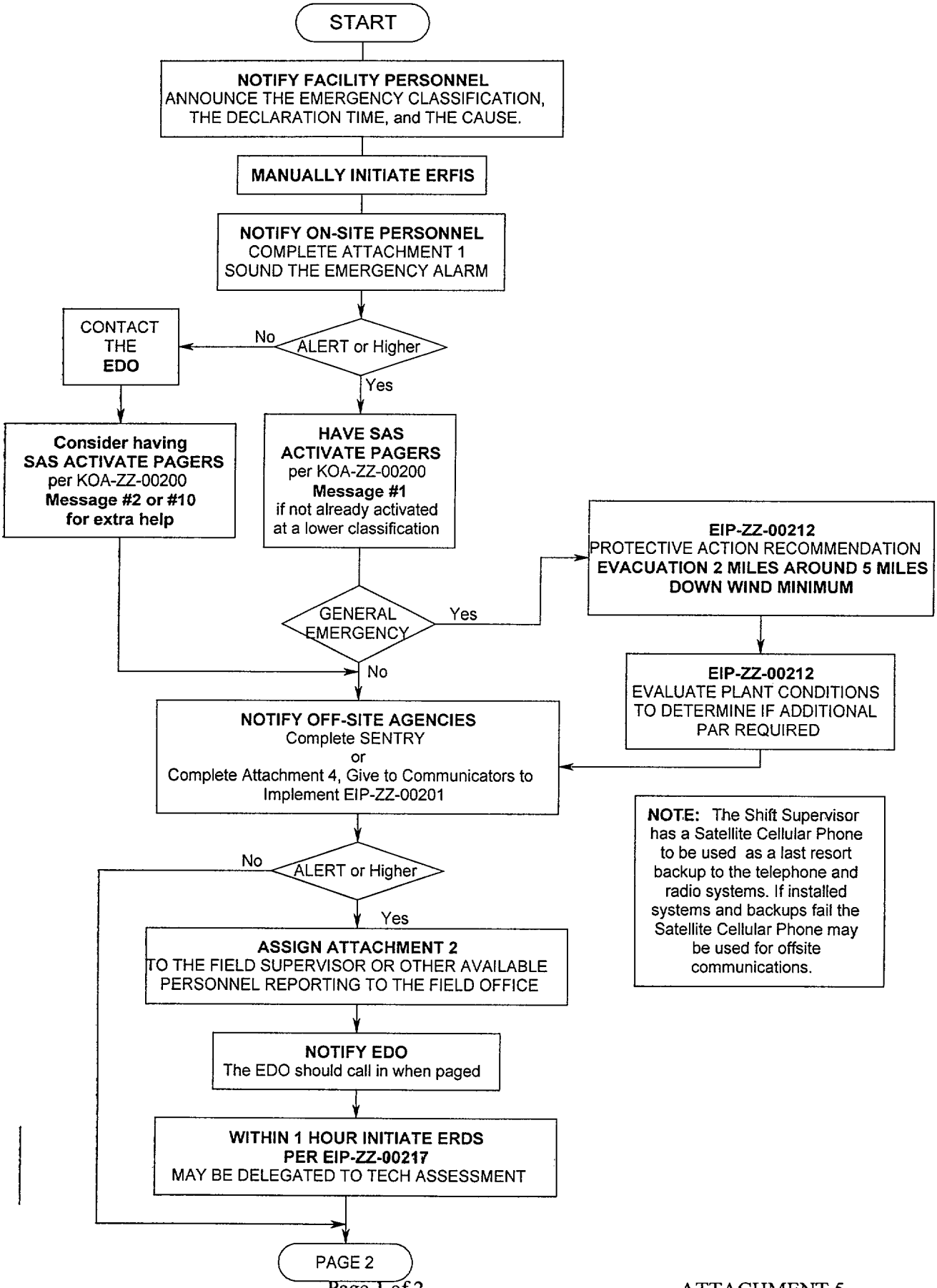
ADDITIONAL NOTES:

40)

