CAROLINA POWER AND LIGHT COMPANY ROBINSON NUCLEAR PROJECT DEPARTMENT

PLAN FOR ANNUAL EMERGENCY EXERCISE

NOVEMBER 13-14, 1989

9406090115 891004 PDR ADOCK 05000261 F PDR

;

9406090115

SCN-89-3083 RNPD-89-03-R0

CAROLINA POWER AND LIGHT COMPANY PLAN FOR RNPD ANNUAL EMERGENCY EXERCISE - NOVEMBER 13-14, 1989

	TABLE OF CONTENTS	PAGE
MISSION A	AND PURPOSE OF EXERCISE	0.0-3
SCOPE ANI	O OBJECTIVES	
I. II.	Scope Objectives	0.0-3 0.0-3
SITUATION	N AND ASSUMPTIONS	
I. II.	Exercise Dates Exercise Locations/Facilities	0.0-3 0.0-4
CONCEPTS	AND CONDUCT OF THE EXERCISE	
I. II. III. IV. V.	Exercise Scenario Robinson Exercise Organization Activities Evaluation and Critique Exercise Exempt Personnel General Guidance for the Conduct of the Exercise	0.0-5 0.0-6 0.0-7 0.0-8 0.0-9
COMMAND,	CONTROL, AND COMMUNICATIONS	
I. II. III. IV. V.	Site Emergency Coordinator (SEC) Communications Records Exercise Message/Drill Card Time Message Preamble and Close	0.0-10 0.0-10 0.0-10 0.0-10 0.0-11 0.0-11
VI. VII.	Exercise Basics	0.0-12

CAROLINA POWER AND LIGHT COMPANY PLAN FOR RNPD ANNUAL EMERGENCY EXERCISE - NOVEMBER 13-14, 1989

TABLE OF CONTENTS (Continued)

Section 1.	0		Introduction
Section 2.	0		Objectives and Guidelines
Section 3.	0		Scenario
S	ection	3.1	Messages
S	ection	3.2	Plant Parameters
S	ection	3.3	Meteorological Information
S	ection	3.4	Radiological Information
Section 4.	0		Controller's Information
Section 5.	0	⊕	Evaluator's Information
Section 6.	0		Supplementary Material

SCN-89-3083 RNPD-89-03-R0

CAROLINA POWER AND LIGHT COMPANY PLAN FOR RNPD ANNUAL EMERGENCY EXERCISE - NOVEMBER 13-14, 1989

MISSION AND PURPOSE OF EXERCISE

To activate and evaluate portions of Carolina Power & Light (CP&L) 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 Compliance (NRC) Regulation 10CFR50.47(b).

SCOPE AND OBJECTIVES

SCOPE I.

A simulated accident at the H. B. Robinson Nuclear Power Plant (RNPD), which will escalate to a General Emergency, which will involve planned response and recovery actions to include: emergency classification; notification of offsite organizations and Plant personnel; actions to correct the emergency conditions; and initiation of accident assessment and protective actions as necessary to cope with the accident. The 1989 RNPD Emergency Preparedness Exercise will be a partial participation exercise, with full county participation and limited participation by the State of South Carolina. Proposed Exercise Basics are presented in Table #1 and Table #2, of Section 2.0

OBJECTIVES TT.

Objectives for the H. B. Robinson Annual Exercise were submitted to the Nuclear Regulatory Commission on August 31, 1989, and are contained in Section 2.0.

SITUATION AND ASSUMPTIONS

I. Exercise Dates

Β.

Submit exercise scope and objectives to NRC: Α. Exercise - 75 days (August 31, 1989)

Submit exercise scenario to NRC: Exercise - 40 days (October 4, 1989)

8:20 p.m. (2020)

12:30 p.m. (1230)

- 10:00 Final Evaluator Meeting: November 13, 1989 1:00 p.m. (1300) C.
 - Room #122 TSC/EOF Training Bldg. November 13, 1989 4:30 p.m. (1630) to
- Exercise: D.
- Ε. Facility Critique with Players

SCN-89-3083 RNPD-89-03-R1

0.0 - 3

November 14, 1989 8:30 a.m. (0830) to

November 14, 1989 12:45 p.m. (1245)

- F. Evaluator Group Meeting: November 14, 1989 1:45 p.m. (1345) to 3:00 p.m. (1500)
- G. Lead Evaluator Meeting: November 14, 1989, 3:30 p.m. (1530) to 6:00 p.m. (1800)
- H. Post Exercise Critique Report to Players: November 15, 1989 8:00 a.m. (0800) Room #122, TSC/EOF Training Building

II. Exercise Locations/Facilities

- A. <u>H. B. Robinson Steam Electric Plant</u>, Hartsville, South Carolina
 - 1. <u>Control Room</u> (see Figure 1). The function of the Control Room is to provide plant control and initial direction of all plant related emergency operations.
 - 2. Operations Support Center (OSC) (see Figure 1). 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. <u>Technical Support Center (TSC)</u> (see Figure 1). 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.

SCN-89-3083 RNPD-89-03-R1

- 4. Plant Media Center (PMC) The Plant Media Center is located at the Information/Visitor Center at the Robinson site. The Center will be staffed by a CP&L Site Public Information Coordinator and other Corporate Public Information personnel. Work stations and a briefing room are available at the Center for CP&L personnel to assist the media representatives by providing immediate access to accurate emergency related information and providing equipment for document reproduction and for communications.
- 5. Emergency Operations Facility (EOF) (see Figure 1). 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, Radiological Control, and Emergency Communications.
- 6. <u>Meteorology Tower</u> 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.
 - <u>Start of Exercise</u>: Listed Initial Conditions
 <u>Subsequent</u>: (Sub-section 3.3)
- B. <u>Headquarters Communication Center (HCC)</u>, Raleigh. The Corporate Emergency Operations Center is located on the 11th floor in the Center Plaza Building, Raleigh, NC.
- C. Miscellaneous Facilities
 - 1. <u>Hartsville Airport</u>, 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)

Lakeshore Motel, Business Route 15 North, North 5th Street, Hartsville, South Carolina (803/332-7539)

Lakeview Motel 942 North 5th Street Hartsville, South Carolina (803/332-8145)

CONCEPTS AND CONDUCT OF THE EXERCISE

I. Exercise Scenario

The exercise will simulate an off-normal incident at the RNPD Plant that will escalate to a General Emergency and require: accident recognition and classification; assessment of onsite and offsite radiological consequences; alerting, notification, and mobilization of various organizations and personnel; in-plant corrective actions; activation and use of emergency facilities and equipment; effective use of communications; preparation of reports, messages, and records; implementing protective actions for site personnel; making protective action recommendations to offsite agencies; and maintaining public

SCN-89-3083 RNPD-89-03-R1

relations. During the course of the exercise, there will also arise incidents that require deployment of CP&L radiological monitoring teams for offsite monitoring. The scenario and time schedule of simulated plant conditions are provided in Section 3.0 of this plan. Only the NRC, and Controllers and Evaluators listed in Section 4.0 will receive the sub-sections of Section 3.0 of the plan/exercise scenario.

II. Robinson Exercise Organization Activities

The exercise organization will consist of players, the Corporate Exercise Director, the Chief Planner/Controller, Controllers, a Chief Evaluator, Evaluators, and Observers as follows:

- The CP&L Players include all plant and other CP&L personnel 1. assigned to perform functions the emergency positions as described in Section 5.3 of 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. Some situations affecting player action or reaction may exist at the time the exercise play begins. However, most situations will be introduced through the vehicle of Controller Exercise Message/Drill Cards and messages generated by players. Therefore, players are responsible for initiating actions and/or messages during the exercise according to their procedures, responsibilities, and tasks outlined for their particular function in the Plant Radiological Emergency Response Plan and Procedures. Players will be identified by wearing WHITE player badges.
- 2. <u>The Corporate Exercise Director</u> 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. <u>The Chief Planner/Controller</u> will be responsible for the development of the exercise plan, scenario, and the controller input messages. During the exercise the Chief Planner/Controller will coordinate controller input as necessary to initiate player response and keep the exercise action moving according to the scenario and exercise objectives.

- 4. <u>The Controllers</u> will deliver "Exercise Message/Drill Cards" to designated exercise players at various times and places during the exercise; inject or deliver additional messages, as may be required to keep the exercise action moving according to the scenario and exercise objectives; observe the exercise at their assigned locations; maintain controller log sheet notes (see Section 6.0); and submit recorded observations to the Chief Exercise Evaluator prior to the scheduled critique. Controllers will be identified by wearing a badge marked in RED LETTERS, "Controller/Evaluator" or arm band. Only the assigned Controllers are authorized to make Exercise Message/Drill Card inputs to the exercise and ALL Contingency Messages must be given specific clearance by the Lead Exercise Controller <u>BEFORE</u> being issued to the players.
- Chief Evaluator and Evaluators are CP&L or other qualified 5. 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. For example, health physics activities will be evaluatd by qualified Health Physics personnel. When feasible, persons designated as Controllers for a given function will also be assigned as evaluators of that function. Evaluators will record their observations using the Controller Log Sheet (see Section 6.0), and if possible, provide recommendations on corrective actions to the Chief Exercise 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 be identified by wearing a badge marked in RED LETTERS, "Controller/Evaluator" or arm band.
- 6. <u>Observers</u> 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 with a blue badge.

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 in Section 5.0 as guidelines. Following the exercise, Evaluators will present their findings at the critiques as scheduled in Section 1.0, Paragraph I of this plan.

SCN-89-3083 RNPD-89-03-R0

. A. Evaluation of the exercise will include activities:

The following facilities will be evaluated:

- 1. Control Room (C.R.)
- 2. Operational Support Center (OSC)
- 3. Technical Support Center (TSC)
- 4. Plant Media Center (PMC)
- 5. Emergency Operations Facility (EOF)

The following activities will be evaluated:

- 1. Accident recognition, classification, and assessment
- 2. Assessment of onsite and offsite radiological consequences
- 3. Alerting, notification, and mobilization activities
- 4. In plant corrective actions
- 5. Activation and use of emergency facilities and equipment
- 6. Use of communications equipment and procedures
- 7. Preparation of reports, messages, and records
- 8. Protective actions for site personnel
- 9. Protective action recommendations to offsite agencies
- 10. Public information and public relations
- 11. Onsite and offsite radiological Monitoring
- 12. First aid measures
- 13. Security control
- 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 Plant Radiological Emergency Response Plan and implementing procedures, training, etc., that is identified through the critique process shall be documented by the Chief 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.

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. <u>Only</u> when it is not feasible to perform an action should it be simulated. Any orders given by controllers, which for any reason cannot or should not actually be performed, should begin with the word <u>"Simulate."</u> For example, the order to put out a fire that is being hypothesized would state: "Simulate discharging the fire extinguisher." Where such actions are being taken, it is suggested that participants inform any observers in the area of what action really would be taken had the emergency been real.

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 exercise participants must be specifically informed of the need to avoid intentional violation of all federal, state and local laws, regulations, ordinances, statutes, and other legal restrictions.
- 2. Exercise participants will not direct illegal actions being taken by other exercise participants or members of the general public.
- 3. Exercise 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 exercises. 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 AN EXERCISE MESSAGE; THIS IS AN EXERCISE MESSAGE."

D. Maintaining Emergency Readiness

During the performance of an exercise the ability to recognize a real emergency, terminate the exercise, and respond to the new situation must be maintained. Therefore, the exercise 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 Exercise Controller or the Emergency Exercise Director 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 AN 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 exercise 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 Procedure, requires that plant personnel responsible for maintaining records during an emergency shall provide a copy of those records to the RNPD Specialist - Emergency Preparedness following an emergency or emergency exercise.

IV. Exercise Message/Drill Card

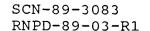
The Exercise Message/Drill Cards" are prepared by the exercise drill planners/controllers prior to the exercise to satisfy the requirements of the exercise/drill scenario. The purpose of the message is to initiate a player response and to keep the exercise moving according to the scenario and exercise objectives. The messages that are delivered to players during the play of the exercise will allow "free play".

V. <u>TIME</u>

- 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 will be specified as appropriate.

VI. <u>Message Preable and Close</u>

The words "THIS IS AN 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 attachments and tables used throughout the plan and scenario:

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. In areas such as the HCC and EOF, activation of optional groups is as determined by the managers in response to the scenario.

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. Notification:

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 a drill 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 a minimum daily shift complement to a fully activated emergency 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.

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

1. Extent:

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

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

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 drill 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 drill 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.

CAROLINA POWER AND LIGHT COMPANY ROBINSON NUCLEAR PROJECT DEPARTMENT

1989 EMERGENCY PREPAREDNESS . ANNUAL EXERCISE

1.0 INTRODUCTION

SCN:89-3083 RNPD-89-03-RO

To assure that the public health and safety in the vicinity of the Robinson Project Department (RNPD) is protected in the event of a radiological emergency, Carolina Power & Light Company (CP&L) is required to conduct an annual emergency preparedness exercise which tests CP&L's Robinson Plant, Corporate, State and Local emergency response capabilities. Federal agencies will evaluate and critique the annual exercise to assure proper response in the event of an actual emergency at RNPD.

The 1989 CP&L Emergency Preparedness Annual Exercise will include the mobilization of personnel and resources, such that the capability to respond adequately to a simulated accident at RNPD can be verified. Exercise participants will not have knowledge of the scenario which will be used in the exercise. The exercise should demonstrate that those individuals and agencies who are assigned responsibilities in a radiological emergency are adequately trained to perform according to current plans and procedures. Furthermore, this exercise will provide training to and test emergency response personnel, and identify any potential problem areas in the overall emergency response system.

The Annual Exercise which is scheduled to be conducted on November 13-14, 1989, will be observed and critiqued by the Nuclear Regulatory Commission (NRC).

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

<u>Section 2.0</u> <u>Objectives and Guidelines</u> - this section defines the exercise objectives and sets forth guidelines for the conduct of the exercise to meet those objectives.

<u>Section 3.0</u> <u>Scenario</u> - 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.

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

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

SCN: 89-3083 RNPD-89-03-R1

<u>Subsection 3.3 Meteorological Information</u> - 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.

<u>Subsection 3.4 Radiological Information</u> - 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 exercise 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. Following the exercise, copies of this manual will be distributed to key exercise participants.

ROBINSON NUCLEAR PROJECT DEPARTMENT CAROLINA POWER AND LIGHT COMPANY

1989 EMERGENCY PREPAREDNESS 89-03 ANNUAL EXERCISE

2.0 OBJECTIVES/GUIDELINES

SCN-89-3083 RNPD-89-03-R1

1989 EMERGENCY PREPAREDNESS EXERCISE OBJECTIVES

A. OPERATIONAL ASSESSMENT

- Demonstrate the Control Room staff's ability to recognize operational symptoms and parameters indicative of degrading plant conditions.
- 2. Demonstrate the ability to properly classify emergency conditions.
- 3. Demonstrate the ability to formulate appropriate offsite protective action recommendations.
- 4. Demonstrate the ability to properly escalate the emergency response based upon event classification.
- 5. Demonstrate the adequacy of the RNPD Emergency Plan Implementing Procedures applicable to the scenario.
- 6. Demonstrate the ability to effectively coordinate emergency response with state and county emergency response agencies.
- 7. Demonstrate effective coordination of information and plant status with the South Carolina Emergency Preparedness Division (EPD) emergency response organization.

B. COMMUNICATIONS

- 1. Demonstrate that appropriate communication systems exist to accomplish notification of offsite agencies in accordance with emergency plans and procedures.
- 2. Demonstrate the ability to adequately notify and activate emergency response organization personnel.
- 3. Demonstrate the ability to effectively communicate with plant emergency teams and company environmental monitoring teams located offsite.
- 4. Demonstrate proper recordkeeping at emergency response facilities.
- 5. Demonstrate that accurate messages concerning the emergency are transmitted in accordance with established procedures.
- 6. Demonstrate that follow-up messages are transmitted to county and state officials, so as to keep them properly informed of developments at the plant site.
- 7. Demonstrate that status boards are accurately maintained and updated in accordance with emergency response plans and procedures.
- 8. Demonstrate that appropriate briefings are held and incoming personnel are briefed and updated on the current conditions of the plant and other aspects to the emergency situation.

1989 EMERGENCY PREPAREDNESS EXERCISE OBJECTIVES (Continued)

- C. RADIOLOGICAL AND ENVIRONMENTAL ASSESSMENT
 - 1. Demonstrate the proper use of post-accident sample results to support the dose projection process.
 - Demonstrate the ability to evaluate field radiological monitoring data, offsite radiological dose projections, and plant conditions, to arrive at appropriate protective action recommendations.
 - 3. Demonstrate the activation, operation, and reporting of the field monitoring teams within and beyond the site boundary.
 - 4. Demonstrate the capability to perform radiological monitoring activities and assessments.
 - 5. Demonstrate effective coordination of the radiological and environmental assessment process with the South Carolina Bureau of Radiological Health.
 - 6. Demonstrate the ability to support the radiological assessment process while maintaining personnel radiation exposure ALARA.
 - 7. Demonstrate the use of post-accident sampling equipment to obtain, transport, and analyze samples of reactor coolant or a containment air sample under conditions specified by the scenario. Actual liquid sample will be demineralized water.
- D. EMERGENCY RESPONSE FACILITIES
 - 1. Demonstrate that sufficient and adequate emergency equipment exists to effectively perform necessary emergency actions.
 - 2. Demonstrate that adequate access control of facilities can be maintained.
 - 3. Demonstrate that emergency response facilities (TSC, OSC, EOF, and Plant Media Center) can be activated in accordance with the emergency plan and procedures.
- E. PUBLIC INFORMATION
 - 1. Demonstrate the activation of the Plant Media Center in accordance with the emergency procedures.
 - 2. Demonstrate the ability to develop and disseminate accurate news releases in accordance with established emergency procedures.
 - 3. Demonstrate that briefings concerning plant events are provided to the media during the emergency.
 - 4. Demonstrate that public information is coordinated between CP&L and state and/or county officials.

1989 EMERGENCY PREPAREDNESS EXERCISE OBJECTIVES (Continued)

F. EMERGENCY RESPONSE ORGANIZATION

- 1. Demonstrate that sufficient emergency response organization personnel are available to support the emergency response on a round-the-clock coverage schedule.
- Exhibit proper response of emergency personnel to activate emergency response facilities and carry out assigned roles and responsibilities in accordance with emergency response procedures.
- 3. Demonstrate the ability to transfer command and control responsibilities between the Control Room, Technical Support Center and Emergency Operations Facility.

G. PERSONNEL PROTECTION

- 1. Demonstrate that the accountability process within the Protected Area can be accomplished in accordance with emergency response procedures.
- 2. Demonstrate the ability to provide onsite access to local offsite emergency services and/or support in accordance with emergency response procedures.
- 3. Demonstrate the ability to conduct area surveys under emergency conditions.
- 4. Demonstrate the ability to provide adequate radiation protection services such as dosimetry and personnel monitoring.
- 5. Demonstrate the ability to provide first aid for an individual who has become ill and, as a result, requires transportation for further medical treatment.
- 6. Demonstrate the ability to adequately control the spread of contamination and the radiological exposure of onsite and offsite emergency workers.
- 7. Demonstrate the decision-making process for consideration of thyroid-blocking agent distribution to emergency personnel.
- 8. Demonstrate proper radiation exposure recordkeeping for emergency personnel.

1989 EMERGENCY PREPAREDNESS EXERCISE OBJECTIVES (Continued)

H. GENERAL

- 1. Demonstrate the ability to conduct a controller/evaluator meeting before the beginning of the exercise which addresses final concerns about the conduct of the exercise.
- 2. Demonstrate the ability to self-critique and to identify areas needing improvement.
- 3. Demonstrate that previously identified NRC deficiencies, exercise weaknesses or inspector follow-up items (IFIs) from the 1987 and 1988 annual Emergency Preparedness exercise have been resolved.

"CONFIDENTIAL"

Preliminary 1989 Annual Exercise Guidelines

Α.	Annual Exercise Date * November 13, 193 * November 14, 193	B9 1630 to 2030	(4:30 p.m 8:30 p.m.) (8:30 a.m 12:30 p.m.)
в.	Annual Exercise Time	eline & Emergency	Classification Activity
47	<u>November 13, 1989</u> * T - 15 min.	1615 (4:15 pm)	Exercise Controllers Assemble and Delivery of Initial Plant & Exercise Conditions.
	* T = 0	1630 (4:30 pm)	Exercise begins.
	* T + 5 min.	1635 (4:35 pm)	Declared "UNUSUAL EVENT" Classification
	* T + 1 Hr. 35 min.	1805 (6:05 pm)	Declared "ALERT" Classification
	* T + 4 Hr.	2030 (8:30 pm)	Administrative Break Until 8:30 am on 11/14/89
	<u>November 14, 1989</u>		
	* T + 4 Hr.	0830 (8:30 am)	Exercise resumes
	* T + 4 Hr. 50 min.	0920 (9:20 am)	Declared "SITE AREA EMERGENCY" Classification
	* T + 6 Hr. 5 min.	1035 (10:35 am)	Declared "GENERAL EMERGENCY" Classification
	* T + 8 Hr.	1230 (12:30 pm)	Exercise complete: Player & Controller facility critiques after break.
	* T + 8 Hr. 15 min.	1245 (12:45 pm)	Facility Critiques.
	* T + 11 Hr.	1530 (3:30 pm)	Critique with Lead Exercise Evaluators.

NOTE: Above times for emergency classifications are the best estimates of the Scenario Development Team based on their knowledge of this scenario and the EAL's. Contingency Messages will be issued to ensure these times are within 15 minutes of the above times to allow offsite objectives to be met.

SCN: 89-3083 RNPD-89-03-R2

C. Meteorological Conditions

• All meteorological data will be "simulated."

Currently, skies at RNPD are partly cloudy with no precipitation. Winds are from the southwest at 5 to 10 mph. Forecasts include scattered thunder showers, some of which could be severe.

D. Extent of Participant Actions

- All RNPD Emergency response facilities will be activated. The Technical Support Center (TSC) will be included into the Protective Area of the Plant.
- Plant personnel from the TSC, PMC, and OSC will not be prepositioned at their emergency response facilities. Personnel preresponding to the EOF and the PMC from the Harris Energy and Environmental Center near New Hill, North Carolina or the Corporate Office in Raleigh, North Carolina will be in the vicinity of the RNPD site and will be appropriately called to the facility. The actual drive from the HE&EC and Corporate offices will not occur.
- RNPD control room personnel who will "play" during the exercise will be positioned in the control room before the beginning of the exercise.
- Exercise will commence with a simulated Plant condition requiring declaration on an "UNUSUAL EVENT," escalating to a "GENERAL EMERGENCY".
- Accident conditions will result in a simulated radiological release requiring consideration of protective actions for the plume Emergency Planning Zone (EPZ).
- Radiological monitoring teams will be dispatched onsite and offsite to perform monitoring and sampling procedures. Plant offsite environmental monitorings teams will be dispatched in accordance with Plant procedures.
- RNPD Emergency Alarms and announcements will be demonstrated.
- Initial and continuous RNPD Accountability procedures will be implemented.
- Emergency Assembly of non-essential personnel will be conducted in accordance with Plant procedures. Evacuation of non-essential personnel to offsite locations will be simulated.
- RNPD Emergency Call-Out procedures, beepers, and/or manual system will be utilized.
- Activities initiated or performed by offsite governmental emergency response agencies with the state and counties will be demonstrated.

2.0-6

;

CAROLINA POWER & LIGHT CO.

ROBINSON NUCLEAR PROJECT DEPARTMENT

EXERCISE BASICS

DATE: Nov . FULL SCALE ANNOUNCED EXERCISE 13 - 14, 1989 XXX BEGIN TIME: PARTIAL PARTICIPATION XXX_ UNANNOUNCED EXERCISE END TIME. - UTILITY ONLY

MAXIMUM EMERGENCY ACTION LEVEL

SITE AREA EMERGENCY

STATE N.R.C.: FEMA: OFF-SITE 9 SUPPORT: SOUTH BYRELY HOSPITAL: WILSON HOSPITAL: RESPONSE TEAM: CAROLINA: OPS. CENTER: LOCAL MEDIA: AMBULANCE: FIRE DEPT: PHYSICIAN: RESIDENT: **RECION II:** FEOC: EOC: PARTICIPATION XX XX XX XX XX ম XХ XX NOT INVOLVED SIMULATED PLAY ХХ LIMITED PLAY X XX X X £. FULL PLAY 1 1 AS PER EXERCISE PLAY NOTIFICATION XX X X X XX XX SIMULATED XX XX XX START/FINISH 1 L 1 ł ACTIVATION ACTUAL XX X XX XX PRE-STACED

rdic - deficient grownow comp. Rdic - Rowwo deficient grownow comp. N.A.C. - Nuclea Rowlandk comp. Rdia - Rudia deficient unwolder addict

2.0-8

HCC - HEADQUARTERS COMMUNICATION CENTER head = impresence & entromatical conter

EDF - EVERADION OPENNIOUS FACULTY

PNC - PUNT NEDA CENTER

PARTICIPATION STITUATION ANTICIPATION CP&L ON-SITE ERO: NOT INVOLVED NOT INVOLVED ATTICIPATION CONTROL ROOM: NOT INVOLVED SIMULATED PLAY TSC: I I AST PER EDF: I I AST PER EDF: I I AST PER EDF: I I AST PER EDF: I I I I I I AST PER EDRC: I I AST PER EXERCISE PLAY I I AST PER EXERCISE PLAY I I AST INTER COUNTIES: I I I I AST INTER I AST INTER I COUNTIES: I I I I I I I I <th <="" colspan="2" th=""><th></th><th>- OPENNIONS SUFFORT CONTER</th><th>5 2 P</th><th>OUNG</th><th>-</th><th>8</th><th></th><th></th><th></th><th></th><th></th><th>ISC = TEDANCAL SUPPORT (20)TER</th></th>	<th></th> <th>- OPENNIONS SUFFORT CONTER</th> <th>5 2 P</th> <th>OUNG</th> <th>-</th> <th>8</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>ISC = TEDANCAL SUPPORT (20)TER</th>			- OPENNIONS SUFFORT CONTER	5 2 P	OUNG	-	8						ISC = TEDANCAL SUPPORT (20)TER
NATICIPATION NOT INVOLVED CON-SITE ERO: NOT INVOLVED CONTROL ROOM: NOT INVOLVED SIMULATED PLAY SIMULATED PLAY SIMULATED PLAY OFF-SITE ERO: SIMULATED PLAY POFF-SITE ERO: SIMULATED PLAY PMC: SIMULATED PLAY PMC: X SIMULATED PLAY PMC: X SIMULATED PLAY PMC: X SIMULATED PLAY CHESTERFIELD: X SIMULATED PLAY CHESTERFIELD: X <th <="" colspan="2" th=""><th>XX</th><th></th><th></th><th></th><th></th><th>XX</th><th>•</th><th></th><th>XX</th><th></th><th></th><th>FLORENCE:</th></th>	<th>XX</th> <th></th> <th></th> <th></th> <th></th> <th>XX</th> <th>•</th> <th></th> <th>XX</th> <th></th> <th></th> <th>FLORENCE:</th>		XX					XX	•		XX			FLORENCE:
PARTICIPATION ON-SITE ERO: NOT INVOLVED CONTROL ROOM: NOT INVOLVED TISC: I IMULATED PLAY OFF-SITE ERO: I IMULATED PLAY FOF: I IMULATED PLAY FOF: I IMULATED PLAY FOF: I IMULATED PLAY FULL PLAY SIMULATED PLAY PMC: I IMULATED PLAY PMC: I IMULATED PLAY SIMULATED PLAY SIMULATED PLAY IMULT PLAY	XX		1.			X		XX				CHESTERFIELD:		
PARTICIPATION ON-SITE ERO: NOT INVOLVED CONTROL ROOM: NOT INVOLVED CONTROL ROOM: NOT INVOLVED TIC: I NOT INVOLVED OFF-SITE ERO: I I NOT INVOLVED NOT INVOLVED NOT INVOLVED OSC: I I IMULATED PLAY HE&EC: I I I ASS PER EXERCISE PLAY PMC: I <th <="" colspan="2" td=""><td>X</td><td></td><td>1.</td><td></td><td></td><td>X</td><td><u> </u></td><td>XX</td><td> </td><td></td><td></td><td>LEE:</td></th>	<td>X</td> <td></td> <td>1.</td> <td></td> <td></td> <td>X</td> <td><u> </u></td> <td>XX</td> <td> </td> <td></td> <td></td> <td>LEE:</td>		X		1.			X	<u> </u>	XX	 			LEE:
PARTICIPATION NOTFICATION ON-SITE ERO: NOT INVOLVED CONTROL ROOM: NOT INVOLVED TSC: I INVOLVED OFFF-SITE ERO: NOT INVOLVED OSC: I INVOLVED SIMULATED PLAY HE&EC: XX - PMC: I INVOLVED NOTTICATON NOT INVOLVED INVOLVED SIMULATED PLAY SIMULATED PLAY HE&EC: XX - HCC: XX - PMC: - - XX - XX - NOT INVOLVED SIMULATED PLAY - - NX - - - - - </td <td>XX</td> <td></td> <td></td> <td></td> <td> </td> <td>XX</td> <td>1.</td> <td>X</td> <td></td> <td></td> <td></td> <td>DARLINGTON:</td>	XX					XX	1.	X				DARLINGTON:		
PARTICIPATION NOT INVOLVED NOT INVOLVED OFF-SITE ERO: NOT INVOLVED SIMULATED PLAY HE&EC: INX INX INX HCC: IXX INX INX HC: IXX INX INX INC: INX INVOLVED INC: INTEC INTEC INC: INX INTEC INC: INX INTEC INC: INTEC INTEC INC: INX INTEC INC: INX INTEC INC: INTEC INTEC INTEC INTEC INTEC <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>h</td> <td></td> <td></td> <td></td> <td>COUNTIES:</td>								h				COUNTIES:		
OFF-SITE ERO: NOT INVOLVED NOT INVOLVED HE&EC: XX - XX - ASS PER EXERCISE PLAY NOT INVOLVED HC: XX - XX - <		XX	•	<u> </u>		X		XX	<u> </u>	 	<u> </u>	PMC:		
OFF-SITE ERO: NOT INVOLVED NOT INVOLVED FOR: NOT INVOLVED ISC: NOT INVOLVED FOR: NOT INVOLVED IMULATED PLAY IMULATED PLAY HE&EC: XX - XX SIMULATED VX - XX SIMULATED IXX HE&EC: XX - XX SIMULATED XX - XX SIMULATED XX XX - XX SIMULATED XX XX - XX SIMULATED XX	XX		•			XX	•		X			HCC:		
OFF-SITE ERO: ON-SITE ERO: NOT INVOLVED INCONTROL ROOM: INOT INVOLVED INOT INVOLVED OSC: I SIMULATED PLAY EOF: I I AS PER EXERCISE PLAY INC INULATED SIMULATED INC INITED SIMULATED	X		•		X	<u> </u>	1.		XX			HE&EC:		
FOF: OF OF FROM: NOT INVOLVED ISC: ISC: ISC: NOT INVOLVED ISC: ISC: ISC: ISC: ISC: ISC: ISC: ISC: <	-		•			1	1	1	1			OFF-SITE		
OC PROOD TSC: NOT INVOLVED		XX	•			XX	1.	X		1	1	EOF:		
OF ROOM: FRO: ISC: NOT INVOLVED ISIMULATED PLAY ISIMULATED ISIMULATED ISIMULATED ISIMULATED ISIMULATED ISIMULATED		X	•		<u> </u>	X	1.	XX	1			OSC:		
OCROON: PARTICIPATION NOT INVOLVED SIMULATED PLAY LIMITED PLAY XX FULL PLAY XX SIMULATED	ł	XX	•	<u>†</u>	<u> </u>	X	•	XX				TSC:		
NOT INVOLVED NOT INVOLVED SIMULATED PLAY LIMITED PLAY FULL PLAY AS PER EXERCISE PLAY SIMULATED START/FINISH		XX	•	1	+	X	•.	XX		1		CONTROL ROOM:		
AS PER EXERCISE PLAY SIMULATED START/FINISH			•		1	1	•		1					
NOTIFICATION	PRE-STAGED			START/FINISH	SIMULATED	AS PER Exercise play		FULL PLAY	LIMITED PLAY	SIMULATED PLAY	NOT INVOLVED			
	ATI	CTIV	•	ATIO	IFIC	NOT		- M	ATIC	ICIE	PART			

CAROLINA POWER & LIGHT CO. Table #2

ROBINSON NUCLEAR PROJECT DEPARTMENT

EXERCISE BASICS

DATE: Nov. 13 -14, 1989 BEGIN TIME:

XXX UNANNOUNCED EXERCISE

XXX PARTIAL PARTICIPATION עדועדץ סאנץ

MAXIMUM EMERGENCY ACTION LEVEL

END TIME

ANNOUNCED EXERCISE

FULL SCALE

XXX

CAROLINA POWER AND LIGHT COMPANY ROBINSON NUCLEAR PROJECT DEPARTMENT

1989 EMERGENCY PREPAREDNESS ANNUAL EXERCISE

3.0 SCENARIO

•--- ---

SCN-89-3083 RNPD-89-03-R0

NARRATIVE SUMMARY

This exercise is based on a loss of offsite power with a runback to ~73%, a recovery of offsite power, an ATWS with fuel damage, a RTD thermowell failure that damages a steam generator tube, and a main steam PORV that sticks open releasing radioactivity to the environment.

Initial conditions are that the plant is at 100% power. The following equipment is out of service:

- "B" SI pump is not available.
- DS Diesel is out of service for preventative maintenance.
- Channel "A" of reactor protection is being tested under MST-020.

Severe weather in the plant area causes a lightning strike at 1630 hours which causes a failure in the startup transformer controls which causes the East-West tie breaker to open. The resulting loss of offsite power causes the plant to runback to about 73%. An Unusual Event should be declared due to loss of offsite power.

The substation maintenance crew from Hartsville is onsite performing a visual inspection of the startup transformer. They are directed to determine cause of problem and correct. By 1800 hours, offsite power has been restored.

At 1805 hours, while increasing power, an air line on the feedwater flow control valve (FRV-478) fails and the valve fails shut. The "A" S/G loses level and reaches the low-low level which should trip the reactor. However, the reactor does not trip and the operator must push the manual scram button which does trip the control rods. An Alert should be declared due to the Anticipated Trip Without SCRAM (ATWS).

The transient caused by the ATWS event causes some fuel failure and the resulting rise in radioactivity in the RCS is detected by Chemistry samples. I-131 levels are approximately 340 μ Ci/ml.

At 1925 hours, the Auxiliary Operator hears a loud noise on the "A" SW Booster Pump. The OSC should respond with mechanics being sent to the pump.

At about 2030 hours, play will be suspended. On the next day, following a short time (~30 min.) to settle players back into their roles, the play will resume at 0900 hours.

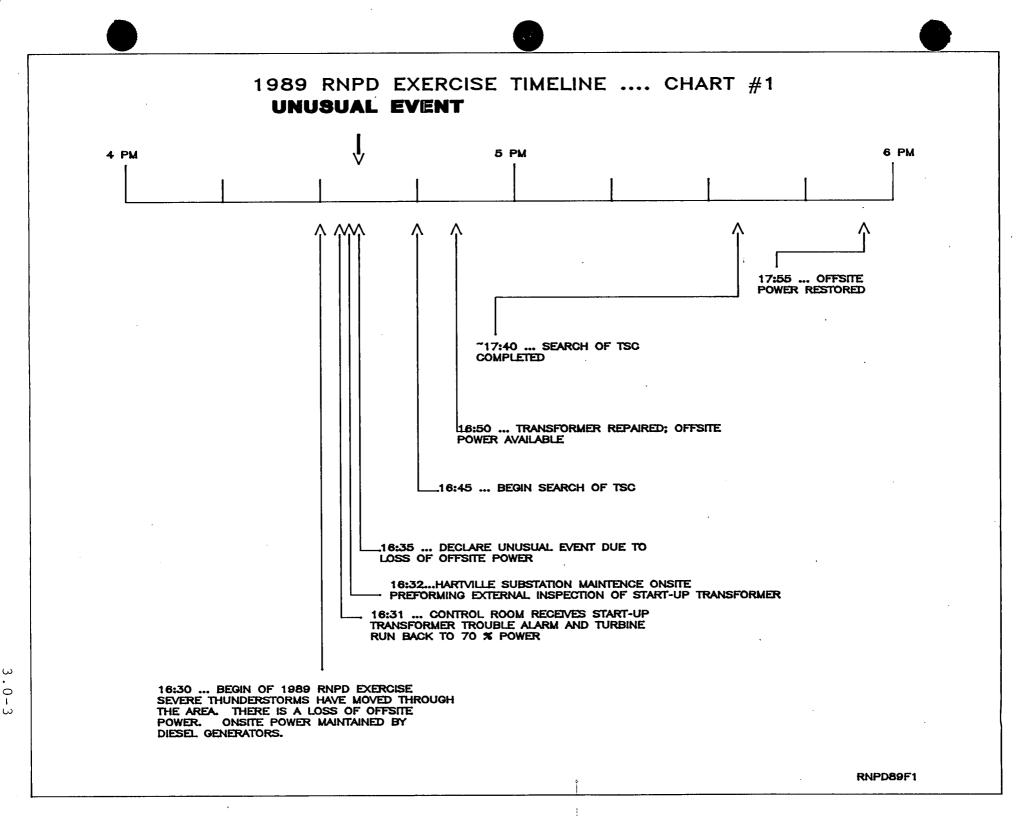
At about 0905 hours, a RTD thermowell on "A" hot leg fails, causing alarms on the Loose Parts Monitoring System (LPMS). The leakage of RCS to the CV is approximately 20 gpm. At 0920, a tube leak on "A" S/G occurs. The S/G tube leak is approximately 300 gpm which causes the level in the faulted S/G to rise. The operator should manually accuate SI and a Site Emergency should be declared due

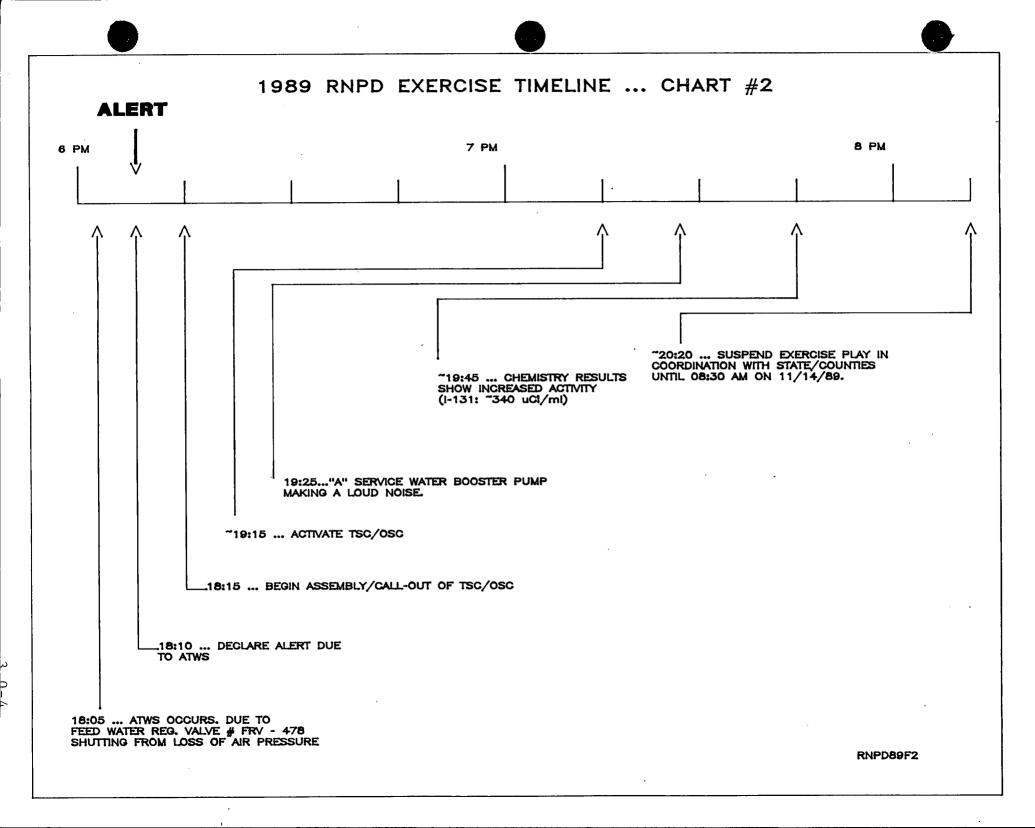
to the S/G tube rupture. Later, at approximately 1030 hours, a main steam power operated relief valve (PORV) lifts, sticks open and releases radioactivity to the environment. A General Emergency should be declared due to the release of radioactivity to the environment. The OST should respond by sending a team to shut the valve. Efforts to manually shut the PORV are successful after approximately one hour.

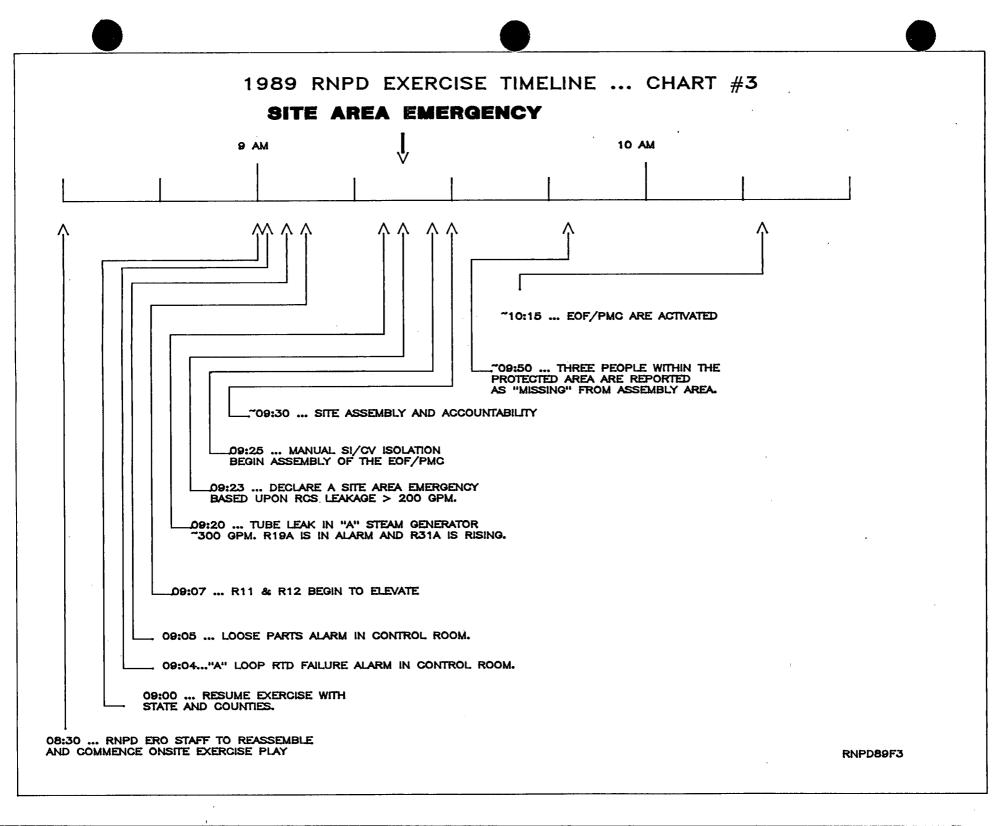
During the evacuation of the site, three people will be missing. After the GE has been declared, someone in the TSC will become ill due to diabetic shock at about 1140.

Plant Operations will stabilize the Plant by use of the EOPs. Recovery efforts will focus on maintaining and isolating the faulted S/G. Dose assessments should be made and use of KI tables considered.

The exercise will terminate at about 1230 hours.



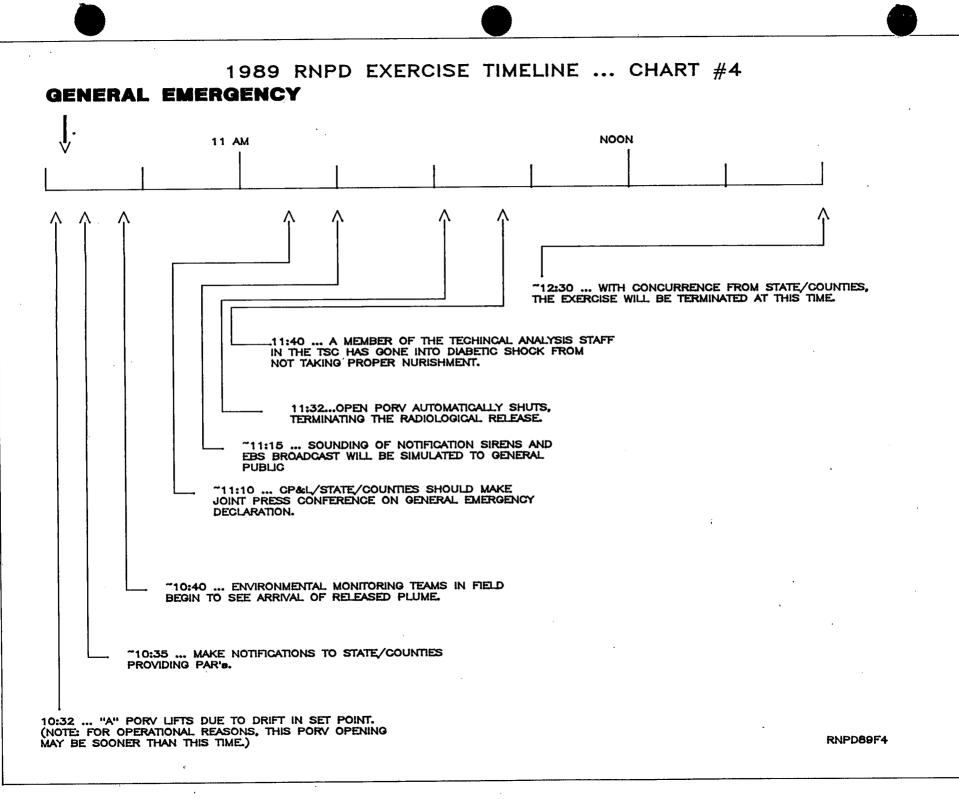




ω

0

J



ω

CAROLINA POWER AND LIGHT COMPANY ROBINSON NUCLEAR PROJECT DEPARTMENT

1989 EMERGENCY PREPAREDNESS ANNUAL EXERCISE

3.1 MESSAGES

SCN-89-3083 RNPD-89-03-R1

3.1-0

CAROLINA POWER & LIGHT COMPANY EXERCISE MESSAGE/DRILL CARD

RNPD
 PLANT

MESSAGE NO. 0 DATE: NOVEMBER 13, 1989 TIME: -----

MESSAGE FOR: RNPD MANAGER ADMIN. & CONTROL

FROM: LEAD SCENARIO COORDINATOR

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

DURING THE ROUTINE MONDAY MORNING REPORT, FROM GARY MCKINZIE, HE REPORTED THAT HIS PERSONNEL FOUND THAT SIRENS #5 AND #10 IN CHESTERFIELD COUNTY WERE <u>NOT</u> FUNCTIONAL AND THAT SIRENS #35 AND #40 IN LEE COUNTY WERE <u>NOT</u> FUNCTIONAL. HE WILL DISPATCH PERSONNEL TO MAKE THE NECESSARY REPAIRS, HOWEVER IT WILL PROBABLY BE UNTIL THURSDAY (11/16/89) BEFORE THE ARE RETURNED TO SERVICE

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

(NONE

SCN: 89-3354 RNPD-89-03-R0

3.1-0A

RNPD PLANT

MESSAGE NO. 1 DATE: NOVEMBER 13, 1989 TIME: BEFORE 16:30

MESSAGE FOR: 1989 E.P. EXERCISE PLAYERS

FROM: LEAD CONTROLLER

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

INITIAL CONDITIONS:

* PLANT IS AT 100% POWER AND HAS BEEN FOR APPROXIMATELY 7 MONTHS.

* "B" SI PUMP IS NOT AVAILABLE.

* D.S. DIESEL IS OUT OF SERVICE FOR PREVENTATIVE MAINTENANCE.

* CHANNEL "A" ON REACTOR PROTECTION IS BEING TESTED UNDER MST-020.

- * SEVERE THUNDERSTORMS HAVE MOVED EAST OF THE PLANT SITE. SEVERAL AREAS HAVE EXPERIENCED POWER INTERRUPTIONS.
- * SUBSTATION MAINTENANCE CREW IS ONSITE INSPECTING ONE OF THE TRANSFORMERS IN THE SWITCHYARD.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

- SHARE WITH OTHER EXERCISE PLAYERS.

RNPD PLANT

MESSAGE NO. 2 DATE: NOVEMBER 13, 1989 TIME:16:30
MESSAGE FOR: SHIFT CONTROL ROOM FOREMAN
FROM: LEAD CONTROL ROOM CONTROLLER
MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"
YOU RECEIVED THE FOLLOWING ALARMS AND INDICATIONS:
- "TRANSFORMER OVERLOAD OR DIFF. TRIP" LIT
- "TRANSFORMER FAULT PRESS" LIT
- "STARTUP TRANSFORMER TROUBLE" LIT
- "STARTUP TRANSFORMER ENERGIZED" WHITE LIGHT IS OUT
- "TURBINE RUNBACK" LIT
- "B" EMERGENCY DIESEL STARTS
- "B" EMERGENCY DIESEL OUTPUT BREAKER CLOSES

- CONTROL RODS START DRIVING IN

- "C" SERVICE WATER PUMP STARTS

- "B" MD AFW PUMP STARTS

- "C" CCW STARTS

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

Should refer to AOP for Load Rejection.

APP-009-7 APP-009-15 APP-009-23

Steam dump will not work until diesel starts and ties in.

PAGE HARTSVILLE SUBSTATION MAINTENANCE CREW ON STARTUP TRANSFORMER. NOTE: SD-16 has error on Circuit 18 for Instrument Bus 4.

SCN:89-3354 RNPD-89-03-R1

RNPD PLANT

CONTINGENCY MESSAGE NO. A DATE: NOVEMBER 13, 1989 TIME: 16:32

MESSAGE FOR: HARTSVILLE SUBSTATION MAINTENANCE FOREMAN

FROM: FIELD CONTROLLER

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

YOU HAVE RECEIVED NOTIFICATION THAT THERE IS A PROBLEM WITH THE STARTUP TRANSFORMER AT ROBINSON.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

- SEND CREW MEMBER TO CONTROL ROOM TO OBTAIN CLEARANCE TO WORK ON THE TRANSFORMER.
- EXAMINE THE STARTUP TRANSFORMER FOR PROBLEM AREA.

SCN:89-3354 RNPD-89-03-R1

RNPD PLANT

MESSAGE NO. 3 DATE: NOVEMBER 13, 1989 TIME: 16:35

MESSAGE FOR: HARTSVILLE SUBSTATION MAINTENANCE

FROM: FIELD CONTROLLER

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

YOU SEE AND HEAR THAT THE EAST AND WEST TIE BREAKER AIR BRAKE SWITCH HAS OPENED.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

- PROCEED TO STARTUP TRANSFORMER ANNUNCIATOR PANEL.

RNPD PLANT

MESSAGE NO. 4DATE: NOVEMBER 13, 1989TIME: 16:37MESSAGE FOR:HARTSVILLE SUBSTATION MAINTENANCE

FROM: FIELD CONTROLLER

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

OBSERVE THE "FAULT & PRESS" ALARM LIT.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

- (1) ISOLATE AND VALIDATE ALARMS.
- (2) PROBLEM FAULT PRESSURE RELAY.
- (3) OBTAIN PART.
- (4) INSTALL PART.
- (5) CHECK OUT REPAIR (TIME ~13 MINUTES).

SCN:89-3354 RNPD-89-03-R1

RNPD PLANT

 CONTINGENCY

 MESSAGE NO.
 B
 DATE: NOVEMBER 13, 1989
 TIME: 16:50

 MESSAGE FOR:
 SHIFT FOREMAN

 FROM:
 LEAD CONTROL ROOM CONTROLLER

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

DECLARE AN UNUSUAL EVENT BASED UPON LOSS OF OFFSITE POWER.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

- DESIGNATE APPROPRIATE ERO IN CONTROL ROOM.
- SEE THAT APPROPRIATE NOTIFICATIONS TO STATE AND COUNTIES ARE MADE WITHIN 15 MINUTES OF DECLARATION.
- CALL SECURITY TO BEGIN SEARCH OF THE TSC.

RNPD PLANT

MESSAGE NO. 5 DATE: NOVEMBER 13, 1989 TIME: 16:50 MESSAGE FOR: HARTSVILLE SUBSTATION MAINTENANCE FROM: FIELD CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE" TRANSFORMER REPAIR IS COMPLETE AND CHECKED OUT; OFFSITE POWER AVAILABLE.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

- (1) NOTIFY CONTROL ROOM OF REPAIR.
- (2) NOTIFY SKAALE DISPATCHER OF REPAIR.
- (3) CANCEL CLEARANCE.
- (4) CONTROL ROOM SHOULD BEGIN RESTORING POWER USING OP-603.

RNPD PLANT

CONTINGENCYMESSAGE NO.CDATE: NOVEMBER 13, 1989TIME: 18:00MESSAGE FOR:CONTROL ROOM SEC

FROM: LEAD CONTROL ROOM CONTROLLER

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

ALL REQUIREMENTS FOR RESTORING OFFSITE POWER HAVE BEEN COMPLETED, RESULTING IN RESTORATION OF OFFSITE POWER TO THE PLANT.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

SCN:89-3354 RNPD-89-03-R1

RNPD PLANT

MESSAGE NO. 6 DATE: NOVEMBER 13, 1989 TIME: 18:05 MESSAGE FOR: SEC CONTROL ROOM FROM: LEAD CONTROL ROOM CONTROLLER MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE" YOU HAVE RECEIVED THE FOLLOWING INDICATIONS AND ALARMS:

S.G.1 FLOW ¥ STEAM > FW S.G.1 ACTUAL - S.P. LVL DEV S.G.1 NAR. RGE. LO/LO-LO/LVL FRV-478 DEMAND POSITION INDICATES "ZERO" FIRST OUT ANN. - S.G.1 LO-LO LEVEL TRIP S.G.1 LO LVL AND STM/FWF ¥ TRIP Rx TRIP BRKRS INDICATE CLOSED NO ROD BOTTOM LIGHTS ARE LIT

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

```
REVIEW APP-006-2
APP-006-3
APP-006-25
APP-004-4
APP-004-5
```

* Operators should manually trip the Reactor at this time.

RNPD PLANT

MESSAGE NO. 7

DATE: NOVEMBER 13, 1989 . TIME: 18:10 OR

IME: 18:10 OR (UPON ARRIVAL)

MESSAGE FOR: AUXILIARY OPERATOR

FROM: DAMAGE TEAM #1 CONTROLLER

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

UPON APPROACHING FRV-478, YOU HEAR A LOUD HISSING NOISE FROM THE COILED PORTION OF THE COPPER TUBING, AIR SUPPLY LINE.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

(1) ISOLATE INSTRUMENT AIR SUPPLY LINE TO FRV-478 BY CLOSING MANUAL VALVE.
 (2) NOTIFY SHIFT FOREMAN OF BREAK IN TUBING.

SCN:89-3354 RNPD-89-03-R1

RNPD <u>PLANT</u>

MESSAGE NO. 7A DATE: NOVEMBER 13, 1989 TIME: AFTER 18:10

MESSAGE FOR: CONTROL ROOM SHIFT FOREMAN

FROM: LEAD CONTROL ROOM CONTROLLER

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

THE ATTACHMENT 9.5 PROVIDED WITH THIS MESSAGE CARD IS TO BE APPROPRIATELY TRANSMITTED.

FOR CONTROLLER USE ONLY

* After Attachment 9.5 has been appropriately completed in the control room, provide this message card with a substitute Attachment 9.5. Be sure that the infromation is given to NREC "A" exactly as presented on the substitute Attachment 9.5.

ACTIONS EXPECTED:

(none)

SCN: 89-3354 RNPD-89-03-R0

3.1-10A

Page 1 of 14

NREC "A" (Page 1 of 1)

NREC RNPD ERO NOTIFICATION MESSAGE AND CALLOUT CHECKLIST

1. Contact one person for each position listed below and <u>slowly</u> read the following message to them.

Hello, my name is $X \times X$ This is a drill message. This is a real emergency message.

I am calling to inform you of the Declaration of a(n) ALERT emergency condition at the Robinson Plant Unit 2. This message is to inform you that you are to notify the personnel on your callout checklist that they are to:

a. Report to the site immediately and activate their emergency response position. **EXERCISE PLAY WILL NOT CONTINUE PAST 9 PM TONICHT**. OR

b. Maintain a State of Readiness in the event of mobilization.

2. Ask "Are there any questions?", and if so, repeat entire message.

Home Phone	(am/pm)
332-4240	
332-2158	
1-484-6159	
1-335-8594	
332-9536	· · · · · · · · · · · · · · · · · · ·
383-6002	
332-4327	
*383-6980	
383-6853	
332-9060	
395-2841	
669-3864	
· .	
1-335-6450	
*332-3163	
	1-484-6159 $1-335-8594$ $332-9536$ $383-6002$ $332-4327$ $*383-6980$ $383-6853$ $332-9060$ $395-2841$ $669-3864$

- 3. If you are unable to contact the TSC/EOF Set Up Team Leader or another NREC, you will make their call outs after contacting the other NRECs.
- 4. Maintain a list of all positions that are reported to you by the calling NRECs as being unable to be contacted.

PEP-171 Rev. 12

Page 27 of 55

PAGE 3.1-10B

RNPD PLANT

CONTINGENCY MESSAGE NO. D DATE: NOVEMBER 13, 1989 TIME: 18:20 MESSAGE FOR: I&C TECHNICIAN FROM: DAMAGE TEAM #2 CONTROLLER

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

(1) ANNUNCIATORS APP-004-4 AND APP-004-5 ARE LIT.

(2) STATUS LIGHTS LC-474A1, LC-475A1, AND LC-476A1 ARE LIT.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

- (1) GO TO CONTROL ROOM FOR REACTOR PROTECTION SYSTEM (RPS) DRAWING #CP380-5379 (PG. 5 OF 14) FOR RELAYS WHICH FAILED (#7 AND #8 AND #3 AND #4)
- (2) FROM THE SAME DRAWING (PAGE 2 OF 14) DETERMINE RACK #, I.E., RACK 4, CABINET 59.
- (3) SHOULD GET KEY FROM CONTROL ROOM FOREMAN FOR THE RPS CABINETS.

SCN:89-3354 RNPD-89-03-R1

RNPD PLANT

 CONTINGENCY

 MESSAGE NO.
 E
 DATE: NOVEMBER 13, 1989
 TIME: 18:25

 MESSAGE FOR:
 CONTROL ROOM SEC

 FROM:
 LEAD CONTROL ROOM CONTROLLER

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

DECLARE AN ALERT BASED UPON AN ATWS.

.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

- IMPLEMENT PEP-103.
- MAKE PA ANNOUNCEMENT AND ACTIVATE ERO CALLOUT USING NREC, ETC.

SCN:89-3354 RNPD-89-03-R1

RNPD PLANT

CONTINGENCY MESSAGE NO. F DATE: NOVEMBER 13, 1989 TIME: 18:30 MESSAGE FOR: MANAGER - CORP. COMMUNICATIONS FROM: HCC/CORP. COMM. CONTROLLER MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE" ACTIVATE THE CCEIPS, NOTIFY HCC AND JIC PERSONNEL TO REPORT TO THEIR RESPECTIVE FACILITIES.

FOR CONTROLLER USE ONLY

- IF MANAGER CORP. COMM. DOES NOT ACTIVATE THE CCEIPS AT THE ALERT CLASSIFICATION, THE MESSAGE ABOVE SHOULD BE PROVIDED.

ACTIONS EXPECTED:

SCN:89-3354 RNPD-89-03-R1

RNPD PLANT

MESSAGE NO. 8 DATE: NOVEMBER 13, 1989 TIME: 18:50 OR

(UPON ARRIVAL AT CABINET 59)

MESSAGE FOR: I&C TECHNICIAN

DAMAGE TEAM #2 CONTROLLER FROM:

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

THE ATTACHED SHEET IS WHAT YOU OBSERVE AT CABINET 59.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

1) UNLOCK AND EVALUATE RELAY STATUS.

- UPON OBSERVING THE CABINET, PROVIDE THE ATTACHED CABINET 2) VIEW.
- NO CORRECTIVE ACTION WILL CORRECT PROBLEM. 3)
- REPLACE 2 RELAYS 4)
- 5) FOLLOW I&C TO COMPLETION --- (TIME ~1:30 FOR REPAIR)
 - A) GET REPLACEMENT RELAY AT STORES
 - B) KEEPS OLD RELAY FOR EVALUATION
- C) TOOLS --- SCREWDRIVER AND TAPE (HOLD TABS IN PLACE). 6) NOTIFY SHIFT FOREMAN WHEN COMPLETED.

SCN: 89-3354 RNPD-89-03-R2

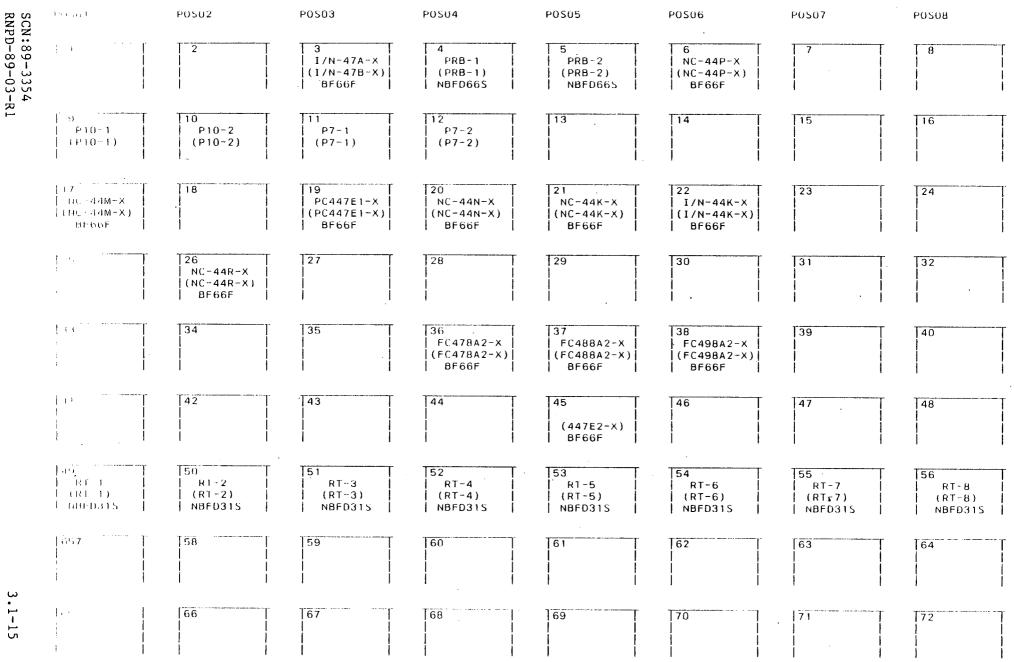
3.1 - 14



RACK 56 AND 59 FRONT

15:45 THURSDAY, AUGUST 10, 1989

1



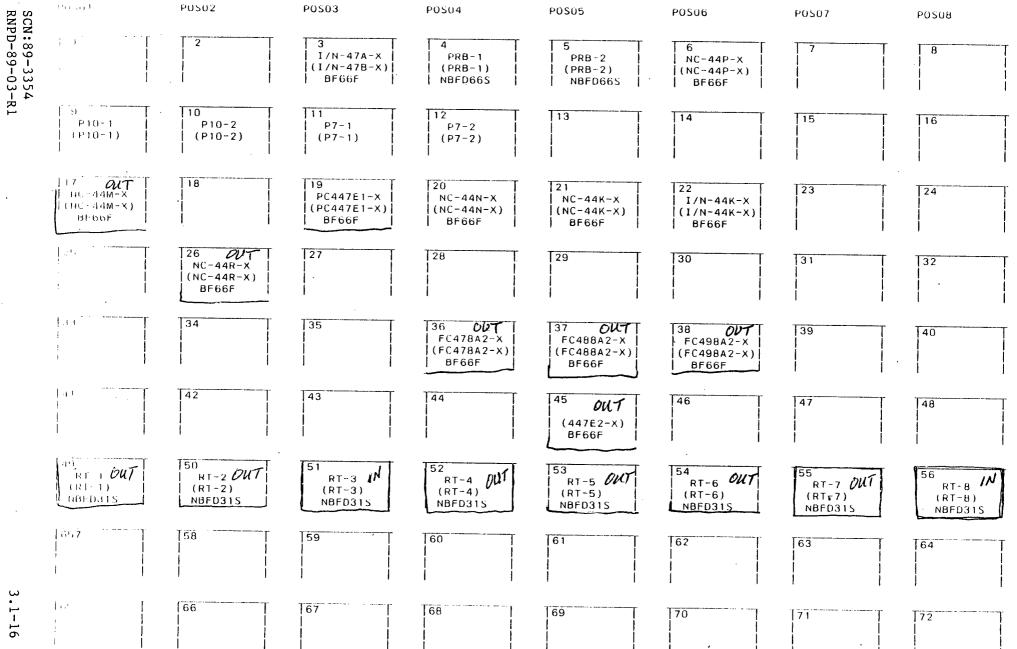
ÌS

ŝ

REACTOR PROTECTION RACK RELAY POSITIONS RACK 56 AND 59 FRONT

15:45 THURSDAY, AUGUST 10, 1989

,1



DCT #2 1850

RNPD <u>PLANT</u>

MESSAGE NO. 8A DATE: NOVEMBER 13, 1989 TIME: *~19:00

MESSAGE FOR: SITE PUBLIC INFORMATION COORDINATOR

FROM: HCC/CORP. COMM. CONTROLLER

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

COMPANY CARS FOR THE TRIP TO THE ROBINSON VISITORS CENTER ARE AVAILABLE FOR JIC PERSONNEL FROM THE LEAD HCC/CORP. COMM. CONTROLLER. KEYS AND CAR PACKETS ARE TO BE MADE AVAILABLE TO THE SITE PUBLIC INFORMATION COORDINATOR UPON REQUEST.

ROOM RESERVATIONS HAVE BEEN MADE AT THE LANDMARK INN, HARTSVILLE, S.C. FOR ALL PERSONNEL.

JIC PERSONNEL SHOULD GO TO THE LANDMARK INN INSTEAD OF RNPD JIC. UPON ARRIVAL, THEY SHOULD ENSURE THAT ARRIVAL TIME IS NOTED. UPON CHECKING IN AT THE LANDMARK, EXERCISE PLAY IS SUSPENDED.

JIC PERSONNEL SHALL REPORT TO THE RNPD JIC BY 07:30 A.M. ON NOVEMBER 14, 1989. FINAL SET-UP CHECKS SHOULD BE COMPLETED TO ENSURE READINESS TO RESUME THE EXERCISE AT 08:30 A.M.

