

ROBINSON NUCLEAR PROJECT

EMERGENCY PREPAREDNESS EXERCISE

COMPANY

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INFORMATION

NOVEMBER 17, 1992

CAROLINA POWER AND LIGHT COMPANY
ROBINSON NUCLEAR PROJECT DEPARTMENT

PLAN FOR ROBINSON ANNUAL EMERGENCY PREPAREDNESS EXERCISE

NOVEMBER 17, 1992

CAROLINA POWER AND LIGHT COMPANY
SCENARIO PACKAGE FOR EXERCISE

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1992 EXERCISE

1.0 INTRODUCTION

INTRODUCTION

On November 17, 1992, the annual Exercise will be conducted. This exercise will be an "off-year" exercise and will not involve FEMA evaluation of the State and Counties. Limited participation by Chesterfield, Darlington and Lee Counties, and the State of South Carolina will take place for communications purposes. Offsite Emergency Operations Centers and the Joint Information Center will be simulated. The exercise will include the mobilization of onsite personnel and resources, such that the capability to respond adequately to a simulated accident can be verified. Exercise participants will not have prior knowledge of the scenario.

This manual has been prepared to assist the exercise controllers, evaluators, and observers in the conduct and evaluation of the exercise. It contains the information and data necessary to properly conduct the exercise in an efficient and coordinated manner and is organized as follows:

Section 2.0 Objectives - this section defines the exercise objectives.

Section 3.0 Scenario and Timeline - this section describes the RNPD postulated sequence of events occurring at RNPD which will require the RNPD Emergency Response Organization, CP&L Corporate Support Organization, and various onsite and offsite organizations to respond. Included in this section are copies of the exercise messages and pertinent data which will be utilized to control the progress of the exercise scenario. This scenario will be run on the simulator. The messages and data include backup information should be simulator fail.

Subsection 3.1 Messages - this subsection contains copies of the exercise messages which will be utilized to control the development of the exercise scenario.

Subsection 3.2 Plant Parameters - this subsection contains time related information concerning the postulated Plant conditions, which corresponds to the development of the exercise scenario.

Subsection 3.3 Meteorological Information - this subsection contains information and data concerning the postulated meteorological conditions to the site area which will be utilized in the development of the exercise scenario.

Subsection 3.4 Radiological and Damage Control Information - this subsection contains time-related information concerning radiological conditions at the various onsite and offsite monitoring locations, which corresponds to the development of the exercise scenario. Also included in this subsection is information concerning primary and secondary systems radiochemistry, containment atmosphere radiochemistry, radiological release rates, in-plant radiation levels, and onsite emergency worker exposure and contamination levels.

Subsection 4.0 Controller's Instructions - this section provides general instructions to the controllers in the conduct of the exercise, as well as any required special maintenance instructions.

Section 5.0 Evaluator's Instructions - this section provides general instructions and evaluation criteria to the exercise controllers for evaluating the responses of the exercise participants and the progress of the exercise.

Section 6.0 Supplementary Material - this section contains supplementary material for use by the exercise controllers during the course of the exercise, including log sheets.

Copies of this manual will be provided to exercise controllers, evaluators, and selected observers prior to the exercise.

CAROLINA POWER AND LIGHT COMPANY
PLAN FOR ANNUAL EMERGENCY PREPAREDNESS EXERCISE

MISSION AND PURPOSE OF DRILL

To demonstrate portions of Carolina Power and Light emergency response capabilities and other elements of the CP&L Robinson Nuclear Project Department (RNPDP) Radiological Emergency Plan, associated implementing procedures and the CP&L Corporate Emergency Plans in accordance with Nuclear Regulatory Commission (NRC) Regulation 10CFR50.47(b).

SCOPE AND OBJECTIVES

I. SCOPE

A simulated accident at the H. B. Robinson Nuclear Power plant which will involve planned response actions to include: emergency classification; notification of offsite organizations, notification of Plant personnel; augmentation of personnel (normal work day), activation of emergency facilities; and dispatching with plant teams. The exercise will involve participation by the State of South Carolina and surrounding Counties.

II. OBJECTIVES

Objectives for the 1992 H. B. Robinson Exercise are included in Section 2 of this package.

SITUATION AND ASSUMPTIONS

I. EXERCISE DATES

- | | | |
|----|---------------------------------|--|
| A. | Player Briefing: | November 16, 1992 - 10:00 a.m. in Room 132 of the TSC/EOF Building |
| B. | Final Controller Meeting: | November 16, 1992 - 1:00 p.m. in Room 132 of the TSC/EOF Building |
| C. | Exercise: | November 17, 1992 - 7:30 a.m. to 2:30 p.m. |
| D. | Facility Critique with Players: | At conclusion of exercise |
| E. | Lead Evaluator Meeting: | November 18, 1992 - 8:00 a.m. in Room 122 of the TSC/EOF Building |
| F. | CP&L Critique: | November 19, 1992, Room 140 |
| G. | NRC Exit: | November 20 1992 - Following CP&L Critique, Room 140 |

II. DRILL/EXERCISE LOCATIONS/FACILITIES

A. H. B. Robinson Steam Electric Plant, Hartsville, South Carolina

1. Control Room The function of the Control Room is to provide plant control and initial direction of all plant related emergency operations. Note: A Drill/Exercise Control Room will be set up the Simulator of the TSC/EOF Training Bldg.
2. Operations Support Center (OSC) The OSC will be located in the Maintenance Shop. The function of the OSC is to provide an area for assembly and briefing of support personnel and "off shift" personnel called to the site.
3. Technical Support Center (TSC) The location of the TSC is in the TSC/EOF/Training Building. The function of the TSC is to provide an assembly location for personnel who provide engineering and management support of plant activities following an accident; direction and coordination of field and mobile radiological monitoring teams prior to Emergency Operations Facility (EOF) activation; onsite dose projections; offsite dose projections prior to the EOF activation; display of status of plant parameters; and provide an emergency reference collection of selected engineering and plant documents. The TSC is activated and emergency functions are performed in accordance with the provisions of the Plant Radiological Emergency Response Plan and Implementing Procedures.

The TSC will perform the EOF functions until the EOF is operational. In addition to the normal plant communications system, redundant emergency communications facilities in the TSC provide telephone contact with required agencies and other response centers, by use of the Corporate Emergency Communications System.

4. Joint Information Center (JIC) The JIC is located at the Florence District Office in Florence. The Center will be staffed during this exercise.
5. Emergency Operations Facility (EOF) The EOF is located in the plant TSC/EOF Training Building. When activated, the EOF is managed by the Emergency Response Manager. He will have a staff to provide support in: Technical Analysis, Administrative and Logistics, and Emergency Communications. The Radiological Control Manager and his staff, who arrive from the Corporate Office, will participate in this exercise.

6. Meteorology Tower Located north of the TSC on the plant site. Measures wind at 10.0 meters (33 feet) and 62.8 meters (206 feet) above the ground.
- B. Corporate Communication Department (CCD), Raleigh. The Corporate Communications Department is located in the Center Plaza Building, Raleigh, NC and supports the Public Information function in the early phases of the emergency.
- C. Miscellaneous Facilities
 1. Hartsville Airport, 365 foot elevation, 3300 foot runway is located approximately 4 miles east of the RNPD Plant.
 2. Motels

Landmark Motel, U.S. 15 Bypass and S.C. 151
Hartsville, South Carolina (803/332-2611)

Days Inn, Business Route 15 North,
Hartsville, South Carolina (803/383-0110)

CONCEPTS AND CONDUCT OF THE EXERCISE

I. Exercise Scenario

The exercise will simulate an off-normal incident at the RNPD Plant that will require: accident recognition and classification; assessment of onsite and offsite radiological consequences; alerting, notification, and mobilization of CP&L emergency response personnel; activation and use of emergency facilities and equipment; effective use of communications; preparation of reports, messages, and records; and dispatching of plant teams.

II. Robinson Exercise Organization Activities

The exercise organization will consist of players, the Exercise Director, the Lead Exercise Controller, Controllers, Evaluators, and Observers as follows:

1. The CP&L Players include plant personnel assigned to perform functions and the emergency positions as described in the Plant Radiological Emergency Response Plan. The success of the exercise is largely dependent upon player reaction, player knowledge of the Radiological Emergency Response Plan and Implementing Procedures, and an understanding of the Exercise Plan and Exercise Objectives.

Most situations will be introduced through the simulator and response generated by players. Players are responsible for initiating actions during the exercise according to their procedures, responsibilities, and tasks outlined for their particular function in the Plant Radiological Emergency Response Plan and Procedures.

2. The Exercise Director and Lead Exercise Evaluator will be responsible for overall exercise preparation; to oversee conduct of the exercise; to arrange preparation at the conclusion of the exercise of a consolidated evaluation and critique report; and to prepare and follow-up on an itemized list of corrective actions recommended as a result of evaluation and critique.
3. The Lead Scenario Controller will coordinate controller input as necessary to initiate player response and keep the action moving according to the scenario and objectives.
4. The Controllers may deliver "Exercise Message Cards" to designated players at various times and places during the exercise; inject or deliver additional messages, as may be required to keep the action moving according to the scenario and objectives; observe the exercise at their assigned locations; maintain controller log sheet notes; and submit recorded observations to Lead Evaluators prior to the scheduled critique. Controllers will be identified as such.
5. Lead Evaluators and Evaluators are personnel who are assigned to observe and judge the effectiveness of selected organizations, personnel, functions and/or activities of the Plant Radiological Emergency Response Plan and Implementing Procedures. Selection of evaluators is based on their expertise in, or their qualifications to evaluate the activity or area assigned. In most cases, persons designated as Controllers for a given function will also be assigned as evaluators of that function. Evaluators may record their observations using the Controller Log Sheet, and if possible, provide recommendations on corrective actions to the Lead Evaluator prior to the scheduled critique. They will take steps whenever possible to collect data on the time and motion aspects of the activity observed for post exercise use in designing system improvements. Evaluators will also be identified as such.
6. Observers from various CP&L components and from other organizations may be authorized on a limited basis to participate in the exercise solely for the purpose of observing exercise activity. Observers will be identified as such.

III. Evaluation and Critique

The exercise will be evaluated by Evaluators who will be assigned to key locations and response activities where they will record their observations using checklists provided as guidelines. Following the exercise, Evaluators will present their findings at the critiques as scheduled in this plan.

A. Evaluation of the exercise will include activities:

The following activities will be evaluated:

1. Control Room (C.R.) (Located in the Simulator)
2. Operational Support Center (OSC)
3. Technical Support Center (TSC)
4. Emergency Operations Facility (EOF)
5. Accident recognition, classification, and assessment, including a classification of General Emergency.
6. Assessment of onsite and offsite radiological consequences
7. Alerting, notification, and mobilization activities
8. In plant corrective actions (simulated)
9. Use of emergency facilities and equipment
10. Use of communications equipment and procedures—
11. Preparation of reports, messages, and records
12. Protective actions for site personnel (Evacuation assembly, and accountability will be simulated)
13. Joint Information Center (JIC)

B. Exercise performance will be evaluated on the basis of standards or requirements contained in the Plant Radiological Emergency Response Plan and Implementing Procedures.

C. Any deficiency in the exercise identified through the critique process shall be documented by the Lead Exercise Evaluator and corrected by the organizations and individuals who have responsibility for the areas identified. Management controls shall be established to ensure that corrective actions are taken as necessary in accordance with the Robinson Corrective Action Program.

IV. Exercise Exempt Personnel

Some plant personnel must be exempt from exercise participation in order to maintain vital plant functions such as security, normal operations, chemistry, etc.

V. General Guidance for the Conduct of the Exercise

A. Simulating Emergency Actions

Since exercises are intended to demonstrate actual capabilities as realistically as possible, participants should act as they would during a real emergency. Wherever possible, actions should be carried out.

B. Avoiding Violation of Law

Intentional violation of laws is not justifiable during any exercise. To implement this guideline, the following actions must be taken:

1. All evaluators and potential participants must avoid intentional violation of all federal, state and local laws, regulations, ordinances, statutes, and other legal restrictions.
2. Participants will not direct illegal actions being taken by other participants or members of the general public.
3. Participants will not intentionally take illegal actions when being called out to participate in an exercise. Specifically, local traffic laws such as speed laws will be observed.

C. Actions to Minimize Public Inconvenience

It is not the intent, nor is it desirable or feasible, to effectively train or test the public response during the conduct of radiological emergency exercise. Public inconvenience is to be minimized. The actions of federal, state, and county agencies and nuclear power plant operators receive continuous public notice and scrutiny; therefore, the conduct of an exercise could arouse public concern that an actual emergency is occurring. It is important that conversations that can be monitored by the public (radio, loudspeakers, etc.) be prefaced and conclude with the words. "THIS IS A DRILL/EXERCISE MESSAGE; THIS IS A DRILL/EXERCISE MESSAGE."

D. Maintaining Emergency Response Readiness

During the performance of the exercise, the ability to recognize a real emergency, terminate the exercise, and respond to the new situation must be maintained. Therefore, the scenario and actions of participants will not include any actions which seriously degrade the condition of systems, equipment or supplies, or affect the detection, assessment, or response capability to radiological or other emergencies.

Actions taken by the participants will also avoid actually reducing plant or public safety. The potential for creating real radiological or other emergencies will be specifically avoided.

If a real emergency occurs during the exercise, requiring the actions of Company personnel, then the exercise will be terminated by the Lead Scenario Controller in consultation with appropriate plant management. All messages about the real events will be clearly identified as such. For example, precede a real message with: "THIS IS NOT, REPEAT NOT A DRILL/EXERCISE MESSAGE."

COMMAND, CONTROL, AND COMMUNICATIONS

I. Site Emergency Coordinator (SEC)

The SEC has immediate and unilateral authority to act on behalf of the Company to manage and direct all onsite emergency operations involving the facility. During the exercise, he will have responsibility also for the simulated emergency operations.

II. Communications

Communication equipment and procedures are described in Plant Emergency Procedure and others. The plant public address (P.A) system will be the primary means of communication.

III. Records

Robinson Plant Emergency Procedures, require that plant personnel responsible for maintaining records during an emergency shall provide a copy of those records to the RNPD - Emergency Preparedness Staff following an emergency or emergency exercise.

IV. Exercise Message/Drill Card and Simulator Action

The simulator will be run in interactive mode and consequently, time lines are approximate. The Exercise Message Cards are prepared by the exercise planners/controllers prior to the exercise where simulation action does not apply. The messages that are delivered to players during the play of the exercise will allow "free play".

V. Time

- A. All CP&L in-plant exercise participants will report time of incidents, messages, etc., in accordance with time based on the Control Room clocks.
- B. Local 24-hour clock time will be used to reference time in all reports and communications. Eastern Standard Time (EST) will be specified as appropriate.

VI. Message Preamble and Close

The words "THIS IS A DRILL/EXERCISE MESSAGE" should be used at the beginning and end of each message.

EXERCISE BASICS

The following is a definition of terms found in the tables in the following pages:

I. Participants

1. Extent of Participation:

Not Involved - These groups will not play. They may or may not be simulated by controllers as necessary.

Limited - Play is limited to less than full participation. Evaluations by controllers will not penalize players on items caused by the limited participation.

Full Play - A full staff is expected to play in the facilities involved.

Controllers - (where checked) Controllers will be used to simulate organizations not participating.

Evaluators - Evaluators will evaluate the exercise.

Observers - Outside Organizations have requested to send observers to the areas checked.

Simulated - Where controllers are not used to simulate an organization that is not participating, the entire interface with the non-participating organization is simulated.

2. Notify:

Actual - Actual notification methods and procedures are used to notify the participating organization.

Simulated - The organization is not actually notified by procedure. The notification may be made to an artificial number with a controller staged to receive the information, or it may be simulated.

Start/Finish - Some organizations want notifications only at the start and finish of an exercise and not continual updates.

3. Activation:

Actual - Actual activation may involve notifying the emergency organization members at their work place and home, and set up of the facility is performed by the participants.

Prestaged - The affected personnel may be in place or in a nearby place on standby when the initial notification to begin activation is received.

II. Facilities --

1. Manning:

Not Activated - No one reports to the facility.

Single Shift - Each position is expected to be manned by a primary or alternate designee. No shift turnover is expected or required, but individual turnovers are acceptable if unavoidable schedule conflicts occur.

Multiple Shift - A shift turnover is required to meet exercise objectives.

Augmentation - An augmentation drill progressing from the available shift complement to an activated emergency response facility is performed.

2. Setup:

Simulated - Setup of the facility is simulated.

Actual - Participants are expected to set up their facilities from everyday use to emergency use.

Prestaged - Setup of the facility is already prestaged in the emergency mode.

Alternate - Where available, an alternate facility will be used.

III. CP&L and Non-CP&L Activities

1. Extent:

Not Tested - This activity is not within the scope and objectives.

Simulated - This activity is not within the scope and objectives, but it must be simulated by the players and/or controllers to assure a complete and logical exercise.

Partial - This activity is expected to be performed to the extent that plant completion can permit. Evaluators will not penalize players for non-performance of activities where they must be simulated due to circumstances beyond their control; for example, lab analyses may involve players in the lab using props instead of actual equipment.

Full - This activity is expected to be performed in full without simulation. For example, full use of SCBAs and protective clothing means donning the clothing and equipment and using the breathing air. Evaluators will look for any problems when evaluating a fully played activity.

2. Frequency:

One Time - This activity can be demonstrated one time to the evaluators in order to fulfill exercise objectives.

Every Time - This activity must be performed every time as required by the players in response to the scenario. The evaluators, when available, will observe each time the activity is performed.

Specific Time - Where an activity is prestaged or constrained by the scenario, such as for offsite fire participation, a specific time will be built into the scenario for the activity.

3. Time:

Real Time - The activity is performed as given by the players and the scenario for as long as it takes.

Compressed Time - Some activities take so long, such as analysis of filed collected samples in the mobile laboratory, that time must be compressed to complete that activity within the exercise schedule.

4. Source:

Players - The driving force behind the activity will be player response to the scenario. No messages will be handed out to players to initiate the action.

Scenario - Driving force for initiating the activity will be a message handed to the player from the controller.

Exercise Basics

Date: November 17, 1992 Begin Time: 0730 End Time: 1430

Location(s): Robinson

X Announced Full Scale Max. EAL Site Emergency
 Unannounced X Small Scale X General Emergency

Participants	Extent of Participation							Notify			Activate	
	Not Involved	Limited	Full Play	Controllers	Evaluators	Observers	Simulated	Actual	Simulated	Start/Finish	Actual	Pre-staged
CP&L Site			X	X	X	X		X		X	X	
CP&L Offsite (NPS HP/Chem)			X	X	X				X	X		*
CP&L Corporate (CCD)				X				X				
Counties		X						X				X
State		X						X				X
NRC Resident						X						
NRC Operations Center	X		**					X				
NRC Site Response Team	X											
FEMA	X											
Fire Dept.	X											
Ambulance	X											
Hospital	X											
Agreement Physician	X											
Media	X						X		X			

* These personnel will be in Hartsville area, and will be delayed such that their arrival will follow EOF activation.

** If NRC is not playing, then CP&L will provide a simulated NRC contact.

<u>Facilities</u>	Manning				Setup			
	Not Activated	Single Shift	Multiple Shift	Augmentation	Simulated	Actual	Pre-staged	Alternate
Control Room		X					X	
OSC		X				X		
TSC		X				X		
EOF		X				X		
Joint Information Center	X				X			
CCD	X				X			
State Mobile Lab	X							
Hospital	X							
SERT/FEOC	X				X			
SEOC	X				X			
Simulator		X				X		

	Extent				Frequency			Time		Source	
	Not Tested	Simulated	Partial	Full	One Time	Every Time	Specific Time	Real Time	Compressed	Players	Scenario
Non-CP&L Activities											
Sheltering	X		X								
Evacuation	X		X								
Access Control	X		X								
Use of KI		X									
Fire Department	X										
Ambulance/Medical	X										
Ambulance Contamination Control	X										
Hospital Contamination Control	X										
Agreement Physician to Site	X										
News Release		X				X		X			X
Press Conference		X				X		X			X

CP&L Activities	Extent				Frequency			Time		Source	
	Not Tested	Simulated	Partial	Full	One Time	Every Time	Specific Time	Real Time	Compressed	Players	Scenario
Accident Assessment				X		X		X		X	
EAL Classification				X		X		X		X	
Notification				X		X		X		X	
Accountability		X									
Evacuation		X									
Prot. Area Access Control				X		X		X		X	
Use of Dosimetry				X		X		X		X	
Use of KI		X									
Use of Protective Clothing				X		X		X			
Use of SCBA			X			X		X		X	
Use of Respirators			X			X		X		X	
Source Term Determination				X		X		X		X	
Dose Assessment				X		X		X		X	
Offsite Protective Action Recommendation				X		X		X		X	
Fire Brigade				X		X		X		X	
First Aid Team	X										
Decontamination	X										
Security			X			X		X		X	
PASS Sample			X		X			X		X	
Other Samples				X	X			X		X	
Lab Analysis				X	X			X		X	
Onsite Surveys				X		X		X		X	
Offsite Surveys				X		X		X		X	
Press Conference				X		X		X		X	
Media Calls				X		X		X		X	
News Release				X		X		X		X	
Rumor Control				X		X		X		X	
Recovery	X										

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1992 EXERCISE

2.0 OBJECTIVES

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DRILL & EXERCISE OBJECTIVES 1992

- | <u>No.</u> | <u>Objectives</u> |
|------------|--|
| 1. | Demonstrate the ability of the Control Room to detect accident conditions and formulate near term mitigating actions. |
| 2. | Demonstrate the adequacy of the Technical Support Center in providing accident assessment and mitigation, dose assessment, and other activities. |
| 3. | Demonstrate the ability to identify and properly classify the emergency in accordance with the Emergency Plan and Implementing Procedures. |
| 4. | Demonstrate the adequacy of procedures for alerting, notifying, and mobilizing Emergency Response Organization Personnel. |
| 5. | Demonstrate the timeliness of initial and follow-up <u>notifications</u> to responsible state and local government agencies. |
| 6. | Demonstrate the adequacy of the information provided to responsible state and local government agencies in the initial and follow-up notifications. |
| 7. | Demonstrate the capability to make timely and accurate notifications to the Nuclear Regulatory Commission. (Actual participation of the NRC Operations Center may be simulated.) |
| 8. | Demonstrate the ability to effectively communicate with plant emergency teams and company environmental monitoring teams. |
| 9. | Demonstrate the ability to communicate between Emergency Response Facilities. |
| 10. | Demonstrate the ability to support the radiological assessment process while maintaining personnel radiation exposure as low as reasonably achievable (ALARA). |
| 11. | Demonstrate the capability to perform radiological monitoring activities and assessment. |
| 12. | Demonstrate the ability to provide adequate radiation protection services such as dosimetry and personnel monitoring. |

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<u>No.</u>	<u>Objectives</u>
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- | | |
|-----|--|
| 13. | Demonstrate the ability to adequately control the spread of contamination and the radiological exposure of on-site and off-site emergency workers. |
| 14. | Demonstrate the ability to formulate appropriate protective action recommendations to off-site government authorities. |
| 15. | Demonstrate the ability to augment the on-shift emergency organization within the time limits specified within the Emergency Plan and its Implementing Procedures (normal working hours). |
| 16. | Demonstrate that the Technical Support Center, Operational Support Center, and Emergency Operations Facility can be activated in accordance with the Emergency Plan and its implementing procedures. |

Demonstrate corrective action for the following 1991 exercise weaknesses:

- | | |
|-----|--|
| 17. | Failure to provide complete information regarding the simulated emergency to state and local governments, as required. |
| 18. | Failure to demonstrate the ability to conduct damage control activities in a timely manner. |
| 19. | Failure to demonstrate adequate assessment of the radiological consequences of the simulated accident/dose assessment. |
| 20. | Failure to fully demonstrate the formulation of Protective Action Recommendations. |

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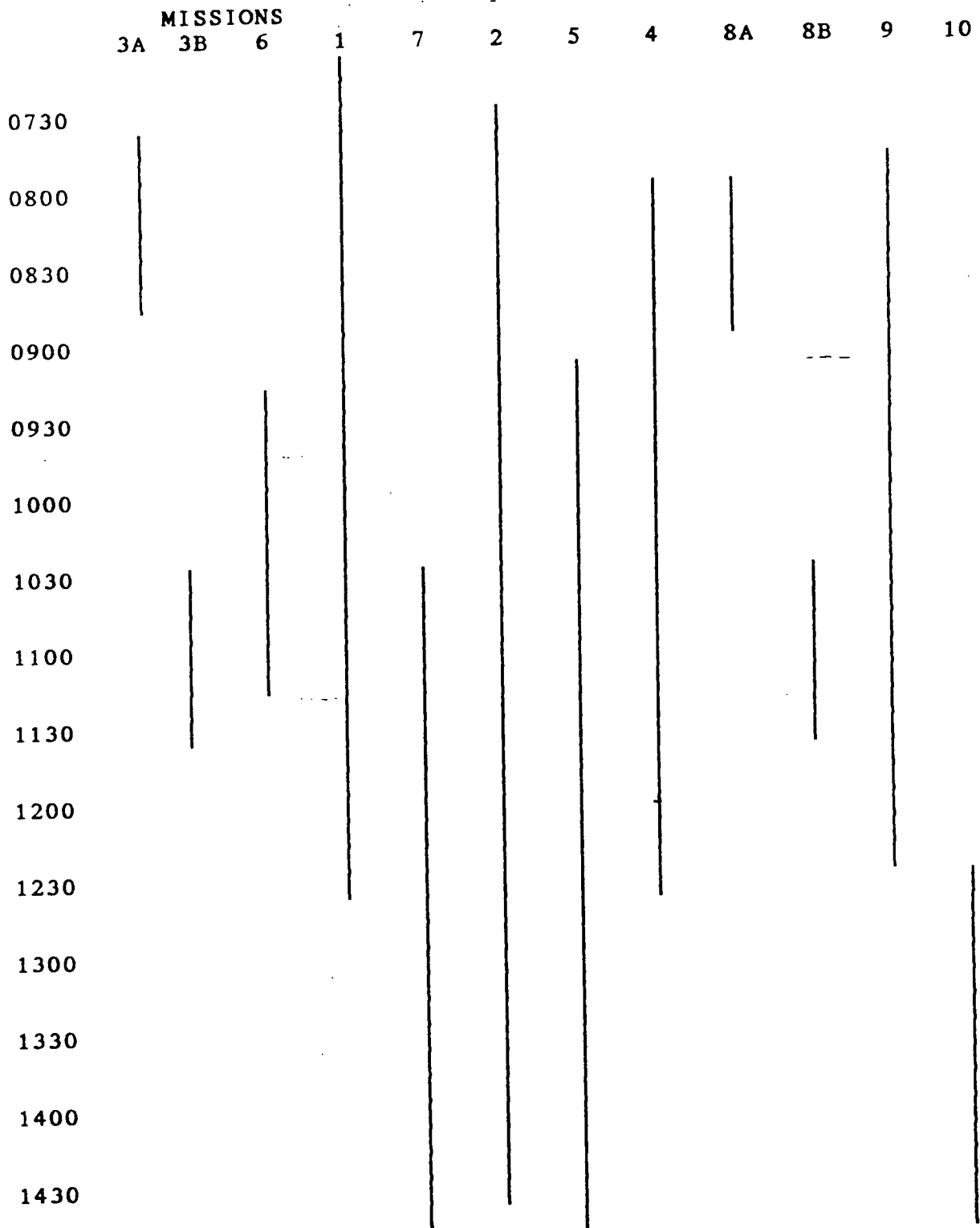
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3.0 SCENARIO SUMMARY AND TIME LINE

1992 ANNUAL EXERCISE
DAMAGE CONTROL MISSION

1. DAMAGE CONTROL MISSION #1
HVH-2 PLUGGING This a pre condition for the beginning of the scenario.
2. DAMAGE CONTROL MISSION #2
REPAIR RADWASTE CRANE This is an activity taking place at the beginning of the work day.
3. DAMAGE CONTROL MISSION #3A
SEISMIC MISSION After a seismic event two seismic recorders must be checked to determine strength of the event. two teams will be sent out ,only one will enter the Radiation Control Area.
4. DAMAGE CONTROL MISSION #3B
SEISMIC MISSION Later in the scenario a second seismic will occur. Actions same as mission #3A.
5. DAMAGE CONTROL MISSION #4
RCS SAMPLE FROM PASS Reactor Coolant Sample (RCS) activity will be needed to determine condition of the fuel.
6. DAMAGED CONTROL MISSION #5
LOSS OF VACUUM PT-1310 will fail due to a piece of split tubing.
7. DAMAGE CONTROL MISSION #6
CONTROL ROD H-8 During shut down H-8 will not respond from the RTGB.
8. DAMAGE CONTROL MISSION #7
SERVICE WATER PIPE BREAK IN THE CHARGING PUMP ROOM Due to the uncovered HVH-2 in containment this break will be the path to the environment for the release.
9. DAMAGE CONTROL MISSION #8A
OPERATIONS(OPS) WALKDOWNS After any seismic event there will be walkdowns by ops personnel to determine plant status as far as damage is concerned.
10. DAMAGE CONTROL MISSION #8B
SAME AS #9 .
11. DAMAGE CONTROL MISSION #9
CONTAINMENT DOORS Trouble shoot and repair broken spur gear on the outside of personnel hatch.
12. DAMAGE CONTROL MISSION #10
TURBINE TURNING GEAR TRIP

TIMELINE FOR THE ANNUAL EXERCISE



1992 ANNUAL EXERCISE
NARRATIVE SUMMARY

The scenario begins at 07:30 with Reactor Coolant System (RCS) activity higher than normal due to "leakers" in the fuel. Tube plugging is in progress on HVH-2 (Containment Fan Cooler). A resin transfer is also scheduled to occur today in the Radwaste Building. At 0748 a seismic event occurs which is followed by a call from the load dispatcher confirming seismic activity in northeastern South Carolina. Operations will consult the seismic activity abnormal operating procedure and begin to perform plant walkdowns and prescribed Operational Surveillance Tests (OSTs). An **Unusual Event** should be declared based on confirmed seismic activity around 08:00.

At 08:18 the results of the seismic instrumentation should be available and will indicate that the earthquake was below the threshold for declaring an Alert. At 08:30 RCS activity begins to increase on R-9 (letdown) and R-4 (charging pump room) area monitors. The R-9 reading will increase to the alarm setpoint and the R-4 reading is elevated. Based on the continued increase of R-9 the fuel fission product barrier will be considered breached and at approximately 09:00 an **Alert** should be declared.

A small RCS leak (~2 gpm) will then occur at about 09:10. This will result in increasing readings for the containment gas and particulate monitors (R-11 and R-12) to the alarm setpoint. The operations crew will be alerted to the fact that there is a leak in the RCS inside containment. The leak rate is well below the threshold for considering the RCS fission product barrier breached and no upgrade of the emergency classification is expected. A condenser vacuum leak will occur at about 09:20. This malfunction will prompt the decision to shut down the reactor if the decision has not already been made by this time. During the shutdown, control rod H-8 will be noted as stuck in position.

At 10:30 an after-shock will occur causing the failure of the service water piping for HVH-2 in the charging pump room. This provides a direct pathway from containment through the open service water piping in containment to the pipe break in the charging pump room to the Auxiliary Building Ventilation System. The leak of the Containment Vessel atmosphere into the charging pump room through the failed service water piping will cause a single train of fire alarm to be received in the Control Room. A small release will be detected through the plant vent stack by the stack monitor (R-14). The containment fission product barrier should then be evaluated as breached. At 11:00 a **Site Area Emergency** should be declared based on the loss of two fission product barriers (fuel and containment).

The second seismic alarm will also cause additional fuel failure which will be

reflected in rising R-4 readings. The small release with increasing fuel failure and a direct pathway to the environment may result in a conservative early General Emergency to be declared, even though the RCS fission product barrier leakage is well below the threshold for breach of that barrier.

At 12:30 the leak from the RCS increases substantially to 400 gpm, well above the leakage required to consider the RCS breached (50 gpm). The loss of the third fission product barrier (RCS) should result in a **General Emergency** to be declared at about 12:45.

The Protective Action Recommendation chosen should be either to evacuate the five mile radius and ten miles downwind (shelter all other sectors) or to shelter the five mile radius and evacuate 5-10 miles downwind. These recommendation choices should be made based upon the breach of three fission product barriers (release in progress). The decision between the two choices will be made based upon the judgement of the Site Emergency Coordinator whether or not an estimate of the duration of the release is known and that estimate is less than the evacuation time.

At approximately time 14:30 the exercise will be terminated.

ROBINSON NUCLEAR PROJECT

**EMERGENCY EXERCISE SCENARIO
CONSOLIDATED TIME LINE
(ALL TIMES ARE APPROXIMATE)**

UPDATE:
November 13, 1992

[illegible]

ROBINSON NUCLEAR PROJECT

EMERGENCY EXERCISE SCENARIO
 CONSOLIDATED TIME LINE
 (ALL TIMES ARE APPROXIMATE)

UPDATE:
 November 13, 1992

T-Time	Clock	Simulator Instruction	Event Description	Emergency Plan Actions	Missions Dispatched
0035 MSG A	0805			Approximate time to declare an Unusual Event based upon an alarm on the Seismic Monitoring System and confirmation of seismic activity in the region.	AOs dispatched for AOP-021 walkdown of the plant. MISSION #8A
0040	0810			Approximate time that a PA announcement is made that an Unusual Event is declared. Approximate time that security will be called to search the TSC and Incorporate it into the Protected Area.	
0048	0818	CLR Override MSC-14 when notified by seismic controller.	Approximate time that the results of the seismic monitoring system alarm is interpreted. The results are less than .1G horizontal acceleration and less than .067G vertical acceleration. - OST-011 completed.		I&C reports back to the Control Room with the results of the seismic monitors.
0050	0820	MAL CRF 4 (variable time)	After completion of OST-011, Rod H-8 will stick during shut down.	Approximate time that State and Counties should be notified of the Unusual Event via Selective Signalling System.	
0060 MSG 6(P)	0830	Xmitter Override: R-9: 3180 mR/hr in 300 sec.	RCS activity as read by the letdown monitor (R-9) begins to increase.		
0065	0835	Xmitter Override: R-4: 558 mR/hr in 3300 sec. R-9: 5248 mR/hr in 600 sec. R-6: Per Page 7, ramp = 30 sec.	Letdown monitor (R-9) alarms and the charging pump room monitor (R-4) begins to increase. Entry into AOP-005.		Approximate time that OSC will be requested to dispatch a PASS team. MISSION #4
0075	0845	Xmitter Override: R-9: 11,167 mR/hr in 1800 sec.	The letdown monitor (R-9) has increased 5 Rem above the initial reading.	Approximate time that EALs will be reviewed.	Approximate time that AOP-021 walk down is complete.

ROBINSON NUCLEAR PROJECT

EMERGENCY EXERCISE SCENARIO
 CONSOLIDATED TIME LINE
 (ALL TIMES ARE APPROXIMATE)

UPDATE:
 November 13, 1992

T-Time	Clock	Simulator Instruction	Event Description	Emergency Plan Actions	Missions Dispatched
0090 MSG B	0900			Approximate time that an Alert will be declared based upon failure of the fuel fission product barrier (R-9 increase greater than 5 Rem in 30 minutes).	
0092	0902			Approximate time that PA announcement of Alert will be made with order to activate TSC, OSC, and possibly the EOF.	
0100	0910	MAL RCS 9A (2 gpm) in 120 sec.	<ul style="list-style-type: none"> - Leakage in excess of Technical Specifications begins (2 gpm). - OST-051 started. 		
0102 MSG 8(P)	0912	Xmitter Override: R-11: 229,580 CPM in 180 sec. R-12: 3,293 CPM in 180 sec.	Containment Airborne Monitor particulate channel (R-11) alarms due to RCS leakage combined with high RCS activity.	Approximate time that State and Counties will be notified of the Alert.	
0105 MSG 9	0915	Xmitter Override: R-4: 515 mR/hr in 3600 sec. R-9: 10,306 mR/hr in 3600 sec. R-11: 1.0E+6CPM in 3600 sec. R-12: 11,180 CPM in 3600 sec.	<ul style="list-style-type: none"> - Containment airborne monitor gas channel (R-12) alarms. - HVE 3&4 placed into prepurge. - OST-901 completed. 		
0110 MSG 10(P) MSG 11(P)	0920	MAL CND-2 350/120 → 325	Condenser vacuum begins to decrease. This event is due to ruptured tubing at the vacuum pressure switch. This indication will force the plant into a shutdown. <ul style="list-style-type: none"> - Entry into AOP-12. 		AO's dispatched to investigate. MISSION #5
0115 MSG C(P)	0925		<ul style="list-style-type: none"> - Unit shutdown begins. - OST-051 completed. 		

ROBINSON NUCLEAR PROJECT

EMERGENCY EXERCISE SCENARIO
CONSOLIDATED TIME LINE
(ALL TIMES ARE APPROXIMATE)UPDATE:
November 13, 1992

T-Time	Clock	Simulator Instruction	Event Description	Emergency Plan Actions	Missions Dispatched
0110 → 0148 MSG 12(P)	0920 → 0958	Inhibit Alarm: Turbine at Zero Speed. MAL CRF-4	During shutdown of the unit, the individual rod position indicator for H-8 indicates that the rod has not moved.		OSC requested to dispatch an I&C team to investigate H-8 MISSION #6
0135 MSG 13	0945			Darlington County decides to close all schools. Darlington Co. also reports earthquake damage.	
0150	1000			Approximate time that TSC and OSC should be activated.	
0180 MSG 14(P)	1030	Override MSC: Seismic Alarm Xmitter Override: R-2: 15 mR/hr in 6300 sec. R-4: 5000 mR/hr in 120 sec. R-7: 13 mR/hr in 6300 sec. R-9: 1.0E+5mR/hr in 240 sec. R-12: 2.1E+5CPM in 6300 sec. R-14A: 1.0E+6CPM in 900 sec. R-14B: 1.0E+6CPM in 900 sec. R-14C: 3655 CPM in 900 sec.	Aftershock occurs. The seismic monitoring system in the control room alarms. - The charging pump area radiation monitor (R-4) begins to rise again. - The service water pipe in the charging pump room is ruptured. - Small release begins. The stack airborne monitor (R-14) increases but does not alarm.		OSC Requested to send teams to check seismic recorders per MST-0904. MISSIONS #3B & #7
0182	1032	- Waste Disposal Boron Recycle Alarm - Fire alarm (one train only) in Zone 4	- A waste disposal boron recycle alarm is received in the control room. The source of the alarm is the charging pump seal leakoff tank level. - A fire alarm is received in Zone 4.		Operator sent to investigate.
0185 MSG 17	1035	Load dispatcher calls into Control Room: "A second earthquake occurred near the first one in northeastern South Carolina. The possibility of more aftershocks exist."	- The load dispatcher calls to confirm a second seismic event in the region. - HVE 5B started.	- Alarm and PA announcement for local evacuation of Charging pump room. - A dose projection based on the current R-14 readings may be made.	- AOs dispatched for AOP-021 walkdown of the plant. - OSC Team will be requested to dispatch a team to the charging pump room to repair service water pipe. MISSION #8B

ROBINSON NUCLEAR PROJECT

EMERGENCY EXERCISE SCENARIO
CONSOLIDATED TIME LINE
(ALL TIMES ARE APPROXIMATE)UPDATE:
November 13, 1992

T-Time	Clock	Simulator Instruction	Event Description	Emergency Plan Actions	Missions Dispatched
0195	1045	Xmitter Override: R-14C: 16,725 CPM in 5400 sec.		EALs should be consulted.	During the post seismic walkdown, a service water pipe in the charging pump room for HVH-2 is discovered failed. This creates a direct path from containment air to the charging pump room via the open HVH unit in containment.
0210 MSG D	1100	Clear Override MSC 14 when notified by seismic controller	Approximate time that the results of the seismic monitoring system alarm is interpreted. The results are .09G horizontal acceleration and .06G vertical acceleration.	Approximate time that a Site Area Emergency is declared based upon failure of two fission product barriers (fuel breach based upon R-9 monitor and containment breach based on pathway for fission products to escape to the environment).	I&C reports back to the Control Room with the results of the seismic monitors.
0215 MSG 18	1105			Approximate time that Site Evacuation Alarm and PA announcement is made of Site Area Emergency.	
0225 MSG 19(P)	1115	Xmitter Override: R-33: 0.8 mR/hr in 4500 sec. <u>CONTINGENCY BASED ON ISOLATION OF LETDOWN:</u> R-4: 3,621 mR/hr in 3600 sec. R-9: 21,000 mR/hr in 10800 sec.	Approximate time that unit is off line.	Approximate time that States and Counties will be notified of the Site Area Emergency.	Damage Control Team to discover ruptured pipe.
0250 MSG 20	1140			Time that public warning system sirens and EBS will be sounded (controller injected message).	
0270	1200			Approximate time for EOF activation if not done at an Alert.	

ROBINSON NUCLEAR PROJECT

EMERGENCY EXERCISE SCENARIO
 CONSOLIDATED TIME LINE
 (ALL TIMES ARE APPROXIMATE)

UPDATE:
 November 13, 1992

T-Time	Clock	Simulator Instruction	Event Description	Emergency Plan Actions	Missions Dispatched
0300 MSG 21(P)	1230	Malfunction RCS 9A 400/10 Xmitter Override: R-2: 1.0E+4mR/hr in 1200 sec. R-4: 1.0E+4mR/hr in 300 sec. R-7: 1.0E+4mR/hr in 1200 sec. R-12: 4.5E+6CPM in 300 sec. R-14C: 5.0E+4CPM in 300 sec. R-32A: 140 R/hr in 6300 sec. R-32B: 140 R/hr in 6300 sec. R-33: 78 mR/hr in 6300 sec.	A large break Loss of Coolant Accident (400 gpm) occurs inside containment. This corresponds to loss of the third fission product barrier. Activity in the charging pump room increases dramatically due to the service water pipe break and R-4 rises to high levels.	The EALs will be consulted.	
0305 MSG 22(P) MSG 23(P)	1235	Xmitter Override: R-12: 1.0E+7CPM in 1200 sec. R-14C: 1.0E+6CPM in 1200 sec.	The stack monitor (R-14) alarms. A significant radiological release begins.	A dose projection based upon the R-14 monitor reading will be made. Environmental Monitoring Teams close in may begin to see increases in monitor readings.	
0315 MSG E	1245	Xmitter Override: R-14D: 296 CPM in 900 sec. R-14E: 15 CPM in 10 sec.		Approximate time that a General Emergency is declared.	Approximate time that first PASS results will be available to the TSC.
0330 MSG 24	1300	MAL TUR 13 Turbine Turning Gear motor trip. Xmitter Override: R-14D: 725 CPM in 5400 sec.	Turning Gear fails to engage.	Approximate time that the state and counties are notified of the General Emergency. A protective action recommendation will be made.	MISSION #10
0345 MSG 25	1315			Approximate time that State decides on what public protective action will be made. State will order an evacuation of the ten mile EPZ (Controller message).	
0360 MSG 26	1330			Approximate time that sirens and EBS will be sounded (Controller message).	

ROBINSON NUCLEAR PROJECT

EMERGENCY EXERCISE SCENARIO
CONSOLIDATED TIME LINE
(ALL TIMES ARE APPROXIMATE)UPDATE:
November 13, 1992

T-Time	Clock	Simulator Instruction	Event Description	Emergency Plan Actions	Missions Dispatched
0420 MSG 27	1400		Terminate Exercise.	Notify all affected parties.	

R-6 Simulator Instructions:

Set R-6 to Value Shown at times indicated. Return R-6 to 2x original value when sample complete.
All ramp times are 30 seconds.

T-Time	Clock	(Normal RCS Sample) mR/hr	(PASS Sample) mR/hr
0075-0135	0845-0945	900	100
0135-0195	0945-1045	1800	200
0195-0255	1045-1145	15000	5000
0255-0315	1145-1245	14500	1000
0315-0375	1245-1345	11000	600
0375-0435	1345-1415	9000	500
0435-	1415-	5000	250

RADIATION MONITORS

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			07:30	07:45	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30	10:45
RADIATION MONITORS																
R2	CV LOW RANGE	mR/hr	12	12	12	12	12	12	12	12	12	12	12	12	12	12
R4	CHARGING PUMP AREA	mR/hr	5	5	5	5	5	262	359	558	543	532	524	515	5000	5000
R7	SEAL TABLE	mR/hr	8.0	9	9	9	9	9	9	9	9	9	9	9	9	9
R9	LETDOWN LINE AREA	mR/hr	99	99	99	99	99	5248	7185	11167	10860	10646	10489	10306	100000	100000
R11	CV PURGE PARTICULATE	CPM	20000	20000	20000	20000	20000	20000	20000	229580	433287	632872	829400	1000000	1000000	1000000
R12	CV PURGE GAS	CPM	1200	1200	1200	1200	1200	1200	1200	3293	5313	7297	9255	11180	38062	63880
R14A	PLANT VENT PART.	CPM	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
R14B	PLANT VENT IODINE	CPM	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
R14C	PLANT VENT GAS LOW	CPM	400	400	400	400	400	400	400	400	400	400	400	400	400	3655
R14D	PLANT VENT GAS MID	CPM	10	10	10	10	10	10	10	10	10	10	10	10	10	10
R14E	PLANT VENT GAS HIGH	CPM	10	10	10	10	10	10	10	10	10	10	10	10	10	10
R15	COND. AIR EJECTOR	CPM	10	10	10	10	10	10	10	10	10	10	10	10	10	10
R19A	SG "A" BLOWDOWN	CPM	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
R19B	SG "B" BLOWDOWN	CPM	1000	1001	1001	1001	1001	1000	1000	1000	1000	1000	1000	1000	1000	1000
R19C	SG "C" BLOWDOWN	CPM	500	500	500	500	500	500	500	500	500	500	500	500	500	500
R23P	RADWASTE BLDG PART.	CPM	60	60	60	60	60	60	60	60	60	60	60	60	60	60
R23I	RADWASTE BLDG IOD.	CPM	10	10	10	10	10	10	10	10	10	10	10	10	10	10
R23NG	RADWASTE BLDG GAS	CPM	20	20	20	20	20	20	20	20	20	20	20	20	20	20
R31A	MAIN STEAM "A"	mR/hr	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
R31B	MAIN STEAM "B"	mR/hr	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
R31C	MAIN STEAM "C"	mR/hr	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
R32A	CV HIGH RANGE	R/hr	1	1	1	1	1	1	1	1	1	1	1	1	1	1
R32B	CV HIGH RANGE	R/hr	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	CV OUTSIDE @ "X"	mR/hr	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.43	0.44	0.45	0.46	0.47	0.48
R33	MONITOR BLDG. AREA	mR/hr	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

RADIATION MONITORS

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		11:00	11:15	11:30	11:45	12:00	12:15	12:30	12:45	13:00	13:15	13:30	13:45	14:00	14:15
RADIATION MONITORS															
R2	CV LOW RANGE mR/hr	13	13	14	14	15	15	824	10000	10000	10000	10000	10000	10000	10000
R4	CHARGING PUMP AREA mR/hr	5000	5000	5000	5000	4255	3621	10000	10000	10000	10000	10000	10000	10000	10000
R7	SEAL TABLE mR/hr	10	10	11	11	12	13	821	10000	10000	10000	10000	10000	10000	10000
R9	LETDOWN LINE AREA mR/hr	100000	100000	100000	100000	85090	72417	61644	52487	44704	38089	32465	27686	23623	20169
R11	CV PURGE PARTICULATE CPM	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000
R12	CV PURGE GAS CPM	89243	114151	138471	162274	186055	207359	4428079	7987177	10000000	10000000	10000000	10000000	10000000	10000000
R14A	PLANT VENT PART. CPM	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000
R14B	PLANT VENT IODINE CPM	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000
R14C	PLANT VENT GAS LOW CPM	5936	8176	10375	12523	14625	16725	36814	782315	1000000	1000000	1000000	1000000	1000000	1000000
R14D	PLANT VENT GAS MID CPM	10	10	10	10	10	10	10	10	298	412	508	590	664	727
R14E	PLANT VENT GAS HIGH CPM	10	10	10	10	10	10	10	10	15	15	15	15	15	15
R15	COND. AIR EJECTOR CPM	10	10	10	10	10	10	10	10	10	10	10	10	10	10
R19A	SG "A" BLOWDOWN CPM	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
R19B	SG "B" BLOWDOWN CPM	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
R19C	SG "C" BLOWDOWN CPM	500	500	500	500	500	500	500	500	500	500	500	500	500	500
R23P	RADWASTE BLDG PART. CPM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
R23I	RADWASTE BLDG IOD. CPM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
R23NG	RADWASTE BLDG GAS CPM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
R31A	MAIN STEAM "A" mR/hr	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
R31B	MAIN STEAM "B" mR/hr	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
R31C	MAIN STEAM "C" mR/hr	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
R32A	CV HIGH RANGE R/hr	1	1	1	1	1	1	1	9	27	49	73	95	117	136
R32B	CV HIGH RANGE R/hr	1	1	1	1	1	1	1	9	25	47	69	90	111	129
	CV OUTSIDE @ "X" mR/hr	0.49	0.50	0.51	0.52	0.53	0.54	0.55	0.64	0.91	1.40	2.13	3.08	4.25	5.61
R33	MONITOR BLDG. AREA mR/hr	0.3	0.4	0.4	0.5	0.6	0.6	0.8	4.5	11.3	20.6	32.3	45.8	61.1	77.9

ROBINSON NUCLEAR PROJECT

EMERGENCY PREPAREDNESS EXERCISE

COMPANY

CONFIDENTIAL

INFORMATION

NOVEMBER 17, 1992

CAROLINA POWER AND LIGHT COMPANY
ROBINSON NUCLEAR PROJECT DEPARTMENT

PLAN FOR ROBINSON ANNUAL EMERGENCY PREPAREDNESS EXERCISE

NOVEMBER 17, 1992

CAROLINA POWER AND LIGHT COMPANY
SCENARIO PACKAGE FOR EXERCISE

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CAROLINA POWER & LIGHT COMPANY
ROBINSON NUCLEAR PROJECT DEPARTMENT

1992 EXERCISE

1.0 INTRODUCTION

INTRODUCTION

On November 17, 1992, the annual Exercise will be conducted. This exercise will be an "off-year" exercise and will not involve FEMA evaluation of the State and Counties. Limited participation by Chesterfield, Darlington and Lee Counties, and the State of South Carolina will take place for communications purposes. Offsite Emergency Operations Centers and the Joint Information Center will be simulated. The exercise will include the mobilization of onsite personnel and resources, such that the capability to respond adequately to a simulated accident can be verified. Exercise participants will not have prior knowledge of the scenario.

This manual has been prepared to assist the exercise controllers, evaluators, and observers in the conduct and evaluation of the exercise. It contains the information and data necessary to properly conduct the exercise in an efficient and coordinated manner and is organized as follows:

Section 2.0 Objectives - this section defines the exercise objectives.

Section 3.0 Scenario and Timeline - this section describes the RNPD postulated sequence of events occurring at RNPD which will require the RNPD Emergency Response Organization, CP&L Corporate Support Organization, and various onsite and offsite organizations to respond. Included in this section are copies of the exercise messages and pertinent data which will be utilized to control the progress of the exercise scenario. This scenario will be run on the simulator. The messages and data include backup information should be simulator fail.

Subsection 3.1 Messages - this subsection contains copies of the exercise messages which will be utilized to control the development of the exercise scenario.

Subsection 3.2 Plant Parameters - this subsection contains time related information concerning the postulated Plant conditions, which corresponds to the development of the exercise scenario.

Subsection 3.3 Meteorological Information - this subsection contains information and data concerning the postulated meteorological conditions to the site area which will be utilized in the development of the exercise scenario.

Subsection 3.4 Radiological and Damage Control Information - this subsection contains time-related information concerning radiological conditions at the various onsite and offsite monitoring locations, which corresponds to the development of the exercise scenario. Also included in this subsection is information concerning primary and secondary systems radiochemistry, containment atmosphere radiochemistry, radiological release rates, in-plant radiation levels, and onsite emergency worker exposure and contamination levels.

Subsection 4.0 Controller's Instructions - this section provides general instructions to the controllers in the conduct of the exercise, as well as any required special maintenance instructions.

Section 5.0 Evaluator's Instructions - this section provides general instructions and evaluation criteria to the exercise controllers for evaluating the responses of the exercise participants and the progress of the exercise.

Section 6.0 Supplementary Material - this section contains supplementary material for use by the exercise controllers during the course of the exercise, including log sheets.

Copies of this manual will be provided to exercise controllers, evaluators, and selected observers prior to the exercise.

CAROLINA POWER AND LIGHT COMPANY
PLAN FOR ANNUAL EMERGENCY PREPAREDNESS EXERCISE

MISSION AND PURPOSE OF DRILL

To demonstrate portions of Carolina Power and Light emergency response capabilities and other elements of the CP&L Robinson Nuclear Project Department (RNPd) Radiological Emergency Plan, associated implementing procedures and the CP&L Corporate Emergency Plans in accordance with Nuclear Regulatory Commission (NRC) Regulation 10CFR50.47(b).

SCOPE AND OBJECTIVES

I. SCOPE

A simulated accident at the H. B. Robinson Nuclear Power plant which will involve planned response actions to include: emergency classification; notification of offsite organizations, notification of Plant personnel; augmentation of personnel (normal work day), activation of emergency facilities; and dispatching with plant teams. The exercise will involve participation by the State of South Carolina and surrounding Counties.

II. OBJECTIVES

Objectives for the 1992 H. B. Robinson Exercise are included in Section 2 of this package.

SITUATION AND ASSUMPTIONS

I. EXERCISE DATES

- | | | |
|----|---------------------------------|--|
| A. | Player Briefing: | November 16, 1992 - 10:00 a.m. in Room 132 of the TSC/EOF Building |
| B. | Final Controller Meeting: | November 16, 1992 - 1:00 p.m. in Room 132 of the TSC/EOF Building |
| C. | Exercise: | November 17, 1992 - 7:30 a.m. to 2:30 p.m. |
| D. | Facility Critique with Players: | At conclusion of exercise |
| E. | Lead Evaluator Meeting: | November 18, 1992 - 1:00 p.m. in Room 122 of the TSC/EOF Building |
| F. | CP&L Critique: | November 20, 1992, Room 140 |
| G. | NRC Exit: | November 20, 1992 - Following CP&L Critique, Room 140 |

II. DRILL/EXERCISE LOCATIONS/FACILITIES

A. H. B. Robinson Steam Electric Plant, Hartsville, South Carolina

1. Control Room The function of the Control Room is to provide plant control and initial direction of all plant related emergency operations. Note: A Drill/Exercise Control Room will be set up the Simulator of the TSC/EOF Training Bldg.
2. Operations Support Center (OSC) The OSC will be located in the Maintenance Shop. The function of the OSC is to provide an area for assembly and briefing of support personnel and "off shift" personnel called to the site.
3. Technical Support Center (TSC) The location of the TSC is in the TSC/EOF/Training Building. The function of the TSC is to provide an assembly location for personnel who provide engineering and management support of plant activities following an accident; direction and coordination of field and mobile radiological monitoring teams prior to Emergency Operations Facility (EOF) activation; onsite dose projections; offsite dose projections prior to the EOF activation; display of status of plant parameters; and provide an emergency reference collection of selected engineering and plant documents. The TSC is activated and emergency functions are performed in accordance with the provisions of the Plant Radiological Emergency Response Plan and Implementing Procedures.

The TSC will perform the EOF functions until the EOF is operational. In addition to the normal plant communications system, redundant emergency communications facilities in the TSC provide telephone contact with required agencies and other response centers, by use of the Corporate Emergency Communications System.

4. Joint Information Center (JIC) The JIC is located at the Florence District Office in Florence. The Center will not be staffed during this exercise.
5. Emergency Operations Facility (EOF) The EOF is located in the plant TSC/EOF Training Building. When activated, the EOF is managed by the Emergency Response Manager. He will have a staff to provide support in: Technical Analysis, Administrative and Logistics, and Emergency Communications. The Radiological Control Manager and his staff, who arrive from the Corporate Office, will participate in this exercise.

6. Meteorology Tower Located north of the TSC on the plant site. Measures wind at 10.0 meters (33 feet) and 62.8 meters (206 feet) above the ground.

B. Corporate Communication Department (CCD), Raleigh. The Corporate Communications Department is located in the Center Plaza Building, Raleigh, NC and supports the Public Information function in the early phases of the emergency.

C. Miscellaneous Facilities

1. Hartsville Airport, 365 foot elevation, 3300 foot runway is located approximately 4 miles east of the RNPDP Plant.

2. Motels

Landmark Motel, U.S. 15 Bypass and S.C. 151
Hartsville, South Carolina (803/332-2611)

Days Inn, Business Route 15 North,
Hartsville, South Carolina (803/383-0110)

CONCEPTS AND CONDUCT OF THE EXERCISE

I. Exercise Scenario

The exercise will simulate an off-normal incident at the RNPDP Plant that will require: accident recognition and classification; assessment of onsite and offsite radiological consequences; alerting, notification, and mobilization of CP&L emergency response personnel; activation and use of emergency facilities and equipment; effective use of communications; preparation of reports, messages, and records; and dispatching of plant teams.

II. Robinson Exercise Organization Activities

The exercise organization will consist of players, the Exercise Director, the Lead Exercise Controller, Controllers, Evaluators, and Observers as follows:

1. The CP&L Players include plant personnel assigned to perform functions and the emergency positions as described in the Plant Radiological Emergency Response Plan. The success of the exercise is largely dependent upon player reaction, player knowledge of the Radiological Emergency Response Plan and Implementing Procedures, and an understanding of the Exercise Plan and Exercise Objectives.

Most situations will be introduced through the simulator and response generated by players. Players are responsible for initiating actions during the exercise according to their procedures, responsibilities, and tasks outlined for their particular function in the Plant Radiological Emergency Response Plan and Procedures.

2. The Exercise Director and Lead Exercise Evaluator will be responsible for overall exercise preparation; to oversee conduct of the exercise; to arrange preparation at the conclusion of the exercise of a consolidated evaluation and critique report; and to prepare and follow-up on an itemized list of corrective actions recommended as a result of evaluation and critique.
3. The Lead Scenario Controller will coordinate controller input as necessary to initiate player response and keep the action moving according to the scenario and objectives.
4. The Controllers may deliver "Exercise Message Cards" to designated players at various times and places during the exercise; inject or deliver additional messages, as may be required to keep the action moving according to the scenario and objectives; observe the exercise at their assigned locations; maintain controller log sheet notes; and submit recorded observations to Lead Evaluators prior to the scheduled critique. Controllers will be identified as such.
5. Lead Evaluators and Evaluators are personnel who are assigned to observe and judge the effectiveness of selected organizations, personnel, functions and/or activities of the Plant Radiological Emergency Response Plan and Implementing Procedures. Selection of evaluators is based on their expertise in, or their qualifications to evaluate the activity or area assigned. In most cases, persons designated as Controllers for a given function will also be assigned as evaluators of that function. Evaluators may record their observations using the Controller Log Sheet, and if possible, provide recommendations on corrective actions to the Lead Evaluator prior to the scheduled critique. They will take steps whenever possible to collect data on the time and motion aspects of the activity observed for post exercise use in designing system improvements. Evaluators will also be identified as such.
6. Observers from various CP&L components and from other organizations may be authorized on a limited basis to participate in the exercise solely for the purpose of observing exercise activity. Observers will be identified as such.

III. Evaluation and Critique

The exercise will be evaluated by Evaluators who will be assigned to key locations and response activities where they will record their observations using checklists provided as guidelines. Following the exercise, Evaluators will present their findings at the critiques as scheduled in this plan.

A. Evaluation of the exercise will include activities:

The following activities will be evaluated:

1. Control Room (C.R.) (Located in the Simulator)
2. Operational Support Center (OSC)
3. Technical Support Center (TSC)
4. Emergency Operations Facility (EOF)
5. Accident recognition, classification, and assessment, including a classification of General Emergency.
6. Assessment of onsite and offsite radiological consequences
7. Alerting, notification, and mobilization activities
8. In plant corrective actions (simulated)
9. Use of emergency facilities and equipment
10. Use of communications equipment and procedures
11. Preparation of reports, messages, and records
12. Protective actions for site personnel (Evacuation assembly, and accountability will be simulated)

B. Exercise performance will be evaluated on the basis of standards or requirements contained in the Plant Radiological Emergency Response Plan and Implementing Procedures.

C. Any deficiency in the exercise identified through the critique process shall be documented by the Lead Exercise Evaluator and corrected by the organizations and individuals who have responsibility for the areas identified. Management controls shall be established to ensure that corrective actions are taken as necessary in accordance with the Robinson Corrective Action Program.

IV. Exercise Exempt Personnel

Some plant personnel must be exempt from exercise participation in order to maintain vital plant functions such as security, normal operations, chemistry, etc.

V. General Guidance for the Conduct of the Exercise

A. Simulating Emergency Actions

Since exercises are intended to demonstrate actual capabilities as realistically as possible, participants should act as they would during a real emergency. Wherever possible, actions should be carried out.

B. Avoiding Violation of Law

Intentional violation of laws is not justifiable during any exercise. To implement this guideline, the following actions must be taken:

1. All evaluators and potential participants must avoid intentional violation of all federal, state and local laws, regulations, ordinances, statutes, and other legal restrictions.
2. Participants will not direct illegal actions being taken by other participants or members of the general public.
3. Participants will not intentionally take illegal actions when being called out to participate in an exercise. Specifically, local traffic laws such as speed laws will be observed.

C. Actions to Minimize Public Inconvenience

It is not the intent, nor is it desirable or feasible, to effectively train or test the public response during the conduct of radiological emergency exercise. Public inconvenience is to be minimized. The actions of federal, state, and county agencies and nuclear power plant operators receive continuous public notice and scrutiny; therefore, the conduct of an exercise could arouse public concern that an actual emergency is occurring. It is important that conversations that can be monitored by the public (radio, loudspeakers, etc.) be prefaced and conclude with the words. "THIS IS A DRILL/EXERCISE MESSAGE; THIS IS A DRILL/EXERCISE MESSAGE."

D. Maintaining Emergency Response Readiness

During the performance of the exercise, the ability to recognize a real emergency, terminate the exercise, and respond to the new situation must be maintained. Therefore, the scenario and actions of participants will not include any actions which seriously degrade the condition of systems, equipment or supplies, or affect the detection, assessment, or response capability to radiological or other emergencies.

Actions taken by the participants will also avoid actually reducing plant or public safety. The potential for creating real radiological or other emergencies will be specifically avoided.

If a real emergency occurs during the exercise, requiring the actions of Company personnel, then the exercise will be terminated by the Lead Scenario Controller in consultation with appropriate plant management. All messages about the real events will be clearly identified as such. For example, precede a real message with: "THIS IS NOT, REPEAT NOT A DRILL/EXERCISE MESSAGE."

COMMAND, CONTROL, AND COMMUNICATIONS

I. Site Emergency Coordinator (SEC)

The SEC has immediate and unilateral authority to act on behalf of the Company to manage and direct all onsite emergency operations involving the facility. During the exercise, he will have responsibility also for the simulated emergency operations.

II. Communications

Communication equipment and procedures are described in Plant Emergency Procedure and others. The plant public address (P.A) system will be the primary means of communication.

III. Records

Robinson Plant Emergency Procedures, require that plant personnel responsible for maintaining records during an emergency shall provide a copy of those records to the RNPD - Emergency Preparedness Staff following an emergency or emergency exercise.

IV. Exercise Message/Drill Card and Simulator Action

The simulator will be run in interactive mode and consequently, time lines are approximate. The Exercise Message Cards are prepared by the exercise planners/controllers prior to the exercise where simulation action does not apply. The messages that are delivered to players during the play of the exercise will allow "free play".

V. Time

- A. All CP&L in-plant exercise participants will report time of incidents, messages, etc., in accordance with time based on the Control Room clocks.
- B. Local 24-hour clock time will be used to reference time in all reports and communications. Eastern Standard Time (EST) will be specified as appropriate.

VI. Message Preamble and Close

The words "THIS IS A DRILL/EXERCISE MESSAGE" should be used at the beginning and end of each message.

EXERCISE BASICS

The following is a definition of terms found in the tables in the following pages:

I. Participants

1. Extent of Participation:

Not Involved - These groups will not play. They may or may not be simulated by controllers as necessary.

Limited - Play is limited to less than full participation. Evaluations by controllers will not penalize players on items caused by the limited participation.

Full Play - A full staff is expected to play in the facilities involved.

Controllers - (where checked) Controllers will be used to simulate organizations not participating.

Evaluators - Evaluators will evaluate the exercise.

Observers - Outside Organizations have requested to send observers to the areas checked.

Simulated - Where controllers are not used to simulate an organization that is not participating, the entire interface with the non-participating organization is simulated.

2. Notify:

Actual - Actual notification methods and procedures are used to notify the participating organization.

Simulated - The organization is not actually notified by procedure. The notification may be made to an artificial number with a controller staged to receive the information, or it may be simulated.

Start/Finish - Some organizations want notifications only at the start and finish of an exercise and not continual updates.

3. Activation:

Actual - Actual activation may involve notifying the emergency organization members at their work place and home, and set up of the facility is performed by the participants.

Prestaged - The affected personnel may be in place or in a nearby place on standby when the initial notification to begin activation is received.

II. Facilities --

1. Manning:

Not Activated - No one reports to the facility.

Single Shift - Each position is expected to be manned by a primary or alternate designee. No shift turnover is expected or required, but individual turnovers are acceptable if unavoidable schedule conflicts occur.

Multiple Shift - A shift turnover is required to meet exercise objectives.

Augmentation - An augmentation drill progressing from the available shift complement to an activated emergency response facility is performed.

2. Setup:

Simulated - Setup of the facility is simulated.

Actual - Participants are expected to set up their facilities from everyday use to emergency use.

Prestaged - Setup of the facility is already prestaged in the emergency mode.

Alternate - Where available, an alternate facility will be used.

III. CP&L and Non-CP&L Activities

1. Extent:

Not Tested - This activity is not within the scope and objectives.

Simulated - This activity is not within the scope and objectives, but it must be simulated by the players and/or controllers to assure a complete and logical exercise.

Partial - This activity is expected to be performed to the extent that plant completion can permit. Evaluators will not penalize players for non-performance of activities where they must be simulated due to circumstances beyond their control; for example, lab analyses may involve players in the lab using props instead of actual equipment.

Full - This activity is expected to be performed in full without simulation. For example, full use of SCBAs and protective clothing means donning the clothing and equipment and using the breathing air. Evaluators will look for any problems when evaluating a fully played activity.

2. Frequency:

One Time - This activity can be demonstrated one time to the evaluators in order to fulfill exercise objectives.

Every Time - This activity must be performed every time as required by the players in response to the scenario. The evaluators, when available, will observe each time the activity is performed.

Specific Time - Where an activity is prestaged or constrained by the scenario, such as for offsite fire participation, a specific time will be built into the scenario for the activity.

3. Time:

Real Time - The activity is performed as given by the players and the scenario for as long as it takes.

Compressed Time - Some activities take so long, such as analysis of field collected samples in the mobile laboratory, that time must be compressed to complete that activity within the exercise schedule.

4. Source:

Players - The driving force behind the activity will be player response to the scenario. No messages will be handed out to players to initiate the action.

Scenario - Driving force for initiating the activity will be a message handed to the player from the controller.

Exercise Basics

Date: November 17, 1992 Begin Time: 0730 End Time: 1430

Location(s): Robinson

X Announced Full Scale Max. EAL Site Emergency
 Unannounced X Small Scale X General Emergency

Participants	Extent of Participation							Notify			Activate	
	Not Involved	Limited	Full Play	Controllers	Evaluators	Observers	Simulated	Actual	Simulated	Start/Finish	Actual	Pre-staged
CP&L Site			X	X	X	X		X		X	X	
CP&L Offsite (NPS HP/Chem)			X	X	X				X	X		*
CP&L Corporate (CCD)				X				X				
Counties		X						X				X
State		X						X				X
NRC Resident						X						
NRC Operations Center	X		**					X				
NRC Site Response Team	X											
FEMA	X											
Fire Dept.	X											
Ambulance	X											
Hospital	X											
Agreement Physician	X											
Media	X						X		X			

* These personnel will be in Hartsville area, and will be delayed such that their arrival will follow EOF activation.

** If NRC is not playing, then CP&L will provide a simulated NRC contact.

Facilities	Manning				Setup			
	Not Activated	Single Shift	Multiple Shift	Augmentation	Simulated	Actual	Pre-staged	Alternate
Control Room		X					X	
OSC		X				X		
TSC		X				X		
EOF		X				X		
Joint Information Center	X				X			
CCD	X				X			
State Mobile Lab	X							
Hospital	X							
SERT/FEOC	X				X			
SEOC	X				X			
Simulator		X				X		

	Extent				Frequency			Time		Source	
	Not Tested	Simulated	Partial	Full	One Time	Every Time	Specific Time	Real Time	Compressed	Players	Scenario
Non-CP&L Activities											
Sheltering	X		X								
Evacuation	X		X								
Access Control	X		X								
Use of KI		X									
Fire Department	X										
Ambulance/Medical	X										
Ambulance Contamination Control	X										
Hospital Contamination Control	X										
Agreement Physician to Site	X										
News Release		X				X		X			X
Press Conference		X				X		X			X

	Extent				Frequency			Time		Source	
	Not Tested	Simulated	Partial	Full	One Time	Every Time	Specific Time	Real Time	Compressed	Players	Scenario
CP&L Activities											
Accident Assessment				X		X		X		X	
EAL Classification				X		X		X		X	
Notification				X		X		X		X	
Accountability		X									
Evacuation		X									
Prot. Area Access Control				X		X		X		X	
Use of Dosimetry				X		X		X		X	
Use of KI		X									
Use of Protective Clothing				X		X		X			
Use of SCBA			X			X		X		X	
Use of Respirators			X			X		X		X	
Source Term Determination				X		X		X		X	
Dose Assessment				X		X		X		X	
Offsite Protective Action Recommendation				X		X		X		X	
Fire Brigade				X		X		X		X	
First Aid Team	X										
Decontamination	X										
Security			X			X		X		X	
PASS Sample			X		X			X		X	
Other Samples				X	X			X		X	
Lab Analysis				X	X			X		X	
Onsite Surveys				X		X		X		X	
Offsite Surveys				X		X		X		X	
Press Conference				X		X		X		X	
Media Calls				X		X		X		X	
News Release				X		X		X		X	
Rumor Control				X		X		X		X	
Recovery	X										

CONFIDENTIAL

CAROLINA POWER & LIGHT COMPANY
ROBINSON NUCLEAR PROJECT DEPARTMENT

1992 EXERCISE

3.1 MESSAGES

CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No. 0 Date 11-16-92 Time

MESSAGE FOR: ERO STAFF AT THE PRE-DRILL BRIEFING

FROM: LEAD DRILL CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

THE SIMULATED UNIT IS PRESENTLY OPERATING AT 100% POWER AND HAS BEEN ON LINE FOR
53 CONSECUTIVE DAYS. ALL EQUIPMENT IS OPERATING PROPERLY.

INSTRUCTIONS AND RULES FOR PARTICIPANTS ARE ATTACHED.

ACTIONS EXPECTED:

N/A

FOR CONTROLLER USE ONLY

CON-92-2627
RNPD-92-06-R0

INSTRUCTIONS AND RULES FOR PARTICIPANTS

A successful demonstration of emergency response capabilities relies on participants in drills and exercises following the guidelines contained below.

1. Scenario events are hypothetical. With the exception of Post Accident Sampling related activities, NO Control Room actions, or reactions, involving operation of plant systems or affecting generation capability will be initiated.
2. Identify your controllers and evaluators by their badge.
3. Perform all actions as much as possible, as if it were a real emergency. You should not simulate your actions unless authorized by your controller. If you are allowed to simulate an action, tell your controller/evaluator how and when you would actually perform the action or activity.
4. Periodically speak out loud, identifying your key actions and decisions to the controller or evaluator. The controller or evaluator can not determine what actions you are thinking about or what you are looking at. Vocalize your thoughts.
5. If in doubt, ask your controller for clarification. Do not take an action if you are unsure of what is desired. Do not expect to be prompted or coached into the desired response. The controllers will attempt to clarify the item for you.
6. The controller will periodically issue messages or instructions designed to initiate response actions. You must accept these messages immediately. They are essential to your successful performance.
7. If the controller intervenes with your activities, it is for good reason. Obey your controller's directions at all times.
8. If you disagree with your controller you can ask them to reconsider or to consult with the lead facility controller. You must, however, accept his/her word as final and proceed.
9. Respond to the controllers questions.
10. You must respond to and follow scenario radiation exposure control practices associated with the presented radiation levels. This may require that you wear radiation dosimeters, anti-contamination clothing, and observe ALARA practices. Ensure that you have the needed information regarding radiation levels prior to initiating activities. Be aware that controllers and evaluators are not required to abide by radiation control practices for the simulated conditions, but they must comply with actual plant exposure control requirements in effect at the time of the exercise.

INSTRUCTIONS AND RULES FOR PARTICIPANTS

11. DO NOT enter High Radiation areas of the plant without authorization from the controller. Follow ALARA principles.
12. Utilize status boards, logs, memos, etc., as much as possible to document and record your actions, instructions, and reports to other exercise participants. This is very important. Remember "Put it in writing."
13. Do not enter into non-drill related conversations with visitors, observers, controllers, or evaluators.
14. Keep a list of items you feel will improve the emergency plan and procedures. Provide these comments in your facility critique at the end of the exercise. Remember, one of the key reasons for performing drills and exercises is to assure the participants that they are prepared to respond to an actual emergency.

DATE 11-14-92
TIME 0500

ROBINSON NUCLEAR PROJECT
OPERATIONS DAILY STATUS REPORT

DAYS OF CONTINUOUS RUN: 53
ON LINE: 9-24-92 @ 0350 HRS
LAST SCRAM FROM CRITICAL: 8-22-92 @ 1009 HRS
LAST SIGNIFICANT EVENT : 8-22-92

CORE THERMAL POWER: 100%
ELECTRIC GEN GROSS: 755
MDC : 683
NET : 725

1. SIGNIFICANT OCCURRENCES OR EVOLUTIONS SINCE LAST REPORT (SCRAM, S/U, S/D, ETC.) AFFECTING POWER LEVEL OR SCHEDULE:
- NET GENERATION THROUGH MIDNIGHT 11/15/92: 3,289,003 KWH.

