

CAROLINA POWER AND LIGHT COMPANY  
ROBINSON NUCLEAR PROJECT DEPARTMENT

PLAN FOR ANNUAL EMERGENCY EXERCISE

NOVEMBER 13-14, 1989

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

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CAROLINA POWER AND LIGHT COMPANY  
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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

I. SCOPE

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

II. OBJECTIVES

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

- A. Submit exercise scope and objectives to NRC:  
Exercise - 75 days (August 31, 1989)
- B. Submit exercise scenario to NRC:  
Exercise - 40 days (October 4, 1989)
- C. Final Evaluator Meeting: November 13, 1989 <sup>10:00</sup>~~1:00~~ p.m. (1300)  
Room #122 TSC/EOF Training Bldg.
- D. Exercise: November 13, 1989 4:30 p.m. (1630) to 8:20 p.m. (2020)  
November 14, 1989 8:30 a.m. (0830) to 12:30 p.m. (1230)
- E. Facility Critique with Players 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. H. B. Robinson Steam Electric Plant, Hartsville, South Carolina

1. Control Room (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. Technical Support Center (TSC) (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.

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. Meteorology Tower Located north of the TSC on the plant site. Measures wind at 10.0 meters (33 feet) and 62.8 meters (206 feet) above the ground.
    1. Start of Exercise: Listed Initial Conditions
    2. Subsequent: (Sub-section 3.3)
- B. Headquarters Communication Center (HCC), Raleigh. The Corporate Emergency Operations Center is located on the 11th floor in the Center Plaza Building, Raleigh, NC.
- C. Miscellaneous Facilities
1. Hartsville Airport, 365 foot elevation, 3300 foot runway is located approximately 4 miles east of the RNPDP Plant.
  2. Motels
    - Landmark Motel, U.S. 15 Bypass and S.C. 151  
Hartsville, South Carolina (803/332-2611)
    - 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 RNPDP 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

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:

1. The CP&L Players include all plant and other CP&L personnel 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. The Corporate Exercise Director will be responsible for overall exercise preparation; to oversee conduct of the exercise; to arrange preparation at the conclusion of the exercise of a consolidated evaluation and critique report; and to prepare and follow-up on an itemized list of corrective actions recommended as a result of evaluation and critique.
3. The Chief Planner/Controller 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. The Controllers 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 BEFORE being issued to the players.
5. Chief Evaluator and Evaluators are CP&L or other qualified 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 evaluated 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. Observers from various CP&L components and from other organizations may be authorized on a limited basis to participate in the exercise solely for the purpose of observing exercise activity. Observers will be identified 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.

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. Only 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 "Simulate." 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. TIME

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

VI. Message Preamble and Close

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

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:

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

Section 3.0 Scenario - 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.

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

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

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

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

Subsection 4.0 Controller's Instructions - this section provides general instructions to the 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

## 1989 EMERGENCY PREPAREDNESS EXERCISE OBJECTIVES

### A. OPERATIONAL ASSESSMENT

1. 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 RNP 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.
2. 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.
2. 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

A. Annual Exercise Date & Time

- \* November 13, 1989 1630 to 2030 (4:30 p.m. - 8:30 p.m.)
- \* November 14, 1989 0830 to 1230 (8:30 a.m. - 12:30 p.m.)

B. Annual Exercise Timeline & Emergency Classification Activity

November 13, 1989

- \* 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

November 14, 1989

- \* 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.

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 responding 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. *Corp. (not plt.) personnel prepositioned*
- 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.

# Table #1 **CAROLINA POWER & LIGHT CO.**

## ROBINSON NUCLEAR PROJECT DEPARTMENT

### EXERCISE BASICS

DATE: Nov. 13-14, 1989      BEGIN TIME: \_\_\_\_\_ END TIME: \_\_\_\_\_

\_\_\_\_ ANNOUNCED EXERCISE      XXX UNANNOUNCED EXERCISE

\_\_\_\_ FULL SCALE      XXX PARTIAL PARTICIPATION      \_\_\_\_ UTILITY ONLY

### **MAXIMUM EMERGENCY ACTION LEVEL**

\_\_\_\_ SITE AREA EMERGENCY      XXX GENERAL EMERGENCY

	PARTICIPATION				NOTIFICATION ACTIVATION			
	NOT INVOLVED	SIMULATED PLAY	LIMITED PLAY	FULL PLAY	AS PER EXERCISE PLAY	SIMULATED	START/FINISH	ACTUAL
								PRE-STAGED
STATE OF SOUTH CAROLINA:				-			-	
EOC:		XX		-	XX		-	XX
FEOC:		XX		-	XX		-	XX
N.R.C.:				-			-	
RESIDENT:		XX		-	XX		-	
REGION II:	XX			-	XX		-	
OPS. CENTER:	XX			-		XX	-	
RESPONSE TEAM:	XX			-	XX		-	
FEMA:	XX			-	XX		-	
OFF-SITE SUPPORT:				-			-	
FIRE DEPT:	XX			-			-	
AMBULANCE:		XX		-	XX		-	XX
BYRELY HOSPITAL:	XX			-			-	
WILSON HOSPITAL:	XX			-			-	
PHYSICIAN:	XX			-			-	
LOCAL MEDIA:		XX		-	XX		-	XX

EOC = EMERGENCY OPERATIONS CENTER  
 FEOC = FORWARD DEPENDENT OPERATIONS CENTER  
 N.R.C. = NUCLEAR REGULATORY COMMISSION  
 FEMA = FEDERAL EMERGENCY MANAGEMENT AGENCY

**CAROLINA POWER & LIGHT CO.****ROBINSON NUCLEAR PROJECT DEPARTMENT****EXERCISE BASICS**DATE: Nov. 13 -14, 1989 BEGIN TIME: \_\_\_\_\_ END TIME: \_\_\_\_\_\_\_\_\_ ANNOUNCED EXERCISE      XXX UNANNOUNCED EXERCISE\_\_\_\_ FULL SCALE      XXX PARTIAL PARTICIPATION      \_\_\_\_ UTILITY ONLY**MAXIMUM EMERGENCY ACTION LEVEL**\_\_\_\_ SITE AREA EMERGENCY      XXX GENERAL EMERGENCY

	PARTICIPATION				NOTIFICATION			ACTIVATION	
	NOT INVOLVED	SIMULATED PLAY	LIMITED PLAY	FULL PLAY	AS PER EXERCISE PLAY	SIMULATED	START/FINISH	ACTUAL	PRE-STAGED
<b>CP&amp;L ON-SITE ERO:</b>				-				-	
CONTROL ROOM:			XX	-	XX			-	XX
TSC:			XX	-	XX			-	XX
OSC:			XX	-	XX			-	XX
EOF:			XX	-	XX			-	XX
<b>CP&amp;L OFF-SITE ERO:</b>			-					-	
HE&EC:		XX	-		XX			-	XX
HCC:		XX	-	XX				-	XX
PMC:			XX	-	XX			-	XX
<b>COUNTIES:</b>			-					-	
DARLINGTON:			XX	-	XX			-	XX
LEE:			XX	-	XX			-	XX
CHESTERFIELD:			XX	-	XX			-	XX
FLORENCE:		XX	-	XX				-	XX

TSC = TECHNICAL SUPPORT CENTER

EOF = EMERGENCY OPERATIONS FACILITY

HCC = HEADQUARTERS COMMUNICATION CENTER

HE&amp;EC = HARRIS ENERGY &amp; ENVIRONMENTAL CENTER

OSC = OPERATIONS SUPPORT CENTER

PMC = PLANT MEDIA CENTER

CAROLINA POWER AND LIGHT COMPANY  
ROBINSON NUCLEAR PROJECT DEPARTMENT

1989 EMERGENCY PREPAREDNESS  
ANNUAL EXERCISE

3.0 SCENARIO



## 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  $\mu\text{Ci/ml}$ .

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.

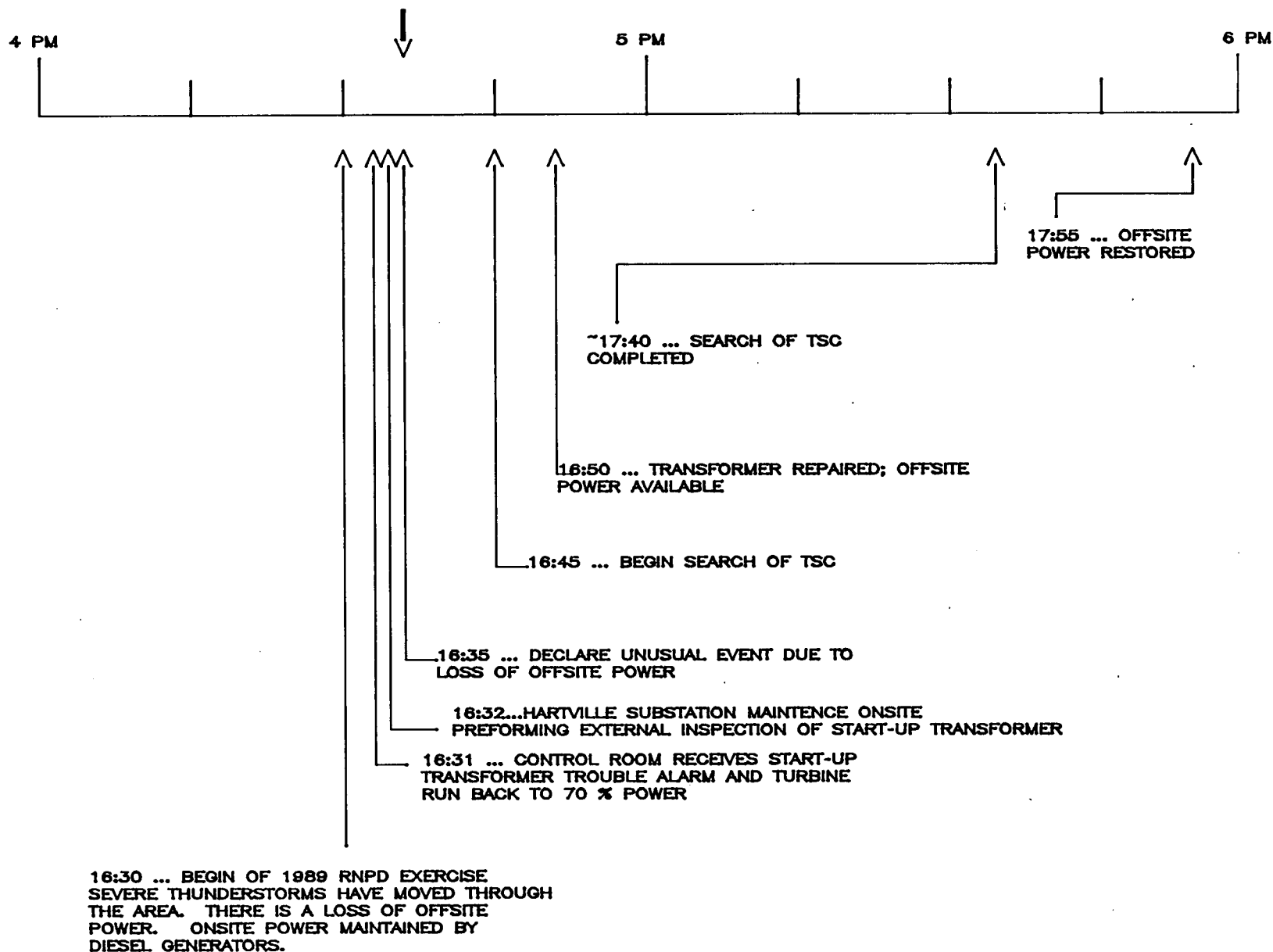
During the evacuation of the site, three people will be missing. After the GE has been declared, someone in the TSC will become ill due to diabetic shock at about 1140.

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.

# 1989 RNPD EXERCISE TIMELINE .... CHART #1

## UNUSUAL EVENT



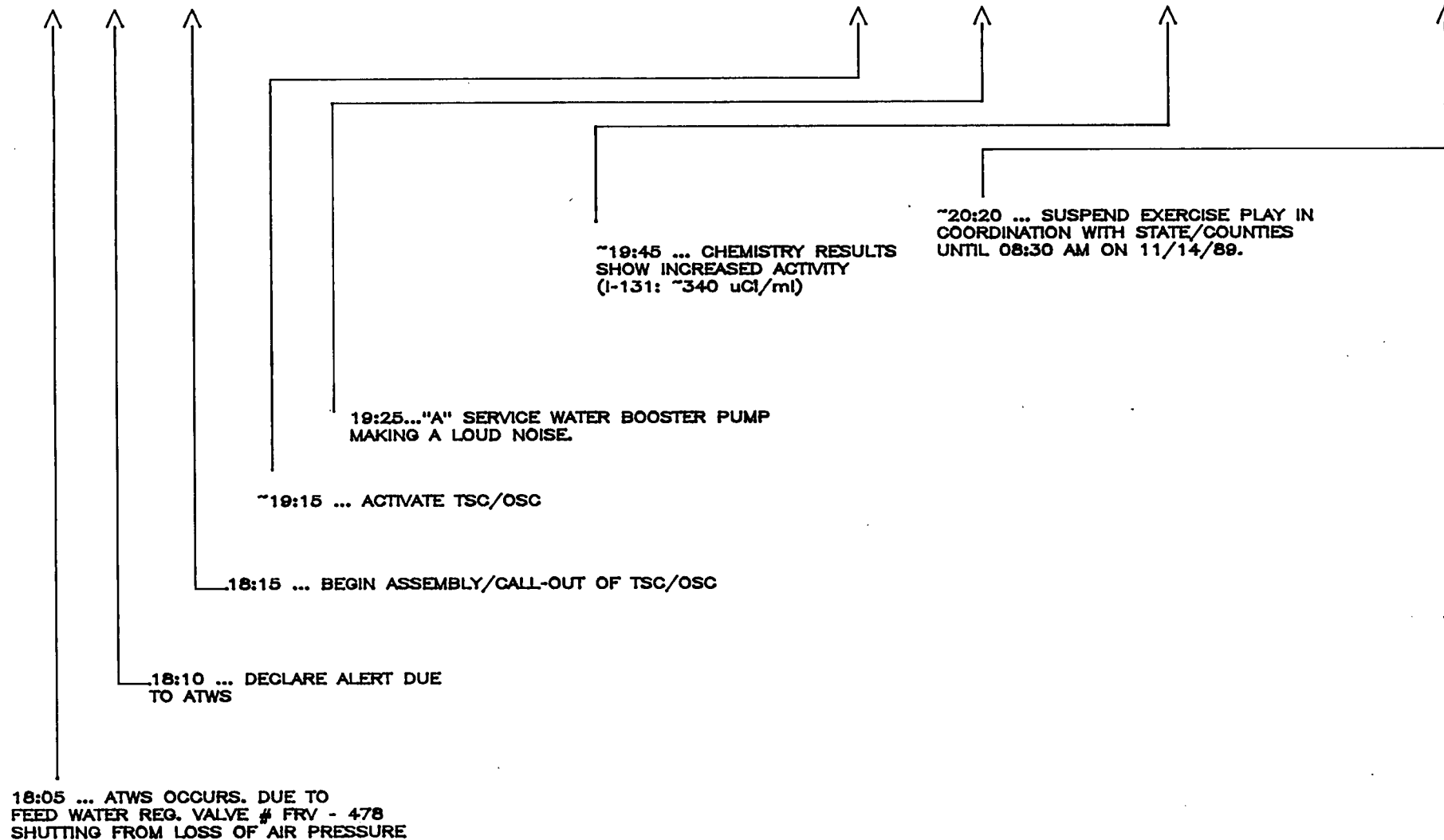
# 1989 RNPD EXERCISE TIMELINE ... CHART #2

## ALERT

6 PM

7 PM

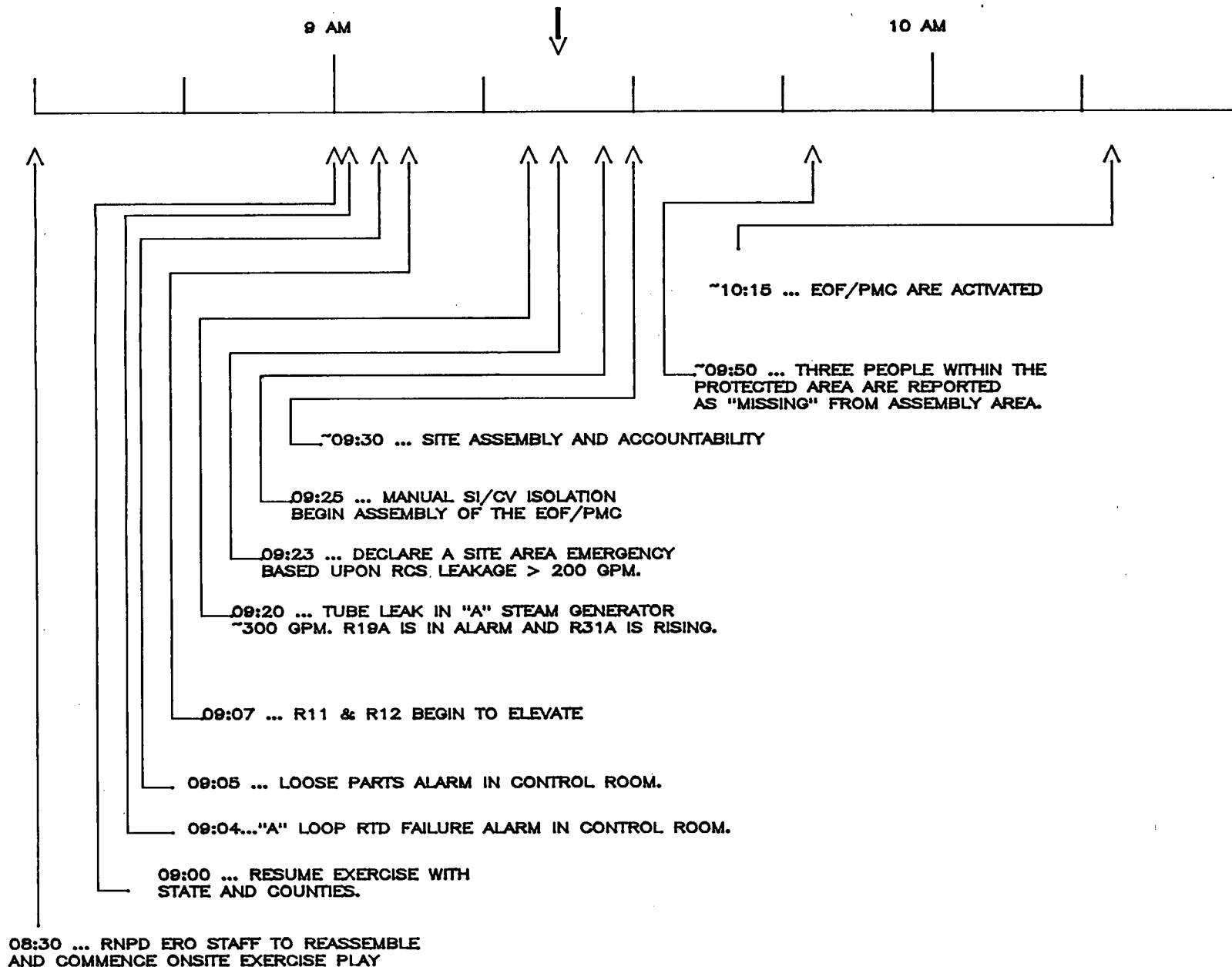
8 PM



RNPD89F2

# 1989 RNPDP EXERCISE TIMELINE ... CHART #3

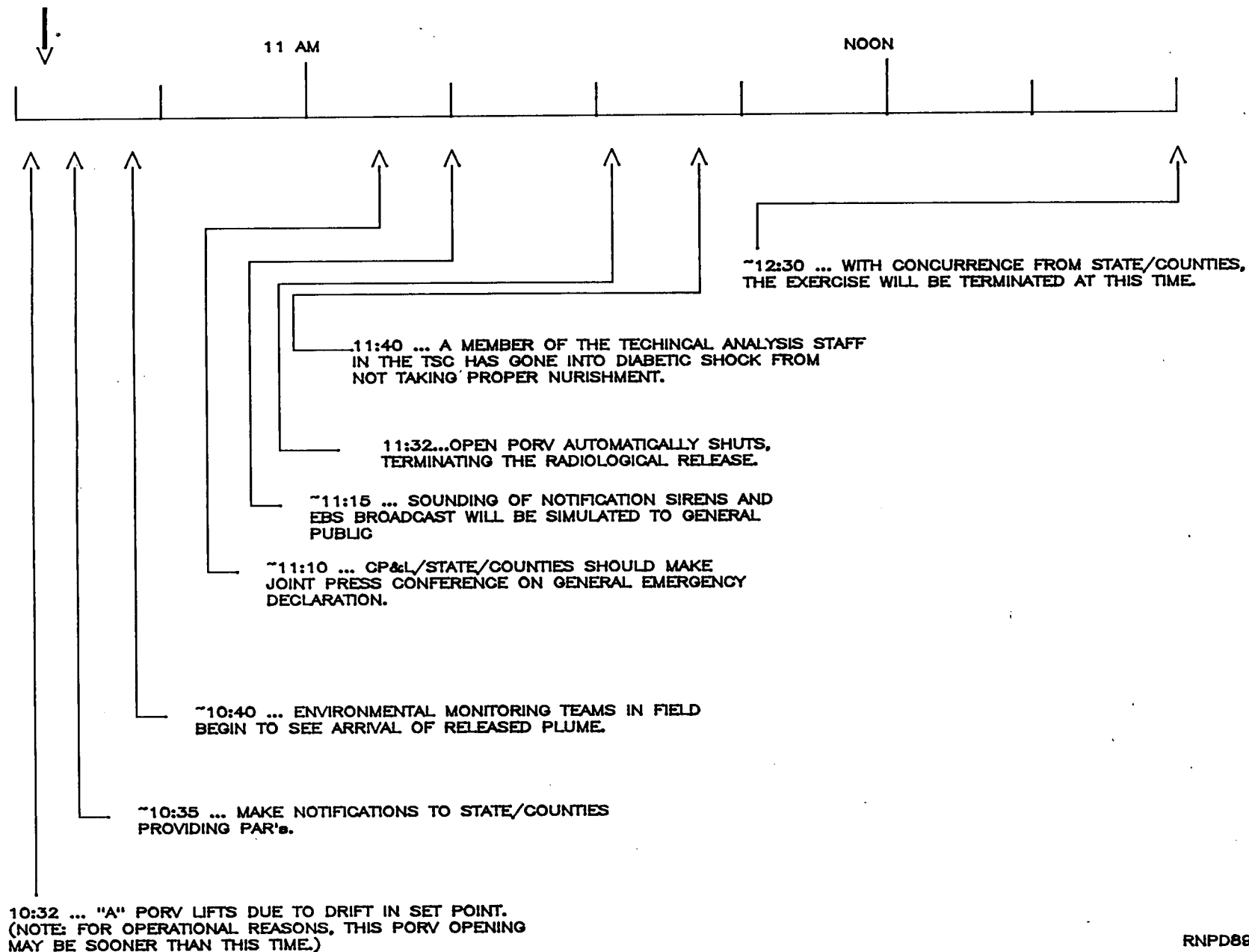
## SITE AREA EMERGENCY



RNPDP89F3

# 1989 RNPD EXERCISE TIMELINE ... CHART #4

## GENERAL EMERGENCY



RNPD89F4

CAROLINA POWER AND LIGHT COMPANY  
ROBINSON NUCLEAR PROJECT DEPARTMENT

1989 EMERGENCY PREPAREDNESS  
ANNUAL EXERCISE

3.1 MESSAGES

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 NOT FUNCTIONAL AND THAT SIRENS #35 AND #40 IN LEE COUNTY WERE NOT 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



CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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.

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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.

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

RNPD  
PLANT

MESSAGE NO.            CONTINGENCY            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.

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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.

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

RNPD  
PLANT

MESSAGE NO. 4

DATE: NOVEMBER 13, 1989

TIME: 16:37

MESSAGE 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).

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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.

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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

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

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:



CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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  $\neq$  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  $\neq$  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.

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

RNPD  
PLANT

MESSAGE NO. 7

DATE: NOVEMBER 13, 1989

TIME: 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.

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

RNPD  
PLANT

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 information 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

NREC RNPD ERO NOTIFICATION MESSAGE AND CALLOUT CHECKLIST

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

Hello, my name is \_\_\_\_\_,

XXX 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 TONIGHT.

OR

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

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

TSC/EOF Set Up Team Leader	Home Phone	Time Contacted (am/pm)
Debbie Hancock	332-4240	_____
Susan Wallace	332-2158	_____
Mike Morrow	1-484-6159	_____
NREC "B"		
Tonda McLeod	1-335-8594	_____
Glory Huckabee	332-9536	_____
Kim Winburn	383-6002	_____
NREC "C"		
Eileen Welch Jones	332-4327	_____
Fran Melton	*383-6980	_____
NREC "D"		
Valerie Frazier Haynesworth	383-6853	_____
Joye Howard	332-9060	_____
NREC "E"		
Bruce Weatherford	395-2841	_____
Bob Pugh	669-3864	_____
NREC "F"		
Emmett Dixon	1-335-6450	_____
Toni Gainey	*332-3163	_____

\* Unlisted Number

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.

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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.

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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.

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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:

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

RNPD  
PLANT

MESSAGE NO. 8

DATE: NOVEMBER 13, 1989

TIME: 18:50 OR  
(UPON ARRIVAL AT  
CABINET 59)

MESSAGE FOR: I&C TECHNICIAN

FROM: DAMAGE TEAM #2 CONTROLLER

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.
- 2) UPON OBSERVING THE CABINET, PROVIDE THE ATTACHED CABINET VIEW.
- 3) NO CORRECTIVE ACTION WILL CORRECT PROBLEM.
- 4) REPLACE 2 RELAYS
- 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.



REACTOR PROTECTION RACK RELAY POSITIONS  
RACK 56 AND 59 FRONT

15:45 THURSDAY, AUGUST 10, 1989

1

SCN:89-3354  
RNP-89-03-R1

POS01	POS02	POS03	POS04	POS05	POS06	POS07	POS08
	2	3 I/N-47A-X (I/N-47B-X) BF66F	4 PRB-1 (PRB-1) NBFD66S	5 PRB-2 (PRB-2) NBFD66S	6 NC-44P-X (NC-44P-X) BF66F	7	8
9 P10-1 (P10-1)	10 P10-2 (P10-2)	11 P7-1 (P7-1)	12 P7-2 (P7-2)	13	14	15	16
17 NC-44M-X (NC-44M-X) BF66F	18	19 PC447E1-X (PC447E1-X) BF66F	20 NC-44N-X (NC-44N-X) BF66F	21 NC-44K-X (NC-44K-X) BF66F	22 I/N-44K-X (I/N-44K-X) BF66F	23	24
	26 NC-44R-X (NC-44R-X) BF66F	27	28	29	30	31	32
	34	35	36 FC478A2-X (FC478A2-X) BF66F	37 FC488A2-X (FC488A2-X) BF66F	38 FC498A2-X (FC498A2-X) BF66F	39	40
	42	43	44	45 (447E2-X) BF66F	46	47	48
49 RT-1 (RT-1) NBFD31S	50 RT-2 (RT-2) NBFD31S	51 RT-3 (RT-3) NBFD31S	52 RT-4 (RT-4) NBFD31S	53 RT-5 (RT-5) NBFD31S	54 RT-6 (RT-6) NBFD31S	55 RT-7 (RT-7) NBFD31S	56 RT-8 (RT-8) NBFD31S
65	58	59	60	61	62	63	64
	66	67	68	69	70	71	72

3.1-15

REACTOR PROTECTION RACK RELAY POSITIONS  
RACK 56 AND 59 FRONT

15:45 THURSDAY, AUGUST 10, 1989

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

POS01	POS02	POS03	POS04	POS05	POS06	POS07	POS08
	2	3 I/N-47A-X (I/N-47B-X) BF66F	4 PRB-1 (PRB-1) NBFD66S	5 PRB-2 (PRB-2) NBFD66S	6 NC-44P-X (NC-44P-X) BF66F	7	8
9 P10-1 (P10-1)	10 P10-2 (P10-2)	11 P7-1 (P7-1)	12 P7-2 (P7-2)	13	14	15	16
17 <i>OUT</i> NC-44M-X (NC-44M-X) BF66F	18	19 PC447E1-X (PC447E1-X) BF66F	20 NC-44N-X (NC-44N-X) BF66F	21 NC-44K-X (NC-44K-X) BF66F	22 I/N-44K-X (I/N-44K-X) BF66F	23	24
	26 <i>OUT</i> NC-44R-X (NC-44R-X) BF66F	27	28	29	30	31	32
	34	35	36 <i>OUT</i> FC478A2-X (FC478A2-X) BF66F	37 <i>OUT</i> FC488A2-X (FC488A2-X) BF66F	38 <i>OUT</i> FC498A2-X (FC498A2-X) BF66F	39	40
	42	43	44	45 <i>OUT</i> (447E2-X) BF66F	46	47	48
49 <i>OUT</i> RT-1 (RT-1) NBFD31S	50 <i>OUT</i> RT-2 (RT-2) NBFD31S	51 <i>IN</i> RT-3 (RT-3) NBFD31S	52 <i>OUT</i> RT-4 (RT-4) NBFD31S	53 <i>OUT</i> RT-5 (RT-5) NBFD31S	54 <i>OUT</i> RT-6 (RT-6) NBFD31S	55 <i>OUT</i> RT-7 (RT-7) NBFD31S	56 <i>IN</i> RT-8 (RT-8) NBFD31S
65	58	59	60	61	62	63	64
	66	67	68	69	70	71	72

DET #2 1830

3.1-16

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

RNPD  
PLANT

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

3.1-17

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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:

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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.

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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.

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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.



CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

RNPD  
PLANT

MESSAGE NO. 14                      DATE: NOVEMBER 13, 1989                      TIME: ~20:20

MESSAGE FOR: ALL PLAYERS

FROM: ALL CONTROLLERS

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:

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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 08:30 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.

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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:

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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:

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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:

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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

NOTE: IN COMPARISON, LOOP 2 AND LOOP 3 INSTRUMENTS READ 0°F ON  $\Delta T$  AND 546°  
ON TAVG.

---

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

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

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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.

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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



CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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.

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

RNPD  
PLANT

CONTINGENCY  
MESSAGE NO. G DATE: NOVEMBER 14, 1989 TIME: 09:25

MESSAGE FOR: SHIFT FOREMAN

FROM: LEAD CONTROL ROOM CONTROLLER

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

- YOU HAVE INITIATED MANUAL SI.

---

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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:

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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.

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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.

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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:

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

RNPD  
PLANT

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:

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

RNPD  
PLANT

MESSAGE NO. 24a

DATE: NOVEMBER 14, 1989

TIME: AFTER  
COMPLETION OF  
ACCOUNTABILITY

MESSAGE FOR: SITE EMERGENCY COORDINATOR

FROM: LEAD TSC CONTROLLER

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



CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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.)

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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.

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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:

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

RNPD  
PLANT

CONTINGENCY  
MESSAGE NO. J DATE: NOVEMBER 14, 1989 TIME: 10:42  
MESSAGE FOR: SITE EMERGENCY COORDINATOR - TSC  
FROM: TSC CONTROLLER  
MESSAGE/SIMULATED PLANT CONDITIONS: "THIS IS AN EXERCISE MESSAGE"

A GENERAL EMERGENCY SHOULD HAVE BEEN DECLARED BASED UPON  
"A" PORV FAILED OPEN.

---

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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.

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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



CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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.

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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:

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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:

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

RNPD  
PLANT

MESSAGE NO. 34

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"

- 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:

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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:

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

RNPD  
PLANT

CONTINGENCY  
MESSAGE NO. K DATE: NOVEMBER 14, 1989 TIME: 11:01

MESSAGE FOR: SHIFT FOREMAN

FROM: LEAD CONTROL ROOM CONTROLLER

MESSAGE/SIMULATED PLANT CONDITIONS: "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:

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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:

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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:



CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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:

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

RNPD  
PLANT

CONTINGENCY  
MESSAGE NO. M DATE: NOVEMBER 14, 1989 TIME: 11:32  
MESSAGE 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:

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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:

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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).

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

RNPD  
PLANT

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, SIMULATE THE CALL FOR THE AMBULANCE AND SIMULATE 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

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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 "MEDICAL ALERT" 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 AND NOTIFICATION TO SECURITY, "PLAYERS" WILL BE ALLOWED TO TAKE VICTIM THROUGH DOUBLE DOORS OF TSC TO EOF OUTSIDE DOORS.

SCN: 89-3354  
RNPD-89-03-RO

3.1-57

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

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.

---

FOR CONTROLLER USE ONLY

ACTIONS EXPECTED:

CAROLINA POWER & LIGHT COMPANY  
EXERCISE MESSAGE/DRILL CARD

RNPD  
PLANT

MESSAGE NO. 41                      DATE: NOVEMBER 14, 1989                      TIME: ~12:30

MESSAGE FOR: ALL PLAYERS

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:



CAROLINA POWER AND LIGHT COMPANY  
ROBINSON NUCLEAR PROJECT DEPARTMENT

1989 EMERGENCY PREPAREDNESS  
ANNUAL EXERCISE

3.2 PLANT PARAMETERS AND GRAPHS

## SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

## EMERGENCY CLASSIFICATION (CIRCLE)

NOTIFICATION OF UNUSUAL EVENT

ALERT

SITE AREA EMERGENCY

GENERAL EMERGENCY

Date: NOV. 13, 1989

Time: 16:30

Completed By:

## ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 12.9  
 LOWER (MPH) 7.3  
 WIND DIR. UPPER (° FROM) 225  
 LOWER (° FROM) 189  
 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) .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

R-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

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  
 R-36 PLT VNT GAS (HI) (MR/HR) 14  
 R-37 CONDENSATE POLISHER (CPM) OOS

## CONTAINMENT STATUS

PRESSURE (PSIG) .2  
 TEMPERATURE (°F) 121  
 HYDROGEN CONC. (%) .01  
 SUMP LEVEL (INCHES) .2  
 RWST LEVEL (%) 91

## PRIMARY SYSTEM

RCS PRESSURE (PSIG) 2225  
 PZR LEVEL (%) 53  
 TAVE (°F) 575  
 LOOP A TH (°F) 604  
 TC (°F) 547  
 ΔT 57  
 LOOP B TH (°F) 604  
 TC (°F) 547  
 ΔT 57  
 LOOP C TH (°F) 604  
 TC (°F) 547  
 ΔT 57

SUBCOOLING (°F) 49  
 CHRNGG FLOW (GPM) 29  
 LETDOWN FLOW (GPM) 37  
 REACTOR POWER 99.4  
 ACTIVITY:  
 GROSS (uCi/ml) 1.60E-01  
<sup>131</sup>I (uCi/ml) 2.16E-03

## SECONDARY SYSTEM

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

## ENGINEERED SAFETY FEATURES

SI ACTUATED: TIME  
 RESET: TIME  
 CS ACTUATED: TIME  
 RESET: TIME  
 CONT. ISO. A ACTUATED: TIME  
 RESET: TIME  
 CONT. ISO. B ACTUATED: TIME  
 RESET: TIME  
 SPRAY ADD TANK LEVEL (%) 67  
 SI COLD-LEG FLOW (GPM) 0  
 SI HOT-LEG INJECT START 0

## EQUIPMENT STATUS

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

## PRIMARY

	A	O	B	O	C	O
RCP	A	O	B	O	C	O
CHG PUMP	A	A	B	A	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

## SECONDARY

	A	O	B	O	C	O
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

	A	A	B	A
EDG	A	A	B	A
DS/DG		N		
OFFSITE		E		
EMER. BUS E1		E		E
E2				E
FANS				
HVE 1A		A	1B	A
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

Date: NOV. 13, 1989

Time: 16:45

Completed By: \_\_\_\_\_

## 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

R-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

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  
 R-36 PLT VNT GAS (HI) (MR/HR) 14  
 R-37 CONDENSATE POLISHER (CPM) OOS

## 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  
 ΔT 44  
 LOOP B TH (°F) 594  
 TC (°F) 547  
 ΔT 44  
 LOOP C TH (°F) 592  
 TC (°F) 548  
 ΔT 44

SUBCOOLING (°F) 54  
 CHRNGG FLOW (GPM) 0  
 LETDOWN FLOW (GPM) 36  
 REACTOR POWER 73  
 ACTIVITY:  
 GROSS (uCi/ml) 1.60E-01  
<sup>131</sup>I (uCi/ml) 2.16E-03

## SECONDARY SYSTEM

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

## 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

	A	O	B	O	C	O
RCP	A	O	B	O	C	O
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	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	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	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

Date: NOV. 13, 1989

Time: 17:00

Completed By: \_\_\_\_\_

## 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

R-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 (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
R-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

RCS PRESSURE (PSIG)	2116
PZR LEVEL (%)	.47
TAVE (°F)	565
LOOP A TH (°F)	594
TC (°F)	547
ΔT	44
LOOP B TH (°F)	594
TC (°F)	547
ΔT	44
LOOP C TH (°F)	592
TC (°F)	548
ΔT	44

SUBCOOLING (°F)	54
CHRGNG FLOW (GPM)	0
LETDOWN FLOW (GPM)	36
REACTOR POWER	73
ACTIVITY:	
GROSS (uCi/ml)	1.60E-01
<sup>131</sup> I (uCi/ml)	2.16E-03

## SECONDARY SYSTEM

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

## ENGINEERED SAFETY FEATURES

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

## EQUIPMENT STATUS

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

## PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	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

## 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

## ELECTRICAL

EDG A	A	B	O
DS/DG	N		
OFFSITE	N		

EMER. BUS E1	E	E2	E
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## FANS

HVE 1A	A	1B	A
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

Date: NOV. 13, 1989

Time: 17:15

Completed By: \_\_\_\_\_

## 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

R-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

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
R-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
ΔT	44
LOOP B TH (°F)	594
TC (°F)	547
ΔT	44
LOOP C TH (°F)	592
TC (°F)	548
ΔT	44

SUBCOOLING (°F)	54
CHRGNG FLOW (GPM)	0
LETDOWN FLOW (GPM)	36
REACTOR POWER	73
ACTIVITY:	
GROSS (uCi/ml)	1.60E-01
<sup>131</sup> I (uCi/ml)	2.16E-03

## SECONDARY SYSTEM

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

## ENGINEERED SAFETY FEATURES

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

## EQUIPMENT STATUS

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

## PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	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

## 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

## 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	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

Date: NOV. 13, 1989

Time: 17:30

Completed By: \_\_\_\_\_

## 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

R-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)	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
R-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
ΔT	44
LOOP B TH (°F)	594
TC (°F)	547
ΔT	44
LOOP C TH (°F)	592
TC (°F)	548
ΔT	44

SUBCOOLING (°F)	54
CHRGNG FLOW (GPM)	0
LETDOWN FLOW (GPM)	36
REACTOR POWER	73
ACTIVITY:	
GROSS (uCi/ml)	1.60E-01
<sup>131</sup> I (uCi/ml)	2.16E-03

## SECONDARY SYSTEM

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

## ENGINEERED SAFETY FEATURES

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

## EQUIPMENT STATUS

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

## PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	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

## 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

## 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	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

Date: NOV. 13, 1989

Time: 17:45

Completed By: \_\_\_\_\_

## 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

R-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

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  
 R-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  
 ΔT 44  
 LOOP B TH (°F) 594  
 TC (°F) 547  
 ΔT 44  
 LOOP C TH (°F) 592  
 TC (°F) 548  
 ΔT 44

SUBCOOLING (°F) 54  
 CHRGNG FLOW (GPM) 0  
 LETDOWN FLOW (GPM) 36  
 REACTOR POWER 73

## ACTIVITY:

GROSS (uCi/ml) 1.60E-01  
<sup>131</sup>I (uCi/ml) 2.16E-03

## SECONDARY SYSTEM

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

## ENGINEERED SAFETY FEATURES

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

## EQUIPMENT STATUS

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

## PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	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

## SECONDARY

FEED PUMP	A	O	B	O
COND PUMP	A <td>O <td>B <td>O</td> </td></td>	O <td>B <td>O</td> </td>	B <td>O</td>	O
AFW MOTOR	A <td>A</td> <td>B</td> <td>A</td>	A	B	A
AFW STEAM	A			
MSIV	A <td>O <td>B <td>O</td> </td></td>	O <td>B <td>O</td> </td>	B <td>O</td>	O
				C