FOR CONTROLLER USE ONLY

* WHEN THE SPIC ATTEMPTS TO MAKE ARRANGEMENTS FOR TRANSPORTATION TO ROBINSON, PROVIDE THE MESSAGE ABOVE.

ACTIONS EXPECTED:

SCN: 89-3354 RNPD-89-03-R2

ς,

RNPD PLANT

MESSAGE NO. 9 DATE: NOVEMBER 13, 1989

TIME: *~19:00

.

MESSAGE FOR: JIC ADMIN. SUPERVISOR

FROM: JIC CONTROLLER

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

HOTEL RESERVATIONS HAVE BEEN MADE AT THE LANDMARK INN, HARTSVILLE, FOR ALL JIC PERSONNEL. JIC CONTROLLER HAS ALL ROOM KEYS.

FOR CONTROLLER USE ONLY

* WHEN JIC ADMIN. SUPERVISOR ATTEMPTS TO MAKE ROOM RESERVATIONS FOR THE JIC PERSONNEL, PROVIDE THE MESSAGE ABOVE.

ACTIONS EXPECTED:

RNPD PLANT

MESSAGE NO. 10 DATE: NOVEMBER 13, 1989 TIME: 19:15 MESSAGE FOR: I&C TECHNICIAN FROM: DAMAGE TEAM #1 CONTROLLER MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE" (NO MESSAGE FOR PLAYERS)

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

- (1) I&C TECHNICIAN DISPATCHED TO FRV-478 TO DETERMINE SIZE (3/8" TUBING) AND LENGTH OF TUBING (~2 FEET) AND FITTINGS (2-3/8" SWAGE LOCK FITTINGS) REQUIRED TO REPAIR OR REPLACE TUBING AND TOOLS NEEDED (2 - CRESCENT WRENCHES).
- (2) FOLLOW I&C TECHNICIAN TO COMPLETION (TIME = 50 MINUTES) TO COMPLETE TUBE REPLACEMENT.
- (3) NOTIFY SHIFT FOREMAN.

RNPD PLANT

MESSAGE NO. 11 DATE: NOVEMBER 13, 1989 TIME: 19:25 MESSAGE FOR: AO, SHIFT FOREMAN OR PERSON WALKING BY FROM: DAMAGE TEAM #3 CONTROLLER MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE" YOU HEAR A LOUD NOISE IS COMING FROM "A" SERVICE WATER BOOSTER PUMP.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

(1) REPORT NOISE TO CR.

(2) AO SHOULD BE SENT TO CHECK NOISE.

DCT #3

RNPD PLANT

MESSAGE NO. 12 DATE: NOVEMBER 13, 1989 TIME: 19:35 MESSAGE FOR: AUX. OPERATOR RESPONDING TO "A" SERVICE WATER BOOSTER PUMP FROM: DAMAGE TEAM #3 CONTROLLER MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE" YOU FIND COUPLING GUARD LEANING AND COUPLING IS STRIKING GUARD.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

AO SHOULD INFORM SHIFT FOREMAN OF PROBLEM. ANY ATTEMPTS BY AO TO MOVE COUPLING GUARD ARE UNSUCCESSFUL AND COULD BE UNSAFE (IF PUMP IS RUNNING).

AO MAY HAVE PUMP STOPPED PRIOR TO MECHANIC ARRIVING.

SCN:89-3354 RNPD-89-03-R1

RNPD PLANT

MESSAGE NO. 13

DATE: NOVEMBER 13, 1989

TIME: WHEN ARRIVE (~20:00)

MESSAGE FOR: MECHANIC RESPONDING TO "A" SERVICE WATER BOOSTER PUMP

FROM: DAMAGE TEAM #3 CONTROLLER

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

THE COUPLING GUARD IS LEANING AGAINST COUPLING AND THE COUPLING IS STRIKING THE GUARD.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

- (1) REPAIR TEAM SHOULD OBTAIN CLEARANCE.
- (2) TEAM SHOULD STRAIGHTEN THE GUARD. THEY MAY REMOVE IT OR STRAIGHTEN IT IN PLACE. ESTIMATED REPAIR TIME IS 30 MINUTES.

TOOLS AND SUPPLIES

- 2 COMBINATION WRENCHES
- (3) NOTIFY OSC OF JOB COMPLETION.

SCN:89-3354 RNPD-89-03-R1

RNPD PLANT

MESSAGE	NO.	14	DATE:	NOVEMBER	13,	1989	TIME:	~20:20
MESSAGE	FOR:	ALL PLAYERS						
FROM: A	LL CC	NTROLLERS						

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

PLAY IS SUSPENDED FOR THIS EVENING.

PLAYERS SHOULD ESTABLISH THE STATUS OF ANY ON-GOING ACTIONS AS WELL AS ACTION COMPLETED TO THIS POINT IN TIME.

ALL PLAYERS SHOULD BE IN PLACE BY 08:30 HOURS TO RESUME PLAY FROM THE POINT OF SUSPENSION.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

SCN:89-3354 RNPD-89-03-R1

RNPD PLANT

MESSAGE NO. 15 DATE: NOVEMBER 13, 1989

TIME: ~20:20 *(SEE NOTE)

MESSAGE FOR: ALL JIC PERSONNEL

FROM: LEAD JIC CONTROLLER

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

EXERCISE PLAY IS SUSPENDED AT THIS TIME.

ROOMS FOR JIC PERSONNEL ARE AT THE LANDMARK INN, HARTSVILLE. REPORT BACK TO THE JIC BY Q2:30 A.M. ON NOVEMBER 14, 1989, TO RESUME THE EXERCISE.

FOR CONTROLLER USE ONLY

NOTE

THIS MESSAGE IS TO BE PROVIDED TO JIC PERSONNEL BY THE LEAD JIC CONTROLLER AFTER JIC PERSONNEL ARRIVE FROM RALEIGH AND THE FACILITY IS SET UP AND READY FOR ACTIVATION (I.E., AT DISCRETION OF CONTROLLER).

JIC PLAY MAY CONTINUE AFTER OTHER PLANT FACILITIES SUSPEND PLAY FOR THE EVENING.

> RNPD PLANT

MESSAGE NO. 16 DATE: NOVEMBER 14, 1989 TIME: 08:30 MESSAGE FOR: ALL PLAYERS FROM: ALL CONTROLLERS MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

RESUME PLAY FROM THE POINT OF SUSPENSION LAST NIGHT.

NO ACTIONS OR CONDITIONS HAVE CHANGED SINCE THE SUSPENSION OF PLAY.

ANY QUESTION CONCERNING EXISTING CONDITIONS SHOULD BE DIRECTED TO THE APPROPRIATE LEAD CONTROLLER.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

SCN:89-3354 RNPD-89-03-R1

> RNPD PLANT

MESSAGE NO. 17 DATE: NOVEMBER 14, 1989 TIME: AFTER 9:00

(FIRST NEWS BRIEFING)

MESSAGE FOR: PMC NEWS BRIEFING

FROM: MOCK MEDIA

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

- WHAT IS FUEL DAMAGE? -
- HOW DID IT GET DAMAGED?
- (IF THE TERM FUEL BARRIER OR FISSION PRODUCT BARRIER IS USED, ASK THE FOLLOWING, IF APPLICABLE.)
 - IF ONE BARRIER IS BREECHED, HOW MANY MORE UNTIL IT IS SERIOUS?
- IS THERE ANY DANGER TO THE PUBLIC YET?
- ARE RADIATION LEVELS INCREASING ONSITE?
- IS THERE A CHANCE OF AN OFFSITE RELEASE?
- WHICH WAY IS THE WIND BLOWING NOW AND DO YOU KNOW IF IT IS GOING TO CHANGE?

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

SCN:89-3354 RNPD-89-03-R1

RNPD PLANT

MESSAGE NO. 18 DATE: NOVEMBER 14, 1989 TIME: AFTER 09:00

(FIRST NEWS BRIEF)

MESSAGE FOR: CORPORATE SPOKESMAN IN PMC

FROM: MOCK MEDIA

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

THE FOLLOWING QUESTIONS CAN BE USED:

- WHAT DOES IT MEAN WHEN THE REACTOR SCRAMS? -
- ---WHY DID THE REACTOR SCRAM?
- WHAT IS AN ATWS?
- CAN YOU DESCRIBE A TRANSIENT?

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

RNPD PLANT

MESSAGE NO. 19 DATE: NOVEMBER 14, 1989 TIME: 09:04

MESSAGE FOR: SHIFT FOREMAN

FROM: LEAD CONTROL ROOM CONTROLLER

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

YOU RECEIVE THE FOLLOWING INDICATIONS AND ALARMS:

RC LOOPS AT DEVIATION RC LOOPS T AVG. DEVIATION RC SYS HI AT OVERPOWER ΔT OVERTEMP ΔT BISTABLE-TC412C1 BISTABLE-TC412B1 INST. TI-412A READS 80°F (A LOOP AT PROT) INST. TI-412B READS 575°F (A LOOP T AVG. PROT) LOOP 1 OP ΔT LOOP 1 OT ΔT

IN COMPARISON, LOOP 2 AND LOOP 3 INSTRUMENTS READ 0°F ON AT AND 546° NOTE: ON TAVG.

FOR CONTROLLER USE ONLY

.

ACTIONS EXPECTED:

REVIEW APP-003-4 APP-003-12 APP-003-7 APP-003-14 APP-003-22

SCN:89-3354 RNPD-89-03-R1

RNPD PLANT

MESSAGE NO. 20 DATE: NOVEMBER 14, 1989 TIME: 09:05 MESSAGE FOR: SHIFT FOREMAN FROM: LEAD CONTROL ROOM CONTROLLER MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

YOU RECEIVE A LPMS ALARM ON APP-036-03.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

- DISPATCH AO TO REVIEW LPMS PANEL.

SCN:89-3354 RNPD-89-03-R1

RNPD PLANT

MESSAGE NO. 21 DATE: NOVEMBER 14, 1989 TIME: 09:07 MESSAGE FOR: SHIFT FOREMAN FROM: LEAD CONTROL ROOM CONTROLLER MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

YOU RECEIVE THE FOLLOWING ALARM: "CHARGING PUMPS HI SPEED."

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

REVIEW APP-001-38

SCN:89-3354 RNPD-89-03-R1

RNPD PLANT

MESSAGE NO. 22

DATE: NOVEMBER 14, 1989

TIME: 09:10

MESSAGE FOR: PERSON RESPONDING TO LPMS PANEL (AO)

FROM: CONTROL ROOM CONTROLLER

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

MULTIPLE SIGNALS GENERATED ON CHANNEL 754-S/G "A" PRIMARY SIDE OF TUBE SHEET. IT SHOWS 10 IMPACTS ABOVE SETPOINT AND 100 IMPACTS BELOW. ALSO, CHANNEL 755 HAS SAME NUMBER OF IMPACTS BUT NOT AS LOUD AND NOT SAME AMPLITUDE AS ON CHANNEL 754.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

- NOTIFY SHIFT FOREMAN.

> RNPD PLANT

> > •----

MESSAGE	NO.	CONTIN · G		DATE:	NOVEMBER	. ¹⁴ ,	1989	TIME:	09:25
MESSAGE	FOR:	SHIFT	FOREMAN						
FROM: I	LEAD O	CONTROL	ROOM CO	NTROLL	ER				
MESSAGE	SIMUI	LATED P	LANT CON	DITION	S: "THIS	IS	AN EXERCISE	MESSAGE"	

- YOU HAVE INITIATED MANUAL SI.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

RNPD PLANT

MESSAGE NO. 23 DATE: NOVEMBER 14, 1989 TIME: 09:28 MESSAGE FOR: SHIFT FOREMAN FROM: LEAD CONTROL ROOM CONTROLLER MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

R-15 AND R-19A HAVE ALARMED AND ARE OFF SCALE HIGH.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

SCN:89-3354 RNPD-89-03-R1

RNPD PLANT

MESSAGE NO. 23A DATE: NOVEMBER 14, 1989 TIME: 09:32 MESSAGE FOR: CONTROLLER IN CONTROL ROOM FROM: LEAD CONTROL ROOM CONTROLLER MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

(NOT A PLAYER MESSAGE.)

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

AN AUTO SI OCCURRED PRIOR TO RESET OF SI FROM THE 09:25 TIME FRAME.

RNPD PLANT

CONTINGENCY MESSAGE NO. H DATE: NOVEMBER 14, 1989 TIME: 09:38

MESSAGE FOR: SITE EMERGENCY COORDINATOR

FROM: TSC CONTROLLER

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

A SITE AREA EMERGENCY SHOULD HAVE BEEN DECLARED BASED UPON RCS LEAKAGE >200 GPM.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

- IMPLEMENT PEP-104.

RNPD PLANT

 CONTINGENCY

 MESSAGE NO.
 I

 DATE: NOVEMBER 14, 1989
 TIME: 09:40

 MESSAGE FOR:
 SHIFT FOREMAN

 FROM:
 LEAD CONTROL ROOM CONTROLLER

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

- RESET SI AT THIS TIME.

- STOP "B" RHR PUMP.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

SCN:89-3354 RNPD-89-03-R1

RNPD PLANŤ

MESSAGE NO. 24

DATE: NOVEMBER 14, 1989

TIME: ~09:45

MESSAGE FOR: RUMOR CONTROL

FROM: HC/CORP. COMM. CONTROLLERS

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

- I'VE HEARD SIRENS AT THE PLANT AND SEE PEOPLE LEAVING. WHY ISN'T THE PUBLIC BEING WARNED? WHY AREN'T WE BEING EVACUATED?
- DOESN'T CP&L CARE ABOUT THE PUBLIC?
- ARE YOUR EMPLOYEES MORE IMPORTANT?
- WHEN ARE THE LITTLE CHILDREN IN THE WEE CARE DAY CENTER GOING TO BE EVACUATED AND HOW? WHERE WILL THEY BE TAKEN?

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

SCN:89-3354 RNPD-89-03-R1

RNPD PLANT

MESSAGE NO. 24a DATE: NOVEMBER 14, 1989

TIME: AFTER COMPLETION OF ACCOUNTABILITY

MESSAGE FOR: SITE EMERGENCY COORDINATOR

LEAD TSC CONTROLLER FROM:

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

CALL THE DARLINGTON COUNT EOC AND PROVIDE THE FOLLOWING MESSAGE:

"AT THIS TIME, H.B. ROBINSON IS EVACUATING APPROXIMATELY 450 NON-ESSENTIAL PERSONNEL IN 125 VEHICLES. THEY HAVE BEEN TOLD TO GO TO THEIR HOMES AND MONITOR THEIR EBS STATION. IF EVACUATION IS ORDERED, THEY WILL PROCEED TO THE SHELTERS DESIGNATED FOR THEIR SECTORS. ABOUT ONE HALF OF THESE PEOPLE LIVE IN SECTORS B-1 AND B-2

FOR CONTROLLER USE ONLY

PROVIDE THIS MESSAGE WHEN SECURITY TEAM LEADER REPORTS TO * THE SEC THAT ACCOUNTABILITY IS NOW COMPLETE.

SCN: 89-3354 RNPD-89-03-R0

3.1-37A

RNPD PLANT

MESSAGE NO. 24B DATE: NOVEMBER 14, 1989

TIME: AFTER COMPLETION OF ACCOUNTABILITY

MESSAGE FOR: NON-ESSENTIAL EVACUEE

FROM: LEAD SCENARIO COORDINATOR

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

AT THIS TIME, PROCEED TO THE CORNER OF 5TH. AND CAROLINA AVENUES. UPON SEEING A POLICE OFFICE AT THIS INTERSECTION, INSTRUCT HIM THAT YOU ARE FROM H.B. ROBINSON AND ARE PART OF THE EXERCISE. YOU HAVE BEEN INSTRUCTED TO EVACUATE THE AREA AND DON'T KNOW WHERE TO GO.

AFTER HE PROVIDE YOU INSTRUCTIONS, YOU WILL RETURN TO THE PLANT ANT REPORT HIS RESPONSE TO THE LEAD SCENARIO COORDINATOR.

FOR CONTROLLER USE ONLY

THIS MESSAGE IS TO BE PROVIDED ONLY IF REQUESTED BY THE LEAD * STATE SCENARIO COORDINATOR.

ACTIONS EXPECTED:

SCN: 89-3354 RNPD-89-03-R0

3.1-37B

RNPD PLANT

MESSAGE NO. 25 DATE: NOVEMBER 14, 1989 TIME: AFTER 10:00

MESSAGE FOR: PMC NEWS BRIEFING

FROM: MOCK MEDIA

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

THE FOLLOWING QUESTIONS CAN BE USED:

- WHAT IS A STEAM GENERATOR?
- HOW DID THE LOOSE PARTS GET INTO THE STEAM GENERATOR AND WHAT DOES THIS MEAN?
- WHERE IS THE LEAK IN THE STEAM GENERATOR?
- DOES THIS MEAN THE EMPLOYEES AT THE PLANT ARE NEGLIGENT?
- CAN YOU STOP THE LEAK? WHEN WILL IT STOP?
- IS THERE A RELEASE OF RADIATION AS A RESULT OF THIS LEAK? (IF NO, DO YOU ANTICIPATE ONE?)
- IS THE PUBLIC IN DANGER?

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

. .

(This page intentionally blank.)

RNPD PLANT

MESSAGE NO. 27 DATE: NOVEMBER 14, 1989 TIME: 10:32 MESSAGE FOR: CONTROL ROOM (TELEPHONED INTO CONTROL ROOM) FROM: DAMAGE CONTROL TEAM #4 CONTROLLER MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

I HAVE HEARD A POWER OPERATED RELIEF VALVE OPEN.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

SHIFT FOREMAN SHOULD ANALYZE SITUATION AND MAY SEND AO TO TRY AND CLOSE PORV. AO WILL GO TO SECONDARY CONTROL PANEL AND TRY TO TAKE MANUAL CONTROL OF VALVE. ALL EFFORTS WILL BE UNSUCCESSFUL UNTIL 11:32.

RNPD PLANT

MESSAGE NO. 28 DATE: NOVEMBER 14, 1989 TIME: 10:32

MESSAGE FOR: ALL JIC PERSONNEL

FROM: LEAD JIC CONTROLLER

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

YOU CAN HEAR A VERY LOUD NOISE, WHICH APPEARS TO BE COMING FROM THE PLANT. IT SOUNDS LIKE A LOUD JET ENGINE AT FULL THROTTLE. THE SOUND IS CONTINUING.

FOR CONTROLLER USE ONLY

- IF PERSONNEL GO TO VISITOR CENTER WINDOW, THEY CAN SEE STEAM COMING FROM NEAR THE TURBINE DECK. TELL PLAYERS WHAT THEY SEE WHEN THEY LOOK.

ACTIONS EXPECTED:

RNPD PLANT

CONTINGENCYMESSAGE NO.JDATE: NOVEMBER 14, 1989TIME: 10:42MESSAGE FOR:SITE EMERGENCY COORDINATOR - TSC

FROM: TSC CONTROLLER

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

A <u>GENERAL</u> <u>EMERGENCY</u> SHOULD HAVE BEEN DECLARED BASED UPON "A" PORV FAILED OPEN.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

RNPD PLANT

MESSAGE NO. 29 DATE: NOVEMBER 14, 1989 TIME: 10:45 MESSAGE FOR: AUXILIARY OPERATOR FROM: DAMAGE TEAM #4 CONTROLLER AT SECONDARY CONTROL PANEL MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

YOU HEAR STEAM FLOWING FROM OPEN PORV.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

(1) ATTEMPT TO ISOLATE INSTRUMENT AIR TO THE VALVE OPERATOR UNSUCCESSFUL.(2) AO SHOULD NOTIFY SHIFT FOREMAN THAT VALVE WON'T CLOSE.

.

RNPD PLANT

MESSAGE NO. 30 DATE: NOVEMBER 14, 1989 TIME: 11:00 MESSAGE FOR: MECHANIC FROM: DAMAGE TEAM #4 CONTROLLER MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

VALVE IS BOUND UP AND WON'T CLOSE.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

(1) THEY SHOULD ATTEMPT TO CLOSE THE VALVE BY USING A PRY BAR ON VALVE STEM TO FORCE THE VALVE CLOSED.

NOTE PORV MUST STAY OPEN UNTIL 11:32.

TOOLS NEEDED: PRY BAR, HAMMER

SCN:89-3354 RNPD-89-03-R1

3.1-44 .

RNPD PLANT

MESSAGE NO. 31

DATE: NOVEMBER 14, 1989

TIME: AFTER 11:00

MESSAGE FOR: RUMOR CONTROL

FROM: HCC/CORP. COMM. CONTROLLER

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

- HAS PLAINVIEW ELEMENTARY SCHOOL BEEN EVACUATED? WHAT ABOUT OTHER SCHOOLS? WHY OR WHY NOT?
- HAS BYERLY HOSPITAL BEEN EVACUATED? WHY OR WHY NOT? WHERE WILL THESE PEOPLE GO?
- HAS MORRELL NURSING HOME BEEN EVACUATED?
- WHAT WILL HAPPEN TO RESIDENTS THAT HAVE NO TRANSPORTATION OR ARE HANDICAPPED?
- MY SON IS FISHING ON THE NORTH END OF THE LAKE AT THE MORRISON BRIDGE; WHO IS GOING TO WARN HIM? IS HE SAFE?

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

CAN BE USED BY MOCK MEDIA DURING NEWS BRIEFING.

RNPD PLANT

MESSAGE NO. 32

.

DATE: NOVEMBER 14, 1989

TIME: FIRST NEWS BRIEFING AFTER GEN. EMER. (~10:32)

MESSAGE FOR: CORPORATE SPOKESMAN IN PMC

FROM: MOCK MEDIA

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

THE FOLLOWING QUESTIONS CAN BE USED WHEN PORV LIFTS:

- WHAT IS ALL THAT NOISE COMING FROM THE PLANT? DOES THAT MEAN THERE IS A RELEASE OF RADIATION? HOW MUCH?
- HAS THE PLANT BLOWN UP? WHAT IS THAT STEAM COMING FROM THE PLANT? IS IT RADIOACTIVE?
- WHAT SHOULD WE DO?
- DO YOU HAVE ANY OF THOSE PILLS I CAN TAKE TO PROTECT ME FROM RADIATION?
- WHERE WOULD WE GO FOR INFORMATION IF THIS CENTER WERE EVACUATED?

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

SCN:89-3354 RNPD-89-03-R1

RNPD PLANT

MESSAGE NO. 33

DATE: NOVEMBER 14, 1989

TIME: FIRST NEWS BRIEFING AFTER GEN. EMERGENCY (~10:32)

MESSAGE FOR: NEWS BRIEFING/STATE PIO IN PMC

FROM: MOCK MEDIA

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

- HOW IS THE PUBLIC BEING ALERTED?
- CAN EVERYBODY HEAR THE SIRENS?
- WHAT IF ONE OF THE SIRENS DOESN'T WORK? HOW WILL SOMEONE LIVING NEAR IT BE ALERTED?
- WHAT SHOULD PEOPLE DO AFTER THEY HEAR THE SIRENS?
- WHY SHOULDN'T EVERYONE EVACUATE?
- WHAT HAPPENS IF THE WIND SHIFTS?
- WHAT SHOULD PEOPLE DO IF THEY DON'T HAVE CARS?

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

SCN:89-3354 RNPD-89-03-R1

RNPD PLANT

(10:52)	•	34	DATE:	NOVEMBER .	14,	1989		FIRST NEWS BRIEFING AFTER GEN. EMERGENCY (~10:32)
---------	---	----	-------	------------	-----	------	--	---

MESSAGE FOR: CORPORATE SPOKESMAN IN PMC

FROM: MOCK MEDIA

MESSAGE NO.

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

- HOW DID THE PLANT GET TO THIS POINT?
- HOW COULD EMPLOYEES AT THIS NUCLEAR PLANT LET PROBLEMS GET THIS BAD?
- DON'T YOU HAVE ANY REGARD FOR PEOPLE THAT LIVE AROUND THIS PLANT?
- WHY OR WHY NOT HAVE RESIDENTS BEEN EVACUATED?

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

SCN:89-3354 RNPD-89-03-R1

RNPD PLANT

MESSAGE NO. 35 DATE: NOVEMBER 14, 1989

TIME: FIRST NEWS BRIEFING AFTER GEN. EMERGENCY (~10:32)

MESSAGE FOR: CORPORATE SPOKESMAN IN PMC

FROM: MOCK MEDIA

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

IF A RELEASE IS/HAS OCCURRED, ASK THE FOLLOWING:

- HOW MUCH RADIATION HAS BEEN RELEASED?
- WHAT DOES THIS MEAN IN EVERYDAY TERMS?
- WHAT EFFECT WILL THIS HAVE ON MY PREGNANT DAUGHTER?
- WHAT ABOUT MY FARM ANIMALS?
- WILL THE LAND BE CONTAMINATED LIKE IT WAS IN RUSSIA?
- IS THIS AS BAD AS THE ACCIDENT IN RUSSIA?
- (IF THE ANSWER TO "WILL A RELEASE OCCUR" WAS NO THIS MORNING, ASK THE FOLLOWING):
 - THIS MORNING YOU SAID NO RELEASE IS EXPECTED AND NOW ONE HAS HAPPENED. WHY SHOULD WE BELIEVE WHAT YOU ARE SAYING NOW?

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

3.1-49

١

RNPD PLANT

MESSAGE		CONTING K		DATE:	NOVEMBER	14,	19	89	TIME:	11:01
MESSAGE	FOR:	SHIFT	FOREMAN							
FROM: I	LEAD C	ONTROL	ROOM COI	NTROLL	ER					
MESSAGE/	STMUL	ATED PI	LANT CON	DITION	s: "THIS	IS	AN	EXERCISE	MESSAGE"	

YOU HAVE STOPPED CHARGING PUMP "B" AND "C". YOU HAVE STOPPED "C" SI PUMP. _

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

RNPD PLANT

 CONTINGENCY

 MESSAGE NO.
 L
 DATE: NOVEMBER 14, 1989
 TIME: 11:16

 MESSAGE FOR:
 SHIFT FOREMAN

 FROM:
 LEAD CONTROL ROOM CONTROLLER

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

- YOU HAVE INITIATED PRESSURIZER SPRAY.

- YOU HAVE STOPPED SI PUMP "A".

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

RNPD PLANT

MESSAGE NO. 36

DATE: NOVEMBER 14, 1989

TIME: AFTER EBS MESSAGE ISSUED (11:30)

MESSAGE FOR: RUMOR CONTROL

FROM: HCC/CORP. COMM. CONTROLLER

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

EBS MESSAGE ON TV SAYS I SHOULD EVACUATE:

- WHAT SHOULD I TAKE WITH ME?
- WHAT ROUTE SHOULD I TAKE IF I LIVE AT OLD CAMDEN ROAD?
- WHAT ABOUT MY CAT? CAN I TAKE HER AND THE KITTENS WITH ME?
- I LIVE AT FLYNN'S CROSSLAND. WHAT ZONE DO I LIVE IN AND WHERE SHOULD I GO?

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

SCN:89-3354 RNPD-89-03-R1

RNPD PLANT

MESSAGE NO. 37 DATE: NOVEMBER 14, 1989 TIME: 11:32 MESSAGE FOR: SHIFT FOREMAN FROM: LEAD CONTROL ROOM CONTROLLER MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

YOU HAVE RECEIVED A GREEN LIGHT ON RV-1.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

RNPD PLANT

CONTINGENCYMESSAGE NO.MDATE: NOVEMBER 14, 1989TIME: 11:32MESSAGE FOR:SHIFT FOREMAN (TELEPHONE CALL TO CONTROL ROOM)FROM:DCT #4 CONTROLLER

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

PORV APPEARS TO HAVE CLOSED.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

SCN:89-3354 RNPD-89-03-R1

RNPD PLANT

MESSAGE NO. 38 DATE: NOVEMBER 14, 1989 TIME: ~11:32 MESSAGE FOR: NEWS BRIEFING

FROM: MOCK MEDIA

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

THAT NOISE HAS STOPPED AND THERE IS NO MORE STEAM COMING OUT.

- IS IT GOING TO START AGAIN?

(IF NO, HOW DO YOU KNOW IT WON'T? OR NOT SURE? WHAT ARE YOU DOING TO STOP IT FROM HAPPENING AGAIN?)

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

SCN:89-3354 RNPD-89-03-R1

RNPD PLANT

MESSAGE NO. 39 DATE: NOVEMBER 14, 1989 TIME: 11:40

MESSAGE FOR: MEDICAL VICTIM

FROM: LEAD TSC CONTROLLER

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

YOU ARE A KNOWN DIABETIC AND DID NOT TAKE PROPER NOURISHMENT BEFORE REPORTING TO THE TSC. YOU HAVE GONE INTO DIABETIC SHOCK AND NEED MEDICAL ATTENTION. YOU ARE TO SLUMP OVER YOUR WORK STATION AND SLOWLY FALL TO THE FLOOR. YOU CANNOT BE AROUSED FROM UNCONSCIOUSNESS AND YOU CANNOT COMMUNICATE WITH YOUR FIRST AID RESPONSE PERSONS.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

- SOMEONE IN ROOM SHOULD NOTIFY THE TSC-SEC AND A FIRST AID TEAM SHOULD BE DISPATCHED TO ASSIST.
- CONTROL ROOM SHOULD CALL FOR OFFSITE AMBULANCE TO TRANSPORT TO BYERLY HOSPITAL (AMBULANCE TO BE CALLED . . . HOSPITAL TO BE SIMULATED).

SCN:89-3354 RNPD-89-03-R1

RNPD <u>PLANT</u>

MESSAGE NO. 39A DATE: NOVEMBER 14, 1989 TIME: AFTER ~11:40

MESSAGE FOR: CONTROL ROOM SHIFT FOREMAN

FROM: LEAD CONTROL ROOM CONTROLLER

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

WHEN REQUESTED TO CALL FOR OFFSITE AMBULANCE TO TRANSPORT PERSON TO HOSPITAL, <u>SIMULATE</u> THE CALL FOR THE AMBULANCE AND <u>SIMULATE</u> THE CALL TO THE HOSPITAL. MAKE ALL OTHER APPROPRIATE NOTIFICATIONS.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

SCN: 89-3354 RNPD-89-03-R0

-

3.1-56A

RNPD PLANT

MESSAGE NO. 40	DATE:	NOVEMBER 14,	1989	TIME: 11:40

MESSAGE FOR: FIRST AID RESPONDER

FROM: LEAD TSC CONTROLLER

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

- PERSON IN NEED OF AID IS WEARING A "<u>MEDICAL ALERT</u>" BRACELET INDICATING THAT THEY ARE A DIABETIC.
- THE VICTIM IS UNCONSCIOUS AND CANNOT BE AWAKENED.
- BREATHING IS SHALLOW

FOR CONTROLLER USE ONLY

ADDITIONAL INFORMATION:

- -- PULSE IS 42
- -- BLOOD PRESSURE 62/40
- -- PUPILS ARE DILATED.
- -- BEFORE THE VICTIM BECAME UNCONSCIOUS, HE WAS NOT MAKING SENSE ... IN TALKING WITH OTHERS, THIS PERSONS CONVERSATION WAS AS IF HE WERE NOT HERE.

ACTIONS EXPECTED:

-- WITH PROPER H.P. CONSIDERATIONS <u>AND</u> NOTIFICATION TO SECURITY, "PLAYERS" <u>WILL</u> BE ALLOWED TO TAKE VICTIM THROUGH DOUBLE DOORS OF TSC TO EOF OUTSIDE DOORS.

SCN: 89-3354 RNPD-89-03-R0

RNPD PLANT

 CONTINGENCY

 MESSAGE NO.
 N

 DATE: NOVEMBER 14, 1989
 TIME: 12:00

 MESSAGE FOR:
 SHIFT FOREMAN

 FROM:
 LEAD CONTROL ROOM CONTROLLER

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

- YOU HAVE SECURED "C" RC PUMP.

inan shanishi katalari na manda sa misina wakali wakali wakali kata

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

RNPD PLANT

MESSAGE NO. 41	DATE: NOVEMBER 14, 1989	TIME: ~12:30
MESSAGE FOR: ALL PLAYERS	· · · ·	x
FROM: ALL CONTROLLERS		

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

1989 RNPD E.P. EXERCISE IS TERMINATED.

.

A FACILITY CRITIQUE WILL NOW BE CONDUCTED AT EACH LOCATION TO OBTAIN PLAYER COMMENTS.

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

SCN:89-3354 RNPD-89-03-R1

CAROLINA POWER AND LIGHT COMPANY ROBINSON NUCLEAR PROJECT DEPARTMENT

1989 EMERGENCY PREPAREDNESS ANNUAL EXERCISE

.

3.2 PLANT PARAMETERS AND GRAPHS

.

3.2-0

ATTACHMENT 9.7 Page 1 of

Date: NOV. 13, 1989 EMERGENCY CLASSIFICATION (CIRCLE) NOTIFICATION OF UNUSUAL EVENT Time: 16:30 ALERT SITE AREA EMERGENCY Completed By: GENERAL EMERGENCY ENGINEEDED CAEETY FEATURES ENVIRONMENTAL SYSTEMS CONTAINMENT STATUS WIND SPEED UPPER (MPH) 12.9 PRESSURE (PSIG) .2 7.3 121 TEMPERATURE (°F) LOWER (MPH) 225 .01 WIND DIR. UPPER (* FROM) HYDROGEN CONC. (%) LOWER (° FROM) 189 .2 SUMP LEVEL (INCHES) 60 91 RWST LEVEL (%) AIR TEMPERATURE ("F) D PASQUILL STAB. FACTOR PRIMARY SYSTEM AREA RADIATION MONITORS R-1 CONTROL ROOM (MR/HR) <1 10 R-2 CONT. AREA (MR/HR) R-3 HP WORK AREA <1 R-4 CHG. PUMP RM (MR/HR) 4.0 R-5 SPENT FUEL PIT (MR/HR) .3 R-6 SAMPLING ROOM (MR/HR) .5 R-7 IN-CORE INST (MR/HR) 1.0 R-8 DRUM. RM. (MR/HR) .5 R-9 FAILED FUEL (MR/HR) 30

PROCESS RADIATION MONITORS

11 CV VENT PART. (CPM)	35K
R-12 CV VENT GAS (CPM)	1.2K
R-14 PLT VNT GAS (CPM)	650
R-15 COND. AIR EJEC. (CPM)	38
R-16 CV FAN CW (CPM)	850
R-17 COMP. CW (CPM)	400
R-18 WASTE DISPOSAL (CPM)	6.5K
R-19A S/G A BLOWDOWN (CPM)	1K
R-19B S/G B BLOWDOWN (CPM)	1K
R-19C S/G C BLOWDOWN (CPM)	1K
R-20 FUEL HDLG BASE (CPM)	17
R-21 FUEL HDLG UPPER (CPM)	35

ACCIDENT RADIATION MONITORS

<1
<10
<10
<10
<1
<1
<10
<1
<1
<1
<1
14
005

RCS PRESSURE (PSIG)	2225
PZR LEVEL (%)	53
TAVE (°F)	575
LOOP A TH (°F)	604
TC (°F)	547
ΔΤ	57
LOOP B TH (°F)	604
TC (°F)	547
Δτ	57
"LOOP C TH ("F)	604
TC (°F)	547
ΔΤ	57
SUBCOOLING (°F)	49
CHRGNG FLOW (GPM)	29
LETDOWN FLOW (GPM)	37
REACTOR POWER	99.4
ACTIVITY:	
GROSS (uCi/ml)	1.60E-01
1 ³¹ (uCi/ml)	2.16E-03

SECONDARY SYSTEM

S/G A LEVWR (%)	53
PRESS (PSIG)	833
FEED (PPH)	3.35E6
STEAM (PPH)	3.33E6
ACT. (uCi/ml)	0
S/G B LEVWR (%)	53
PRESS (PSIG)	833
FEED (PPH)	3.35E6
STEAM (PPH)	3.33E6
ACT. (uCi/ml)	0
S/G C LEVWR (%)	53
PRESS (PSIG)	833
FEED (PPH)	3.35E6
STEAM (PPH)	3.33E6
ACT. (uCi/ml)	0

ENGINEERED SAFET	Y FEA	TURES		
SI ACTUATED: TI	ME		<u> </u>	
RESET: TI	ме			
CS ACTUATED: TI	ME			
RESET: TI	ME _			
CONT. ISO. A ACT	UATEĊ	: TIM	:	
	RESET	: TIM	E	A 10 21
CONT. ISO. B ACT	UATED	D: TIME		
	RESET	: TIME		
SPRAY ADD TANK L	EVEL	(%)		67
SI COLD-LEG FLOW	(GPN	1)		0
SI HOT-LEG INJEC	T STA	RT		0
EQUIPMENT STATUS				
N = NOT AVAILABL	E			
A = AVAILABLE (N	OT OF	PERATING	3)	
0 = OPERATING				
E = ENERGIZED				
PRIMARY				
RCP A	<u>о</u> в	0	с_	0
CHG PUMP A A	В	Α	c _	0
SI PUMP A	A B	N	c _	Α
CS PUMP A	A B	Α		
RHR PUMP A	<u>A</u> B	A		
HVH 1 0 2	0 3	0	4	0
SECONDARY				
FEED PUMP A	о в	_0	÷	
COND PUMP A	0 В	0		
AFW MOTOR A	A B	<u> </u>		
AFW STEAM	<u>A</u>			
MSIV A	0 В	0	c _	0
ELECTRICAL				
EDG A	<u>A</u> B	<u> </u>		
DS/DG	N			
OFFSITE	Е			
EMER. BUS E1	E	E2		E
FANS				
HVE 1A	Α	1B		А
HVE 2A	0	2B		Α.
HVE 5A	A	5B		0
HVE 15	0	15A		A

LEGEND: OSH = OFF SCALE HIGH

02H	=	Urr	307	1LE	пісп
OSL	=	OFF	SC/	٩LE	LOW
00S	=	OUT	OF	SEF	RVICE
ISOL	=	I SOL	ATE	ED	

ATTACHMENT 9.7

Page 1 of

EMERGENCY CLASSIFICATION (CIRCLE) NOTIFICATION OF UNUSUAL EVENT ALERT SITE AREA EMERGENCY

GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	11.8
LOWER (MPH)	6.5
WIND DIR. UPPER (* FROM)	226
LOWER (° FROM)	193
AIR TEMPERATURE (°F)	61
PASQUILL STAB. FACTOR	D

AREA RADIATION MONITORS

R-1	CONTROL ROOM (MR/HR)	<1
R-2	CONT. AREA (MR/HR)	10
R-3	HP WORK AREA	<1
R-4	CHG. PUMP RM (MR/HR)	4.0
R-5	SPENT FUEL PIT (MR/HR)	0.3
R-6	SAMPLING ROOM (MR/HR)	0.5
R-7 ·	IN-CORE INST (MR/HR)	1.0
R-8	DRUM. RM. (MR/HR)	0.5
R-9	FAILED FUEL (MR/HR)	30.0

PROCESS RADIATION MONITORS

	CV VENT PART. (CPM)	35K
R-12	CV VENT GAS (CPM)	1.2K
R-14	PLT VNT GAS (CPM)	650
R-15	COND. AIR EJEC. (CPM)	38
R-16	CV FAN CW (CPM)	850
R-17	COMP. CW (CPM)	400
R-18	WASTE DISPOSAL (CPM)	6.5K
R-19A	S/G A BLOWDOWN (CPM)	1K
R-19B	S/G B BLOWDOWN (CPM)	1K
R-19C	S/G C BLOWDOWN (CPM)	1K
R-20	FUEL HDLG BASE (CPM)	17
R-21	FUEL HOLG UPPER (CPM)	35

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR)	<1
R-31A "A" MN STM (MR/HR)	<10
R-31B "B" MN STM (MR/HR)	<10
R-31C "C" MN STM (MR/HR)	<10
R-32A CV HI RG (R/HR)	<1
R-32B CV HI RG (R/HR)	<1
R-33 MON BLDG (MR/HR)	<10
R-34 "P" PLT VNT (cpm)	<1
R-34 " " PLT VNT (cpm)	<1
R-34 "NG" PLT VNT (cpm)	<1
R-35 PLT VNT GAS (MID) (MR/HR)	<1
6 PLT VNT GAS (H1) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	00S

CONTAINMENT STATUS
PRESSURE (PSIG)
TEMPERATURE (*F)

HYDROGEN CONC. (%)	.01
SUMP LEVEL (INCHES)	.2
RWST LEVEL (%)	91

PRIMARY SYSTEM

THEFT GIGTEN	
RCS PRESSURE (PSIG)	2116
PZR LEVEL (%)	47
TAVE (°F)	565
LOOP A TH (°F)	594
TC (°F)	- 547
ΔΤ	44
LOOP B TH (°F)	594
TC (°F)	547
ΔΤ	44
LOOP C TH (°F)	592
TC (°F)	548
ΔΤ	44
SUBCOOLING (°F)	54
CHRGNG FLOW (GPM)	0
LETDOWN FLOW (GPM)	36
REACTOR POWER	73
ACTIVITY:	
GROSS (uCi/ml)	1.60E-01
1 ¹³¹ (uCi/ml)	2.16E-03

SECONDARY SYSTEM

S/G A LEVWR (%)	56
PRESS (PSIG)	869
FEED (PPH)	2.3E6
STEAM (PPH)	2.3E6
ACT. (uCi/ml)	0
S/G B LEVWR (%)	56
PRESS (PSIG)	884
FEED (PPH)	2.3E6
STEAM (PPH)	2.3E6
ACT. (uCi/mi)	0
S/G C LEVWR (%)	56
PRESS (PSIG)	884
FEED (PPH)	2.3E6
STEAM (PPH)	2.3E6
ACT. (uCi/mi)	0

Date:	NOV.	13,	1989

Time: 16:45

Completed By:

.2

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) 0 = OPERATINGE = ENERGIZEDPRIMARY RCP CHG PUMP A N B O C O SIPUMP A A B N C A CS PUMP A A B Α RHR PUMP A A B A HVH 1 0 2 0 3 A 4 A SECONDARY FEED PUMP A O B O COND PUMP A ____O B __O AFW MOTOR A A. B O AFW STEAM _____A MSIV A ово со ELECTRICAL EDG A A B O N DS/DG OFFSITE N EMER. BUS E1 ____ E ___ E2 ____ Е FANS HVE 1A _____ A ___1B _____ HVE 2A _____ 0 2B ____ Α HVE 5A _____ 5B ____ 0 HVE 15 O 15A Α

LEGEND:

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

ATTACHMENT 9.7

Page 1 of

EMERGENCY	CLASS	SIFICATIO	N (CIRCLE)
NOTIFICAT	TION OF	UNUSUAL	EVENT
ALERT			

SITE AREA EMERGENCY GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

.

WIND SPEED UPPER (MPH)	12.2	
LOWER (MPH)	7.1	
WIND DIR. UPPER (* FROM)	228	
LOWER (* FROM)	201 .	
AIR TEMPERATURE (°F) 61		
PASQUILL STAB. FACTOR	D	

AREA RADIATION MONITORS

R-1	CONTROL ROOM (MR/HR)	<1
R-2	CONT. AREA (MR/HR)	10
R-3	HP WORK AREA	<1
R-4	CHG. PUMP RM (MR/HR)	4.0
R-5	SPENT FUEL PIT (MR/HR)	0.3
R-6	SAMPLING ROOM (MR/HR)	0.5
R-7	IN-CORE INST (MR/HR)	1.0
R-8	DRUM. RM. (MR/HR)	0.5
R-9	FAILED FUEL (MR/HR)	30.0

PROCESS RADIATION MONITORS

11	CV VENT PART. (CPM)	35K
R-12	CV VENT GAS (CPM)	1.2K
R-14	PLT VNT GAS (CFM)	650
R-15	COND. AIR EJEC. (CPM)	38
R-16	CV FAN CW (CPM)	850
R-17	COMP. CW (CPM)	400
R-18	WASTE DISPOSAL (CPM)	6.5K
R-19A	S/G A BLOWDOWN (CPM)	1K
R-19B	S/G B BLOWDOWN ((PM)	1K
R-19C	S/G C BLOWDOWN (CPM)	1K
R-20	FUEL HDLG BASE (CPM)	17
R-21	FUEL HOLG UPPER (CPM)	35

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR) <1 R-31A "A" MN STM (MR/HR) <10 R-31B "B" MN STM (MR/HR) <10 R-31C "C" MN STM (MR/HR) <10 R-31C "C" MN STM (MR/HR) <10 R-31C "C" MN STM (MR/HR) <10 R-32A CV HI RG (R/HR) <1 R-32B CV HI RG (R/HR) <1 R-33 MON BLDG (MR/HR) <10 R-34 "P" PLT VNT (cpm) <1 R-34 "I" PLT VNT (cpm) <1 R-35 PLT VNT GAS (MID) (MR/HR) <1 B-35 PLT VNT GAS (MID) (MR/HR) 14 R-37 CONDENSATE POLISHER (CPM) OOS		
R-31B "B" MN STM (MR/HR) <10	R-30 F.H. BASE HI RG (MR/HR)	<1
R-31C "C" MN STM (MR/HR) <10	R-31A "A" MN STM (MR/HR)	<10
R-32A CV HI RG (R/HR) <1	R-31B "B" MN STM (MR/HR)	<10
R-32B CV HI RG (R/HR) <1	R-31C "C" MN STM (MR/HR)	<10
R-33 MON BLDG (MR/HR) <10	R-32A CV HI RG (R/HR)	<1
R-34 "P" PLT VNT (cpm) <1	R-32B CV HI RG (R/HR)	<1
R-34 "!" PLT VNT (cpm) <1	R-33 MON BLDG (MR/HR)	<10
R-34 "NG" PLT VNT (cpm) <1 R-35 PLT VNT GAS (MID) (MR/HR) <1	R-34 "P" PLT VNT (cpm)	<1
R-35 PLT VNT GAS (MID) (MR/出社) <1 36 PLT VNT GAS (H1) (MR/HR) 14	R-34 "I" PLT VNT (cpm)	<1
36 PLT VNT GAS (H1) (MR/HR) 14	R-34 "NG" PLT VNT (cpm)	<1
	R-35 PLT VNT GAS (MID) (MR/HR)	<1
R-37 CONDENSATE POLISHER (CPM) 005	36 PLT VNT GAS (HI) (MR/HR)	14
	R-37 CONDENSATE POLISHER (CPM)	00S

CONTAINMENT STATUS

.

PRESSURE (PSIG)	.2
TEMPERATURE (°F)	122
HYDROGEN CONC. (%)	.01
SUMP LEVEL (INCHES)	.2
RWST LEVEL (%)	91

PRIMARY SYSTEM

RCS PRESSURE (PSIG)	2116
PZR LEVEL (%)	. 47
TAVE (°F)	565
LOOP A TH (°F)	594
TC (°F)	547
Δτ	44
LOOP B TH (°F)	594
TC (°F)	547
ΔΤ	44
LOOP C TH (°F)	592
TC (°F)	548
Δτ	44
SUBCOOLING (°F)	54
CHRGNG FLOW (GPM)	0
LETDOWN FLOW (GPM)	36
REACTOR POWER	73
ACTIVITY:	
GROSS (uCi/ml)	1.60E-01
1 ³¹ (uCi/ml)	2.16E-03

SECONDARY SYSTEM

S/G A LEVWR (%)	56
PRESS (PSIG)	869
FEED (PPH)	2.3E6
STEAM (PPH)	2.3E6
ACT. (uCi/ml)	0
S/G B LEVWR (%)	56
PRESS (PSIG)	884
FEED (PPH)	2.3E6
STEAM (PPH)	2.3E6
ACT. (uCi/ml)	0
S/G C LEVWR (%)	56
PRESS (PSIG)	884
FEED (PPH)	2.3E6
STEAM (PPH)	2.3E6
ACT. (uCi/ml)	0

Date: NOV. 13, 1989

Time: <u>17:00</u>

Completed By:

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 C)				
CHG PUMP A N B O C C					
SI PUMP A A B N C A					
CS PUMP A A B A					
RHR PUMP A A B A					
HVH 1 0 2 0 3 0 4 0)				
SECONDARY					
FEED PUMP A O B O					
COND PUMP A O B O					
AFW MOTOR A A B O					
AFW STEAM A					
MSIV A O B O C O)				
ELECTRICAL					
EDG A A B O					
DS/DG N					
OFFSITE N					
EMER. BUS E1 E E2 E					
FANS					
HVE IA A IB A					
HVE 2A 0 2B A					
HVE 5A A 5B 0					
HVE 15 0 15A A					
	<u> </u>				

LEGEND:

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

.

ATTACHMENT 9.7 Page 1 of

EMERGENCY CLASSIFICATION (CIRCLE)

NOTIFICATION OF UNUSUAL EVENT ALERT SITE AREA EMERGENCY GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	14.9
LOWER (MPH)	9.1
WIND DIR. UPPER (* FROM)	234
LOWER (* FROM)	215
AIR TEMPERATURE (°F)	60
PASQUILL STAB. FACTOR	D

AREA RADIATION MONITORS

R-1	CONTROL ROOM (MR/HR)	<1
R-2	CONT. AREA (MR/HR)	10
R-3	HP WORK AREA	<1
R-4	CHG. PUMP RM (MR/HR)	4.0
R-5	SPENT FUEL PIT (MR/HR)	0.3
R-6	SAMPLING ROOM (MR/HR)	0.5
R-7	IN-CORE INST (MR/HR)	1.0
R-8	DRUM. RM. (MR/HR)	0.5
R-9	FAILED FUEL (MR/HR)	30.0

PROCESS RADIATION MONITORS

11	CV VENT PART. (CPM)	35K
R-12	CV VENT GAS (CPM)	1.2K
R-14	PLT VNT GAS (CPM)	650
R-15	COND. AIR EJEC. (CPM)	38
R-16	CV FAN CW (CPM)	850
R-17	COMP. CW (CPM)	400
R-18	WASTE DISPOSAL (CPM)	6.5K
R-19A	S/G A BLOWDOWN (CPM)	<u>1K</u>
R-198	S/G B BLOWDOWN (CPM)	1K
R-19C	S/G C BLOWDOWN (CPM)	1K
R-20	FUEL HDLG BASE (CPM)	17
R-21	FUEL HDLG UPPER (CPM)	35

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR)	<1
R-31A "A" MN STM (MR/HR)	<10
R-31B "B" MN STM (MR/HR)	<10
R-31C "C" MN STM (MR/HR)	<10
R-32A CV HI RG (R/HR)	<1
R-32B CV HI RG (R/HR)	<1
R-33 MON BLDG (MR/HR)	<10
R-34 "P" PLT VNT (cpm)	<1
R-34 "I" PLT VNT (cpm)	<1
R-34 "NG" PLT VNT (cpm)	<1
R-35 PLT VNT GAS (MID) (MR/HR)	<1
B6 PLT VNT GAS (H1) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	005

CONTAINMENT STATUS	
PRESSURE (PSIG)	.2
TEMPERATURE (°F)	. 122
HYDROGEN CONC. (%)	.0
SUMP LEVEL (INCHES)	.2
RWST LEVEL (%)	91

PRIMARY SYSTEM

RCS PRESSURE (PSIG)	2116
PZR LEVEL (%)	47
TAVE (°F)	565
LOOP A TH (°F)	594
TC (°F)	547
ΔΤ	44
LOOP B TH (*F)	594
TC (°F)	547
ΔΤ	44
LOOP C TH (°F)	592
TC (°F)	548
ΔΤ	44
SUBCOOLING (°F)	54
CHRGNG FLOW (GPM)	0
LETDOWN FLOW (GPM)	36
REACTOR POWER	73
ACTIVITY:	
GROSS (uCi/ml)	1.60E-01
1 ³¹ (uCi/ml)	2.16E-03

SECONDARY SYSTEM

S/G A LEVWR (%)	56
PRESS (PSIG)	869
FEED (PPH)	2.3E6
STEAM (PPH)	2.3E6
ACT. (uCi/ml)	0
S/G B LEVWR (%)	56
PRESS (PSIG)	884
FEED (PPH)	2.3E6
STEAM (PPH)	2.3E6
ACT. (uCi/ml)	0
S/G C LEVWR (%)	56
PRESS (PSIG)	884
FEED (PPH)	2.3E6
STEAM (PPH)	2.3E6
ACT. (uCi/ml)	0

Date:	NOV.	13,	1989	
Time:	17:15	5		

Completed By:

.2

.01 .2

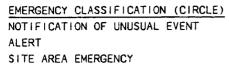
ENGINEERED SAFETY FEATURES
SI ACTUATED: TIME
RESET: TIME
CS ACTUATED: TIME
RESET: TIME
CONT. ISO. A ACTUATED: TIME
RESET: TIME
CONT. ISO. B ACTUATED: TIME
RESET: TIME
SPRAY ADD TANK LEVEL (%) 67
SI COLD-LEG FLOW (GPM)
SI HOT-LEG INJECT START
EQUIPMENT STATUS
N = NOT AVAILABLE
A = AVAILABLE (NOT OPERATING)
O = OPERATING
E = ENERGIZED
PRIMARY
RCP A <u>0</u> B <u>0</u> C <u>0</u>
CHG PUMP A N B O C O
SIPUMP A A B N C A
CS PUMP A A B A
RHR PUMP A A B A
HVH 1 0 2 0 3 0 4 0
SECONDARY
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 Â B O
OFFSITE N
EMER. BUS E1 E E2 E
FANS
HVE 1A A 1B A
HVE 2A 0 2B A
HVE 5A 5B 0
HVE 15 0 15A A

LEGEND: OSH = OFF SCALE HIGH

0.511	-	011	50/	16.6	mon
OSL	=	OFF	SC/	٩LE	LOW
00S	=	OUT	0F	SEF	RVICE
ISOL	=	150	ATE	ED	

ATTACHMENT 9.7 Page 1 of

SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS



GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	15.1
LOWER (MPH)	9.4
WIND DIR. UPPER (* FROM)	237
LOWER (* FROM)	215
AIR TEMPERATURE (°F)	60
PASQUILL STAB. FACTOR	D

AREA RADIATION MONITORS

R-1	CONTROL ROOM (MR/HR)	<1
R-2	CONT. AREA (MR/HR)	10
R-3	HP WORK AREA	<1
R-4	CHG. PUMP RM (MR/HR)	4.0
R-5	SPENT FUEL PIT (MR/HR)	0.3
R-6	SAMPLING ROOM (MR/HR)	0.5
R-7	IN-CORE INST (MR/HR)	1.0
R-8	DRUM. RM. (MR/HR)	0.5
R-9	FAILED FUEL (MR/HR)	30.0

PROCESS RADIATION MONITORS

	CV VENT PART. (CPM)	35K
R-12	CV VENT GAS (CPM)	1.2K
R-14	PLT VNT GAS (CPM)	650
R-15	COND. AIR EJEC. (CPM)	38
R-16	CV FAN CW (CPM)	850
R-17	COMP. CW (CPM)	400
R-18	WASTE DISPOSAL (CPM)	6.5K
R-19A	S/G A BLOWDOWN (CPM)	1K
R-19B	S/G B BLOWDOWN (CPM)	<u>1K</u>
R-19C	S/G C BLOWDOWN (CPM)	1K
R-20	FUEL HDLG BASE (CPM)	17
R-21	FUEL HDLG UPPER (CPM)	35

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR)	<1
R-31A "A" MN STM (MR/HR)	<10
R-31B "B" MN STM (MR/HR)	<10
R-31C "C" MN STM (MR/HR)	<10
R-32A CV HI RG (R/HR)	<1
R-32B CV HI RG (R/HR)	<1
R-33 MON BLDG (MR/HR)	<10
R-34 "P" PLT VNT (cpm)	<1
R-34 "I" PLT VNT (cpm)	<1
R-34 "NG" PLT VNT (cpm)	<1
R-35 PLT VNT GAS (MID) (MR/HR)	<1
6 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	005

CONTAINMENT STATUS	
PRESSURE (PSIG)	.2
TEMPERATURE (°F)	122
HYDROGEN CONC. (%)	.01
SUMP LEVEL (INCHES)	.2
RWST LEVEL (%)	91

PRIMARY SYSTEM

PZR LEVEL (%) 47	
TAVE (°F) 565	
LOOP A TH (°F) 594	
TC (°F) 547	
ΔΤ 44	
LOOP B TH (°F) 594	
TC (°F) 547	
ΔΤ 44	
LOOP C TH (°F) 592	
TC (°F)548	
ΔΤ 44	
SUBCOOLING (°F) 54	
CHRGNG FLOW (GPM) 0	
LETDOWN FLOW (GPM) 36	_
REACTOR POWER 73	
ACTIVITY:	
GROSS (uCi/ml) 1.60E-0	1
1 ¹³¹ (uCi/ml)2.16E-0	3

SECONDARY SYSTEM

S/G A LEVWR (%)	56
PRESS (PSIG)	869
FEED (PPH)	2.3E6
STEAM (PPH)	2.3E6
ACT. (uCi/ml)	0
S/G B LEVWR (%)	56
PRESS (PSIG)	884
FEED (PPH)	2.3E6
STEAM (PPH)	2.3E6
ACT. (uCi/ml)	0
S/G C LEVWR (%)	56
PRESS (PSIG)	884
FEED (PPH)	2.3E6
STEAM (PPH)	2.3E6
ACT. (uCi/ml)	0

Date: <u>NOV. 13, 1989</u>

Time: 17:30

Completed By:

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 0 B 0 C 0
CHG PUMP A N B O C O
SI PUMP A A B N C A
CS PUMP A A B A
RHR PUMP A A B A
HVH 1 0 2 0 3 0 4 0
SECONDARY
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 O
DS/DG N
OFFSITE N
EMER. BUS E1 E E2 E
FANS
HVE 1A A 1B A
HVE 2A O 2B A
HVE 5A A 5B O
HVE 15 0 15A A

LEGEND:

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

ATTACHMENT 9.7 Page 1 of

.

EMERGENCY	CLASSIFICATION	(CIRCLE)
	and the second	

NOTIFICATION OF UNUSUAL EVENT ALERT SITE AREA EMERGENCY GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	16.7
LOWER (MPH)	10.9
WIND DIR. UPPER (* FROM)	236
LOWER (° FROM)	213
AIR TEMPERATURE (°F)	59
PASQUILL STAB. FACTOR	D

AREA RADIATION MONITORS

R-1	CONTROL ROOM (MR/HR)	<1
R-2	CONT. AREA (MR/HR)	10
R-3	HP WORK AREA	<1
R-4	CHG. PUMP RM (MR/HR)	4.0
R-5	SPENT FUEL PIT (MR/HR)	0.3
R-6	SAMPLING ROOM (MR/HR)	0.5
R-7	IN-CORE INST (MR/HR)	1.0
R-8	DRUM. RM. (MR/HR)	0.5
R-9	FAILED FUEL (MR/HR)	30.0

PROCESS RADIATION MONITORS

. 1	CV VENT PART. (CPM)	35K
R-12	CV VENT GAS (CPM)	1.2K
R-14	PLT_VNT GAS (CPM)	650
.R-15	COND. AIR EJEC. (CPM)	38
R-16	CV FAN CW (CPM)	850
R-17	COMP. CW (CPM)	400
`R-18	WASTE DISPOSAL (CPM)	6.5K
R-19A	S/G A BLOWDOWN (CPM)	1K
R-198	S/G B BLOWDOWN (CPM)	1K
R-19C	S/G C BLOWDOWN (CPM)	<u>1K</u>
R-20	FUEL HDLG BASE (CPM)	17
R-21	FUEL HDLG UPPER (CPM)	35

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR)	<1
R-31A "A" MN STM (MR/HR)	<10
R-31B "B" MN STM (MR/HR)	<10
R-31C "C" MN STM (MR/HR)	<10
R-32A CV HI RG (R/HR)	<1
R-32B CV HI RG (R/HR)	<1
R-33 MON BLDG (MR/HR)	<10
R-34 "P" PLT VNT (cpm)	<1
R-34 "I" PLT VNT (cpm)	<1
R-34 "NG" PLT VNT (cpm)	<1
35 PLT VNT GAS (MID) (MR/HR)	<1
6 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	005

CONTAINMENT STATUS

.