2. GENERATION OR OUTAGE PLANS AND LIMITS FOR NEXT 24 HOURS:
- MAINTAIN 100% RX POWER.

3. SIGNIFICANT PROBLEMS THAT HAVE POTENTIAL TO AFFECT LOAD OR SCHEDULE:
SIGNIFICANT LCO'S:

NEW PROBLEMS:

4. ADDITIONAL COMMENTS:
- RCS ACTIVITY IS HIGHER THAN NORMAL AT $2.35 \text{ E-4 } \mu\text{Ci/ml}$

5. MAJOR WORK IN PROGRESS:

6. ABNORMAL PLANT CONDITIONS:

ANNUNCIATORS: LIGHTED 0 DISABLED 0

PRIMARY COOLANT LEAKAGE 0.1189 CONDENSER AIR INLEAKAGE 3.15

AVERAGE S/G CATION CONDUCTIVITY 0.32 MICRO-SIEMENS
(ACTION LEVEL 1 - >0.8)

RCS BORON 509 PPM DATE SAMPLED 11/15/92

CPI 0.28

DATE 11-16-92
TIME 0500

ROBINSON NUCLEAR PROJECT
OPERATIONS DAILY STATUS REPORT

DAYS OF CONTINUOUS RUN: 53
ON LINE: 9-24-92 @ 0350 HRS
LAST SCRAM FROM CRITICAL: 8-22-92 @ 1009 HRS
LAST SIGNIFICANT EVENT : 8-22-92

CORE THERMAL POWER: 100%
ELECTRIC GEN GROSS: 755
MDC : 683
NET : 725

1. SIGNIFICANT OCCURRENCES OR EVOLUTIONS SINCE LAST REPORT (SCRAM, S/U, S/D, ETC.) AFFECTING POWER LEVEL OR SCHEDULE:
- NET GENERATION THROUGH MIDNIGHT 11/15/92: 3,289,003 MWH.

2. GENERATION OR OUTAGE PLANS AND LIMITS FOR NEXT 24 HOURS:
- MAINTAIN 100% RX POWER.

3. SIGNIFICANT PROBLEMS THAT HAVE POTENTIAL TO AFFECT LOAD OR SCHEDULE:
SIGNIFICANT LCO'S:

NEW PROBLEMS:

4. ADDITIONAL COMMENTS:
- RCS ACTIVITY IS HIGHER THAN NORMAL AT $2.35 \text{ E-4 } \mu\text{Ci/ml}$

5. MAJOR WORK IN PROGRESS:

6. ABNORMAL PLANT CONDITIONS:

ANNUNCIATORS: LIGHTED 0 DISABLED 0

PRIMARY COOLANT LEAKAGE 0.1189 CONDENSER AIR INLEAKAGE 3.45

AVERAGE S/G CATION CONDUCTIVITY 0.32 MICRO-SIEMENS
(ACTION LEVEL 1 - >0.8)

RCS BORON 509 PPM DATE SAMPLED 11/15/92

CFI 0.28

CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No. 1A Date 11-17-93 Time 0700

MESSAGE FOR: SHIFT SUPERVISOR

FROM: CONTROLLER - SIMULATOR

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

SEE ATTACHED OWP (HVH-2), WR.

DAILY STATUS SHEET, AND HVH-2 CLEARANCE.

ACTIONS EXPECTED:

HVH-2: THE COVER PLATES ARE REMOVED FROM THE COOLERS ON HVH-2.

FOR CONTROLLER USE ONLY

REFERENCE MISSIONS #1 AND #2.

DATE 11-17-92
TIME 0500

ROBINSON NUCLEAR PROJECT
OPERATIONS DAILY STATUS REPORT

DAYS OF CONTINUOUS RUN: 54
ON LINE: 9-24-92 @ 0350 HRS
LAST SCRAM FROM CRITICAL: 8-22-92 @ 1009 HRS
LAST SIGNIFICANT EVENT : 8-22-92

CORE THERMAL POWER: 100%
ELECTRIC GEN GROSS: 755
MDC : 683
NET : 725

1. SIGNIFICANT OCCURRENCES OR EVOLUTIONS SINCE LAST REPORT (SCRAM, S/U, S/D, ETC.) AFFECTING POWER LEVEL OR SCHEDULE:
- NET GENERATION THROUGH MIDNIGHT 11/16/92: 3,306,003 MWH.

2. GENERATION OR OUTAGE PLANS AND LIMITS FOR NEXT 24 HOURS:
- MAINTAIN 100% RX POWER.

3. SIGNIFICANT PROBLEMS THAT HAVE POTENTIAL TO AFFECT LOAD OR SCHEDULE:
SIGNIFICANT LCO'S:
- HVH-2 WAS REMOVED FROM SERVICE AT 0200 DUE TO COOLER LEAKS,
ENTERED 24 HOUR LCO

NEW PROBLEMS:

4. ADDITIONAL COMMENTS:
- RCS ACTIVITY IS HIGHER THAN NORMAL AT $2.35 \text{ E-1 } \mu\text{Ci/ml}$

MAJOR WORK IN PROGRESS:

ABNORMAL PLANT CONDITIONS:

ANNUNCIATORS: LIGHTED 0 DISABLED 0

PRIMARY COOLANT LEAKAGE 0.1189 CONDENSER AIR INLEAKAGE 3.45

AVERAGE S/G CATION CONDUCTIVITY 0.32 MICRO-SIEMENS
(ACTION LEVEL 1 - >0.8)

RCS BORON 506 PPM DATE SAMPLED 11/16/92

CPI 0.28

DATE 11-17-92
TIME 0500

ROBINSON NUCLEAR PROJECT
OPERATIONS DAILY STATUS REPORT

DAYS OF CONTINUOUS RUN: 54

CORE THERMAL POWER: 100%

ON LINE: 9-24-92 @ 0350 HRS

ELECTRIC GEN GROSS: 755

LAST SCRAM FROM CRITICAL: 8-22-92 @ 1009 HRS

MDC: 683

LAST SIGNIFICANT EVENT: 8-22-92

NET: 725

1. SIGNIFICANT OCCURRENCES OR EVOLUTIONS SINCE LAST REPORT (SCRAM, S/U, S/D, ETC.) AFFECTING POWER LEVEL OR SCHEDULE:
- NET GENERATION THROUGH MIDNIGHT 11/16/92: 3,306,003 MWH.

2. GENERATION OR OUTAGE PLANS AND LIMITS FOR NEXT 24 HOURS:
- MAINTAIN 100% RX POWER.

3. SIGNIFICANT PROBLEMS THAT HAVE POTENTIAL TO AFFECT LOAD OR SCHEDULE:
SIGNIFICANT LCO'S:
- RVH-2 WAS REMOVED FROM SERVICE AT 0200 DUE TO COOLER LEAKS,
ENTERED 24 HOUR LCO

NEW PROBLEMS:

4. ADDITIONAL COMMENTS:
- RCS ACTIVITY IS HIGHER THAN NORMAL AT $2.35 \text{ E-4 } \mu\text{Ci/ml}$

5. MAJOR WORK IN PROGRESS:

ABNORMAL PLANT CONDITIONS:

ANNUNCIATORS: LIGHTED 0 DISABLED 0

PRIMARY COOLANT LEAKAGE 0.1189 CONDENSER AIR INLEAKAGE 3.45

AVERAGE S/G CATION CONDUCTIVITY 0.32 MICRO-SIEMENS
(ACTION LEVEL 1 - >0.8)

RCS BORON 506 PPM DATE SAMPLED 11/16/92

CPI 0.28

DRILL USE
ONLY

OWP Title: HVH-2
Page 1 of 4

1. This revision is the latest revision available and has been verified
against the Revision Status List.

W. E. STOVER

(Print)

[Signature]

11-17-92

Name

Signature

Date

2. System: HVH Work Request No: 92-AHVH 1
3. Component: Containment Recirculation Fan HVH-2
4. Scope of Work: Repair fan/motor/dampers/coolers/breaker.
5. Testing required on redundant equipment prior to rendering component
inoperable: Test both C.V. Spray Pumps per OST-352 (not required in Cold
S/D).
6. Precaution: 1) Redundant equipment operable requirements (Tech Spec
3.3.2.2): 4 HVH units for startup, 3 HVH units for power operation
(24 hour limit). 2) Emergency Diesel "B" and its Engineered Safety
Features must be operable except during Cold S/D. 3) One HVH unit
required during Mid-Loop Operations. 4) The potential exists for a Loss
of Containment Integrity if openings in coolers/piping occur inside and
outside Containment at the same time when RCS temperature is greater than
200°F.

7. Valve/Breaker/Switch lineup has been
completed.

Signature

Date

8. LCTR Issued (If applicable)

LCTR No: 92-00784

9. Testing required on redundant equipment while component is inoperable.

N/A

10. I&C Maintenance Lineup Completed.

N/A

Signature

Date

11. LCTR removed and Valve/Breaker/Switch
lineup restored to normal.

Signature

Date

12. Post Maintenance Testing.

- a. Following cooler repair, check for
leakage per OP-903.

Signature

Date

- b. After fan/motor repair: place fan in
normal service for 5 min. noting
absence of flow alarm and checking
vibration.

Signature

Date

- c. Following damper repair: perform
applicable section of OST-902.

Signature

Date

DRILL USE ONLY

OWP Title: HVH-2
Page 2 of 4

12. Post Maintenance Testing. (Continued)

d. Following fan housing or duct work
modification, perform applicable
section of EST-026.

Signature

Date

e. Following breaker repair, test by
starting and stopping HVH-2.

Signature

Date

DRAW
USE
ONLY

OWP Title: HVH-2
Page 3 of 4

VALVE, BREAKER, SWITCH LINEUP

COMPONENT DESCRIPTION	POSITION FOR MAINTENANCE	RESTORED POSITION
<u>REPAIR FAN AND/OR MOTOR COOLER</u>		
	<u>INITIALS VERIFIED</u>	<u>INITIALS VERIFIED</u>
HVH-2 Breaker (480V Bus E-1)	RACKED OUT <u>H</u>	RACKED IN _____
RTGB Indication	LOST <u>H</u>	RESTORED _____
HVH-2 Reset Button (Aux Relay Rack CA)	_____ N/A	DEPRESS _____
V6-33B SW Inlet	CLOSED <u>H</u> <u>Wed</u>	OPEN _____
V6-33B Breaker (MCC-5)	OPEN <u>H</u>	CLOSED _____
RTGB Indication	LOST <u>H</u>	RESTORED _____
V6-33F Selective Inlet	CLOSED <u>H</u> <u>Wed</u>	OPEN _____
V6-33F Breaker (MCC-6)	OPEN <u>H</u>	CLOSED _____
RTGB Indication	LOST <u>H</u>	RESTORED _____
V6-34B SW Outlet	CLOSED <u>H</u> <u>Wed</u>	OPEN _____
V6-34B Breaker (MCC-5)	OPEN <u>H</u>	CLOSED _____
RTGB Indication	LOST <u>H</u>	RESTORED _____
V6-35B Wtr. Sampling	CLOSED <u>H</u> <u>Wed</u>	OPEN _____
V6-35B Breaker (MCC-9)	OPEN <u>H</u>	CLOSED _____
RTGB Indication	LOST <u>H</u>	RESTORED _____
SW-761 HVH-2 Return Drain	CLOSED <u>H</u>	CLOSED _____
SW-755 HVH-2 Supply Drain	CLOSED <u>H</u>	CLOSED _____
SW-756 SWBP B to A Crosstie Drain	CLOSED <u>H</u>	CLOSED _____

DRILL USE
ONLY

OWP Title: HVH-2
Page 4 of 4

VALVE, BREAKER, SWITCH LINEUP

COMPONENT DESCRIPTION	POSITION FOR MAINTENANCE	RESTORED POSITION
<u>REPAIR FAN, MOTOR OR DAMPERS</u>		
HVH-2 Breaker (480V Bus E-1) RTGB Indication HVH-2 Reset Button (Aux Relay Rack CA)	<u>INITIALS</u> RACKED OUT <u>N/A</u> LOST <u>N/A</u> <u>N/A</u>	<u>INITIALS VERIFIED</u> RACKED IN <u>N/A</u> RESTORED <u>J</u> DEPRESS <u>J</u> <u>N/A</u>
<u>REPAIR MOTOR BREAKER</u>		
HVH-2 Breaker (480V Bus E-1) RTGB Indication HVH-2 Reset Button (Aux Relay Rack CA)	<u>INITIALS</u> RACKED OUT <u>N/A</u> LOST <u>N/A</u> <u>N/A</u>	<u>INITIALS VERIFIED</u> RACKED IN <u>N/A</u> RESTORED <u>J</u> DEPRESS <u>J</u> <u>N/A</u>

DRILL USE ONLY

CAROLINA POWER & LIGHT COMPANY
H.B. ROBINSON UNIT #2
LOCAL CLEARANCE & TEST REQUEST

Page 1 of
LCTR NO. 92-00784

This revision is the latest revision available and has been verified against the Revision Status List

W. E. STOVER

Name (printed)

W. E. Stover

Signature

11/17/92

Date

Revision: 21

EQUIPMENT: HVH-2

SCOPE OF WORK: REPAIR COOLER LEAKS

IS AN EIR REQUIRED: YES

IS AN OWP REQUIRED PER OMM-004: YES

OWP NO.: HVH-2

SS PERMISSION RECEIVED: CO/SCO/SS

TIME: 0130

DATE: 11/17/92

CLEARANCE

COMPONENT LINEUP FOR MAINTENANCE:

PREPARED BY: STOVER, WILLIAM E

TIME: 01:00

DATE: 11/17/92

CHECKED BY: BILLINGS, DANNY

TIME: 01:05

DATE: 11/17/92

COMPONENTS IN POSITION FOR MAINTENANCE AND RED TAGS OR CAPS PROPERLY ATTACHED.

CO/SCO: W. E. Stover

TIME: 0200

DATE: 11/17/92

THE CLEARANCE TAGS/CAPS HAVE BEEN REMOVED AND COMPONENT LINEUP RESTORED.

CO/SCO:

TIME:

DATE: 11

TEST REQUEST

PRIOR TO STARTING ANY WORK/TROUBLESHOOTING, ENTER THE POST MAINTENANCE TESTING THAT WILL BE REQUIRED. SPECIFY:

N/A

CO/SCO: N/A

TIME: N/A

DATE: N/A

ATTACHMENTS:

OST:

SCHEDULED:

OWP:

OTHER:

INITIALS	PERFORMED BY: NAME (PRINT)	DATE:
<u>WES</u>	<u>W. E. STOVER</u>	<u>11-17-92</u>
<u>(.)</u>	<u>PM D. L. L. L.</u>	<u>11-17-92</u>

INITIALS	NAME (PRINT)	DATE:

INITIALS	NAME (PRINT)	DATE:

COMMENTS

ENSURE INTEGRITY OF SYSTEM IS NOT BROKEN INSIDE AND
OUTSIDE CONTAINMENT AS THIS WILL VIOLATE CONTAINMENT
INTEGRITY

SHIFT SUPERVISOR REVIEW:

TIME:

DATE:

LCTR NO. 92-00784

DRILL
USE
ONLY

CAROLINA POWER & LIGHT COMPANY
H.B. ROBINSON UNIT #2
COMPONENT IDENTIFICATION SHEET

Page ____ of ____
LCTR NO. 92-00784

IDENTIFICATION			INSTALLATION				RESTORATION			
Tag No.	COMPONENT	NOMENCLATURE	SEQ	POSITION FOR MAINTENANCE	POS'd BY	VERIF BY	SEQ	RESTORED POSITION	REST'd BY	VERIF BY
1	HVH-2 C/S	HVH-2 RTGB SWITCH	1	CAPPED	D	N/A		UNCAPPED		N/A
2	V6-33B C/S	HVH-2 SW INLET RTGB SWITCH	2	CAPPED	D	N/A		UNCAPPED		N/A
3	V6-33F C/S	HVH-2 SW SELECTIVE INLET RTGB SWITCH	3	CAPPED	D	N/A		UNCAPPED		N/A
4	V6-34B C/S	HVH-2 SW OUTLET RTGB SWITCH	4	CAPPED	D	N/A		UNCAPPED		N/A
5	V6-35B C/S	HVH-2 SW SAMPLING RTGB SWITCH	5	CAPPED	D	N/A		UNCAPPED		N/A
6	HVH-2 BKR	HVH-2 BREAKER(E-1)	6	RACKED OUT	D	WEL		RACKED IN		
7	V6-33F BKR	HVH-2 SW SELECTIVE INLET BREAKER(MCC-6)	7	OPEN	D	WEL		CLOSED		
8	V6-35B BKR	HVH-2 SW SAMPLING BREAKER(MCC-9)	8	OPEN	D	WEL		CLOSED		
9	V6-33B BKR	HVH-2 SW INLET BREAKER(MCC-5)	9	OPEN	D	WEL		CLOSED		
10	V6-34B BKR	HVH-2 SW OUTLET BREAKER(MCC-5)	10	OPEN	D	WEL		CLOSED		
11	V6-33B	HVH-2 SW INLET HANDWHEEL	11	CLOSED	D	WEL		OPEN		
12	V6-33F	HVH-2 SW SELECTIVE INLET HANDWHEEL	12	CLOSED	D	WEL		OPEN		
13	V6-34B	HVH-2 SW OUTLET HANDWHEEL	13	CLOSED	D	WEL		OPEN		

LCTR NO. 92-00784

DRILL
USE
ONLY

CAROLINA POWER & LIGHT COMPANY
H.B. ROBINSON UNIT #2
COMPONENT IDENTIFICATION SHEET

Page ____ of ____
LCTR NO. 92-00784

IDENTIFICATION			INSTALLATION				RESTORATION			
Tag No.	COMPONENT	NOMENCLATURE	SEQ	POSITION FOR MAINTENANCE	POS'd BY	VERIF BY	SEQ	RESTORED POSITION	REST'd BY	VERIF BY
14	V6-35B	HVH-2 SW SAMPLING HANDWHEEL	14	CLOSED	D	RED		OPEN		
15	SW-761	HVH-2 OUTLET DRAIN	15	CLOSED	D	RED		CLOSED		
16	SW-755	INLET DRAIN ON HVH-2	16	CLOSED	D	RED		CLOSED		
17	SW-756	DRAIN DOWNSTREAM OF V6-33F HVH 2 SELECTIVE INLET	17	CLOSED	D	RED		CLOSED		

[illegible]

FOR DRILL USE ONLY

EIR - ECCS EQUIPMENT

ATTACHMENT 6.1

Page 1 of 1

File No. 07-15505/2

This revision is the latest revision available and has been verified against the Revision Status List.

Name W E. STOVER (Print)Signature [Signature]Date 11/17/92

- A. Equipment Inoperable: HVH-2
 B. REDUNDANT EQUIPMENT TESTING REQUIRED

Equipment Inoperable	Redundant Equipment (Circle as Applicable) *Redundant Equip. required to be demonstrated operable prior to initiating repairs	Redundant Equip. Operable/ Tested for Operability	Tech. Spec.
1. RWST	None	<u>N/A</u>	(3.3.1.1a), 3.0
2. SI Accumulator	SI Accumulator A / B / C	<u> </u>	3.3.1.2a
3. SI Pump	*SI Pump A / B / C	<u> </u>	3.3.1.2b
4. RHR Pump	*RHR Pump A / B	<u> </u>	3.3.1.2c
5. RHR HX	RHR HX A / B	<u> </u>	3.3.1.2d
6. All Essential Features (valves, interlocks, piping) for above components	*Redundant Flow Path/ Valves Verified	<u> </u>	3.3.1.2e
7. Control Power/Air Restored to	<u>N/A</u>	<u> </u>	3.3.1.2f
8. Spray Additive Tank	None	<u>N/A</u>	(3.3.2.1a), 3.0
9. CV Spray Pump	*CV Spray Pump A / B and HVH-1, 2, 3, 4	<u> </u>	3.3.2.2b
10. HVH Unit <u>2</u>	HVH-1 / 2 / 3 / 4 and *CV Spray Pumps A and B	<u>WET</u>	3.3.2.2a
11. All Essential Features (valves, controls, dampers, piping) for above components	*Redundant Flow Path/ Valves Verified	<u> </u>	3.3.2.2.a,c
12. Auto initiation of NaOH	None	<u>N/A</u>	(3.3.2.1e), 3.0

C. Operating Limitations

1. Equipment declared inoperable: Time 0200 Date 11/17/92
 2. Time equipment allowed inoperable before:
 Hot shutdown 24 hrs. Cold shutdown hrs.
 Special Report hrs/Days
 3. Time and Date Action #2 Required:
 Hot shutdown -- Time: 0200 Date: 11/17/92
 Cold shutdown -- Time: Date:
 Special Report -- Time: Date:
 4. Load Dispatcher notified of LCO condition which could force Plant shutdown/load reduction. WET (SS/SCO Initials)
 5. Planning and Scheduling notified to develop Forced Outage Schedule if LCO condition exists and Plant shutdown anticipated. (SS/SCO Initials)
 6. Reason for Equipment Inoperability: 92-AHVH1 - COOLER LEAKS

Completed By: [Signature]

Unit 2 Shift Supervisor

Date 11-17-92D. Restoration

1. Equipment operable: Time Date
 2. Equipment no longer required due to Plant conditions: Time Date
 Reason:

Completed By:

Unit 2 Shift Supervisor

Date

CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No. 1B Date 11-17-92 Time 0700

MESSAGE FOR: RC SUPERVISOR

FROM: CONTROLLER - E&RC

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"
SEE ATTACHED. SRWPs FOR HVH-2 WORK AND FOR RESIN SHIPMENT.

ACTIONS EXPECTED:

1. SEND 1 HP WITH HVH-2 MAINTENANCE CREW.
2. SEND 3 HPs AND TWO DECONNERS TO RADWASTE BUILDING TO SUPPORT RESIN SHIPMENT.

FOR CONTROLLER USE ONLY

CONTROLLERS ARE ASSIGNED.

PERSONNEL PROTECTION REQUIREMENTS WILL NOT BE SIMULATED.

S_F_E_C_I_A_L RWP:

R92-DR11

REV: 07

UNOFFICIAL COPY

FOR INFORMATION ONLY

DO NOT POST

INITIAL DATE: 02/11/92 TIME: 15:12

REVISION DATE: 05/06/92 TIME: 07:13

VALID THROUGH: 12/31/92

10D :

WRA :

LOCATION

CONTAINMENT VESSEL

SECOND AND THIRD LEVEL- HVH UNITS ,2

WORK DESCRIPTION

REMOVE / REPLACE / TRANSPORT PREFILTERS, CLEAN COOLERS, CLEAN AND REPAIR

RADIOLOGICAL CONDITIONS

AS POSTED

RECOMMENDED ALLOWED DOSE: 100 MREM

EMPLOYERS: CFL OT
CREW IDS:

REQUIRED DOSIMETRY AND PROTECTIVE EQUIPMENT

DOSIMETRY

PROTECTIVE CLOTHING

TLD
CHEST

SRPDS
200MR OR 500MR

SINGLE CLOTH COVERALLS

GLOVES: SINGLE RUBBER

SHOECOVERS: SINGLE CLOTH AND SINGLE RUBBER

HEADCOVER: SINGLE CLOTH HOOD

INSTRUCTIONS

* REVIEW ATTACHED WORK AREA SURVEY FOR " AS POSTED " RADIOLOGICAL *
* CONDITIONS. SEE RWP INFORMATION BOOTH FOR ADDITIONAL INFORMATION. *

RADIOLOGICAL CONDITIONS SUBJECT TO CHANGE.
NOTIFY HEALTH PHYSICS PRIOR TO STARTING WORK.
SURVEY INSTRUMENT REQUIRED FOR WORK IN HRA / LHRA'S.
PRE-JOB BRIEFING REQUIRED FOR WORK IN LHRA'S.
LHRA FORM/CONTINUOUS HP COVERAGE REQUIRED FOR WORK IN LHRA'S.
ALARA REVIEW PERFORMED BY ().
CHECK DOSIMETERS OFTEN.
(INSTRUCTIONS CONTINUED ON NEXT PAGE)

SAMPLING REQUIRED: YES (AS SPECIFIED BY HP) RESPONSIBLE PERSON: RICHARD SMITH
SURVEYS: 07050592

APPROVED BY:

DATE: ___/___/___

TIME: ___:___:___

CP&L - ROBINSON PLANT

TERMINATION DATE: ___/___/___ TIME: ___:___:___

----- INSTRUCTIONS (CONTINUED) -----

RESPIRATORY PROTECTION REQUIRED FOR REMOVING HVH PRE-FILTERS.
DOUBLE PC'S REQUIRED FOR REMOVING, REPLACING, TRANSPORTING FILTERS.
IF WORK IS BEING PERFORMED INSIDE HVH/HVE FAN ROOMS, ATTACH HVH/HVE FAN
ROOM UNIT ENTRY FORM.

(END OF INSTRUCTIONS)

S_F_E_C_I_A_L RWP:

R92-DRILL

REV: 00

UNOFFICIAL COPY

FOR INFORMATION ONLY

DO NOT POST

INITIAL DATE: 06/24/92 TIME: 08:40

VALID THROUGH: 12/31/92

MOD #: WRA #: 92-ALGM1

----- LOCATION -----

ALL AREAS IN THE RCA/NOT CV. | "C" WASTE EVAPORATOR ROOM, RADWASTE BUILDING,
| DRUMMING ROOM, AND PA FENCE LINE

----- WORK DESCRIPTION -----

SLUICE RESIN FROM PROCESS VESSELS TO SPENT RESIN STORAGE TANK; SLUICE RESIN
FROM SPENT RESIN STORAGE TANK TO HIC IN RAD WASTE BUILDING; TO INCLUDE SET-UP,
DE-WATERING, SHIPPING, DECON AND ALL ASSOCIATED ACTIVITIES.

----- RADIOLOGICAL CONDITIONS -----

AS POSTED

RECOMMENDED ALLOWED DOSE: 200 MREM

EMPLOYERS: CFL OT
CREW IDS:

----- REQUIRED DOSIMETRY AND PROTECTIVE EQUIPMENT -----

----- DOSIMETRY -----

----- PROTECTIVE CLOTHING -----

--- TLD ---

--- SRPDS ---

CHEST

500MR

DRESS PER INSTRUCTIONS

----- INSTRUCTIONS -----

* REVIEW ATTACHED WORK AREA SURVEY FOR "AS POSTED" RADIOLOGICAL *
* CONDITIONS. SEE RWP INFORMATION BOOTH FOR ADDITIONAL INFORMATION *

NOTIFY HEALTH PHYSICS PRIOR TO STARTING WORK.
RADIOLOGICAL CONDITIONS SUBJECT TO CHANGE.
IF UNKNOWN DOSES >1R/HR ARE FOUND, LEAVE.
ALARA REVIEW PERFORMED BY ().
SURVEY INSTRUMENT REQUIRED FOR ENTRIES IN HRA'S / LHRA'S.
CHECK DOSIMETERS OFTEN.

(INSTRUCTIONS CONTINUED ON NEXT PAGE)

SAMPLING REQUIRED: YES (AS SPECIFIED BY HP) RESPONSIBLE PERSON: MIKE CRABTREE
SURVEYS: 07080792 11080992

APPROVED BY: _____

DATE: ____/____/____

TIME: _____

CP&L - ROBINSON PLANT

TERMINATION DATE: ____/____/____ TIME: ____:____:____

----- INSTRUCTIONS (CONTINUED) -----

FULL PROTECTIVE CLOTHING REQUIRED FOR WORK IN CONTAMINATION
AREAS OR ON CONTAMINATED EQUIPMENT.
RESPIRATORY PROTECTION REQUIRED FOR BREACHING CONTAMINATED SYSTEMS.
CLOTH HOOD REQUIRED WITH RESPIRATOR.
DRESS AS POSTED FOR SUPPORT FUNCTIONS.
ALARMING DOSIMETER REQUIRED FOR PERSONNEL MONITORING RESIN TRANSFER
LINES. SET ALARMING DOSIMETERS AT 150 MR ACCUMULATED DOSE AND 500 MR
RADIATION FIELD.

PRE-JOB BRIEFING REQUIRED PRIOR TO RESIN TRANSFER.
CONTINUOUS HF COVERAGE REQUIRED DURING RESIN TRANSFER.
NOTIFY EFFECTED PERSONNEL PRIOR TO RESIN TRANSFER.
ENSURE COMMUNICATION IS ESTABLISHED PRIOR TO AND DURING TRANSFER
WITH THE SPECIFIC INDIVIDUALS INVOLVED.

(END OF INSTRUCTIONS)

CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No. 1C Date 11-17-92 Time 0700

MESSAGE FOR: MAINTENANCE SUPERVISOR

FROM: CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

TWO WORKMEN IN CONTAINMENT WORKING HVH-2 HAVE COME OUT OF CONTAINMENT TO PICK UP A PART AND RECEIVE TURNOVER. THE COVER PLATES ARE REMOVED FROM THE COOLERS ON HVH-2. SEE ATTACHED WR.

ACTIONS EXPECTED:

2 MECHANICS WITH HP PREPARE FOR CV ENTRY.

FOR CONTROLLER USE ONLY

PERSONNEL PROTECTION REQUIREMENTS WILL NOT BE SIMULATED. A CONTROLLER IS ASSIGNED.

CP&L
EXERCISE MESSAGE CARD

RNPD

Plant

Message No. 2 Date 11-17-92 Time 0745

MESSAGE FOR: MECHANICS HVH-2

FROM: CONTROLLER - HVH-2

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

CONTACT SIMULATOR CONTROL ROOM AND TELL THEM THAT YOU ARE AT CV AIR LOCK.

ACTIONS EXPECTED:

FOR CONTROLLER USE ONLY

MECHANICS ARE TO BE TAKEN TO LOW DOSE AREA OUTSIDE OF AIRLOCK AND MAY NOT BE USED FOR OTHER PURPOSES UNTIL INSTRUCTED TO LEAVE CONTAINMENT.

MECHANICS WILL BE UNABLE TO OPEN OUTER DOOR. HANDWHEEL WILL SPIN FREELY AND DOES NOT OPERATE DOOR.

SEE MISSION #9

PAPER SCENARIO ONLY

CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No. 3 (P) Date 11-17-92 Time 0748

MESSAGE FOR: RO

FROM: CONTROLLER - SCR

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

THE FOLLOWING ANNUNCIATOR APP-036-D12 IS FLASHING.

ACTIONS EXPECTED:

ACKNOWLEDGE ALARM. ANNUNCIATOR STAYS LIT.

CONSULT APP-006

CONSULT AOP-021

REVIEW EALs

FOR CONTROLLER USE ONLY

APP-036-D12 IS "SEISMIC ALARM"

REFERENCE MISSION #3A

CON-92-2627
RNPD-92-06-R0

CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No. 4 Date 11-17-92 Time 0748

MESSAGE FOR: RESIN SHIPMENT CREW

FROM: CONTROLLER - RESIN SHIPMENT

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

YOU FELT A SHAKING IN THE BUILDING AND THE RADWASTE BUILDING CRANE STOPPED AND WILL NOT MOVE. A RESIN HIGH INTEGRITY CONTAINER (HIC) IS SUSPENDED ON THE CRANE AND CONTAINS RESIN. THE CABLE APPEARS TO BE WEDGED BETWEEN THE DRUM AND THE DRUM SUPPORT.

ACTIONS EXPECTED:

FOR CONTROLLER USE ONLY

HIC IS READING 1000 R/hr ON CONTACT.

CP&L
EXERCISE MESSAGE CARD

RNPD

Plant

Message No. 5 Date 11-17-92 Time 0750

MESSAGE FOR: SCR STAFF

FROM: CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

THE DISPATCHER CALLS ON THE HOT LINE: "AN EARTHQUAKE OCCURRED IN NORTHEASTERN SOUTH CAROLINA. THE POSSIBILITY OF AFTERSHOCKS EXIST."

ACTIONS EXPECTED:

INCLUDE THIS INFORMATION IN REVIEW OF EALs.

FOR CONTROLLER USE ONLY

CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No. A Date 11-17-92 Time WHEN NECESSARY AS
DETERMINED BY HEAD
EXERCISE CONTROLLER

MESSAGE FOR: SHIFT SUPERVISOR

FROM: CONTROLLER - SCR

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

DECLARE AN UNUSUAL EVENT BASED ON CONFIRMED SEISMIC ACTIVITY.

ACTIONS EXPECTED:

FOR CONTROLLER USE ONLY

DO NOT ISSUE THIS MESSAGE WITHOUT PERMISSION OF HEAD SCENARIO CONTROLLER.

Paper Scenario Only

CP&L
EXERCISE MESSAGE CARD

RNPD

Plant

Message No. 6 (P) Date 11-17-92 Time 0830

MESSAGE FOR: SCR STAFF

FROM: CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

THE FOLLOWING ANNUNCIATOR APP-021-A-1 IS FLASHING.

ACTIONS EXPECTED:

ACKNOWLEDGE ALARM. ANNUNCIATOR STAYS LIT. R-4 IN ALARM.

CONSULT APP-021

CONSULT AOP-005

REVIEW EALs

FOR CONTROLLER USE ONLY

1. PROVIDE CURRENT AND PAST R-4 READING LEVELS PER GRAPH.
2. ALARM SETPOINTS FOR R-4 IS 50 mR/hr.
3. SOURCE CHECK IS SAT.
4. APP-021-A-1 IS "AREA RADIATION MONITOR".

CON-92-2627
RNPD-92-06-R0

PAPER SCENARIO ONLY

CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No. 7 (P) Date 11-17-92 Time 0835

MESSAGE FOR: SCR STAFF

FROM: CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

THE FOLLOWING ANNUNCIATOR APP-021-A-1 IS FLASHING. THE RED LIGHT ON R-9 IS ILLUMINATED.

ACTIONS EXPECTED:

ACKNOWLEDGE ALARM. ANNUNCIATOR STAYS LIT. R-9 IN ALARM.

CONSULT APP-021

CONSULT AOP-005

REVIEW EALs

FOR CONTROLLER USE ONLY

1. PROVIDE CURRENT AND PAST R-9 READING LEVELS PER GRAPH.
2. ALARM SETPOINT FOR R-9 IS 3000 mR/hr.
3. SOURCE CHECK IS SAT.
4. APP-021-A-1 IS "AREA RADIATION MONITOR".
5. REFERENCE MISSION #4.

CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No. B Date 11-17-92 Time WHEN NECESSARY AS
DETERMINED BY HEAD
EXERCISE CONTROLLER

MESSAGE FOR: SCR STAFF

FROM: CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

DECLARE AN ALERT BASED UPON THE FAILURE OF THE FUEL FISSION PRODUCT BARRIER.

(R-9 INCREASE GREATER THAN 5 REM IN 30 MINUTES)

ACTIONS EXPECTED:

FOR CONTROLLER USE ONLY

DO NOT ISSUE THIS MESSAGE WITHOUT PERMISSION OF THE HEAD EXERCISE CONTROLLER.

PAPER SCENARIO ONLY

CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No. 8 (P) Date 11-17-92 Time 0912

MESSAGE FOR: SCR STAFF

FROM: CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

THE FOLLOWING ANNUNCIATOR APP-021-A-2 IS FLASHING. THE RED LIGHTS ON R-11 AND R-12 ARE ILLUMINATED.

ACTIONS EXPECTED:

ACKNOWLEDGE ALARM. ANNUNCIATOR STAYS LIT.

CONSULT APP-021

CONSULT AOP-005

REVIEW EALs

FOR CONTROLLER USE ONLY

1. PROVIDE CURRENT AND PAST R-11, 12 READING LEVELS PER GRAPHS.
2. ALARM SETPOINTS ARE: R-11 = 36000 CPM
R-12 = 2200 CPM
3. SOURCE CHECKS ARE SAT.
4. APP-021-A-2 IS "PROCESS RADIATION MONITOR".

CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No. 9 Date 11-17-92 Time 0915

MESSAGE FOR: AUX OPERATOR

FROM: CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

OST-901 IS COMPLETE - SEE ATTACHED DATA.

ACTIONS EXPECTED:

FOR CONTROLLER USE ONLY

INSIDE AUX. OPERATOR IS NORMALLY SENT TO PERFORM THIS OST.

FORMULA FOR COMPUTING INDIVIDUAL CONDENSATION RATES

$$\frac{\text{Level(Step 7.6)} - \text{Level(Step 7.2)} \times .106 \text{ gal/ft}}{\text{Time(Step 7.6)} - \text{Time(Step 7.3)}} = \text{GPM}$$

HVH-1:

$$\frac{(\text{LVL Final } 13.2 \text{ FT}) - (\text{LVL Initial } 1.1 \text{ FT})}{(\text{Stop Time } \overset{\text{START}}{\underset{2 \text{ MIN}}{\quad}}) - (\text{Start Time } \quad)} \times (.106 \text{ gal/ft}) = \underline{.6413} \text{ GPM (Step 7.10)}$$

HVH-2: (005)

$$\frac{(\text{LVL Final } \quad \text{FT}) - (\text{LVL Initial } \quad \text{FT})}{(\text{Stop Time } \quad) - (\text{Start Time } \quad)} \times (.106 \text{ gal/ft}) = \underline{\quad} \text{ GPM (Step 7.10)}$$

HVH-3:

$$\frac{(\text{LVL Final } 14.0 \text{ FT}) - (\text{LVL Initial } 1.2 \text{ FT})}{(\text{Stop Time } \overset{\text{START}}{\underset{2 \text{ MIN}}{\quad}}) - (\text{Start Time } \quad)} \times (.106 \text{ gal/ft}) = \underline{.6784} \text{ GPM (Step 7.10)}$$

HVH-4:

$$\frac{(\text{LVL Final } 14 \text{ FT}) - (\text{LVL Initial } 1.0 \text{ FT})}{(\text{Stop Time } \overset{\text{START}}{\underset{2 \text{ MIN}}{\quad}}) - (\text{Start Time } \quad)} \times (.106 \text{ gal/ft}) = \underline{.689} \text{ GPM (Step 7.10)}$$

$$\text{HVH-1 GPM} + \text{HVH-2 GPM} + \text{HVH-3 GPM} + \text{HVH-4 GPM} = \text{Total Condensate Rate}$$

$$(\underline{.6413} \text{ GPM}) + (\underline{005} \text{ GPM}) + (\underline{.6784} \text{ GPM}) + (\underline{.689} \text{ GPM}) = (\underline{2.0087} \text{ GPM}) \text{ (Step 7.11)}$$

FORMULA FOR COMPUTING INDIVIDUAL CONDENSATION RATES

Example

Cooler HVH-3

Test Started at 10:10 (Step 7.3)

Test Stopped at 10:30 (Step 7.6)

Initial Level .5 ft (Step 7.2.3)

Final Level 4.5 ft (Step 7.6.3)

$$\frac{(4.5) \text{ ft.} - (.5)}{(10:30) \text{ time} - (10:10) \text{ time}} \times (.106 \text{ gal./ft.}) = \text{GPM}$$

$$\frac{(4.0) \text{ ft.} \times (.106 \text{ gal./ft.})}{(20) \text{ min.}} = \text{GPM}$$

$$(.20) \text{ ft./min.} \times (.106 \text{ gal./ft.}) = \text{GPM}$$

$$(.02120 \text{ gal./min.}) = \text{GPM}$$

(HVH-3)

FORMULA FOR COMPUTING INDIVIDUAL CONDENSATION RATES

$$\frac{\text{Level(Step 7.6)} - \text{Level(Step 7.2)}}{\text{Time(Step 7.6)} - \text{Time(Step 7.3)}} \times .106 \text{ gal/ft} = \text{GPM}$$

HVH-1:

$$\frac{(\text{LVL Final } 13.2 \text{ FT}) - (\text{LVL Initial } 1.1 \text{ FT})}{(\text{Stop Time } \frac{\text{START} + 2 \text{ MIN}}{2 \text{ MIN}}) - (\text{Start Time } \underline{\hspace{2cm}})} \times (.106 \text{ gal/ft}) = \underline{\hspace{2cm}} \text{ GPM (Step 7.10)}$$

HVH-2:

$$\frac{(\text{LVL Final } 005 \text{ FT}) - (\text{LVL Initial } 005 \text{ FT})}{(\text{Stop Time } \underline{005}) - (\text{Start Time } \underline{005})} \times (.106 \text{ gal/ft}) = \underline{005} \text{ GPM (Step 7.10)}$$

HVH-3:

$$\frac{(\text{LVL Final } 14.0 \text{ FT}) - (\text{LVL Initial } 1.2 \text{ FT})}{(\text{Stop Time } \frac{\text{START} + 2 \text{ MIN}}{2 \text{ MIN}}) - (\text{Start Time } \underline{\hspace{2cm}})} \times (.106 \text{ gal/ft}) = \underline{\hspace{2cm}} \text{ GPM (Step 7.10)}$$

HVH-4:

$$\frac{(\text{LVL Final } 14.0 \text{ FT}) - (\text{LVL Initial } 1.0 \text{ FT})}{(\text{Stop Time } \frac{\text{START} + 2 \text{ MIN}}{2 \text{ MIN}}) - (\text{Start Time } \underline{\hspace{2cm}})} \times (.106 \text{ gal/ft}) = \underline{\hspace{2cm}} \text{ GPM (Step 7.10)}$$

$$\text{HVH-1 GPM} + \text{HVH-2 GPM} + \text{HVH-3 GPM} + \text{HVH-4 GPM} = \text{Total Condensate Rate}$$

$$(\underline{\hspace{2cm}} \text{ GPM}) + (\underline{005} \text{ GPM}) + (\underline{\hspace{2cm}} \text{ GPM}) + (\underline{\hspace{2cm}} \text{ GPM}) = (\underline{\hspace{2cm}} \text{ GPM}) \text{ (Step 7.11)}$$

FORMULA FOR COMPUTING INDIVIDUAL CONDENSATION RATES

Example

Cooler HVH-3

Test Started at 10:10 (Step 7.3)

Test Stopped at 10:30 (Step 7.6)

Initial Level .5 ft (Step 7.2.3)

Final Level 4.5 ft (Step 7.6.3)

$$\frac{(4.5) \text{ ft.} - (.5)}{(10:30) \text{ time} - (10:10) \text{ time}} \times (.106 \text{ gal./ft.}) = \text{GPM}$$

$$\frac{(4.0) \text{ ft.} \times (.106 \text{ gal./ft.})}{(20) \text{ min.}} = \text{GPM}$$

$$(.20) \text{ ft./min.} \times (.106 \text{ gal./ft.}) = \text{GPM}$$

$$(.02120 \text{ gal./min.}) = \text{GPM}$$

(HVH-3)

AO CONTROLLER INFORMATION

FOR THE AO CONTROLLER FOR OST-901 THERE MAY BE A REQUEST FOR CONTAINMENT DEW POINT INFORMATION.

CV DEWPOINT TEMPERATURE WILL INCREASE ~ 5 DEGREES.

NOTE: $(.4 \text{ GPM}/^{\circ}\text{F}) (5^{\circ}\text{F}) = 2.0 \text{ GPM}$

PAPER SCENARIO ONLY

CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No. 10 (P) Date 11-17-92 Time 0920

MESSAGE FOR: SCR STAFF

FROM: CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

THE FOLLOWING ANNUNCIATOR APP-008-A-5 IS FLASHING.

ACTIONS EXPECTED:

ACKNOWLEDGE ANNUNCIATOR. ANNUNCIATOR STAYS LIT.

CONSULT APP-008

CONSULT AOP-012

PREPARE FOR PLANT SHUTDOWN.

FOR CONTROLLER USE ONLY

1. APP-008-A-5 IS "CONDENSER LOW VACUUM".
2. REFERENCE MISSION #5.

CON-92-2627
RNPD-92-06-R0

PAPER SCENARIO ONLY

CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No. 11 (P) Date 11-17-92 Time 0920

MESSAGE FOR: SCR STAFF

FROM: CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

THE FOLLOWING ANNUNCIATOR APP-002-E-2 IS FLASHING.

ACTIONS EXPECTED:

ACKNOWLEDGE COMMUNICATOR. ANNUNCIATOR STAYS LIT.

CONSULT APP-002

CONSULT AOP-016

PERFORM OST-901 IF NOT DONE ALREADY.

FOR CONTROLLER USE ONLY

APP-002-E-2 IS "HVH CONDENSATE COLL".

PAPER SCENARIO ONLY

CP&L
EXERCISE MESSAGE CARD

RNPD

Plant

Message No. C (P) Date 11-17-92 Time 0925

MESSAGE FOR: SCR STAFF

FROM: CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

BEGIN SHUTDOWN AT 1%/MIN.

ACTIONS EXPECTED:

FOR CONTROLLER USE ONLY

PAPER SCENARIO ONLY

CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No. 12 (P) Date 11-17-92 Time 0935

MESSAGE FOR: SCR STAFF

FROM: CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

CONTROL ROD H-8 IS NOT MOVING FROM ORIGINAL POSITION.

ACTIONS EXPECTED:

CONSULT AOP-001.

FOR CONTROLLER USE ONLY

1. REFERENCE MISSION #6.

CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No. 13 Date 11-17-92 Time 0945

MESSAGE FOR: SEC - TSC

FROM: CONTROLLER - DARLINGTON CO. EOC

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

YOU RECEIVE A CALL VIA DECISION LINE. "WE HAVE EXPERIENCED EARTHQUAKE DAMAGE IN THE AREA AND HAVE DECIDED TO CLOSE ALL DARLINGTON CO. SCHOOLS."

ACTIONS EXPECTED:

FOR CONTROLLER USE ONLY

PAPER SCENARIO ONLY

CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No. 14 (P) Date 11-17-92 Time 1030

MESSAGE FOR: SCR STAFF

FROM: CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

THE FOLLOWING ANNUNCIATOR APP-036-D-12 IS FLASHING. YOU FEEL THE CR SHAKING.

ACTIONS EXPECTED:

ACKNOWLEDGE ALARM. ANNUNCIATOR STAYS LIT.

CONSULT APP-036

CONSULT AOP-021

REVIEW EALs

FOR CONTROLLER USE ONLY

1. APP-036-D-12 IS "SEISMIC ALARM".
2. REFERENCE MISSION #3B.

PAPER SCENARIO ONLY

CP&L
EXERCISE MESSAGE CARD

RNPD

Plant

Message No. 15 (P) Date 11-17-92 Time 1030

MESSAGE FOR: SCR STAFF

FROM: CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

THE FOLLOWING ANNUNCIATOR APP-036-H1 IS FLASHING.

ACTIONS EXPECTED:

ACKNOWLEDGE ALARM. ANNUNCIATOR STAYS LIT.

CONSULT APP-036

NOTIFY AO TO INVESTIGATE ALARM.

FOR CONTROLLER USE ONLY

1. APP-036-H-1 IS "WDBRP TROUBLE".
2. REFERENCE MISSION #7

CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No. 16 Date 11-17-92 Time 1030

MESSAGE FOR: SCR STAFF

FROM: CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

THE FOLLOWING ALARMS ANNUNCIATE ON THE FIRE ALARM CONSOLE:

A11 A50 IN 17-NOV-92 ZN-4 FIRE ALM TRN- A CHARGING PUMP RM
(TIME)

A55 A50 IN 17-NOV-92 ZN-NO FIRE ALM TRN- A FDAP A1 MASTER FIRE ALM.
(TIME)

THE FOLLOWING ON FDAP A1: 1) MASTER FIRE LIGHT; 2) ZONE 4 FIRE ALARM; 3) LOCAL BELL (SIMULATED).

ACTIONS EXPECTED:

ACKNOWLEDGE ALARM.

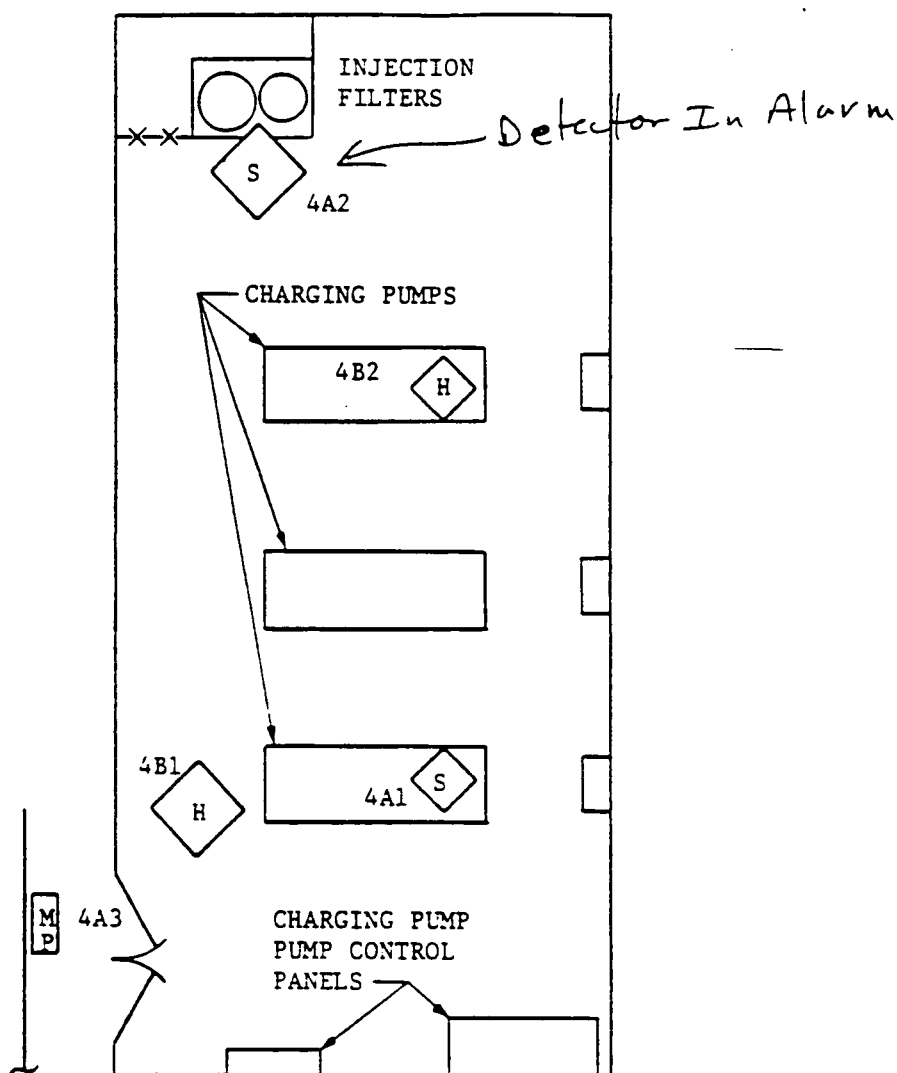
REFER TO AP-044.

PER FP-001 DISPATCH FIRE PROTECTION TECH AIDE OR FIRE BRIGADE MEMBER TO INVESTIGATE. NO FIRE BRIGADE RESPONSE IS REQUIRED. ONCE INVESTIGATION IS DONE, CONTROLLER PROVIDES CONDITION FOUND. SIMULATE RESET FIRE ALARM, ALARM WILL CLEAR.

FOR CONTROLLER USE ONLY

1. AT CHARGING PUMP ROOM WHEN FBT OR OPS ARRIVE IF THEY ENTER ROOM AND GO TOWARD C PUMP LOOK UP FOR DETECTORS THEY WILL NOTE THE INDICATOR LIGHT OR IONIZATION SMOKE DETECTOR 4A2. NO EVIDENCE OF SMOKE OR FIRE.
2. IF HP ONLY ALLOWS THEM TO OPEN DOOR TO CHARGING PUMP ROOM, NO SMOKE OR ODOR OF SMOKE CAN BE DETECTED. EXPECT THEM TO RESET FDAP AND ALARM CLEARS.
3. AT FDAP-A1 IF THEY LOOK AT THIS PANEL, THEY WILL NOTE THE "MASTER" FIRE ALARM LIGHT, ZONE 4 ALARM LIGHT, LOCAL BELL (SIMULATED).

Figure 4. Zone 4 - Charging Pump Room.



CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No. 17 Date 11-17-92 Time 1035

MESSAGE FOR: SCO STAFF

FROM: CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

THE DISPATCHER CALLS ON THE HOT LINE. " A SECOND EARTHQUAKE OCCURRED NEAR THE FIRST ONE IN NORTHEASTERN SOUTH CAROLINA. THE POSSIBILITY OF MORE AFTERSHOCKS EXIST.

ACTIONS EXPECTED:

FOR CONTROLLER USE ONLY

CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No. D Date 11-17-92 Time WHEN NECESSARY AS
DETERMINED BY HEAD
SCENARIO CONTROLLER

MESSAGE FOR: SCR STAFF

FROM: CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

DECLARE A SITE AREA EMERGENCY BASED UPON LOSS OF TWO FISSION PRODUCT BARRIERS.
(FUEL BREACH AS INDICATED BY R-9 AND CONTAINMENT BREACH AS INDICATED BY R-14
ACTIVITY.)

ACTIONS EXPECTED:

FOR CONTROLLER USE ONLY

DO NOT ISSUE THIS MESSAGE WITHOUT THE PERMISSION OF THE HEAD EXERCISE CONTROLLER.

CON-92-2627
RNPD-92-06-R0

3.1-40

CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No. 18 Date 11-17-92 Time WHEN ANNOUNCEMENT
IS ABOUT TO BE MADE

MESSAGE FOR:

FROM: CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"
USE ATTACHED PROCEDURE PAGE FOR SITE AREA EMERGENCY PA ANNOUNCEMENT.

ACTIONS EXPECTED:

FOR CONTROLLER USE ONLY

SITE AREA EMERGENCY

THIS IS AN EXERCISE SIMULATION PAGE FOR EXERCISE USE ONLY NOR FOR REAL EMERGENCIES.

2.0 PROCEDURE (Continued)

2.5.2 Make the following announcement.

THIS IS AN EXERCISE MESSAGE FOR EXERCISE PARTICIPANTS ONLY.

ATTENTION ALL PERSONNEL. ATTENTION CALL PERSONNEL. A SITE AREA EMERGENCY HAS BEEN DECLARED. THE CAUSE OF THE EMERGENCY IS

ALL RNPD EMERGENCY RESPONSE ORGANIZATION PERSONNEL REPORT TO YOUR DESIGNATED EMERGENCY RESPONSE FACILITY.

ALL NON-EMERGENCY RESPONSE PERSONNEL DO NOT EVACUATE, I REPEAT, DO NOT EVACUATE TO THE EAST/WEST (CIRCLE ONE) PARKING LOT. THE USE OF THE PUBLIC ADDRESS SYSTEM IS NOW RESTRICTED TO EXERCISE OR EMERGENCY COMMUNICATIONS UNTIL FURTHER NOTICE. THIS IS AN EXERCISE MESSAGE.

2.5.3 Continue to sound Site Evacuation Alarm for approximately 1 minute.

2.5.4 Upon initiating evacuation procedures implement PEP-502, Personnel Accountability, and PEP-504, Access Control.

2.6 Determine if TSC has been incorporated into the Protected Area.

2.6.1 If it has, go to Step 2.7.

NOTE

A deviation from 10CFR73.55(d) is required when allowing TSC access prior to search by Security.

2.6.2 If not, call Security and request that the TSC be searched and incorporated into the Protected Area. Inform them that you (the Shift Supervisor or SRO in the Control Room) are invoking 10CFR50.54x, y, and z, and to allow IMMEDIATE access to TSC via the Protected Area.

NOTE

ATTACHMENT 5.3, Protective Action Recommendations (PARs) for a General Emergency, provides the SEC or ERM with automatic protective actions to be recommended if dose projections are not immediately available. One of these PARs will be issued as a minimum. These must be made within 15 minutes of the declaration of the General Emergency.

FOR EXERCISE USE ONLY

PAPER SCENARIO ONLY

CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No. 19 (P) Date 11-17-92 Time 1115

MESSAGE FOR: SCR STAFF

FROM: CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

UNIT IS OFF LINE.

ACTIONS EXPECTED:

FOR CONTROLLER USE ONLY

CP&L
EXERCISE MESSAGE CARD

RNPD

Plant

Message No. 20 Date 11-17-92 Time 1140

MESSAGE FOR: EMERGENCY COMMUNICATOR ON SSS

FROM: CONTROLLER - DARLINGTON CO. EOC

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

A COUNT DOWN FOR SIREN SOUNDING AND EBS ACTIVATION OCCURS.

ACTIONS EXPECTED:

FOR CONTROLLER USE ONLY

PAPER SCENARIO ONLY

CP&L
EXERCISE MESSAGE CARD

RNPD

Plant

Message No. 21 (P) Date 11-17-92 Time 1230

MESSAGE FOR:

FROM: CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

THE FOLLOWING ANNUNCIATORS ARE ALARMING:

APP-003-F-4
APP-003-D-8
APP-003-E-8
APP-003-B-8
APP-004-D-1

ACTIONS EXPECTED:

ENTER INTO PATH 1 OF EOP NETWORK.

APP-003-F-4 IS "CHG PMP HI SPEED"
APP-003-D-8 IS "PZR CONTROL HI/LO PRESSURE"
APP-003-E-8 IS "PZR CONTROL HI/LO LEVEL"
APP-003-B-8 IS "PZR PROT LO PRESS"
APP-004-D-1 IS "PZR LO PRESS SFGRD/TRIP"

FOR CONTROLLER USE ONLY

PAPER SCENARIO ONLY

CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No. 22 (P) Date 11-17-92 Time 1230

MESSAGE FOR: SCR STAFF

FROM: CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

THE FOLLOWING ANNUNCIATOR IS FLASHING:

APP-021-A-1, R-2 AND R-7 HAVE RED LIGHTS ILLUMINATED ON THE DRAWER.

ACTIONS EXPECTED:

ACKNOWLEDGE ALARM ANNUNCIATOR STAYS LIT.

CONSULT APP-021

CONSULT AOP-005

FOR CONTROLLER USE ONLY

1. PROVIDE CURRENT AND PAST R-2, 7 READING LEVELS PER GRAPHS.
2. ALARM SETPOINTS ARE R-2 = 100
R-7 = 200
3. SOURCE CHECKS ARE SAT.
4. APP-021-A-1 IS "AREA RADIATION MONITOR"

CON-92-2627
RNPD-92-06-R0

PAPER SCENARIO ONLY

CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No. 23 (P) Date 11-17-92 Time 1235

MESSAGE FOR:

FROM: CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

THE FOLLOWING ANNUNCIATOR APP-021-A-2 IS FLASHING. R-14C RED LIGHT IS ILLUMINATED.

ACTIONS EXPECTED:

ACKNOWLEDGE ANNUNCIATOR. ANNUNCIATOR STAYS LIT.

CONSULT APP-021

CONSULT AOP-005

FOR CONTROLLER USE ONLY

1. PROVIDE CURRENT AND PAST READINGS FOR R-14C CHANNELS PER THE GRAPHS.
2. R-14C ALARM SETPOINT IS 15,000 CPM.
3. SOURCE CHECK IS SAT.
4. APP-021-A-2 IS "PROCESS RADIATION MONITOR".

CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No. E Date 11-17-92 Time WHEN REQUIRED AS
AS DETERMINED BY
HEAD SCENARIO CONTROLLER

MESSAGE FOR: SCR STAFF

FROM: CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

DECLARE A GENERAL EMERGENCY BASED ON A BREACH OF ALL THRU FISSION PRODUCT
BARRIERS. (FUEL BREACH PER R-9, RCS BREACH DUE TO LEAKAGE > 50 GPM, CONTAINMENT
BREACH DUE TO RELEASE PATH).

ACTIONS EXPECTED:

FOR CONTROLLER USE ONLY

CORRECT PARs ARE A0, A1, B1, C1, D1, E1 EVAC.
A2, B2 (E2 POSSIBLY)
SHELTER ALL REMAINING

CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No. 24 Date 11-17-92 Time WHEN ANNOUNCEMENT
IS ABOUT TO BE MADE

MESSAGE FOR: SCR STAFF

FROM: CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"
USE ATTACHED PROCEDURE PAGE FOR GENERAL EMERGENCY PA ANNOUNCEMENT.

ACTIONS EXPECTED:

FOR CONTROLLER USE ONLY

2.5.2 Make the following announcement (with VLC switch in the "EMERGENCY position):

ATTENTION ALL PERSONNEL. ATTENTION ALL PERSONNEL. A GENERAL EMERGENCY HAS BEEN DECLARED. THE CAUSE OF THE EMERGENCY IS _____

ALL RNPd EMERGENCY RESPONSE ORGANIZATION PERSONNEL REPORT TO YOUR DESIGNATED EMERGENCY RESPONSE FACILITY. ALL NON-EMERGENCY RESPONSE PERSONNEL DO NOT EVACUATE, I REPEAT, DO NOT EVACUATE TO THE EAST/WEST (CIRCLE ONE) PARKING LOT. THE USE OF THE PUBLIC ADDRESS SYSTEM IS NOW RESTRICTED TO EXERCISE OR EMERGENCY COMMUNICATIONS UNTIL FURTHER NOTICE. THIS IS AN EXERCISE MESSAGE.

2.5.3 Continue to sound Site Evacuation Alarm for approximately 1 minute.

2.5.4 Upon initiating evacuation procedures implement PEP-502, Personnel Accountability, and PEP-504, Access Control.

2.6 Determine if TSC has been incorporated into the Protected Area.

2.6.1 If it has, go to Step 2.7.

NOTE

A deviation from 10CFR73.55(d) is required when allowing TSC access prior to search by Security.

2.6.2 If not, call Security and request that the TSC be immediately incorporated into the Protected Area. Inform them that you (the Shift Supervisor or SRO in the Control Room) are invoking 10CFR50.54(x), and to allow IMMEDIATE access to TSC via the Protected Area.

CP&L
EXERCISE MESSAGE CARD

RNPD
Plant

Message No.: 24A (P) Date: 10/30/92 Time: 1300

MESSAGE FOR: Control Room

FROM: Controller - Simulator

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

THE FOLLOWING ANNUNCIATOR IS ALARMING:

APP-008-D2

ACTIONS EXPECTED:

ACKNOWLEDGE ALARM. ANNUNCIATOR STAYS LIT

CONSULT APP-008

CONTACT TSC

FOR CONTROLLER USE ONLY:

THIS IS THE TURBINE GEAR MOTOR TRIP

CP&L
EXERCISE MESSAGE CARD

RNPD

Plant

Message No. 25 Date 11-17-92 Time 1315+

MESSAGE FOR: EMERGENCY RESPONSE MANAGER

FROM: CONTROLLER - DARLINGTON CO. EOC

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

THE COUNTIES HAVE REVIEWED YOUR PARs AND HAVE DECIDED TO EVACUATE ALL SECTORS.

ACTIONS EXPECTED:

FOR CONTROLLER USE ONLY

CP&L
EXERCISE MESSAGE CARD

RNPD

Plant

Message No. 26 Date 11-17-92 Time 1330

MESSAGE FOR: EMERGENCY COMMUNICATOR VIA SSS

FROM: CONTROLLER - DARLINGTON CO. EOC

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

A COUNTDOWN FOR SIREN AND EBS ACTIVATION IS CONDUCTED.

ACTIONS EXPECTED:

FOR CONTROLLER USE ONLY

CP&L
EXERCISE MESSAGE CARD

RNPD

Plant

Message No. 27 Date 11-17-92 Time 1400 - 1430
AS DETERMINED BY
HEAD SCENARIO
CONTROLLER

MESSAGE FOR: ERM/SEC

FROM: CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

THE EXERCISE IS OVER. TAKE A BREAK AND PERFORM A FACILITY CRITIQUE.

ACTIONS EXPECTED:

FOR CONTROLLER USE ONLY

DO NOT GIVE THIS MESSAGE WITHOUT THE PERMISSION OF THE LEAD SCENARIO CONTROLLER.