## ELECTRICAL

EDG	A	A	B	O
DS/DG		N		
OFFSITE		N		
EMER. BUS E1		E		E
			E2	E

## FANS

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

Date: NOV. 13, 1989

Time: 18:00

Completed By: \_\_\_\_\_

## 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

R-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

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
R-36 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	OOS

## 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
ΔT	44
LOOP B TH (°F)	594
TC (°F)	547
ΔT	44
LOOP C TH (°F)	592
TC (°F)	548
ΔT	44

SUBCOOLING (°F)	54
CHRGNG FLOW (GPM)	0
LETDOWN FLOW (GPM)	36
REACTOR POWER	73
ACTIVITY:	
GROSS (uCi/ml)	1.60E-01
<sup>131</sup> I (uCi/ml)	2.16E-03

## SECONDARY SYSTEM

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

## ENGINEERED SAFETY FEATURES

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

## EQUIPMENT STATUS

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

## PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	A	B	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

## 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	E		

EMER. BUS E1	E	E2	E
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## FANS

HVE 1A	A	1B	A
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

Date: NOV. 13, 1989

Time: 18:15

Completed By:

## 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 0

## 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) 1.2K  
 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

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  
 R-36 PLT VNT GAS (HI) (MR/HR) 14  
 R-37 CONDENSATE POLISHER (CPM) OOS

## CONTAINMENT STATUS

PRESSURE (PSIG) .3  
 TEMPERATURE (°F) 125  
 HYDROGEN CONC. (%) .01  
 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  
 ΔT 3  
 LOOP B TH (°F) 550  
 TC (°F) 548  
 ΔT 2  
 LOOP C TH (°F) 549  
 TC (°F) 547  
 ΔT 2

SUBCOOLING (°F) 99  
 CHRNG FLOW (GPM) 24  
 LETDOWN FLOW (GPM) 36  
 REACTOR POWER 0  
 ACTIVITY:  
 GROSS (uCi/ml) 9.56E+02  
<sup>131</sup>I (uCi/ml) 3.55E+02

## SECONDARY SYSTEM

S/G A LEV.-WR (%) 31  
 PRESS (PSIG) 990  
 FEED (PPH) 0  
 STEAM (PPH) 0  
 ACT. (uCi/ml) 0  
 S/G B LEV.-WR (%) 57  
 PRESS (PSIG) 990  
 FEED (PPH) 0  
 STEAM (PPH) 0  
 ACT. (uCi/ml) 0  
 S/G C LEV.-WR (%) 57  
 PRESS (PSIG) 990  
 FEED (PPH) 0  
 STEAM (PPH) 0  
 ACT. (uCi/ml) 0

## ENGINEERED SAFETY FEATURES

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

## EQUIPMENT STATUS

N = NOT AVAILABLE

A = AVAILABLE (NOT OPERATING)

O = OPERATING

E = ENERGIZED

## PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	A	B	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

## 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

## 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	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

Date: NOV. 13, 1989

Time: 18:30

Completed By:

## ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 17.8  
 LOWER (MPH) 11.9  
 WIND DIR. UPPER (° FROM) 233  
 LOWER (° FROM) 210  
 AIR TEMPERATURE (°F) 58  
 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) 1.2K  
 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

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  
 R-36 PLT VNT GAS (HI) (MR/HR) 14  
 R-37 CONDENSATE POLISHER (CPM) OOS

## 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  
 ΔT 3  
 LOOP B TH (°F) 550  
 TC (°F) 548  
 ΔT 2  
 LOOP C TH (°F) 549  
 TC (°F) 547  
 ΔT 2

SUBCOOLING (°F) 99  
 CHRNGG FLOW (GPM) 24  
 LETDOWN FLOW (GPM) 36  
 REACTOR POWER 0  
 ACTIVITY:  
 GROSS (uCi/ml) 9.34E+02  
<sup>131</sup>I (uCi/ml) 3.50E+02

## SECONDARY SYSTEM

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

## ENGINEERED SAFETY FEATURES

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

## EQUIPMENT STATUS

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

## PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	A	B	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

## SECONDARY

FEED PUMP	A	O	B	A
COND PUMP	A <td>O <td>B <td>A</td> </td></td>	O <td>B <td>A</td> </td>	B <td>A</td>	A
AFW MOTOR	A <td>O <td>B <td>O</td> </td></td>	O <td>B <td>O</td> </td>	B <td>O</td>	O
AFW STEAM	O			
MSIV	A <td>O <td>B <td>O</td> </td></td>	O <td>B <td>O</td> </td>	B <td>O</td>	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	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

Date: NOV. 13, 1989

Time: 18:45

Completed By: \_\_\_\_\_

## 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

R-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

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
R-36 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	OOS

## 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
ΔT	3
LOOP B TH (°F)	550
TC (°F)	548
ΔT	2
LOOP C TH (°F)	549
TC (°F)	547
ΔT	2

SUBCOOLING (°F)	98.6
CHRGNG FLOW (GPM)	24
LETDOWN FLOW (GPM)	36
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	9.14E+02
<sup>131</sup> I (uCi/ml)	3.45E+02

## SECONDARY SYSTEM

S/G A LEV.-WR (%)	63
PRESS (PSIG)	990
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G B LEV.-WR (%)	68
PRESS (PSIG)	990
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEV.-WR (%)	68
PRESS (PSIG)	990
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0

## ENGINEERED SAFETY FEATURES

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

## EQUIPMENT STATUS

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

## PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	A	B	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

## SECONDARY

FEED PUMP A	O	B	A
COND PUMP A	O	B	A
AFW MOTOR A	O	B	O
AFW STEAM	A		
MSIV A	O	B	O
			C

## 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	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

Date: NOV. 13, 1989

Time: 19:00

Completed By: \_\_\_\_\_

## 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

R-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

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  
 R-36 PLT VNT GAS (HI) (MR/HR) 14  
 R-37 CONDENSATE POLISHER (CPM) OOS

## 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  
 ΔT 3  
 LOOP B TH (°F) 550  
 TC (°F) 548  
 ΔT 2  
 LOOP C TH (°F) 549  
 TC (°F) 547  
 ΔT 2

SUBCOOLING (°F) 98.6  
 CHRNGG FLOW (GPM) 24  
 LETDOWN FLOW (GPM) 36  
 REACTOR POWER 0  
 ACTIVITY:  
 GROSS (uCi/ml) 8.95E+02  
 I<sup>131</sup> (uCi/ml) 3.41E+02

## SECONDARY SYSTEM

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

## ENGINEERED SAFETY FEATURES

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

## EQUIPMENT STATUS

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

## PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	A	B	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

## SECONDARY

FEED PUMP	A	O	B	A
COND PUMP	A <td>O <td>B <td>A</td> </td></td>	O <td>B <td>A</td> </td>	B <td>A</td>	A
AFW MOTOR	A <td>A</td> <td>B</td> <td>A</td>	A	B	A
AFW STEAM	A			
MSIV	A <td>O <td>B <td>O</td> </td></td>	O <td>B <td>O</td> </td>	B <td>O</td>	O
				C

## 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	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

Date: NOV. 13, 1989

Time: 19:15

Completed By: \_\_\_\_\_

## 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

R-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

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  
 R-36 PLT VNT GAS (HI) (MR/HR) 14  
 R-37 CONDENSATE POLISHER (CPM) OOS

## 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  
 ΔT 3  
 LOOP B TH (°F) 550  
 TC (°F) 548  
 ΔT 2  
 LOOP C TH (°F) 549  
 TC (°F) 547  
 ΔT 2

SUBCOOLING (°F) 98.6  
 CHRNGG FLOW (GPM) 24  
 LETDOWN FLOW (GPM) 36  
 REACTOR POWER 0

## ACTIVITY:

GROSS (uCi/ml) 8.78E+02  
<sup>131</sup>I (uCi/ml) 3.37E+02

## SECONDARY SYSTEM

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

## ENGINEERED SAFETY FEATURES

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

## EQUIPMENT STATUS

N = NOT AVAILABLE

A = AVAILABLE (NOT OPERATING)

O = OPERATING

E = ENERGIZED

## PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	A	B	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	O	2	O	3	O	4

## 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		A	1B		A
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

Date: NOV. 13, 1989

Time: 19:30

Completed By: \_\_\_\_\_

## ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	14.4
LOWER (MPH)	9.1
WIND DIR. UPPER (° FROM)	239
LOWER (° FROM)	216
AIR TEMPERATURE (°F)	57
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-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)	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
R-36 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)	2240
PZR LEVEL (%)	22
TAVE (°F)	547
LOOP A TH (°F)	550
TC (°F)	547
ΔT	3
LOOP B TH (°F)	550
TC (°F)	548
ΔT	2
LOOP C TH (°F)	549
TC (°F)	547
ΔT	2

SUBCOOLING (°F)	98.6
CHRGNG FLOW (GPM)	24
LETDOWN FLOW (GPM)	36
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	8.63E+02
<sup>131</sup> I (uCi/ml)	3.33E+02

## SECONDARY SYSTEM

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

## ENGINEERED SAFETY FEATURES

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

## EQUIPMENT STATUS

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

## PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	A	B	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

## 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

## 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	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

Date: NOV. 13, 1989

Time: 19:45

Completed By: \_\_\_\_\_

## ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	13.1
LOWER (MPH)	9.3
WIND DIR. UPPER (° FROM)	243
LOWER (° FROM)	219
AIR TEMPERATURE (°F)	56
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-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 EJECT. (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

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
R-36 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	OOS

## CONTAINMENT STATUS

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

## PRIMARY SYSTEM

RCS PRESSURE (PSIG)	2240
PZR LEVEL (%)	22
TAVE (°F)	547
LOOP A TH (°F)	550
TC (°F)	547
ΔT	3
LOOP B TH (°F)	550
TC (°F)	548
ΔT	2
LOOP C TH (°F)	549
TC (°F)	547
ΔT	2

SUBCOOLING (°F)	98.6
CHRGNG FLOW (GPM)	24
LETDOWN FLOW (GPM)	36
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	8.48E+02
<sup>131</sup> I (uCi/ml)	3.30E+02

## SECONDARY SYSTEM

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

## ENGINEERED SAFETY FEATURES

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

## EQUIPMENT STATUS

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

## PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	A	B	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

## 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

## ELECTRICAL

EDG	A	A	B	A
DS/DG	N			
OFFSITE	E			

EMER. BUS E1	E	E2	E
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## FANS

HVE 1A	A	1B	A
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

Date: NOV. 13, 1989

Time: 20:00

Completed By: \_\_\_\_\_

## ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	16.6
LOWER (MPH)	11.0
WIND DIR. UPPER (° FROM)	242
LOWER (° FROM)	227
AIR TEMPERATURE (°F)	56
PASQUILL STAB. FACTOR	C

## 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-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)	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
R-36 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	OOS

## 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
ΔT	3
LOOP B TH (°F)	550
TC (°F)	548
ΔT	2
LOOP C TH (°F)	549
TC (°F)	547
ΔT	2

SUBCOOLING (°F)	98.6
CHRGNG FLOW (GPM)	24
LETDOWN FLOW (GPM)	36
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	8.40E+02
<sup>131</sup> I (uCi/ml)	3.28E+02

## SECONDARY SYSTEM

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

## ENGINEERED SAFETY FEATURES

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

## EQUIPMENT STATUS

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

## PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	A	B	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

## 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

## ELECTRICAL

EDG	A	A	B	A
DS/DG		N		
OFFSITE		E		
EMER. BUS E1		E		E
			E2	E

## FANS

HVE 1A		A	1B		A
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

Date: NOV. 13, 1989

Time: 20:15

Completed By: \_\_\_\_\_

## ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 16.4  
 LOWER (MPH) 12.1  
 WIND DIR. UPPER (° FROM) 243  
 LOWER (° FROM) 216  
 AIR TEMPERATURE (°F) 55  
 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) 1.2K  
 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

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  
 R-36 PLT VNT GAS (HI) (MR/HR) 14  
 R-37 CONDENSATE POLISHER (CPM) OOS

## 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  
 ΔT 3  
 LOOP B TH (°F) 550  
 TC (°F) 548  
 ΔT 2  
 LOOP C TH (°F) 549  
 TC (°F) 547  
 ΔT 2

SUBCOOLING (°F) 98.6  
 CHRGNG FLOW (GPM) 24  
 LETDOWN FLOW (GPM) 36  
 REACTOR POWER 0  
 ACTIVITY:  
 GROSS (uCi/ml) 8.35E+02  
<sup>131</sup>I (uCi/ml) 3.24E+02

## SECONDARY SYSTEM

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

## ENGINEERED SAFETY FEATURES

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

## EQUIPMENT STATUS

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

## PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	A	B	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

## SECONDARY

FEED PUMP	A	O	B	A
COND PUMP	A <td>O <td>B <td>A</td> </td></td>	O <td>B <td>A</td> </td>	B <td>A</td>	A
AFW MOTOR	A <td>A</td> <td>B</td> <td>A</td>	A	B	A
AFW STEAM	A			
MSIV	A <td>O <td>B <td>O</td> </td></td>	O <td>B <td>O</td> </td>	B <td>O</td>	O
				C

## 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	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

Date: NOV. 13, 1989

Time: 20:30

Completed By: \_\_\_\_\_

## ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 18.8  
 LOWER (MPH) 11.9  
 WIND DIR. UPPER (° FROM) 244  
 LOWER (° FROM) 222  
 AIR TEMPERATURE (°F) 56  
 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) 1.2K  
 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

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  
 R-36 PLT VNT GAS (HI) (MR/HR) 14  
 R-37 CONDENSATE POLISHER (CPM) OOS

## 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  
 ΔT 3  
 LOOP B TH (°F) 550  
 TC (°F) 548  
 ΔT 2  
 LOOP C TH (°F) 549  
 TC (°F) 547  
 ΔT 2

SUBCOOLING (°F) 98.6  
 CHRGNG FLOW (GPM) 24  
 LETDOWN FLOW (GPM) 36  
 REACTOR POWER 0  
 ACTIVITY:  
 GROSS (uCi/ml) 8.35E+02  
<sup>131</sup>I (uCi/ml) 8.24E+02

## SECONDARY SYSTEM

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

## ENGINEERED SAFETY FEATURES

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

## EQUIPMENT STATUS

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

## PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	A	B	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

## SECONDARY

FEED PUMP	A	O	B	A
COND PUMP	A <td>O <td>B <td>A</td> </td></td>	O <td>B <td>A</td> </td>	B <td>A</td>	A
AFW MOTOR	A <td>A</td> <td>B</td> <td>A</td>	A	B	A
AFW STEAM	A			
MSIV	A <td>O <td>B <td>O</td> </td></td>	O <td>B <td>O</td> </td>	B <td>O</td>	O
				C

## ELECTRICAL

EDG	A	A	B	A
DS/DG		N		
OFFSITE		E		
EMER. BUS E1		E		E
			E2	E
FANS				
HVE 1A		A	1B	A
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

Date: NOV. 13, 1989

Time: 20:45

Completed By: \_\_\_\_\_

## ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 12.1  
 LOWER (MPH) 6.9  
 WIND DIR. UPPER (° FROM) 245  
 LOWER (° FROM) 225  
 AIR TEMPERATURE (°F) 56  
 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) 1.2K  
 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

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  
 R-36 PLT VNT GAS (HI) (MR/HR) 14  
 R-37 CONDENSATE POLISHER (CPM) OOS

## CONTAINMENT STATUS

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

## PRIMARY SYSTEM

RCS PRESSURE (PSIG) 2240  
 PZR LEVEL (%) 22  
 TAVE (°F) 547  
 LOOP A TH (°F) 550  
 TC (°F) 547  
 ΔT 3  
 LOOP B TH (°F) .550  
 TC (°F) 548  
 ΔT 2  
 LOOP C TH (°F) 549  
 TC (°F) 547  
 ΔT 2

SUBCOOLING (°F) 98.6  
 CHRNGG FLOW (GPM) 24  
 LETDOWN FLOW (GPM) 36  
 REACTOR POWER 0

## ACTIVITY:

GROSS (uCi/ml) 8.35E+02  
<sup>131</sup>I (uCi/ml) 3.24E+02

## SECONDARY SYSTEM

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

## ENGINEERED SAFETY FEATURES

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

## EQUIPMENT STATUS

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

## PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	A	B	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

## SECONDARY

FEED PUMP	A	O	B	A
COND PUMP	A <td>O <td>B <td>A</td> </td></td>	O <td>B <td>A</td> </td>	B <td>A</td>	A
AFW MOTOR	A <td>A</td> <td>B</td> <td>A</td>	A	B	A
AFW STEAM	A			
MSIV	A <td>O <td>B <td>O</td> </td></td>	O <td>B <td>O</td> </td>	B <td>O</td>	O
				C

## ELECTRICAL

EDG	A	A	B	A
DS/DG		N		
OFFSITE		E		
EMER. BUS E1		E		E
			E2	E

## FANS

HVE 1A	A	1B	A
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

Date: NOV. 13, 1989

Time: 21:00

Completed By: \_\_\_\_\_

## ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	7.8
LOWER (MPH)	4.9
WIND DIR. UPPER (° FROM)	239
LOWER (° FROM)	218
AIR TEMPERATURE (°F)	55
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-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)	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
R-36 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)	2230
PZR LEVEL (%)	22
TAVE (°F)	547
LOOP A TH (°F)	550
TC (°F)	547
ΔT	3
LOOP B TH (°F)	550
TC (°F)	548
ΔT	2
LOOP C TH (°F)	549
TC (°F)	547
ΔT	2

SUBCOOLING (°F)	98.6
CHRGNG FLOW (GPM)	24
LETDOWN FLOW (GPM)	36
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	8.35E+02
<sup>131</sup> I (uCi/ml)	3.24E+02

## SECONDARY SYSTEM

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

## ENGINEERED SAFETY FEATURES

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

## EQUIPMENT STATUS

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

## PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	A	B	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

## 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		A	1B		A
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

Date: NOV. 14, 1989

Time: 08:30

Completed By: \_\_\_\_\_

## 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

R-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) 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  
 R-36 PLT VNT GAS (HI) (MR/HR) 14  
 R-37 CONDENSATE POLISHER (CPM) OOS

## CONTAINMENT STATUS

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

## PRIMARY SYSTEM

RCS PRESSURE (PSIG) 2295  
 PZR LEVEL (%) 22  
 TAVE (°F) 547  
 LOOP A TH (°F) 548.3  
 TC (°F) 547  
 ΔT 1  
 LOOP B TH (°F) 548  
 TC (°F) 547  
 ΔT 1  
 LOOP C TH (°F) 548  
 TC (°F) 547  
 ΔT 1

SUBCOOLING (°F) 108  
 CHRGNG FLOW (GPM) 24  
 LETDOWN FLOW (GPM) 37  
 REACTOR POWER 0  
 ACTIVITY:  
 GROSS (uCi/ml) 8.35E+02  
<sup>131</sup>I (uCi/ml) 3.24E+02

## SECONDARY SYSTEM

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

## 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

	A	O	B	O	C	O
RCP	A	O	B	O	C	O
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

## SECONDARY

	A	O	B	A
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

## ELECTRICAL

	A	A	B	A
EDG	A	A	B	A
DS/DG			N	
OFFSITE			E	
EMER. BUS E1			E	E

## FANS

	A	1B	A
HVE 1A	A	1B	A
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

Date: NOV. 14, 1989

Time: 08:45

Completed By: \_\_\_\_\_

## ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	5.9
LOWER (MPH)	3.9
WIND DIR. UPPER (° FROM)	200
LOWER (° FROM)	193
AIR TEMPERATURE (°F)	51
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)	1.2K
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

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
R-36 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	OOS

## CONTAINMENT STATUS

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

## PRIMARY SYSTEM

RCS PRESSURE (PSIG)	2295
PZR LEVEL (%)	22
TAVE (°F)	547
LOOP A TH (°F)	548
TC (°F)	547
ΔT	1
LOOP B TH (°F)	548
TC (°F)	547
ΔT	1
LOOP C TH (°F)	548
TC (°F)	547
ΔT	1

SUBCOOLING (°F)	108
CHRGNG FLOW (GPM)	24
LETDOWN FLOW (GPM)	40
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	8.35E+02
<sup>131</sup> I (uCi/ml)	3.24E+02

## SECONDARY SYSTEM

S/G A LEV.-WR (%)	68
PRESS (PSIG)	990
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G B LEV.-WR (%)	68
PRESS (PSIG)	990
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEV.-WR (%)	68
PRESS (PSIG)	996
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0

## ENGINEERED SAFETY FEATURES

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

## EQUIPMENT STATUS

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

## PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	A	B	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	O	2	O	3	O	4
						O

## 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	A	1B	A
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

Date: NOV. 14, 1989

Time: 09:00

Completed By: \_\_\_\_\_

## 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

## PROCESS RADIATION MONITORS

R-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 "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)	OOS

## CONTAINMENT STATUS

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

## PRIMARY SYSTEM

RCS PRESSURE (PSIG)	2240
PZR LEVEL (%)	22
TAVE (°F)	547
LOOP A TH (°F)	548
TC (°F)	547
ΔT	1
LOOP B TH (°F)	548
TC (°F)	547
ΔT	1
LOOP C TH (°F)	548
TC (°F)	547
ΔT	1

SUBCOOLING (°F)	108
CHRGNG FLOW (GPM)	27
LETDOWN FLOW (GPM)	42
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	8.33E+02
I <sup>131</sup> (uCi/ml)	3.26E+02

## SECONDARY SYSTEM

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

## ENGINEERED SAFETY FEATURES

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

## EQUIPMENT STATUS

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

## PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	A	B	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

## 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		A		1B		A
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

Date: NOV. 14, 1989

Time: 09:15

Completed By: \_\_\_\_\_

## 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

## PROCESS RADIATION MONITORS

R-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-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
R-35 PLT VNT GAS (MID) (MR/HR)	<1
R-36 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	OOS

## CONTAINMENT STATUS

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

## PRIMARY SYSTEM

RCS PRESSURE (PSIG)	2240
PZR LEVEL (%)	22
TAVE (°F)	547
LOOP A TH (°F)	548
TC (°F)	547
ΔT	1
LOOP B TH (°F)	548
TC (°F)	547
ΔT	1
LOOP C TH (°F)	548
TC (°F)	547
ΔT	1

SUBCOOLING (°F)	108
CHRGNG FLOW (GPM)	45
LETDOWN FLOW (GPM)	45
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	8.16E+02
<sup>131</sup> I (uCi/ml)	3.21E+02

## SECONDARY SYSTEM

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

## ENGINEERED SAFETY FEATURES

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

## EQUIPMENT STATUS

N = NOT AVAILABLE

A = AVAILABLE (NOT OPERATING)

O = OPERATING

E = ENERGIZED

## PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	A	B	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

## 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

## 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	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

Date: NOV. 14, 1989

Time: 09:30

Completed By: \_\_\_\_\_

## 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

R-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) 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 "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) OOS

## 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  
 ΔT 3  
 LOOP B TH (°F) 540  
 TC (°F) 540  
 ΔT 3  
 LOOP C TH (°F) 540  
 TC (°F) 540  
 ΔT 4

SUBCOOLING (°F) 107  
 CHRGNG FLOW (GPM) 208  
 LETDOWN FLOW (GPM) 0  
 REACTOR POWER 0

## ACTIVITY:

GROSS (uCi/ml) 7.70E+02  
<sup>131</sup>I (uCi/ml) 3.05E+02

## SECONDARY SYSTEM

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

## 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 (%) 67  
 SI COLD-LEG FLOW (GPM)  
 SI HOT-LEG INJECT START

## EQUIPMENT STATUS

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

## PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	O	B	O	C	O
SI PUMP	A	O	B	N	C	O
CS PUMP	A	A	B	A		
RHR PUMP	A	O	B	O		
HVH 1	0	2	0	3	0	4

## SECONDARY

FEED PUMP	A	A	B	A
COND PUMP	A	O	B	A
AFW MOTOR	A	O	B	O
AFW STEAM	A			
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		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

Date: NOV. 14, 1989

Time: 09:40

Completed By: \_\_\_\_\_

## 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

R-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)	2.5E+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)	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)	1350
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
R-35 PLT VNT GAS (MID) (MR/HR)	<1
R-36 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	OOS

## 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
ΔT	6
LOOP B TH (°F)	485
TC (°F)	480
ΔT	5
LOOP C TH (°F)	486
TC (°F)	480
ΔT	6

SUBCOOLING (°F)	90
CHRGNG FLOW (GPM)	208
LETDOWN FLOW (GPM)	0
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	7.70E+02
I <sup>131</sup> (uCi/ml)	3.05E+02

## SECONDARY SYSTEM

S/G A LEV.-WR (%)	80
PRESS IG)	1010
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	14.0
S/G B LEV.-WR (%)	74
PRESS (PSIG)	575
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEV.-WR (%)	70
PRESS (PSIG)	575
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	9:32
RESET: TIME	
CONT. ISO. B ACTUATED: TIME	
RESET: TIME	
SPRAY ADD TANK LEVEL (%)	67
SI COLD-LEG FLOW (GPM)	910
SI HOT-LEG INJECT START	

## EQUIPMENT STATUS

N = NOT AVAILABLE

A = AVAILABLE (NOT OPERATING)

O = OPERATING

E = ENERGIZED

## PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	O	B	O	C	O
SI PUMP	A	O	B	N	C	O
CS PUMP	A	A	B	A		
RHR PUMP	A	O	B	A		
HVH 1	0	2	0	3	0	4

## SECONDARY

FEED PUMP	A	A	B	A
COND PUMP	A	O	B	A
AFW MOTOR	A	O	B	O
AFW STEAM	A			
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	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

Date: NOV. 14, 1989

Time: 09:45

Completed By: \_\_\_\_\_

## ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH)	6.9
LOWER (MPH)	4.6
WIND DIR. UPPER (° FROM)	220
LOWER (° FROM)	211
AIR TEMPERATURE (°F)	54
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

R-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)	3.0E+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)	1280
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
R-35 PLT VNT GAS (MID) (MR/HR)	<1
R-36 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	OOS

## CONTAINMENT STATUS

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

## PRIMARY SYSTEM

RCS PRESSURE (PSIG)	1350
PZR LEVEL (%)	74
TAVE (°F)	OSL
LOOP A TH (°F)	460
TC (°F)	423
ΔT	57
LOOP B TH (°F)	452
TC (°F)	430
ΔT	22
LOOP C TH (°F)	435
TC (°F)	430
ΔT	5

SUBCOOLING (°F)	100
CHRGNG FLOW (GPM)	208
LETDOWN FLOW (GPM)	0
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	7.19E+02
131I (uCi/ml)	2.86E+02

## SECONDARY SYSTEM

S/G A LEV.-WR (%)	78
PRESS (PSIG)	985
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	13.2
S/G B LEV.-WR (%)	78
PRESS (PSIG)	575
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEV.-WR (%)	66
PRESS (PSIG)	575
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)	600
SI HOT-LEG INJECT START	

## EQUIPMENT STATUS

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

## PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	O	B	O	C	O
SI PUMP	A	O	B	N	C	O
CS PUMP	A	A	B	A		
RHR PUMP	A	O	B	A		
HVH 1	0	2	0	3	0	4

## SECONDARY

FEED PUMP	A	A	B	A
COND PUMP	A	O	B	A
AFW MOTOR	A	O	B	O
AFW STEAM	A			
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		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

Date: NOV. 14, 1989

Time: 10:00

Completed By: \_\_\_\_\_

## 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

R-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-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
R-35 PLT VNT GAS (MID) (MR/HR)	<1
R-36 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	OOS

## 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
ΔT	47
LOOP B TH (°F)	430
TC (°F)	430
ΔT	0
LOOP C TH (°F)	430
TC (°F)	430
ΔT	0

SUBCOOLING (°F)	60
CHRGNG FLOW (GPM)	208
LETDOWN FLOW (GPM)	0
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	6.69E+02
I <sup>131</sup> (uCi/ml)	2.68E+02

## SECONDARY SYSTEM

S/G A LEV.-WR (%)	81
PRESS (PSIG)	830
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	12.1
S/G B LEV.-WR (%)	76
PRESS (PSIG)	410
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEV.-WR (%)	72
PRESS (PSIG)	410
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 AVAILABLE  
A = AVAILABLE (NOT OPERATING)  
O = OPERATING  
E = ENERGIZED

## PRIMARY

RCP	A	O	B	O	C	O
CHG PUMP	A	O	B	O	C	O
SI PUMP	A	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

## SECONDARY

FEED PUMP	A	A	B	A
COND PUMP	A	O	B	A
AFW MOTOR	A	O	B	O
AFW STEAM	A			
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	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

Date: NOV. 14, 1989

Time: 10:15

Completed By: \_\_\_\_\_

## 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

R-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-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)	1100
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
R-35 PLT VNT GAS (MID) (MR/HR)	<1
R-36 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	OOS

## CONTAINMENT STATUS

PRESSURE (PSIG)	.3
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
ΔT	37
LOOP B TH (°F)	430
TC (°F)	430
ΔT	0
LOOP C TH (°F)	430
TC (°F)	430
ΔT	0

SUBCOOLING (°F)	105
CHRGNG FLOW (GPM)	208
LETDOWN FLOW (GPM)	0
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	6.20E+02
I <sup>131</sup> (uCi/ml)	2.50E+02

## SECONDARY SYSTEM

S/G A LEV.-WR (%)	81
PRESS (PSIG)	720
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	11.0
S/G B LEV.-WR (%)	78
PRESS (PSIG)	336
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEV.-WR (%)	74
PRESS (PSIG)	336
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)	0
SI HOT-LEG INJECT START	

## EQUIPMENT STATUS

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

## PRIMARY

RCP	A	A	B	A	C	O
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

## SECONDARY

FEED PUMP	A	A	B	A	
COND PUMP	A	O	B	A	
AFW MOTOR	A	O	B	O	
AFW STEAM		O			
MSIV	A	A	B	O	C

## ELECTRICAL

EDG	A	A	B	A	
DS/DG		N			
OFFSITE		E			
EMER. BUS E1		E		E2	E

## FANS

HVE 1A		0		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

## SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

## EMERGENCY CLASSIFICATION (CIRCLE)

## NOTIFICATION OF UNUSUAL EVENT

ALERT

SITE AREA EMERGENCY

GENERAL EMERGENCY

Date: NOV. 14, 1989

Time: 10:30

Completed By: \_\_\_\_\_

## ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 5.9  
 LOWER (MPH) 2.1  
 WIND DIR. UPPER (° FROM) 214  
 LOWER (° FROM) 194  
 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

R-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) 1000  
 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  
 R-35 PLT VNT GAS (MID) (MR/HR) <1  
 R-36 PLT VNT GAS (HI) (MR/HR) 14  
 R-37 CONDENSATE POLISHER (CPM) OOS

## 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 (%) 26  
 TAVE (°F) OSL  
 LOOP A TH (°F) 402  
 TC (°F) 402  
 ΔT 0  
 LOOP B TH (°F) 408  
 TC (°F) 408  
 ΔT 0  
 LOOP C TH (°F) 412  
 TC (°F) 412  
 ΔT 0

SUBCOOLING (°F) 90  
 CHRGNG FLOW (GPM) 208  
 LETDOWN FLOW (GPM) 0  
 REACTOR POWER 0  
 ACTIVITY:

GROSS (uCi/ml) 5.72E+02  
<sup>131</sup>I (uCi/ml) 2.31E+02

## SECONDARY SYSTEM

S/G A LEV.-WR (%) 84  
 PRESS (PSIG) 700  
 FEED (PPH) 0  
 STEAM (PPH) 0  
 ACT. (uCi/ml) 9.9  
 S/G B LEV.-WR (%) 78  
 PRESS (PSIG) 265  
 FEED (PPH) 0  
 STEAM (PPH) 0  
 ACT. (uCi/ml) 0  
 S/G C LEV.-WR (%) 68  
 PRESS (PSIG) 265  
 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) 0  
 SI HOT-LEG INJECT START

## EQUIPMENT STATUS

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

## PRIMARY

	A	B	C	O
RCP	A	B	C	O
CHG PUMP	A	B	C	O
SI PUMP	A	B	N	C
CS PUMP	A	B	A	
RHR PUMP	A	B	A	
HVH 1	0	2	0	4

## SECONDARY

	A	B	A
FEED PUMP	A	B	A
COND PUMP	A	B	A
AFW MOTOR	A	B	A
AFW STEAM	A		
MSIV	A	ISOL	B

## ELECTRICAL

	A	B	A
EDG	A	B	A
DS/DG	N		
OFFSITE	E		
EMER. BUS E1	E	E2	E

## FANS

	A	1B	A
HVE 1A	A	1B	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

## SAFETY PARAMETER DISPLAY SYSTEM/PLANT STATUS

## EMERGENCY CLASSIFICATION (CIRCLE)

NOTIFICATION OF UNUSUAL EVENT

ALERT

SITE AREA EMERGENCY

GENERAL EMERGENCY

Date: NOV. 14, 1989

Time: 10:45

Completed By: \_\_\_\_\_

## 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

R-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) 900  
 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  
 R-35 PLT VNT GAS (MID) (MR/HR) <1  
 R-36 PLT VNT GAS (HI) (MR/HR) 14  
 R-37 CONDENSATE POLISHER (CPM) OOS

## CONTAINMENT STATUS

PRESSURE (PSIG) .3  
 TEMPERATURE (°F) 125  
 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  
 ΔT 0  
 LOOP C TH (°F) 370  
 TC (°F) 370  
 ΔT 0

SUBCOOLING (°F) 137  
 CHRNGG FLOW (GPM) 208  
 LETDOWN FLOW (GPM) 0  
 REACTOR POWER 0  
 ACTIVITY:  
 GROSS (uCi/ml) 5.24E+02  
 I<sup>131</sup> (uCi/ml) 2.13E+02

## SECONDARY SYSTEM

S/G A LEV.-WR (%) 82  
 PRESS (PSIG) 100  
 FEED (PPH) 0  
 STEAM (PPH) 5.0E4  
 ACT. (uCi/ml) 9.0  
 S/G B LEV.-WR (%) 78  
 PRESS (PSIG) 140  
 FEED (PPH) 0  
 STEAM (PPH) 0  
 ACT. (uCi/ml) 0  
 S/G C LEV.-WR (%) 74  
 PRESS (PSIG) 140  
 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 AVAILABLE  
 A = AVAILABLE (NOT OPERATING)  
 O = OPERATING  
 E = ENERGIZED

## PRIMARY

	A	B	C	O
RCP	A	A	B	O
CHG PUMP	A	O	B	O
SI PUMP	A	O	B	N
CS PUMP	A	A	B	A
RHR PUMP	A	A	B	A
HVH 1	0	2	0	3
HVH 2	0	3	0	4
HVH 3	0	4	0	5

## SECONDARY

	A	B	C	O
FEED PUMP	A	A	B	A
COND PUMP	A	O	B	A
AFW MOTOR	A	O	B	A
AFW STEAM	A	A	B	A
MSIV	A	ISOL	B	O

## ELECTRICAL

	A	B	C	O
EDG	A	A	B	A
DS/DG	N			
OFFSITE	E			
EMER. BUS E1	E	E2	E	

## FANS

	A	B	C	O
HVE 1A	A	1B	A	
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

Date: NOV. 14, 1989

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

## PROCESS RADIATION MONITORS

R-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)	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
R-35 PLT VNT GAS (MID) (MR/HR)	<1
R-36 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	OOS

## 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
ΔT	10
LOOP B TH (°F)	365
TC (°F)	365
ΔT	0
LOOP C TH (°F)	365
TC (°F)	365
ΔT	0

SUBCOOLING (°F)	160
CHRGNG FLOW (GPM)	208
LETDOWN FLOW (GPM)	0
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	4.78E+02
<sup>131</sup> I (uCi/ml)	1.95E+02

## SECONDARY SYSTEM

S/G A LEV.-WR (%)	81
PRESS (PSIG)	90
FEED (PPH)	0
STEAM (PPH)	5.0E3
ACT. (uCi/ml)	8.0
S/G B LEV.-WR (%)	78
PRESS (PSIG)	135
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEV.-WR (%)	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 AVAILABLE  
A = AVAILABLE (NOT OPERATING)  
O = OPERATING  
E = ENERGIZED

## PRIMARY

RCP	A	A	B	A	C	O
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	A	B	A		
HVH 1	0	2	0	3	0	4

## SECONDARY

FEED PUMP	A	A	B	A	
COND PUMP	A	O	B	A	
AFW MOTOR	A	O	B	A	
AFW STEAM	A				
MSIV	A	ISOL	B	O	C

## 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	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

Date: NOV. 14, 1989

Time: 11:15

Completed By: \_\_\_\_\_

## 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

R-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) 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 "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) OOS

## 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  
 ΔT 10  
 LOOP B TH (°F) 340  
 TC (°F) 340  
 ΔT 0  
 LOOP C TH (°F) 340  
 TC (°F) 340  
 ΔT 0  
 SUBCOOLING (°F) 130  
 CHRNGG FLOW (GPM) 40  
 LETDOWN FLOW (GPM) 0  
 REACTOR POWER 0  
 ACTIVITY:

GROSS (uCi/ml) 4.32E+02  
 I<sup>131</sup> (uCi/ml) 1.77E+02

## SECONDARY SYSTEM

S/G A LEV.-WR (%) 81  
 PRESS (PSIG) 90  
 FEED (PPH) 0  
 STEAM (PPH) 5.0E3  
 ACT. (uCi/ml) 7.2  
 S/G B LEV.-WR (%) 78  
 PRESS (PSIG) 100  
 FEED (PPH) 0  
 STEAM (PPH) 0  
 ACT. (uCi/ml) 0  
 S/G C LEV.-WR (%) 74  
 PRESS (PSIG) 100  
 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) 500  
 SI HOT-LEG INJECT START

## EQUIPMENT STATUS

N = NOT AVAILABLE

A = AVAILABLE (NOT OPERATING)

O = OPERATING

E = ENERGIZED

## PRIMARY

RCP	A	A	B	A	C	O
CHG PUMP	A	O	B	A	C	A
SI PUMP	A	O	B	N	C	A
CS PUMP	A	A	B	A		
RHR PUMP	A	A	B	A		
HVH 1	0	2	0	3	0	4

## SECONDARY

FEED PUMP	A	A	B	A		
COND PUMP	A	O	B	A		
AFW MOTOR	A	O	B	A		
AFW STEAM	A					
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		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

Date: NOV. 14, 1989

Time: 11:30

Completed By: \_\_\_\_\_

## 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

R-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)	3.35E+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)	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
R-35 PLT VNT GAS (MID) (MR/HR)	<1
R-36 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	OOS

## 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 (%)	35
TAVE (°F)	OSL
LOOP A TH (°F)	340
TC (°F)	340
ΔT	10
LOOP B TH (°F)	340
TC (°F)	340
ΔT	0
LOOP C TH (°F)	340
TC (°F)	340
ΔT	0

SUBCOOLING (°F)	100
CHRGNG FLOW (GPM)	40
LETDOWN FLOW (GPM)	0
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	4.21E+02
<sup>131</sup> I (uCi/ml)	1.74E+02

## SECONDARY SYSTEM

S/G A LEV.-WR (%)	81
PRESS (PSIG)	90
FEED (PPH)	0
STEAM (PPH)	5.0E3
ACT. (uCi/ml)	6.9
S/G B LEV.-WR (%)	78
PRESS (PSIG)	100
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEV.-WR (%)	78
PRESS (PSIG)	100
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)	0
SI HOT-LEG INJECT START	

## EQUIPMENT STATUS

N = NOT AVAILABLE

A = AVAILABLE (NOT OPERATING)

O = 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	A	B	A		
RHR PUMP	A	A	B	A		
HVH 1	0	2	0	3	0	4

## SECONDARY

FEED PUMP	A	A	B	A		
COND PUMP	A	O	B	A		
AFW MOTOR	A	O	B	A		
AFW STEAM	A					
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	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

