

IMMEDIATE ACTION PROCEDURES

RESPONSIBLE INDIVIDUAL: SITE EMERGENCY COORDINATOR/SHIFT SUPERVISOR

- NOTE -

SHIFT SUPERVISOR ASSUMES POSITION OF INTERIM
SITE EMERGENCY COORDINATOR UNTIL RELIEVED
BY A PRIMARY POSITION HOLDER.

CONDITIONS: WHENEVER EVENTS ARE IN PROGRESS WHICH COULD AFFECT THE
SAFETY OF THE PLANT, ONSITE PERSONNEL, OR THE OFFSITE
POPULATION.

IDENTIFY THE PROPER CATEGORY FROM THE LISTING BELOW AND GO TO THE
INDICATED PAGE.

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PERSONNEL INJURY - IMMEDIATE ACTION

RESPONSIBLE INDIVIDUAL: SHIFT SUPERVISOR/SITE EMERGENCY COORDINATOR

1. **RECORD** the following information: Date _____ Time _____ h
- Victim Location _____
- Nature of Injuries: Respiratory Distress _____ Broken Bones _____
 Uncontrolled Bleeding _____ Unable to Move _____
 Unconscious/Incoherent _____ Other/Unknown _____
- Is Victim Contaminated? Yes _____ No _____ Unknown _____

- NOTE -

Continue this procedure if any of the above were checked OR there is doubt of the victims need for medical attention.

2. **NOTIFY** onsite personnel of the injured personnel report, if First Aid Team has not already been alerted.
- a. SOUND a 5 second burst on the emergency PA alarm.
 - b. If a drill, ANNOUNCE "This is a drill. This is a drill."
 - c. ANNOUNCE "A personnel injury exists." Give location and instructions.

REPEAT the above step once.

- NOTE -

IF the First Aid Team Leader determines that the victim requires hospital care, he will direct the responding Security officer to notify CAS/SAS to call for an ambulance.

3. **IF** victim requires transport to the hospital **AND** is contaminated, **THEN** initiate an **ALERTING** call to Calvert Memorial Hospital (535-4000). Ask for Ext. 344 or 345. Ensure you are speaking to a nurse and provide the following information:

Total number of victims _____ Number Contaminated _____

Nature of Injuries _____

Estimated Time of Arrival at Calvert Memorial Hospital _____

CONTINUED ON NEXT PAGE

PERSONNEL INJURY - IMMEDIATE ACTION (CONT'D)

4. EVALUATE other conditions against Emergency Action Level (EAL) criteria. GO TO
Page 3.1-15.

FORWARD THIS PROCEDURE TO THE EMERGENCY PLANNING UNIT UPON
TERMINATION OF EMERGENCY CONDITIONS.

FIRE - IMMEDIATE ACTION

RESPONSIBLE INDIVIDUAL: SHIFT SUPERVISOR/SITE EMERGENCY COORDINATOR

1. RECORD the following: DATE _____ TIME _____
- Location _____
- Type _____
- Size _____
- Damage _____

IF PERSONNEL INJURIES are reported, direct implementation of ERPIP 3.1.01.

CONTINUE this procedure ONLY IF fire is INSIDE Protected Area AND fire team is activated.

2. NOTIFY onsite personnel of reported fire.
- a. SOUND Emergency PA alarm for 5 seconds.
- b. If a drill, ANNOUNCE "This is a Drill." "This is a Drill."
- c. ANNOUNCE, "There is a Fire." Give location and specific instructions.
- REPEAT above step once.

3. OBTAIN from Fire Brigade Leader:
- Firefighting efforts BEGAN at _____ h
- Safety Related Equipment affected: _____ Yes _____ No
- OFFSITE firefighting assistance required: _____ Yes _____ No

- NOTE -

If OFFSITE firefighting assistance is required, direct that assistance be requested by calling 911.

CONTINUED ON NEXT PAGE

FIRE IMMEDIATE ACTION (CONTD)

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4. IF Fire Brigade Leader requests electrical equipment be de-energized in affected area, consider request based on components involved AND current plant operating condition.
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5. GO TO Page 3.1-15 to evaluate against Emergency Action Level (EAL) criteria.
-

FORWARD THIS PROCEDURE TO THE EMERGENCY PLANNING UNIT
UPON TERMINATION OF EMERGENCY CONDITIONS.

QUICK DOSE ESTIMATE DURING RADIOACTIVITY RELEASE

RESPONSIBLE INDIVIDUAL: INTERIM RAD, IF AVAILABLE. OTHERWISE THE
SHIFT SUPERVISOR/SEC MAY DIRECT CONTROL
ROOM PERSONNEL TO PERFORM THIS PROCEDURE.

1. RECORD the following:

Release/Alarm(s) began _____ h _____ / _____ / _____
Time Date

Estimated duration (assume 60 minutes if unknown) _____ minutes

- NOTE -

Record off-normal radiation indications at 15 minute
intervals during event.

MAIN VENT RADIOGAS READINGS

Time	UNIT 1 Reading (CPM)	Trend	Time	UNIT 2 Reading (CPM)	Trend
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

AREA RADIATION READINGS

Monitor _____			Monitor _____		
Time	Reading (R/h)	Trend	Time	Reading (R/h)	Trend
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

CONTINUED ON NEXT PAGE

QUICK DOSE ESTIMATE DURING RADIOACTIVITY RELEASE (CONT'D)

2. RECORD meteorological data:

METEOROLOGICAL DATA

Wind Speed _____ mph	IF ΔT is not available:
Wind Direction _____° (from)	Determine average wind
ΔT (200' - 30') _____°F	band fluctuation during
	last hour _____
	Band Widths

DETERMINE atmospheric stability class using ΔT if available. Otherwise use wind band fluctuations. If neither are available, use outside observation.

ΔT (200' - 30')	WIND BAND FLUCTUATIONS	OUTSIDE CONDITIONS	STABILITY CLASS
Less than -1.7°F	2 1/2		A
-1.7°F to -1.6°F	2	* Calm sunny day	B
-1.5°F to -1.4°F	1 1/2	Any cloudy day, or windy sunny day	C
-1.3°F to -0.5°F	1	Windy night (clear or cloudy)	D
-0.4°F to +1.3°F	1/2	* Calm, cloudy night	E
+1.4°F to +3.6°F	1/4	* Calm, clear night	F
Greater than +3.6°F	1/6		G

* (CALM: less than 10 mph)

Stability Class _____ at _____ h
Time

BASED ON: ΔT (200' - 30') _____
Wind Band Fluctuations _____
Outside Observation _____

FORWARD THIS PROCEDURE TO THE EMERGENCY PLANNING UNIT
UPON TERMINATION OF EMERGENCY CONDITIONS.