CON-92-2627
RNPD-92-06-R0

3.1-53

CONFIDENTIAL

CAROLINA POWER & LIGHT COMPANY
ROBINSON NUCLEAR PROJECT DEPARTMENT

1992 EXERCISE

3.2 PLANT PARAMETERS & GRAPHS

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7

Page 1 of 1

EMERGENCY CLASSIFICATION (CIRCLE)

UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 0730

Completed By: _____

ALERT

GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 6.3
LOWER (MPH) 2.3
WIND DIR. UPPER (° FROM) 180
LOWER (° FROM) 185
AIR TEMPERATURE (°F) 45.2
STABILITY CLASS E

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 0.1
R-2 CONT. AREA (MR/HR) 15
R-3 HP WORK AREA (MR/HR) 0.15
R-4 CHG. PUMP RM (MR/HR) 5
R-5 SPENT FUEL PIT (MR/HR) 0.7
R-6 SAMPLING ROOM (MR/HR) 0.8
R-7 IN-CORE INST (MR/HR) 6
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 95
R-33 MON BLDG (MR/HR) 0.5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 20K
R-12 CV VENT GAS (CPM) 1.2K
R-14A "P" PLT VNT (CPM) 548
R-14B "I" PLT VNT (CPM) 10
R-14C "NG" PLT VNT (CPM) 29
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 2150
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) 0.5
R-31A "A" MN STM (MR/HR) 0.5
R-31B "B" MN STM (MR/HR) 0.5
R-31C "C" MN STM (MR/HR) 0.5
R-32A CV HI RG (R/HR) 1
R-32B CV HI RG (R/HR) 1
R-14D PLT VNT GAS (MID) (CPM) 10
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) 0.3
TEMPERATURE (°F) 127
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 5.2
RWST LEVEL (%) 91

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 2235
PZR LEVEL (%) 53.3
TAVE (°F) 575.4
LOOP A TH (°F) 604
TC (°F) 547
ΔT 57
LOOP B TH (°F) 604
TC (°F) 547
ΔT 57
LOOP C TH (°F) 604
TC (°F) 547
ΔT 57
SUBCOOLING (°F) 53
CHARGING FLOW (GPM) 32
LETDOWN FLOW (GPM) 42
REACTOR POWER 100
ACTIVITY:
GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 598.4
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 831
FEED (PPH) 3.4
STEAM (PPH) 3.4
ACT. (Uci/ml) _____
S/G B
LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 831
FEED (PPH) 3.4
STEAM (PPH) 3.4
ACT. (Uci/ml) _____
S/G C
LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 831
FEED (PPH) 3.4
STEAM (PPH) 3.4
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
RESET: TIME _____
CS ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) _____
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP A O B O C O
CHG PUMP A A B A C O
SI PUMP A A B A C OOS
CS PUMP A A B A
RHR PUMP A A B A
HVH 1 O 2 OOS 3 O 4 O

SECONDARY

CST LEVEL (%) 90
FEED PUMP A O B O
COND PUMP A O B O
AFW MOTOR A A B A
AFW STEAM A

MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A

FANS

HVE 1A A 1B A
HVE 2A A 2B O
HVE 5A A 5B A
HVE 15 O 15A A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)
UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 0745

Completed By: _____

ALERT GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 6.4
 LOWER (MPH) 2.6
WIND DIR. UPPER (° FROM) 183
 LOWER (° FROM) 187
AIR TEMPERATURE (°F) 45.2
STABILITY CLASS E

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 0.1
R-2 CONT. AREA (MR/HR) 15
R-3 HP WORK AREA (MR/HR) 0.15
R-4 CHG. PUMP RM (MR/HR) 5
R-5 SPENT FUEL PIT (MR/HR) 0.7
R-6 SAMPLING ROOM (MR/HR) 0.8
R-7 IN-CORE INST (MR/HR) 6
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 95
R-33 MON BLDG (MR/HR) 0.5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 20K
R-12 CV VENT GAS (CPM) 1.2K
R-14A "P" PLT VNT (CPM) 548
R-14B "I" PLT VNT (CPM) 10
R-14C "NG" PLT VNT (CPM) 29
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 2150
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) 0.5
R-31A "A" MN STM (MR/HR) 0.5
R-31B "B" MN STM (MR/HR) 0.5
R-31C "C" MN STM (MR/HR) 0.5
R-32A CV HI RG (R/HR) 1
R-32B CV HI RG (R/HR) 1
R-14D PLT VNT GAS (MID) (CPM) 10
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) 0.3
TEMPERATURE (°F) 127
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 5.2
RWST LEVEL (%) 91

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 2235
PZR LEVEL (%) 53.3
TAVE (°F) 575.4
LOOP A TH (°F) 604
 TC (°F) 547
 ΔT 57
LOOP B TH (°F) 604
 TC (°F) 547
 ΔT 57
LOOP C TH (°F) 604
 TC (°F) 547
 ΔT 57
SUBCOOLING (°F) 53
CHARGING FLOW (GPM) 32
LETDOWN FLOW (GPM) 42
REACTOR POWER 100
ACTIVITY:
GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 598.4
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 831
FEED (PPH) 3.4
STEAM (PPH) 3.4
ACT. (Uci/ml) _____
S/G B
LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 831
FEED (PPH) 3.4
STEAM (PPH) 3.4
ACT. (Uci/ml) _____
S/G C
LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 831
FEED (PPH) 3.4
STEAM (PPH) 3.4
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
 RESET: TIME _____
CS ACTUATED: TIME _____
 RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
 RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
 RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) _____
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	A	B	A	C	O
SI PUMP	A	A	B	A	C	OOS
CS PUMP	A	A	B	A		
RHR PUMP	A	A	B	A		
HVH 1	O		2	OOS	3	O 4 O

SECONDARY

CST LEVEL (%) 90
FEED PUMP A O B O
COND PUMP A O B O
AFW MOTOR A A B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A
FANS
HVE 1A A 1B A
HVE 2A A 2B O
HVE 5A A 5B A
HVE 15 O 15A A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)
UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 0800

Completed By: _____

ALERT GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 7.1
 LOWER (MPH) 3.0
WIND DIR. UPPER (° FROM) 185
 LOWER (° FROM) 189
AIR TEMPERATURE (°F) 45.3
STABILITY CLASS E

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 0.1
R-2 CONT. AREA (MR/HR) 15
R-3 HP WORK AREA (MR/HR) 0.15
R-4 CHG. PUMP RM (MR/HR) 5
R-5 SPENT FUEL PIT (MR/HR) 0.7
R-6 SAMPLING ROOM (MR/HR) 0.8
R-7 IN-CORE INST (MR/HR) 6
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 95
R-33 MON BLDG (MR/HR) 0.5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 20K
R-12 CV VENT GAS (CPM) 1.2K
R-14A "P" PLT VNT (CPM) 548
R-14B "I" PLT VNT (CPM) 10
R-14C "NG" PLT VNT (CPM) 29
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 2150
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) 0.5
R-31A "A" MN STM (MR/HR) 0.5
R-31B "B" MN STM (MR/HR) 0.5
R-31C "C" MN STM (MR/HR) 0.5
R-32A CV HI RG (R/HR) 1
R-32B CV HI RG (R/HR) 1
R-14D PLT VNT GAS (MID) (CPM) 10
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) 0.3
TEMPERATURE (°F) 127
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 5.2
RWST LEVEL (%) 91

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 2235
PZR LEVEL (%) 53.3
TAVE (°F) 575.4
LOOP A TH (°F) 604
TC (°F) 547
ΔT 57
LOOP B TH (°F) 604
TC (°F) 547
ΔT 57
LOOP C TH (°F) 604
TC (°F) 547
ΔT 57
SUBCOOLING (°F) 53
CHARGING FLOW (GPM) 32
LETDOWN FLOW (GPM) 42
REACTOR POWER 100
ACTIVITY:
GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 598.4
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 831
FEED (PPH) 3.4
STEAM (PPH) 3.4
ACT. (Uci/ml) _____
S/G B
LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 831
FEED (PPH) 3.4
STEAM (PPH) 3.4
ACT. (Uci/ml) _____
S/G C
LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 831
FEED (PPH) 3.4
STEAM (PPH) 3.4
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
RESET: TIME _____
CS ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) _____
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP	A	O	B	O	C	O	
CHG PUMP	A	A	B	A	C	O	
SI PUMP	A	A	B	A	C	OOS	
CS PUMP	A	A	B	A			
RHR PUMP	A	A	B	A			
HVH 1	O	2	OOS	3	O	4	O

SECONDARY

CST LEVEL (%) 90
FEED PUMP A O B O
COND PUMP A O B O
AFW MOTOR A A B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A
FANS
HVE 1A A 1B A
HVE 2A A 2B O
HVE 5A A 5B A
HVE 15 O 15A A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)
UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 0815

Completed By: _____

ALERT GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 6.9
 LOWER (MPH) 3.4
WIND DIR. UPPER (° FROM) 191
 LOWER (° FROM) 195
AIR TEMPERATURE (°F) 45.2
STABILITY CLASS E

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 0.1
R-2 CONT. AREA (MR/HR) 15
R-3 HP WORK AREA (MR/HR) 0.15
R-4 CHG. PUMP RM (MR/HR) 5
R-5 SPENT FUEL PIT (MR/HR) 0.7
R-6 SAMPLING ROOM (MR/HR) 0.8
R-7 IN-CORE INST (MR/HR) 6
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 95
R-33 MON BLDG (MR/HR) 0.5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 20K
R-12 CV VENT GAS (CPM) 1.2K
R-14A "P" PLT VNT (CPM) 548
R-14B "I" PLT VNT (CPM) 10
R-14C "NG" PLT VNT (CPM) 29
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 2150
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) 0.5
R-31A "A" MN STM (MR/HR) 0.5
R-31B "B" MN STM (MR/HR) 0.5
R-31C "C" MN STM (MR/HR) 0.5
R-32A CV HI RG (R/HR) 1
R-32B CV HI RG (R/HR) 1
R-14D PLT VNT GAS (MID) (CPM) 10
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) 0.3
TEMPERATURE (°F) 127
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 5.2
RWST LEVEL (%) 91

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 2235
PZR LEVEL (%) 53.3
TAVE (°F) 575.4
LOOP A TH (°F) 604
TC (°F) 547
ΔT 57
LOOP B TH (°F) 604
TC (°F) 547
ΔT 57
LOOP C TH (°F) 604
TC (°F) 547
ΔT 57

SUBCOOLING (°F) 53
CHARGING FLOW (GPM) 32
LETDOWN FLOW (GPM) 42
REACTOR POWER 100

ACTIVITY:

GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 598.4
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 831
FEED (PPH) 3.4
STEAM (PPH) 3.4
ACT. (Uci/ml) _____

S/G B

LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 831
FEED (PPH) 3.4
STEAM (PPH) 3.4
ACT. (Uci/ml) _____

S/G C

LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 831
FEED (PPH) 3.4
STEAM (PPH) 3.4
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
RESET: TIME _____
CS ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) _____
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP A O B O C O
CHG PUMP A A B A C O
SI PUMP A A B A C OOS
CS PUMP A A B A
RHR PUMP A A B A
HVH 1 O 2 OOS 3 O 4 O

SECONDARY

CST LEVEL (%) 90
FEED PUMP A O B O
COND PUMP A O B O
AFW MOTOR A A B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A

FANS

HVE 1A A 1B A
HVE 2A A 2B O
HVE 5A A 5B A
HVE 15 O 15A A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)

UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 0830

Completed By: _____

ALERT

GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 7.1
LOWER (MPH) 3.4
WIND DIR. UPPER (° FROM) 190
LOWER (° FROM) 199
AIR TEMPERATURE (°F) 45.8
STABILITY CLASS E

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 0.1
R-2 CONT. AREA (MR/HR) 15
R-3 HP WORK AREA (MR/HR) 0.15
R-4 CHG. PUMP RM (MR/HR) 109
R-5 SPENT FUEL PIT (MR/HR) 0.7
R-6 SAMPLING ROOM (MR/HR) 0.8
R-7 IN-CORE INST (MR/HR) 6
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 2180
R-33 MON BLDG (MR/HR) 0.5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 20K
R-12 CV VENT GAS (CPM) 1.2K
R-14A "P" PLT VNT (CPM) 548
R-14B "I" PLT VNT (CPM) 10
R-14C "NG" PLT VNT (CPM) 29
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 2150
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) .5
R-31A "A" MN STM (MR/HR) .5
R-31B "B" MN STM (MR/HR) .5
R-31C "C" MN STM (MR/HR) .5
R-32A CV HI RG (R/HR) 1
R-32B CV HI RG (R/HR) 1
R-14D PLT VNT GAS (MID) (CPM) 10
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) 0.3
TEMPERATURE (°F) 127
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 5.2
RWST LEVEL (%) 91

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 2235
PZR LEVEL (%) 53.3
TAVE (°F) 575.4
LOOP A TH (°F) 604
TC (°F) 547
ΔT 57
LOOP B TH (°F) 604
TC (°F) 547
ΔT 57
LOOP C TH (°F) 604
TC (°F) 547
ΔT 57
SUBCOOLING (°F) 53
CHARGING FLOW (GPM) 32
LETDOWN FLOW (GPM) 42
REACTOR POWER 100
ACTIVITY:
GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 598.4
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 831
FEED (PPH) 3.4
STEAM (PPH) 3.4
ACT. (Uci/ml) _____
S/G B
LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 831
FEED (PPH) 3.4
STEAM (PPH) 3.4
ACT. (Uci/ml) _____
S/G C
LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 831
FEED (PPH) 3.4
STEAM (PPH) 3.4
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
RESET: TIME _____
CS ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) _____
SI HOT-LEG INJECT START _____
EQUIPMENT STATUS

N = NOT AVAILABLE

A = AVAILABLE (NOT OPERATING)

O = OPERATING

E = ENERGIZED

PRIMARY

RCP A O B O C O
CHG PUMP A A B A C O
SI PUMP A A B A C OOS
CS PUMP A A B A
RHR PUMP A A B A
HVV 1 O 2 OOS 3 O 4 O

SECONDARY

CST LEVEL (%) 90
FEED PUMP A O B O
COND PUMP A O B O
AFW MOTOR A A B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A

FANS

HVE 1A A 1B A
HVE 2A A 2B O
HVE 5A A 5B A
HVE 15 O 15A A

LEGEND:

OSH = OFF SCALE HIGH

OSL = OFF SCALE LOW

OOS = OUT OF SERVICE

ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)
UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 0845

Completed By: _____

ALERT GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 7.3
LOWER (MPH) 4.3
WIND DIR. UPPER (° FROM) 195
LOWER (° FROM) 203
AIR TEMPERATURE (°F) 46.2
STABILITY CLASS E

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 0.1
R-2 CONT. AREA (MR/HR) 17
R-3 HP WORK AREA (MR/HR) 0.11
R-4 CHG. PUMP RM (MR/HR) 262
R-5 SPENT FUEL PIT (MR/HR) 0.7
R-6 SAMPLING ROOM (MR/HR) 0.8
R-7 IN-CORE INST (MR/HR) 6
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 5248
R-33 MON BLDG (MR/HR) 0.5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 20K
R-12 CV VENT GAS (CPM) 1.2K
R-14A "P" PLT VNT (CPM) 548
R-14B "I" PLT VNT (CPM) 10
R-14C "NG" PLT VNT (CPM) 29
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 2200
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) .5
R-31A "A" MN STM (MR/HR) .5
R-31B "B" MN STM (MR/HR) .5
R-31C "C" MN STM (MR/HR) .5
R-32A CV HI RG (R/HR) 1
R-32B CV HI RG (R/HR) 1
R-14D PLT VNT GAS (MID) (CPM) 10
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) 0.3
TEMPERATURE (°F) 127
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 5.2
RWST LEVEL (%) 91

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 2235
PZR LEVEL (%) 53.3
TAVE (°F) 575.4
LOOP A TH (°F) 604
TC (°F) 547
ΔT 57
LOOP B TH (°F) 604
TC (°F) 547
ΔT 57
LOOP C TH (°F) 604
TC (°F) 547
ΔT 57
SUBCOOLING (°F) 53

CHARGING FLOW (GPM) 32
LETDOWN FLOW (GPM) 42
REACTOR POWER 100

ACTIVITY:

GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 598.4
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 831
FEED (PPH) 3.4
STEAM (PPH) 3.4
ACT. (Uci/ml) _____

S/G B

LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 831
FEED (PPH) 3.4
STEAM (PPH) 3.4
ACT. (Uci/ml) _____

S/G C

LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 831
FEED (PPH) 3.4
STEAM (PPH) 3.4
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
RESET: TIME _____
CS ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) _____
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP A O B O C O
CHG PUMP A A B A C O
SI PUMP A A B A C OOS
CS PUMP A A B A
RHR PUMP A A B A
HVH 1 O 2 OOS 3 O 4 O

SECONDARY

CST LEVEL (%) 90
FEED PUMP A O B O
COND PUMP A O B O
AFW MOTOR A A B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A

FANS

HVE 1A A 1B A
HVE 2A A 2B O
HVE 5A A 5B A
HVE 15 O 15A A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)

UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 0900

Completed By: _____

ALERT

GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 7.4
 LOWER (MPH) 4.5
WIND DIR. UPPER (° FROM) 201
 LOWER (° FROM) 203
AIR TEMPERATURE (°F) 46.9
STABILITY CLASS E

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 0.1
R-2 CONT. AREA (MR/HR) 20
R-3 HP WORK AREA (MR/HR) 0.11
R-4 CHG. PUMP RM (MR/HR) 359
R-5 SPENT FUEL PIT (MR/HR) 0.7
R-6 SAMPLING ROOM (MR/HR) 0.8
R-7 IN-CORE INST (MR/HR) 6
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 7185
R-33 MON BLDG (MR/HR) .5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 20K
R-12 CV VENT GAS (CPM) 1.2K
R-14A "P" PLT VNT (CPM) 548
R-14B "I" PLT VNT (CPM) 10
R-14C "NG" PLT VNT (CPM) 29
R-15 COND. AIR EJECT. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 2250
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) .5
R-31A "A" MN STM (MR/HR) .5
R-31B "B" MN STM (MR/HR) .5
R-31C "C" MN STM (MR/HR) .5
R-32A CV HI RG (R/HR) 1
R-32B CV HI RG (R/HR) 1
R-14D PLT VNT GAS (MID) (CPM) 10
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) .3
TEMPERATURE (°F) 127
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 5.2
RWST LEVEL (%) 91

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 2235
PZR LEVEL (%) 53.3
TAVE (°F) 575.4
LOOP A TH (°F) 604
 TC (°F) 547
 ΔT 57
LOOP B TH (°F) 604
 TC (°F) 547
 ΔT 57
LOOP C TH (°F) 604
 TC (°F) 547
 ΔT 57

SUBCOOLING (°F) 53
CHARGING FLOW (GPM) 32
LETDOWN FLOW (GPM) 42
REACTOR POWER 100
ACTIVITY:
GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 598.4
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 831
FEED (PPH) 3.4
STEAM (PPH) 3.4
ACT. (Uci/ml) _____

S/G B
LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 831
FEED (PPH) 3.4
STEAM (PPH) 3.4
ACT. (Uci/ml) _____

S/G C
LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 831
FEED (PPH) 3.4
STEAM (PPH) 3.4
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
 RESET: TIME _____
CS ACTUATED: TIME _____
 RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
 RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
 RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) _____
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP	A	<u>O</u>	B	<u>O</u>	C	<u>O</u>
CHG PUMP	A	<u>A</u>	B	<u>A</u>	C	<u>O</u>
SI PUMP	A	<u>A</u>	B	<u>A</u>	C	<u>OOS</u>
CS PUMP	A	<u>A</u>	B	<u>A</u>		
RHR PUMP	A	<u>A</u>	B	<u>A</u>		
HVH 1	<u>O</u>	2	<u>OOS</u>	3	<u>O</u>	4 <u>O</u>

SECONDARY

CST LEVEL (%) 90
FEED PUMP A O B O
COND PUMP A O B O
AFW MOTOR A A B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A

FANS

HVE 1A	<u>A</u>	1B	<u>A</u>
HVE 2A	<u>A</u>	2B	<u>O</u>
HVE 5A	<u>A</u>	5B	<u>A</u>
HVE 15	<u>O</u>	15A	<u>A</u>

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)
UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 0915

Completed By: _____

ALERT GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 7.6
 LOWER (MPH) 4.8
WIND DIR. UPPER (° FROM) 205
 LOWER (° FROM) 201
AIR TEMPERATURE (°F) 47.5
STABILITY CLASS E

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 0.1
R-2 CONT. AREA (MR/HR) 20
R-3 HP WORK AREA (MR/HR) 0.15
R-4 CHG. PUMP RM (MR/HR) 558
R-5 SPENT FUEL PIT (MR/HR) 0.7
R-6 SAMPLING ROOM (MR/HR) 0.8
R-7 IN-CORE INST (MR/HR) 6
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 11167
R-33 MON BLDG (MR/HR) 0.5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 229K
R-12 CV VENT GAS (CPM) 3.3K
R-14A "P" PLT VNT (CPM) 548
R-14B "I" PLT VNT (CPM) 10
R-14C "NG" PLT VNT (CPM) 29
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 2300
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) .5
R-31A "A" MN STM (MR/HR) .5
R-31B "B" MN STM (MR/HR) .5
R-31C "C" MN STM (MR/HR) .5
R-32A CV HI RG (R/HR) 1
R-32B CV HI RG (R/HR) 1
R-14D PLT VNT GAS (MID) (CPM) 10
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) 0.3
TEMPERATURE (°F) 127
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 5.2
RWST LEVEL (%) 91

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 2235
PZR LEVEL (%) 53.3
TAVE (°F) 575.4
LOOP A TH (°F) 604
 TC (°F) 547
 ΔT 57
LOOP B TH (°F) 604
 TC (°F) 547
 ΔT 57
LOOP C TH (°F) 604
 TC (°F) 547
 ΔT 57
SUBCOOLING (°F) 53
CHARGING FLOW (GPM) 33
LETDOWN FLOW (GPM) 42
REACTOR POWER 100
ACTIVITY:
GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 598.4
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 831
FEED (PPH) 3.4
STEAM (PPH) 3.4
ACT. (Uci/ml) _____
S/G B
LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 831
FEED (PPH) 3.4
STEAM (PPH) 3.4
ACT. (Uci/ml) _____
S/G C
LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 831
FEED (PPH) 3.4
STEAM (PPH) 3.4
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
 RESET: TIME _____
CS ACTUATED: TIME _____
 RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
 RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
 RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) _____
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	A	B	A	C	O
SI PUMP	A	A	B	A	C	OOS
CS PUMP	A	A	B	A		
RHR PUMP	A	A	B	A		
HVH 1	O					
2	OOS					
3	O					
4	O					

SECONDARY

CST LEVEL (%) 90
FEED PUMP A O B O
COND PUMP A O B O
AFW MOTOR A A B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A
FANS
HVE 1A A 1B A
HVE 2A A 2B O
HVE 5A A 5B A
HVE 15 O 15A A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

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EMERGENCY CLASSIFICATION (CIRCLE)
UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 0930

Completed By: _____

ALERT GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 8.0
 LOWER (MPH) 5.3
WIND DIR. UPPER (° FROM) 201
 LOWER (° FROM) 204
AIR TEMPERATURE (°F) 47.9
STABILITY CLASS E

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 0.1
R-2 CONT. AREA (MR/HR) 22
R-3 HP WORK AREA (MR/HR) 0.2
R-4 CHG. PUMP RM (MR/HR) 543
R-5 SPENT FUEL PIT (MR/HR) 0.7
R-6 SAMPLING ROOM (MR/HR) 0.8
R-7 IN-CORE INST (MR/HR) 6
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 10860
R-33 MON BLDG (MR/HR) 0.5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 433.2K
R-12 CV VENT GAS (CPM) 5.3K
R-14A "P" PLT VNT (CPM) 548
R-14B "I" PLT VNT (CPM) 10
R-14C "NG" PLT VNT (CPM) 29
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 2350
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) .5
R-31A "A" MN STM (MR/HR) .5
R-31B "B" MN STM (MR/HR) .5
R-31C "C" MN STM (MR/HR) .5
R-32A CV HI RG (R/HR) 1
R-32B CV HI RG (R/HR) 1
R-14D PLT VNT GAS (MID) (CPM) 10
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) 0.3
TEMPERATURE (°F) 128
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 5.2
RWST LEVEL (%) 91

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 2235
PZR LEVEL (%) 53
TAVE (°F) 575
LOOP A TH (°F) 601
 TC (°F) 548
 ΔT 53
LOOP B TH (°F) 601
 TC (°F) 548
 ΔT 53
LOOP C TH (°F) 601
 TC (°F) 548
 ΔT 53
SUBCOOLING (°F) 56
CHARGING FLOW (GPM) 32
LETDOWN FLOW (GPM) 42
REACTOR POWER 93
ACTIVITY:
GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 596
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 850
FEED (PPH) 3.1
STEAM (PPH) 3.1
ACT. (Uci/ml) _____
S/G B
LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 850
FEED (PPH) 3.1
STEAM (PPH) 3.1
ACT. (Uci/ml) _____
S/G C
LEV.-WR(%) 53 NR(%) 52
PRESS (PSIG) 850
FEED (PPH) 3.1
STEAM (PPH) 3.1
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
 RESET: TIME _____
CS ACTUATED: TIME _____
 RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
 RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
 RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) _____
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP	A	O	B	O	C	O	
CHG PUMP	A	A	B	A	C	O	
SI PUMP	A	A	B	A	C	OOS	
CS PUMP	A	A	B	A			
RHR PUMP	A	A	B	A			
HVH 1	O	2	OOS	3	O	4	O

SECONDARY

CST LEVEL (%) 90
FEED PUMP A O B O
COND PUMP A O B O
AFW MOTOR A A B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A

FANS

HVE 1A	A	1B	A
HVE 2A	A	2B	O
HVE 5A	A	5B	A
HVE 15	O	15A	A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)
UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 0945

Completed By: _____

ALERT GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 7.3
LOWER (MPH) 4.8
WIND DIR. UPPER (° FROM) 201
LOWER (° FROM) 210
AIR TEMPERATURE (°F) 48.3
STABILITY CLASS E

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 0.1
R-2 CONT. AREA (MR/HR) 25
R-3 HP WORK AREA (MR/HR) .2
R-4 CHG. PUMP RM (MR/HR) 532
R-5 SPENT FUEL PIT (MR/HR) 0.7
R-6 SAMPLING ROOM (MR/HR) 0.8
R-7 IN-CORE INST (MR/HR) 6
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 10646
R-33 MON BLDG (MR/HR) .5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 632.8K
R-12 CV VENT GAS (CPM) 7.3K
R-14A "P" PLT VNT (CPM) 548
R-14B "I" PLT VNT (CPM) 10
R-14C "NG" PLT VNT (CPM) 29
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 2400
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) .5
R-31A "A" MN STM (MR/HR) .5
R-31B "B" MN STM (MR/HR) .5
R-31C "C" MN STM (MR/HR) .5
R-32A CV HI RG (R/HR) 1
R-32B CV HI RG (R/HR) 1
R-14D PLT VNT GAS (MID) (CPM) 10
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) .3
TEMPERATURE (°F) 128
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 5.3
RWST LEVEL (%) 91

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 2235
PZR LEVEL (%) 49
TAVE (°F) 571
LOOP A TH (°F) 595
TC (°F) 547
ΔT 47
LOOP B TH (°F) 595
TC (°F) 547
ΔT 47
LOOP C TH (°F) 595
TC (°F) 547
ΔT 47
SUBCOOLING (°F) 63
CHARGING FLOW (GPM) 34
LETDOWN FLOW (GPM) 42
REACTOR POWER 81
ACTIVITY:
GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 589
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 54 NR(%) 52
PRESS (PSIG) 862
FEED (PPH) 2.7
STEAM (PPH) 2.7
ACT. (Uci/ml) _____
S/G B
LEV.-WR(%) 54 NR(%) 52
PRESS (PSIG) 862
FEED (PPH) 2.7
STEAM (PPH) 2.7
ACT. (Uci/ml) _____
S/G C
LEV.-WR(%) 54 NR(%) 52
PRESS (PSIG) 862
FEED (PPH) 2.7
STEAM (PPH) 2.7
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
RESET: TIME _____
CS ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) _____
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP	A	O	B	O	C	O	
CHG PUMP	A	A	B	A	C	O	
SI PUMP	A	A	B	A	C	OOS	
CS PUMP	A	A	B	A			
RHR PUMP	A	A	B	A			
HVH 1	O	2	OOS	3	O	4	O

SECONDARY

CST LEVEL (%) 90
FEED PUMP A O B O
COND PUMP A O B O
AFW MOTOR A A B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A
FANS
HVE 1A A 1B A
HVE 2A A 2B O
HVE 5A A 5B A
HVE 15 O 15A A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7

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EMERGENCY CLASSIFICATION (CIRCLE)

UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 1000

Completed By: _____

ALERT

GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 7.0
 LOWER (MPH) 4.6
WIND DIR. UPPER (° FROM) 205
 LOWER (° FROM) 211
AIR TEMPERATURE (°F) 48.9
STABILITY CLASS D

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 0.1
R-2 CONT. AREA (MR/HR) 28
R-3 HP WORK AREA (MR/HR) .2
R-4 CHG. PUMP RM (MR/HR) 524
R-5 SPENT FUEL PIT (MR/HR) 0.7
R-6 SAMPLING ROOM (MR/HR) 0.8
R-7 IN-CORE INST (MR/HR) 6
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 10489
R-33 MON BLDG (MR/HR) .5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 829.4K
R-12 CV VENT GAS (CPM) 9.2K
R-14A "P" PLT VNT (CPM) 548
R-14B "I" PLT VNT (CPM) 10
R-14C "NG" PLT VNT (CPM) 29
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 2450
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) .5
R-31A "A" MN STM (MR/HR) .5
R-31B "B" MN STM (MR/HR) .5
R-31C "C" MN STM (MR/HR) .5
R-32A CV HI RG (R/HR) 1
R-32B CV HI RG (R/HR) 1
R-14D PLT VNT GAS (MID) (CPM) 10
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) .4
TEMPERATURE (°F) 128
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 5.3
RWST LEVEL (%) 91

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 2235
PZR LEVEL (%) 42
TAVE (°F) 565
LOOP A TH (°F) 586
 TC (°F) 545
 ΔT 41
LOOP B TH (°F) 586
 TC (°F) 545
 ΔT 41
LOOP C TH (°F) 586
 TC (°F) 545
 ΔT 41

SUBCOOLING (°F) 72
CHARGING FLOW (GPM) 34
LETDOWN FLOW (GPM) 42
REACTOR POWER 69

ACTIVITY:

GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 580
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 55 NR(%) 52
PRESS (PSIG) 861
FEED (PPH) 2.2
STEAM (PPH) 2.2
ACT. (Uci/ml) _____

S/G B
LEV.-WR(%) 55 NR(%) 52
PRESS (PSIG) 861
FEED (PPH) 2.2
STEAM (PPH) 2.2
ACT. (Uci/ml) _____

S/G C
LEV.-WR(%) 55 NR(%) 52
PRESS (PSIG) 861
FEED (PPH) 2.2
STEAM (PPH) 2.2
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
 RESET: TIME _____
CS ACTUATED: TIME _____
 RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
 RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
 RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) _____
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP A O B O C O
CHG PUMP A A B A C O
SI PUMP A A B A C OOS
CS PUMP A A B A
RHR PUMP A A B A
HVH 1 O 2 OOS 3 O 4 O

SECONDARY

CST LEVEL (%) 90
FEED PUMP A O B O
COND PUMP A O B O
AFW MOTOR A A B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A

FANS

HVE 1A A 1B A
HVE 2A A 2B O
HVE 5A A 5B A
HVE 15 O 15A A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)
UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 1015

Completed By: _____

ALERT GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 6.8
LOWER (MPH) 5.2
WIND DIR. UPPER (° FROM) 201
LOWER (° FROM) 207
AIR TEMPERATURE (°F) 49.5
STABILITY CLASS D

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 0.1
R-2 CONT. AREA (MR/HR) 30
R-3 HP WORK AREA (MR/HR) .2
R-4 CHG. PUMP RM (MR/HR) 515
R-5 SPENT FUEL PIT (MR/HR) 0.7
R-6 SAMPLING ROOM (MR/HR) 0.8
R-7 IN-CORE INST (MR/HR) 6
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 10306
R-33 MON BLDG (MR/HR) .5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 1M
R-12 CV VENT GAS (CPM) 11.2K
R-14A "P" PLT VNT (CPM) 548
R-14B "I" PLT VNT (CPM) 10
R-14C "NG" PLT VNT (CPM) 29
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 2500
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) .5
R-31A "A" MN STM (MR/HR) .5
R-31B "B" MN STM (MR/HR) .5
R-31C "C" MN STM (MR/HR) .5
R-32A CV HI RG (R/HR) 1
R-32B CV HI RG (R/HR) 1
R-14D PLT VNT GAS (MID) (CPM) 10
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) .4
TEMPERATURE (°F) 128
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 5.3
RWST LEVEL (%) 91

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 2235
PZR LEVEL (%) 38
TAVE (°F) 562
LOOP A TH (°F) 578
TC (°F) 545
ΔT 33
LOOP B TH (°F) 578
TC (°F) 545
ΔT 33
LOOP C TH (°F) 578
TC (°F) 545
ΔT 33
SUBCOOLING (°F) 79
CHARGING FLOW (GPM) 34
LETDOWN FLOW (GPM) 42
REACTOR POWER 56
ACTIVITY:
GROSS (Uci/mi)
I¹³¹ (Uci/mi)
AVG 5 HOTTEST T/Cs 573
BORON CONC. (PPM)

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 57 NR(%) 52
PRESS (PSIG) 878
FEED (PPH) 1.8
STEAM (PPH) 1.8
ACT. (Uci/ml)
S/G B
LEV.-WR(%) 57 NR(%) 52
PRESS (PSIG) 878
FEED (PPH) 1.8
STEAM (PPH) 1.8
ACT. (Uci/ml)
S/G C
LEV.-WR(%) 57 NR(%) 52
PRESS (PSIG) 878
FEED (PPH) 1.8
STEAM (PPH) 1.8
ACT. (Uci/ml)

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
RESET: TIME _____
CS ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) _____
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP A O B O C O
CHG PUMP A A B A C O
SI PUMP A A B A C OOS
CS PUMP A A B A
RHR PUMP A A B A
HVH 1 O 2 OOS 3 O 4 O

SECONDARY

CST LEVEL (%) 90
FEED PUMP A O B A
COND PUMP A O B O
AFW MOTOR A A B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A

FANS

HVE 1A A 1B A
HVE 2A A 2B O
HVE 5A A 5B A
HVE 15 O 15A A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)
UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 1030

Completed By: _____

ALERT GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 7.0
 LOWER (MPH) 5.0
WIND DIR. UPPER (° FROM) 203
 LOWER (° FROM) 207
AIR TEMPERATURE (°F) 50.1
STABILITY CLASS D

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 0.1
R-2 CONT. AREA (MR/HR) 33
R-3 HP WORK AREA (MR/HR) .2
R-4 CHG. PUMP RM (MR/HR) 5K
R-5 SPENT FUEL PIT (MR/HR) 0.7
R-6 SAMPLING ROOM (MR/HR) 0.8
R-7 IN-CORE INST (MR/HR) 7
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 100K
R-33 MON BLDG (MR/HR) .5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 1M
R-12 CV VENT GAS (CPM) 38K
R-14A "P" PLT VNT (CPM) 548
R-14B "I" PLT VNT (CPM) 10
R-14C "NG" PLT VNT (CPM) 29
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 2550
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) .5
R-31A "A" MN STM (MR/HR) .5
R-31B "B" MN STM (MR/HR) 5
R-31C "C" MN STM (MR/HR) .5
R-32A CV HI RG (R/HR) 1
R-32B CV HI RG (R/HR) 1
R-14D PLT VNT GAS (MID) (CPM) 10
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) .4
TEMPERATURE (°F) 128
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 5.3
RWST LEVEL (%) 91

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 2235
PZR LEVEL (%) 34
TAVE (°F) 558
LOOP A TH (°F) 571
 TC (°F) 545
 ΔT 26
LOOP B TH (°F) 571
 TC (°F) 545
 ΔT 26
LOOP C TH (°F) 571
 TC (°F) 545
 ΔT 26

SUBCOOLING (°F) 86
CHARGING FLOW (GPM) 34
LETDOWN FLOW (GPM) 42
REACTOR POWER 43

ACTIVITY:

GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 565
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 58 NR(%) 52
PRESS (PSIG) 898
FEED (PPH) 1.4
STEAM (PPH) 1.4
ACT. (Uci/ml) _____

S/G B
LEV.-WR(%) 58 NR(%) 52
PRESS (PSIG) 898
FEED (PPH) 1.4
STEAM (PPH) 1.4
ACT. (Uci/ml) _____

S/G C
LEV.-WR(%) 58 NR(%) 52
PRESS (PSIG) 898
FEED (PPH) 1.4
STEAM (PPH) 1.4
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
 RESET: TIME _____
CS ACTUATED: TIME _____
 RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
 RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
 RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) _____
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP	A	O	B	O	C	O	
CHG PUMP	A	A	B	A	C	O	
SI PUMP	A	A	B	A	C	OOS	
CS PUMP	A	A	B	A			
RHR PUMP	A	A	B	A			
HVH 1	O	2	OOS	3	O	4	O

SECONDARY

CST LEVEL (%) 90
FEED PUMP A O B A
COND PUMP A O B A
AFW MOTOR A A B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A

FANS

HVE 1A	A	1B	A
HVE 2A	A	2B	O
HVE 5A	A	5B	A
HVE 15	O	15A	A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)
UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 1045

Completed By: _____

ALERT GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 6.9
 LOWER (MPH) 5.5
WIND DIR. UPPER (° FROM) 200
 LOWER (° FROM) 209
AIR TEMPERATURE (°F) 50.4
STABILITY CLASS D

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 0.1
R-2 CONT. AREA (MR/HR) 57
R-3 HP WORK AREA (MR/HR) .2
R-4 CHG. PUMP RM (MR/HR) 5K
R-5 SPENT FUEL PIT (MR/HR) 0.7
R-6 SAMPLING ROOM (MR/HR) 0.8
R-7 IN-CORE INST (MR/HR) 7
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 100K
R-33 MON BLDG (MR/HR) .5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 1M
R-12 CV VENT GAS (CPM) 63.9K
R-14A "P" PLT VNT (CPM) 693
R-14B "I" PLT VNT (CPM) 68
R-14C "NG" PLT VNT (CPM) 1.3K
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 2600
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) .5
R-31A "A" MN STM (MR/HR) .5
R-31B "B" MN STM (MR/HR) .5
R-31C "C" MN STM (MR/HR) .5
R-32A CV HI RG (R/HR) 1
R-32B CV HI RG (R/HR) 1
R-14D PLT VNT GAS (MID) (CPM) 10
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) .4
TEMPERATURE (°F) 128
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 5.3
RWST LEVEL (%) 91

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 2235
PZR LEVEL (%) 29
TAVE (°F) 553
LOOP A TH (°F) 561
 TC (°F) 545
 ΔT 16
LOOP B TH (°F) 561
 TC (°F) 545
 ΔT 16
LOOP C TH (°F) 561
 TC (°F) 545
 ΔT 16
SUBCOOLING (°F) 94
CHARGING FLOW (GPM) 34
LETDOWN FLOW (GPM) 42
REACTOR POWER 25
ACTIVITY:
GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 558
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 60 NR(%) 52
PRESS (PSIG) 926
FEED (PPH) 0.8
STEAM (PPH) 0.8
ACT. (Uci/ml) _____
S/G B
LEV.-WR(%) 60 NR(%) 52
PRESS (PSIG) 926
FEED (PPH) 0.8
STEAM (PPH) 0.8
ACT. (Uci/ml) _____
S/G C
LEV.-WR(%) 60 NR(%) 52
PRESS (PSIG) 926
FEED (PPH) 0.8
STEAM (PPH) 0.8
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
 RESET: TIME _____
CS ACTUATED: TIME _____
 RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
 RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
 RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) _____
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP	A	O	B	O	C	O	
CHG PUMP	A	A	B	A	C	O	
SI PUMP	A	A	B	A	C	OOS	
CS PUMP	A	A	B	A			
RHR PUMP	A	A	B	A			
HVH 1	O	2	OOS	3	O	4	O

SECONDARY

CST LEVEL (%) 90
FEED PUMP A O B A
COND PUMP A O B A
AFW MOTOR A A B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A

FANS

HVE 1A	A	1B	A
HVE 2A	A	2B	O
HVE 5A	A	5B	A
HVE 15	O	15A	A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)

UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 1100

Completed By: _____

ALERT

GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 7.5
LOWER (MPH) 5.3
WIND DIR. UPPER (° FROM) 209
LOWER (° FROM) 212
AIR TEMPERATURE (°F) 50.8
STABILITY CLASS D

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 0.1
R-2 CONT. AREA (MR/HR) 60
R-3 HP WORK AREA (MR/HR) .2
R-4 CHG. PUMP RM (MR/HR) 5K
R-5 SPENT FUEL PIT (MR/HR) 0.7
R-6 SAMPLING ROOM (MR/HR) 0.8
R-7 IN-CORE INST (MR/HR) 7
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 100K
R-33 MON BLDG (MR/HR) .5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 1M
R-12 CV VENT GAS (CPM) 89.2K
R-14A "P" PLT VNT (CPM) 752
R-14B "I" PLT VNT (CPM) 95
R-14C "NG" PLT VNT (CPM) 4.5K
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 2650
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) .5
R-31A "A" MN STM (MR/HR) .5
R-31B "B" MN STM (MR/HR) .5
R-31C "C" MN STM (MR/HR) .5
R-32A CV HI RG (R/HR) 1
R-32B CV HI RG (R/HR) 1
R-14D PLT VNT GAS (MID) (CPM) 10
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) .4
TEMPERATURE (°F) 128
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 5.4
RWST LEVEL (%) 91

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 2235
PZR LEVEL (%) 26
TAVE (°F) 550
LOOP A TH (°F) 555
TC (°F) 546
ΔT 9
LOOP B TH (°F) 555
TC (°F) 546
ΔT 9
LOOP C TH (°F) 555
TC (°F) 546
ΔT 9

SUBCOOLING (°F) 98
CHARGING FLOW (GPM) 34
LETDOWN FLOW (GPM) 42
REACTOR POWER 12

ACTIVITY:

GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 554
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 61 NR(%) 45
PRESS (PSIG) 956
FEED (PPH) 0.4
STEAM (PPH) 0.4
ACT. (Uci/ml) _____

S/G B
LEV.-WR(%) 61 NR(%) 45
PRESS (PSIG) 956
FEED (PPH) 0.4
STEAM (PPH) 0.4
ACT. (Uci/ml) _____

S/G C
LEV.-WR(%) 61 NR(%) 45
PRESS (PSIG) 956
FEED (PPH) 0.4
STEAM (PPH) 0.4
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
RESET: TIME _____
CS ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) _____
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP A O B O C O
CHG PUMP A A B A C O
SI PUMP A A B A C OOS
CS PUMP A A B A
RHR PUMP A A B A
HVB 1 O 2 OOS 3 O 4 O

SECONDARY

CST LEVEL (%) 90
FEED PUMP A O B A
COND PUMP A O B A
AFW MOTOR A A B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A

FANS

HVE 1A A 1B A
HVE 2A A 2B O
HVE 5A O 5B A
HVE 15 O 15A A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)
UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 1115

Completed By: _____

ALERT GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 7.4
 LOWER (MPH) 5.4
WIND DIR. UPPER (° FROM) 215
 LOWER (° FROM) 208
AIR TEMPERATURE (°F) 51.4
STABILITY CLASS D

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 0.1
R-2 CONT. AREA (MR/HR) 62
R-3 HP WORK AREA (MR/HR) .2
R-4 CHG. PUMP RM (MR/HR) 5K
R-5 SPENT FUEL PIT (MR/HR) 0.7
R-6 SAMPLING ROOM (MR/HR) 0.8
R-7 IN-CORE INST (MR/HR) 7
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 100K
R-33 MON BLDG (MR/HR) 0.5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 1M
R-12 CV VENT GAS (CPM) 114.1K
R-14A "P" PLT VNT (CPM) 810
R-14B "I" PLT VNT (CPM) 124
R-14C "NG" PLT VNT (CPM) 6.3K
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 2700
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) .5
R-31A "A" MN STM (MR/HR) .5
R-31B "B" MN STM (MR/HR) .5
R-31C "C" MN STM (MR/HR) .5
R-32A CV HI RG (R/HR) 1
R-32B CV HI RG (R/HR) 1
R-14D PLT VNT GAS (MID) (CPM) 10
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) .4
TEMPERATURE (°F) 128
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 5.4
RWST LEVEL (%) 91

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 2235
PZR LEVEL (%) 22
TAVE (°F) 547
LOOP A TH (°F) 548
 TC (°F) 546
 ΔT 2
LOOP B TH (°F) 548
 TC (°F) 546
 ΔT 2
LOOP C TH (°F) 548
 TC (°F) 546
 ΔT 2

SUBCOOLING (°F) 104
CHARGING FLOW (GPM) 34
LETDOWN FLOW (GPM) 42
REACTOR POWER 0

ACTIVITY:

GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 547
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 66 NR(%) 54
PRESS (PSIG) 983
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

S/G B
LEV.-WR(%) 66 NR(%) 54
PRESS (PSIG) 983
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

S/G C
LEV.-WR(%) 66 NR(%) 54
PRESS (PSIG) 983
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
 RESET: TIME _____
CS ACTUATED: TIME _____
 RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
 RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
 RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) _____
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP	A	O	B	O	C	O	
CHG PUMP	A	A	B	A	C	O	
SI PUMP	A	A	B	A	C	OOS	
CS PUMP	A	A	B	A			
RHR PUMP	A	A	B	A			
HVH 1	O	2	OOS	3	O	4	O

SECONDARY

CST LEVEL (%)	<u>90</u>					
FEED PUMP A	O	B	A			
COND PUMP A	O	B	A			
AFW MOTOR A	A	B	A			
AFW STEAM	A					
MSIV	A	O	B	O	C	O

ELECTRICAL

EDG	A	A	B	A
DS/DG	A			
OFFSITE	E			
EMER. BUS E1	E	E2	E	
FROM: OFFSITE	E	D.G.	A	

FANS

HVE 1A	A	1B	A
HVE 2A	A	2B	O
HVE 5A	O	5B	A
HVE 15	O	15A	A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)
UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 1130

Completed By: _____

ALERT GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 7.9
 LOWER (MPH) 5.3
WIND DIR. UPPER (° FROM) 214
 LOWER (° FROM) 209
AIR TEMPERATURE (°F) 52.0
STABILITY CLASS D

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 0.1
R-2 CONT. AREA (MR/HR) 62
R-3 HP WORK AREA (MR/HR) .2
R-4 CHG. PUMP RM (MR/HR) 5K
R-5 SPENT FUEL PIT (MR/HR) 0.7
R-6 SAMPLING ROOM (MR/HR) 0.8
R-7 IN-CORE INST (MR/HR) 7
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 100K
R-33 MON BLDG (MR/HR) .5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 1M
R-12 CV VENT GAS (CPM) 138.5K
R-14A "P" PLT VNT (CPM) 866
R-14B "I" PLT VNT (CPM) 156
R-14C "NG" PLT VNT (CPM) 8.2K
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 2750
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) .5
R-31A "A" MN STM (MR/HR) .5
R-31B "B" MN STM (MR/HR) .5
R-31C "C" MN STM (MR/HR) .5
R-32A CV HI RG (R/HR) 1
R-32B CV HI RG (R/HR) 1
R-14D PLT VNT GAS (MID) (CPM) 10
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) .4
TEMPERATURE (°F) 128
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 5.4
RWST LEVEL (%) 91

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 2235
PZR LEVEL (%) 23
TAVE (°F) 547
LOOP A TH (°F) 548
 TC (°F) 547
 ΔT 1
LOOP B TH (°F) 548
 TC (°F) 547
 ΔT 1
LOOP C TH (°F) 548
 TC (°F) 547
 ΔT 1
SUBCOOLING (°F) 103
CHARGING FLOW (GPM) 34
LETDOWN FLOW (GPM) 42
REACTOR POWER 0
ACTIVITY:
GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 548
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 66 NR(%) 52
PRESS (PSIG) 991
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____
S/G B
LEV.-WR(%) 66 NR(%) 52
PRESS (PSIG) 991
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____
S/G C
LEV.-WR(%) 66 NR(%) 52
PRESS (PSIG) 991
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
 RESET: TIME _____
CS ACTUATED: TIME _____
 RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
 RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
 RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) _____
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	A	B	A	C	O
SI PUMP	A	A	B	A	C	OOS
CS PUMP	A	A	B	A		
RHR PUMP	A	A	B	A		
HVH 1	O					
2	OOS					
3	O					
4	O					

SECONDARY

CST LEVEL (%) 90
FEED PUMP A O B A
COND PUMP A O B A
AFW MOTOR A A B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A

FANS

HVE 1A	A	1B	A
HVE 2A	A	2B	O
HVE 5A	O	5B	A
HVE 15	O	15A	A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)
UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 1145

Completed By: _____

ALERT GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 7.5
LOWER (MPH) 5.2
WIND DIR. UPPER (° FROM) 220
LOWER (° FROM) 213
AIR TEMPERATURE (°F) 52.7
STABILITY CLASS D

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 0.1
R-2 CONT. AREA (MR/HR) 66
R-3 HP WORK AREA (MR/HR) .2
R-4 CHG. PUMP RM (MR/HR) 5K
R-5 SPENT FUEL PIT (MR/HR) 0.7
R-6 SAMPLING ROOM (MR/HR) 0.8
R-7 IN-CORE INST (MR/HR) 8
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 100K
R-33 MON BLDG (MR/HR) .5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 1M
R-12 CV VENT GAS (CPM) 162.3K
R-14A "P" PLT VNT (CPM) 921
R-14B "I" PLT VNT (CPM) 189
R-14C "NG" PLT VNT (CPM) 9.9K
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 2800
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) .5
R-31A "A" MN STM (MR/HR) .5
R-31B "B" MN STM (MR/HR) .5
R-31C "C" MN STM (MR/HR) .5
R-32A CV HI RG (R/HR) 1
R-32B CV HI RG (R/HR) 1
R-14D PLT VNT GAS (MID) (CPM) 10
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) .4
TEMPERATURE (°F) 128
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 5.5
RWST LEVEL (%) 91

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 2235
PZR LEVEL (%) 23
TAVE (°F) 547
LOOP A TH (°F) 548
TC (°F) 547
ΔT 1
LOOP B TH (°F) 548
TC (°F) 547
ΔT 1
LOOP C TH (°F) 548
TC (°F) 547
ΔT 1
SUBCOOLING (°F) 104

CHARGING FLOW (GPM) 34
LETDOWN FLOW (GPM) 42
REACTOR POWER 0

ACTIVITY:

GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 548.5
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 65 NR(%) 49
PRESS (PSIG) 991
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

S/G B
LEV.-WR(%) 65 NR(%) 49
PRESS (PSIG) 991
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

S/G C
LEV.-WR(%) 65 NR(%) 49
PRESS (PSIG) 991
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
RESET: TIME _____
CS ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) _____
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP A O B O C O
CHG PUMP A A B A C O
SI PUMP A A B A C OOS
CS PUMP A A B A
RHR PUMP A A B A
HVH 1 O 2 OOS 3 O 4 O

SECONDARY

CST LEVEL (%) 90
FEED PUMP A O B A
COND PUMP A O B A
AFW MOTOR A A B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A

FANS

HVE 1A A 1B A
HVE 2A A 2B O
HVE 5A O 5B A
HVE 15 O 15A A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)
UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 1200

Completed By: _____

ALERT GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 7.4
LOWER (MPH) 4.8
WIND DIR. UPPER (° FROM) 224
LOWER (° FROM) 212
AIR TEMPERATURE (°F) 53.1
STABILITY CLASS D

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 0.1
R-2 CONT. AREA (MR/HR) 67
R-3 HP WORK AREA (MR/HR) .2
R-4 CHG. PUMP RM (MR/HR) 4254
R-5 SPENT FUEL PIT (MR/HR) 0.7
R-6 SAMPLING ROOM (MR/HR) 0.8
R-7 IN-CORE INST (MR/HR) 8
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 85K
R-33 MON BLDG (MR/HR) .5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 1M
R-12 CV VENT GAS (CPM) 186.1K
R-14A "P" PLT VNT (CPM) 976
R-14B "I" PLT VNT (CPM) 224
R-14C "NG" PLT VNT (CPM) 11.6K
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 2850
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) .5
R-31A "A" MN STM (MR/HR) .5
R-31B "B" MN STM (MR/HR) .5
R-31C "C" MN STM (MR/HR) .5
R-32A CV HI RG (R/HR) 1
R-32B CV HI RG (R/HR) 1
R-14D PLT VNT GAS (MID) (CPM) 10
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) .4
TEMPERATURE (°F) 128
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 5.5
RWST LEVEL (%) 91

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 2235
PZR LEVEL (%) 23
TAVE (°F) 547
LOOP A TH (°F) 548
TC (°F) 547
ΔT 1
LOOP B TH (°F) 548
TC (°F) 547
ΔT 1
LOOP C TH (°F) 548
TC (°F) 547
ΔT 1
SUBCOOLING (°F) 104
CHARGING FLOW (GPM) 34
LETDOWN FLOW (GPM) 42
REACTOR POWER 0

ACTIVITY:

GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 548.5
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 65 NR(%) 49
PRESS (PSIG) 991
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

S/G B

LEV.-WR(%) 65 NR(%) 49
PRESS (PSIG) 991
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

S/G C

LEV.-WR(%) 65 NR(%) 49
PRESS (PSIG) 991
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
RESET: TIME _____
CS ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) _____
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP A O B O C O
CHG PUMP A A B A C O
SI PUMP A A B A C OOS
CS PUMP A A B A
RHR PUMP A A B A
HVH 1 O 2 OOS 3 O 4 O

SECONDARY

CST LEVEL (%) 90
FEED PUMP A O B A
COND PUMP A O B A
AFW MOTOR A A B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A

FANS

HVE 1A A 1B A
HVE 2A A 2B O
HVE 5A O 5B A
HVE 15 O 15A A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)
UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 1215

Completed By: _____

ALERT GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 7.3
LOWER (MPH) 4.7
WIND DIR. UPPER (° FROM) 219
LOWER (° FROM) 213
AIR TEMPERATURE (°F) 53.4
STABILITY CLASS D

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 1
R-2 CONT. AREA (MR/HR) 68
R-3 HP WORK AREA (MR/HR) .2
R-4 CHG. PUMP RM (MR/HR) 3620
R-5 SPENT FUEL PIT (MR/HR) 0.7
R-6 SAMPLING ROOM (MR/HR) 0.8
R-7 IN-CORE INST (MR/HR) 8
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 72.4K
R-33 MON BLDG (MR/HR) .5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 1M
R-12 CV VENT GAS (CPM) 207.4K
R-14A "P" PLT VNT (CPM) 1026
R-14B "I" PLT VNT (CPM) 260
R-14C "NG" PLT VNT (CPM) 13.4K
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 2900
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) .5
R-31A "A" MN STM (MR/HR) .5
R-31B "B" MN STM (MR/HR) .5
R-31C "C" MN STM (MR/HR) .5
R-32A CV HI RG (R/HR) 1
R-32B CV HI RG (R/HR) 1
R-14D PLT VNT GAS (MID) (CPM) 10
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) .4
TEMPERATURE (°F) 128
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 5.5
RWST LEVEL (%) 91

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 2235
PZR LEVEL (%) 23
TAVE (°F) 547
LOOP A TH (°F) 548
TC (°F) 547
ΔT 1
LOOP B TH (°F) 548
TC (°F) 547
ΔT 1
LOOP C TH (°F) 548
TC (°F) 547
ΔT 1
SUBCOOLING (°F) 104
CHARGING FLOW (GPM) 34
LETDOWN FLOW (GPM) 42
REACTOR POWER 0

ACTIVITY:

GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 540.5
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 65 NR(%) 49
PRESS (PSIG) 991
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

S/G B

LEV.-WR(%) 65 NR(%) 49
PRESS (PSIG) 991
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

S/G C

LEV.-WR(%) 65 NR(%) 49
PRESS (PSIG) 991
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
RESET: TIME _____
CS ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) _____
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	A	B	A	C	O
SI PUMP	A	A	B	A	C	OOS
CS PUMP	A	A	B	A		
RHR PUMP	A	A	B	A		
HVH 1	O					
2	OOS					
3	O					
4	O					

SECONDARY

CST LEVEL (%) 90
FEED PUMP A O B A
COND PUMP A O B A
AFW MOTOR A A B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A
FANS
HVE 1A A 1B A
HVE 2A A 2B O
HVE 5A O 5B A
HVE 15 O 15A A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)
UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 1230

Completed By: _____

ALERT GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 6.9
 LOWER (MPH) 5.1
WIND DIR. UPPER (° FROM) 214
 LOWER (° FROM) 209
AIR TEMPERATURE (°F) 53.8
STABILITY CLASS D

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 1
R-2 CONT. AREA (MR/HR) 824
R-3 HP WORK AREA (MR/HR) .4
R-4 CHG. PUMP RM (MR/HR) 10K
R-5 SPENT FUEL PIT (MR/HR) 0.7
R-6 SAMPLING ROOM (MR/HR) 0.8
R-7 IN-CORE INST (MR/HR) 816
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 61.6K
R-33 MON BLDG (MR/HR) .5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 1M
R-12 CV VENT GAS (CPM) 442.8K
R-14A "P" PLT VNT (CPM) 1325
R-14B "I" PLT VNT (CPM) 495
R-14C "NG" PLT VNT (CPM) 29.8K
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 2950
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) .5
R-31A "A" MN STM (MR/HR) .5
R-31B "B" MN STM (MR/HR) .5
R-31C "C" MN STM (MR/HR) .5
R-32A CV HI RG (R/HR) 1
R-32B CV HI RG (R/HR) 1
R-14D PLT VNT GAS (MID) (CPM) 10
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) 2.4
TEMPERATURE (°F) 150
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 10.8
RWST LEVEL (%) 91

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 2003
PZR LEVEL (%) 0
TAVE (°F) 547
LOOP A TH (°F) 548
 TC (°F) 547
 ΔT 1
LOOP B TH (°F) 548
 TC (°F) 547
 ΔT 1
LOOP C TH (°F) 548
 TC (°F) 547
 ΔT 1

SUBCOOLING (°F) 89
CHARGING FLOW (GPM) 142
LETDOWN FLOW (GPM) 0
REACTOR POWER 0

ACTIVITY:

GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 548
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 67 NR(%) 52
PRESS (PSIG) 994
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

S/G B
LEV.-WR(%) 67 NR(%) 52
PRESS (PSIG) 994
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

S/G C
LEV.-WR(%) 67 NR(%) 52
PRESS (PSIG) 994
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
 RESET: TIME _____
CS ACTUATED: TIME _____
 RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
 RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
 RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) _____
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP _____ A O B O C O
CHG PUMP A O B O C O
SI PUMP A O B O C OOS
CS PUMP A A B A
RHR PUMP A O B A
HVH 1 O 2 OOS 3 O 4 O

SECONDARY

CST LEVEL (%) 90
FEED PUMP A A B A
COND PUMP A O B A
AFW MOTOR A O B O
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A O B O
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A

FANS

HVE 1A A 1B A
HVE 2A A 2B O
HVE 5A O 5B A
HVE 15 O 15A A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)
UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 1245

Completed By: _____

ALERT

GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 7.0
 LOWER (MPH) 5.3
WIND DIR. UPPER (° FROM) 212
 LOWER (° FROM) 215
AIR TEMPERATURE (°F) 54.4
STABILITY CLASS D

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 1
R-2 CONT. AREA (MR/HR) 2555
R-3 HP WORK AREA (MR/HR) .4
R-4 CHG. PUMP RM (MR/HR) 10K
R-5 SPENT FUEL PIT (MR/HR) 1.5
R-6 SAMPLING ROOM (MR/HR) 1
R-7 IN-CORE INST (MR/HR) 2547
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 52.4K
R-33 MON BLDG (MR/HR) .5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 1M
R-12 CV VENT GAS (CPM) 798.7K
R-14A "P" PLT VNT (CPM) 2649
R-14B "I" PLT VNT (CPM) 1.4K
R-14C "NG" PLT VNT (CPM) 638.6K
R-15 COND. AIR EUEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 3000
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) .5
R-31A "A" MN STM (MR/HR) .5
R-31B "B" MN STM (MR/HR) .5
R-31C "C" MN STM (MR/HR) .5
R-32A CV HI RG (R/HR) 2
R-32B CV HI RG (R/HR) 2
R-14D PLT VNT GAS (MID) (CPM) 10
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) 2.2
TEMPERATURE (°F) 141
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 19.8
RWST LEVEL (%) 89

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 1400
PZR LEVEL (%) 9
TAVE (°F) <540
LOOP A TH (°F) 472
 TC (°F) 470
 ΔT 30
LOOP B TH (°F) 472
 TC (°F) 470
 ΔT 30
LOOP C TH (°F) 472
 TC (°F) 470
 ΔT 30
SUBCOOLING (°F) 111
CHARGING FLOW (GPM) 142
LETDOWN FLOW (GPM) 0
REACTOR POWER 0

ACTIVITY:

GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 478
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 70 NR(%) 42
PRESS (PSIG) 509
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

S/G B

LEV.-WR(%) 70 NR(%) 42
PRESS (PSIG) 509
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

S/G C

LEV.-WR(%) 70 NR(%) 42
PRESS (PSIG) 509
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
 RESET: TIME _____
CS ACTUATED: TIME _____
 RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
 RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
 RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) 240
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP	A	A	B	O	C	A	
CHG PUMP	A	O	B	O	C	O	
SI PUMP	A	O	B	O	C	OOS	
CS PUMP	A	A	B	A			
RHR PUMP	A	O	B	A			
HVH 1	O	2	OOS	3	O	4	O

SECONDARY

CST LEVEL (%) 88
FEED PUMP A A B A
COND PUMP A O B A
AFW MOTOR A O B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A

FANS

HVE 1A	A	1B	A
HVE 2A	A	2B	O
HVE 5A	O	5B	A
HVE 15	O	15A	A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)
UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 1300

Completed By: _____

ALERT GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 7.2
LOWER (MPH) 5.0
WIND DIR. UPPER (° FROM) 216
LOWER (° FROM) 209
AIR TEMPERATURE (°F) 54.7
STABILITY CLASS D

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 1
R-2 CONT. AREA (MR/HR) 4780
R-3 HP WORK AREA (MR/HR) .4
R-4 CHG. PUMP RM (MR/HR) 10K
R-5 SPENT FUEL PIT (MR/HR) 1.5
R-6 SAMPLING ROOM (MR/HR) 1
R-7 IN-CORE INST (MR/HR) 4772
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 44.6K
R-33 MON BLDG (MR/HR) .5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 1M
R-12 CV VENT GAS (CPM) 10M
R-14A "P" PLT VNT (CPM) 3478
R-14B "I" PLT VNT (CPM) 2.8K
R-14C "NG" PLT VNT (CPM) 1M
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 3050
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) .5
R-31A "A" MN STM (MR/HR) .5
R-31B "B" MN STM (MR/HR) .5
R-31C "C" MN STM (MR/HR) .5
R-32A CV HI RG (R/HR) 4
R-32B CV HI RG (R/HR) 3
R-14D PLT VNT GAS (MID) (CPM) 298
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) 2.3
TEMPERATURE (°F) 142
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 29.7
RWST LEVEL (%) 88

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 1489
PZR LEVEL (%) 18.8
TAVE (°F) <540
LOOP A TH (°F) 469
TC (°F) 471
ΔT 30
LOOP B TH (°F) 469
TC (°F) 471
ΔT 30
LOOP C TH (°F) 469
TC (°F) 471
ΔT 30
SUBCOOLING (°F) 122
CHARGING FLOW (GPM) 142
LETDOWN FLOW (GPM) 0
REACTOR POWER 0
ACTIVITY:
GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 474
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 72 NR(%) 49
PRESS (PSIG) 490
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____
S/G B
LEV.-WR(%) 72 NR(%) 49
PRESS (PSIG) 490
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____
S/G C
LEV.-WR(%) 72 NR(%) 49
PRESS (PSIG) 490
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
RESET: TIME _____
CS ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) 0
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

	A	A	B	O	C	A
RCP	A	O	B	O	C	O
CHG PUMP	A	O	B	O	C	O
SI PUMP	A	O	B	O	C	OOS
CS PUMP	A	A	B	A		
RHR PUMP	A	O	B	A		
HVH 1	O	2	OOS	3	O	4

SECONDARY

CST LEVEL (%) 87
FEED PUMP A A B A
COND PUMP A O B A
AFW MOTOR A A B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A
FANS
HVE 1A A 1B A
HVE 2A A 2B O
HVE 5A O 5B A
HVE 15 O 15A A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)
UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 1315

Completed By: _____

ALERT GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 7.4
LOWER (MPH) 5.2
WIND DIR. UPPER (° FROM) 213
LOWER (° FROM) 205
AIR TEMPERATURE (°F) 55.0
STABILITY CLASS D

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 1
R-2 CONT. AREA (MR/HR) 7100
R-3 HP WORK AREA (MR/HR) .4
R-4 CHG. PUMP RM (MR/HR) 10K
R-5 SPENT FUEL PIT (MR/HR) 1.5
R-6 SAMPLING ROOM (MR/HR) 1
R-7 IN-CORE INST (MR/HR) 7092
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 38K
R-33 MON BLDG (MR/HR) .5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 1M
R-12 CV VENT GAS (CPM) 10M
R-14A "P" PLT VNT (CPM) 5398
R-14B "I" PLT VNT (CPM) 4.7K
R-14C "NG" PLT VNT (CPM) 1M
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 3100
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) .5
R-31A "A" MN STM (MR/HR) .5
R-31B "B" MN STM (MR/HR) .5
R-31C "C" MN STM (MR/HR) .5
R-32A CV HI RG (R/HR) 6
R-32B CV HI RG (R/HR) 5
R-14D PLT VNT GAS (MID) (CPM) 412
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) 2.3
TEMPERATURE (°F) 142
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 39.7
RWST LEVEL (%) 86

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 1206
PZR LEVEL (%) 19
TAVE (°F) <540
LOOP A TH (°F) 448
TC (°F) 449
ΔT 30
LOOP B TH (°F) 448
TC (°F) 449
ΔT 30
LOOP C TH (°F) 448
TC (°F) 449
ΔT 30
SUBCOOLING (°F) 60
CHARGING FLOW (GPM) 142
LETDOWN FLOW (GPM) 0
REACTOR POWER 0
ACTIVITY:
GROSS (Uci/mi)
I¹³¹ (Uci/mi)
AVG 5 HOTTEST T/Cs 453
BORON CONC. (PPM)

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 75 NR(%) 54
PRESS (PSIG) 375
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml)
S/G B
LEV.-WR(%) 75 NR(%) 54
PRESS (PSIG) 375
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml)
S/G C
LEV.-WR(%) 75 NR(%) 54
PRESS (PSIG) 375
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml)

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME
RESET: TIME
CS ACTUATED: TIME
RESET: TIME
CONT. ISO. A ACTUATED: TIME
RESET: TIME
CONT. ISO. B ACTUATED: TIME
RESET: TIME
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) 600
SI HOT-LEG INJECT START

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP	A	A	B	O	C	A	
CHG PUMP	A	O	B	O	C	O	
SI PUMP	A	O	B	O	C	OOS	
CS PUMP	A	A	B	A			
RHR PUMP	A	O	B	A			
HVH 1	O	2	OOS	3	O	4	O

SECONDARY

CST LEVEL (%) 87
FEED PUMP A A B A
COND PUMP A O B A
AFW MOTOR A A B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A

FANS

HVE 1A	A	1B	A
HVE 2A	A	2B	O
HVE 5A	O	5B	A
HVE 15	O	15A	A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)
UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 1330

Completed By: _____

ALERT GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 7.3
 LOWER (MPH) 5.0
WIND DIR. UPPER (° FROM) 214
 LOWER (° FROM) 209
AIR TEMPERATURE (°F) 55.3
STABILITY CLASS D

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 1
R-2 CONT. AREA (MR/HR) 9316
R-3 HP WORK AREA (MR/HR) .4
R-4 CHG. PUMP RM (MR/HR) 10K
R-5 SPENT FUEL PIT (MR/HR) 1.5
R-6 SAMPLING ROOM (MR/HR) 1
R-7 IN-CORE INST (MR/HR) 9308
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 32.4K
R-33 MON BLDG (MR/HR) .5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 1M
R-12 CV VENT GAS (CPM) 10M
R-14A "P" PLT VNT (CPM) 6.2K
R-14B "I" PLT VNT (CPM) 7.1K
R-14C "NG" PLT VNT (CPM) 1M
R-15 COND. AIR EJECT. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 3150
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) .5
R-31A "A" MN STM (MR/HR) .5
R-31B "B" MN STM (MR/HR) .5
R-31C "C" MN STM (MR/HR) .5
R-32A CV HI RG (R/HR) 8
R-32B CV HI RG (R/HR) 8
R-14D PLT VNT GAS (MID) (CPM) 508
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) 2.4
TEMPERATURE (°F) 143
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 50
RWST LEVEL (%) 85

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 1485
PZR LEVEL (%) 21
TAVE (°F) <540
LOOP A TH (°F) 445
 TC (°F) 448
 ΔT 30
LOOP B TH (°F) 445
 TC (°F) 448
 ΔT 30
LOOP C TH (°F) 445
 TC (°F) 448
 ΔT 30
SUBCOOLING (°F) 144

CHARGING FLOW (GPM) 142
LETDOWN FLOW (GPM) 0
REACTOR POWER 0

ACTIVITY:

GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 452
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 75 NR(%) 56
PRESS (PSIG) 380
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

S/G B
LEV.-WR(%) 75 NR(%) 56
PRESS (PSIG) 380
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

S/G C
LEV.-WR(%) 75 NR(%) 56
PRESS (PSIG) 380
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
 RESET: TIME _____
CS ACTUATED: TIME _____
 RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
 RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
 RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) 0
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP	A	A	B	O	C	A
CHG PUMP	A	O	B	O	C	O
SI PUMP	A	O	B	O	C	OOS
CS PUMP	A	A	B	A		
RHR PUMP	A	O	B	A		
HVH 1	O	2	OOS	3	O	4
						O

SECONDARY

CST LEVEL (%) 87
FEED PUMP A A B A
COND PUMP A O B A
AFW MOTOR A A B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A

FANS

HVE 1A	A	1B	A
HVE 2A	A	2B	O
HVE 5A	O	5B	A
HVE 15	O	15A	A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)
UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 1345

Completed By: _____

ALERT

GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 7.5
LOWER (MPH) 5.3
WIND DIR. UPPER (° FROM) 219
LOWER (° FROM) 203
AIR TEMPERATURE (°F) 55.7
STABILITY CLASS D

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 1
R-2 CONT. AREA (MR/HR) 10K
R-3 HP WORK AREA (MR/HR) .4
R-4 CHG. PUMP RM (MR/HR) 10K
R-5 SPENT FUEL PIT (MR/HR) 1.5
R-6 SAMPLING ROOM (MR/HR) 1
R-7 IN-CORE INST (MR/HR) 10K
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 27.6K
R-33 MON BLDG (MR/HR) .5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 1M
R-12 CV VENT GAS (CPM) 10M
R-14A "P" PLT VNT (CPM) 6.9K
R-14B "I" PLT VNT (CPM) 9.7K
R-14C "NG" PLT VNT (CPM) 1M
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 3200
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) .5
R-31A "A" MN STM (MR/HR) .5
R-31B "B" MN STM (MR/HR) .5
R-31C "C" MN STM (MR/HR) .5
R-32A CV HI RG (R/HR) 10
R-32B CV HI RG (R/HR) 10
R-14D PLT VNT GAS (MID) (CPM) 590
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) 2.3
TEMPERATURE (°F) 139
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 58
RWST LEVEL (%) 83

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 1100
PZR LEVEL (%) 30
TAVE (°F) <540
LOOP A TH (°F) 444
TC (°F) 441
ΔT 30
LOOP B TH (°F) 450
TC (°F) 447
ΔT 30
LOOP C TH (°F) 444
TC (°F) 441
ΔT 30
SUBCOOLING (°F) 105
CHARGING FLOW (GPM) 142
LETDOWN FLOW (GPM) 0
REACTOR POWER 0
ACTIVITY:
GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 448
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 75 NR(%) 55
PRESS (PSIG) 375
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____
S/G B
LEV.-WR(%) 75 NR(%) 55
PRESS (PSIG) 375
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____
S/G C
LEV.-WR(%) 75 NR(%) 55
PRESS (PSIG) 375
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
RESET: TIME _____
CS ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) 450
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP	A	A	B	O	C	A	
CHG PUMP	A	O	B	O	C	O	
SI PUMP	A	O	B	A	C	OOS	
CS PUMP	A	A	B	A			
RHR PUMP	A	O	B	A			
HVH 1	O	2	OOS	3	O	4	O

SECONDARY

CST LEVEL (%) 87
FEED PUMP A A B A
COND PUMP A O B A
AFW MOTOR A A B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A
FANS
HVE 1A A 1B A
HVE 2A A 2B O
HVE 5A O 5B A
HVE 15 O 15A A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)

UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 1400

Completed By: _____

ALERT

GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 7.3
LOWER (MPH) 5.4
WIND DIR. UPPER (° FROM) 220
LOWER (° FROM) 215
AIR TEMPERATURE (°F) 55.6
STABILITY CLASS D

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 1
R-2 CONT. AREA (MR/HR) 10K
R-3 HP WORK AREA (MR/HR) .4
R-4 CHG. PUMP RM (MR/HR) 10K
R-5 SPENT FUEL PIT (MR/HR) 1.5
R-6 SAMPLING ROOM (MR/HR) 1
R-7 IN-CORE INST (MR/HR) 10K
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 23.6K
R-33 MON BLDG (MR/HR) .5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 1M
R-12 CV VENT GAS (CPM) 10M
R-14A "P" PLT VNT (CPM) 7.5K
R-14B "I" PLT VNT (CPM) 12.7K
R-14C "NG" PLT VNT (CPM) 1M
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 3250
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) .5
R-31A "A" MN STM (MR/HR) .5
R-31B "B" MN STM (MR/HR) .5
R-31C "C" MN STM (MR/HR) .5
R-32A CV HI RG (R/HR) 12
R-32B CV HI RG (R/HR) 12
R-14D PLT VNT GAS (MID) (CPM) 664
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) 2.3
TEMPERATURE (°F) 139
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 60
RWST LEVEL (%) 81

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 1000
PZR LEVEL (%) 50
TAVE (°F) <540
LOOP A TH (°F) 444
TC (°F) 441
ΔT 30
LOOP B TH (°F) 450
TC (°F) 447
ΔT 30
LOOP C TH (°F) 444
TC (°F) 441
ΔT 30
SUBCOOLING (°F) 90
CHARGING FLOW (GPM) 142
LETDOWN FLOW (GPM) 0
REACTOR POWER 0
ACTIVITY:
GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 448
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 75 NR(%) 55
PRESS (PSIG) 375
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____
S/G B
LEV.-WR(%) 75 NR(%) 55
PRESS (PSIG) 375
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____
S/G C
LEV.-WR(%) 75 NR(%) 55
PRESS (PSIG) 375
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
RESET: TIME _____
CS ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) 400
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP	A	A	B	O	C	A	
CHG PUMP	A	O	B	O	C	O	
SI PUMP	A	O	B	A	C	OOS	
CS PUMP	A	A	B	A			
RHR PUMP	A	O	B	A			
HVH 1	O	2	OOS	3	O	4	O

SECONDARY

CST LEVEL (%) 87
FEED PUMP A A B A
COND PUMP A O B A
AFW MOTOR A A B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A

FANS

HVE 1A	A	1B	A
HVE 2A	A	2B	O
HVE 5A	O	5B	A
HVE 15	O	15A	A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)
UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 1415

Completed By: _____

ALERT

GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 6.9
LOWER (MPH) 5.0
WIND DIR. UPPER (° FROM) 225
LOWER (° FROM) 214
AIR TEMPERATURE (°F) 55.8
STABILITY CLASS D

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 1
R-2 CONT. AREA (MR/HR) 10K
R-3 HP WORK AREA (MR/HR) .4
R-4 CHG. PUMP RM (MR/HR) 10K
R-5 SPENT FUEL PIT (MR/HR) 1.5
R-6 SAMPLING ROOM (MR/HR) 1
R-7 IN-CORE INST (MR/HR) 10K
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 44.3K
R-33 MON BLDG (MR/HR) .5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 1M
R-12 CV VENT GAS (CPM) 10M
R-14A "P" PLT VNT (CPM) 8.1K
R-14B "I" PLT VNT (CPM) 16K
R-14C "NG" PLT VNT (CPM) 1M
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 3300
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) .5
R-31A "A" MN STM (MR/HR) .5
R-31B "B" MN STM (MR/HR) .5
R-31C "C" MN STM (MR/HR) .5
R-32A CV HI RG (R/HR) 14
R-32B CV HI RG (R/HR) 14
R-14D PLT VNT GAS (MID) (CPM) 727
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) 2.2
TEMPERATURE (°F) 140
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 45
RWST LEVEL (%) 79

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 1222
PZR LEVEL (%) 33
TAVE (°F) <540
LOOP A TH (°F) 384
TC (°F) 384
ΔT 30
LOOP B TH (°F) 382
TC (°F) 376
ΔT 30
LOOP C TH (°F) 388
TC (°F) 386
ΔT 30
SUBCOOLING (°F) 183

CHARGING FLOW (GPM) 142
LETDOWN FLOW (GPM) 0
REACTOR POWER 0

ACTIVITY:

GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 388
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 74 NR(%) 39
PRESS (PSIG) 182
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

S/G B

LEV.-WR(%) 78 NR(%) 51
PRESS (PSIG) 183
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

S/G C

LEV.-WR(%) 74 NR(%) 39
PRESS (PSIG) 184
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
RESET: TIME _____
CS ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) 300
SI HOT-LEG INJECT START _____

EQUIPMENT STATUS

N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP	A	A	B	O	C	A
CHG PUMP	A	O	B	O	C	O
SI PUMP	A	O	B	A	C	OOS
CS PUMP	A	A	B	A		
RHR PUMP	A	O	B	A		
HVH 1	O					
2	OOS					
3	O					
4	O					

SECONDARY

CST LEVEL (%) 87
FEED PUMP A A B A
COND PUMP A O B A
AFW MOTOR A A B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A
FANS
HVE 1A A 1B A
HVE 2A A 2B O
HVE 5A O 5B A
HVE 15 O 15A A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

RNPD ANNUAL EXERCISE 1992
SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

ATTACHMENT 9.7
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EMERGENCY CLASSIFICATION (CIRCLE)
UNUSUAL EVENT SITE AREA EMERGENCY

Date/Time: 11/17/92 / 1430

Completed By: _____

ALERT GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 6.9
LOWER (MPH) 5.0
WIND DIR. UPPER (° FROM) 225
LOWER (° FROM) 214
AIR TEMPERATURE (°F) 56.0
STABILITY CLASS D

AREA RADIATION MONITORS

R-1 CONTROL ROOM (MR/HR) 1
R-2 CONT. AREA (MR/HR) 10K
R-3 HP WORK AREA (MR/HR) .5
R-4 CHG. PUMP RM (MR/HR) 10K
R-5 SPENT FUEL PIT (MR/HR) 1.5
R-6 SAMPLING ROOM (MR/HR) 1
R-7 IN-CORE INST (MR/HR) 10K
R-8 DRUM. RM. (MR/HR) 1.5
R-9 FAILED FUEL (MR/HR) 44K
R-33 MON BLDG (MR/HR) .5

PROCESS RADIATION MONITORS

R-11 CV VENT PART. (CPM) 1M
R-12 CV VENT GAS (CPM) 10M
R-14A "P" PLT VNT (CPM) 8.7K
R-14B "I" PLT VNT (CPM) 16.5K
R-14C "NG" PLT VNT (CPM) 1M
R-15 COND. AIR EJEC. (CPM) 13
R-16 CV FAN CW (CPM) 290
R-17 COMP. CW (CPM) 290
R-18 WASTE DISPOSAL (CPM) 50K
R-19A S/G A BLOWDOWN (CPM) 3350
R-19B S/G B BLOWDOWN (CPM) 756
R-19C S/G C BLOWDOWN (CPM) 505
R-20 FUEL HDLG BASE (CPM) 40
R-21 FUEL HDLG UPPER (CPM) 25

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) .5
R-31A "A" MN STM (MR/HR) .5
R-31B "B" MN STM (MR/HR) .5
R-31C "C" MN STM (MR/HR) .5
R-32A CV HI RG (R/HR) 15
R-32B CV HI RG (R/HR) 15
R-14D PLT VNT GAS (MID) (CPM) 750
R-14E PLT VNT GAS (HI) (CPM) 10
R-37 CONDENSATE POLISHER (CPM) 2

CONTAINMENT STATUS

PRESSURE (PSIG) 2.1
TEMPERATURE (°F) 136
HYDROGEN CONC. (%) 0
SUMP LEVEL (INCHES) 54.5
RWST LEVEL (%) 77

PRIMARY SYSTEM

RCS PRESSURE (PSIG) 511
PZR LEVEL (%) 50
TAVE (°F) <540
LOOP A TH (°F) 351
TC (°F) 355
ΔT 30
LOOP B TH (°F) 349
TC (°F) 347
ΔT 30
LOOP C TH (°F) 356
TC (°F) 355
ΔT 30
SUBCOOLING (°F) 116
CHARGING FLOW (GPM) 100
LETDOWN FLOW (GPM) 0
REACTOR POWER 0
ACTIVITY:
GROSS (Uci/mi) _____
I¹³¹ (Uci/mi) _____
AVG 5 HOTTEST T/Cs 356
BORON CONC. (PPM) _____

SECONDARY SYSTEM

S/G A
LEV.-WR(%) 76 NR(%) 45
PRESS (PSIG) 116
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____
S/G B
LEV.-WR(%) 76 NR(%) 45
PRESS (PSIG) 116
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____
S/G C
LEV.-WR(%) 76 NR(%) 45
PRESS (PSIG) 116
FEED (PPH) 0
STEAM (PPH) 0
ACT. (Uci/ml) _____

PRI/SEC. LK. RT (GPM) _____

ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME _____
RESET: TIME _____
CS ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. A ACTUATED: TIME _____
RESET: TIME _____
CONT. ISO. B ACTUATED: TIME _____
RESET: TIME _____
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM) 0
SI HOT-LEG INJECT START _____
EQUIPMENT STATUS
N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED

PRIMARY

RCP A A B O C A
CHG PUMP A O B O C O
SI PUMP A A B A C OOS
CS PUMP A A B A
RHR PUMP A O B A
HVV 1 O 2 OOS 3 O 4 O

SECONDARY

CST LEVEL (%) 87
FEED PUMP A A B A
COND PUMP A O B A
AFW MOTOR A A B A
AFW STEAM A
MSIV A O B O C O

ELECTRICAL

EDG A A B A
DS/DG A
OFFSITE E
EMER. BUS E1 E E2 E
FROM: OFFSITE E D.G. A

FANS

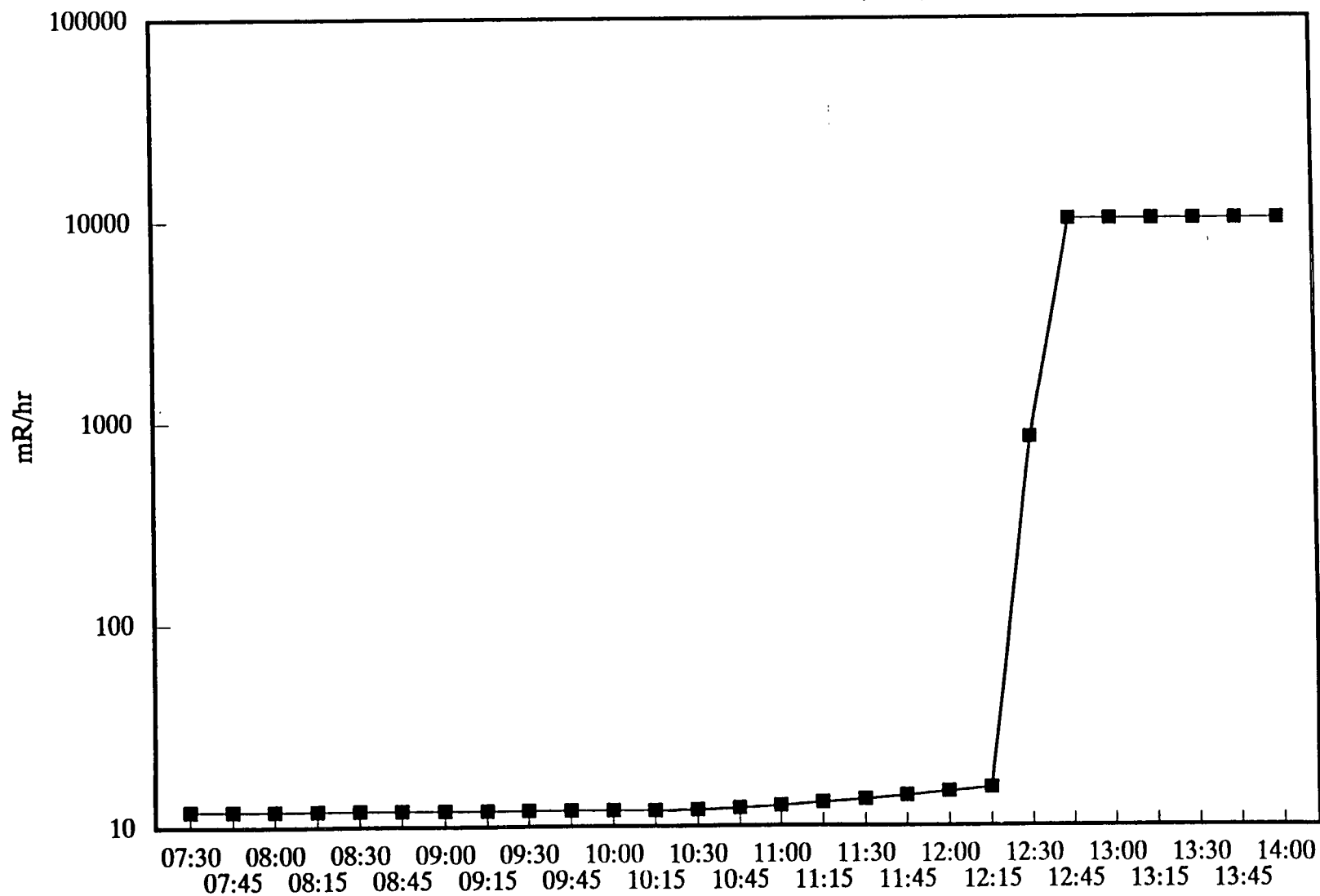
HVE 1A A 1B A
HVE 2A A 2B O
HVE 5A O 5B A
HVE 15 O 15A A