PRESSURE (PSIG)	.2
TEMPERATURE (°F)	122
HYDROGEN CONC. (%)	.01
SUMP LEVEL (INCHES)	.2
RWST LEVEL (%)	91

PRIMARY SYSTEM

RCS PRESSURE (PSIG)	2116
PZR LEVEL (%)	47
TAVE (°F)	565
LOOP A TH (°F)	594
TC (°F)	547
ΔΤ	44
LOOP B TH (°F)	594
TC (°F)	547
ΔΤ	44
LOOP C TH (°F)	592
TC (°F)	548
ΔΤ	44
SUBCOOLING (°F)	54
CHRGNG FLOW (GPM)	0
LETDOWN FLOW (GPM)	36
REACTOR POWER	73
ACTIVITY:	
GROSS (uCi/ml)	1.60E-01
1 ³¹ (uCi/ml)	2.16E-03

SECONDARY SYSTEM

S/G A LEVWR (%)	56
PRESS (PSIG)	869
FEED (PPH)	2.3E6
STEAM (PPH)	2.3E6
ACT. (uCi/ml)	0
S/G B LEVWR (%)	56
PRESS (PSIG)	884
FEED (PPH)	2.3E6
STEAM (PPH)	2.3E6
ACT. (uCi/ml)	0
S/G C LEVWR (%)	56
PRESS (PSIG)	884
FEED (PPH)	2.3E6
STEAM (PPH)	2.3E6
ACT. (uCi/ml)	0

Date:	NOV. 13, 1989
Time:	17:45

Completed By:

ENGINEERED SAFETY FEATORESSI ACTUATED: TIMERESET: TIMECS ACTUATED: TIMERESET: TIMECONT. ISO. A ACTUATED: TIMERESET: TIMECONT. ISO. B ACTUATED: TIMERESET: TIMESPRAY ADD TANK LEVEL $($)$ 67SI COLD-LEG FLOW (GPM)SI HOT-LEG INJECT STARTSI HOT-LEG INJECT START67SI COLD-LEG FLOW (GPM)SI HOT-LEG INJECT STARTEQUIPMENT STATUS N = NOT AVAILABLE67A = AVAILABLE (NOT OPERATING)0 = OPERATINGE = ENERGIZEDPRIMARY RCPRCPABOC0SI PUMPAAA BARHR PUMPABA RHR PUMPABAFW MOTOR AABAFW STEAMAAFW STEAMABOS /DGNOFFSITEN<		
RESET:TIMECSACTUATED:TIMERESET:TIMECONT.ISO.A ACTUATED:TIMERESET:CONT.ISO.B ACTUATED:TIMERESET:CONT.ISO.B ACTUATED:TIMERESET:TIMERESET:SPRAY ADD TANK LEVEL (\$)67SICOLD-LEG FLOW (GPM)SIHOT-LEG INJECT STARTEQUIPMENT STATUSN = NOT AVAILABLEA = AVAILABLE (NOT OPERATING)C = OPERATINGE = ENERGIZEDPRIMARYRCPACBOC OCHG PUMPAABOC OSI PUMPAABOC OC PUMPAABACND PUMPABOCOND PUMP AABAAFW STEAMAAFW STEAMAASIVABOCOS/DGNOFFSITENEMER.BUS E1EEZEFANSHVE 1AAAHVE 5AASBO	ENGINEERED SAFETY FEATURES	
CS ACTUATED: TIME RESET: TIME CONT. ISO. A ACTUATED: TIME RESET: TIME CONT. ISO. B ACTUATED: TIME RESET: TIME SPRAY ADD TANK LEVEL (\pounds) 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 RTR STEAM A MSIV A O B O C O ELECTRICAL EDG A A B O OS/DG N OFFSITE N EMER. BUS E1 E E2 E FANS HVE 1A A 1B A HVE 1A A 5B O		
RESET: TIMECONT. ISO. A ACTUATED: TIMERESET: TIMECONT. ISO. B ACTUATED: TIMERESET: TIMESPRAY ADD TANK LEVEL (\$)67SI COLD-LEG FLOW (GPM)SI HOT-LEG INJECT STARTEQUIPMENT STATUS N = NOT AVAILABLE A = AVAILABLE (NOT OPERATING) O = OPERATING E = ENERGIZEDPRIMARYRCPAOBOCOCOND PUMP AABOCOND PUMP AABOCOND PUMP AABOCOND PUMP AOBOCOND PUMP AOBOOCOND PUMP AOBOCOND PUMP AOBOCOND PUMP AOBOCOND PUMP AOB <td c<="" td=""><td></td></td>	<td></td>	
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 = OUIPMENT STATUSN = NOT AVAILABLE A = AVAILABLE (NOT OPERATING) O = OPERATING E = ENERGIZED PRIMARY RCP A O B O C O CHG PUMP A N B O C O SI PUMP A A B A RHR VUMP A O B O SECONDARY FEED PUMP A O B O COND PUMP A O B O SECONDARY FEED FUMP A A B A AFW STEAM A MSIV A O B O COND PUMP A O B O CO CO ELECTRICAL EDG A A B O DS/DG N OFFSITE N EMER. BUS E1 E FANS HVE 1A A 1B A HVE 2A O 2B A HVE 5A A SB O		
RESET: TIMERESET: TIMERESET: TIMERESET: TIMESPRAY ADD TANK LEVEL (\mathfrak{X}) 67SI COLD-LEG FLOW (GPM)SI HOT-LEG INJECT STARTEQUIPMENT STATUS N = NOT AVAILABLEA N = NOT AVAILABLEA = AVAILABLE (NOT OPERATING)O = OPERATINGE = ENERGIZEDPRIMARYRCP A O B O C OC OCHG PUMP A N B O C OSI PUMP A A B ARKR PUMP A A B ARRR PUMP A A B AA O B OCOND AMP A A B AA O B OCOND PUMP A O B OAFW MOTOR A A B AA B OO C OELECTRICALEDG A A B ODS/DGOO 2B AHVE 1A A 1B AHVE 2A O 2B AHVE 5A A 5B O		
CONT. ISO. B ACTUATED: TIME RESET: TIME RESET: TIME SPRAY ADD TANK LEVEL (\pounds) 67 SI COLD-LEG FLOW (GPM) SI HOT-LEG INJECT START <u>EQUIPMENT STATUS</u> N = NOT AVAILABLE A = AVAILABLE (NOT OPERATING) O = OPERATING E = ENERGIZED PRIMARY RCP A O B O C O CHG PUMP A N B O C O CHG PUMP A A B A RHR PUMP A A B A RHR PUMP A A B A HVH 1 O 2 O 3 O 4 O SECONDARY 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 CO ELECTRICAL EDG A A B O OFFSITE N EMER. BUS E1 E E2 E FANS HVE 1A A 1B A HVE 2A O 2B A HVE 5A A 5B O		
RESET: TIME SPRAY ADD TANK LEVEL (\$) 67 SI COLD-LEG FLOW (GPM) SI HOT-LEG INJECT START SI HOT-LEG INJECT START		
SPRAY ADD TANK LEVEL (\$) 67 SI COLD-LEG FLOW (GPM)		
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 HG PUMP A N = NOT A B O C O B O C RCP A O B O CHG PUMP A A B A CS PUMP A A B A RHR PUMP A A B A RHR PUMP A A B A SECONDARY FEED PUMP A O B O FEED PUMP A O B O O COND PUMP A O B O O EDG A A B O O DS/DG N O B O O DS/DG N O C		
SI HOT-LEG INJECT STARTEQUIPMENT STATUS N = NOT AVAILABLEA = AVAILABLE (NOT OPERATING)O = OPERATINGE = ENERGIZEDPRIMARYRCPARCPAABOC GSI PUMPAABOCOSI PUMPAABACS PUMPAABARHR PUMPAABAHVH 1O2OSECONDARYFEED PUMPFEED PUMPAOBOCOND PUMP AOBOCOND PUMP AABOCOND PUMP AOBOCOND PUMP AOBOCOND PUMP AOBOCOND PUMP ACOBOCOND PUMP AOBOCOND PUMP AOBOCOELECTRICALEDGAABAAMER. BUS E1EE2FANSHVE 1AAHVE 5AASBO		
EQUIPMENT STATUS N = NOT AVAILABLEA = AVAILABLE (NOT OPERATING)O = OPERATINGE = ENERGIZEDPRIMARYRCPARCPAOBOCOSI PUMPAABAC PUMPAABAC S PUMPAABARHR PUMPAABAHVH 1O2OSECONDARYFEED PUMPFEED PUMPAOBOCOND PUMP AOBOAFW MOTOR AABAMSIVAOBOCOELECTRICALEDGAABODS/DGNOFFSITENEMER. BUS E1EE2EANSHVE 1AAHVE 1AAASBO	SI COLD-LEG FLOW (GPM)	
N = NOT AVAILABLEA = AVAILABLE (NOT OPERATING)O = OPERATINGE = ENERGIZEDPRIMARYRCPAOBOC OCHG PUMPAABOCOSI PUMPAABNC S PUMPAABAC S PUMPAARCPAABAC S PUMPAABAC S PUMPAABAC S PUMPAABAHVH 1O2O3O4OSECONDARYFEED PUMP AOBOCOND PUMP AOBOCOGNOFFSITENEMER. BUS E1EEE2E <td>SI HOT-LEG INJECT START</td>	SI HOT-LEG INJECT START	
N = NOT AVAILABLEA = AVAILABLE (NOT OPERATING)O = OPERATINGE = ENERGIZEDPRIMARYRCPAOBOC OCHG PUMPAABOCOSI PUMPAABNC S PUMPAABAC S PUMPAARCPAABAC S PUMPAABAC S PUMPAABAC S PUMPAABAHVH 1O2O3O4OSECONDARYFEED PUMP AOBOCOND PUMP AOBOCOGNOFFSITENEMER. BUS E1EEE2E <td></td>		
A = AVAILABLE (NOT OPERATING)O = OPERATINGE = ENERGIZEDPRIMARYRCPAOBOC GOSI PUMPAABNCCS PUMPAABACS PUMPAABACS PUMPAABACS PUMPAABACNDPAABOCOND PUMPAOBOCOND PUMP AABAFW MOTORAAA BAAFW STEAMAMSIVAOBOCOGNOFFSITENEMER. BUS E1EE2EANSHVE 1AAHVE 1AAHVE 5AASBO	EQUIPMENT STATUS	
0 = OPERATING E = ENERGIZED PRIMARY RCP A 0 B 0 C 0 CHG PUMP A N B 0 C 0 SI PUMP A A B A CS PUMP A A B A RHR PUMP A A B A HVH 1 0 2 0 3 0 4 0 SECONDARY FEED PUMP A 0 B 0 COND PUMP A 0 B 0 COND PUMP A 0 B 0 AFW MOTOR A A B A AFW STEAM A MSIV A 0 B 0 C 0 ELECTRICAL EDG A A B 0 DS/DG N OFFSITE N EMER. BUS E1 E E2 E FANS HVE 1A A 1B A HVE 2A 0 2B A HVE 5A A 5B 0	N = NOT AVAILABLE	
E = ENERGIZEDPRIMARYRCPAOBOCOCHG PUMPANBOCOSI PUMPAABACACS PUMPAABAARHR PUMPAABAHVH1O2O3O4OSECONDARYFEEDPUMPAOBOCOCONDPUMPAOBOAAAFWMOTORAABAAAFW STEAMABOCOELECTRICALEDGAABODS/DGNOFFSITENEMER. BUS E1EE2EFANSHVEIAA1BAHVE1AA5BOO	A = AVAILABLE (NOT OPERATING)	
PRIMARYRCPAOBOCOCHG PUMPANBOCOSI PUMPAABACACS PUMPAABAARHR PUMPAABAHVH 1O2O3O4SECONDARYFEED PUMPAOBOCOND PUMPAOBOAFW MOTORAABAAFW STEAMABOCDS/DGNOBOCCFS1TENEMER. BUS E1EE2EFANSHVE 1AA1BAHVE 2AO2BAHVE 5AA5BO	0 = OPERATING	
RCPAOBOCOCHG PUMPANBOCOSI PUMPAABNCACS PUMPAABAARHR PUMPAABAHVH 1O2O3O4OSECONDARYFEED PUMPAOBOCOND PUMPAOBOAFW MOTORAABAAFW STEAMABOELECTRICALEDGAAEMGRBUS E1EE2EFANSHVE 1AA1BAHVE 1AA5BO	E = ENERGIZED	
CHG PUMPANBOCOSI PUMPAABNCACS PUMPAABARHR PUMPAABAHVH1O2O3O4HVH1O2O3O4OSECONDARYFEEDPUMPAOBOCCONDPUMPAOBOAAFWMOTORAABAAFW STEAMABOCOELECTRICALEDGAABODS/DGNOFFSITENEMER. BUS E1EE2EFANSHVE1AA1BAHVE1AA5BOO	PRIMARY	
CHG PUMPANBOCOSI PUMPAABNCACS PUMPAABARHR PUMPAABAHVH1O2O3O4HVH1O2O3O4OSECONDARYFEEDPUMPAOBOOCONDPUMPAOBOAAFWMOTORAABAAFW STEAMABOCOELECTRICALEDGAABODS/DGNOFFSITENEMER. BUS E1EE2EFANSHVE1AA1BAHVE1AA5BOO	RCP A O B O C O	
SI PUMPAABNCACS PUMPAABARHR PUMPAABAHVH1O2O3O4OSECONDARYFEED PUMPAOBOCOCOND PUMPAOBOAFWAAFWMOTORAABAAAFW STEAMABOCOELECTRICALEDGAABODS/DGNOFFSITENEEMER.BUS E1EE2EFANSHVE1AA1BAHVE 2AO2BAHVEHVE 5AA5BOI		
CS PUMP A A B A RHR PUMP A A B A HVH 1 O 2 O 3 O 4 O SECONDARY FEED PUMP A O B O Condensity Condensity FEED PUMP A O B O Condensity C		
RHR PUMP A A B A HVH 1 0 2 0 3 0 4 0 SECONDARY FEED PUMP A 0 B 0 0 0 0 FEED PUMP A 0 B 0 0 0 0 0 COND PUMP A 0 B 0 0 0 0 0 AFW MOTOR A A B A 0 0 0 0 0 AFW STEAM A A B O 0		
HVH 1 0 2 0 3 0 4 0 SECONDARY FEED PUMP A 0 B 0 0 0 0 FEED PUMP A 0 B 0 0 0 0 0 0 COND PUMP A 0 B 0 0 0 0 0 0 AFW MOTOR A A B A A 0 B 0 0 AFW STEAM A B 0 C 0		
SECONDARY FEED PUMP A 0 B 0 COND PUMP A 0 B 0 AFW MOTOR A A B A AFW STEAM A B 0 AFW STEAM A B 0 MSIV A 0 B 0 C 0 ELECTRICAL EDG A A B 0 0 DS/DG N 0 O C 0 0 OFFSITE N EEEE E2 E EANS HVE 1A A 1B A A HVE 1A A 5B 0 0		
FEED PUMP A O B O COND PUMP A O B O AFW MOTOR A A B A AFW STEAM A A MSIV A O B O EDG A A B O DS/DG N O D O OFFSITE N E E2 E FANS HVE 1A A 1B A HVE 2A O 2B A HVE 5A A 5B O		
COND PUMP A O B O AFW MOTOR A A B A AFW STEAM A A MSIV A O B O C O ELECTRICAL EDG A A B O C O EDG A A B O C O DS/DG N O O For the second secon		
AFW MOTOR A A B A AFW STEAM A B O C O MSIV A O B O C O ELECTRICAL EDG A A B O O EDG A A B O O O OS/DG N O O O D OFFSITE N E E2 E FANS HVE 1A A 1B A HVE 2A O 2B A HVE 5A A		
AFW STEAM A MSIV A O B O C O ELECTRICAL EDG A A B O O EDG A A B O O O DS/DG N OFFSITE N O O O EMER. BUS E1 E E2 E FANS HVE 1A A 1B A HVE 2A O 2B A HVE 5A A 5B O		
MSIV A O B O C O ELECTRICAL EDG A A B O DS/DG N OFFSITE N EMER. BUS E1 E E2 FANS HVE 1A A 1B HVE 2A O 2B A 5B O		
ELECTRICAL EDG A A B O DS/DG N OFFSITE N EMER. BUS E1 E E2 E FANS HVE 1A A 1B A HVE 2A O 2B A HVE 5A A 5B O		
EDG A A B O DS/DG N		
DS/DG N OFFSITE N EMER. BUS E1 E E2 FANS HVE 1A A 1B HVE 2A O 2B HVE 5A A 5B		
OFFSITE N EMER. BUS E1 E E2 E FANS HVE 1A A 1B A HVE 2A O 2B A A HVE 5A A 5B O O		
EMER. BUS E1 E E2 E FANS HVE 1A A 1B A HVE 2A O 2B A HVE 5A A 5B O		
FANS HVE 1A A 1B A HVE 2A O 2B A HVE 5A A 5B O		
HVE IA A IB A HVE 2A O 2B A HVE 5A A 5B O		
HVE 2A O 2B A HVE 5A A 5B O		
HVE 5A A 5B O		
HVE 15 0 15A A		
	HVE 15 0 15A A	

LEGEND:

	_				
OSH	=	OFF	SC/	ALE	HIGH
OSL	=	OFF	SC/	٩LE	LO₩
00S	=	OUT	OF	SEF	RVICE
I SOL	=	I SOL	ATE	ED	

ATTACHMENT 9.7 Page 1 of

EMERGENCY CLASSIFICATION (CIRCLE) NOTIFICATION OF UNUSUAL EVENT ALERT SITE AREA EMERGENCY GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	17.3
LOWER (MPH)	10.9
WIND DIR. UPPER (* FROM)	237
LOWER (° FROM)	213
AIR TEMPERATURE (°F)	59
PASQUILL STAB. FACTOR	D

AREA RADIATION MONITORS

R-1	CONTROL ROOM (MR/HR)	<1
R-2	CONT. AREA (MR/HR)	10
R-3	HP WORK AREA	<1
R-4	CHG. PUMP RM (MR/HR)	4.0
R-5	SPENT FUEL PIT (MR/HR)	0.3
R-6	SAMPLING ROOM (MR/HR)	0.5
R-7	IN-CORE INST (MR/HR)	1.0
R-8	DRUM. RM. (MR/HR)	0.5
R-9	FAILED FUEL (MR/HR)	30.0

PROCESS RADIATION MONITORS

11	CV VENT PART. (CPM)	35K
R-12	CV VENT GAS (CPM)	1.2K
R-14	PLT VNT GAS (CPM)	650
R-15	COND. AIR EJEC. (CPM)	38
R-16	CV FAN CW (CPM)	850
R-17	COMP. CW (CPM)	400
R-18	WASTE DISPOSAL (CPM)	6.5K
R-19A	S/G A BLOWDOWN (CPM)	1K
R-198	S/G B BLOWDOWN (CPM)	1K
R-19C	S/G C BLOWDOWN (CPM)	1K
R-20	FUEL HDLG BASE (CPM)	17
R-21	FUEL HDLG UPPER (CPM)	35

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR)	<1
R-31A "A" MN STM (MR/HR)	<10
R-31B "B" MN STM (MR/HR)	<10
R-31C "C" MN STM (MR/HR)	<10
R-32A CV HI RG (R/HR)	<1
R-32B CV HI RG (R/HR)	<1
R-33 MON BLDG (MR/HR)	<10
R-34 "P" PLT VNT (cpm)	<1
R-34 " " PLT VNT (cpm)	<1
R-34 "NG" PLT VNT (cpm)	<1
R-35 PLT VNT GAS (MID) (MR/HR)	<1
36 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	005

CONTAINMENT STATUS

PRESSURE (PSIG)	.2
TEMPERATURE (°F)	122
HYDROGEN CONC. (%)	.01
SUMP LEVEL (INCHES)	.2
RWST LEVEL (%)	91

PRIMARY SYSTEM

TRIBURY OF OTOTEL	
RCS PRESSURE (PSIG)	2116
PZR LEVEL (%)	47
TAVE (°F)	565
LOOP A TH (°F)	594
TC (°F)	547
ΔΤ	44
LOOP B TH (°F)	594
TC (°F)	
ΔΤ	
LOOP C TH (°F)	
TC (°F)	548
ΔΤ	44
SUBCOOLING (°F)	54
CHRGNG FLOW (GPM)	0
LETDOWN FLOW (GPM)	· 36
REACTOR POWER	73
ACTIVITY:	
GROSS (uCi/ml)	1.60E-01
¹³¹ (uCi/ml)	2.16E-03

SECONDARY SYSTEM

S/G A LEVWR (%)	56
PRESS (PSIG)	869
FEED (PPH)	2.3E6
STEAM (PPH)	2.3E6
ACT. (uCi/ml)	0
S/G B LEVWR (%)	56
PRESS (PSIG)	884
FEED (PPH)	2.3E6
STEAM (PPH)	2.3E6
ACT. (uCi/ml)	0
S/G C LEVWR (%)	56
PRESS (PSIG)	884
FEED (PPH)	2.3E6
STEAM (PPH)	2.3E6
ACT. (uCi/ml)	0

Date:	NOV.	13,	1989

Time: <u>18:00</u>

Completed By:

ENGINEERED SAFETY FEATURES		
SI ACTUATED: TIME	•	
RESET: TIME		
CS ACTUATED: TIME		·····~
RESET: TIME		
CONT. ISO. A ACTUATED: TI	MF	
	ME -	
CONT. ISO. B ACTUATED: TI	-	
RESET: TI		
SPRAY ADD TANK LEVEL (%)	-	67
SI COLD-LEG FLOW (GPM)	•	
SI HOT-LEG INJECT START		
EQUIPMENT STATUS		
N = NOT AVAILABLE		
A = AVAILABLE (NOT OPERATI	NGI	
O = OPERATING	107	
E = ENERGIZED		
PRIMARY		
RCP A O B O	С	0
CHG PUMP A A B O	- č	0
SI PUMP A A B N	- c	
CS PUMP A A B A	- Ŭ	
RHR PUMP A A B A		
HVH 1 0 $\frac{1}{2}$ 0 $\frac{1}{3}$ 0	- 4	0
SECONDARY		
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	с	0
ELECTRICAL	- 0	
EDG A A B O		
	-	
OFFSITE E		
EMER. BUS E1 E E2		E
FANS		<u> </u>
HVE 1A A 1B		A
HVE 2A 0 2B		<u>A</u> .
HVE 5A A 5B		0
HVE 15 0 15A		
		<u></u>

LEGEND: OSH = OFF SCALE

OSH	=	OFF	SCA	LE	HIGH
OSL	=	OFF	SCA	LE	LOW
00S	=	OUT	0F [·]	SEF	RVICE
I SOL	=	1 501	ATE	D	

ATTACHMENT 9.7 Page 1 of

Date: NOV. 13, 1989

Time: 18:15

.3

.01

.2

EMERGENCY CLASSIFICATION (CIRCLE) NOTIFICATION OF UNUSUAL EVENT ALERT SITE AREA EMERGENCY GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	17.8
LOWER (MPH)	11.7
WIND DIR. UPPER (* FROM)	237
LOWER (* FROM)	215
AIR TEMPERATURE (*F)	59
PASQUILL STAB. FACTOR	D

AREA RADIATION MONITORS

R-1	CONTROL ROOM (MR/HR)	<1
R-2	CONT. AREA (MR/HR)	10
R-3	HP WORK AREA	<1
R-4	CHG. PUMP RM (MR/HR)	300
R-5	SPENT FUEL PIT (MR/HR)	0.3
R-6	SAMPLING ROOM (MR/HR)	70
R-7	IN-CORE INST (MR/HR)	10
R-8	DRUM. RM. (MR/HR)	0.5
R-9	FAILED FUEL (MR/HR)	OSH

PROCESS RADIATION MONITORS

R-11	CV VENT PART. (CPM)	35K
R-12	CV VENT GAS (CPM)	1.2
R-14	PLT VNT GAS (CPM)	650
R-15	COND. AIR EJEC. (CPM)	38
R-16	CV FAN CW (CPM)	850
R-17	COMP. CW (CPM)	400
R-18	WASTE DISPOSAL (CPM)	6.5K
R-19A	S/G A BLOWDOWN (CPM)	1K
R-198	S/G B BLOWDOWN (CPM)	1K
R-19C	S/G C BLOWDOWN (CPM)	1K
R-20	FUEL HDLG BASE (CPM)	17
R-21	FUEL HOLG UPPER (CPM)	35

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR)	<1
R-31A "A" MN STM (MR/HR)	(10
R-318 "B" MN STM (MR/HR)	<10
R-31C "C" MN STM (MR/HR)	<10
R-32A CV HI RG (R/HR)	<1
R-32B CV HI RG (R/HR)	<1
R-33 MON BLDG (MR/HR)	<10
R-34 "P" PLT VNT (cpm)	<1
R-34 "I" PLT VNT (cpm)	<1
R-34 "NG" PLT VNT (cpm)	<1
R-35 PLT VNT GAS (MID) (MR/HR)	<1
R-36 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	<u>005</u>

CONTAINMENT STATUS	
PRESSURE (PSIG)	.3
TEMPERATURE (* F)	125
HYDROGEN CONC. (%)	.0
SUMP LEVEL (INCHES)	.2
RWST LEVEL (%)	91
PRIMARY SYSTEM	
RCS PRESSURE (PSIG)	2170
PZR LEVEL (%)	33
TAVE (°F)	547
LOOP A TH (°F)	550
TC (°F)	547
ΔΤ	3
LOOP B TH ("F)	550
TC (*F)	5/9

TC (*F)	548
ΔΤ	2
LOOP C TH (*F)	549
TC (*F)	547
ΔΤ	2
SUBCOOLING (*F)	99
CHRGNG FLOW (GPM)	24
LETDOWN FLOW (GPM)	36
REACTOR POWER	0
ACTIVITY:	•
GROSS (uCi/ml)	9.56E+02
131 (uCi/ml)	3.55E+02

SECONDARY SYSTEM

1.0.0

S/G A LEVWR (\$)	31
PRESS (PSIG)	990
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G 8 LEV₩R (%)	57
PRESS (PSIG)	990
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEVWR (%)	57
PRESS (PSIG)	990
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0

Completed By: 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) 0 = OPERATINGE = ENERGIZEDPRIMARY RCP A O B O C_0 CHG PUMP A A B o c 0 A B SI PUMP A N С А CS PUMP A A B Α RHR PUMP A A B Α HVH 1 0 2 0 3 0 4 0 SECONDARY FEED PUMP A 0 в A COND PUMP A 0 B Α AFW MOTOR A 0 B 0 AFW STEAM 0 MSIV A <u>0</u> B 0 C 0 ELECTRICAL A <u>A</u> B <u>A</u> EDG OS/DG Ν OFFSITE Ξ EMER. BUS E1 E Ε Ξ2

FANS			
HVE 1A	Α	18	A
HVE 2A	0	2B	A
HVE 5A	A	5B	0
HVE 15	0	15A	A

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

SCN:89-3368

EMERGENCY CLASSIFICATION (CIRCLE)

NOTIFICATION OF UNUSUAL EVENT ALERT SITE AREA EMERGENCY GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

PASQUILL STAB. FACTOR	D
AIR TEMPERATURE (°F)	58
LOWER (° FROM)	210
WIND DIR. UPPER (* FROM)	233
LOWER (MPH)	11.9
WIND SPEED UPPER (MPH)	17.8

AREA RADIATION MONITORS

R-1	CONTROL ROOM (MR/HR)	<1
R-2	CONT. AREA (MR/HR)	10
R-3	HP WORK AREA	<1
R-4	CHG. PUMP RM (MR/HR)	300
R-5	SPENT FUEL PIT (MR/HR)	0.3
R-6	SAMPLING ROOM (MR/HR)	70
R-7	IN-CORE INST (MR/HR)	10
R-8	DRUM. RM. (MR/HR)	0.5
R-9	FAILED FUEL (MR/HR)	OSH

PROCESS RADIATION MONITORS

eet (<mark>)</mark> 11 -	CV VENT PART. (CPM)	35K
R-12	CV VENT GAS (CPM)	1.2K
R-14	PLT VNT GAS (CPM)	650
R-15	COND. AIR EJEC. (CPM)	38
R-16	CV FAN CW (CPM)	850
R-17	COMP. CW (CPM)	400
R-18 ⁻	WASTE DISPOSAL (CPM)	6.5K
R-19A	S/G A BLOWDOWN (CPM)	1K
R-19B	S/G B BLOWDOWN (CPM)	1K
R-19C	S/G C BLOWDOWN (CPM)	1K
R-20	FUEL HDLG BASE (CPM)	17
R-21	FUEL HOLG UPPER (CPM)	35

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR)	<1
R-31A "A" MN STM (MR/HR)	<10
R-318 "B" MN STM (MR/HR)	<10
R-31C "C" MN STM (MR/HR)	<10
R-32A CV HI RG (R/HR)	<1
R-32B CV HI RG (R/HR)	<1
R-33 MON BLDG (MR/HR)	<10
R-34 "P" PLT VNT (cpm)	<1
R-34 "!" PLT VNT (cpm)	<1
R-34 "NG" PLT VNT (cpm)	<1
-35 PLT VNT GAS (MID) (MR/HR)	<1
6 PLT VNT GAS (H1) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	00S

CONTAINMENT STATUS	
PRESSURE (PSIG)	.3
TEMPERATURE (°F)	125
HYDROGEN CONC. (%)	.01
SUMP LEVEL (INCHES)	2
RWST LEVEL (%)	91

PRIMARY SYSTEM

RCS PRESSURE (PSIG)	2200
PZR LEVEL (%)	22
TAVE (°F)	547
LOOP A TH (°F)	550
TC (°F)	547
Δτ	3
LOOP B TH (*F)	550
TC (°F)	548
Δτ	2
LOOP C TH (°F)	549
TC (°F)	547
Δτ	2
SUBCOOLING (°F)	99
CHRGNG FLOW (GPM)	24
LETDOWN FLOW (GPM)	36
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	9.34E+02
¹³¹ (uCi/ml)	3.50E+02

SECONDARY SYSTEM

S/G A LEVWR (%)	55
PRESS (PSIG)	990
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G B LEVWR (%)	68
PRESS (PSIG)	990
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEVWR (%)	68
PRESS (PSIG)	990
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
-	

ATTACHMENT 9.7 Page 1 of

Date: NOV. 13, 1989 Time: 18:30

Completed By:

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 AVAILABLEA = AVAILABLE (NOT OPERATING) O = OPERATINGE = ENERGIZEDPRIMARY RCP CHG PUMP A A B O C O SI PUMP A A B N C A RHR PUMP A A B A HVH 1 0 2 0 3 0 4 0 SECONDARY FEED PUMP A O B A COND PUMP A O B A AFW MOTOR A O B O AFW STEAM O MSIV A O B O C O ELECTRICAL EDG A A B A N DS/DG OFFSITE ε EMER. BUS E1 E E2 E FANS HVE 1A _____ A 18 _____ Α HVE 2A _____ 2B _____ Α HVE 5A _____ 5B ____ 0 HVE 15 0 15A Α

LEGEND:

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

|SOL = |SOLATED|

ATTACHMENT 9.7

Page 1 of

EMERGENCY CLASSIFICATION (CIRCLE)
NOTIFICATION OF UNUSUAL EVENT
ALERT
SITE AREA EMERGENCY

GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	16.7
LOWER (MPH)	10.1
WIND DIR. UPPER (* FROM)	236
LOWER (" FROM)	215
AIR TEMPERATURE (°F)	60
PASQUILL STAB. FACTOR	D

AREA RADIATION MONITORS

R-1	CONTROL ROOM (MR/HR)	<1
R-2	CONT. AREA (MR/HR)	10
R-3	HP WORK AREA	<1
R-4	CHG. PUMP RM (MR/HR)	300
R-5	SPENT FUEL PIT (MR/HR)	0.3
R-6	SAMPLING ROOM (MR/HR)	70
R-7	IN-CORE INST (MR/HR)	10
R-8	DRUM. RM. (MR/HR)	0.5
R-9	FAILED FUEL (MR/HR)	OSH

PROCESS RADIATION MONITORS

11	CV VENT PART. (CPM)	35K
R-12	CV VENT GAS (CPM)	1,2K
R-14	PLT VNT GAS (CPM)	650
R-15	COND. AIR EJEC. (CPM)	38
-R-16	CV FAN CW (CPM)	850
R-17	COMP. CW (CPM)	400
R-18	WASTE DISPOSAL (CPM)	6.5K
R-19A	S/G A BLOWDOWN (CPM)	1K
R-19B	S/G B BLOWDOWN (CPM)	1K
R-19C	S/G C BLOWDOWN (CPM)	1К
R-20	FUEL HDLG BASE (CPM)	17
R-21	FUEL HDLG UPPER (CPM)	35

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR)	<1
R-31A "A" MN STM (MR/HR)	<10
R-31B "B" MN STM (MR/HR)	<10
R-31C "C" MN STM (MR/HR)	<10
R-32A CV HI RG (R/HR)	<1
R-32B CV HI RG (R/HR)	<1
R-33 MON BLDG (MR/HR)	<10
R-34 "P" PLT VNT (cpm)	<1
R-34 "1" PLT VNT (cpm)	<1
R-34 "NG" PLT VNT (cpm)	<1
R-35 PLT VNT GAS (MID) (MR/HR)	<1
36 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	005

CONTAINMENT STATUS	
PRESSURE (PSIG)	.3
TEMPERATURE (°F)	125
HYDROGEN CONC. (%)	.01
SUMP LEVEL (INCHES)	.2
RWST LEVEL (%)	91

PRIMARY SYSTEM

RCS PRESSURE (PSIG)	2235
PZR LEVEL (%)	22
TAVE (°F)	547
LOOP A TH (°F)	550
TC (°F)	547
Δτ	3
LOOP B TH (°F)	550
TC (°F)	548
Δτ	2
LOOP C TH (°F)	549
TC (°F)	547
ΔΤ	2
SUBCOOLING (°F)	98.6
CHRGNG FLOW (GPM)	24
LETDOWN FLOW (GPM)	36
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	9.14E+02
¹³¹ (uCi/ml)	3.45E+02

SECONDARY SYSTEM

S/G A LEVWR (%)	63
PRESS (PSIG)	990
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G B LEVWR (%)	68
PRESS (PSIG)	990
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEVWR (\$)	68
PRESS (PSIG)	990
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
	_

TUS							
	Date:	<u>NOV.</u>	13,	19	89		
	Time:	<u>18:4</u>	5				
Comp	leted By:						
•	ENGINEERE	D SAF	ETY	FEA	TURES		
	SI ACTUATI	ED:	TIME				
	RES	ET:	TIME				
1	CS ACTUATE	ED:	TIME				
	RES	ET:	TIME				
	CONT. ISO			_	: TIM	Е	
			RE	SET	: TIM	ε _	
	CONT. ISO	. В А	CTUA	TED	: TIM	E –	
				SET		Ē	
	SPRAY ADD	TANK				_	67
	SI COLD-LE						
	SI HOT-LEG						
—							
	EQUIPMENT	STAT	us				
	N = NOT A						
	A = AVAIL/	_		0P	ERATIN	G)	
<u> </u>	0 = OPERA			,		-,	
	E = ENERG						
	PRIMARY						
_	RCP	A	0	в	0	С	0
	CHG PUMP	Α	 A	8	0	Ċ	0
	SI PUMP	A	 A	в	 N	Ċ.	A
	CS PUMP	A	A		A		
_	RHR PUMP	A	A	в	A		
	HVH 1 0	· —	0	3	0	4	0
2	SECONDARY			-			
2 2	FEED PUMP	A	0	в	Α		
		A	0	в	A		
	AFW MOTOR	A	0	в	0		
	AFW STEAM		A	-			
	MSIV	A	0	в	0	с	0
	ELECTRICAL						
_	EDG	= A	Α	в	А		
	DS/DG		 N				

HVE	1A		Α	1B	
HVE	2A 📃		0	2B	
HVE	5A 🔄		A	_ 5B _	
HVE	15		0	15A	
LEGE OSH		F SCAI	E H10	ЭH	
OSL	= 0F	F SCAL	E LOV	1	
00S	= OU	TOFS	SERVIO	Έ	

EMER. BUS E1 E E2 E

А Α 0

Α

OFFSITE E

FANS

.

ISOL = ISOLATED

•

ATTACHMENT 9.7

Page 1 of

EMERGENCY CLASSIFICATION (CIRCLE) NOTIFICATION OF UNUSUAL EVENT ALERT SITE AREA EMERGENCY

GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	16.7	
LOWER (MPH)	10.4	
WIND DIR. UPPER (* FROM)	240	
LOWER (° FROM)	222	
AIR TEMPERATURE (°F) 60		
PASQUILL STAB. FACTOR	D	

AREA RADIATION MONITORS

R-1	CONTROL ROOM (MR/HR)	<1
R-2	CONT. AREA (MR/HR)	10
R-3	HP WORK AREA	<1
R-4	CHG. PUMP RM (MR/HR)	300
R-5	SPENT FUEL PIT (MR/HR)	0.3
R-6	SAMPLING ROOM (MR/HR)	70
R-7	IN-CORE INST (MR/HR)	10
R-8	DRUM. RM. (MR/HR)	0.5
R-9	FAILED FUEL (MR/HR)	OSH

PROCESS RADIATION MONITORS

1	CV VENT PART. (CPM)	35K
R-12	CV VENT GAS (CPM)	1.2K
R-14	PLT VNT GAS (CPM)	650
R-15	COND. AIR EJEC. (CPM)	38
R-16	CV FAN CW (CPM)	850
R-17	COMP. CW (CPM)	400
R-18	WASTE DISPOSAL (CPM)	6.5K
R-19A	S/G A BLOWDOWN (CPM)	1K
R-198	S/G B BLOWDOWN (CPM)	1K
R-19C	S/G C BLOWDOWN (CPM)	1K
R-20	FUEL HDLG BASE (CPM)	17
R-21	FUEL HDLG UPPER (CPM)	35

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR)	<1
R-31A "A" MN STM (MR/HR)	<10
R-318 "B" MN STM (MR/HR)	<10
R-31C "C" MN STM (MR/HR)	<10
R-32A CV HI RG (R/HR)	<1
R-32B CV HI RG (R/HR)	<1
R-33 MON BLDG (MR/HR)	<10
R-34 "P" PLT VNT (cpm)	<1
R-34 "I" PLT VNT (cpm)	<1
R-34 "NG" PLT VNT (cpm)	<1
P=35 PLT VNT GAS (MID) (MR/HR)	<1
6 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	00S

.3
125
.01
.2
91

PRIMARY SYSTEM

RCS PRESSURE (PSIG)	2235
PZR LEVEL (%)	22
TAVE (°F)	547
LOOP A TH (°F)	550
TC (°F)	547
ΔΤ	3
LOOP B TH (°F)	550
TC (°F)	548
Δτ	2
LOOP C TH (°F)	549
TC (°F)	547
Δτ	2
SUBCOOLING (°F)	98.6
CHRGNG FLOW (GPM)	24
LETDOWN FLOW (GPM)	36
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	8.95E+02
¹³¹ (uCi/ml)	3.41E+02

SECONDARY SYSTEM

S/G A LEVWR (%)	68
PRESS (PSIG)	990
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G B LEVWR (%)	68
PRESS (PSIG)	990
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEVWR (%)	68
PRESS (PSIG)	990
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0

Date:	NOV.	13,	19 89

Time: 19:00

Completed By:

ENGINEEDED CAFETY FEATURES
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)
0 = OPERATING
E = ENERGIZED
PRIMARY
RCP A O B O C O
CHG PUMP A A B O C O
SIPUMP A A B N C A
CS PUMP A A B A
RHR PUMP A A B A
HVH 1 0 2 0 3 0 4 0
SECONDARY
FEED PUMP A O B A
COND PUMP A O B A
AFW MOTOR A A B A
AFW STEAM A
ELECTRICAL
EDG A A B A
DS/DG N
OFFSITE E
EMER, BUS E1 E E2 E
FANS
HVE 1A A 1B A
HVE 2A 0 2B A
HVE 5A A 5B O
HVE 15 0 15A A

LEGEND:

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

ATTACHMENT 9.7 Page 1 of

EMERGENCY CLASSIFICATION (CIRCLE)

NOTIFICATION OF UNUSUAL EVENT ALERT SITE AREA EMERGENCY GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	15.6
LOWER (MPH)	9.8
WIND DIR. UPPER (* FROM)	240
LOWER (° FROM)	220
AIR TEMPERATURE (°F)	59
PASQUILL STAB. FACTOR	D

AREA RADIATION MONITORS

R-1	CONTROL ROOM (MR/HR)	<1
R-2	CONT. AREA (MR/HR)	10
R-3	HP WORK AREA	<1
R-4	CHG. PUMP RM (MR/HR)	300
R-5	SPENT FUEL PIT (MR/HR)	0.3
R-6	SAMPLING ROOM (MR/HR)	70
R-7	IN-CORE INST (MR/HR)	10
R-8	DRUM. RM. (MR/HR)	0.5
R-9	FAILED FUEL (MR/HR)	OSH

PROCESS RADIATION MONITORS

1	CV VENT PART. (CPM)	35K
R -12	CV VENT GAS (CPM)	1.2K
R-14	PLT VNT GAS (CPM)	650
R-15	COND. AIR EJEC. (CPM)	38
R-16	CV FAN CW (CPM)	850
R-17	COMP. CW (CPM)	400
R-18	WASTE DISPOSAL (CPM)	6.5K
R-19A	S/G A BLOWDOWN (CPM)	1K
R-19B	S/G B BLOWDOWN (CPM)	<u>1K</u>
R-19C	S/G C BLOWDOWN (CPM)	<u>1K</u>
R-20	FUEL HDLG BASE (CPM)	17
R-21	FUEL HDLG UPPER (CPM)	35

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR)	<1
R-31A "A" MN STM (MR/HR)	<10
R-31B "B" MN STM (MR/HR)	<10
R-31C "C" MN STM (MR/HR)	<10
R-32A CV HI RG (R/HR)	<1
R-32B CV HI RG (R/HR)	<1
R-33 MON BLDG (MR/HR)	<10
R-34 "P" PLT VNT (cpm)	<1
R-34 " " PLT VNT (cpm)	<1
R-34 "NG" PLT VNT (cpm)	<1
R-35 PLT VNT GAS (MID) (MR/HR)	<1
6 PLT VNT GAS (HI) (MR/HR)	14
	005

CONTAINMENT STATUS	
PRESSURE (PSIG)	.3
TEMPERATURE (°F)	125
HYDROGEN CONC. (%)	.01
SUMP LEVEL (INCHES)	.2
RWST LEVEL (%)	91

PRIMARY SYSTEM

RCS PRESSURE (PSIG)	2230
PZR LEVEL (%)	22
TAVE (°F)	547
LOOP A TH (°F)	550
TC (°F)	547
ΔΤ	3
LOOP B TH (°F)	550
TC (°F)	548
ΔΤ	2
LOOP C TH (°F)	549
TC (°F)	547
ΔΤ	2
SUBCOOLING (°F)	98.6
CHRGNG FLOW (GPM)	24
LETDOWN FLOW (GPM)	36
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	8.78E+02
¹³¹ (uCi/ml)	3.37E+02

SECONDARY SYSTEM

S/G A LEVWR (%)	68
PRESS (PSIG)	990
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G B LEVWR (%)	68
PRESS (PSIG)	990
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEVWR (%)	68
PRESS (PSIG)	990
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0

Date:	NOV.	13,	1989	

Time: <u>19:15</u>

Completed By:

ENGINEERED SA	FETY FEA	TURES	
SI ACTUATED:	TIME		
RESET:	TIME		
CS ACTUATED:	TIME		
RESET:	TIME		
CONT. ISO. A	ACTUATED	: TIME	
	RESET	: TIME	
CONT. ISO. B	ACTUATED	: TIME	
		: TIME	
SPRAY ADD TAN			67
SI COLD-LEG F			
SI HOT-LEG IN		·	
•••••••••••••••			
EQUIPMENT STA	TUS		
N = NOT AVAIL			
A = AVAILABLE			
0 = OPERATING		ERATING)	
E = ENERGIZED			
PRIMARY		• •	•
RCP A_	<u> </u>	<u> </u>	
CHG PUMP A	A B	<u> </u>	0
SI PUMP A _	A B	<u>N</u> C	<u> </u>
CS PUMP A	A B	A	
RHR PUMP A	<u>A</u> B	<u>A</u>	
HVH 1 _ 0 _ 2	0 3	0 4	0
SECONDARY			
FEED PUMP A	<u> 0 </u> B	A	
COND PUMP A	<u> 0 </u> B	<u> </u>	
AFW MOTOR A	A B	<u>A</u>	
AFW STEAM	Α		
MSIV A	0 B	0 C	0
ELECTRICAL			
EDG A	A B	Α	
DS/DG	N	<u></u>	
OFFSITE	E		
EMER. BUS E1	<u>_</u>	E2	Ε
FANS			
	A	1B	А
HVE 2A	0	2B	A
HVE 5A	0	5B	<u> </u>
HVE 15	0	15A	
	<u> </u>		~~~~

OSH	=	OFF	SC/	٩LE	HIGH
OSL	=	OFF	sc/	٨LE	LOW
00S	=	OUT	0F	SEF	RVICE
ISOL	=	1 50	ATE	ED	

ATTACHMENT 9.7

67

N C A

Α

0

Α

Page 1 of

EMERGENCY CLASSIFICATION (CIRCLE) Date: NOV. 13, 1989 NOTIFICATION OF UNUSUAL EVENT ALERT Time: 19:30 SITE AREA EMERGENCY GENERAL EMERGENCY Completed By: ENVIRONMENTAL SYSTEMS CONTAINMENT STATUS ENGINEERED SAFETY FEATURES WIND SPEED UPPER (MPH) PRESSURE (PSIG) 14.4 SI ACTUATED: TIME .3 125 LOWER (MPH) 9.1 TEMPERATURE (°F) RESET: TIME 239 HYDROGEN CONC. (%) WIND DIR. UPPER (* FROM) CS ACTUATED: TIME .01 .2 LOWER (° FROM) 216 SUMP LEVEL (INCHES) RESET: TIME 91 AIR TEMPERATURE (°F) 57 RWST LEVEL (%) CONT. ISO. A ACTUATED: TIME D PASQUILL STAB. FACTOR RESET: TIME PRIMARY SYSTEM CONT. ISO. B ACTUATED: TIME AREA RADIATION MONITORS RCS PRESSURE (PSIG) 2240 RESET: TIME R-1 CONTROL ROOM (MR/HR) PZR LEVEL (%) 22 <1 SPRAY ADD TANK LEVEL (%) TAVE (°F) R-2 CONT. AREA (MR/HR) 10 547 SI COLD-LEG FLOW (GPM) LOOP A TH (°F) 550 R-3 HP WORK AREA SI HOT-LEG INJECT START <1 TC (°F) R-4 CHG. PUMP RM (MR/HR) 300 547 R-5 SPENT FUEL PIT (MR/HR) 0.3 ∆т 3 EQUIPMENT STATUS LOOP B TH (°F) 550 R-6 SAMPLING ROOM (MR/HR) 70 N = NOT AVAILABLE548 R-7 IN-CORE INST (MR/HR) 10 TC (°F) A = AVAILABLE (NOT OPERATING) 2 R-8 DRUM. RM. (MR/HR) 0.5 ΔT 0 = OPERATINGLOOP C TH (°F) R-9 FAILED FUEL (MR/HR) OSH 549 E = ENERGIZEDTC (°F) 547 PRIMARY PROCESS RADIATION MONITORS ΔT 2 RCP 1 CV VENT PART. (CPM) SUBCOOLING (°F) 98.6 CHG PUMP A A B O C O 35K R-12 CV VENT GAS (CPM) 1.2K CHRGNG FLOW (GPM) 24 SI PUMP A A B 36 LETDOWN FLOW (GPM) CS PUMP A A B A R-14 PLT VNT GAS (CPM) 650 0 RHR PUMP A A B A R-15 COND, AIR EJEC. (CPM) 38 REACTOR POWER R-16 CV FAN CW (CPM) 850 HVH 1 0 2 0 3 0 4 0 ACTIVITY: R-17 COMP. CW (CPM) 400 GROSS (uCi/ml) 8.63E+02 SECONDARY R-18 WASTE DISPOSAL (CPM) 1¹³¹ (uCi/ml) 3.33E+02 6.5K FEED PUMP A O B A R-19A S/G A BLOWDOWN (CPM) COND PUMP A O B A 1K AFW MOTOR A A B A R-19B S/G B BLOWDOWN (CPM) 1K SECONDARY SYSTEM R-19C S/G C BLOWDOWN (CPM) 1K S/G A LEV.-WR (%) 68 AFW STEAM A • 17 R-20 FUEL HDLG BASE (CPM) PRESS (PSIG) 990 MSIV A O B O C O R-21 FUEL HDLG UPPER (CPM) 35 FEED (PPH) 0 ELECTRICAL STEAM (PPH) 0 EDG A A B A 0___ ACCIDENT RADIATION MONITORS ACT. (uCi/ml) DS/DG N R-30 F.H. BASE HI RG (MR/HR) OFFSITE Ε <1 S/G B LEV.-WR (%) 68 R-31A "A" MN STM (MR/HR) <10 990 EMER. BUS E1 E E2 PRESS (PSIG) R-318 "B" MN STM (MR/HR) <10 FEED (PPH) 0 FANS R-31C "C" MN STM (MR/HR) <10 STEAM (PPH) HVE 1A _____ A ___ 1B ____ 0 R-32A CV H1 RG (R/HR) <1 ACT. (uCi/ml) 0 HVE 2A _____ 2B ____ HVE 5A _____ A 5B S/G C LEV.-WR (%) R-32B CV HI RG (R/HR) <1 68 R-33 MON BLDG (MR/HR) 990 <10 PRESS (PSIG) HVE 15 0 15A R-34 "P" PLT VNT (cpm) <1 FEED (PPH) 0 R-34 "I" PLT VNT (cpm) <1 STEAM (PPH) 0 LEGEND: <1 R-34 "NG" PLT VNT (cpm) ACT. (uCi/ml) 0 OSH = OFF SCALE HIGH R=35 PLT VNT GAS (MID) (MR/HR) <1 OSL = OFF SCALE LOW 6 PLT VNT GAS (HI) (MR/HR) 14 OOS = OUT OF SERVICE

SCN:89-3368

(-37 CONDENSATE POLISHER (CPM) OOS

3.2-13

ISOL = ISOLATED

ATTACHMENT 9.7 Page 1 of

EMERGENCY CLASSIFICATION (CIRCLE) Date: NOV. 13, 1989 NOTIFICATION OF UNUSUAL EVENT Time: 19:45 AL FRT SITE AREA EMERGENCY Completed By: GENERAL EMERGENCY ENVIRONMENTAL SYSTEMS CONTAINMENT STATUS ENGINEERED SAFETY FEATURES WIND SPEED UPPER (MPH) 13.1 PRESSURE (PSIG) SI ACTUATED: TIME .3 LOWER (MPH) 9.3 TEMPERATURE (°F) 125 RESET: TIME .01 CS ACTUATED: TIME WIND DIR. UPPER (* FROM) 243 HYDROGEN CONC. (%) SUMP LEVEL (INCHES) .2____ RESET: TIME . LOWER (* FROM) 219 91 AIR TEMPERATURE (°F) 56 RWST LEVEL (%) CONT. ISO. A ACTUATED: TIME PASQUILL STAB. FACTOR D RESET: TIME CONT. ISO. B ACTUATED: TIME PRIMARY SYSTEM RESET: TIME RCS PRESSURE (PSIG) 2240 AREA RADIATION MONITORS SPRAY ADD TANK LEVEL (%) 67 R-1 CONTROL ROOM (MR/HR) PZR LEVEL (%) 22 <1 547 TAVE (°F) R-2 CONT. AREA (MR/HR) 10 SI COLD-LEG FLOW (GPM) <1 LOOP A TH (°F) 550 SI HOT-LEG INJECT START R-3 HP WORK AREA TC (°F) _____ 547 R-4 CHG. PUMP RM (MR/HR) 300 0.3 3 R-5 SPENT FUEL PIT (MR/HR) ΔT EQUIPMENT STATUS LOOP B TH (°F) 550 70 N = NOT AVAILABLER-6 SAMPLING ROOM (MR/HR) 548 R-7 IN-CORE INST (MR/HR) A = AVAILABLE (NOT OPERATING) 10 TC (°F) _____ 2 0.5 ΔΤ . 0 = OPERATINGR-8 DRUM. RM. (MR/HR) LOOP C TH (°F) 549 R-9 FAILED FUEL (MR/HR) OSH E = ENERGIZED547 TC (°F) PRIMARY RCP A <u>0</u> B <u>0</u> C <u>0</u> ΔT 2 PROCESS RADIATION MONITORS 1 CV VENT PART. (CPM) CHG PUMP A A B O C O SUBCOOLING (°F) 98.6 35K 24 SIPUMP A A B N C A -12 CV VENT GAS (CPM) 1.2K CHRGNG FLOW (GPM) 36 650 LETDOWN FLOW (GPM) CS PUMP A _ A B _ A R-14 PLT VNT GAS (CPM) REACTOR POWER 0 RHR PUMP A A B A R-15 COND. AIR EJEC. (CPM) 38 HVH 1 0 2 0 3 0 4 0 R-16 CV FAN CW (CPM) 850 ACTIVITY: GROSS (uCi/ml) 8.48E+02 1³¹ (uCi/ml) 3.30E+02 R-17 COMP. CW (CPM) 400 SECONDARY FEED PUMP A O B A R-18 WASTE DISPOSAL (CPM) 6.5K COND PUMP A O B A R-19A S/G A BLOWDOWN (CPM) 1K AFW MOTOR A A B A R-19B S/G B BLOWDOWN (CPM) 1K SECONDARY SYSTEM S/G A LEV.-WR (%) ____Α AFW STEAM R-19C S/G C BLOWDOWN (CPM) 1K 68 990 MSIV A O B O C O R-20 FUEL HDLG BASE (CPM) 17 PRESS (PSIG) 0 FEED (PPH) ELECTRICAL R-21 FUEL HDLG UPPER (CPM) 35 EDG A A B A STEAM (PPH) 0 ACCIDENT RADIATION MONITORS ACT. (uCi/ml) 0 DS/DG Ν DS/DG N OFFSITE E R-30 F.H. BASE HI RG (MR/HR) <1 S/G B LEV.-WR (%) 68 PRESS (PSIG) EMER. BUS E1 E E2 E 990 R-31A "A" MN STM (MR/HR) <10 R-31B "B" MN STM (MR/HR) <10 FEED (PPH) 0 FANS 0____ STEAM (PPH) HVE 1A _____ 1B ____ R-32A CV HI RG (R/HR) ____
 HVE
 2A
 O
 2B
 A

 HVE
 5A
 A
 5B
 O
 <1 0 ACT. (uCi/ml) S/G C LEV.-WR (%) 6**8** R-32B CV HI RG (R/HR) <1 HVE 15 _____ 15A ____ 990 R-33 MON BLDG (MR/HR) <10 PRESS (PSIG) FEED (PPH) R-34 "P" PLT VNT (cpm) <1 0

LEGEND:

0

0

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

R-34 "I" PLT VNT (cpm)

R-34 "NG" PLT VNT (cpm)

R-35 PLT VNT GAS (MID) (MR/HR) <1 6 PLT VNT GAS (HI) (MR/HR)

-37 CONDENSATE POLISHER (CPM) 00S

<1____

14

<1

STEAM (PPH)

ACT. (uCi/ml)



67

Page 1 of

EMERGENCY CLASSIFICATION (CIRCLE) Date: NOV. 13, 1989 NOTIFICATION OF UNUSUAL EVENT ALERT Time: 20:00 SITE AREA EMERGENCY Completed By: GENERAL EMERGENCY ENVIRONMENTAL SYSTEMS CONTAINMENT STATUS ENGINEERED SAFETY FEATURES WIND SPEED UPPER (MPH) 16.6 PRESSURE (PSIG) .3__ SI ACTUATED: TIME TEMPERATURE (°F) 125 RESET: TIME LOWER (MPH) 11.0 WIND DIR. UPPER (* FROM) 242 HYDROGEN CONC. (\$) .01 CS ACTUATED: TIME .2 SUMP LEVEL (INCHES) LOWER (° FROM) 227 RESET: TIME 91 AIR TEMPERATURE (°F) _____56 CONT. ISO. A ACTUATED: TIME RWST LEVEL (%) PASQUILL STAB. FACTOR C RESET: TIME PRIMARY SYSTEM CONT. ISO. B ACTUATED: TIME RCS PRESSURE (PSIG) 2230 AREA RADIATION MONITORS RESET: TIME R-1 CONTROL ROOM (MR/HR) <1 PZR LEVEL (%) 22 SPRAY ADD TANK LEVEL (%) 10 R-2 CONT. AREA (MR/HR) 547 TAVE (°F) SI COLD-LEG FLOW (GPM) <1 LOOP A TH (°F) 550 R-3 HP WORK AREA SI HOT-LEG INJECT START TC (°F) ____ R-4 CHG. PUMP RM (MR/HR) 300 547 3____ R-5 SPENT FUEL PIT (MR/HR) 0.3 ΔΤ EQUIPMENT STATUS R-6 SAMPLING ROOM (MR/HR) . 70 LOOP B TH (°F) _____ 550____ N = NOT AVAILABLE548 TC (°F) R-7 IN-CORE INST (MR/HR) 10 A = AVAILABLE (NOT OPERATING) 2 R-8 DRUM. RM. (MR/HR) 0.5 ∆т 0 = OPERATINGLOOP C TH (°F) 549 R-9 FAILED FUEL (MR/HR) OSH E = ENERGIZED547 TC (°F) _____ PRIMARY PROCESS RADIATION MONITORS
 RCP
 A
 O
 B
 O
 C
 O

 CHG PUMP
 A
 A
 B
 O
 C
 O
 ΔΤ 2 98.6 35K SUBCOOLING (°F) 24 SI PUMP A A B N C A -12 CV VENT GAS (CPM) _____1.2K CHRGNG FLOW (GPM) 36 CS PUMP A A B A RHR PUMP A A B A 650 R-14 PLT VNT GAS (CPM) LETDOWN FLOW (GPM) 0 REACTOR POWER HVH 1 0 2 0 3 0 4 0 R-16 CV FAN CW (CPM) 850 ACTIVITY: GROSS (uCi/ml) 8.40E+02 R-17 COMP. CW (CPM) 400 SECONDARY 1³¹ (uCi/ml) 3.28E+02 R-18 WASTE DISPOSAL (CPM) FEED PUMP A O B A 6.5K 1K R-19A S/G A BLOWDOWN (CPM) COND PUMP A O B A SECONDARY SYSTEM R-19B S/G B BLOWDOWN (CPM) 1K AFW MOTOR A ____A B __A S/G A LEV.-WR (%) AFW STEAM A R-19C S/G C BLOWDOWN (CPM) 1K 68 17 MSIV A O B O C O PRESS (PSIG) 990 R-20 FUEL HDLG BASE (CPM) 0____ R-21 FUEL HDLG UPPER (CPM) 35 FEED (PPH) ELECTRICAL EDG A A B A 0 STEAM (PPH) 0____ DS/DG N OFFSITE E N ACCIDENT RADIATION MONITORS ACT. (uCi/ml) R-30 F.H. BASE HI RG (MR/HR) <1 S/G B LEV.-WR (\$) 68 R-31A "A" MN STM (MR/HR) PRESS (PSIG) 990 EMER. BUS E1 E E2 E <10 R-31B "B" MN STM (MR/HR) <10 FEED (PPH) 0 FANS
 HVE
 1A
 A
 1B

 HVE
 2A
 O
 2B

 HVE
 5A
 A
 5B

 HVE
 15
 O
 15A
 0 R-31C "C" MN STM (MR/HR) <10 STEAM (PPH) 0 Α. R-32A CV HI RG (R/HR) <1 ACT. (uCi/ml) <1 68 0 R-32B CV HI RG (R/HR) S/G C LEV.-WR (%) PRESS (PSIG) 990 R-33 MON BLDG (MR/HR) <10 R-34 "P" PLT VNT (cpm) <1 FEED (PPH) 0 R-34 "I" PLT VNT (cpm) <1 0 STEAM (PPH) LEGEND: 0 R-34 "NG" PLT VNT (cpm) <1 ACT. (uCi/ml) OSH = OFF SCALE HIGH R-35 PLT VNT GAS (MID) (MR/HR) <1 OSL = OFF SCALE LOW 6 PLT VNT GAS (HI) (MR/HR) OOS = OUT OF SERVICE 14 -37 CONDENSATE POLISHER (CPM) OOS |SOL = |SOLATED|

-

ATTACHMENT 9.7

Page 1 of

EMERGENCY CLASSIFICATION (C			Date: NOV. 13, 1989
NOTIFICATION OF UNUSUAL EVEN	NT		
ALERT			Time: 20:15
SITE AREA EMERGENCY			
GENERAL EMERGENCY		Сол	npleted By:
ENVIRONMENTAL SYSTEMS	CONTAINMENT STATUS		ENGINEERED SAFETY FEATURES
WIND SPEED UPPER (MPH) 16.4		.3	SI ACTUATED: TIME
LOWER (MPH) 12.1	TEMPERATURE (°F)	125	RESET: TIME
WIND DIR. UPPER (° FROM) 243	HYDROGEN CONC. (%)	.01	CS ACTUATED: TIME
LOWER (° FROM) 216	SUMP LEVEL (INCHES)	.2	RESET: TIME
AIR TEMPERATURE (°F) 55	RWST LEVEL (%)	91	CONT. ISO. A ACTUATED: TIME
PASQUILL STAB. FACTOR D			RESET: TIME
	PRIMARY SYSTEM		CONT. ISO. B ACTUATED: TIME
AREA RADIATION MONITORS	RCS PRESSURE (PSIG)	2235	RESET: TIME
R-1 CONTROL ROOM (MR/HR) <1	PZR LEVEL (%)	22	SPRAY ADD TANK LEVEL (%)
R-2 CONT. AREA (MR/HR) 10	TAVE (°F)	547	SI COLD-LEG FLOW (GPM)
R-3 HP WORK AREA <1			
R-3 HP WORK AREA <1 R-4 CHG. PUMP RM (MR/HR) 300	LOOP A TH (°F) TC (°F) ΔT LOOP B TH (°F) TC (°F) ΔT	547	
R-5 SPENT FUEL PIT (MR/HR) 0.3 R-6 SAMPLING ROOM (MR/HR) 70	ΔΤ	3	EQUIPMENT STATUS
R-6 SAMPLING ROOM (MR/HR)70	LOOP B TH (°F)	550	N = NOT AVAILABLE
R-7 IN-CORE INST (MR/HR) 10	TC (°F)	548	A = AVAILABLE (NOT OPERATING)
R-8 DRUM. RM. (MR/HR) 0.5	ΔΤ	2	0 = OPERATING
R-9 FAILED FUEL (MR/HR)OSH	LOOP C TH (°F)	549	E = ENERGIZED
	TC (°F)	547	PRIMARY
PROCESS RADIATION MONITORS	ΔΤ	2	RCP A <u>0</u> B <u>0</u> C <u>0</u>
1 CV VENT PART. (CPM) 35K	SUBCOOLING (°F)	98.6	CHG PUMP A A B O C O
R-12 CV VENT GAS (CPM)1.2K	CHRGNG FLOW (GPM)	24	SI PUMP A A B N C A
R-14 PLT VNT GAS (CPM) 650	LETDOWN FLOW (GPM)	36	CS PUMP A A B A
R-15 COND. AIR EJEC. (CPM) 38	REACTOR POWER	0	RHR PUMP A <u>A</u> B <u>A</u>
R-16 CV FAN CW (CPM) 850	ACTIVITY:		HVH 1 0 2 0 3 0 4 0
R-17 COMP. CW (CPM) 400	GROSS (uCi/ml)	8.35E+02	SECONDARY
	1 ³¹ (uCi/ml)	3.24E+02	FEED PUMP A O B A
R-19A S/G A BLOWDOWN (CPM) 1K			COND PUMP A BA
R-19B S/G B BLOWDOWN (CPM) 1K	SECONDARY SYSTEM		AFW MOTOR AA B _A
R-19C S/G C BLOWDOWN (CPM) 1K			
R-20 FUEL HDLG BASE (CPM) 17	PRESS (PSIG)		MSIV A <u>O</u> B <u>O</u> C <u>O</u>
R-21 FUEL HDLG UPPER (CPM)35		0	ELECTRICAL
	STEAM (PPH)	0	
ACCIDENT RADIATION MONITORS			DS/DG N
R-30 F.H. BASE HI RG (MR/HR) <1		68	
R-31A "A" MN STM (MR/HR) <10		990	EMER. BUS E1 E2 E
R-318 "B" MN STM (MR/HR) <10	FEED (PPH)	0	FANS
R-31C "C" MN STM (MR/HR)		0	HVE 1A A 1B A
	ACT. (uCi/ml)		HVE 2A 0 2B A
R-32B CV HI RG (R/HR) <1	S/G C LEVWR (%)		
R-33 MON BLDG (MR/HR) <10			HVE 15 0 15A A
R-34 "P" PLT VNT (cpm) <1	FEED (PPH)	0	
R-34 "I" PLT VNT (cpm) <1	STEAM (PPH)	0	LEGEND:
R-34 "NG" PLT VNT (cpm) <1	ACT. (uCi/ml)	U	OSH = OFF SCALE HIGH
R=35 PLT VNT GAS (MID) (MR/HR) <1			OSL = OFF SCALE LOW
6 PLT VNT GAS (HI) (MR/HR) 14	·.		OOS = OUT OF SERVICE

-37 CONDENSATE POLISHER (CPM) OOS

ISOL = ISOLATED

.