QUICK DOSE ESTIMATE DURING RADIOACTIVITY RELEASE (CONT'D)

- NOTE -

IF Main Vent Monitor Readings are available, continue this step. Otherwise GO TO Step 4.

3. DETERMINE the projected Whole Body Site Boundary Dose Rate.
- a. RECORD the Main Vent readings to determine total reading. (Page 3.1-5)
- U-1 Main Vent Reading _____ cpm
- U-2 Main Vent Reading + _____ cpm
- TOTAL Main Vent Reading _____ cpm
- b. DETERMINE Conversion Factor based on current stability class.
(Page 3.1-6)

Stability Class	A	B	C	D	E	F	G
Conversion Factor	2E-5	1E-4	2E-4	5E-4	2E-3	6E-3	3E-2

- c. CALCULATE the Site Boundary Dose Rate.

Multiply the TOTAL Main Vent Reading by the Conversion Factor.

$$\frac{\text{TOTAL (cpm)}}{\text{Conversion Factor}} \times \text{Conversion Factor} = \frac{\text{Whole Body Site Boundary Dose Rate}}{\text{Dose Rate}} \text{ mrem/h}$$

- d. GO TO page 15 and compare calculated dose rate against EALs.
IF an EAL has not been met THEN go to page 9 and evaluate conditions against Radiological Event criteria.

CONTINUED ON NEXT PAGE

QUICK DOSE ESTIMATE DURING RADIOACTIVITY RELEASE (CONT'D)

- NOTE -

To perform this step, it is necessary that a portable instrument survey be taken at approximately 10 meters from the Main Vent stack. The Interim RAD will perform this survey at the Site Emergency Coordinators' request. The calculation may be performed by either the Interim RAD or one of the Control Room personnel.

4. DETERMINE the projected Whole Body Site Boundary Dose Rate.

- a. RECORD the 10 meter radiation exposure reading: _____ R/h
- b. DETERMINE the Conversion Factor based on current stability classification.
(Page 3.1-6)

Stability Class	A	B	C	D	E	F	G
Conversion Factor	1	5	10	30	90	300	1000

- c. CALCULATE the Site Boundary Dose Rate.

Multiply the Radiation Reading at 10 meters by the Conversion Factor.

$$\frac{\text{10 meter Radiation Reading}}{\text{Conversion Factor}} \times \text{Conversion Factor} = \frac{\text{Whole Body Site Boundary Dose Rate}}{\text{mrem/h}}$$

- d. GO TO page 15 and compare calculated dose rate against EALS.
IF an EAL has not been met THEN go to page 9 and evaluate conditions against Radiological Event criteria.

FORWARD THIS PROCEDURE TO THE EMERGENCY PLANNING UNIT
UPON TERMINATION OF EMERGENCY CONDITIONS.

RADIOLOGICAL EVENT CLASSIFICATION

RESPONSIBLE INDIVIDUAL: SHIFT SUPERVISOR WITH ASSISTANCE OF INTERIM RAD

- NOTE -

On shift Rad-Con and Chemistry Technicians are to be notified for any unplanned release conditions.

-
1. EVALUATE Radiological Event Criteria against current conditions. If criteria have been met, THEN continue this procedure. Otherwise continue to monitor conditions and review CCL-118 for non-emergency reporting requirements.

- NOTE -

Radiological event criteria is on next page of this procedure.
Tech. Spec. criteria are on Attachment 5.

Radiological Event Criteria met _____ Date _____ Time _____ h

-
2. DECLARE a Radiological Event.
- a. Sound emergency P/A alarm for 5 seconds.
 - b. If a drill, ANNOUNCE "This is a drill. This is a drill."
 - c. Announce, "A Radiological Event exists." Give specific instructions.
 - d. ANNOUNCE "RAD report to the Control Room."
-

-
3. Upon arrival of the RAD at the Control Room, provide a briefing and request that dose projections and possible protective action recommendations be determined.
-

CONTINUED ON NEXT PAGE

RADIOLOGICAL EVENT CLASSIFICATION (CONT'D)

- NOTE -

Evaluation of the Radiological Event criteria listed below requires that certain radiological parameters be available. The determination of whether a Radiological Event exists should be a joint effort between the on-shift technician and the Shift Supervisor.

RADIOLOGICAL EVENT EVALUATION CRITERIA

GENERAL	SPECIFIC
UNPLANNED radiation monitor alarm.	An RMS alarm which, in the opinion of the Shift Supervisor is valid.
UNPLANNED radiation field.	An unplanned radiation field greater than 100 mR/h in a local area.
UNPLANNED airborne activity.	An unplanned gross airborne activity greater than: 10^{-9} uCi/cm ³
Loose surface contamination.	Contamination (outside controlled area) greater than: 10^4 dpm/100 cm ² Beta-gamma <u>OR</u> 10^3 dpm/100 cm ² Alpha
Spill (unmonitored release to the environment.)	Unmonitored radioactive liquid spill, which after analysis indicates 25% of 10CFR20 limits for any isotope have been exceeded.

- NOTE -

After initial alarm requiring Radiological Event declaration, subsequent and recurring alarms of the same monitor over a period of hours or days, do not constitute a Radiological Event when the indications are less than 25% above initial indications.

WEATHER - IMMEDIATE ACTIONS

RESPONSIBLE INDIVIDUAL: SITE EMERGENCY COORDINATOR/SHIFT SUPERVISOR

1. EVALUATE the need for immediate actions when one of the following is experienced or is predicted to affect the site.

TORNADO

- Tornado Watch - Halt irradiated fuel handling outside of containment and secure all fuel.
- Tornado Warning - Verify local weather conditions by calling the Principal Systems Operator. If this service is not available, contact Patuxant River Naval Air Station (863-3535).

HURRICANE

- Hurricane Watch - Obtain updates every four hours from the Principal Systems Operator.
- Hurricane Warning - Secure outside equipment and shut intake structure watertight door. (IS-2).

FLOOD

Shut intake structure watertight door (IS-2) and hatches.