LEGEND:

OSH = OFF SCALE HIGH
OSL = OFF SCALE LOW
OOS = OUT OF SERVICE
ISOL = ISOLATED

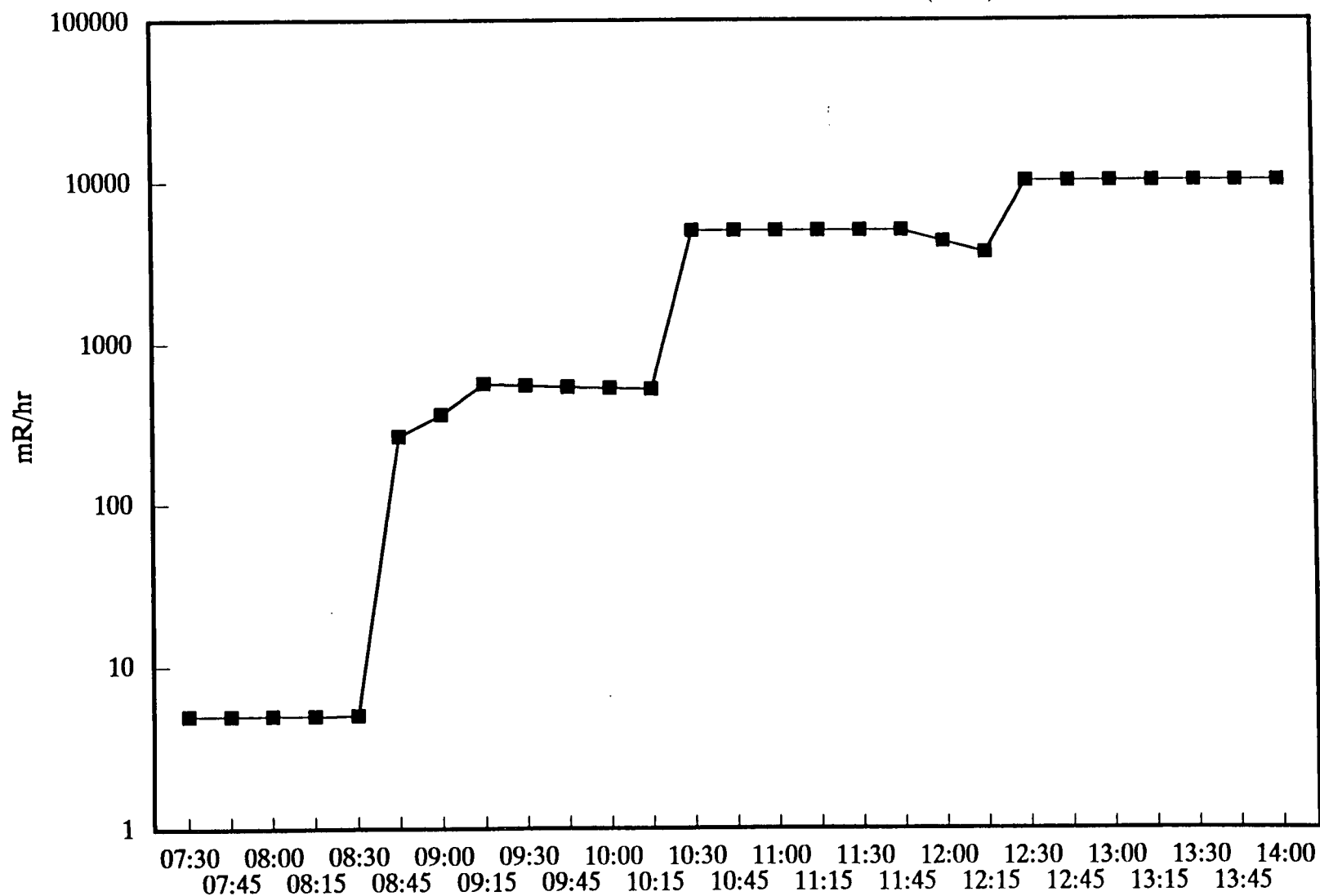
RNP 1992 ANNUAL EXERCISE

PLANT STACK MONITOR (R-2)



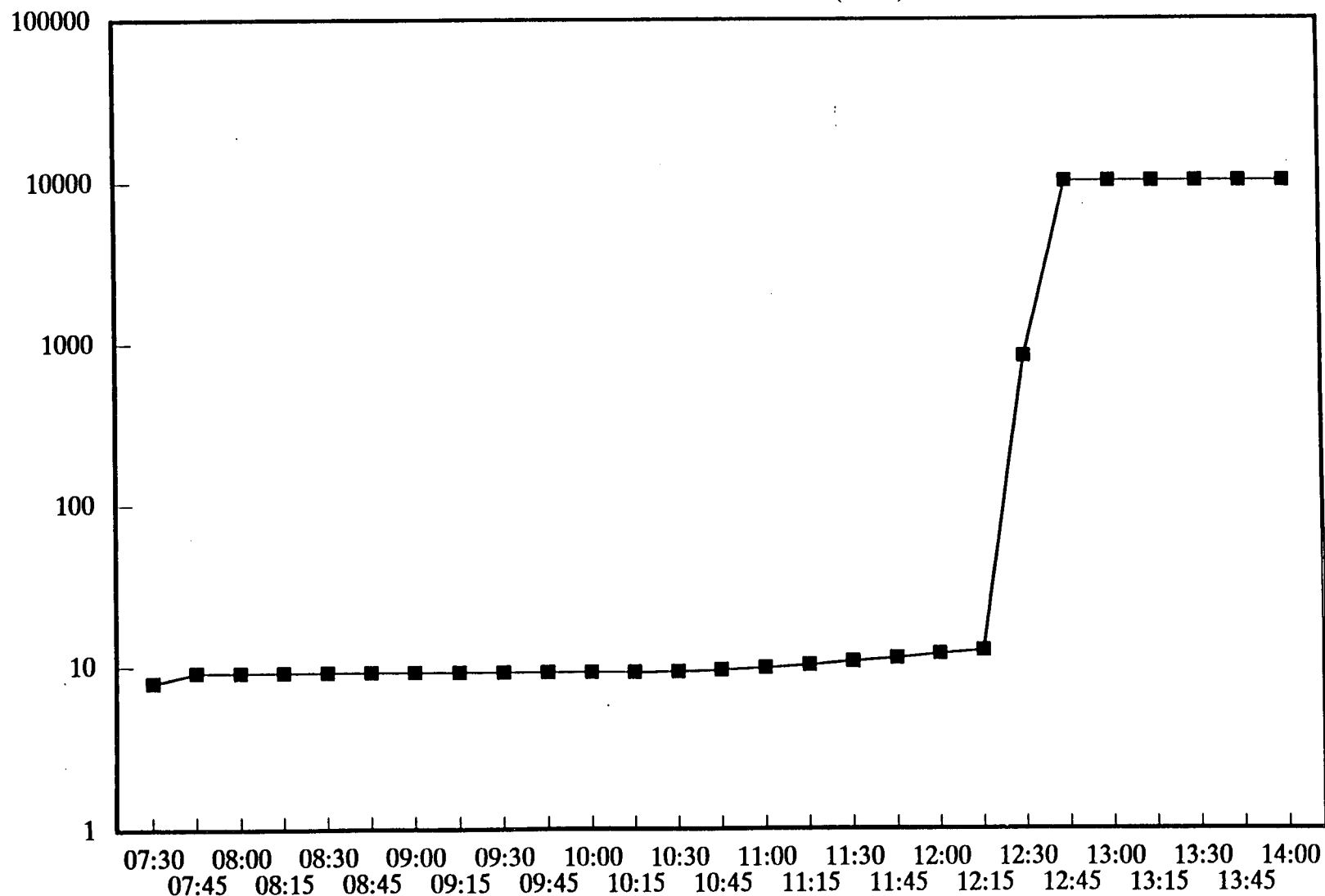
RNP 1992 ANNUAL EXERCISE

CHARGING PUMP AREA MONITOR (R-4)



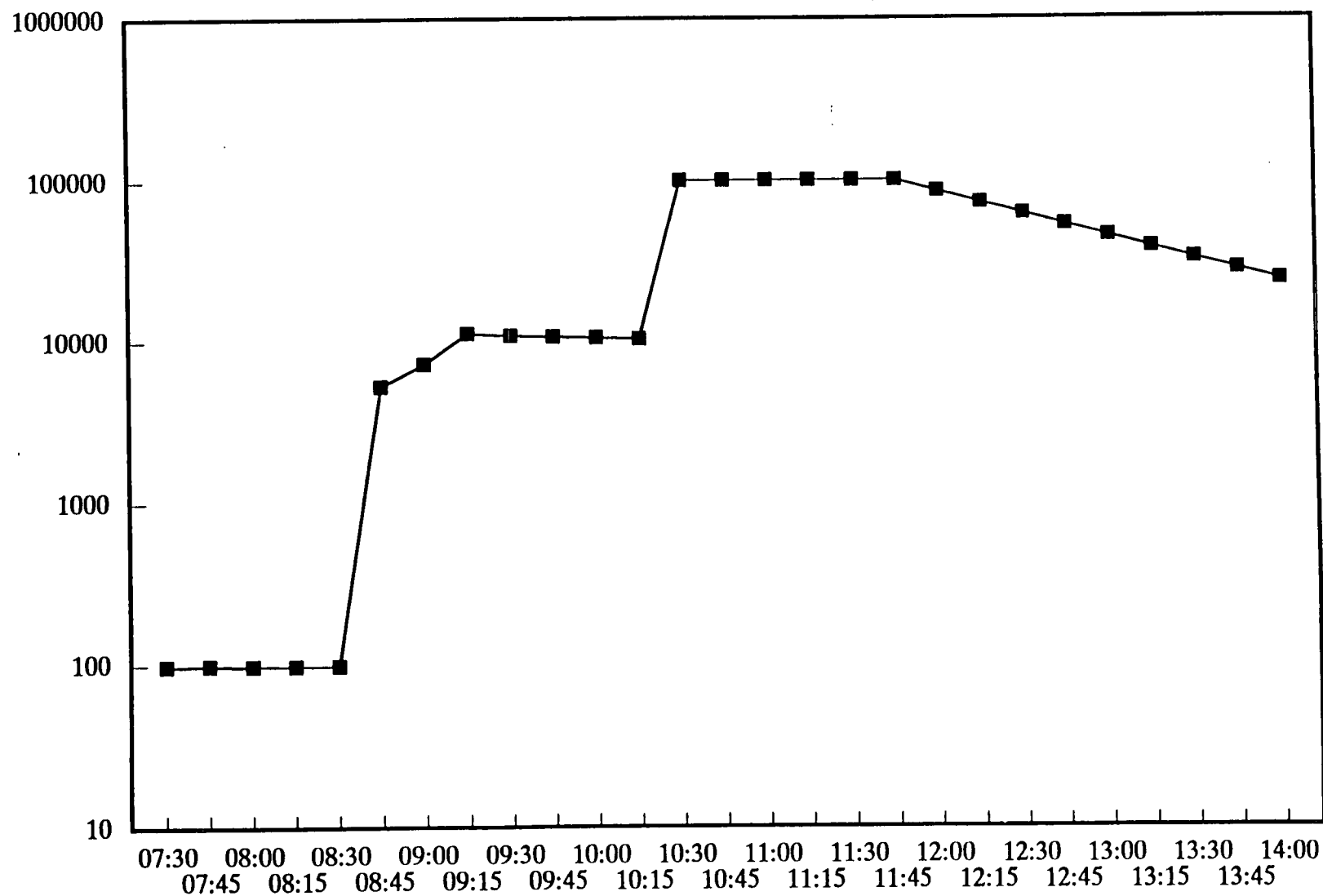
ROBINSON ANNUAL EXERCISE 1992

SEAL TABLE MONITOR (R-7)



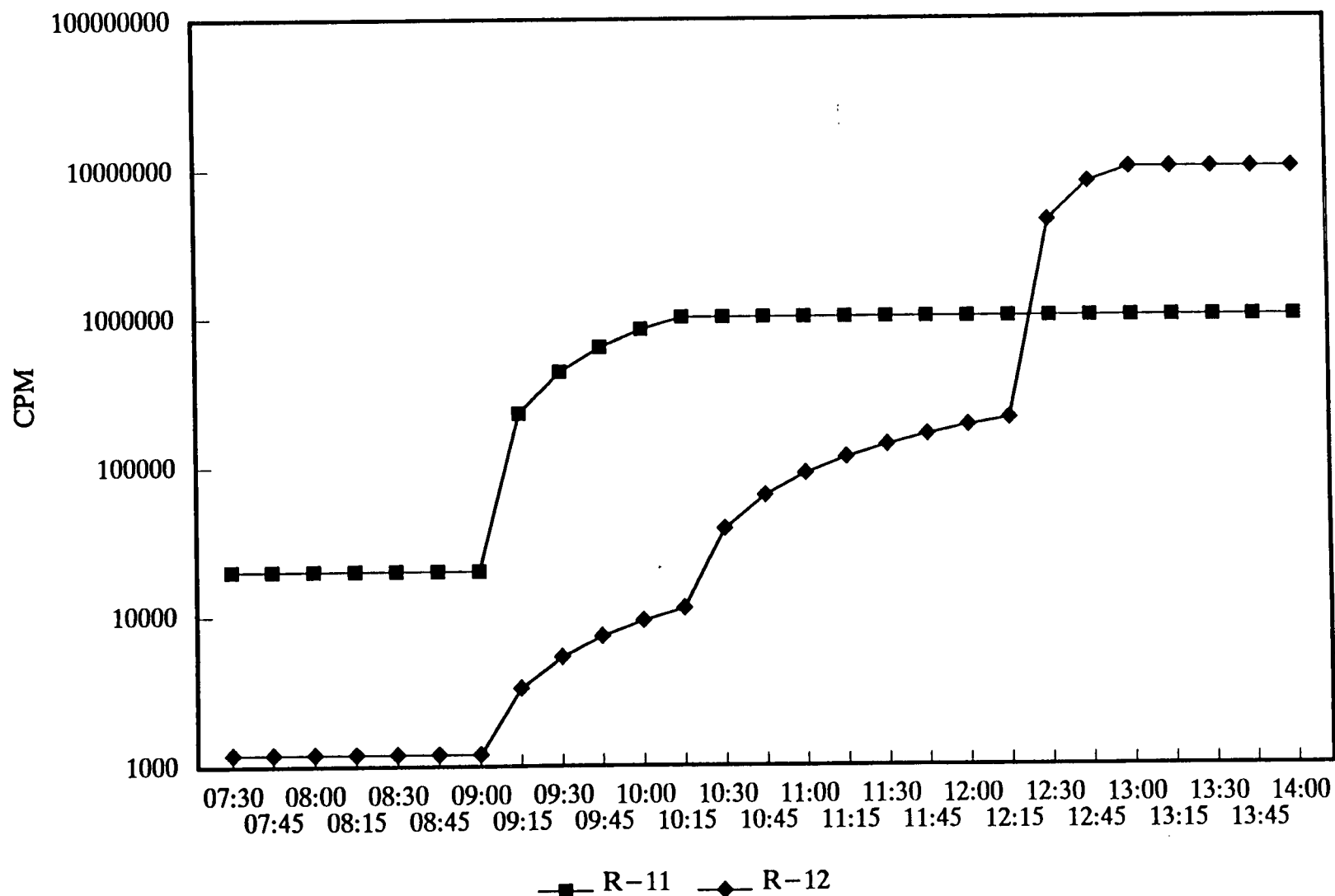
ROBINSON ANNUAL EXERCISE 1992

LETDOWN AREA MONITOR (R-9)



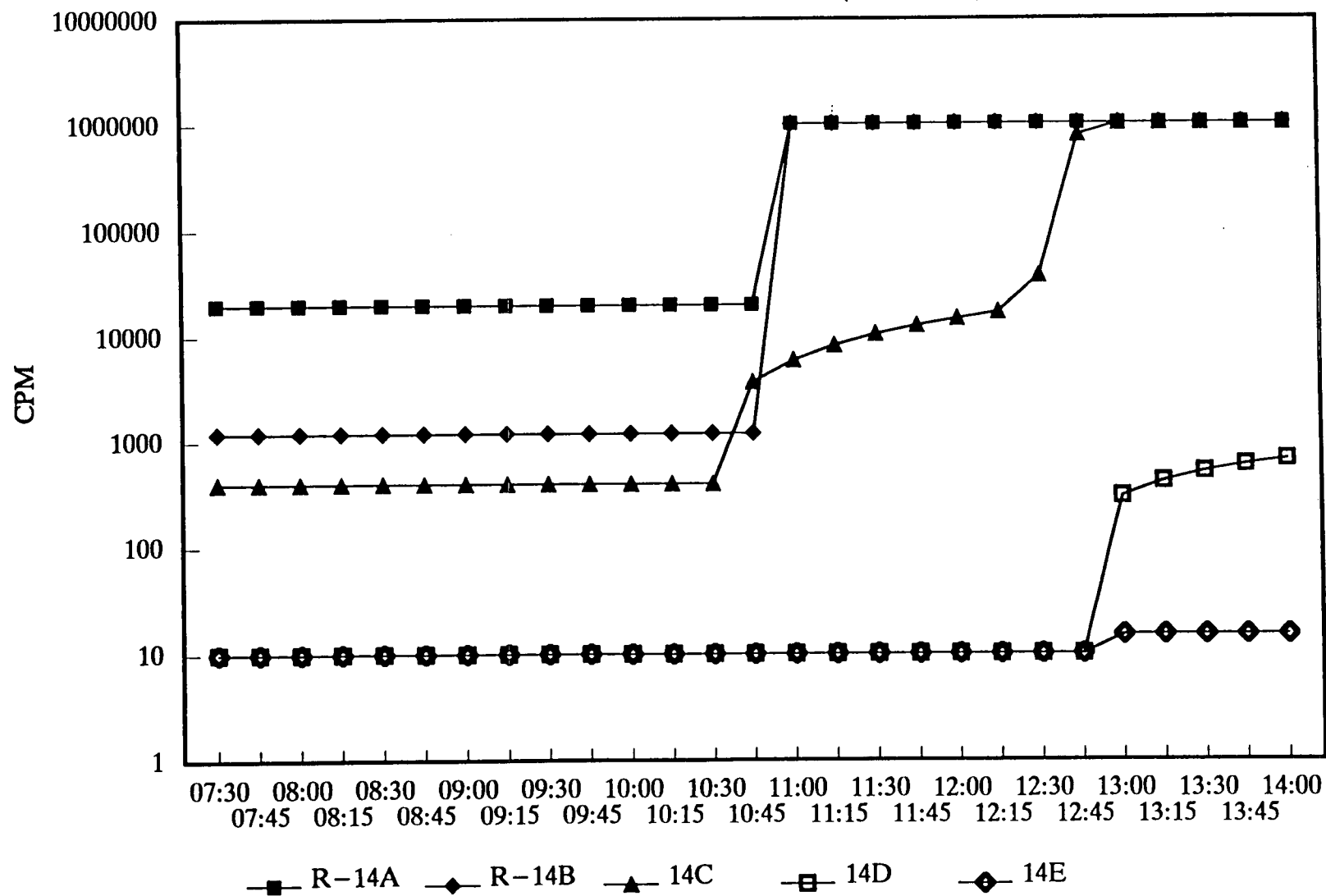
ROBINSON ANNUAL EXERCISE 1992

CONTAINMENT PURGE MONITORS (R-11,12)



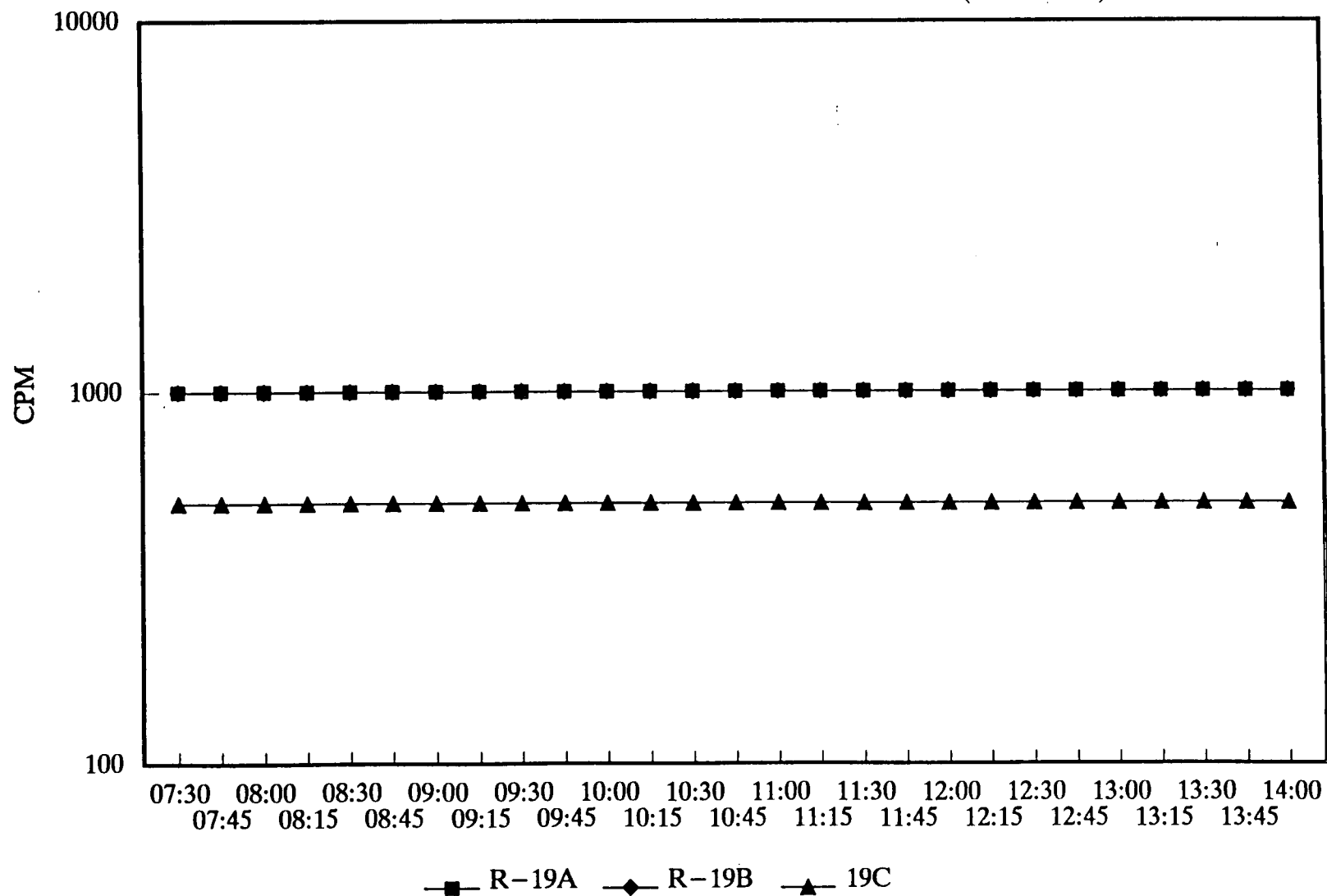
ROBINSON ANNUAL EXERCISE 1992

PLANT VENT MONITORS (R-14A-E)



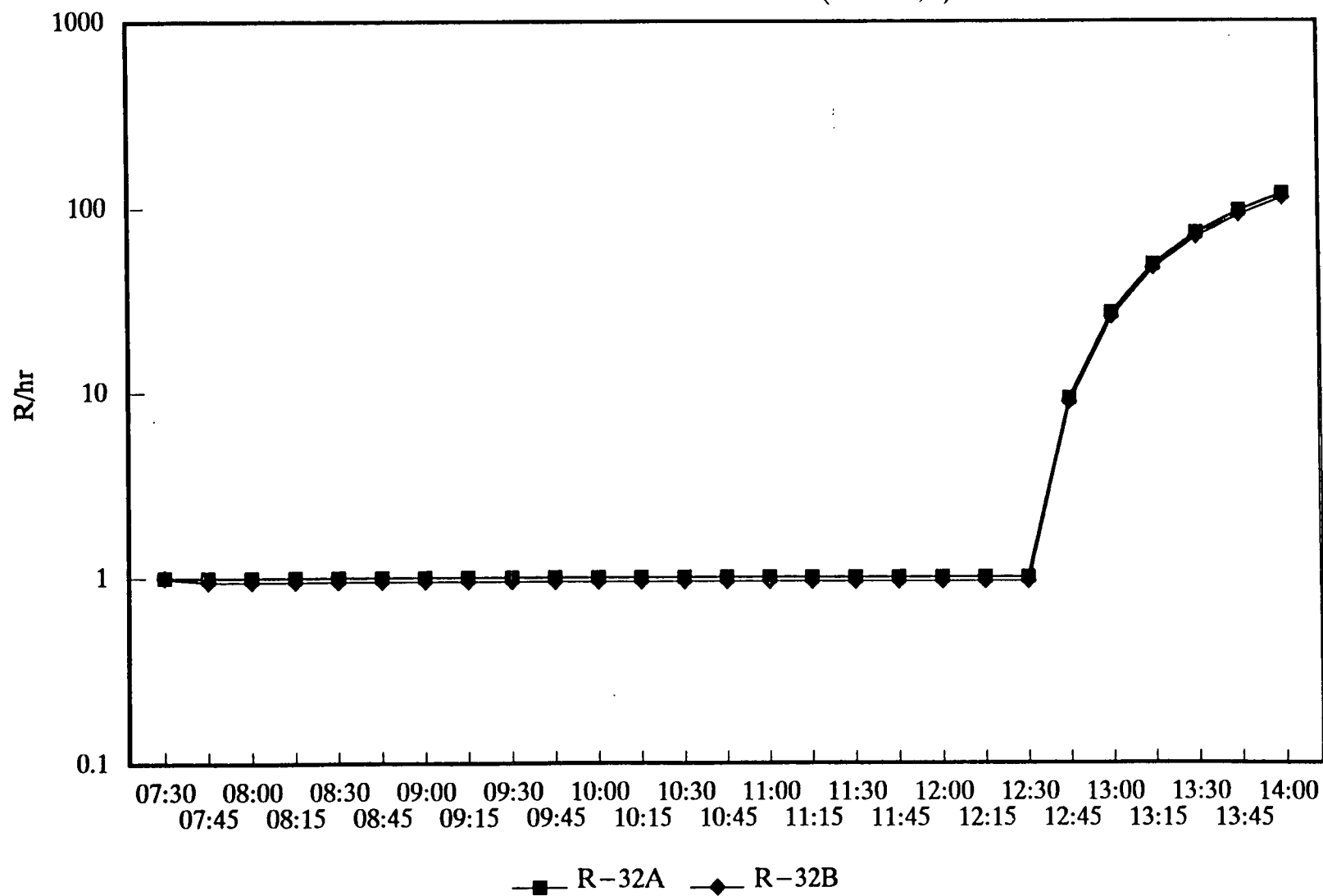
ROBINSON ANNUAL EXERCISE 1992

STEAM GENERATOR BLOWDOWN MONITORS (R-19A-C)



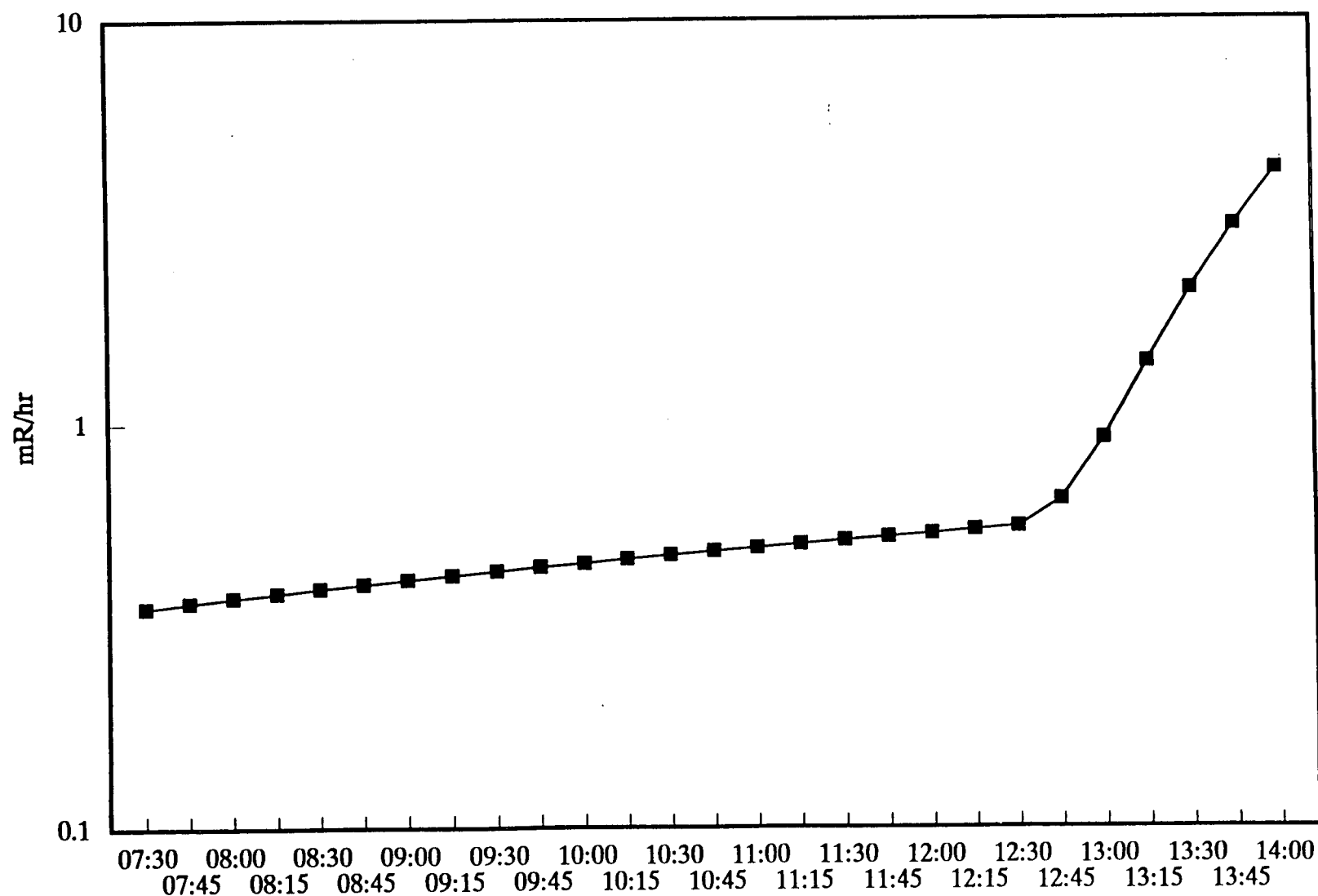
ROBINSON ANNUAL EXERCISE 1992

PLANT VENT MONITORS (R-32A,B)



ROBINSON ANNUAL EXERCISE 1992

OUTSIDE "X"



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CAROLINA POWER & LIGHT COMPANY
ROBINSON NUCLEAR PROJECT DEPARTMENT

1992 EXERCISE

3.3 METEOROLOGICAL INFORMATION

FORECAST DISCUSSION FOR HB ROBINSON

November 17, 1992

0800 EST

A cold front located over the North Carolina mountains will push eastward today, and will move across the Robinson area late this afternoon or this evening. Winds will be from the south to southwest around 5 mph ahead of the front but will be shifting from the northwest tonight. There will be a slight chance of scattered showers late today.

END DISCUSSION

CP&L

Carolina Power & Light Company

ONSITE METEOROLOGICAL DATA

Date: November 17, 1992Plant: Robinson

Time (EST)	<u>0730</u>	<u>0745</u>	<u>0800</u>	<u>0815</u>
Upper Speed (mph)	<u>6.3</u>	<u>6.4</u>	<u>7.1</u>	<u>6.9</u>
Upper Direc. (DEG)	<u>180</u>	<u>183</u>	<u>185</u>	<u>191</u>
Lower Speed (mph)	<u>2.3</u>	<u>2.6</u>	<u>3.0</u>	<u>3.4</u>
Lower Direc. (DEG)	<u>185</u>	<u>187</u>	<u>189</u>	<u>195</u>
AMB Temp. (°F)	<u>45.2</u>	<u>45.2</u>	<u>45.3</u>	<u>45.5</u>
ΔT (°C/100m)	<u>1.30</u>	<u>1.27</u>	<u>1.14</u>	<u>1.01</u>
Stability Class	<u>E</u>	<u>E</u>	<u>E</u>	<u>E</u>

Time (EST)	<u>0830</u>	<u>0845</u>	<u>0900</u>	<u>0915</u>
Upper Speed (mph)	<u>7.1</u>	<u>7.3</u>	<u>7.4</u>	<u>7.6</u>
Upper Direc. (DEG)	<u>190</u>	<u>195</u>	<u>201</u>	<u>205</u>
Lower Speed (mph)	<u>3.4</u>	<u>4.2</u>	<u>4.5</u>	<u>4.8</u>
Lower Direc. (DEG)	<u>199</u>	<u>203</u>	<u>203</u>	<u>201</u>
AMB Temp. (°F)	<u>45.8</u>	<u>46.2</u>	<u>46.9</u>	<u>47.5</u>
ΔT (°C/100m)	<u>0.74</u>	<u>0.11</u>	<u>-0.15</u>	<u>-0.38</u>
Stability Class	<u>E</u>	<u>E</u>	<u>E</u>	<u>E</u>

CP&L

Carolina Power & Light Company

ONSITE METEOROLOGICAL DATADate: November 17, 1992Plant: Robinson

Time (EST)	<u>0930</u>	<u>0945</u>	<u>1000</u>	<u>1015</u>
Upper Speed (mph)	<u>8.0</u>	<u>7.3</u>	<u>7.0</u>	<u>6.8</u>
Upper Direc. (DEG)	<u>201</u>	<u>201</u>	<u>205</u>	<u>201</u>
Lower Speed (mph)	<u>5.3</u>	<u>4.8</u>	<u>4.6</u>	<u>5.2</u>
Lower Direc. (DEG)	<u>204</u>	<u>210</u>	<u>211</u>	<u>207</u>
AMB Temp. (°F)	<u>47.9</u>	<u>48.3</u>	<u>48.9</u>	<u>49.5</u>
ΔT (°C/100m)	<u>-0.43</u>	<u>-0.41</u>	<u>-0.59</u>	<u>-0.57</u>
Stability Class	<u>E</u>	<u>E</u>	<u>D</u>	<u>D</u>

Time (EST)	<u>1030</u>	<u>1045</u>	<u>1100</u>	<u>1115</u>
Upper Speed (mph)	<u>7.0</u>	<u>6.9</u>	<u>7.5</u>	<u>7.4</u>
Upper Direc. (DEG)	<u>203</u>	<u>200</u>	<u>209</u>	<u>215</u>
Lower Speed (mph)	<u>5.0</u>	<u>5.5</u>	<u>5.3</u>	<u>5.4</u>
Lower Direc. (DEG)	<u>207</u>	<u>209</u>	<u>212</u>	<u>208</u>
AMB Temp. (°F)	<u>50.1</u>	<u>50.4</u>	<u>50.8</u>	<u>51.4</u>
ΔT (°C/100m)	<u>-0.74</u>	<u>-0.94</u>	<u>-1.11</u>	<u>-0.94</u>
Stability Class	<u>D</u>	<u>D</u>	<u>D</u>	<u>D</u>

CP&L

Carolina Power & Light Company

ONSITE METEOROLOGICAL DATA

Date: November 17, 1992 Plant: Robinson

Time (EST)	<u>1130</u>	<u>1145</u>	<u>1200</u>	<u>1215</u>
Upper Speed (mph)	<u>7.9</u>	<u>7.5</u>	<u>7.4</u>	<u>7.3</u>
Upper Direc. (DEG)	<u>214</u>	<u>220</u>	<u>224</u>	<u>219</u>
Lower Speed (mph)	<u>5.3</u>	<u>5.2</u>	<u>4.8</u>	<u>4.7</u>
Lower Direc. (DEG)	<u>209</u>	<u>213</u>	<u>212</u>	<u>213</u>
AMB Temp. (°F)	<u>52.0</u>	<u>52.7</u>	<u>53.1</u>	<u>53.4</u>
ΔT (°C/100m)	<u>-1.15</u>	<u>-1.24</u>	<u>-1.11</u>	<u>-1.04</u>
Stability Class	<u>D</u>	<u>D</u>	<u>D</u>	<u>D</u>

Time (EST)	<u>1230</u>	<u>1245</u>	<u>1300</u>	<u>1315</u>
Upper Speed (mph)	<u>6.9</u>	<u>7.0</u>	<u>7.2</u>	<u>7.4</u>
Upper Direc. (DEG)	<u>214</u>	<u>212</u>	<u>210</u>	<u>213</u>
Lower Speed (mph)	<u>5.1</u>	<u>5.3</u>	<u>5.0</u>	<u>5.2</u>
Lower Direc. (DEG)	<u>209</u>	<u>215</u>	<u>209</u>	<u>205</u>
AMB Temp. (°F)	<u>53.8</u>	<u>54.4</u>	<u>54.7</u>	<u>55.0</u>
ΔT (°C/100m)	<u>-0.94</u>	<u>-1.17</u>	<u>-1.01</u>	<u>-0.95</u>
Stability Class	<u>D</u>	<u>D</u>	<u>D</u>	<u>D</u>

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ONSITE METEOROLOGICAL DATADate: November 17, 1992 Plant: Robinson

Time (EST)	<u>1330</u>	<u>1345</u>	<u>1400</u>	<u>1415</u>
Upper Speed (mph)	<u>7.3</u>	<u>7.5</u>	<u>7.3</u>	<u>6.9</u>
Upper Direc. (DEG)	<u>214</u>	<u>219</u>	<u>220</u>	<u>225</u>
Lower Speed (mph)	<u>5.0</u>	<u>5.3</u>	<u>5.4</u>	<u>5.0</u>
Lower Direc. (DEG)	<u>209</u>	<u>203</u>	<u>215</u>	<u>214</u>
AMB Temp. (°F)	<u>55.3</u>	<u>55.7</u>	<u>55.6</u>	<u>55.8</u>
ΔT (°C/100m)	<u>-1.21</u>	<u>-1.15</u>	<u>-1.04</u>	<u>-0.95</u>
Stability Class	<u>D</u>	<u>D</u>	<u>D</u>	<u>D</u>

Time (EST)	<u>1430</u>	<u> </u>	<u> </u>	<u> </u>
Upper Speed (mph)	<u>7.1</u>	<u> </u>	<u> </u>	<u> </u>
Upper Direc. (DEG)	<u>220</u>	<u> </u>	<u> </u>	<u> </u>
Lower Speed (mph)	<u>4.9</u>	<u> </u>	<u> </u>	<u> </u>
Lower Direc. (DEG)	<u>213</u>	<u> </u>	<u> </u>	<u> </u>
AMB Temp. (°F)	<u>56.1</u>	<u> </u>	<u> </u>	<u> </u>
ΔT (°C/100m)	<u>-1.14</u>	<u> </u>	<u> </u>	<u> </u>
Stability Class	<u>D</u>	<u> </u>	<u> </u>	<u> </u>

CP&L

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METEOROLOGICAL FORECAST FORM

Date: November 17, 1992 Time Issued: 0800 EST

Issued By: _____ Received By: _____

Forecast Location: Robinson Nuclear Project

A) Next 1 Hour

- 1) Wind Direction: Sector S Deg. 190
- 2) Winds Should Remain (Steady; Shifting; Variable)
2a) Variation Should Be ± 10 Deg.
- 3) Wind Velocity: 3 to 5 (MPH)
- 4) Stability Class E
- 5) Precipitation Activity Will Be (None, Scattered, Steady)
- 6) Precipitation Type (Rain, Rainshowers, Thunderstorms, Ice, Snow)
- 7) Precipitation Intensity (Light, Moderate, Severe)

B) Next 3 Hours:

Winds: S → SSW 4-6 mph
Precipitation: None
Stability Class: E → D

C) Remarks: _____

CP&L

Carolina Power & Light Company

METEOROLOGICAL FORECAST FORM

Date: November 17, 1992 Time Issued: 0900 EST

Issued By: _____ Received By: _____

Forecast Location: Robinson Nuclear Project

A) Next 1 Hour

- 1) Wind Direction: Sector SSW Deg. 200
- 2) Winds Should Remain (Steady; Shifting; Variable)
2a) Variation Should Be ± 10 Deg.
- 3) Wind Velocity: 4 to 6 (MPH)
- 4) Stability Class E
- 5) Precipitation Activity Will Be (None, Scattered, Steady)
- 6) Precipitation Type (Rain, Rainshowers, Thunderstorms, Ice, Snow)
- 7) Precipitation Intensity (Light, Moderate, Severe)

B) Next 3 Hours:

Winds: SSW 4-6 mph
Precipitation: None
Stability Class: E → D

C) Remarks: _____

CP&L

Carolina Power & Light Company

METEOROLOGICAL FORECAST FORM

Date: November 17, 1992 Time Issued: 1000 EST
Issued By: _____ Received By: _____
Forecast Location: Robinson Nuclear Project

A) Next 1 Hour

- 1) Wind Direction: Sector SSW Deg. 210
- 2) Winds Should Remain (Steady; Shifting; Variable)
2a) Variation Should Be ± 10 Deg.
- 3) Wind Velocity: 4 to 6 (MPH)
- 4) Stability Class D
- 5) Precipitation Activity Will Be (None, Scattered, Steady)
- 6) Precipitation Type (Rain, Rainshowers, Thunderstorms, Ice, Snow)
- 7) Precipitation Intensity (Light, Moderate, Severe)

B) Next 3 Hours:

Winds: SSW 4-6 mph
Precipitation: None
Stability Class: D

C) Remarks: _____

CP&L

Carolina Power & Light Company

METEOROLOGICAL FORECAST FORM

Date: November 17, 1992 Time Issued: 1100 EST

Issued By: _____ Received By: _____

Forecast Location: Robinson Nuclear Project

A) Next 1 Hour

1) Wind Direction: Sector SSW Deg. 210

2) Winds Should Remain (Steady; Shifting; Variable)
2a) Variation Should Be ± 10 Deg.

3) Wind Velocity: 4 to 6 (MPH)

4) Stability Class D

5) Precipitation Activity Will Be (None, Scattered, Steady)

6) Precipitation Type (Rain, Rainshowers, Thunderstorms, Ice, Snow)

7) Precipitation Intensity (Light, Moderate, Severe)

B) Next 3 Hours:

Winds: SSW 4-6 mph

Precipitation: None

Stability Class: D

C) Remarks: _____

CP&L

Carolina Power & Light Company

METEOROLOGICAL FORECAST FORM

Date: November 17, 1992 Time Issued: 1200 EST

Issued By: _____ Received By: _____

Forecast Location: Robinson Nuclear Project

A) Next 1 Hour

- 1) Wind Direction: Sector SSW Deg. 210
- 2) Winds Should Remain (Steady; Shifting; Variable)
2a) Variation Should Be ± 10 Deg.
- 3) Wind Velocity: 4 to 6 (MPH)
- 4) Stability Class D
- 5) Precipitation Activity Will Be (None, Scattered, Steady)
- 6) Precipitation Type (Rain, Rainshowers, Thunderstorms, Ice, Snow)
- 7) Precipitation Intensity (Light, Moderate, Severe)

B) Next 3 Hours:

Winds: SSW 4-6 mph

Precipitation: None

Stability Class: D

C) Remarks: _____

CP&L

Carolina Power & Light Company

METEOROLOGICAL FORECAST FORM

Date: November 17, 1992 Time Issued: 1300 EST

Issued By: _____ Received By: _____

Forecast Location: Robinson Nuclear Project

A) Next 1 Hour

1) Wind Direction: Sector SSW Deg. 205

2) Winds Should Remain (Steady; Shifting; Variable)
2a) Variation Should Be ± 10 Deg.

3) Wind Velocity: 4 to 6 (MPH)

4) Stability Class D

5) Precipitation Activity Will Be (None, Scattered, Steady)

6) Precipitation Type (Rain, Rainshowers, Thunderstorms, Ice, Snow)

7) Precipitation Intensity (Light, Moderate, Severe)

B) Next 3 Hours:

Winds: SSW 5-7 mph

Precipitation: None

Stability Class: D

C) Remarks: _____

CP&L

Carolina Power & Light Company

METEOROLOGICAL FORECAST FORM

Date: November 17, 1992 Time Issued: 1400 EST

Issued By: _____ Received By: _____

Forecast Location: Robinson Nuclear Project

A) Next 1 Hour

- 1) Wind Direction: Sector SW Deg. 215
- 2) Winds Should Remain (Steady; Shifting; Variable)
2a) Variation Should Be ± 10 Deg.
- 3) Wind Velocity: 4 to 6 (MPH)
- 4) Stability Class D
- 5) Precipitation Activity Will Be (None, Scattered, Steady)
- 6) Precipitation Type (Rain, Rainshowers, Thunderstorms, Ice, Snow)
- 7) Precipitation Intensity (Light, Moderate, Severe)

B) Next 3 Hours:

Winds: SW 5-7 mph
Precipitation: None
Stability Class: D

C) Remarks: _____

CP&L

Carolina Power & Light Company

METEOROLOGICAL FORECAST FORM

Date: November 17, 1992 Time Issued: 1500 EST

Issued By: _____ Received By: _____

Forecast Location: Robinson Nuclear Project

A) Next 1 Hour

1) Wind Direction: Sector SW Deg. 215

2) Winds Should Remain (Steady; Shifting; Variable)
2a) Variation Should Be ± 10 Deg.

3) Wind Velocity: 5 to 7 (MPH)

4) Stability Class D

5) Precipitation Activity Will Be (None, Scattered, Steady)

6) Precipitation Type (Rain, Rainshowers, Thunderstorms, Ice, Snow)

7) Precipitation Intensity (Light, Moderate, Severe)

B) Next 3 Hours:

Winds: SW 4-6 mph

Precipitation: Scattered Showers by the third hour

Stability Class: D → E

C) Remarks: _____

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ROBINSON NUCLEAR PROJECT DEPARTMENT

1992 EXERCISE

3.4A PRIMARY CHEMISTRY

CONTAINMENT ATMOSPHERE ACTIVITY

SAMPLE DOSE RATES

SOURCE TERMS

PRIMARY SYSTEM ACTIVITY

09:46 AM 09/29/92

PAGE 3.4A-1

NUCLIDE	07:30	07:45	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30	10:45	11:00	11:15	11:30	11:45
	NORMAL	NORMAL	NORMAL	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT
	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml
I-131	1.67E-03	1.67E-03	1.65E-03	1.64E-03	4.11E+00	1.02E+01	1.43E+01	2.23E+01	2.21E+01	2.20E+01	2.20E+01	2.19E+01	2.92E+02	2.91E+02	2.89E+02	2.88E+02	2.84E+02	2.81E+02
I-132	2.77E-03	2.77E-03	2.54E-03	2.33E-03	6.35E-01	1.53E+00	2.04E+00	3.13E+00	2.88E+00	2.65E+00	2.46E+00	2.26E+00	4.36E+01	4.03E+01	3.71E+01	3.42E+01	3.13E+01	2.87E+01
I-133	3.92E-03	3.92E-03	3.85E-03	3.79E-03	2.52E+00	6.25E+00	8.66E+00	1.35E+01	1.33E+01	1.32E+01	1.30E+01	1.29E+01	1.78E+02	1.76E+02	1.74E+02	1.71E+02	1.68E+02	1.65E+02
I-134	9.98E-03	9.98E-03	8.11E-03	6.59E-03	5.89E-01	1.35E+00	1.68E+00	2.53E+00	2.06E+00	1.68E+00	1.38E+00	1.12E+00	3.92E+01	3.20E+01	2.61E+01	2.13E+01	1.73E+01	1.40E+01
I-135	5.66E-03	5.66E-03	5.47E-03	5.28E-03	1.26E+00	3.11E+00	4.26E+00	6.63E+00	6.40E+00	6.22E+00	6.06E+00	5.88E+00	8.83E+01	8.58E+01	8.31E+01	8.07E+01	7.78E+01	7.51E+01
TOTAL I	2.40E-02	2.40E-02	2.16E-02	1.96E-02	9.12E+00	2.25E+01	3.09E+01	4.82E+01	4.68E+01	4.57E+01	4.50E+01	4.41E+01	6.41E+02	6.25E+02	6.09E+02	5.95E+02	5.79E+02	5.64E+02
I-131 EQ	3.47E-03	3.47E-03	3.38E-03	3.30E-03	4.93E+00	1.23E+01	1.71E+01	2.67E+01	2.64E+01	2.62E+01	2.62E+01	2.60E+01	3.49E+02	3.47E+02	3.45E+02	3.42E+02	3.38E+02	3.34E+02
KR-83M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
KR-85M	2.00E-02	2.00E-02	1.91E-02	1.82E-02	7.28E-02	1.53E-01	2.01E-01	3.03E-01	2.88E-01	2.76E-01	2.65E-01	2.54E-01	3.89E+00	3.73E+00	3.56E+00	3.41E+00	3.24E+00	3.09E+00
KR-85	2.12E-02	2.12E-02	2.10E-02	2.08E-02	7.09E-02	1.46E-01	1.95E-01	2.94E-01	2.91E-01	2.90E-01	2.90E-01	2.89E-01	3.59E+00	3.58E+00	3.56E+00	3.55E+00	3.51E+00	3.48E+00
KR-87	2.04E-02	2.04E-02	1.76E-02	1.52E-02	6.94E-02	1.44E-01	1.81E-01	2.69E-01	2.32E-01	2.01E-01	1.75E-01	1.52E-01	3.82E+00	3.32E+00	2.88E+00	2.50E+00	2.15E+00	1.86E+00
KR-88	2.85E-02	2.85E-02	2.65E-02	2.47E-02	1.45E-01	3.19E-01	4.19E-01	6.35E-01	5.91E-01	5.54E-01	5.20E-01	4.87E-01	8.48E+00	7.95E+00	7.43E+00	6.95E+00	6.46E+00	6.01E+00
KR-89	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-02	3.22E-02	2.20E-02	4.27E-02	1.20E-03	3.39E-05	9.61E-07	2.70E-08	1.38E+00	3.88E-02	1.08E-03	3.03E-05	8.38E-07	2.33E-08
XE-131M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-02	3.73E-02	5.19E-02	8.14E-02	8.06E-02	8.03E-02	8.03E-02	7.99E-02	1.06E+00	1.06E+00	1.05E+00	1.05E+00	1.04E+00	1.03E+00
XE-133M	9.07E-03	9.07E-03	8.97E-03	8.86E-03	4.60E-02	1.01E-01	1.37E-01	2.10E-01	2.08E-01	2.06E-01	2.06E-01	2.04E-01	2.65E+00	2.63E+00	2.61E+00	2.59E+00	2.56E+00	2.53E+00
XE-133	3.58E-01	3.58E-01	3.55E-01	3.51E-01	2.87E+00	6.63E+00	9.08E+00	1.40E+01	1.39E+01	1.38E+01	1.38E+01	1.37E+01	1.79E+02	1.79E+02	1.77E+02	1.77E+02	1.74E+02	1.73E+02
XE-135M	5.73E-03	5.73E-03	2.89E-03	1.46E-03	3.05E-02	6.01E-02	6.01E-02	8.99E-02	4.53E-02	2.30E-02	1.17E-02	5.93E-03	1.96E+00	9.94E-01	5.03E-01	2.55E-01	1.28E-01	6.46E-02
XE-135	9.40E-02	9.40E-02	9.15E-02	8.91E-02	2.23E-01	4.23E-01	5.48E-01	8.07E-01	7.85E-01	7.69E-01	7.55E-01	7.38E-01	9.69E+00	9.49E+00	9.27E+00	9.07E+00	8.81E+00	8.57E+00
XE-138	1.11E-02	1.11E-02	1.06E-02	1.00E-02	1.09E-01	2.53E-01	3.40E-01	5.22E-01	4.97E-01	4.75E-01	4.56E-01	4.36E-01	6.94E+00	6.65E+00	6.34E+00	6.06E+00	5.76E+00	5.47E+00
TOTAL NG	5.68E-01	5.68E-01	5.53E-01	5.39E-01	3.67E+00	8.29E+00	1.12E+01	1.73E+01	1.69E+01	1.67E+01	1.66E+01	1.64E+01	2.23E+02	2.18E+02	2.15E+02	2.12E+02	2.08E+02	2.05E+02
SR-89	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-02	4.87E-02	6.71E-02	1.05E-01	1.02E-01	9.97E-02	9.79E-02	9.57E-02	1.39E+00	1.36E+00	1.33E+00	1.30E+00	1.26E+00	1.23E+00
TE-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-02	8.40E-02	1.17E-01	1.83E-01	1.81E-01	1.80E-01	1.80E-01	1.79E-01	2.39E+00	2.38E+00	2.36E+00	2.35E+00	2.32E+00	2.29E+00
BA-140	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E-02	1.05E-01	1.46E-01	2.29E-01	2.27E-01	2.26E-01	2.26E-01	2.25E-01	2.99E+00	2.98E+00	2.97E+00	2.95E+00	2.92E+00	2.89E+00
ZR-97	4.00E-05	4.00E-05	3.58E-05	3.20E-05	3.62E-02	8.65E-02	1.14E-01	1.74E-01	1.55E-01	1.40E-01	1.26E-01	1.13E-01	2.47E+00	2.23E+00	2.00E+00	1.79E+00	1.60E+00	1.43E+00
CE-143	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-02	8.23E-02	1.11E-01	1.72E-01	1.62E-01	1.53E-01	1.45E-01	1.37E-01	2.34E+00	2.22E+00	2.09E+00	1.98E+00	1.85E+00	1.74E+00
ND-147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-02	4.13E-02	5.75E-02	9.02E-02	8.93E-02	8.90E-02	8.89E-02	8.85E-02	1.18E+00	1.17E+00	1.17E+00	1.16E+00	1.15E+00	1.14E+00
CS-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.56E-03	2.38E-02	3.32E-02	5.20E-02	5.15E-02	5.14E-02	5.14E-02	5.12E-02	6.78E-01	6.77E-01	6.73E-01	6.71E-01	6.64E-01	6.58E-01
CS-137	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.09E-03	7.70E-03	1.07E-02	1.68E-02	1.67E-02	1.66E-02	1.66E-02	1.66E-02	2.19E-01	2.19E-01	2.18E-01	2.17E-01	2.15E-01	2.13E-01
TOTAL	4.00E-05	4.00E-05	3.58E-05	3.20E-05	1.95E-01	4.79E-01	6.56E-01	1.02E+00	9.85E-01	9.55E-01	9.32E-01	9.06E-01	1.37E+01	1.32E+01	1.28E+01	1.24E+01	1.20E+01	1.16E+01
GRAND	5.92E-01	5.92E-01	5.74E-01	5.59E-01	1.30E+01	3.13E+01	4.28E+01	6.65E+01	6.47E+01	6.34E+01	6.25E+01	6.14E+01	8.77E+02	8.56E+02	8.36E+02	8.20E+02	7.99E+02	7.81E+02

PRIMARY SYSTEM ACTIVITY

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NUCLIDE	12:00	12:15	12:30	12:45	13:00	13:15	13:30	13:45	14:00	14:15
	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT
	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml
I-131	2.84E+02	2.58E+02	2.44E+02	2.08E+02	1.86E+02	1.61E+02	1.39E+02	1.25E+02	1.10E+02	1.04E+02
I-132	2.68E+01	2.26E+01	1.98E+01	1.56E+01	1.28E+01	1.02E+01	8.11E+00	6.74E+00	5.48E+00	4.81E+00
I-133	1.65E+02	1.49E+02	1.40E+02	1.18E+02	1.05E+02	8.98E+01	7.69E+01	6.87E+01	6.00E+01	5.66E+01
I-134	1.16E+01	8.66E+00	6.72E+00	4.63E+00	3.35E+00	2.34E+00	1.63E+00	1.19E+00	8.54E-01	6.59E-01
I-135	7.38E+01	6.54E+01	6.03E+01	5.01E+01	4.36E+01	3.66E+01	3.08E+01	2.70E+01	2.31E+01	2.14E+01
TOTAL I	5.62E+02	5.04E+02	4.71E+02	3.97E+02	3.51E+02	2.99E+02	2.56E+02	2.28E+02	1.99E+02	1.88E+02
I-131 EQ	3.36E+02	3.05E+02	2.88E+02	2.45E+02	2.19E+02	1.88E+02	1.62E+02	1.46E+02	1.28E+02	1.22E+02
KR-83M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
KR-85M	3.00E+00	2.62E+00	2.38E+00	1.95E+00	1.67E+00	1.38E+00	1.15E+00	9.91E-01	8.38E-01	7.65E-01
KR-85	3.51E+00	3.19E+00	3.02E+00	2.58E+00	2.31E+00	1.99E+00	1.72E+00	1.55E+00	1.37E+00	1.30E+00
KR-87	1.63E+00	1.30E+00	1.07E+00	7.87E-01	6.09E-01	4.53E-01	3.38E-01	2.64E-01	2.01E-01	1.66E-01
KR-88	5.70E+00	4.88E+00	4.33E+00	3.46E+00	2.90E+00	2.34E+00	1.89E+00	1.60E+00	1.32E+00	1.18E+00
KR-89	6.58E-10	2.18E-11	7.53E-13	2.50E-14	7.26E-16	1.85E-17	3.83E-19	6.47E-21	9.14E-23	1.06E-24
XE-131M	1.04E+00	9.42E-01	8.90E-01	7.60E-01	6.80E-01	5.86E-01	5.06E-01	4.56E-01	4.02E-01	3.82E-01
XE-133M	2.54E+00	2.31E+00	2.17E+00	1.85E+00	1.65E+00	1.42E+00	1.22E+00	1.10E+00	9.65E-01	9.15E-01
XE-133	1.74E+02	1.58E+02	1.49E+02	1.27E+02	1.14E+02	9.81E+01	8.47E+01	7.62E+01	6.71E+01	6.38E+01
XE-135M	3.32E-02	1.55E-02	7.50E-03	3.04E-03	1.30E-03	5.39E-04	2.24E-04	9.81E-05	4.20E-05	1.95E-05
XE-135	8.50E+00	7.59E+00	7.05E+00	5.91E+00	5.19E+00	4.39E+00	3.72E+00	3.29E+00	2.84E+00	2.66E+00
XE-138	5.30E+00	4.63E+00	4.20E+00	3.43E+00	2.94E+00	2.43E+00	2.01E+00	1.74E+00	1.47E+00	1.34E+00
TOTAL NG	2.05E+02	1.86E+02	1.74E+02	1.48E+02	1.32E+02	1.13E+02	9.72E+01	8.72E+01	7.65E+01	7.25E+01
SR-89	1.21E+00	1.09E+00	1.01E+00	8.44E-01	7.41E-01	6.27E-01	5.31E-01	4.70E-01	4.07E-01	3.79E-01
TE-132	2.31E+00	2.10E+00	1.98E+00	1.69E+00	1.51E+00	1.30E+00	1.12E+00	1.01E+00	8.85E-01	8.40E-01
BA-140	2.92E+00	2.65E+00	2.51E+00	2.14E+00	1.92E+00	1.65E+00	1.43E+00	1.29E+00	1.13E+00	1.08E+00
ZR-97	1.30E+00	1.07E+00	9.12E-01	6.97E-01	5.59E-01	4.32E-01	3.35E-01	2.71E-01	2.14E-01	1.83E-01
CE-143	1.67E+00	1.44E+00	1.29E+00	1.04E+00	8.84E-01	7.20E-01	5.89E-01	5.02E-01	4.19E-01	3.77E-01
ND-147	1.15E+00	1.04E+00	9.86E-01	8.42E-01	7.53E-01	6.49E-01	5.61E-01	5.05E-01	4.45E-01	4.23E-01
CS-134	6.64E-01	6.04E-01	5.71E-01	4.88E-01	4.37E-01	3.77E-01	3.26E-01	2.94E-01	2.59E-01	2.46E-01
CS-137	2.15E-01	1.95E-01	1.85E-01	1.58E-01	1.41E-01	1.22E-01	1.05E-01	9.50E-02	8.38E-02	7.97E-02
TOTAL	1.14E+01	1.02E+01	9.44E+00	7.90E+00	6.94E+00	5.88E+00	4.99E+00	4.43E+00	3.84E+00	3.61E+00
GRAND	7.78E+02	7.00E+02	6.54E+02	5.53E+02	4.90E+02	4.18E+02	3.58E+02	3.20E+02	2.80E+02	2.64E+02

ROBINSON PROJECT ANNUAL EXERCISE 1992

CONTAINMENT ATMOSPHERE ACTIVITY

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NUCLIDE	07:30	07:45	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30	10:45	11:00	11:15	11:30	11:45
	CI/M3	CI/M3	CI/M3	CI/M3	CI/M3	CI/M3	CI/M3	CI/M3	CI/M3	CI/M3	CI/M3	CI/M3	CI/M3	CI/M3	CI/M3	CI/M3	CI/M3	CI/M3
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.60E-06	9.14E-06	1.37E-05	1.82E-05	2.27E-05	8.27E-05	1.42E-04	2.02E-04	2.61E-04	3.19E-04	3.77E-04
I-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.45E-07	1.19E-06	1.65E-06	2.03E-06	2.35E-06	1.11E-05	1.86E-05	2.48E-05	3.00E-05	3.43E-05	3.76E-05
I-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E-06	5.50E-06	8.16E-06	1.08E-05	1.33E-05	4.98E-05	8.56E-05	1.21E-04	1.55E-04	1.88E-04	2.20E-04
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.21E-07	8.51E-07	1.04E-06	1.14E-06	1.17E-06	9.02E-06	1.40E-05	1.69E-05	1.82E-05	1.85E-05	1.81E-05
I-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-06	2.65E-06	3.86E-06	5.00E-06	6.08E-06	2.41E-05	4.11E-05	5.72E-05	7.23E-05	8.64E-05	9.96E-05
TOTAL	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.91E-06	1.93E-05	2.84E-05	3.71E-05	4.56E-05	1.77E-04	3.02E-04	4.21E-04	5.36E-04	6.46E-04	7.52E-04
KR-83M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
KR-85M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.22E-07	1.19E-06	1.71E-06	2.19E-06	2.63E-06	1.05E-05	1.78E-05	2.44E-05	3.05E-05	3.60E-05	4.09E-05
KR-85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.04E-07	1.20E-06	1.80E-06	2.40E-06	2.99E-06	1.04E-05	1.77E-05	2.50E-05	3.23E-05	3.96E-05	4.67E-05
KR-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.53E-07	9.59E-07	1.25E-06	1.45E-06	1.58E-06	9.24E-06	1.49E-05	1.89E-05	2.16E-05	2.33E-05	2.41E-05
KR-88	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-06	2.44E-06	3.44E-06	4.30E-06	5.04E-06	2.22E-05	3.72E-05	5.02E-05	6.15E-05	7.11E-05	7.92E-05
KR-89	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.79E-08	5.71E-09	2.80E-10	1.23E-11	5.10E-13	2.84E-06	1.85E-07	9.04E-09	3.95E-10	1.63E-11	6.49E-13
XE-131M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-07	3.33E-07	4.98E-07	6.63E-07	8.27E-07	3.01E-06	5.19E-06	7.35E-06	9.50E-06	1.16E-05	1.37E-05
XE-133M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.33E-07	8.59E-07	1.28E-06	1.70E-06	2.11E-06	7.55E-06	1.29E-05	1.83E-05	2.36E-05	2.87E-05	3.38E-05
XE-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.89E-05	5.74E-05	8.58E-05	1.14E-04	1.42E-04	5.11E-04	8.77E-04	1.24E-03	1.60E-03	1.96E-03	2.31E-03
XE-135M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-07	1.88E-07	1.44E-07	9.78E-08	6.24E-08	4.06E-06	4.13E-06	3.15E-06	2.14E-06	1.36E-06	8.31E-07
XE-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-06	3.25E-06	4.77E-06	6.23E-06	7.64E-06	2.74E-05	4.65E-05	6.47E-05	8.22E-05	9.89E-05	1.15E-04
XE-138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-06	2.05E-06	2.95E-06	3.77E-06	4.51E-06	1.86E-05	3.15E-05	4.33E-05	5.41E-05	6.37E-05	7.24E-05
TOTAL	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.56E-05	6.99E-05	1.04E-04	1.37E-04	1.70E-04	6.27E-04	1.07E-03	1.50E-03	1.92E-03	2.33E-03	2.74E-03

ROBINSON PROJECT ANNUAL EXERCISE 1992

CONTAINMENT ATMOSPHERE ACTIVITY

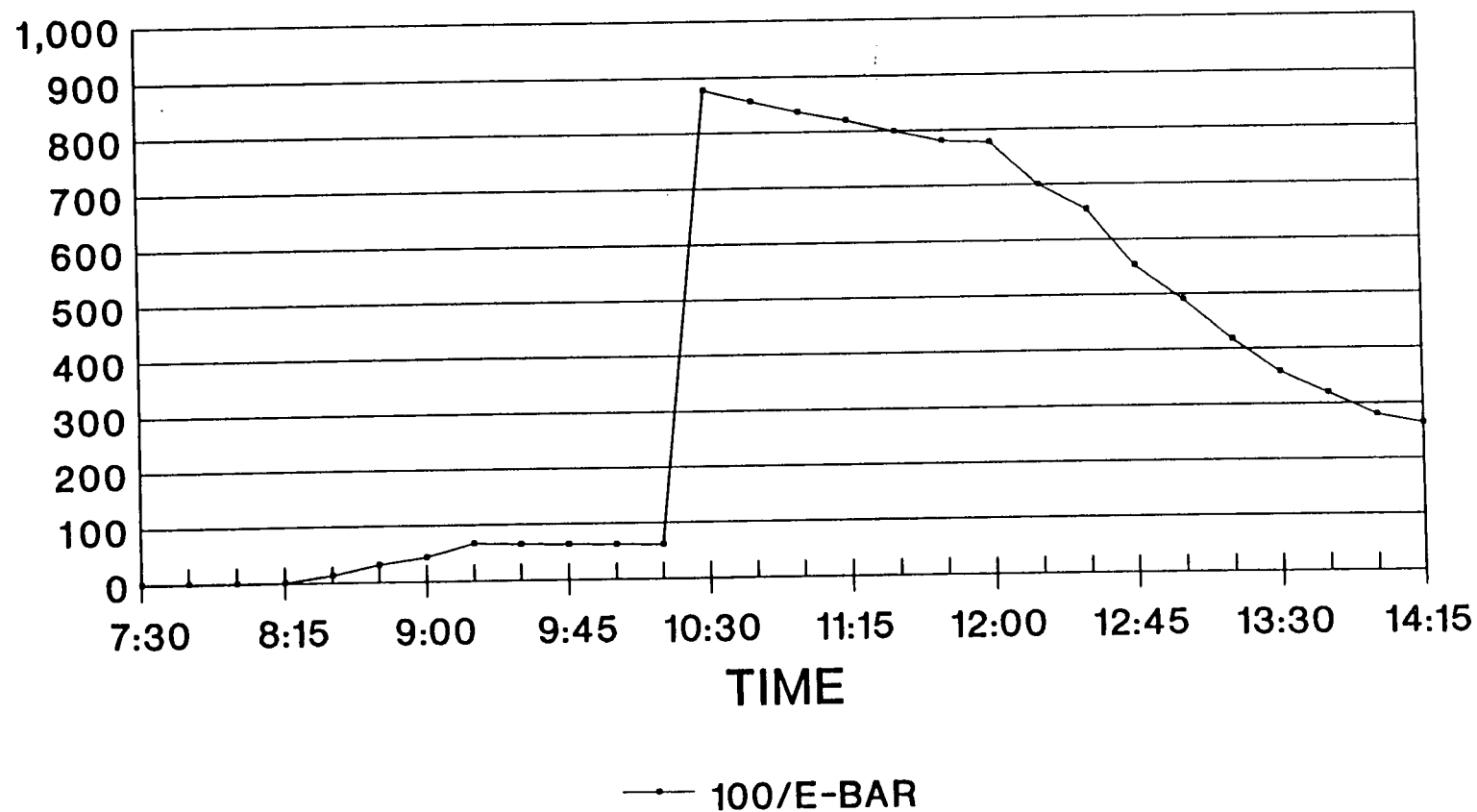
09:46 AM

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NUCLIDE	12:00	12:15	12:30	12:45	13:00	13:15	13:30	13:45	14:00	14:15
	CI/M3	CI/M3	CI/M3	CI/M3	CI/M3	CI/M3	CI/M3	CI/M3	CI/M3	CI/M3
I-131	4.35E-04	4.87E-04	1.05E-02	1.91E-02	2.67E-02	3.33E-02	3.90E-02	4.41E-02	4.86E-02	5.28E-02
I-132	4.04E-05	4.20E-05	8.53E-04	1.43E-03	1.85E-03	2.13E-03	2.31E-03	2.42E-03	2.46E-03	2.48E-03
I-133	2.53E-04	2.81E-04	6.03E-03	1.09E-02	1.51E-02	1.86E-02	2.17E-02	2.43E-02	2.66E-02	2.87E-02
I-134	1.72E-05	1.59E-05	2.89E-04	4.28E-04	4.89E-04	4.98E-04	4.76E-04	4.40E-04	3.96E-04	3.52E-04
I-135	1.12E-04	1.23E-04	2.60E-03	4.59E-03	6.27E-03	7.62E-03	8.69E-03	9.57E-03	1.03E-02	1.09E-02
TOTAL	8.57E-04	9.49E-04	2.03E-02	3.64E-02	5.04E-02	6.22E-02	7.21E-02	8.08E-02	8.83E-02	9.52E-02
KR-83M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
KR-85M	4.55E-05	4.91E-05	1.03E-03	1.79E-03	2.41E-03	2.88E-03	3.24E-03	3.53E-03	3.74E-03	3.91E-03
KR-85	5.39E-05	6.05E-05	1.30E-03	2.36E-03	3.32E-03	4.14E-03	4.84E-03	5.48E-03	6.05E-03	6.58E-03
KR-87	2.44E-05	2.40E-05	4.61E-04	7.26E-04	8.84E-04	9.57E-04	9.74E-04	9.58E-04	9.18E-04	8.69E-04
KR-88	8.62E-05	9.10E-05	1.87E-03	3.18E-03	4.18E-03	4.90E-03	5.38E-03	5.72E-03	5.92E-03	6.04E-03
KR-89	2.53E-14	9.78E-16	3.46E-16	2.30E-17	1.15E-18	5.00E-20	2.00E-21	7.64E-23	2.86E-24	1.06E-25
XE-131M	1.59E-05	1.78E-05	3.84E-04	6.96E-04	9.76E-04	1.22E-03	1.42E-03	1.61E-03	1.78E-03	1.93E-03
XE-133M	3.90E-05	4.36E-05	9.37E-04	1.70E-03	2.37E-03	2.95E-03	3.44E-03	3.88E-03	4.27E-03	4.63E-03
XE-133	2.67E-03	2.99E-03	6.44E-02	1.17E-01	1.63E-01	2.04E-01	2.38E-01	2.69E-01	2.96E-01	3.22E-01
XE-135M	4.95E-07	2.86E-07	3.23E-06	2.91E-06	2.03E-06	1.26E-06	7.40E-07	4.20E-07	2.33E-07	1.27E-07
XE-135	1.30E-04	1.43E-04	3.04E-03	5.42E-03	7.45E-03	9.12E-03	1.05E-02	1.17E-02	1.26E-02	1.35E-02
XE-138	8.04E-05	8.67E-05	1.81E-03	3.15E-03	4.24E-03	5.07E-03	5.69E-03	6.18E-03	6.53E-03	6.82E-03
TOTAL	3.14E-03	3.50E-03	7.53E-02	1.36E-01	1.89E-01	2.35E-01	2.74E-01	3.08E-01	3.38E-01	3.67E-01

100/E-BAR VALUES

NOV 17, 1992



ANNUAL EXERCISE

3,4A-4a

ROBINSON PROJECT ANNUAL EXERCISE 1992

PRIMARY SAMPLE EXPOSURE RATES

	07:30	07:45	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15
UNDILUTED & UNSHIELDED	8	8	7	6	1443	3505	4722	7311	6871	6522	6238	5963
UNDILUTED & SHIELDED	0	0	0	0	1	3	4	6	6	5	5	5

PASS LIQUID SAMPLE (mR/hr on Contact)

	07:30	07:45	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15
UNDILUTED & UNSHIELDED	2	2	2	2	444	1079	1453	2249	2114	2007	1919	1835
UNDILUTED & SHIELDED	0	0	0	0	0	0	0	0	0	0	0	0
DILUTED 1000:1 & UNSHIELDED	0	0	0	0	1	2	2	3	3	3	3	3
DILUTED 1000:1 & SHIELDED	0	0	0	0	0	0	0	0	0	0	0	0