Date: NOV. 14, 1989

Time: 11:45

Completed By: \_\_\_\_\_

## ENVIRONMENTAL SYSTEMS

WIND SPEED UPPER (MPH) 6.0  
 LOWER (MPH) 3.6  
 WIND DIR. UPPER (° FROM) 213  
 LOWER (° FROM) 200  
 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

R-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) 660  
 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  
 R-35 PLT VNT GAS (MID) (MR/HR) <1  
 R-36 PLT VNT GAS (HI) (MR/HR) 14  
 R-37 CONDENSATE POLISHER (CPM) OOS

## 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 (%) 32  
 TAVE (°F) OSL  
 LOOP A TH (°F) 328  
 TC (°F) 328  
 ΔT 0  
 LOOP B TH (°F) 328  
 TC (°F) 328  
 ΔT 0  
 LOOP C TH (°F) 328  
 TC (°F) 328  
 ΔT 0  
 SUBCOOLING (°F) 115  
 CHRGNG FLOW (GPM) 40  
 LETDOWN FLOW (GPM) 0  
 REACTOR POWER 0  
 ACTIVITY:

GROSS (uCi/ml) 4.10E+02  
<sup>131</sup>I (uCi/ml) 1.70E+02

## SECONDARY SYSTEM

S/G A LEV.-WR (%) 81  
 PRESS (PSIG) 130  
 FEED (PPH) 0  
 STEAM (PPH) 0  
 ACT. (uCi/ml) 6.6  
 S/G B LEV.-WR (%) 78  
 PRESS (PSIG) 100  
 FEED (PPH) 0  
 STEAM (PPH) 0  
 ACT. (uCi/ml) 0  
 S/G C LEV.-WR (%) 78  
 PRESS (PSIG) 100  
 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) 0  
 SI HOT-LEG INJECT START

## EQUIPMENT STATUS

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

## PRIMARY

	A	B	C	O
RCP	A	A	A	O
CHG PUMP	A	O	B	A
SI PUMP	A	A	B	N
CS PUMP	A	A	B	A
RHR PUMP	A	A	B	A
HVH 1	0	2	0	3
HVH 2	0	3	0	4
HVH 3	0	4	0	0

## SECONDARY

	A	B	C	O
FEED PUMP	A	A	B	A
COND PUMP	A	O	B	A
AFW MOTOR	A	O	B	A
AFW STEAM	A	A	B	A
MSIV	A	ISOL	B	O
MSIV C	A	ISOL	B	O

## ELECTRICAL

	A	B	C	O
EDG	A	A	B	A
DS/DG	N	N	N	N
OFFSITE	E	E	E	E

	E1	E2	E
EMER. BUS	E	E	E

## FANS

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

Date: NOV. 14, 1989

Time: 12:00

Completed By: \_\_\_\_\_

## 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

R-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) 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 "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) OOS

## CONTAINMENT STATUS

PRESSURE (PSIG) .3  
 TEMPERATURE (°F) 12.5  
 HYDROGEN CONC. (%) .01  
 SUMP LEVEL (INCHES) .2  
 RWST LEVEL (%) 91

## PRIMARY SYSTEM

RCS PRESSURE (PSIG) 350  
 PZR LEVEL (%) 32  
 TAVE (°F) OSL  
 LOOP A TH (°F) 313  
 TC (°F) 313  
 ΔT 0  
 LOOP B TH (°F) 313  
 TC (°F) 313  
 ΔT 0  
 LOOP C TH (°F) 313  
 TC (°F) 313  
 ΔT 0

SUBCOOLING (°F) 130  
 CHRGNG FLOW (GPM) 40  
 LETDOWN FLOW (GPM) 0  
 REACTOR POWER 0

## ACTIVITY:

GROSS (uCi/ml) 3.99E+02  
<sup>131</sup>I (uCi/ml) 1.66E+02

## SECONDARY SYSTEM

S/G A LEV.-WR (%) 81  
 PRESS (PSIG) 170  
 FEED (PPH) 0  
 STEAM (PPH) 0  
 ACT. (uCi/ml) 6.3  
 S/G B LEV.-WR (%) 78  
 PRESS (PSIG) 100  
 FEED (PPH) 0  
 STEAM (PPH) 0  
 ACT. (uCi/ml) 0  
 S/G C LEV.-WR (%) 78  
 PRESS (PSIG) 100  
 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) 0  
 SI HOT-LEG INJECT START

## EQUIPMENT STATUS

N = NOT AVAILABLE

A = AVAILABLE (NOT OPERATING)

O = OPERATING

E = ENERGIZED

## PRIMARY

RCP	A	A	B	A	C	A
CHG PUMP	A	O	B	A	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

## SECONDARY

FEED PUMP	A	A	B	A
COND PUMP	A	O	B	A
AFW MOTOR	A	O	B	A
AFW STEAM	A			
MSIV	A	ISOL	B	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	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

Date: NOV. 14, 1989

Time: 12:15

Completed By:

## 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

R-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)	3.35E+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)	600
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
R-35 PLT VNT GAS (MID) (MR/HR)	<1
R-36 PLT VNT GAS (HI) (MR/HR)	14
R-37 CONDENSATE POLISHER (CPM)	00S

## CONTAINMENT STATUS

PRESSURE (PSIG)	.3
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
ΔT	0
LOOP B TH (°F)	300
TC (°F)	300
ΔT	0
LOOP C TH (°F)	300
TC (°F)	300
ΔT	0

SUBCOOLING (°F)	145
CHRGNG FLOW (GPM)	40
LETDOWN FLOW (GPM)	0
REACTOR POWER	0
ACTIVITY:	
GROSS (uCi/ml)	3.88E+02
<sup>131</sup> I (uCi/ml)	1.63E+02

## SECONDARY SYSTEM

S/G A LEV.-WR (%)	83
PRESS (PSIG)	210
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	6.0
S/G B LEV.-WR (%)	78
PRESS (PSIG)	100
FEED (PPH)	0
STEAM (PPH)	0
ACT. (uCi/ml)	0
S/G C LEV.-WR (%)	78
PRESS (PSIG)	100
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)	
SI HOT-LEG INJECT START	

## EQUIPMENT STATUS

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

## PRIMARY

RCP	A	A	B	A	C	A
CHG PUMP	A	O	B	A	C	A
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	A	B	A
COND PUMP	A	O	B	A
AFW MOTOR	A	O	B	A
AFW STEAM	A			
MSIV	A	ISOL	B	O
				C
				0

## 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	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

Date: NOV. 14, 1989

Time: 12:30

Completed By: \_\_\_\_\_

## 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 0

## 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

R-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 "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) OOS

## 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) OSL  
 LOOP A TH (°F) 285  
 TC (°F) 285  
 ΔT 0  
 LOOP B TH (°F) 285  
 TC (°F) 285  
 ΔT 0  
 LOOP C TH (°F) 285  
 TC (°F) 285  
 ΔT 0

SUBCOOLING (°F) 160  
 CHRGNG FLOW (GPM) 40  
 LETDOWN FLOW (GPM) 0  
 REACTOR POWER 0  
 ACTIVITY:  
 GROSS (uCi/ml) 3.77E+02  
<sup>131</sup>I (uCi/ml) 1.59E+02

## SECONDARY SYSTEM

S/G A LEV.-WR (%) 83  
 PRESS (PSIG) 260  
 FEED (PPH) 0  
 STEAM (PPH) 0  
 ACT. (uCi/ml) 5.8  
 S/G B LEV.-WR (%) 80  
 PRESS (PSIG) 100  
 FEED (PPH) 0  
 STEAM (PPH) 0  
 ACT. (uCi/ml) 0  
 S/G C LEV.-WR (%) 80  
 PRESS (PSIG) 100  
 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)  
 SI HOT-LEG INJECT START

## EQUIPMENT STATUS

N = NOT AVAILABLE

A = AVAILABLE (NOT OPERATING)

O = OPERATING

E = ENERGIZED

## PRIMARY

RCP	A	A	B	A	C	A
CHG PUMP	A	O	B	A	C	A
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

## SECONDARY

FEED PUMP	A	A	B	A
COND PUMP	A	O	B	A
AFW MOTOR	A	O	B	A
AFW STEAM	A			
MSIV	A	ISOL	B	O

## ELECTRICAL

EDG	A	A	B	A
DS/DG		N		
OFFSITE		E		
EMER. BUS E1		E		E2

## FANS

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

## LEGEND:

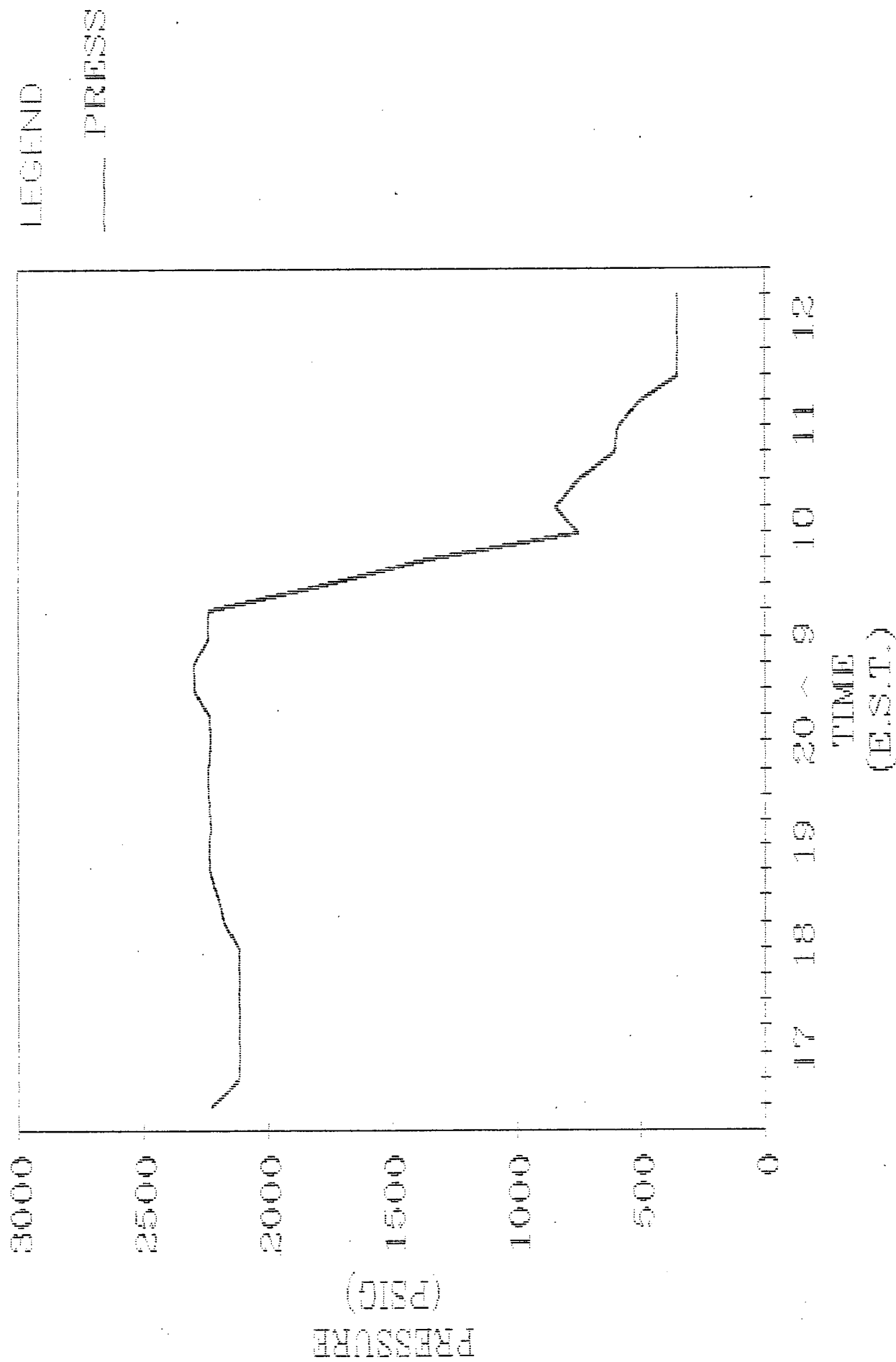
OSH = OFF SCALE HIGH

OSL = OFF SCALE LOW

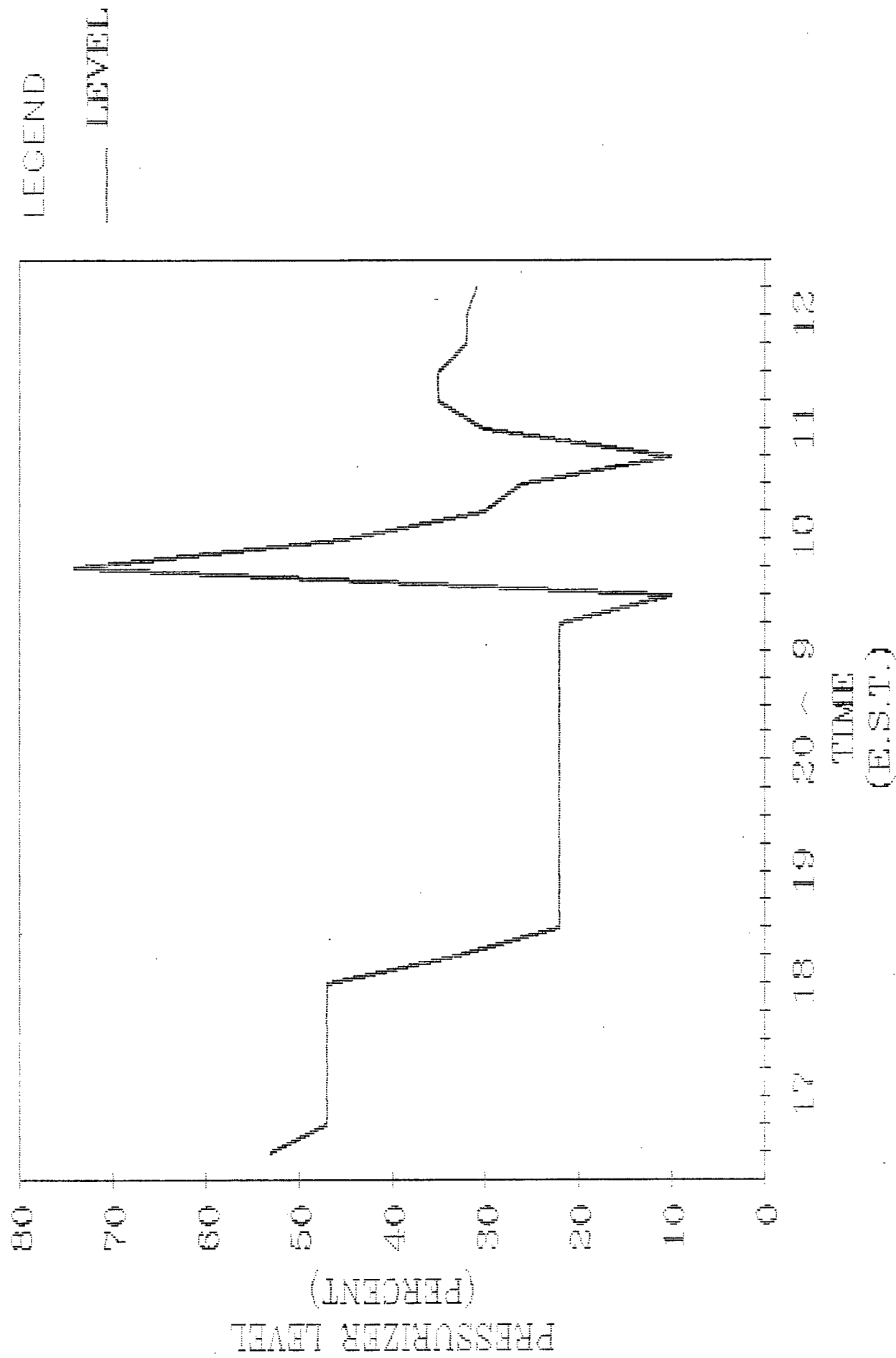
OOS = OUT OF SERVICE

ISOL = ISOLATED

RNPD 1989 EMERGENCY PREPAREDNESS EXERCISE  
 RCS PRESSURE  
 (FULL EXERCISE PLOT)

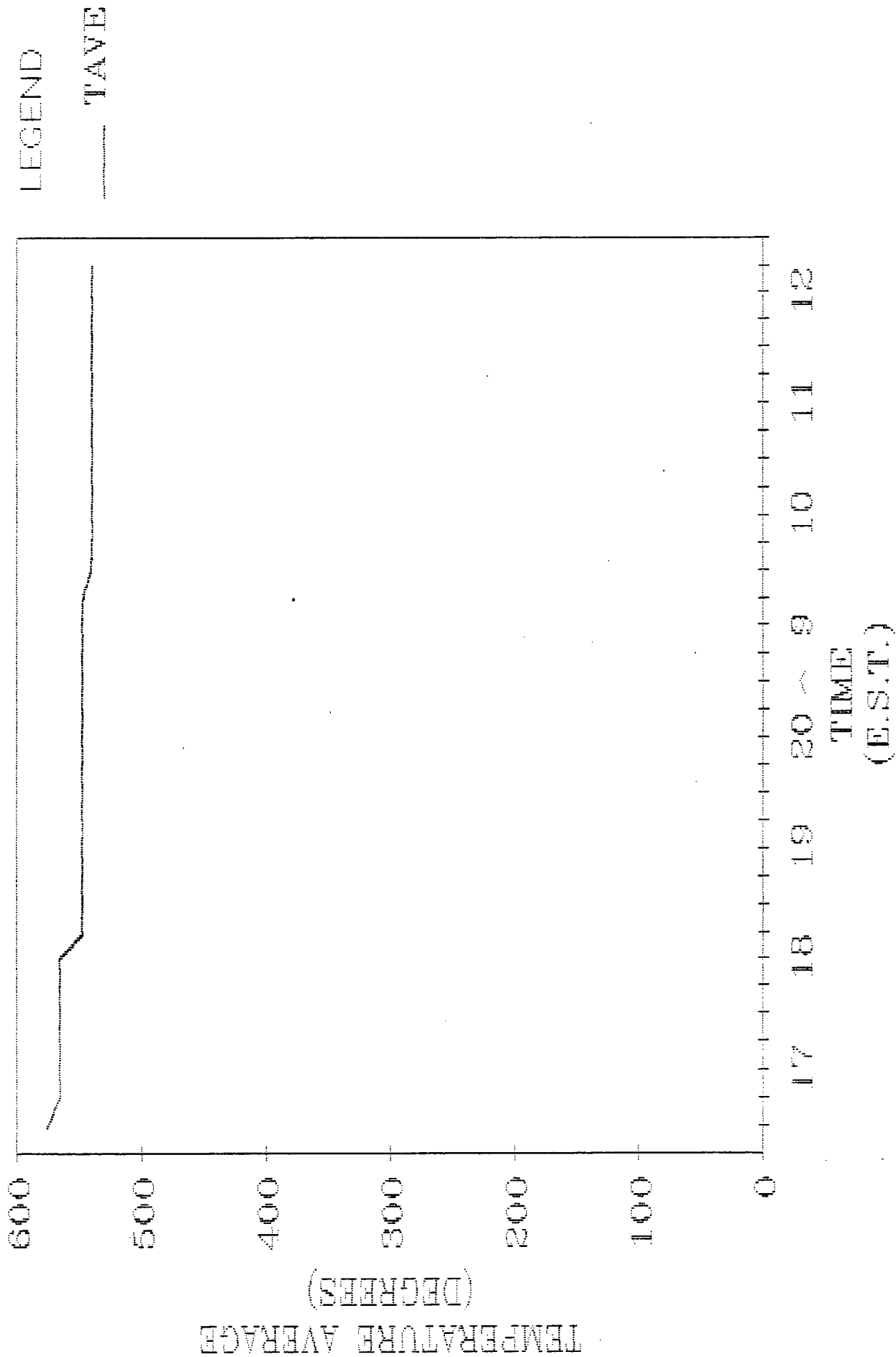


KNPD 1989 EMERGENCY PREPAREDNESS EXERCISE  
PRESSURIZER LEVEL  
(FULL EXERCISE PLOT)

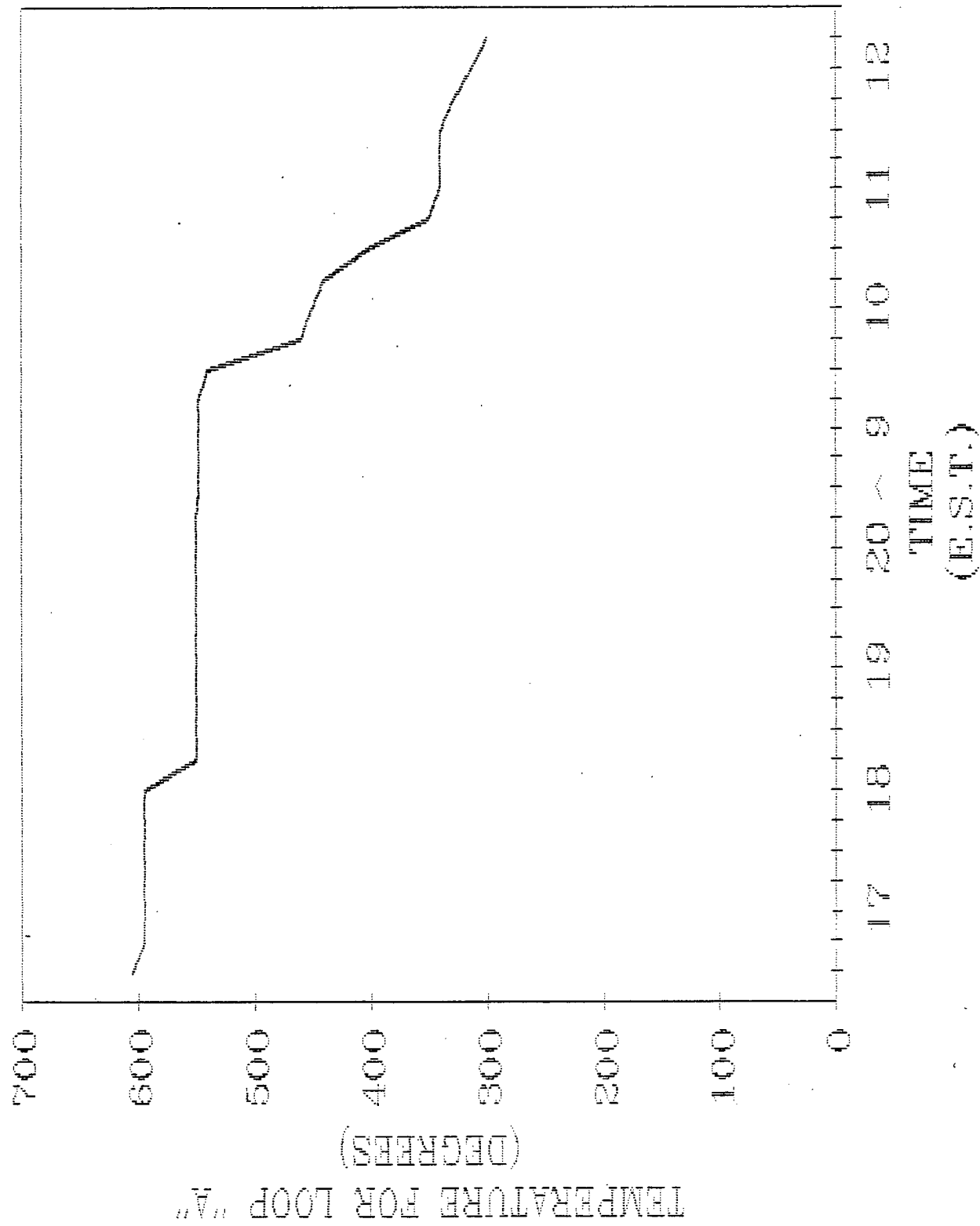




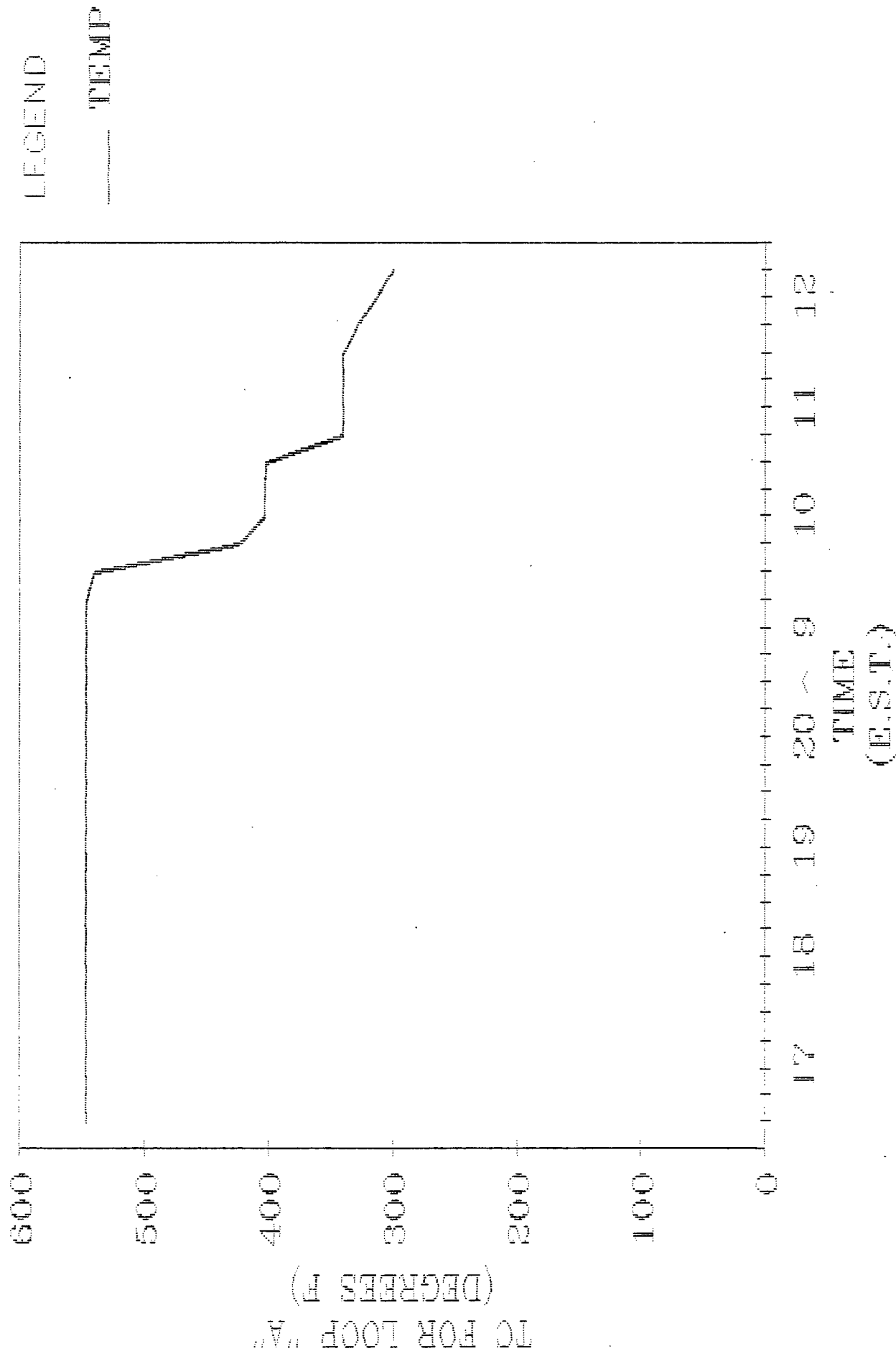
# RNPD 1989 EMERGENCY PREPAREDNESS EXERCISE TEMP. AVERAGE (FULL EXERCISE PLOT)



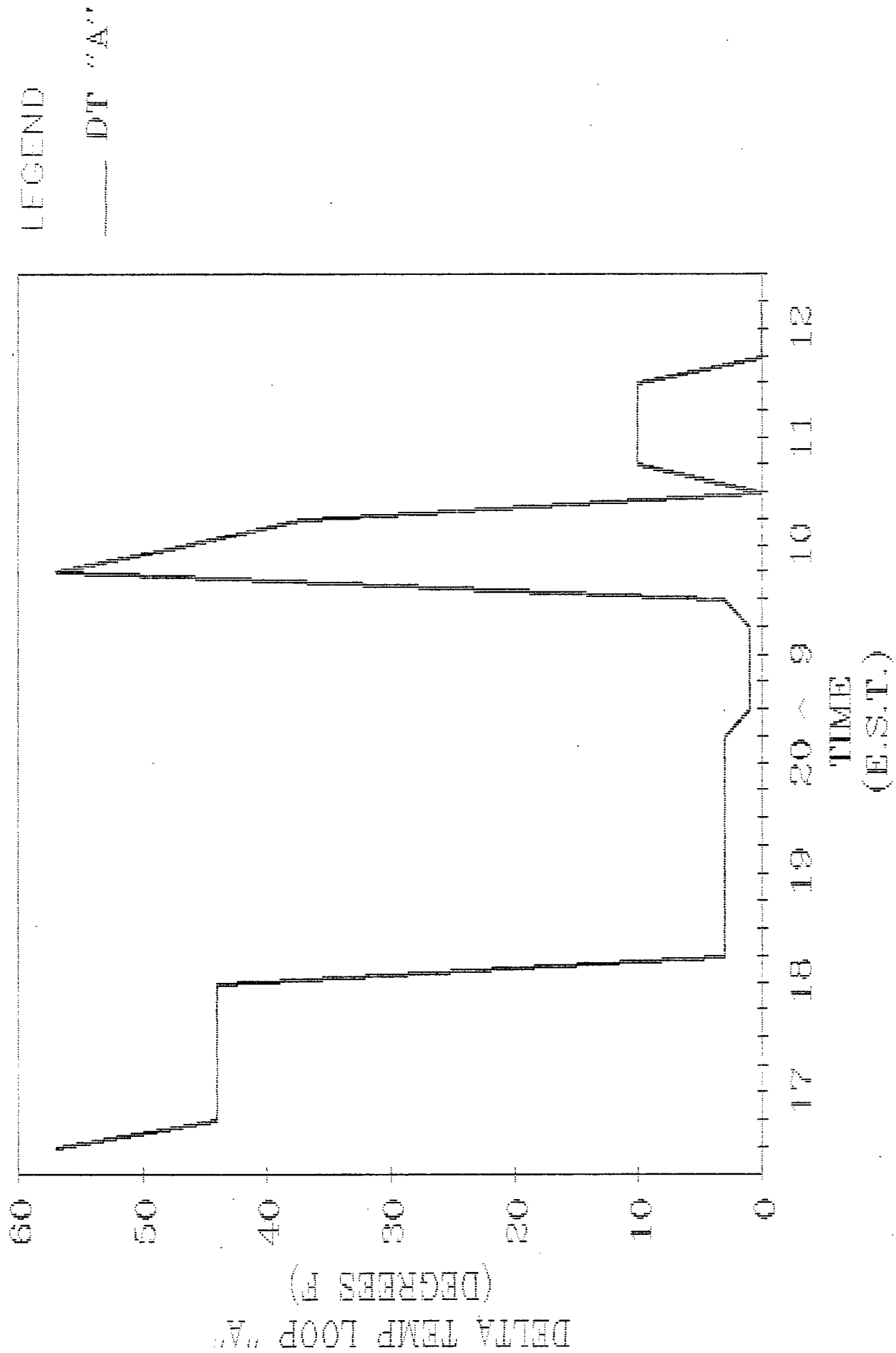
# RNPD 1989 EMERGENCY PREPAREDNESS EXERCISE LOOP "A" TH (DEG. F) (FULL EXERCISE PLOT)



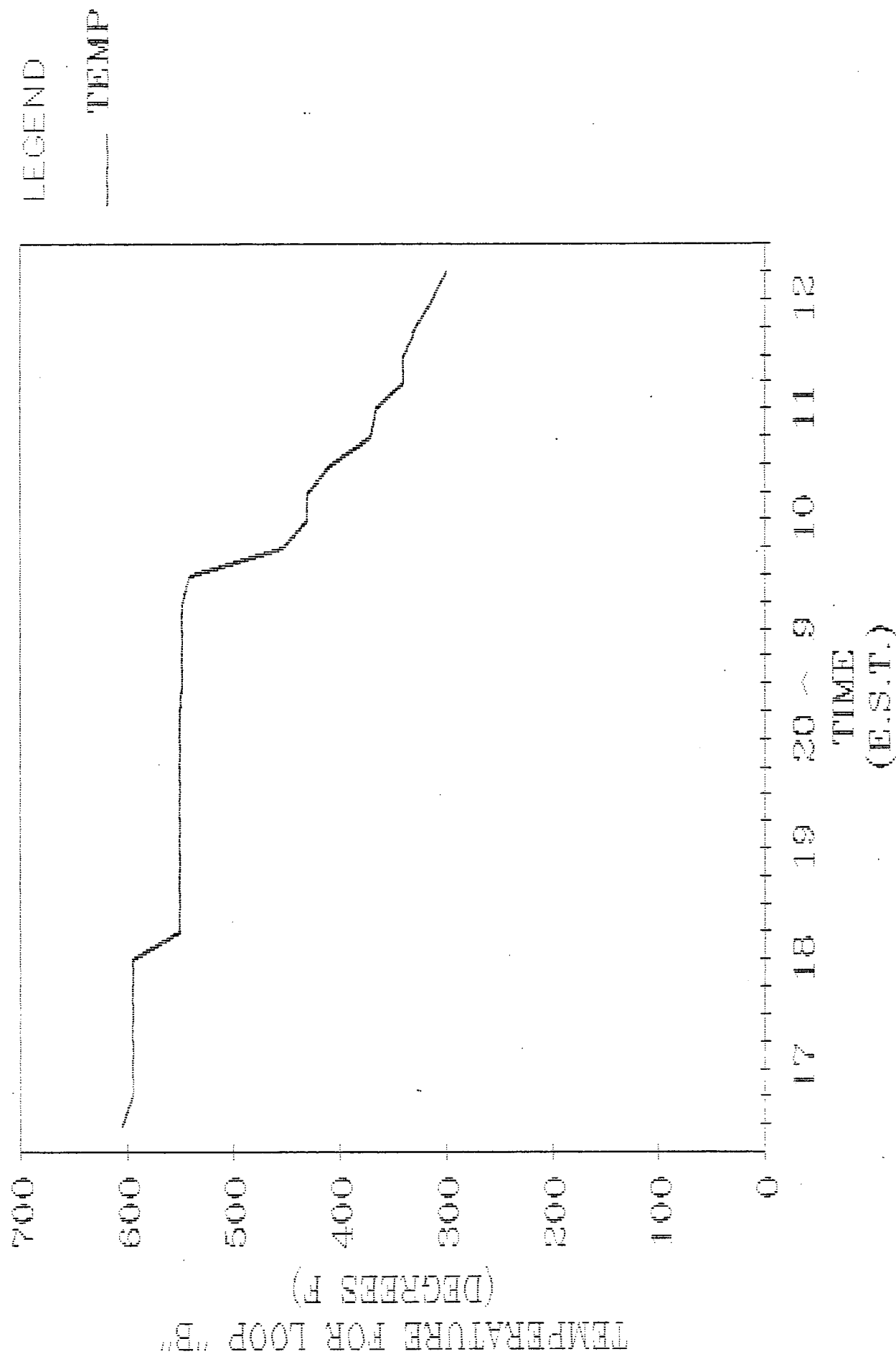
# RNPD 1989 EMERGENCY PREPAREDNESS EXERCISE LOOP "A" TC (DEG. F) (FULL EXERCISE PLOT)



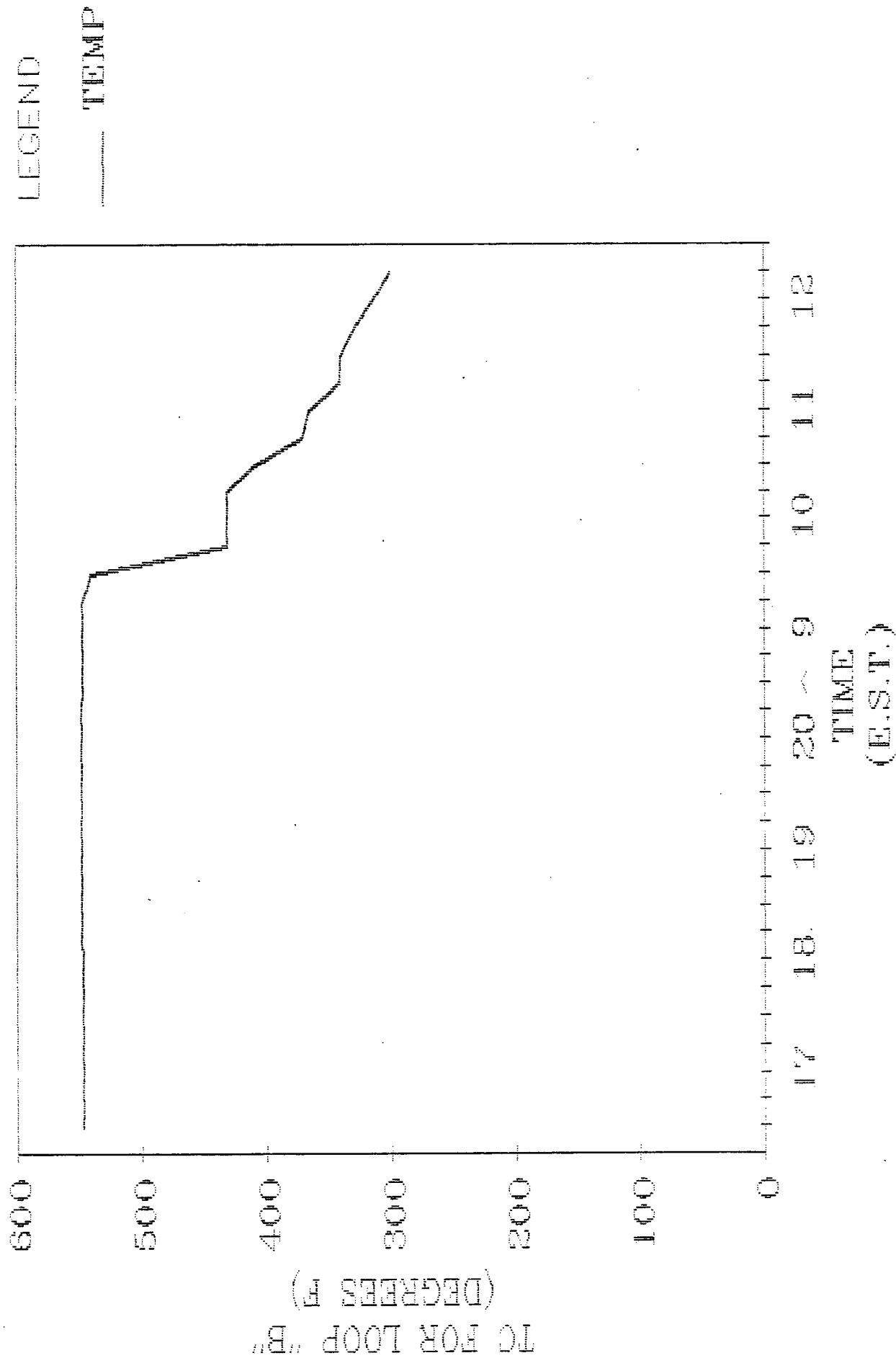
RNPD 1989 EMERGENCY PREPAREDNESS EXERCISE  
LOOP "A" DELTA T  
(FULL EXERCISE PLOT)