2. GO TO Page 3.1-15 and evaluate conditions against Emergency Action Level (EAL) criteria.

~~NOTE~~

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LNG INCIDENT

RESPONSIBLE INDIVIDUAL: SITE EMERGENCY COORDINATOR

- NOTE -

THIS PROCEDURE HAS NOT BEEN DISTRIBUTED AT THIS TIME. IT IS BEING MAINTAINED BY THE EMERGENCY PLANNING UNIT, AND WILL BE DISTRIBUTED WHEN THE LNG FACILITY IS ONCE AGAIN OPERATIONAL.

- NOTE -

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EMERGENCY ACTION LEVEL(EAL) CRITERIA

CATEGORY	GENERAL EMERGENCY	SITE EMERGENCY
RADIOACTIVITY RELEASE:	Actual or potential offsite dose >1000 mrem whole body/ 5000 mrem thyroid under actual meteorological conditions. Whole body site boundary dose rate >1000 mrem/h under actual meteorological conditions.	Actual or potential projected dose at Protected Area fence >500 mrem whole body/ 2500 thyroid under actual meteorological conditions. Whole body site boundary dose rate >250 mrem/h under actual meteorological conditions.
FISSION PRODUCT BARRIER DEGRADATION:	TWO of the following: <ul style="list-style-type: none"> • RCS activity > 300 uCi/cc I-131 Dose Equivalent. • EOP-3 Implementation • CTMT degradation (any of the below) <ul style="list-style-type: none"> - Equip. hatch not closed/sealed. - Either airlock inoperable. - CTMT pressure > 25 psig. - All penetrations not closed or capable of being closed on CIS. 	LOCA with SI Tank discharge. Total loss of main & auxiliary feedwater for longer than 10 min. Subcooled margin lost (0°F.) CTMT pressure > 25 psig. CTMT ave. temp. >180°F.
SECURITY:	Control Room or other vital areas are not under BG&E control.	Takeover of Control Room and one of the safe shutdown panels is imminent.
FIRE:		Major fire which defeats both safety trains or functions.
GENERAL SAFETY:	Plant conditions exist which could result in imminent core degradation.	Plant conditions exist which could result in gross plant contamination.
STEAM LINE BREAK:		SGIS and both MSIV's fail to close.
AIRCRAFT/MISSILE:		SEVERE damage to any of the below: <ul style="list-style-type: none"> -Auxiliary Bldg. -Intake Structure -#12 Cond. Str. Tk. -#21 Diesel Fuel Tk. -Containment -500kv Sw. Yard -13 kv Sw. Yard -RWT
WEATHER:		Earthquake >0.15g horz/0.10g vert. Flood >45' above mean sea level. Wind >90 mph. Predicted >150 mph.
ELECTRICAL:		Loss of vital AC/DC for >15 min. Transient affecting RCS or waste processing occurs AND annunciators are not functioning for >15 min.
OTHER HAZARDS: EXPLOSIONS GASES LIQUIDS		EOP-3 implemented W/O regaining shutdown control within 15 min. Hazardous substance rendering safety related equipment inoperable in any of the following: <ul style="list-style-type: none"> -Control Room -Containment -Shutdown Panels -Cable Spread Rm -Diesel Gen Rm -Switchgear Rm

EMERGENCY ACTION LEVEL(EAL) CRITERIA

CATEGORY	ALERT	UNUSUAL EVENT																																													
RADIOACTIVITY RELEASE:	<p>Prior to augmentation: Any valid RMS Readings > listed for longer than 15 minutes & expected to continue for longer than 1 hour.</p> <table> <thead> <tr> <th>NAME</th><th>NUMBER</th><th>(CPM)</th></tr> </thead> <tbody> <tr> <td>U-1 Main Vent</td><td>1-RE-5415</td><td>8.9E4</td></tr> <tr> <td>U-2 Main Vent</td><td>2-RE-5415</td><td>1.0E5</td></tr> <tr> <td>U-1 Waste Proc</td><td>1-RE-5410</td><td>2.3E5</td></tr> <tr> <td>U-2 Waste Proc</td><td>2-RE-5410</td><td>2.3E5</td></tr> <tr> <td>Access Control</td><td>0-RE-5425</td><td>8.4E5</td></tr> </tbody> </table> <p>Other plant conditions with actual/potential doses >100 mrem Whole Body/ 500 mrem thyroid (Excluding controlled area).</p>	NAME	NUMBER	(CPM)	U-1 Main Vent	1-RE-5415	8.9E4	U-2 Main Vent	2-RE-5415	1.0E5	U-1 Waste Proc	1-RE-5410	2.3E5	U-2 Waste Proc	2-RE-5410	2.3E5	Access Control	0-RE-5425	8.4E5	<p>Prior to augmentation: Any valid RMS Readings > listed for longer than 1 hour.</p> <table> <thead> <tr> <th>NAME</th><th>NUMBER</th><th>(CPM)</th></tr> </thead> <tbody> <tr> <td>U-1 Main Vent</td><td>1-RE-5415</td><td>8.9E3</td></tr> <tr> <td>U-2 Main Vent</td><td>2-RE-5415</td><td>1.0E4</td></tr> <tr> <td>U-1 Waste Proc</td><td>1-RE-5410</td><td>2.3E4</td></tr> <tr> <td>U-2 Waste Proc</td><td>2-RE-5410</td><td>2.3E4</td></tr> <tr> <td>U-1 ECCS PP Rm</td><td>1-RE-5406</td><td>2.0E5</td></tr> <tr> <td>U-2 ECCS PP Rm</td><td>2-RE-5406</td><td>2.0E5</td></tr> <tr> <td>Fuel Handling Rm</td><td>0-RE-5420</td><td>1.4E5</td></tr> <tr> <td>Access Control</td><td>0-RE-5425</td><td>8.4E4</td></tr> </tbody> </table> <p>Liquid waste discharge monitor (0-R1-2201) high alarm trip fails to shut both isolation valves.</p>	NAME	NUMBER	(CPM)	U-1 Main Vent	1-RE-5415	8.9E3	U-2 Main Vent	2-RE-5415	1.0E4	U-1 Waste Proc	1-RE-5410	2.3E4	U-2 Waste Proc	2-RE-5410	2.3E4	U-1 ECCS PP Rm	1-RE-5406	2.0E5	U-2 ECCS PP Rm	2-RE-5406	2.0E5	Fuel Handling Rm	0-RE-5420	1.4E5	Access Control	0-RE-5425	8.4E4
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GENERAL SAFETY:	Conditions exist which have substantially degraded plant safety.	Mode change imminent from not meeting LCO or conditions warrant increasing offsite agency awareness.																																													
FISSION PRODUCT BARRIER DEGRADATION:	EOP's 5, 6 or 7 implemented.	ECCS actuation during power operation involving initiating signal resulting in ECCS water being injected into RCS.																																													
FUEL	RCS activity > 300 uCi/cc I-131 DE.																																														
RCS	Subcooled Margin < 10°F.																																														
CTMT	Ctmt pressure > 4 psig.	ECCS flow verified by LPSI/HPSI indication on 1/2 C08 & 1/2 C09.																																													
	Ctmt temperature (ave) > 150°F.																																														
	Failure of RPS to bring reactor sub-critical after a valid trip condition.																																														
SECURITY:	Ongoing severe security threat involving physical attack on Protected Area.	"Security Emergency" as described in Calvert Cliffs Security Counting Plan.																																													
FIRE:	Safety Related Equipment area fire requiring offsite assistance.	Safety Related Equipment area fire not extinguished within 10 minutes.																																													
STEAM LINE BREAK:	Main Steam Line break with SGIS.	Resulting in automatic reactor trip.																																													
AIRCRAFT/MISSILE:	Crash inside of protected area, or onto any permanent plant structure.	Aircraft crash outside protected area and not impacting any plant structures.																																													
WEATHER:	<p>Earthquake > 0.08g Horz. or 0.05g vert.</p> <p>Flood > 40' above MSL.</p> <p>Wind > 90 mph predicted < 150 mph.</p> <p>Tornado striking facility.</p>																																														
ELECTRICAL:	<p>Loss of all vital DC to either unit.</p> <p>EOP-15 Implementation.</p> <p>Unplanned loss of all/most annunciators for > 1 hour during power operation.</p>																																														
OTHER HAZARDS: EXPLOSIONS GASES LIQUIDS	<p>EOP-8 Implemented.</p> <p>Explosion or release of hazardous substance rendering safety related equipment inoperable.</p>	Explosion or release of hazardous substance potentially affecting a vital area or personnel safety.																																													