STRIPPED GAS SAMPLE REGULAR & PASS (mR/hr on contact)

	07:30	07:45	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15
UNDILUTED & UNSHIELDED	0	0	0	0	0	0	1	1	1	1	1	1
UNDILUTED & SHIELDED	0	0	0	0	0	0	0	0	0	0	0	0
DILUTED 1000:1 & UNSHIELDED	0	0	0	0	0	0	0	0	0	0	0	0
DILUTED 1000:1 & SHIELDED	0	0	0	0	0	0	0	0	0	0	0	0

09:46 AM 09/29/92

PAGE 3.4A-5

PRIMARY SAMPLE EXPOSURE RATES

PAGE 3.4A-6

[illegible]

ROBINSON PROJECT ANNUAL EXERCISE 1992

PRIMARY SAMPLE EXPOSURE RATES

PAGE 3.4A-7

	13:30	13:45	14:00	14:15
UNDILUTED & UNSHIELDED	35865	30185	26551	22874
UNDILUTED & SHIELDED	29	24	21	19

PASS LIQUID SAMPLE (mR/hr on Contact)

	11035	9288	8170	7038
UNDILUTED & UNSHIELDED	1	1	1	1
UNDILUTED & SHIELDED	16	13	12	10
DILUTED 1000:1 & UNSHIELDED	0	0	0	0
DILUTED 1000:1 & SHIELDED				

STRIPPED GAS SAMPLE REGULAR & PASS (mR/hr on contact)

	6	5	5	4
UNDILUTED & UNSHIELDED	0	0	0	0
UNDILUTED & SHIELDED	0	0	0	0
DILUTED 1000:1 & UNSHIELDED	0	0	0	0
DILUTED 1000:1 & SHIELDED				

														09:58 AM	09/29/92	PAGE 3.4A-8	
SOURCE TERMS:	07:30	07:45	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30	10:45	11:00	11:15	
NG RELEASE RATE (CI/SEC)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-03	3.52E-03	4.95E-03	
I RELEASE RATE (CI/SEC)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.84E-04	9.97E-04	1.39E-03	
PART RELEASE RATE (CI/SEC)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.34E-05	1.43E-04	2.01E-04	

ROBINSON PROJECT ANNUAL EXERCISE 1992 SOURCE TERM

									09:58 AM 09/29/92	PAGE 3.4A-9		
SOURCE TERMS:	11:30	11:45	12:00	12:15	12:30	12:45	13:00	13:15	13:30	13:45	14:00	14:15
NG RELEASE RATE (CI/SEC)	6.34E-03	7.71E-03	9.05E-03	1.04E-02	2.32E-02	4.97E-01	8.97E-01	1.25E+00	1.55E+00	1.81E+00	2.04E+00	2.24E+00
I RELEASE RATE (CI/SEC)	1.77E-03	2.13E-03	2.49E-03	2.83E-03	6.27E-03	1.34E-01	2.40E-01	3.33E-01	4.11E-01	4.76E-01	5.34E-01	5.83E-01
PART RELEASE RATE (CI/SEC)	2.58E-04	3.14E-04	3.68E-04	4.23E-04	9.42E-04	1.92E-02	3.45E-02	4.82E-02	5.98E-02	6.98E-02	7.86E-02	8.64E-02

CONFIDENTIAL

CAROLINA POWER & LIGHT COMPANY
ROBINSON NUCLEAR PROJECT DEPARTMENT

1992 EXERCISE

3.4B RELEASE INFORMATION

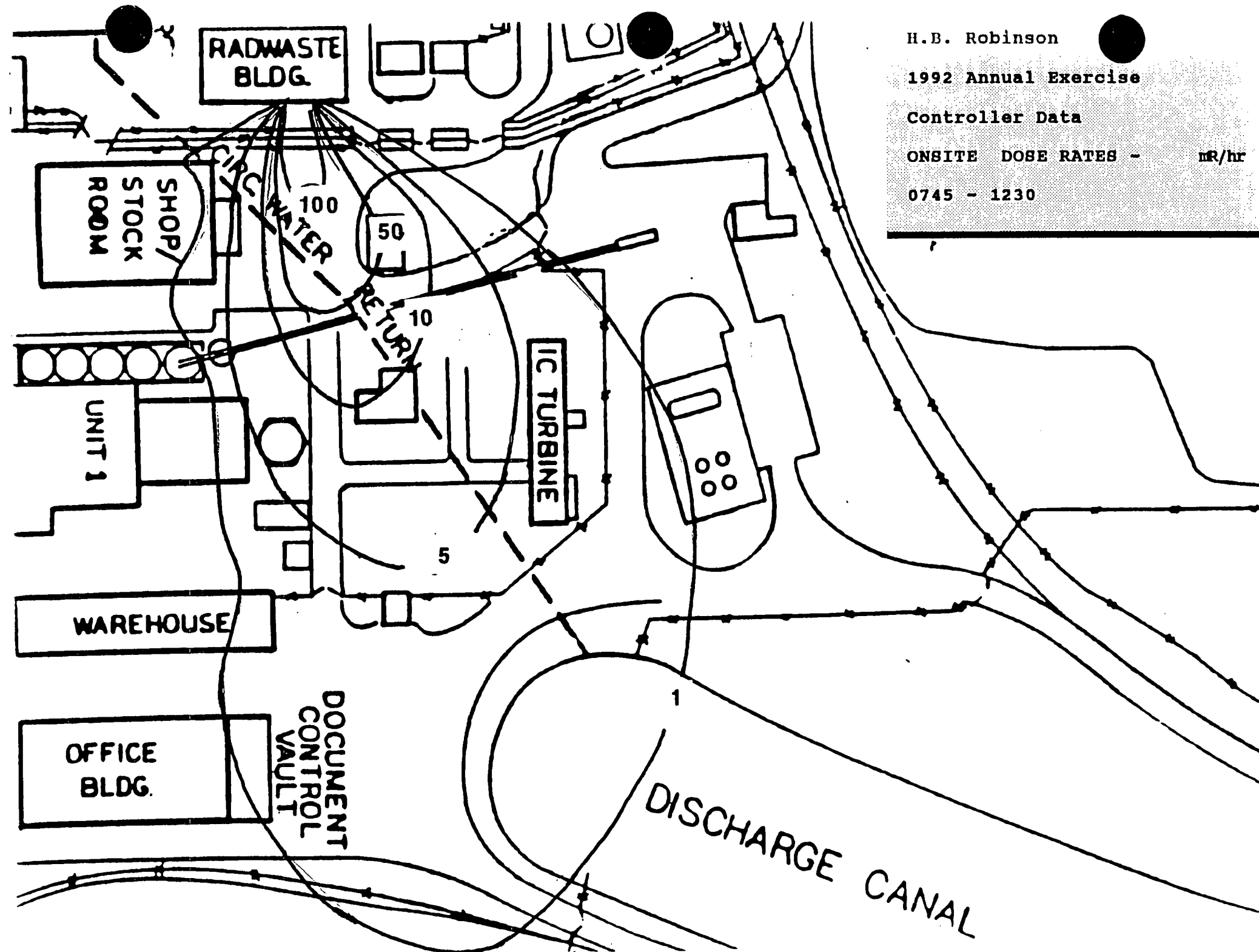
H.B. Robinson

1992 Annual Exercise

Controller Data

ONSITE DOSE RATES - mR/hr

0745 - 1230

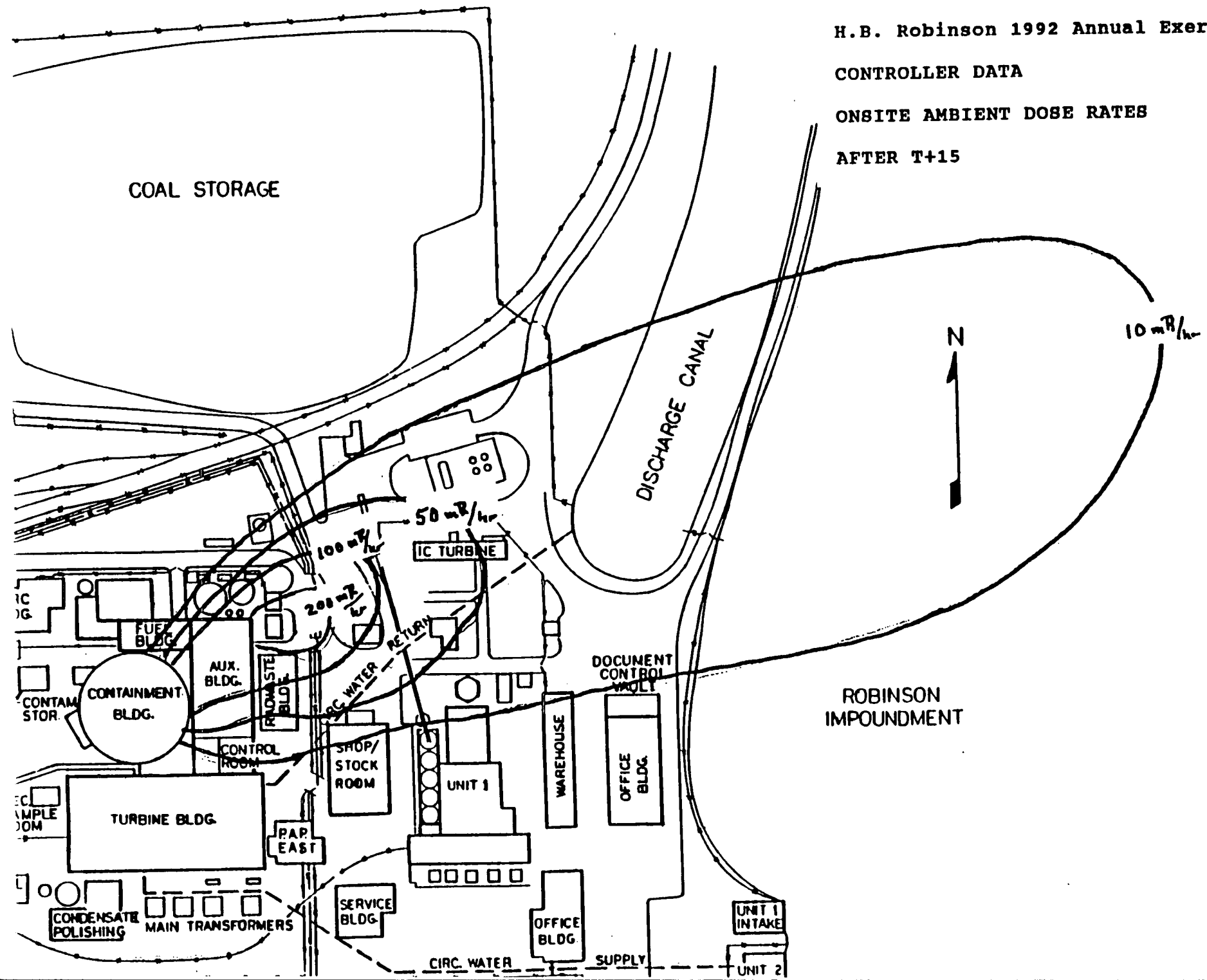


H.B. Robinson 1992 Annual Exercise

CONTROLLER DATA

ONSITE AMBIENT DOSE RATES

AFTER T+15

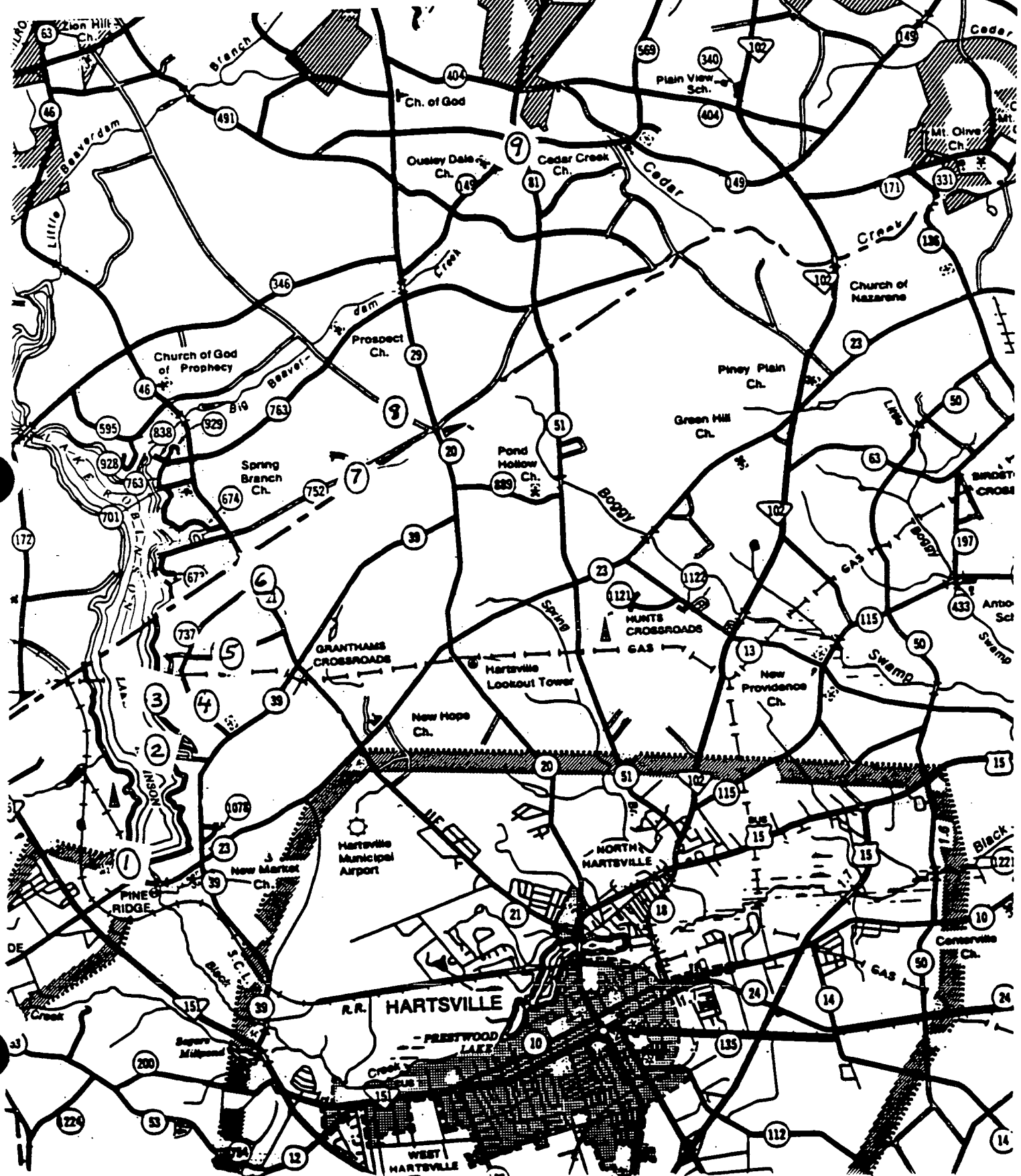




10
Carnegie
Ch.

AFTER T+45

Offsite Sampling Points



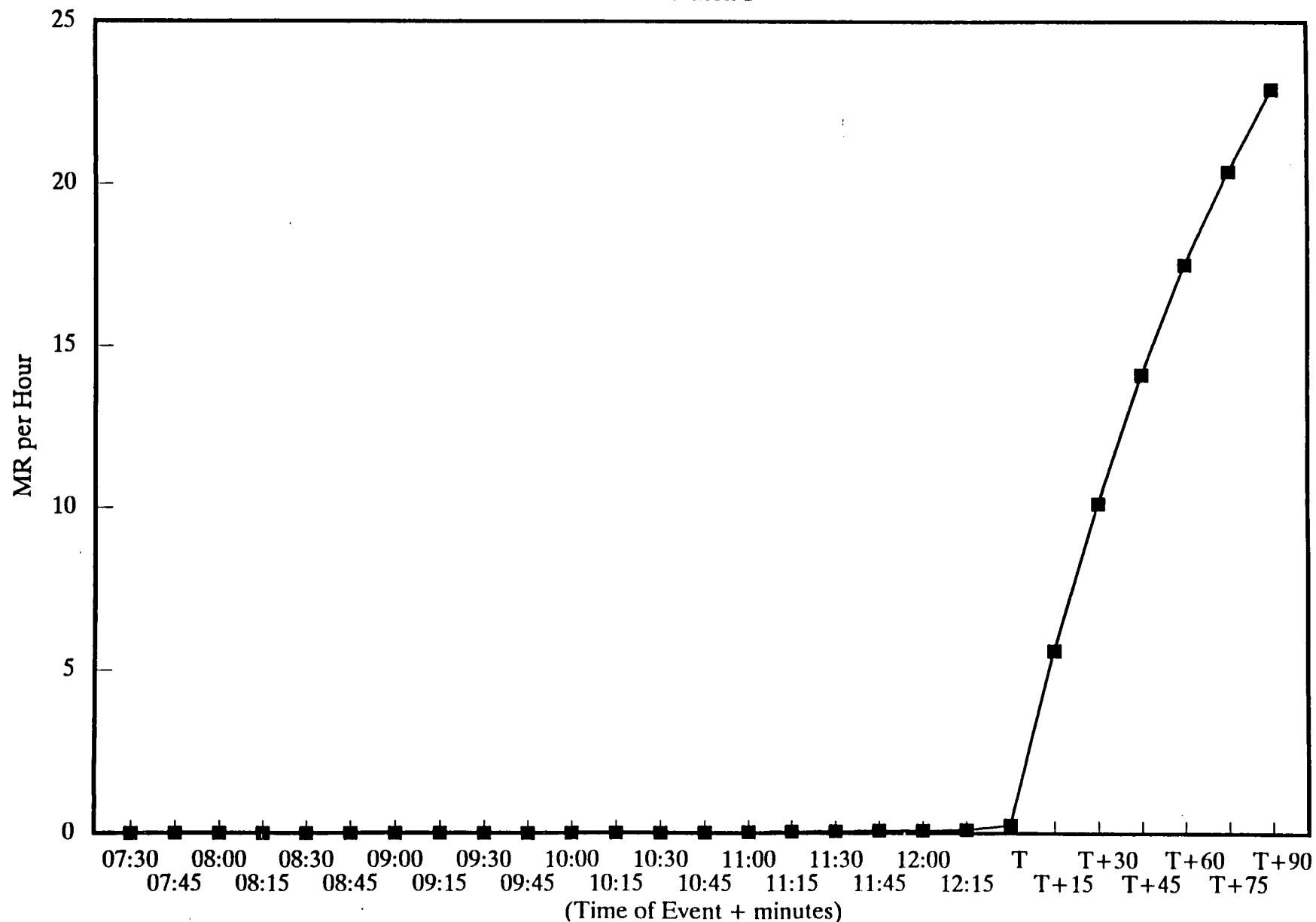
ROBINSON ANNUAL EXERCISE
11/17/92

Offsite Sampling Points

#	Description	Distance (Downwind)	Degrees (from plume)
1.	Beginning of the Discharge Canal	0.2	0
2.	Atkinson's Landing	1.3	4
3.	Shady Rest Landing	1.6	0
4.	Secondary Road 737, 0.5 mi. NW of SR 39	2.0	0
5.	SR 1198, (0.4 mi. E. SR 737).	2.5	0
6.	SR 737 at SR 21 (Hicks Grocery)	3.3	3
7.	SR 752 at spur road.	4.7	1
8.	On dirt road 0.5 mi. NW of intersection SR 752 and SR 29,20 (at county line)	5.5	0
9.	SR 149 at SR 81	8.5	0

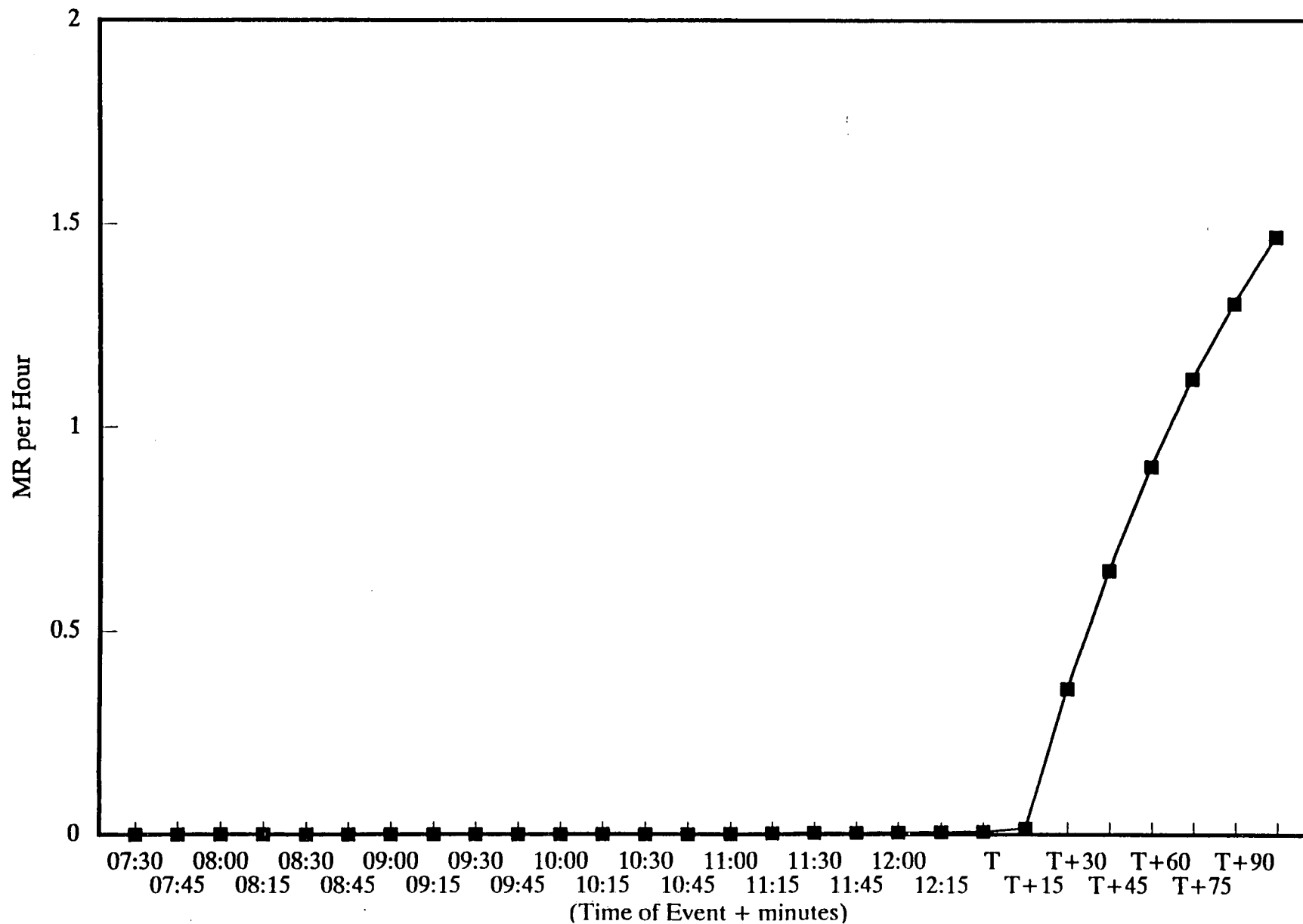
AMBIENT DOSE RATES

Position 1



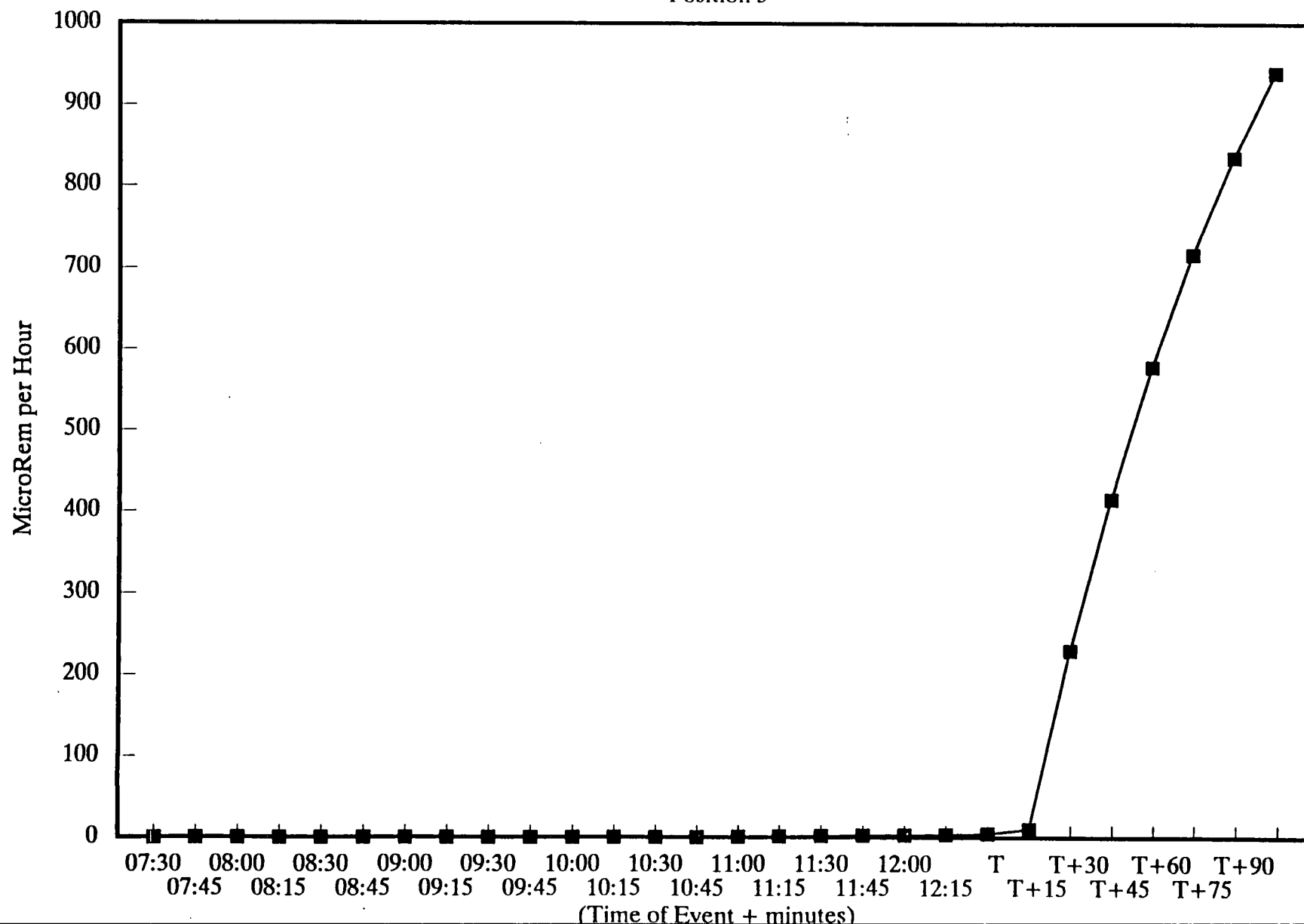
AMBIENT DOSE RATES

Position 2



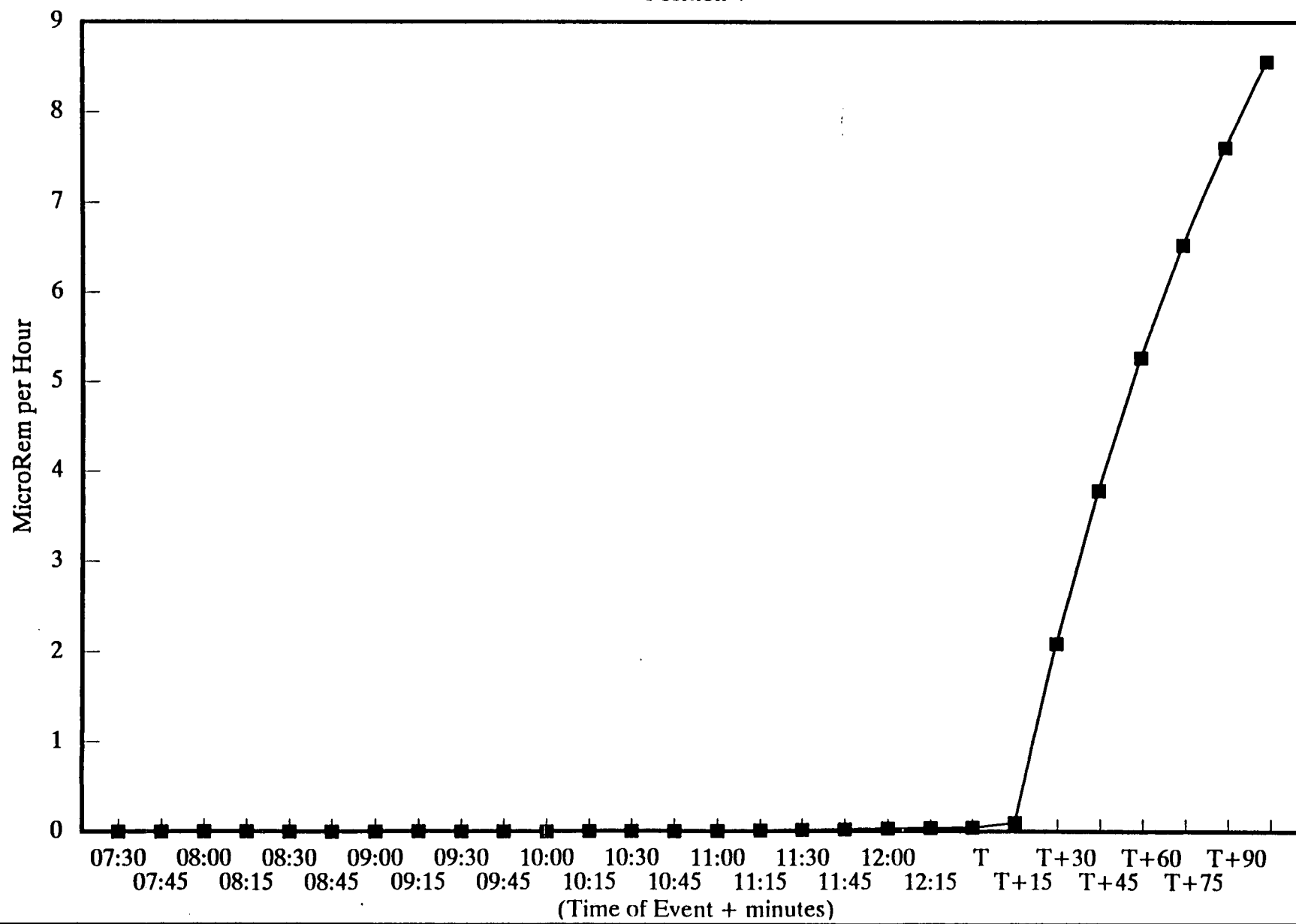
AMBIENT DOSE RATES

Position 3



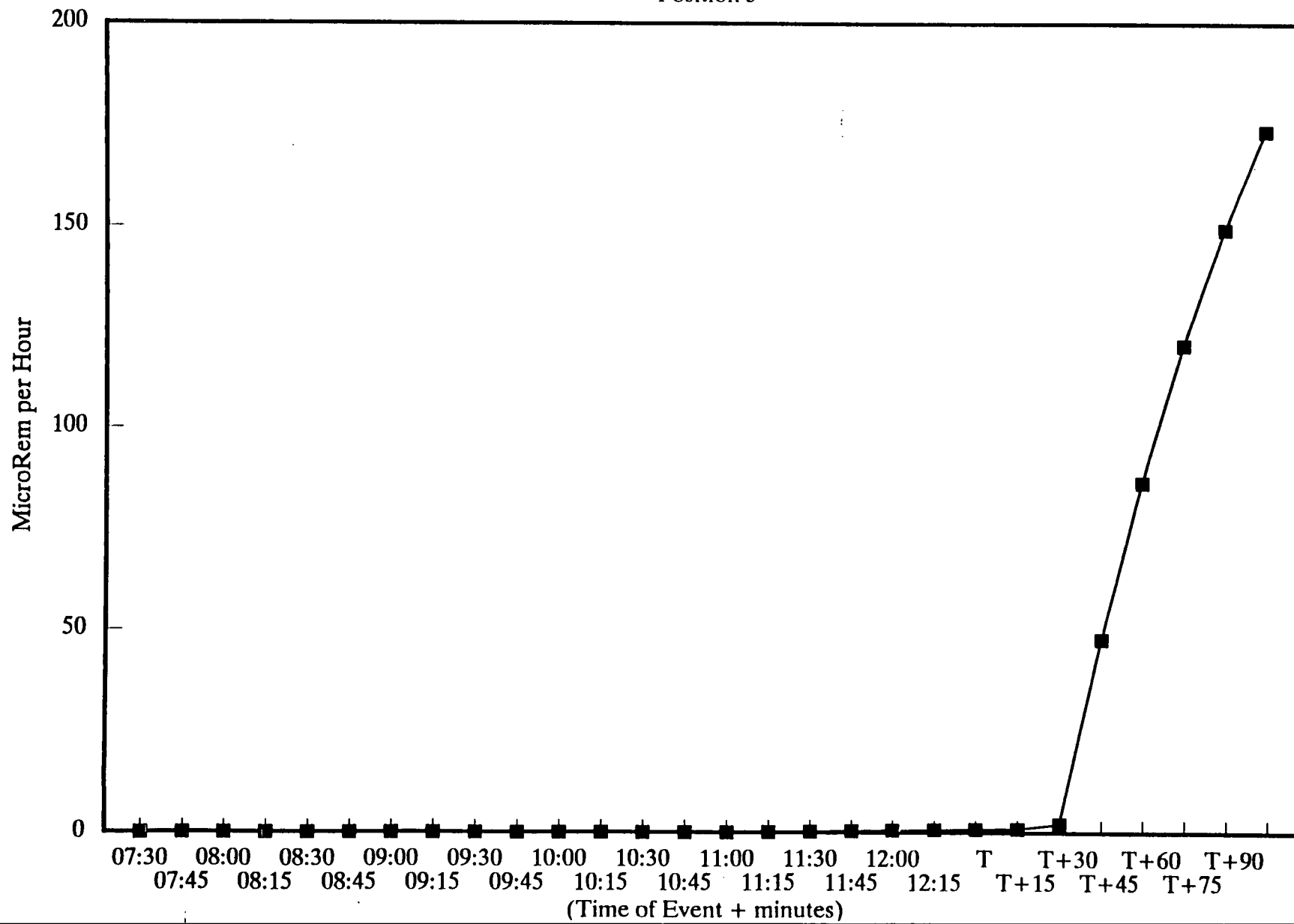
AMBIENT DOSE RATES

Position 4



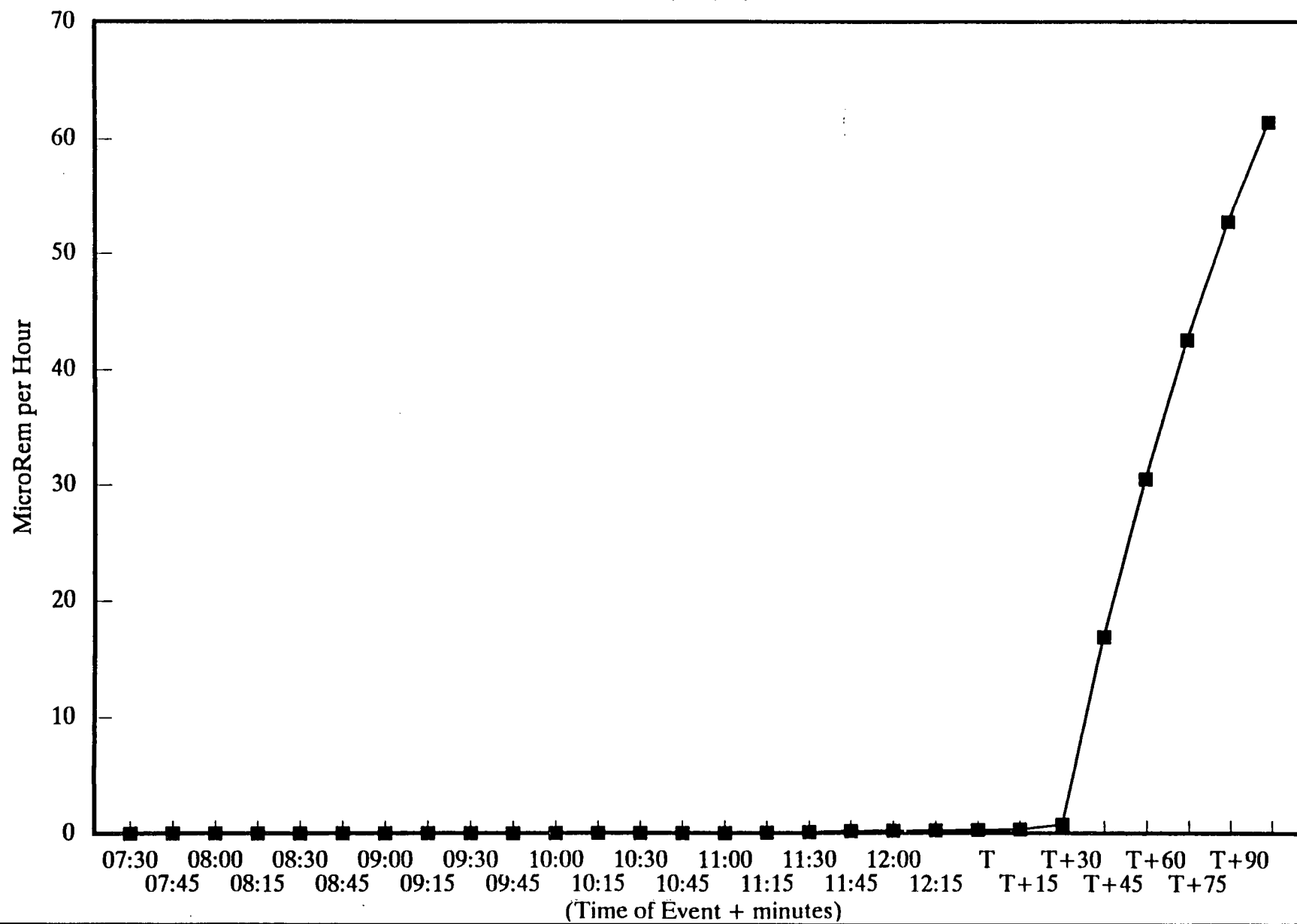
AMBIENT DOSE RATES

Position 5



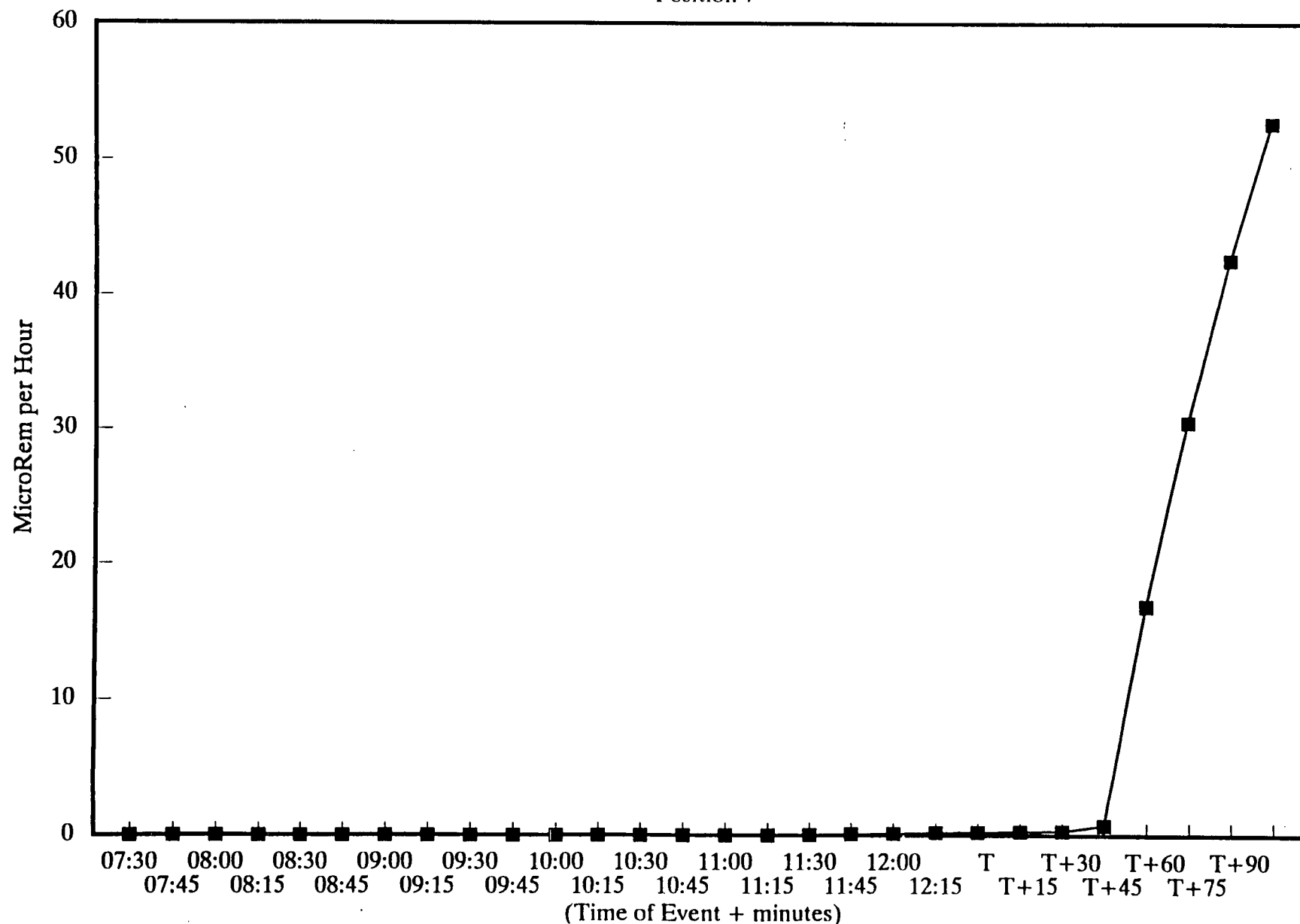
AMBIENT DOSE RATES

Position 6



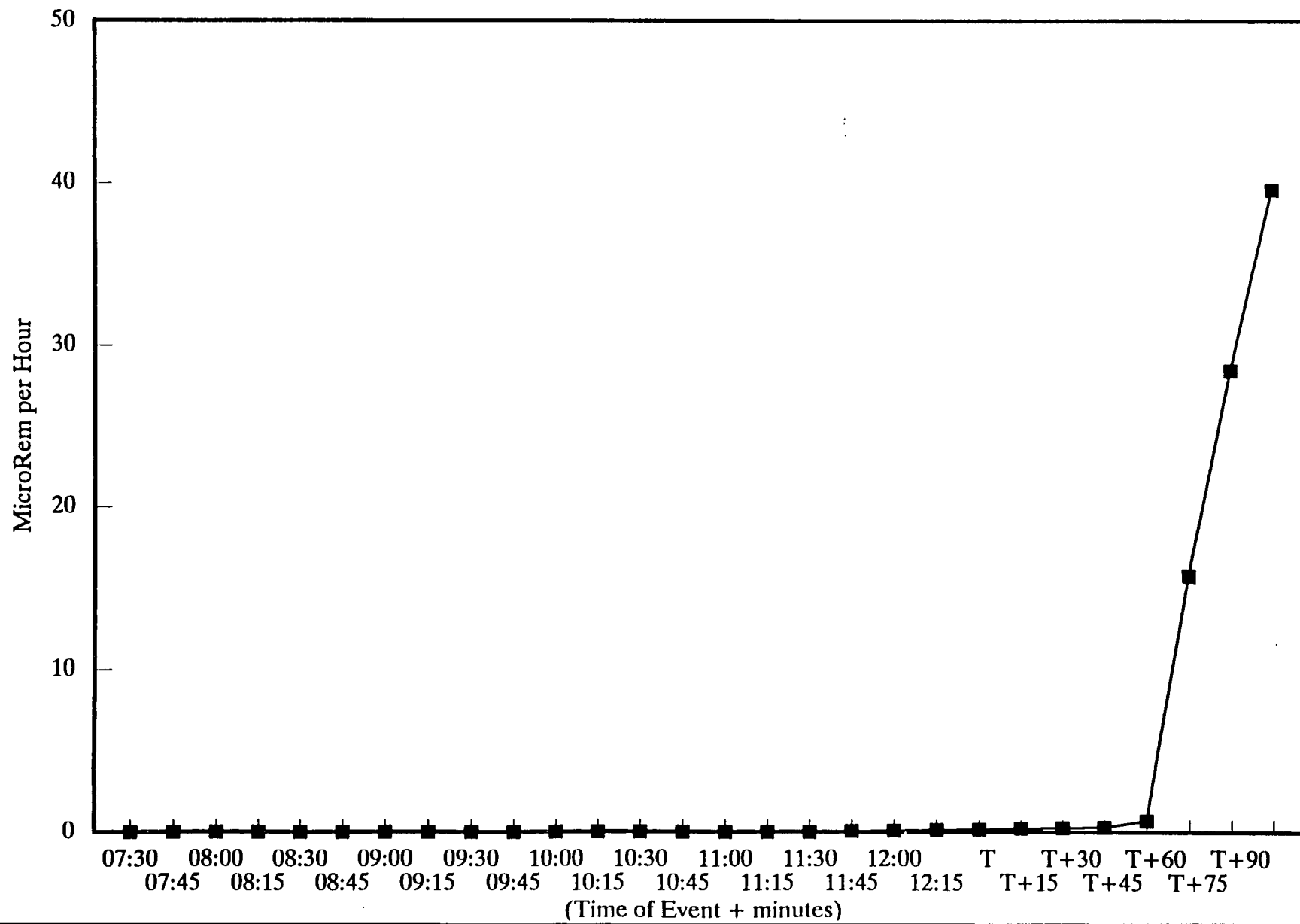
AMBIENT DOSE RATES

Position 7



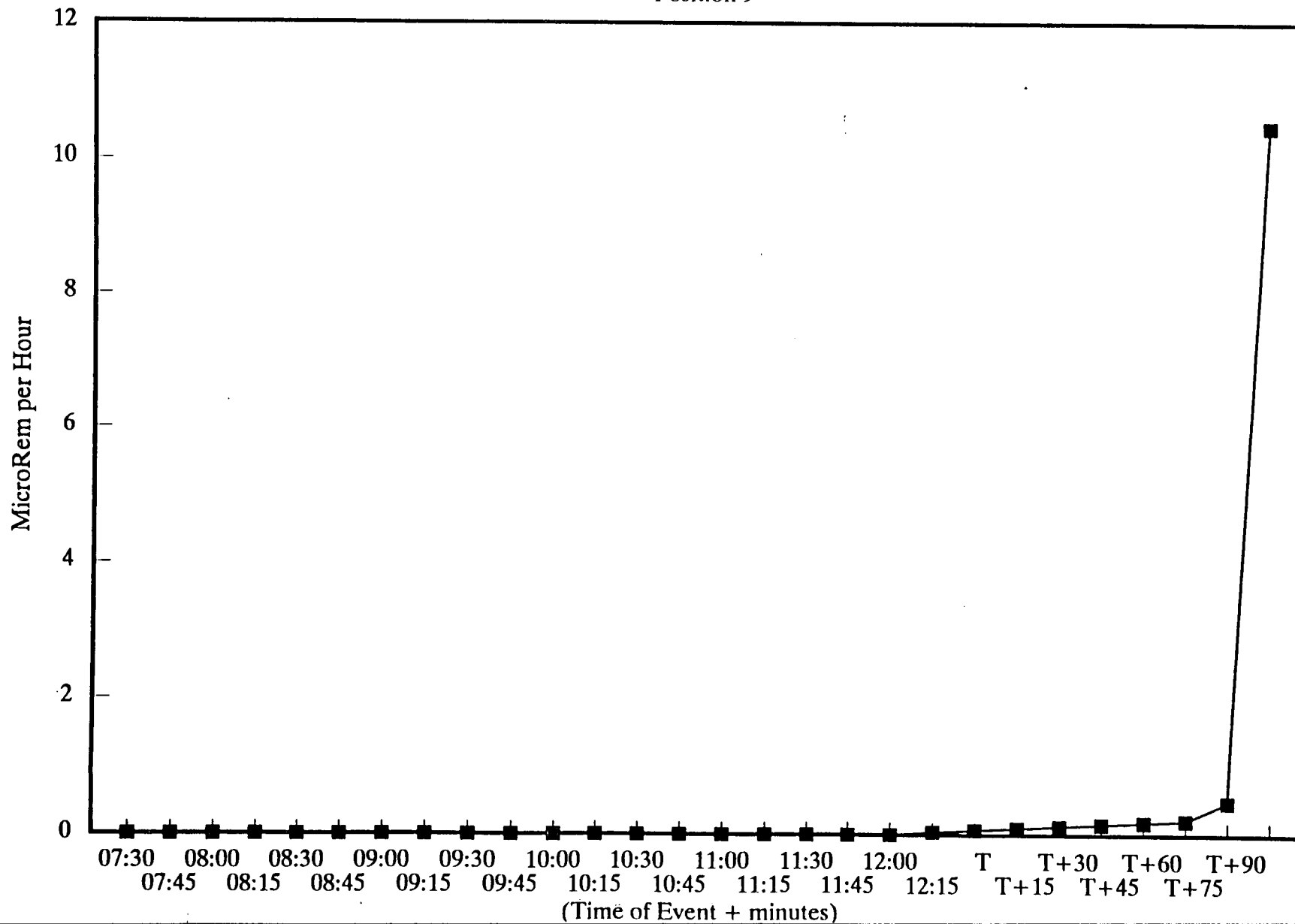
AMBIENT RADIATION LEVELS

Position 8



AMBIENT RADIATION LEVELS

Position 9



ROBINSON ANNUAL EXERCISE NOVEMBER 17, 1992 OFFSITE RELEASE BY SAMPLE POINT

SAMPLE POINT 01

AMBIENT RADIATION READINGS									CONTAMINATION READINGS			OFF-SITE LABORATORY DATA					
1 METER ABOVE SURFACE					6" ABOVE SURFACE				READINGS MADE OUTSIDE PLUME			CONTAMINATION SAMPLE RESULTS					
DRILL TIME	Dose Rate	Dose Rate	LUD-19	HP-210	Dose Rate	Dose Rate	LUD-19	HP-210	IODINE	PART.	VEGETAT'N	IODINE	PART.	IODINE	IODINE	PARTIC	TLD
	CW	OW	D/R	C/R	CW	OW	D/R	C/R	AIRBORNE	AIRBORNE	SAMPLE	AIRBORNE	AIRBORNE	SURFACE	VEGETAT'N	VEG	DOSE
	mR/hr	mR/hr	uR/hr	cpm				cpm	cpm/cfm	cpm/cfm	mR/hr	uCi/cc	uCi/cc	uCi/m^2	pCi/g	pCi/g	mRem
07:30	0	0.0	0.0	0.0	0	0	0	0	0.0	0.0	contact	0.00E+00	0.00E+00	0.00	0	0	0.0
07:45	3	4	2516	3019	2	3	1761	2113	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:00	3	4	2516	3019	2	3	1761	2113	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.6
08:15	3	4	2516	3019	2	3	1761	2113	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	1.3
08:30	3	4	2516	3019	2	3	1761	2113	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	1.9
08:45	3	4	2516	3019	2	3	1761	2113	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	2.5
09:00	3	4	2516	3019	2	3	1761	2113	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	3.1
09:15	3	4	2516	3019	2	3	1761	2113	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	3.8
09:30	3	4	2516	3019	2	3	1761	2113	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	4.4
09:45	3	4	2516	3019	2	3	1761	2113	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	5.0
10:00	3	4	2516	3019	2	3	1761	2113	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	5.7
10:15	3	4	2516	3019	2	3	1761	2113	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	6.3
10:30	3	4	2516	3019	2	3	1761	2113	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	6.9
10:45	3	4	2539	3047	2	3	1777	2133	0.0	0.3	0.0	1.91E-10	2.73E-09	0.00	0	0	7.5
11:00	3	4	2555	3067	2	3	1789	2147	0.0	0.5	0.0	3.26E-10	4.68E-09	0.00	0	0	8.2
11:15	3	4	2572	3086	2	3	1800	2160	0.0	0.7	0.0	4.55E-10	6.59E-09	0.00	0	0	8.8
11:30	3	4	2587	3105	2	3	1811	2173	0.1	0.8	0.0	5.79E-10	8.45E-09	0.00	0	0	9.5
11:45	3	4	2603	3123	2	3	1822	2186	0.1	1.0	0.0	6.98E-10	1.03E-08	0.00	0	0	10.1
12:00	3	4	2618	3141	2	3	1832	2199	0.1	1.2	0.0	8.13E-10	1.20E-08	0.00	0	0	10.8
12:15	3	4	2633	3159	2	3	1843	2212	0.1	1.4	0.0	9.26E-10	1.38E-08	0.00	0	0	11.4
T	3	4	2777	3332	2	3	1944	2332	0.2	3.1	0.0	2.05E-09	3.08E-08	0.00	0	0	12.1
T+15	8	12	8113	9736	7	10.7	7256.3	8707.5	4.4	62.7	0.0	4.39E-08	6.27E-07	0.00	0	0	12.8
T+30	13	19	12614	15136	13	19.2	13090.1	15708.1	7.9	113.0	0.0	7.86E-08	1.13E-06	0.00	1	0	14.8
T+45	17	24	16595	19914	18	26.8	18250.8	21900.9	10.9	157.5	0.0	1.09E-07	1.58E-06	0.00	4	0	18.0
T+60	17	25.7	17467.0	17467.0	23	33.3	22642.8	27171.4	13.4	195.6	0.0	1.34E-07	1.96E-06	0.01	7	0	22.1
T+75	20	29.9	20354.2	24425.0	26	38.8	26385.4	31662.5	15.6	228.1	0.1	1.56E-07	2.28E-06	0.01	11	0	26.5
T+90	23	33.7	22924.0	27508.8	30	43.7	29716.7	35660.0	17.5	257.2	0.1	1.75E-07	2.57E-06	0.02	16	0	31.6
T+105	25	37.0	25158.4	30190.1	33	47.9	32613.0	39135.6	19.1	282.6	0.1	1.91E-07	2.83E-06	0.02	21	0	37.3

ROBINSON ANNUAL EXERCISE NOVEMBER 17, 1992 OFFSITE RELEASE BY SAMPLE POINT

SAMPLE POINT 02

AMBIENT RADIATION READINGS
1 METER ABOVE SURFACE

6" ABOVE SURFACE

CONTAMINATION READINGS
READINGS MADE OUTSIDE PLUME

OFF-SITE LABORATORY DATA
CONTAMINATION SAMPLE RESULTS

DRILL TIME	Dose Rate CW mR/hr	Dose Rate OW mR/hr	LUD-19 D/R uR/hr	HP-210 C/R cpm	Dose Rate CW mR/hr	Dose Rate OW mR/hr	LUD-19 D/R uR/hr	HP-210 C/R cpm	IODINE AIRBORNE cpm/cfm	PART. AIRBORNE cpm/cfm	VEGETAT'N SAMPLE mR/hr contact	IODINE AIRBORNE uCi/cc	PART. AIRBORNE uCi/cc	IODINE SURFACE uCi/m^2	IODINE VEGETAT'N pCi/g	PARTIC VEG pCi/g	TLD DOSE mRem
07:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
07:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11:00 AM	0	0.0	1.5	1.8	0	0.0	1.9	2.3	0.0	0.0	0.0	1.22E-11	1.74E-10	0.00	0	0	0.0
11:15 AM	0	0.0	2.5	3.0	0	0.0	3.3	3.9	0.0	0.0	0.0	2.08E-11	2.99E-10	0.00	0	0	0.0
11:30 AM	0	0.0	3.6	4.3	0	0.0	4.6	5.5	0.0	0.0	0.0	2.91E-11	4.21E-10	0.00	0	0	0.0
11:45 AM	0	0.0	4.6	5.5	0	0.0	5.9	7.1	0.0	0.1	0.0	3.70E-11	5.40E-10	0.00	0	0	0.0
12:00 PM	0	0.0	5.6	6.7	0	0.0	7.2	8.6	0.0	0.1	0.0	4.46E-11	6.56E-10	0.00	0	0	0.0
12:15 PM	0	0.0	6.5	7.8	0	0.0	8.4	10.1	0.0	0.1	0.0	5.19E-11	7.70E-10	0.00	0	0	0.0
T	0	0.0	7.5	9.0	0	0.0	9.7	11.6	0.0	0.1	0.0	5.92E-11	8.83E-10	0.00	0	0	0.0
T+15	0	0.0	16.7	20.0	0	0.0	21.6	25.9	0.0	0.2	0.0	1.31E-10	1.97E-09	0.00	0	0	0.0
T+30	0	0.5	357.8	429.3	0	0.7	463.8	556.5	0.3	4.0	0.0	2.80E-09	4.01E-08	0.00	0	0	0.0
T+45	1	0.9	645.4	774.5	1	1.2	836.6	1004.0	0.5	7.2	0.0	5.02E-09	7.22E-08	0.00	0	0	0.1
T+60	1	1.3	899.8	1079.8	1	1.7	1166.5	1399.8	0.7	10.1	0.0	6.96E-09	1.01E-07	0.00	0	0	0.3
T+75	1	1.6	1116.4	1339.7	1	2.1	1447.2	1736.6	0.9	12.5	0.0	8.59E-09	1.25E-07	0.00	0	0	0.5
T+90	1	1.9	1300.9	1561.1	2	2.5	1686.4	2023.7	1.0	14.6	0.0	9.96E-09	1.46E-07	0.00	1	0	0.8
T+105	1	2.2	1465.2	1758.2	2	2.8	1899.3	2279.2	1.1	16.4	0.0	1.12E-08	1.64E-07	0.00	1	0	1.1

ROBINSON ANNUAL EXERCISE NOVEMBER 17, 1992 OFFSITE RELEASE BY SAMPLE POINT

SAMPLE POINT 03

AMBIENT RADIATION READINGS
1 METER ABOVE SURFACE

6" ABOVE SURFACE

CONTAMINATION READINGS
READINGS MADE OUTSIDE PLUME

OFF-SITE LABORATORY DATA
CONTAMINATION SAMPLE RESULTS

DRILL TIME	Dose Rate		LUD-19 D/R uR/hr	HP-210 C/R cpm	Dose Rate		LUD-19 D/R uR/hr	HP-210 C/R cpm	IODINE AIRBORNE cpm/cfm	PART. AIRBORNE cpm/cfm	VEGETAT'N SAMPLE mR/hr contact	IODINE AIRBORNE uCi/cc	PART. AIRBORNE uCi/cc	IODINE SURFACE uCi/m^2	IODINE VEGETAT'N pCi/g	PARTIC VEG pCi/g	TLD DOSE mRem
	CW mR/hr	OW mR/hr			CW	OW											
07:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
07:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11:00 AM	0	0.0	1.0	1.1	0	0.0	1.2	1.5	0.0	0.0	0.0	7.82E-12	1.12E-10	0.00	0	0	0.0
11:15 AM	0	0.0	1.6	1.9	0	0.0	2.1	2.5	0.0	0.0	0.0	1.34E-11	1.92E-10	0.00	0	0	0.0
11:30 AM	0	0.0	2.3	2.7	0	0.0	3.0	3.6	0.0	0.0	0.0	1.86E-11	2.70E-10	0.00	0	0	0.0
11:45 AM	0	0.0	2.9	3.5	0	0.0	3.8	4.6	0.0	0.0	0.0	2.37E-11	3.46E-10	0.00	0	0	0.0
12:00 PM	0	0.0	3.6	4.3	0	0.0	4.6	5.5	0.0	0.0	0.0	2.86E-11	4.21E-10	0.00	0	0	0.0
12:15 PM	0	0.0	4.2	5.0	0	0.0	5.4	6.5	0.0	0.0	0.0	3.33E-11	4.94E-10	0.00	0	0	0.0
T	0	0.0	4.8	5.8	0	0.0	6.2	7.5	0.0	0.1	0.0	3.79E-11	5.66E-10	0.00	0	0	0.0
T+15	0	0.0	10.7	12.8	0	0.0	13.9	16.6	0.0	0.1	0.0	8.41E-11	1.26E-09	0.00	0	0	0.0
T+30	0	0.3	229.4	275.3	0	0.4	297.4	356.8	0.2	2.6	0.0	1.80E-09	2.57E-08	0.00	0	0	0.0
T+45	0	0.6	413.8	496.6	1	0.8	536.4	643.7	0.3	4.6	0.0	3.22E-09	4.63E-08	0.00	0	0	0.1
T+60	1	0.8	576.9	692.3	1	1.1	747.9	897.5	0.4	6.5	0.0	4.46E-09	6.46E-08	0.00	0	0	0.2
T+75	1	1.1	715.8	858.9	1	1.4	927.9	1113.4	0.6	8.0	0.0	5.51E-09	8.01E-08	0.00	0	0	0.3
T+90	1	1.2	834.1	1000.9	1	1.6	1081.2	1297.5	0.6	9.3	0.0	6.38E-09	9.35E-08	0.00	0	0	0.5
T+105	1	1.4	939.4	1127.3	1	1.8	1217.7	1461.3	0.7	10.5	0.0	7.15E-09	1.05E-07	0.00	1	0	0.7

ROBINSON ANNUAL EXERCISE NOVEMBER 17, 1992 OFFSITE RELEASE BY SAMPLE POINT

SAMPLE POINT 04

AMBIENT RADIATION READINGS
1 METER ABOVE SURFACE

6" ABOVE SURFACE

CONTAMINATION READINGS
READINGS MADE OUTSIDE PLUME

OFF-SITE LABORATORY DATA
CONTAMINATION SAMPLE RESULTS

DRILL TIME	Dose Rate		LUD-19 D/R uR/hr	HP-210 C/R cpm	Dose Rate		LUD-19 D/R uR/hr	HP-210 C/R cpm	IODINE AIRBORNE cpm/cfm	PART. AIRBORNE cpm/cfm	VEGETAT'N SAMPLE mR/hr contact	IODINE AIRBORNE uCi/cc	PART. AIRBORNE uCi/cc	IODINE SURFACE uCi/m^2	IODINE VEGETAT'N pCi/g	PARTIC VEG pCi/g	TLD DOSE mRem
	CW mR/hr	OW mR/hr			CW	OW											
07:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
07:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	7.13E-14	1.02E-12	0.00	0	0	0.0
11:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	1.22E-13	1.75E-12	0.00	0	0	0.0
11:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	1.70E-13	2.46E-12	0.00	0	0	0.0
11:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	2.16E-13	3.15E-12	0.00	0	0	0.0
12:00 PM	0	0.0	0.0	0.0	0	0.0	0.0	0.1	0.0	0.0	0.0	2.61E-13	3.83E-12	0.00	0	0	0.0
12:15 PM	0	0.0	0.0	0.0	0	0.0	0.0	0.1	0.0	0.0	0.0	3.03E-13	4.50E-12	0.00	0	0	0.0
T	0	0.0	0.0	0.1	0	0.0	0.1	0.1	0.0	0.0	0.0	3.46E-13	5.16E-12	0.00	0	0	0.0
T+15	0	0.0	0.1	0.1	0	0.0	0.1	0.2	0.0	0.0	0.0	7.66E-13	1.15E-11	0.00	0	0	0.0
T+30	0	0.0	2.1	2.5	0	0.0	2.7	3.2	0.0	0.0	0.0	1.64E-11	2.34E-10	0.00	0	0	0.0
T+45	0	0.0	3.8	4.5	0	0.0	4.9	5.9	0.0	0.0	0.0	2.93E-11	4.22E-10	0.00	0	0	0.0
T+60	0	0.0	5.3	6.3	0	0.0	6.8	8.2	0.0	0.1	0.0	4.07E-11	5.88E-10	0.00	0	0	0.0
T+75	0	0.0	6.5	7.8	0	0.0	8.5	10.1	0.0	0.1	0.0	5.02E-11	7.30E-10	0.00	0	0	0.0
T+90	0	0.0	7.6	9.1	0	0.0	9.8	11.8	0.0	0.1	0.0	5.81E-11	8.51E-10	0.00	0	0	0.0
T+105	0	0.0	8.6	10.3	0	0.0	11.1	13.3	0.0	0.1	0.0	6.52E-11	9.60E-10	0.00	0	0	0.0

ROBINSON ANNUAL EXERCISE NOVEMBER 17, 1992 OFFSITE RELEASE BY SAMPLE POINT

SAMPLE POINT 05

AMBIENT RADIATION READINGS
1 METER ABOVE SURFACE

6" ABOVE SURFACE

CONTAMINATION READINGS
READINGS MADE OUTSIDE PLUME

OFF-SITE LABORATORY DATA
CONTAMINATION SAMPLE RESULTS

DRILL TIME	Dose Rate		LUD-19 D/R uR/hr	HP-210 C/R cpm	Dose Rate		LUD-19 D/R uR/hr	HP-210 C/R cpm	IODINE AIRBORNE cpm/cfm	PART. AIRBORNE cpm/cfm	VEGETAT'N SAMPLE mR/hr contact	IODINE AIRBORNE uCi/cc	PART. AIRBORNE uCi/cc	IODINE SURFACE uCi/m^2	IODINE VEGETAT'N pCi/g	PARTIC VEG pCi/g	TLD DOSE mRem
	CW mR/hr	OW mR/hr			CW	OW											
07:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
07:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11:15 AM	0	0.0	0.2	0.2	0	0.0	0.3	0.3	0.0	0.0	0.0	1.63E-12	2.33E-11	0.00	0	0	0.0
11:30 AM	0	0.0	0.3	0.4	0	0.0	0.4	0.5	0.0	0.0	0.0	2.78E-12	3.99E-11	0.00	0	0	0.0
11:45 AM	0	0.0	0.5	0.6	0	0.0	0.6	0.7	0.0	0.0	0.0	3.88E-12	5.62E-11	0.00	0	0	0.0
12:00 PM	0	0.0	0.6	0.7	0	0.0	0.8	0.9	0.0	0.0	0.0	4.94E-12	7.21E-11	0.00	0	0	0.0
12:15 PM	0	0.0	0.7	0.9	0	0.0	1.0	1.2	0.0	0.0	0.0	5.96E-12	8.76E-11	0.00	0	0	0.0
T	0	0.0	0.9	1.0	0	0.0	1.1	1.4	0.0	0.0	0.0	6.93E-12	1.03E-10	0.00	0	0	0.0
T+15	0	0.0	1.0	1.2	0	0.0	1.3	1.6	0.0	0.0	0.0	7.90E-12	1.18E-10	0.00	0	0	0.0
T+30	0	0.0	2.2	2.7	0	0.0	2.9	3.5	0.0	0.0	0.0	1.75E-11	2.63E-10	0.00	0	0	0.0
T+45	0	0.1	47.8	57.3	0	0.1	61.9	74.3	0.0	0.5	0.0	3.74E-10	5.35E-09	0.00	0	0	0.0
T+60	0	0.1	86.2	103.4	0	0.2	111.7	134.0	0.1	1.0	0.0	6.71E-10	9.64E-09	0.00	0	0	0.0
T+75	0	0.2	120.1	144.1	0	0.2	155.7	186.9	0.1	1.3	0.0	9.29E-10	1.34E-08	0.00	0	0	0.0
T+90	0	0.2	149.0	178.8	0	0.3	193.2	231.8	0.1	1.7	0.0	1.15E-09	1.67E-08	0.00	0	0	0.1
T+105	0	0.3	173.7	208.4	0	0.3	225.1	270.1	0.1	1.9	0.0	1.33E-09	1.95E-08	0.00	0	0	0.1

ROBINSON ANNUAL EXERCISE NOVEMBER 17, 1992 OFFSITE RELEASE BY SAMPLE POINT

SAMPLE POINT 06

AMBIENT RADIATION READINGS

1 METER ABOVE SURFACE

6" ABOVE SURFACE

CONTAMINATION READINGS

READINGS MADE OUTSIDE PLUME

OFF-SITE LABORATORY DATA

CONTAMINATION SAMPLE RESULTS

DRILL TIME	Dose Rate		LUD-19 D/R uR/hr	HP-210 C/R cpm	Dose Rate		LUD-19 D/R uR/hr	HP-210 C/R cpm	IODINE AIRBORNE cpm/cfm	PART. AIRBORNE cpm/cfm	VEGETAT'N SAMPLE mR/hr contact	IODINE AIRBORNE uCi/cc	PART. AIRBORNE uCi/cc	IODINE SURFACE uCi/m^2	IODINE VEGETAT'N pCi/g	PARTIC VEG pCi/g	TLD DOSE mRem
	CW mR/hr	OW mR/hr			CW	OW											
07:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
07:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11:15 AM	0	0.0	0.1	0.1	0	0.0	0.1	0.1	0.0	0.0	0.0	5.76E-13	8.22E-12	0.00	0	0	0.0
11:30 AM	0	0.0	0.1	0.1	0	0.0	0.2	0.2	0.0	0.0	0.0	9.83E-13	1.41E-11	0.00	0	0	0.0
11:45 AM	0	0.0	0.2	0.2	0	0.0	0.2	0.3	0.0	0.0	0.0	1.37E-12	1.99E-11	0.00	0	0	0.0
12:00 PM	0	0.0	0.2	0.3	0	0.0	0.3	0.3	0.0	0.0	0.0	1.75E-12	2.55E-11	0.00	0	0	0.0
12:15 PM	0	0.0	0.3	0.3	0	0.0	0.3	0.4	0.0	0.0	0.0	2.11E-12	3.10E-11	0.00	0	0	0.0
T	0	0.0	0.3	0.4	0	0.0	0.4	0.5	0.0	0.0	0.0	2.45E-12	3.63E-11	0.00	0	0	0.0
T+15	0	0.0	0.4	0.4	0	0.0	0.5	0.5	0.0	0.0	0.0	2.79E-12	4.17E-11	0.00	0	0	0.0
T+30	0	0.0	0.8	0.9	0	0.0	1.0	1.2	0.0	0.0	0.0	6.18E-12	9.29E-11	0.00	0	0	0.0
T+45	0	0.0	16.9	20.3	0	0.0	21.9	26.3	0.0	0.2	0.0	1.32E-10	1.89E-09	0.00	0	0	0.0
T+60	0	0.0	30.4	36.5	0	0.1	39.5	47.4	0.0	0.3	0.0	2.37E-10	3.41E-09	0.00	0	0	0.0
T+75	0	0.1	42.5	50.9	0	0.1	55.0	66.0	0.0	0.5	0.0	3.28E-10	4.75E-09	0.00	0	0	0.0
T+90	0	0.1	52.7	63.2	0	0.1	68.3	81.9	0.0	0.6	0.0	4.05E-10	5.90E-09	0.00	0	0	0.0
T+105	0	0.1	61.4	73.6	0	0.1	79.6	95.5	0.0	0.7	0.0	4.70E-10	6.88E-09	0.00	0	0	0.0

ROBINSON ANNUAL EXERCISE NOVEMBER 17, 1992 OFFSITE RELEASE BY SAMPLE POINT

SAMPLE POINT 07

AMBIENT RADIATION READINGS
1 METER ABOVE SURFACE

6" ABOVE SURFACE

CONTAMINATION READINGS
READINGS MADE OUTSIDE PLUME

OFF-SITE LABORATORY DATA
CONTAMINATION SAMPLE RESULTS

DRILL TIME	Dose Rate CW mR/hr	Dose Rate OW mR/hr	LUD-19 D/R uR/hr	HP-210 C/R cpm	Dose Rate CW mR/hr	Dose Rate OW mR/hr	LUD-19 D/R uR/hr	HP-210 C/R cpm	IODINE AIRBORNE cpm/cfm	PART. AIRBORNE cpm/cfm	VEGETAT'N SAMPLE mR/hr contact	IODINE AIRBORNE uCi/cc	PART. AIRBORNE uCi/cc	IODINE SURFACE uCi/m^2	IODINE VEGETAT'N pCi/g	PARTIC VEG pCi/g	TLD DOSE mRem
07:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
07:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11:30 AM	0	0.0	0.1	0.1	0	0.0	0.1	0.1	0.0	0.0	0.0	5.76E-13	8.22E-12	0.00	0	0	0.0
11:45 AM	0	0.0	0.1	0.1	0	0.0	0.2	0.2	0.0	0.0	0.0	9.83E-13	1.41E-11	0.00	0	0	0.0
12:00 PM	0	0.0	0.2	0.2	0	0.0	0.2	0.3	0.0	0.0	0.0	1.37E-12	1.99E-11	0.00	0	0	0.0
12:15 PM	0	0.0	0.2	0.3	0	0.0	0.3	0.3	0.0	0.0	0.0	1.75E-12	2.55E-11	0.00	0	0	0.0
T	0	0.0	0.3	0.3	0	0.0	0.3	0.4	0.0	0.0	0.0	2.11E-12	3.10E-11	0.00	0	0	0.0
T+15	0	0.0	0.3	0.4	0	0.0	0.4	0.5	0.0	0.0	0.0	2.45E-12	3.63E-11	0.00	0	0	0.0
T+30	0	0.0	0.4	0.4	0	0.0	0.5	0.5	0.0	0.0	0.0	2.79E-12	4.17E-11	0.00	0	0	0.0
T+45	0	0.0	0.8	0.9	0	0.0	1.0	1.2	0.0	0.0	0.0	6.18E-12	9.29E-11	0.00	0	0	0.0
T+60	0	0.0	16.9	20.3	0	0.0	21.9	26.3	0.0	0.2	0.0	1.32E-10	1.89E-09	0.00	0	0	0.0
T+75	0	0.0	30.4	36.5	0	0.1	39.5	47.4	0.0	0.3	0.0	2.37E-10	3.41E-09	0.00	0	0	0.0
T+90	0	0.1	42.5	50.9	0	0.1	55.0	66.0	0.0	0.5	0.0	3.28E-10	4.75E-09	0.00	0	0	0.0
T+105	0	0.1	52.7	63.2	0	0.1	68.3	81.9	0.0	0.6	0.0	4.05E-10	5.90E-09	0.00	0	0	0.0