ATTACHMENT 9.7

Page 1 of

EMERGENCY CLASSIFICATION (CIRCLE) Date: NOV. 13, 1989 NOTIFICATION OF UNUSUAL EVENT Time: 20:30 ALERT SITE AREA EMERGENCY GENERAL EMERGENCY Completed By: ENGINEERED SAFETY FEATURES ENVIRONMENTAL SYSTEMS CONTAINMENT STATUS 18.8 WIND SPEED UPPER (MPH) PRESSURE (PSIG) SI ACTUATED: TIME .3 RESET: TIME 125 LOWER (MPH) 11.9 TEMPERATURE (°F) HYDROGEN CONC. (%) CS ACTUATED: TIME WIND DIR. UPPER (* FROM) 244 .01 .2 SUMP LEVEL (INCHES) RESET: TIME LOWER (° FROM) 222 AIR TEMPERATURE (°F) 91 RWST LEVEL (%) CONT. ISO. A ACTUATED: TIME 56 RESET: TIME PASQUILL STAB. FACTOR D PRIMARY SYSTEM CONT. ISO. B ACTUATED: TIME RESET: TIME AREA RADIATION MONITORS RCS PRESSURE (PSIG) 2235 R-1 CONTROL ROOM (MR/HR) SPRAY ADD TANK LEVEL (%) 67 22 <1 PZR LEVEL (%) R-2 CONT. AREA (MR/HR) 10 TAVE (°F) 547 SI COLD-LEG FLOW (GPM) LOOP A TH (*F) 550 SI HOT-LEG INJECT START R-3 HP WORK AREA <1 547 R-4 CHG. PUMP RM (MR/HR) 300 TC (°F) _____ 3 Δт R-5 SPENT FUEL PIT (MR/HR) 0.3 EQUIPMENT STATUS 70_____ 550 R-6 SAMPLING ROOM (MR/HR) LOOP B TH (°F) N = NOT AVAILABLE548____ R-7 IN-CORE INST (MR/HR) 10 TC (°F) A = AVAILABLE (NOT OPERATING) 0.5 2____ R-8 DRUM. RM. (MR/HR) ΔT 0 = OPERATINGOSH LOOP C TH (°F) 549 R-9 FAILED FUEL (MR/HR) E = ENERGIZEDTC (*F) _____ 547 PRIMARY PROCESS RADIATION MONITORS ΔT 2 RCP A <u>O B O C O</u> CHG PUMP A A B O C O 1 CV VENT PART. (CPM) 35K SUBCOOLING (°F) 98.6 24 -12 CV VENT GAS (CPM) SI PUMP A A B N C A 1.2K CHRGNG FLOW (GPM) 36 CS PUMP A A B A 650 LETDOWN FLOW (GPM) R-14 PLT VNT GAS (CPM) R-15 COND. AIR EJEC. (CPM) _____38___ 0 RHR PUMP A A B A REACTOR POWER HVH 1 0 2 0 3 0 4 0 R-16 CV FAN CW (CPM) 850 ACTIVITY: R-17 COMP. CW (CPM) 8.35E+02 400 GROSS (uCi/ml) SECONDARY 1¹³¹ (uCī/ml) 8.24E+02 6.5K R-18 WASTE DISPOSAL (CPM) FEED PUMP A O B A COND PUMP A O B A R-19A S/G A BLOWDOWN (CPM) 1K AFW MOTOR A A B A R-19B S/G B BLOWDOWN (CPM) 1K SECONDARY SYSTEM 1K 68 AFW STEAM A R-19C S/G C BLOWDOWN (CPM) S/GALEV.-WR (%) 990____ PRESS (PSIG) 17 MSIV A <u>0</u> B <u>0</u> C <u>0</u> R-20 FUEL HDLG BASE (CPM) 35 R-21 FUEL HOLG UPPER (CPM) 0 FEED (PPH) ELECTRICAL STEAM (PPH) 0 EDG A A B A 0 ACCIDENT RADIATION MONITORS DS/DG N ACT. (uCi/ml) R-30 F.H. BASE HI RG (MR/HR) Ε <1 S/G B LEV.-WR (%) ____ 68 OFFSITE <10 PRESS (PSIG) 990 EMER. BUS E1 E E2 E R-31A "A" MN STM (MR/HR) 0____ R-31B "B" MN STM (MR/HR) <10 FEED (PPH) FANS R-31C "C" MN STM (MR/HR) HVE 1A _____ A ___ 1B _____ <10 STEAM (PPH) 0 HVE 2A 0 2B R-32A CV HI RG (R/HR) <1 ACT. (uCi/ml) 0 68 HVE 5A _____ A 5B _____ S/G C LEV.-WR (%) R-32B CV HI RG (R/HR) <1 990 HVE 15 _____ 15A <10 PRESS (PSIG) R-33 MON BLDG (MR/HR) <1 R-34 "P" PLT VNT (cpm) FEED (PPH) 0 0___ R-34 "I" PLT VNT (cpm) <1 STEAM (PPH) LEGEND: R-34 "NG" PLT VNT (cpm) <1 ACT. (uCi/mi) 0 OSH = OFF SCALE HIGH P-35 PLT VNT GAS (MID) (MR/HR) OSL = OFF SCALE LOW <1 6 PLT VNT GAS (HI) (MR/HR) 14 OOS = OUT OF SERVICE -37 CONDENSATE POLISHER (CPM) OOS ISOL = ISOLATED

Α

0

Α

ATTACHMENT 9.7

Page 1 of

EMERGENCY CLASSIFICATION (CIRCLE) Date: NOV. 13, 1989 NOTIFICATION OF UNUSUAL EVENT Time: 20:45 ALERT SITE AREA EMERGENCY GENERAL EMERGENCY Completed By: ENVIRONMENTAL SYSTEMS CONTAINMENT STATUS ENGINEERED SAFETY FEATURES 12.1 WIND SPEED UPPER (MPH) PRESSURE (PSIG) SI ACTUATED: TIME .3 6.9 125 RESET: TIME TEMPERATURE (°F) LOWER (MPH) WIND DIR. UPPER (° FROM) .01 CS ACTUATED: TIME HYDROGEN CONC. (%) 245 .2 LOWER (° FROM) 225 SUMP LEVEL (INCHES) RESET: TIME 91 RWST LEVEL (%) AIR TEMPERATURE (°F) 56 CONT. ISO. A ACTUATED: TIME RESET: TIME PASQUILL STAB. FACTOR D CONT. ISO. B ACTUATED: TIME PRIMARY SYSTEM RESET: TIME AREA RADIATION MONITORS RCS PRESSURE (PSIG) 2240 <1____ R-1 CONTROL ROOM (MR/HR) 22 SPRAY ADD TANK LEVEL (%) 67 PZR LEVEL (%) R-2 CONT, AREA (MR/HR) 10 SI COLD-LEG FLOW (GPM) TAVE (°F) 547 R-3 HP WORK AREA <1 550 LOOP A TH (°F) SI HOT-LEG INJECT START R-4 CHG, PUMP RM (MR/HR) 300 TC (°F) 547 R-5 SPENT FUEL PIT (MR/HR) 0.3 ΔΤ 3 EQUIPMENT STATUS R-6 SAMPLING ROOM (MR/HR) 70 . 550 LOOP B TH (°F) N = NOT AVAILABLETC (°F) 548 R-7 IN-CORE INST (MR/HR) 10 A = AVAILABLE (NOT OPERATING) 2 0.5 R-8 DRUM. RM. (MR/HR) ΔT 0 = OPERATING549 R-9 FAILED FUEL (MR/HR) OSH LOOP C TH ("F) E = ENERGIZEDTC (°F) 547 PRIMARY PROCESS RADIATION MONITORS 2 ΔΤ RCP CHG PUMP A A B O C O 11 CV VENT PART. (CPM) 35K SUBCOOLING (°F) 98.6 24 1.2K R-12 CV VENT. GAS (CPM) CHRGNG FLOW (GPM) SIPUMP A A B N C A 36 650 LETDOWN FLOW (GPM) CS PUMP A A B A R-14 PLT VNT GAS (CPM) 0 R-15 COND. AIR EJEC. (CPM) _____38___ REACTOR POWER RHR PUMP A A B A R-16 CV FAN CW CPM 850 870 HVH 1 0 2 0 3 0 4 0 ACTIVITY: R-17 COMP. CW (CPM) GROSS (uCi/ml) 8.35E+02 SECONDARY 1¹³¹ (uCi/ml) 3.24E+02 R-18 WASTE DISPOSAL (CPM) 6.5K FEED PUMP A O B A COND PUMP A O B A R-19A S/G A BLOWDOWN (CPM) 1K AFW MOTOR A A B A R-19B S/G B BLOWDOWN (CPM) 1K SECONDARY SYSTEM AFW STEAM A R-19C S/G C BLOWDOWN (CPM) 1K S/G A LEV.-WR (%) 68 990 17 MSIV A O B O C O PRESS (PSIG) R-20 FUEL HDLG BASE (CPM) 35 R-21 FUEL HDLG UPPER (CPM) FEED (PPH) 0 ELECTRICAL STEAM (PPH) 0 EDG A A B A 0 ACT. (uCi/ml) ACCIDENT RADIATION MONITORS DS/DG N OFFSITE Ε <1 S/G B LEV.-WR (%) _____ R-30 F.H. BASE HI RG (MR/HR) 68 990 R-31A "A" MN STM (MR/HR) _____ <10 PRESS (PSIG) EMER. BUS E1 E E2 E 0___ R-31B "B" MN STM (MR/HR) <10 FEED (PPH) FANS HVE IA A IB HVE IA O 2B HVE 5A A 5B HVE 15 O 15A R-31C "C" MN STM (MR/HR) <10 STEAM (PPH) 0 R-32A CV HI RG (R/HR) <1 ACT. (uCi/ml) 0 68____ S/G C LEV.-WR (%) R-32B CV HI RG (R/HR) <1 990 R-33 MON BLDG (MR/HR) <10 PRESS (PSIG) FEED (PPH) R-34 "P" PLT VNT (cpm) <1 0 0 <1 R-34 "I" PLT VNT (cpm) STEAM (PPH) LEGEND: _____ R-34 "NG" PLT VNT (cpm) <1 ACT. (uCi/ml) 0 OSH = OFF SCALE HIGH R-35 PLT VNT GAS (MID) (MR/HR) OSL = OFF SCALE LOW <1 6 PLT VNT GAS (HI) (MR/HR) OOS = OUT OF SERVICE 14

|SOL = |SOLATED|

Α

0

Α

-37 CONDENSATE POLISHER (CPM) OOS

ATTACHMENT 9.7

67

4

0

ε

Α

0

Page 1 of

EMERGENCY CLASSIFICATION (CIRCLE) Date: NOV. 13, 1989 NOTIFICATION OF UNUSUAL EVENT ALERT Time: 21:00 SITE AREA EMERGENCY Completed By: GENERAL EMERGENCY ENVIRONMENTAL SYSTEMS CONTAINMENT STATUS ENGINEERED SAFETY FEATURES WIND SPEED UPPER (MPH) .3___ 7.8 PRESSURE (PSIG) SI ACTUATED: TIME 4.9 TEMPERATURE (°F) 125 RESET: TIME LOWER (MPH) .01 CS ACTUATED: TIME WIND DIR. UPPER (° FROM) 239 HYDROGEN CONC. (%) .2 SUMP LEVEL (INCHES) RESET: TIME LOWER (° FROM) 218 AIR TEMPERATURE (°F) RWST LEVEL (%) 91 CONT. ISO. A ACTUATED: TIME 55 PASQUILL STAB. FACTOR RESET: TIME n CONT. ISO. B ACTUATED: TIME PRIMARY SYSTEM AREA RADIATION MONITORS RCS PRESSURE (PSIG) 2230 RESET: TIME 22 SPRAY ADD TANK LEVEL (%) R-1 CONTROL ROOM (MR/HR) <1 PZR LEVEL (%) R-2 CONT. AREA (MR/HR) TAVE (°F) 547 SI COLD-LEG FLOW (GPM) 10 LOOP A TH (°F) 550 SI HOT-LEG INJECT START R-3 HP WORK AREA <1 TC (°F) _____ R-4 CHG. PUMP RM (MR/HR) 300 547 0.3 ΔΤ R-5 SPENT FUEL PIT (MR/HR) 3 EQUIPMENT STATUS 550 R-6 SAMPLING ROOM (MR/HR) 70 LOOP B TH (°F) N = NOT AVAILABLE548 R-7 IN-CORE INST (MR/HR) 10 TC (°F) A = AVAILABLE (NOT OPERATING) R-8 DRUM. RM. (MR/HR) 0.5 Δт 2 0 = OPERATING LOOP C TH (°F) 549 R-9 FAILED FUEL (MR/HR) OSH E = ENERG1ZEDTC (°F) _____ 547____ PRIMARY 2 RCP A <u>0 B 0 C 0</u> PROCESS RADIATION MONITORS Δт CHG PUMP A A B O C O 1 CV VENT PART. (CPM) 35K SUBCOOLING (°F) 98.6 R-12 CV VENT GAS (CPM) CHRGNG FLOW (GPM) SIPUMP A ABN CA 1.2K 24 LETDOWN FLOW (GPM) 36 CS PUMP A A B R-14 PLT VNT GAS (CPM) Α 650 REACTOR POWER 0 R-15 COND. AIR EJEC. (CPM) 38 RHR PUMP A A B Α R-16 CV FAN CW (CPM) 850 ACTIVITY: HVH 1 0 2 0 3 0 R-17 COMP. CW (CPM) 400 GROSS (uCi/ml) 8.35E+02 SECONDARY R-18 WASTE DISPOSAL (CPM) 1¹³¹ (uCi/ml) 3.24E+02 FEED PUMP A O B A 6.5K COND PUMP A 0 B A R-19A S/G A BLOWDOWN (CPM) 1K AFW MOTOR A ABA 1K SECONDARY SYSTEM R-19B S/G B BLOWDOWN (CPM) AFW STEAM · A · R-19C S/G C BLOWDOWN (CPM) 1K S/G A LEV.-WR (%) 68 17 990 ÑŜIV A O B O C O R-20 FUEL HDLG BASE (CPM) PRESS (PSIG) FEED (PPH) R-21 FUEL HDLG UPPER (CPM) 0 ELECTRICAL 35 STEAM (PPH) 0 EDG A A B A N 0 DS/DG ACCIDENT RADIATION MONITORS ACT. (uCi/ml) OFFSITE Ε R-30 F.H. BASE HI RG (MR/HR) S/G B LEV.-WR (%) 68 <1 <10 EMER. BUS E1 E E2 R-31A "A" MN STM (MR/HR) 990 _ PRESS (PSIG) R-318 "B" MN STM (MR/HR) <10 FEED (PPH) 0 FANS R-31C "C" MN STM (MR/HR) STEAM (PPH) <10 0 R-32A CV HI RG (R/HR) <1 ACT. (uCi/ml) 0 HVE 5A _____ A 5B _____ S/G C LEV.-WR (%) 68 R-32B CV HI RG (R/HR) <1 PRESS (PSIG) R-33 MON BLDG (MR/HR) <10 990 HVE 15 0 15A <1 R-34 "P" PLT VNT (cpm) FEED (PPH) 0 R-34 "1" PLT VNT (cpm) STEAM (PPH) 0 LEGEND: <1 ACT. (uCi/ml) R-34 "NG" PLT VNT (cpm) 0 OSH = OFF SCALE HIGH <1 R-35 PLT VNT GAS (MID) (MR/HR) OSL = OFF SCALE LOW <1 6 PLT VNT GAS (HI) (MR/HR) OOS = OUT OF SERVICE 14

-37 CONDENSATE POLISHER (CPM) OOS

CONTAINMENT STATUS

PRESSURE (PSIG)

HYDROGEN CONC. (%)

TEMPERATURE (°F)

SUMP LEVEL (INCHES)

RWST LEVEL (%)

ATTACHMENT 9.7

Page 1 of 17

EMERGENCY CLASSIFICATION (CIRCLE) NOTIFICATION OF UNUSUAL EVENT

ALERT SITE AREA EMERGENCY GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	5.0
LOWER (MPH)	3.2
WIND DIR. UPPER (* FROM)	190
LOWER (° FROM)	188
AIR TEMPERATURE (°F)	50
PASQUILL STAB. FACTOR	E

AREA RADIATION MONITORS

R-1	CONTROL ROOM (MR/HR)	<1
R-2	CONT. AREA (MR/HR)	10
R-3	HP WORK AREA	<1
R-4	CHG. PUMP RM (MR/HR)	300
R-5	SPENT FUEL PIT (MR/HR)	0.3
R-6	SAMPLING ROOM (MR/HR)	70
R-7	IN-CORE INST (MR/HR)	10
R-8	DRUM. RM. (MR/HR)	0.5
R-9	FAILED FUEL (MR/HR)	OSH

PROCESS RADIATION MONITORS

CV VENT PART. (CPM)	35K
CV VENT GAS (CPM)	1.2K
PLT VNT GAS (CPM)	650
COND. AIR EJEC. (CPM)	38
CV FAN CW (CPM)	850
COMP. CW (CPM)	400
WASTE DISPOSAL (CPM)	6.5K
S/G A BLOWDOWN (CPM)	1K
S/G B BLOWDOWN (CPM)	1K
S/G C BLOWDOWN (CPM)	1K
FUEL HDLG BASE (CPM)	17
FUEL HDLG UPPER (CPM)	35
	CV VENT GAS (CPM) PLT VNT GAS (CPM) COND. AIR EJEC. (CPM) CV FAN CW (CPM) COMP. CW (CPM) WASTE DISPOSAL (CPM) S/G A BLOWDOWN (CPM) S/G C BLOWDOWN (CPM) FUEL HDLG BASE (CPM)

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR)	<1
R-31A "A" MN STM (MR/HR)	<10
R-31B "B" MN STM (MR/HR)	<10
R-31C "C" MN STM (MR/HR)	<10
R-32A CV HI RG (R/HR)	<1
R-328 CV HI RG (R/HR)	<1
R-33 MON BLDG (MR/HR)	<10
R-34 "P" PLT VNT (cpm)	<1
R-34 "I" PLT VNT (cpm)	<1
R-34 "NG" PLT VNT (cpm)	<1
R-35 PLT VNT GAS (MID) (MR/HR)	<1
6 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	005

PRIMARY SYSTEM	
RCS PRESSURE (PSIG)	2295
PZR LEVEL (%)	22
TAVE (°F)	547
LOOP A TH (°F)	548.3
TC (°F)	547
Δτ	1
LOOP B TH (°F)	548
TC (°F)	547
Δτ	1
LOOP C TH (°F)	548
TC (°F)	547
ΔΤ	1
SUBCOOLING (°F)	108
CHRGNG FLOW (GPM)	24
LETDOWN FLOW (GPM)	37
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	8.35E+02
¹³¹ (uCi/ml)	3.24E+02

SECONDARY SYSTEM

S/G A LEVWR (%)	68
PRESS (PSIG)	985
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G B LEVWR (%)	68
PRESS (PSIG)	980
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEVWR (%)	68
PRESS (PSIG)	985
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0

Date: <u>NOV. 14, 1989</u>	Date:	NOV.	14,	1989
----------------------------	-------	------	-----	------

Time: 08:30

ENGINEERED SAFETY FEATURES

Completed By:

.3

.01

.2

91

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
and a second of the second of
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 O C O
SI PUMP A A B N C A
RHR PUMP A A B A
HVH 1 0 2 0 3 0 4 0
SECONDARY
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 N
OFFSITE E
EMER. BUS E1 E E2 E
FANS
HVE 1A 1B A
HVE 2A 0 2B A
HVE 5A A 5B O
HVE 15 0 15A A

OSH	Ξ	OFF	SC/	ALE	HIGH
OSL	Ξ	OFF	SC/	٩LE	LOW
00S	=	OUT	OF	SEF	RVICE
1 SOL	=	ISOL		ED	

ATTACHMENT 9.7

67

Α

Α

Α

0

Α

Α ...

Page 1 of 17

Date: NOV. 14, 1989 EMERGENCY CLASSIFICATION (CIRCLE) NOTIFICATION OF UNUSUAL EVENT Time: 08:45 ALERT SITE AREA EMERGENCY Completed By: GENERAL EMERGENCY ENVIRONMENTAL SYSTEMS CONTAINMENT STATUS ENGINEERED SAFETY FEATURES 5.9__ WIND SPEED UPPER (MPH) PRESSURE (PSIG) .3 SI ACTUATED: TIME TEMPERATURE (°F) 125 RESET: TIME 3.9 LOWER (MPH) WIND DIR. UPPER (* FROM) HYDROGEN CONC. (\$) .01 CS ACTUATED: TIME 200 .2 RESET: TIME LOWER (° FROM) 193 SUMP LEVEL (INCHES) 91 AIR TEMPERATURE (°F) 51 RWST LEVEL (%) CONT. ISO. A ACTUATED: TIME RESET: TIME PASQUILL STAB, FACTOR D CONT. ISO. B ACTUATED: TIME PRIMARY SYSTEM RCS PRESSURE (PSIG) 2295 RESET: TIME AREA RADIATION MONITORS <1 SPRAY ADD TANK LEVEL (%) PZR LEVEL (%) 22 R-1 CONTROL ROOM (MR/HR) 10 TAVE (°F) 547 R-2 CONT. AREA (MR/HR) SI COLD-LEG FLOW (GPM) <1 LOOP A TH (°F) _____ 548 R-3 HP WORK AREA SI HOT-LEG INJECT START TC (°F) 300 547 R-4 CHG. PUMP RM (MR/HR) 1 R-5 SPENT FUEL PIT (MR/HR) 0.3 ΔT EQUIPMENT STATUS N = NOT AVAILABLE LOOP B TH (°F) 70 R-6 SAMPLING ROOM (MR/HR) 548 547 R-7 IN-CORE INST (MR/HR) 10 TC (°F) A = AVAILABLE (NOT OPERATING) 1 0.5 ΔT 0 = OPERATINGR-8 DRUM. RM. (MR/HR) LOOP C TH (°F) OSH 548 E = ENERGIZEDR-9 FAILED FUEL (MR/HR) TC (°F) _____ 547 PRIMARY 1 RCP PROCESS RADIATION MONITORS A <u>0</u> B <u>0</u> C <u>0</u> ΔT CHG PUMP A A B O C O 11 CV VENT PART. (CPM) SUBCOOLING (°F) 108 35K A A B N C A R-12 CV VENT GAS (CPM) 1.2K CHRGNG FLOW (GPM) 24 SI PUMP 650 40 CS PUMP A _ A B R-14 PLT VNT GAS (CPM) LETDOWN FLOW (GPM) R-15 COND. AIR EJEC. (CPM) ____ 0 REACTOR POWER RHR PUMP A A B 38 R-16 CV FAN CW (CPM) 850 HVH 1 0 2 0 3 0 4 0 ACTIVITY: GROSS (uCi/ml) 8.35E+02 1³¹ (uCi/ml) 3.24E+02 400 R-17 COMP. CW (CPM) SECONDARY 6.5K 3.24E+02 FEED PUMP A O B A R-18 WASTE DISPOSAL (CPM) COND PUMP A O B A 1K R-19A S/G A BLOWDOWN (CPM) AFW MOTOR A A B A 1K R-19B S/G B BLOWDOWN (CPM) SECONDARY SYSTEM Α__ R-19C S/G C BLOWDOWN (CPM) 1K S/G A LEV.-WR (%) 68 AFW STEAM 17 990 MSIV A O B O C O PRESS (PSIG) R-20 FUEL HDLG BASE (CPM) 35 ELECTRICAL 0 FEED (PPH) R-21 FUEL HDLG UPPER (CPM) STEAM (PPH) 0 EDG A A B A DS/DG N OFFSITE E ACCIDENT RADIATION MONITORS ACT. (uCi/ml) 0 S/G B LEV.-WR (%) 68 R-30 F.H. BASE HI RG (MR/HR) <1 EMER. BUS E1 E E2 E <10 990 R-31A "A" MN STM (MR/HR) PRESS (PSIG) R-31B "B" MN STM (MR/HR) <10 FEED (PPH) 0 FANS HVE 1A _____ 1B ____ R-31C "C" MN STM (MR/HR) <10 STEAM (PPH) 0 HVE 2A 0 2B R-32A CV HI RG (R/HR) ACT. (uCi/ml) <1 0 HVE 5A _____ 5B ____ R-32B CV HI RG (R/HR) <1 S/G C LEV.-WR (%) 68 PRESS (PSIG) 996 HVE 15 0 15A <10 R-33 MON BLDG (MR/HR) <1 FEED (PPH) 0 R-34 "P" PLT VNT (cpm) <1 0 STEAM (PPH) R-34 "I" PLT VNT (cpm) LEGEND: 0 ACT. (uCi/ml) _____ OSH = OFF SCALE HIGH R-34 "NG" PLT VNT (cpm) <1 OSL = OFF SCALE LOW R-35 PLT VNT GAS (MID) (MR/HR) <1 B6 PLT VNT GAS (HI) (MR/HR) OOS = OUT OF SERVICE 14 R-37 CONDENSATE POLISHER (CPM) OOS ISOL = ISOLATED

SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS



EMERGENCY CLASSIFICATION (CIRCLE)

NOTIFICATION OF UNUSUAL EVENT ALERT SITE AREA EMERGENCY GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	5.7
LOWER (MPH)	4.1
WIND DIR. UPPER (° FROM)	202
LOWER (° FROM)	197
AIR TEMPERATURE (°F)	51
PASQUILL STAB. FACTOR	D

AREA RADIATION MONITORS

R-1	CONTROL ROOM (MR/HR)	<1
R-2	CONT. AREA (MR/HR)	1.0E+04
R-3	HP WORK AREA	· <1
R-4	CHG. PUMP RM (MR/HR)	300
R-5	SPENT FUEL PIT (MR/HR)	0.3
R-6	SAMPLING ROOM (MR/HR) _	70
R-7	IN-CORE INST (MR/HR)	10
R-8	DRUM. RM. (MR/HR)	0.5
R-9	FAILED FUEL (MR/HR)	OSH

POCESS RADIATION MONITORS

1	CV VENT PART. (CPM)	OSH
R-12	CV VENT GAS (CPM)	1.33E+05
R-14	PLT VNT GAS (CPM)	650
R-15	COND. AIR EJEC. (CPM)	38
R-16	CV FAN CW (CPM) 9.	0E+04
R-17	COMP. CW (CPM)	400
R-18	WASTE DISPOSAL (CPM)	6.5K
R-19A	S/G A BLOWDOWN (CPM)	1K
R-19B	S/G B BLOWDOWN (CPM)	1K
R-19C	S/G C BLOWDOWN (CPM)	1K
R-20	FUEL HDLG BASE (CPM)	17
R-21	FUEL HDLG UPPER (CPM)	35

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR)	<1
R-31A "A" MN STM (MR/HR)	<10
R-31B "B" MN STM (MR/HR)	<10
R-31C "C" MN STM (MR/HR)	<10
R-32A CV HI RG (R/HR)	10
R-32B CV HI RG (R/HR)	10
R-33 MON BLDG (MR/HR)	<10
R-34 "P" PLT VNT (cpm)	<1
R-34 "!" PLT VNT (cpm)	<1
R-34 "NG" PLT VNT (cpm)	<1
35 PLT VNT GAS (MID) (MR/HR)	<1
6 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	005

CONTAINMENT STATUS	
PRESSURE (PSIG)	
TEMPERATURE (°F)	
HYDROGEN CONC. (%)	
SUMP LEVEL (INCHES)	

RWST LEVEL (%)

PRIMARY SYSTEM

PRIMART STSTEM	
RCS PRESSURE (PSIG)	2240
PZR LEVEL (%)	22
TAVE (°F)	547
LOOP A TH (°F)	548
TC (°F)	547
ΔΤ	1
LOOP B TH (°F)	548
TC (°F)	547
Δτ	1
LOOP C TH (°F)	548
TC (°F)	547
ΔΤ	11
SUBCOOLING (°F)	108
CHRGNG FLOW (GPM)	27
LETDOWN FLOW (GPM)	42
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	8.33E+02
¹³¹ (uCi/ml)	3.26E+02

SECONDARY SYSTEM

S/G A LEVWR (%)	68
PRESS (PSIG)	990
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G B LEVWR (%)	69
PRESS (PSIG)	990
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEVWR (%)	68
PRESS (PSIG)	1000
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0

Date: <u>NOV. 14, 1989</u> Time: <u>09:00</u>

Completed By:

.3

.01

.2____

91

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 AVAILABLEA = AVAILABLE (NOT OPERATING) 0 = OPERATINGE = ENERGIZEDPRIMARY RCP CHG PUMP A A B O C O SI PUMP A A B N C A CS PUMP A A B A RHR PUMP A A B A HVH 1 0 2 0 3 0 4 0 SECONDARY FEED PUMP A O B A COND PUMP A O B AFW MOTOR A _____A B ____A AFW STEAM A MSIV A O B O C O ELECTRICAL EDG A A B A DS/DG N OFFSITE E EMER. BUS E1 E E2 E FANS HVE 1A _____ 1B _____ Α HVE 2A O 2B A HVE 5A A 5B O HVE 15 O 15A A

LEGEND:

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

ISOL = ISOLATED

SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

EMERGENCY CLASSIFICATION (CIRCLE)

NOTIFICATION OF UNUSUAL EVENT ALERT SITE AREA EMERGENCY GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	4.2
LOWER (MPH)	3.3
WIND DIR. UPPER (* FROM)	205
LOWER (° FROM)	199
AIR TEMPERATURE (°F)	52
PASQUILL STAB. FACTOR	D

AREA RADIATION MONITORS

R-1	CONTROL ROOM (MR/HR)	<1
R-2	CONT. AREA (MR/HR)	1.0E+04
R-3	HP WORK AREA	<1
R-4	CHG. PUMP RM (MR/HR)	300
R-5	SPENT FUEL PIT (MR/HR)	0.3
R-6	SAMPLING ROOM (MR/HR) _	70
R-7	IN-CORE INST (MR/HR)	10
R-8	DRUM. RM. (MR/HR)	0.5
R-9	FAILED FUEL (MR/HR)	OSH

ROCESS RADIATION MONITORS

E. 11	CV VENT PART. (CPM)	OSH
R-12	CV VENT GAS (CPM)	OSH
R-14	PLT VNT GAS (CPM)	650
R-15	COND. AIR EJEC. (CPM)	OSH
R-16	CV FAN CW (CPM) 2.	0E+05
R -17	COMP. CW (CPM)	400
R-18	WASTE DISPOSAL (CPM)	6.5K
R-19A	S/G A BLOWDOWN (CPM)	1K
R-19B	S/G B BLOWDOWN (CPM)	1K
R-19C	S/G C BLOWDOWN (CPM)	1K
R-20	FUEL HDLG BASE (CPM)	17
R-21	FUEL HDLG UPPER (CPM)	35

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR)	<1
R-31A "A" MN STM (MR/HR)	<10
R-318 "B" MN STM (MR/HR)	<10
R-31C "C" MN STM (MR/HR)	<10
R-32A CV HI RG (R/HR)	10
R-32B CV HI RG (R/HR)	10
R-33 MON BLDG (MR/HR)	<10
R-34 "P" PLT VNT (cpm)	<1
R-34 "!" PLT VNT (cpm)	<1
R-34 "NG" PLT VNT (cpm)	<1
35 PLT VNT GAS (MID) (MR/HR)	<1
36 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	005

CONTAINMENT STATUS	
PRESSURE (PSIG)	
TEMPERATURE (°F)	12
HYDROGEN CONC. (%)	
SUMP LEVEL (INCHES)	

RWST LEVEL (%)

.3

.01

.2

91

PRIMARY SYSTEM

RCS PRESSURE (PSIG)	2240
PZR LEVEL (%)	22
TAVE (°F)	547
LOOP A TH (°F)	548
TC (°F)	547
ΔΤ	1
LOOP B TH (°F)	548
TC (°F)	547
Δτ	1
LOOP C TH (°F)	548
TC (°F)	547
ΔΤ	1
SUBCOOLING (°F)	108
CHRGNG FLOW (GPM)	45
LETDOWN FLOW (GPM)	45
REACTOR POWER	0
ACTIVITY:	•
GROSS (uCi/ml)	8.16E+02
1 ³¹ (uCi/ml)	3.21E+02

SECONDARY SYSTEM

S/G A LEVWR (%)	71
PRESS (PSIG)	1000
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G B LEVWR (%)	70
PRESS (PSIG)	990
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEVWR (%)	71
PRESS (PSIG)	1000
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/mi)	0

Date: <u>NOV. 14, 1989</u> Time: <u>09:15</u> Completed By:

ENGINEERE	D SAF	ETY	FE/	ATURES		
SI ACTUAT	ED:	TIME	_			
RES	ET:	TIME	_			
CS ACTUAT	ED:	TIME				
RES	ET:	TIME	_			
CONT. ISO	. A A	CTUA	TEL	D: TIM	IE	
		RE	SET	Γ: ΤΙM	1E _	
CONT. ISO	. B A	CTUA	TE	D: TIM	1E _	
		RE	SET	T. TIM	IE	
SPRAY ADD	TANK	LEV	EL	(%)	_	67
SI COLD-L	EG FL	.OW (GPN	4)		
SI HOT-LE	G INJ	ECT	ST/	ART		
EQUIPMENT	STAT	บร				
N = NOT A						
A = AVAIL	ABLE	(NOT	OF	PERATIN	IG)	
0 = 0 PERA	TING	•				
E = ENERG	IZED					
PRIMARY						
RCP	Α	0	в	0	с	0
CHG PUMP	A	A	В	0	Ċ	0
SI PUMP	A	A	в	N	Ċ.	A
CS PUMP	Α _	A	в	A	• • •	
RHR PUMP	Α —	A	в	A	-	
HVH 1 0	2	0	3	0	. 4	0
SECONDARY			-		• •	
FEED PUMP		0	8	А		
COND PUMP		0	в	A	-	
AFW MOTOR			в	A	-	
AFW STEAM	_	 A	Ū		-	
MSIV	Ā	0	в	0	с	0
ELECTRICA	· · -	<u> </u>	0		. • .	
EDG	A	Α	в	Α		
DS/DG	^	 N	0		-	
		E				
EMER. BUS	E 1	E		E2		E
FANS	сı –	C		E2		<u>с</u>
HVE 1A		A		1B		A
HVE 2A		- 0		2B		A .
HVE 5A		0	_	28 58		0
HVE 15		<u> </u>		15A		A
пус 15 <u>—</u>		0		- ^2		<u>^</u>

LEGEND:

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

ISOL = ISOLATED

SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS



EMERGENCY CLASSIFICATION (CIRCLE)

NOTIFICATION OF UNUSUAL EVENT ALERT SITE AREA EMERGENCY GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	5.3
LOWER (MPH)	4.1
WIND DIR. UPPER (* FROM)	215
LOWER (* FROM)	210
AIR TEMPERATURE (°F)	53
PASQUILL STAB. FACTOR	D

AREA RADIATION MONITORS

R-1	CONTROL ROOM (MR/HR)	<1
R-2	CONT. AREA (MR/HR)	1.0E+04
R-3	HP WORK AREA	<1
R-4	CHG. PUMP RM (MR/HR)	300
R-5	SPENT FUEL PIT (MR/HR)	0.3
R-6	SAMPLING ROOM (MR/HR)	300
R-7	IN-CORE INST (MR/HR)	10
R-8	DRUM. RM. (MR/HR)	0.5
R-9	FAILED FUEL (MR/HR)	OSH

PROCESS RADIATION MONITORS

. 1	CV VENT PART. (CPM)	OSH
R-12	CV VENT GAS (CPM)	OSH
R-14	PLT VNT GAS (CPM)	650
R-15	COND. AIR EJEC. (CPM)	<u>OSH</u>
R-1.6	CV FAN CW (CPM) 2.0	E+05
R-17	COMP. CW (CPM)	400
R-18	WASTE DISPOSAL (CPM)	6.5K
R-19A	S/G A BLOWDOWN (CPM)	OSH
R-19B	S/G B BLOWDOWN (CPM)	1K
R-19C	S/G C BLOWDOWN (CPM)	1K
R-20	FUEL HDLG BASE (CPM)	17
R-21	FUEL HDLG UPPER (CPM)	35

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR)	<1
R-31A "A" MN STM (MR/HR)	1400
R-31B "B" MN STM (MR/HR)	<10
R-31C "C" MN STM (MR/HR)	<10
R-32A CV HI RG (R/HR)	10
R-32B CV HI RG (R/HR)	10
R-33 MON BLDG (MR/HR)	<10
R-34 "P" PLT VNT (cpm)	<1
R-34 "!" PLT VNT (cpm)	<1
R-34 "NG" PLT VNT (cpm)	<1
R-35 PLT VNT GAS (MID) (MR/HR)	<1
6 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	00S

CONTAINMENT STATUS	
PRESSURE (PSIG)	.3
TEMPERATURE (°F)	125
HYDROGEN CONC. (%)	.01
SUMP LEVEL (INCHES)	.2
RWST LEVEL (%)	91

PRIMARY SYSTEM

RCS PRESSURE (PSIG)	1770
PZR LEVEL (%)	10
TAVE (°F)	540
LOOP A TH (°F)	540
TC (°F)	540
ΔΤ	3
LOOP B TH (°F)	540
TC (°F)	540
Δτ	3
LOOP C TH (°F)	540
TC (°F)	540
Δτ	4
SUBCOOLING (°F)	107
CHRGNG FLOW (GPM)	208
LETDOWN FLOW (GPM)	0
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	7.70E+02
1 ¹³¹ (uCi/ml)	3.05E+02
	· · · · · · · · · · · · · · · · · · ·

SECONDARY SYSTEM

S/G A LEVWR (%)	77
PRESS (PSIG)	936
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	14.4
S/G B LEVWR (%)	70
PRESS (PSIG)	936
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEVWR (%)	68
PRESS (PSIG)	936
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0

Date: <u>NOV. 14, 1989</u> Time: <u>09:30</u>

Completed By:

ENGINEERED SAFETY FEATURES				
SI ACTUATED: TIME	9:25			
RESET: TIME				
CS ACTUATED: TIME				
RESET: TIME				
CONT. ISO. A ACTUATED:	TIME 9:25			
RESET:	TIME			
CONT. ISO. B ACTUATED:	TIME			
RESET:	TIME			
SPRAY ADD TANK LEVEL (%				
SI COLD-LEG FLOW (GPM)				
SI HOT-LEG INJECT START				
EQUIPMENT STATUS	•			
N = NOT AVAILABLE				
A = AVAILABLE (NOT OPER	ATING			
0 = OPERATING	AT 11407			
E = ENERGIZED				
PRIMARY				
	o c			
	· ·			
	<u>A</u>			
	<u>o</u>			
	0 4 0			
SECONDARY				
	<u>A</u>			
	A			
	0			
AFW STEAMA				
MSIV A ISOL B	<u> </u>			
ELECTRICAL				
EDG A A B	A			
DS/DG N				
OFFSITE E				
EMER. BUS E1	E2 <u>E</u>			
FANS				
HVE TA 1B	Α			
HVE 2A 0 2B				
HVE 5A 5B	0			
HVE 15 0 15	A A			
<u></u>				

OSH	=	OFF	SC/	٩LE	HIGH
OSL	=	OFF	SC/	٩LE	LOW
00S	Ξ	OUT	OF	SEF	RVICE
I SOL	3	1 501	ATE	ED	

ATTACHMENT 9.7

Date: NOV. 14, 1989

Time: 09:40

· Page 1 of 17

SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

EMERGENCY CLASSIFICATION (CIRCLE) NOTIFICATION OF UNUSUAL EVENT

ALERT SITE AREA EMERGENCY GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	5.3
LOWER (MPH)	4.1
WIND DIR. UPPER (* FROM)	215
LOWER (° FROM)	210
AIR TEMPERATURE (°F)	53
PASQUILL STAB. FACTOR	D

AREA RADIATION MONITORS

R-1	CONTROL ROOM (MR/HR)	<1
R-2	CONT. AREA (MR/HR)	1.0E+04
R-3	HP WORK AREA	<1
R-4	CHG. PUMP RM (MR/HR)	300
R-5	SPENT FUEL PIT (MR/HR)	0.3
R-6	SAMPLING ROOM (MR/HR)	300
R-7	IN-CORE INST (MR/HR)	10
R-8	DRUM. RM. (MR/HR)	0.5
R-9	FAILED FUEL (MR/HR)	OSH

ROCESS RADIATION MONITORS

1	CV VENT PART. (CPM)	OSH
Ř-12	CV VENT GAS (CPM)	OSH
R-14	PLT VNT GAS (CPM)	650
R-15	COND. AIR EJEC. (CPM)	OSH
R-16	CV FAN CW (CPM) 2	.5E+05
R-17	COMP. CW (CPM)	400
R-18	WASTE DISPOSAL (CPM)	6.5K
R-19A	S/G A BLOWDOWN (CPM)	OSH
R-19B	S/G B BLOWDOWN (CPM)	1K
R-19C	S/G C BLOWDOWN (CPM)	١K
R-20	FUEL HDLG BASE (CPM)	17
R-21	FUEL HDLG UPPER (CPM)	35

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR)	<1
R-31A "A" MN STM (MR/HR)	1350
R-318 "B" MN STM (MR/HR)	<10
R-31C "C" MN STM (MR/HR)	<10
R-32A CV HI RG (R/HR)	10
R-32B CV HI RG (R/HR)	10
R-33 MON BLDG (MR/HR)	<10
R-34 "P" PLT VNT (cpm)	<1
R-34 "!" PLT VNT (cpm)	<1
R-34 "NG" PLT VNT (cpm)	<1
35 PLT VNT GAS (MID) (MR/HR)	<1
6 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	00S

CONTAINMENT STATUS	
PRESSURE (PSIG)	.3
TEMPERATURE (°F)	125
HYDROGEN CONC. (%)	.01
SUMP LEVEL (INCHES)	.2
RWST LEVEL (%)	91

PRIMARY SYSTEM

RCS PRESSURE (PSIG)	920
PZR LEVEL (%)	65
TAVE (°F)	483
LOOP A TH (°F)	486
TC (°F)	480
ΔΤ	6
LOOP B TH (°F)	485
TC (°F)	
ΔΤ	5
LOOP C TH ("F)	486
TC (°F)	
ΔΤ	6
SUBCOOLING (°F)	90
CHRGNG FLOW (GPM)	208
LETDOWN FLOW (GPM)	0
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	7.70E+02
1 ¹³¹ (uCi/ml)	3.05E+02

SECONDARY SYSTEM

S/G A LEVWR (%)	80
PRESS IG)	1010
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	14.0
S/G B LEVWR (%)	74
PRESS (PSIG)	575
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEVWR (%)	70
PRESS (PSIG)	575
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0

Сотр	leted By:		<u> </u>	
	ENGINEERE	D SAFETY FE	ATURES	
	SI ACTUATE		TORES	9:32
	RESE			9:40
	CS ACTUATE			3.40
		ED: TIME		
		. A ACTUATE	D: TIME	9:32
	LUNI. 150.	RESE		9:52
	00NT 100	. B ACTUATE		
	CUNT. ISU.			
			T: TIME	
<u> </u>		TANK LEVEL		67
		EG FLOW (GP	·	910
	SI HOT-LEO	G INJECT ST	ART	
<u> </u>	EQUIPMENT			
	N = NOT A	VAILABLE		
·	A = AVAILA	ABLE (NOT O	PERATING)	
	0 = OPERAT	TING		
	E = ENERG	I ZED		
	PRIMARY			
	RCP	A O B	0 C	0
	CHG PUMP	A O B	<u> </u>	0
	SI PUMP	A 0 B	N C	0
	CS PUMP	A A B	A	
	RHR PUMP	A 0 B	A	
	HVH 1 0		0 4	0
2	SECONDARY		·	
2	FEED PUMP		Α	
	COND PUMP		<u>A</u>	
	AFW MOTOR			
	AFW MOTOR			
		A ISOL B	o c	0
	MSIV		<u> </u>	
	ELECTRICAL	-	•	
	EDG		A	
	DS/DG	<u> </u>		
	OFFSITE	<u> </u>		
	EMER. BUS	E1 <u>E</u>	E2	<u> </u>
	FANS			
	HVE 1A	A	1B	Α
	HVE 2A	0	2B	<u>A</u>
	HVE 5A	Α	58	0

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

HVE 15 0 15A A

ATTACHMENT 9.7

Page 1 of 17

EMERGENCY CLASSIFICATION (C			Date: NOV. 14, 1989
NOTIFICATION OF UNUSUAL EVEN			
ALERT			Time: 09:45
SITE AREA EMERGENCY			
GENERAL EMERGENCY		Con	npleted By:
ENVIRONMENTAL SYSTEMS	CONTAINMENT STATUS		ENGINEERED SAFETY FEATURES
WIND SPEED UPPER (MPH) 6.9	PRESSURE (PSIG)		SI ACTUATED: TIME 9:32
LOWER (MPH) 4.6	TEMPERATURE (°F)	125	RESET: TIME 9:40
WIND DIR. UPPER (° FROM) 220	TEMPERATURE (°F) HYDROGEN CONC. (%) SUMP LEVEL (INCHES)	.01	
LOWER (° FROM) 211	SUMP LEVEL (INCHES) RWST_LEVEL (1	.2	RESET: TIME
AIR TEMPERATURE (°F) 54	RWST_LEVEL (%)	91	CONT. ISO. A ACTUATED: TIME
PASQUILL STAB. FACTOR D			RESET: TIME
	PRIMARY SYSTEM		CONT. ISO. B ACTUATED: TIME
AREA RADIATION MONITORS	RCS PRESSURE (PSIG)	1350	RESET: TIME
R-1 CONTROL ROOM (MR/HR) <1		74	RESET: TIME SPRAY ADD TANK LEVEL (\$)67
R-2 CONT. AREA (MR/HR)1.0E+04	TAVE (°F)	OSL	SI COLD-LEG FLOW (GPM) 600
R-3 HP WORK AREA <1	LOOP A TH (°F)	460 🥪	
R-4 CHG. PUMP RM (MR/HR) 300	TC (°F)	423	· · · · · · · · · · · · · · · · · · ·
R-5 SPENT FUEL PIT (MR/HR)0.3	ΔΤ	57	EQUIPMENT STATUS
	LOOP B TH (°F)	452	N = NOT AVAILABLE
R-7 IN-CORE INST (MR/HR) 10	TC (°F)	430	A = AVAILABLE (NOT OPERATING)
R-8 DRUM. RM. (MR/HR)0.5	Δτ	22	$\dot{\Omega} = \Omega P P A T I N C$
R-9 FAILED FUEL (MR/HR) OSH	LOOP C TH (°F)	435	E = ENERGIZED
	TC (°F)	430	PRIMARY
PROCESS RADIATION MONITORS	ΔΤ	5	RCP A O B O C O
1 CV VENT PART. (CPM) OSH		100	CHG PUMP A O B O C O
(-12 CV VENT GAS (CPM) OSH	CHRGNG FLOW (GPM)		
R-14 PLT VNT GAS (CPM) 650	LETDOWN FLOW (GPM)	0	CS PUMP A A B A
R-15 COND. AIR EJEC. (CPM) OSH	REACTOR POWER	0	RHR PUMP A O B A
R-16 CV FAN CW (CPM) 3.0E+05	ACTIVITY:		HVH 1 0 2 0 3 0 4 0
R-17 COMP. CW (CPM) 400	GROSS (uCi/ml)	7.19E+02	
R-18 WASTE DISPOSAL (CPM) 6.5K	1 ³¹ (uCi/ml)	2.86E+02	FEED PUMP A A B A
R-19A S/G A BLOWDOWN (CPM) ISOL			COND PUMP A O B A
R-19B S/G B BLOWDOWN (CPM)	SECONDARY SYSTEM		
		78	
R-20 FUEL HDLG BASE (CPM) 17	PRESS (PS16)	985	MSIV A ISOL B O C O
R-21 FUEL HDLG UPPER (CPM) 35	FEED (PPH)		ELECTRICAL
	STEAM (PPH)	<u>0</u>	
R-19C S/G C BLOWDOWN (CPM) 1K R-20 FUEL HDLG BASE (CPM) 17 R-21 FUEL HDLG UPPER (CPM) 35 ACCIDENT RADIATION MONITORS R-30 F.H. BASE HI RG (MR/HR) <1	ACT. (uCi/ml)	13.2	
R-30 F.H. BASE HI RG (MR/HR) <1	S/G B EVWR (%)	78	DS/DG N OFFSITE E EMER. BUS E1 E E2 E
R-31A "A" MN STM (MR/HR) 1280	PRESS (PSIG)	575	
R-31B "B" MN STM (MR/HR) <10	PRESS (PSIG) FEED (PPH) STEAM (PPH) ACT. (uCi/ml) S/G C LEV - WR (%)		FANS
R-31C "C" MN_STM (MR/HR) <10	STEAM (PPH)	<u> </u>	
R-31C "C" MN STM (MR/HR) <10		<u>0</u>	HVE 1A A 1B A HVE 2A O 2B A
R-32A CV HI RG (R/HR) 10	S/G C LEVWR (%)		HVE 2A 2B A
	3/0 C LLY. MIX (///		HVE 5AA 5B HVE 150 15AA
R-33 MON BLDG (MR/HR) <10	PRESS (PSIG)		
R-34 "P" PLT VNT (cpm) <1	STEAM (ODU)		
	SIERM (FPR)	<u> </u>	LEGENU:
R-34 "I" PLT VNT (cpm) <1	AOT /	^	
R-34 "I" PLI VNI (cpm) <1 R-34 "NG" PLT VNT (cpm) <1 2.35 PLT VNT (cfm) <1 2.35 PLT VNT (cfm) (ND (ND) (10) (10) (10) (10) (10) (10) (10) (10	FEED (PPH) STEAM (PPH) ACT. (uCi/ml)	0	OSH = OFF SCALE HIGH
R-34 "I" PLI VNI (cpm) <1	ACT. (uCi/mi)	0	OSH = OFF SCALE HIGH OSL = OFF SCALE LOW OOS = OUT OF SERVICE

ATTACHMENT 9.7

Page 1 of 17

EMERGENCY CLASSIFICATION (CIRCLE)

NOTIFICATION OF UNUSUAL EVENT ALERT SITE AREA EMERGENCY GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	6.8
LOWER (MPH)	5.4
WIND DIR. UPPER (* FROM)	219
LOWER (° FROM)	200
AIR TEMPERATURE (°F)	55
PASQUILL STAB. FACTOR	D

AREA RADIATION MONITORS

R-1	CONTROL ROOM (MR/HR)	<1
R-2	CONT. AREA (MR/HR)	1.0E+04
R-3	HP WORK AREA	<1
R-4	CHG. PUMP RM (MR/HR)	300
R-5	SPENT FUEL PIT (MR/HR)	0.3
R -6	SAMPLING ROOM (MR/HR)	300
R-7	IN-CORE INST (MR/HR)	· 10
R-8	DRUM. RM. (MR/HR)	0.5
R-9	FAILED FUEL (MR/HR)	OSH

PROCESS RADIATION MONITORS

L 11	CV VENT PART. (CPM)	OSH
R-12	CV VENT GAS (CPM)	OSH
R-14	PLT VNT GAS (CPM)	650
R-15	COND. AIR EJEC. (CPM)	OSH
-R-16	CV FAN CW (CPM) 3	.5E+05
R-17	COMP. CW (CPM)	400
R-18	WASTE DISPOSAL (CPM)	6.5K
R-19A	S/G A BLOWDOWN (CPM)	ISOL
R-19B	S/G B BLOWDOWN (CPM)	1K
R-19C	S/G C BLOWDOWN (CPM)	1K
R-20	FUEL HDLG BASE (CPM)	17
R-21	FUEL HDLG UPPER (CPM)	35

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR)	<1
R-31A "A" MN STM (MR/HR)	1200
R-318 "B" MN STM (MR/HR)	<10
R-31C "C" MN STM (MR/HR)	<10
R-32A CV HI RG (R/HR)	10
R-32B CV HI RG (R/HR)	10
R-33 MON BLDG (MR/HR)	<10
R-34 "P" PLT VNT (cpm)	<1
R-34 "I" PLT VNT (cpm)	<1
R-34 "NG" PLT VNT (cpm)	<1
R-35 PLT VNT GAS (M1D) (MR/HR)	<1
6 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	00S

CONTAINMENT STATUS

PRESSURE (PSIG)	.3
TEMPERATURE (°F)	125
HYDROGEN CONC. (%)	.01
SUMP LEVEL (INCHES)	.2
RWST LEVEL (%)	91

PRIMARY SYSTEM

RCS PRESSURE (PSIG)	750
PZR LEVEL (%)	45
TAVE (°F)	OSL
LOOP A TH (°F)	450
TC (°F)	403
ΔΤ	47
LOOP B TH (*F)	430
TC (°F)	430
ΔΤ	0
LOOP C TH (*F)	430
TC (°F)	430
Δτ	0
SUBCOOLING ("F)	60
CHRGNG FLOW (GPM)	208
LETDOWN FLOW (GPM)	0
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	6.69E+02
¹³¹ (uCi/ml)	2.68E+02

SECONDARY SYSTEM

S/G A LEVWR (%)	81
PRESS (PSIG)	830
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	12.1
S/G B LEVWR (%)	76
PRESS (PSIG)	410
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEVWR (%)	72
PRESS (PSIG)	410
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCî/mi)	0

Date:	: NOV	. 14	, 198	9

Time: 10:00

Completed By:

THO INCEDED CALETY FEATURES			
ENGINEERED SAFETY FEATURES	0.72		
SI ACTUATED: TIME	9:32		
RESET: TIME	9:40		
CS ACTUATED: TIME	<u> </u>		
RESET: TIME			
CONT. ISO. A ACTUATED: TIME			
RESET: TIME	<u></u>		
CONT. ISO. B ACTUATED: TIME			
RESET: TIME	67		
SPRAY ADD TANK LEVEL (%)	67		
SI COLD-LEG FLOW (GPM)	1000		
SI HOT-LEG INJECT START	.		
EQUIPMENT STATUS			
N = NOT AVAILABLE			
A = AVAILABLE (NOT OPERATING)			
0 = OPERATING			
E = ENERGIZED			
PRIMARY			
CHG PUMP A O B O C	0		
SI PUMP A A B N C	<u>A</u>		
CS PUMP A A B A			
RHR PUMP A <u>A</u> B <u>A</u>			
HVH 1 <u>0</u> 2 <u>0</u> 3 <u>0</u> 4	_0		
SECONDARY			
FEED PUMP A <u>A</u> B <u>A</u>			
COND PUMP A O B A			
AFW MOTOR A B			
AFW STEAMA			
MSIV A ISOL B O C			
ELECTRICAL			
EDG A A B A			
DS/DG <u>N</u>			
OFFSITE E			
EMER. BUS E1 E2	E		
FANS			
HVE 1A A 1B	A		
HVE 2A 0 2B	Α		
HVE 5A 5B	0		
HVE 15 0 15A	Α		

OSH	=	OFF	SC/	٩LE	HIGH
OSL	=	OFF	SC/	ALE	LOW
00S	Ξ	OUT	0F	SEF	RVICE
I SOL	=	ISOL	AT	D	

SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

EMERGENCY CLASSIFICATION (CIRCLE)

NOTIFICATION OF UNUSUAL EVENT ALERT SITE AREA EMERGENCY GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	6.6
LOWER (MPH)	2.9
WIND DIR. UPPER (* FROM)	222
LOWER (* FROM)	206
AIR TEMPERATURE (°F)	55
PASQUILL STAB. FACTOR	D

AREA RADIATION MONITORS

R-1	CONTROL ROOM (MR/HR)	<1
R-2	CONT. AREA (MR/HR)	1.0E+04
R-3	HP WORK AREA	<1
R-4	CHG. PUMP RM (MR/HR)	300
R-5	SPENT FUEL PIT (MR/HR)	0.3
R-6	SAMPLING ROOM (MR/HR)	300
R-7	IN-CORE INST (MR/HR)	10
R-8	DRUM. RM. (MR/HR)	0.5
R-9	FAILED FUEL (MR/HR)	OSH

PROCESS RADIATION MONITORS

1	CV VENT PART. (CPM)	OSH
R-12	CV VENT GAS (CPM)	OSH
R-14	PLT VNT GAS (CPM)	650
R-15	COND. AIR EJEC. (CPM)	OSH
R-16	CV FAN CW (CPM) 3	.5E+05
R-17	COMP. CW (CPM)	400
R-18	WASTE DISPOSAL (CPM)	6.5K
R-19A	S/G A BLOWDOWN (CPM)	ISOL
R-198	S/G B BLOWDOWN (CPM)	1K
R-19C	S/G C BLOWDOWN (CPM)	1K
R-20	FUEL HDLG BASE (CPM)	17
R-21	FUEL HDLG UPPER (CPM)	35

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR)	<1
R-31A "A" MN STM (MR/HR)	1100
R-318 "B" MN STM (MR/HR)	<10
R-31C "C" MN STM (MR/HR)	<10
R-32A CV HI RG (R/HR)	10
R-32B CV HI RG (R/HR)	10
R-33 MON BLDG (MR/HR)	<10
R-34 "P" PLT VNT (cpm)	<1
R-34 "I" PLT VNT (cpm)	<1
R-34 "NG" PLT VNT (cpm)	<1
35 PLT VNT GAS (MID) (MR/HR)	<1
6 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	005

CONTAINMENT STATUS PRESSURE (PSIG)

TEMPERATURE (°F)	125
HYDROGEN CONC. (%)	.01
SUMP LEVEL (INCHES)	.2
RWST LEVEL (%)	91

PRIMARY SYSTEM

RCS PRESSURE (PSIG)	840
PZR LEVEL (%)	30
TAVE (°F)	OSL
LOOP A TH (°F)	440
TC (°F)	403
ΔΤ	37
LOOP B TH (°F)	430
TC (°F)	430
Δτ	0
LOOP C TH (°F)	430
TC (°F)	430
ΔΤ	0
SUBCOOLING (°F)	105
CHRGNG FLOW (GPM)	208
LETDOWN FLOW (GPM)	0
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	6.20E+02
1 ¹³¹ (uCi/ml)	2.50E+02

SECONDARY SYSTEM

S/G A LEVWR (%)	81
PRESS (PSIG)	720
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	11.0
S/G B LEVWR (%)	78
PRESS (PSIG)	336
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEVWR (%)	74
PRESS (PSIG)	336
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0

Date:	NOV. 14, 198	9
Time:	10:15	

Completed By: ____

.3

ENGINEERED SAFETY FEATURES	
SI ACTUATED: TIME	9:32
RESET: TIME	9:40
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) 0 = OPERATING E = ENERGIZEDPRIMARY RCP A <u>A</u> B <u>A</u> C <u>O</u> CHG PUMP A O B O C O SI PUMP A O B N C O CS PUMP A A B A RHR PUMP A O B O HVH 1 0 2 0 3 0 4 0 SECONDARY FEED PUMP A A B A COND PUMP A O B A AFW MOTOR A 0 B 0 AFW STEAM O MSIV A A B O C O ELECTRICAL EDG A A B A DS/DG Ν OF

OFFSITE	Ε			
EMER. BUS E1	E	E2	Ε	_
FANS				
HVE TA	0	18	Α	_
HVE 2A	0	2B	A	•
HVE 5A	Α	58	0	_
HVE 15	0	15A	A	

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

ATTACHMENT 9.7

Page 1 of 17

37121	T FARAMETER DISFLAT SIST		
EMERGENCY CLASSIFICATION (C)	RCLE)		Date: NOV. 14, 1989
NOTIFICATION OF UNUSUAL EVEN			
ALERT			Time: 10:30
SITE AREA EMERGENCY			
GENERAL EMERGENCY		Com	pleted By:
ENVIRONMENTAL SYSTEMS	CONTAINMENT STATUS		ENGINEERED SAFETY FEATURES
WIND SPEED UPPER (MPH) 5.9	PRESSURE (PSIG)	.3	SI ACTUATED: TIME9:32_
LOWER (MPH)2.1	TEMPERATURE (°F)	125	RESET: TIME9:40_
WIND DIR. UPPER (° FROM) 214	HYDROGEN CONC. (%)	.01	CS ACTUATED: TIME
LOWER (° FROM) 194	SUMP LEVEL (INCHES)	.2	RESET: TIME
AIR TEMPERATURE (°F) 56	RWST LEVEL (%)	91	
PASQUILL STAB. FACTOR D			RESET: TIME
	PRIMARY SYSTEM		CONT. ISO. B ACTUATED: TIME
AREA RADIATION MONITORS	RCS PRESSURE (PSIG)	750	RESET: TIME
R-1 CONTROL ROOM (MR/HR) <1		26	RESET: TIME SPRAY ADD TANK LEVEL (%)67
R-2 CONT. AREA (MR/HR)1.0E+04		OSL	SI COLD-LEG FLOW (GPM) 0
R-3 HP WORK AREA <1		402	SI HOT-LEG INJECT START
R-4 CHG. PUMP RM (MR/HR) 300		402	
R-5 SPENT FUEL PIT (MR/HR) 0.3			EQUIPMENT STATUS
R-6 SAMPLING ROOM (MR/HR) 70	LOOP B TH (°F)	408	N = NOT AVAILABLE
R-7 IN-CORE INST (MR/HR) 10	TC (°F)	408	
R-8 DRUM. RM. (MR/HR)0.5			0 = OPERATING
	LOOP C TH (°F)		
	TC (°F)		
PROCESS RADIATION MONITORS	Δτ	0	RCP A A B A C O
11 CV VENT PART. (CPM) OSH	SUBCOOLING (°F)		
R-12 CV VENT GAS (CPM) OSH		208	SI PUMP A A B N C A
R-14 PLT VNT GAS (CPM) 650		0	CS PUMP A A B A
R-15 COND. AIR EJEC. (CPM) OSH		0	RHR PUMP A A B A
R-16 CV FAN CW (CPM)3.35E+05		F 705.00	HVH 1 0 2 0 3 0 4 0
R-17 COMP. CW (CPM) 400	GROSS (uCi/ml)	5.72E+02	SECONDARY
R-18 WASTE DISPOSAL CPM) 6.5K R-19A S/G A BLOWDOWN (CPM) ISOL	(uCi/ml)	2.31E+02	FEED PUMP A A B A
R-19A S/G A BLOWDOWN (CPM) ISOL			
R-19B S/G B BLOWDOWN (CPM) 1K	SECONDARY SYSTEM	04	AFW MOTOR A O B A
R-196 S/G C BLOWDOWN (CPM)	5/G A LEVWK (%)	84	
R-20 FUEL HDLG BASE (CPM) 17	PRESS (PSIG)	700	MSIV A ISOL B O C O
R-21 FUEL HDLG UPPER (CPM)35	FEED (PPH)		EDG A A B A
ACCIDENT DADIATION MONITORS	STEAM (PPH) ACT. (uCi/ml)	<u>v</u>	
ACCIDENT RADIATION MONITORS		79	DS/DG N OFFSITE E
R-30 F.H. BASE HI RG (MR/HR) <1		265	EMER. BUS E1 E E2 E
R-31A "A" MN STM (MR/HR) 1000	PRESS (PSIG)		EMER. BUS ET <u>E</u> EZ <u>E</u> FANS
R-31B "B" MN STM (MR/HR) <10	FEED (PPH)	0	HVE 1A A 1BA
	STEAM (PPH)		HVE 1AA 1BA
R-32A CV HI RG (R/HR) 10	ACT. (uCi/ml)		
R-32B CV HI RG (R/HR) 10 R-33 MON BLDG (MR/HR) <10	S/G C LEVWR (%) PRESS (PSIG)		HVE 5A A 5B O HVE 15 O 15A A
	FEED (PPH)		
R-34 "I" PLT VNT (cpm)	STEAM (PPH)	0	LEGEND:
R-34 "NG" PLT VNT (cpm)	FEED (PPH) STEAM (PPH) ACT. (uCi/ml)	<u>0</u>	OSH = OFF SCALE HIGH
	ACT. (uCi/ml)	V	OSL = OFF SCALE LOW
R-35 PLT VNT GAS (MID) (MR/HR) <a>			OOS = OUT OF SERVICE
R-37 CONDENSATE POLISHER (CPM) 00S			ISOL = ISOLATED
N-37 CONDENSATE POLISTER (CPM) 005			ISUL - ISULAILU

SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

EMERGENCY CLASSIFICATION (CIRCLE)

NOTIFICATION OF UNUSUAL EVENT ALERT SITE AREA EMERGENCY GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	6.0
LOWER (MPH)	2.4
WIND DIR. UPPER (* FROM)	219
LOWER (* FROM)	210
AIR TEMPERATURE (°F)	56
PASQUILL STAB. FACTOR	D

AREA RADIATION MONITORS

R-1	CONTROL ROOM (MR/HR)	<1
R-2	CONT. AREA (MR/HR)	1.0E+04
R-3	HP WORK AREA	<1
R-4	CHG. PUMP RM (MR/HR)	300
R-5	SPENT FUEL PIT (MR/HR)	0.3
R-6	SAMPLING ROOM (MR/HR)	70
R-7	IN-CORE INST (MR/HR)	10
R-8	DRUM. RM. (MR/HR)	0.5
-R-9	FAILED FUEL (MR/HR)	OSH

PROCESS RADIATION MONITORS

	CV VENT PART. (CPM)	OSH
R-12	CV VENT GAS (CPM)	OSH
R-14	PLT VNT GAS (CPM)	650
R-15	COND. AIR EJEC. (CPM)	OSH
R-16	CV FAN CW (CPM)3.35	E+05
R-17	COMP. CW (CPM)	400
R-18	WASTE DISPOSAL (CPM)	6.5K
R-19A	S/G A BLOWDOWN (CPM)	I SOL
R-19B	S/G B BLOWDOWN (CPM)	1K
R-19C	S/G C BLOWDOWN (CPM)	1K
R-20	FUEL HDLG BASE (CPM)	- 17
R-21	FUEL HDLG UPPER (CPM)	35

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR)	<1
R-31A "A" MN STM (MR/HR)	900
R-318 "B" MN STM (MR/HR)	<10
R-31C "C" MN STM (MR/HR)	<10
R-32A CV HI RG (R/HR)	10
R-32B CV HI RG (R/HR)	10_
R-33 MON BLDG (MR/HR)	<10
R-34 "P" PLT VNT (cpm)	<1
R-34 "I" PLT VNT (cpm)	<1
R-34 "NG" PLT VNT (cpm)	<1
-35 PLT VNT GAS (MID) (MR/HR)	<1
6 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	00S

CONTAINMENT STATUS
PRESSURE (PSIG)
TEMPERATURE (°F)
HYDROGEN CONC. (%)

HYDROGEN CONC. (%)	.01
SUMP LEVEL (INCHES)	.2
RWST LEVEL (%)	91

PRIMARY SYSTEM

RCS PRESSURE (PSIG)	600
PZR LEVEL (%)	10
TAVE (°F)	OSL
LOOP A TH (°F)	350
TC (°F)	340
·ΔT	10
LOOP B TH (°F)	370
TC (°F)	370
Δτ	0
LOOP C TH (°F)	370
TC (°F)	370
ΔΤ	0
SUBCOOLING (°F)	137
CHRGNG FLOW (GPM)	208
LETDOWN FLOW (GPM)	00
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	5.24E+02
¹³¹ (uCi/ml)	2.13E+02

SECONDARY SYSTEM

S/G A LEVWR (%)	82
PRESS (PSIG)	100
FEED (PPH)	0
STEAM (PPH)	5.0E4
ACT. (uCi/ml)	9.0
S/G B LEVWR (%)	78
PRESS (PSIG)	140
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEVWR (%)	74
PRESS (PSIG)	140
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0

Date: <u>NOV. 14, 1989</u> Time: <u>10:45</u>

Completed By:

125

ENGINEERED SAFETY FEATURES			
SI ACTUATED: TIME 9:32			
RESET: TIME 9:40			
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) 1000			
SI HOT-LEG INJECT START			
EQUIPMENT STATUS			
N = NOT AVAILABLE			
A = AVAILABLE (NOT OPERATING)			
0 = OPERATING			
E = ENERGIZED			
PRIMARY			
RCP A A B A C O			
SI PUMP A O B N C O			
CS PUMP A A B A			
RHR PUMP A A B A			
$\frac{1}{10000000000000000000000000000000000$			
<u>SECONDARY</u> FEED PUMP A A B A			
AFW MOTOR A O B A			
AFW STEAMA			
MSIV A ISOL B O C O			
ELECTRICAL			
EDG A A B A			
DS/DG N			
OFFSITE E			
EMER. BUS E1 E E2 E			
FANS			
HVE 1A A 1B A			
HVE 2A 0 2B A			
HVE 5A A 5B O			
HVE 15 0 15A A			

OSH	=	OFF	SC/	٩LE	HIGH
OSL	Ŧ	OFF	SC/	ALE	LOW
00S	₽	OUT	0F	SEF	RVICE
ISOL	Ξ	ISO	ATE	Ð	

ATTACHMENT 9.7 Page 1 of 17

-

Date: NOV. 14, 1989

EMERGENCY CLASSIFICATION (CIRCLE) NOTIFICATION OF UNUSUAL EVENT

ALERT SITE AREA EMERGENCY GENERAL EMERGENCY Time: 11:00

Completed By:

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	6.4
LOWER (MPH)	2.7
WIND DIR. UPPER (* FROM)	218
LOWER (° FROM)	205
AIR TEMPERATURE (°F)	57
PASQUILL STAB. FACTOR	D

AREA RADIATION MONITORS

R-1	CONTROL ROOM (MR/HR)	<1
R-2	CONT. AREA (MR/HR)	1.0E+04
R-3	HP WORK AREA	<1
R-4	CHG. PUMP RM (MR/HR)	300
R-5	SPENT FUEL PIT (MR/HR)	0.3
R-6	SAMPLING ROOM (MR/HR)	70
R-7	IN-CORE INST (MR/HR)	10
R-8	DRUM. RM. (MR/HR)	0.5
R-9	FAILED FUEL (MR/HR)	OSH

ROCESS RADIATION MONITORS

	CV VENT PART. (CPM)	OSH
R-12	CV VENT GAS (CPM)	OSH
R-14	PLT VNT GAS (CPM)	650
R-15	COND. AIR EJEC. (CPM)	OSH
R-16	CV FAN CW (CPM) 3.	35E+05
R- 17	COMP. CW (CPM)	400
R-18	WASTE DISPOSAL (CPM)	6.5K
R-19A	S/G A BLOWDOWN (CPM)	ISOL
R-198	S/G B BLOWDOWN (CPM)	1K
R-19C	S/G C BLOWDOWN (CPM)	1K
R-20	FUEL HDLG BASE (CPM)	17
R-21	FUEL HDLG UPPER (CPM)	35
R-20	FUEL HDLG BASE (CPM)	17

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR)	<1
R-31A "A" MN STM (MR/HR)	800
R-31B "B" MN STM (MR/HR)	<10
R-31C "C" MN STM (MR/HR)	<10
R-32A CV HI RG (R/HR)	10
R-32B CV HI RG (R/HR)	10
R-33 MON BLDG (MR/HR)	<10
R-34 "P" PLT VNT (cpm)	<1
R-34 "I" PLT VNT (cpm)	<1
R-34 "NG" PLT VNT (cpm)	<1
-35 PLT VNT GAS (MID) (MR/HR)	<1
6 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	00S

CONTAINMENT STATUS	
PRESSURE (PSIG)	.3
TEMPERATURE (°F)	125
HYDROGEN CONC. (\$)	.01
SUMP LEVEL (INCHES)	.2
RWST LEVEL (%)	91

PRIMARY SYSTEM

RCS PRESSURE (PSIG)	590
PZR LEVEL (%)	30
TAVE (°F)	OSL
LOOP A TH (°F)	340
TC (°F)	340
ΔΤ	10
LOOP B TH (*F)	365
TC (°F)	365
ΔŢ	0
LOOP C TH (°F)	365
TC (°F)	365
Δτ	0
SUBCOOLING (°F)	160
CHRGNG FLOW (GPM)	208
LETDOWN FLOW (GPM)	0
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	4.78E+02
¹³¹ (uCi/ml)	1.95E+02

SECONDARY SYSTEM

S/G A LEVWR (%)	81
PRESS (PSIG)	90
FEED (PPH)	0
STEAM (PPH)	5.0E3
ACT. (uCi/ml)	8.0
S/G B LEVWR (%)	78
PRESS (PSIG)	135
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEVWR (%)	74
PRESS (PSIG)	135
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0

ENGINEERED SAFETY FEATURES SI ACTUATED: TIME 9:32 RESET: TIME 9:40 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) 1000 SI HOT-LEG INJECT START EQUIPMENT STATUS N = NOT AVAILABLEA = AVAILABLE (NOT OPERATING)

	100		0		6,	
O = OPERATING						
E = ENERG	IZE	D				
PRIMARY						
RCP	Α	A	в	A	c _	0
CHG PUMP	Α	0	в		с	0
SI PUMP	A	0	в	<u>N</u>	с _	0
CS PUMP	Α	<u>A</u>	в	<u> </u>		
RHR PUMP	Α	<u>A</u>	В	Α		
HVH 1 _ 0		2_0	3	0	4 _	0
SECONDARY						
FEED PUMP	A	<u>A</u>	в	A		
COND PUMP	Α	0	в	A		
AFW MOTOR	Α	0	в	A		
AFW STEAM		A				
MSIV	A	ISOL	в	0	С	0
ELECTRICAL	_					
EDG	A	A	в	A		
DS/DG		N				
OFFSITE		E				
EMER. BUS	El	E		E2	Ξ	
FANS						
HVE 1A		Α		1B	Α	
HVE 2A		0		2B	A	
HVE 5A		Α		58	0	
HVE 15		0		15A	Α	

OSH	8	OFF	SC/	٩LE	HIGH
OSL	=	0FF	SC/	٩LE	LOW
00S	=	OUT	OF	SEF	RVICE
150	=	150	ATE	-n	

SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

EMERGENCY CLASSIFICATION (CIRCLE) NOTIFICATION OF UNUSUAL EVENT ALERT SITE AREÁ EMERGENCY GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	6.2
LOWER (MPH)	1.9
WIND DIR. UPPER (* FROM)	218
LOWER (* FROM)	208
AIR TEMPERATURE (°F)	57
PASQUILL STAB. FACTOR	D

AREA RADIATION MONITORS

R-1	CONTROL ROOM (MR/HR)	<1
R-2	CONT. AREA (MR/HR)	1.0E+04
R-3	HP WORK AREA	<1
R-4	CHG. PUMP RM (MR/HR)	300
R-5	SPENT FUEL PIT (MR/HR)	0.3
R-6	SAMPLING ROOM (MR/HR)	70
R-7	IN-CORE INST (MR/HR)	10
R-8	DRUM. RM. (MR/HR)	0.5
R-9	FAILED FUEL (MR/HR)	OSH

PROCESS RADIATION MONITORS

1	1 CV	VENT F	PART.	(CPM)	OSH
- R -1:	2 CV	VENT G	SAS (CF	PM)	OSH
R-1-	4 PLT	VNT G	GAS (CF	PM)	650
R-1	5 CON	D. AIF	EJEC.	. (CPM)	OSH
R-1	6 CV	FAN CW	(CPM)) _ 3.	.35E+05
R=1	7 COM	IP. CW	(CPM)		400
R-1	8 WAS	TE DIS	POSAL	(CPM)	6.5K
R-1	9A S/G	A BLC	WDOWN	(CPM)	I SOL
R-1	98 S/G	B BLC	WDOWN	(CPM)	1K
R-1	9C S/G	C BLC	WDOWN	(CPM)	1K
R-2	O FUE	L HDLO	BASE	(CPM)	17
R-2	1 FUE	L HDLG	UPPEF	R (CPM)	35

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR)	<1
R-31A "A" MN STM (MR/HR)	740
R-31B "B" MN STM (MR/HR)	<10
R-31C "C" MN STM (MR/HR)	<10
R-32A CV HI RG (R/HR)	10
R-32B CV HI RG (R/HR)	10
R-33 MON BLDG (MR/HR)	<10
R-34 "P" PLT VNT (cpm)	<1
R-34 " " PLT VNT (cpm)	<1
R-34 "NG" PLT VNT (cpm)	<1
R-35 PLT VNT GAS (MID) (MR/HR)	<1.
36 PLT VNT GAS (HI) (MR/HR)	14
K-37 CONDENSATE POLISHER (CPM)	00S

CONTAINMENT STATUS PRESSURE (PSIG)	.3
TEMPERATURE (°F)	125
HYDROGEN CONC. (%)	.01
SUMP LEVEL (INCHES)	.2
RWST LEVEL (\$)	91
PRIMARY SYSTEM	
RCS PRESSURE (PSIG)	500
PZR LEVEL (%)	35
TAVE (°F)	OSL
LOOP A TH (°F)	340
TC (°F)	340
Δτ	10
LOOP B TH (°F)	340
TC (°F)	340
ΔΤ	0
LOOP C TH (°F)	340

TC (°F)	340
ΔΤ	0
SUBCOOLING (°F)	130
CHRGNG FLOW (GPM)	40
LETDOWN FLOW (GPM)	0
REACTOR POWER	00
ACTIVITY:	
GROSS (uCi/ml)	4.32E+02
¹³¹ (uCi/ml)	1.77E+02

SECONDARY SYSTEM

S/G A'LEVWR (%)	81
PRESS (PSIG)	90
FEED (PPH)	0
STEAM (PPH)	5.0E3
ACT. (uCi/ml)	7.2
S/G B LEVWR (%)	78
PRESS (PSIG)	100
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEVWR (%)	74
PRESS (PSIG)	100
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0

Date: NOV. 14, 1989

Time: 11:15

Completed By:

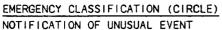
•

.