EMERGENCY CLASSIFICATION AND INITIAL NOTIFICATION OF OFFSITE AGENCIES

RESPONSIBLE INDIVIDUAL: SITE EMERGENCY COORDINATOR

- NOTE -

The decision to classify, notify, and recommend protective actions is **NOT** to be delegated by the Site Emergency Coordinator.

1. **RECORD** the following: Date _____ Time _____ h

EMERGENCY CLASSIFICATION: () General Emergency
() Site Emergency
() Alert
() Notification of Unusual Event

Emergency Classification Declared By: _____

2. **NOTIFY** onsite personnel of the Emergency Classification.

- a. SOUND the emergency PA alarm for 5 seconds.
- b. If a drill, ANNOUNCE "This is a drill. This is a drill."
- c. Announce "A(n) _____ exists." For Alert or higher, ANNOUNCE "All personnel report to your assembly area immediately."

REPEAT the above step once.

3. **NOTIFY** offsite agencies of Emergency Classification.

- a. Ensure the Initial Notification Form (Attachment 1) is completed.
- b. **DIRECT** the Emergency Communicator to transmit the Initial Notification information to the offsite agencies.

- NOTE -

Offsite notification is to be initiated within 15 minutes of the declaration of an Emergency Classification.

CONTINUED ON NEXT PAGE

EMERGENCY CLASSIFICATION AND INITIAL NOTIFICATION
OF OFFSITE AGENCIES (CONT'D)

4. RECALL emergency organization personnel in accordance with Attachment 2 of this procedure (Page 3.1-20).

5. GO TO the Site Emergency Coordinator Checklist ERPIP 4.1.2. as time permits or as appropriate.

- NOTE -

For Follow-Up Notifications within the same Emergency Classification, use Attachments 3 or 4 of this procedure.

FORWARD THIS PROCEDURE TO THE EMERGENCY PALNNING UNIT UPON TERMINATION OF EMERGENCY CONDITIONS.

INITIAL NOTIFICATION

Use for initial notification, emergency class upgrading and downgrading. Give items 1 through 12 in order.

1. This is/is not an exercise. (circle one)
2. Name of Caller: _____
3. Title/Organization: _____
4. Facility: Calvert Cliffs
5. Emergency Class: () Unusual Event () Alert
() Site Emergency () General Emergency () None
6. Time Declared: _____ Date: _____
7. Nature of Incident (EAL, etc.): _____
8. Radioactivity: () Has Not Been Released () Has Been Released
() Is Being Released () In Plant () From the Plant
9. Type of Release: () None () Airborne () Waterborne () Surface Spill
10. Population Affected: () None () Yes
Location (Sector/Zone) _____
11. Protective Actions Recommended:
() None () Yes _____
12. This is/is not an exercise.
(circle one) _____
- SEC Signature _____

Use Conference feature of dedicated phone for simultaneous notification or call in order shown. If plume is heading easterly, call DOR EOC after CC EOC.

<u>Call to:</u>	<u>Date</u>	<u>Time</u>	<u>Call Received By</u>	<u>Contact Method</u>
CC EOC	_____	_____	_____	() Dedicated Phone
ST. M EOC	_____	_____	_____	() Radiotelephone 153.665 MHz (call sign WXD211 or KXE 463)
DOR EOC	_____	_____	_____	() Other (specify) _____
MD EOC	_____	_____	_____	_____
DRC	_____	_____	_____	_____
DRC contact during non-work hours is possible only if Accident Assessment Center is manned.				
NRC	_____	_____	_____	_____
Security Cntl.	_____	_____	_____	_____
8-5988	_____	_____	_____	_____
OTHERS	_____	_____	_____	_____
(specify)	_____	_____	_____	_____

- NOTE -

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PERSONNEL RECALL BY PAGER

EXISTING CONDITION	ERP POSITION	NOTIFY (N) RECALL (R)	# OF PEOPLE TO BE CALLED	PAGER CODES (LISTED BY PRIORITY)
<u>Radiological</u>	PS	N	1	21*, 12, 13
<u>Event 25%</u>	RAD	N & R	1	41*, 42, 43, 81, 82
<u>T. S. Limit</u>	RPD	N	1	31*, 32, 23
	CD	N	1	71*, 72, 73
UNUSUAL EVENT	SEC	N	1	01*, 02, 03, 04
	PS	N	1	21*, 12, 13
if, radiological event exists	RAD	N & R	1	41*, 42, 43, 81, 82,
	RPD	N	1	31*, 32, 23
	CD	N	1	71*, 72, 73
Others as needed	TSCD	As needed	1	51*, 52, 53
	ERMT OFMT, ONMT	As needed		05 (Group Code)
ALERT, SITE EMERGENCY, OR GENERAL EMERG	ALL	R	ALL	11, 22, 33, 44, 55

* Primary Emergency Response Individual

Pager Recall instructions in ERPIP 5.1, ATTACHMENT 3.