ROBINSON ANNUAL EXERCISE NOVEMBER 17, 1992 OFFSITE RELEASE BY SAMPLE POINT

SAMPLE POINT 08

AMBIENT RADIATION READINGS

1 METER ABOVE SURFACE

6" ABOVE SURFACE

CONTAMINATION READINGS

READINGS MADE OUTSIDE PLUME

OFF-SITE LABORATORY DATA

CONTAMINATION SAMPLE RESULTS

DRILL TIME	Dose Rate		LUD-19 D/R uR/hr	HP-210 C/R cpm	Dose Rate		LUD-19 D/R uR/hr	HP-210 C/R cpm	IODINE AIRBORNE cpm/cfm	PART. AIRBORNE cpm/cfm	VEGETAT'N SAMPLE mR/hr contact	IODINE AIRBORNE uCi/cc	PART. AIRBORNE uCi/cc	IODINE SURFACE uCi/m^2	IODINE VEGETAT'N pCi/g	PARTIC VEG pCi/g	TLD DOSE mRem
	CW mR/hr	OW mR/hr			CW	OW											
07:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
07:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11:45 AM	0	0.0	0.1	0.1	0	0.0	0.1	0.1	0.0	0.0	0.0	5.36E-13	7.65E-12	0.00	0	0	0.0
12:00 PM	0	0.0	0.1	0.1	0	0.0	0.1	0.2	0.0	0.0	0.0	9.15E-13	1.31E-11	0.00	0	0	0.0
12:15 PM	0	0.0	0.2	0.2	0	0.0	0.2	0.2	0.0	0.0	0.0	1.28E-12	1.85E-11	0.00	0	0	0.0
T	0	0.0	0.2	0.2	0	0.0	0.3	0.3	0.0	0.0	0.0	1.63E-12	2.37E-11	0.00	0	0	0.0
T+15	0	0.0	0.2	0.3	0	0.0	0.3	0.4	0.0	0.0	0.0	1.96E-12	2.88E-11	0.00	0	0	0.0
T+30	0	0.0	0.3	0.3	0	0.0	0.4	0.4	0.0	0.0	0.0	2.28E-12	3.38E-11	0.00	0	0	0.0
T+45	0	0.0	0.3	0.4	0	0.0	0.4	0.5	0.0	0.0	0.0	2.60E-12	3.88E-11	0.00	0	0	0.0
T+60	0	0.0	0.7	0.9	0	0.0	0.9	1.1	0.0	0.0	0.0	5.76E-12	8.65E-11	0.00	0	0	0.0
T+75	0	0.0	15.7	18.9	0	0.0	20.4	24.4	0.0	0.2	0.0	1.23E-10	1.76E-09	0.00	0	0	0.0
T+90	0	0.0	28.3	34.0	0	0.1	36.7	44.1	0.0	0.3	0.0	2.21E-10	3.17E-09	0.00	0	0	0.0
T+105	0	0.1	39.5	47.4	0	0.1	51.2	61.5	0.0	0.4	0.0	3.06E-10	4.42E-09	0.00	0	0	0.0

ROBINSON ANNUAL EXERCISE NOVEMBER 17, 1992 OFFSITE RELEASE BY SAMPLE POINT

SAMPLE POINT 09

AMBIENT RADIATION READINGS

1 METER ABOVE SURFACE

6" ABOVE SURFACE

CONTAMINATION READINGS

READINGS MADE OUTSIDE PLUME

OFF-SITE LABORATORY DATA

CONTAMINATION SAMPLE RESULTS

DRILL TIME	Dose Rate		LUD-19	HP-210	Dose Rate		LUD-19	HP-210	IODINE	PART.	VEGETAT'N	IODINE	PART.	IODINE	IODINE	PARTIC	TLD
	CW	OW	D/R	C/R	CW	OW	D/R	C/R	AIRBORNE	AIRBORNE	SAMPLE	AIRBORNE	AIRBORNE	SURFACE	VEGETAT'N	VEG	DOSE
	mR/hr	mR/hr	uR/hr	cpm				cpm	cpm/cfm	cpm/cfm	mR/hr	uCi/cc	uCi/cc	uCi/m^2	pCi/g	pCi/g	mRem
											contact						
07:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
07:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11:00 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11:15 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11:30 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11:45 AM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
12:00 PM	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
12:15 PM	0	0.0	0.0	0.1	0	0.0	0.1	0.1	0.0	0.0	0.0	3.57E-13	5.09E-12	0.00	0	0	0.0
T	0	0.0	0.1	0.1	0	0.0	0.1	0.1	0.0	0.0	0.0	6.09E-13	8.74E-12	0.00	0	0	0.0
T+15	0	0.0	0.1	0.1	0	0.0	0.1	0.2	0.0	0.0	0.0	8.50E-13	1.23E-11	0.00	0	0	0.0
T+30	0	0.0	0.1	0.2	0	0.0	0.2	0.2	0.0	0.0	0.0	1.08E-12	1.58E-11	0.00	0	0	0.0
T+45	0	0.0	0.2	0.2	0	0.0	0.2	0.3	0.0	0.0	0.0	1.30E-12	1.92E-11	0.00	0	0	0.0
T+60	0	0.0	0.2	0.2	0	0.0	0.2	0.3	0.0	0.0	0.0	1.52E-12	2.25E-11	0.00	0	0	0.0
T+75	0	0.0	0.2	0.3	0	0.0	0.3	0.3	0.0	0.0	0.0	1.73E-12	2.58E-11	0.00	0	0	0.0
T+90	0	0.0	0.5	0.6	0	0.0	0.6	0.8	0.0	0.0	0.0	3.83E-12	5.76E-11	0.00	0	0	0.0
T+105	0	0.0	10.5	12.6	0	0.0	13.6	16.3	0.0	0.1	0.0	8.19E-11	1.17E-09	0.00	0	0	0.0

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: 07:30 AM

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS
READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA 1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE									6" ABOVE SURFACE				IODINE	PART.	VEGETAT'N				
									AIRBORNE	AIRBORNE	SAMPLE	IODINE	PART.	IODINE	IODINE	PARTIC	TLD		
									HP-210	HP-210	HP-210	AIRBORNE	AIRBORNE	SURFACE	VEGETAT'N	VEG	DOSE		
Dose Rate	Dose Rate	LUD-19	HP-210	Dose Rate	Dose Rate	LUD-19	HP-210	HP-210	HP-210	HP-210									
CW	OW	D/R	C/R	CW	OW	D/R	C/R	cpm/cfm	cpm/cfm	cpm/cfm									
mR/hr	mR/hr	uR/hr	cpm	mR/hr	mR/hr	uR/hr	cpm	SAMPLE	SAMPLE	contact									
SAMPLE POINT																			
01	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0		
02	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0		
03	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0		
04	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0		
05	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0		
06	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0		
07	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0		
08	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0		
09	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0		
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0		
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0		

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: 07:45 AM

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS
READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA 1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE				6" ABOVE SURFACE				IODINE AIRBORNE		PART. AIRBORNE		VEGETAT'N SAMPLE		IODINE AIRBORNE		PART. AIRBORNE		IODINE SURFACE		IODINE VEGETAT'N		PARTIC VEG		TID DOSE	
SAMPLE POINT	Dose Rate	Dose Rate	LUD-19	HP-210	Dose Rate	Dose Rate	LUD-19	HP-210	HP-210	HP-210	HP-210	HP-210	HP-210	uCi/cc	uCi/cc	uCi/m^2	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	mRem	mRem
	CW	OW	D/R	C/R	CW	OW	D/R	C/R	cpm/cfm	cpm/cfm	cpm/cfm	cpm/cfm	cpm/cfm	contact	contact	contact	contact	contact	contact	contact	contact	contact	contact	contact	contact
01	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0	0	0	0	0	0.0	0.0
02	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0	0	0	0	0	0.0	0.0
03	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0	0	0	0	0	0.0	0.0
04	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0	0	0	0	0	0.0	0.0
05	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0	0	0	0	0	0.0	0.0
06	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0	0	0	0	0	0.0	0.0
07	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0	0	0	0	0	0.0	0.0
08	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0	0	0	0	0	0.0	0.0
09	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0	0	0	0	0	0.0	0.0
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0	0	0	0	0	0.0	0.0
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0	0	0	0	0	0.0	0.0

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: 08:00 AM

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS

READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA

1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE				6" ABOVE SURFACE				IODINE AIRBORNE		PART. AIRBORNE		VEGETAT'N SAMPLE		IODINE AIRBORNE		PART. AIRBORNE		IODINE SURFACE		IODINE VEGETAT'N		PARTIC VEG		TLD DOSE		
SAMPLE POINT	Dose Rate		LUD-19 D/R uR/hr	HP-210 C/R cpm	Dose Rate		LUD-19 D/R uR/hr	HP-210 C/R cpm	HP-210 cpm/cfm SAMPLE	HP-210 cpm/cfm SAMPLE	HP-210 mR/hr contact	uCi/cc	uCi/cc	uCi/m^2	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	mRem
	CW mR/hr	OW mR/hr			CW mR/hr	OW mR/hr																				
01	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0	0	0	0	0	0	0	0	0	0.0
02	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0	0	0	0	0	0	0	0	0	0.0
03	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0	0	0	0	0	0	0	0	0	0.0
04	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0	0	0	0	0	0	0	0	0	0.0
05	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0	0	0	0	0	0	0	0	0	0.0
06	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0	0	0	0	0	0	0	0	0	0.0
07	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0	0	0	0	0	0	0	0	0	0.0
08	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0	0	0	0	0	0	0	0	0	0.0
09	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0	0	0	0	0	0	0	0	0	0.0
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0	0	0	0	0	0	0	0	0	0.0
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0	0	0	0	0	0	0	0	0	0.0

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: 08:15 AM

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS
READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA

1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE				6" ABOVE SURFACE				CONTAMINATION READINGS				CONTAMINATION SAMPLE RESULTS					
								IODINE	PART.	VEGETAT'N		IODINE	PART.	IODINE	IODINE	PARTIC	TLD
								AIRBORNE	AIRBORNE	SAMPLE		AIRBORNE	AIRBORNE	SURFACE	VEGETAT'N	VEG	DOSE
SAMPLE	Dose Rate	Dose Rate	LUD-19	HP-210	Dose Rate	Dose Rate	LUD-19	HP-210	HP-210	HP-210	HP-210						
POINT	CW	OW	D/R	C/R	CW	OW	D/R	C/R	cpm/cfm	cpm/cfm	mR/hr						
	mR/hr	mR/hr	uR/hr	cpm	mR/hr	mR/hr	uR/hr	cpm	SAMPLE	SAMPLE	contact	uCi/cc	uCi/cc	uCi/m ²	pCi/g	pCi/g	mRem
01	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
02	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
03	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
04	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
05	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
06	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
07	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: 08:30 AM

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS
READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA

1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE				6" ABOVE SURFACE					IODINE AIRBORNE		PART. AIRBORNE	VEGETAT'N SAMPLE	IODINE AIRBORNE	PART. AIRBORNE	IODINE SURFACE	IODINE VEGETAT'N	PARTIC VEG	TLD DOSE
SAMPLE POINT	Dose Rate	Dose Rate	LUD-19	HP-210	Dose Rate	Dose Rate	LUD-19	HP-210	HP-210	HP-210	HP-210	mR/hr contact	uCi/cc	uCi/cc	uCi/m^2	pCi/g	pCi/g	mRem
	CW	OW	D/R	C/R	CW	OW	D/R	C/R	cpm/cfm	cpm/cfm	SAMPLE							
	mR/hr	mR/hr	uR/hr	cpm	mR/hr	mR/hr	uR/hr	cpm										
01	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
02	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
03	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
04	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
05	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
06	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
07	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: 08:45 AM

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS

READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA

1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE				6" ABOVE SURFACE				AIRBORNE		AIRBORNE	SAMPLE	IODINE	PART.	IODINE	IODINE	PARTIC	TLD
Dose Rate		Dose Rate	LUD-19	HP-210	Dose Rate	Dose Rate	LUD-19	HP-210	HP-210	HP-210	HP-210	AIRBORNE	AIRBORNE	SURFACE	VEGETAT'N	VEG	DOSE
SAMPLE	CW	OW	D/R	C/R	CW	OW	D/R	C/R	cpm/cfm	HP-210	HP-210	uCi/cc	uCi/cc	uCi/m^2	pCi/g	pCi/g	mRem
POINT	mR/hr	mR/hr	uR/hr	cpm	mR/hr	mR/hr	uR/hr	cpm	SAMPLE	SAMPLE	contact						
01	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
02	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
03	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
04	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
05	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
06	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
07	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: 09:00 AM

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS

READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA

1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE				6" ABOVE SURFACE				IODINE AIRBORNE		PART. AIRBORNE	VEGETAT'N SAMPLE	IODINE AIRBORNE	PART. AIRBORNE	IODINE SURFACE	IODINE VEGETAT'N	PARTIC VEG	TLD DOSE
SAMPLE POINT	Dose Rate CW mR/hr	Dose Rate OW mR/hr	LUD-19 D/R uR/hr	HP-210 C/R cpm	Dose Rate CW mR/hr	Dose Rate OW mR/hr	LUD-19 D/R uR/hr	HP-210 C/R cpm	HP-210 cpm/cfm SAMPLE	HP-210 cpm/cfm SAMPLE	HP-210 mR/hr contact	uCi/cc	uCi/cc	uCi/m^2	pCi/g	pCi/g	mRem
01	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
02	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
03	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
04	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
05	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
06	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
07	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: 09:15 AM

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS

READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA

1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE				6" ABOVE SURFACE				CONTAMINATION READINGS				CONTAMINATION SAMPLE RESULTS					
SAMPLE POINT	Dose Rate		LUD-19 D/R	HP-210 C/R		Dose Rate		LUD-19 D/R	HP-210 C/R		VEGETAT'N SAMPLE	IODINE AIRBORNE	PART. AIRBORNE	IODINE SURFACE	IODINE VEGETAT'N	PARTIC VEG	TLD DOSE
	CW	OW		CW	OW	CW	OW		CW	OW		uCi/cc	uCi/cc	uCi/m ²	pCi/g	pCi/g	mRem
	mR/hr	mR/hr	uR/hr	cpm	mR/hr	mR/hr	mR/hr	uR/hr	cpm	mR/hr	contact						
01	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
02	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
03	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
04	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
05	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
06	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
07	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: 09:30 AM

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS
READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA 1. Multiply veg. values by
no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE				6" ABOVE SURFACE				CONTAMINATION READINGS			CONTAMINATION SAMPLE RESULTS					
Dose Rate Dose Rate				Dose Rate Dose Rate				IODINE	PART.	VEGETAT'N	IODINE	PART.	IODINE	IODINE	PARTIC	TLD
SAMPLE	CW	OW	D/R	HP-210	C/R	CW	OW	HP-210	HP-210	HP-210	AIRBORNE	AIRBORNE	SURFACE	VEGETAT'N	VEG	DOSE
POINT	mR/hr	mR/hr	uR/hr	cpm	mR/hr	mR/hr	uR/hr	cpm	cpm/cfm	cpm/cfm	uCi/cc	uCi/cc	uCi/m^2	pCi/g	pCi/g	mRem
									SAMPLE	SAMPLE						
01	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
02	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
03	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
04	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
05	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
06	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
07	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: 09:45 AM

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS
READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA 1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE				6" ABOVE SURFACE				IODINE AIRBORNE		PART. AIRBORNE		VEGETAT'N SAMPLE		IODINE AIRBORNE		PART. AIRBORNE		IODINE SURFACE		IODINE VEGETAT'N		PARTIC VEG		TLD DOSE	
SAMPLE POINT	Dose Rate		LUD-19	HP-210	Dose Rate		LUD-19	HP-210	HP-210	HP-210	HP-210	uCi/cc	uCi/cc	uCi/m^2	pCi/g	pCi/g	mRem								
	CW	OW	D/R	C/R	CW	OW	D/R	C/R	cpm/cfm	cpm/cfm	mR/hr														
	mR/hr	mR/hr	uR/hr	cpm	mR/hr	mR/hr	uR/hr	cpm	SAMPLE	SAMPLE	contact														
01	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0								
02	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0								
03	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0								
04	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0								
05	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0								
06	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0								
07	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0								
08	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0								
09	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0								
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0								
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0								

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: 10:00 AM

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS
READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA 1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE				6" ABOVE SURFACE				AIRBORNE		AIRBORNE		SAMPLE	IODINE	PART.	IODINE	IODINE	PARTIC	TLD		
Dose Rate		Dose Rate		LUD-19	HP-210	Dose Rate		Dose Rate		LUD-19	HP-210	HP-210	HP-210	HP-210	AIRBORNE	AIRBORNE	SURFACE	VEGETAT'N	VEG	DOSE
SAMPLE	CW	OW	D/R	C/R	CW	OW	D/R	C/R	cpm/cfm	cpm/cfm	cpm/cfm	cpm/cfm	cpm/cfm	cpm/cfm	uCi/cc	uCi/cc	uCi/m^2	pCi/g	pCi/g	mRem
POINT	mR/hr	mR/hr	uR/hr	cpm	mR/hr	mR/hr	uR/hr	cpm	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE						
01	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
02	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
03	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
04	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
05	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
06	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
07	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: 10:15 AM

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS

READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA

1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE				6" ABOVE SURFACE				CONTAMINATION READINGS			CONTAMINATION SAMPLE RESULTS					
SAMPLE POINT	Dose Rate		LUD-19 D/R uR/hr	Dose Rate		LUD-19 D/R uR/hr	HP-210 C/R cpm	Dose Rate		HP-210 C/R cpm	Dose Rate		HP-210 C/R cpm	PART. AIRBORNE cpm/cfm	VEGETAT'N SAMPLE mR/hr	TLD DOSE mRem
	CW mR/hr	OW mR/hr		CW mR/hr	OW mR/hr			CW mR/hr	OW mR/hr		CW mR/hr	OW mR/hr				
01	0	0.0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0
02	0	0.0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0
03	0	0.0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0
04	0	0.0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0
05	0	0.0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0
06	0	0.0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0
07	0	0.0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0
08	0	0.0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0
09	0	0.0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0
10	0	0.0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0
11	0	0.0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0.0	0	0.0

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: 10:30 AM

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS
READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA 1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE				6" ABOVE SURFACE					IODINE	PART.	VEGETAT'N						
									AIRBORNE	AIRBORNE	SAMPLE	IODINE	PART.	IODINE	IODINE	PARTIC	TLD
												AIRBORNE	AIRBORNE	SURFACE	VEGETAT'N	VEG	DOSE
Dose Rate	Dose Rate	LUD-19	HP-210	Dose Rate	Dose Rate	LUD-19	HP-210	HP-210	HP-210	HP-210							
CW	OW	D/R	C/R	CW	OW	D/R	C/R	cpm/cfm	cpm/cfm	cpm/cfm		uCi/cc	uCi/cc	uCi/m^2	pCi/g	pCi/g	mRem
SAMPLE								SAMPLE	SAMPLE	contact							
POINT	mR/hr	mR/hr	uR/hr	cpm	mR/hr	mR/hr	uR/hr	cpm									
01	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
02	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
03	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
04	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
05	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
06	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
07	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: 10:45 AM

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS

READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA

1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE									6" ABOVE SURFACE				IODINE AIRBORNE		PART. AIRBORNE		VEGETAT'N SAMPLE		IODINE AIRBORNE		PART. AIRBORNE		IODINE SURFACE		IODINE VEGETAT'N		PARTIC VEG		TLD DOSE	
SAMPLE POINT	Dose Rate	Dose Rate	LUD-19	HP-210	Dose Rate	Dose Rate	LUD-19	HP-210	HP-210	HP-210	HP-210	uCi/cc	uCi/cc	uCi/m^2	pCi/g	pCi/g	mRem													
	CW	OW	D/R	C/R	CW	OW	D/R	C/R	cpm/cfm	cpm/cfm	mR/hr																			
	mR/hr	mR/hr	uR/hr	cpm	mR/hr	mR/hr	uR/hr	cpm	SAMPLE	SAMPLE	contact																			
01	0	0.0	23.3	28.0	0	0.0	30.2	36.3	0.0	0.3	0.0	1.91E-10	2.73E-09	0.00	0	0	0.0													
02	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0													
03	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0													
04	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0													
05	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0													
06	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0													
07	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0													
08	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0													
09	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0													
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0													
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0													

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: 11:00 AM

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS

READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA

1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE				6" ABOVE SURFACE					IODINE AIRBORNE	PART. AIRBORNE	VEGETAT'N SAMPLE	IODINE AIRBORNE	PART. AIRBORNE	IODINE SURFACE	IODINE VEGETAT'N	PARTIC VEG	TLD DOSE
SAMPLE POINT	Dose Rate CW mR/hr	Dose Rate OW mR/hr	LUD-19 D/R uR/hr	HP-210 C/R cpm	Dose Rate CW mR/hr	Dose Rate OW mR/hr	LUD-19 D/R uR/hr	HP-210 C/R cpm	HP-210 cpm/cfm SAMPLE	HP-210 cpm/cfm SAMPLE	HP-210 mR/hr contact	uCi/cc	uCi/cc	uCi/m ²	pCi/g	pCi/g	mRem
01	0	0.1	39.7	47.6	0	0.1	51.4	61.7	0.0	0.5	0.0	3.26E-10	4.68E-09	0.00	0	0	0.0
02	0	0.0	1.5	1.8	0	0.0	1.9	2.3	0.0	0.0	0.0	1.22E-11	1.74E-10	0.00	0	0	0.0
03	0	0.0	1.0	1.1	0	0.0	1.2	1.5	0.0	0.0	0.0	7.82E-12	1.12E-10	0.00	0	0	0.0
04	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	7.13E-14	1.02E-12	0.00	0	0	0.0
05	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
06	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
07	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
08	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: 11:15 AM

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS
READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA 1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE									6" ABOVE SURFACE			IODINE AIRBORNE	PART. AIRBORNE	VEGETAT'N SAMPLE	IODINE AIRBORNE	PART. AIRBORNE	IODINE SURFACE	IODINE VEGETAT'N	PARTIC VEG	TLD DOSE
SAMPLE POINT	Dose Rate CW mR/hr	Dose Rate OW mR/hr	LUD-19 D/R uR/hr	HP-210 C/R cpm	Dose Rate CW mR/hr	Dose Rate OW mR/hr	LUD-19 D/R uR/hr	HP-210 C/R cpm	HP-210 cpm/cfm SAMPLE	HP-210 cpm/cfm SAMPLE	HP-210 mR/hr contact	uCi/cc	uCi/cc	uCi/m^2	pCi/g	pCi/g	mRem			
01	0	0.1	55.7	66.8	0	0.1	72.2	86.6	0.0	0.7	0.0	4.55E-10	6.59E-09	0.00	0	0	0.0			
02	0	0.0	2.5	3.0	0	0.0	3.3	3.9	0.0	0.0	0.0	2.08E-11	2.99E-10	0.00	0	0	0.0			
03	0	0.0	1.6	1.9	0	0.0	2.1	2.5	0.0	0.0	0.0	1.34E-11	1.92E-10	0.00	0	0	0.0			
04	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	1.22E-13	1.75E-12	0.00	0	0	0.0			
05	0	0.0	0.2	0.2	0	0.0	0.3	0.3	0.0	0.0	0.0	1.63E-12	2.33E-11	0.00	0	0	0.0			
06	0	0.0	0.1	0.1	0	0.0	0.1	0.1	0.0	0.0	0.0	5.76E-13	8.22E-12	0.00	0	0	0.0			
07	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0			
08	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0			
09	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0			
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0			
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0			

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: 11:30 AM

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS
READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA 1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE				6" ABOVE SURFACE					IODINE AIRBORNE	PART. AIRBORNE	VEGETAT'N SAMPLE	IODINE AIRBORNE	PART. AIRBORNE	IODINE SURFACE	IODINE VEGETAT'N	PARTIC VEG	TLD DOSE
SAMPLE POINT	Dose Rate	Dose Rate	LUD-19	HP-210	Dose Rate	Dose Rate	LUD-19	HP-210	HP-210	HP-210	HP-210	uCi/cc	uCi/cc	uCi/m^2	pCi/g	pCi/g	mRem
	CW	OW	D/R	C/R	CW	OW	D/R	C/R	cpm/cfm	cpm/cfm	mR/hr						
	mR/hr	mR/hr	uR/hr	cpm	mR/hr	mR/hr	uR/hr	cpm	SAMPLE	SAMPLE	contact						
01	0	0.1	71.5	85.8	0	0.1	92.6	111.1	0.1	0.8	0.0	5.79E-10	8.45E-09	0.00	0	0	0.0
02	0	0.0	3.6	4.3	0	0.0	4.6	5.5	0.0	0.0	0.0	2.91E-11	4.21E-10	0.00	0	0	0.0
03	0	0.0	2.3	2.7	0	0.0	3.0	3.6	0.0	0.0	0.0	1.86E-11	2.70E-10	0.00	0	0	0.0
04	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	1.70E-13	2.46E-12	0.00	0	0	0.0
05	0	0.0	0.3	0.4	0	0.0	0.4	0.5	0.0	0.0	0.0	2.78E-12	3.99E-11	0.00	0	0	0.0
06	0	0.0	0.1	0.1	0	0.0	0.2	0.2	0.0	0.0	0.0	9.83E-13	1.41E-11	0.00	0	0	0.0
07	0	0.0	0.1	0.1	0	0.0	0.1	0.1	0.0	0.0	0.0	5.76E-13	8.22E-12	0.00	0	0	0.0
08	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
09	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: 11:45 AM

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS

READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA

1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE				6" ABOVE SURFACE				CONTAMINATION READINGS				CONTAMINATION SAMPLE RESULTS					
								IODINE	PART.	VEGETAT'N		IODINE	PART.	IODINE	IODINE	PARTIC	TLD
								AIRBORNE	AIRBORNE	SAMPLE		AIRBORNE	AIRBORNE	SURFACE	VEGETAT'N	VEG	DOSE
Dose Rate	Dose Rate	LUD-19	HP-210	Dose Rate	Dose Rate	LUD-19	HP-210	HP-210	HP-210	HP-210							
CW	OW	D/R	C/R	CW	OW	D/R	C/R	cpm/cfm	cpm/cfm	mR/hr		uCi/cc	uCi/cc	uCi/m ²	pCi/g	pCi/g	mRem
SAMPLE POINT	mR/hr	mR/hr	uR/hr	cpm	mR/hr	mR/hr	uR/hr	cpm	SAMPLE	SAMPLE	contact						
01	0	0.1	86.8	104.2	0	0.2	112.6	135.1	0.1	1.0	0.0	6.98E-10	1.03E-08	0.00	0	0	0.0
02	0	0.0	4.6	5.5	0	0.0	5.9	7.1	0.0	0.1	0.0	3.70E-11	5.40E-10	0.00	0	0	0.0
03	0	0.0	2.9	3.5	0	0.0	3.8	4.6	0.0	0.0	0.0	2.37E-11	3.46E-10	0.00	0	0	0.0
04	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	2.16E-13	3.15E-12	0.00	0	0	0.0
05	0	0.0	0.5	0.6	0	0.0	0.6	0.7	0.0	0.0	0.0	3.88E-12	5.62E-11	0.00	0	0	0.0
06	0	0.0	0.2	0.2	0	0.0	0.2	0.3	0.0	0.0	0.0	1.37E-12	1.99E-11	0.00	0	0	0.0
07	0	0.0	0.1	0.1	0	0.0	0.2	0.2	0.0	0.0	0.0	9.83E-13	1.41E-11	0.00	0	0	0.0
08	0	0.0	0.1	0.1	0	0.0	0.1	0.1	0.0	0.0	0.0	5.36E-13	7.65E-12	0.00	0	0	0.0
09	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: 12:00 PM

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS

READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA

1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE				6" ABOVE SURFACE				AIRBORNE		AIRBORNE		SAMPLE	IODINE	PART.	IODINE	IODINE	PARTIC	TLD		
Dose Rate		Dose Rate		LUD-19	HP-210	Dose Rate		Dose Rate		LUD-19	HP-210	HP-210	HP-210	HP-210	AIRBORNE	AIRBORNE	SURFACE	VEGETAT'N	VEG	DOSE
SAMPLE	CW	OW	D/R	C/R	CW	OW	D/R	C/R	cpm/cfm	cpm/cfm	cpm/cfm	mR/hr	uCi/cc	uCi/cc	uCi/m^2	pCi/g	pCi/g	mRem		
POINT	mR/hr	mR/hr	uR/hr	cpm	mR/hr	mR/hr	uR/hr	cpm	SAMPLE	SAMPLE	SAMPLE	contact								
01	0	0.1	101.9	122.3	0	0.2	132.1	158.5	0.1	1.2	0.0	0.0	8.13E-10	1.20E-08	0.00	0	0	0.1		
02	0	0.0	5.6	6.7	0	0.0	7.2	8.6	0.0	0.1	0.0	0.0	4.46E-11	6.56E-10	0.00	0	0	0.0		
03	0	0.0	3.6	4.3	0	0.0	4.6	5.5	0.0	0.0	0.0	0.0	2.86E-11	4.21E-10	0.00	0	0	0.0		
04	0	0.0	0.0	0.0	0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	2.61E-13	3.83E-12	0.00	0	0	0.0		
05	0	0.0	0.6	0.7	0	0.0	0.8	0.9	0.0	0.0	0.0	0.0	4.94E-12	7.21E-11	0.00	0	0	0.0		
06	0	0.0	0.2	0.3	0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	1.75E-12	2.55E-11	0.00	0	0	0.0		
07	0	0.0	0.2	0.2	0	0.0	0.2	0.3	0.0	0.0	0.0	0.0	1.37E-12	1.99E-11	0.00	0	0	0.0		
08	0	0.0	0.1	0.1	0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	9.15E-13	1.31E-11	0.00	0	0	0.0		
09	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0		
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0		
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0		

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: 12:15 PM

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS

READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA

1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE				6" ABOVE SURFACE													
Dose Rate Dose Rate				Dose Rate Dose Rate								IODINE	PART.	VEGETAT'N			
SAMPLE	CW	OW	LUD-19	HP-210	C/R	CW	OW	LUD-19	HP-210	C/R	HP-210	HP-210	HP-210	HP-210	IODINE	PART.	IODINE
POINT	mR/hr	mR/hr	uR/hr	cpm		mR/hr	mR/hr	uR/hr	cpm		cpm/cfm	cpm/cfm	mR/hr	contact	AIRBORNE	AIRBORNE	SURFACE
											SAMPLE	SAMPLE			uCi/cc	uCi/cc	uCi/m ²
															pCi/g	pCi/g	TLD DOSE
01	0	0.2	117.0	140.3		0	0.2	151.6	181.9		0.1	1.4	0.0		9.26E-10	1.38E-08	0.00
02	0	0.0	6.5	7.8		0	0.0	8.4	10.1		0.0	0.1	0.0		5.19E-11	7.70E-10	0.00
03	0	0.0	4.2	5.0		0	0.0	5.4	6.5		0.0	0.0	0.0		3.33E-11	4.94E-10	0.00
04	0	0.0	0.0	0.0		0	0.0	0.0	0.1		0.0	0.0	0.0		3.03E-13	4.50E-12	0.00
05	0	0.0	0.7	0.9		0	0.0	1.0	1.2		0.0	0.0	0.0		5.96E-12	8.76E-11	0.00
06	0	0.0	0.3	0.3		0	0.0	0.3	0.4		0.0	0.0	0.0		2.11E-12	3.10E-11	0.00
07	0	0.0	0.2	0.3		0	0.0	0.3	0.3		0.0	0.0	0.0		1.75E-12	2.55E-11	0.00
08	0	0.0	0.2	0.2		0	0.0	0.2	0.2		0.0	0.0	0.0		1.28E-12	1.85E-11	0.00
09	0	0.0	0.0	0.1		0	0.0	0.1	0.1		0.0	0.0	0.0		3.57E-13	5.09E-12	0.00
10	0	0.0	0.0	0.0		0	0.0	0.0	0.0		0.0	0.0	0.0		0.00E+00	0.00E+00	0.00
11	0	0.0	0.0	0.0		0	0.0	0.0	0.0		0.0	0.0	0.0		0.00E+00	0.00E+00	0.00

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: T

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS

READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA

1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE				6" ABOVE SURFACE				CONTAMINATION READINGS				CONTAMINATION SAMPLE RESULTS					
								IODINE AIRBORNE	PART. AIRBORNE	VEGETAT'N SAMPLE		IODINE AIRBORNE	PART. AIRBORNE	IODINE SURFACE	IODINE VEGETAT'N	PARTIC VEG	TLD DOSE
SAMPLE POINT	Dose Rate CW mR/hr	Dose Rate OW mR/hr	LUD-19 D/R uR/hr	HP-210 C/R cpm	Dose Rate CW mR/hr	Dose Rate OW mR/hr	LUD-19 D/R uR/hr	HP-210 C/R cpm	HP-210 cpm/cfm SAMPLE	HP-210 cpm/cfm SAMPLE	HP-210 mR/hr contact	uCi/cc	uCi/cc	uCi/m ²	pCi/g	pCi/g	mRem
01	0	0.4	260.9	313.0	0	0.5	338.1	405.7	0.2	3.1	0.0	2.05E-09	3.08E-08	0.00	0	0	0.1
02	0	0.0	7.5	9.0	0	0.0	9.7	11.6	0.0	0.1	0.0	5.92E-11	8.83E-10	0.00	0	0	0.0
03	0	0.0	4.8	5.8	0	0.0	6.2	7.5	0.0	0.1	0.0	3.79E-11	5.66E-10	0.00	0	0	0.0
04	0	0.0	0.0	0.1	0	0.0	0.1	0.1	0.0	0.0	0.0	3.46E-13	5.16E-12	0.00	0	0	0.0
05	0	0.0	0.9	1.0	0	0.0	1.1	1.4	0.0	0.0	0.0	6.93E-12	1.03E-10	0.00	0	0	0.0
06	0	0.0	0.3	0.4	0	0.0	0.4	0.5	0.0	0.0	0.0	2.45E-12	3.63E-11	0.00	0	0	0.0
07	0	0.0	0.3	0.3	0	0.0	0.3	0.4	0.0	0.0	0.0	2.11E-12	3.10E-11	0.00	0	0	0.0
08	0	0.0	0.2	0.2	0	0.0	0.3	0.3	0.0	0.0	0.0	1.63E-12	2.37E-11	0.00	0	0	0.0
09	0	0.0	0.1	0.1	0	0.0	0.1	0.1	0.0	0.0	0.0	6.09E-13	8.74E-12	0.00	0	0	0.0
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: T+15

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS

READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA

1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE				6" ABOVE SURFACE				CONTAMINATION READINGS			CONTAMINATION SAMPLE RESULTS					
								IODINE	PART.	VEGETAT'N	IODINE	PART.	IODINE	IODINE	PARTIC	TLD
								AIRBORNE	AIRBORNE	SAMPLE	AIRBORNE	AIRBORNE	SURFACE	VEGETAT'N	VEG	DOSE
SAMPLE	CW	OW	LUD-19	HP-210	Dose Rate	Dose Rate	LUD-19	HP-210	HP-210	HP-210	HP-210	HP-210	HP-210	HP-210	HP-210	HP-210
POINT	mR/hr	mR/hr	D/R	C/R	CW	OW	D/R	C/R	cpm/cfm	cpm/cfm	mR/hr	uCi/cc	uCi/cc	uCi/m^2	pCi/g	mRem
			uR/hr	cpm	mR/hr	mR/hr	uR/hr	cpm	SAMPLE	SAMPLE	contact					
01	6	8.2	5597.6	6717.1	7	10.7	7256.3	8707.5	4.4	62.7	0.0	4.39E-08	6.27E-07	0.00	0	0.2
02	0	0.0	16.7	20.0	0	0.0	21.6	25.9	0.0	0.2	0.0	1.31E-10	1.97E-09	0.00	0	0.0
03	0	0.0	10.7	12.8	0	0.0	13.9	16.6	0.0	0.1	0.0	8.41E-11	1.26E-09	0.00	0	0.0
04	0	0.0	0.1	0.1	0	0.0	0.1	0.2	0.0	0.0	0.0	7.66E-13	1.15E-11	0.00	0	0.0
05	0	0.0	1.0	1.2	0	0.0	1.3	1.6	0.0	0.0	0.0	7.90E-12	1.18E-10	0.00	0	0.0
06	0	0.0	0.4	0.4	0	0.0	0.5	0.5	0.0	0.0	0.0	2.79E-12	4.17E-11	0.00	0	0.0
07	0	0.0	0.3	0.4	0	0.0	0.4	0.5	0.0	0.0	0.0	2.45E-12	3.63E-11	0.00	0	0.0
08	0	0.0	0.2	0.3	0	0.0	0.3	0.4	0.0	0.0	0.0	1.96E-12	2.88E-11	0.00	0	0.0
09	0	0.0	0.1	0.1	0	0.0	0.1	0.2	0.0	0.0	0.0	8.50E-13	1.23E-11	0.00	0	0.0
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0.0
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0.0

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: T+30

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS
READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA 1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE				6" ABOVE SURFACE				IODINE AIRBORNE		PART. AIRBORNE	VEGETAT'N SAMPLE	IODINE AIRBORNE	PART. AIRBORNE	IODINE SURFACE	IODINE VEGETAT'N	PARTIC VEG	TLD DOSE
SAMPLE POINT	Dose Rate	Dose Rate	LUD-19	HP-210	Dose Rate	Dose Rate	LUD-19	HP-210	HP-210	HP-210	HP-210	uCi/cc	uCi/cc	uCi/m^2	pCi/g	pCi/g	mRem
	CW	OW	D/R	C/R	CW	OW	D/R	C/R	cpm/cfm	cpm/cfm	mR/hr						
	mR/hr	mR/hr	uR/hr	cpm	mR/hr	mR/hr	uR/hr	cpm	SAMPLE	SAMPLE	contact						
01	10	14.8	10097.8	12117.4	13	19.2	13090.1	15708.1	7.9	113.0	0.0	7.86E-08	1.13E-06	0.00	1	0	1.6
02	0	0.5	357.8	429.3	0	0.7	463.8	556.5	0.3	4.0	0.0	2.80E-09	4.01E-08	0.00	0	0	0.0
03	0	0.3	229.4	275.3	0	0.4	297.4	356.8	0.2	2.6	0.0	1.80E-09	2.57E-08	0.00	0	0	0.0
04	0	0.0	2.1	2.5	0	0.0	2.7	3.2	0.0	0.0	0.0	1.64E-11	2.34E-10	0.00	0	0	0.0
05	0	0.0	2.2	2.7	0	0.0	2.9	3.5	0.0	0.0	0.0	1.75E-11	2.63E-10	0.00	0	0	0.0
06	0	0.0	0.8	0.9	0	0.0	1.0	1.2	0.0	0.0	0.0	6.18E-12	9.29E-11	0.00	0	0	0.0
07	0	0.0	0.4	0.4	0	0.0	0.5	0.5	0.0	0.0	0.0	2.79E-12	4.17E-11	0.00	0	0	0.0
08	0	0.0	0.3	0.3	0	0.0	0.4	0.4	0.0	0.0	0.0	2.28E-12	3.38E-11	0.00	0	0	0.0
09	0	0.0	0.1	0.2	0	0.0	0.2	0.2	0.0	0.0	0.0	1.08E-12	1.58E-11	0.00	0	0	0.0
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: T+45

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS

READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA

1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE				6" ABOVE SURFACE				IODINE AIRBORNE			PART. AIRBORNE	VEGETAT'N SAMPLE	IODINE AIRBORNE	PART. AIRBORNE	IODINE SURFACE	IODINE VEGETAT'N	PARTIC VEG	TLD DOSE
Dose Rate	Dose Rate	LUD-19	HP-210	Dose Rate	Dose Rate	LUD-19	HP-210	HP-210	HP-210	HP-210	HP-210	HP-210						
CW	OW	D/R	C/R	CW	OW	D/R	C/R	cpm/cfm	cpm/cfm	cpm/cfm	cpm/cfm	cpm/cfm	uCi/cc	uCi/cc	uCi/m ²	pCi/g	pCi/g	mRem
SAMPLE POINT	mR/hr	mR/hr	uR/hr	cpm	mR/hr	mR/hr	uR/hr	cpm	SAMPLE	SAMPLE	SAMPLE	contact						
01	14	20.7	14078.9	16894.6	18	26.8	18250.8	21900.9	10.9	157.5	0.0	0.0	1.09E-07	1.58E-06	0.00	4	0	4.1
02	1	0.9	645.4	774.5	1	1.2	836.6	1004.0	0.5	7.2	0.0	0.0	5.02E-09	7.22E-08	0.00	0	0	0.1
03	0	0.6	413.8	496.6	1	0.8	536.4	643.7	0.3	4.6	0.0	0.0	3.22E-09	4.63E-08	0.00	0	0	0.1
04	0	0.0	3.8	4.5	0	0.0	4.9	5.9	0.0	0.0	0.0	0.0	2.93E-11	4.22E-10	0.00	0	0	0.0
05	0	0.1	47.8	57.3	0	0.1	61.9	74.3	0.0	0.5	0.0	0.0	3.74E-10	5.35E-09	0.00	0	0	0.0
06	0	0.0	16.9	20.3	0	0.0	21.9	26.3	0.0	0.2	0.0	0.0	1.32E-10	1.89E-09	0.00	0	0	0.0
07	0	0.0	0.8	0.9	0	0.0	1.0	1.2	0.0	0.0	0.0	0.0	6.18E-12	9.29E-11	0.00	0	0	0.0
08	0	0.0	0.3	0.4	0	0.0	0.4	0.5	0.0	0.0	0.0	0.0	2.60E-12	3.88E-11	0.00	0	0	0.0
09	0	0.0	0.2	0.2	0	0.0	0.2	0.3	0.0	0.0	0.0	0.0	1.30E-12	1.92E-11	0.00	0	0	0.0
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: T+60

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS

READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA

1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE				6" ABOVE SURFACE				CONTAMINATION READINGS			CONTAMINATION SAMPLE RESULTS					
								IODINE	PART.	VEGETAT'N	IODINE	PART.	IODINE	IODINE	PARTIC	TLD
								AIRBORNE	AIRBORNE	SAMPLE	AIRBORNE	AIRBORNE	SURFACE	VEGETAT'N	VEG	DOSE
SAMPLE	CW	OW	LUD-19	HP-210	Dose Rate	Dose Rate	LUD-19	HP-210	HP-210	HP-210	HP-210	HP-210	HP-210	HP-210	HP-210	HP-210
POINT	mR/hr	mR/hr	uR/hr	cpm	mR/hr	mR/hr	uR/hr	cpm	cpm/cfm	cpm/cfm	mR/hr	cpm/cfm	cpm/cfm	uCi/cc	uCi/cc	mRem
									SAMPLE	SAMPLE	contact					
01	17	25.7	17467.0	20960.4	23	33.3	22642.8	27171.4	13.4	195.6	0.0	1.34E-07	1.96E-06	0.01	7	0 7.6
02	1	1.3	899.8	1079.8	1	1.7	1166.5	1399.8	0.7	10.1	0.0	6.96E-09	1.01E-07	0.00	0	0 0.3
03	1	0.8	576.9	692.3	1	1.1	747.9	897.5	0.4	6.5	0.0	4.46E-09	6.46E-08	0.00	0	0 0.2
04	0	0.0	5.3	6.3	0	0.0	6.8	8.2	0.0	0.1	0.0	4.07E-11	5.88E-10	0.00	0	0 0.0
05	0	0.1	86.2	103.4	0	0.2	111.7	134.0	0.1	1.0	0.0	6.71E-10	9.64E-09	0.00	0	0 0.0
06	0	0.0	30.4	36.5	0	0.1	39.5	47.4	0.0	0.3	0.0	2.37E-10	3.41E-09	0.00	0	0 0.0
07	0	0.0	16.9	20.3	0	0.0	21.9	26.3	0.0	0.2	0.0	1.32E-10	1.89E-09	0.00	0	0 0.0
08	0	0.0	0.7	0.9	0	0.0	0.9	1.1	0.0	0.0	0.0	5.76E-12	8.65E-11	0.00	0	0 0.0
09	0	0.0	0.2	0.2	0	0.0	0.2	0.3	0.0	0.0	0.0	1.52E-12	2.25E-11	0.00	0	0 0.0
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0 0.0
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0 0.0

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: 1+75

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS

READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA

1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE				6" ABOVE SURFACE				CONTAMINATION READINGS			CONTAMINATION SAMPLE RESULTS					
								IODINE	PART.	VEGETAT'N	IODINE	PART.	IODINE	IODINE	PARTIC	TLD
								AIRBORNE	AIRBORNE	SAMPLE	AIRBORNE	AIRBORNE	SURFACE	VEGETAT'N	VEG	DOSE
								HP-210	HP-210	HP-210	HP-210	HP-210	HP-210	HP-210	HP-210	HP-210
								cpm/cfm	cpm/cfm	cpm/cfm	cpm/cfm	cpm/cfm	uCi/cc	uCi/cc	uCi/m^2	pCi/g
SAMPLE	CW	OW	D/R	HP-210	C/R	CW	OW	D/R	C/R	HP-210	HP-210	HP-210	uCi/cc	uCi/cc	uCi/m^2	pCi/g
POINT	mR/hr	mR/hr	uR/hr	cpm	mR/hr	mR/hr	mR/hr	uR/hr	cpm	SAMPLE	SAMPLE	contact				
01	20	29.9	20354.2	24425.0	26	38.8	26385.4	31662.5	15.6	228.1	0.1	1.56E-07	2.28E-06	0.01	11	0
02	1	1.6	1116.4	1339.7	1	2.1	1447.2	1736.6	0.9	12.5	0.0	8.59E-09	1.25E-07	0.00	0	0
03	1	1.1	715.8	858.9	1	1.4	927.9	1113.4	0.6	8.0	0.0	5.51E-09	8.01E-08	0.00	0	0
04	0	0.0	6.5	7.8	0	0.0	8.5	10.1	0.0	0.1	0.0	5.02E-11	7.30E-10	0.00	0	0
05	0	0.2	120.1	144.1	0	0.2	155.7	186.9	0.1	1.3	0.0	9.29E-10	1.34E-08	0.00	0	0
06	0	0.1	42.5	50.9	0	0.1	55.0	66.0	0.0	0.5	0.0	3.28E-10	4.75E-09	0.00	0	0
07	0	0.0	30.4	36.5	0	0.1	39.5	47.4	0.0	0.3	0.0	2.37E-10	3.41E-09	0.00	0	0
08	0	0.0	15.7	18.9	0	0.0	20.4	24.4	0.0	0.2	0.0	1.23E-10	1.76E-09	0.00	0	0
09	0	0.0	0.2	0.3	0	0.0	0.3	0.3	0.0	0.0	0.0	1.73E-12	2.58E-11	0.00	0	0
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: T+90

1. Zeros are "as read"

2. Multiply the airborne values by the ft^3 sampled.

3. Veg. value based on a 1 kilogram sample

4. ERRATIC means cpm to high to be reliable

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1 METER ABOVE SURFACE

6" ABOVE SURFACE

SAMPLE POINT	Dose Rate		LUD-19 D/R uR/hr	HP-210 C/R cpm	Dose Rate		LUD-19 D/R uR/hr	HP-210 C/R cpm	CONTAMINATION READINGS READINGS MADE OUTSIDE PLUME			OFF SITE LABORATORY DATA					
	CW mR/hr	OW mR/hr			CW mR/hr	OW mR/hr			IODINE AIRBORNE cpm/cfm SAMPLE	PART. AIRBORNE cpm/cfm SAMPLE	VEGETAT'N SAMPLE mR/hr contact	IODINE AIRBORNE uCi/cc	PART. AIRBORNE uCi/cc	IODINE SURFACE uCi/m^2	IODINE VEGETAT'N pCi/g	PARTIC VEG pCi/g	TLD DOSE mRem
01	23	33.7	22924.0	27508.8	30	43.7	29716.7	35660.0	17.5	257.2	0.1	1.75E-07	2.57E-06	0.02	16	0	17.1
02	1	1.9	1300.9	1561.1	2	2.5	1686.4	2023.7	1.0	14.6	0.0	9.96E-09	1.46E-07	0.00	1	0	0.8
03	1	1.2	834.1	1000.9	1	1.6	1081.2	1297.5	0.6	9.3	0.0	6.38E-09	9.35E-08	0.00	0	0	0.5
04	0	0.0	7.6	9.1	0	0.0	9.8	11.8	0.0	0.1	0.0	5.81E-11	8.51E-10	0.00	0	0	0.0
05	0	0.2	149.0	178.8	0	0.3	193.2	231.8	0.1	1.7	0.0	1.15E-09	1.67E-08	0.00	0	0	0.1
06	0	0.1	52.7	63.2	0	0.1	68.3	81.9	0.0	0.6	0.0	4.05E-10	5.90E-09	0.00	0	0	0.0
07	0	0.1	42.5	50.9	0	0.1	55.0	66.0	0.0	0.5	0.0	3.28E-10	4.75E-09	0.00	0	0	0.0
08	0	0.0	28.3	34.0	0	0.1	36.7	44.1	0.0	0.3	0.0	2.21E-10	3.17E-09	0.00	0	0	0.0
09	0	0.0	0.5	0.6	0	0.0	0.6	0.8	0.0	0.0	0.0	3.83E-12	5.76E-11	0.00	0	0	0.0
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0	0.0

OFF SITE LABORATORY DATA

1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

ROBINSON ANNUAL EXERCISE 1992 OFFSITE RELEASE DATA SUMMARY

DRILL TIME: T+105

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft³ sampled.
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS
READINGS MADE OUTSIDE PLUME

OFF SITE LABORATORY DATA 1. Multiply veg. values by no. of grams in sample.

CONTAMINATION SAMPLE RESULTS

1 METER ABOVE SURFACE				6" ABOVE SURFACE				IODINE AIRBORNE	PART. AIRBORNE	VEGETAT'N SAMPLE	IODINE AIRBORNE	PART. AIRBORNE	IODINE SURFACE	IODINE VEGETAT'N	PARTIC VEG	TLD DOSE
SAMPLE POINT	Dose Rate	Dose Rate	LUD-19	HP-210	Dose Rate	Dose Rate	LUD-19	HP-210	HP-210	HP-210	HP-210					
	CW	OW	D/R	C/R	CW	OW	D/R	C/R	cpm/cfm	cpm/cfm	mR/hr	uCi/cc	uCi/cc	uCi/m^2	pCi/g	pCi/g
	mR/hr	mR/hr	uR/hr	cpm	mR/hr	mR/hr	uR/hr	cpm	SAMPLE	SAMPLE	contact					mRem
01	25	37.0	25158.4	30190.1	33	47.9	32613.0	39135.6	19.1	282.6	0.1	1.91E-07	2.83E-06	0.02	21	0
02	1	2.2	1465.2	1758.2	2	2.8	1899.3	2279.2	1.1	16.4	0.0	1.12E-08	1.64E-07	0.00	1	0
03	1	1.4	939.4	1127.3	1	1.8	1217.7	1461.3	0.7	10.5	0.0	7.15E-09	1.05E-07	0.00	1	0
04	0	0.0	8.6	10.3	0	0.0	11.1	13.3	0.0	0.1	0.0	6.52E-11	9.60E-10	0.00	0	0
05	0	0.3	173.7	208.4	0	0.3	225.1	270.1	0.1	1.9	0.0	1.33E-09	1.95E-08	0.00	0	0
06	0	0.1	61.4	73.6	0	0.1	79.6	95.5	0.0	0.7	0.0	4.70E-10	6.88E-09	0.00	0	0
07	0	0.1	52.7	63.2	0	0.1	68.3	81.9	0.0	0.6	0.0	4.05E-10	5.90E-09	0.00	0	0
08	0	0.1	39.5	47.4	0	0.1	51.2	61.5	0.0	0.4	0.0	3.06E-10	4.42E-09	0.00	0	0
09	0	0.0	10.5	12.6	0	0.0	13.6	16.3	0.0	0.1	0.0	8.19E-11	1.17E-09	0.00	0	0
10	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0
11	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E+00	0.00E+00	0.00	0	0

DAMAGE CONTROL MISSION # 1

MISSION: HVH-2 is isolated for tube plugging operations. Plugging is in progress. This is in progress from the previous night shift.

INDICATIONS: Clearance has been taken and HVH-2 is out of service.

BACKGROUND: At the onset of the scenario this work has been in progress. End bells have been removed for the maintenance. The crews are out for turnover. This meeting will possibly take place in the maintenance shop.

RELEVANCE TO SCENARIO: This is the escape path for the release of activity to the environment. Though the open cooler & out through the ruptured service water pipe in the Charging Pump Room.

SCENARIO TIME CONSTRAINTS: This must take place at the beginning of the exercise. The coolers in the CV are to remain open.

SIMULATION: Entrance into Containment will be simulated for ALARA purposes. The call to the control room as the team enters CV needs to be made to the simulated control room. The mission controller needs to call the Simulator controller to allow the proper alarms to be used in the Simulator. Mechanics performing the maintenance to be taken to the CV air lock.

REFERENCES IN PACKAGE: G-190199, RWP R92-DRL1 WR#

LOCATION: Teams should start at the maintenance shop and travel to the entrance of Containment. Containment entry will be simulated.

RADIATION LEVELS: See Maps and time line on the maps

MESSAGE REFERENCE: 1A

S_F_E_C_I_A_L RWP:

R92-DR11

REV: 07

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DO NOT POST

INITIAL DATE: 02/11/92 TIME: 15:12

REVISION DATE: 05/06/92 TIME: 07:13

VALID THROUGH: 12/31/92

IOD #:

WRA #:

LOCATION

CONTAINMENT VESSEL

SECOND AND THIRD LEVEL- HVH UNITS ,2

WORK DESCRIPTION

REMOVE / REPLACE / TRANSPORT PREFILTERS, CLEAN COOLERS, CLEAN AND REPAIR

RADIOLOGICAL CONDITIONS

AS POSTED

RECOMMENDED ALLOWED DOSE: 100 MREM

EMPLOYERS: CPL OT
CREW IDS:

REQUIRED DOSIMETRY AND PROTECTIVE EQUIPMENT

DOSIMETRY

PROTECTIVE CLOTHING

TLD --- SRPDS ---
CHEST 200MR OR 500MR

SINGLE CLOTH COVERALLS

GLOVES: SINGLE RUBBER

SHOECOVERS: SINGLE CLOTH AND SINGLE RUBBER

HEADCOVER: SINGLE CLOTH HOOD

INSTRUCTIONS

* REVIEW ATTACHED WORK AREA SURVEY FOR "AS POSTED" RADIOLOGICAL *
* CONDITIONS. SEE RWP INFORMATION BOOTH FOR ADDITIONAL INFORMATION. *

RADIOLOGICAL CONDITIONS SUBJECT TO CHANGE.
NOTIFY HEALTH PHYSICS PRIOR TO STARTING WORK.
SURVEY INSTRUMENT REQUIRED FOR WORK IN HRA / LHRA'S.
PRE-JOB BRIEFING REQUIRED FOR WORK IN LHRA'S.
LHRA FORM/CONTINUOUS HP COVERAGE REQUIRED FOR WORK IN LHRA'S.
ALARA REVIEW PERFORMED BY ().
CHECK DOSIMETERS OFTEN.
(INSTRUCTIONS CONTINUED ON NEXT PAGE)

SAMPLING REQUIRED: YES (AS SPECIFIED BY HP) RESPONSIBLE PERSON: RICHARD SMITH
SURVEYS: 07050592

APPROVED BY:

DATE: ___/___/___ TIME: ___:___:___

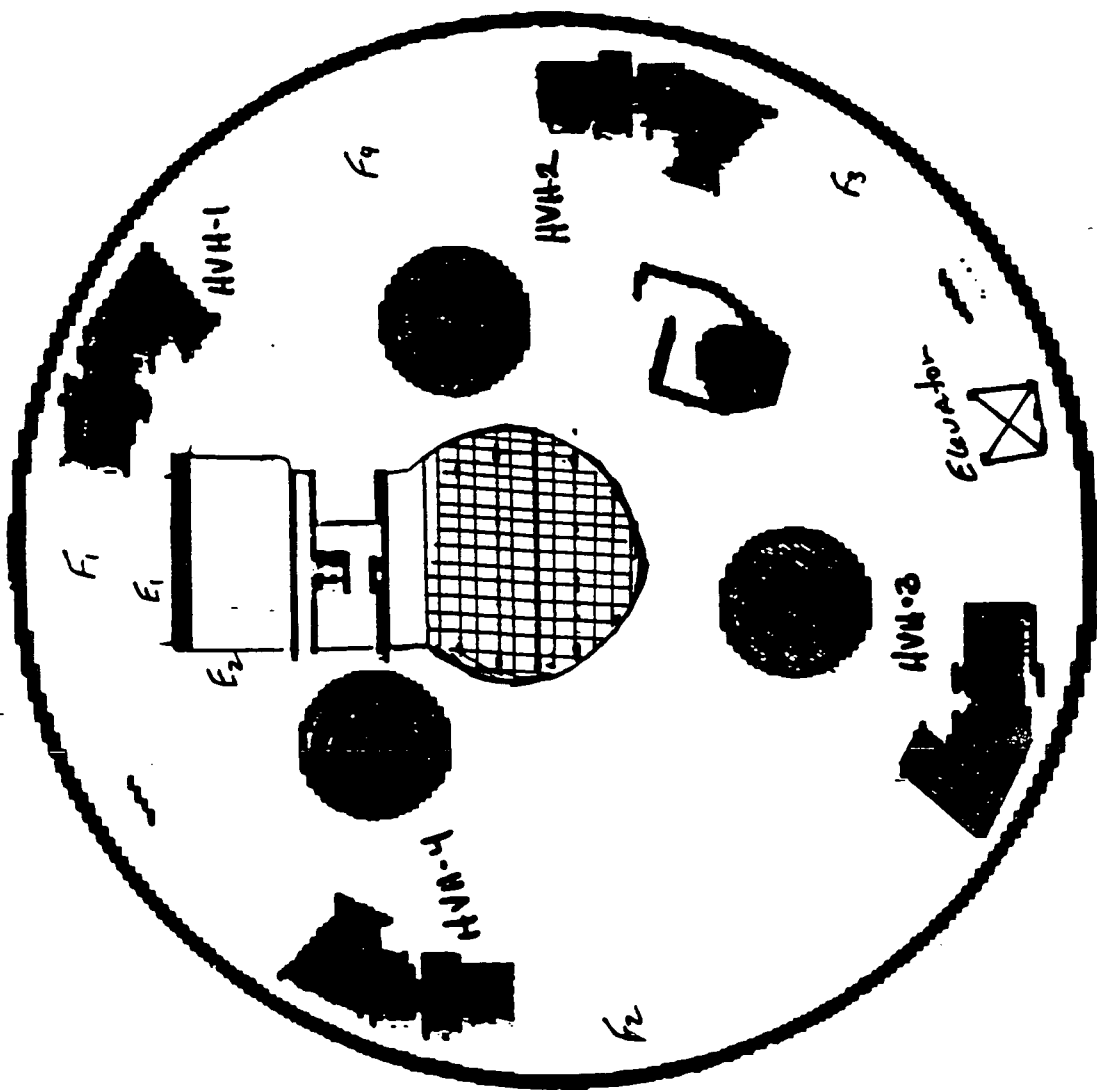
CP&L - ROBINSON PLANT

TERMINATION DATE: ___/___/___ TIME: ___:___:___

----- INSTRUCTIONS (CONTINUED) -----

RESPIRATORY PROTECTION REQUIRED FOR REMOVING HVH PRE-FILTERS.
DOUBLE PC'S REQUIRED FOR REMOVING, REPLACING, TRANSPORTING FILTERS.
IF WORK IS BEING PERFORMED INSIDE HVH/HVE FAN ROOMS, ATTACH HVH/HVE FAN
ROOM UNIT ENTRY FORM.

(END OF INSTRUCTIONS)



3rd Floor Containment

Rad Levels on
CV 3rd level

mr/hr

TIME	7:30	8:00	8:30	9:00	9:30	10:00	10:30
F1	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>20</u>	<u>20</u>	<u>30</u>
F2	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>4</u>	<u>6</u>	<u>8</u>
F3	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>4</u>	<u>6</u>	<u>8</u>
F4	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>4</u>	<u>6</u>	<u>8</u>
E1	<u>20</u>	<u>20</u>	<u>20</u>	<u>20</u>	<u>30</u>	<u>30</u>	<u>60</u>
E2	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>60</u>	<u>60</u>	<u>80</u>
E3	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
E4	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
TIME	<u>11:00</u>	<u>11:30</u>	<u>12:00</u>	<u>12:30</u>	<u>13:00</u>	<u>13:30</u>	<u>14:00</u>
F1	<u>40</u>	<u>100</u>	<u>200</u>	<u>900</u>	<u>4000</u>	<u>8000</u>	<u>14000</u>
F2	<u>10</u>	<u>25</u>	<u>50</u>	<u>200</u>	<u>4000</u>	<u>20000</u>	<u>50000</u>
F3	<u>10</u>	<u>25</u>	<u>50</u>	<u>200</u>	<u>10000</u>	<u>20000</u>	<u>50000</u>
F4	<u>10</u>	<u>25</u>	<u>50</u>	<u>200</u>	<u>4000</u>	<u>20000</u>	<u>100000</u>
E1	<u>95</u>	<u>110</u>	<u>225</u>	<u>990</u>	<u>4000</u>	<u>8000</u>	<u>14000</u>
E2	<u>110</u>	<u>150</u>	<u>300</u>	<u>990</u>	<u>4000</u>	<u>8000</u>	<u>14000</u>
E3	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
E4	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>

Air Activity may be gotten from Section 3.4 Radiological
Information Containment Atmosphere Activity

DAMAGE CONTROL MISSION #2

MISSION:

Repair the Rad Waste Crane.

INDICATIONS:

The crane will lock up causing the load to be left on the hook. The drive motor will not allow movement in the up or down direction. The lock up will come when the load is about 10' off the target area. Upon inspection maintenance will find a cable wedged between the drum and the support causing it to bind. I&C will inspect, finding the breaker tripped due to the overheating of the motor.

BACKGROUND:

At the onset of the exercise a seismic event occurs. During this time a highly radioactive resin shipment is in progress. A [simulated High Integrity Container (HIC)] drum will be lifted. The lift cable on the crane will cross over and bind the lift motor causing the motor to trip the breaker. This will leave the load hanging in the air.

RELEVANCE TO SCENARIO:

This mission has no bearing on the time line of the exercise and may not be worked at all due to the fact that it does not impact the health and safety of the public. It is used to test setting the priority of missions. Mission success will be judged on the ability of the Health Physics personnel to mitigate exposure to the rest of the drill participants.

SCENARIO TIME CONSTRAINTS:

This repair portion of this mission cannot be completed in the time constraints of this exercise. The Health Physics portion will only include the job coverage portion and the roping off of the area to preclude entry.

SIMULATION:

No electrical panels/cubicles are to be opened. There will be a drum to be lifted to simulate the loading of the HIC. All other activities will be simulated and all activities will be in the upper levels of the Rad Waste Building due to ALARA concerns.

REFERENCES IN PACKAGE:

RWP R92-DRL2

LOCATION:

Rad Waste Building. Hook-up of the HIC will be in the truck bay. All other activities will be in the upper two levels of the Rad Waste building.

RADIATION
LEVELS:

Rad level on contact (up to 6") will be 1000 R/hr:

@ 2' 63 R/hr

@ 4' 16 R/hr

@ 8' 4 R/hr

(rule of thumb 17 mr/min for every 1R of exposure)

On the second level of the Rad Waste Building, rad levels will be 2 - 5 mR/hr except at the viewing window where it will be 100mR/hr.

MESSAGE
REFERENCE:

1B, 4,

S_F_E_C_I_A_L RWF:

R92-DR2

REV: 00

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DO NOT POST

INITIAL DATE: 06/24/92 TIME: 08:40

VALID THROUGH: 12/31/92

MOD #: WRA #: 92-ALGM1

LOCATION

ALL AREAS IN THE RCA/NOT CV.

"C" WASTE EVAPORATOR ROOM, RADWASTE BUILDING,
DRUMMING ROOM, AND FA FENCE LINE

WORK DESCRIPTION

SLUICE RESIN FROM PROCESS VESSELS TO SPENT RESIN STORAGE TANK; SLUICE RESIN
FROM SPENT RESIN STORAGE TANK TO HIC IN RAD WASTE BUILDING; TO INCLUDE SET-UP,
DE-WATERING, SHIPPING, DECON AND ALL ASSOCIATED ACTIVITIES.

RADIOLOGICAL CONDITIONS

AS POSTED

RECOMMENDED ALLOWED DOSE: 200 MREM

EMPLOYERS: CPL OT

CREW IDS:

REQUIRED DOSIMETRY AND PROTECTIVE EQUIPMENT

DOSIMETRY

PROTECTIVE CLOTHING

TLDR

SRPDS

CHEST

500MR

DRESS PER INSTRUCTIONS

INSTRUCTIONS

* REVIEW ATTACHED WORK AREA SURVEY FOR "AS POSTED" RADIOLOGICAL *
* CONDITIONS. SEE RWF INFORMATION BOOTH FOR ADDITIONAL INFORMATION *

NOTIFY HEALTH PHYSICS PRIOR TO STARTING WORK.
RADIOLOGICAL CONDITIONS SUBJECT TO CHANGE.
IF UNKNOWN DOSES >1R/HR ARE FOUND, LEAVE.
ALARA REVIEW PERFORMED BY ().
SURVEY INSTRUMENT REQUIRED FOR ENTRIES IN HRA'S / LHRA'S.
CHECK DOSIMETERS OFTEN.

(INSTRUCTIONS CONTINUED ON NEXT PAGE)

SAMPLING REQUIRED: YES (AS SPECIFIED BY HP) RESPONSIBLE PERSON: MIKE CRABTREE
SURVEYS: 07080792 11080992

APPROVED BY: *Drill*

DATE: ___/___/___

TIME: *Drill*

CP&L - ROBINSON PLANT

TERMINATION DATE: ___/___/___ TIME: ___:___:___

----- INSTRUCTIONS (CONTINUED) -----

FULL PROTECTIVE CLOTHING REQUIRED FOR WORK IN CONTAMINATION
AREAS OR ON CONTAMINATED EQUIPMENT.
RESPIRATORY PROTECTION REQUIRED FOR BREACHING CONTAMINATED SYSTEMS.
CLOTH HOOD REQUIRED WITH RESPIRATOR.
DRESS AS POSTED FOR SUPPORT FUNCTIONS.
ALARMING DOSIMETER REQUIRED FOR PERSONNEL MONITORING RESIN TRANSFER
LINES. SET ALARMING DOSIMETERS AT 150 MR ACCUMULATED DOSE AND 500 MR
RADIATION FIELD.

PRE-JOB BRIEFING REQUIRED PRIOR TO RESIN TRANSFER.
CONTINUOUS HF COVERAGE REQUIRED DURING RESIN TRANSFER.
NOTIFY EFFECTED PERSONNEL PRIOR TO RESIN TRANSFER.
ENSURE COMMUNICATION IS ESTABLISHED PRIOR TO AND DURING TRANSFER
WITH THE SPECIFIC INDIVIDUALS INVOLVED.