SI ACTUATI	ED:	TIME			9:32
RESI	ET:	TIME	_		9:40
CS ACTUATI	ED:	TIME		•	
RESI	ET:	TIME			
CONT. ISO	. А	ACTUA	TEC	: TIM	IE
		RE	SET	: TIM	IE
CONT. ISO	. в	ACTUA	TEC	: TIM	IE
		RE	SET	: TIM	IE
SPRAY ADD	TAN	K LEV	EL	(%)	67
SI COLD-LI	EG F	LOW (GPM	1) —	500
SI HOT-LEG					
EQUIPMENT	STA	TUS			
N = NOT A	AIL	ABLE			
A = AVAIL	ABLE	(NOT	OF	PERATIN	IG)
0 = OPERA	T I NG				
E = ENERG	I ZED				
PRIMARY					
RCP	Α	Α	в	Α	C O
CHG PUMP	Α -	0	в	A	C A
SI PUMP	Α -	0	8	N	C A
CS PUMP	Α _	A	в	A	
RHR PUMP	Α _	A	в	A	•
HVH 1 0	2	0	3	0	4 0
SECONDARY					
FEED PUMP	А	Α	в	Α	
COND PUMP	Α -	0	в	A	•
AFW MOTOR	Α -	0	в	A	•
AFW STEAM	_	Α		·····	•
MSIV	Ā	ISOL	в	0	со
ELECTRICAL					
EDG	A	Α	в	А	
DS/DG	-	N			•
OFFSITE		E			
EMER. BUS	E1	 E		E2	E
FANS	•				
HVE 1A		Α		18	А
HVE 2A		0		2B	A
		A		5B	0
HVE 5A					

LEGEN	<u>U</u>	:			•
OSH	=	OFF	SC/	٩LE	HIGH
OSL	=	OFF	SC/	٩LE	LOW
00S	=	OUT	0F	SEF	RVICE
I SOL	=	I SOL	ATE	Ð	

SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS



ALERT SITE AREA EMERGENCY GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	6.7
LOWER (MPH)	2.0
WIND DIR. UPPER (* FROM)	215
LOWER (* FROM)	199
AIR TEMPERATURE (°F)	58
PASQUILL STAB. FACTOR	D

AREA RADIATION MONITORS

R-1	CONTROL ROOM (MR/HR)	<1
R-2	CONT. AREA (MR/HR)	1.0E+04
R-3	HP WORK AREA	<1
R-4	CHG. PUMP RM (MR/HR)	300
R-5	SPENT FUEL PIT (MR/HR)	0.3
R-6	SAMPLING ROOM (MR/HR)	70
R-7	IN-CORE INST (MR/HR)	10
R-8	DRUM. RM. (MR/HR)	0.5
R-9	FAILED FUEL (MR/HR)	OSH

PROCESS RADIATION MONITORS

CV VENT PART. (CPM)	OSH
CV VENT GAS (CPM)	OSH
PLT VNT GAS (CPM)	650
COND. AIR EJEC. (CPM)	OSH
CV FAN CW (CPM)3.35	E+05
COMP. CW (CPM)	400
WASTE DISPOSAL (CPM)	6.5K
S/G A BLOWDOWN (CPM)	ISOL
S/G B BLOWDOWN (CPM)	1K
S/G C BLOWDOWN (CPM)	<u>1K</u>
FUEL HDLG BASE (CPM)	17 ·
FUEL HDLG UPPER (CPM)	35
	PLT VNT GAS (CPM) COND. AIR EJEC. (CPM) CV FAN CW (CPM) 3.35 COMP. CW (CPM) WASTE DISPOSAL (CPM) S/G A BLOWDOWN (CPM) S/G C BLOWDOWN (CPM) FUEL HDLG BASE (CPM)

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR)	<1
R-31A "A" MN STM (MR/HR)	710
R-31B "B" MN STM (MR/HR)	<10
R-31C "C" MN STM (MR/HR)	<10
R-32A CV HI RG (R/HR)	10
R-32B CV HI RG (R/HR)	10
R-33 MON BLDG (MR/HR)	<10
R-34 "P" PLT VNT (cpm)	<1
R-34 "I" PLT VNT (cpm)	<1
R-34 "NG" PLT VNT (cpm)	<1
2-35 PLT VNT GAS (MID) (MR/HR)	<1
6 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	00S

CONTAINMENT STATUS PRESSURE (PSIG) 125 TEMPERATURE (°F) HYDROGEN CONC. (%) SUMP LEVEL (INCHES) .2

PRIMARY SYSTEM

RWST LEVEL (%)

RCS PRESSURE (PSIG)	350
PZR LEVEL (%)	35
TAVE (°F)	OSL
LOOP A TH (°F)	340
TC (°F)	340
ΔΤ	10
LOOP B TH (°F)	340
TC (°F)	340
ΔΤ	0
LOOP C TH (°F)	340
TC (°F)	340
Δτ	0
SUBCOOLING (°F)	100
CHRGNG FLOW (GPM)	40
LETDOWN FLOW (GPM)	0
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	4.21E+02
¹³¹ (uCi/ml)	1.74E+02

SECONDARY SYSTEM

90 0
0
5.0E3
6.9
78
100
0
0
0
78
100
0
0
0

Date:	NOV.	14,	1989	

Time: <u>11:30</u>

Completed By:

.3

.01

91

ENGINEERED SAFETY FEATURES	
SI ACTUATED: TIME 9:32	
RESET: TIME 9:40	
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)	
0 = OPERATING	
E = ENERGIZED	
PRIMARY	
RCP A A B A C O	_
CHG PUMP A O B A C A	_
SI PUMP A A B N C A	-
CS PUMP A <u>A</u> B <u>A</u>	
RHR PUMP A <u>A</u> B <u>A</u>	
HVH 1 0 2 0 3 0 4 0	_
SECONDARY	
FEED PUMP A <u>A</u> B <u>A</u>	
COND PUMP A O B A	
AFW MOTOR A O B A	
AFW STEAMA	
MSIV A ISOL B O C O	_
ELECTRICAL	-
EDG A A B A	
DS/DG N	
OFFSITE E	-
EMER. BUS E1 E E2 E	-
FANS	-
HVE 1A A 1B A	
HVE 2A 0 2B A	-
HVE 5A A 5B O	-
HVE 15 0 15A A	-
	-

LEGEND:

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



Page 1 of 17

9:32

Α

0

Α

0

EMERGENCY CLASSIFICATION (CIRCLE) Date: NOV. 14, 1989 NOTIFICATION OF UNUSUAL EVENT Time: 11:45 ALERT SITE AREA EMERGENCY Completed By: GENERAL EMERGENCY ENVIRONMENTAL SYSTEMS CONTAINMENT STATUS ENGINEERED SAFETY FEATURES SI ACTUATED: TIME WIND SPEED UPPER (MPH) 6.0 PRESSURE (PSIG) .3___ 3.6 TEMPERATURE (°F) 125 RESET: TIME 9:40 LOWER (MPH) WIND DIR. UPPER (* FROM) 213 CS ACTUATED: TIME HYDROGEN CONC. (%) .01 .2 RESET: TIME SUMP LEVEL (INCHES) LOWER (° FROM) 200 91 AIR TEMPERATURE (°F) 58 RWST LEVEL (%) CONT. ISO. A ACTUATED: TIME RESET: TIME PASQUILL STAB. FACTOR D CONT. ISO. B ACTUATED: TIME PRIMARY SYSTEM RESET: TIME RCS PRESSURE (PSIG) 350 AREA RADIATION MONITORS SPRAY ADD TANK LEVEL (%) _____67 R-1 CONTROL ROOM (MR/HR) <1</td> R-2 CONT. AREA (MR/HR) 1.0E+04 PZR LEVEL (%) 32 0SL SI COLD-LEG FLOW (GPM) _____O TAVE (°F) R-3 HP WORK AREA <1 LOOP A TH (°F) SI HOT-LEG INJECT START 328 R-4 CHG. PUMP RM (MR/HR) TC (°F) 328 300 0 R-5 SPENT FUEL PIT (MR/HR) 0.3 ΔΤ_____ EQUIPMENT STATUS LOOP B TH (°F) 328 R-6 SAMPLING ROOM (MR/HR) 70 N = NOT AVAILABLE TC (°F) 328 A = AVAILABLE (NOT OPERATING) R-7 IN-CORE INST (MR/HR) 10 0 R-8 DRUM. RM. (MR/HR) 0 = OPERATING0.5 ΔT 328 R-9 FAILED FUEL (MR/HR) LOOP C TH (*F) OSH E = ENERGIZED328 TC (°F) _____ PRIMARY RCP A A B A C O 0 PROCESS RADIATION MONITORS ΔΤ I CV VENT PART. (CPM) OSH CHG PUMP A O B A C SUBCOOLING (°F) 115 40 SIPUMP A A B N C -12 CV VENT GAS (CPM) OSH CHRGNG FLOW (GPM) 0 LETDOWN FLOW (GPM) CS PUMP A A B A R-14 PLT VNT GAS (CPM) 650 RHR PUMP A A B A R-15 COND. AIR EJEC. (CPM) OSH REACTOR POWER 0 HVH 1 0 2 0 3 0 4 R-16 CV FAN CW (CPM) 3.35E+05 ACTIVITY: 400 GROSS (uCi/ml) |¹³¹ (uCi/ml) R-17 COMP. CW (CPM) 4.10E+02 SECONDARY R-18 WASTE DISPOSAL (CPM) 1.70E+02 FEED PUMP A A B A 6.5K COND PUMP A O B A R-19A S/G A BLOWDOWN (CPM) ISOL _____1K AFW MOTOR A O B A R-19B S/G B BLOWDOWN (CPM) SECONDARY SYSTEM S/G A LEV.-WR (%) Α AFW STEAM R-19C S/G C BLOWDOWN (CPM) 81 1K 17 PRESS (PSIG) _____ 130 MSIV A ISOL B O C O R-20 FUEL HDLG BASE (CPM) 0 FEED (PPH) ELECTRICAL R-21 FUEL HDLG UPPER (CPM) 35 EDG A A B A DS/DG N STEAM (PPH) 0 DS/DG N OFFSITE E 6.6 ACT. (uCi/ml) ACCIDENT RADIATION MONITORS 78 R-30 F.H. BASE HI RG (MR/HR) <1 S/G B LEV.-WR (%) 100 R-31A "A" MN STM (MR/HR) _____ EMER. BUS E1 E E2 E 660 PRESS (PSIG) R-318 "B" MN STM (MR/HR) 0___ <10 FEED (PPH) FANS HVE 1A A 1B HVE 2A O 2B HVE 5A A 5B HVE 15 O 15A 0____ R-31C "C" MN STM (MR/HR) <10 STEAM (PPH) 0____ ACT. (uCi/ml) 10 R-32A CV HI RG (R/HR) 10 S/G C LEV.-WR (%) 78 R-32B CV HI RG (R/HR) PRESS (PSIG) 100 R-33 MON BLDG (MR/HR) <10 FEED (PPH) R-34 "P" PLT VNT (cpm) 0 <1 STEAM (PPH) 0 R-34 "I" PLT VNT (cpm) <1 LEGEND: R-34 "NG" PLT VNT (cpm) <1 ACT. (uCi/ml) 0 OSH = OFF SCALE HIGH R-35 PLT VNT GAS (MID) (MR/HR) <1 OSL = OFF SCALE LOW OOS = OUT OF SERVICE 6 PLT VNT GAS (HI) (MR/HR) 14 ISOL = ISOLATED -37 CONDENSATE POLISHER (CPM) OOS

ATTACHMENT 9.7 Page 1 of 17

Date: NOV. 14, 1989

EMERGENCY CLASSIFICATION (CIRCLE) NOTIFICATION OF UNUSUAL EVENT ALERT

SITE AREA EMERGENCY GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	6.8
LOWER (MPH)	5.1
WIND DIR. UPPER (* FROM)	215
LOWER (° FROM)	203
AIR TEMPERATURE (°F) 58	
PASQUILL STAB. FACTOR	D

AREA RADIATION MONITORS

R-1	CONTROL ROOM (MR/HR)	<1
R-2	CONT, AREA (MR/HR)	1.0E+04
R-3	HP WORK AREA	<1
R-4	CHG. PUMP RM (MR/HR)	300
R-5	SPENT FUEL PIT (MR/HR)	0.3
R-6	SAMPLING ROOM (MR/HR)	70
R-7	IN-CORE INST (MR/HR)	10
R-8	DRUM. RM. (MR/HR)	0.5
R-9	FAILED FUEL (MR/HR)	OSH

PROCESS RADIATION MONITORS

- 1	CV VENT PART. (CPM)	OSH
K-12	CV VENT GAS (CPM)	OSH
R-14	PLT VNT GAS (CPM)	650
R-15	COND. AIR EJEC. (CPM)	OSH
R-16	CV FAN CW (CPM)3.3	5E+05
R-17	COMP. CW (CPM)	400
R-18	WASTE DISPOSAL (CPM)	6.5K
R-19A	S/G A BLOWDOWN (CPM)	I SOL
R-19B	S/G B BLOWDOWN (CPM)	1K
R-19C	S/G C BLOWDOWN (CPM)	1K
R-20	FUEL HDLG BASE (CPM)	17
R-21	FUEL HOLG UPPER (CPM)	35

ACCIDENT RADIATION MONITORS

	~1
R-30 F.H. BASE HI RG (MR/HR)	<1
R-31A "A" MN STM (MR/HR)	630
R-31B "B" MN STM (MR/HR)	<10
R-31C "C" MN STM (MR/HR)	<10
R-32A CV HI RG (R/HR)	10
R-32B CV HI RG (R/HR)	10
R-33 MON BLDG (MR/HR)	<10
R-34 "P" PLT VNT (cpm)	<1
R-34 "1" PLT VNT (cpm)	<1
R-34 "NG" PLT VNT (cpm)	<1
R-35 PLT VNT GAS (MID) (MR/HR)	<1
6 PLT VNT GAS (HI) (MR/HR)	14
T-37 CONDENSATE POLISHER (CPM)	005

CONTAINMENT STATUS PRESSURE (PSIG) 12.5 TEMPERATURE (°F) HYDROGEN CONC. (%) .01 SUMP LEVEL (INCHES)

RWST LEVEL (%)

.3

.2

91

PRIMARY SYSTEM

.

RCS PRESSURE (PSIG)	350
PZR LEVEL (%)	32
TAVE (°F)	OSL
LOOP A TH (°F)	313
TC (°F)	313
Δτ	0
LOOP B TH (*F)	313
TC (°F)	313
Δτ	0
LOOP C TH (*F)	313
TC (°F)	313
ΔΤ	0
SUBCOOLING (°F)	130
CHRGNG FLOW (GPM)	40
LETDOWN FLOW (GPM)	0
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	3.99E+02
¹³¹ (uCi/ml)	1.66E+02

SECONDARY SYSTEM

S/G A LEVWR (%)	81
PRESS (PSIG)	170
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	6.3
S/G B LEVWR (%)	78
PRESS (PSIG)	100
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEVWR (%)	78
PRESS (PSIG)	100
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0

Time: 12:00 Completed By: ENGINEERED SAFETY FEATURES

ENGINEERL	JAILII	I LATURE.	2
SI ACTUAT	ED: TIME		9:32
RES	ET: TIME		9:40
CS ACTUAT	ED: TIME	:	
RES	ET: TIME		
CONT. ISO	. A ACTUA	TED: T	IME
	RE	SET: T	IME
CONT. ISO	. B ACTUA	TED: T	I ME
			IME
SPRAY ADD	TANK LEV	'EL (%)	67
SI COLD-L			0
SI HOT-LE			
		-	
EQUIPMENT	STATUS		
N = NOT A'			
A = AVAIL		OPERAT	ING)
0 = OPERA		Of Erall	
E = ENERG			
PRIMARY			
RCP	A A	B A	C A
CHG PUMP		. В. <u>А</u> В А	
	···	·	
SI PUMP	A A A A		
CS PUMP RHR PUMP	A _ A		
		. B <u>A</u>	
HVH 1 0		3_0	_ 4 _0
SECONDARY		- ·	
FEED PUMP			
COND PUMP		B <u>A</u>	
AFW MOTOR		8 <u>A</u>	_
AFW STEAM			
MSIV	A ISOL	в_0	C
ELECTRICAL	L		
EDG	AA	B <u>A</u>	
DS/DG	<u>N</u>		
OFFSITE	E		
EMER. BUS	E1 E	Eź	2 E
FANS			
HVE 1A	Α	1B	Α
HVE 2A	0	2B	Α.
HVE 5A	A	<u></u>	0
HVE 15	0	15A	A
· · ·			

LEGEND:

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

SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

EMERGENCY CLASSIFICATION (CIRCLE) NOTIFICATION OF UNUSUAL EVENT ALERT SITE AREA EMERGENCY

GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	- 6.9
LOWER (MPH)	4.9
WIND DIR. UPPER (* FROM)	219
LOWER (° FROM)	208
AIR TEMPERATURE (°F)	58
PASQUILL STAB. FACTOR	D

AREA RADIATION MONITORS

R-1	CONTROL ROOM (MR/HR)	<1
R-2	CONT. AREA (MR/HR)	1.0E+04
R-3	HP WORK AREA	<1
R-4	CHG. PUMP RM (MR/HR)	300
R-5	SPENT FUEL PIT (MR/HR)	0.3
R-6	SAMPLING ROOM (MR/HR)	70
R-7	IN-CORE INST (MR/HR)	10
R-8	DRUM. RM. (MR/HR)	0.5
R-9	FAILED FUEL (MR/HR)	OSH

PROCESS RADIATION MONITORS

1	CV VENT PART. (CPM)	OSH
R-12	CV VENT GAS (CPM)	OSH
R-14	PLT VNT GAS (CPM)	650
R-15	COND. AIR EJEC. (CPM)	OSH
R-16	CV FAN CW (CPM) 3.3	35E+05
R-17	COMP. CW (CPM)	400
R-18	WASTE DISPOSAL (CPM)	6.5K
R-19A	S/G A BLOWDOWN (CPM)	I SOL
R-19B	S/G B BLOWDOWN (CPM)	1K
R-19C	S/G C BLOWDOWN (CPM)	<u>1K</u>
R-20	FUEL HDLG BASE (CPM)	17
R-21	FUEL HDLG UPPER (CPM)	35

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR)	<1
R-31A "A" MN STM (MR/HR)	600
R-318 "B" MN STM (MR/HR)	<10
R-31C "C" MN STM (MR/HR)	<10
R-32A CV HI RG (R/HR)	10
R-328 CV HI RG (R/HR)	10
R-33 MON BLDG (MR/HR)	<10
R-34 "P" PLT VNT (cpm)	<1
R-34 "!" PLT VNT (cpm)	<1
R-34 "NG" PLT VNT (cpm)	<1
B=35 PLT VNT GAS (MID) (MR/HR)	<1
6 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	005

CONTAINMENT STATUS	
PRESSURE (PSIG)	

TEMPERATURE (°F)	12.5
HYDROGEN CONC. (%)	.01
SUMP LEVEL (INCHES)	.2
RWST LEVEL (%)	91

PRIMARY SYSTEM

RCS PRESSURE (PSIG)	350
PZR LEVEL (%)	31
TAVE (°F)	OSL
LOOP A TH (°F)	300
TC (°F)	300
ΔΤ	0
LOOP B TH (°F)	300
TC (°F)	300
ΔΤ	0
LOOP C TH (°F)	300
TC (°F)	300
ΔΤ	0
SUBCOOLING (°F)	145
CHRGNG FLOW (GPM)	40
LETDOWN FLOW (GPM)	0
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	3.88E+02
1 ³¹ (uCi/ml)	1.63E+02

SECONDARY SYSTEM

83
210
0
0
6.0
78
100
0
0
0
78
100
0
0
0

Date: <u>NOV. 14, 1989</u> Time: <u>12:15</u>

Completed By:

ENGINEERE	n c	ΔΕΕΤΥ	CEAT	HDES		
SI ACTUATE						9:32
						9:40
CS ACTUATE	- · ·	–				9.40
		TIME				
CONT. ISO				тім	c	
	• ^			TIM		
CONT. ISO	в				-	,
0011.150				ТІМ	-	
SPRAY ADD	TA					67
SI COLD-LI						
SI HOT-LE						
			51743	· · · · · ·		
EQUIPMENT	ST	ATUS				
N = NOT A						
A = AVAIL/			OPE	RATIN	G)	
$0 = 0PERA^{-1}$			•		•,	
E = ENERG		-				
PRIMARY		-				
<u> </u>	Α	A	8	A	С	A
CHG PUMP	A	0	в	A	c -	A
SI PUMP			в	N		A
CS PUMP				Α	-	
RHR PUMP	A	A	в	A		
HVH 1 O		2_0	3	0	4	0
SECONDARY			_		_	
FEED PUMP	Α	Α	в	Α		
COND PUMP	A		в	A		
AFW MOTOR	A	0		A		
AFW STEAM		A	-			
MSIV	Ā	ISOL	в	0	С	.0
ELECTRICAL	•					
EDG	Ā	А	в	А		
DS/DG	•	N	_			

200	· · _		0 <u> </u>		
DS/DG _		N			_
OFFSITE		Ε			_
EMER. B	US E1	E	E2	ΕΕ	
FANS					-
HVE 1A		Α	1B	А	_
HVE 2A		0	28	A	_
HVE 5A		Α	58	0	_
HVE 15		0	15A	Α	_

OSH	=	OFF	SC/	٨LE	HIGH
0ŚL	=	OFF	SC/	١LE	LOW
00S	=	OUT	OF	SEF	RVICE
ISOL	=	ISOL	ATE	Ð	

Date: NOV. 14, 1989

Time: 12:30

.

SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

EMERGENCY CLASSIFICATION (CIRCLE)

NOTIFICATION OF UNUSUAL EVENT ALERT SITE AREA EMERGENCY

GENERAL EMERGENCY

ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	6.5
LOWER (MPH)	4.8
WIND DIR. UPPER (* FROM)	221
LOWER (° FROM)	211
AIR TEMPERATURE (°F)	59
PASQUILL STAB. FACTOR	D

AREA RADIATION MONITORS

R-1	CONTROL ROOM (MR/HR)	<1
R-2	CONT. AREA (MR/HR)	1.0E+04
R-3	HP WORK AREA	<1
R-4	CHG. PUMP RM (MR/HR)	300
R-5	SPENT FUEL PIT (MR/HR)	0.3
R-6	SAMPLING ROOM (MR/HR)	70
R-7	IN-CORE INST (MR/HR)	10
R-8	DRUM. RM. (MR/HR)	0.5
R-9	FAILED FUEL (MR/HR)	OSH

COCESS RADIATION MONITORS

11	CV VENT PART. (CPM)	OSH
R-12	CV VENT GAS (CPM)	OSH
R-14	PLT VNT GAS (CPM)	650
R-15	COND. AIR EJEC. (CPM)	OSH
R-16	CV FAN CW (CPM) 3.	35E+05
R-17	COMP. CW (CPM)	400
R-18	WASTE DISPOSAL (CPM)	6.5K
R-19A	S/G A BLOWDOWN (CPM)	ISOL
R-19B	S/G B BLOWDOWN (CPM)	1K
R-19C	S/G C BLOWDOWN (CPM)	1K
R-20	FUEL HDLG BASE (CPM)	17
R-21	FUEL HDLG UPPER (CPM)	35

ACCIDENT RADIATION MONITORS

R-30 F.H. BASE HI RG (MR/HR)	<1
R-31A "A" MN STM (MR/HR)	580
R-31B "B" MN STM (MR/HR)	<10
R-31C "C" MN STM (MR/HR)	<10
R-32A CV HI RG (R/HR)	10
R-32B CV HI RG (R/HR)	10
R-33 MON BLDG (MR/HR)	<10
R-34 "P" PLT VNT (cpm)	<1
R-34 " " PLT VNT (cpm)	<1
R-34 "NG" PLT VNT (cpm)	<1
35 PLT VNT GAS (MID) (MR/HR)	<1
56 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	005

 CONTAINMENT STATUS

 PRESSURE (PSIG)
 .3

 TEMPERATURE (°F)
 125

 HYDROGEN CONC. (\$)
 .01

 SUMP LEVEL (INCHES)
 .2

 RWST LEVEL (\$)
 91

PRIMARY SYSTEM

RCS PRESSURE (PSIG)	350
PZR LEVEL (%)	31
TAVE (°F)	
LOOP A TH (°F)	285
TC (°F)	285
Δτ	^
LOOP B TH (°F)	285
TC (°F)	285
Δτ	^
LOOP C TH (°F)	285
TC (°F)	285
Δτ	0
SUBCOOLING (°F)	160
CHRGNG FLOW (GPM)	40
LETDOWN FLOW (GPM)	0
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	3.77E+02
1 ³¹ (uCi/ml)	1.59E+02

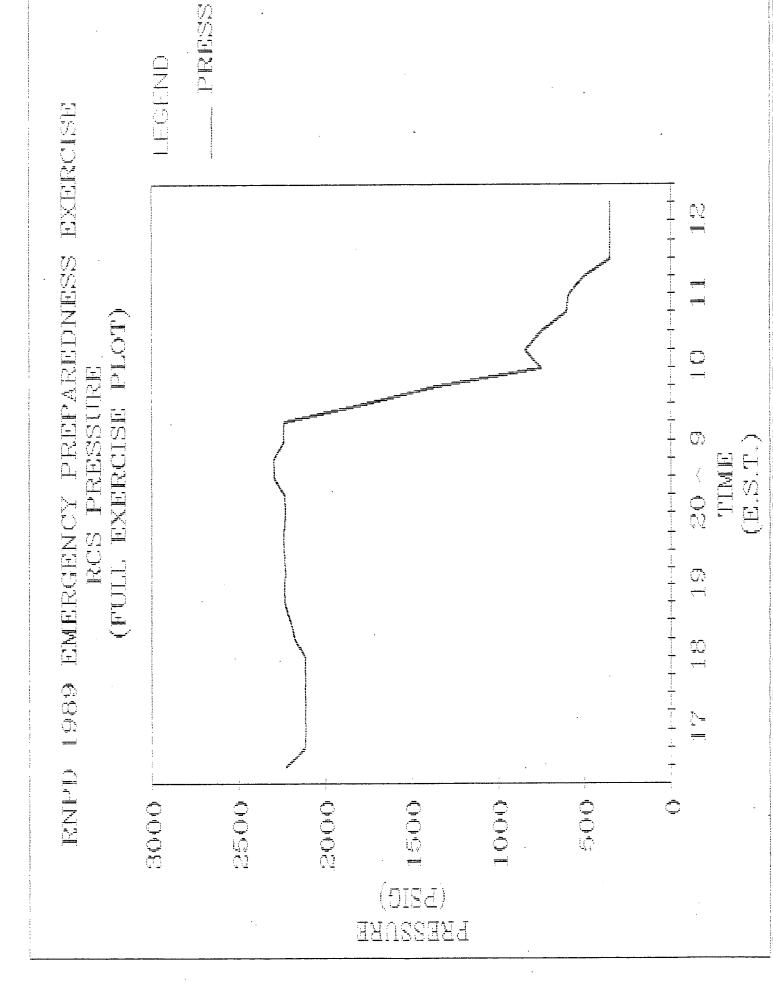
SECONDARY SYSTEM

S/G A LEVWR (%)	83
PRESS (PSIG)	260
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	5.8
S/G B LEVWR (%)	80
PRESS (PSIG)	100
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEVWR (%)	80
PRESS (PSIG)	100
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0

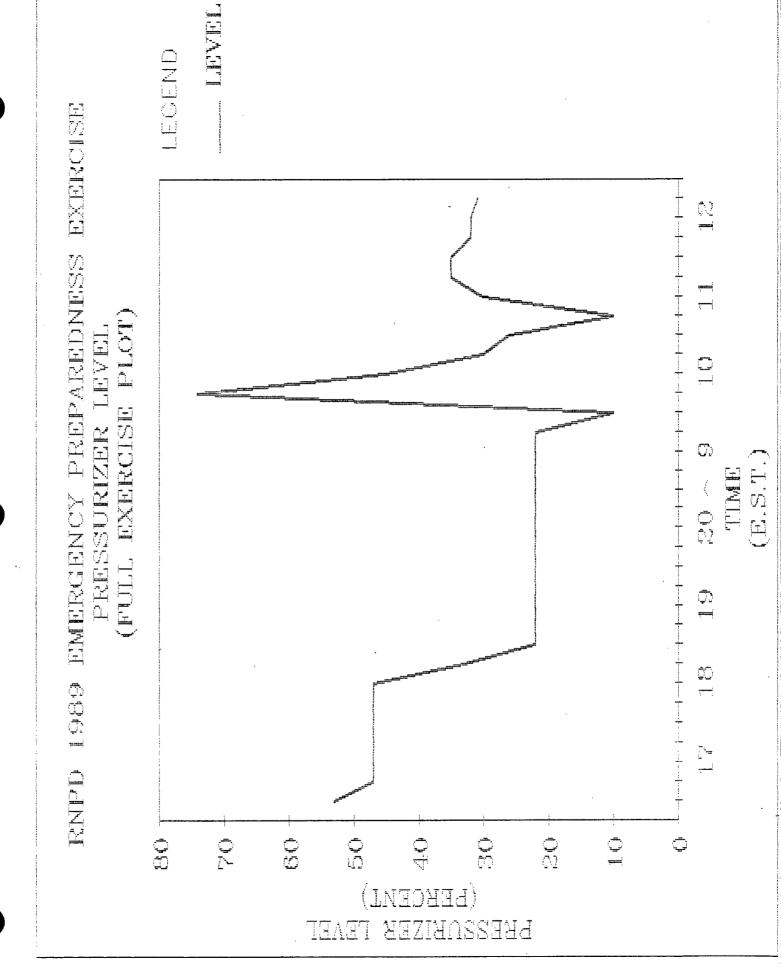
Completed By: ENGINEERED SAFETY FEATURES SI ACTUATED: TIME 9:32 9:40 RESET: TIME CS ACTUATED: TIME RESET: TIME CONT. ISO. A ACTUATED: TIME RESET: TIME CONT. ISO. B ACTUATED: TIME RESET: TIME SPRAY ADD TANK LEVEL (%) 67 SI COLD-LEG FLOW (GPM) SI HOT-LEG INJECT START EQUIPMENT STATUS

N = NOT AVAILABLE									
A = AVAILABLE (NOT OPERATING)									
0 = OPERATING									
E = ENERGIZED									
PRIMARY									
RCP	Α	Α	в	A	_ C	Α			
CHG PUMP	Α	0	В	A	_ c	A			
SI PUMP	Α _	Α	в	N	C	A			
CS PUMP	Α _	Α	В	A	_				
RHR PUMP	Α _	A	В	A	_				
HVH 1 _ 0	_ 2	0	3	0	_ 4	0			
SECONDARY									
FEED PUMP	Α	Α	8	Α					
COND PUMP	Α _	0	B	A					
AFW MOTOR	Α _	0	8	A	_				
AFW STEAM		Α							
MSIV	A	ISOL	8	0	_ C	0			
ELECTRICAL									
EDG	A _	Α	8	Α					
DS/DG		N							
OFFSITE		Ε							
EMER. BUS	E1	Ε		E2	?	E			
FANS	•								
HVE 1A	A			18	A				
HVE 2A	0			28		A			
HVE 5A		A		5B	0				
HVE 15		0		15A		A			
				-					

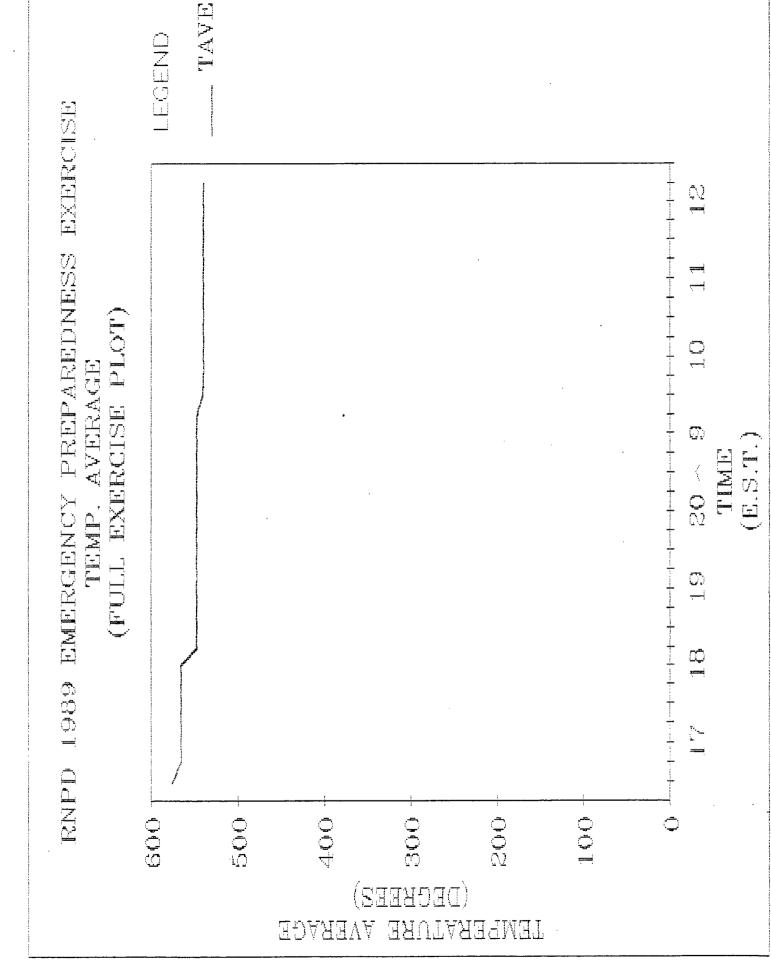
024	=	OFF	30/	ALE	HIGH
OSL	3	OFF	SC/	ALE	LOW
00S	=	OUT	OF	SEF	RVICE
I SOL	=	ISO	ATE	ED	