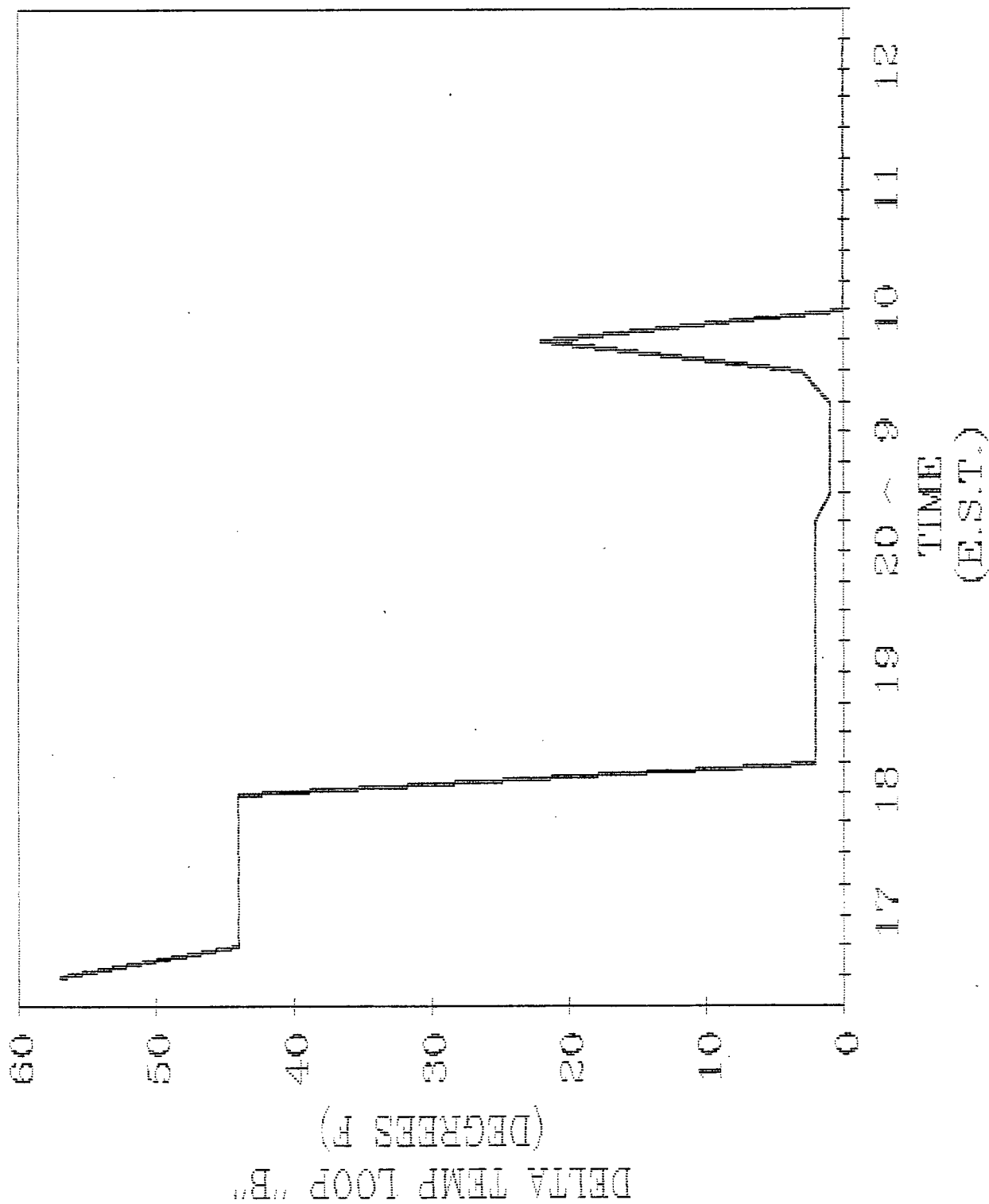
# RNPD 1989 EMERGENCY PREPAREDNESS EXERCISE LOOP "B" TH (DEG. F) (FULL EXERCISE PLOT)



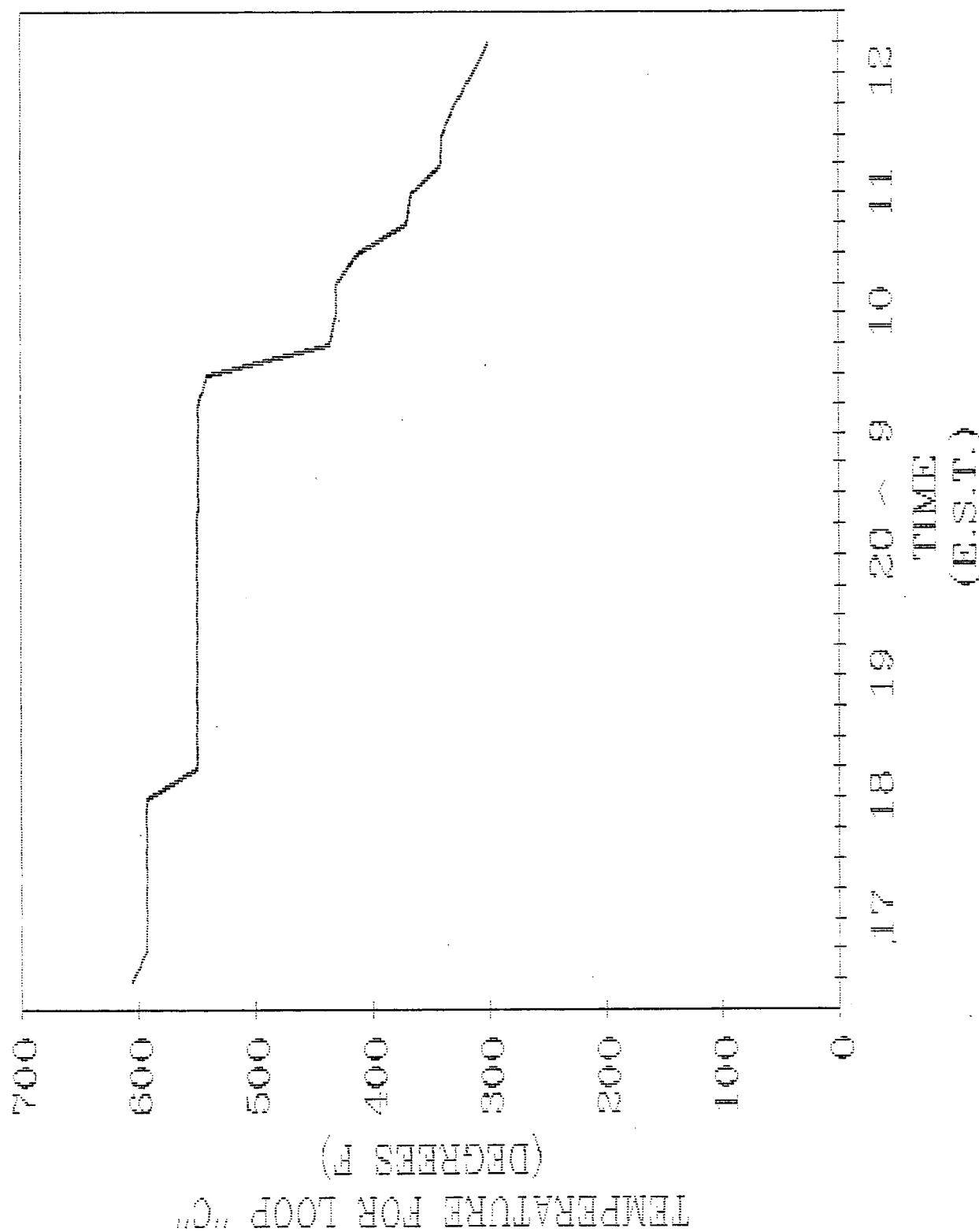
# RNPD 1989 EMERGENCY PREPAREDNESS EXERCISE LOOP "B" TC (DEG. F) (FULL EXERCISE PLOT)



# RNPD 1989 EMERGENCY PREPAREDNESS EXERCISE LOOP "B" DELTA T (FULL EXERCISE PLOT)

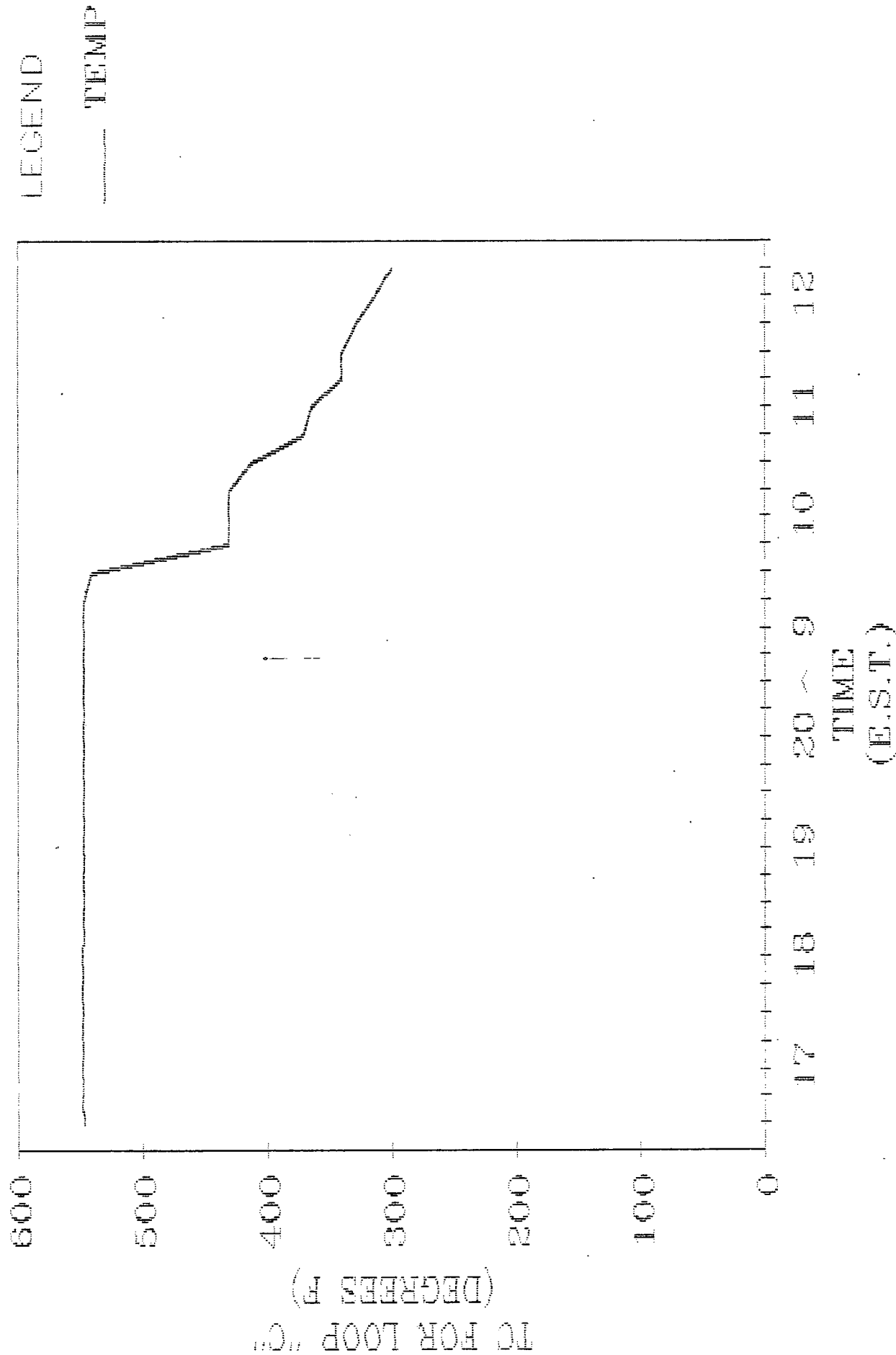


# RNPD 1989 EMERGENCY PREPAREDNESS EXERCISE LOOP "C" TH (DEG. F) (FULL EXERCISE PLOT)

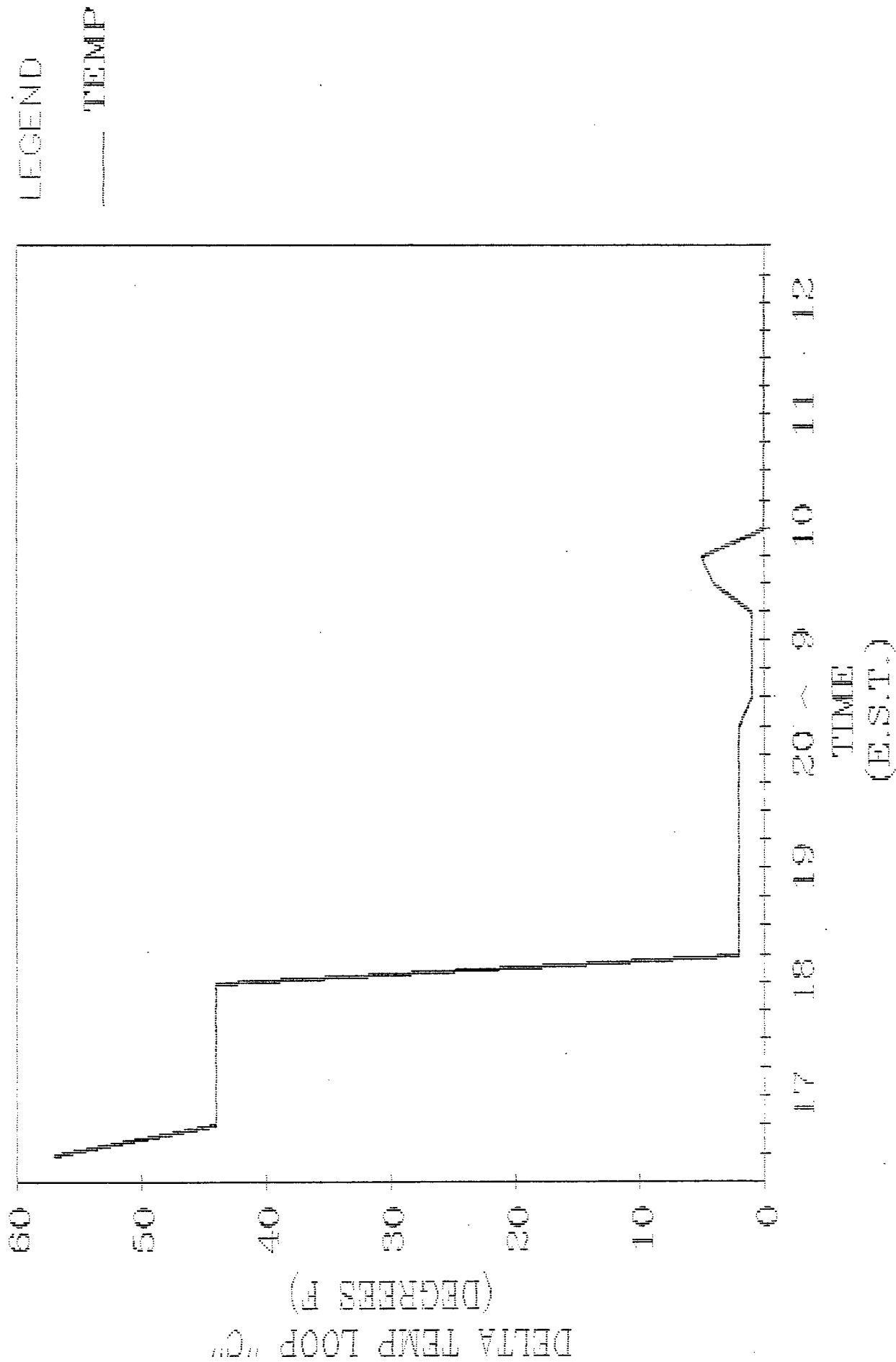




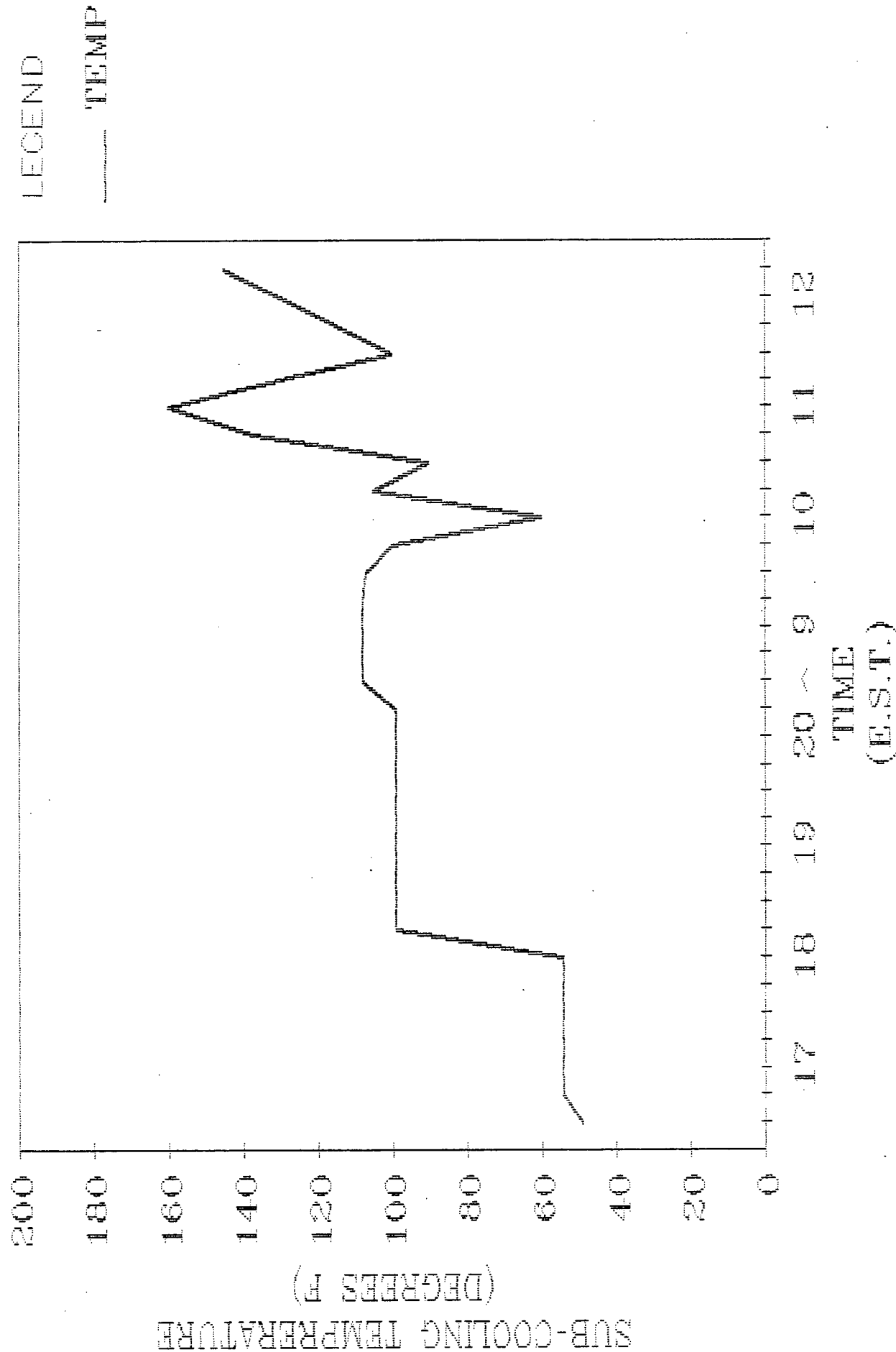
# RNPD 1989 EMERGENCY PREPAREDNESS EXERCISE LOOP "C" TC (DEG.F) (FULL EXERCISE PLOT)



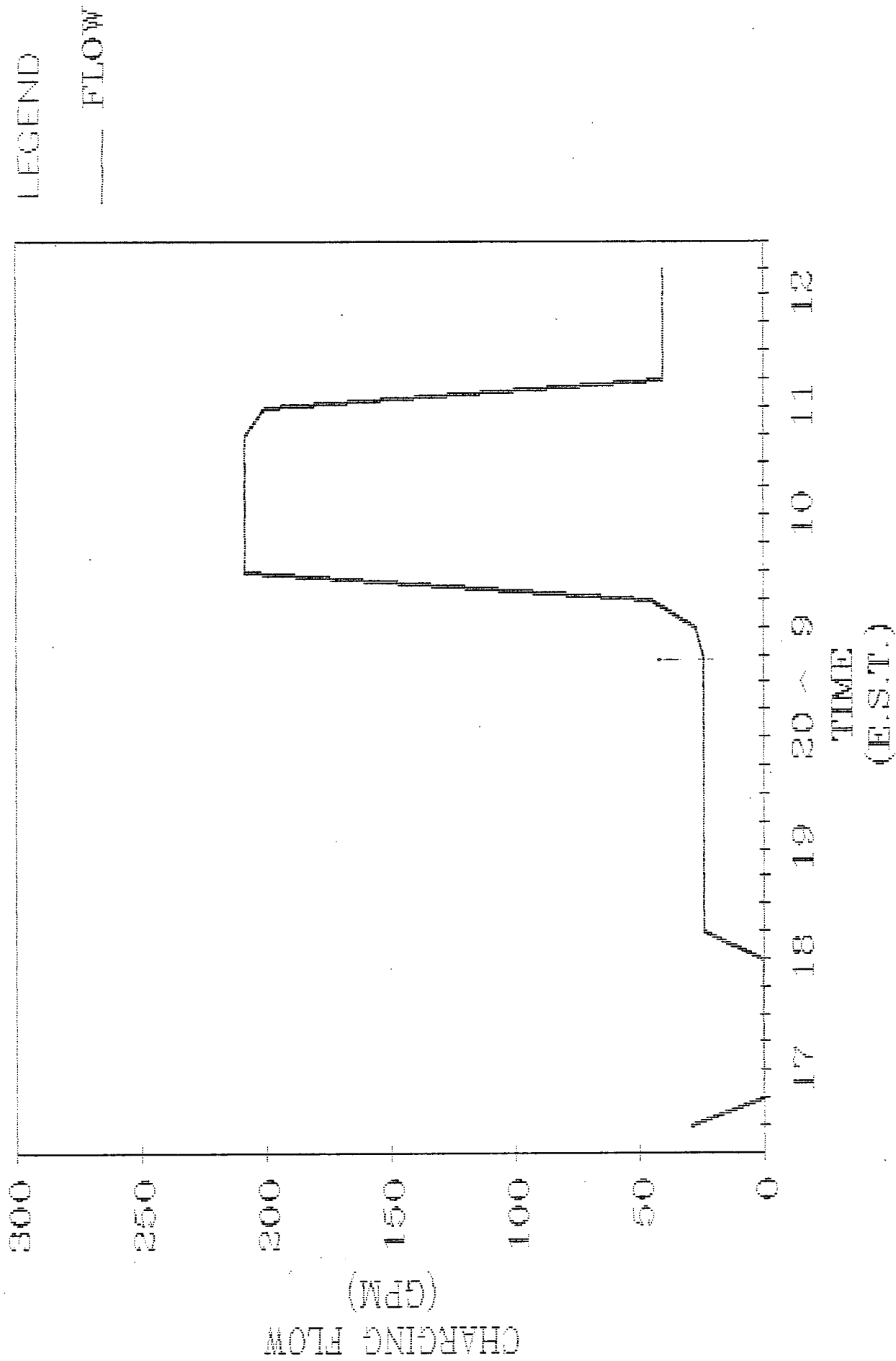
# RNPD 1989 EMERGENCY PREPAREDNESS EXERCISE LOOP "C" DELTA T (FULL EXERCISE PLOT)



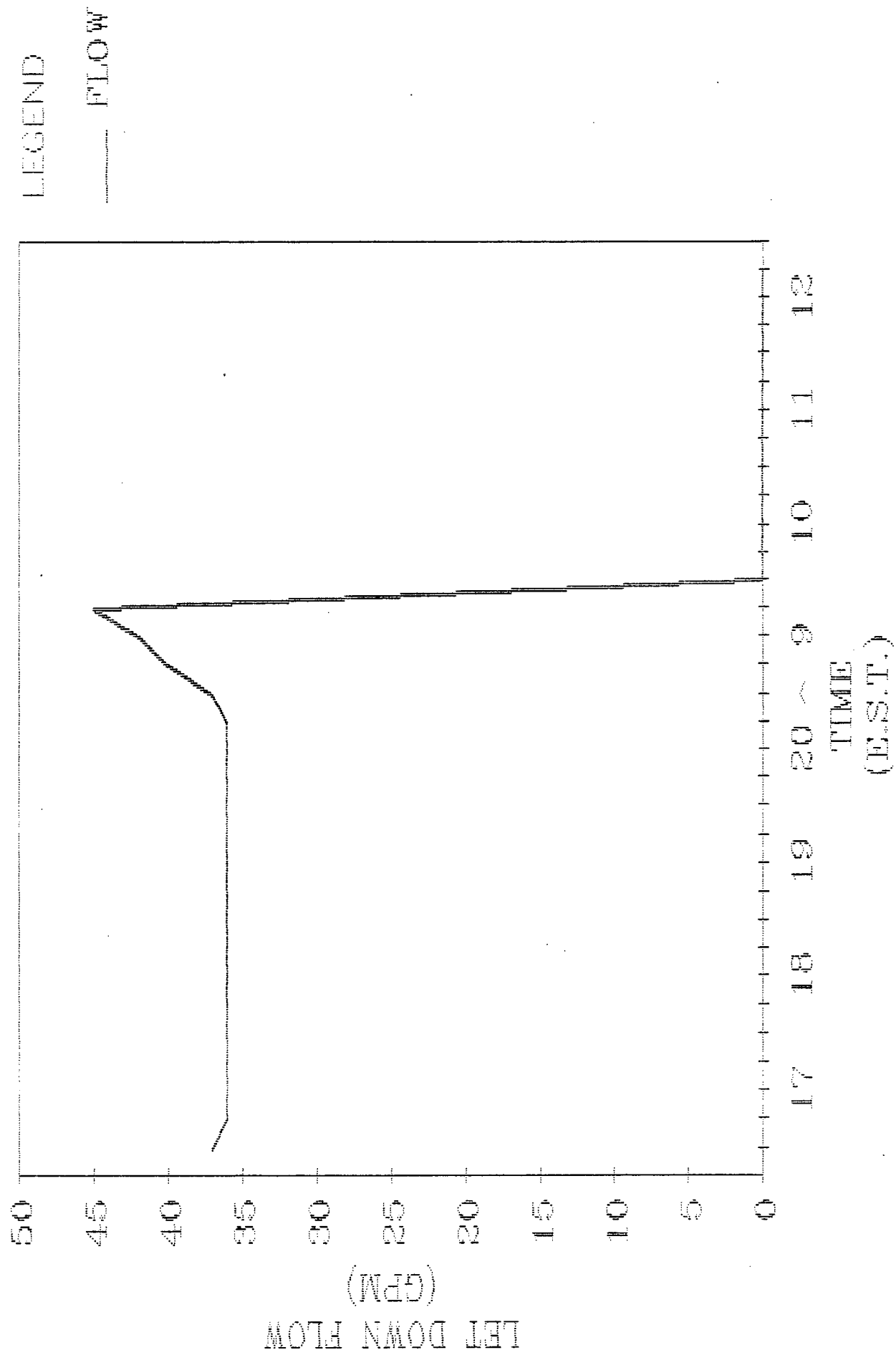
RNPD 1989 EMERGENCY PREPAREDNESS EXERCISE  
SUB-COOLING  
(FULL EXERCISE PLOT)



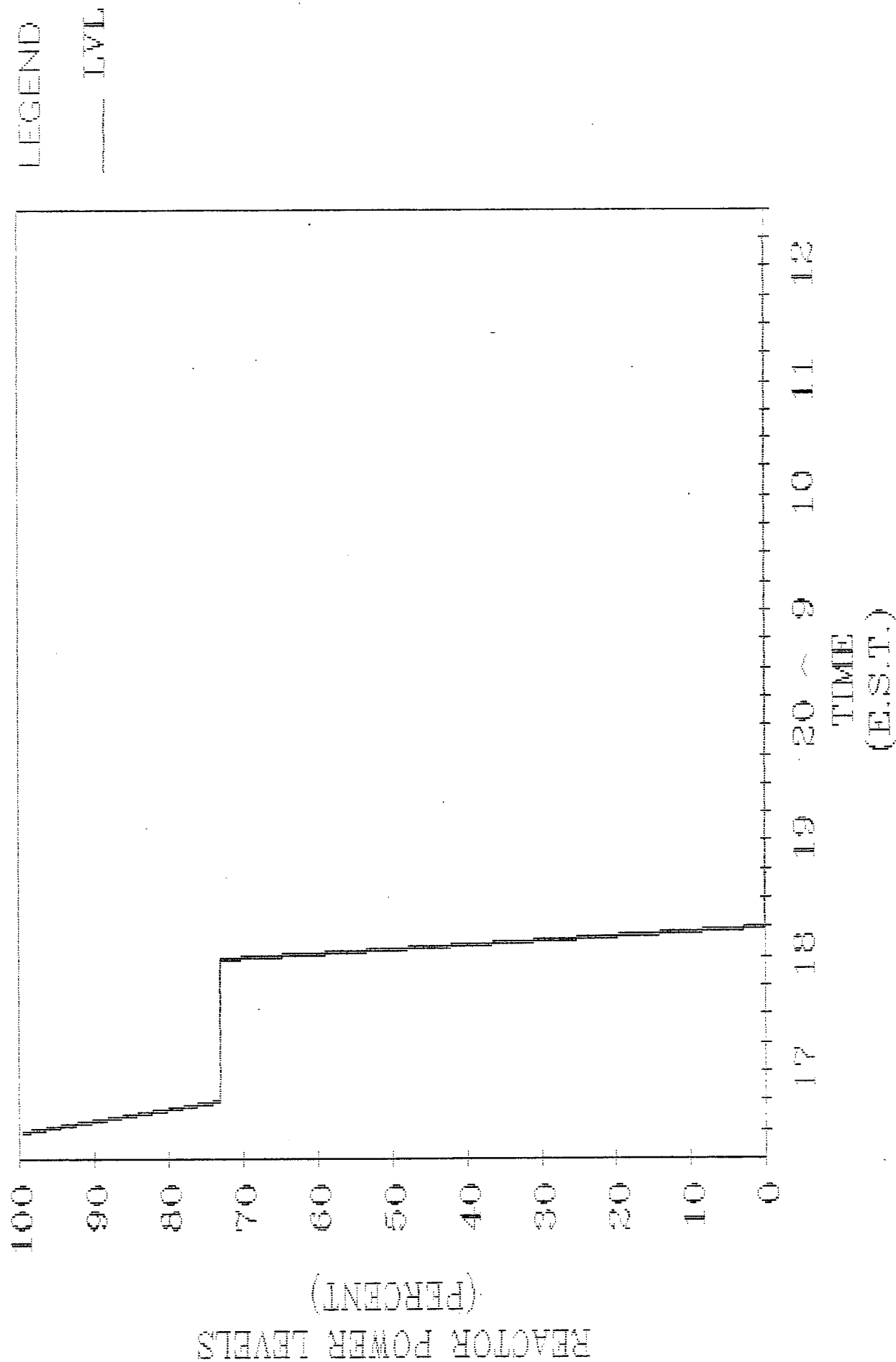
# RNPD 1989 EMERGENCY PREPAREDNESS EXERCISE CHARGING FLOW (FULL EXERCISE PLOT)



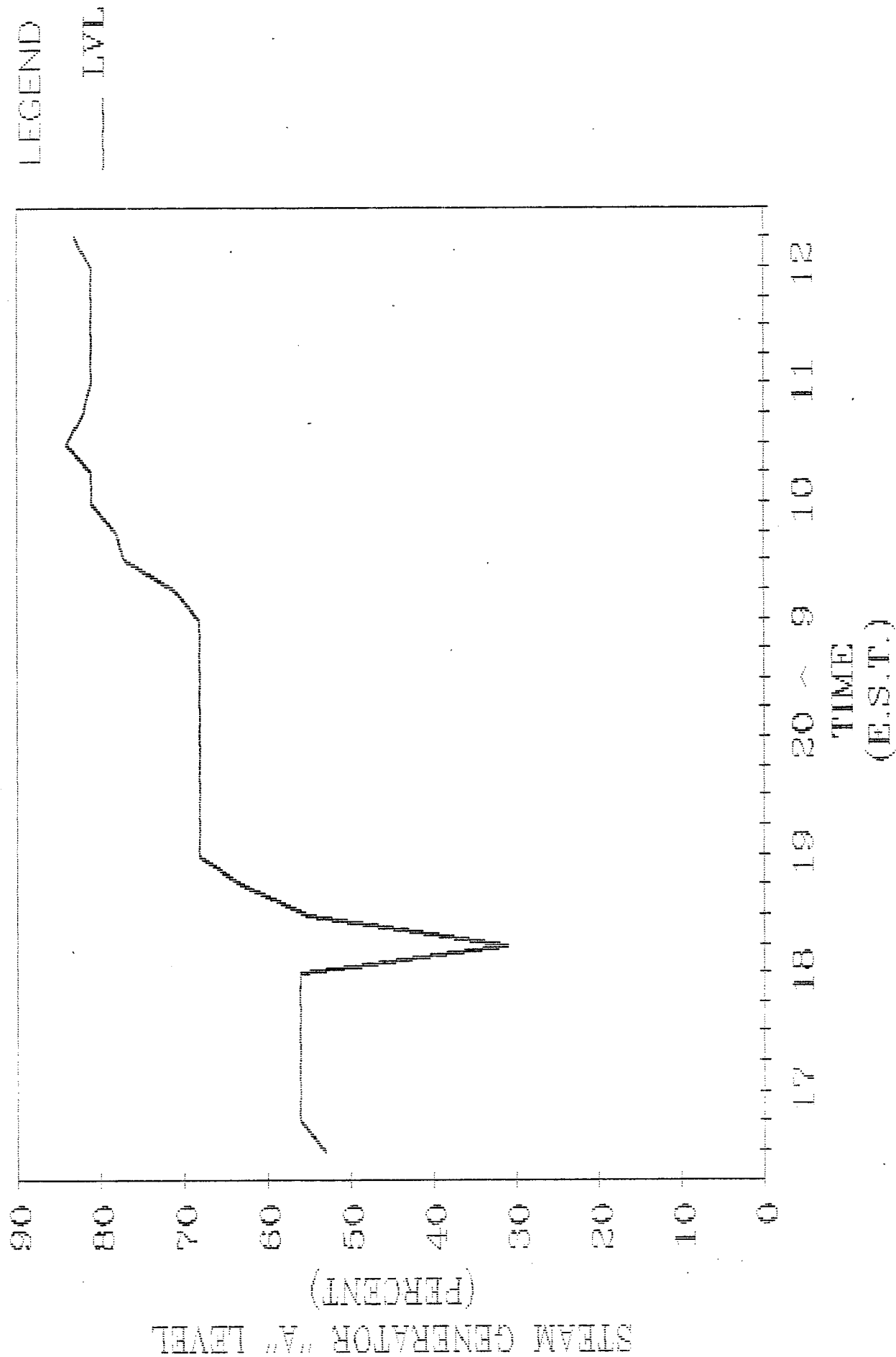
RNPD 1989 EMERGENCY PREPAREDNESS EXERCISE  
LET DOWN FLOW  
(FULL EXERCISE PLOT)



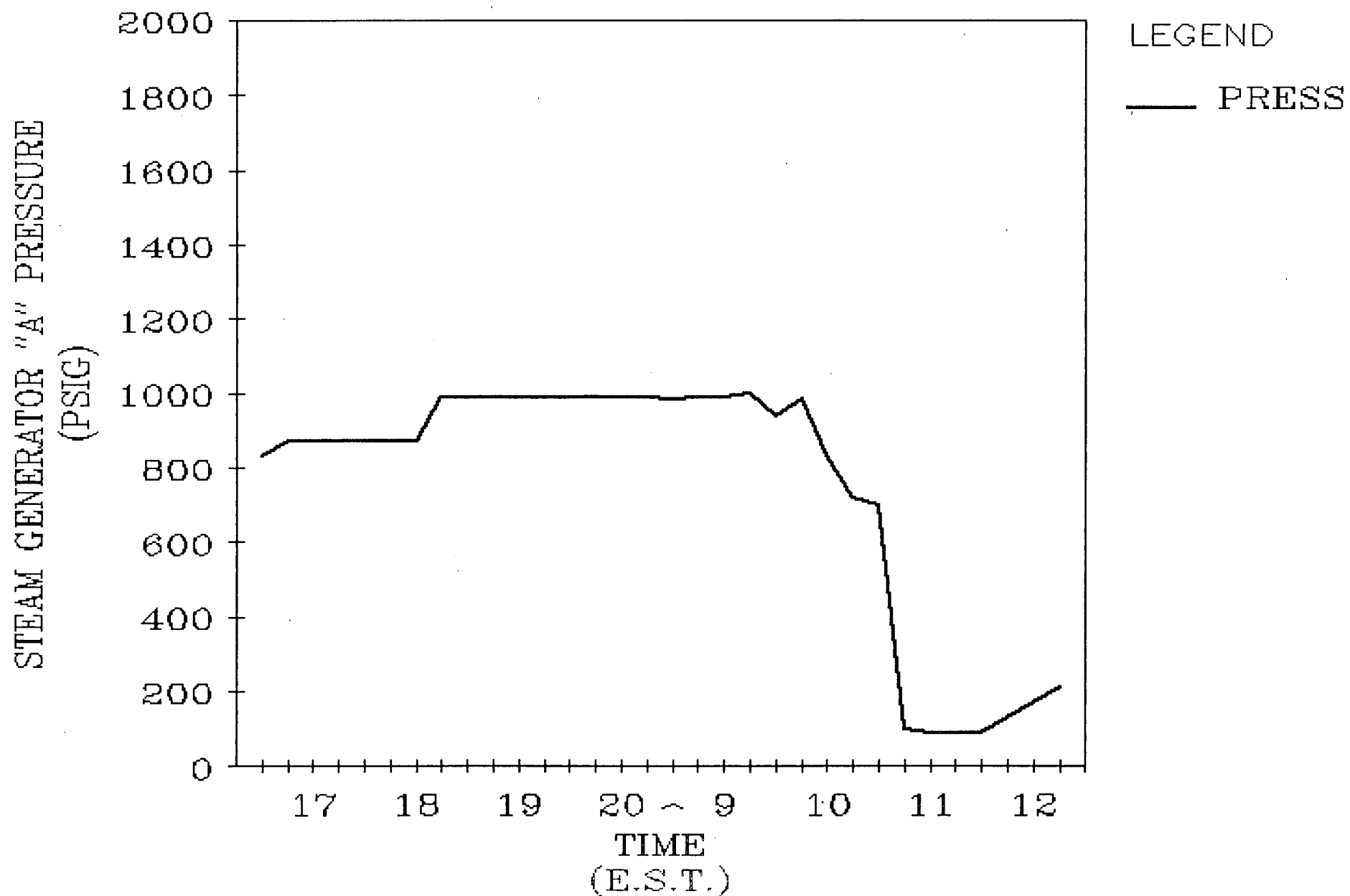
# RNPD 1989 EMERGENCY PREPAREDNESS EXERCISE REACTOR POWER LEVELS (FULL EXERCISE PLOT)