- NOTE -

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ATTACHMENT 3
FOLLOW-UP COMMUNICATIONS
SHORT FORM

Notify off-site agencies of Items 1 through 8 sequentially. If plume is headed easterly, notify DOR EOC after CC EOC.

1. This is/is not an exercise (circle one).
2. Name of Caller: _____
3. Location of Incident: Calvert Cliffs Nuclear Power Plant
4. Class of Emergency Classification (check one):

() Unusual Event
() Alert

() Site Emergency
() General Emergency
5. Date/Time Declared: _____ / _____
6. Affected Unit (check one) () One () Two () Common Systems
7. Narrative (be concise; DO NOT use acronyms; Use space provided only):

Site Emergency Coordinator

Signature Date Time

<u>Call to:</u>	<u>Date</u>	<u>Time</u>	<u>Call Received By:</u>	<u>Contact Method</u>
CC EOC	_____	_____	_____	() Dedicated Phone
ST. M EOC	_____	_____	_____	() Radiotelephone 153.665 Mhz (call sign WXD211 or KXE 463)
DOR EOC	_____	_____	_____	() Other (specify) _____
MD EOC	_____	_____	_____	_____
DRC	_____	_____	_____	_____
DRC contact during non-work hours is possible, only if Accident Assessment Center is manned.				
NRC	_____	_____	_____	_____
ANI (203)	_____	_____	_____	_____
677-7305	_____	_____	_____	_____
OTHERS	_____	_____	_____	_____
(specify)	_____	_____	_____	_____

- NOTE -

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FOLLOW-UP COMMUNICATIONS
LONG FORM

Notify off-site agencies of Items 1 through 19 sequentially. If plume is headed easterly, notify DOR EOC after CC EOC.

<u>Call to:</u>	<u>Date</u>	<u>Time</u>	<u>Call Received By:</u>	<u>Contact Method for EOCs</u>
CC EOC	_____	_____	_____	() Dedicated Phone
ST. M EOC	_____	_____	_____	() Radiotelephone 53.665 Mhz (call sign WXD211 or KXE 463)
DOR EOC	_____	_____	_____	() Other (specify) _____
MD EOC	_____	_____	_____	_____
DRC	_____	_____	_____	_____

DRC contact during non-work hours is possible, only if Accident Assessment Center is manned.

NRC	_____	_____	_____	_____
ANI (203)	_____	_____	_____	_____
677-7305	_____	_____	_____	_____
OTHERS	_____	_____	_____	_____
(specify)	_____	_____	_____	_____

.....

1. This is/is not an exercise (circle one).

2. Name of Caller: _____

3. Location of Incident: Calvert Cliffs Nuclear Power Plant

4. Emergency Classification

(check one):

() Unusual Event

() Alert

() Site Emergency

() General Emergency

5. Date/Time Declared: _____ / _____

6. Affected Unit (check one):

() One

() Two

() Common Systems

7. Nature of Incident (EAL,etc): _____

*8. Reactor/Plant Status (check):

☐ Has Not Tripped☐ Has Tripped☐ Hot Standby☐ Hot Shutdown☐ Cooling Down☐ Cold Shutdown

*9. Emergency Safeguards System actuated: (e.g., SIAS, CIS, etc.) _____

*10. Reactor Emergency Response Actions underway: _____

*11. Off-Site Power (check one):

Is Available ☐Is Not Available ☐

*12. Status of Emergency Power Diesel Generators:

Diesel-GeneratorOperableNon-Operable

#11

☐☐

#12

☐☐

#21

☐☐

13. Personnel Status (Injuries/Contamination):

NameStatus• Extent/Levels of Exposure or Contamination

14. Radioactivity (check one):

☐ Has Not Been Released☐ Is Being Released☐ Has Been Released☐ In the Plant☐ From the Plant*Data Required by DRC for Release Calculations

Type of actual or potential release:

A. Airborne: Noble Gases, Composite (Xe, Kr) _____ Ci/s

Iodines (I-131 equivalent) _____ Ci/s

Particulates _____ Ci/s

Others _____ Ci/s

_____ Ci/s

ATTACHMENT 4 (CONT.)
(Page 3 of 4)

- 1) Time of Reactor Shutdown: _____ /Date _____
- 2) Time released to containment building: _____
- 3) Time released from Plant: _____
- 4) Wind Speed: _____ mi/h; _____ m/s
- 5) Wind direction (from): _____ °, (to): _____ °
- 6) Plume centerline X/Q at _____ miles: _____ s/m³
- 7) Estimated duration of release: _____ h.
- 8) Atmospheric Stability Class: A B C D E F G (circle one)
- 9) Form of precipitation (if any): _____; Location: _____

Impact Times:

Sector	Zone	Impact Times / Date
_____	_____	_____ / _____
_____	_____	_____ / _____
_____	_____	_____ / _____

B. Surface Spill:

V = _____ gal.
A = _____ uCi/cm³

Spill (circle one): In plant Outside plant

Release Rate: _____ Ci/s

Date/Time (h) occurred: _____ / _____

C. Waterborne: _____ gal.; _____ uCi/cm³

Date/Time (h) occurred: _____ / _____

14. Measured or (projected) Exposure Rates and Integrated Dose: (circle one)

Location	Sector/Zone	Exposure Rate (R/h)	W.B.	Dose (rem)		Date/Time (h)
				Thyroid Adult	Thyroid Child	