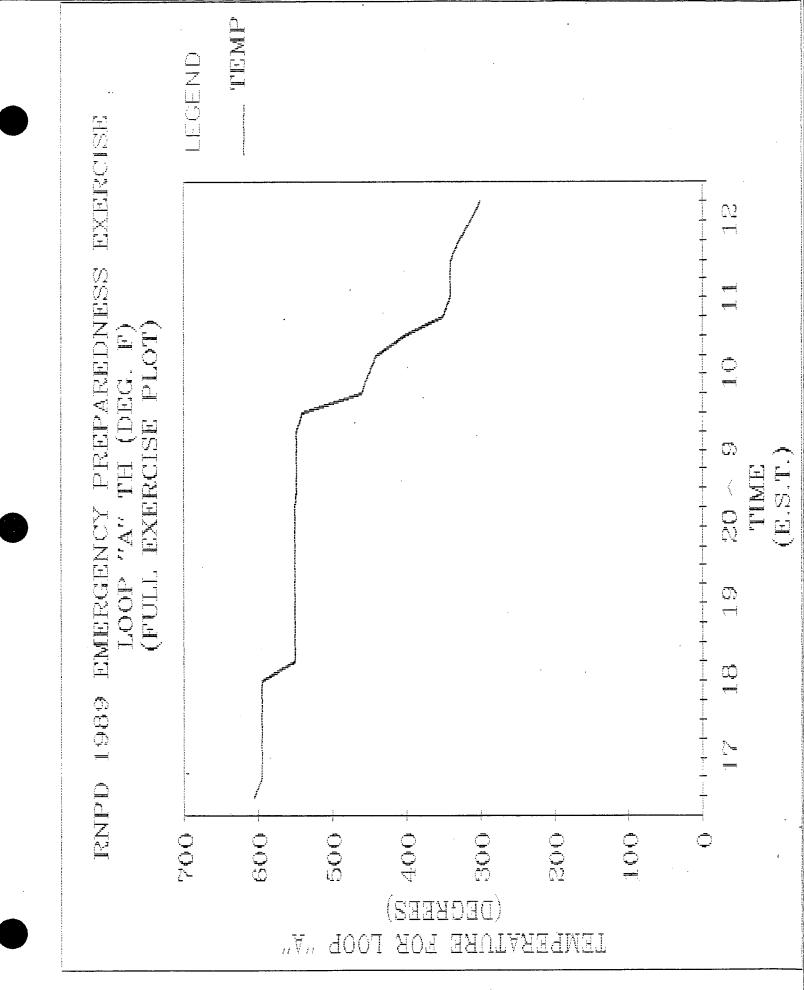


^{3.2-38}

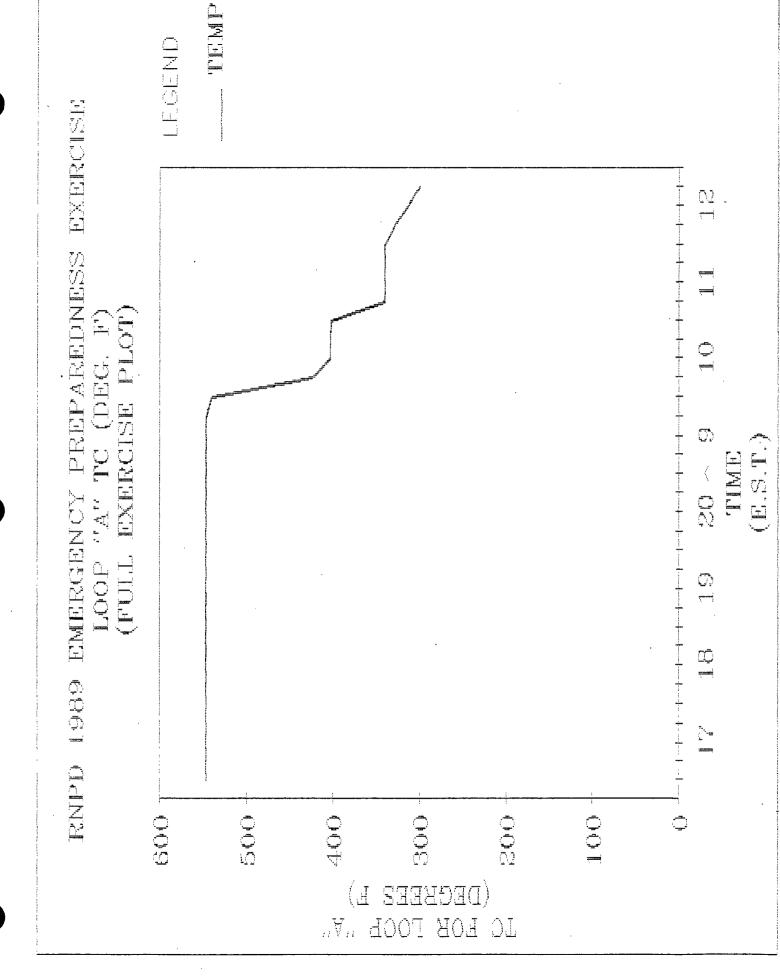


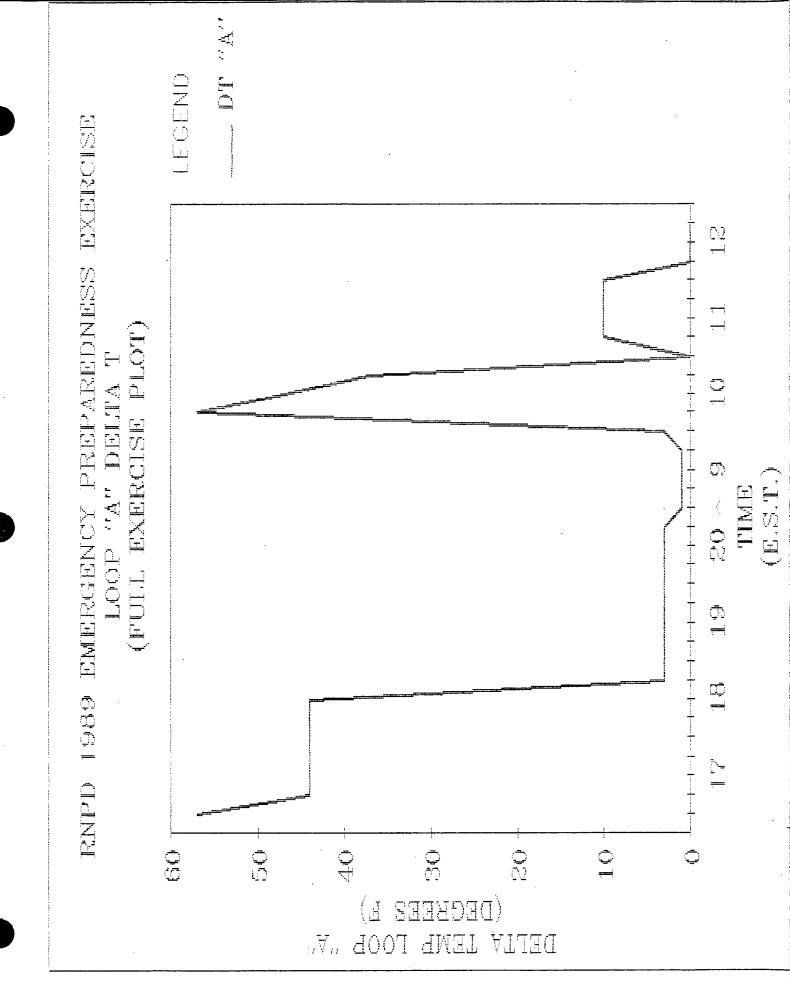




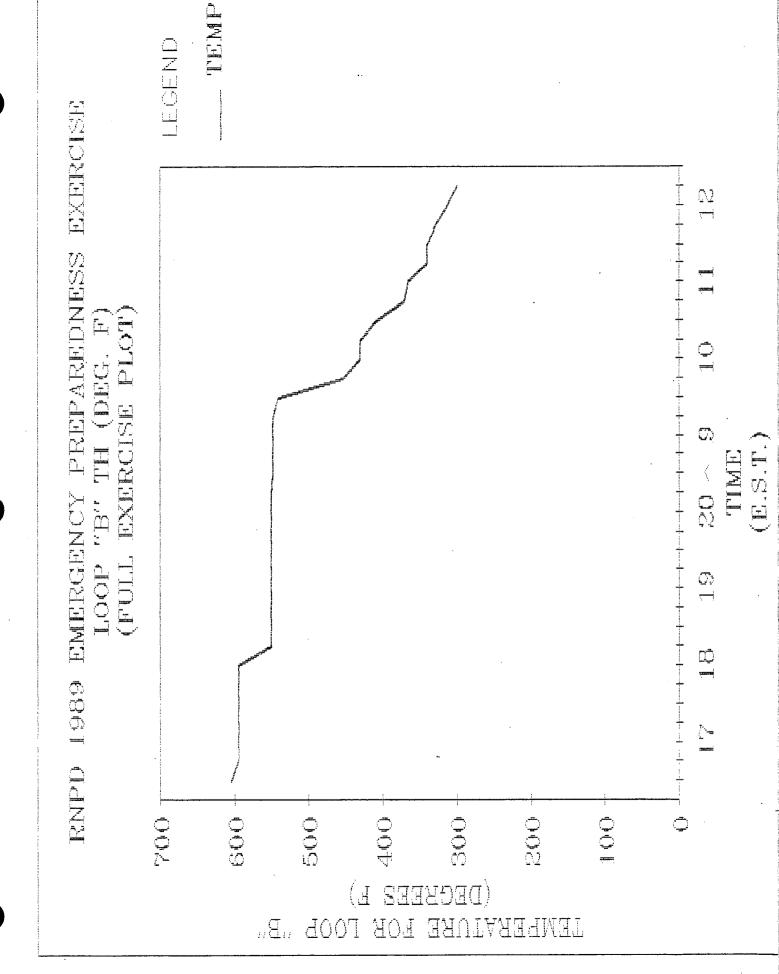


^{3.2-41}

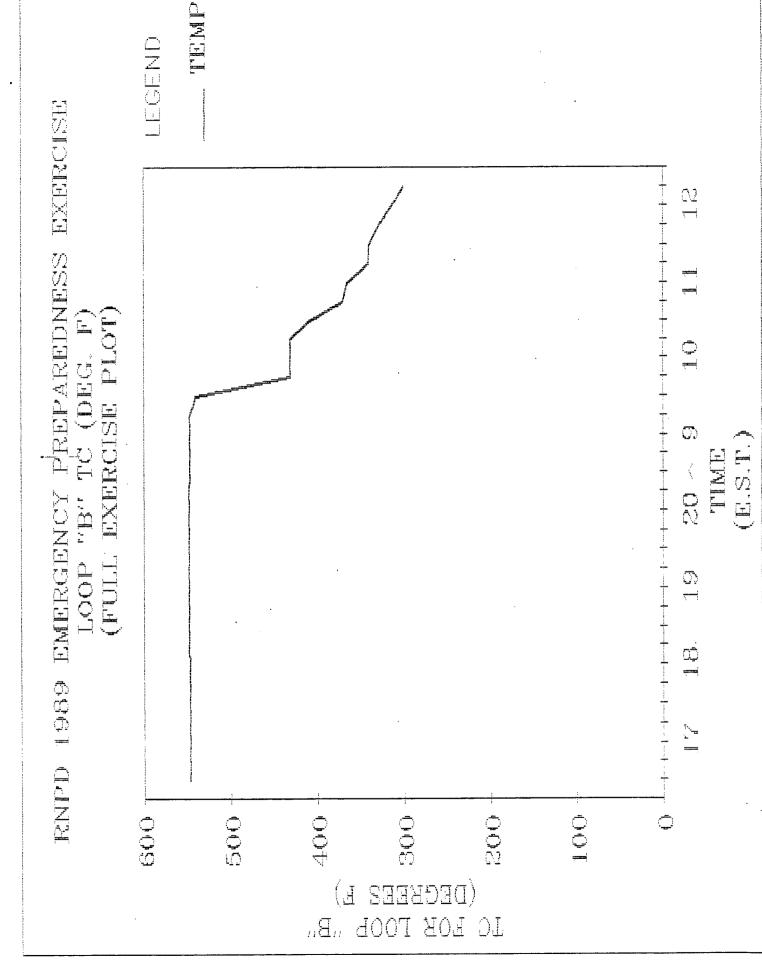


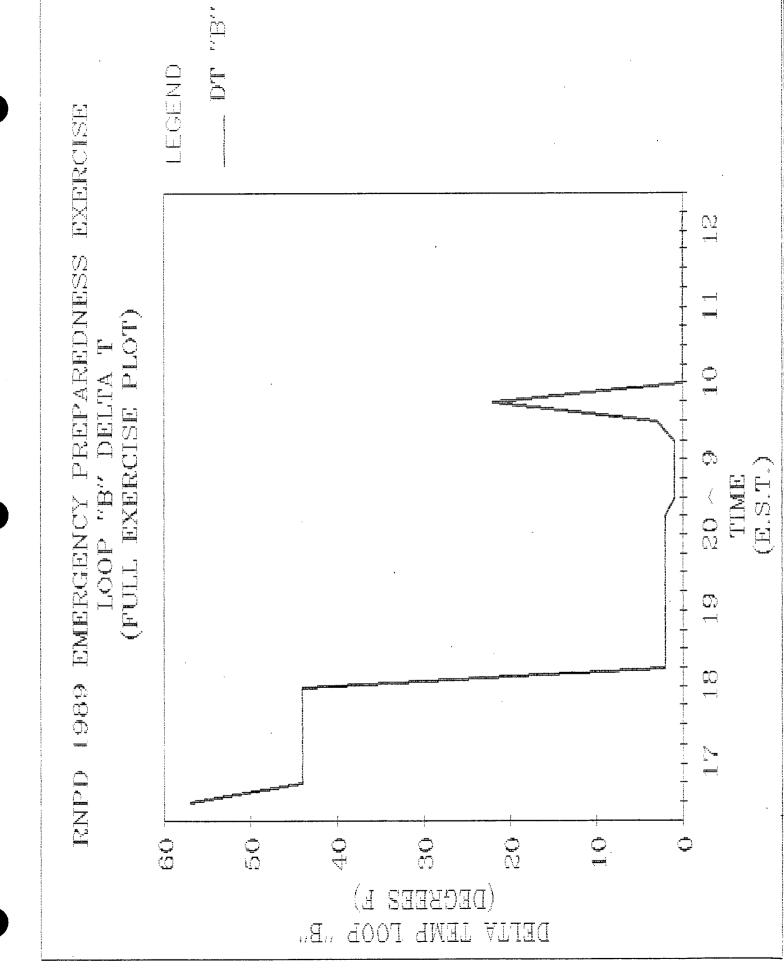


^{3.2-43}

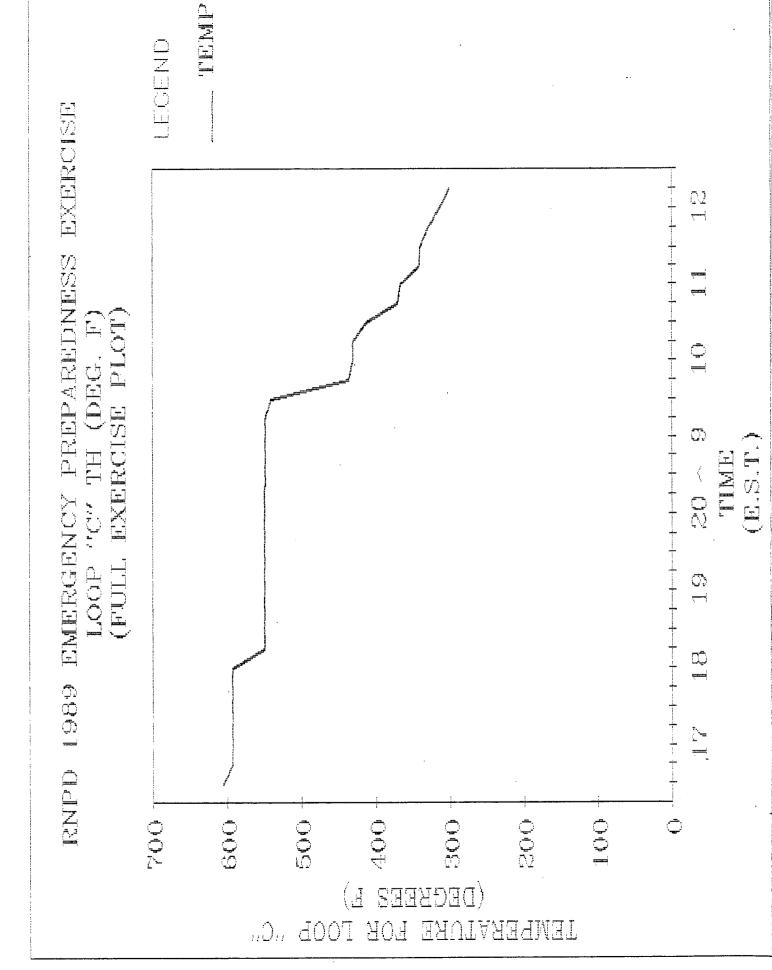


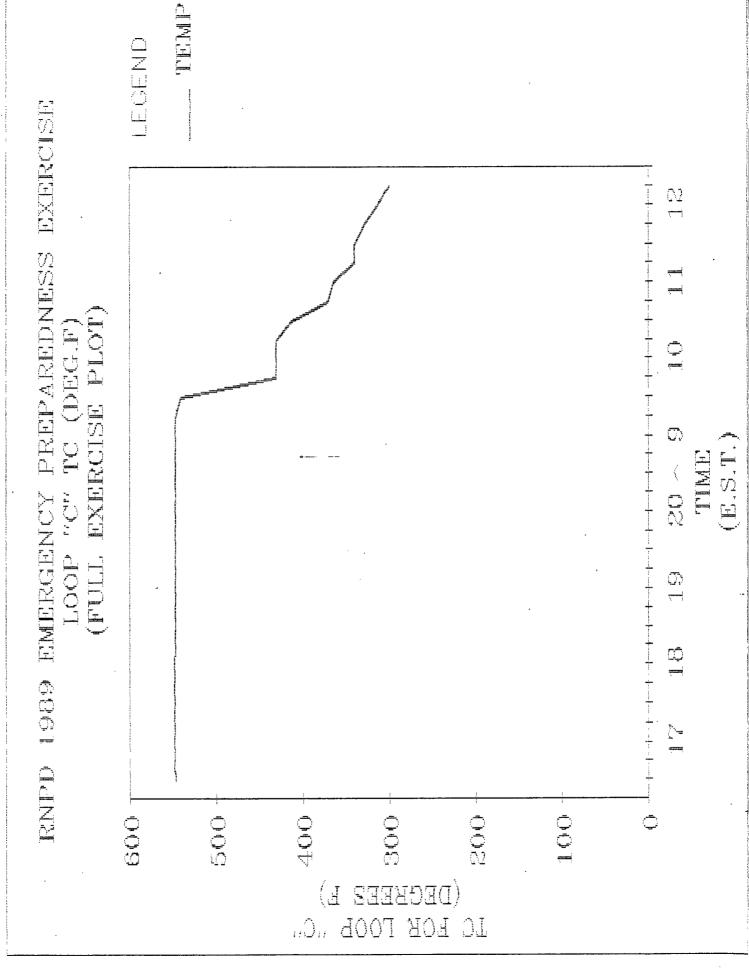
^{3.2-44}



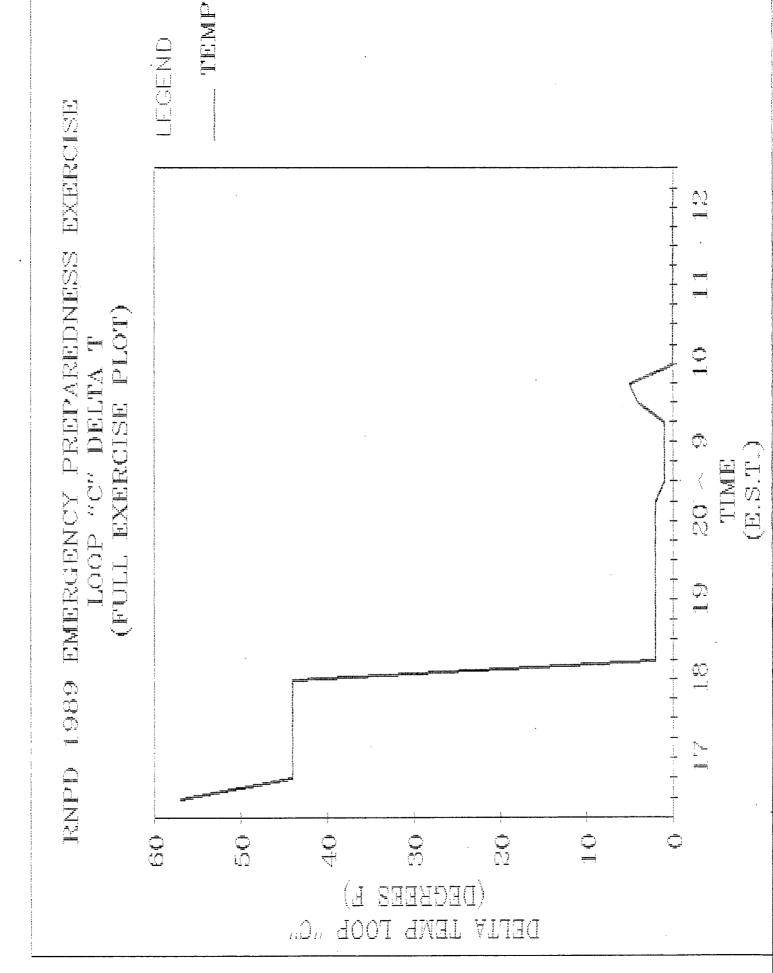


^{3.2-46}

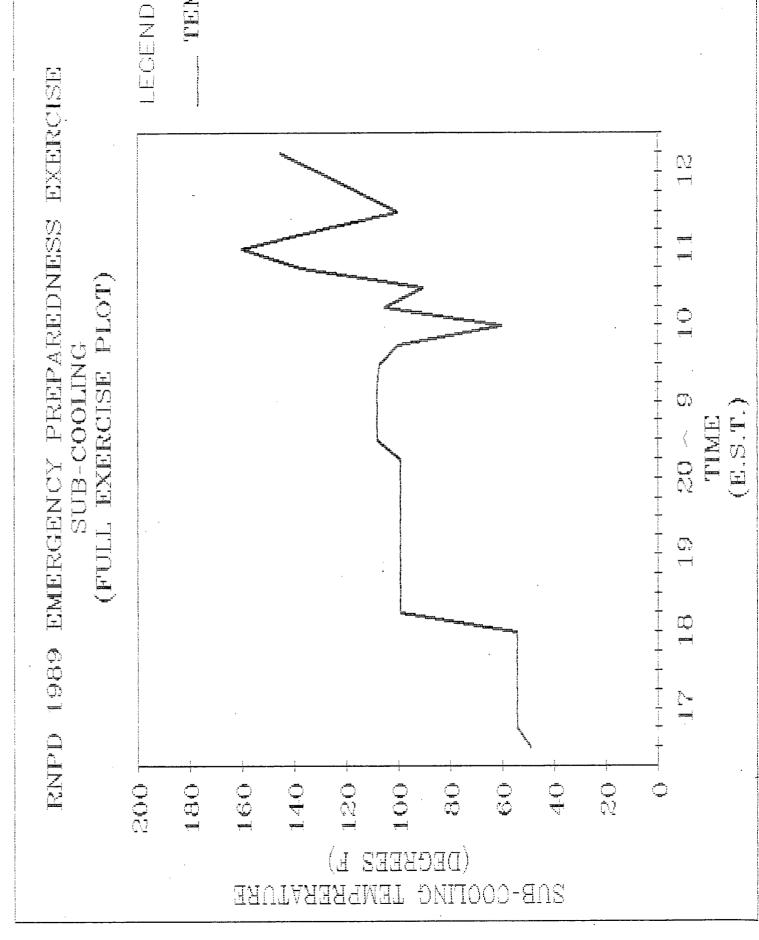


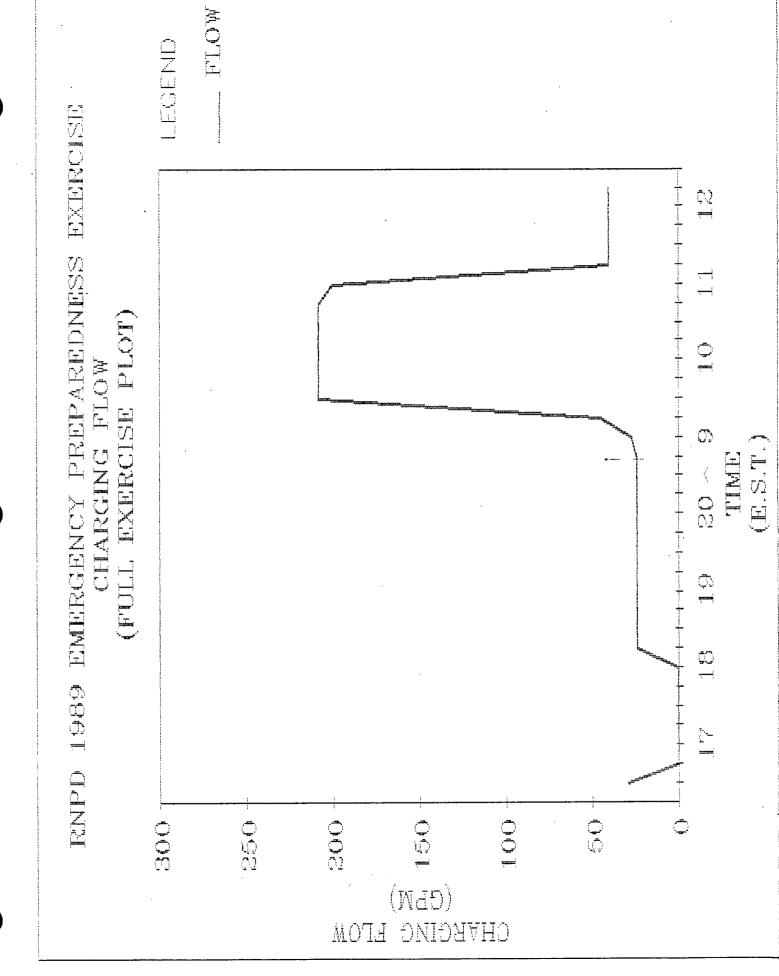


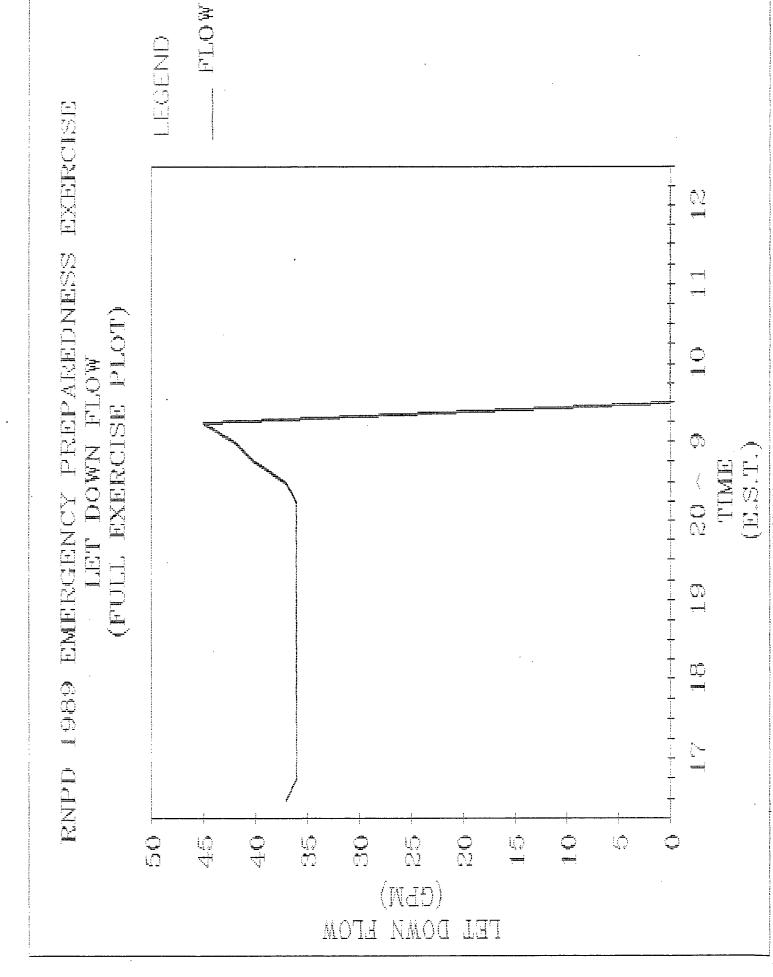


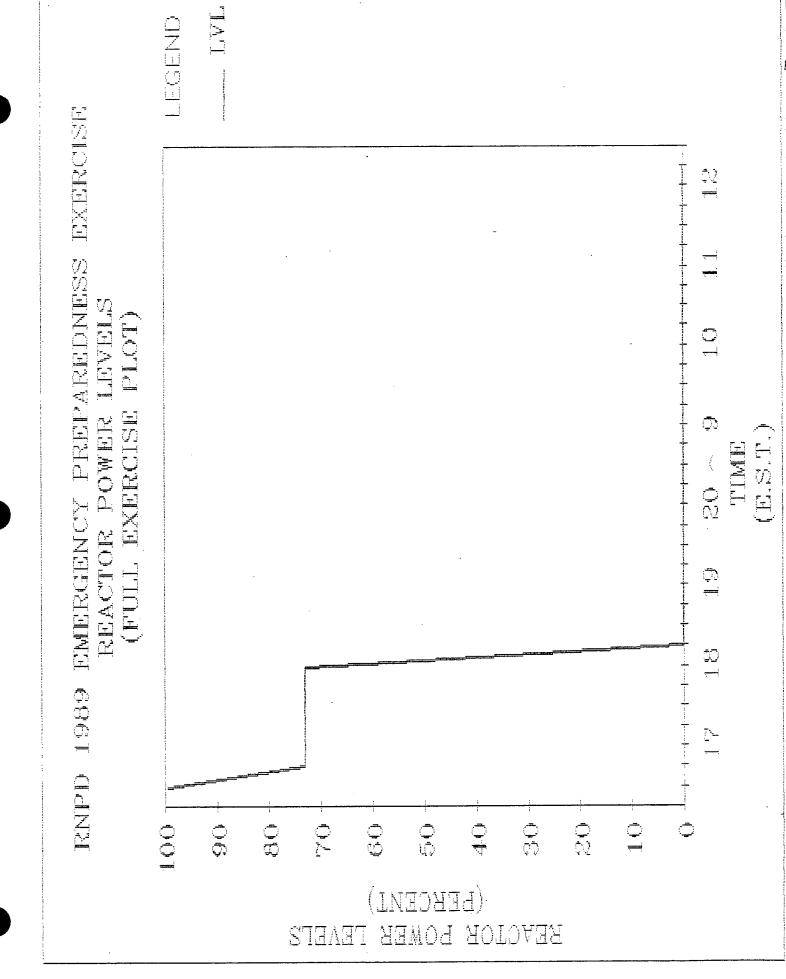


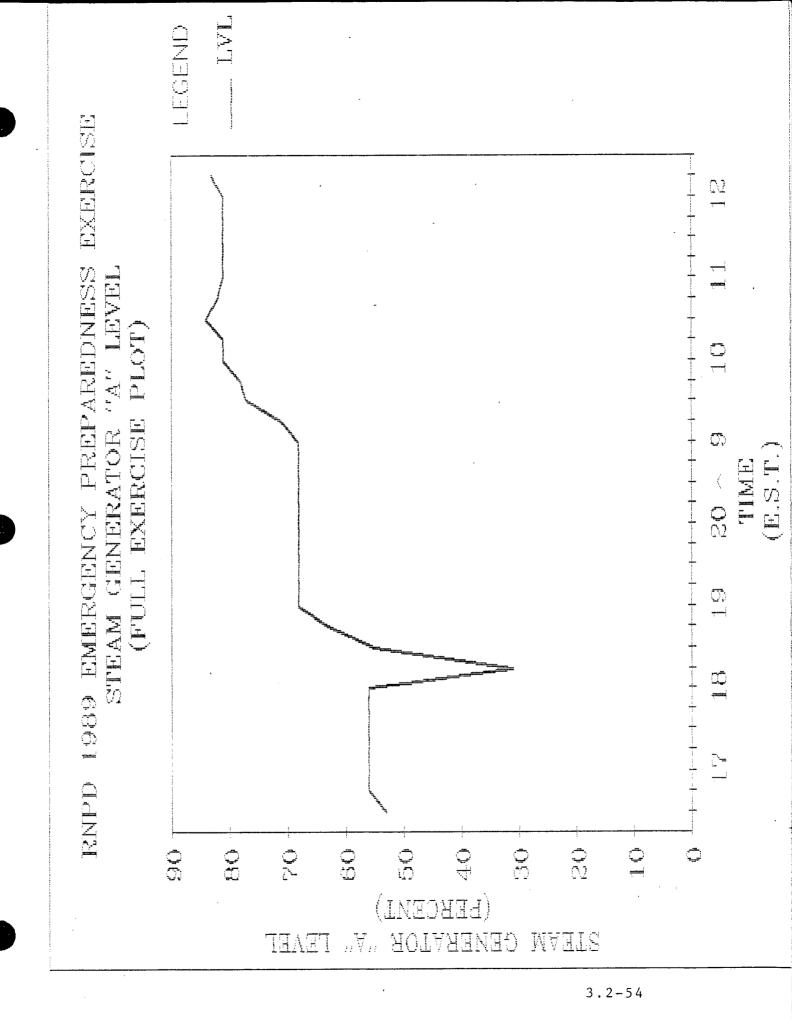


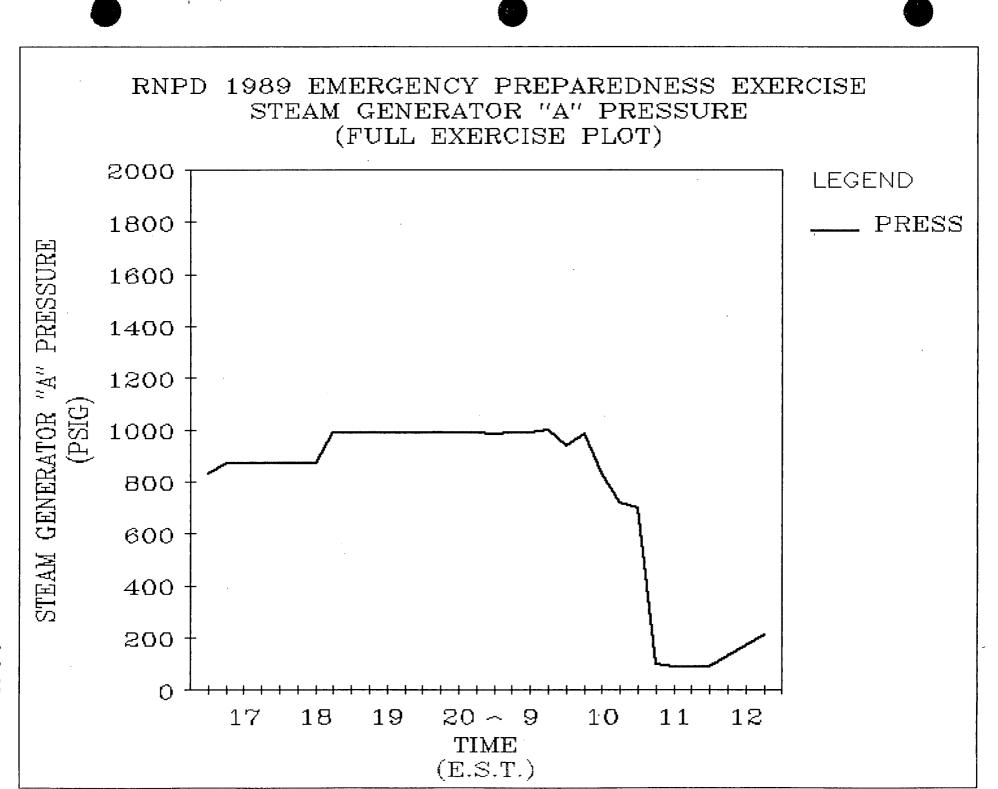




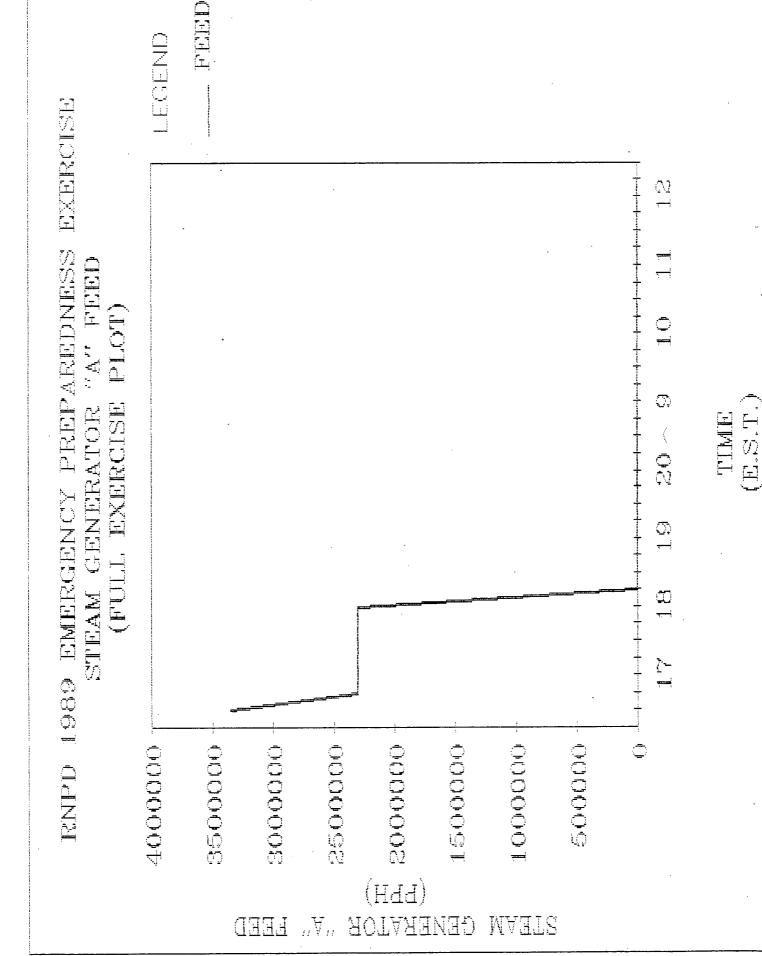


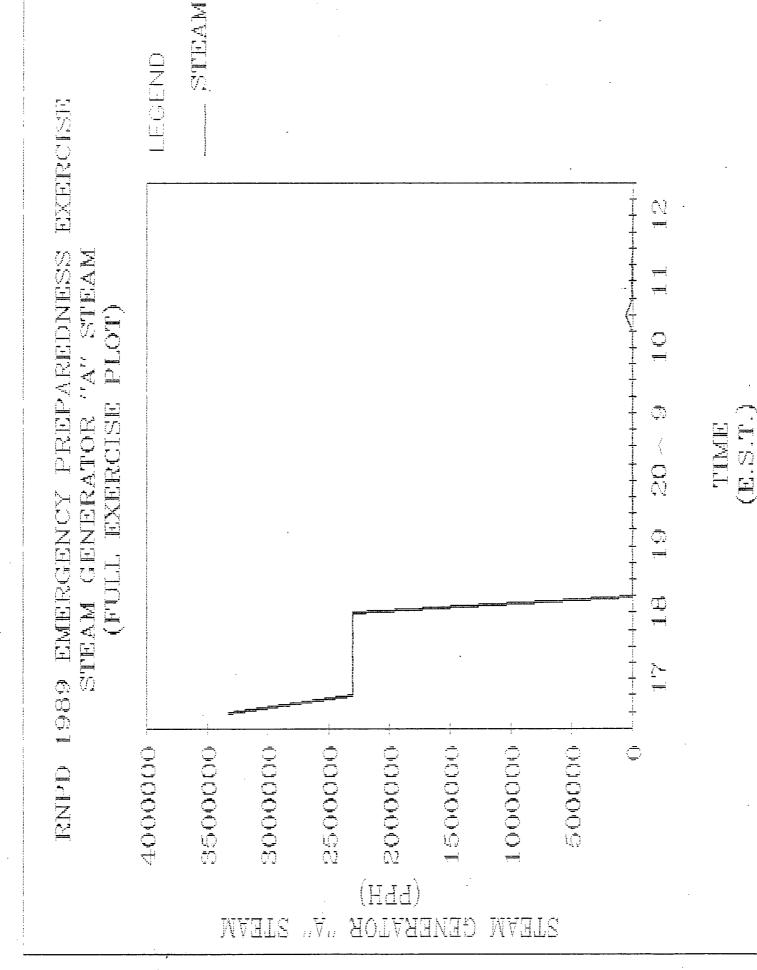


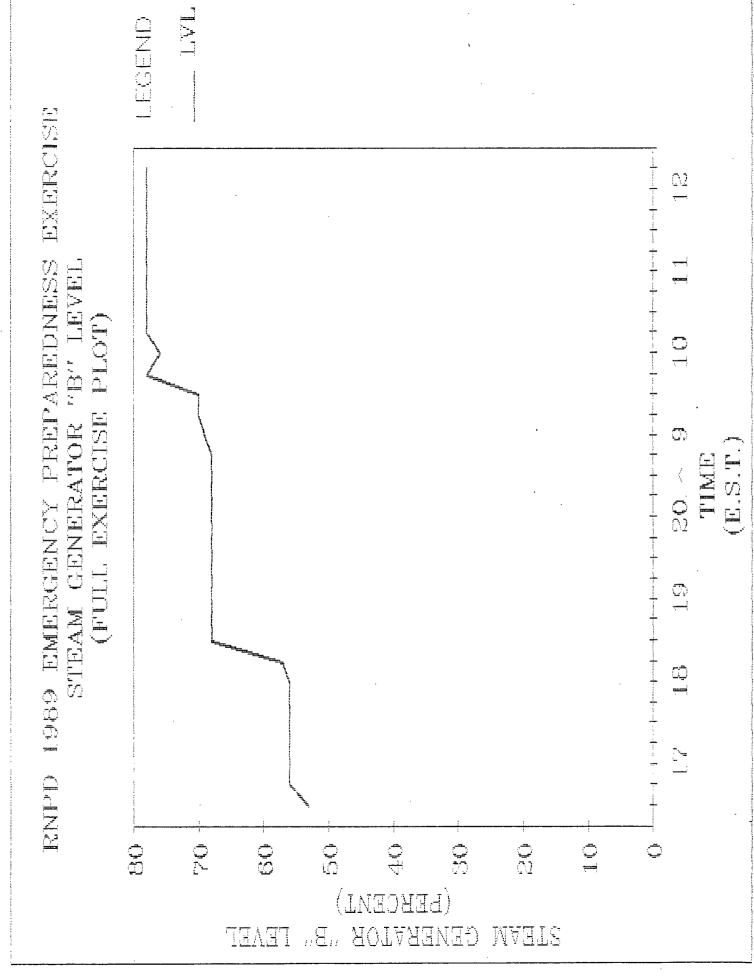




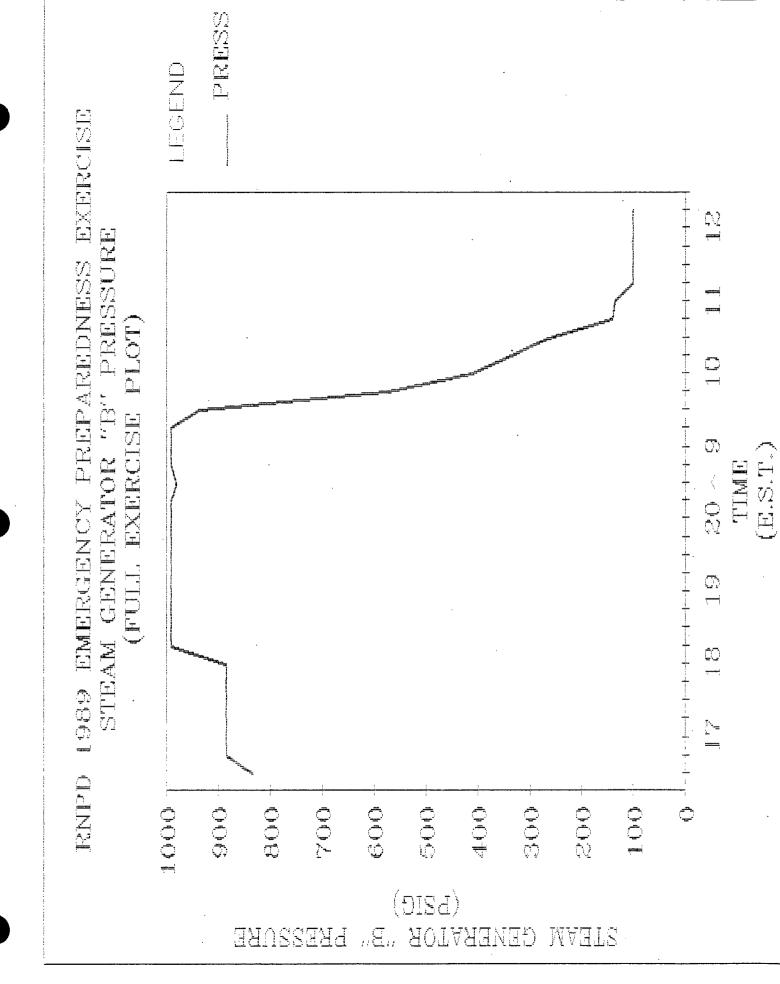
·

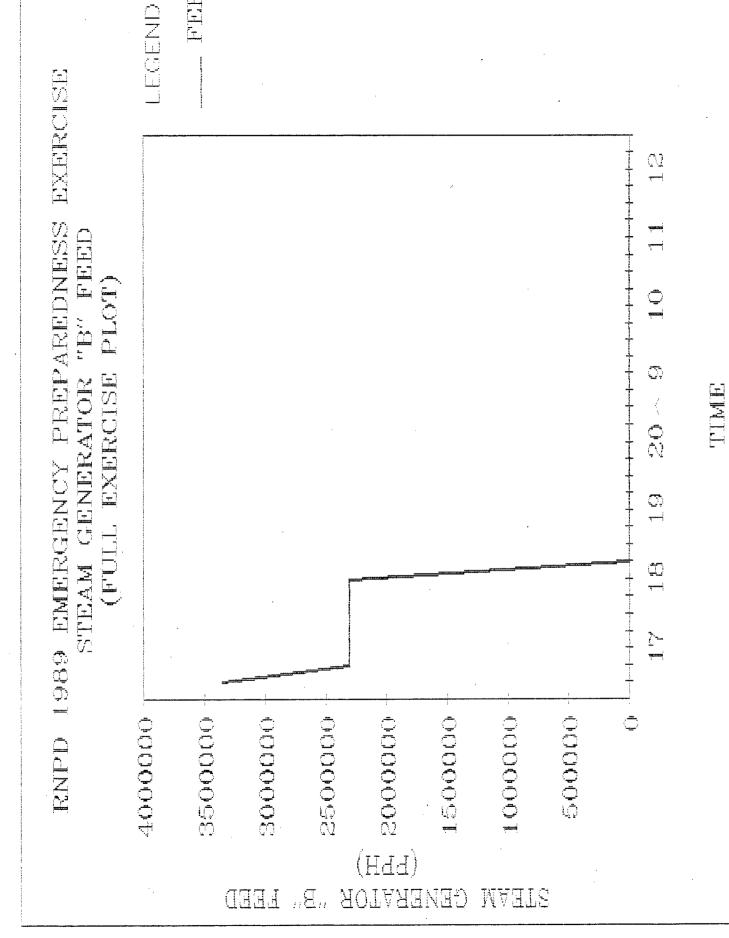






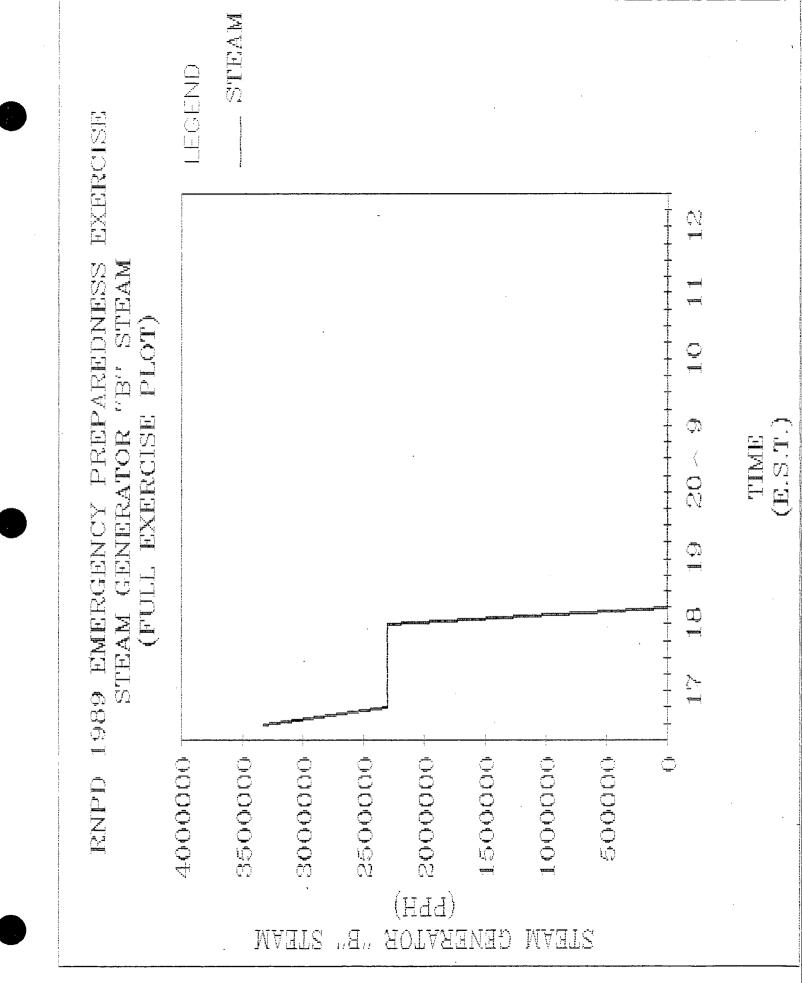


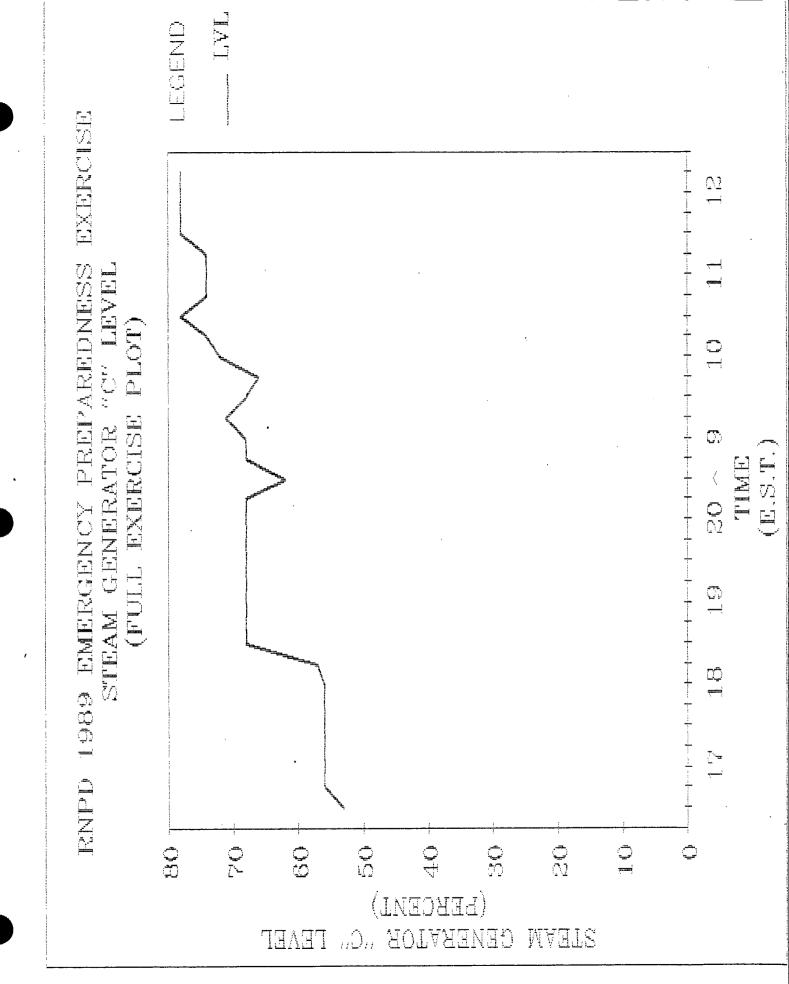


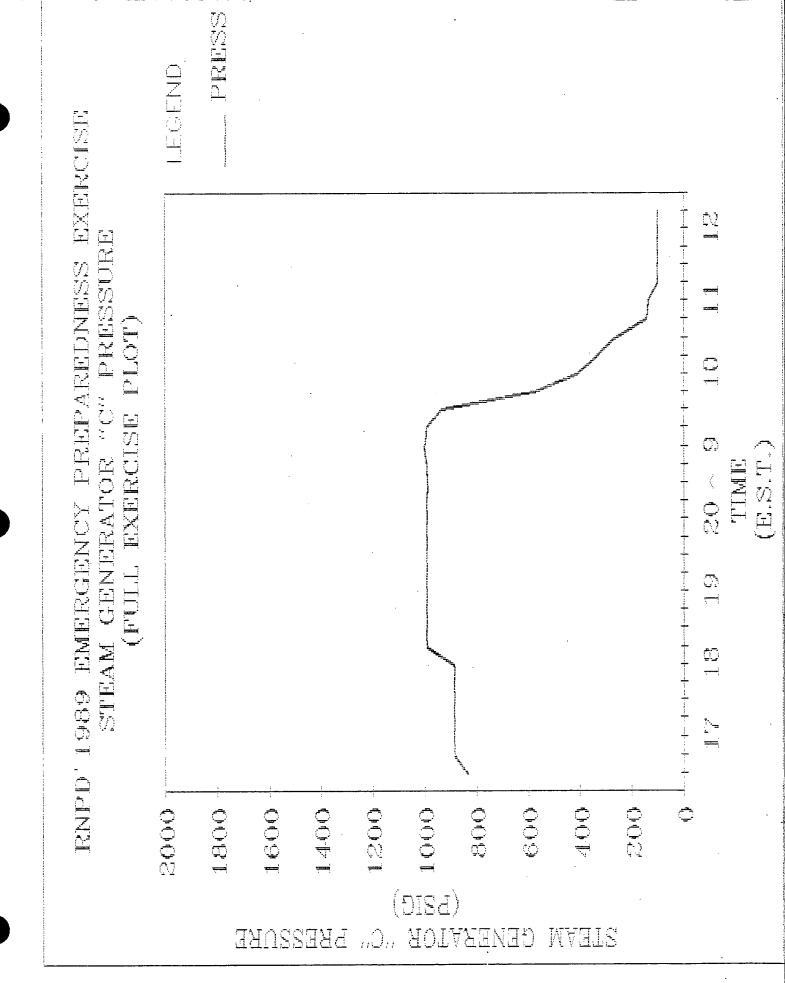


O E E E

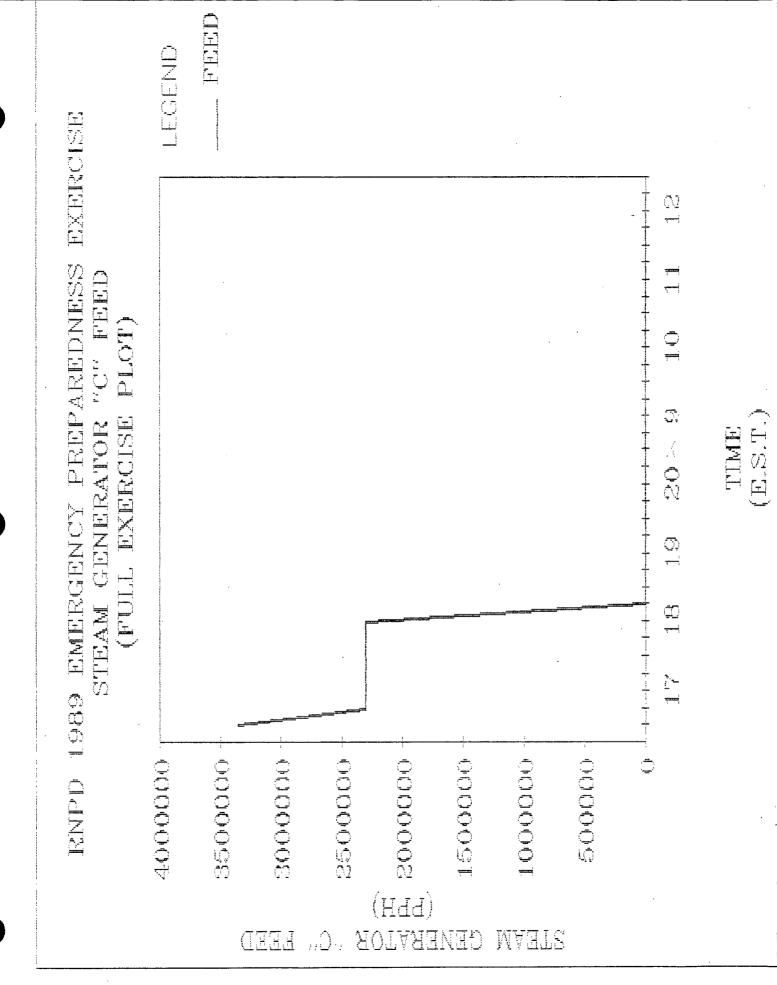
3.2-60

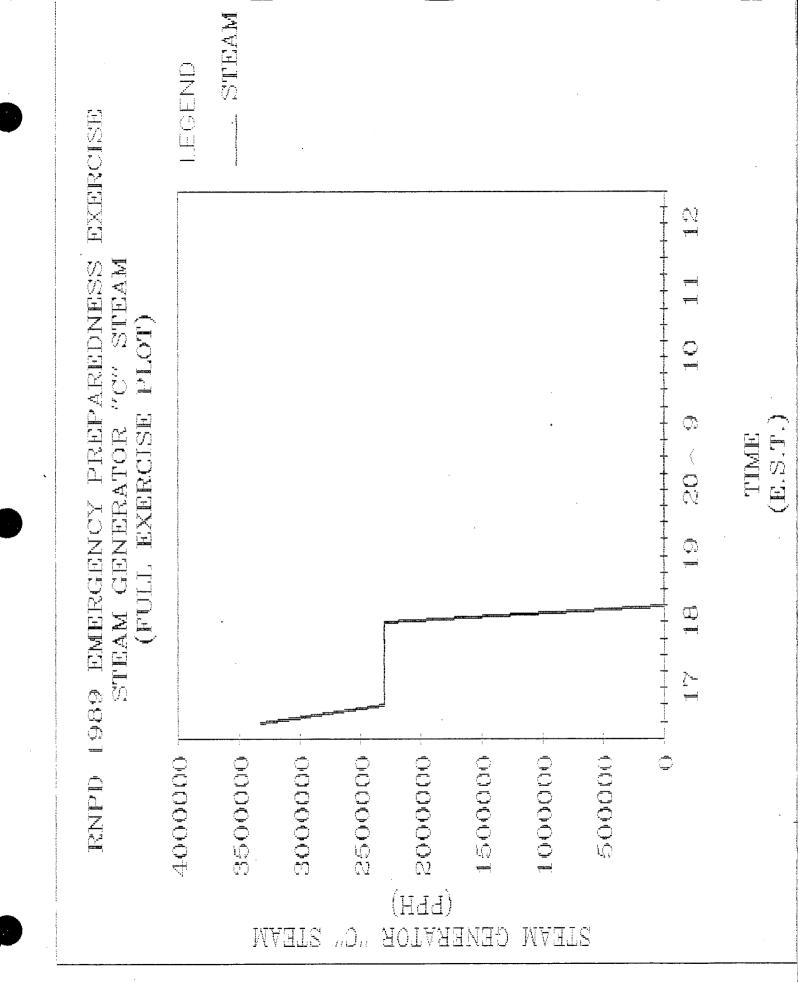






^{3.2-63}





^{3.2-65}

CAROLINA POWER AND LIGHT COMPANY ROBINSON NUCLEAR PROJECT DEPARTMENT

1989 EMERGENCY PREPAREDNESS ANNUAL EXERCISE

3.3 <u>METEOROLOGICAL</u> DATA

SCN-89-3083 RNPD-89-03-R0

3.3-0

09:02



Carolina Power & Light Company

••			_	п сопрану		
	· ONSITE		EOROLOG	ICAL	DATA	
	Dete: November	5,1489	RNP			
	Time (EST)	1600	1615	1630	1645	
	Upper Speed (mph)	14.7 /	13.11	12.91	11.81	· .
	Upper Direc. (DEG)	224	224	225	226	
	Lower Speed (mph).	7,31	7.11	7,3 1	6.51	
	Lower Direc. (DEG)	165	183	189	193	
	AMB Temp. (°F)	61.5	59.6	59.6	60.5	
	∆ т (° C/100m)	-0.53	-0.46	-0.57	-0.74	
	Stability Class	<u>_D</u>	E	<u>D</u>	<u>D</u>	
	Time (EST)	1700	1715	_/730	1745	:
	Upper Speed (mph)	12.21	14.91	<u> /5 1</u>	16.71	•
	Upper Direc. (DEG)	228	234	237	236	• .
	Lower Speed (mph)	7.1	-9.1	9.4	10.9	•
	Lower Direc. (DEG)	201	215	215	213	
	AMB Temp. (⁰ F)	60,7	60.3	59.5	589	
	△T (°c/100m)	-0.90	0.89	-1.07	-0.95	
	Stability Class			_ <u>D</u>		

SCN-89-3083 RNPD-89-03-RO

3.3-1

002

.

09:03

CP&L NU FUEL



Carolina Power & Light Company

	Carolinia Power & Light Company											
	ONSITE		EOROLOG	ICAL	DATA							
	Date: <u>Nevember</u>	13,1989	RNP									
	Time (EST)	1800	1815	1830	1845							
	Upper Speed (mph)	17.31	17.81	17.81	16.71							
	Upper Direc. (DEG)	237	237	233	236							
• • •	Lower Speed (mph).	<u>/0,91</u>	11.71	11.91	10-11							
	Lower Direc. (DEG)	213	215	210	215							
	AMB Temp. (^o F)	58.7	58.5	58.4	60.3							
	△T ([°] c/100m)	-1.08	-1.21	-1.11	-1.09							
	Stability Class	<u> </u>	D	<u>D</u>	D							
•	Time (EST)	1900	1915	/930	1945							
i	Upper Speed (mpb)	16.71	15,61	<u> 14.41</u>	13.11							
	Uppar Direc. (DEG)	240	240	239	243							
	Lower Speed (mph)	10.4	9,8	9.1	9.3							
	Lower Direc. (DEG)	222	220	216	219							
	AMB Temp. (^o F)	59.7	58.6	57.4	56.3							
	DI (°C/1000)	-1.03	-1.06	-1.35	-1.41							
	Stability Class		<u>D</u>	<u>D</u>								

09:04

CP&L NU FUEL



Carolina Power & Light Company

		Carolin	lina Power & Light Company							
	ONSITI	e met	EOROLOG	GICAL	DATA					
	Date: <u>Abvember K</u>	3.1989	RNP	-	• *					
	Time (ES7)	2000	2015	2030	20 45					
	Upper Speed (mph)	16.61	16.41	18.81	<u>22, ,</u>					
	Upper Direc. (DEG)	242	243	244	245	•				
	Lower Speed (mph).	11.01	12,11	11.91	12.91					
•	Lower Direc. (DEC)	227	216	222	725					
	AMB Temp. (⁰ F)	55.9	55,4	55.7	56.0					
	<u>∧</u> I (°c/100m)	-1.55	-1.32	-1.45	-1.38					
)	Stability Class	_ <u>C</u>	<u></u>							
	Time (ES7)	2/00	2115	2130	2145					
	Upper Speed (mph)	[7.8]	17.31	16.51	15,61					
	Opper Direc. (DEG)	239	252	252	248					
	Lower Speed (mph) -	. 11.9	11.0	9.5	9.0					
	Lower Direc. (DEG)	218	232	233	227					
	AMB Temp. (^O F)	<u> </u>	54.1	53.9	53.7					
	∧ T ([°] C/100m)	-130	-1.23	-0.79	-1.07					
	Stability Class			<u>D</u>	<u></u> .	-				

SCN-89-3083 RNPD-89-03-R0 2004

09/28/89 09:05



Carolina Power & Light Company

METEOROLOGICAL ONSITE DATA Nevember 14, 1989 Date: 0800 0815 Time (EST) 0830 0845 6.31 4.61 - ----Upper Speed (mph) 5.01 591 194 200 Upper Direc. (DEG) 190 200 Lower Speed (mph). 1.91. 3.21 3.91 188 185 Lower Direc. (DEG) 193 48.6 49 AMB Temp. (°F) 5D.Z 5D.9 △T (°C/100m) 29 Ο. 42 -0. 0.55 Ē Stability Class _0900 0915 Time (EST) 0930 0945 57 6.9.1 Upper Speed (mph) 5.31 1 471 Upper Direc. (DEG) 202 205 15 3,3 4. Lower Speed (mph) 4.6 197 199 Lower Direc. (DEG) \mathcal{D} II210 51.4 52.2 531 AMB Temp. (°F) 9 △ T (°c/100m) -0,77 70.82 0.99 1,08 ${\cal D}$ D Stability Class

09:08



Carolina Power & Light Company

ONSITE METEOROLOGICAL DATA

Date: <u>Movember 14</u>	1,1989	RAIP			
Time (EST)	1000	101.5	1030	_10.45	
Upper Speed (mph)	6.81	6.61	5.91	6.01	
Upper Direc. (DEG)	219	222	214	219	· .
Lower Speed (mph).	5.41	4.91	4.11	4.41	
Lower Direc. (DEG)	200	206	194	210	
AMB Temp. (^O F)	54.5	55.1	55.6	56.0	
▲T ([°] C/100m)	-1.19	-1.36	-1.46	-1.44	
Stability Cleas	<u></u>	<u>D</u>		D	
	·-·.	-			
Time (EST)	1100	//15	//30	/145	-
Time (E577) Upper Speed (mph)	·····	 6.21	 6.71	<u>/145</u> 6.01	
	·····	· · · · · · · · · · · · · · · · · · ·			
Upper Speed (mph)	6-41	6.21		6.01	
Upper Speed (mph)	6-41	6.21	6.71	6.01	
Upper Speed (mph) Upper Direc. (DEG) Lower Speed (mph)	<u>6-41</u> <u>218</u> <u>4-7</u>	6.21 218 4.9	6.71 215 5.0	6.01 _213_ 4.6	
Upper Speed (mph) Upper Direc. (DEG) Lower Speed (mph) Lower Direc. (DEG)	6-41 218 4.7 205	6.21 218 4.9 208	6.71 215 5.0 199	6.01 213 4.6 200	-

SCN-89-3083 RNPD-89-03-RO

3.3-5

09/28/89

09:07

3919 546 4361

CP&L NU FUEL



Carolina Power & Light Company

ONSITE METEOROLOGICAL DATA Date: $\frac{A|_{ovember} / 4. 1989}{RNP}$ Time (EST) 1200 1215 1230 1245 Upper Speed (mph) 6.81 6.91 6.51 7.01

Upper Direc. (DEG) 2/5 219 221 220 Lower Speed (mph). 5.1.1 <u>4.91</u> 4.81 5.41 203 208 Lower Direc. (DEG) 213 211 58.4 AME Temp. ("F) 58.7 58_9 59.3 △T (°C/100m) -1,45 -1-46 -1,48 . 44 Stability Class

Time (ZST) Upper Speed (mph)

Upper Direc. (DEG)

Lower Speed (mph)

AMB Temp. (°F) ∧T (°C/100m)

Stability Class

SCN-89-3083 RNPD-89-03-R0

3.3-6

2007

國 008	О Іч Гч И	1600 EST			•	Steadyl	12 moh	MOVING	
CP&L NU FUEL	L FORECA	Time Issued	RNP	secor 5-55W Der. 19	Be 2 / June 1	Hil Ze (None Scattered 1. Bainshovers Thundersu (light, Moderare Severe)	2150 7- TRW/RW	E Sprere Thunderstorms using this hour.	3.3-7
03:08 23313 546 4361	TEOROLOGICAL	5	Issued Fi: Forecast Location:	A) Next 1 Four 1) Nind Directions Se	Rinds Suchid Renai 22) Variation Shou Nind Velocity:) Stability Class	 5) Pracipitation Activity 6 6) Pracipitation Type (Bais 7) Pracipitation Intensity 	3) Nerr 3 Edus: Wind: SSW Stubility: D VPCin: SCT	c) Reactions Lines of HIrcush RNP du	083 03-RO
09/28/89	EX							· · ·	SCN-89-3083 RNPD-89-03-R(

ı.

ź

ı .

•

1.0

• •	0 年。	Est.				.4	(apres -	you have				• • •
	中の回口の国の国	<u> </u>	Racaived By:		55 W-5W Dec. 2/5		S S S	Jacerate, Severel 7-12 y				3.3-8
Carolina Power & Light Company	IFORU OFO HOHE	Dasas Nourabor 13, 1989	Issued By: Forecase Locarica: RAIP		Mate I Hour 1) Wind Direction: Secon 501 2) Winds Should Remain Manada St	22) Verterion Should Wind Velecing: 7	 4) security class 5) Precipitation Activity Will 3a (None, 6) Precipitation Type (Bain (Beinforers)) 	Hind: Sin/ 2250	Precip: None	Rearras:		
	E E N	11 9 A A		• •	a		· · ·	ିକ	· .	ີບ		SCN-89-3083 RNPD-89-03-R0

÷

國008

09/28/89 08:10 20018 548 4361

CP&L NU FUEL

.

• • •

•

.

.

09:11

Ø010

		•
Carolina Power 8	Light Company	-
METEOROLOGICAL	FORECA	ST FO
Data: November 13.1989	III Issued: _/	800 EST
	Received By:	
Forecast Locations RNP	-	
- *	÷	· .
A) Next 1 Hour		
1) Wind Direction: Sector <u>SSN</u>	1-SW Deg. 2/3	·····
2) Winds Should Renzin (Steady)	Shifting; Veriable)	•
2a) Variation Should Se $\underline{-}$	· · · ·	· · ·
3) Wind Velocity: to	<u> </u>	*
4) Stability Class		
5) Precipication Activity W <u>11</u> 3:		
6) Practification Type (Rain, Rain	ishowers, Thurderscorus,	ICE, SEOW)
- 7) Pracipization Intensity (Ligh	2, Moderate, Severe)	•
E) Next 3 Hours:	~~~~	0.0
Winds SW	123	8-13 mph
Stability: 1		
Piecip: None		
		· •
C) Remarks:		
·		
	• • • •	<u>-</u> · ·
•		

SCN-89-3083 RNPD-89-03-RO

3.3-9

00/18/00 00:10 Collo 3:10 Coll NUL Carcuina Power & Light Company DAETTEO E O LO G I CAL FORE Daen Jone Jan Daen Jan Jan Jan Daen Jan	國 011	• •	(고 고 고 고 고 고 고 고 고 고 고 고 고 고 고 고 고 고 고	POO EST			727		Stardy) 1728, Ica, Smort)		8-13 meh				•	3.3-10
	03:12 2919 546 4361	Power PL	FOIDOIO HOE	DELES Xleyember 13.	RAP	1 Eour	Wind Direction: Secur <u>J W</u> Deg Winds Startic Remain (Steady) Stefetor; Vari 2a) Variztion Should Be <u>I / D</u> Deg.	Wind Velocity: 8 to 13 Stability Class D	Pracipiusion Activity Will Be (None,) Scattared, Pracipiustion Type (Bain, Azinshowers, Thundersto	Frechination Lacensity (Light, Motorate, Sev	WS I Downer SW	n E .	C) Reactes		•	

1

.

.

Carolina Power & Licht Company		Deces November 13, 1989	Issued Zr. Received 27: Forecast Loundary RNP		A) Wart I Hour 1) Wind Direction: Secon SW Deg. 225	 2) Winds Should Remain (Steady) Shifting; Variable) 2a) Variation Should Be 2/0 Day. 3) Wind Velocity: S m /3 (NPY) 	Hill Be (None,) Scattered, Stead	steriitaton Intersty (Light, Moderal	B) New 3 Hours: W. nols: SW 230 7-12mph Stubility: D	Freip: None- C. Reartes:			SCN-89-3083 RNPD-89-03-RO
--------------------------------	--	-------------------------	---	--	--	---	----------------------------------	--------------------------------------	--	-----------------------------	--	--	------------------------------

.

.

G 012

09/28/89 00:13 2019 546 4361

CP&L NU FUEL

<u>ୟ</u> 013	,	OH EST	2100 EST							Stazdy)	s, Ice, Snow)	5-10mph				-12
CP&L NU FUEL	Power & Light Company	D 可 可 可 可 可 可 可 可 可 可 可 可 可 可 可 可 可 可 可		Received Ay:		. 1 5			(EER) 27 ee	Will Je (Youe, Scenerad, St	, Zeinzhovers , Thurderscores, (ligne , Maderace, Severe)	2250				3.3-12
t 919 546 4301 CP&	Carolina Po	OHOTOCIOF	: <u>Abvember 13, 1989</u>	ر 11-11 11-11	areast Leastion: <u>KNI</u>	,	Mext I Zour 1) Wind Disserving: Server	Finds Should Remain 2a) Variation Show	3) Find Velocity: 7	Stability Class <u>U</u> Ptacipitation Activity	 Fracipication Type (Bain, 7) Fracipication Interaty (Nexe 3 Educa: Wind: SW	Precip: Nane	Rentries:		
09/28/89 09:14	,	と国国国	12:13:1 12:13:14:14:14:14:14:14:14:14:14:14:14:14:14:	1.55485	1940 1	•				."		E	· .	ប		SCN-89-3083 RNPD-89-03-RO

. .

G 013

	09/28/89	09:15	2 919 546 4361	CP&L I	U FUEL		Q	3014
		-	Carr					
	ME	TE	DEOLOO			-	AST	FO
		- Daee:	November 1	<u>+,1989</u>	7	a Issued: '	0.800 E	-57
		<u>Is</u> sue	12 I;;		Rec	aived By:		
		Fore	ast Locations	RNP	- - -			
	• •	•						
• • •		· ·	Next 1 Hour 1) Wind Direction: 2) Winds Should Re-				185	
	• •		Za) Variation SI3) Wind Velocity:4) Stability Class	nould 3e)eg.		
٠			5) Precipicatica A		L Be (None,)	Scattered,	Steedy)	
			6) Precipitation T 7) Precipitation I	79e (Zzin, I	Britshovers,	Thurderst	rms, Ice. Sa	54)
		E)	Nexe 3 Ecurs: Wind: 551	N:	2/0°		2-6mph	
		•	Stability: J Precip: N) ACC	•			
		C)	Renarks:	·····				
						·		
					-			- ,
	SCN-89-3	083				•		

SCN-89-3083 RNPD-89-03-R0

.

Q015	•	0 4 1- 0	0900 EST		مورد در مراجع	in the second		Steadyl Tra Srov)	•	you				14
09/28/89 09:18 22 919 546 4361 CP&L NU FUEL	Carolina Power & Light Company	METEOROLOCION MOREOL	Darces Movember 14 1989	Forecast Location: KAP	•	dour d Direction: Sev de Sponid Rengin	24) Varietren Should 32 -// Deg. 3) Wind Velociny: J to // (NPE)	4) Stability Class	Precipianton Intersity (Light, Moderat	B) Nexe 3 EDURS: M/ind: SSW 210° 2-60 Stability: D	Trecip : None-	- C) Remarks:		SCN-89-3083 . RNPD-89-03-RO 3.3-14

09/28/	89 09:17	2 919 546 4361	CP&L NU FUE	L	Ø	016
		(Trolina Power & L			-
\mathbb{N}	ETEC		GICAL			FO
	Dece:	November 1	<u>4, 1989</u>	Time Issued		• •
,	lesze	ć it:	54	Received 33		
	Torec	est Location:	RNP	4		
•	-					
	A) 3	ext 1 Sour) Wind Direction		<u>.</u> Dec.	-205	
	:	2a) Variation	Should Be $\frac{I}{D}$ to	O Deg.	le) t	
-	·	5) Pracipitation	Activity Will 3a Type (Zzie, Rains			, 22)
		7) P recipiazion	Intensity (Light,	Maderate, Seve	re)	- ·
·	E)	Stability: -	<u>5W 210°</u>		2-10 mph	
	c)	Remarks:	<u>nP</u>	-		
- ·						
		• 			· · · · · · · · · · · · · · · · · · ·	
	89-3083 -89-03-RO			•	3.3-15	

09/28/89 09:17	77 919 546 1381	CP&L NU FUEL		@ 017
	Carolina	Power & Light	() t Company	•
METE	IOROLOGIC	CAL E	FORECAST	FO
bat	November 14,14	<u>789</u>	Time Issued: <u></u>	-
īs:	steć Zy:	- -	Received By:	
Fa	reast Location:	NP		
•				
• • •	•_	ĩ		
(Å)	Next I Hour I) Wind Direction: See	SSU/	Deg2/0	
	2) Winds Should Remain 2a) Variation Should 3) Wind Velocity:	(Staady:) 52	ing; Varizble)	
	4) Stability Class		(¥.
• •	5) Precipitation Activi		Scarrared, Steadyl	
	6) Pracipitation Type (Rein, Edinshove	rs, Thugaerstorm, Ice,	Szov)
: 	7) Presigization Intens	ity (Light, Med	erzte, Severe)	· ·
. B	Wind: SSW	210 ⁶	48mph	
	Stability: D Procipi None		-	
, · · c) Re-arts:			-
			·	
	-	-	· ·	-

SCN-89-3083 RNPD-89-03-RO

.

,

Carolina Power & Light Company LOGICAL FORECAST FO	14,1989 <u>zîre</u> Issueii 12.00 RAVP Received Ey:	r 1 Zour Wind Direction: Secon SSM Day. 240 Rinds Shavid Zentia (Steering; Vertebie) 23) Variation Shouid 30 ZM Deg. Wind Velocity: 3 to 7 (Arr) Wind Velocity: 3 to 7 (Arr) Rind Velocity: 3 to 7 (Arr) Stability Class 0 at 7 (Arr) Stability Class 0 at 7 (Arr) Stability Class 0 for 8 (Sceneral, Steery) Stability Class 0 for 8 (Sceneral, Steery) Precipitation Lorder, Will the (Youe, Sceneral, Steery) Precipitation Lorder, Mill the (Sources, Innederstons, Ice, Stoon) Precipitation Lorders, (Licht, Indersto, Severe)	2.1nc 4-Ranph		3.3-17
	Dana: Movember 14. Lesued Ey: Forcense Location:	 A) Hart I Four 1) Wind Direction: Second 2) Wind Velocity: Second Should Be 3) Wind Velocity: S 3) Stability Cleas 4) Stability Cleas 5) Precipitation Activity 5 6) Precipitation Type (Rest 7) Precipitation Intensity 	3) Yex 3 Edus: Wind: 55 W Stability: D Procipi Non	C)	SCN-89-3083 RNPD-89-03-RO

,

Q 018

09/28/89 09:18 **3**918 346 4361 CP&L NU FUEL

CAROLINA POWER AND LIGHT COMPANY ROBINSON NUCLEAR PROJECT DEPARTMENT

1989 EMERGENCY PREPAREDNESS ANNUAL EXERCISE

3.4 RADIOLOGICAL INFORMATION

SUBSECTIONS:

- 3.4-A IN-PLANT RADIOCHEMISTRY SAMPLING DATA
- 3.4-B IN-PLANT MONITOR READINGS AND ONSITE SURVEY DATA
- 3.4-C OFFSITE PLUME MONITORING DATA

3.4-0

The Radiological Information Section of this scenario manual contains the time-related data and information needed to conduct the radiological aspects of this exercise. This section contains onsite and offsite field monitoring maps, in-plant area radiation readings, in-plant radiochemistry data, and field monitoring data. As appropriate, controllers will provide this information and data to the "players" upon request.

Time-related in-plant radiochemistry data is provided in Subsection A for key systems affected by the scenario. Concentration data is provided by isotope in units of uCi/ml for the reactor coolant system, containment atmosphere, and auxiliary building atmosphere. Time frames at top of page are based on the time at which the sample is collected, not when it is analyzed.

Time-related onsite radiological monitoring data is provided in Subsection B. Information is provided for in-plant surveys. Readings for key in-plant areas and process radiation monitors are provided in Section 3.1, Plant Parameters on the SPDS/Plant Status Sheets.

Time-related offsite radiological monitoring data is contained in Subsection C.

CAROLINA POWER AND LIGHT COMPANY ROBINSON NUCLEAR PROJECT DEPARTMENT

1989 EMERGENCY PREPAREDNESS ANNUAL EXERCISE

3.4-A IN-PLANT RADIOCHEMISTRY SAMPLING DATA

SCN-89-3083 RNPD-89-03-R1

•	0930 ACCIDENT PRIMARY CHEM. UC1/ml	2.96E+02 2.13E+01 1.68E+02 5.87E+00 7.04E+01	5.61E+02	3.05E+02	$\begin{array}{c} 0.00 \pm +00\\ 2.71 \pm +00\\ 3.65 \pm +00\\ 3.65 \pm +00\\ 1.04 \pm +00\\ 1.04 \pm +00\\ 2.62 \pm +00\\ 1.81 \pm +02\\ 1.81 \pm +02\\ 2.73 \pm -03\\ 8.27 \pm +00\\ 4.79 \pm +00\\ 4.79 \pm +00\\ 0.00 \pm +00\\$	7.702+02 -
	F-1 >-1					
	P.1.		2 5.95£+02	2 3.21£+02	0.005+00 0.2965+00 0.2965+00 0.1.255+00 0.1.255+00 0.1.255+00 0.1.13E+00 0.1.13E+00 0.2.76E+00 0.2.76E+00 0.2.76E+00 0.2.76E+00 0.2.255 0.2.255+00 0.2556+00 0.005+0000000000	8.16E+02
	0900 ACCIDENT PRIMARY CHEM. UCI/ml	3.148+02 2.638+01 1.818+02 9.248+00 7.868+01	6.092+02	3.26E+02	$\begin{array}{c} 0.002\pm00\\ 3.112\pm00\\ 3.112\pm00\\ 3.862\pm00\\ 5.732\pm00\\ 5.732\pm00\\ 5.732\pm00\\ 2.792\pm00\\ 1.152\pm00\\ 1.152\pm00\\ 2.792\pm00\\ 0.022\pm00\\ 0.002\pm00\\ 0.002\pm00\\$	8 . 33 2 +02
	1945 ACCIDENT FRIMARY CHEM. UCI/ml	3.16E+02 2.86E+01 1.83E+01 1.13E+01 8.11E+01	6.20E+02	3.30E+02	0.002+00 3.262+00 3.262+00 3.892+00 1.672+00 6.132+00 1.1522+00 1.932+00 1.932+00 2.272+00 2.272+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00	8.48E+02
	1930 ACCIDENT PRIMARY CHEM. UCI/ml	3.18E+02 3.10E+01 1.86E+02 1.39E+01 8.37E+01	6.33E+02	3.33E+02	$\begin{array}{c} 0.002\pm00\\ 3.412\pm00\\ 3.412\pm00\\ 3.912\pm00\\ 5.562\pm00\\ 6.562\pm00\\ 4.122-09\\ 1.162\pm00\\ 1.952\pm00\\ 0.532\pm00\\ 6.052\pm00\\ 0.002\pm00\\ 0.002\pm00\\$	8.63E+02
	1915 ACCIDENT PRIMARY CHEM. UCi/ml	3.202+02 3.372+01 1.892+02 1.70E+01 8.64E+01	6.46E+02	3.37E+02	$\begin{array}{c} 0.00 \pm 0.$	8.785+02
	1900 ACCIDENT PRIMARY CSEM. UCi/ml	3.222+02 3.662+01 1.912+02 2.088+01 8.912+01	6.60E+02	3.41E+02	$\begin{array}{c} 0.002\pm00\\ 3.732\pm00\\ 3.732\pm00\\ 3.952\pm00\\ 3.952\pm00\\ 7.502\pm00\\ 1.172\pm00\\ 1.172\pm00\\ 1.172\pm00\\ 0.922\pm00\\ 6.632\pm00\\ 6.632\pm00\\ 0.922\pm00\\ 0.002\pm00\\ 0.002\pm00\\$	8.95E+02
	1845 ACCIDENT PRIMARY CREM. UCI/ml	3.24E+02 3.97E+01 1.94E+02 2.55E+01 9.19E+01	6.75E+02	3.45E+02	$\begin{array}{c} 0.00\ \ 0.00\ \ \ \ 0.00\ \ \ \ \ \ \ \$	9.14E+02
	1830 ACCIDENT PRIMARY CHEN. UCI/ml	3.26E+02 4.31E+01 1.96E+02 3.12E+01 3.12E+01 9.48E+01	6.92E+02	3.50E+02	0.00E+00 4.07E+00 3.99E+00 3.40E+00 3.40E+00 1.19E+00 1.19E+00 2.94E+00 2.94E+00 2.94E+00 2.94E+00 2.94E+00 2.94E+00 2.94E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00	9.345+02
	1815 ACCIDENT PRIMARY CHEM. UCi/ml	3.28E+02 4.68E+01 1.99E+01 3.82E+01 3.82E+01 9.78E+01	7.10E+02	3.55E+02	$\begin{array}{c} 0.002\pm00\\ 4.262\pm00\\ 4.012\pm00\\ 3.912\pm00\\ 9.182\pm00\\ 5.202\pm02\\ 1.192\pm00\\ 1.072\pm00\\ 1.072\pm00\\ 1.072\pm00\\ 1.072\pm00\\ 1.072\pm00\\ 0.002\pm00\\ 0.002\pm00\\$	9.56E+02
	1800 NORMAL PRIMARY CHEM. UCi/ml	1.46E-04 2.50E-03 1.30E-03 4.10E-03 1.95E-03 1.95E-03	1.00E-02	2.16E-03	$\begin{array}{c} 0.002\pm00\\ 1.602\pm00\\ 0.002\pm00\\ 3.502\pm02\\ 3.502\pm02\\ 0.002\pm00\\ 0.002\pm00\\ 0.002\pm00\\ 1.102\pm01\\ 1.502\pm02\\ 0.002\pm00\\ 0.002\pm00\\$	1.602-01
	1745 NORMAL PRIMARY CREM. CREM. UCi/ml	1.46E-64 2.50E-03 1.30E-03 4.10E-03 4.10E-03 1.95E-03	1.00E-02	2.16E-03	$\begin{array}{c} 0.00 \pm 40\\ 1.60 \pm -04\\ 0.00 \pm 40\\ 0.00 \pm 40\\ 3.50 \pm -02\\ 3.50 \pm -02\\ 0.00 \pm +00\\ 0.00 \pm +00\\ 0.00 \pm +00\\ 1.10 \pm -01\\ 1.10 \pm -01\\ 1.10 \pm -02\\ 0.00 \pm +00\\ 0.$	1.60E-01
	1730 NORMAL PRIMARY CHEM. CCHEM. UCI/MI	1.462-04 2.502-03 1.302-03 4.102-03 1.952-03	1.00E-02	2.16E-03	$\begin{array}{c} 0.00 \pm 40\\ 1.60 \pm -04\\ 1.60 \pm -04\\ 0.00 \pm 400\\ 3.50 \pm -02\\ 3.50 \pm -02\\ 0.00 \pm +00\\ 0.00 \pm +00\\ 0.00 \pm +00\\ 1.50 \pm -01\\ 1.50 \pm -01\\ 1.50 \pm -01\\ 0.00 \pm +00\\ $	
	1715 NORMAL PRIMARY CHEM. UCI/ml	1.462-04 2.502-03 1.302-03 4.102-03 1.952-03	1.00E-02	2.16E-03	$\begin{array}{c} 0.00 \pm +00 \\ 1.60 \pm -04 \\ 0.00 \pm +00 \\ 3.50 \pm -02 \\ 3.50 \pm -02 \\ 3.50 \pm -02 \\ 0.00 \pm +00 $	
	1706 NORAAL PRIMARY CHEM. UCI/ml	1.46E-04 2.502-03 1.30E-03 4.10E-03 1.95E-03 1.95E-03	1.00E-02	EQ2.16E-03	$\begin{array}{c} 0.002\pm00\\ 1.602\pm04\\ 1.602\pm04\\ 0.002\pm00\\ 3.502\pm02\\ 2.002\pm00\\ 0.002\pm00\\ 0.002\pm00\\ 0.002\pm00\\ 1.102\pm01\\ 1.502\pm02\\ 0.002\pm00\\ 0.002\pm00\\$	
		[-131 [-132 [-133 [-134 [-135	TOTAL	IODINE E	KR-83 KR-85 KR-85 KR-85 KR-85 KR-85 KR-85 KR-85 KR-85 FE-131 KR-85 FE-133 KR-89 FE-133 KR-89 FE-133 KR-89 FE-133 KR-89 FE-133 FE-133 FE-133 FE-133 FE-133 FE-133 FE-132 FE-133 FE	GRAND

NUCLIDE	0945 ACCIDENT PRIMARY CHEM. uCi/al	1000 ACCIDENT PRIMARY CHEM. UCI/ml	1015 ACCIDENT PRIMARY CHEM. UCI/ml	1030 ACCIDENT PRIMARY CHEM. UCI/ml	1045 ACCIDENT PRIMARY CHEM. uCi/ml	1100 ACCIDENT PRIMARY CHEM. UCI/ml		1130 ACCIDENT PRIMARY CHEM. uCi/ml	1145 ACCIDENT PRIMARY CHEM. UCI/ml	1200 ACCIDENT PRIMARY CHEM. UCI/ml	1215 ACCIDENT PRIMARY CHEM. UCI/ml	1230 ACCIDENT PRIMARY CHEM. uCi/ml
I-131 I-132 I-133 I-134 I-135	2.78E+02 1.86E+01 1.57E+02 4.54E+00 6.46E+01	2.61E+02 1.62E+01 1.46E+02 3.50E+00 5.91E+01	2.44E+02 1.40E+01 1.35E+02 2.68E+00 5.38E+01	2.26E+02 1.20E+01 1.25E+02 2.05E+00 4.88E+01	2.09E+02 1.03E+01 1.14E+02 1.55E+00 4.39E+01	1.92E+02 8.77E+00 1.04E+02 1.17E+00 3.93E+01	1.74E+02 7.39E+00 9.38E+01 8.75E-01 3.48E+01	1.71E+02 6.72E+00 9.12E+01 7.05E-01 3.33E+01	1.63E+02 6.10E+00 8.87E+01 5.67E-01 3.18E+01	1.64E+02 5.54E+00 8.62E+01 4.56E-01 3.04E+01	1.61E+02 5.02E+00 8.37E+01 3.67E-01 2.90E+01	1.57E+02 4.55E+00 8.12E+01 2.95E-01 2.77E+01
TOTAL IODINE E	5.23E+02 202.86E+02	4.86E+02 2.68E+02										
KR-83M KR-85 KR-87 KR-88 KR-89 XE-131M XE-133M XE-135 XE-135	2.46±+00 3.44±+00 8.54±-01 4.23±+00 2.47±-16 1.02±+00 2.46±+00 1.70±+02 1.32±-03 7.65±+00	0.00E+00 2.22E+00 3.23E+00 6.99E-01 3.73E+00 8.56E-18 9.54E-01 2.30E+00 1.59E+02 6.35E-04 7.05E+00 3.90E+00	$\begin{array}{c} 1.99\pm 0\\ 3.01\pm 0\\ 5.70\pm 0\\ 1\\ 3.28\pm 0\\ 2.95\pm 1\\ 9\\ 8.91\pm 0\\ 1\\ 2.14\pm 0\\ 1.49\pm 0\\ 3.05\pm 0\\ 4\\ 6.47\pm 0\end{array}$	1.78±+00 2.80±+00 4.62±-01 2.86±+00 1.01±-20 8.28±-01 1.99±+00 1.38±+02 1.45±-04 5.91±+00	1.58E+00 2.59E+00 3.73E-01 2.49E+00 3.45E-22 7.65E-01 1.83E+00 1.27E+02 6.89E-05 5.36E+00	1.40E+00 2.38E+00 2.98E-01 2.15E+00 1.17E-23 7.02E-01 1.67E+00 1.17E+02 3.24E-05 4.83E+00	1.22E+00 2.17E+00 2.37E-01 1.84E+00 3.92E-25 6.38E-01 1.52E+00 1.06E+02 1.52E-05 4.32E+00	1.15E+00 2.12E+00 2.03E-01 1.69E+00 1.42E-26 6.26E-01 1.49E+00 1.04E+02 7.63E-05 4.17E+00	1.09E+00 2.08E+00 1.73E-01 1.56E+00 5.14E-28 6.13E-01 1.45E+00 1.02E+02 3.84E-06 4.01E+00	1.02E+00 2.04E+00 1.48E-01 1.44E+00 1.86E-29 6.01E-01 1.42E+00 9.97E+01 1.93E-06 3.86E+00	9.64E-01 2.00E+00 1.27E-01 1.32E+00 6.71E-31 5.88E-01 1.39E+00 9.76E+01 9.69E-07 3.71E+00	9.07E-01 1.96E+00 1.08E-01 1.22E+00 2.42E-32 5.75E-01 1.35E+00 9.53E+01 4.86E-07 3.57E+00
TOTAL		1.83E+02										
SR-89 TE-132 BA-140 ZR-97 CE-143 ND-147 CS-134 CS-137	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	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 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 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	0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00
TOTAL	0.00E+00											
GRAND	7.19E+02	0.092+UZ	0.202+02	5.726+02	5.246+02	4./86+02	4.321+02	4.210702	4.106+02	3.336402	3.005+02	J.//⊡†UZ

DCFs	SR-89 55-132 5A-140 ZR-97 CE-143 CE-143 CS-137 CS-137	e Ert	XR-83M XR-83M XR-85M XR-85M XR-85 XR-85 XR-85 XR-85 XR-85 XR-85 XR-133M XE-133M XE-133M XE-135M	TOTAL	I-131 I-132 I-133 I-135 I-135	MACROS,
0.00E+00 0.00E+00	0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00	0.00E+00		0.00E+00	0.002+00 0.002+00 0.002+00 0.002+00 0.002+00	T 1700 NORMAL SG "A" CGEX. (UC1/m1)
0.00E+00 0.00E+00	0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00	0.00E+00	0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00	0.002+00	0.002+00 0.002+00 0.002+00 0.002+00 0.002+00	1715 NORMAL SG "A" CHEM. (UC1/ml)
0.00E+00	0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00	0.00E+00	0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00	0.00E+00		1730 NORMAL SG "A" CHEM. (UC1/ml)
0.00E+00 (0.005+00 (0.005+00 (0.005+00 (0.005+00 (0.005+00 (0.005+00 (0.005+00 (0.005+00	0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00	0.002+00 1	0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00	1745 NORWAL SG "A" CHEX. (uCl/ml)
0.002+00 (0.002+00 (0.00E+00 (0.00E+00 (0.00E+00 (0.00E+00 (0.00E+00 (0.00E+00 (0.001:00 (0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00	0.00E+00	0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00	1800 NORMAL SC "A" CHEM. (UC1/ml)
0.00E+00 (0.00E+00 (0.002+00 (0.002+09 (0.002+09 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (1815 NORMAL SG "A" CHEM. (UC1/ml)
0.00E+00 0 0.00E+00 0	0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.00E+00 (0.002+00 (0.002+00 (0.00E+00 (0.002+00 (0.003+00 (0.002+00 (0.002+00 (0.002+00 (1830 NORMAL SG "A" CHEN. (UC1/ml) (
0.002+00 0 0.002+00 0	0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00	0.00E+00 (0.00E+00 (0.00E+00 (0.00E+00 (0.00E+00 (0.00E+00 (1845 NORMAL SG "A" CHEX. (UC1/al)
0.002+00 0	0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.00E+00 (0.002+00 0.002+0000000000	0.00:500.0	0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (1900 NORMAL SG "A" CHEM. (uC1/ml) (
0.002+00 0 0.002+00 0	0.003+00 0.003+00 0.008+00 0.008+00 0.008+00 0.008+00 0.008+00 0.008+00	0.00E+00 (0.002+00 (0.002+00 (0.00E+00 (0.005+00 (0.005+00 (0.005+00 (0.005+00 (0.005+00 (1915 NORMAL SS "A" C35%.
0.003+00 0. 0.003+00 0.	0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 0	$\begin{array}{c} 0.002+00 \\ 0.002+000 \\ 0.002+000 \\ 0.002+000 \\ 0.002+000 \\ 0.002+000 \\ 0.002+000 \\ 0.002+000 \\ 0.002+000 \\ 0.002+000 \\ 0.002+000 \\ 0.002+000 \\ 0.002+000 \\ 0.002+000 \\ 0.002+000 \\ 0.002+0000 \\ 0.002+0000 \\ 0.002+0000 \\ 0.002+0000 \\ 0.002+0000 \\ 0.002+0000 \\ 0.002+0000 \\ 0.002+0000 \\ 0.002+0000 \\ 0.002+0000 \\ 0.002+0000 \\ 0.002+00000 \\ 0.002+00000 \\ 0.002+000000 \\ 0.002+000000 \\ 0.002+0000000000 \\ 0.000000000000000000000000$	0.00E+00 (0.00E+00 (0.00E+00 (0.00E+00 (0.00E+00 (0.00E+00 (1930 NORMAL -SG PA -SE PA -CEEX. (uCi/ml) (
0.002+00 0.002+00 0.00E+00 0.002+00 0.002+09 0.00E+00	$\begin{array}{c} 0.105\pm00\\ 0.105\pm00\\ 0.005\pm00\\ 0.002\pm00\\ 0.002\pm0\\ 0.0$	0.008+00 (.002+00 .002+00 .002+00 .002+00 .002+00 .002+00 .002+00 .002+00 .002+00 .002+00	0.00E+00 (0.003+00 0.003+00 0.003+00 0.003+00 0.003+00 0.003+00 0.003+00 0.003+00 0.003+00 0.003+00	1945 NORMAL SG "A" CHEX. (UC1/ml)
.002+00 0 1.002÷00 9	.002+00 .002+00 .002+00 .002+00 .002+00 .002+00 .002+00	0.005+00 0	$\begin{array}{c} 0.002+00\\ 0.002+00\\ 0.002+00\\ 0.002+00\\ 0.002+00\\ 0.002+00\\ 0.002+00\\ 0.002+00\\ 0.002+00\\ 0.002+00\\ 0.002+00\\ 0.002+00\\ 0\end{array}$	0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0.002+00 (0900 NORMAL S6 "A" CHEM. (uC1/ml) (
	$\begin{array}{c} 0.002+00\\ 0.002+00\\ 0.002+00\\ 0.002+00\\ 0.002+00\\ 0.002+00\\ 0.002+00\\ 0\\ 0.002+00\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ $	0.002+00 3	0.002+00 0 0.002+00 5 0.002+00 5 0.002+00 1 0.002+00 1 0.002+00 2 0.002+00 4 0.002+00 4 0.002+00 5 0.002+00 5 0.002+0005+0005505050505050505050505050505	0.002+00 1	0.00E+00 5 0.00E+00 4 0.00E+00 3 0.00E+00 1 0.00E+00 1	0915 NORMAL 7 SG "A" CEEX. (UC1/ml) (
0.00E+00 1.44E+01	0.003+00 0.003+00 0.003+00 0.003+00 0.008+00 0.008+00 0.008+00 0.008+00	3.93E+00	0.008+00 5.098-02 6.848-02 1.958-02 3.958-02 1.338-16 2.022-02 3.398+00 5.128-02 3.398+00 5.128-05 1.558-01 1.558-01	1.05E+01	5.552+00 4.002-01 3.142+00 1.102-01 1.322+00	0930 ACCIDENT SG "A" CHEM. (uC1/ml)

1215 CCIDENT 56 "A" CEEM. CEEM.	2.50E+00 1.81E-02 .30E+00 5.70E-03	E+00	0.005+00 1.502-02 3.112-02 1.972-03 1.972-03 1.972-03 1.142-03 2.1512-02 2.1512-02 2.1512-02 2.57772-02 2.602-02	E+00	.008+00 .008+00 .008+00 .008+00 .008+00 .008+00 .008+00 .008+00	E+00 (.035+00	,	i	
		4.33		1.70	00000000	0 0.00E	1.C			
1200 ACCIDEN 56 "A" 6353. (uCi/Al	2.59E+00 8.74E-02 1.36E+00 7.21E-03 4.80E-01	4.53E+00	0.002+00 1.62E-02 3.22E-02 3.22E-02 2.33E-02 2.23E-02 2.24E-02 2.93E-03 1.58E+00 1.58E+00 3.05E-08 3.05E-08 2.81E-02 2.81E-02	1.77E+00	$\begin{array}{c} 0. \ 002\pm0\\ 0. \ 0. \ 002\pm0\\ 0. \ 0. \ 0. \ 0. \ 0. \ 0. \ 0. \ 0.$	0.003+00	6.303+00			
1145 ACCIDENT 55 "A" CEEX. (uCi/al)	2.69E+00 9.79E-02 1.42E+00 9.10E-03 5.11E-01	4.738+00	0.005+00 1.745-02 3.345-02 3.345-02 2.505-02 3.245-30 9.845-03 9.845-03 0.1667+00 6.168-08 6.168-08 3.046-02	1.84E+00	$\begin{array}{c} 0.062+00\\$	0.002+00	6.572+00			
1130 ACCIDENT 56 "A" CHER. (uCL/ml)	2.79E+00 1.10E-01 1.49E+00 1.15E-02 5.43E-01	4.94E+00	0.00E+00 1.88E-02 3.46E-02 3.46E-02 3.31E-02 3.31E-02 2.76E-02 1.70E+00 1.70E+00 1.70E+00 1.78E-02 3.28E-02 3.28E-02	1.92E+00	0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00	.003+00	.862+00			
1115 ACCIDENT 56 "A" CHEM. (uCi/ml)	2.892+00 1.232-01 1.552+00 1.452-02 1.452-02 5.782-01	.16E+00	0.008+00 2.038-02 3.598-02 3.598-02 3.048-02 3.048-02 1.768+00 1.768+00 1.768+00 7.178-02 3.548-02 3.548-02	.99E+00	0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00	.00E+00 0	7,168+00 6			
1100 ACCIDENT / 56 "A" CHEM. (UCI/ml) (3.23E+00 2 1.48E-01 1 1.75E+00 1 1.97E-02 1 1.97E-02 1 6.62E-01 5	5.81E+00 5	0.008+00 0 2.352-02 2 4.012-02 3 5.038-02 3 3.628-02 3 3.628-02 3 3.628-02 2 1.978+00 1 5.478-07 2 8.158-02 7 4.128-02 3 4.128-02 3	2.24E+00 i	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	.002+00 0	.05E+00			
1045 ACCIDENT SG "A" CHEM. (UCL/Ml) (3.59E+00 1.773-01 1.96E+00 1.96E+00 2.67E-02 7.53E-01	6.50E+00	0.008+00 2.71E-02 4.44E-02 4.44E-02 5.93E-03 6.39E-03 6.39E-02 1.31E-02 1.18E-02 3.14E-02 3.14E-02 3.14E-02 1.18E-06 9.20E-02 8.75E-02 4.75E-02	2.498+00 2	0.002+00 C 0.002+00 C 0.002+00 C 0.002+00 C 0.002+00 C 0.002+00 C 0.002+00 C	.005+00 0	.99 <u>5</u> +00 8			
1030 ACCIDENT 56 "A" 055%.	3.95E+00 2.10E-01 2.17E+00 3.57E-02 8.51E-01	7.22E+00 (0.002+00 3.112-02 4.892-02 8.892-02 4.9925-02 4.9925-02 1.772-22 3.472-02 3.472-02 1.772-22 3.472-02 1.032-01 5.455-02 5.455-02 5.455-02	2.75E+00 2	0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00	0.005+00 0	9.97E+00 8			
1015 ACCIDENT SG "A" CRE%. (uCi/mì)	4.33E+00 2.48E-01 2.40E+00 4.77E-02 9.56E-01	7.98E+00	0.008+00 3.548-02 5.358-02 5.358-02 5.248-02 3.818-02 3.818-02 3.818-02 5.418-06 5.418-06 5.418-06 5.418-06	3.03E+00	0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00	0.00E+00 (1.10E+01			
1000 ACCIDENT SG "A" CEEM: (uCi/ml)	4.72E+00 2.92E-01 2.64E+00 6.33E-02 1.07E+00	8.78E+00	0.00E+00 4.01E-02 5.83E-02 6.74E-02 6.74E-02 1.75E-02 1.75E-02 1.15E-02 1.15E-02 1.15E-02 7.05E-01	3.31E+00	0.005+00 0.005+00 0.005+00 0.005+00 0.005+00 0.005+00 0.005+00 0.005+00	0.002+00	1.212+01	I		
0945 ACCIDENT 56 "A" CHEM. (uC1/ml)	5.12E+00 3.42E-01 2.88E+00 8.36E-02 1.19E+00	9.62E+00	0.006+00 4.53E-02 6.33E-02 6.33E-02 7.78E-02 7.78E-02 3.13E+00 3.13E+00 3.13E+00 2.43E-05 2.43E-01 1.41E-01 1.41E-01 7.97E-02	3.62E+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	1.322+01			
0930 ACCIDENT 56 "A" CHEX. (uCi/ml)	5.55E+00 4.00E-01 3.14E+00 1.10E-01 1.32E+00	1.05E+01	0.002+00 5.092+02 6.842-02 6.842-02 8.952-02 8.952-02 3.392+00 5.122-02 5.122-02 5.122-02 8.982-01	3.93E+00	0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00	0.005+00	1.445+01			
0915 NORMAL SG "Å" CHEM. (uCi/ml)	0.062+00 0.002+00 0.002+00 0.002+00 0.002+00	0.005+00	0.002+00 0.002+000 0.002+0000	0.002+00	0.005+00 0.005+00 0.005+00 0.005+00 0.005+00 0.005+00 0.005+00 0.005+00	0.001+00	0.00E+00			
0900 NORMAL 56 "A" CHEM. (UC1/ml)	0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00	0.002+00	0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00	0.00£+00	0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00	0.00E+00	0.002+00			
1945 NORMAL 56 "A" CEEX. (UCL/AL)	0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00	0.00£+00	0.002+00 0.002+0000000000	0.00E+00	0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00	0.005+00	0.002+00			
MACROS, T	I-131 I-132 I-133 I-135 I-135	TOTAL	KR-83M KR-85M KR-85 KR-85 KR-85 KR-85 KR-85 KR-85 KR-85 KR-83 KR-133 KR-133 KR-133 KR-135 KR-	TVI T	SR-89 75-132 BA-140 ZR-97 CE-143 ND-147 CS-134 CS-137	DCFs				6

3.4-A-4

.