# IRNPD 1989 EMERGENCY PREPAREDNESS EXERCISE STEAM GENERATOR "A" LEVEL (FULL EXERCISE PLOT)

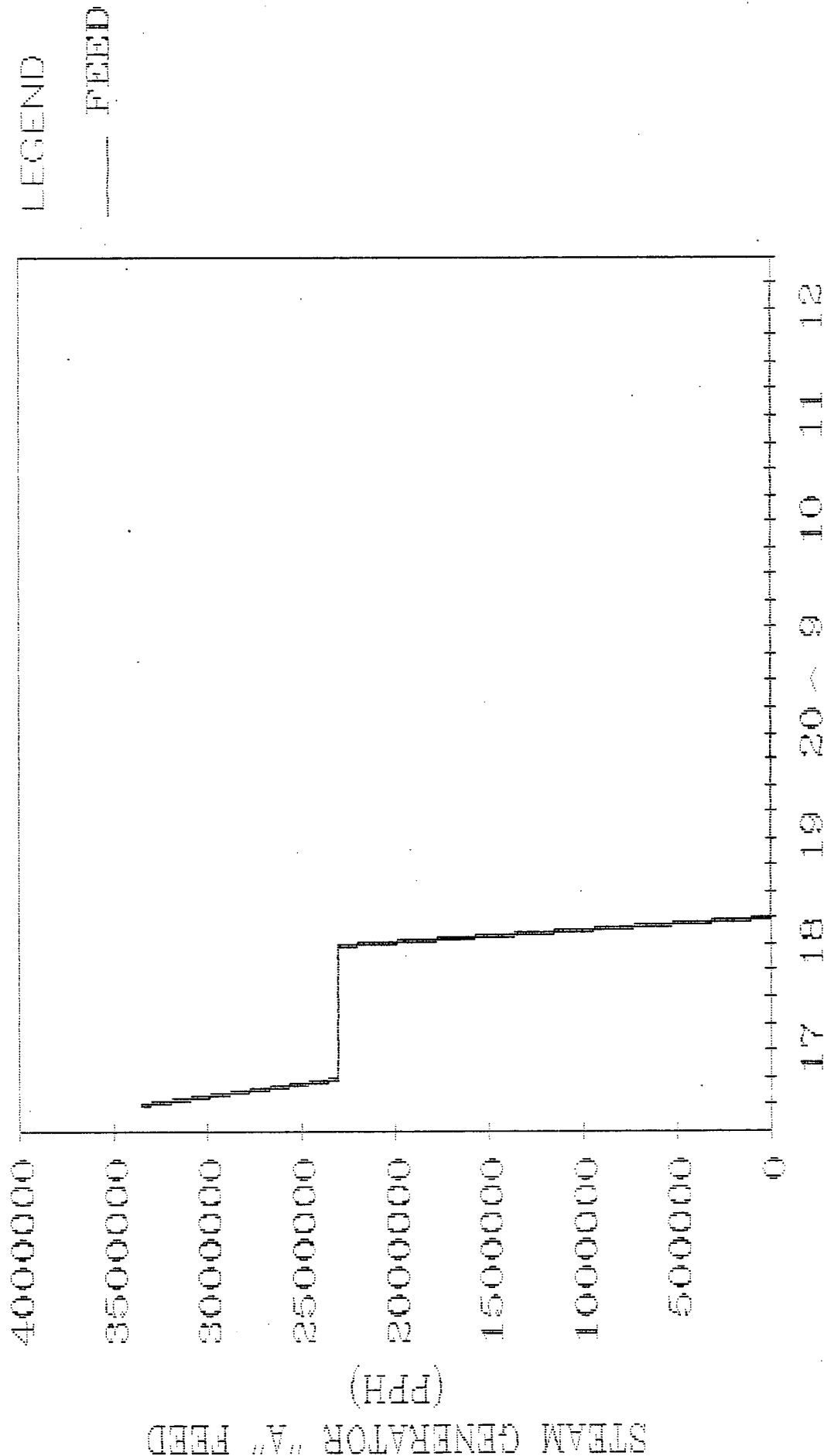


RNPD 1989 EMERGENCY PREPAREDNESS EXERCISE  
STEAM GENERATOR "A" PRESSURE  
(FULL EXERCISE PLOT)

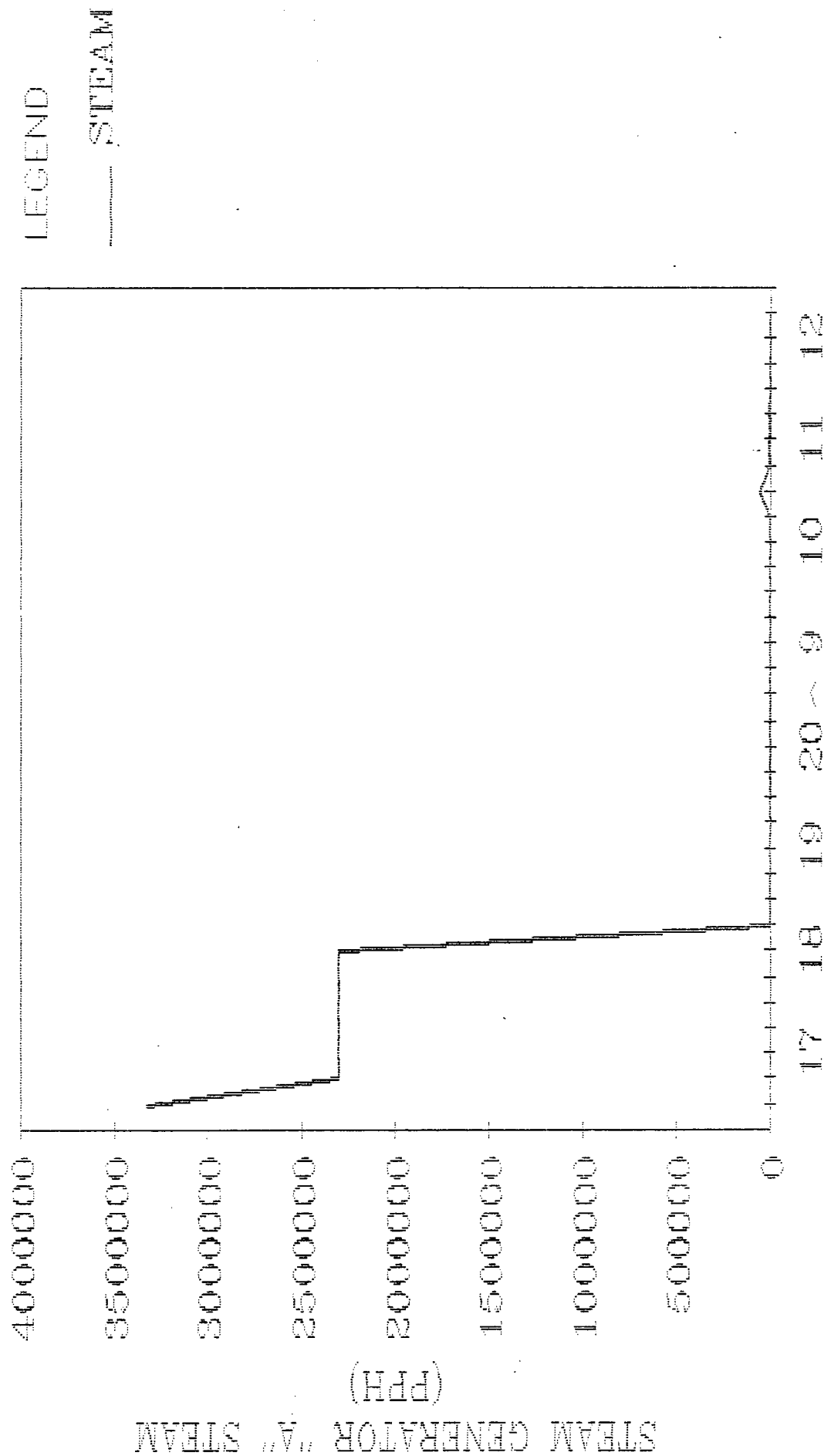




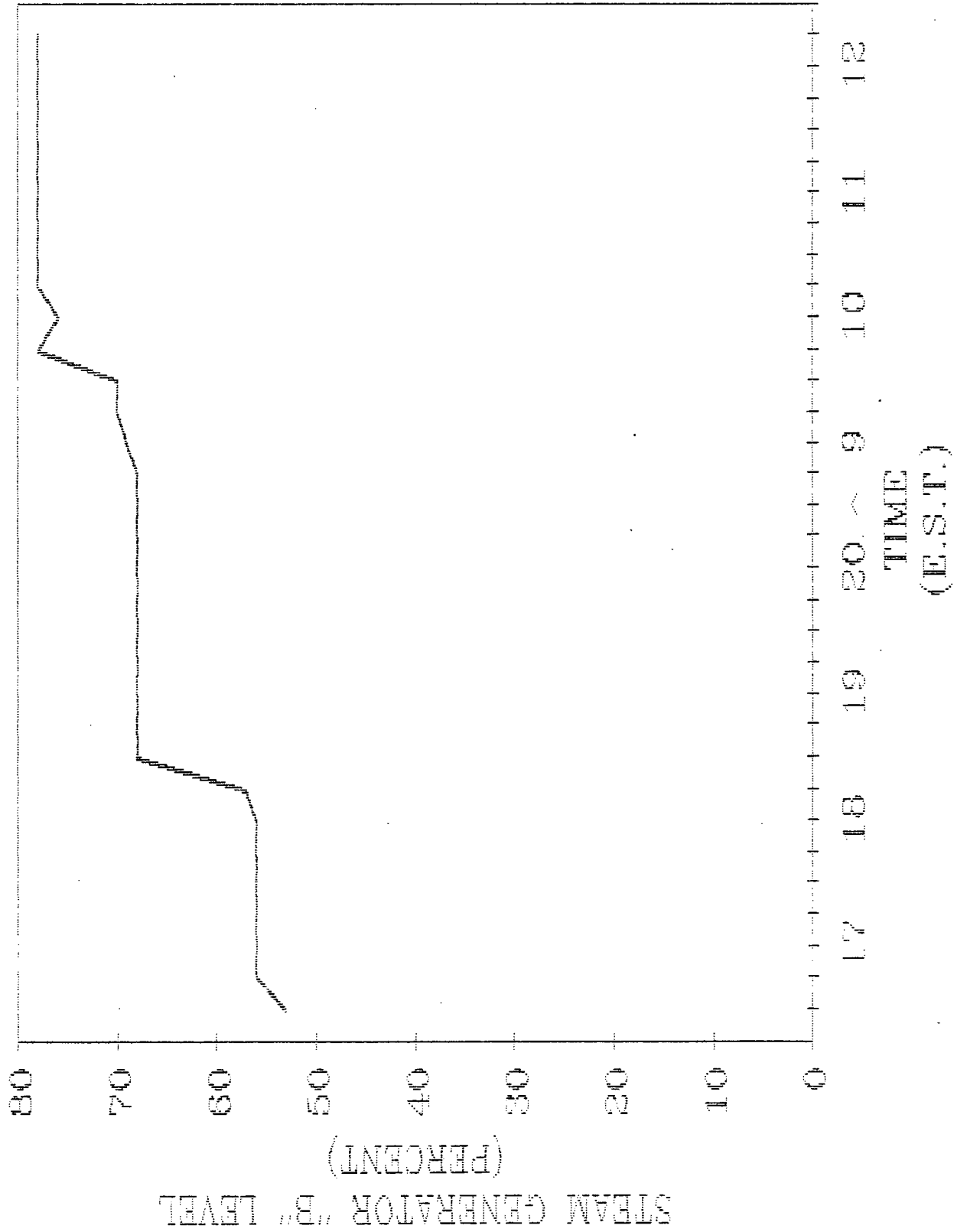
# RNPD 1989 EMERGENCY PREPAREDNESS EXERCISE STEAM GENERATOR "A" FEED (FULL EXERCISE PLOT)



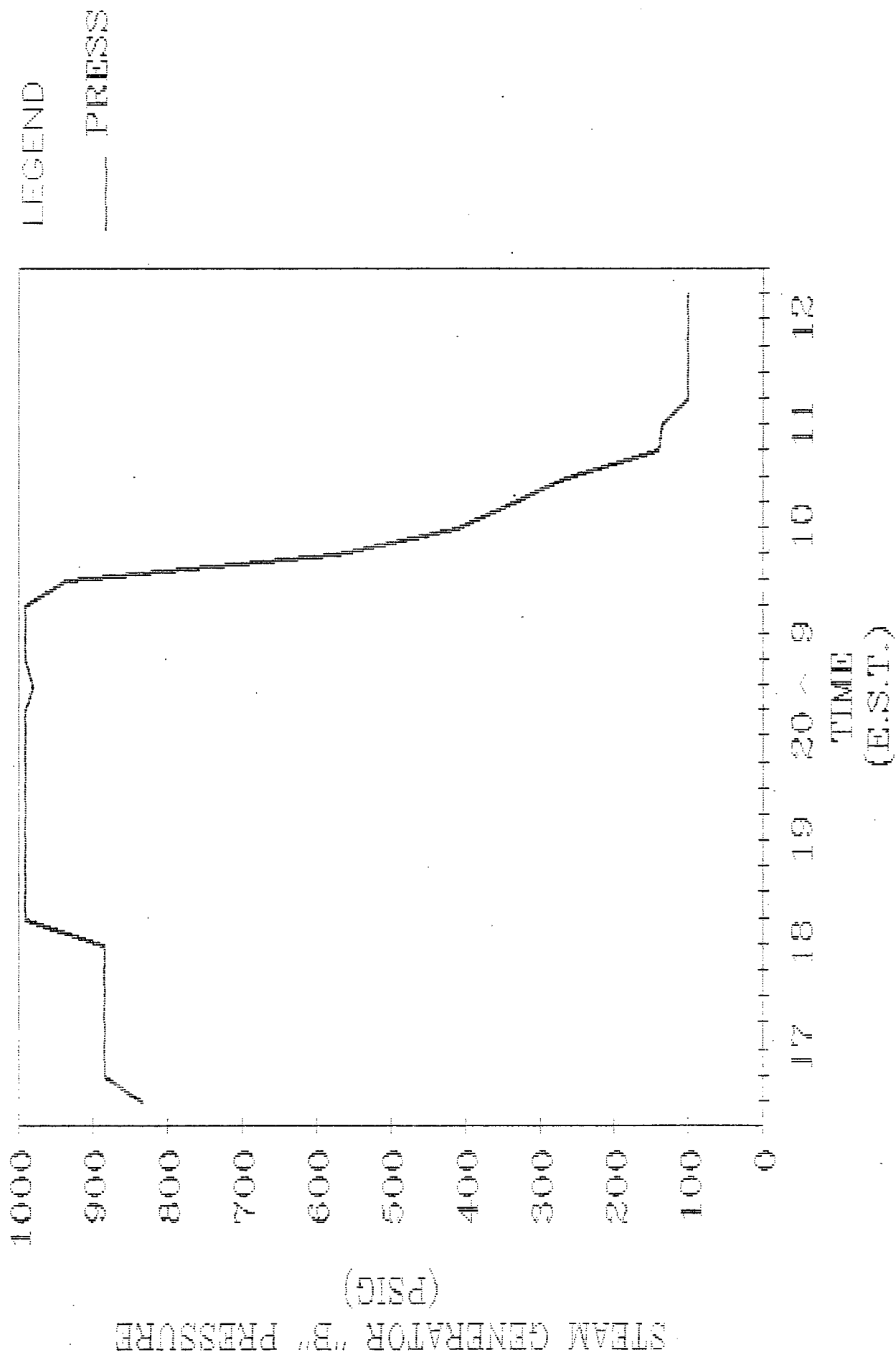
# RNPD 1989 EMERGENCY PREPAREDNESS EXERCISE STEAM GENERATOR "A" STEAM (FULL EXERCISE PLOT)



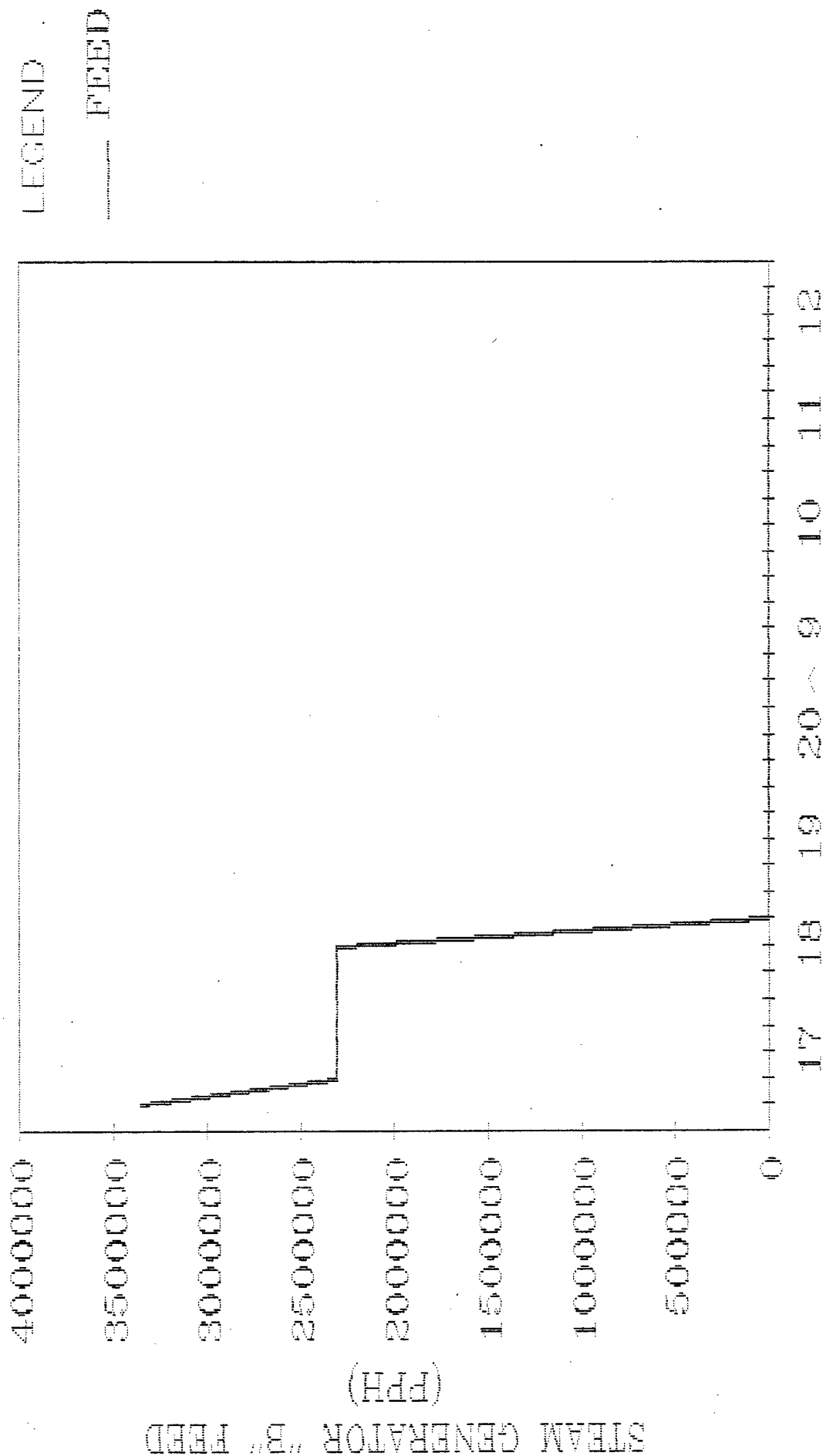
# RNPD 1989 EMERGENCY PREPAREDNESS EXERCISE STEAM GENERATOR "B" LEVEL (FULL EXERCISE PLOT)



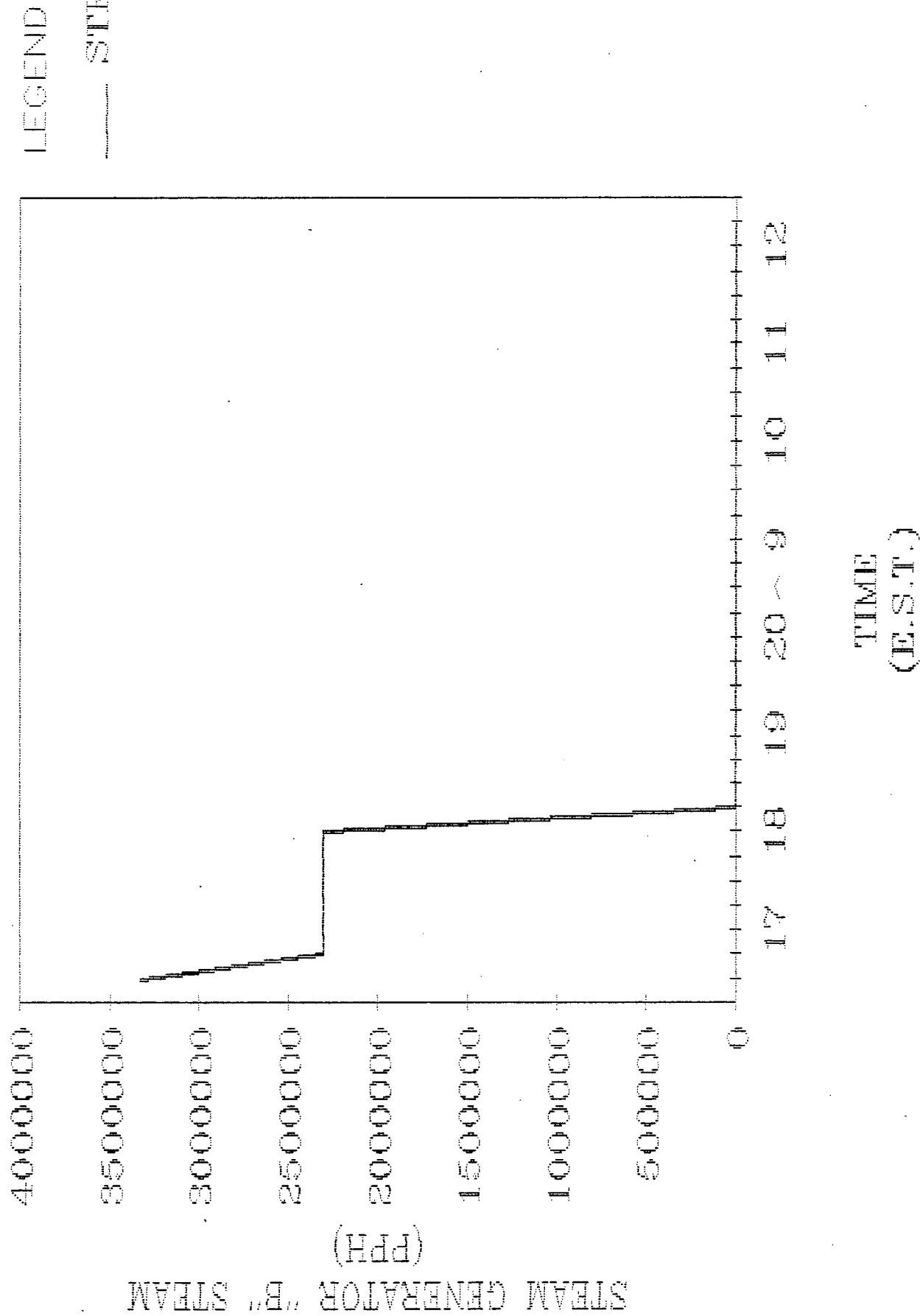
# RNPD 1989 EMERGENCY PREPAREDNESS EXERCISE STEAM GENERATOR "B" PRESSURE (FULL EXERCISE PLOT)



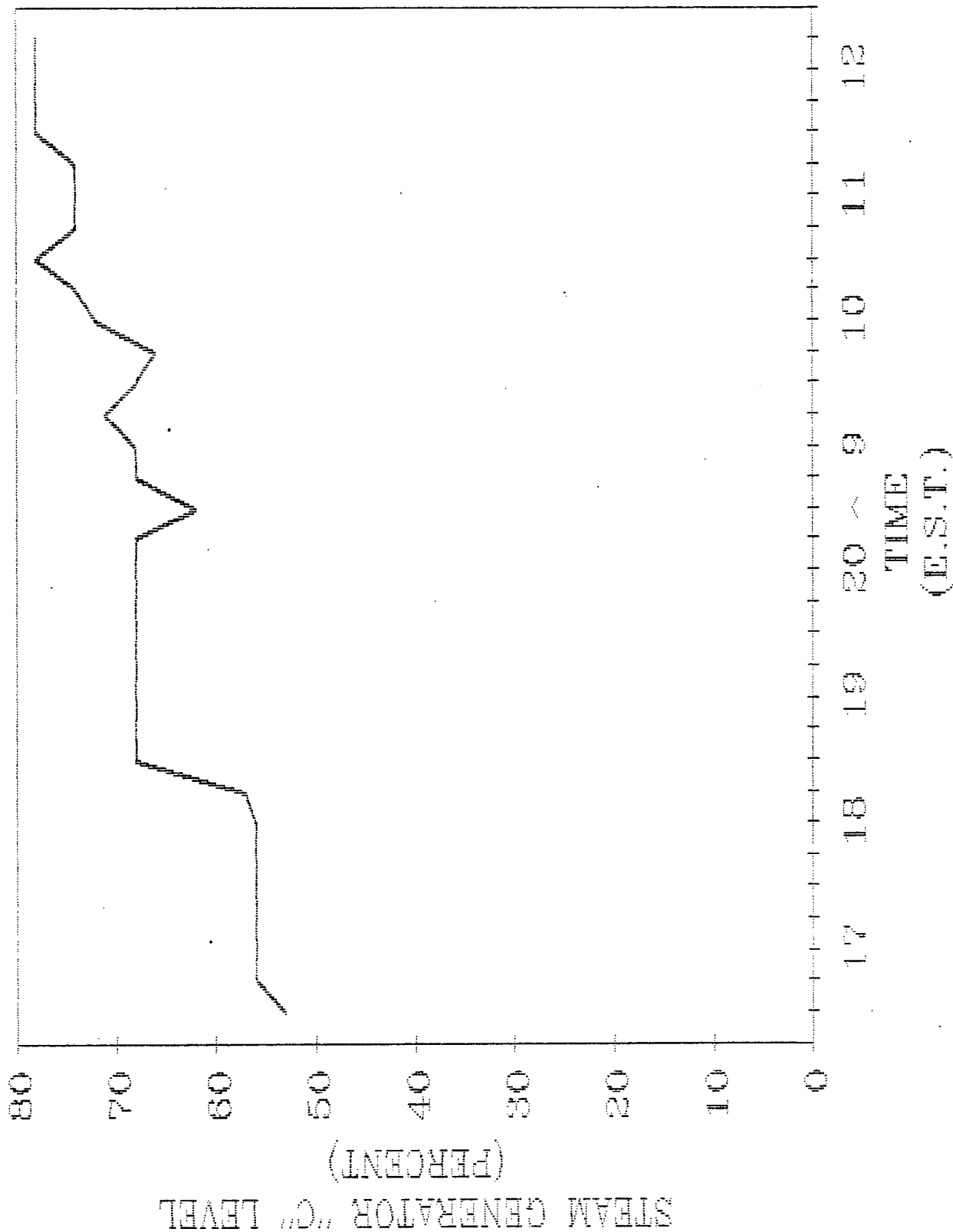
# RNPD 1989 EMERGENCY PREPAREDNESS EXERCISE STEAM GENERATOR "B" FEED (FULL EXERCISE PLOT)



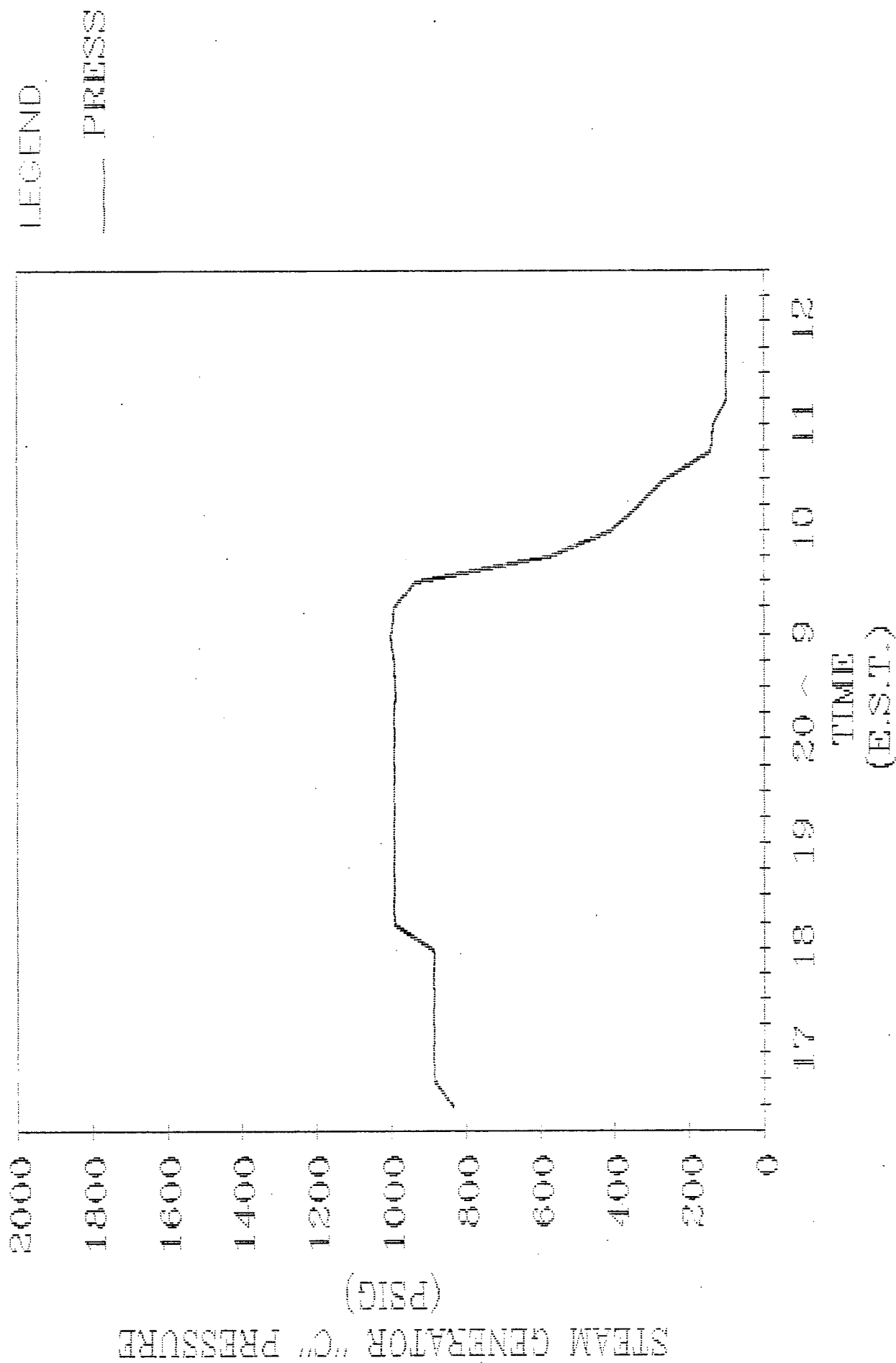
# RNPD 1989 EMERGENCY PREPAREDNESS EXERCISE STEAM GENERATOR "B" STEAM (FULL EXERCISE PLOT)



# RNPD 1989 EMERGENCY PREPAREDNESS EXERCISE STEAM GENERATOR "C" LEVEL (FULL EXERCISE PLOT)

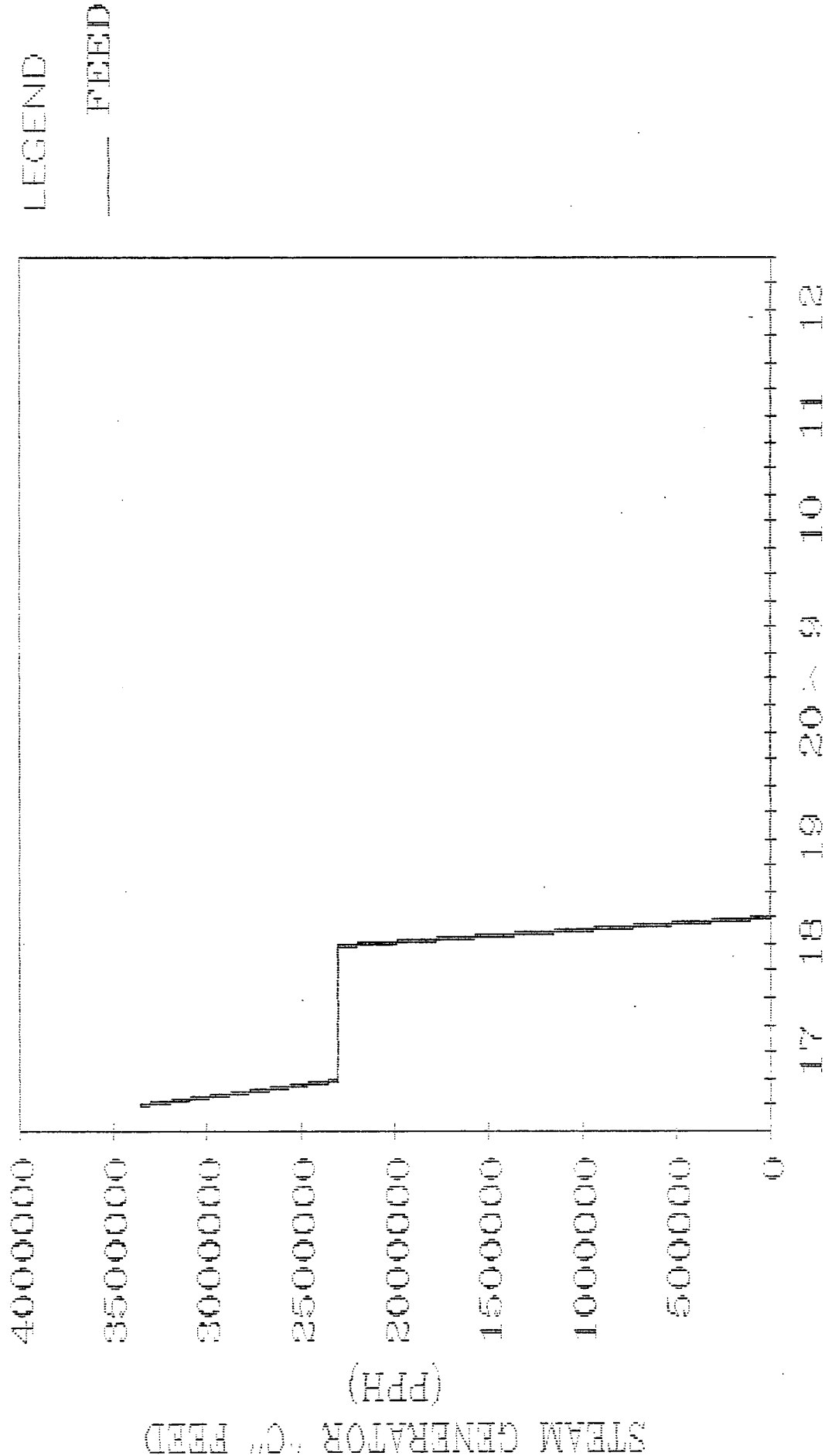


# RNPD' 1989 EMERGENCY PREPAREDNESS EXERCISE STEAM GENERATOR "C" PRESSURE (FULL EXERCISE PLOT)

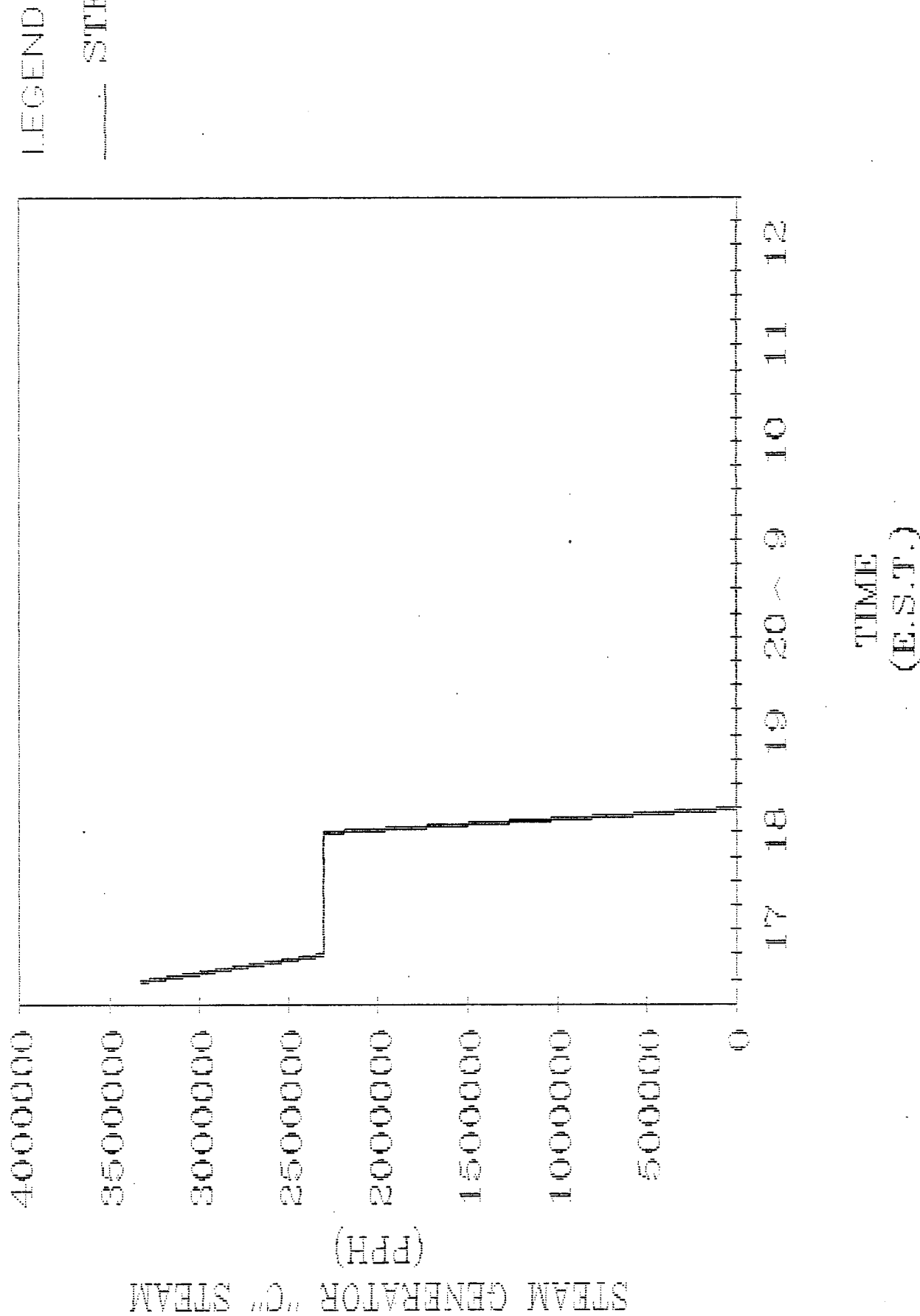




# RNPD 1989 EMERGENCY PREPAREDNESS EXERCISE STEAM GENERATOR "C" FEED (FULL EXERCISE PLOT)



# RNPD 1989 EMERGENCY PREPAREDNESS EXERCISE STEAM GENERATOR "C" STEAM (FULL EXERCISE PLOT)



CAROLINA POWER AND LIGHT COMPANY  
ROBINSON NUCLEAR PROJECT DEPARTMENT

1989 EMERGENCY PREPAREDNESS  
ANNUAL EXERCISE

3.3 METEOROLOGICAL  
DATA



Carolina Power &amp; Light Company

**ONSITE METEOROLOGICAL DATA**Date: November 13, 1989

RNP

Time (EST)	<u>1600</u>	<u>1615</u>	<u>1630</u>	<u>1645</u>
Upper Speed (mph)	<u>14.71</u>	<u>13.11</u>	<u>12.91</u>	<u>11.81</u>
Upper Direc. (DEG)	<u>224</u>	<u>224</u>	<u>225</u>	<u>226</u>
Lower Speed (mph)	<u>7.31</u>	<u>7.11</u>	<u>7.31</u>	<u>6.51</u>
Lower Direc. (DEG)	<u>165</u>	<u>183</u>	<u>189</u>	<u>193</u>
AMB Temp. (°F)	<u>61.5</u>	<u>59.6</u>	<u>59.6</u>	<u>60.5</u>
$\Delta T$ (°C/100m)	<u>-0.53</u>	<u>-0.46</u>	<u>-0.57</u>	<u>-0.74</u>
Stability Class	<u>D</u>	<u>E</u>	<u>D</u>	<u>D</u>