EC/RM APPROVAL:_____ COMMUNICATOR: _____

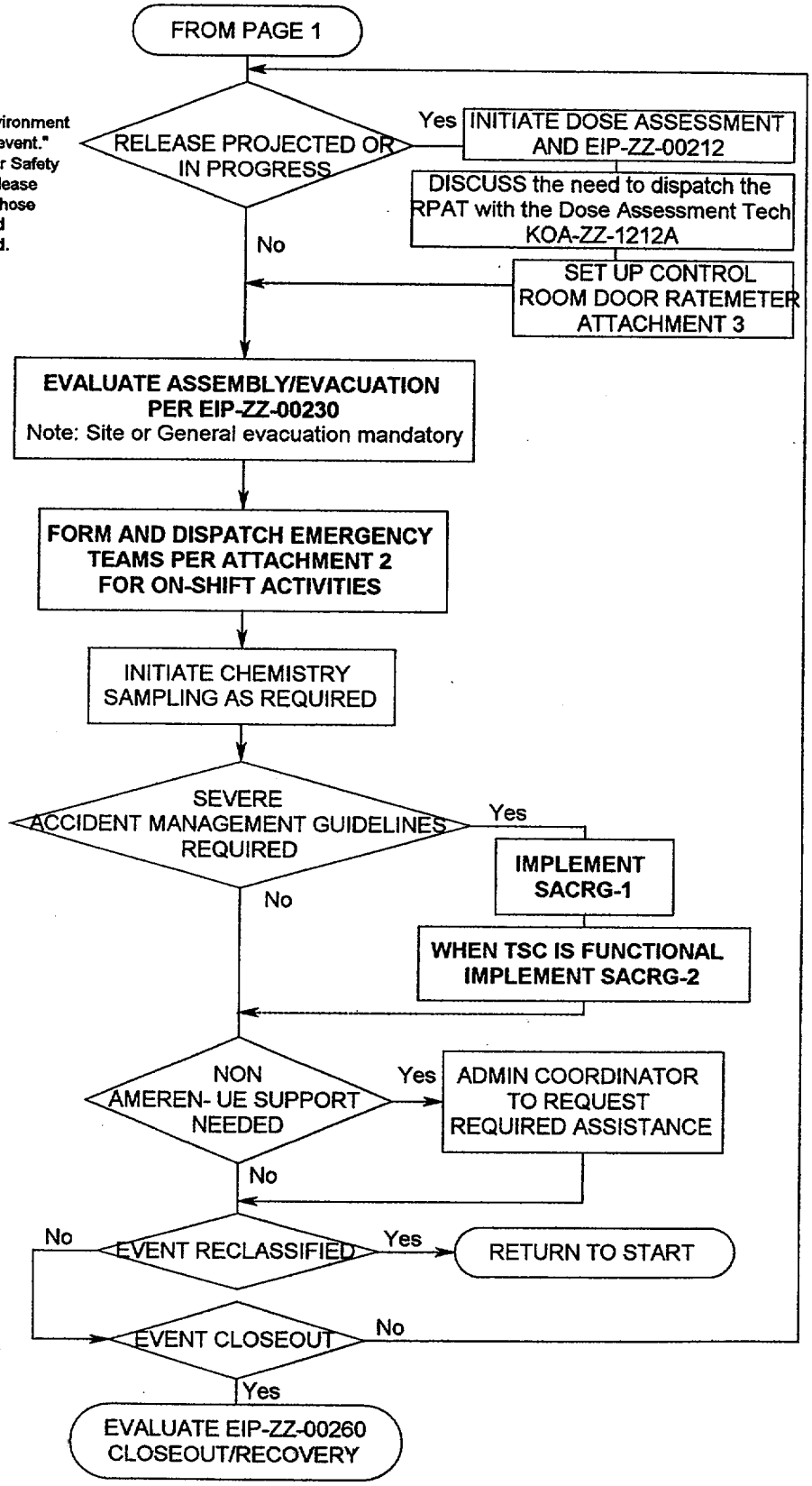
Distribution: Recovery Manager
Communicator
State of Missouri
File # K171.0010

ATTACHMENT 4
CA-#0231



ATTACHMENT 5

Release defined as: "Any unplanned, discharge to the environment of radioactive effluent attributable to a declared emergency event."
NOTE: If, as a result of the declared emergency, a PORV or Safety is opened, or the TDAFP is operated, or any other steam release occurs and we know any primary to secondary leak exists, those actions would be considered to be "attributable to a declared emergency event" and therefore a release will have occurred.