REGULAR SAMPLE (mR/hr on Contact)	0945	1000	1015	1030	1045	1100	1115	1130	1145	1200	1215	1230
UNDILUTED & UNSHIELDED UNDILUTED & SHIELDED	63241 51	57867 47	52790 43	47975 39	43393 35	39020 32	34836 28	33537 27	32292 26	31097 25	29946 24	28835 23
PASS LIQUID SAMPLE (mR/hr on Contact)												
UNDILUTED & UNSHIELDED	19459	17805	16243	14762	13352	12006	10719	10319	9936	9568	9214	8872
UNDILUTED & SHIELDED	1	1	1	1	1	1	1	1	1	1	1	1
DILUTED 1000:1 & UNSHIELDED	28	25	23	21	19	17	15	-15	14	14	13	13
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)												
UNDILUTED & UNSHIELDED	10	10	9	8	8	7	6	6	6	6	6	6
UNDILUTED & SHIELDED	0	0	0	0	0	0	Ó	0	0	Û	Ũ	Õ
DILUTED 1000:1 & UNSHIELDED	0	0	0	0	0	0	0	0	. 0	0	0	Û
DILUTED 1000:1 & SHIELDED	0	0	0	0	0	0	0	0	0	0	0	Û

PASS Data

	1700	1715	1730	1745	1800	1815	1830	1845	1900	1915	1930	1945	0900	0915	0930
REGULAR SAMPLE (mR/hr on Contact)										02204	0.005	00000		3	
UNDILUTED & UNSHIELDED	4	4	4	4	4	108293	102141	96751	92002	87791	84035	80665	77571	74459	68955
UNDILUTED & SHIELDED	0	0	0	0	0	88	83	78	74	71	68	65	63	60	56
PASS LIQUID SAMPLE (mR/hr on Contact) UNDILUTED & UNSHIELDED UNDILUTED & SHIELDED DILUTED 1000:1 & UNSHIELDED DILUTED 1000:1 & SHIELDED	1 0 0	1 0 0 0	1 0 0 0	1 0 0 0	1 0 0 0	33321 2 48 0	31428 2 45 0	29770 2 43 0	28308 2 41 0	27013 2 39 0	25857 2 37 0	24820 - 2 - 36 0	23868 2 34 0	22910 2 33 0	21217 2 30 0
STRIPPED GAS SAMPLE REGULAR & PASS (mR/hr on contact) UNDILUTED & UNSHIELDED UNDILUTED & SHIELDED DILUTED 1000:1 & UNSHIELDED DILUTED 1000:1 & SHIELDED	0 0 0	0 0 0	0 0 0	0 0 0 0	0 0 0 0	13 0 0 0	13 0 0 0	13 0 0 0	12 0 0 0	12 0 0 0	12 0 0 0	12 0 0 0	12 0 0 0	12 0 0 0	11 0 0 0

PASS Data

ι,

,

CAROLINA POWER AND LIGHT COMPANY ROBINSON NUCLEAR PROJECT DEPARTMENT

1989 EMERGENCY PREPAREDNESS ANNUAL EXERCISE

3.4-B IN-PLANT MONITOR READINGS AND ONSITE SURVEY DATA

TIME: 10:30
1. Zeros are "as read"
2. Mulitply the airborne values by the ft 3 sampled CONTAMINATION READINGS
ON SITE FIELD DATA
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable
IODINE PART VEGETATION

	1 METER AN	BOVE SURFA	CE		6" ABOVE	SURFACE			AIRBORNE	AIRBORNE	SAMPLE	
SAMPLE POINT	DOSE RATE mR/hr	SPA-3 DOSE RATE cpm	HP-270 DOSE RATE cpm	HP-290 DOSE RATE CPM	DOSE RATE	SPA-3 DOSE RATE cpm	HP-270 DOSE RATE cpm	HP-290 DOSE RATE . cpm	HP-210 cpm>bkgd/ ft^3 SAMP	HP-210 cpm>bkgd/ ft^3 SAMP	mR/hr on contact	
A	0.000	0	0	0	0.00	0	0	0	0	0	0.0	
8	0.000	0	0	0	0.00	0	0	0	0	0	0.0	
С	0.000	0	0	0	0.00	0	0	0	0	0	0.0	
Ð	0.000	0	° 0	0	0.00	0	0	0	0	. 0	0.0	
Ξ	0.000	0	0	0	0.00	0	0	0	0	0	0.0	
F	0.000	0	0	0	0.00	0	0	0	0	0	0.0	
G	0.000	0	0	0	0.00	0	0	0	0	0	0.0	
H	0.000	0	0	0	0.00	0	0	0	0	0	0.0	
I	0.000	0	- 0	0	0.00	0	0	0	0	0	0.0	
J	0.000	0	0	0	0.00	0	. 0	0	0	0	0.0	

ON SITE LABORATORY DATA

	CONTAMINAT	ION SAMPLE	RESULTS IODINE		IODINE	PARTIC	INTEGRATED DOSE
	IODINE AIRBORNE	PART AIRBORNE	SURFACE		VEGETATION	VEG	POSTED TLD
SAMPLE POINT	uCi/cc	uCi/cc	uCi/m^2		pCi/g	pCi/g	mR
A	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0.00E+00	0.0
8	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.002+00	0.0
С	0.00E+00	0.00E÷00	0.00	0	0.005+00	0.00E+00	0.0
D	0.00E+00	0.00E+00	0.00	0	0.002÷00	0.00E+00	0.0
Ξ	0.00E÷00	0.00E+00	0.00	0	0.00E+00	0.002÷00	0.0
F	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00	0.0
G	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00	0.0
Н	0.002+00	0.00E+00	0.00	0	0.00E+00	0.002+00	0.0
I	0.003÷00	0.00E+00	0.00	0	0.00E+00	0.00E+00	0.0
J	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.002+00	0.0

		VEGETATION	SAMPLE	₿R/hr on	contact	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CONTAMINATION READINGS	(INDIA PINKE)	6-1 6-1 6-1 6-1 6-1 6-1 6-1 6-1 6-1 6-1	AIRBORNE	HP-210 cpm>bkgď∕	ft^3 SAMP	0	0	0	0	0	0	0	0	0	0
COMPANIATI	READINGS MADE OUTSIDE PLUME	3NICOI	AIRBORNE	HP-210 cpm>bkgd/	ft°3 SAMP	5280000	5227200	2640000	156763	47520	31680	105600	100320	343200	396000
sampled	<u> </u>			HP-290 DOSE RATE	e do	ERRATIC	ERRATIC	ERRATIC	210001	63658	42439	141463	134389	459753	530485
y the ft^3	am sample e reliable			HP-270 DOSE RATE		ERRATIC	ERRATIC	ERRATIC	ERRATIC	954872	636582	ERRATIC	ERRATIC	ERRATIC	ERRATIC
Zeros are "as read" Mulitply the airborne values by the ft^3 sampled	Veç. Value based on a î kilogram sample ERRATIC means com to high to be reliable		6" ABOVE SURFACE	SPA-3 DOSE RATE DOSE RATE		88414.10 ERRATIC	87529.96 ERRATIC	44207.05 ERRATIC	2625.01 ERRATIC	795.73 ERRATIC	530.48 ERRATIC	1768.28 ERRATIC	1679.87 ERRATIC	5746.92 ERRATIC	6631.06 ERRATIC
i. Zeros are 2. Mulitply	3. Veg. Valu 4. ERRATIC D			HP-290 DOSE RATE	cpm	ERRATIC	ERRATIC	ERRATIC	161547	48970	32647	108823	103381	353673	408085
		READINGS	Œ	HP-270 DOSE RATE		ERRATIC	ERRATIC		ERRATIC	734552	489702	ERRATIC	ERRATIC	ERRATIC	ERRATIC
10:35	IELO DATA	AMBIENT RADIATION R	1 METER ABOVE SURFACE	SPA-3 DOSE RATE DOSE RATE	mR/hr com	68014.098 ERRATIC	67333.957 ERRATIC	34007.049 ERRATIC		612.127 ERRATIC	408.085 ERRATIC	1360.282 ERRATIC		ERRATI	ERRATI
TIME: 10:35	ON SITE FI			SAMPLE					0	പ	f.x.a	9	513		

ON SITE LABORATORY DATA

5

: .

;

LE RESOLTS INTEGRATED TANINE ANDRIC DAEP	SURFACE VEGETATION VEG POS	c uCi/m^2 pCi/g pCi/g mR	-00 0.00 0.00 0.00E+00 0.00E+00 0.0	-00 0.00 0.00E+00 0.00E+00 0.0	0.00 0.002+00 0.002+00	0.00 0.002+00 0.052+00	0.00 0.00E+00 0.00E+00	0.00 0 0.00E+00 0.00E+00	0.00	0.00 0.002+00 0.002+00	00 0.00 0 0.00E+00 0.00E+00 0.0	
RESUL	PART SURFACE AIRBORNE	uCi∕cc uCi/m^2	0.00E+00 0.00	0.002+00 0.00	0.002+00 0.00	0.005+00 0.00	0.002+00 0.00	0.002+00 0.00	0.002+00 0.00	0.002+00 0.00	0.00E+00 0.00	
CONTAMINATION SAMPLE	IODINE Airborne	SAMPLE uCi/cc POINT	A 5.28E-02	B 5.238-02	C 2.643-02	D 1.57E-03	E 4.75E-04	F 3.17E-04	G 1.06E-03	H 1.00E-03	I 3.43E-03	

3.4-3-2

190°0	0	009501	587171	DITARRE	17 T U U U U	0C100/T	CH000T	077134410	0711010	LACIONST	-
			101111	JIWKGGZ	SITARRE	92 8971	S7880T	ESSATIC	JITA99 3	⊅95'09ET	Ð
0'87	0	08918	45440	636683	DITASSE	LS'0ES	32654	€0858⊅	ESSATIC	691 ° 80†	3
15'0	0	025/7	89969	520556	DITARAIC	S8'S6L	08687	SOLVEL	ESSATIC	€I3'S2¢	3
5.752	0	£9/9ST	510032	ERRATIC	DITARRE	5625.43	T8ST9T	SERATIC	CB8ATIC,	5070°J22	Q
9.6665	0	5640000	DITASSE	SERATIC	DITASRE	44514'10	ERRATIC	BRATIC	EBRATIC	860.11016	С
Z'616L	0	255 <i>1</i> 500	ESSATIC	SERATIC	DITARRE	16.64378	DITASSE	ERRATIC	E38ATIC	£16.74£78	В
2 ° 666 <i>L</i>	0	0000825	SRATIC 598871C	SRATIC	SITASAB	88428'50	SRATIC	SITA885	DITASRE	\$61.85088	A
JosJnoo	SMAR Efti	SAMR 5-33	aqo	aqs	udo		udo	cbw	cbw	nd/8m	POINT
ας/με ου	cbw)p¢àq/	/p5xq <udo< td=""><td>ETAS E200</td><td>STAS SEOC</td><td>STAS S200</td><td>DOSE RATE</td><td>STAS S200</td><td>DOSE RATE</td><td>BTAR S200</td><td>DOSE RATE</td><td>SAMPLE</td></udo<>	ETAS E200	STAS SEOC	STAS S200	DOSE RATE	STAS S200	DOSE RATE	BTAR S200	DOSE RATE	SAMPLE
	H6-510	H6-310	86-330	H6-370	£-Ag2		H6-290	HP-270	£-A92		
EIGMAS	ENROSRIA	BNEGGEIA BNEGGEIA			EDATAUE	2 3VO8A "ð		33	DARRUZ EVO	A ABTEN I	-
VEGETATION	7849	ENIGOI					·	SONTOA	ER NOITAIDA	ANALANA KA	
				etépitej é	итан со ра	oj udo supe	@ DITA885 .4	0001111		it entited	
		BOAK REWICASE)		etçes m	elpolix i e	a no bessó s	ulev .çsV .{			ATAC QJEI	3 BLIS NO
	SONIGAER NO.	CONTANINATI	pətoməs	fît ent y	{d zeuíbv e	miočiis shj	YiqjiluM .S				
						"bsei ze"	1. Zeros are			S7:0T	SKIL

0114883 DITABAS LL.2600

ST47.83 ERRATIC ERRATIC

1680,14 ERRATIC ERRATIC

ATAG YROTAROBAL BTI2 NO

SIO2.115 ERRATIC ERRATIC

4421.833 ERRATIC ERRATIC

1292.536 ERRATIC ERRATIC

ſ

I

3

. . . .

691801

L¥LESE

103403

0°58 20°57 577 577 8°9 7°07 2°07 2°07 2°07 2°07 2°07 2°07 2°07	00+300'0 00+300'0 00+300'0 00+300'0 00+300'0 00+300'0 00+300'0 00+300'0 00+300'0 00+300'0	50+261'T 50+260'T 50+250'T 50+21'E 50+205'6 50+205'6 50+25'T 50+26'L 50+26'L 90+285'T	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	118'80 105'9e 30'10 31'98 6'20 14'03 14'03 1288'19 1289'00	00+200.0 00+200.0 00+200.0 00+200.0 00+200.0 00+200.0 00+200.0 00+200.0 00+200.0 00+200.0	3'62E-03 3'43E-03 1'00E-03 3'11E-04 3'11E-04 4'12E-05 1'21E-05 5'64E-05 2'53E-05 2'58E-05	с с с с с С Я В В В В В В В В В В В В В В В В В В В
03748037N1 3200 017 037209 8m	PARTIC VEG PCi/g	IODINE VEGETATION PCI\9		STUDSE SORFACE SORFACE SOLINE	8 5.19642 001 1849 30908014 50\iDu	ITANIMATNOO SUIODI SNROBNIE SNROBNIE SO\iDu	EJ9KA2 TVIO9

6'665

6.918

J55'0

0

0

0

000968

343200

100350

695085

134411

. L286S7

	VEGETATION SAMPLE	@R/hr on contact	15998.4 15838.4 7999.2 475.0 96.0 304.0 304.0 304.0 1039.9 1199.9				
ON READINGS OUTSIDE PLUME)	PART AIRBORNE	RP-210 cpm>bkgd/ ft^3 SAMP					
CONTAMINATION READINGS (READINGS MADE OUTSIDE PEUME)	IODINE AIRBORNE	HP-210 cpm>bkgd/ ft^3 SAMP	5280000 5227200 5227200 15640000 31689 31689 100320 343200 343200 343200		INTEGRATED DOSE POSTED TLD	er E	4535.0 4489.6 134.5 27.2 26.2 27.2 26.2 29.7 29.7 29.7 29.7 29.1 340.1
sampled		HP-290 DOSE RATE cpm	ERRATIC ERRATIC ERRATIC ERRATIC 53678 42452 42452 134432 134432 134432 134432 134432 134432 134432 134432 134432 13654		PARTIC VEG P(pCi/g	0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00
Y the ft^3 am sample e reliable		HP-270 DOSE RATE cpm	ERRATIC ERRATIC ERRATIC 955177 636785 ERRATIC ERRATIC ERRATIC ERRATIC		IODINE VEGETATION	pCi/g	3.178+06 3.178+06 5.588+06 9.418+04 2.858+04 1.903+04 6.348+04 6.348+04 6.348+04 5.388+04 2.388+05 2.388+05
Zeros are "as read" Mulitply the airborne values by the ft^3 Veg. value based on a 1 kilogram sample ERRATIC means com to high to be reliable	6" ABOVE SURFACE	SPA-3 DOSE RATE DOSE RATE CPM	88442.29 ERRATIC 87557.87 ERRATIC 44221.15 ERRATIC 2625.85 ERRATIC 795.98 ERRATIC 530.65 ERRATIC 1768.85 ERRATIC 1768.85 ERRATIC 1680.40 ERRATIC 5748.75 ERRATIC 6633.17 ERRATIC	• • • •	RESULTS I ODINE SURFACE	uCi/m^2	3168.00 0.00 3136.32 0.00 94.00 0.00 24.06 0 28.51 0 63.36 0 63.36 0 63.36 0 63.36 0 205.92 0 205.92 0 237.60 0
1. Zeros are 2. Mulitply 3. Veg. valu 4. ERRATIC m		HP-290 DOSE RATE cpm	ERRATIC ERRATIC ERRATIC ERRATIC 48990 32660 103424 103424 353820 408254	ON SITE LABORATORY DATA		uCi/cc	00+200.0 00+200.0 00+200.0 00+200.0 00+200.0 00+200.0 00+200.0 00+200.0 00+200.0 00+200.0 00+200.0
	READINGS FACE	EP-270 2 DOSE RATE CPm	ERRATIC ERRATIC ERRATIC ERRATIC 734857 734857 734857 734857 888ATIC ERRATIC ERRATIC ERRATIC	N SITE LABC	CONTAMINATION SAMPLE IODINE PART AIRBORNE AIRBORNE	uCi/cc	5.288-02 5.288-02 5.288-02 2.648-02 1.578-04 4.758-04 3.178-04 3.178-04 1.008-03 3.438-03 3.438-03 3.968-03
11:00 EID DATA	AMBIENT RADIATION R 1 METER ABOVE SURFA	SPA-3 DOSE RATE DOSE RATE mR/hr cpm			U 4	SAMPLE Point	м ФСС) (СС 141 fra CD 665 HH HH
		SAMPLE POINT	よ 3 じ つ 10 に 5 日 7 ワ				

.

ŃŌ

3 4 - B - 4

-1

8.82011	0	5640000	ERRATIC	DITARAS	ERRATIC	\$ \$558°50	DITARRS	DITARRE	SERATIC	34028-162	С
3.727.6	0	2557200	SITARRE	E88ATIC	SITARAE	£8'T/5/8	DITARRE	DITARRE	DITA983	978'97576	8
9.79952	0	0000825	E 88ATIC	ERRATIC	ERRATIC	68.82456	SERATIC	DITARAE	ERRATIC	068.32083	A
Jostnoo	AMA2 E^J1	9≝A2 €^J1	ພປລ	udo	cbw		cbw	uđo	udo	ug/yu	P01NT
ως/με ου	/p6xq <udo< td=""><td>/p6xq<wdo< td=""><td>DOSE RATE</td><td>BTAS B200</td><td>STAS SECO</td><td>DOSE RATE</td><td>STAR SEOC</td><td>BIAS BROD</td><td>DOSE RATE</td><td>BTAS BROG</td><td>SAMPLE</td></wdo<></td></udo<>	/p6xq <wdo< td=""><td>DOSE RATE</td><td>BTAS B200</td><td>STAS SECO</td><td>DOSE RATE</td><td>STAR SEOC</td><td>BIAS BROD</td><td>DOSE RATE</td><td>BTAS BROG</td><td>SAMPLE</td></wdo<>	DOSE RATE	BTAS B200	STAS SECO	DOSE RATE	STAR SEOC	BIAS BROD	DOSE RATE	BTAS BROG	SAMPLE
	86-310	HP-210	H6-290	H6-570	6-A92		HP-290	Hb-570	8-A92		
VƏGETATION Sample	T849 BNROBRIA	ENROBALA ENIGOINE			SOASAU	E 3VO8A "ð		3:	BOVE SURFAC	IA RETEN I	
								SONICE	BS NOITAION	A TUBISKA	
				eldbiler	ed of Apid	og måd supe	em DITARRE .4				
	(BRADE BOISINO	SOAM SONIGASE)		sigmaz m	EIPOLIX I	e no besed a	euisv .peV .t			ATAG GIBIS	BIIS NO
	SOVICASS NOT	TANIKATNOO	pəţdwes				Z. Mulitply t				
						"besi ze"	1. Zeros are			\$1:11 :	BXII

5634.23 ERRATIC ERRATIC

S749.67 ERRATIC ERRATIC

1769.13 ERRATIC ERRATIC

2626.27 ERRATIC ERRATIC

1680.67 ERATIC

S30.74 E88ATIC

796.11 ERRATIC

SERATIC 5388410

636886

622356

\$68338

868858

10344Q

068801

3566J

10061

879191

ATAG YROTAROEAL ETIR NO

SI04.229 ERRATIC ERRATIC

1293.071 ERRATIC ERRATIC

1361.128 ERRATIC ERRATIC

2020.594 ERRATIC ERRATIC

. 4423.665 ERRATIC

408.338 ERRATIC

612,508 ERRATIC

STERATIC

900067

600SEL

f

Ī

8

9

2

Σ

G

NO

5'898	00+200'0	3°03E+02	0	88,805	0.00E+00	3.43E-03	I
L·LOT	00+300.0	9.03E+04	0	62.09	00+200'0	1.00E-03	H
113.4	00+300.0	⊅0+30S'6	0	Þ0°S6	00÷300.0	1.06E-03	9
34°0	00+200'0	7°82E+0¢	0	T8 ° 87	00+300.0	\$0-371.6	3
0'IS	0.005+00	\$°58E+0\$	0	LL'Z†	00+200'0	70-39 <u>/</u> '7	3
168,3	00+200.0	S0+210'T	0	60'T†T	00÷300'0	£0-2/5'T	Q
5'7:87	00+300'0	5'38E+00	0	00'9752	00÷300'0	5'945-05	Э
2915'3	00+300'0	¢°_40€+00	0	84.4074	00+300'0	2.238-02	8
0'6999	0.400.00	90+25/.4	00.0	00.2274	0.00E+00	21285-02	A
Aa	₽\iJg	€\iJq		2°m\iJu	oo/iOu	oo/iJu	519MA2 TVIO9
					-3N80881	A BUROBAIA	
POSTED TLD	03A	VEGETATION		SURFACE	T 8A9	IODINE	٠
3500	PARTIC	IODINE		IODINE			
OBTÁSDETNI				STIUSER	SAMPLE	CONTAMIMATION	

1 3'36E-03 0'00E+00 328'40 0 3'28E+02 0'00E+00

8'66LT

8'65SI

0.024

0.084

0'771

510'0

115.5

0

0

Û

0

Û

0

Ð

000968

343200

100350

102900

31680

0ZS*L*7

897631

857052

826691

†9778T

085T‡T

45428

68989

510105

₹52°5

	VEGETATION SAMPLE	æR/hr on contact	31996.8 31676.8 15998.4 288.0 132.0 633.9 607.9 2399.8 2399.8
HINATION READINGS MADE OUTSIDE PLUME)	PART AIRBORNE	HP-210 cpm>bkgd/ ft^3 SAMP	
CONTAMINATION READINGS READINGS MADE OUTSIDE FLU	IODINE AIRBORNE	HP-210 cpm>bkgd/ ft^3 SAMP	5280000 5227200 2640000 155763 47520 31560 100320 343200 343200 343200
		AP-290 DOSE RATE CPM	ERRATIC ERRATIC ERRATIC ERRATIC ERRATIC 63699 42466 141553 134475 134475 530823 530823
γ the ft^3 am sample ereliable		HP-270 I DOSE RATE cpm	ERRATIC ERRATIC ERRATIC ERRATIC ERRATIC 955481 635981 ERRATIC ERRATIC ERRATIC ERRATIC
Zeros are "as read" Mulitoly the airborne values by the ft^3 sampled Veg. value based on a 1 kilogram sample ERRATIC means com to high to be reliable	6" ABOVE SURFACE	SPA-3 DOSE RATE DOSE RATE com	88470.49 ERRATIC 87585.78 ERRATIC 44235.24 ERRATIC 2626.69 ERRATIC 796.23 ERRATIC 530.82 ERRATIC 1769.41 ERRATIC 1769.41 ERRATIC 1769.44 ERRATIC 1680.94 ERRATIC 5750.58 ERRATIC 6635.29 ERRATIC
 Zeros are Xulitoly Yeg. valu ERRATIC m 		HP-290 DOSE RATE cpm	ERRATIC ERRATIC ERRATIC ERRATIC 101681 49011 32674 108913 108913 108423 408423
	READINGS ACE	RP-270 : DOSE RATE cpm	ERRATIC ERRATIC ERRATIC ERRATIC 735161 735161 490108 ERRATIC ERRATIC ERRATIC
: 11:30 Field Data	AMBIENT RADIATION REAL 1 METER ABOVE SURFACE	SPA-3 DOSE RATE DOSE RATE mR/hr cpm	68070.488 ERRATIC 67389.783 ERRATIC 34035.244 ERRATIC 2021.013 ERRATIC 612.634 ERRATIC 408.423 ERRATIC 408.423 ERRATIC 1361.410 ERRATIC 1293.339 ERRATIC 1293.339 ERRATIC 5105.287 ERRATIC
STR ST		SAMPLE POINT	A B C D B C B T ワ

ON SITE LABORATORY DATA

uCi/cc 5.288-02 5.288-02 5.288-02 2.648-02 1.578-02 1.578-03 3.178-04 0. 1.068-03 0.	PART PART UC1/CC 0.005+00 0.005+00 0.005+00 0.005+00 0.005+00 0.005+00 0.005+00 0.005+00	UCi/m^2 6336.00 6272.64 3168.00 53.02 38.02 38.02 126.72 126.72	000000000000000000000000000000000000000	TODINE PEGETATION PC1/9 PC1/9 6.34E+06 6.34E+06 6.34E+06 3.178+06 5.778+06 5.778+06 5.778+05 1.278+05 1.278+05 1.278+05	PARTIC VEG pCi/9 pCi/9 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00 0.002+00	POSTED TLD DOSE 00STED TLD 7937.6 7937.6 7937.6 7936.8 71.6 71.6 158.8 158.8 158.8 158.8 158.8
	0.00E+00	411.84	0	4.12E+05	0.00E+00	515.9
	004400 0	175 20	C	4.755+05	0.005+00	595.3

.

3.4-B-6

	•			Y
	VEGETATION Sample	mR/hr on contact	39996.0 39596.0 19998.0 1137.5	240.0 240.0 799.9 759.9 2599.7
CONTAMINATION READINGS DINGS MADE OUTSIDE PIUME)	PART Airborne	HP-210 cpm>bkgd/ ft^3 SAMP	00000	
CONTANINATI (READINGS RADE	IODINE AIRBORNE	RP-210 cpm>bkgd/ ft^3 SAMP	00000	
sampiec.	·	HP-290 DOSE RATE com	5639 5583 2820 167	101 101 102 102 102 103 103 103 103 103 103 103 103 103 103
the ft^3 s sample reliable		HP-270 DOSE RATE D CPM	84586 83740 42293 2511 751	1692 1692 1692 1693 1693 1693 1693 1693 1693 1693 1693
Actus are as redu Mulitaly the airborne values by the ft^3 Veg. value besed on a 1 kilogram sample GRAATIC means con to high to be reliable	6" ABOVE SURFACE	SPA-3 DOSE RATE DOSE RATE D CPm	70.49 ERRATIC 69.78 ERRATIC 35.24 ERRATIC 2.09 ERRATIC 6.3 761270	
2. Mulitply the as B. Veg. value bas d. ERRATIC means		HP-290 DOSE RATE CPM	5639 5583 2820 167 51	113 107 107 107
	eautaus CE	HP-270 DOSE RATE [cpm	84586 83740 42293 2511	508 508 1692 1607 5498 5498
A NUMBER OF STREET, ST	ABBIENT ANDIATION KEA 1 METER ABOVE SURFACE	SPA-3 DOSE RATE DOSE RATE (mR/hr cpm	70.488 ERRATIC 69.783 ERRATIC 35.244 ERRATIC 2.093 ERRATIC 0.634 761270	
		SAMPLE POINT	≪നധറം bx	

ON SITE LABORATORY DATA

1

•

: .

05	110		.6	s.	~	303.0	91.9	61.2	204.1	193.9	÷.	765.5
INTEGRATED DOSE	POSTED TLD	a R	10206.6	10104.5	5103.3	303	6	Q]	204	193	663.4	165
PARTIC	VEG	pCi/g	0.005+00	0.003+00	0.005+00	0.005+00	0.605+00	0.005+00	0.00E+00	0.00E+00	0.002+00	0.00E+00
IODINE	VEGETATION	pCi∕g	7.926+06	7.845+06	3.965+06	2.356+05	7,132+04	4.752+04	1.58E+05	1.50E+05	5.15E+05	5.94E+05
			0.00	0	0	0	0	0	0	0	0	0
RESULTS IODINE	SURFACE	uCi/m^2	7920.00	7840.80	3960.00	235.14	71.28	47.52	158.40	150.48	514.80	594.00
SAMPLE	PART AIRBORNE	uCi/cc	0,003+00	0.00E+00	$0.005 \div 00$	0.005-00	0.002+00	0.002+00	0.00E+00	0.00E+00	0.005+00	0.00E+00
CONTAMINATION	I ODINE AIRBORNE	uCi/cc	0.005+00	0.001:00	0.005+00	0.001-00	0.002+00	0.00E+00	0.005+00	0.005+00	0.00E+00	0.00E+00
		SAMPLE POINT	~	613	د د	0	673	fx.	9	:10	j	F-5

3.4-B-7

.

	VEGETATION		mR/hr on	contact	0.99996	39596.0	19998.0	1187.5	360.0	240.0	799.9	759.9	2599.7	2999.7	
INATION READINGS MADE OUTSIDE PLUME)	100 K ()	AIRBORNE	HP-210 cpm>bkgd/	ft^3 SAMP	0	0	0	0	C	0	0	0	0	0	
CONTANIMATION READINGS READINGS MADE OUTSIDE PLU	IODINE	ALRBORNE	8P-210 cpm>bkgḋ/	ft^3 SAMP	0	0	0	0	0	0	0	0	0	0	
sampled			HP-290 DOSE RATE	ngo	5639	5583	2820	167	51	4 7 7	<u>113</u>	107	367	423	
			BP-270 DOSE RATE [cpm	84586	83740	42293	2511	761	508	1692	1607	5498	6344	
"as read" the airborne values e based on a 1 kilo: eans com to high to		6" ABOVE SURFACE	SPA-3 DOSE RATE DOSE RATE		70.49 ERRATIC	69.78 ERRATIC			0.63 761270	0.42 507514	1.41 ERRATIC	1.34 ERRATIC	4.58 ERRATIC	5.29 ERRATIC	
1. Zeros are 2. Kulitpiy 3. Veg. valu 4. ERRATIC m			HP-290 DOSE RATE	cpm	5639	5583	2820	167	51	34.	113	107	367	423	
	READINGS	[r.]	HP-270 DOSE RATE 1			83740		•	761		1692	1607	5498	6344	
TIME: 12:00 ITE FIELD DATA	AMBLENT RADIATION RE	1 METER ABOVE SURFACE	SPA-3 плск ратк ЛСК ВАТК		70.488 ERRATIC	69.783 ERRATIC	35.244 ERRATIC	2.093 ERRATIC	0.634 761270	0.423 507514	10002		ERRATI	ERRATI	
6 6-0 2-0 (-0 11 (-) 6-1 (-) 6-1 (-) 00 20 20 20 20 20 20 20 20 20 20 20 20			SANDIA FIGNES	POINT	A	: <i>c</i> r.	ı د) <i>c</i>	n fira	l (7.	. C	o sia) p	• • •	

25

ON SITE LABORATCRY DATA

INTEGRATED DOSE	POSTED TLD	а Ш	10211.3	10109.2	5105.6	303.2	0-1-0 0	61.3	204.2	194.0	663.7	765.8
DIRAG	VEG	pCi/g	0.002+00	0.00E+00	0.002+00	0.052+00	0.005+00	0.002+00	0.002+00	0.90E+00	0.00E+00	0.00E+00
3NIGOI	REGETATION	pCi/g	7.92E+06	7.845+06	3.963+06	2.358+05	7.132404	4.752+04	1.583+05	1.50E+05	5.152+05	5.942+05
	Δ.		0.00	0	C	0	Û	0	0	0	0	0
RESULTS IODINE	SURFACE	uCi/m^2	7920.00	7840.80	3960.00	235.14	71.28	47.52	158.40	150.48	514.80	594.00
SAMPLE	PART AIRBORNE	uCi/cc	0.00E+00	0.002+00	0,005+00	0.005+00		0.005+00	0.005+00	0.00 ± 00	0.00E+00	0.005+00
CONTAMINATION	IODINE AIRBORNE	uCi/cc	0.002+00	0.00E+00	0.00 ± 00	0.002+00	0.005+00	0.005+00	0.002+00	0.005+00	0.00E+00	0.00E+00
		SAMPLE POINT	~0	60	υ	0	i 1921	C+	9	93	: •	-

3.4-B-8

.

TIXE:	12:15				the airborn		-	•	CONTAMINAT	ION READINGS	
ON SITE F	IELD DATA			•	ue based on . means com to	-	•		(READINGS MADE	OUTSIDE PLUM	3)
	AMBIENT R	ADIATION RE	EADINGS		·	•			IODINE	PART	VEGETATION
	1 METER AN	BOVE SURFAC	25		6" ABOVE	SURFACE			AIRBORNE	- AIRBORNE	SAMPLE
SAMPLE POINT	DOSE RATE mR/hr	SPA-3 DOSE RATE cpm	HP-270 DOSE RATE cpm	HP-290 DOSE RATE cpm	DOSE RATE	SPA-3 DOSE RATE cpm	HP-270 DOSE RATE cpm	HP-290 DOSE RATE cpm	HP-210 cpm>bkgd/ ft^3 SAMP	HP-210 cpm>bkgd/ ft^3 SAMP	mR/hr on contact
A		ERRATIC	84586	5639		ERRATIC	84586	5639	0	0	39996.0
В	69.783	ERRATIC	83740	5583	69.78	ERRATIC	83740	5583	. 0	0	39596.0
С	35.244	ERRATIC	42293	2820	35.24	ERRATIC	42293	2820	0	0	19998.0
D	2.093	ERRATIC	2511	167	2.09	ERRATIC	2511	167	0	0	1187.5
2	0.634	761270	761	51	0.63	761270	761	51	0	0	360.0
. 5	0.423	507514	508	34	0.42	507514	508	34	0	0	240.0
G	1.410	ERRATIC	1692	113	1.41	ERRATIC	1692	113	0	0	799.9
H	1.339	ERRATIC	1607	107	1.34	ERRATIC	1607	107	0	Û	759.9
I	4.582	ERRATIC	5498	367	4.58	ERRATIC	5498	367	0	0	2599.7
J	5.287	ERRATIC	6344	423	5.29	ERRATIC	6344	423	0	- 0	2999.7

ON SITE LABORATORY DATA

e

	CONTAMINATI	ION SAMPLE RE	SULTS IODINE		IODINE	PARTIC	INTEGRATED DOSE
	IODINE AIRBORNE	PART AIRBORNE	SURFACE		VEGETATION	VEG	POSTED TLD
SAMPLE POINT	uCi/cc	uCi/cc	uCi/m^2		pCi/g	pCi/g	- nR
A	0.00E+00	0.00E+00	7920.00	0.00	7.92E+06	0.00E+00	10216.0
3	0.002+00	0.002+00	7840.80	0	7.84E+06	0.002+00	10113.8
ç	0.00E+00	0.00E+00	3960.00	0	3.96E+06	0.00E+00	5108.0
Ð	0.003÷00	0.00E+00	235.14	0	2.358÷05	0.005+00	303.3
5	0,003÷00	0.002+00	71.28	0	7,13E+04	0.00E÷00	91.9
5	0.00E+00	0.002+00	47.52	0	4.75E+04	0.00E+00	61.3
G	0.00E+00	0.00E+00	158.40	0	1.58E+05	0.00E+00	204.3
Н	0.00E+00	0.00E+00	150.48	0	1.50E+05	0.00E+00	194.1
I	0.00E+00	0.00E+00	514.80	0	5.15E+05	0.002+00	664.0
J	0.00E+00	0.00E+00	594.00	0	5.94E+05	0.00E+00	766.2

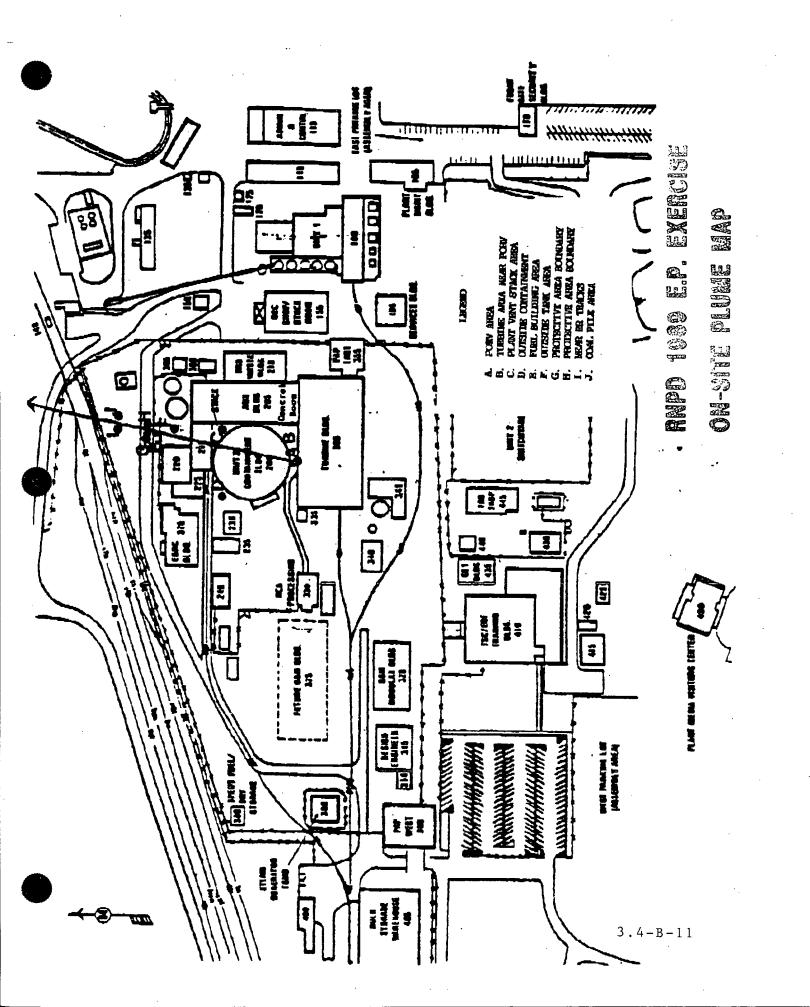
3.4-B-9

TIME	: 12:30			 Zeros are Mulitply 	the airborne			sampled		ON READINGS	
ON SITE	FIELD DATA			 Veg', valu ERRATIC π 	le based on a	i i kilogra	im sample		(READINGS MADE	OUTSIDE PLUM	<u>:</u>)
	AMBIENT RA	DIATION RE	CADINGS	4. ERRAIIU W	ieans cpm to	urðu co pe	; leilabie		IODINE	PART	VEGETATION
	1 METER AG	BOVE SURFAC	CE		6" ABOVE S	SURFACE			AIRBORNE	AIRBORNE	SAMPLE
SAMPLE POINT	DOSE RATE mR/hr	SPA-3 DOSE RATE cpm	HP-270 DOSE RATE cpm	HP-290 DOSE RATE cpm	DOSE RATE	SPA-3 DOSE RATE cpm	HP-270 DOSE RATE cpm	HP-290 DOSE RATE cpm	EP-210 cpm>bkgd/ ft^3 SAMP	HP-210 cpm>bkgd/ ft^3 SAMP	mR/hr on contact
A	70.488	ERRATIC	84586	5639	70.49	ERRATIC	84586			0	39996.0
В		ERRATIC	83740	5583	69.78	ERRATIC	83740			0	39596.0
С	35.244	ERRATIC	42293	2820	35.24	ERRATIC	42293			0	19998.0
D	2.093	ERRATIC	2511	167		ERRATIC	2511			0	1187.5
3	0.634	761270	761	51	0.63		761			U	360.0
2	0.423	507514	508	34	0.42					U	240.0
G	1.410	ERRATIC	1692	113		ERRATIC	1692			U	799.9
8	1.339	ERRATIC	1607	107	1.34	ERRATIC	1607			U	759.9
Ι	4.582	ERRATIC	5498	367	4.58	ERRATIC	5498			U	2599.7
J	5.287	ERRATIC	6344	423	5.29	ERRATIC	6344	423	0	0	2999.7

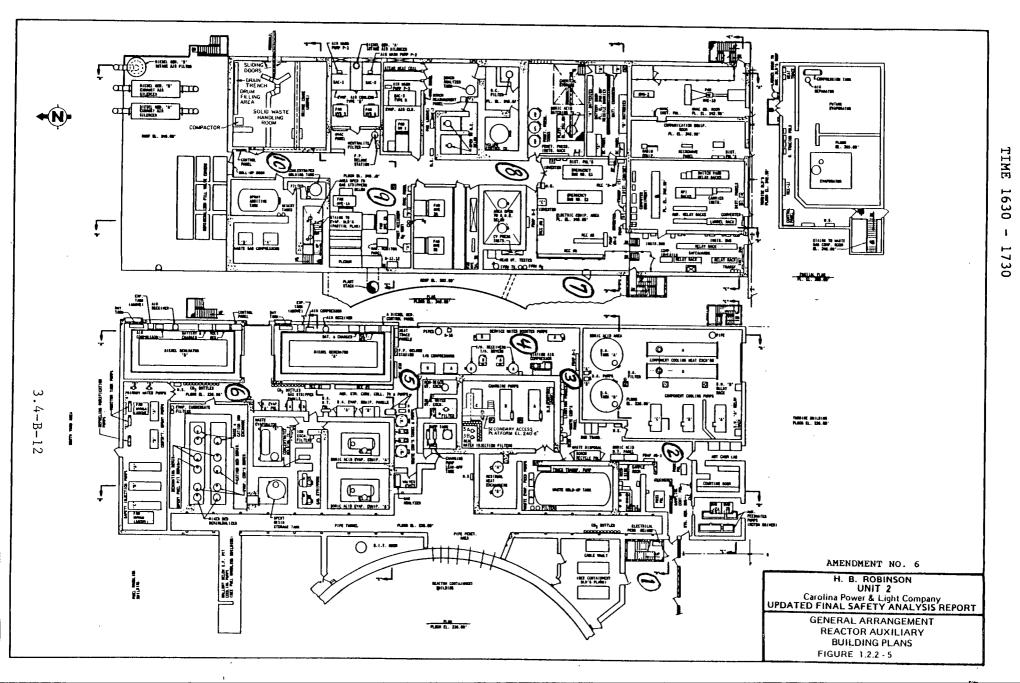
· ON SITE LABORATORY DATA

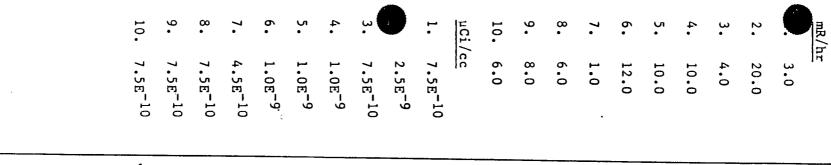
	CONTAMINATI	ION SAMPLE RE	ISULTS IODINE		IODINE	PARTIC	INTEGRATED DOSE
	IODINE AIRBORNE	PART AIRBORNE	SURFACE		VEGETATION	VEG	POSTED TLD
SAMPLE POINT	uCi/cc	uCi/cc	uCi/m^2		pCi/g	pCi/g	nR
A	0.002+00	0.00E+00	7920.00	0.00	7.92E+06	0.00E+00	10217.2
3	0.00E÷00	0.00E+00	7840.80	0	7.84E+05	0.00E+00	10115.0
0	0.002+00	0.002+00	3950.00	0	3.96E+06	0.00E÷00	5108.6
D	0.002÷00	0.00E+00	235.14	0	2.35E+05	0.00E+00	303.3
3	0.00E+00	0.002+00	71.28	0	7.13E+04	0.00E+00	92.0
ŧ	0.00E+00	0.002+00	47.52	0	4.75E+04	0.002+00	61.3
G	0.00E+00	0.00E+00	158.40	0	1.58E+05	0.00E+00	204.3
8	0.00E+00	0.00E+00	150.48	0	1.50E+05	0.002+00	194.1
Ĩ	0.00E+00	0.00E+00	514.80	0	5.15E+05	0.00E+00	564.1
J	0.002+00	0.005+00	594.00	0	5.94E+05	0.00E+00	766.3

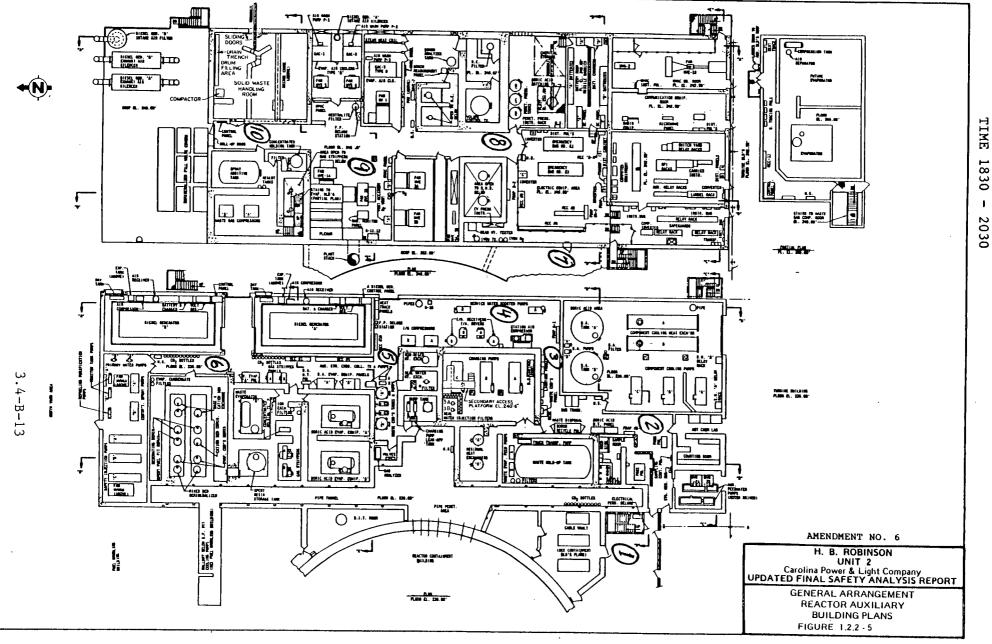
3.4-B-10

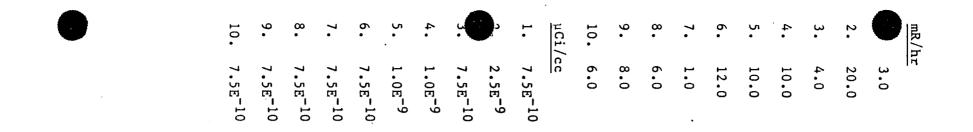


		4						_	}											-	
10	9.	<u>∞</u>	7.	6	S S	4	ω		-	3	10	9	8	7.	6	ა •	4	ω	2		a.
•										1		-	-	-	-	-	•	-	•		~ E
<2 .	<2 .	<2.	•	<2.	<2 .	<2 .	<2 .	•	<2.	lo o	2.0	2.0	2.0	0.5	2.0	2.0	2.0	1.0	2.0	0 ¹	r
5E	SE	SET	SE.	5E	5E-	5 E -	5E-	5 E -	5E'		_	-	-		-	-	-	-	-	•	
10	10	10	10	10	10	10	10	10	10					•							

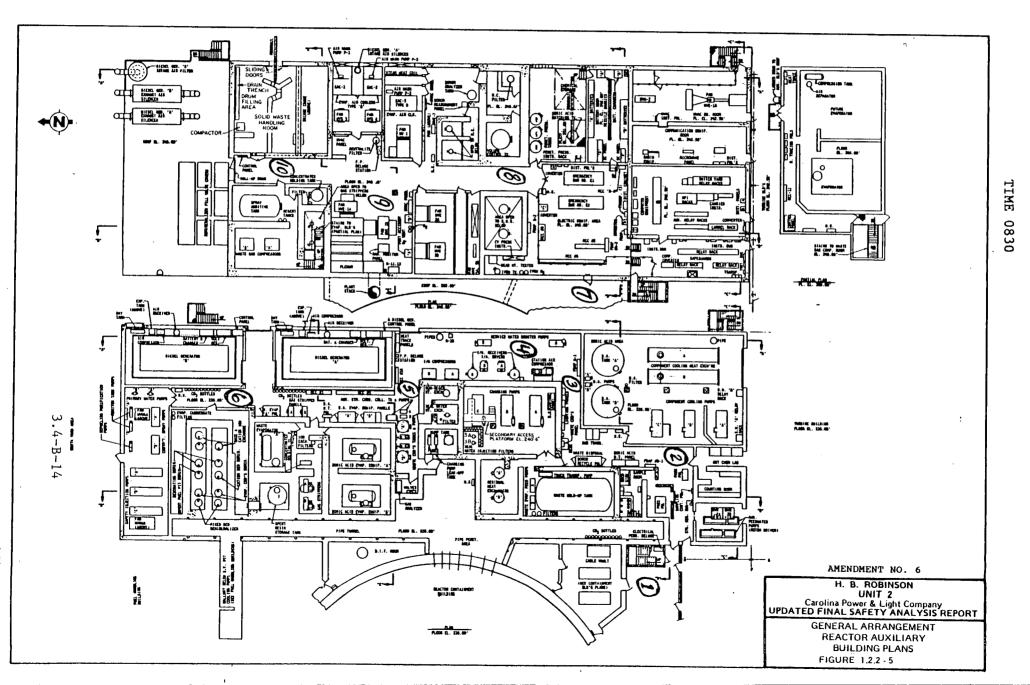


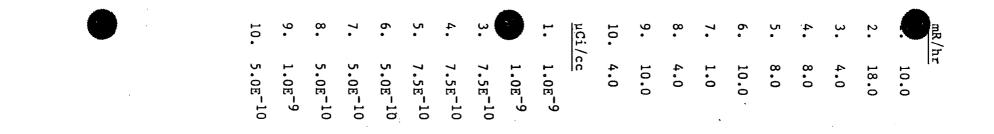


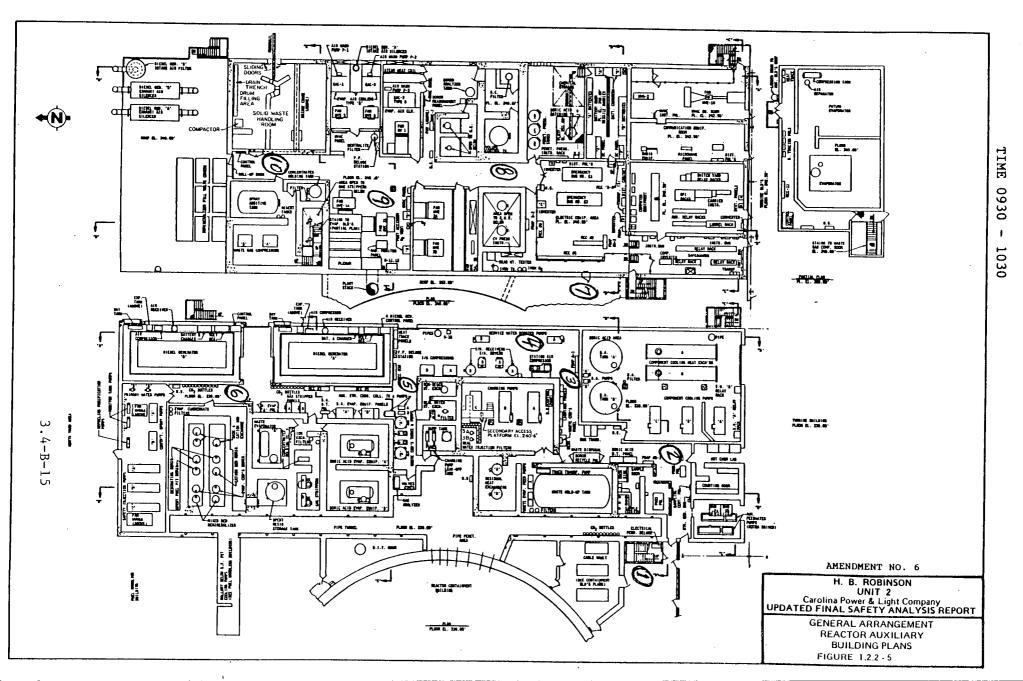


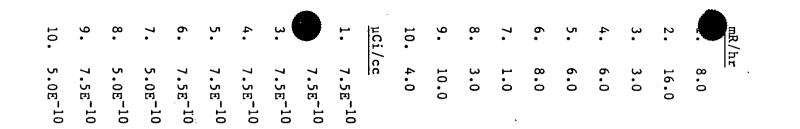


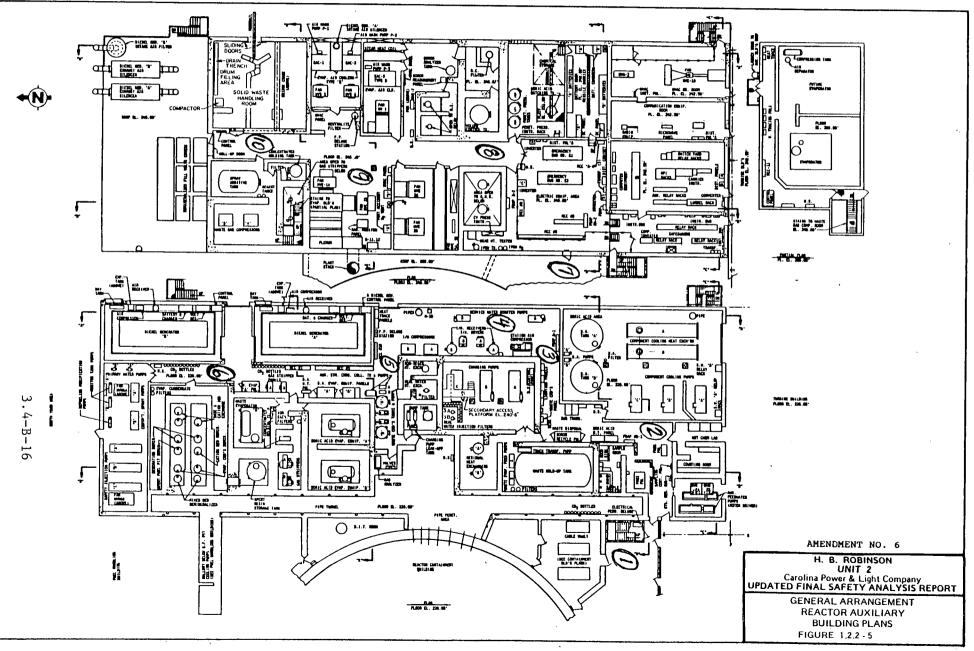
÷.











TIME 1130 - 1230

CAROLINA POWER AND LIGHT COMPANY ROBINSON NUCLEAR PROJECT DEPARTMENT

1989 EMERGENCY PREPAREDNESS ANNUAL EXERCISE

3.4-C OFFSITE PLUME MONITORING DATA

3.4-C-0

	VEGETATION CAMPIC	291180	mR/hr on contact	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	0.0	0.0	 	0.0	0.0	0.0	0.0	0.0			
DN READINGS DUTSIDE PLUXE)	PARE		HP-210 cpm>bkgd/ . m ft^3 SAMP c	0	0 .	0,0	- C	° O	0	Û	0	G	0	0	0	0	0	0	0	-	•	Û	0	0	0			
CONTAMINATION READINGS READINGS ANDE OUTSIDE FLUXE	ENICOI	THUDOUTH	RP-210 cpa>bkgd/ ft^3 SAMP		0	0 0) (0	0	0	0	0	0	0	0	0	0	G	0	0 (0	0	0	0	0			
sampled (HP-290 DOSE RATE CPm	0	0	0 0	- -	•	Ō	0	0	0	0	0	0	0	0	-	0	0 0	D	0	0	0	0			
			HP-270 DOSE RATE C cpm	0	0 (0 0	• c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
e values by the ft^3 i i kilogram sample high to be reliable	an Ardino	חמרמרב	SPA-3 DOSE RATE [cpm	0	•	0 0		0	0	0	0	0	0	0	0	0	0	0	0	0	D	0	0	0	0		•	
s read" airborne ased on a s cpm to	22 2008 C		DOSE RATE I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
1. Zeros are "a 2. Kulitoly the 3. Veg. value b 4. ERRATIC mean			HP-290 DOSE RATE cpm	0			~ ~	0	0	0	0	0	0	0	0	0	0	0	0	0	Ð	0	0	0	0	·		
	READINGS ACT		HP-270 DOSE RATE (cpm	0	⇒ •	0 0	- C	0	0	Û	0	0	0	0	0	0	0	o [`]	0	0	Ð	0	0	0	0			
	RADIATION REAL AROVE SUBEACE		SPA-3 DOSE RATE cpm	0,		0 0		0	0	0	0	0	0	0	0	0	0	-	0	0	D	0	0	0	0			
10:30 FIELD 0AT	AS TNEISNA AS TURNER AS TURNER		DOSE RATE mR/hr	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0,000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.00	0.00			
64 54 55 65 65 65 65 65 65 65 65 65 65 65 65 65 65 65 6	·		SAMPLE	~	aa t	ఆ జ	b fxJ	l fiza	¢	12823	, }4		Х	7				a .	~ ,	as s	. 73	e→	0	٨	1345			

3.4-C-1

TIME: 10:30

OFF SITE LABORATORY DATA

 Multiply veg. values by No. in sample.