Time (EST)	<u>1700</u>	<u>1715</u>	<u>1730</u>	<u>1745</u>
Upper Speed (mph)	<u>12.21</u>	<u>14.91</u>	<u>15.11</u>	<u>16.71</u>
Upper Direc. (DEG)	<u>228</u>	<u>234</u>	<u>237</u>	<u>236</u>
Lower Speed (mph)	<u>7.1</u>	<u>9.1</u>	<u>9.4</u>	<u>10.9</u>
Lower Direc. (DEG)	<u>201</u>	<u>215</u>	<u>215</u>	<u>213</u>
AMB Temp. (°F)	<u>60.7</u>	<u>60.3</u>	<u>59.5</u>	<u>58.9</u>
$\Delta T$ (°C/100m)	<u>-0.80</u>	<u>-0.89</u>	<u>-1.07</u>	<u>-0.95</u>
Stability Class	<u>D</u>	<u>D</u>	<u>D</u>	<u>D</u>



Carolina Power &amp; Light Company

# **ONSITE METEOROLOGICAL DATA**

Date: November 13, 1989

RNP

Time (EST)	<u>1800</u>	<u>1815</u>	<u>1830</u>	<u>1845</u>
Upper Speed (mph)	<u>17.31</u>	<u>17.81</u>	<u>17.81</u>	<u>16.71</u>
Upper Direc. (DEG)	<u>237</u>	<u>237</u>	<u>233</u>	<u>236</u>
Lower Speed (mph)	<u>10.91</u>	<u>11.71</u>	<u>11.91</u>	<u>10.11</u>
Lower Direc. (DEG)	<u>213</u>	<u>215</u>	<u>210</u>	<u>215</u>
AMB Temp. (°F)	<u>58.7</u>	<u>58.5</u>	<u>58.4</u>	<u>60.3</u>
$\Delta T$ (°C/100m)	<u>-1.08</u>	<u>-1.21</u>	<u>-1.11</u>	<u>-1.09</u>
Stability Class	<u>D</u>	<u>D</u>	<u>D</u>	<u>D</u>

Time (EST)	<u>1900</u>	<u>1915</u>	<u>1930</u>	<u>1945</u>
Upper Speed (mph)	<u>16.71</u>	<u>15.61</u>	<u>14.41</u>	<u>13.11</u>
Upper Direc. (DEG)	<u>240</u>	<u>240</u>	<u>239</u>	<u>243</u>
Lower Speed (mph)	<u>10.4</u>	<u>9.8</u>	<u>9.1</u>	<u>9.3</u>
Lower Direc. (DEG)	<u>222</u>	<u>220</u>	<u>216</u>	<u>219</u>
AMB Temp. (°F)	<u>59.7</u>	<u>58.6</u>	<u>57.4</u>	<u>56.3</u>
$\Delta T$ (°C/100m)	<u>-1.03</u>	<u>-1.06</u>	<u>-1.35</u>	<u>-1.41</u>
Stability Class	<u>D</u>	<u>D</u>	<u>D</u>	<u>D</u>



Carolina Power &amp; Light Company

# ONSITE METEOROLOGICAL DATA

Date: November 13, 1989

RNP

Time (EST)	<u>2000</u>	<u>2015</u>	<u>2030</u>	<u>2045</u>
Upper Speed (mph)	<u>16.61</u>	<u>16.41</u>	<u>18.81</u>	<u>22.11</u>
Upper Direc. (DEG)	<u>242</u>	<u>243</u>	<u>244</u>	<u>245</u>
Lower Speed (mph)	<u>11.01</u>	<u>12.11</u>	<u>11.91</u>	<u>12.91</u>
Lower Direc. (DEG)	<u>227</u>	<u>216</u>	<u>222</u>	<u>225</u>
AMB Temp. (°F)	<u>55.9</u>	<u>55.4</u>	<u>55.7</u>	<u>56.0</u>
$\Delta T$ (°C/100m)	<u>-1.55</u>	<u>-1.32</u>	<u>-1.45</u>	<u>-1.38</u>
Stability Class	<u>C</u>	<u>D</u>	<u>D</u>	<u>D</u>

Time (EST)	<u>2100</u>	<u>2115</u>	<u>2130</u>	<u>2145</u>
Upper Speed (mph)	<u>17.81</u>	<u>17.31</u>	<u>16.51</u>	<u>15.61</u>
Upper Direc. (DEG)	<u>239</u>	<u>252</u>	<u>252</u>	<u>248</u>
Lower Speed (mph)	<u>11.9</u>	<u>11.0</u>	<u>9.5</u>	<u>9.0</u>
Lower Direc. (DEG)	<u>218</u>	<u>232</u>	<u>233</u>	<u>227</u>
AMB Temp. (°F)	<u>55.0</u>	<u>54.1</u>	<u>53.9</u>	<u>53.7</u>
$\Delta T$ (°C/100m)	<u>-1.30</u>	<u>-1.23</u>	<u>-0.79</u>	<u>-1.07</u>
Stability Class	<u>D</u>	<u>D</u>	<u>D</u>	<u>D</u>



Carolina Power &amp; Light Company

**ONSITE METEOROLOGICAL DATA**Date: November 14, 1989

Time (EST)	<u>0800</u>	<u>0815</u>	<u>0830</u>	<u>0845</u>
Upper Speed (mph)	<u>6.31</u>	<u>4.61</u>	<u>5.01</u>	<u>5.91</u>
Upper Direc. (DEG)	<u>200</u>	<u>194</u>	<u>190</u>	<u>200</u>
Lower Speed (mph)	<u>1.11</u>	<u>1.91</u>	<u>3.21</u>	<u>3.91</u>
Lower Direc. (DEG)	<u>174</u>	<u>185</u>	<u>188</u>	<u>193</u>
AMB Temp. (°F)	<u>48.6</u>	<u>49.1</u>	<u>50.2</u>	<u>50.9</u>
$\Delta T$ (°C/100m)	<u>-0.14</u>	<u>-0.29</u>	<u>-0.42</u>	<u>-0.55</u>
Stability Class	<u>E</u>	<u>E</u>	<u>E</u>	<u>D</u>

Time (EST)	<u>0900</u>	<u>0915</u>	<u>0930</u>	<u>0945</u>
Upper Speed (mph)	<u>5.71</u>	<u>4.21</u>	<u>5.31</u>	<u>6.91</u>
Upper Direc. (DEG)	<u>202</u>	<u>205</u>	<u>215</u>	<u>220</u>
Lower Speed (mph)	<u>4.1</u>	<u>3.3</u>	<u>4.1</u>	<u>4.6</u>
Lower Direc. (DEG)	<u>197</u>	<u>199</u>	<u>210</u>	<u>211</u>
AMB Temp. (°F)	<u>51.4</u>	<u>52.2</u>	<u>53.1</u>	<u>53.9</u>
$\Delta T$ (°C/100m)	<u>-0.77</u>	<u>-0.82</u>	<u>-0.99</u>	<u>-1.08</u>
Stability Class	<u>D</u>	<u>D</u>	<u>D</u>	<u>D</u>



Carolina Power &amp; Light Company

# **ONSITE METEOROLOGICAL DATA**

Date: November 14, 1989

RNP

Time (EST)	<u>1000</u>	<u>1015</u>	<u>1030</u>	<u>1045</u>
Upper Speed (mph)	<u>6.81</u>	<u>6.61</u>	<u>5.91</u>	<u>6.01</u>
Upper Direc. (DEG)	<u>219</u>	<u>222</u>	<u>214</u>	<u>219</u>
Lower Speed (mph)	<u>5.41</u>	<u>4.91</u>	<u>4.11</u>	<u>4.41</u>
Lower Direc. (DEG)	<u>200</u>	<u>206</u>	<u>194</u>	<u>210</u>
AMB Temp. (°F)	<u>54.5</u>	<u>55.1</u>	<u>55.6</u>	<u>56.0</u>
ΔT (°C/100m)	<u>-1.19</u>	<u>-1.36</u>	<u>-1.46</u>	<u>-1.44</u>
Stability Class	<u>D</u>	<u>D</u>	<u>D</u>	<u>D</u>

Time (EST)	<u>1100</u>	<u>1115</u>	<u>1130</u>	<u>1145</u>
Upper Speed (mph)	<u>6.41</u>	<u>6.21</u>	<u>6.71</u>	<u>6.01</u>
Upper Direc. (DEG)	<u>218</u>	<u>218</u>	<u>215</u>	<u>213</u>
Lower Speed (mph)	<u>4.7</u>	<u>4.9</u>	<u>5.0</u>	<u>4.6</u>
Lower Direc. (DEG)	<u>205</u>	<u>208</u>	<u>199</u>	<u>200</u>
AMB Temp. (°F)	<u>57.2</u>	<u>57.0</u>	<u>57.7</u>	<u>58.2</u>
ΔT (°C/100m)	<u>-1.49</u>	<u>-1.44</u>	<u>-1.48</u>	<u>-1.37</u>
Stability Class	<u>D</u>	<u>D</u>	<u>D</u>	<u>D</u>





Carolina Power &amp; Light Company

# **ONSITE METEOROLOGICAL DATA**

Date: November 14, 1989

RNP

Time (EST)	<u>1200</u>	<u>1215</u>	<u>1230</u>	<u>1245</u>
Upper Speed (mph)	<u>6.81</u>	<u>6.91</u>	<u>6.51</u>	<u>7.01</u>
Upper Direc. (DEG)	<u>215</u>	<u>219</u>	<u>221</u>	<u>220</u>
Lower Speed (mph)	<u>5.11</u>	<u>4.91</u>	<u>4.81</u>	<u>5.41</u>
Lower Direc. (DEG)	<u>203</u>	<u>208</u>	<u>211</u>	<u>213</u>
AMB Temp. (°F)	<u>58.4</u>	<u>58.7</u>	<u>58.9</u>	<u>59.3</u>
$\Delta T$ (°C/100m)	<u>-1.45</u>	<u>-1.46</u>	<u>-1.48</u>	<u>-1.44</u>
Stability Class	<u>D</u>	<u>D</u>	<u>D</u>	<u>D</u>

Time (EST)				
Upper Speed (mph)	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
Upper Direc. (DEG)				
Lower Speed (mph)				
Lower Direc. (DEG)				
AMB Temp. (°F)				
$\Delta T$ (°C/100m)				
Stability Class				



Carolina Power &amp; Light Company

## METEOROLOGICAL FORECAST FOR:

Date: November 13, 1989Time Issued: 1600 EST

Issued By: \_\_\_\_\_

Received By: \_\_\_\_\_

Forecast Location: \_\_\_\_\_

RNP

## A) Next 1 Hour

1) Wind Direction: \_\_\_\_\_ Sector S-SSW Deg. 1902) Winds Should Remain (Steady) Steady; Variable)2a) Variation Should Be ± 15 Deg.3) Wind Velocity: 5 to 10 (MPH)4) Stability Class D

5) Precipitation Activity Will Be (None, Scattered, Steady)

6) Precipitation Type (Rain, Rainshowers, Thunderstorms, Ice, Snow)7) Precipitation Intensity (Light, Moderate, Severe)

## B) Next 3 Hours:

Wind: SSW 215°7-12 mphStability: DPrecip: SCT TRW/RW

## C) Remarks:

Line of Severe Thunderstorms moving  
through RNP during this hour.



Carolina Power &amp; Light Company

## METEOROLOGICAL FORECAST FOR

Date: November 13, 1989Time Issued: 1700 EST

Issued By: \_\_\_\_\_

Received By: \_\_\_\_\_

Forecaster Location: \_\_\_\_\_

RNP

## A) Next 1 Hour

- 1) Wind Direction: Sector SSW-SW Deg. 215
- 2) Winds Should Remain (Steady) Shifting: Variable)  
2a) Variation Should Be 1/5 Deg.
- 3) Wind Velocity: 7 to 12 (MPH)
- 4) Stability Class D
- 5) Precipitation Activity Will Be (None, Scattered, Steady)
- 6) Precipitation Type (Rain, Rainshowers, Thunderstorms, Ice, Snow)
- 7) Precipitation Intensity (Light, Moderate, Severe)

## B) Next 3 Hours:

Wind: SW 225° 7-12 mphStability: DPrecip: None

## C) Remarks: \_\_\_\_\_



Carolina Power &amp; Light Company

## METEOROLOGICAL FORECAST FO

Date: November 13, 1989Time Issued: 1800 EST

Issued By: \_\_\_\_\_

Received By: \_\_\_\_\_

Forecast Location: RNP

## A) Next 1 Hour

- 1) Wind Direction: Sector SSW-SW Deg. 215
- 2) Winds Should Remain (Steady) ~~(Shifting; Variable)~~
  - 2a) Variation Should Be ± 10 Deg.
- 3) Wind Velocity: 7 to 12 (MPH)
- 4) Stability Class D
- 5) Precipitation Activity Will Be (None) ~~(Scattered, Steady)~~
- 6) Precipitation Type (Rain, Rainshowers, Thunderstorms, Ice, Snow)
- 7) Precipitation Intensity (Light, Moderate, Severe)

## B) Next 3 Hours:

Winds: SW 225° 8-13 mph  
Stability: D  
Precip: None

C) Remarks: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



Carolina Power &amp; Light Company

## METEOROLOGICAL FORECAST FOR

Date: November 13, 1989Time Issued: 1900 EST

Issued By: \_\_\_\_\_

Received By: \_\_\_\_\_

Forecast Location: RNP

## A) Next 1 Hour

- 1) Wind Direction: Sector SW Deg. 225
- 2) Winds Should Remain (Steady) Steady; Variable  
2a) Variation Should Be ± 10 Deg.
- 3) Wind Velocity: 8 to 13 (MPH)
- 4) Stability Class D
- 5) Precipitation Activity Will Be (None), Scattered, Steady
- 6) Precipitation Type (Rain, Rainshowers, Thunderstorms, Ice, Snow)
- 7) Precipitation Intensity (Light, Moderate, Severe)

## B) Next 3 Hours:

Wind: SW 225°8-13 mphStability: DPrecip: None

## C) Remarks:



Carolina Power &amp; Light Company

## METEOROLOGICAL FORECAST FO

Date: November 13, 1989Time Issued: 2000 EST

Issued By: \_\_\_\_\_

Received By: \_\_\_\_\_

Forecast Location: \_\_\_\_\_

RNP

## A) Next 1 Hour

- 1) Wind Direction: Sector SW Deg. 225
- 2) Winds Should Remain (Steady) Shifting: Variable
- 2a) Variation Should Be ± 10 Deg.
- 3) Wind Velocity: 8 to 13 (MPH)
- 4) Stability Class: D
- 5) Precipitation Amount Will Be (None), Scattered, Steady
- 6) Precipitation Type (Rain, Rainshowers, Thunderstorms, Ice, Snow)
- 7) Precipitation Intensity (Light, Moderate, Severe)

## B) Next 3 Hours:

Winds: SW 2307-12 mphStability: DPrecip: None

## C) Remarks: \_\_\_\_\_



Carolina Power &amp; Light Company

## METEOROLOGICAL FORECAST FOR

Date: November 13, 1989Time Issued: 2100 EST

Issued By: \_\_\_\_\_

Received By: \_\_\_\_\_

Forecast Location: RNP

## A) Next 1 Hour

1) Wind Direction: SECTOR SW Deg. 2302) Winds Should Remain (Steady; Steadying; Variable)2a) Variation Should Be ±10 Deg.3) Wind Velocity: 7 to 12 (MPH)4) Stability Class D5) Precipitation Activity Will Be (None, Scattered, Steady)

6) Precipitation Type (Rain, Rainshowers, Thunderstorms, Ice, Snow)

7) Precipitation Intensity (Light, Moderate, Severe)

## B) Next 3 Hours:

Wind: SW 2250 5-10 mphStability: D-EPrecip: None

## C) Remarks: \_\_\_\_\_



Carolina Power &amp; Light Company

## METEOROLOGICAL FORECAST FO

Date: November 14, 1989Time Issued: 0800 EST

Issued By: \_\_\_\_\_

Received By: \_\_\_\_\_

Forecast Location: RNP

## A) Next 1 Hour

- 1) Wind Direction: Sector S Deg. 185
- 2) Winds Should Remain (Steady; Shifting; Variable)  
2a) Variation Should Be ±15 Deg.
- 3) Wind Velocity: 1 to 4 (MPH)
- 4) Stability Class E-D
- 5) Precipitation Activity Will Be (None, Scattered, Steady)
- 6) Precipitation Type (Rain, Rain-showers, Thunderstorms, Ice, Snow)
- 7) Precipitation Intensity (Light, Moderate, Severe)

## B) Next 3 Hours:

Wind: SSW 210° 2-6mph  
Stability: D  
Precip: None

C) Remarks: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



# CP&L

Carolina Power &amp; Light Company

## METEOROLOGICAL FORECAST FOR

Date: November 14, 1989Time Issued: 0900 EST

Issued By: \_\_\_\_\_

Received By: \_\_\_\_\_

Forecast Location: RVP

## A) Next 1 Hour

- 1) Wind Direction: \_\_\_\_\_ Speed: SSW Deg. 205
- 2) Winds Should Remain (Steady; Steady; Variable)  
 2a) Variation Should Be ±10 Deg.
- 3) Wind Velocity: 3 to 7 (MPH)
- 4) Stability Class D
- 5) Precipitation Activity Will Be (None, Scattered, Steady)
- 6) Precipitation Type (Rain, Part-showers, Thunderstorms, Ice, Snow)
- 7) Precipitation Intensity (Light, Moderate, Severe)

## B) Next 3 Hours:

Wind: SSW 210°2-6 mphStability: DPrecip: None

## C) Remarks: \_\_\_\_\_



Carolina Power &amp; Light Company

## METEOROLOGICAL FORECAST FO

Date: November 14, 1989Time Issued: 1000

Issued By: \_\_\_\_\_

Received By: \_\_\_\_\_

Forecast Location: RNP

## A) Next 1 Hour

1) Wind Direction: Sector SSW Deg. 2052) Winds Should Remain (Steady; Shifting; Variable)2a) Variation Should Be ± 10 Deg.3) Wind Velocity: 3 to 7 (MPH)4) Stability Class D5) Precipitation Activity Will Be (None; Scattered; Steady)

6) Precipitation Type (Rain, Rainshowers, Thunderstorms, Ice, Snow)

7) Precipitation Intensity (Light, Moderate, Severe)

## B) Next 3 Hours:

Wind: SSW 210° 2-6 mphStability: DPrecip: NoneC) Remarks: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



Carolina Power &amp; Light Company

## METEOROLOGICAL FORECAST FO

Date: November 14, 1989Time Issued: 1100

Issued By: \_\_\_\_\_

Received By: \_\_\_\_\_

Forecast Location: RNP

## A) Next 1 Hour

1) Wind Direction: Sector SSW Deg. 2102) Winds Should Remain (Steady; Shifting; Variable)2a) Variation Should Be ± 10 Deg.3) Wind Velocity: 2 to 6 (MPH)4) Stability Class D5) Precipitation Activity Will Be (None, Scattered, Steady)

6) Precipitation Type (Rain, Rainshowers, Thunderstorms, Ice, Snow)

7) Precipitation Intensity (Light, Moderate, Severe)

## B) Next 3 Hours:

Wind: SSW 210° 4-8 mphStability: DPrecip: None

C) Remarks: \_\_\_\_\_



Carolina Power &amp; Light Company

## METEOROLOGICAL FORECAST FO

Date:

November 14, 1989

Time Issued:

1200

Issued By: \_\_\_\_\_

Received By: \_\_\_\_\_

Forecast Location: \_\_\_\_\_

RNP

## A) NEXT 1 HOUR

1) Wind Direction: \_\_\_\_\_ Sector SSW Deg. 2102) Winds Should Remain (Steady), Shifting; Variable)2a) Variation Should Be ± 10 Deg.3) Wind Velocity: 3 to 7 (MPH)4) Stability Class D5) Precipitation Activity Will Be (None), Scattered, Steady

6) Precipitation Type (Rain, Rain-showers, Thunderstorms, Ice, Snow)

7) Precipitation Intensity (Light, Moderate, Severe)

## B) Next 3 Hours:

Wind: SSW 210° 4-8 mphStability: DPrecip: None

C) Remarks: \_\_\_\_\_

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

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

	1700	1715	1730	1745	1800	1815	1830	1845	1900	1915	1930	1945	0900	0915	0930
POLYIDE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT
	PRIMARY	PRIMARY	PRIMARY	PRIMARY	PRIMARY	PRIMARY	PRIMARY	PRIMARY	PRIMARY	PRIMARY	PRIMARY	PRIMARY	PRIMARY	PRIMARY	PRIMARY
	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.
	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml
I-131	1.46E-04	1.46E-04	1.46E-04	1.46E-04	3.28E+02	3.26E+02	3.26E+02	3.24E+02	3.22E+02	3.20E+02	3.18E+02	3.16E+02	3.14E+02	3.10E+02	2.96E+02
I-132	2.50E-03	2.50E-03	2.50E-03	2.50E-03	4.68E+01	4.31E+01	3.97E+01	3.66E+01	3.37E+01	3.10E+01	2.86E+01	2.63E+01	2.41E+01	2.13E+01	1.83E+01
I-133	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.99E+02	1.96E+02	1.94E+02	1.91E+02	1.89E+02	1.86E+02	1.83E+02	1.81E+02	1.77E+02	1.68E+02	1.58E+02
I-134	4.10E-03	4.10E-03	4.10E-03	4.10E-03	3.82E+01	3.12E+01	2.55E+01	2.08E+01	1.70E+01	1.39E+01	1.13E+01	9.24E+00	7.51E+00	5.87E+00	4.51E+00
I-135	1.95E-03	1.95E-03	1.95E-03	1.95E-03	9.78E+01	9.48E+01	9.19E+01	8.91E+01	8.64E+01	8.37E+01	8.11E+01	7.86E+01	7.58E+01	7.04E+01	6.41E+01
TOTAL	1.00E-02	1.00E-02	1.00E-02	1.00E-02	7.10E+02	6.92E+02	6.73E+02	6.60E+02	6.46E+02	6.33E+02	6.20E+02	6.09E+02	5.95E+02	5.61E+02	5.18E+02
IODINE EQ2.16E-03	2.16E-03	2.16E-03	2.16E-03	2.16E-03	3.55E+02	3.50E+02	3.45E+02	3.41E+02	3.37E+02	3.33E+02	3.30E+02	3.26E+02	3.21E+02	3.05E+02	2.81E+02
KR-83M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
KR-85M	1.60E-04	1.60E-04	1.60E-04	1.60E-04	4.26E+00	4.07E+00	3.90E+00	3.73E+00	3.56E+00	3.41E+00	3.26E+00	3.11E+00	2.96E+00	2.71E+00	2.46E+00
KR-85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.01E+00	3.99E+00	3.97E+00	3.95E+00	3.93E+00	3.91E+00	3.89E+00	3.86E+00	3.83E+00	3.65E+00	3.45E+00
KR-87	3.50E-02	3.50E-02	3.50E-02	3.50E-02	3.50E+00	3.40E+00	2.95E+00	2.56E+00	2.22E+00	1.92E+00	1.67E+00	1.45E+00	1.23E+00	1.04E+00	8.45E+00
KR-88	2.00E-03	2.00E-03	2.00E-03	2.00E-03	9.18E+00	8.58E+00	8.02E+00	7.50E+00	7.01E+00	6.56E+00	6.13E+00	5.73E+00	5.33E+00	4.77E+00	4.18E+00
KR-89	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.20E+00	2.27E+00	8.34E+05	3.06E+06	1.12E+07	4.12E+09	1.51E+10	5.54E+12	2.02E+13	7.12E+15	2.51E+17
XE-131M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E+00	1.19E+00	1.19E+00	1.18E+00	1.17E+00	1.16E+00	1.15E+00	1.15E+00	1.13E+00	1.08E+00	1.02E+00
XE-133M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.96E+00	2.94E+00	2.91E+00	2.89E+00	2.87E+00	2.84E+00	2.82E+00	2.79E+00	2.76E+00	2.62E+00	2.46E+00
YE-133	9.40E-04	9.40E-04	9.40E-04	9.40E-04	2.01E+02	2.00E+02	1.99E+02	1.97E+02	1.96E+02	1.95E+02	1.93E+02	1.92E+02	1.90E+02	1.81E+02	1.71E+02
YE-135M	1.10E-01	1.10E-01	1.10E-01	1.10E-01	1.22E+00	6.23E-01	3.19E-01	1.62E-01	8.28E-02	4.22E-02	2.16E-02	1.10E-02	5.58E-03	2.73E-03	1.36E-03
XE-135	1.50E-03	1.50E-03	1.50E-03	1.50E-03	1.07E+01	1.05E+01	1.02E+01	9.99E+00	9.76E+00	9.53E+00	9.31E+00	9.09E+00	8.83E+00	8.27E+00	7.61E+00
XE-138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.62E+00	7.28E+00	6.93E+00	6.63E+00	6.33E+00	6.05E+00	5.77E+00	5.51E+00	5.23E+00	4.79E+00	4.35E+00
TOTAL	1.50E-01	1.50E-01	1.50E-01	1.50E-01	2.46E+02	2.42E+02	2.39E+02	2.36E+02	2.33E+02	2.30E+02	2.27E+02	2.23E+02	2.21E+02	2.10E+02	1.96E+02
SR-89	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
TE-132	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
BA-140	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
ZR-97	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
CE-143	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
WD-147	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
CS-134	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
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
TOTAL	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
GRAND	1.60E-01	1.60E-01	1.60E-01	1.60E-01	9.56E+02	9.34E+02	9.14E+02	8.95E+02	8.78E+02	8.63E+02	8.48E+02	8.33E+02	8.16E+02	7.70E+02	7.18E+02



	0945	1000	1015	1030	1045	1100	1115	1130	1145	1200	1215	1230
NUCLIDE	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT
	PRIMARY	PRIMARY	PRIMARY	PRIMARY	PRIMARY	PRIMARY	PRIMARY	PRIMARY	PRIMARY	PRIMARY	PRIMARY	PRIMARY
	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.
	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml	uCi/ml
I-131	2.78E+02	2.61E+02	2.44E+02	2.26E+02	2.09E+02	1.92E+02	1.74E+02	1.71E+02	1.68E+02	1.64E+02	1.61E+02	1.57E+02
I-132	1.86E+01	1.62E+01	1.40E+01	1.20E+01	1.03E+01	8.77E+00	7.39E+00	6.72E+00	6.10E+00	5.54E+00	5.02E+00	4.55E+00
I-133	1.57E+02	1.46E+02	1.35E+02	1.25E+02	1.14E+02	1.04E+02	9.38E+01	9.12E+01	8.87E+01	8.62E+01	8.37E+01	8.12E+01
I-134	4.54E+00	3.50E+00	2.68E+00	2.05E+00	1.55E+00	1.17E+00	8.75E-01	7.05E-01	5.67E-01	4.56E-01	3.67E-01	2.95E-01
I-135	6.46E+01	5.91E+01	5.38E+01	4.88E+01	4.39E+01	3.93E+01	3.48E+01	3.33E+01	3.18E+01	3.04E+01	2.90E+01	2.77E+01
TOTAL	5.23E+02	4.86E+02	4.49E+02	4.14E+02	3.79E+02	3.45E+02	3.11E+02	3.03E+02	2.95E+02	2.87E+02	2.79E+02	2.71E+02
IODINE	EQ2.86E+02	2.68E+02	2.50E+02	2.31E+02	2.13E+02	1.95E+02	1.77E+02	1.74E+02	1.70E+02	1.66E+02	1.63E+02	1.59E+02
KR-83M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
KR-85M	2.46E+00	2.22E+00	1.99E+00	1.78E+00	1.58E+00	1.40E+00	1.22E+00	1.15E+00	1.09E+00	1.02E+00	9.64E-01	9.07E-01
KR-85	3.44E+00	3.23E+00	3.01E+00	2.80E+00	2.59E+00	2.38E+00	2.17E+00	2.12E+00	2.08E+00	2.04E+00	2.00E+00	1.96E+00
KR-87	8.54E-01	6.99E-01	5.70E-01	4.62E-01	3.73E-01	2.98E-01	2.37E-01	2.03E-01	1.73E-01	1.48E-01	1.27E-01	1.08E-01
KR-88	4.23E+00	3.73E+00	3.28E+00	2.86E+00	2.49E+00	2.15E+00	1.84E+00	1.69E+00	1.56E+00	1.44E+00	1.32E+00	1.22E+00
KR-89	2.47E-16	8.56E-18	2.95E-19	1.01E-20	3.45E-22	1.17E-23	3.92E-25	1.42E-26	5.14E-28	1.86E-29	6.71E-31	2.42E-32
XE-131M	1.02E+00	9.54E-01	8.91E-01	8.28E-01	7.65E-01	7.02E-01	6.38E-01	6.26E-01	6.13E-01	6.01E-01	5.88E-01	5.75E-01
XE-133M	2.46E+00	2.30E+00	2.14E+00	1.99E+00	1.83E+00	1.67E+00	1.52E+00	1.49E+00	1.45E+00	1.42E+00	1.39E+00	1.35E+00
XE-133	1.70E+02	1.59E+02	1.49E+02	1.38E+02	1.27E+02	1.17E+02	1.06E+02	1.04E+02	1.02E+02	9.97E+01	9.76E+01	9.53E+01
XE-135M	1.32E-03	6.35E-04	3.05E-04	1.45E-04	6.89E-05	3.24E-05	1.52E-05	7.63E-06	3.84E-06	1.93E-06	9.69E-07	4.86E-07
XE-135	7.65E+00	7.05E+00	6.47E+00	5.91E+00	5.36E+00	4.83E+00	4.32E+00	4.17E+00	4.01E+00	3.86E+00	3.71E+00	3.57E+00
XE-138	4.33E+00	3.90E+00	3.50E+00	3.12E+00	2.77E+00	2.44E+00	2.13E+00	2.01E+00	1.89E+00	1.78E+00	1.67E+00	1.57E+00
TOTAL	1.96E+02	1.83E+02	1.71E+02	1.58E+02	1.45E+02	1.33E+02	1.20E+02	1.18E+02	1.15E+02	1.12E+02	1.09E+02	1.07E+02
SR-89	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
TE-132	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
BA-140	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
ZR-97	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
CE-143	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
ND-147	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
CS-134	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
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
TOTAL	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
GRAND	7.19E+02	6.69E+02	6.20E+02	5.72E+02	5.24E+02	4.78E+02	4.32E+02	4.21E+02	4.10E+02	3.99E+02	3.88E+02	3.77E+02



MACROS, T	1945	0900	0915	0930	0945	1000	1015	1030	1045	1100	1115	1130	1145	1200	1215
NORMAL	NORMAL	NORMAL	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT	ACCIDENT
SG "A"	SG "A"	SG "A"	SG "A"	SG "A"	SG "A"	SG "A"	SG "A"	SG "A"	SG "A"	SG "A"	SG "A"	SG "A"	SG "A"	SG "A"	SG "A"
CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.	CHEM.
(uci/ml)	(uci/ml)	(uci/ml)	(uci/ml)	(uci/ml)	(uci/ml)	(uci/ml)	(uci/ml)	(uci/ml)	(uci/ml)	(uci/ml)	(uci/ml)	(uci/ml)	(uci/ml)	(uci/ml)	(uci/ml)
I-131	0.00E+00	0.00E+00	5.55E+00	5.12E+00	4.73E+00	4.33E+00	3.95E+00	3.59E+00	3.23E+00	2.89E+00	2.79E+00	2.69E+00	2.59E+00	2.50E+00	
I-132	0.00E+00	0.00E+00	4.00E+00	3.42E+00	2.92E+00	2.48E+00	2.10E+00	1.77E+00	1.48E+00	1.23E+00	1.10E+00	9.79E+00	8.74E+00	7.81E+00	
I-133	0.00E+00	0.00E+00	3.14E+00	2.88E+00	2.64E+00	2.40E+00	2.17E+00	1.96E+00	1.75E+00	1.55E+00	1.49E+00	1.42E+00	1.36E+00	1.30E+00	
I-134	0.00E+00	0.00E+00	1.10E+00	8.36E+00	6.33E+00	4.77E+00	3.57E+00	2.67E+00	1.97E+00	1.43E+00	1.15E+00	9.10E+00	7.21E+00	5.70E+00	
I-135	0.00E+00	0.00E+00	1.32E+00	1.19E+00	1.07E+00	9.58E+00	8.51E+00	7.53E+00	6.62E+00	5.78E+00	5.43E+00	5.11E+00	4.80E+00	4.51E+00	
TOTAL	0.00E+00	0.00E+00	1.05E+00	9.62E+00	8.78E+00	7.98E+00	7.22E+00	6.50E+00	5.81E+00	5.16E+00	4.94E+00	4.73E+00	4.53E+00	4.33E+00	
KR-83M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
KR-85M	0.00E+00	0.00E+00	5.09E+00	4.53E+00	4.01E+00	3.54E+00	3.11E+00	2.71E+00	2.35E+00	2.03E+00	1.88E+00	1.74E+00	1.62E+00	1.50E+00	
KR-85	0.00E+00	0.00E+00	6.84E+00	6.33E+00	5.83E+00	5.35E+00	4.89E+00	4.44E+00	4.01E+00	3.59E+00	3.46E+00	3.34E+00	3.22E+00	3.11E+00	
KR-87	0.00E+00	0.00E+00	1.95E+00	1.57E+00	1.26E+00	1.01E+00	8.06E+00	6.39E+00	5.03E+00	3.93E+00	3.31E+00	2.78E+00	2.34E+00	1.97E+00	
KR-88	0.00E+00	0.00E+00	8.95E+00	7.78E+00	6.74E+00	5.82E+00	4.99E+00	4.26E+00	3.62E+00	3.04E+00	2.76E+00	2.50E+00	2.27E+00	2.06E+00	
KR-89	0.00E+00	0.00E+00	1.33E+00	1.16E+00	1.01E+00	8.55E+00	7.24E+00	5.92E+00	4.97E+00	4.19E+00	3.51E+00	2.93E+00	2.43E+00	2.04E+00	
XE-131M	0.00E+00	0.00E+00	2.02E+00	1.87E+00	1.72E+00	1.58E+00	1.44E+00	1.31E+00	1.18E+00	1.05E+00	1.02E+00	9.84E+00	9.49E+00	9.14E+00	
XE-133M	0.00E+00	0.00E+00	4.91E+00	4.53E+00	4.16E+00	3.81E+00	3.47E+00	3.14E+00	2.82E+00	2.52E+00	2.42E+00	2.33E+00	2.24E+00	2.15E+00	
XE-133	0.00E+00	0.00E+00	3.39E+00	3.13E+00	2.88E+00	2.64E+00	2.41E+00	2.18E+00	1.97E+00	1.76E+00	1.70E+00	1.64E+00	1.58E+00	1.52E+00	
XE-135M	0.00E+00	0.00E+00	5.12E+00	4.43E+00	3.85E+00	3.31E+00	2.81E+00	2.35E+00	1.94E+00	1.57E+00	1.24E+00	9.61E+00	8.35E+00	7.15E+00	
XE-135	0.00E+00	0.00E+00	1.55E+00	1.41E+00	1.27E+00	1.15E+00	1.03E+00	9.20E+00	8.15E+00	7.17E+00	6.79E+00	6.43E+00	6.09E+00	5.77E+00	
XE-138	0.00E+00	0.00E+00	8.98E+00	7.97E+00	7.05E+00	6.22E+00	5.45E+00	4.75E+00	4.12E+00	3.54E+00	3.28E+00	3.04E+00	2.81E+00	2.60E+00	
TOTAL	0.00E+00	0.00E+00	3.93E+00	3.62E+00	3.31E+00	3.03E+00	2.75E+00	2.49E+00	2.24E+00	1.99E+00	1.92E+00	1.84E+00	1.77E+00	1.70E+00	
SR-89	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	
TE-132	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	
BA-140	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	
ZR-97	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	
CE-143	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	
ND-147	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	
CS-134	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	
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	
DCFS	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	1.44E+00	1.32E+00	1.21E+00	1.10E+00	9.97E+00	8.99E+00	8.05E+00	7.16E+00	6.33E+00	5.57E+00	5.30E+00	5.03E+00	

## PASS Data

[illegible]

PASS Data

	1700	1715	1730	1745	1800	1815	1830	1845	1900	1915	1930	1945	0900	0915	0930
REGULAR SAMPLE (mR/hr on Contact)															
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	1	1	1	1	1	33321	31428	29770	28308	27013	25857	24820	23868	22910	21217
UNDILUTED & SHIELDED	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2
DILUTED 1000:1 & UNSHIELDED	0	0	0	0	0	48	45	43	41	39	37	36	34	33	30
DILUTED 1000:1 & SHIELDED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STRIPPED GAS SAMPLE REGULAR & PASS (mR/hr on contact)															
UNDILUTED & UNSHIELDED	0	0	0	0	0	13	13	13	12	12	12	12	12	12	11
UNDILUTED & SHIELDED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DILUTED 1000:1 & UNSHIELDED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DILUTED 1000:1 & SHIELDED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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

ON SITE FIELD DATA

1. Zeros are "as read"
2. Multiply the airborne values by the ft<sup>3</sup> sampled
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS  
(READINGS MADE OUTSIDE PLUME)

AMBIENT RADIATION READINGS

1 METER ABOVE SURFACE					6" ABOVE SURFACE				IODINE AIRBORNE	PART AIRBORNE	VEGETATION SAMPLE
SAMPLE POINT	DOSE RATE mR/hr	SPA-3	HP-270	HP-290	DOSE RATE	SPA-3	HP-270	HP-290	HP-210 cpm>bkgd/ ft <sup>3</sup> SAMP	HP-210 cpm>bkgd/ ft <sup>3</sup> SAMP	mR/hr on contact
		DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm		DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm			
A	0.000	0	0	0	0.00	0	0	0	0	0	0.0
B	0.000	0	0	0	0.00	0	0	0	0	0	0.0
C	0.000	0	0	0	0.00	0	0	0	0	0	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
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

CONTAMINATION SAMPLE RESULTS

SAMPLE POINT	IODINE AIRBORNE	PART AIRBORNE	IODINE SURFACE	IODINE VEGETATION	PARTIC VEG	INTEGRATED DOSE POSTED TLD
	uCi/cc	uCi/cc	uCi/m <sup>2</sup>	pCi/g	pCi/g	mR
A	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0.00E+00
B	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
C	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
D	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
E	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
F	0.00E+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
H	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
I	0.00E+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

TIME: 10:35

# CONTAMINATION READINGS (READINGS MADE OUTSIDE PLUME)

1. Zeros are "as read"
2. Multiply the airborne values by the ft<sup>3</sup> sampled
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

## ON SITE FIELD DATA

### AMBIENT RADIATION READINGS

1 METER ABOVE SURFACE				6" ABOVE SURFACE				VEGETATION SAMPLE	
1 METER ABOVE SURFACE				6" ABOVE SURFACE				VEGETATION SAMPLE	
1 METER ABOVE SURFACE				6" ABOVE SURFACE				VEGETATION SAMPLE	

1 METER ABOVE SURFACE				6" ABOVE SURFACE				VEGETATION SAMPLE	
1 METER ABOVE SURFACE				6" ABOVE SURFACE				VEGETATION SAMPLE	
1 METER ABOVE SURFACE				6" ABOVE SURFACE				VEGETATION SAMPLE	

### ON SITE LABORATORY DATA

#### CONTAMINATION SAMPLE RESULTS

CONTAMINATION SAMPLE RESULTS				CONTAMINATION SAMPLE RESULTS			
CONTAMINATION SAMPLE RESULTS				CONTAMINATION SAMPLE RESULTS			
CONTAMINATION SAMPLE RESULTS				CONTAMINATION SAMPLE RESULTS			





TIME: 11:00

# ON SITE FIELD DATA

1. Zeros are "as read"
2. Multiply the airborne values by the ft<sup>3</sup> sampled
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

## AMBIENT RADIATION READINGS

### 1 METER ABOVE SURFACE

SAMPLE POINT	SPA-3		HP-270		HP-290	
	DOSE RATE mR/hr	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm
A	68042.293	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
B	67361.870	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
C	34021.146	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
D	2020.176	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
E	612.381	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
F	408.254	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
G	1360.846	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
H	1292.804	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
I	4422.749	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
J	5103.172	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC

### 6" ABOVE SURFACE

SAMPLE POINT	SPA-3		HP-270		HP-290	
	DOSE RATE mR/hr	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm
A	88442.29	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
B	87557.87	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
C	44221.15	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
D	2625.85	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
E	795.98	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
F	530.65	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
G	1768.85	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
H	1660.40	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
I	5748.75	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
J	6633.17	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC

## CONTAMINATION READINGS (READINGS MADE OUTSIDE PLUME)

SAMPLE	IODINE AIRBORNE		PART AIRBORNE		VEGETATION SAMPLE
	HP-210 cpm/bkgd/ft <sup>3</sup> SAMP	HP-210 cpm/bkgd/ft <sup>3</sup> SAMP	HP-210 cpm/bkgd/ft <sup>3</sup> SAMP	HP-210 cpm/bkgd/ft <sup>3</sup> SAMP	
A	5280000	0	15998.4		
B	5227200	0	15838.4		
C	2640000	0	7999.2		
D	156763	0	475.0		
E	47320	0	144.0		
F	31680	0	96.0		
G	105500	0	320.0		
H	100320	0	304.0		
I	343200	0	1039.9		
J	396000	0	1199.9		

## ON SITE LABORATORY DATA

### CONTAMINATION SAMPLE RESULTS

SAMPLE POINT	IODINE AIRBORNE		PART AIRBORNE	
	uCi/cc	uCi/cc	uCi/cc	uCi/cc
A	5.28E-02	0.00E+00	3168.00	0.00
B	5.23E-02	0.00E+00	3136.32	0
C	2.64E-02	0.00E+00	1584.00	0
D	1.57E-03	0.00E+00	94.06	0
E	4.75E-04	0.00E+00	28.51	0
F	3.17E-04	0.00E+00	19.01	0
G	1.06E-03	0.00E+00	63.36	0
H	1.00E-03	0.00E+00	60.19	0
I	3.43E-03	0.00E+00	205.92	0
J	3.96E-03	0.00E+00	237.60	0

### INTEGRATED

SAMPLE POINT	IODINE PARTIAL DOSE		VEGETATION VEG		POSTED TLD
	uCi/g	uCi/g	uCi/g	uCi/g	
A	3.17E+06	0.00E+00	4535.0		
B	3.14E+06	0.00E+00	4489.6		
C	1.58E+06	0.00E+00	2267.5		
D	9.41E+04	0.00E+00	134.6		
E	2.85E+04	0.00E+00	40.8		
F	1.90E+04	0.00E+00	27.2		
G	6.34E+04	0.00E+00	90.7		
H	6.02E+04	0.00E+00	86.2		
I	2.06E+05	0.00E+00	294.8		
J	2.38E+05	0.00E+00	340.1		

TIME: 11:15

ON SITE FIELD DATA

AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft<sup>3</sup> sampled
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS  
(READINGS MADE OUTSIDE PLUME)

1 METER ABOVE SURFACE		6" ABOVE SURFACE		AIRBORNE		AIRBORNE		PART		VEGETATION	
SAMPLE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE
HP-270	HP-270	HP-270	SPA-3	HP-270	HP-270	HP-290	HP-210	HP-210	HP-210	ft <sup>3</sup> SAMP	ft <sup>3</sup> SAMP
cm	cm	cm	cm	cm	cm	cm	cm>bkgd/	cm>bkgd/	cm>bkgd/	MR/ht on	contact

A	68056.390	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
B	67375.826	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
C	34028.195	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
D	2020.594	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
E	612.508	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
F	408.338	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
G	1361.128	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
H	1293.071	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
I	4423.665	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC
J	5104.229	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC	ERRATIC

ON SITE LABORATORY DATA

CONTAMINATION SAMPLE RESULTS

IODINE		PART		SURFACE		VEGETATION		VEG		POSTED TLD	
SAMPLE	DOSE	DOSE	DOSE	DOSE	DOSE	DOSE	DOSE	DOSE	DOSE	DOSE	DOSE
IODINE	DOSE	DOSE	DOSE	DOSE	DOSE	DOSE	DOSE	DOSE	DOSE	DOSE	DOSE
PCl/cc	PCl/cc	PCl/cc	PCl/cc	PCl/cc	PCl/cc	PCl/cc	PCl/cc	PCl/cc	PCl/cc	PCl/cc	PCl/cc
MR	MR	MR	MR	MR	MR	MR	MR	MR	MR	MR	MR

A	5.28E-02	0.00E+00	4752.00	0.00	4.75E+06	0.00E+00	5669.0
B	5.23E-02	0.00E+00	4704.48	0	4.70E+06	0.00E+00	5612.3
C	2.64E-02	0.00E+00	2376.00	0	2.38E+06	0.00E+00	2834.5
D	1.57E-03	0.00E+00	141.09	0	1.41E+05	0.00E+00	168.3
E	4.75E-04	0.00E+00	42.77	0	4.28E+04	0.00E+00	51.0
F	3.17E-04	0.00E+00	28.51	0	2.85E+04	0.00E+00	34.0
G	1.06E-03	0.00E+00	95.04	0	9.50E+04	0.00E+00	113.4
H	1.00E-03	0.00E+00	90.29	0	9.03E+04	0.00E+00	107.7
I	3.43E-03	0.00E+00	308.88	0	3.09E+05	0.00E+00	368.5
J	3.96E-03	0.00E+00	356.40	0	3.56E+05	0.00E+00	425.2



CONFIDENTIAL

## AMBIENT RADIATION READINGS

1 METER ABOVE SURFACE

6" ABOVE SURFACE

SAMPLE POINT	DOSE RATE mR/hr	SPA-3 cpm	HP-270 cpm	HP-290 cpm	DOSE RATE	SPA-3 cpm	HP-270 cpm	HP-290 cpm	HP-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	5639	0	0	39996.0
B	69.783	ERRATIC	83740	5583	69.78	ERRATIC	83740	5583	0	0	39596.0
C	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
E	0.634	761270	761	51	0.63	761270	761	51	0	0	360.0
F	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	0	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

CONTAMINATION SAMPLE RESULTS				INTEGRATED DOSE				
SAMPLE POINT	IODINE AIRBORNE		PART AIRBORNE	IODINE SURFACE	IODINE VEGETATION	PARTIC VEG	FIELD POSTED	
	uCi/cc	uCi/cc		uCi/m^2	pCi/g	pCi/g		mR
A	0.00E+00	0.00E+00		7920.00	0.00	7.92E+06	0.00E+00	10206.6
B	0.00E+00	0.00E+00		7840.80	0	7.84E+06	0.00E+00	10104.5
C	0.00E+00	0.00E+00		3960.00	0	3.96E+06	0.00E+00	5103.3
D	0.00E+00	0.00E+00		235.14	0	2.35E+05	0.00E+00	303.0
E	0.00E+00	0.00E+00		71.28	0	7.13E+04	0.00E+00	91.9
F	0.00E+00	0.00E+00		47.52	0	4.75E+04	0.00E+00	61.2
G	0.00E+00	0.00E+00		158.40	0	1.58E+05	0.00E+00	204.1
H	0.00E+00	0.00E+00		150.48	0	1.50E+05	0.00E+00	193.9
I	0.00E+00	0.00E+00		514.80	0	5.15E+05	0.00E+00	663.4
J	0.00E+00	0.00E+00		594.00	0	5.94E+05	0.00E+00	765.5

TIME: 12:00

1. Zeros are "as read"

2. Multiply the airborne values by the ft<sup>3</sup> sampled

3. Veg. value based on a 1 kilogram sample

4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS  
(READINGS MADE OUTSIDE PLUMES)

ON SITE FIELD DATA

AMBIENT RADIATION READINGS

IODINE PART  
AIRBORNE AIRBORNE  
VEGETATION  
SAMPLE

6" ABOVE SURFACE

1 METER ABOVE SURFACE

SAMPLE POINT	SPA-3		HP-270		HP-290		SPA-3		HP-270		HP-290		HP-210		VEGETATION SAMPLE
	DOSE RATE mR/hr	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm	
A	70.488	ERRATIC	84586	5639	70.49	ERRATIC	84586	5639	0	0	0	0	0	0	39996.0
B	69.783	ERRATIC	83740	5583	69.78	ERRATIC	83740	5583	0	0	0	0	0	0	39596.0
C	35.244	ERRATIC	42293	2820	35.24	ERRATIC	42293	2820	0	0	0	0	0	0	19998.0
D	2.093	ERRATIC	2511	167	2.09	ERRATIC	2511	167	0	0	0	0	0	0	1187.5
E	0.534	761270	761	51	0.63	761270	761	51	0	0	0	0	0	0	360.0
F	0.423	507514	508	34	0.42	507514	508	34	0	0	0	0	0	0	240.0
G	1.410	ERRATIC	1692	113	1.41	ERRATIC	1692	113	0	0	0	0	0	0	799.9
H	1.339	ERRATIC	1607	107	1.34	ERRATIC	1607	107	0	0	0	0	0	0	759.9
I	4.582	ERRATIC	5498	367	4.58	ERRATIC	5498	367	0	0	0	0	0	0	2599.7
J	5.287	ERRATIC	6344	423	5.29	ERRATIC	6344	423	0	0	0	0	0	0	2999.7

ON SITE LABORATORY DATA

CONTAMINATION SAMPLE RESULTS

IODINE  
SURFACE

IODINE PART  
VEGETATION VEG

INTEGRATED  
DOSE  
POSTED TLD

uCi/cc uCi/m<sup>2</sup> pCi/g pCi/g mR

SAMPLE POINT	AIRBORNE		PART AIRBORNE		SURFACE		VEGETATION		DOSE	
	uCi/cc	uCi/m <sup>2</sup>	uCi/cc	uCi/m <sup>2</sup>	pCi/g	pCi/g	pCi/g	pCi/g	mR	POSTED TLD
A	0.00E+00	0.00E+00	0.00E+00	7920.00	0.00	7.92E+06	0.00E+00	10211.3		
B	0.00E+00	0.00E+00	0.00E+00	7840.80	0	7.84E+06	0.00E+00	10109.2		
C	0.00E+00	0.00E+00	0.00E+00	3960.00	0	3.96E+06	0.00E+00	5105.6		
D	0.00E+00	0.00E+00	0.00E+00	235.14	0	2.35E+05	0.00E+00	303.2		
E	0.00E+00	0.00E+00	0.00E+00	71.28	0	7.12E+04	0.00E+00	91.9		
F	0.00E+00	0.00E+00	0.00E+00	47.52	0	4.75E+04	0.00E+00	61.3		
G	0.00E+00	0.00E+00	0.00E+00	158.40	0	1.58E+05	0.00E+00	204.2		
H	0.00E+00	0.00E+00	0.00E+00	150.48	0	1.50E+05	0.00E+00	194.0		
I	0.00E+00	0.00E+00	0.00E+00	514.80	0	5.15E+05	0.00E+00	663.7		
J	0.00E+00	0.00E+00	0.00E+00	594.00	0	5.94E+05	0.00E+00	765.8		

TIME: 12:15

ON SITE FIELD DATA

1. Zeros are "as read"
2. Multiply the airborne values by the ft<sup>3</sup> sampled
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS  
(READINGS MADE OUTSIDE PLUME)

AMBIENT RADIATION READINGS

SAMPLE POINT	1 METER ABOVE SURFACE				6" ABOVE SURFACE				IODINE AIRBORNE	PART AIRBORNE	VEGETATION SAMPLE
	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 <sup>3</sup> SAMP	HP-210 cpm>bkgd/ ft <sup>3</sup> SAMP	mR/hr on contact
A	70.488	ERRATIC	84586	5639	70.49	ERRATIC	84586	5639	0	0	39996.0
B	69.783	ERRATIC	83740	5583	69.78	ERRATIC	83740	5583	0	0	39596.0
C	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
E	0.634	761270	761	51	0.63	761270	761	51	0	0	360.0
F	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	0	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

SAMPLE POINT	CONTAMINATION SAMPLE RESULTS			INTEGRATED		
	IODINE AIRBORNE	PART AIRBORNE	IODINE SURFACE	IODINE VEGETATION	PARTIC VEG	DOSE POSTED TLD
	uCi/cc	uCi/cc	uCi/m <sup>2</sup>	pCi/g	pCi/g	-mR
A	0.00E+00	0.00E+00	7920.00	0.00	7.92E+06	0.00E+00 10216.0
B	0.00E+00	0.00E+00	7840.80	0	7.84E+06	0.00E+00 10113.8
C	0.00E+00	0.00E+00	3960.00	0	3.96E+06	0.00E+00 5108.0
D	0.00E+00	0.00E+00	235.14	0	2.35E+05	0.00E+00 303.3
E	0.00E+00	0.00E+00	71.28	0	7.13E+04	0.00E+00 91.9
F	0.00E+00	0.00E+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
H	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	0.00E+00 664.0
J	0.00E+00	0.00E+00	594.00	0	5.94E+05	0.00E+00 766.2

TIME: 12:30

ON SITE FIELD DATA

1. Zeros are "as read"
2. Multiply the airborne values by the ft<sup>3</sup> sampled
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS  
(READINGS MADE OUTSIDE PLUME)

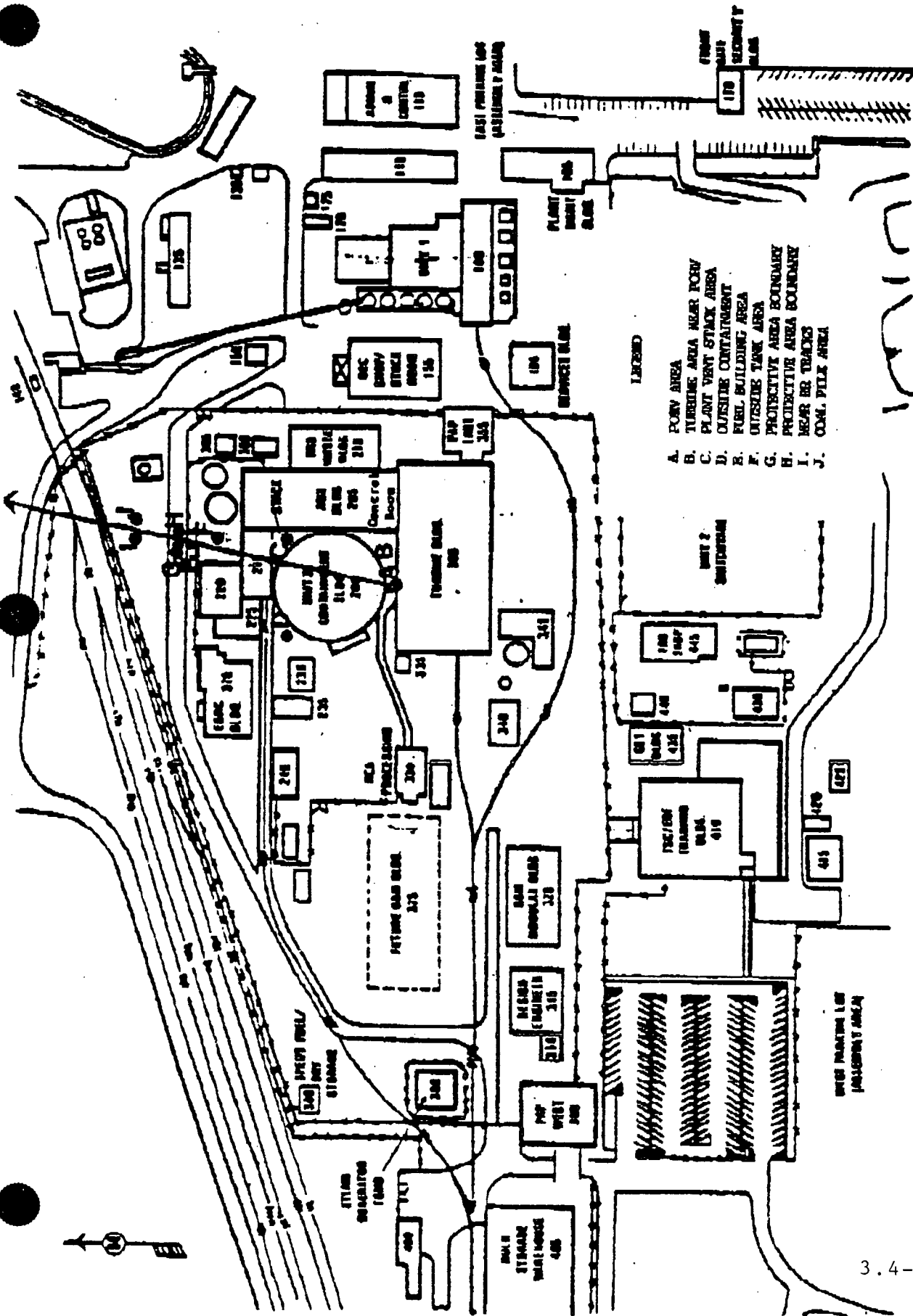
AMBIENT RADIATION READINGS

SAMPLE POINT	1 METER ABOVE SURFACE				6" ABOVE SURFACE				IODINE AIRBORNE	PART AIRBORNE	VEGETATION SAMPLE
	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 <sup>3</sup> SAMP	HP-210 cpm>bkgd/ft <sup>3</sup> SAMP	mR/hr on contact
A	70.488	ERRATIC	84586	5639	70.49	ERRATIC	84586	5639	0	0	39996.0
B	69.783	ERRATIC	83740	5583	69.78	ERRATIC	83740	5583	0	0	39596.0
C	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
E	0.634	761270	761	51	0.63	761270	761	51	0	0	360.0
F	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	0	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

SAMPLE POINT	CONTAMINATION SAMPLE RESULTS			INTEGRATED		
	IODINE AIRBORNE	PART AIRBORNE	IODINE SURFACE	IODINE VEGETATION	PARTIC VEG	DOSE POSTED TLD
	uCi/cc	uCi/cc	uCi/m <sup>2</sup>	pCi/g	pCi/g	mR
A	0.00E+00	0.00E+00	7920.00	0.00	7.92E+06	0.00E+00 10217.2
B	0.00E+00	0.00E+00	7840.80	0	7.84E+06	0.00E+00 10115.0
C	0.00E+00	0.00E+00	3960.00	0	3.96E+06	0.00E+00 5108.6
D	0.00E+00	0.00E+00	235.14	0	2.35E+05	0.00E+00 303.3
E	0.00E+00	0.00E+00	71.28	0	7.13E+04	0.00E+00 92.0
F	0.00E+00	0.00E+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
H	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	0.00E+00 664.1
J	0.00E+00	0.00E+00	594.00	0	5.94E+05	0.00E+00 766.3





- LEGEND
- A. FISH AREA
  - B. TURBINE AREA NEAR FISH PLANT VENT STACK AREA
  - C. OUTSIDE TANK AREA
  - D. FUEL BUILDING AREA
  - E. PROTECTIVE AREA BOUNDARY
  - F. PROTECTIVE AREA BOUNDARY
  - G. NEAR RR TRACKS
  - H. COM. PILE AREA
  - I.
  - J.

# RMPD 1000 E.P. EXERCISE ON-SITE PLUME MAP



PLANT AREA NOTING CENTER

TIME 1630 - 1730

MR/hr

0.5

2. 2.0

3. 1.0

4. 2.0

5. 2.0

6. 2.0

7. 0.5

8. 2.0

9. 2.0

10. 2.0

uci/cc

1. <2.5E-10

2. <2.5E-10

3. <2.5E-10

4. <2.5E-10

5. <2.5E-10

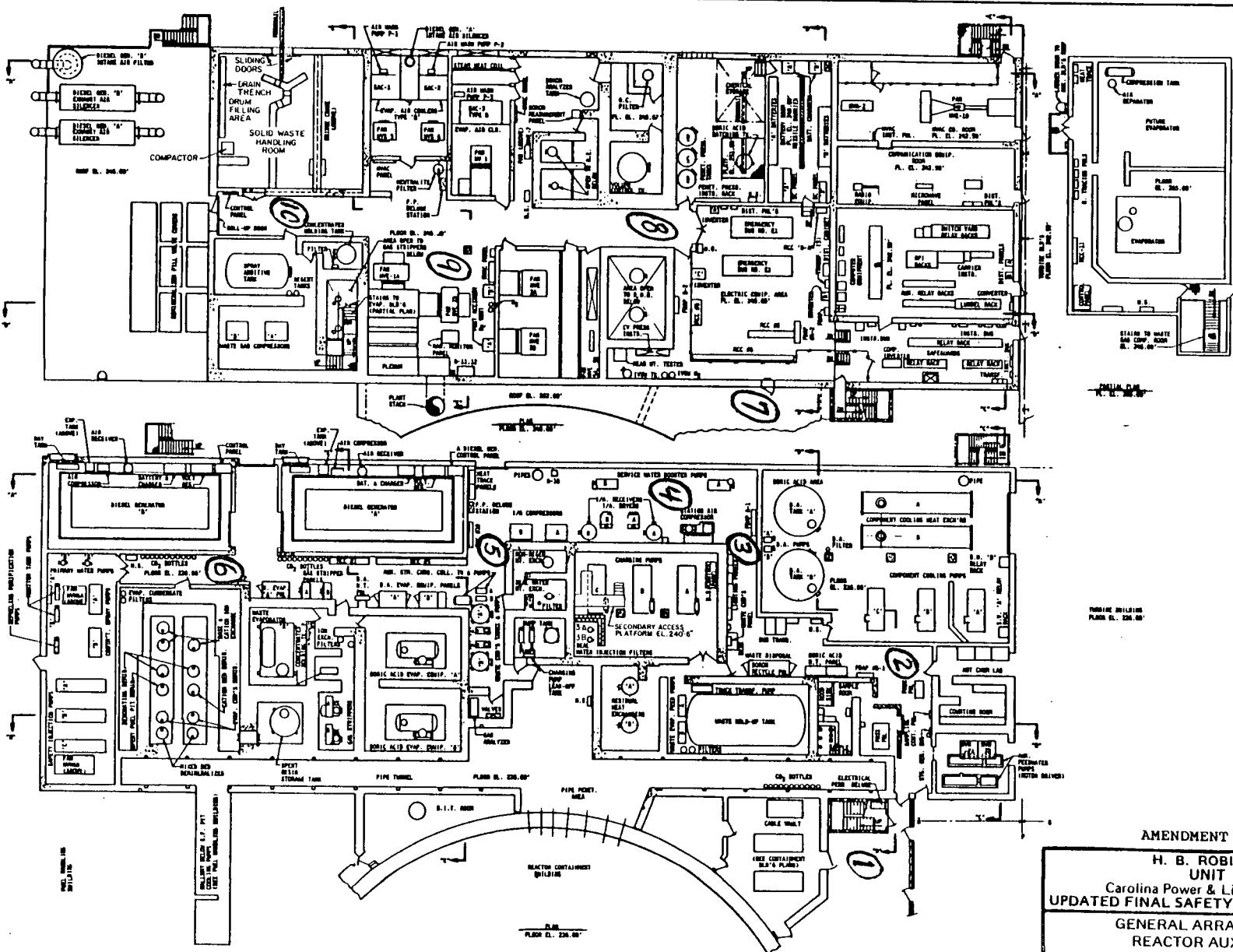
6. <2.5E-10

7. <2.5E-10

8. <2.5E-10

9. <2.5E-10

10. <2.5E-10



AMENDMENT NO. 6

H. B. ROBINSON  
UNIT 2

Carolina Power & Light Company  
UPDATED FINAL SAFETY ANALYSIS REPORT

GENERAL ARRANGEMENT  
REACTOR AUXILIARY  
BUILDING PLANS

FIGURE 1.2.2-5

3.4-B-12

$$\frac{mR}{h\tau}$$

3.0

2. 20.0

3.4.0

4. 10.0

5. 10.0

6. 12.0

0.1-1.0%

0.9  
0.8

8.0  
9.

0.9  
10.0

$$\frac{\mu\text{Ci}}{\text{cc}}$$

1. 1.2E

2.2E

3. 1.2E 3.

4. I.0E

2. 1.0E

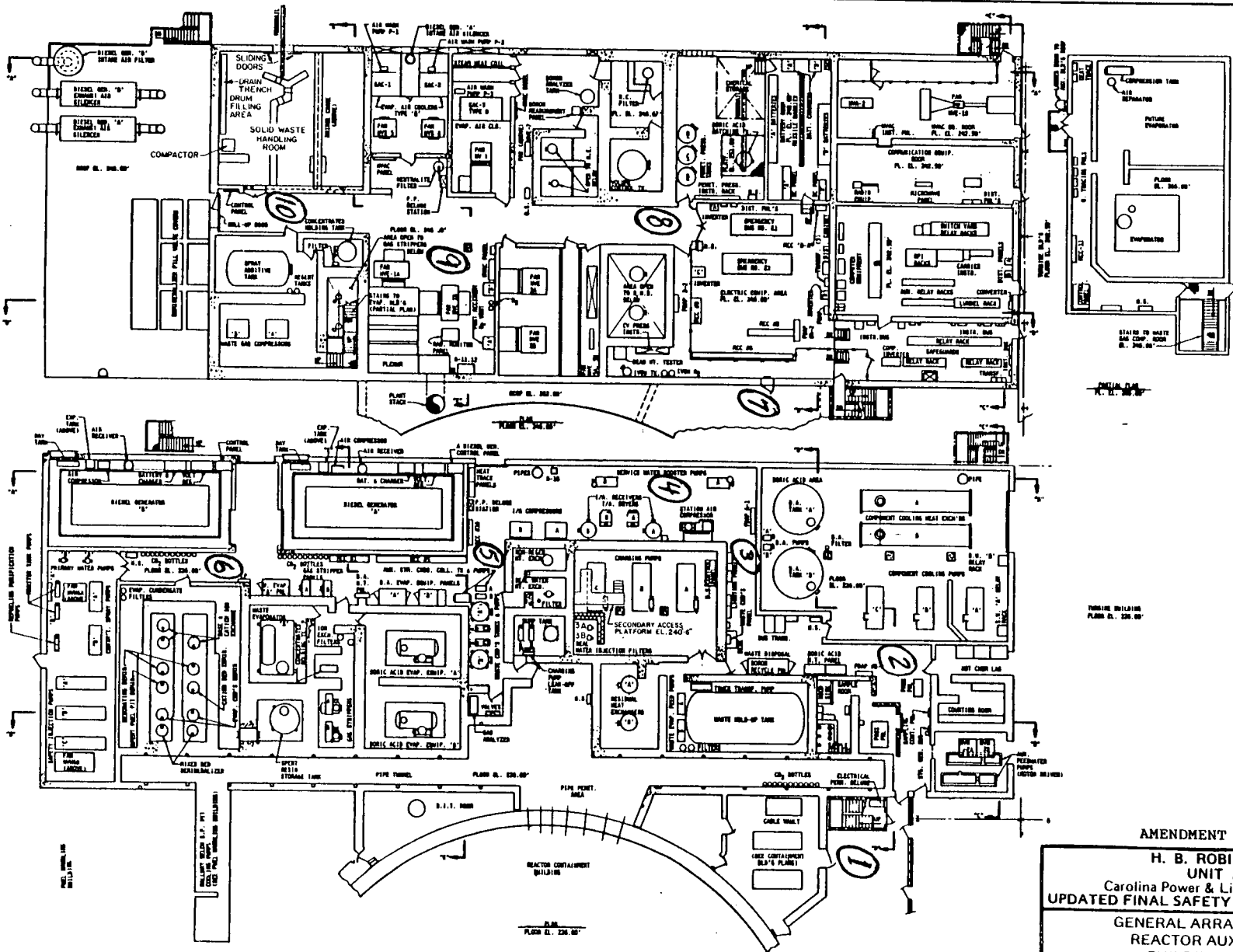
1.0E-09

4.2E

1.3E

9. 1.2E

10. /:JE



AMENDMENT NO. 6

H. B. ROBINSON  
UNIT 2

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**UPDATED FINAL SAFETY ANALYSIS REPORT**

GENERAL ARRANGEMENT  
REACTOR AUXILIARY  
BUILDING PLANS

FIGURE 1.2.2 - 5

$$\frac{mR}{h\tau}$$

2. 20.0

4. 10.0

5. 10.0

6. 12.0

7. 1.0

8.  
6.0

9.0

10. 6.0

$$\frac{\mu_{Cl}/cc}{\mu_{Cl}/cc}$$

1. 7.5E

## 2.5E

3. 7.5E

4. 1.0E

5. 1.0E

6. 7.5E

7. 7.5E

8. 7.5E

9. 7.5E

10. 7.5E



GENERAL ARRANGEMENT  
REACTOR AUXILIARY  
BUILDING PLANS

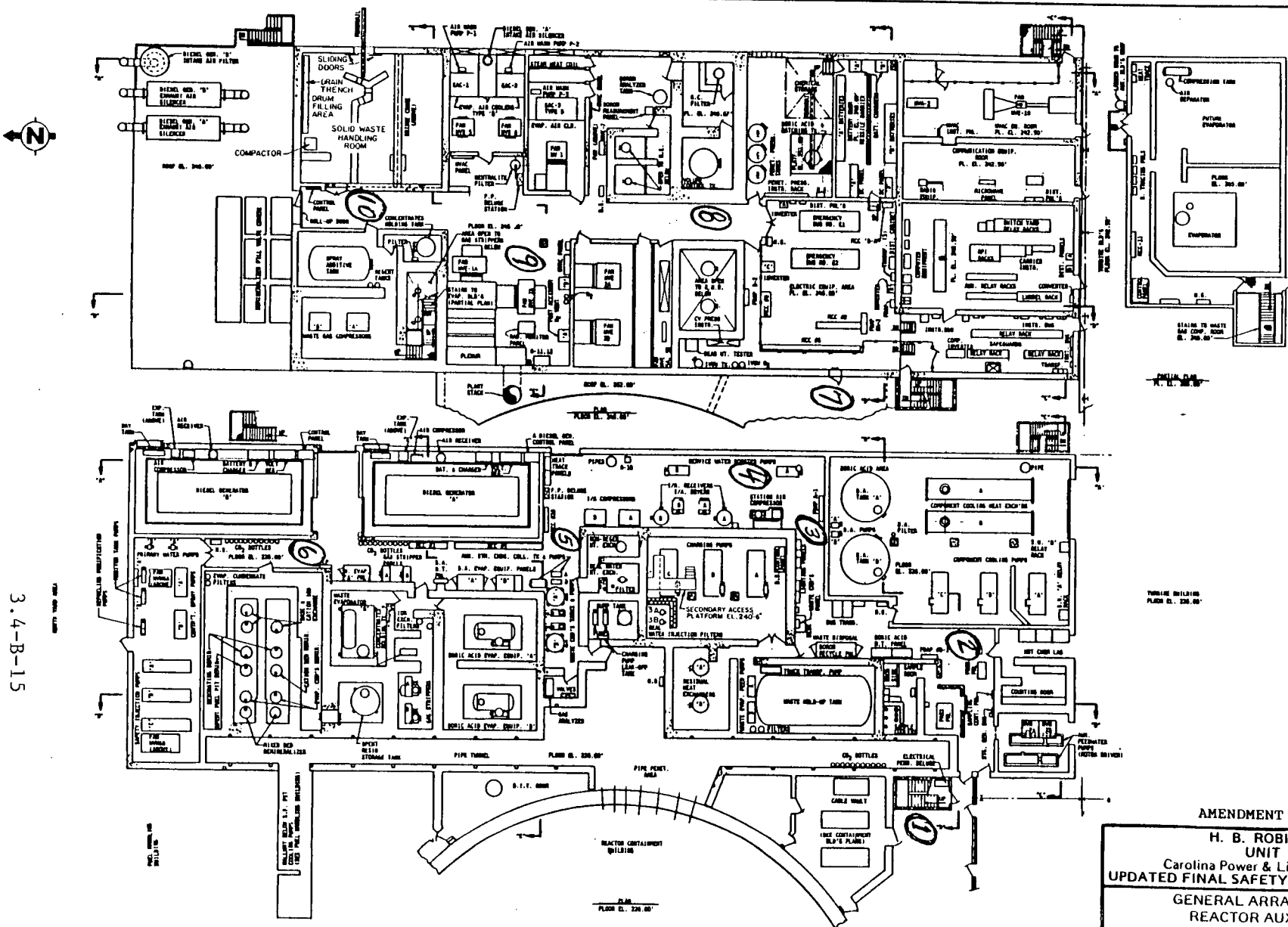
FIGURE 1.2.2 - 5

TIME 0930 - 1030

MR/hr

- 10.0
- 18.0
- 4.0
- 8.0
- 8.0
- 10.0
- 1.0
- 4.0
- 10.0
- 4.0
- 1.0E-9
- 7.5E-10
- 7.5E-10
- 7.5E-10
- 5.0E-10
- 5.0E-10
- 5.0E-10
- 1.0E-9
- 5.0E-10

pci/cc



AMENDMENT NO. 6

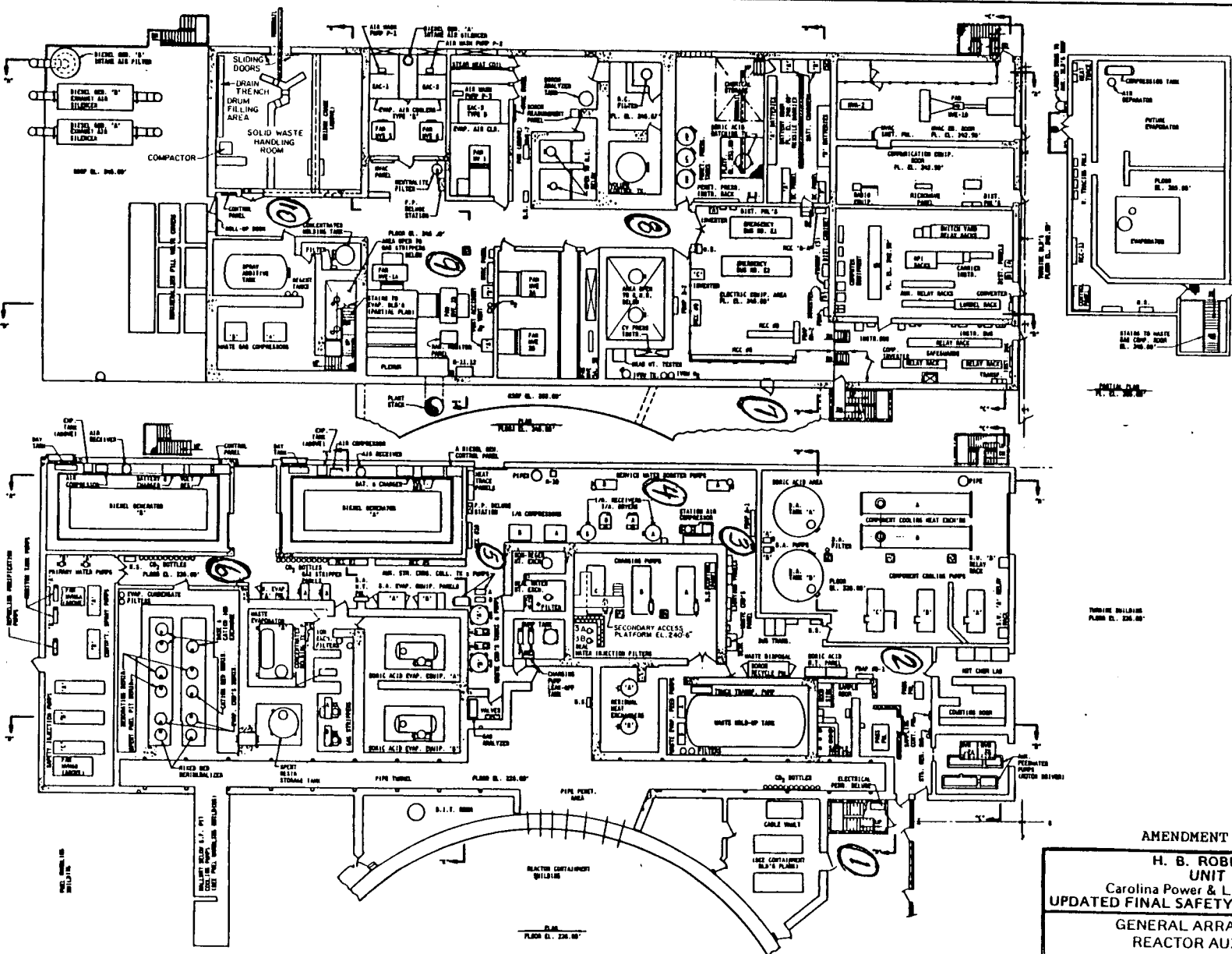
H. B. ROBINSON  
UNIT 2  
Carolina Power & Light Company  
UPDATED FINAL SAFETY ANALYSIS REPORT  
GENERAL ARRANGEMENT  
REACTOR AUXILIARY  
BUILDING PLANS  
FIGURE 1.2.2-5

3.4-B-15

TIME 1130 - 1230

mR/hr

1. 8.0
  2. 16.0
  3. 3.0
  4. 6.0
  5. 6.0
  6. 8.0
  7. 1.0
  8. 3.0
  9. 10.0
  10. 4.0
- µCi/cc
1. 7.5E-10
  2. 7.5E-10
  3. 7.5E-10
  4. 7.5E-10
  5. 7.5E-10
  6. 7.5E-10
  7. 5.0E-10
  8. 5.0E-10
  9. 7.5E-10
  10. 5.0E-10



AMENDMENT NO. 6

H. B. ROBINSON  
UNIT 2

Carolina Power & Light Company  
UPDATED FINAL SAFETY ANALYSIS REPORT

GENERAL ARRANGEMENT  
REACTOR AUXILIARY  
BUILDING PLANS  
FIGURE 1.2.2-5

3.4-B-16

CAROLINA POWER AND LIGHT COMPANY  
ROBINSON NUCLEAR PROJECT DEPARTMENT

1989 EMERGENCY PREPAREDNESS  
ANNUAL EXERCISE

3.4-C OFFSITE PLUME MONITORING DATA

TIME: 10:30

1. Zeros are "as read"

2. Multiply the airborne values by the ft<sup>3</sup> sampled

OFF SITE FIELD DATA

3. Veg. value based on a 1 kilogram sample

4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS  
(READINGS MADE OUTSIDE FENCE)

AMBIENT RADIATION READINGS

1 METER ABOVE SURFACE				6" ABOVE SURFACE				PART				VEGETATION	
								AIRBORNE				SAMPLE	
SAMPLE POINT	DOSE RATE		DOSE RATE	DOSE RATE		DOSE RATE	DOSE RATE		DOSE RATE	DOSE RATE		DOSE RATE	DOSE RATE
	MR/hr	CPM	HP-270	HP-290	SPA-3	HP-270	HP-290	HP-210	HP-210	HP-210	CPM>3 SAMP	CPM>3 SAMP	MR/hr on contact
A	0.000	0	0	0	0.00	0	0	0	0	0	0	0	0.0
B	0.000	0	0	0	0.00	0	0	0	0	0	0	0	0.0
C	0.000	0	0	0	0.00	0	0	0	0	0	0	0	0.0
D	0.000	0	0	0	0.00	0	0	0	0	0	0	0	0.0
E	0.000	0	0	0	0.00	0	0	0	0	0	0	0	0.0
F	0.000	0	0	0	0.00	0	0	0	0	0	0	0	0.0
G	0.000	0	0	0	0.00	0	0	0	0	0	0	0	0.0
H	0.000	0	0	0	0.00	0	0	0	0	0	0	0	0.0
I	0.000	0	0	0	0.00	0	0	0	0	0	0	0	0.0
J	0.000	0	0	0	0.00	0	0	0	0	0	0	0	0.0
K	0.000	0	0	0	0.00	0	0	0	0	0	0	0	0.0
L	0.000	0	0	0	0.00	0	0	0	0	0	0	0	0.0
M	0.000	0	0	0	0.00	0	0	0	0	0	0	0	0.0
N	0.000	0	0	0	0.00	0	0	0	0	0	0	0	0.0
O	0.000	0	0	0	0.00	0	0	0	0	0	0	0	0.0
P	0.000	0	0	0	0.00	0	0	0	0	0	0	0	0.0
Q	0.000	0	0	0	0.00	0	0	0	0	0	0	0	0.0
R	0.000	0	0	0	0.00	0	0	0	0	0	0	0	0.0
S	0.000	0	0	0	0.00	0	0	0	0	0	0	0	0.0
T	0.000	0	0	0	0.00	0	0	0	0	0	0	0	0.0
U	0.00	0	0	0	0.00	0	0	0	0	0	0	0	0.0
V	0.00	0	0	0	0.00	0	0	0	0	0	0	0	0.0
W	0.00	0	0	0	0.00	0	0	0	0	0	0	0	0.0