Site

Boundary
2 miles

5 miles

10 miles

15. Estimated Surface Contamination:

<u>Sector/Zone</u>	<u>General Area</u> <u>dpm/100 cm²</u>	<u>Hot Spots</u> <u>dpm/100 cm²</u>	<u>Time (h)/Date</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

16. Offsite Emergency Response Actions Underway:

17. Recommended Protective Actions:

<u>Sector</u>	<u>Zone</u>	<u>Action</u>	<u>Date/Time (h)</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

18. On-Site Assistance: Required Not Required Request Status

Personnel: _____

Supplies: _____

Equipment: _____

19. Prognosis of Incident (circle one):

Worsening
Improving

Terminating
No Change

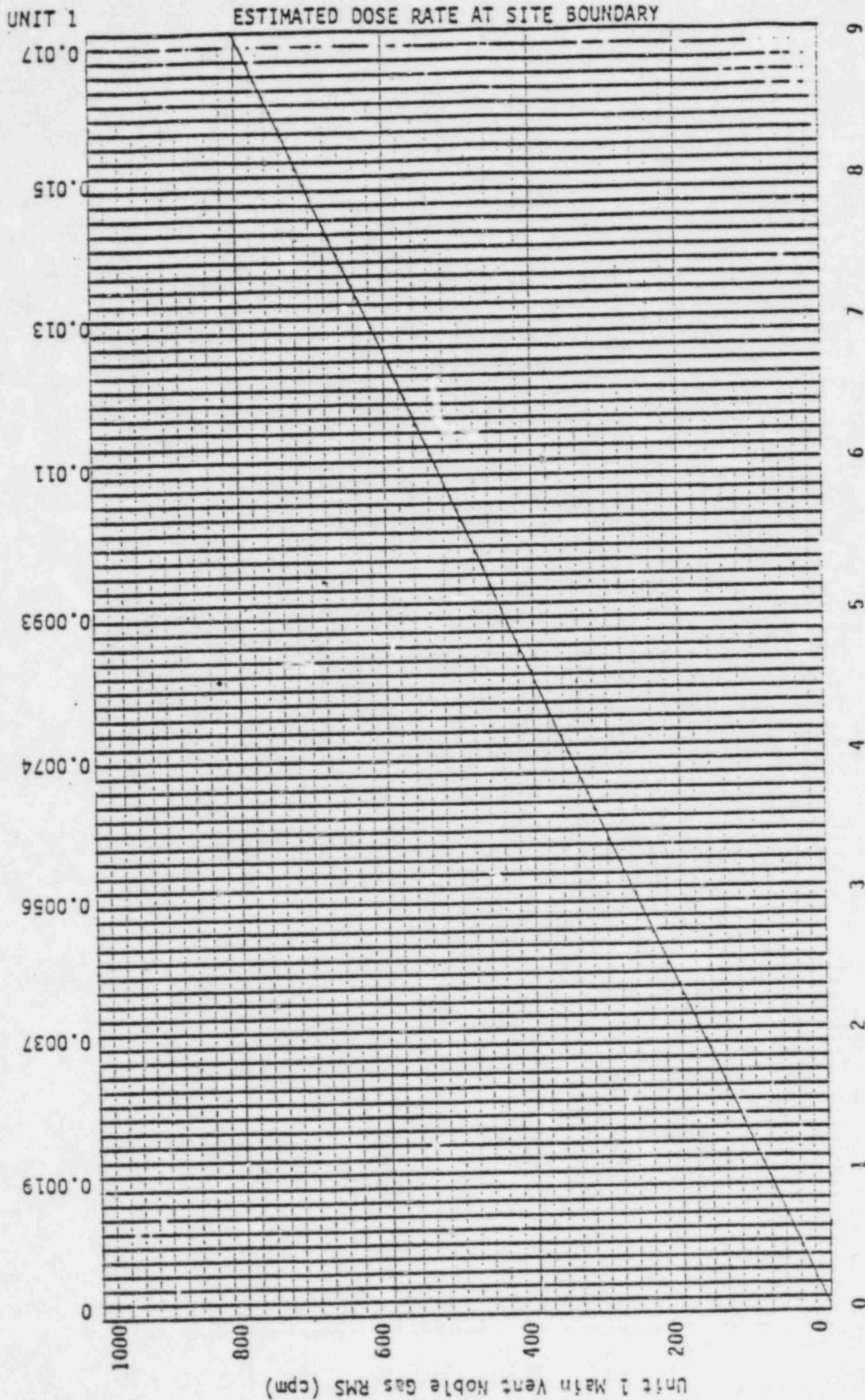
_____/_____/_____
Site Emergency Coordinator