EIP-ZZ-01211
Revision 023
February 4, 2002

CALLAWAY PLANT

EMERGENCY PLAN IMPLEMENTING PROCEDURE

EIP-ZZ-01211

MANAGEMENT ACTION GUIDES FOR NUCLEAR EMERGENCIES
(MAGNEM)

RESPONSIBLE DEPARTMENT **EMERGENCY PREPAREDNESS**

PROCEDURE OWNER **T.W. PARKER**

WRITTEN BY **T.W. PARKER**

PREPARED BY **T.W. PARKER**

APPROVED BY Warren A. Witt

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Pages	1	through	4
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TABLE OF CONTENTS

Section		Page Number
1	PURPOSE AND SCOPE	1
2	DEFINITIONS	1
3	RESPONSIBILITIES	2
4	INITIATING CONDITIONS	2
5	PROCEDURE	2
6	FINAL CONDITIONS	4
7	REFERENCES	4
8	RECORDS	4

Attachment 1	PC Dose Assessment Data Input	2 Pages

MANAGEMENT ACTION GUIDES FOR NUCLEAR EMERGENCIES (MAGNEM)

1 PURPOSE AND SCOPE

1.1 PURPOSE

This procedure provides guidance for using the MAGNEM computer program for Dose Assessment.

1.2 SCOPE

This procedure provides a method of entering data into the MAGNEM computer program using effluent monitors, grab samples, and field monitoring team data.

2 DEFINITIONS

2.1 RELEASE -Any unplanned discharge to the environment of radioactive effluent attributable to a declared emergency event.

2.1.1 UNPLANNED -The release is related to an event that was not planned or scheduled.

2.1.2 ENVIRONMENT –The area outside the confines of the Protected Area.

NOTE:	If, as a result of the declared emergency, a PORV or Safety is opened, or the TDAFP is operated, or any other steam release occurs and we know any primary to secondary leak exists, those actions would be considered to be "attributable to a declared emergency event" and therefore a release would have occurred.

3 RESPONSIBILITIES

3.1 RAD/CHEM TECHNICIAN HPTS (CONTROL ROOM) **COMN 3951**

Performs dose calculations using MAGNEM and forwards results to the Emergency Coordinator, until the EOF is manned and ready to accept responsibility.

3.2 DOSE ASSESSMENT COORDINATOR (EOF)

Assumes responsibility from the Dose Assessment Technician (Control Room) when the EOF is manned and ready.

4 INITIATING CONDITIONS

This procedure should be implemented upon declaration of an emergency, which involves or may involve a release of radioactive material to the environment.

5 PROCEDURE

5.1 RUNNING MAGNEM

5.1.1 Log on to the LAN, if available.

5.1.2 Click on MAGNEM, which is in the Windows "START" menu or located on the Desktop.

5.2 DATA COLLECTION FOR MAGNEM INPUT

5.2.1 When the Callaway LAN is available, data will be automatically transferred from the Plant Computer to the appropriate data entry fields for all parameters that have a “manual” override option.

5.2.1.1 To manually enter data into any of these automatic fields, select the “Manual Over-ride” box. The box changes from white to red indicating manual over-ride of data entry is in effect for that field.

5.2.1.2 If the Plant Computer is not available or manual data for all fields must be used, select "MANUAL OVER-RIDE" from the pull-down menu. Select All Manual. This will override all automatic fields and allow manual data only. Data collection for manual entry is described in the following steps.

5.2.2 Using the plant computer system, display the PC Dose assessment data input screen using the Turn-On-Code P C D, or from the RRIS menu screen, select PC Dose.