(END OF INSTRUCTIONS)

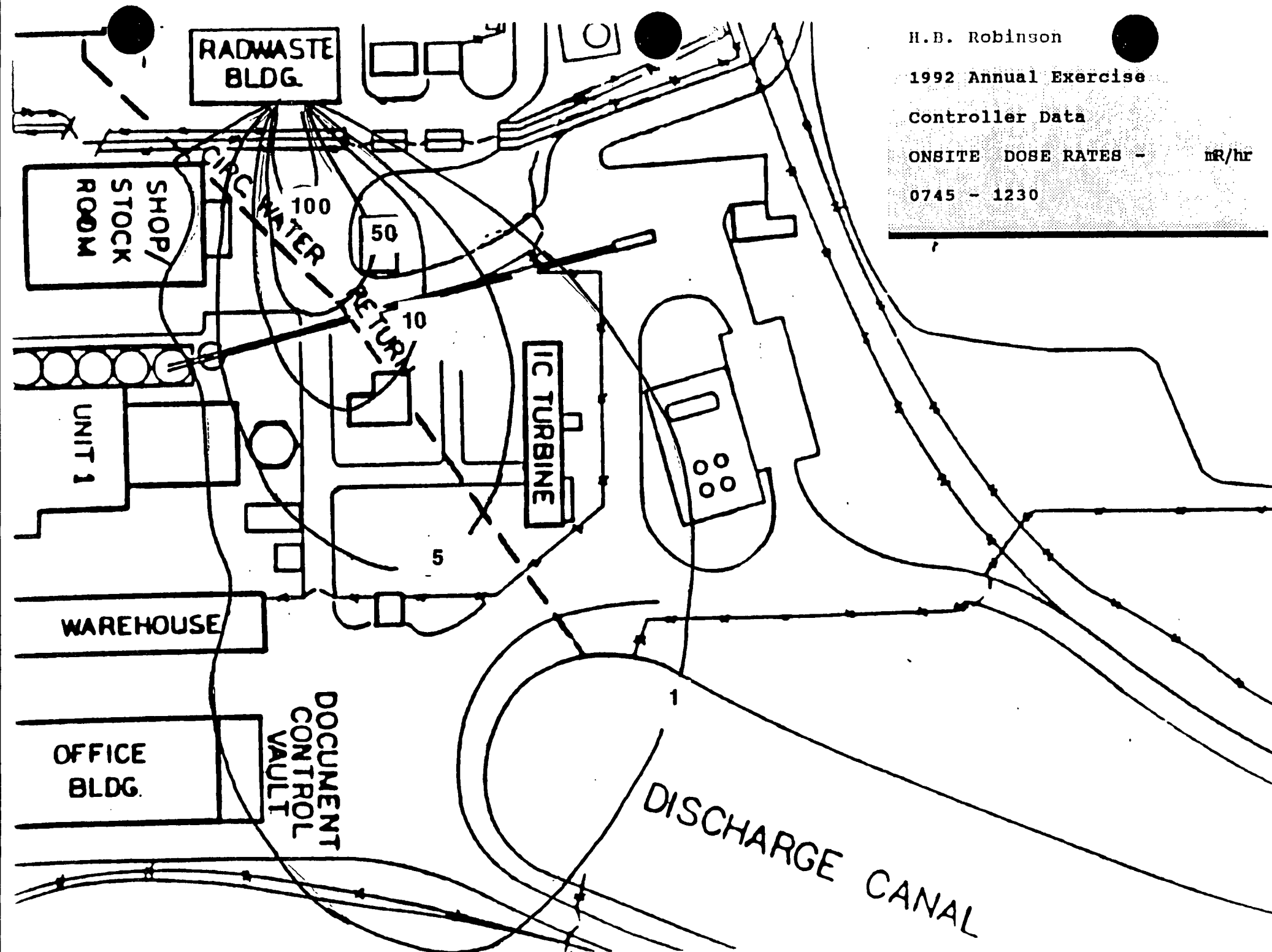
H.B. Robinson

1992 Annual Exercise

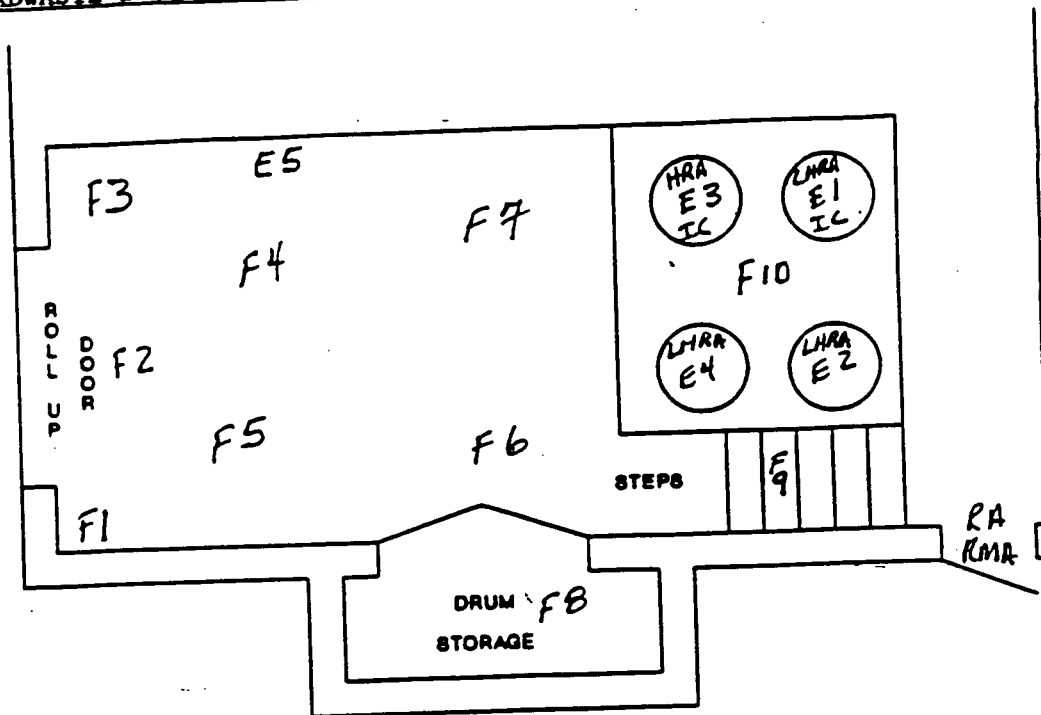
Controller Data

ONSITE DOSE RATES - mR/hr

0745 - 1230



ROOM OR AREA: RADWASTE BUILDING TRUCK BAY SURVEY# 12-1234 RWP# 92-0001



PERFORMED BY: DRILL HP DATE: 11-17-92 TIME: 0100-07

LOCATION	DESCRIPTION	CONTACT MR/HR	CONTACT MPAD/HR	15" MR/HR	SMEAR DPM/100cm ²	AIRBORNE MPC FRAC.
F1	FLOOR			22	103	1.25
F2					183	
F3					CMDA	
F4					96	
F5					CMDA	
F6						
F7						
F8				20		
F9				8		
F10						
E1	RESIN HIC	120		100	119	
E2		148		120	98	
E3		10		8	CMDA	
E4		390		300	113	
E5	LADDER				80	

INSTRUMENT TYPE
ROZA
TENN

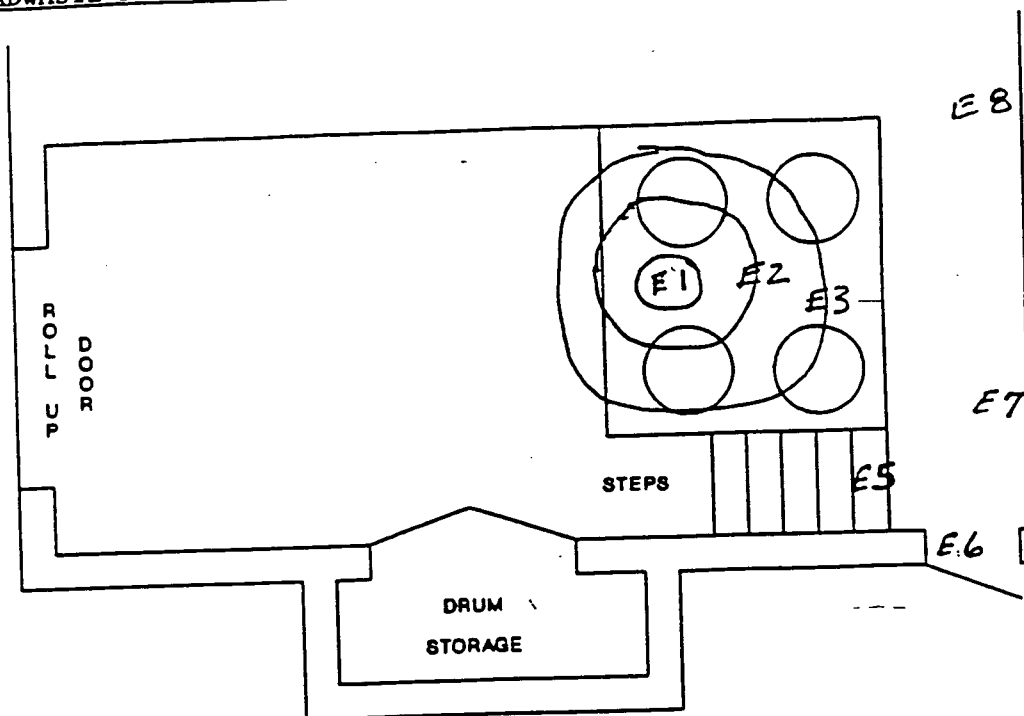
SERIAL NO.
252
03

ABBREVIATION KEY
 LHRA: Locked Hi-Rad Area
 HRA: Hi-Rad Area
 HCA: Hi-Contaminat. Area
 CA: Contamination Area
 CPEA: Contam. Proc. Equip. Area
 ARA: Airborne Rad Area
 RA: Rad Area
 RMA: Rad Material Area
 SOP: Step-Off Pad
 E#: Equip. Locati
 F#: Floor Locati
 H#: Hot Spot Loc.
 IC: Internal Contamination

Page: 1 of 1

Comments: MDA = 74 DPM E4 Contains HIC With A Reading of 1000 R/hr
at 6"

Drill
MESSAGE



PERFORMED BY: Drill HP DATE: 11-17-92 TIME: 0749

LOCATION	DESCRIPTION	CONTACT MR/HR	CONTACT MRAD/HR	18" MR/HR	SMEAR DPM/100cm ²	AIRBORNE MPC FRAC.
E1	16" FROM HIC	1000 R/hr				4.25
E2	2' FROM HIC	163 R/hr				
E3	4' FROM HIC	16 R/hr				
E4	8' FROM HIC *	4 R/hr				
E5	TOP STEP	3.2 R/hr				
E6	DOORWAY	1.2 R/hr				
E7	WALKWAY	1.4 R/hr				
E8	WALKWAY	1.4 R/hr				
E9	DOORWAY	180 mr/hr				

INSTRUMENT TYPE Tele SERIAL NO. 27

ABBREVIATION KEY
 LHRA: Locked Hi-Rad Area
 HRA: Hi-Rad Area
 HCA: Hi-Contamination Area
 CA: Contamination Area
 CPEA: Contam. Process Equip. Area
 ARA: Airborne Rad Area
 RA: Rad Area
 RMA: Rad Material Area
 SOP: Step-Off Pad
 E#: Equip. Location
 F#: Floor Location
 H#: Hot Spot Loc.
 IC: Internal Contamination
 Page: _____ of _____

Comments: * IN ANY DIRECTION (NOT SHOWN ON MAP)

DRILL MESSAGE

Radwaste Truck Bay

Mr/hr

TIME	<u>0800</u>	<u>08:30</u>	<u>09:00</u>	<u>09:30</u>	<u>10:00</u>	<u>10:30</u>
E1	<u>1000,000</u>	<u>1000,000</u>	<u>1000,000</u>	<u>1000,000</u>	<u>1000,000</u>	<u>1000,000</u>
E2	<u>63,000</u>	<u>63,000</u>	<u>63,000</u>	<u>63,000</u>	<u>63,000</u>	<u>63,000</u>
E3	<u>16,000</u>	<u>16,000</u>	<u>16,000</u>	<u>16,000</u>	<u>16,000</u>	<u>16,000</u>
E4	<u>4,000</u>	<u>4,000</u>	<u>4,000</u>	<u>4,000</u>	<u>4,000</u>	<u>4,000</u>
E5	<u>3,200</u>	<u>3,200</u>	<u>3,200</u>	<u>3,200</u>	<u>3,200</u>	<u>3,200</u>
E6	<u>1,200</u>	<u>1,200</u>	<u>1,200</u>	<u>1,200</u>	<u>1,200</u>	<u>1,200</u>
E7	<u>1,400</u>	<u>1,400</u>	<u>1,400</u>	<u>1,400</u>	<u>1,400</u>	<u>1,400</u>
E8	<u>1,400</u>	<u>1,400</u>	<u>1,400</u>	<u>1,400</u>	<u>1,400</u>	<u>1,400</u>
E9	<u>180</u>	<u>180</u>	<u>180</u>	<u>180</u>	<u>180</u>	<u>180</u>

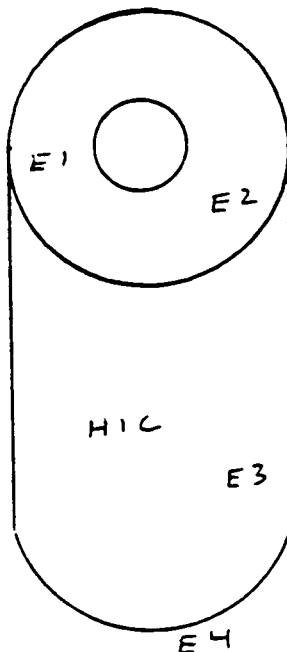
TIME	<u>11:00</u>	<u>11:30</u>	<u>12:00</u>	<u>12:30</u>	<u>13:00</u>	<u>13:30</u>
E1	<u>1000,000</u>	<u>1000,000</u>	<u>1000,000</u>	<u>1000,000</u>	<u>1000,000</u>	<u>1000,000</u>
E2	<u>63,000</u>	<u>63,000</u>	<u>63,000</u>	<u>63,000</u>	<u>63,000</u>	<u>63,000</u>
E3	<u>16,000</u>	<u>16,000</u>	<u>16,000</u>	<u>16,000</u>	<u>16,000</u>	<u>16,000</u>
E4	<u>4,000</u>	<u>4,000</u>	<u>4,000</u>	<u>4,000</u>	<u>4,000</u>	<u>4,000</u>
E5	<u>3,200</u>	<u>3,200</u>	<u>3,200</u>	<u>3,200</u>	<u>3,200</u>	<u>3,200</u>
E6	<u>1,200</u>	<u>1,200</u>	<u>1,200</u>	<u>1,200</u>	<u>1,200</u>	<u>1,200</u>
E7	<u>1,400</u>	<u>1,400</u>	<u>1,400</u>	<u>1,400</u>	<u>1,400</u>	<u>1,400</u>
E8	<u>1,400</u>	<u>1,400</u>	<u>1,400</u>	<u>1,400</u>	<u>1,400</u>	<u>1,400</u>
E9	<u>180</u>	<u>180</u>	<u>180</u>	<u>180</u>	<u>180</u>	<u>180</u>

Air Activity is less than 2.25 E-9 for
the entire time of the exercise



MISSION # 2 RADIOLOGICAL DATA

1. 170 mR/hr
2. 0.2 mR/hr
3. As read
4. 250 mR/hr
5. 434 mR/hr
6. 920 mR/hr
7. 1.4 R/hr
8. 1.4 R/hr
9. 1.4 R/hr
10. 200 R/hr
11. 1.2 R/hr



PERFORMED BY: J. Pennington

DATE: 11/16/92 TIME: 10:

[illegible]

COMMENTS: SURVEY OF DEWATERED BEAD RESIN

INSTRUMENT	TYPE	SERIAL
<u>TENN</u>	<u>TENN</u>	<u>04</u>
<u>TENN</u>	<u>TENN</u>	<u>02</u>
<u>200CW</u>	<u>200CW</u>	<u>213</u>

ABBREVIATION KEY

LHRA: Locked Hi-Rad Area
HRA: Hi-Rad Area
HCA: Hi-Contaminat Area
CA: Contamination
CPEA: Contam. Proce Equip. Area
ARA: Airborne Rad
RA: Rad Area
RMA: Rad Material
SDP: Step-Off Pad
E#: Equip. Locat.
F#: Floor Locat.
HS: Hot Spot Loc.
Page: 1 of

CONTAINER LOG

CONTAINER NO. L-448182-7

CONTAINER TYPE. 8-120 HIC

TYPE SURVEY:

STEAR

Alpha

List Type:

Eff.:

Begd.:

Beta

List Type:

EFF.:

Begd.:

Radiological

List Type:

Serial No.:

Due Date:

TYPE WASTE

☐ DAW

FILTERS

□ **OL**

☒ OTHER (SPECIFY) LETIN

[illegible]

CONTAINER FILLED WT. 4300 LBS.

SHIPPING DATE 11/17/92

SHIPMENT NO. C-924

REVIEWED BY:

RC FOREIGN

CONTAINER VOLUME 120/3 FT³ CONTAINER SEAL NO. 827

BOX/DRUM INTEGRITY VERIFIED

VERIFICATION PRIOR TO SHIPPING

DATE:

CONTAINER SEAL NO. 227

Initial

Initial

11/16/61

७५८

11/16/17

Da

DAMAGE CONTROL MISSION # 3A

MISSION: 1st Seismic mission will require a team of personnel to be dispatched to the seismic recorders. (A team may only consist of one person or two separate teams.) They are located at the settling ponds and inside the Inlet Purge Room.

INDICATIONS: Seismic alarm in the control room and a telephone call from the load dispatcher.

BACKGROUND: As per procedure at any time there is a seismic event the seismic recorders will be checked to determine the magnitude of the seismic event. There are two recorders, one at the settling pond and the other is located in the Purge Inlet Room inside the RCA. Results of the alarm will be given in G's horizontal and vertical.

RELEVANCE TO SCENARIO: The first seismic will cause the plant to enter into an Unusual Event.

SCENARIO TIME CONSTRAINTS: none

SIMULATION: Tapes will be provided for the I&C tech to retrieve to the Maintenance shop for interpretation and data transmittal.

REFERENCES IN PACKAGE: N/A

LOCATION: Settling ponds and inside the Purge Inlet Room

RADIATION LEVELS: As Read at this time.

MESSAGE REFERENCE: 3

DAMAGE CONTROL MISSION # 3B

MISSION: 2nd Seismic mission will require a team of personnel to be dispatched to the seismic recorders. (A team may only consist of one person or two separate teams.) They are located at the settling ponds and inside the Inlet Purge Room.

INDICATIONS: The seismic recorder is activated and recording. There is a seismic alarm in the control room and a call from the load dispatcher.

BACKGROUND: As per procedure at any time there is a seismic event the seismic recorders will be checked to determine the magnitude of the seismic event. There are two recorders, one at the settling pond and the other is located in the Purge Inlet Room inside the RCA. The results are to be given G's for horizontal and vertical

RELEVANCE TO SCENARIO: The second seismic will cause damage in the plant, including the service water break in the Charging Pump Room.

SCENARIO TIME CONSTRAINTS: none

SIMULATION: Tapes will be provided for the I&C tech to retrieve to the Maintenance shop for interpretation and data transmittal.

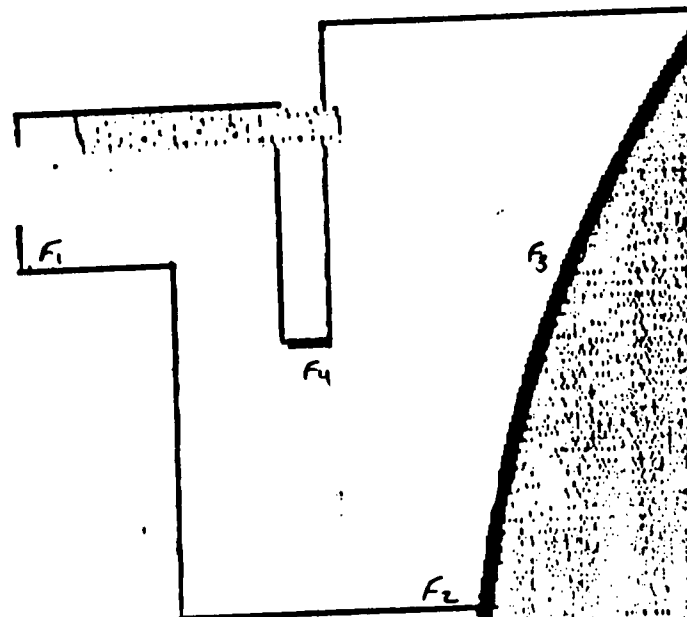
REFERENCES IN PACKAGE: N/A

LOCATION: Settling ponds and inside the Purge Inlet Room

RADIATION LEVELS: 10 mr/hr in the Purge Inlet Room and as read at the settling ponds.

MESSAGE REFERENCE: 14

Purge Inlet Room



$$\text{m} / \text{hr} -$$
$$\text{mL/hr.}$$

TIME	<u>7:30</u>	<u>8:00</u>	<u>8:30</u>	<u>9:00</u>	<u>9:30</u>	<u>10:00</u>	<u>10:30</u>
F1	<u><2</u>	<u><2</u>	<u><2</u>	<u><2</u>	<u><2</u>	<u><2</u>	<u>2</u>
F2	<u><2</u>	<u><2</u>	<u><2</u>	<u><2</u>	<u><2</u>	<u>2</u>	<u>10</u>
F3	<u><2</u>	<u><2</u>	<u><2</u>	<u><2</u>	<u><2</u>	<u>2</u>	<u>10</u>
F4	<u><2</u>	<u><2</u>	<u><2</u>	<u><2</u>	<u><2</u>	<u><2</u>	<u>5</u>
E1	_____	_____	_____	_____	_____	_____	_____
E2	_____	_____	_____	_____	_____	_____	_____
E3	_____	_____	_____	_____	_____	_____	_____
E4	_____	_____	_____	_____	_____	_____	_____
Air Activity	<u>1E-10 pci/cc</u>		<u>1E-10 pci/cc</u>		<u>1E-10 pci/cc</u>		<u>1E-10 pci</u>

TIME	<u>11:00</u>	<u>11:30</u>	<u>12:00</u>	<u>12:30</u>	<u>13:00</u>	<u>13:30</u>	<u>14:00</u>
F1	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
F2	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>
F3	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>
F4	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>
E1	_____	_____	_____	_____	_____	_____	_____
E2	_____	_____	_____	_____	_____	_____	_____
E3	_____	_____	_____	_____	_____	_____	_____
E4	_____	_____	_____	_____	_____	_____	_____
Air Activity	<u>1E-10 pci/cc</u>		<u>1E-10 pci/cc</u>		<u>1E-10 pci/cc</u>		<u>1E-10 pci/cc</u>

MISSION # 4

MISSION: Draw RCS sample from normal or from the PASS.

INDICATIONS: RCS activity increases as indicated by RMS monitors need to be verified by sampling.

BACKGROUND: In emergency conditions RCS activity needs to be known to determine the extent of any fuel damage and to assess the risk of exposure of the public.

RELEVANCE TO SCENARIO: PASS sampling is required during emergency conditions.

SCENARIO TIME RESTRAINTS: During the time line of this scenario RCS Samples will be needed. Due to the exposure rates associated with RCS samples during an accident.

SIMULATION: Demin sample may be drawn (with permission from the REAL Control Room) Coordination with the real control room will be via the head scenario controller and the head OSC controller.

REFERENCES IN PACKAGE: N/A

LOCATION: Aux building hall #1 next to the H.P. and Aux Operator work areas.

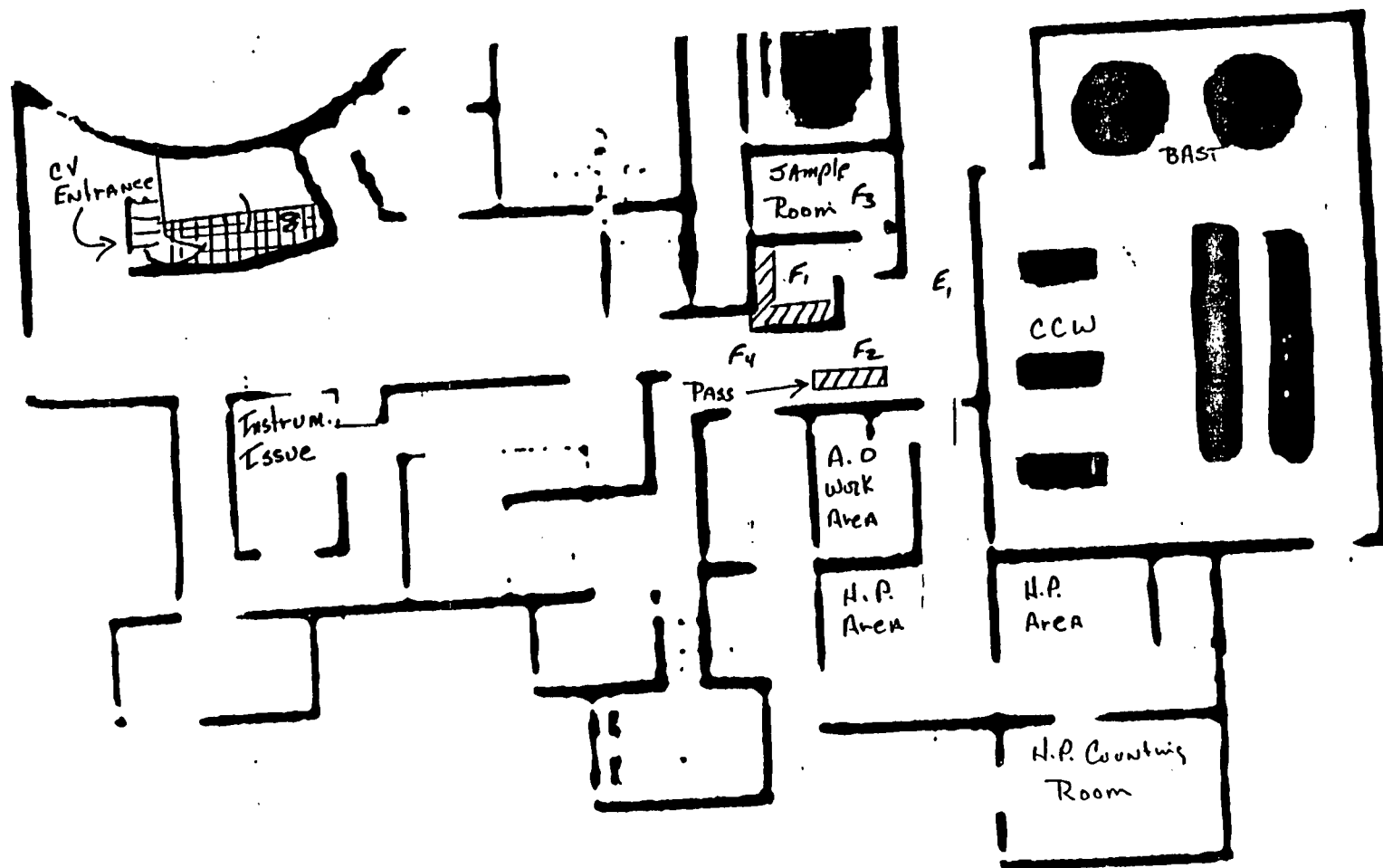
RADIATION LEVELS: As per maps and time lines on the maps.

MESSAGE REFERENCE: N/A

MISSION #4 INSTRUCTIONS

Mission #4 deals with the procurement of RCS Samples by either the means of the normal sample room or the PASS. Considering that the sample mechanism for both systems are in the same area a single map will be used. On the attached time line dose rates are listed as to the activity of the RCS. The dose rates are to be used only as the PASS is loaded. The exposure rates will be as the sample sink is being used and purged. Please use 1/10th of the listed rates after the samples have been taken and the sample sink is purged.

If there are any questions please call Tee Lucas.



3.4C-20

$$\text{m}r/\text{hr} -$$

	100	200	300	400	500	600	700
F1	<u><2</u>	<u><2</u>	<u><2</u>	<u>200</u>	<u>400</u>	<u>10,000</u>	<u>2,000</u>
F2	<u><2</u>	<u><2</u>	<u><2</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>
F3	<u><2</u>	<u><2</u>	<u><2</u>	<u>900</u>	<u>1900</u>	<u>15,000</u>	<u>14,500</u>
F4	<u><2</u>	<u><2</u>	<u><2</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>

E1	<u><2</u>	<u><2</u>	<u><2</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>
E2	_____	_____	_____	_____	_____	_____	_____
E3	_____	_____	_____	_____	_____	_____	_____
E4	_____	_____	_____	_____	_____	_____	_____

F1	<u>1200</u>	<u>1000</u>	<u>500</u>	_____	_____	_____	_____
F2	<u>50</u>	<u>50</u>	<u>50</u>	_____	_____	_____	_____
F3	<u>11,000</u>	<u>9,000</u>	<u>5,000</u>	_____	_____	_____	_____
F4	<u>10</u>	<u>10</u>	<u>10</u>	_____	_____	_____	_____

[illegible]

DAMAGE CONTROL MISSION # 5

MISSION: Investigate loss of condenser vacuum.

INDICATIONS: Loss of vacuum is noticed on the RTGB, in the control room. If an Aux Operator(AO) is sent to investigate, a visual inspection will uncover a split tubing at PT-1310 transmitter.

BACKGROUND: A gradual decrease in the condenser vacuum from PT-1310 is noticed on the RTGB.

RELEVANCE TO SCENARIO: If shut down is not already in progress, this failure will expedite shut down of the unit.

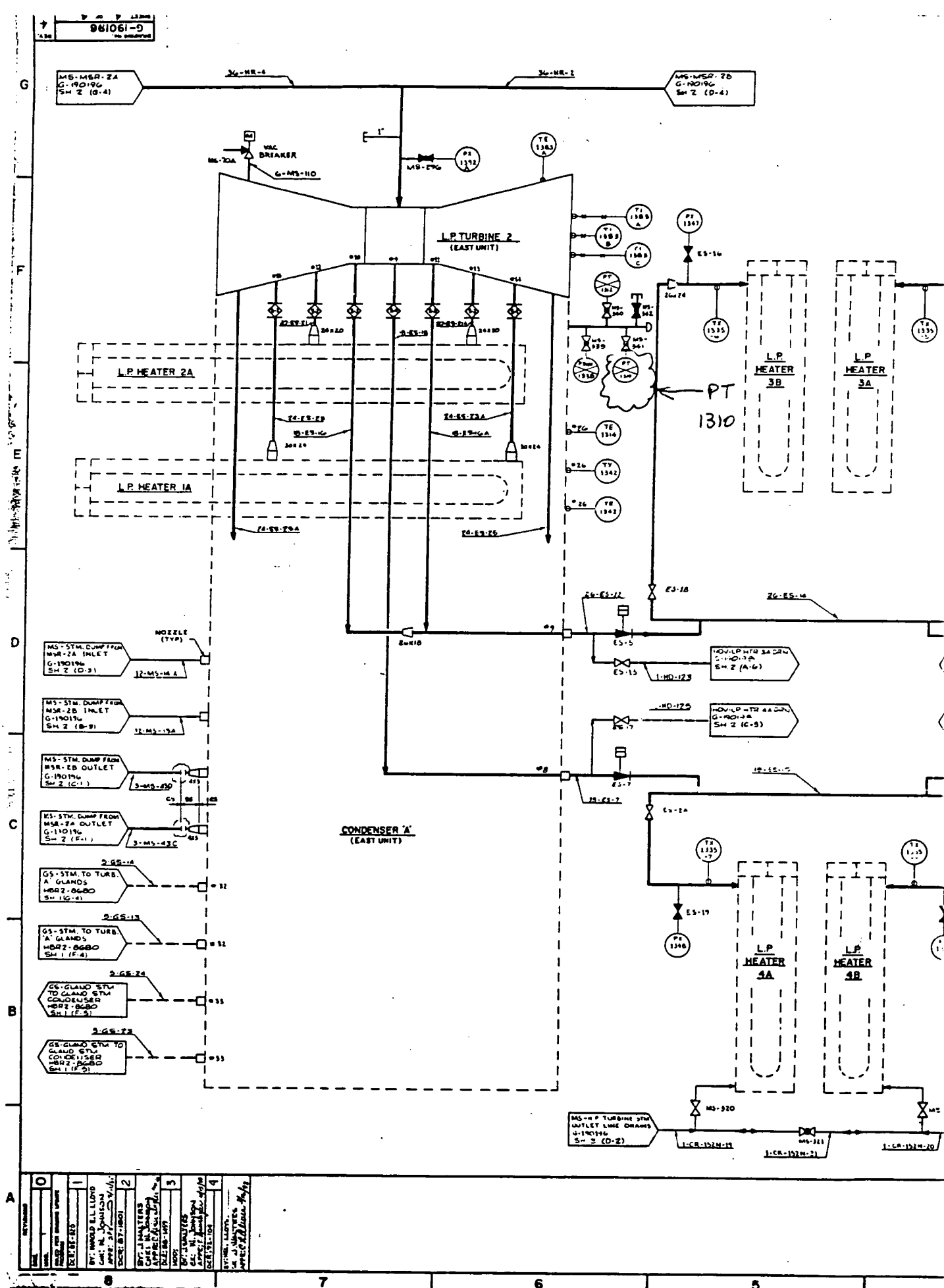
SCENARIO TIME CONSTRAINTS: Based on personnel availability and the amount of activity going on at this time, this mission may receive a very low priority and may not be worked.

SIMULATION: Only the repair will be simulated. The team may travel to this cabinet and view the pipe in question. At this time require the team to talk through the repair. (The controller/evaluator may want to retreat to an area that the noise is not as loud. Check on the requirement of hearing protection.) Players must have all parts and tools required for the fix to get credit for repair.

REFERENCES IN PACKAGE: G-190196

LOCATION: Located on the mezzanine level on turbine south side above condenser water boxes.

RADIATION LEVELS: As read through out the drill



ROOM OR ARE A:



PERFORMED BY:

All measurements as read

COMMENTS: _____

[illegible]

L-RA: Locked Hi-Rad
 -RA: Hi-Rad Area
 -CA: Hi-Contamination Area
 CA: Contamination
 CPEA: Contam. Process Equip. Area
 ARA: Airborne Rad Area
 RA: Rad Area
 RMA: Rad Material Area
 SCP: Step-Off Pad
 E#: Equip. Location
 F#: Floor Location
 H#: Hot Spot Location
 Page: _____ of _____

DAMAGE CONTROL MISSION # 6

MISSION: Rod Control H-8 does not move during plant shutdown. Electrical trouble shooting to determine if H-8 can be repaired.

INDICATIONS: Individual indicator on the RTGB for H-8 indicates it has not moved.

BACKGROUND: During shutdown of the unit the individual rod position indicator for H-8 indicates that the rod has not moved. If the reactor trip breakers are opened the rod will fall in to the bottom.

RELEVANCE TO SCENARIO: This mission is low on the priority scale as unit can be safely shut down with H-8 remaining in position.

SCENARIO TIME CONSTRAINTS: H-8 will not be repaired during the time allowed for this exercise.

SIMULATION: Simulation will be required due to the significance of the equipment controlled in this area. Controller, please have participants talk through this mission on location unless noise prohibits if so move to an area that will allow communication.

REFERENCES IN PACKAGE: N/A

LOCATION: HAGEN RACK, AUX BUILDING

RADIATION LEVELS: As read

MESSAGE REFERENCE: 12

DAMAGE CONTROL MISSION # 7

MISSION: Investigate and repair ruptured service water pipe in the Charging Pump Room.

INDICATIONS: Water running down the wall and the piping has shifted exposing the inside of the pipe.

BACKGROUND: HVH-2 is out of service due to cooler tube leaks. Work is in the progress in the CV. The service water pipe break was caused by the after shock. Turnover occurs in the maintenance shop at shift change. The work in progress was left as it was, but in a physically safe position with the cooler open to the CV atmosphere.

RELEVANCE TO SCENARIO: The open pipe break provides a escape path for release from the CV. This path will eventually push the scenario to a General Emergency after the large break LOCA.

SCENARIO TIME CONSTRAINTS: This mission will not be repaired prior to the end of the exercise.

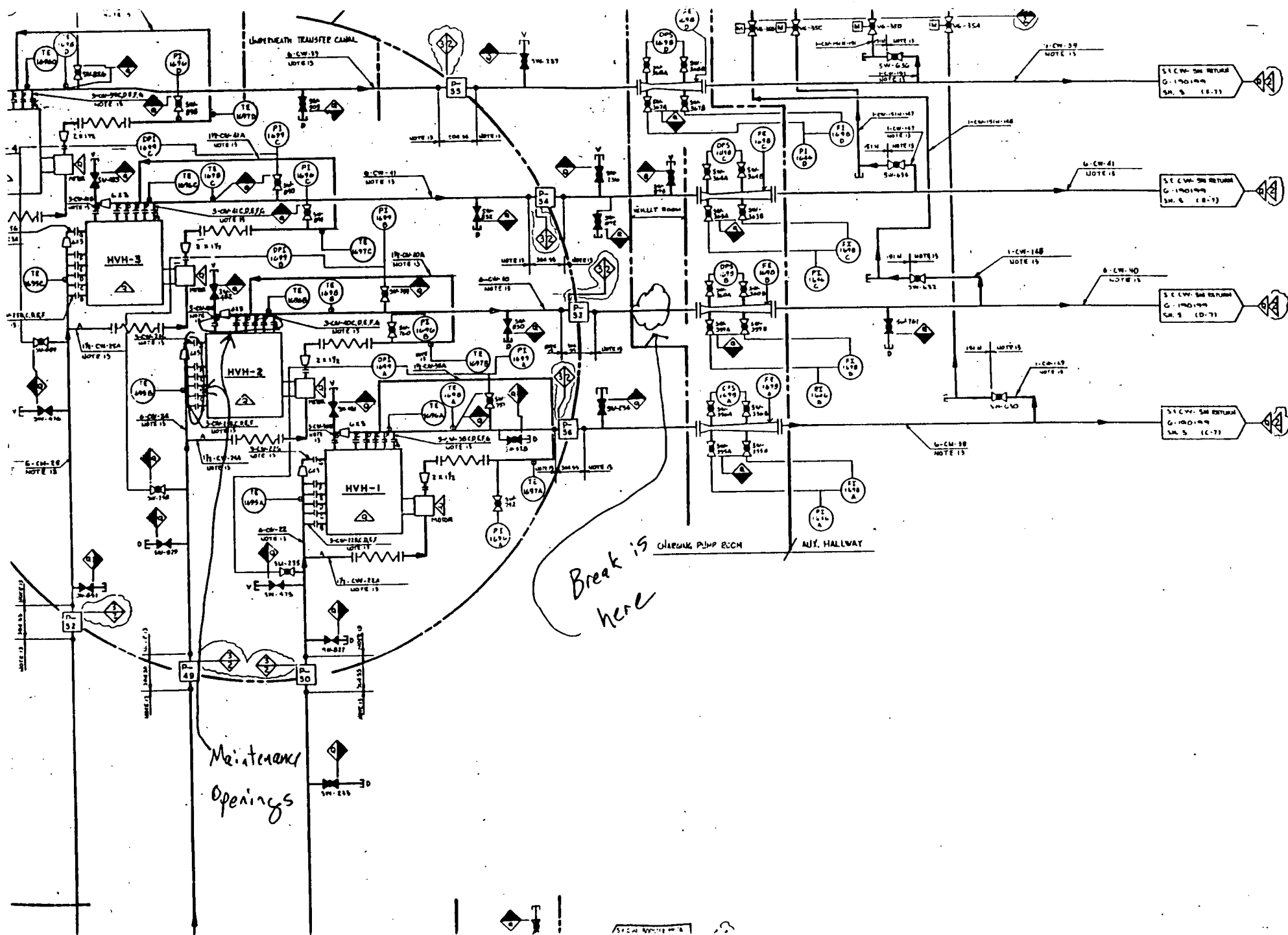
SIMULATION: The pipe break will be provided by an overhead mock up located in the Hot Machine Shop.

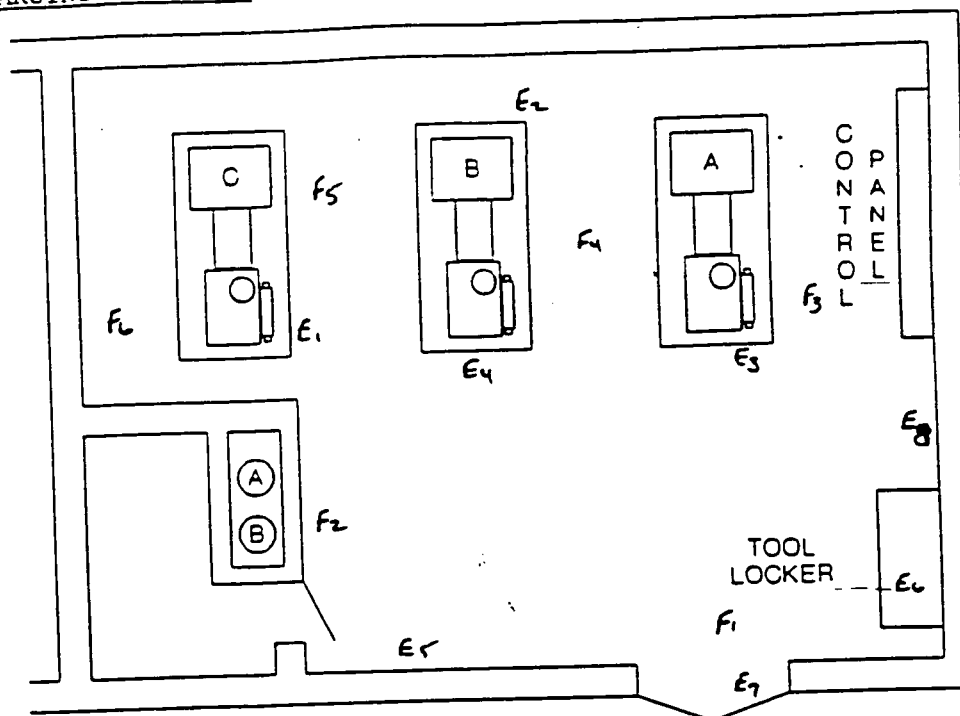
REFERENCES IN PACKAGE: G-190199

LOCATION: The service water pipe break will be located in the ceiling of the Charging Pump Room. The Damage Control Team will be required to enter the Charging Pump Room to view the area and describe the break. Then time out will be called and the Damage Control Team will proceed to the Mock up location(Hot Machine Shop).

RADIATION LEVELS: Rad levels will be as read until the second seismic is complete.

MESSAGE REFERENCE: 16



PERFORMED BY: Chip AmottDATE: Nov 17 1992TIME: 0730

LOCATION	DESCRIPTION	CONTACT MR/HR	CONTACT MRAD/HR	18" MR/HR	SMEAR DPM/100cm ²	AIRBORNE MPC FRAC.
F ₁	Floor			2		< .25
F ₂	↓			12		
F ₃				2		
F ₄				4		
F ₅				4		
F ₆				4		
E ₁	C - Charging Pump			10		
E ₂	B ↓			5		
E ₃	A ↓			4		
E ₄	B ↓			80		
E ₅	Wall			5		
E ₆	Tool locker			< 2		
E ₇	Door			< 2		
E ₈	Wall			5		

 INSTRUMENT TYPE Tele SERIAL NO. _____

ABBREVIATION KEY

LHRA: Locked Hi-Rad Area

HRA: Hi-Rad Area

HCA: Hi-Contamination Area

CA: Contamination Area

CPEA: Contam. Process Equip. Area

ARA: Airborne Rad Area

RA: Rad Area

RMA: Rad Material Area

SOP: Step-Off Pad

E#: Equip. Location

F#: Floor Location

H#: Hot Spot Loc.

IC: Internal Contamination

Page: _____ of _____

Comments: _____

Charging Pump Room

Mr/M

TIME	8:00	8:30	9:00	9:30	10:00	10:30
F1	20	40	40	100	100	175
F2	40	140	200	200	200	295
F3	10	40	60	60	60	500
F4	100	250	4,500	4500	4525	11,000
F5	110	275	4700	4700	4700	8700
F6	90	250	4200	4200	4200	7900
F7						
F8						
Air Activity	1E-10 uci/cc		1E-10 uci/cc		6E-9 uci/cc	
E1	90	260	490	490	490	4100
E2	200	595	9000	9000	9050	28,000
E3	200	595	9000	9000	9050	28,000
E4	180	500	8000	8000	8000	22,000
E5	20	40	40	100	100	175
E6	70	250	390	390	390	3900
E7	15	15	15	90	90	150
E8	105	360	360	540	534	5000

TIME	11:00	11:30	12:00	12:30	13:00	13:30
F1	175	175	450	1650	650	775
F2	500	500	425	1,000	1,000	1,000
F3	11,000	11,000	15,000	15,000	15,000	15,000
F4	8700	8700	9,000	9,000	9,000	9,000
F5						
F6	7500	7900	8000	8000	8,000	8000
F7						
F8						
Air Activity	9E-8 uci/cc		5E-8 uci/cc		1E-8 uci/cc	
E1	4100	4100	3200	8,000	8,000	8,000
E2	28000	28000	30,000	30,000	30,000	30,000
E3	28000	28000	30,000	30,000	30,000	30,000
E4	22,000	22,000	25,000	25,000	25,000	25,000
E5	1250	4500	4500	7000	8000	8000
E6	3900	3900	3100	8000	7000	9000
E7	150	150	325	490	490	620
E8			1000	1000	1000	1000

DAMAGE CONTROL MISSION # 8A

MISSION: Operations walk down of plant after first Seismic event(07:48 a.m.) as per AOP-21.

INDICATIONS: After any seismic event AOP-21 requires a visual inspection or walkdown of vital areas. for plant operation. No problems will be found.

BACKGROUND: The seismic event will result in an Usual Event declaration.

RELEVANCE TO SCENARIO: The AO walk down will have no impact on the scenario.

SCENARIO TIME CONSTRAINTS: These inspections will start after each seismic event.

SIMULATION: Entrance into any High Radiation Area or Locked High Radiation Areas will be simulated for ALARA purposes. Any actions that maybe considered UNSAFE will be simulated.

REFERENCES IN PACKAGE: N/A

LOCATION: The entire Aux Building and surrounding Support areas.

RADIATION LEVELS: As per the Area Maps and time lines.

MESSAGE REFERENCE: 3

DAMAGE CONTROL MISSION # 8B

MISSION: Operations walk down of PLANT after second Seismic event(10:30 a.m.) as per AOP-21.

INDICATIONS: After any seismic event AOP-21 requires a visual inspection or walkdown of vital areas, for plant operation. The AO may discover the service water pipe break in the Charging Pump Room (see Mission #7).

BACKGROUND: At 10:30, a second seismic event will occur.

RELEVANCE TO SCENARIO: These actions should discover problems in the plant which will require other actions and drive the classification to the next level. Special attention should be concentrated around the Charging Pump Room as the Service Water Pipe rupture will be the second fission barrier and eventually drive the scenario to the General Emergency after the large break LOCA.

SCENARIO TIME CONSTRAINTS: These inspections will start after each seismic event.

SIMULATION: Entrance into any High Radiation Area or Locked High Radiation Areas will be simulated for ALARA purposes. Any actions that maybe considered UNSAFE will be simulated.

REFERENCES IN PACKAGE: N/A

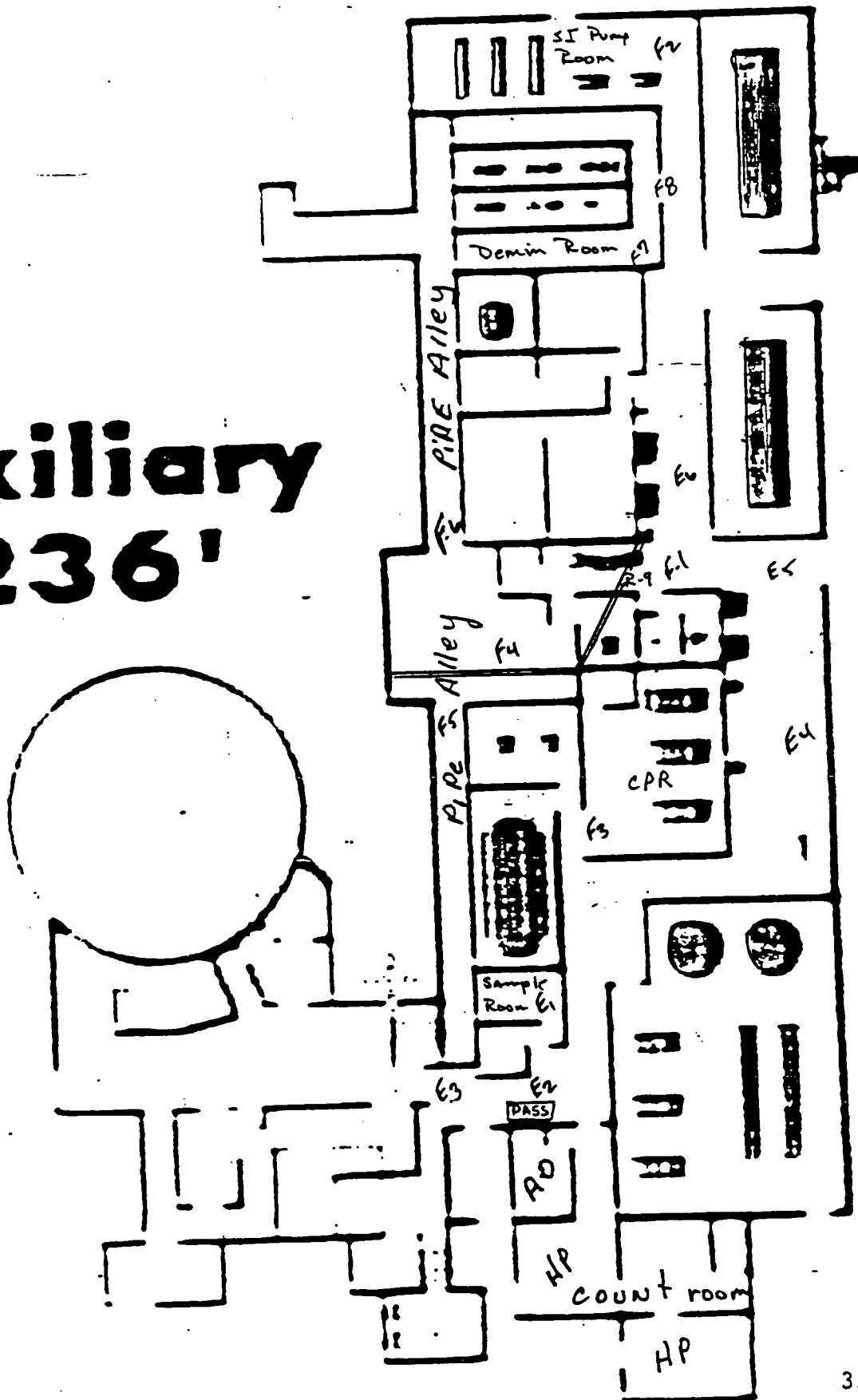
LOCATION: The entire Aux Building and surrounding Support areas.

RADIATION LEVELS: As per the Area Maps and time lines.

MESSAGE REFERENCE: 14

Date Nov 17, 1992

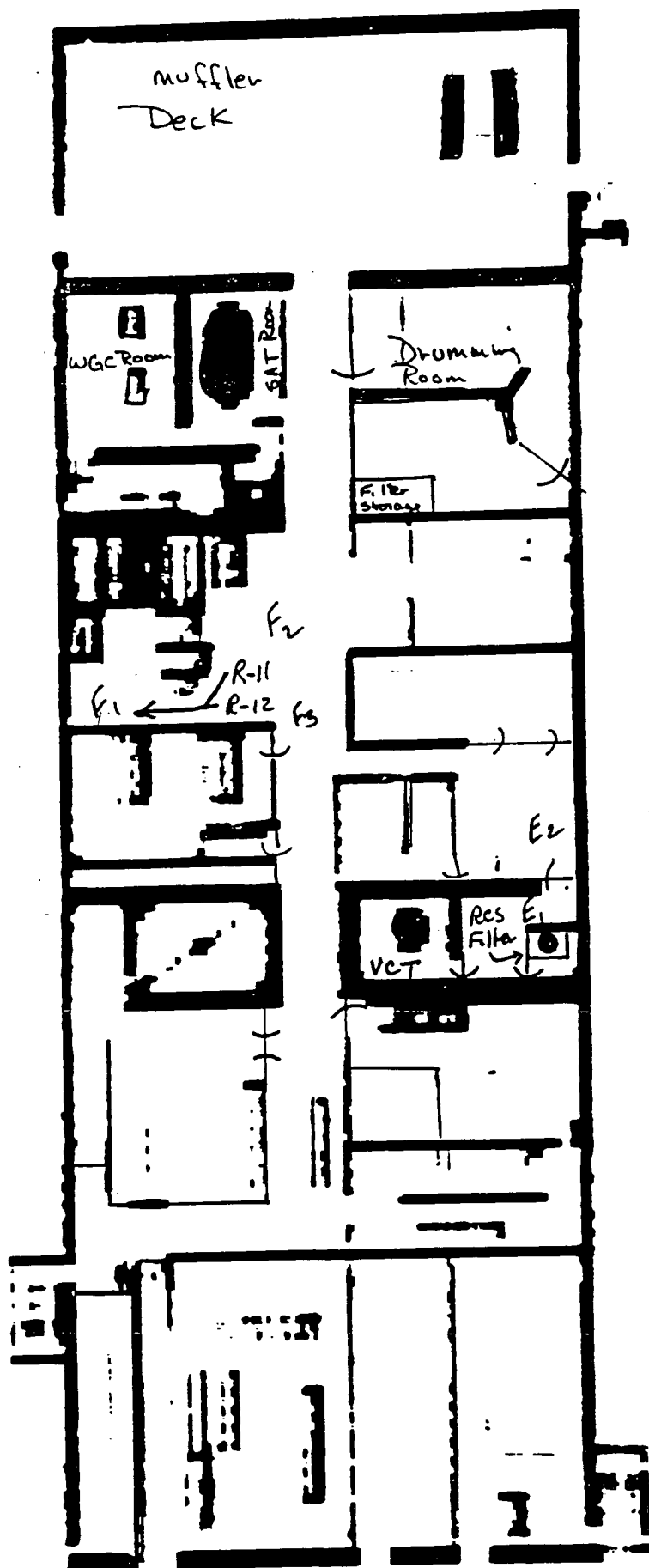
Auxiliary 236'



$$m_v/h$$

E1	*						*
E2	*						*
E3	*						*
E4		<u><2</u>	<u><2</u>	<u><2</u>	<u>3</u>	<u>7</u>	<u>50</u>
E5		<u>2</u>	<u>2</u>	<u>10</u>	<u>30</u>	<u>70</u>	<u>5,000</u>
E6		<u>2</u>	<u>2</u>	<u>10</u>	<u>30</u>	<u>70</u>	<u>5,000</u>
E7							
E8							

E1	E2	E3	E4	E5	E6	E7
*	*	*				
			55	5500	5500	
			52	5250	5250	
			50	5000	5000	
			40	4000	3900	
			10	1000	900	
			10	900	825	
			5	500	500	



**Auxiliary
246'**

Aut Building
2nd Level

Mr/hr-

* As Read

TIME	<u>0730</u>	<u>0800</u>	<u>0830</u>	<u>0900</u>	<u>0930</u>	<u>1000</u>	<u>1030</u>
F1	*	*	*	*	100	100	125
F2	*	*	*	*	2	2	2
F3	*	*	*	*	2	2	2
F4	—	—	—	—	—	—	—
E1	*	*	100	150	300	375	400
E2	*	*	<2	<2	2	2	4
E3	—	—	—	—	—	—	—
E4	—	—	—	—	—	—	—

TIME	<u>1100</u>	<u>1130</u>	<u>1200</u>	<u>1230</u>	<u>1300</u>	<u>1330</u>	<u>1400</u>
F1	125	150	175	250	275	350	500
F2	2	2	5	10	10	15	20
F3	2	2	5	10	10	15	20
F4	—	—	—	—	—	—	—
E1	450	500	545	600	675	700	900
E2	4	5	6	6	10	10	10
E3	—	—	—	—	—	—	—
E4	—	—	—	—	—	—	—

MISSION #9

MISSION: Trouble shoot and repair Containment personnel hatch doors.

INDICATIONS: Hand wheel spins freely due to spur gear broken in half. (#4 on Figure 1, Personnel Lock)

BACKGROUND: With the end bells left off of HVH-2 a possible path for a release to occur exists inside containment.

SCENARIO: The maintenance crews while leaving containment, to turnover to the on coming shift, broke the turning mechanism during the process of securing the hatch doors and securing containment.

SCENARIO TIME CONSTRAINTS: none

SIMULATION: Entry into containment will be simulated.

REFERENCES IN PACKAGE: N/A

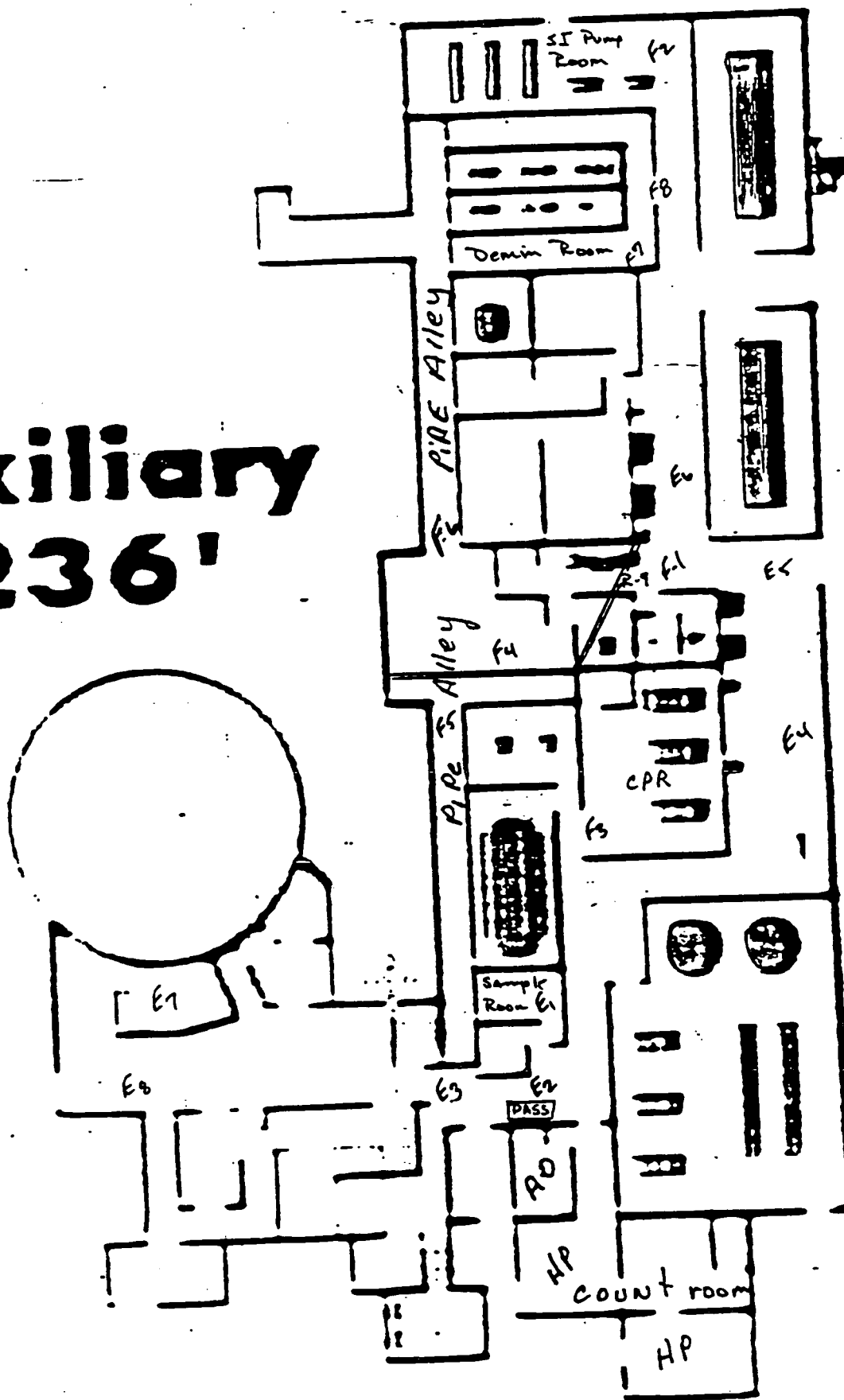
LOCATION: Aux Building, first level entrance to containment.

RADIATION LEVELS: As per attached maps

MESSAGE REFERENCE: Message #2

Date Nov 17, 1992

Auxiliary 236'



Ave Hallway
1st Level

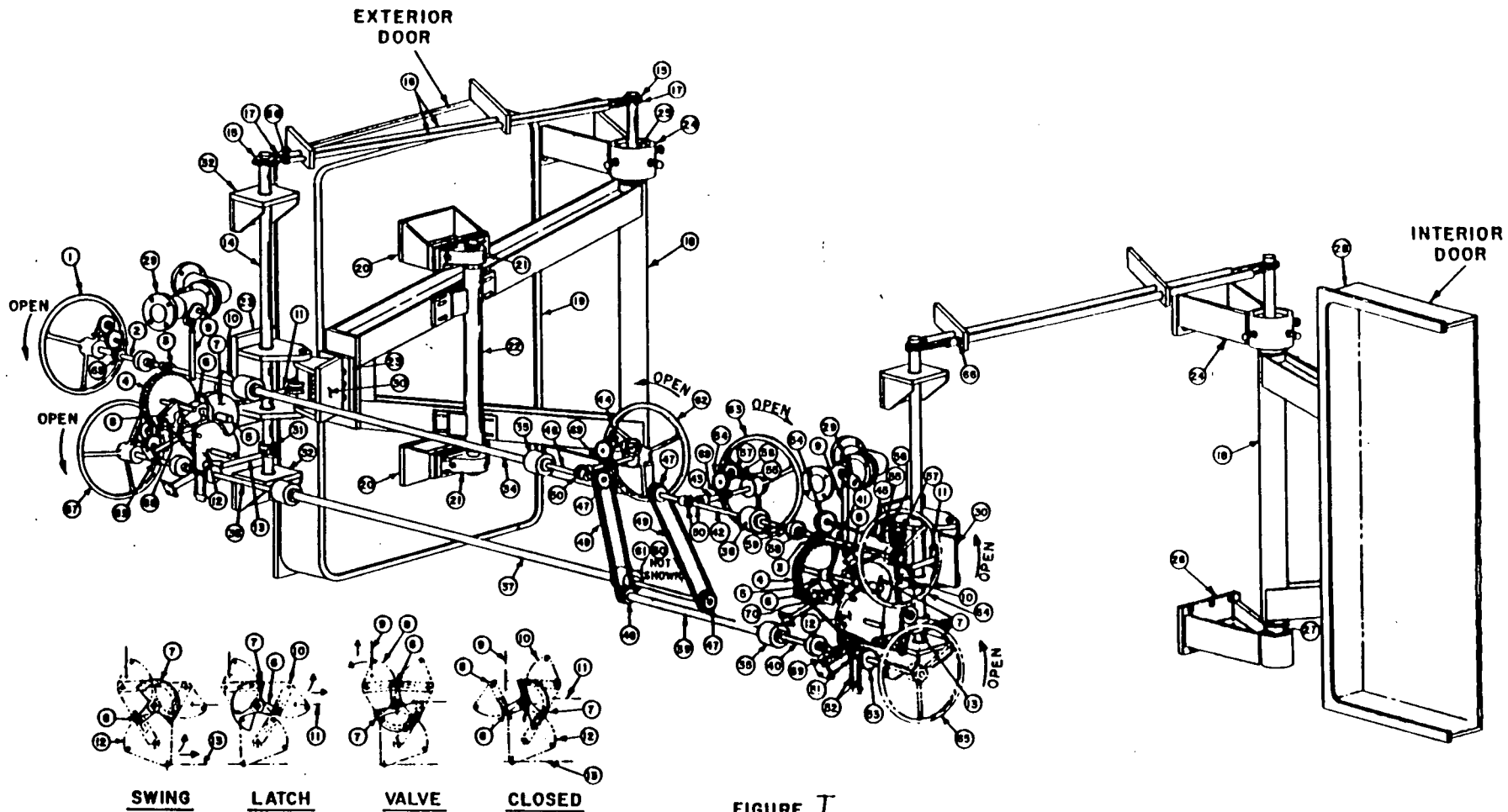
Mr/M

TIME	<u>27:30</u>	<u>8:00</u>	<u>8:30</u>	<u>9:00</u>	<u>9:30</u>	<u>10:00</u>	<u>10:30</u>
F1	<u>30</u>	<u>33</u>	<u>1,000</u>	<u>2,500</u>	<u>5,000</u>	<u>7,000</u>	<u>11,000</u>
F2	<u>12</u>	<u>12</u>	<u>2</u>	<u>3</u>	<u>5</u>	<u>5</u>	<u>15</u>
F3	<u>5</u>	<u>5</u>	<u>109</u>	<u>360</u>	<u>550</u>	<u>525</u>	<u>5,000</u>
F4	<u>45</u>	<u>50</u>	<u>1590</u>	<u>3590</u>	<u>5430</u>	<u>5240</u>	<u>50,000</u>
F5	<u>45</u>	<u>50</u>	<u>200</u>	<u>230</u>	<u>300</u>	<u>300</u>	<u>3,000</u>
F6	<u>45</u>	<u>50</u>	<u>200</u>	<u>230</u>	<u>300</u>	<u>300</u>	<u>3,000</u>
F7	<u>45</u>	<u>50</u>	<u>200</u>	<u>230</u>	<u>300</u>	<u>300</u>	<u>3,500</u>
F8	<u>15</u>	<u>15</u>	<u>50</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>900</u>

E1	* <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> *
E2	* <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> *
E3	* <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> *
E4	<u>12</u>	<u>12</u>	<u>12</u>	<u>3</u>	<u>7</u>	<u>7</u>	<u>50</u>
E5	<u>2</u>	<u>2</u>	<u>10</u>	<u>30</u>	<u>70</u>	<u>70</u>	<u>5,000</u>
E6	<u>2</u>	<u>2</u>	<u>10</u>	<u>30</u>	<u>70</u>	<u>70</u>	<u>5,000</u>
E7	<u>12</u>	<u>12</u>	<u>12</u>	<u>12</u>	<u>12</u>	<u>12</u>	<u>2</u>
E8	<u>12</u>	<u>12</u>	<u>12</u>	<u>12</u>	<u>12</u>	<u>12</u>	<u>2</u>

TIME	<u>11:00</u>	<u>11:30</u>	<u>12:00</u>	<u>12:30</u>	<u>13:00</u>	<u>13:30</u>	<u>14:00</u>
F1	<u>33,333</u>	<u>33,333</u>	<u>29,000</u>	<u>20,500</u>	<u>11,560</u>	<u>10,110</u>	<u>7,750</u>
F2	<u>15</u>	<u>15</u>	<u>10</u>	<u>25</u>	<u>25</u>	<u>25</u>	<u>25</u>
F3	<u>5,000</u>	<u>5,000</u>	<u>4254</u>	<u>10,000</u>	<u>10,000</u>	<u>10,000</u>	<u>10,000</u>
F4	<u>50,000</u>	<u>50,000</u>	<u>42,540</u>	<u>35,300</u>	<u>22,340</u>	<u>16,220</u>	<u>11,800</u>
F5	<u>3,000</u>	<u>3,000</u>	<u>2,500</u>	<u>3,000</u>	<u>4,250</u>	<u>1500</u>	<u>900</u>
F6	<u>3,000</u>	<u>3,000</u>	<u>2,500</u>	<u>2,000</u>	<u>4,250</u>	<u>1500</u>	<u>900</u>
F7	<u>11,000</u>	<u>11,000</u>	<u>9,000</u>	<u>8,000</u>	<u>2,000</u>	<u>2,500</u>	<u>2,000</u>
F8	<u>1,000</u>	<u>1,100</u>	<u>1,000</u>	<u>900</u>	<u>9,00</u>	<u>8,00</u>	<u>8,00</u>

E1	* <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> * See Pass
E2	* <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> * Sample Res
E3	* <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> * Rad map
E4	<u>55</u>	<u>52</u>	<u>50</u>	<u>40</u>	<u>10</u>	<u>10</u>	<u>5</u>
E5	<u>5500</u>	<u>5,250</u>	<u>5,000</u>	<u>4000</u>	<u>1,000</u>	<u>900</u>	<u>500</u>
E6	<u>5500</u>	<u>5,250</u>	<u>5,000</u>	<u>3,200</u>	<u>9,00</u>	<u>825</u>	<u>500</u>
E7	<u>2</u>	<u>2</u>	<u>2</u>	<u>5</u>	<u>10</u>	<u>40</u>	<u>50</u>



E.1 Emergency Procedures (Refer to Figure E1)

Reliable function of the Personnel Airlock is expected when operated and maintained in accordance with the procedures of The Operating and Maintenance Instructions.

The malfunction of any operating mechanism is recognized as being possible. The following procedures are provided for use in the event a malfunction prevents the normal passage of personnel from the containment.

The owner of the Airlock is responsible for training personnel in the use of these procedures. It is further recommended that the required tools and copies of Emergency Procedures be kept available at the appropriate locations, inside the Airlock and inside the containment.

Tools Required

- 3/8" Hex Socket Screw Key (Allen Wrench)
- 2 Each - 12" Adjustable Wrench
- 3/8" x 4" Brass Drift
- 1/4" Blade Screwdriver
- 3'-0 Pry Bar
- 5/32" Hex Socket Screw Key (Allen Wrench)
- 8 oz. Ball Pein Hammer

These procedures do not consider the existence of another Airlock in the Containment Vessel. If an auxiliary Airlock is provided, it is recommended that it be used for passage from the containment, or for the use of maintenance personnel, when the Personnel Lock is not operable.

Emergency Procedures to be followed when personnel are inside the Airlock are outlined in Paragraph E.1.1.

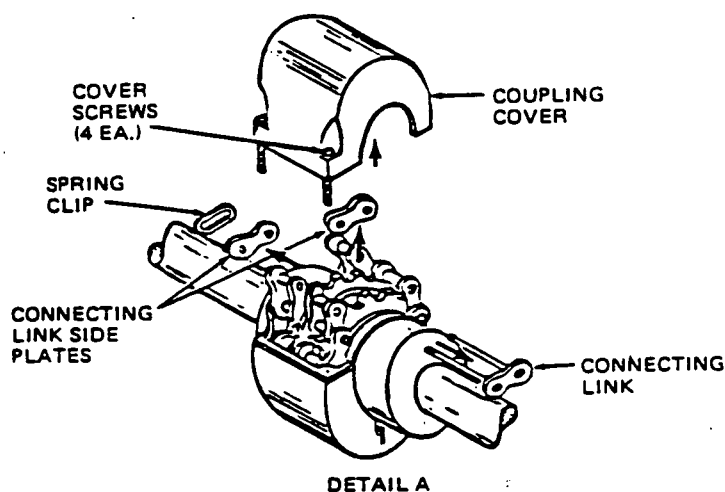
Emergency Procedures to be followed when personnel are inside the Containment are outlined in Paragraph E.1.2.

E.1.1 Emergency Procedures: Inside Lock (Refer to Figure E1)

- E.1.1.1 Rotate the handwheel for the interior door clockwise until the handwheel will not rotate further and the indicator indicates closed. Try to rotate the exterior handwheel in the opening direction (clockwise). If this action doesn't correct the problem, proceed to E.1.1.2.

CAUTION: CALL THE CONTROL ROOM BEFORE PROCEEDING WITH ANY OF THE REMAINING STEPS SINCE CONTAINMENT MAY BE VIOLATED IF THE INTERIOR DOOR, LATCH, AND VALVE ARE NOT CLOSED.

- E.1.1.2 (See Figure E1 for Location of Detail A)



Disengage Shaft Coupling

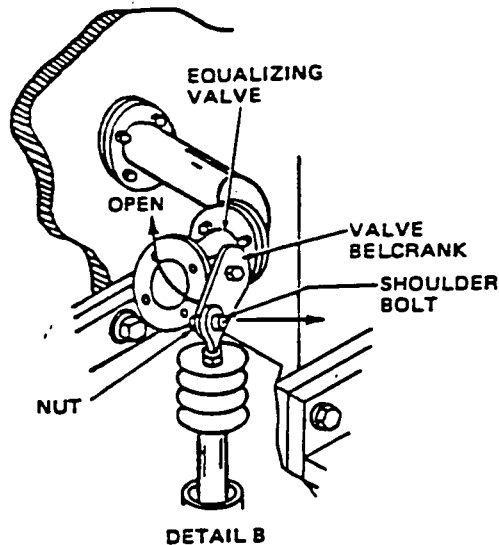
Disconnect the lower shaft coupling located to the right of the transfer box.

- Step 1) Remove the cover using a small blade screwdriver for covers with slotted screws, or the 5/32 hex socket screw key.
- Step 2) Remove the spring clip from the chain using the screwdriver and withdraw the connecting link to remove the chain from the coupling.

When the coupling has been disconnected, the interlock for the exterior door has been bypassed and it should now be operable with the exterior door handwheel.

If the exterior handwheel is still inoperable, proceed to E.1.1.3.

E.1.1.3 Disengage Equalizing Valve
(See Figure E1 for Location of Detail B)



Note: The shoulder bolt must be installed such that the nut is between the valve arm and the valve (Detail B).

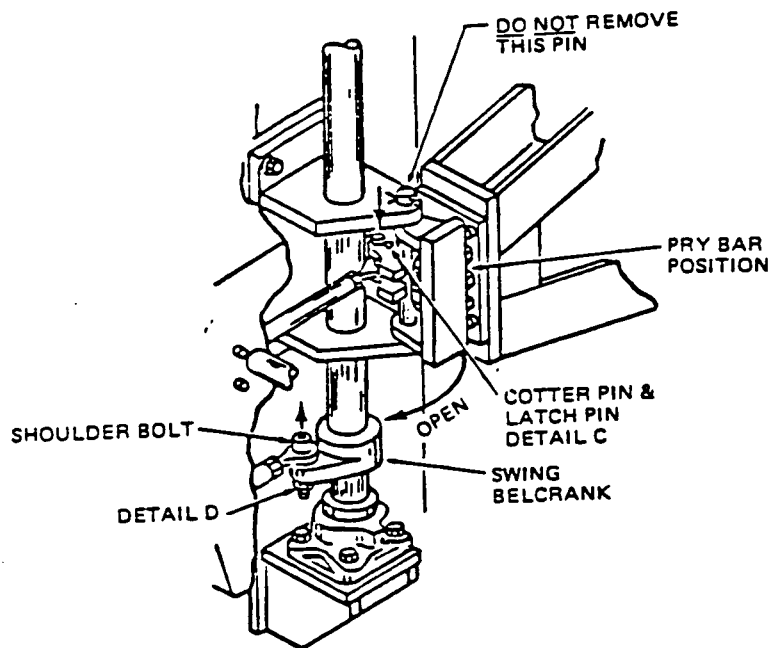
Step 1) To equalize the pressure, remove the shoulder bolt from the exterior valve belcrank using the 3/8 hex socket screw key and adjustable wrench.

Step 2) Manually rotate the valve belcrank upward to open the valve.

Failure of the pressure to equalize indicates the interior equalizing valve and/or the interior door is open. Plug the valve discharge hole in the interior bulkhead and/or pull the interior door closed. The hole can be plugged using rags, a flat plate and rag or even by placing your hand over the opening.

Step 3) When the pressure has been equalized, proceed to E.1.1.4.

E.1.1.4 Disengage Latch and Swing Connections
(See Figure E1 for Location of Details C and D)



- Step 1) Remove the cotter pins and remove the latch pin using the 3/8 brass drift and hammer. (Detail C)

Note: The short end of the 3/8 Allen wrench may be used as a short drift after pin is within the latch arm.

- Step 2) Place the prybar between the edge of the hinge and the latch to pry the latch bar over the roller assembly.

WARNING: STAND CLEAR OF THE DOOR AND HINGE DURING THIS OPERATION. THE SWING MECHANISM IS STILL CONNECTED AND WILL PROVIDE RESTRAINT, BUT IF THERE IS A NEGATIVE PRESSURE INSIDE THE LOCK, THE DOOR MAY JUMP WHEN RELEASED.

- Step 3) Disconnect the shoulder bolt from the swing belcrank and swing arm using the 3/8 hex socket screw key and adjustable wrench (Detail D).

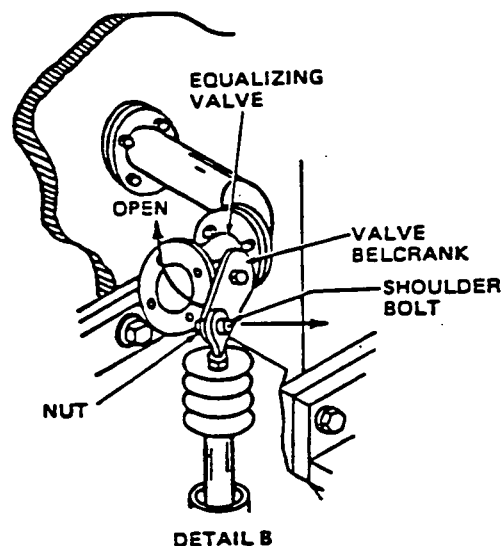
- Step 4) Open the exterior door, close the valve, exit the Airlock, and close the exterior door.

E.1.2 Emergency Procedures: Inside Containment
(Refer to Figure E1)

- E.1.2.1 Rotate the handwheel for the exterior door (lower handwheel) counter clockwise until the handwheel will not rotate further and the indicator indicates closed. Try to rotate the interior handwheel in the opening direction (clockwise). If this action doesn't correct the problem, proceed to E.1.2.2.

CAUTION: CALL THE CONTROL ROOM BEFORE PROCEEDING WITH ANY OF THE REMAINING STEPS SINCE CONTAINMENT MAY BE VIOLATED IF THE EXTERIOR DOOR, LATCH, AND VALVE ARE NOT CLOSED.

- E.1.2.2 Disengage Equalizing Valve
(See Figure E1 for Location of Detail B)

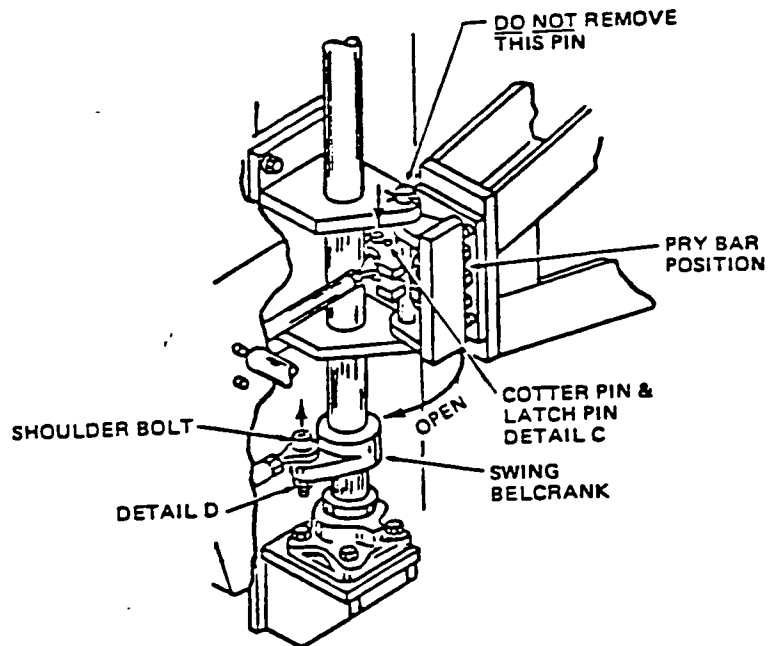


- Step 1) To equalize the pressure, remove the shoulder bolt from the exterior valve belcrank with the 3/8 hex socket screw key and adjustable wrench.
- Step 2) Manually rotate the valve belcrank upward to open the valve and equalize the pressure.

Failure of the pressure to equalize within 60 seconds indicates the exterior equalizing valve and/or the exterior door is open. The control room must be notified. Personnel outside of the exterior end of the lock must seal the valve discharge hole at the exterior end and/or pull the exterior door closed. Any reduction of air flow will eventually permit sufficient equalization to open the interior door. The hole can be plugged with rags, a flat plate and rag, or even by placing your hand over the opening.

- Step 3) When the pressure has been equalized, proceed to E.1.2.3.

E.1.2.3 Disengage Latch and Swing Connections
(See Figure E1 for Location of Details C and D)



- Step 1) Remove the cotter pins and remove the latch pin using the 3/8 brass drift and hammer. (Detail C)

Note: The short end of the 3/8 Allen wrench may be used as a short drift after pin is within the latch arm.

- Step 2) Place the prybar between the edge of the hinge and the latch to pry the latch bar over the roller assembly.

WARNING: STAND CLEAR OF THE DOOR AND HINGE DURING THIS OPERATION. THE SWING MECHANISM IS STILL CONNECTED AND WILL PROVIDE RESTRAINT, BUT IF THERE IS A NEGATIVE PRESSURE INSIDE THE LOCK, THE DOOR MAY JUMP WHEN RELEASED.

- Step 3) Disconnect the shoulder bolt from the swing belcrank and swing arm using the 3/8 hex socket screw key and adjustable wrench (Detail D).

- Step 4) Open the interior door, close the valve, enter the Airlock, and close the interior door.

When inside the Airlock, proceed thru the exterior door in the usual manner. Should the exterior door mechanism not operate, refer to Procedure E.1.1.