Signature

Date

Time

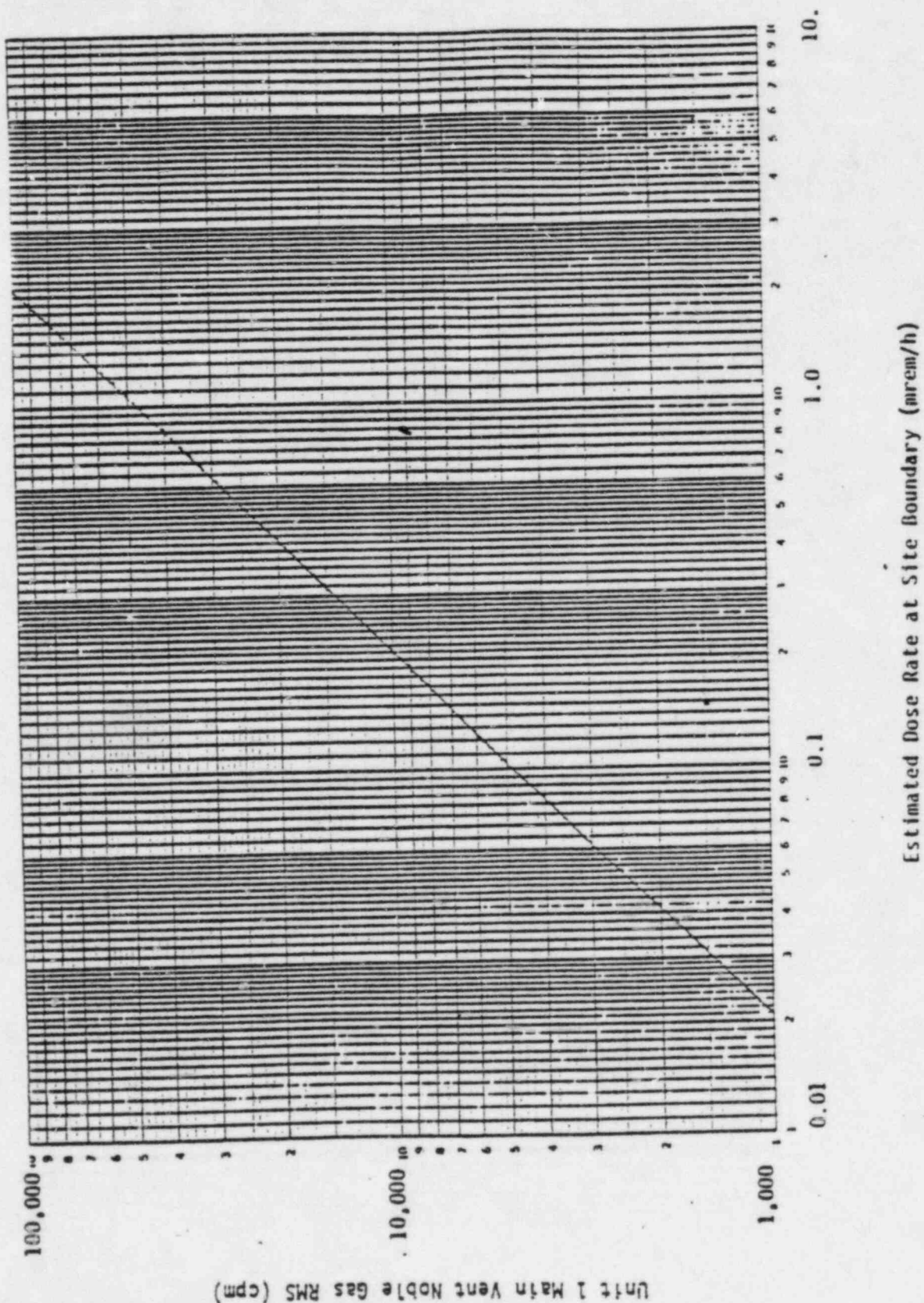
Estimated Dose Rate at Site Boundary (mrem/h)



Estimated Percent of Noble Gas Technical Specification Limit (T.S.L.)

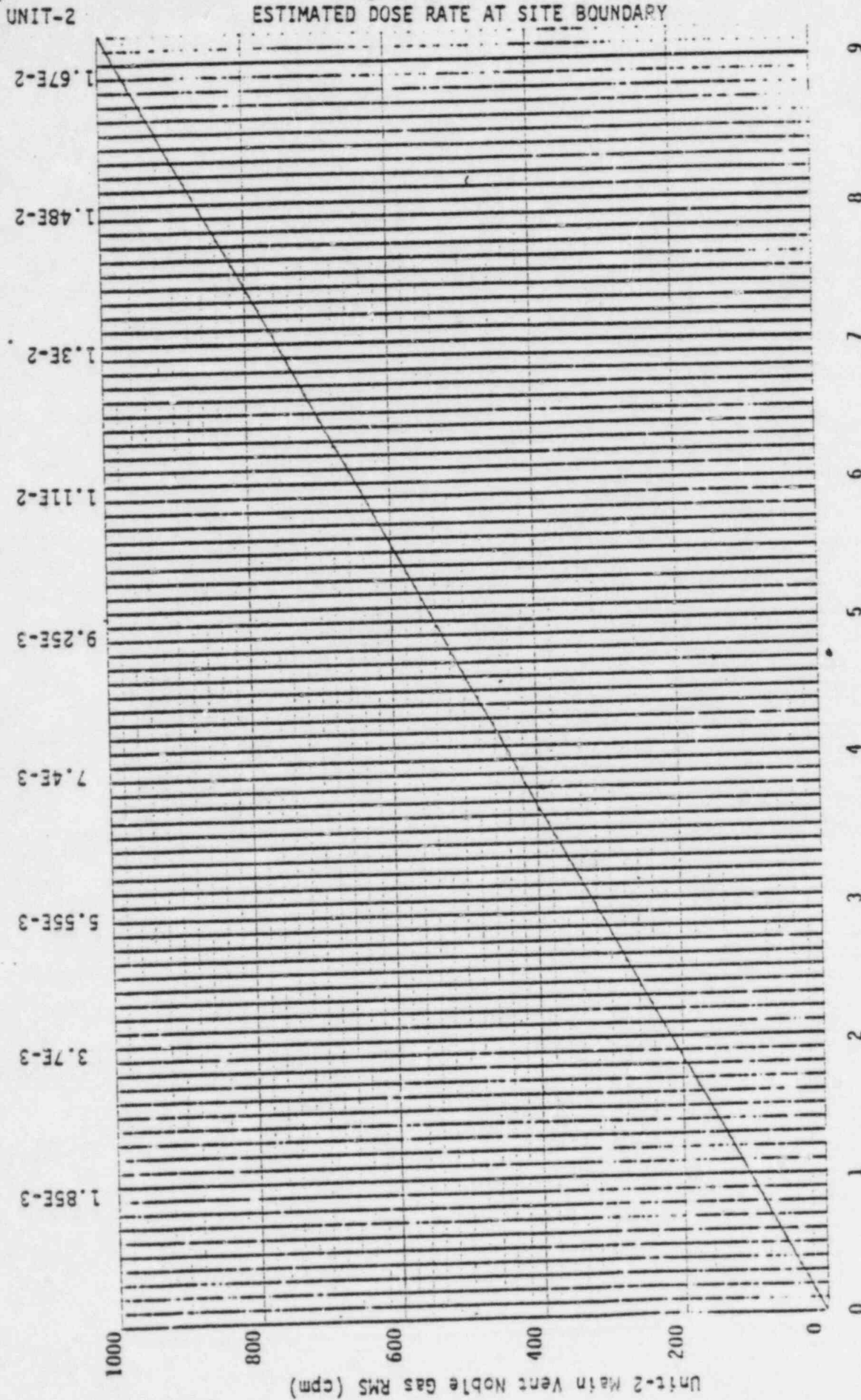
Key: 1.86 E-3 mrem/h per % T.S.L.; 885 cpm = 10% T.S.L.