	CONTAMINAT	ION SAMPLE	•			
	TOOTNE	010 0	IODINE		IODINE	PARTIC
	IODINE AIRBORNE	PART	SURFACE		VEGETATIO	N VEG
	AIRBURNE	AIRBORNE				
SAMPLE POINT	uCi/cc	uCi/cc	uCi/m^2		pCi∕g	pCi/g
A	0.00E+00	0.00E+00	0.00	0.200	0.00E+00	0.00E+00
8	0.002+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
С	0.00E+00	0.00E+00	0.00	0	0.005+00	0.00E+00
D	0.002+00	0.00E+00	0.00	0	0.00E+00	0.002+00
8 7	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
	0.005+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
G	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00'
Н	0.00E+00	0.002+00	0.00	. 0	0.002+00	0.002+00
Ι	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.002+00
J	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.002+00
K	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
L	0.002+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
М	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
N	0.002+00	0.00E+00	0.00	0	0.002+00	0.00E+00
0	0.002+00	0.002+00	0.00	0	0.002+00	0.00E+00
P	0.00E+00	0.002+00	0.00	0	0.00E+00	0.00E+00
Q	0.005+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
8	0.00E+00	0.002+00	0.00	0	0.002+00	0.00E÷00
S	0.00E+00	0.002+00	0.00	0	0.00E+00	0.002+00
T	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
U	0.00E+00	0.00E+00	0.00	. 0	0.00E+00	0.00E+00
V	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
N	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00

3.4-C-2

	Vecepation Sample	aR/hr on contact	
(EXATS BEISERO	Para Para Atreoria	RP-210 cpm>bkgd/ ft^3 SAMP '	
CONTAMINATION READINGS READINGS MADE OUTSIDE PLUNE	IODINE AIRSORNE	HP-210 cpm>bkgd/ ft^3 SAMP	5 20 20 20 20 20 20 20 20 20 20 20 20 20
ເສ ເອ ເອ ເອ ເອ ເອ ເອ ເອ ເອ ເອ ເອ ເອ ເອ ເອ		HP-290 DOSE RATE Com	
ie ft^3 Samole simple		HP-270 DOSE RATE I com	ERRAR TIC C C C C C C C C C C C C C C C C C C
e values by t i kilogram high to be t	SURFACE	SPA-3 DOSE RATE com	ERRATI C C C C C C C C C C C C C C C C C C C
is read" sairborn assed on to	6" ABOVE S	DOSE RATE	88, 0,00 0,00 0,00 0,00 0,00 0,00 0,00
1. Zeros ere "a 2. Mulitoly th 3. Veg. value t 4. ERRATIC mean		HP-290 DOSE RATE cpm	4 4 10000000000000000000000000000000000
5 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		HP-270 DOSE RATE cpm	50000000000000000000000000000000000000
រ ប ស ស ស ស ស ស ស ស ស ស ស ស ស ស ស ស ស ស	- <u>Cu</u>	SPA-3 DOSE RATE cpm	EX X A T T T T T T T T T T T T T T T T T
10:35 10:35 11:5:0 0AT		DOSE RATE mR/hr	680.141 0.00 0.00 0.00 0.00 0.00 0.00 0.00
		SAMPLE POINT	 < а с а в с с с с с с с с с с с с с с с с

.

3.4-C-3

, ,

TIME: 10:35

÷

OFF SITE LABORATORY DATA

1. Aultioly veg. values by No.

.

		TUA TRATERAGE	1	lons ni Lons ni	e vay. va. va.	-08 Jr 20
	CONTAMINAT	ION SAMPLE AE	SULTS			
					IODINE	PARTIC
	IODINE AIRBORNE	PART AIRBORNE	REAC		6-4 AC 6-4 6-1	Fr.1
SAMPLE POINT	uCi/cc	uCi/cc	uCi/m^2		pCi/g	pCi/g
æ	.28E-0	.00E+0	0	0.00	.005+0	.00E+0
60	.005+0	.00E+0	С.	0	.005+0	.00E+0
ల	.005	00.	0	0	.005+0	.005+0
0	.005+0	.005+0	0.0	0	.005+0	.005+0
67.3	.005+0	.0015+0	0	0	.005+0	.005+0
fota	,003+0	.005+0	0	0	.005+0	.002+0
G	\odot	0.00E+00	0.00	0	0.001+00	0.00E+00
93	.00E+	.00E+0	0.	0	.005+0	.005+0
 4	.005+0	.00E+0	0.	0	.00£+0	.005+0
ŗ	.00E+0	.005	0.	0	.002+0	.005+0
×	.00E+0	.00E+0	0.	0	.00E+0	.001+0
,	.00E+0	.00E+0	0	0	.008+0	.005+0
XE.	.00E+	.00E+	0	0	.00E+	.00E+0
X	.00E+0	.00E+0	0.	0	.00E+0	.00E+0
0	.005+0	.00E+	0.	0	.00E+0	.005+0
БЪ.	.005+0	.00E+0	0.	0	0+200.	.005+0
õ	.006+0	.005+0	о.	0	0+300.	.005+0
<u>66</u>	.005+0	.00E	••	0	.00E+0	.005+0
ഗ	.00	.00	0	0	.00	.005+0
E	.00E+0	.008+	0.	0	.005+0	.005+0
0	.00E+0	.00E+0	0.	0	.005+0	.005+0
٥	.005+0	.005	0	0	.00	.005+0
C-96	.00	.00£+0	0	0	.00E+0	.005+0

3.4-C-4

4

											•
TIN	5: 10:45			1. Zeros ar	e "as read"						
				2. Mulitply	the airborn	e values b	y the it^3	sampled	CONTAMINAT	ION READINGS	
JFF 3IT	ATAG GLEIF 1			•	ue based on (•	-		(READINGS MADE	OUTSIDE PLUM	5)
	រអភ្ជាល់ ភ្	ADIATION R	5357866	4. ERRATIC	means cpm to	high to b	e reliable				
	HUBICNI K	ADIAIION R	CAUINOS						IODINE	PART	VEGETATION
	1 METER A	BOVE SURFA	CE		6" ABOVE	SURFACE			AIRBORNE	AIRBORNE	SAMPLE
		SPA-3	HP-270	HP-290		SPA-3	8P-270	HP-290	HP-210	HP-210	
SAMPLE			DOSE RATE		0.000 0300		DOSE RATE				mR/hr on
POINT	mR/hr				DODE MALE			CDURE KALE	ft^3 SAMP	ft^3 SAMP	contact
FUINI	WK/ 111	còw	cbw	Cbw		Cbw	cbw	C Pill	IC J Dhat	IC J JACI	Concact
A	630.282	ERRATIC	816338	54423	884.28	ERRATIC	ERRATIC	70743	52800	0	80.0
В	717.549	ERRATIC	861058	57404	932.77	ERRATIC	ERRATIC	74621	55704	0	0.0
С	0.000	0	0	0	0.00	0	0	0	0	Û	0.0
D	0.000	0	0	0	0.00	0	0	0	0	0	0.0
E	0.000	0	0	0	0.00	0	0	0	0	0	0.0
E	0.000		0	Û	0.00	0	0	0	0	0	0.0
G	0.000		0	0	0.00	0	0	0	0	0	0.0
В	0.000		0	0	0.00	0	0	0	0	0	0.0
I	0.000		0	0	0.00	0	0	0	0	0	0.0
J	0.000		0	0	0.00	0	0	0	0	0	0.0
X	0.000		0	0	0.00	0	0	0	0	0	0.0
L	0.000		0	0	0.00	0	0	0	. 0	0	0.0
M N	0.000		0	0	0.00	0	0	0	0	Ŋ	0.0
N	0.000		0	0	0.00	0	0	0	0	0	0.0
0	0.000		0	0	0.00	0	0	0	0	0	0.0
Ģ	1922.589		ERRATIC	153807	2499.25		ERRATIC	199940	149252	0	0.0
Q		ERRATIC	362572	24171		ERRATIC	471321	31421	23456	U	0.0
8	0.000		0	0	0.00	. 0	0	0	Ű	0	0.0
5	0.000		U	U	0.00	U	U	U	Ú	U	0.0
ľ	0.000		0	0	0.00	U	U	0	U	U	0.0
U	0.00		U	0	0.00	U	U	0	U A	U	0.0
V	0.00		U	0	0.00	U	U	0	U	U	0.0
. 3	0.00	Ų	U	0	0.00	U	0	0	. 0	U	0.0

10:45 TIME:

0478 LABORATORY OPF SITE

Multiply veg. values by No. in sample.

1

1

	AMINAT DINE	SAMPLE S PART S	ESULTS IODINE SURFACE		IODINE VEGETATION	PARTIC VEG
BORN Ci/c		i/ 08	uCi/m^2		pCi/q	pCi/q
285		+ ±		00 0	, <u> </u>	100
0		.00E+0	0.0	2	.005+	012+0
.00E		.00E+	0.00	0	002+0	.00E
.005+0		0E+0	°.	0	.00140	.00E+0
.005+0		.005+0	0	0	.005+0	.00E+0
.00E+0		.00	0	0	.00E+	- 300 ·
.005+		.005+0	਼	0	0E+0	.00E+0
.005+0		.005+0	-	0	.002+0	.005+0
.005+0		.005	0.00	0	.00E+0	.005+0
.00E+		.003+0	•	0	.005+0	.005
.005+0		.00E+0	•	0	.00E+0	.00E+0
.00		.00E+	-	0	.005+0	.005+0
Ε+0		.00E+0	0.00	0	98÷	0+5
.005+0		.00E+0	•	0	.005+0	.005+0
.00		00.	•	0	.002+0	.005+0
.495-0		.005+0	0.	0	.005+0	.005+0
.355-0		.005+0	਼	0	.005+0	.002+0
,002+0		.005+0	с .	0	.00140	.005+0
.005+0		+B0	਼	0	.005+0	.005+
.006+0		.00E+0	0	0	.005+0	.00E+0
.00E+0		.005+0	•	0	.00E+0	.00E+0
.0		00.	-	0	\circ	0
.00E+0		0.00E+00	0.00	0	.00E+	.00E+0

.

3.4-C-6

÷

	E: 11:00			1. Zeros ar	e "as read"				·		
	C. 11.0V				the airborna	values by	y the ft^3	sampled		ION READINGS	
OFF SIT	ATAG CLEIS B			3. Veg. val	ue based on a	i i kilogra	em sample		(READINGS MADE	OUTSIDE PLUX	Ξ)
	AMRTENT R	ADIATION R	EADINGS	4. ERRATIC	means cpm to	nign to be	e reilagie				
									IODINE	PART	VEGETATION
	1 METER A	BOVE SURFA	CE		6" ABOVE S	SURFACE			AIRBORNE	AIRBORNE	SAMPLE
		SPA-3	8P-270	HP-290		SPA-3	HP-270	HP-290	HP-210	8P-210	
SAMPL	E DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	cpm>bkgd/	cpm>bkgd/	mR/hr on
POINT	mR/hr	cbw	cpa	cpm		cpm	cpm	cpm	ft^3 SAMP	ft^3 SAMP	contact
A	680.423	ERRATIC	816508	54434	884.42	ERRATIC	ERRATIC	70754	52800	0	160.0
3	717.697	ERRATIC	861237	57416	932.92	ERRATIC	ERRATIC	74633	55704	0	84.4
C	27.575	ERRATIC	33090	2206	35.85	ERRATIC	43015	2868	2141	0	0.0
Ū	20.192	ERRATIC	24230	1615	26.25	ERRATIC	31498	2100	1568 *	0	0.0
51	0.682	817951	818	55	0.89	ERRATIC	1053	71	53	0	0.0
F	0.000	0	0	0	0.00	0	0	0	Û	ŷ	0.0
G	0.000	Û	0	0	0.00	0	0	0	0	0	0.0
đ	.0.000	0	0	0	0.00	0	0	0	Û	ŋ	0.0
I	0.000	0	0	· 0	0.00	0	0	0	0	- 0	0.0
J	0.000	0	0	0	0.00	0	. 0	0	0	0	0.0
K	0.000	0	0	0	0.00	. 0	0	0	0	0	0.0
L	0.000	0	0	0	0.00	0	0	0	0	0	0.0
ă	0.000	0	0	0	0.00	0	0	0	0	0	0.0
N	0.000	0	0	0	0.00	0	0	0	0	0	0.0
0	0.000	0	0	. 0	0.00	0	0	0	0	0	0.0
ģ	1922.987	ERRATIC	ERRATIC	153839	2499.64	ERRATIC	ERRATIC	199972	149252	0	225.1
Q	302.205	ERRATIC	362647	24176	392.83	ERRATIC	471396	31426	23456	0	35.5
R	0.000	0	0	0	0.00	0	j)	Û	0	Û	0.0
S	0.000	0	0	0	0.00	0	0	0	0	Û	0.0
T	0.000	0	0	0	0.00	0	0	0	0	0	0.0
U	0.00	0	0	0	0.00	0	0	0	0	0	0.0
V	0.00	0	0	0	0.00	0	0	0	0	0	0.0
X	0.00	0	0	Û	0.00	0	0	0	0	0	0.0

TIME: 11:00

OFF SITZ LABORATORY DATA

 Multiply veg. values by No. in sample.

. •

PARTIC VEG	pCi/g	0.00E+00 0.00E+00	.0034	E.	- 60 	- 00 	005-	- <u>50</u> 3-	.009	.0064	.008	.00E+0	.002+	.00E+0	•003÷	.002+0	.005+0	.002+0	0	.00E+0	.005+0	95+1	.00E+0
10DINE VEGETATION	pCi/g	17E 67E	0+300	.005+0	.001+0	.005+0	.005+0	.005+0	.005+0	.005+0	6+3	.001.40	.005+0	.00E+0	.005+0	00+20 00+20	.04240.	.003+0	-4-	.005+0	В	.00E+0	0.00E+00
		0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SULTS LODINE SURFACE	uCi/m^2	31.68		0.	0.00	0	0	_	°,	<u> </u>	0.00	਼	9	਼	਼	·	-	<u> </u>	~	~	~	0.00	-
ION SAMPLE RE Part Airborne	uCi/cc	00	0.12+0	00E+	0+300	0+300	008+0	0+200	90	003+0	.00E+0	,00E+	3	.008+	S	.005+0	90.	0.03+0	.00E+0	.00E+0	.00E+0	.005+	.005+0
CONTAMINATI IODINE AIRBORNE	uCi/cc	5.28E-04 5.578-04	145-0	.578-0	.298-0	.005+0	.005+0	.005+0	.00E+C	.00E+	.005+	.00E+	.00E+	.005+	9.	498-	0	04300.	.005+0	.005+0	.005+0	0E+	0+300.
	SAMPLE POINT	rat (1	s ب	0	Cr.')	(r.,	9	5 C 3	↦	Ŀ	Х		JE:	N	0	D .	0		ഹ	64	1	Δ	

3.4-C-8

Ma A C H O P o M		രേഎല്ലാറായ്യം	SAMPIE POINT	
1923.380 568ATIC 302.268 ERRATIC 0.000 0.000 0.000 0.00 0.00 0.00 0.00		.564 ERRATIC .846 ERRATIC .581 ERRATIC .196 ERRATIC .682 31812 .670 ERRATIC	AMBIENT RADIATION READINGS 1 METER ABOVE SURFACE DOSE RATE DOSE RATE DOSE R mR/ht cpm cpm	11:15 77250 OATA
262722 0 0 0 0 0 0 0 0 0 0 0 0 0		816677 861415 33097 24235 818 0 88404	70 ATE	
2337/1 24181 0 0 0		54445 57428 2206 1616 55 5894	HP-290 DOSE RATE CPM	 Zeros are Zulicply Veg. valu Veg. valu ERRATIC m
2300.04 5ARATIC 0.00 0.00 0.00 0.00 0.00 0.00 0.00		884.56 ERRATIC 933.07 ERRATIC 26.25 ERRATIC 0.89 ERRATIC 0.00 95.77 ERRATIC 0.01 ERRATIC	5" ABOVE SURFACE SPA-3 DOSE RATE DOSE RATE CDM	"as read" the airborne values e based on a 1 kilo; eans com to high to
Castalic 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	00000000000000000000000000000000000000	ERRATIC ERRATIC 43022 31503 00 1063 00 114920 0	E DOSE RATE CPm	by the ft^3 be reliable
20000 31431 0 0 0 0		70765 74645 2863 2100 71 7561 0 7661	HP-290 DOSE RATE CPM	saap P.'ed
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		52800 55704 1558 53 5719 0	IODIYE AIRBORNE EP-210 cpm/bkgd/ ft~3 SAMP	CONTRINET BEADINGS BARE
0000 0000			PART AIRBORNE HP-210 CPm>bkgd/ ft^3 SAMP	ION READINGS (1980) EGISTUO
		1540 6.2.40 0.1.4280	VEGETATION SAMPLE aR/hr on contact	

3.4-C-9

.

. L

TIME: 11:15

OFF SITE LABORATORY DATA

 Multiply veg. values by No. in sample.

	CONTAMINAT	ION SAMPLE F			TODING	01 0010
	100180	2120	IODINE		IODINE	PARTIC
	IODINE	PART	SURFACE		VEGETATION	VEG
	AIRBORNE	AIRBORNE				
SAMPLE POINT	uCi/cc	uCi/cc	uCi/m^2		pCi/g	pCi/g
A	5.28E-04	0.00E+00	47.52	0.00	4.75E+04	0.00E+00
В	5.57E-04	0.002+00	33.42	0	3.34E+04	0.002+00
С	2.14E-05	0.00E+00	0.64	0	6.42E+02	0.00E+00
	1.57E-05	0.00E+00	0.47	0	4.70E+02	0.00E+00
Ξ	5.29E-07	0.00E+00	0.02	0	1.59E÷01	0.00E+00
D E F	0.00E+00	0.005+00	0.00	0	0.005+00	0.002+00
G	5.722-05	0.00E+00	0.00	0	0.00E+00	10.00E+00
H	0.00E+00	0.00E+00	0.00	0	0.002÷00	0.00E+00
	0.005+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
I J	0.002+00	0.002+00	0.00	0	0.00E+00	0.005+00
K	0.005+00	0.00E+00	0.00	0	0.00E÷00	0.00E+00
L	0.00E+00	0.005+00	0.00	0	0.00E+00	0.00E+00
M	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
N	0.00E÷00	0.00E+00	0.00	0	0.002+00	0.00E+00
0	0.00E+00	0.00E+00	0.00	0	0,00E+00	0.00E+00
P	1.49E-03	0.002+00	89.55	0	8.962+04	0.00E÷00
Q	2.35E-04	0.00E+00	14.07	0	1.41E+04	0.00E+00
R	0.00E+00	0.002+00	0.00	Û	0.005+00	0.00E+00
S	0.00E+00	0.002+00	0.00	0	0.00E+00	0.00E+00
T	0.002+00	0.00E+00	0.00	0	0.002+00	0.002+00
U	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
V	0.00E+00	0.00E+00	0.00	0	0.002+00	0.00E+00
9	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00

3.4 - C - 10

		••										
	7188:	11:30			1. Zeros ar		a waluoa b	u tha fta)	comici		ION READINGS	
(DFF SITE	FIELD DATA			3. Veg. val	the airborn ue based on a means com to	e 1 kilogr	am sample	-	(READINGS MADE		3)
		AMBIENT R	ADIATION R	EADINGS	4. CANHIL	WEANS COW CO	aiga co p	e telladie		500 F N B	22.25	000001010100
		1 METER A	BOVE SURFA	CE ·		5" ABOVE	SURFACE			IODINE AIRBORNE	PART AIRBORNE	VEGETATION SAMPLE
			SPA-3	HP-270	HP-290		SPA-3	HP-270	HP-290	HP-210	HP-210	
	SAMPLE POINT	DOSE RATE mR/hr	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm		cpm>bkgd/ ft^3 SAMP	mR/hr on contact
	A		ERRATIC	816846			ERRATIC	ERRATIC	70776		0	320.0
	8		ERRATIC	861594			ERRATIC	ERRATIC	74657		0	253.2
	С	27.587	ERRATIC	33104			ERRATIC	43029	2869		0	6.5
	D		ERRATIC	24240			ERRATIC	31508	- 2101		0	4.7
	Ε	0.682	818290	818	55	0.89	ERRATIC	1064	71		0	0.2
	F	625.730	ERRATIC	750876	50058	813.41	ERRATIÇ	976092			0	0.0
	G	73.686	ERRATIC	88423	5895		ERRATIC	114938	7663	5719	Û	8.7
	E	0.000		0	0	0.00	0	0	0	0	0	0.0
	Ι	0.000	0	0	0	0.00	0	. 0	0	0	0	0.0
	J	0.000		0	0	0.00	0	0	0	Û	0	0.0
	K	0.000	0	0	0	0.00	0	0	0	0	0	0.0
	L	0.000	0	0	0	0.00	. 0	0	0	0	0	0.0
_	M	0.000	0	0	0	0.00	0	0	0	0	0	0.0
	N	0.000	0	0	0	0.00	0	0	0	0	0	0.0
-	0	0.000	0	0	0	0.00	0	0	0	0	0	0.0
	5	1923.784	ERRATIC	ERRATIC	153903	2500.44	ERRATIC	ERRATIC	200035	149252	0	678.4
	Q	302.331	ERRATIC	362797	24186	392.96	ERRATIC	471546	31436	23456	0	106.5
	2	0.000	0	0	0	0.00	0	0	0	Û	0	0.0
	S	0.000	0	0	0	0.00	0	0	0	0	0	0.0
	T	0.000	0	0	0	0.00	0	0	. 0	0	0	0.0
	U	0.00		0	0	0.00	0	0	. 0	0	0	0.0
	V	0.00		0	0	0.00	0	0	0	0	. 0	0.0
	¥	0.00		Ū	Û	0.00	Ō	0	.0	0	0	0.0
			-	-	-		-	-		•		

3.4-C-11

TIME: 11:30

OFF SITE LABORATORY DATA

 Multiply veg. values by No. in sample.

	CONTAMINAT	ION SAMPLE	RESULTS			
			IODINE		IODINE	PARTIC
	IODINE	2ART	SURFACE		VEGETATION	VEG
	AIRBORNE	AIRBORNE				
SAMPLE	uCi/cc	uCi/cc	uCi/m^2		pCi/g	pCi/g
POINT						
A	5.28E-04	0.002+00	63.36	0.00	6.34E+04	0.00E+00
В	5.578-04	0.00E+00	50.13	0	5.01E+04	0.00E+00
C	2.14E-05	0.00E+00		0	1.28E+03	0.002+00
D E F G	1.57E-05	0.00E+00	0.94	0	9.41E+02	0.002+00
Ξ	5.29E-07	0.00E+00		0	3.17E+01	0.00E+00
2	4.86E-04	0,002+00	0.00	0	0.002+00	0.00E+00
G	5.722-05	0.00E+00	1.72	0	1.72E+03	0.00E+00
Н	0.002+00	0.00E+00	0.00	0	0.005+00	0.00E+00
I J	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
K	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
L	0.00E+00	0.00E+00	0.00	0	0.002+00	0.00E+00
M	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
N	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.002+00
0	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
5	1.492-03	0.00E+00	134.33	0	1.34E+05	0.002+00
Q	2.35E-04	0.00E+00	21.11	0	2.11E+04	0.00E+00
R	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
S	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
T	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
U	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
V	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
R.	0.00E+00	0.00E+00	0.00	Û	0.002+00	0.00E+00

3.4-C-12

	718E:	11:45			1. Zeros ar							
						the airborn					ION READINGS	
OFF	5178	FIELD DATA				ue based on i				(BEADINGS NADE	0012108 8238	Ξ)
		ה האביבאו	ADIATION R	RADINCS	4. ARRAILU	means com to	nigh to b	e terrapie				
		AUDIENI A.	ADIALIVA A	CHOTHOD						IODINE	2337	VEGETATION
		1 METER A	BOVE SURFA	CE		6" ABOVE :	SURFACE			AIRBORNE	AIRBORNE	SAMPLE
			SPA-3	HP-270	HP-290		SPA-3	HP-270	3P-290	HP-210	HP-210	
	MPLE		DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE		• • •	cpm>bkgd/	mR/hr on
P0	INT	nR∕hr	cbw	ຬຉຆ	cbw		cpm	cbw	cþw	ft^3 SAMP	ft^3 SAMP	contact
	A	0.705	845856	846	56	0.70	845856	846	56	0	0	400.0
	3		ERRATIC	861772			ERRATIC	ERRATIC	74669		Ō	337.6
	C		ERRATIC	33111			ERRATIC	43036	2869		0	9.7
	D	20.204	ERRATIC	24245		26.26	ERRATIC	31513	2101		0	7.1
	Ξ	0.682	818460			0.89	ERRATIC	1064			0	0.2
	6	625.859	ERRATIC	751031		813.54	ERRATIC	976247		48576	0	73.6
	G	73.701	ERRATIC	88441	5896	95.80	ERRATIC	114957	7664	5719	Û	17.3
	Н	421.603	ERRATIC	505923		548.06	ERRATIC	657669	43845	32729	0	0.0
	I	0.000	0	0	0	0.00	0	0	0	0	· 0	0.0
	J	0.000	0	0	0	0.00	0	0	0	. 0	0	0.0
	K	0.000	0	0	0	0.00	0	0	0	0	0	0.0
	L	0.000	0	0	0	0.00	0	0	0	0	0	0.0
	ă	0.000	0	0	0	0.00	0	0	0	0	. 0	0.0
	N	0.000	0	0	0	0.00	0	0	0	0	0	0.0
	0	0.000	0	0	0	0.00	0	0	0	. 0	0	0.0
	P	1924.183	ERRATIC	ERRATIC	153935	2500.84	ERRATIC	ERRATIC	200067	149252	0	904.5
	Q	302.394	ERRATIC	362872	24191	393.02	ERRATIC	471621	31441	23456	0	142.1
	3	0.000	0	0	0	0.00	0	D	Û	0	ŷ	0.0
	S	0.000	0	0	0	0.00	0	0	0	0	0	0.0
	T	0.000	0	0	0	0.00	0	0	0	0	0	` 0.0
	0	0.00	0	0	0	0.00	0	0	0	0	0	0.0
	V	0.00	0	0	0	0.00	0	0	0	0	0	0.0
	7	2.19	ERRATIC	2625	0	2.84	ERRATIC	3412	227	170	0	0.0

-. , [.]

TIME: 11:45

OFF SITE LABORATORY DATA

 Multiply veg. values by No. in sample.

	CONTAMINAT	ION SAMPLE	RESULTS			
			IODINE		IODINE	PARTIC
	IODINE	PART	SURFACE		VEGETATION	VEG
	AIRBORNE	AIRBORNE				
SAMPLE	uCi/cc	uCi/cc	uCi/m^2		pCi/g	pCi/g
POINT						
A	0.002+00	0.00E+00	79.20	0.00	7.92E+04	0.00E+00
В	5.57E-04	0.002+00	66.84	0,00	6.68E+04	0.002+00
C	2.14E-05	0.00E+00		0	1.93E+03	0.002+00
D	1.57E-05	0.00E+00	1.41	ů 0	1.41E+03	0.00E+00
Ξ	5.29E-07	0.00E+00	0.05	Ũ	4.768+01	0.00E+00
Ē	4.86E-04	0.00E+00	14.57	ů	1.46E+04	0.002+00
G	5,728-05	0.002+00	3.43	0	3.43E+03	0.00E+00
B	3.27E-04	0.002+00	0.00	0	0.002+00	0.002+00
I	0.002+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
J	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
K	0.00E+00	0.00E+00	0.00	Ō	0.00E+00	0.00E+00
L	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
M	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
N	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.002+00
0	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
P	1.492-03	0.00E+00	179.10	0	1.79E+05	0.00E+00
Q	2.352-04	0.00E+00	28.15	0.	2.81E+04	0.002+00
R	0.002+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
S	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
Т	0.002+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
Ū	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
V	0.00E+00	0.00E+00	0.00	0	0.002+00	0.00E+00
R	1.705-06	0.00E+00	0.00	0	0.00E+00	0.00E+00

3.4-C-14

-	12:00			1. Zeros ar	e "as read"						
OFF SITE	FIELD DATA			3. Veg. val	the airborn ue based on a means cpm to	a 1 kilogra	am sample	-	CONTAMINAT: (READINGS MAGE	ION READINGS OUTSIDE PLOX	Ξ)
	ANBIENT R	ADIATION R	EADINGS								
	1 METER A	BOVE SURFA	33		6" ABOVE :	SURFACE			IODINE AIRBORNE	PART AIRBORNE	VEGETATION SAMPLE
SAMPLE POINT	DOSE RATE mR/hr	SPA-3 DOSE RATE cpm	HP-270 DOSE RATE cpm	HP-290 DOSE RATE cpm	DOSE RATE	SPA-3 DOSE RATE cpm	HP-270 DOSE RATE cpm ·	HP-290 DOSE RATE cpm	HP-210 cpm>bkgd/ ft^3 SAMP	BP-210 cpm>bkgd/ ft^3 SAMP	mR/hr on contact
A	0.705		846	56	0.70	845856	846	56	0	0	400.0
3	0.744	892378	892	59	0.74	892378	892	59	0	0	422.0
С	27.598	ERRATIC	33118	2208	35.87	ERRATIC	43043	2870	2141	0	13.0
D	20.209	ERRATIC	24250	1617	26.26	ERRATIC	31518		1568	Û	9.5
2	0.682	818629	819	55	0.89	ERRATIC	1064	71	53	0	0.3
F	625.989	ERRATIC	751187	50079	813.67	ERRATIC ·	976403	65094	48575	0	147.2
G	73.716	ERRATIC	88459	5897	95.81	ERRATIC	114975	7665	5719	0	26.0
8	421.690	ERRATIC	506028	33735	548.14	ERRATIC	657774	43852	32729	ŋ	49.6
Ι	244.085	ERRATIC	292901	19527	317.29	ERRATIC	380754	25384	18949	0	0.0
J	217.075	ERRATIC	260490	17366	282.18	ERRATIC	338621	22575	16852	0	0.0
X	0.000	0	0	0	0.00	0	0	0	0	0	0.0
L	0.000	0	0	0	0.00	0	0	0	0	0	0.0
M	0.000	0	0	0	0.00	0	0	0	0	0	0.0
N	0.000	0	0	0	0.00	0	0	0	0	0	0.0
0	0.000	0	0	0	0.00	0	0	0	0	0	0.0
5	1.993	ERRATIC	2391	159	1.99	ERRATIC	2391	159	0	0	1130.6
Q	0.313	375760	376	25	0.31	375760	376	25	0	Û	177.7
R	0.000	0	0	0	0.00	0	0	0	. 0	0	0.0
S	0.000	0	0	0	0.00	0	0	0	0	0	0.0
Т	0.000	Û	0	0	0.00	0	0	0	0	0	0.0
U	0.24	285447	285	19	0.31	371063	371	25	18	0	0.0
V	0.00	0	0	0	0.00	0	0	0	0	0	0.0
X		ERRATIC	2625	0		ERRATIC	3413	228	170	0	0.3

TIME: 12:00

.

OFF SITE LABORATORY DATA

ŗ,

1. Multiply veg. values by No.

				in samp	- B	
	CONTAMINATI	ION SAMPLE RI	(a) 		00 T M	E C
		PART	5 62		VEGETATION	VEG
	BORN	0g				
SAMPLE FOINT	uCi/cc	uCi/cc	uCi/m^2		pCi/g	pCi/g
æ	.005	9.0	5	0.00	.92E	
<i>0</i> 0	08+0	0	83.56			00E+0
ں	.145-0	90	· ·	0	.57E+0	.005+0
Ω	.578-0	.00E+0	-00	0	.888+0	.005+0
[x.]	.295-0	.00E+0	਼	0	.35E+0	.005+0
Er.,	.862-0	.00E+0		0	91240	.005+0
9	.728-0	8	5.15	0	5	.003+0
:003	.278-0	.005+0	•••	0	.82E+0	.005+0
۱	. 395-0	.005+0	9	0	.005+0	.005+0
ŗ	.696-0	.005+0	<u></u>	0	.001.40	8.
X	.005+0	.00E+0	0.00	0	.00E+0	.00E+0
	.008+0	.00E+0	<u> </u>	0	.005+0	.00E+0
XEC	.00E+0	.005+0	਼	0	002+0	.005+0
N	\circ	8	0.00	0	8.0	-
0	.002+0	.00E+0	਼	0	.00E+0	.00E+0
പ	.005+0	.00E+0	°°	0	.24E+0	.005+
0'	.003+0	.00E+0	2	0	.52E+0	.00E+0
æ	.005+0	002+0	਼	0	01210	00
S	.003+0	008+0	•	0	.005+0	0+300
€→	.00E+0	00E+0	0.	0	.00E+0	0+300
D		05+	\odot	0	0	00E+0
D	.00E+0	•00E+0	° .		90.	00
en:	0E-0	.00E+0	°.	0	.093+0	00E+0

.

3.4-C-16

-											
TIP 🚺	E: 12:15			1. Zeros ar		· ·			00123 11732	TON DENETHON	
077 SI1	ATAG GLEIS 2				the airborn ue based on a				CONTAMINAT. (READINGS MADE	ION READINGS OUTSIDE PLUM	3)
	מ המתרכאות	ADIATION R	PARTNOP	4. ERRATIC	means cpm to	high to b	e reliable				
	HEDICNI K	ADIALIUN X	CHUIMOD						IODINE	PART	VEGETATION
	1 METER A	BOVE SURFA	CE		6" ABOVE :	SURFACE			AIRBORNE	AIRBORNE	SAMPLE
		SPA-3	HP-270	HP-290		SPA-3	HP-270	HP-290	HP-210	HP-210	
SAMPI	E DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	cpm>bkgd/	cpm>bkgd/	mR/hr on
POINT	mR/hr	cþw	cþw	cþu		còw	cpa	cpm	ft^3 SAMP	ft^3 SAMP	contact
A	0.705	845856	846	56	0.70	845856	846	56	0	0	400.0
В	0.744	892378	892	59	0.74	892378	892	59	0	Û	422.0
C	0.029	34294	34	. 2	0.03	34294	34	- 2	0	0	16.2
D	0.021	25112	25	2	0.02	25112	25	2	Û	0	11.9
Ξ	0.001	848	1	0	0.00	848	1	0	0	0	0.4
E	626.119	ERRATIC	751343	50090	813.80	ERRATIC	976559	65104	48576	0	220.8
G	73.731	ERRATIC	88478	5899	95.83	ERRATIC	114993	7666	5719	0	34.7
Н	421.778	ERRATIC	506133	33742	548.23	ERRATIC	657879	43859	32729	0	99.2
Ι	244.135	ERRATIC	292962	19531	317.35	ERRATIC	380814	25388	18949	0	28.7
J	217.120	ERRATIC	260544	17370	282.23	ERRATIC	338675	22578	16852	0	25.5
K	299.262	ERRATIC	359114	23941	389.02	ERRATIC	466826	31122	23232	0	0.0
L	0.000	0	0	0	0.00	0	0	0	0	0	0.0
Ň I	0.000	- 0	0	0	0.00	0	0	0	0	0	0.0
N N	0.000		0	0	0.00	0	0	0	0	0	0.0
0	0.000		0	0	0.00	0	0	0	0	0	0.0
ą		ERRATIC	2391	159		ERRATIC	2391	159	0	0	1130.6
Q	0.313		376	25	0.31	375760	376	25	0	0	177.7
R	0.000		0	0	0.00	0	0	0	0	0	0.0
S		ERRATIC	1567	104		ERRATIC	2037	136	101	0	0.0
Т		ERRATIC	114352	7623		ERRATIC	148650	9910	7398	0	0.0
0	0.24		286	19	0.31	371123	371	25	18	0	0.0
V	0.00	0	0	0	0.00	0	0	0	. 0	0	0.0
Ä	2.19	ERRATIC	2626	0	2.94	ERRATIC	3413	228	170	0	0.5

TIME: 12:15

OFF SITE LABORATORY DATA

 Multiply veg. values by No. in sample.

	CONTAMINAT	ION SAMPLE RE			TOD TND	010070
			IODINE		IODINE	PARTIC
	IODINE	PART	SURFACE		VEGETATION	VEG
	AIRBORNE	AIRBORNE				
SAMPLE POINT	uCi/cc	uCi/cc	uCi/m^2		pCi/g	pCi/g
A	0.00E+00	0.00E+00	79.20	0.00	7.92E+04	0.00E+00
В	0.00E+00	0.00E+00	83.56	0	8.36E+04	0.00E+00
С	0.002+00	0.00E+00	3.21	0	3.21E+03	0.00E+00
D	0.00E+00	0.00E+00	2.35	0	2.35E+03	0.00E+00
	0.00E+00	0.00E+00	0.08	0	7.94E+01	0.00E+00
2 7	4.86E-04	0.002+00	43.72	0	4.37E+04	0.00E+00
G	5.72E-05	0.00E+00	6.86	0	6.86E+03	0.00E+00
Н	3.27E-04	0.00E+00	19.64	0	1.96E+04	0.002+00
I	1.89E-04	0.00E+00	5.68	0	5.68E+03	0.00E+00
J	1.69E-04	0.00E+00	5.06	0	5.06E+03	0.00E+00
K	2.32E-04	0.00E+00	0.00	0	0.00E+00	0,00E+00
Ľ	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
M	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
N	0.00E+00	0.00E+00	0.00	0	0.002+00	0.00E+00
0	0.002+00	0.002+00	0.00	0	0.00E+00	0.00E+00
P	0.00E+00	0.00E+00	223.88	0	2.24E+05	0.00E+00
Q	0.00E+00	0.005+00	35.18	0	3.52E+04	0.00E+00
R	0.00E÷00	0.00E+00	0.00	0	0.00E+00	0.002+00
S	1.01E-06	0.00E+00	0.00	0	0.002+00	0.00E+00
T	7.40E-05	0.00E+00	0.00	0	0.00E+00	0.00E+00
D	1.85E-07	0.00E+00	0.01	0	5.54E+00	0.00E+00
V	0.00E+00	0.002+00	0.00	0	0.00E+00	0.00E+00
A	1.70E-06	0.002+00	0.10	0	1.02E+02	0.002+00

3.4 - C - 18

	erye.	12:30			1 Zarne ar	e "as read"						
	1185.	12.00			2. Mulitply	the airborn					ION READINGS	
0	FF SITE	FIELD DATA				ue based on a means cpm to				(READINGS MADE	OUTSIDE PLUM	3)
		AMBIENT RA	ADIATION R	EADINGS	HI DAMAIL	weans opw oo	urdu oo bo	5 IOIIUDIO				
		1 MRTFR 1	BOVE SURFA	rg		6" ABOVE :	SURFACE			IODINE AIRBORNE	PART AIRBORNE	VEGETATION SAMPLE
		1 30100 10	Jord Dollin			0 115015 1						01111 02
			SPA-3	HP-270	HP-290		SPA-3	HP-270	8P-290	HP-210	HP-210	
	SAMPLE			DOSE RATE		DOSE RATE	DOSE RATE					mR/hr on
	POINT	mR/hr	CÞW	cba	cpm		cbu	cpm	mąc	ft^3 SAMP	ft^3 SAMP	contact
	A	0.705	845856	846	56	0.70	845856	846	56	0	0	400.0
	В	0.744	892378	892	59	0.74	892378	892	59	0	0	422.0
	С	0.029	34294	34	2	0.03	34294	34	2	0	0	16.2
	D	0.021	25112	25	2	0.02	25112	25	2	0	0	11.9
	Ξ	0.001	848	1	0	0.00	848	1	0	0	0	0.4
	F	626.248	ERRATIC	751498	50100	813.93	ERRATIC	976714	65114	48576	0	294.4
	G	0.076	91620	92	6	0.08	91620	92	6	Û	Û	43.3
	8	421.865	ERRATIC	506238	33749	548.32	ERRATIC	657983	43866	32729	0	148.8
	Ι	244.186	ERRATIC	293023	19535	317.40	ERRATIC	380875	25392	18949	0	57.4
	J	217.165	ERRATIC	260598	17373	282.27	ERRATIC	338729	22582	16852	0	51.1
	K	299.324	ERRATIC	359189	23946	389.08	ERRATIC	466901	31127	23232	0	35.2
	L	53.468	ERRATIC	64161	4277	69.50	ERRATIC	83406	5560	4151	0	0.0
	ž	0.000	0	0	0	0.00	0	0	0	0	0	0.0
	N	0.000	0	0	0	0.00	0	0	0	0	0	0.0
	0	0.000	0	0	0	0.00	0	0	0	0	0	0.0
	P	1.993	ERRATIC	2391	159	1.99	ERRATIC	2391	159	0	Û	1130.5
-	Q	0.313	375760	376	25	0.31	375760	376	25	0	Û	177.7
	R	0.000	0	0	0	0.00	0	0	0	0	0	0.0
	S	1.306	ERRATIC	1568	105	1.70	ERRATIC	2038	136	101	0	0.2
	Т	95.313	ERRATIC	114376	7625	123.90	ERRATIC	148674	9912	7398	0	11.2
	U	0.24	285565	286	19	0.31	371182	371	25	18	0	0.1
	V	0.00	5580	6	0	0.01	7254	7	0	0	0	0.0
	N	2.19	ERRATIC	2626	. 0	2.84	ERRATIC	3414	228	170	0	0.3

.

.

TIME: 12:30

.

OFF SITE LABORATORY DATA 1. Multiply veg. values by No. in sample.

.

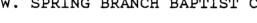
	CONTAMINAT	ION SAMPLE RE			100100	232270
			IODINE		IODINE	PARTIC
	IODINE	PART	SURFACE		VEGETATION	VEG
	AIRBORNE	AIRBORNE				
SAMPL POIN	•	uCi/cc	uCi/m^2		pCi/g	pCi/g
A	0.00E+00	0.00E+00	79.20	0.00	7.92E+04	0.00E+00
В	0.00E+00	0.00E+00	83.56	0	8.36E+04	0.00E+00
C		0.00E+00	3,21	0	3.21E+03	0.002+00
D		0.002+00	2.35	0	2.35E+03	0.00E+00
Ξ		0.00E+00	0.08	0	7.94E+01	0,005+00
F	4.862-04	0,002+00	58.29	0	5.832+04	0.00E+00
G	0.00Z+00	0.002+00	8.58	0	8.58E+03	0.002+00
8	3.27E-04	0,002+00	29.45	0	2.95E+04	0.00E÷00
I	1.89E-04	0.00E+00	11.37	0	1.14E+04	0.00E+00
J	1.69E-04	0.005+00	10.11	0	1.012+04	0.00E+00
K	2.32E-04	0.00E+00	6.97	0	6.97E+03	0.00E+00
ľ	4.15E-05	0.00E+00	0.00	0	0.00E+00	0.00E+00
8	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
Ň	0.00E+00	0.002+00	0.00	0	0.00E+00	0.00E+00
0	0.00E+00	0.0CE+00	0.00	0	0.00E+00	0.00E+00
P	0.00E+00	0.00E+00	223.88	0	2.24E+05	0.00E+00
. Q	0.00E+00	0.00E+00	35.18	0	3.52E+04	0.00E+00
R	0.00E+00	0.,00E+00	0.00	0	0.00E+00	0.00E+00
S	1.01E-06	0.00E+00	0.03	0	3.04E+01	0.00E+00
T	7.40E-05	0.00E+00	2.22	. 0	2.22E+03	0.00E+00
Ũ	1.85E-07	0.00E+00	0.01	0	1.11E+01	0.00E+00
V	3.61E-09	0.00E+00	0.00	0	0.00E+00	0.00E+00
H	1.702-06	0.002+00	0.15	0	1.53E+02	0.00E+00

3,4---C-20

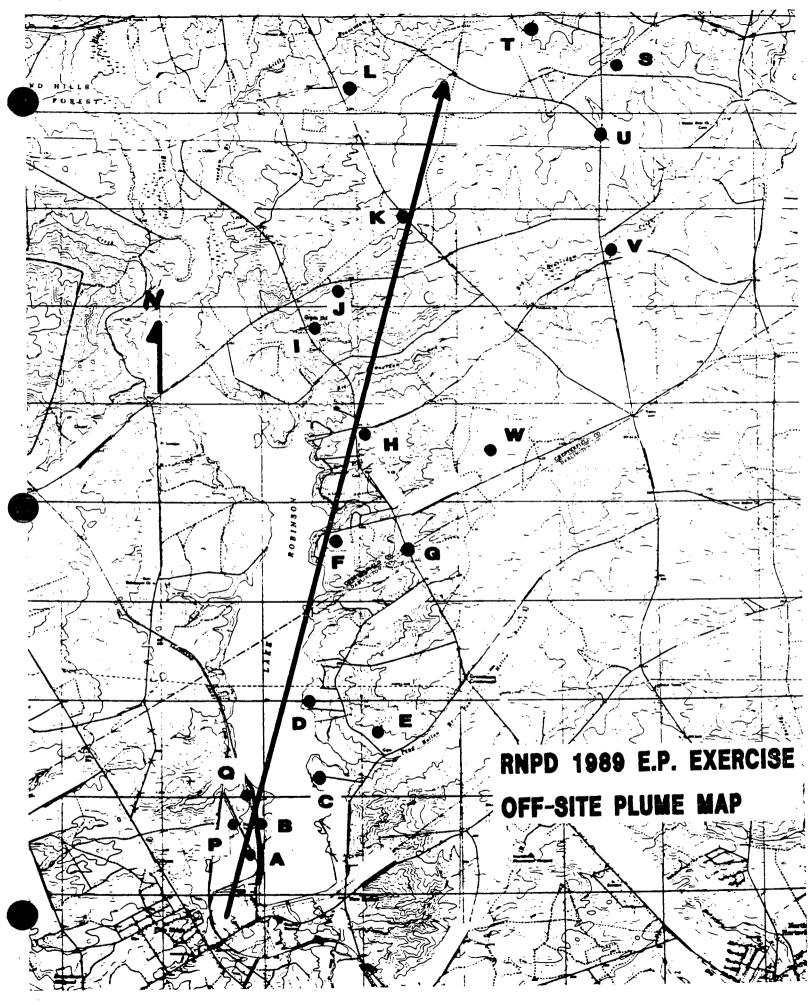
LEGEND: OFF-SITE PLUME MAP

A. PLUME CENTERLINE NEAR RAILROAD TRACK B. PLUME CENTERLINE NEAR DISCHARGE CANAL C. ATKIINSON LANDING , SR 39 D. EASTERLING LANDING , SR 737 E. BIBLE BAPTIST CHURCH . SR 737 F. END OF SR 752 AT LAKE G. SIREN LOCATION AT DARLINGTON COUNTY LINE H. INTERSECTION SR 763 AND SR 46 I. GREEN HILL CHURCH OF GOD , SR 46 OFF 346 J. FIRE HALL AT SR 346 K. PLUME CENTERLINE, DIRT ROAD, .6 MILES NORTH OF SR 346 L. INTERSECTION OF DIRT ROAD, 2 MILES NORTH OF SR 346 M. INTERSECTION OF US 1 AND SR 46 AT LINTON,S GROCERY N. INTERSECTION ON US 1 AND SR 491 , FIRE HALL ACROSS ROAD O. PULL OFF AT OLD BARN , 1,1 MILES NORTH OF US 1 AND SR 491 P. PLUME CENTERLINE NEAR MET TOWER **O. DISCHARGE CANEL NEAR MET TOWER** R. WILKES CHAPEL CHURCH AT SR 29 ON S-13-493 S. CHURCH OF GOD ON SR 29 T. SCOTT POND ON DIRT ROAD U. INTERSECTION OF SR 491 AND SR 29 V. INTERSECTION OF SR 29 AND SR 346

W. SPRING BRANCH BAPTIST CHURCH



3.4 - C - 21



3.4-C-22

CAROLINA POWER AND LIGHT COMPANY ROBINSON NUCLEAR PROJECT DEPARTMENT

1989 EMERGENCY PREPAREDNESS ANNUAL EXERCISE

4.0 CONTROLLERS' INSTRUCTIONS

SCN:89-3083 RNPD-89-03-R0

A. EXERCISE CONTROL ORGANIZATION NOVEMBER 13-14, 1989

NAME	ASSIGNMENT	PHONE #
Max F. Thompson Mike Morrow Brian McFeaters	Corp. Exercise Director Scenario Coordinator Chief Evaluator	Floating 4015 Floating
Bob Steele Jim Harding Russ Muth Terry Byron	Lead Control Room Control Room Control Room (Communications) Control Room	4027 4027 4028
Bob Indelicato Janet Gerald John Davis Vickie Ashman	Lead TSC TSC (Radiological Assessment) TSC (Accident Assessment) TSC (Communications)	4020 4043
Albert Garrou Cecil Oates Mike Blocker Mose Highsmith Steve Barrett Leon Held Doc Gainey Richard Baldwin	Lead OSC OSC (MaintMech.) OSC (PASS Team) OSC (Plant Team) OSC (Plant Team) OSC (Maint I&C/Elect.) OSC (Plant Team/Medical Emergency) OSC (Plant Team)	1380 1380 PA PA PA PA PA
Brad Houston Larry Ratliffe Gail Bowen Effie Carroll	Lead EOF EOF (Radiological Assessment) EOF (Communications) EOF	4051
Jim Davis Margie Johnson	Environmental Mon. Team #1 Environmental Mon. Team #2	Radio Radio
Larry Williams Phil Leslie	Lead Security Security	PA
Ralph Goodwin Tami Dunn Eileen Welch-Jones	Lead Plant Media Center Plant Media Center Plant Media Center	4109
Bob Black	Lead Headquarters Comm. Center	770-4094

B. INSTRUCTIONS FOR CONTROLLERS

- 1. Personnel are assigned as controllers or evaluators at all key function areas to monitor and control the exercise. In addition, they will accompany Radiological Monitoring Teams, Plant Health Physics Personnel, and Maintenance Repair/Rescue Teams.
- 2. The in-plant controllers will be coordinated by the Exercise Lead Controller located in the TSC (Ext. 4015). He/she will be responsible for the overall conduct of the exercise scenario. If unable to reach the Exercise Lead Controller, contact the TSC Lead Controller (Ext. 4015).
- 3. Message forms and simulated control room data will be used to initiate, modify, and complete the events comprising the overall scenario. Selected controllers will use the message forms to place the scenario events in effect and to trigger responses from the involved emergency response organizations. Each controller will have copies of the messages controlling the portion of the exercise 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 Exercise Lead 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 exercise scenario messages will be prefixed and suffixed with the words "THIS IS A DRILL." 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 <u>NOT TO PROMPT</u> 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 (per exercise ring down).
- 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.

CAROLINA POWER AND LIGHT COMPANY ROBINSON NUCLEAR PROJECT DEPARTMENT

1989 EMERGENCY PREPAREDNESS ANNUAL EXERCISE

5.0 EVALUATORS' INSTRUCTIONS

A. EVALUATORS' RULES

- 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 script.
- 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 Exercise 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 the federal 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 Exercise Lead Controller immediately.
- 16. Be at your post at least 30 minutes prior to any player action commencement.
- 17. The federal evaluators will work through the Exercise Director or the Exercise Lead Controller. This is essential for the success of the exercise.

SCN-89-3083 RNPD-89-03-R0

18. Controllers and federal evaluators do not have to follow the radiation exposure control practices appropriate for the <u>simulated</u> radiation levels. However, the players <u>must</u> 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 station 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. A "Critique Worksheet" in Section 5.0 has also been provided as a means to assist in the completion of the "Drill Critique Form." The "Evaluation Checklists" and the "Critique Worksheets" may be completed and returned to the Chief Evaluator for the exercise 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 "Drill Critique Form" has been provided in Section 6.0 to summarize the observations which the evaluators have made during the exercises. Of the ten questions on the form, Questions 8 and 9 will require the most effort on the part of the evaluator to complete in an accurate manner. In responding to Question 8 of the "Drill Critique Form," only those observations 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 exercise report. Response to Question 9 on 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 as a response to Question 9. 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 under Question 9 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 "Drill Critique Form" for completion of the evaluators' response.

It is required that by conclusion of the evaluators critique, the "Drill Critique Form" and the "Controller's Log Sheets" can be returned to the Lead Evaluator or to the Chief 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

SCN-89-3083 RNPD-89-03-R0

-Control Room Controller-

		Yes	No	Not Observed
1.	Did the operators respond quickly to the initiating events and properly assess the situation	<u></u>		
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 immediate notification of the emergency condition?		<u></u>	
5.	Were there sufficient measurable/observable indica- tions to recognize the Emergency Action Levels?	<u></u>	<u> </u>	
6.	Were classifications of the emergency conditions timely and accurate?		<u> </u>	<u> </u>
7.	Did Control Room personnel know when to refer to the emergency plan implementing procedures and which procedures to use?			<u></u>
8.	Was the emergency classification upgraded or down- graded when appropriate?			
9.	Did the Shift Foreman promptly assume control and authority?			
10.	Did the Shift Foreman 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 thoughout 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 Foreman practice efficient use of available personnel?			
14.	Was assistance requested from the appropriate emergency response organizations?			

.

-Control Room Controller-

		Yes	No	Not Observed
15.	Were personnel aware of their emergency response roles and functions?			<u></u>
16.	Did the Shift Foreman review the declared 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?			- <u></u>
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 e <u>mergency</u> 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," or a similar statement?			
25.	Were communications links checked?			
26.	Were all communication networks operational?		. <u> </u>	
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-

.

.

		Yes	No	Not Observed
29.	Were general status announcements or periodic updates provided to Control Room personnel throughout the emergency?			. <u></u>
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?	<u></u>		
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?	. <u></u>		
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 i j	Was the ambient noise level in the Control Room acceptable?			
39.	Was access to the Control Room restricted to specific individuals?			
40.	Was a post-drill/exercise critique held to evaluate Control Room performance?	<u></u>	<u></u>	

· .

			Yes	No	Not Observed
	1.	Did the security organization initiate a search of the TSC in a timely manner?			. <u> </u>
1	2.	Was the TSC incorporated into the protected area?	<u></u>		
	3.	Were ERD personnel admitted into the TSC via the protected area in a timely manner?			
	4.	Was the TSC activated automatically upon the declaration of an Alert?			
	5.	Did emergency response personnel assigned to the TSC report in a timely manner?		. <u></u>	
	6.	Were TSC personnel aware of their assigned work areas?		<u></u>	
	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?	<u> </u>		
	11.	Did communications contain the statement "this is a drill," 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 operational by the Site Emergency Coordinator?			
	14.	Were TSC personnel informed of the change of command?			

SCN-89-3083 RNPD-89-03-R0

		Yes	No	Not Observed
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?	. <u> </u>		
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?			
25.	Were the notification procedures available and used for mobilizing onsite emergency response personnel and augmenting the emergency response staff?			
		;		

SCN-89-3083 RNPD-89-03-R0

		Vaa	No	Not Observed
		Yes	No	Observed
26.	Were communication links established with other emergence 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 Coordinator?			
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?		<u> </u>	
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?			
37.	Was effluent sampling information available?		- <u></u>	
38.	Were the correct procedures and methods used for making dose projection calculations?	7		

SCN-89-3083 RNPD-89-03-R0

.

·

		Yes	No	Not Observed
39.	Were dose projections performed in a timely manner?			. <u></u>
40.	Was there a clear interface between the TSC staff and field monitoring teams?			
41.	Did the Radiological Assessment Coordinator adequately coordinate the activities of the Onsite Survey Teams with those of the Radiological Monitoring Teams?			
42.	Were habitability surveys initiated by the Radiological Assessment Coordinator?			
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.	Was a post-drill/exercise critique held to evaluate TSC performance?			

·

-Emergency Operations Facility (EOF) Controller-

		Yes	No	Not Observed
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?	<i></i>		
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?	<u> </u>		
14.	Did communications contain the statement "this is a drill," or a similar statement?			
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?			

SCN-89-3083 RNPD-89-03-R0

-Emergency Operations Facility (EOF) Controller-

		Yes	No	Not Observed
16.	Did the EOF staff perform manpower projections to support contracted operations and notify the Administrative and Logistic Manager accordingly?		<u></u>	
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?			7
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?		. <u></u>	<u> </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?			

SCN-89-3083 RNPD-89-03-R0

.

•

-Emergency Operations Facility (EOF) Controller-

		Yes	No	Not Observed
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?			
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?			<u></u>

SCN-89-3083 RNPD-89-03-R0

-Emergency Operations Facility (EOF) Controller-

		Yes	No	Not Observed
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.	Was a post-drill/exercise critique held to evaluate EOF performance?		<u></u>	

-Plant Monitoring Team Controller-

		Yes	No	Not Observed
1.	Did the team response 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?			<u> </u>
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?		<u> </u>	<u> </u>
11.	Were samples analyzed within the required time limit?			<u> </u>
12.	Were emergency monitoring procedures available to, and used by, team personnel?		<u> </u>	
13.	Were the capabilities in place for dealing with both heavily contaminated personnel and those individuals only slightly contaminated?			

-Plant Monitoring Team Controller-

	• • •	Yes	No	Not Observed
14.	Was respiratory protection equipment available and used while making the surveys?			
15.	Were communications properly maintained?	<u></u>		
16.	Did communications contain the statement "this is a drill," or similar statement?			
17.	Upon return, was the team properly debriefed?			

SCN-89-3083 RNPD-89-03-R0

-Environmental Monitoring Teams Controller-

		Yes	No	Not Observed
			<u></u>	
1.	Did team members arrive at the staging area and prepare themselves in a timely manner?			
2.	<pre>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?</pre>			
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?	<u> </u>		
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?		. <u></u>	
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-

١

	· · · ·	Yes	No	Not Observed
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," 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?		<u> </u>	
18.	Were dose rate measurements taken to verify radiation levels while in transit to monitoring and/or sampling sites?	·	<u></u>	
19.	Was the team able to find the monitoring and/or sampling locations?		· <u></u>	
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-

				Not
		Yes	No	Observed
26.	Was raw field data converted correctly to uCi/cc for both particulate and iodine airborne samples?		•	
27.	Were vehicle surveys performed periodically?	<u> </u>		
28.	Was the team aware of sample drop location(s)?		<u> </u>	. <u></u>
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?			. <u> </u>
33.	Were spare batteries available for portable radios?			·
34.	Were backup instruments available in case of a failure of the primary instruments?		<u></u>	
35.	Were the team members and vehicle properly surveyed upon completion of their monitoring tasks?		<u></u>	
36.	Were the team members debriefed upon their return?			
37.	Upon return, was equipment returned to its original status?			

5.0-20

....

-Medical Emergency Controller-

		Yes	No	Not Observed
1.	Was the information concerning the event transmitted properly to the Control Room?	<u></u>		- <u> </u>
2.	Was the response team organized and dispatched quickly?			
.3.	Prior to deployment, was a team leader identified and properly briefed?	<u></u>		
4.	Prior to deployment, were the radiological conditions analyzed for potential personnel hazards?			
5.	Prior to deployment, was the team adequately briefed regarding the actual or potential radiological and operational conditions?			
6.	Was access to the site coordinated with security to minimize ambulance and rescue team ingress and egress times?			
7.	Was health physics coverage available and utilized, if required?		. <u></u>	
8.	Were access badges, dosimetry, and security escort standing by for ambulance or other emergency personnel?			
9.	Was the required equipment available to support the medical emergency response?			<u> </u>
10.	Was adequate first aid equipment available?			
11.	Was the worst-case situation philosophy exercised on the victim?			
12.	Were communications adequately demonstrated during the response (i.e., were they maintained on a frequent basis)?			
13.	Did the emergency response team follow proper procedures?			
14.	Were radiological controls implemented during evaluation, treatment, and transport?			
15.	Did the team practice contamination control during the response?	. ——		

SCN-89-3083 RNPD-89-03-R0

-Medical Emergency Controller-

		Yes	No	Not Observed
16.	Did the ambulance have to wait for an excessive period of time to receive the victim for transport?			
17.	Were proper radiological controls practiced by the ambulance and hospital personnel?			
18.	Were proper release procedures practiced and followed?			
19.	Were appropriate procedures employed to minimize ambulance or other transport vehicle contamination?			
20.	Were appropriate procedures employed to maintain the hospital free of contamination?	*		

-Headquarters Communication Center (HCC) and Plant Media Center (PMC) Controllers-

		Yes	No	Not Observed
1.	Was the HCC and PMC activated in a timely manner?			
2.	Was the HCC and PMC activated as prescribed in the Emergency Plan Implementing Procedures?			
3.	Were procedures broken out and used?	<u> </u>	 ,	
4.	Was there a clear dissemination of authority and control in the organization?		<u> </u>	
5.	Were dedicated communication links available with all necessary points of contact?			
6.	Did the HCC and PMC Staff initiate and coordinate activities in an efficient and timely manner?			
7.	Were current plant status announcements and periodic updates made?		·	
8.	Did the HCC and PMC demonstrate operational and functional adequacy?	<u> </u>		
9.	Was there sufficient coordination in the preparation, review, and releast of information to provide accurate and timely releases to the general public and news media?			
10.	Was the ability to establish, operate, and coordinate an effective rumor control demonstrated?	<u></u>		
11.	Were accurate and timely information releases made to the general public and the news media?		. <u></u>	
12.	Did PMC contain sufficient equipment and supplies to support all required public information activities?			
13.	Upon activation of the HCC and PMC, was a check made to assure operability of all phone and telecopy equipment?			
14.	Was a Media Call List used to properly notify representatives of the media of the emergency?			
15.	Was a post drill/exercise critique held to evaluate HCC and PMC and personnel performance?			

SCN-89-3083 RNPD-89-03-R0

-Assembly, Accountability, and Evacuation Controllers-

		Yes	No	Not Observed
1.	Did the RNPD security organization mobilize and respond to the declaration of an Alert in a timely and effective manner?			
2.	Did RNPD security personnel adequately control site access in accordance with applicable security procedures?			
3.	Were appropriate security procedures available to, and used by security personnel?	<u> </u>		
4.	Did communications contain the statement "this is a drill," or a similar statement?			
5.	Was site access limited to those persons necessary to perform emergency-related tasks?			
6.	Were security posts and access control points established and maintained as appropriate?			
7.	Did the RNPD security organization demonstrate the ability to account for all personnel in a timely manner?			
8.	Was the evacuation conducted in an efficient manner?			
9.	Did the security organization initiate steps to locate unaccounted-for individuals?		<u></u>	- <u>·</u>
10.	Were these steps coordinated with the Site Emergency Coordinator?			

SCN-89-3083 RNPD-89-03-R0

-SAMPLE TEAMS (PASS) CONTROLLER-

·		Yes	No	Not Observed
1.	Were the team members selected familiar with sample retrieval procedures/practices?		<u></u>	
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?		<u></u>	
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" 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)?		<u></u>	
14.	Were the protective clothing requirements adequate?		. <u></u>	

CAROLINA POWER AND LIGHT COMPANY ROBINSON NUCLEAR PROJECT DEPARTMENT

1989 EMERGENCY PREPAREDNESS ANNUAL EXERCISE

CRITIQUE WORKSHEET

Primary Areas for Evaluation:

Control Room	State EOC	Enviro	onmental Monitoring
 TSC	 Lee EOC	Teams	
 OSC	Darlington EOC	State	Monitoring Teams
 EOF	 Chesterfield EOC		HE&EC Environmental Teams
 HCC	 Plant Monitoring Tea	am 🗌	Other:
 Hospital	 Onsite Survey Teams		

Objective:

Reference(s):

- 1. Applicable initiating message number(s).
- 2. Evaluation Checklists

Participants' Response Actions Toward Meeting the Objective:

Required Corrective Actions, If Any:

Controller:_____

Location:_____

SCN-89-3083 RNPD-89-03-R0

CAROLINA POWER & LIGHT COMPANY ROBINSON NUCLEAR PROJECT DEPARTMENT

DRILL CRITIQUE FORM

EVALUATOR: _____

_____ DATE: _____

EVALUATION RESPONSIBILITY:

(Use additional sheets if required)

OBSERVED STRENGTHS:

OBSERVED DEFICIENCIES:

EVALUATOR COMMENTS:

Name: Date: <u>November 13-14, 1989</u> Time Summary of A	ctivity P	Performed	d	Page:		of Entere By (Initia
Date: November 13-14, 1989 Time Summary of A	ctivity P		d			Entere
						Ву
				<u>. </u>		
			<u></u>			
	<u></u>				<u></u>	
					<u> </u>	
	<u> </u>			<u></u>		
-						
					<u></u>	
	<u></u>					

Drill	Location: <u>Robinson Nuclear Project Department</u> Exercise Type: <u>Annual Exercise 89-03</u>	
22.222	Andar Dereise 09 05	
	CONTROLLER'S LOG SHEET	
Name:		
Date:	November 13-14, 1989 Page:	of
Time	Summary of Activity Performed	Entere By (Initia
		(Inicia
·	·	
·		

Drill/Exerc	ise Type: <u>Annual Exercise 8</u>	9-03	
	CONTROLLER'S	LOG SHEET	
Name: Date: <u>Novem</u>	ber 13-14, 1989	Page:	_ of
Time	• Summary of Activity Per	rformed	Entered By (Initial
	· · · · · · · · · · · · · · · · · · ·		
	•		

Drill.	Location: <u>Robinson Nuclear Project Department</u> Exercise Type: <u>Annual Exercise 89-03</u>	<u></u>
	CONTROLLER'S LOG SHEET	
Name:		
	November 13-14, 1989 Page:	of
Time	Summary of Activity Performed	Entered By (Initial
	· · · · · · · · · · · · · · · · · · ·	
	· · · · · · · · · · · · · · · · · · ·	

ţ

Name: Date: <u>November 13</u>	pe: <u>Annual Exercise 89-03</u> CONTROLLER'S LOG SHEET -14, 1989 Summary of Activity Performed	Page:	
Date: <u>November 13</u>	-14, 1989	Page:	_ of
Date: <u>November 13</u>		Page:	_ of
Time	Summary of Activity Performed		
			Entered By (Initial
		* *** <u>*****</u>	
	· · · · · · · · · · · · · · · · · · ·		
			
•			
	······································		
	· · · · · · · · · · · · · · · · · · ·		
	· · · · · · · · · · · · · · · · · · ·		
		<u> </u>	
	·		
	· · · · · · · · · · · · · · · · · · ·		

:

	Location:	Robinson Nuclear Project	Department		
Drill/Exe	ercise Type:	Annual Exercise 89-03			
		CONTROLLER'S LOG SHE	SET		
Name: Date: November 13-14, 1989 Page: of					
Time	Summa	ry of Activity Performed	1	Entered By (Initia)	
	· · · · · · · · · · · · · · · · · · ·				
		·			
	····				
	·····				
		1			
	•				
	· · _ · · · · · · · · · · · ·				
		· · · · · · · · · · · · · · · · · · ·			

	Location: Robinson Nuclear Project Department	<u> </u>
Drill	/Exercise Type: <u>Annual Exercise 89-03</u>	
	CONTROLLER'S LOG SHEET	
Name		
Date:	November 13-14, 1989 Page:	of
Time	Summary of Activity Performed	Entere By (Initia
<u></u>	· · · · · · · · · · · · · · · · · · ·	
		<u> </u>
	· · · · · · · · · · · · · · · · · · ·	
	· · · · · · · · · · · · · · · · · · ·	
<u> </u>		

•

D=:11	Location: Robinson Nuclear Project Department	
DEIII	/Exercise Type: Annual Exercise 89-03	
	CONTROLLER'S LOG SHEET	
Name		
Date:	November 13-14, 1989 Page:	_ of
Time	Summary of Activity Performed	Entered By (Initial
·	•	
	· · · · · · · · · · · · · · · · · · ·	<u> </u>

Drill/Exer	cise Type: <u>Annual Exercise 89-</u>	-03	
	CONTROLLER'S LO	OG SHEET	
Name: Date: November 13-14, 1989 Page:			of
Time	Summary of Activity Per	formed	Entered By (Initial
		#	
· · ·			

•

Dril1/E		Robinson Nucles Annual Exercise	ar Project Depar e_89-03	tment	
		CONTROLLER	'S LOG SHEET		
Name: Date: <u>N</u>	ovember 13-14,	1989	_	Page:	of
Time	Summ	ary of Activity	Performed		Entered By (Initial
	 	. <u>.</u>			
				an a forder a strategy of the second second second	.
	·	· ·		· · · · ·	
			-7		
		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		

.

SCN-89-3083 RNPD-89-03-R0

.