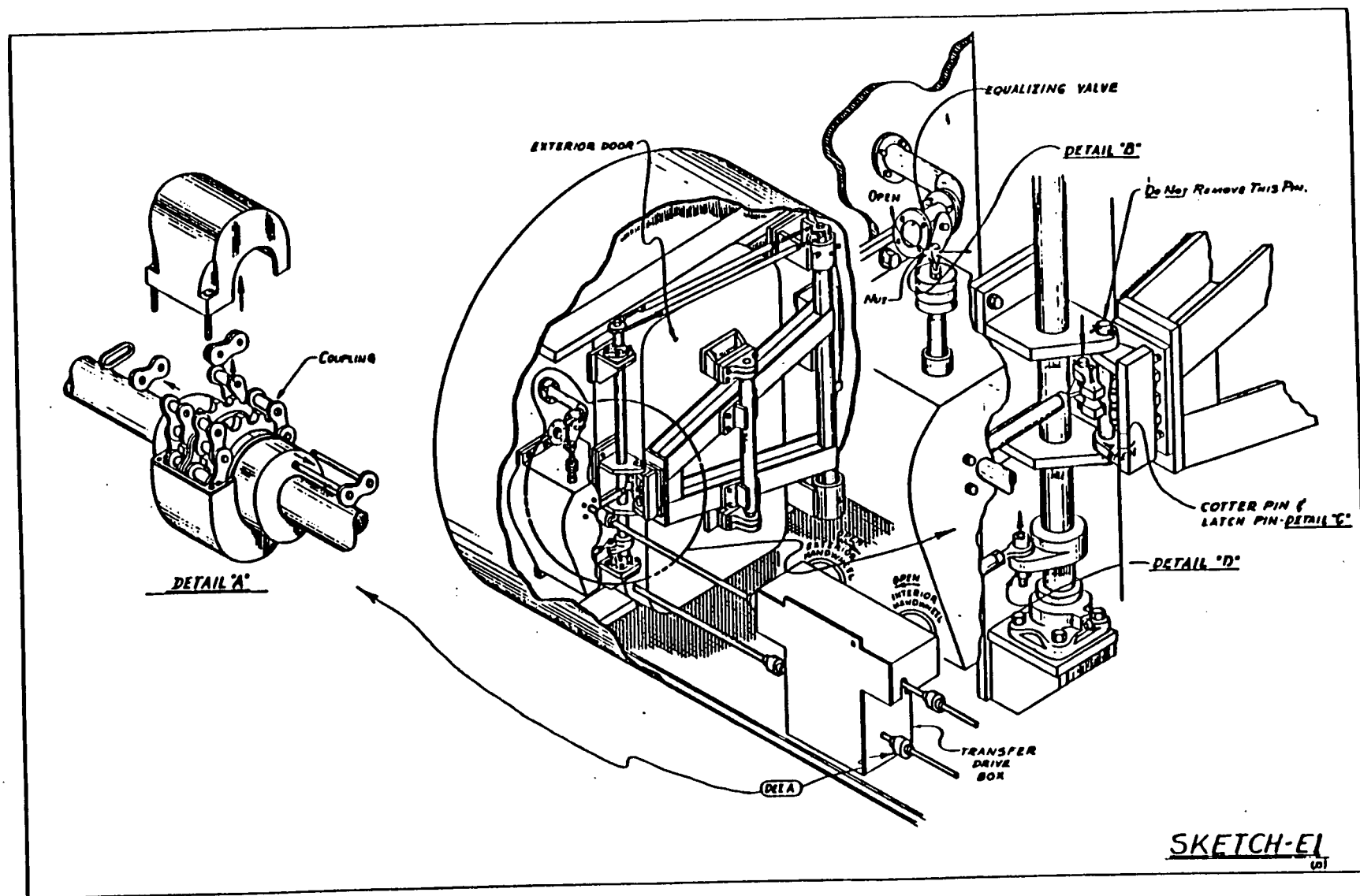


TABLE 3

MARK
REF.
FIG. I

DESCRIPTION

1,62,63, 64	20" Dia. Handwheel - "Tomco" Part No. 12014 - Offset Type Polished Rim - For special modifications contact Chicago Bridge & Iron Company.
3*	Spur Gear - 8 pitch - 2,000 P.D. - 16 teeth - 1 1/4 face - 14 1/2° Pressure Angle - 7/8 Dia. Bore w/3/16 Sq. Keyway - (2) 5/16-18 tapped holes 90° apart w/(1) hole over keyway - 1 5/8 dia. hub w/ 3/4 hub projection
4*	Spur Gear - 8 pitch - 12,000 P.D. - 96 teeth - 1 1/4 face - 14 1/2° pressure angle - 1 1/2 dia. bore w/ 3/8 sq. keyway (2) 1/2-13 tapped holes 90° apart w/(1) hole over keyway 3" hub dia. w/1 1/8" hub projection.
13	Sprockets for 5/8" pitch R.C. #50 - Link Belt Type B - 20 Teeth-3.995"P.D. - 2" Dia. Bore w/1/2" Sq. Keyway - (2) 1/2-13 tapped holes w/(1) Hole over Keyway.
17 & 19	Roller Chain 5/8 pitch RC 50
21	Roller Pillow Block - Adapter Type for 2" Dia. Shaft "Shafter" No. ZPA-200F
25	Ball Bearing Cartridge Block for 2 3/16 Dia. Shaft Link Belt No. C335
27	Roller Bearing Cartridge Block for 2 3/16 Dia. Shaft "Shafer" No. ZMA-203
29	Relief Valve - 3" Dia. Jamesbury Corp. Ball Valve #3D150F36TT.
35	Roller Chain Flexible Coupling - Link Belt #RC5016 - 7/8 Dia. bore w/ 3/16 Keyway & (1) 5/16-18 tapped holes for one half of coupling - The other half is 1 1/2" dia. bore w/ 3/8 Keyway and (1) 1/2-13 tapped hole.
36	Roller Chain Flexible Coupling - Link Belt #RC5016 - both halves 7/8 bore w/ 3/16 keyway and (1) 5/16-18 tapped hole

TABLE 3 (Continued)

MARK
REF.
FIG. I

DESCRIPTION

- 47 Sprocket - Link Belt #18 TRC50BF - 7/8 Dia. Bore
w/ 3/16 Keyway and (2) 5/16-18 tapped holes 90°
apart w/(1) hole over Keyway
- 48 Sprocket - Link Belt #18TRC50BF - 1 1/2" Dia. Bore
w/ 3/8 Keyway and (2) 3/8-16 Tapped Holes 90°
apart w/(1) Hole over Keyway
- 50* Miter Gears - 10 Pitch - 2.500 P.D. - 25 Teeth -
.55 Face - 20°P.A. Hub Dia. 2" Dia. - Mounting
Distance 2 7/16-7/8 Dia. Bore w/ 3/16 Keyway
(2) 5/16-18 Holes 90° apart w/(1) Hole over
Keyway.
- 52 Extension Springs Wire Size .063 - Spring Dia.
.500 - Free Height 2.500 Ends Looped - Spring
Rate 10.4 Lbs./In. Max. extended Length 4.12" -
Associated Spring Corp. #E500-063-250
- 53* Spur Gear - 10 Pitch - 4.000 P.D. - 40 Teeth -
1"Face - 14 1/2° P. A. 2 1/8 Dia. Hub w/ 7/8
Hub Projection - 7/8 Dia. Bore w/ 3/16 Keyway and
(2) 5/16-18 tapped holes w/(1) hole over Keyway
- 54 Spur Gear (Cheapest Available) 8 Pitch - 4.000 P.D.
32 Teeth - 14 1/2° Pressure Angle - Approx.
5/8 Face - Approx. 3/4 Hub Dia. w/1" Hub
Projection - 3/8 Dia. Bore w/(1) #10-32 Tapped
Hole
- 55 Sprocket, Ladder Chain Boston Gear No. CA10
- 56 Ladder Chain - .185" Pitch Boston Gear No. 1A
(High Tensile @ Yield Point of 35#)
- 57 Sprocket, Ladder Chain Boston Gear No. CA60
- 58 Shaft Seals - Teflon Packing - John Crane Style
C-VH#1422 7/8 ID x 1 3/8 OD x .200 w/Adapters
- 60 Chain Tightner - Plain Shaft - Link Belt #C1
- 61 Sprocket - Link Belt #18TRC50BF - 3/4 Bore - No
Keyway Set Screw

TABLE 3 (Continued)

MARK
REF.
FIG. I

DESCRIPTION

66	Set Screw Collar - Boston Gear #SC100 - 1" Dia. Bore
69	Spur Gears 8 D.P. - 2"P.D. Boston Gear #NH16B
	Cam Followers - McGill "Camrol" #CF-1-S
	Rod End Bearings - Heim Unibal #HMF-12
	Accordion Sleeves - 1 3/4 I.D. - No Limit O.D. - Movement: Max. 7 1/2" - Min. 2" - End Collars: 1 1/4 ID x 1" Lg. & 2 7/8 I.D. x 1" Lg. A & A Manufacturing Co.
	Limit Switch - D.P.D.T. Lever Action - Allen Bradely #802THT-W1
	Limit Switch - D.P.D.T. - Plunger Type MICRO #DTF2-2RN-RH
65, 67	20" Dia. Handwheel - "Tomco" Part No. 12014 - Offset type polished rim - for special modifications contract Chicago Bridge & Iron Company

* Material is Cast Steel 0.20% Untreated or Better
Such as 1030 or 1040 SAE with Brinell Hardness
Number of 200 or Better.

TABLE 4

MARK REF. FIG. I	DESCRIPTION .
2,38,40, 41,42,43 46	7/8 Dia. Shafts
5,34,37, 39 6	1 1/2 Dia. Shafts Actuator Arm Assembly
7	Locking Plate Assembly
8	Valve Plate Assembly
9	Valve Rod Assembly
10	Latch Plate Assembly
11	Latch Rod Assembly
12	Swing Plate Assembly
13	Swing Rod Assembly
14	2" Dia. Shaft
16	1" Dia. Rod
18	Hinge Assembly
19	Exterior Door Assembly
20	Mounting Bracket Assembly
22	Door Shaft Assembly
23	Roller Assembly

TABLE 4 (CONTINUED)

MARK REFER DWG	I	DESCRIPTION
24		Upper Hinge Support Bracket Assembly
26		Lower Hinge Support Bracket Assembly
28		Interior Door Assembly
30		Latching Bar Assembly
31		Clevis Plate (Door Swing)
32		Bracket Assembly
33		Bracket Assembly (Latch)
44,45		3/8 Dia. Shaft
51		Interlock Assembly
59		Gland Assembly
68		3/8 Rod (For Interlock)
70		Actuator Stop

MISSION #10

MISSION: Trouble shoot and repair tripped Turbine turning gear motor.

INDICATIONS: Turbine shaft won't turn on the turning gear.
(1) MCC-14 tripped on thermal overload
(2) MCC-20 did not pick-up gear automatically - Check out Automatic Bus Transfer Switch
(3) RTGB indicates that motor is engaged but not running. Turning gear status light goes out and the turning gear light comes on. (4) Start gear motor from either MCC-14 or MCC-20. Motor starts but
(5) Trips again after 10 minutes
MECHANICAL PROBLEM REPEATEDLY CAUSES THERMAL OVERLOAD ON MOTOR. Motor shaft bearing is bad causes the current to go high and tripping the breaker.

BACKGROUND: If the turbine turning gear motor will not operate the turbine shaft will bow causing damage to the turbine shaft.

RELEVANCE TO SCENARIO: Turbine shaft will bow out of specifications if left stationary for very long.

SCENARIO TIME CONSTRAINTS: NONE

SIMULATION: Do Not work on the Turbine All work will be simulated. The mission will be talked through and participants will earn all information.

REFERENCES IN PACKAGE: B-190627, SHEET MC014-1,2
B-190627, SHEET MC020-1,2

RADIATION LEVELS: As read on maps provided.

MESSAGE REFERENCE: N/A

3001



TIME:

All measurements as read

INSTRUMENT	TYPE	SERIAL #

ABBREVIATION KEY

L-FA: Locked Hi-Rad

WMA: M-286 Area

4CA: Hi-Contaminati
Area

CA: Contamination.

CPEA: Contam. Process
Equip. Area

ARA: Airborne Rad

RA: Rad Area

QMA: Rad Material

SCP: Step-Off Pad

Eq: Equip. Location

FL: Floor Location

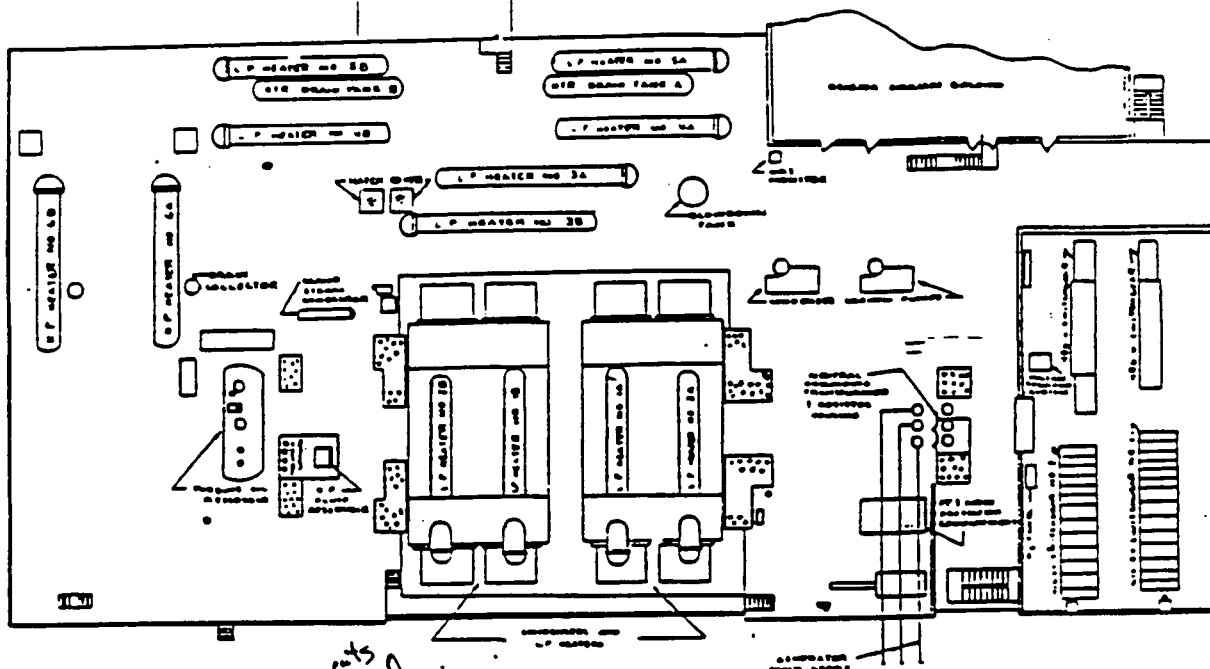
HE: Hot Spot Loca

Page: _____ of _____

SURVEY MAP & DATA TABLE

THE NEW AREA!

DATE: _____



All Measurements as read

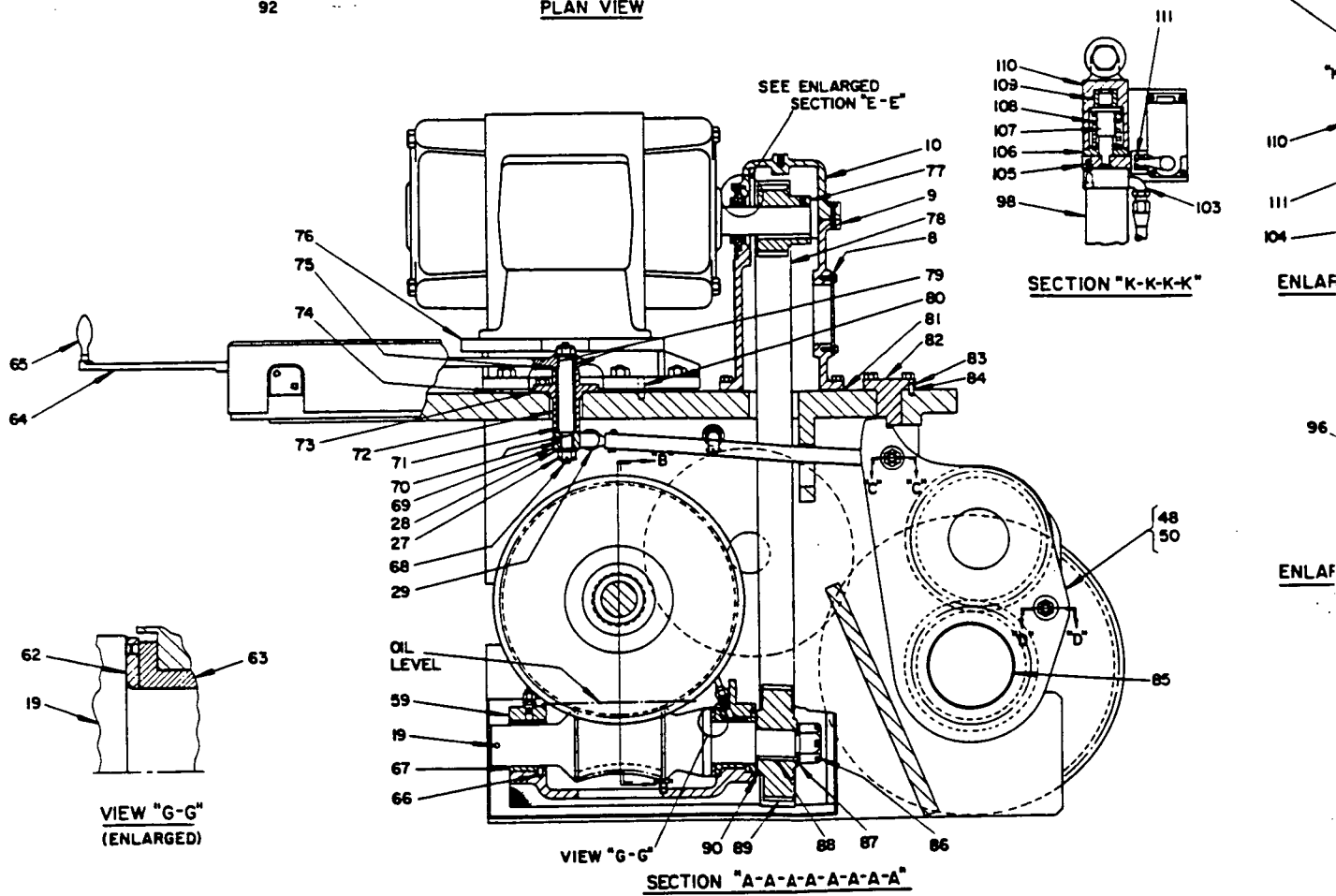
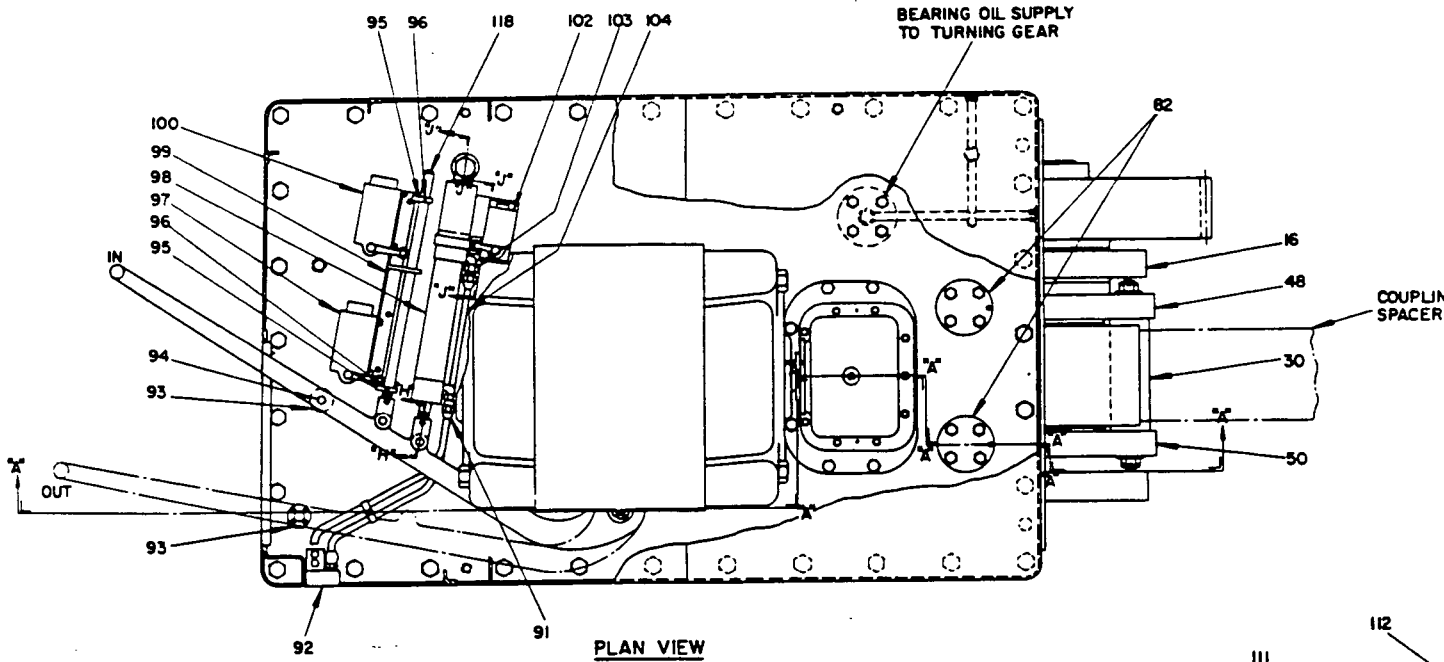
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COMMENTS:

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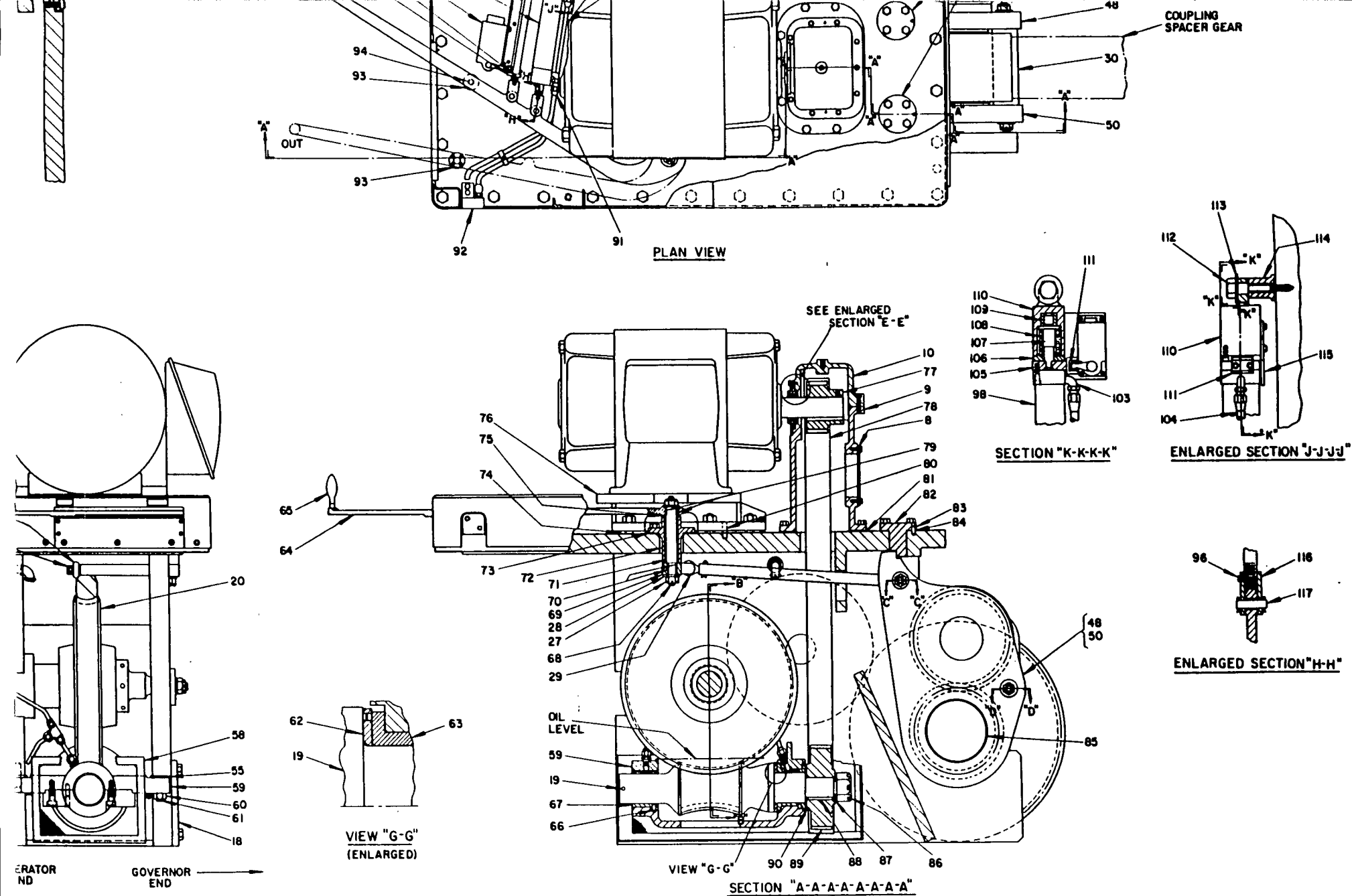
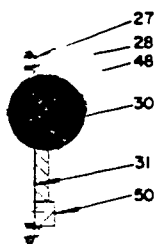
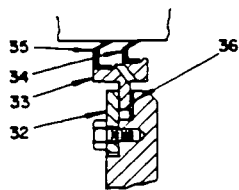


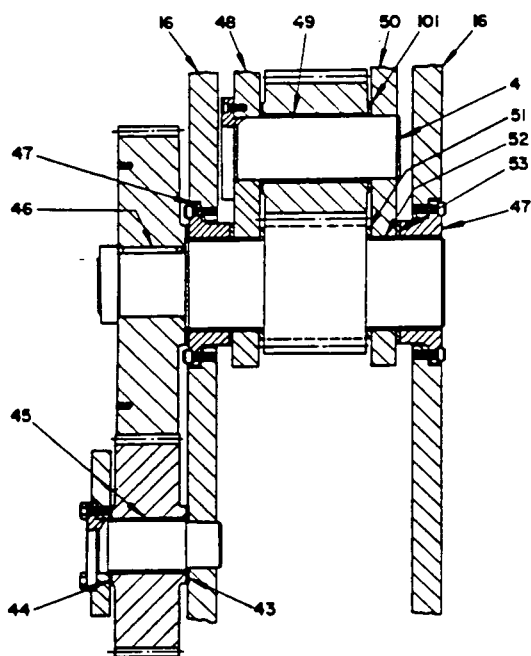
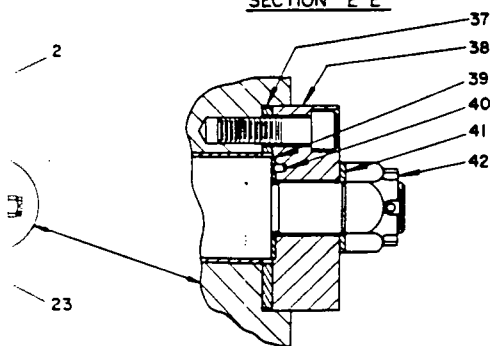
Figure 1
 250-258



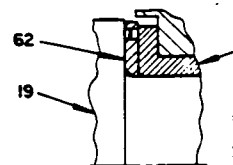
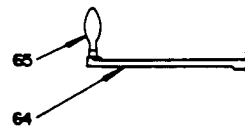
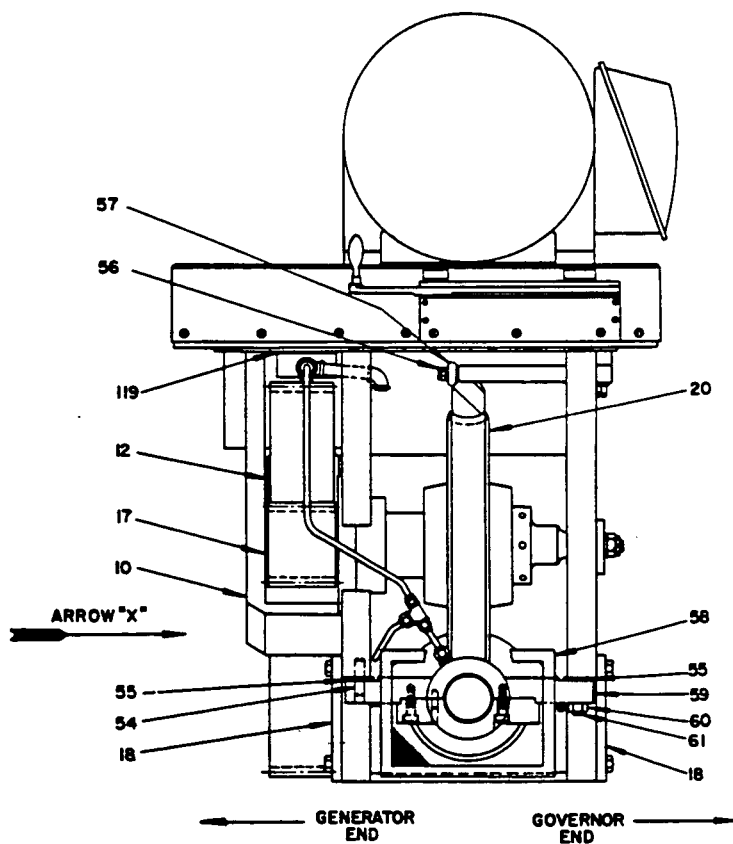
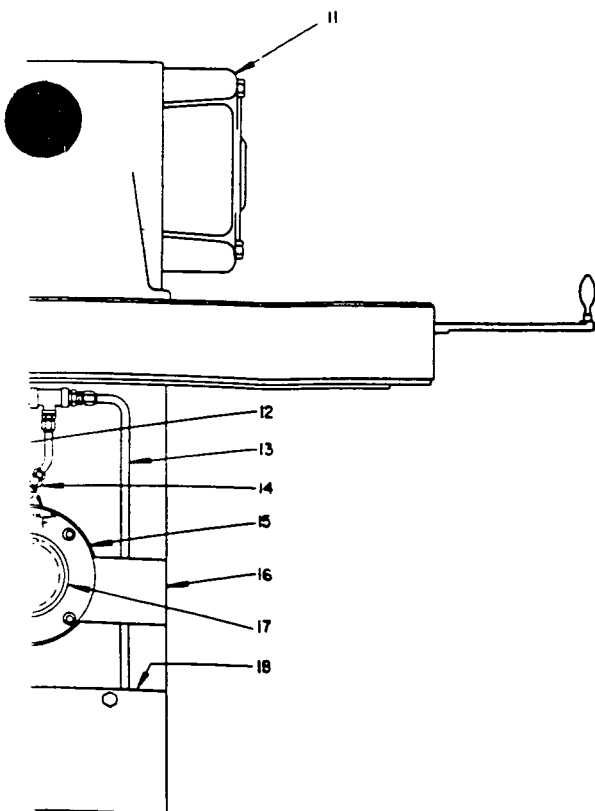
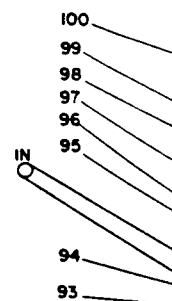
VIEW "D-D"



ENLARGED
SECTION "E-E"



SECTION "F-F-F"



VIEW "G-G"
(ENLARGED)

CONTROLLER/EVALUATOR TELEPHONES

CONTROLLER NETWORK FOR: 11/17/92 *

CONTROL ROOM	4189
TECHNICAL SUPPORT CENTER	4020
EMERGENCY OPERATIONS CENTER	4051
OPERATIONAL SUPPORT CENTER	4249

OTHER CONTROLLER TELEPHONES:

CONTROL ROOM	4089
TECHNICAL SUPPORT CENTER	4043
EMERGENCY OPERATIONS FACILITY	1183
CORPORATE METEOROLOGY (Caronet)	770-7383
CORPORATE COMMUNICATIONS (Caronet)	770-6189
NRC CONTROLLER (Caronet)	770-6189

PA SYSTEM LINE 5 IS FOR CONTROLLER USE ONLY.

* To conference: Dial 1st number and establish communications. Press "Flash." Dial the 2nd number. Press "Flash" then press "*4." Continue until all parties are on line.

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ROBINSON NUCLEAR PROJECT DEPARTMENT

1992 EXERCISE

4.0 CONTROLLERS' INSTRUCTIONS

INSTRUCTIONS FOR CONTROLLERS

1. Personnel are assigned as controllers or evaluators at the key function areas to monitor and control the exercise. In addition, they will accompany Radiological Monitoring Teams, Plant Health Physics Personnel, and Emergency Repair, and Fire Emergency Teams.
2. The in-plant controllers will be coordinated by the Lead Scenario Controller. He/she will be responsible for the overall control of the scenario. If unable to reach the Lead Scenario Controller, contact any Lead Controller.
3. Message forms and the simulator will be used to initiate, modify, and complete the events comprising the overall scenario. Selected controllers will use the messages to initiate the scenario events and to trigger responses from the involved emergency response organizations. Each controller will have copies of the messages controlling the portion of the scenario for which he/she is responsible.

Two kinds of messages will be used:

Control

Messages used as a primary means of implementing scenario events by announcing or placing an event in effect by hypothetical conditions resulting from previous actions.

Contingency

Messages used with the approval of the Lead Scenario Controller in order to maintain the scenario plan continuity or schedule. Control messages will be presented to the designated exercise participant at the time specified in the event schedule. The controller should follow up with an explanation of the message and answer questions to ensure that the participant understands the message.

Controllers will not provide information to the participants regarding scenario development or resolution of problem areas encountered. The participants are expected to obtain information through their own organization and exercise their own judgement in determining response actions and resolving problems.

4. Note that the scenario events are hypothetical. Any portion of the scenario depicting Plant system operational transients are simulated events. No control room actions or reactions involving operation of Plant systems or affecting generation capability will be initiated. All scenario messages will be prefixed and suffixed with the words "THIS IS AN DRILL/EXERCISE MESSAGE." Controllers stationed at areas vital to maintaining generating capability should be especially aware and take extra precautions in issuing messages or giving instructions regarding the scenario events.

5. Required controllers have the time-related Plant and radiological parameters of the exercise scenario. This information shall be issued to the appropriate exercise participants.
6. Some exercise participants may insist that certain parts of the scenario are unrealistic. The controllers and evaluators have the authority, with the approval from the Lead controllers, to clarify any questions regarding scenario validity. In some cases, it may be necessary to exercise specific instructions to preserve the continuity and objective of the exercise. Instructions however, should be made in such a manner so as NOT TO PROMPT players to make a specific response.
7. Prior to exercise commencement, all telecommunications should be tested to ensure satisfactory communications between the Lead Controllers and all other controllers.
8. Controllers will commence their assignments at assembly locations for players that they are to observe or as directed by the Lead Controllers.
9. Players are not allowed to introduce problems or events into the exercise or its scenario. Free play however, should be encouraged wherever possible, so long as the players actions do not affect the overall scenario or the reaching of objectives of the exercise. When free play occurs, the Lead Controller or Exercise Director should be informed and have final authority to decide if such actions are consistent with overall exercise objectives.

CONTROLLER/EVALUATOR TELEPHONES

CONTROLLER NETWORK FOR: 11/17/92 *

CONTROL ROOM	4189
TECHNICAL SUPPORT CENTER	4020
EMERGENCY OPERATIONS CENTER	4051
OPERATIONAL SUPPORT CENTER	4249

OTHER CONTROLLER TELEPHONES:

CONTROL ROOM	4089
TECHNICAL SUPPORT CENTER	4043
EMERGENCY OPERATIONS FACILITY	4052
CORPORATE METEOROLOGY (Caronet)	770-7383
CORPORATE COMMUNICATIONS (Caronet)	770-6189
NRC CONTROLLER (Caronet)	770-6189

* To conference: Dial 1st number and establish communications.
Press "Flash." Dial the 2nd number. Press "Flash" then
press "**4." Continue until all parties are on line.

EXERCISE PHONE NUMBERS FOR PARTICIPANTS

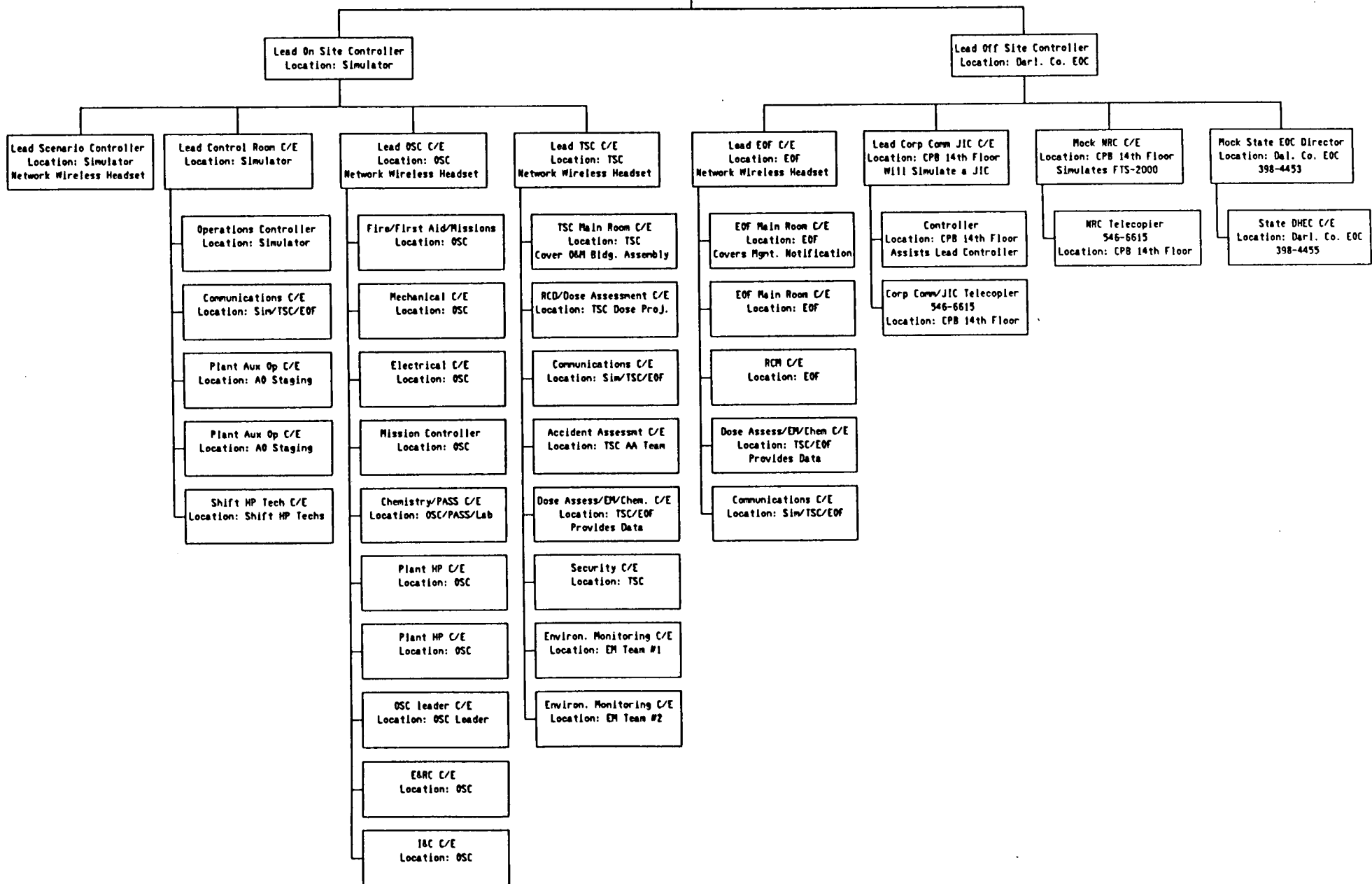
EXERCISE CONTROL ROOM NUMBERS FOR: 11/17/92		
SHIFT SUPERVISOR	(Plant Line)	1849 4071
SENIOR CONTROL OPERATOR		4013
REACTOR OPERATOR		4090
SHIFT TECHNICAL ADVISOR		4046
SPDS COMMUNICATIONS		1852
FAX MACHINE		1815
AO AREA		SIMULATOR /Radio

STATE/COUNTY Selective Signalling.....PER PROCEDURE
 STATE/COUNTY WARNING POINTS/EOCS.....PER PROCEDURE
 STATE/COUNTY TELECOPIER.....PER PROCEDURE
 NRC FTS 2000.....DO NOT USE*
 NRC OPERATIONS CENTER.....(Caronet)...770-4144
 NRC OPERATIONS CENTER TELECOPIER.....(Caronet)...770-6615
 CORPORATE COMMUNICATIONS.....PER PROCEDURE
 OTHER.....Give Message to Nearest Controller

* Notifications to NRC will be by Caronet number from the Simulator Control Room.

REMEMBER: "THIS IS A DRILL MESSAGE"

Exercise (Drill) Director



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ROBINSON NUCLEAR PROJECT DEPARTMENT

1992 EXERCISE

5.0 EVALUATORS' INSTRUCTIONS

A. INSTRUCTIONS FOR EVALUATORS

1. Know the overall Controller/Evaluator Organization.
2. Identify the players by name and function.
3. Identify yourself at all times to all players. Wear identification as provided (controller/evaluator badges or arm bands).
4. Identify the phone (or radio for field teams) you will use to maintain communications with Lead Controllers.
5. Position yourself to maximize your effectiveness in issuing messages and observing the players.
6. Be sure you understand the players' scenario script and the master scenario.
7. If acting as a Controller/Evaluator, keep the play on schedule by checking your timeline.
8. If acting as a Controller/Evaluator, issue the message on time. Make sure the players understand it.
9. If acting as a Controller/Evaluator, remember to call the Lead Controller to report on status of players' actions if off schedule or if in doubt about what to do. Call for advice if players depart significantly from the scenario script.
10. Allow the players reasonable flexibility to perform their functions and demonstrate their skill, knowledge, and initiative.
11. Identify any non CP&L evaluators. Make sure they are aware of all your actions and those of the players.
12. Make notes on good and bad points of players' actions, the strengths and weaknesses, and areas for improvements.
13. Attend the post-exercise critique session to provide your comments and recommendations to the Lead Controller.
14. Identify the players' leaders. Work with them as appropriate.
15. If a real emergency occurs and this affects the players, call off your portion of the exercise and notify the Lead Scenario Controller immediately.
16. Be at your post at least 30 minutes prior to any player action commencement.

17. Any non-CP&L evaluators will work through the Exercise Director or the Lead Scenario Controller. This is essential for the success of the exercise.
18. Controllers and evaluators do not have to follow the radiation exposure control practices appropriate for the simulated radiation levels. However, the players must follow the radiation protection rules. Controllers and evaluators will be exempt from accountability and have access to all areas.

GENERAL "DON'Ts" FOR EVALUATORS

1. Don't leave your post at key times.
2. Don't prompt the players to take action.
3. Don't coach the players.
4. Don't criticize the players' actions during the play.
5. Don't forget to call the Lead Controller to seek advice or help as necessary.
6. Don't allow the media/other external influences to distract the players. No interviews with players are allowed.
7. Don't allow simulation when equipment and facilities are available except for causing flow discharge of fire extinguishers, etc.

*** NOTE ***

All participants will comply with radiation exposure control practices for actual conditions existing at the plant at the time of the exercise.

Critique Worksheets/Evaluation Checklists

In an effort to help evaluators, a set of "Evaluation Checklists" have been provided for reference in Section 5.0. Each evaluator may, if he/she chooses, utilize the checklists for their particular area of observation to assist in being sure that critical items for evaluation are not accidentally missed during the exercise. The Evaluation Checklists may be completed and returned to the Lead Exercise Evaluator upon completion of the critique process; however, this is optional.

Evaluators have been provided in Section 6.0 of this exercise plan, a "Controller's Log Sheet" which is to be used to record events which have been observed during the exercise. These sheets are to be used by both controllers and evaluators for the purpose of documenting times and events which have occurred so that upon conducting the critique, specific facts can be presented. It is important that the time of the event observed be recorded so that if those actions affect several emergency facilities, a coordinated review of the chronological sequence of events may be reconstructed during the critique.

Additionally, a "Exercise Critique Form" has been provided in Section 6.0 to summarize the observations which the evaluators have made during the exercise. In responding to the "Exercise Critique Form," only those strengths which are clearly outstanding need to be noted. In addition to noting the outstanding action, it is important to include (if possible) the name of the individual(s) observed so that recognition of their achievement may be included in the final critique report. Response to the "Drill Critique Form" is to include those observations which are deficiencies from the emergency plan, the implementing procedure, or the objectives for the exercise as stated in Section 2.0 of this exercise plan. It is very important that deficiencies be related directly to a specific item from the three mentioned documents. If possible, provide the exact procedure reference, plan reference, or exercise objective number with the noted deficiency and your recommendation for corrective action. Finally, your observations are an important part of the exercise critique since each controller/evaluator has been selected for their assignment based upon their background or experience in the particular function assigned. Observations allow the whole organization an opportunity for improvement and provide a viewpoint for future consideration, but must be listed differently than deficiencies so that proper consideration can be given. In responding to all three areas (strengths, deficiencies, and observations), additional sheets of paper may be attached to the "Exercise Critique Form" for completion of the evaluators' response.

It is required that by conclusion of the evaluators critique, the "Exercise Critique Form" and the "Controller's Log Sheets" can be returned to the Lead Evaluator or to the Lead Exercise Evaluator. Further comments or observations which an evaluator may wish to elaborate upon and document should be made in the form of a written report to the Chief Evaluator within 5 working days from the conclusion of the exercise. This written information should be further detail or observations which are not of a critical nature to the evaluation process, since two of the exercise objectives are to demonstrate the ability to conduct a post-exercise critique to determine areas requiring corrective actions.

EVALUATION CHECKLISTS

CON-92-2627
RNPd-92-06-R0

-Control Room Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
1. Did the operators respond quickly to the initiating events and properly assess the situation?	_____	_____	_____
2. Did the Control Room personnel take appropriate actions to mitigate the emergency condition in an expeditious manner?	_____	_____	_____
3. Were appropriate abnormal conditions and emergency operations procedures used and periodically reviewed during the emergency situation?	_____	_____	_____
4. Did the Shift Supervisor receive timely notification of the emergency condition?	_____	_____	_____
5. Were there sufficient measurable/observable indications to recognize the Emergency Action Levels?	_____	_____	_____
6. Were classifications of the emergency conditions timely and accurate?	_____	_____	_____
7. Did Control Room personnel know when to refer to the emergency plan implementing procedures and which procedures to use?	_____	_____	_____
8. Was the emergency classification upgraded or downgraded when appropriate?	_____	_____	_____
9. Did the Shift Supervisor promptly assume control and authority?	_____	_____	_____
10. Did the Shift Supervisor initiate the correct response actions to implement onsite and offsite assessment and protective response measures?	_____	_____	_____
11. Were such measures implemented in a prompt and well thought out manner?	_____	_____	_____
12. If an emergency condition required corrective action in-plant, was a team assembled and briefed in a timely manner?	_____	_____	_____
13. Did the Shift Supervisor practice efficient use of available personnel?	_____	_____	_____
14. Was assistance requested from the appropriate emergency response organizations?	_____	_____	_____

-Control Room Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
15. Were personnel aware of their emergency response roles and functions?	_____	_____	_____
16. Did the Shift Supervisor review the simulated plant conditions and declare emergency classification(s) with the Site Emergency Coordinator upon his arrival at the TSC?	_____	_____	_____
17. Were appropriate decision-making responsibilities transferred to the TSC upon its activation?	_____	_____	_____
18. Were manpower and staffing requirements for protracted operations assessed?	_____	_____	_____
19. Were notification procedures available and used for mobilizing onsite emergency response personnel and augmenting the emergency response staff?	_____	_____	_____
20. Were emergency response phone listings available, complete, and up-to-date?	_____	_____	_____
21. Were initial and follow-up notification forms readily available and properly completed?	_____	_____	_____
22. Did the Control Room communicators appear to understand and use the communications equipment and systems effectively?	_____	_____	_____
23. Did Control Room personnel transmit data in a timely and knowledgeable manner?	_____	_____	_____
24. Did the Control Room communicators use the statement, "THIS IS A DRILL/EXERCISE MESSAGE," or a similar statement?	_____	_____	_____
25. Were communications links checked?	_____	_____	_____
26. Were all communication networks operational?	_____	_____	_____
27. Were communications adequate to ensure that the flow of information was timely, effective, and efficient?	_____	_____	_____
28. Were dedicated communication links with the TSC, EOF, and OSC available and used?	_____	_____	_____

-Control Room Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
29. Were general status announcements or periodic updates provided to Control Room personnel throughout the emergency?	_____	_____	_____
30. Was the plant page-party system used to apprise emergency workers of changes in the status of the emergency situation?	_____	_____	_____
31. Was there a proper flow of data between the TSC and the Control Room?	_____	_____	_____
32. Were Control Room logs maintained?	_____	_____	_____
33. Did operators obtain the appropriate information necessary to Support dose projection calculations?	_____	_____	_____
34. Did operators obtain release rate and offsite dose assessment information from the appropriate radiological monitoring systems when required?	_____	_____	_____
35. Was a calculator or computer immediately available for performing dose projection calculations?	_____	_____	_____
36. Were dose projection calculations performed efficiently and accurately?	_____	_____	_____
37. Were emergency supplies and equipment, such as respirators and protective clothing available to Control Room personnel?	_____	_____	_____
38. Was the ambient noise level in the Control Room acceptable?	_____	_____	_____
39. Was access to the Control Room restricted to specific individuals?	_____	_____	_____
40. Did personnel called in meet the criteria of Fitness for Duty (FFD) by completing the "FFD Determination Form"?	_____	_____	_____
41. Was a post exercise players' critique held to evaluate Control Room performance?	_____	_____	_____

-Technical Support Center (TSC) Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
1. Did the security organization initiate a search of the TSC in a timely manner?	_____	_____	_____
2. Was the TSC incorporated into the protected area?	_____	_____	_____
3. Were ERO personnel admitted into the TSC via the protected area in a timely manner?	_____	_____	_____
4. Was the TSC setup initiated upon the declaration of an Alert?	_____	_____	_____
5. Did emergency response personnel assigned to the TSC report in a timely manner?	_____	_____	_____
6. Were TSC personnel aware of their assigned work areas?	_____	_____	_____
7. Were TSC personnel familiar with their assigned duties and responsibilities?	_____	_____	_____
8. Did applicable personnel in the TSC refer to and utilize their checklists?	_____	_____	_____
9. Did TSC personnel have up-to-date phone listings for onsite and offsite contacts?	_____	_____	_____
10. Was command control authority transferred from the Control Room to the TSC according to procedures?	_____	_____	_____
11. Did communications contain the statement "THIS IS A DRILL/EXERCISE MESSAGE," or a similar statement?	_____	_____	_____
12. Did the Site Emergency Coordinator formally accept the transfer of responsibilities from the Control Room?	_____	_____	_____
13. Was the TSC formally declared "activated" by the Site Emergency Coordinator?	_____	_____	_____
14. Were TSC personnel informed of the change of command?	_____	_____	_____

-Technical Support Center (TSC) Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
15. Did the Site Emergency Coordinator demonstrate the ability to maintain command control over all emergency response activities conducted from the TSC?	_____	_____	_____
16. Were plant status briefings periodically conducted by the Site Emergency Coordinator?	_____	_____	_____
17. If necessary, did the Site Emergency Coordinator make offsite protective action recommendations in a proper and timely manner?	_____	_____	_____
18. Were manpower and staffing requirements for protracted operations assessed?	_____	_____	_____
19. Did TSC personnel demonstrate, if necessary, the ability to identify the need for outside assistance when station capabilities were exceeded?	_____	_____	_____
20. Did TSC personnel demonstrate the ability to classify the emergency condition in a timely manner?	_____	_____	_____
21. Did technical personnel demonstrate their ability to react to escalating emergency classification?	_____	_____	_____
22. Did the TSC Accident Assessment Team demonstrate the ability to gather, assess, and disseminate information to help mitigate the emergency conditions?	_____	_____	_____
23. Did the TSC staff adequately Support the Control Room staff's efforts to identify the cause of an incident, mitigate the consequences of that incident, and place the unit in a safe and stable conditions?	_____	_____	_____
24. Did TSC personnel demonstrate the ability to respond to mitigating circumstances and properly de-escalate the emergency situation?	_____	_____	_____

-Technical Support Center (TSC) Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
25. Were the notification procedures available and used for mobilizing onsite emergency response personnel and augmenting the emergency response staff?	_____	_____	_____
26. Were communication links established with other emergency response facilities in a timely manner?	_____	_____	_____
27. Did TSC personnel properly communicate with: a. Control Room? b. OSC? c. EOF?	_____ _____ _____	_____ _____ _____	_____ _____ _____
28. Did the Logistic Support Director notify the Emergency Security Team Leader of anticipated emergency vehicle access to the site necessary to support emergency response activities?	_____	_____	_____
29. Were necessary modifications to the security program coordinated with the Emergency Security Team Leader?	_____	_____	_____
30. Were the periodic follow-up notifications conducted per procedure?	_____	_____	_____
31. Were the initiating conditions or events posted on Plant Status Boards in a timely fashion?	_____	_____	_____
32. Were the subsequent plant status reports posted in a timely manner?	_____	_____	_____
33. Did the TSC have suitable communications with the field monitoring teams?	_____	_____	_____
34. Were the initial radiological conditions ascertained in a timely manner?	_____	_____	_____
35. Did the Dose Assessment Coordinator receive proper data to be able to assess radiological conditions (e.g., meteorological data and release rate data)?	_____	_____	_____
36. Did the TSC receive prompt information regarding permanent and portable radiological monitoring results?	_____	_____	_____

-Technical Support Center (TSC) Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
37. Was effluent sampling information available?	_____	_____	_____
38. Were the correct procedures and methods used for making dose projection calculations?	_____	_____	_____
39. Were dose projections performed in a timely manner?	_____	_____	_____
40. Was there a clear interface between the TSC staff and field monitoring teams?	_____	_____	_____
41. Were the activities of the Onsite Survey Teams with those of the Radiological Monitoring Teams adequately coordinated?	_____	_____	_____
42. Were habitability surveys initiated by the Radiation Monitor Director?	_____	_____	_____
43. Was the TSC monitored for radiological hazards?	_____	_____	_____
44. Did TSC personnel demonstrate the ability to properly define protective action recommendations?	_____	_____	_____
45. Did the TSC have sufficient protective equipment and supplies for the personnel assigned to the TSC?	_____	_____	_____
46. Was the status of the TSC ventilation addressed?	_____	_____	_____
47. Were procedures available to, and used by, TSC personnel?	_____	_____	_____
48. Were technical resources and other information, such as as-built drawings, maps, and emergency plan implementing procedures, readily available?	_____	_____	_____
49. Was the operational and functional adequacy of the TSC demonstrated during the drill/exercise?	_____	_____	_____
50. Was the ambient noise level in the TSC acceptable?	_____	_____	_____
51. Did personnel called in to the TSC from offsite meet Fitness for Duty (FFD) criteria by completing the "FFD Determination Form"?	_____	_____	_____
52. Was a post exercise players' critique held to evaluate TSC performance?	_____	_____	_____

-Emergency Operations Facility (EOF) Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
1. Was the Emergency Response Manager notified following the Notification of Unusual Event and Alert declarations?	_____	_____	_____
2. Was the EOF activated in a timely manner?	_____	_____	_____
3. Were EOF personnel aware of their assigned work areas?	_____	_____	_____
4. Was the EOF activated as prescribed in the emergency plan implementing procedures?	_____	_____	_____
5. Were security controls exercised concerning personnel permitted access to the EOF?	_____	_____	_____
6. Was there a clear and precise transfer of responsibility from the TSC staff to the EOF staff?	_____	_____	_____
7. Did the Emergency Response Manager declare the EOF operational prior to accepting full responsibility for offsite activities?	_____	_____	_____
8. Did the Emergency Response Manager maintain command control over the emergency response activities conducted from the EOF?	_____	_____	_____
9. Was there a clear dissemination of authority and control in the EOF organization?	_____	_____	_____
10. Did the EOF staff initiate and coordinate activities in an efficient and timely manner?	_____	_____	_____
11. Were procedures available to, and used by, EOF personnel?	_____	_____	_____
12. Did EOF personnel have up-to-date phone listings for onsite and offsite emergency contacts?	_____	_____	_____
13. Were current plant status announcements and periodic updates made?	_____	_____	_____
14. Did communications contain the statement "THIS IS A DRILL/EXERCISE MESSAGE," or a similar statement?	_____	_____	_____

-Emergency Operations Facility (EOF) Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
15. Were appropriate EOF staff members aware of decisions regarding protective action recommendations for the general public and emergency workers within the 10-mile EPZ?	_____	_____	_____
16. Did the EOF staff perform manpower projections to support protracted operations and notify the Administrative and Logistic Manager accordingly?	_____	_____	_____
17. Did the EOF staff demonstrate the ability to obtain outside resources when station capabilities were exceeded?	_____	_____	_____
18. Were communicators correctly assigned and communication checks performed in a timely fashion?	_____	_____	_____
19. Were dedicated communication links available and operational?	_____	_____	_____
20. Were the communication links between the EOF and other locations, including mobile personnel, effective?	_____	_____	_____
21. Following changes in the emergency classification level, were notifications made to the proper authorities when required?	_____	_____	_____
22. Did the EOF staff inform and update the appropriate County, State, and Federal emergency response personnel in a timely manner?	_____	_____	_____
23. Did EOF personnel demonstrate the ability to gather, assess, and disseminate information regarding the status of emergency conditions and the status of emergency response activities in a timely manner?	_____	_____	_____
24. Did the EOF staff demonstrate the ability to Support the TSC staff's efforts to identify the cause of an incident, mitigate the consequences of that incident, and place the unit in a safe and stable condition?	_____	_____	_____
25. Did the EOF staff demonstrate the ability to analyze current plant conditions and identify projected trends and potential consequences?	_____	_____	_____

-Emergency Operations Facility (EOF) Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
26. Were there sufficient sources of technical expertise available and utilized?	_____	_____	_____
27. Were technical resources and other information such as as-built drawings, maps, and emergency plan implementing procedures, readily available?	_____	_____	_____
28. Were procedures and other necessary documents used?	_____	_____	_____
29. Did the EOF staff demonstrate the ability to utilize vendor and other outside resources to assist accident analysis and mitigation efforts where necessary?	_____	_____	_____
30. Did the Radiological Control Manager demonstrate the ability to perform offsite dose assessment activities in a timely manner?	_____	_____	_____
31. Did the EOF staff demonstrate the ability to perform timely assessments of offsite radiological conditions to support the formulation of protective action recommendations?	_____	_____	_____
32. Was there an adequate flow of information between State and RNPd radiological assessment personnel regarding offsite radiological conditions?	_____	_____	_____
33. Did the EOF staff effectively direct and coordinate the Radiological Monitoring Teams' activities?	_____	_____	_____
34. Were the EOF radiological assessment personnel in frequent communication with the Radiological Monitoring Teams?	_____	_____	_____
35. Did the Radiological Control Manager demonstrate the ability to coordinate the activities of the Radiological Monitoring Teams with those of the Onsite Survey Teams?	_____	_____	_____
36. Were the emergency plan implementing procedures effectively used to provide adequate protection to station personnel and the general public?	_____	_____	_____

-Emergency Operations Facility (EOF) Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
37. Was there good communication between EOF personnel, State, and Local authorities regarding the protective action recommendations?	_____	_____	_____
38. Was the operational and functional adequacy of the EOF demonstrated?	_____	_____	_____
39. Was the ambient noise level in the EOF acceptable?	_____	_____	_____
40. Did the EOF have sufficient protective equipment and supplies for personnel stationed in the EOF?	_____	_____	_____
41. Did the EOF staff demonstrate, if appropriate, the ability to de-escalate the emergency response based on current plant conditions and projected trends?	_____	_____	_____
42. Did the EOF staff remain involved through the de-escalation of the emergency situation?	_____	_____	_____
43. Was the EOF staff able to identify and discuss appropriate reentry and recovery activities based on current or projected conditions?	_____	_____	_____
44. Did personnel called in to the EOF from offsite meet Fitness for Duty (FFD) criteria by completing the "FFD Determination Form"?	_____	_____	_____
45. Was a post exercise critique held to evaluate EOF performance?	_____	_____	_____

-Plant Monitoring Team Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
1. Did the team respond to, and prepare for, survey tasks in a timely manner?	_____	_____	_____
2. Did the team have the proper equipment?			
a. Dosimetry?	_____	_____	_____
b. Survey instruments?	_____	_____	_____
c. Maps?	_____	_____	_____
d. Protective clothing/respiratory protection equipment?	_____	_____	_____
e. Radio?	_____	_____	_____
f. Vehicle (if needed)?	_____	_____	_____
g. Sampling equipment?	_____	_____	_____
3. Prior to deployment, was the team adequately briefed regarding potential hazards and conditions?	_____	_____	_____
4. Prior to deployment, was a team leader identified?	_____	_____	_____
5. Were the survey instruments and radios functionally checked prior to starting on the survey and were the instrument calibrations current?	_____	_____	_____
6. Was personnel dosimetry available and issued to the team members?	_____	_____	_____
7. Were teams supplied with appropriate high-range personnel dosimeters?	_____	_____	_____
8. Were procedures followed while taking samples?	_____	_____	_____
9. Were appropriate precautions taken in the handling and storing of any high-level samples?	_____	_____	_____
10. Were samples collected in a timely manner?	_____	_____	_____
11. Were samples analyzed within the required time limit?	_____	_____	_____
12. Were emergency monitoring procedures available to, and used by, team personnel?	_____	_____	_____
13. Were the capabilities in place for dealing with both heavily contaminated personnel and those individuals only slightly contaminated?	_____	_____	_____

-Plant Monitoring Team Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
14. Was respiratory protection equipment available and used while making the surveys?	_____	_____	_____
15. Were communications properly maintained?	_____	_____	_____
16. Did communications contain the statement "THIS IS A DRILL/EXERCISE MESSAGE," or similar statement?	_____	_____	_____
17. Upon return, was the team properly debriefed?	_____	_____	_____
18. Did personnel called in from offsite meet Fitness for Duty (FFD) criteria by completing the "FFD Determination Form"?	_____	_____	_____

-Environmental Monitoring Teams Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
1. Did team members arrive at the staging area and prepare themselves in a timely manner?	_____	_____	_____
2. Was the team equipped with the following supplies:			
a. Survey instruments?	_____	_____	_____
b. Air samplers?	_____	_____	_____
c. Radio?	_____	_____	_____
d. Maps?	_____	_____	_____
e. Protective clothing?	_____	_____	_____
f. Respiratory protection equipment?	_____	_____	_____
3. With respect to the team's vehicle:			
a. Was it fully gassed?	_____	_____	_____
b. Were the keys readily available?	_____	_____	_____
c. Was a release survey completed prior to deployment?	_____	_____	_____
4. Prior to deployment, was a team leader identified?	_____	_____	_____
5. Prior to deployment, did team personnel perform preoperational checks on the following equipment:			
a. Radio?	_____	_____	_____
b. Survey meters?	_____	_____	_____
c. Sampling equipment?	_____	_____	_____
6. Were the instruments calibrated within the current calendar quarter or within the prescribed schedule?	_____	_____	_____
7. Was the team briefed prior to dispatch?	_____	_____	_____
8. Was the vehicle properly designed or modified to hold team members, and monitoring, protective, safety, and auxiliary equipment?	_____	_____	_____
9. Were there enough team members to adequately conduct survey and sampling activities?	_____	_____	_____
10. Was the vehicle and/or team equipped with an adequate radio system that permitted unimpeded transmission and reception of data and instructions?	_____	_____	_____

-Environmental Monitoring Teams Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
11. Did the EOF provide adequate instructions regarding what measurements were to be performed?	_____	_____	_____
12. Did the radio communications contain the statement, "THIS IS A DRILL/EXERCISE MESSAGE," or a similar statement?	_____	_____	_____
13. Were radio communications clear, concise, and accurate?	_____	_____	_____
14. Were communications properly maintained?	_____	_____	_____
15. Did the Environmental Monitoring Coordinator exhibit good ALARA practices in directing team?	_____	_____	_____
16. Was information transmitted to the EOF communicator in a timely manner?	_____	_____	_____
17. Was the team kept apprised of the status of the emergency situation?	_____	_____	_____
18. Were dose rate measurements taken to verify radiation levels while in transit to monitoring and/or sampling sites?	_____	_____	_____
19. Was the team able to find the monitoring and/or sampling locations?	_____	_____	_____
20. Did the team demonstrate a knowledge of proper survey and sampling techniques?	_____	_____	_____
21. Did team personnel know how to operate and/or handle monitoring, sampling, and auxiliary equipment?	_____	_____	_____
22. Were air samplers run for an appropriate time interval?	_____	_____	_____
23. Were samples counted outside the plume?	_____	_____	_____
24. Was the proper procedure used for field counting of airborne samples?	_____	_____	_____
25. Were good sample handling techniques used to avoid cross-contamination?	_____	_____	_____

-Environmental Monitoring Teams Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
26. Was raw field data converted correctly to uCi/cc for both particulate and iodine airborne samples?	_____	_____	_____
27. Were vehicle surveys performed periodically?	_____	_____	_____
28. Was the team aware of sample drop location(s)?	_____	_____	_____
29. Did the team members keep track of their individual exposure?	_____	_____	_____
30. Were pocket dosimeters checked on a regular basis?	_____	_____	_____
31. Were data sheets properly filled out and maintained?	_____	_____	_____
32. Were standby areas clearly identified to the team?	_____	_____	_____
33. Were spare batteries available for portable radios?	_____	_____	_____
34. Were backup instruments available in case of a failure of the primary instruments?	_____	_____	_____
35. Were the team members and vehicle properly surveyed upon completion of their monitoring tasks?	_____	_____	_____
36. Were the team members debriefed upon their return?	_____	_____	_____
37. Upon return, was equipment returned to its original status?	_____	_____	_____
38. Did personnel called in to the OSC from offsite meet Fitness for Duty (FFD) criteria by completing the "FFD Determination Form"?	_____	_____	_____

-Operations Support Center (OSC) Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
1. Was the activation of the OSC at the ALERT level initiated in a timely manner?	_____	_____	_____
2. Was the OSC facility log initiated in a timely manner?	_____	_____	_____
3. Was the equipment set up and made ready in a timely manner?	_____	_____	_____
a. Telephones	_____	_____	_____
b. Radios	_____	_____	_____
c. Status Board	_____	_____	_____
d. Emergency Equipment Kit	_____	_____	_____
e. Plant Keys	_____	_____	_____
4. Were communication checks and equipment operability tests made?	_____	_____	_____
5. Did communications contain the statement "THIS IS A DRILL/EXERCISE MESSAGE," or similar statement?	_____	_____	_____
6. Was the OSC Status Board manned in a timely manner?	_____	_____	_____
7. Did the OSC Leader assume control and announce the activation of the OSC?	_____	_____	_____
8. Were status briefings provided to OSC personnel?	_____	_____	_____
9. Was a manpower assessment completed?	_____	_____	_____
10. Did the OSC demonstrate that round-the-clock coverage was possible?	_____	_____	_____
11. Were controls implemented at ingress areas?	_____	_____	_____
12. Were visitors escorted to security egress?	_____	_____	_____
13. Was there an orderly evacuation of all non-essential personnel?	_____	_____	_____
14. Was an adequate number of support personnel available in the OSC?	_____	_____	_____
15. Were the emergency teams formed as required by procedure?	_____	_____	_____

-Operations Support Center (OSC) Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
16. Was the OSC Leader informed of initiating conditions by the TSC staff?	_____	_____	_____
17. Was equipment out-of-service identified and impact on the mission evaluated?	_____	_____	_____
18. Were personnel qualification checked prior to mission dispatch?	_____	_____	_____
19. Was there adequate information flow from the TSC concerning plant conditions and hazardous areas?	_____	_____	_____
20. Were teams made ready and standing by in timely manner?	_____	_____	_____
21. Were increased exposure requests initiated for team members prior to team deployment?	_____	_____	_____
22. Was the OSC Leader aware of all EAL upgrades and reasons for changes?	_____	_____	_____
23. Did the OSC Leader demonstrate the ability to coordinate and control the teams both onsite and in-plant?	_____	_____	_____
24. Was the OSC activated and placed in a state of readiness in accordance with procedures and the OSC H.P. Activation Task Status Board?	_____	_____	_____
25. Did the team remain in a state of readiness until dispatched?	_____	_____	_____
26. Were procedural responsibilities of teams and OSC staff correctly implemented?	_____	_____	_____
27. Was the OSC Leader kept aware of current plant conditions from the TSC?	_____	_____	_____

-Operations Support Center (OSC) Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
28. Were in-plant teams made aware of routes, exposure rates, and hazards during briefings?	_____	_____	_____
29. Had personnel exposure projections been performed for in-plant team members prior to dispatch?	_____	_____	_____
30. Was adequate dosimetry of the appropriate type available for onsite and in-plant teams?	_____	_____	_____
31. Were procedures followed properly for personnel evacuation to the relocation area?	_____	_____	_____
32. Was each team properly debriefed upon return to the OSC?	_____	_____	_____
33. Were the communication channels from the OSC to the TSC functioning properly?	_____	_____	_____
34. Was a post exercise critique held to evaluate OSC performance?	_____	_____	_____

-Sample Teams (PASS) Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
1. Were the teams members selected, familiar with sample retrieval procedures and practices and qualified for Health Physics requirements?	_____	_____	_____
2. Was Health Physics coverage provided for sample retrieval assistance where radiation hazards existed?	_____	_____	_____
3. Was the team given an adequate briefing on radiation hazards and contamination problems?	_____	_____	_____
4. Was a team leader identified?	_____	_____	_____
5. Was a predetermined route established prior to departure and then used by the team?	_____	_____	_____
6. Did the team have appropriate equipment?	_____	_____	_____
7. Were operational checks performed on the equipment?	_____	_____	_____
8. Did the team use good sample retrieval practices (Dosimetry, Surveys, etc.)?	_____	_____	_____
9. Were team members familiar with equipment operation?	_____	_____	_____
10. Were communications maintained?	_____	_____	_____
11. Did communications contain the statement "THIS IS A DRILL/EXERCISE MESSAGE" or a similar statement?	_____	_____	_____
12. Were the procedures sufficient to provide acceptable and accurate results?	_____	_____	_____
13. Did the lab technicians observe good lab practices (e.g., Hot sample shielding and disposal)?	_____	_____	_____
14. Were the protective clothing requirements adequate?	_____	_____	_____
15. Were good ALARA practices implemented?	_____	_____	_____

-Damage Control Team Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
1. Did the team members prepare themselves in a timely manner?	_____	_____	_____
2. Was the team properly equipped?	_____	_____	_____
3. Prior to deployment, was the team leader notified?	_____	_____	_____
4. Was the team properly supported by E&RC personnel?	_____	_____	_____
5. Was the team briefed prior to dispatch?	_____	_____	_____
6. Were there enough team members to adequately do the job?	_____	_____	_____
7. Did the team have adequate communications (radio, near-work phone, etc.)?	_____	_____	_____
8. Did the Damage Control Team Leader provide adequate instructions?	_____	_____	_____
9. Were all team members qualified to do the type of work assigned?	_____	_____	_____
10. Were communications properly maintained with the team?	_____	_____	_____
11. Was the team kept apprised of the status of the emergency?	_____	_____	_____
12. Were dose measurements taken for the team?	_____	_____	_____
13. Did team personnel display proficiency in the use of their equipment?	_____	_____	_____
14. Was the team able to find its work location?	_____	_____	_____
15. Was a predetermined route established and followed by the team?	_____	_____	_____
16. Was the team properly debriefed upon their return to the OSC?	_____	_____	_____
17. Did the team have the required tools to the work assigned?	_____	_____	_____
18. Was equipment returned to its original status?	_____	_____	_____

-Damage Control Team Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
19. Was an ALARA review completed?	_____	_____	_____
20. Did team members sign an RWP?	_____	_____	_____
21. Did teams properly sign in/out of the OSC?	_____	_____	_____
22. Were assignments of alternates done once teams were in the field?	_____	_____	_____
23. Were ingress/egress pathways to work locations identified?	_____	_____	_____
24. Was a team leader identified for each team?	_____	_____	_____

CONFIDENTIAL

CAROLINA POWER & LIGHT COMPANY
ROBINSON NUCLEAR PROJECT DEPARTMENT

1992 EXERCISE

6.0 SUPPLEMENTARY MATERIAL

PLANT: H. B. Robinson **FACILITY OBSERVED:** --

DRILL/EXERCISE TYPE: Annual Exercise

CONTROLLER'S NAME: _____ DATE: 11 / 17 / 1992

[illegible]

CAROLINA POWER & LIGHT COMPANY
ROBINSON NUCLEAR PROJECT DEPARTMENT
EXERCISE CRITIQUE FORM

EVALUATOR: _____ DATE: 11 / 17 / 1992

EVALUATION RESPONSIBILITY: _____
(Use additional sheets if required)

OBSERVED STRENGTHS:

EXERCISE CRITIQUE FORM

EVALUATOR: _____ DATE: 11 / 17 / 1992

EVALUATION RESPONSIBILITY: _____
(Use additional sheets if required)

OBSERVED STRENGTHS:

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EXERCISE CRITIQUE FORM

DATE: 11 / 17 / 1992

(Use additional sheets if required)

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CAROLINA POWER & LIGHT COMPANY
ROBINSON NUCLEAR PROJECT DEPARTMENT
EXERCISE CRITIQUE FORM

EVALUATOR: _____ DATE: 11 / 17 / 1992

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EXERCISE CRITIQUE FORM

EVALUATOR: _____ DATE: 11 / 17 / 1992

EVALUATION RESPONSIBILITY: _____
(Use additional sheets if required)

EVALUATOR COMMENTS:

EXERCISE CRITIQUE FORM

EVALUATOR:

DATE: 11 / 17 / 1992

EVALUATION RESPONSIBILITY:

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PLAYER COMMENTS:This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a slightly textured appearance and some minor discoloration or shadows, suggesting it's a physical scan. There is no handwriting or other markings on the paper.