UNIT-1 ESTIMATED DOSE RATE AT SITE BOUNDARY



Estimated Dose Rate at Site Boundary (mrem/h)

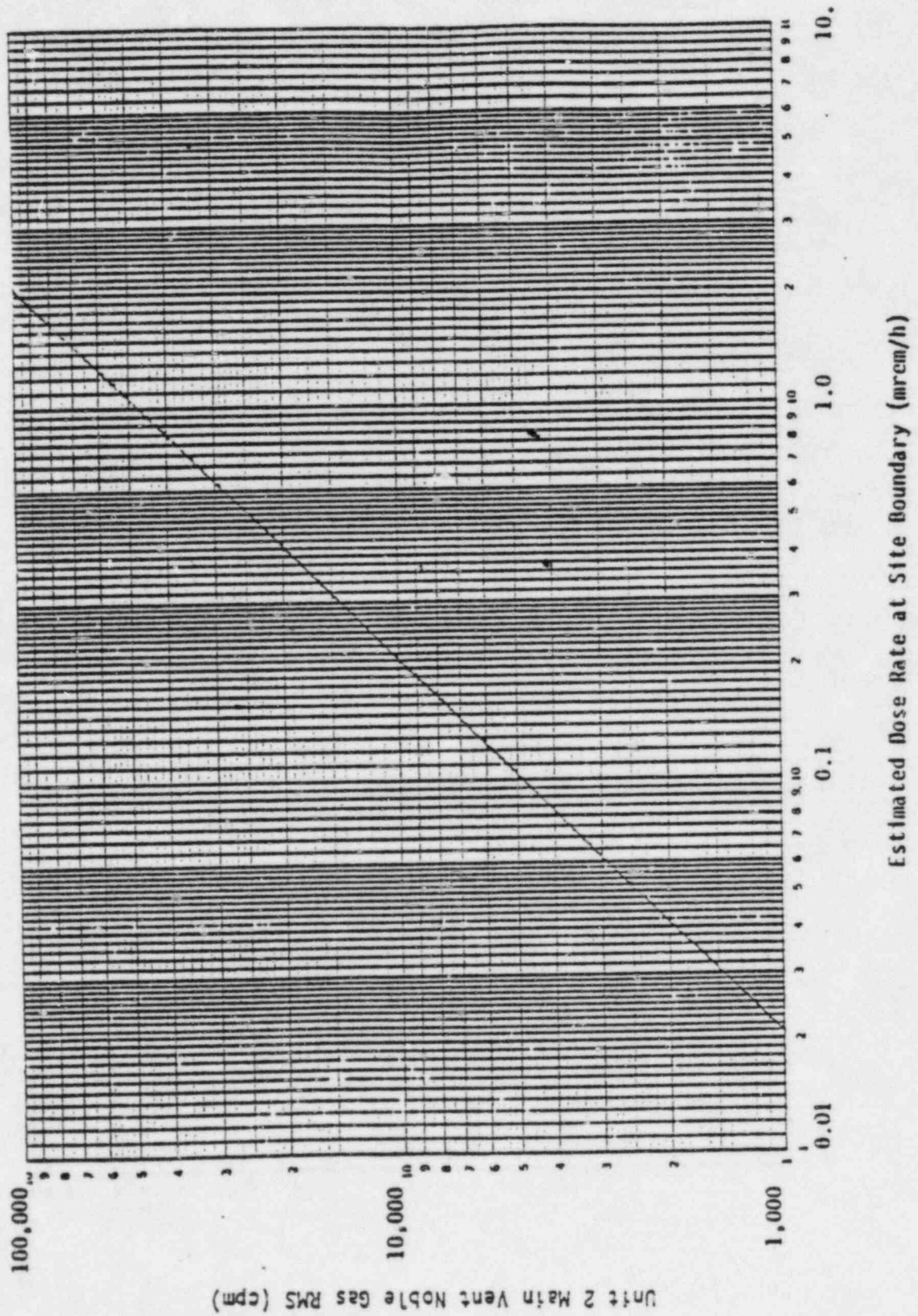
ESTIMATED DOSE RATE AT SITE BOUNDARY



Estimated Percent of Noble Gas Technical Specification Limit (T.S.L.)

Key: 1.85E-3 mrem/h per % T.S.L.
1083 cpm = 10% T.S.L.

UNIT-2 ESTIMATED DOSE RATE AT SITE BOUNDARY



ERP 3.1 REVIEW/APPROVAL

REVISION	CHANGE	REVIEWER SIG/ DATE	SUPERVISOR EPU SIG/DATE	POSRC MTC	PLANT SUPERINTENDENT /DATE
8	1	PL Smith 1.7.83	Smolin 9/31/82	72-115	LB Russell 2.1.83
9	-	PL Smith 1.7.83	Smolin 2/17/83	72-115	1001 F. L. Smith 2.10.83
9	1	PL Smith 12.1.82	Smolin 12/4/82	72-115	LB Russell 12/17/82
9	2	PL Smith 12.1.82	Smolin 12/4/82	82-167	LB Russell 2/22/83
9	3	PL Smith 1.7.83	Smolin 1/1/83	83-04	LB Russell 1/10/83
10	-	CF Wall 2/25/83	PL Smith 2.24.83	83-95	5-25 2/25/83

CALVERT CLIFFS NUCLEAR POWER PLANT
EMERGENCY RESPONSE PLAN
IMPLEMENTATION PROCEDURES

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Attch. 3	10
Attch. 4	10
Attch. 5	10

Calvert Cliffs

32-317
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TO: *N.R.C. Office of I & E*

FROM: Vinnie Usi
Emergency Planning Clerk
Warehouse #1, Calvert Cliffs

DATE: *Sept 15, 1983*

Attached you will find Emergency Response Plan Implementation Procedure's Revision(s) to be incorporated into your Emergency Response Plan Implementation Procedures manuals. Please make the necessary corrections to your manuals and return this form signed and dated.

Revision(s) to be incorporated into manuals:

ERPIPS 3.1 thru 3.10 are being replaced by ERPIP 3.1 Rev. 10.

1. Remove the ENTIRE Section 3, including tabs from the manual.
2. Retain the 3.0 Red Tab "Immediate Actions". Dispose of the remainder of the section, both tabs and procedures.
3. Insert the 3.0 Tab and the Rev. 10 procedures into the manual.

2 copies

I have incorporated the above listed Revision(s) into my manuals.

Signed *L. J. Welch*

Date *9/19/83*

AAU:sab

X005
1/1
[Signature]