5.2.3 Transcribe data from the PCD screen to the appropriate data field in MAGNEM. The PCD screen print option or Attachment 1, Dose Assessment Data Input sheet, may be used to aid in transcribing data.

5.2.3.1 For items not on the Plant Computer System, obtain data from the Chemistry Coordinator, Control Room, Engineering Staff, Field Monitoring Team Leader, or Field Monitoring Team Communicator, as appropriate.

5.2.4 Follow the program prompts after entering data.

5.2.5 If the plant computer is inoperable, dispatch a Rad/Chem Technician to the Control Room to provide effluent monitor data, and to the Plant Computer Room or EOF to provide meteorological data. If meteorological information is not available on-site, obtain wind direction and wind speed, including units, for Columbia, Missouri. The number for obtaining weather information is located in the Federal Emergency Organization section for off-site emergency telephone numbers in the Emergency Telephone Directory.

5.2.5.1 If stability class values are not available onsite, use an "D" stability class.

5.2.6 Obtain weather forecast data initially and every four hours.

5.3 MAGNEM SUMMARY SCREEN DISPLAY

5.3.1 The Summary Screen may be displayed upon entering all required information. Verify all input data is correct and select the option to "Calculate doses".

5.3.2 Inform the Recovery Manager or the Protective Measures Coordinator, if present in the EOF, or the Emergency Coordinator of any changes relevant to the Emergency Action Levels (EALs) or Protective Action Recommendations (PARs).

6 FINAL CONDITIONS

6.1 The emergency has been closed out or the recovery phase has been declared.

6.2 Complete all necessary records and forms according to this procedure and send them to Emergency Preparedness.

7 REFERENCES

7.1 **EIP-ZZ-00212**, Protective Action Recommendations

7.2 **COMN 20363**

7.3 **FSAR SA TABLE 2.3-55**

8 RECORDS

NOTE:	All Facility Logs, SENTRY or MAGNEM screen prints, office memos, notes, etc. should be attached to the Coordinator Checklist and turned in to the Logistics Support Coordinator and/or Emergency Preparedness.

PC DOSE ASSESSMENT DATA INPUT

COLOR LEGEND

RRI | PCDU | PCDRS

GOOD DATA
BAD DATA
HI ALARM
HI/HI ALARM

RELEASE RATE DATA

(1) UNIT VENT NOBLE GAS

_____	uCi/cc	GT-RE-21B	MONITOR
_____	uCi/cc	GT-RE-21B	MONITOR 15 MIN ROLL AVG
_____	uCi/sec	GT-RE-21B	RELEASE RATE 15 MIN AVG

CTMT ATMOSPHERE

_____	uCi/cc	GT-RE-31	GAS MONITOR
_____	uCi/cc	GT-RE-32	GAS MONITOR

CHARMS

_____	R/hr	GT-RE-59	CHARMS EAL
_____	R/hr	GT-RE-60	CHARMS EAL

RADWASTE VENT NOBLE GAS

_____	uCi/cc	GH-RE-10B	MONITOR
_____	uCi/cc	GH-RE-10B	MONITOR 15 MIN ROLL AVG.
_____	uCi/sec	GH-RE-10B	RELEASE RATE 15 MIN AVG

(2) PORV MONITORS

_____	mr/hr	AB-RE-111	"A" S/G
_____	uCi/cc	AB-RE-111	"A" S/G 15 MIN AVG
_____	mr/hr	AB-RE-112	"B" S/G
_____	uCi/cc	AB-RE-112	"B" S/G 15 MIN AVG
_____	mr/hr	AB-RE-113	"C" S/G
_____	uCi/cc	AB-RE-113	"C" S/G 15 MIN AVG
_____	mr/hr	AB-RE-114	"D" S/G
_____	uCi/cc	AB-RE-114	"D" S/G 15 MIN AVG

(3) AUX FEEDWATER TURBINE DISCHARGE

_____	mr/hr	FC-RE-385	MONITOR
_____	uCi/cc	FC-RE-385	MONITOR 15 MIN. AVG.

RADWASTE VENT FLOW STATUS

(4) STEAM FLOWRATES 15 MIN AVG lb/hr

PORV	SAFETIES	TOTAL FLOW	
_____	_____	_____	"A" S/G
_____	_____	_____	"B" S/G
_____	_____	_____	"C" S/G
_____	_____	_____	"D" S/G
N/A	N/A	_____	(5) AUX FW TURBINE DISCHARGE

MET DATA

(6) WIND SPEED 15 MIN AVG

_____	MPH	PRIMARY	10 METER
_____	MPH	SECONDARY	10 METER
_____	MPH	PRIMARY	60 METER
_____	MPH	PRIMARY	90 METER

(7) WIND DIRECTION (FROM) 15 MIN AVG

_____	DEG	PRIMARY	10 METER
_____	DEG	SECONDARY	10 METER
_____	DEG	PRIMARY	60 METER
_____	DEG	PRIMARY	90 METER

(8) STABILITY CLASS

_____	(A-G)	PRIMARY
_____	(A-G)	SECONDARY

(9) TEMPERATURE DIFFERENTIAL 15 MIN AVG

_____	DEG	PRIMARY	90M - 10M
_____	DEG	PRIMARY	60M - 10M

(10) SIGMA THETA 15 MIN AVG

_____	DEG	PRIMARY	10 METER
_____	DEG	SECONDARY	10 METER
_____	DEG	PRIMARY	60 METER
_____	DEG	PRIMARY	90 METER

UNIT VENT FLOW STATUS

CURRENT STATUS	FLOWRATE 15 MIN AVG (CFM)	
	18,975	MAIN STEAM ENCLOSURE
	1,100	CONDENSER AIR REMOVAL
	6,930	HPAC
(11)	9,900	FUEL BLDG EMERG EXHAUST FAN A
	9,900	FUEL BLDG EMERG EXHAUST FAN B
	25,000	AUX/FUEL BLD NORM EXH SLOW
	35,200	AUX/FUEL BLD NORM EXH FAST
	22,000	CONTAINMENT SHUTDOWN PURGE
	5,000	CONTAINMENT MINI-PURGE
(12)	_____	TOTAL FLOW RATE 15 MIN AVG

(1)

a. Obtain these values from the Plant Computer PC Dose Assessment Data Input Screen. If the values are bad or not available, dispatch a technician to the control room to obtain data from the RM-11 system.

b. Use 15 minute average release rate monitor values. Values are either instantaneous values, 15 minute rolling average, or 15 minute average. 15 minute average parameters are labeled as such.

c. Instantaneous value comes from GTR0021B.

d. 15 minute rolling average comes from GTR0021G

e. Release Rate 15 min avg. come from Fan Flow x GTR0021G

(2) (3) Steam Generator PORV and Auxiliary Feed Pump Turbine Discharge Monitors.

AB-RE-111, 112, 113, and 114 are not calibrated for readings less than 1 mr/hr (instantaneous) or 4.06 E-2 μCi/cc (15 min. Avg.).

FC-RE-385 is not calibrated for readings less than 1 mr/hr (instantaneous) or 5.51 E-2 (15 min. Avg.).

If these monitor values are above the lower calibration range, use 15 minute average concentrations. However, if the release has just started and the PCS has not updated with 15 minutes of release data, you should use the instantaneous (mr/hr) values.

(4) Total the steam flow rates from both the safeties and the PORVs.

(5) For a release via the Aux Feedwater Turbine discharge, use this flow rate.

(6) Wind speed should be obtained in the order given. Backup wind speed is available from the BOP computer room.

(7) Wind direction should be obtained in the order given. Backup data are available in the BOP Computer Room.

(8) Use the stability class in the order given.

(9) Use the temperature differential in the order given. Backup data are available in the BOP Computer Room.

(10) Use the Sigma Theta values if the temperature differential values are not available and in the order given.

(11) If (12) is not available from the plant computer screen, determine operating fan status from the Technical Assessment Coordinator, Technical Support Coordinator, or from the Control Room and total the values to obtain the Unit Vent flow rate.

(12) Total unit vent flow is provided on the plant computer system.