TIME: 10:30

OFF SITE LABORATORY DATA

1. Multiply veg. values by No.  
in sample.

CONTAMINATION SAMPLE RESULTS

	IODINE AIRBORNE	PART AIRBORNE	IODINE SURFACE		IODINE VEGETATION	PARTIC VEG
SAMPLE POINT	uCi/cc	uCi/cc	uCi/m <sup>2</sup>		pCi/g	pCi/g
A	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0.00E+00
B	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
C	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
D	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
E	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
F	0.00E+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
H	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
I	0.00E+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	0	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	0.00E+00
O	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
P	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00
Q	0.00E+00	0.00E+00	0.00	0	0.00E+00	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
W	0.00E+00	0.00E+00	0.00	0	0.00E+00	0.00E+00

TIME: 10:35

1. Zeros are "as read"

2. Multiply the airborne values by the ft^3 sampled

3. Veg. value based on a 1 kilogram sample

4. ERRATIC means cpm to high to be reliable

CONVICTION READINGS  
(READINGS MADE OUTSIDE DUVE)

OT SITE FIELD DATA

AMBIENT RADIATION READINGS

1 METER ABOVE SURFACE										6" ABOVE SURFACE		IODINE		PART		VEGETATION	
												AIRBORNE		AIRBORNE		SAMPLES	

TIME: 10:35

OFF SITE LABORATORY DATA

1. Multiply veg. values by No.  
in sample.

CONTAMINATION SAMPLE RESULTS

SAMPLE POINT	IODINE AIRBORNE		PART AIRBORNE		IODINE SURFACE		IODINE VEGETATION		PARTIC VEG	
	uCi/cc	uCi/cc	uCi/cc	uCi/m <sup>2</sup>	uCi/cc	pCi/g	uCi/m <sup>2</sup>	pCi/g	uCi/m <sup>2</sup>	pCi/g
A	5.28E-04	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0.00	0.00E+00	0.00E+00	0.00E+00
B	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00
C	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00
D	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00
E	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00
F	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00
G	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00
H	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00
I	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00
J	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00
K	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00
L	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00
M	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00
N	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00
O	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00
P	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00
Q	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00
R	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00
S	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00
T	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00
U	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00
V	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00
W	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00

TIME: 10:45

1. Zeros are "as read"

2. Multiply the airborne values by the ft<sup>3</sup> sampled

3. Veg. value based on a 1 kilogram sample

4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS

(READINGS MADE OUTSIDE PLUME)

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

SAMPLE POINT	1 METER ABOVE SURFACE				6" ABOVE SURFACE				IODINE AIRBORNE	PART AIRBORNE	VEGETATION SAMPLE
	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 <sup>3</sup> SAMP	HP-210 cpm>bkgd/ ft <sup>3</sup> SAMP	mR/hr on contact
A	680.282	ERRATIC	816338	54423	884.28	ERRATIC	ERRATIC	70743	52800	0	80.0
B	717.549	ERRATIC	861058	57404	932.77	ERRATIC	ERRATIC	74621	55704	0	0.0
C	0.000	0	0	0	0.00	0	0	0	0	0	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
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
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
O	0.000	0	0	0	0.00	0	0	0	0	0	0.0
P	1922.589	ERRATIC	ERRATIC	153807	2499.25	ERRATIC	ERRATIC	199940	149252	0	0.0
Q	302.143	ERRATIC	362572	24171	392.77	ERRATIC	471321	31421	23456	0	0.0
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
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
W	0.00	0	0	0	0.00	0	0	0	0	0	0.0

TIME: 10:45

OFF SITE LABORATORY DATA

1. Multiply veg. values by No.  
in sample.

CONTAMINATION SAMPLE RESULTS

SAMPLE POINT	IODINE		PART		uCi/m <sup>2</sup>	IODINE		PARTIC	
	AIRBORNE	uCi/cc	AIRBORNE	uCi/cc		SURFACE	VEGETATION	VEGETATION	VEG
A	5.28E-04	0.00E+00		0.00E+00	15.94	0.00	1.58E+04	0.00E+00	
B	5.57E-04	0.00E+00		0.00E+00	0.00	0	0.00E+00	0.00E+00	
C	0.00E+00	0.00E+00		0.00E+00	0.00	0	0.00E+00	0.00E+00	
D	0.00E+00	0.00E+00		0.00E+00	0.00	0	0.00E+00	0.00E+00	
E	0.00E+00	0.00E+00		0.00E+00	0.00	0	0.00E+00	0.00E+00	
F	0.00E+00	0.00E+00		0.00E+00	0.00	0	0.00E+00	0.00E+00	
G	0.00E+00	0.00E+00		0.00E+00	0.00	0	0.00E+00	0.00E+00	
H	0.00E+00	0.00E+00		0.00E+00	0.00	0	0.00E+00	0.00E+00	
I	0.00E+00	0.00E+00		0.00E+00	0.00	0	0.00E+00	0.00E+00	
J	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		0.00E+00	0.00	0	0.00E+00	0.00E+00	
L	0.00E+00	0.00E+00		0.00E+00	0.00	0	0.00E+00	0.00E+00	
M	0.00E+00	0.00E+00		0.00E+00	0.00	0	0.00E+00	0.00E+00	
N	0.00E+00	0.00E+00		0.00E+00	0.00	0	0.00E+00	0.00E+00	
O	0.00E+00	0.00E+00		0.00E+00	0.00	0	0.00E+00	0.00E+00	
P	1.49E-03	0.00E+00		0.00E+00	0.00	0	0.00E+00	0.00E+00	
Q	2.35E-04	0.00E+00		0.00E+00	0.00	0	0.00E+00	0.00E+00	
R	0.00E+00	0.00E+00		0.00E+00	0.00	0	0.00E+00	0.00E+00	
S	0.00E+00	0.00E+00		0.00E+00	0.00	0	0.00E+00	0.00E+00	
T	0.00E+00	0.00E+00		0.00E+00	0.00	0	0.00E+00	0.00E+00	
U	0.00E+00	0.00E+00		0.00E+00	0.00	0	0.00E+00	0.00E+00	
V	0.00E+00	0.00E+00		0.00E+00	0.00	0	0.00E+00	0.00E+00	
W	0.00E+00	0.00E+00		0.00E+00	0.00	0	0.00E+00	0.00E+00	

TIME: 11:00  
OFF SITE FIELD DATA

1. Zeros are "as read"
2. Multiply the airborne values by the ft<sup>3</sup> sampled
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS  
(READINGS MADE OUTSIDE PLUME)

AMBIENT RADIATION READINGS

SAMPLE POINT	1 METER ABOVE SURFACE				6" ABOVE SURFACE				IODINE AIRBORNE	PART AIRBORNE	VEGETATION SAMPLE
	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 <sup>3</sup> SAMP	HP-210 cpm>bkgd/ ft <sup>3</sup> SAMP	mR/hr on contact
A	680.423	ERRATIC	816508	54434	884.42	ERRATIC	ERRATIC	70754	52800	0	160.0
B	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
D	20.192	ERRATIC	24230	1615	26.25	ERRATIC	31498	2100	1568	0	0.0
E	0.682	817951	818	55	0.89	ERRATIC	1063	71	53	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
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
O	0.000	0	0	0	0.00	0	0	0	0	0	0.0
P	1922.987	ERRATIC	ERRATIC	153839	2499.64	ERRATIC	ERRATIC	199972	149252	0	226.1
Q	302.206	ERRATIC	362647	24176	392.83	ERRATIC	471396	31426	23456	0	35.5
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
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
W	0.00	0	0	0	0.00	0	0	0	0	0	0.0

TIME: 11:00

OFF SITE LABORATORY DATA

1. Multiply veg. values by No.  
in sample.

CONTAMINATION SAMPLE RESULTS

SAMPLE POINT	IODINE AIRBORNE		PART AIRBORNE	uCi/cc	uCi/m^2	IODINE SURFACE		IODINE VEGETATION		PARTIC VEG	
	uCi/cc	uCi/cc				pCi/g	pCi/g	pCi/g	pCi/g		
A	5.28E-04	0.00E+00		31.68	0.00	3.17E+04	0.00E+00				
B	5.57E-04	0.00E+00		16.71	0	1.67E+04	0.00E+00				
C	2.14E-05	0.00E+00		0.00	0	0.00E+00	0.00E+00				
D	1.57E-05	0.00E+00		0.00	0	0.00E+00	0.00E+00				
E	5.29E-07	0.00E+00		0.00	0	0.00E+00	0.00E+00				
F	0.00E+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				
H	0.00E+00	0.00E+00		0.00	0	0.00E+00	0.00E+00				
I	0.00E+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	0	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	0.00E+00				
O	0.00E+00	0.00E+00		0.00	0	0.00E+00	0.00E+00				
P	1.49E-03	0.00E+00		44.78	0	4.49E+04	0.00E+00				
Q	2.35E-04	0.00E+00		7.04	0	7.04E+03	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				
W	0.00E+00	0.00E+00		0.00	0	0.00E+00	0.00E+00				

TIME: 1115

OFF SITE FIELD DATA

# AMBIENT RADIATION READINGS

1. Zeros are "as read"
2. Multiply the airborne values by the ft<sup>3</sup> sampled
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONVERSION READINGS  
(READINGS MADE OUTSIDE ROOM)

1 METER ABOVE SURFACE

6" ABOVE SURFACE

INDIVE PART VEGETATION  
AIRBORNE AIRBORNE SAMPLE

SAMPLE POINT	SPA-3				HP-270				HP-290				HP-210				HP-210				MR/hr on contact
	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	DOSE RATE	
	MR/hr	cpm	cpm	cpm	cpm	cpm	cpm	cpm	cpm	cpm	cpm	cpm	cpm	cpm	cpm	cpm	cpm	cpm	cpm	cpm	
A	680.564 ERRATIC		816677	54445	884.56 ERRATIC	ERRATIC	ERRATIC	70765	52800	0	240.0										
B	717.846 ERRATIC		861415	57428	933.07 ERRATIC	ERRATIC	ERRATIC	74645	55704	0	168.8										
C	27.581 ERRATIC		33097	2206	35.85 ERRATIC		43022	2868	2141	0	3.2										
D	20.196 ERRATIC		24235	1616	26.25 ERRATIC		31503	2100	1568	0	2.4										
E	0.692	818121	818	55	0.89 ERRATIC		1063	71	53	0	0.1										
F	0.000	0	0	0	0.00	0	0	0	0	0	0.0										
G	73.670 ERRATIC		88404	5894	95.77 ERRATIC		114920	7661	5719	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										
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										
O	0.000	0	0	0	0.00	0	0	0	0	0	0.0										
P	1923.386 ERRATIC	ERRATIC	ERRATIC	153871	2900.04 ERRATIC	ERRATIC	ERRATIC	200003	149252	0	452.2										
Q	302.268 ERRATIC		362722	24181	392.89 ERRATIC		471471	31431	23456	0	71.1										
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										
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										
W	0.00	0	0	0	0.00	0	0	0	0	0	0.0										



TIME: 11:15

OFF SITE LABORATORY DATA

1. Multiply veg. values by No.  
in sample.

CONTAMINATION SAMPLE RESULTS

	IODINE AIRBORNE	PART AIRBORNE	IODINE SURFACE	IODINE VEGETATION	PARTIC VEG
SAMPLE POINT	uCi/cc	uCi/cc	uCi/m <sup>2</sup>	pCi/g	pCi/g
A	5.28E-04	0.00E+00	47.52	0.00	4.75E+04
B	5.57E-04	0.00E+00	33.42	0	3.34E+04
C	2.14E-05	0.00E+00	0.64	0	6.42E+02
D	1.57E-05	0.00E+00	0.47	0	4.70E+02
E	5.29E-07	0.00E+00	0.02	0	1.59E+01
F	0.00E+00	0.00E+00	0.00	0	0.00E+00
G	5.72E-05	0.00E+00	0.00	0	0.00E+00
H	0.00E+00	0.00E+00	0.00	0	0.00E+00
I	0.00E+00	0.00E+00	0.00	0	0.00E+00
J	0.00E+00	0.00E+00	0.00	0	0.00E+00
K	0.00E+00	0.00E+00	0.00	0	0.00E+00
L	0.00E+00	0.00E+00	0.00	0	0.00E+00
M	0.00E+00	0.00E+00	0.00	0	0.00E+00
N	0.00E+00	0.00E+00	0.00	0	0.00E+00
O	0.00E+00	0.00E+00	0.00	0	0.00E+00
P	1.49E-03	0.00E+00	89.55	0	8.96E+04
Q	2.35E-04	0.00E+00	14.07	0	1.41E+04
R	0.00E+00	0.00E+00	0.00	0	0.00E+00
S	0.00E+00	0.00E+00	0.00	0	0.00E+00
T	0.00E+00	0.00E+00	0.00	0	0.00E+00
U	0.00E+00	0.00E+00	0.00	0	0.00E+00
V	0.00E+00	0.00E+00	0.00	0	0.00E+00
W	0.00E+00	0.00E+00	0.00	0	0.00E+00

TIME: 11:30

1. Zeros are "as read"

2. Multiply the airborne values by the ft<sup>3</sup> sampled

3. Veg. value based on a 1 kilogram sample

4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS  
(READINGS MADE OUTSIDE PLUME)

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

SAMPLE POINT	1 METER ABOVE SURFACE				6" ABOVE SURFACE				IODINE AIRBORNE	PART AIRBORNE	VEGETATION SAMPLE
	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 <sup>3</sup> SAMP	HP-210 cpm>bkgd/ft <sup>3</sup> SAMP	mR/hr on contact
A	680.705	ERRATIC	816846	54456	884.70	ERRATIC	ERRATIC	70776	52800	0	320.0
B	717.995	ERRATIC	861594	57440	933.21	ERRATIC	ERRATIC	74657	55704	0	253.2
C	27.587	ERRATIC	33104	2207	35.86	ERRATIC	43029	2869	2141	0	6.5
D	20.200	ERRATIC	24240	1616	26.26	ERRATIC	31508	2101	1568	0	4.7
E	0.682	818290	818	55	0.89	ERRATIC	1064	71	53	0	0.2
F	625.730	ERRATIC	750876	50058	813.41	ERRATIC	976092	65073	48576	0	0.0
G	73.686	ERRATIC	88423	5895	95.78	ERRATIC	114938	7663	5719	0	8.7
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
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
O	0.000	0	0	0	0.00	0	0	0	0	0	0.0
P	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	106.6
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
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
W	0.00	0	0	0	0.00	0	0	0	0	0	0.0

TIME: 11:30

OFF SITE LABORATORY DATA

1. Multiply veg. values by No.  
in sample.

CONTAMINATION SAMPLE RESULTS

	IODINE AIRBORNE	PART AIRBORNE	IODINE SURFACE	IODINE VEGETATION	PARTIC VEG
SAMPLE POINT	uCi/cc	uCi/cc	uCi/m <sup>2</sup>	pCi/g	pCi/g
A	5.28E-04	0.00E+00	63.36	0.00	6.34E+04
B	5.57E-04	0.00E+00	50.13	0	5.01E+04
C	2.14E-05	0.00E+00	1.28	0	1.28E+03
D	1.57E-05	0.00E+00	0.94	0	9.41E+02
E	5.29E-07	0.00E+00	0.03	0	3.17E+01
F	4.86E-04	0.00E+00	0.00	0	0.00E+00
G	5.72E-05	0.00E+00	1.72	0	1.72E+03
H	0.00E+00	0.00E+00	0.00	0	0.00E+00
I	0.00E+00	0.00E+00	0.00	0	0.00E+00
J	0.00E+00	0.00E+00	0.00	0	0.00E+00
K	0.00E+00	0.00E+00	0.00	0	0.00E+00
L	0.00E+00	0.00E+00	0.00	0	0.00E+00
M	0.00E+00	0.00E+00	0.00	0	0.00E+00
N	0.00E+00	0.00E+00	0.00	0	0.00E+00
O	0.00E+00	0.00E+00	0.00	0	0.00E+00
P	1.49E-03	0.00E+00	134.33	0	1.34E+05
Q	2.35E-04	0.00E+00	21.11	0	2.11E+04
R	0.00E+00	0.00E+00	0.00	0	0.00E+00
S	0.00E+00	0.00E+00	0.00	0	0.00E+00
T	0.00E+00	0.00E+00	0.00	0	0.00E+00
U	0.00E+00	0.00E+00	0.00	0	0.00E+00
V	0.00E+00	0.00E+00	0.00	0	0.00E+00
W	0.00E+00	0.00E+00	0.00	0	0.00E+00

TIME: 11:45

1. Zeros are "as read"
2. Multiply the airborne values by the ft<sup>3</sup> sampled
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS  
(READINGS MADE OUTSIDE PLUME)

OFF SITE FIELD DATA

AMBIENT RADIATION READINGS

SAMPLE POINT	1 METER ABOVE SURFACE				6" ABOVE SURFACE				IODINE AIRBORNE	PART AIRBORNE	VEGETATION SAMPLE
	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 <sup>3</sup> SAMP	HP-210 cpm>bkgd/ft <sup>3</sup> SAMP	mR/hr on contact
A	0.705	845856	846	56	0.70	845856	846	56	0	0	400.0
B	718.144	ERRATIC	861772	57451	933.36	ERRATIC	ERRATIC	74669	55704	0	337.6
C	27.592	ERRATIC	33111	2207	35.86	ERRATIC	43036	2869	2141	0	9.7
D	20.204	ERRATIC	24245	1616	26.26	ERRATIC	31513	2101	1568	0	7.1
E	0.682	818460	818	55	0.89	ERRATIC	1064	71	53	0	0.2
F	625.859	ERRATIC	751031	50069	813.54	ERRATIC	976247	65083	48576	0	73.6
G	73.701	ERRATIC	88441	5896	95.80	ERRATIC	114957	7664	5719	0	17.3
H	421.603	ERRATIC	505923	33728	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
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
O	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
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
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
W	2.19	ERRATIC	2625	0	2.84	ERRATIC	3412	227	170	0	0.0

TIME: 11:45

OFF SITE LABORATORY DATA

1. Multiply veg. values by No.  
in sample.

CONTAMINATION SAMPLE RESULTS

	IODINE AIRBORNE	PART AIRBORNE	IODINE SURFACE	IODINE VEGETATION	PARTIC VEG
SAMPLE POINT	uCi/cc	uCi/cc	uCi/m <sup>2</sup>	pCi/g	pCi/g
A	0.00E+00	0.00E+00	79.20	0.00	7.92E+04
B	5.57E-04	0.00E+00	66.84	0	6.68E+04
C	2.14E-05	0.00E+00	1.93	0	1.93E+03
D	1.57E-05	0.00E+00	1.41	0	1.41E+03
E	5.29E-07	0.00E+00	0.05	0	4.76E+01
F	4.86E-04	0.00E+00	14.57	0	1.46E+04
G	5.72E-05	0.00E+00	3.43	0	3.43E+03
H	3.27E-04	0.00E+00	0.00	0	0.00E+00
I	0.00E+00	0.00E+00	0.00	0	0.00E+00
J	0.00E+00	0.00E+00	0.00	0	0.00E+00
K	0.00E+00	0.00E+00	0.00	0	0.00E+00
L	0.00E+00	0.00E+00	0.00	0	0.00E+00
M	0.00E+00	0.00E+00	0.00	0	0.00E+00
N	0.00E+00	0.00E+00	0.00	0	0.00E+00
O	0.00E+00	0.00E+00	0.00	0	0.00E+00
P	1.49E-03	0.00E+00	179.10	0	1.79E+05
Q	2.35E-04	0.00E+00	28.15	0	2.81E+04
R	0.00E+00	0.00E+00	0.00	0	0.00E+00
S	0.00E+00	0.00E+00	0.00	0	0.00E+00
T	0.00E+00	0.00E+00	0.00	0	0.00E+00
U	0.00E+00	0.00E+00	0.00	0	0.00E+00
V	0.00E+00	0.00E+00	0.00	0	0.00E+00
W	1.70E-06	0.00E+00	0.00	0	0.00E+00

TIME: 12:00

OFF SITE FIELD DATA

1. Zeros are "as read"
2. Multiply the airborne values by the ft<sup>3</sup> sampled
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS  
(READINGS MADE OUTSIDE PLUME)

AMBIENT RADIATION READINGS

1 METER ABOVE SURFACE					6" ABOVE SURFACE				IODINE AIRBORNE	PART AIRBORNE	VEGETATION SAMPLE
SAMPLE POINT	SPA-3		HP-270		HP-290		SPA-3		HP-270		mR/hr on contact
	DOSE RATE mR/hr	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm	DOSE RATE cpm	
A	0.705	845856	846	56	0.70	845856	846	56	0	0	400.0
B	0.744	892378	892	59	0.74	892378	892	59	0	0	422.0
C	27.598	ERRATIC	33118	2208	35.87	ERRATIC	43043	2870	2141	0	13.0
D	20.209	ERRATIC	24250	1617	26.26	ERRATIC	31518	2101	1568	0	9.5
E	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	48576	0	147.2
G	73.716	ERRATIC	88459	5897	95.81	ERRATIC	114975	7665	5719	0	26.0
H	421.690	ERRATIC	506028	33735	548.14	ERRATIC	657774	43852	32729	0	49.6
I	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
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
O	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	0	1130.6
Q	0.313	375760	376	25	0.31	375760	376	25	0	0	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
T	0.000	0	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
W	2.19	ERRATIC	2625	0	2.84	ERRATIC	3413	228	170	0	0.3

TIME: 12:00

OFF SITE LABORATORY DATA

1. Multiply veg. values by No.  
in sample.

CONTAMINATION SAMPLE RESULTS

SAMPLE POINT	IODINE AIRBORNE	PART AIRBORNE	IODINE SURFACE	PARTIC VEGETATION	VEG
	uCi/cc	uCi/cc	uCi/m <sup>2</sup>	pCi/g	pCi/g
A	0.00E+00	0.00E+00	79.20	0.00	7.92E+04
B	0.00E+00	0.00E+00	83.56	0	8.36E+04
C	2.14E-05	0.00E+00	2.57	0	2.57E+03
D	1.57E-05	0.00E+00	1.88	0	1.88E+03
E	5.29E-07	0.00E+00	0.06	0	6.35E+01
F	4.86E-04	0.00E+00	29.15	0	2.91E+04
G	5.72E-05	0.00E+00	5.15	0	5.15E+03
H	3.27E-04	0.00E+00	9.82	0	9.82E+03
I	1.89E-04	0.00E+00	0.00	0	0.00E+00
J	1.69E-04	0.00E+00	0.00	0	0.00E+00
K	0.00E+00	0.00E+00	0.00	0	0.00E+00
L	0.00E+00	0.00E+00	0.00	0	0.00E+00
M	0.00E+00	0.00E+00	0.00	0	0.00E+00
N	0.00E+00	0.00E+00	0.00	0	0.00E+00
O	0.00E+00	0.00E+00	0.00	0	0.00E+00
P	0.00E+00	0.00E+00	223.88	0	2.24E+05
Q	0.00E+00	0.00E+00	35.18	0	3.52E+04
R	0.00E+00	0.00E+00	0.00	0	0.00E+00
S	0.00E+00	0.00E+00	0.00	0	0.00E+00
T	0.00E+00	0.00E+00	0.00	0	0.00E+00
U	1.85E-07	0.00E+00	0.00	0	0.00E+00
V	0.00E+00	0.00E+00	0.00	0	0.00E+00
W	1.70E-06	0.00E+00	0.05	0	5.09E+01

TIME: 12:15

OFF SITE FIELD DATA

1. Zeros are "as read"
2. Multiply the airborne values by the ft<sup>3</sup> sampled
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS  
(READINGS MADE OUTSIDE PLUME)

AMBIENT RADIATION READINGS

SAMPLE POINT	1 METER ABOVE SURFACE				6" ABOVE SURFACE				IODINE AIRBORNE	PART AIRBORNE	VEGETATION SAMPLE
	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 <sup>3</sup> SAMP	HP-210 cpm>bkgd/ ft <sup>3</sup> SAMP	mR/hr on contact
A	0.705	845856	846	56	0.70	845856	846	56	0	0	400.0
B	0.744	892378	892	59	0.74	892378	892	59	0	0	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	0	0	11.9
E	0.001	848	1	0	0.00	848	1	0	0	0	0.4
F	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
H	421.778	ERRATIC	506133	33742	548.23	ERRATIC	657879	43859	32729	0	99.2
I	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
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
O	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	0	1130.6
Q	0.313	375760	376	25	0.31	375760	376	25	0	0	177.7
R	0.000	0	0	0	0.00	0	0	0	0	0	0.0
S	1.306	ERRATIC	1567	104	1.70	ERRATIC	2037	136	101	0	0.0
T	95.293	ERRATIC	114352	7623	123.88	ERRATIC	148650	9910	7398	0	0.0
U	0.24	285506	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
W	2.19	ERRATIC	2626	0	2.84	ERRATIC	3413	228	170	0	0.5



TIME: 12:15

OFF SITE LABORATORY DATA

1. Multiply veg. values by No.  
in sample.

CONTAMINATION SAMPLE RESULTS

	IODINE AIRBORNE	PART AIRBORNE	IODINE SURFACE	IODINE VEGETATION	PARTIC VEG
SAMPLE POINT	uCi/cc	uCi/cc	uCi/m <sup>2</sup>	pCi/g	pCi/g
A	0.00E+00	0.00E+00	79.20	0.00	7.92E+04
B	0.00E+00	0.00E+00	83.56	0	8.36E+04
C	0.00E+00	0.00E+00	3.21	0	3.21E+03
D	0.00E+00	0.00E+00	2.35	0	2.35E+03
E	0.00E+00	0.00E+00	0.08	0	7.94E+01
F	4.86E-04	0.00E+00	43.72	0	4.37E+04
G	5.72E-05	0.00E+00	6.86	0	6.86E+03
H	3.27E-04	0.00E+00	19.64	0	1.96E+04
I	1.89E-04	0.00E+00	5.68	0	5.68E+03
J	1.69E-04	0.00E+00	5.06	0	5.06E+03
K	2.32E-04	0.00E+00	0.00	0	0.00E+00
L	0.00E+00	0.00E+00	0.00	0	0.00E+00
M	0.00E+00	0.00E+00	0.00	0	0.00E+00
N	0.00E+00	0.00E+00	0.00	0	0.00E+00
O	0.00E+00	0.00E+00	0.00	0	0.00E+00
P	0.00E+00	0.00E+00	223.88	0	2.24E+05
Q	0.00E+00	0.00E+00	35.18	0	3.52E+04
R	0.00E+00	0.00E+00	0.00	0	0.00E+00
S	1.01E-06	0.00E+00	0.00	0	0.00E+00
T	7.40E-05	0.00E+00	0.00	0	0.00E+00
U	1.85E-07	0.00E+00	0.01	0	5.54E+00
V	0.00E+00	0.00E+00	0.00	0	0.00E+00
W	1.70E-06	0.00E+00	0.10	0	1.02E+02

TIME: 12:30

OFF SITE FIELD DATA

1. Zeros are "as read"
2. Multiply the airborne values by the ft<sup>3</sup> sampled
3. Veg. value based on a 1 kilogram sample
4. ERRATIC means cpm to high to be reliable

CONTAMINATION READINGS  
(READINGS MADE OUTSIDE PLUME)

AMBIENT RADIATION READINGS

SAMPLE POINT	1 METER ABOVE SURFACE				6" ABOVE SURFACE				IODINE AIRBORNE	PART AIRBORNE	VEGETATION SAMPLE
	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 <sup>3</sup> SAMP	HP-210 cpm>bkgd/ ft <sup>3</sup> SAMP	mR/hr on contact
A	0.705	845856	846	56	0.70	845856	846	56	0	0	400.0
B	0.744	892378	892	59	0.74	892378	892	59	0	0	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	0	0	11.9
E	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	0	0	43.3
H	421.865	ERRATIC	506238	33749	548.32	ERRATIC	657983	43866	32729	0	149.8
I	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
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
O	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	0	1130.6
Q	0.313	375760	376	25	0.31	375760	376	25	0	0	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
T	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
W	2.19	ERRATIC	2626	0	2.84	ERRATIC	3414	228	170	0	0.8

TIME: 12:30

OFF SITE LABORATORY DATA

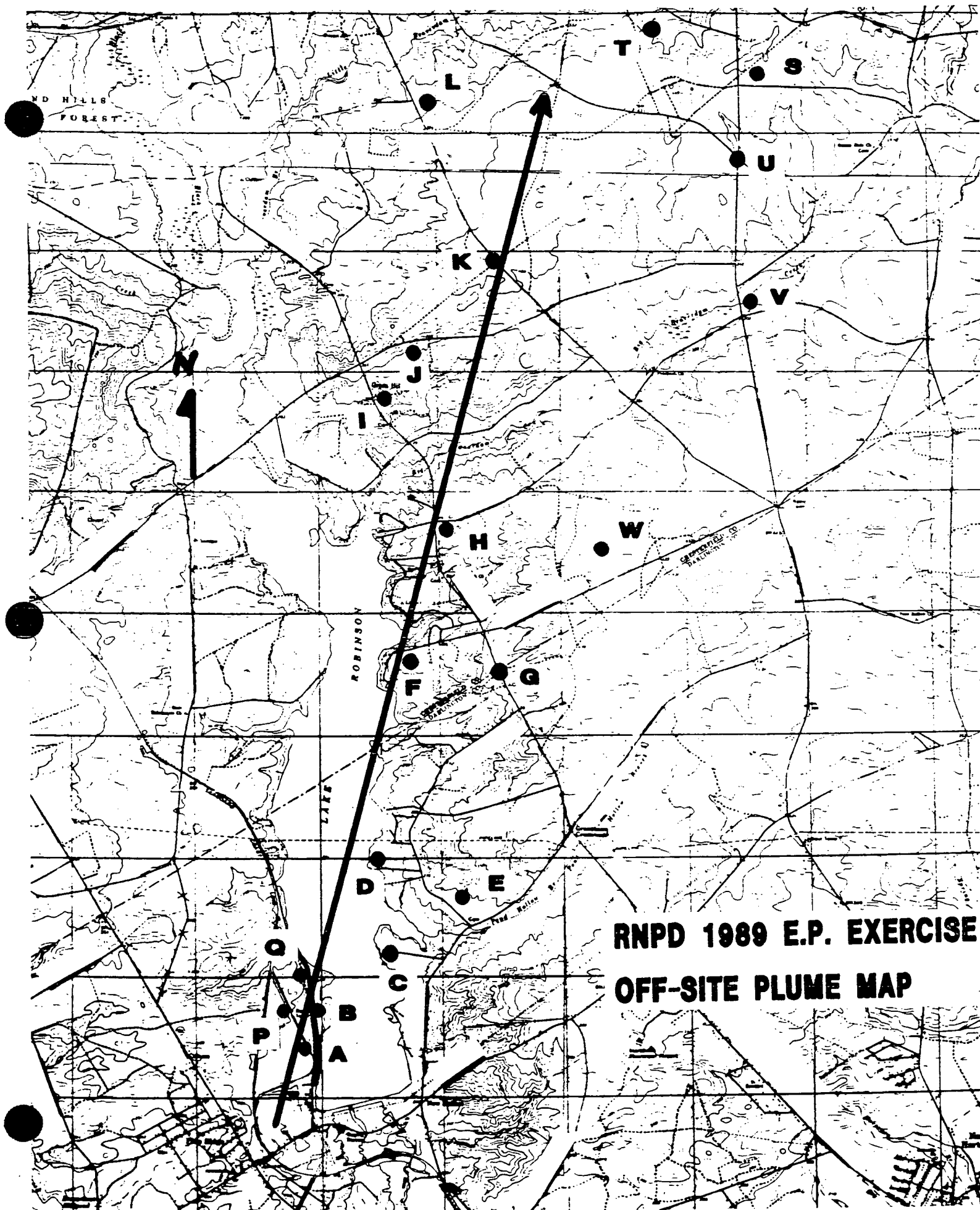
1. Multiply veg. values by No.  
in sample.

CONTAMINATION SAMPLE RESULTS

	IODINE AIRBORNE	PART AIRBORNE	IODINE SURFACE	IODINE VEGETATION	PARTIC VEG
SAMPLE POINT	uCi/cc	uCi/cc	uCi/m <sup>2</sup>	pCi/g	pCi/g
A	0.00E+00	0.00E+00	79.20	0.00	7.92E+04
B	0.00E+00	0.00E+00	83.56	0	8.36E+04
C	0.00E+00	0.00E+00	3.21	0	3.21E+03
D	0.00E+00	0.00E+00	2.35	0	2.35E+03
E	0.00E+00	0.00E+00	0.08	0	7.94E+01
F	4.86E-04	0.00E+00	58.29	0	5.83E+04
G	0.00E+00	0.00E+00	8.58	0	8.58E+03
H	3.27E-04	0.00E+00	29.46	0	2.95E+04
I	1.89E-04	0.00E+00	11.37	0	1.14E+04
J	1.69E-04	0.00E+00	10.11	0	1.01E+04
K	2.32E-04	0.00E+00	6.97	0	6.97E+03
L	4.15E-05	0.00E+00	0.00	0	0.00E+00
M	0.00E+00	0.00E+00	0.00	0	0.00E+00
N	0.00E+00	0.00E+00	0.00	0	0.00E+00
O	0.00E+00	0.00E+00	0.00	0	0.00E+00
P	0.00E+00	0.00E+00	223.88	0	2.24E+05
Q	0.00E+00	0.00E+00	35.18	0	3.52E+04
R	0.00E+00	0.00E+00	0.00	0	0.00E+00
S	1.01E-06	0.00E+00	0.03	0	3.04E+01
T	7.40E-05	0.00E+00	2.22	0	2.22E+03
U	1.85E-07	0.00E+00	0.01	0	1.11E+01
V	3.61E-09	0.00E+00	0.00	0	0.00E+00
W	1.70E-06	0.00E+00	0.15	0	1.53E+02

LEGEND: OFF-SITE PLUME MAP

- A. PLUME CENTERLINE NEAR RAILROAD TRACK
- B. PLUME CENTERLINE NEAR DISCHARGE CANAL
- C. ATKINSON 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
- Q. 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



**RNPD 1989 E.P. EXERCISE  
OFF-SITE PLUME MAP**

CAROLINA POWER AND LIGHT COMPANY  
ROBINSON NUCLEAR PROJECT DEPARTMENT

1989 EMERGENCY PREPAREDNESS  
ANNUAL EXERCISE

4.0 CONTROLLERS' INSTRUCTIONS

A.      EXERCISE CONTROL ORGANIZATION      NOVEMBER 13-14, 1989

<u>NAME</u>	<u>ASSIGNMENT</u>	<u>PHONE #</u>
Max F. Thompson	Corp. Exercise Director	Floating
Mike Morrow	Scenario Coordinator	4015
Brian McFeaters	Chief Evaluator	Floating
Bob Steele	Lead Control Room	4027
Jim Harding	Control Room	4027
Russ Muth	Control Room (Communications)	4028
Terry Byron	Control Room	
Bob Indelicato	Lead TSC	4020
Janet Gerald	TSC (Radiological Assessment)	.....
John Davis	TSC (Accident Assessment)	.....
Vickie Ashman	TSC (Communications)	4043
Albert Garrou	Lead OSC	1380
Cecil Oates	OSC (Maint.-Mech.)	1380
Mike Blocker	OSC (PASS Team)	PA
Mose Highsmith	OSC (Plant Team)	PA
Steve Barrett	OSC (Plant Team)	PA
Leon Held	OSC (Maint. - I&C/Elect.)	PA
Doc Gainey	OSC (Plant Team/Medical Emergency)	PA
Richard Baldwin	OSC (Plant Team)	
Brad Houston	Lead EOF	4051
Larry Ratliffe	EOF (Radiological Assessment)	
Gail Bowen	EOF (Communications)	
Effie Carroll	EOF	
Jim Davis	Environmental Mon. Team #1	Radio
Margie Johnson	Environmental Mon. Team #2	Radio
Larry Williams	Lead Security	PA
Phil Leslie	Security	
Ralph Goodwin	Lead Plant Media Center	4109
Tami Dunn	Plant Media Center	
Eileen Welch-Jones	Plant Media Center	
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 NOT TO PROMPT players to make a specific response.
7. Prior to exercise commencement, all telecommunications should be tested to ensure satisfactory communications between the Lead Controllers and all other controllers (per exercise ring down).
8. Controllers will commence their assignments at assembly locations for players that they are to observe or as directed by the Lead Controllers.
9. Players are not allowed to introduce problems or events into the exercise or its scenario. Free play however, should be encouraged wherever possible, so long as the players actions do not affect the overall scenario or the reaching of objectives of the exercise. when free play occurs, the Lead Controller or Exercise Director should be informed and have final authority to decide if such actions are consistent with overall exercise objectives.

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.

18. Controllers and federal evaluators do not have to follow the radiation exposure control practices appropriate for the simulated radiation levels. However, the players must follow the radiation protection rules. Controllers and evaluators will be exempt from accountability and have access to all areas.

#### GENERAL "DON'Ts" FOR EVALUATORS

1. Don't leave your post at key times.
2. Don't prompt the players to take action.
3. Don't coach the players.
4. Don't criticize the players' actions during the play.
5. Don't forget to call the Lead Controller to seek advice or help as necessary.
6. Don't allow the media/other external influences to distract the players. No interviews with players are allowed.
7. Don't allow simulation when equipment and facilities are available except for causing flow discharge of fire extinguishers, etc.

#### \*\*\* NOTE \*\*\*

All participants will comply with radiation exposure control practices for actual conditions existing at the 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**

-Control Room Controller-

		<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
1.	Did the operators respond quickly to the initiating events and properly assess the situation	_____	_____	_____
2.	Did the Control Room personnel take appropriate actions to mitigate the emergency condition in an expeditious manner?	_____	_____	_____
3.	Were appropriate abnormal conditions and emergency operations procedures used and periodically reviewed during the emergency situation?	_____	_____	_____
4.	Did the Shift Supervisor receive immediate notification of the emergency condition?	_____	_____	_____
5.	Were there sufficient measurable/observable indications to recognize the Emergency Action Levels?	_____	_____	_____
6.	Were classifications of the emergency conditions timely and accurate?	_____	_____	_____
7.	Did Control Room personnel know when to refer to the emergency plan implementing procedures and which procedures to use?	_____	_____	_____
8.	Was the emergency classification upgraded or downgraded when appropriate?	_____	_____	_____
9.	Did the Shift 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 thoughtout 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-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
15. Were personnel aware of their emergency response roles and functions?	_____	_____	_____
16. Did the Shift 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?	_____	_____	_____
18. Were manpower and staffing requirements for protracted operations assessed?	_____	_____	_____
19. Were notification procedures available and used for mobilizing onsite emergency response personnel and augmenting the emergency response staff?	_____	_____	_____
20. Were emergency response phone listings available, complete, and up-to-date?	_____	_____	_____
21. Were initial and follow-up notification forms readily available and properly completed?	_____	_____	_____
22. Did the Control Room communicators appear to understand and use the communications equipment and systems effectively?	_____	_____	_____
23. Did Control Room personnel transmit data in a timely and knowledgeable manner?	_____	_____	_____
24. Did the Control Room communicators use the statement, "this is a drill," or a similar statement?	_____	_____	_____
25. Were communications links checked?	_____	_____	_____
26. Were all communication networks operational?	_____	_____	_____
27. Were communications adequate to ensure that the flow of information was timely, effective, and efficient?	_____	_____	_____
28. Were dedicated communication links with the TSC, EOF, and OSC available and used?	_____	_____	_____



-Control Room Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
29. Were general status announcements or periodic updates provided to Control Room personnel throughout the emergency?	_____	_____	_____
30. Was the plant page-party system used to apprise emergency workers of changes in the status of the emergency situation?	_____	_____	_____
31. Was there a proper flow of data between the TSC and the Control Room?	_____	_____	_____
32. Were Control Room logs maintained?	_____	_____	_____
33. Did operators obtain the appropriate information necessary to Support dose projection calculations?	_____	_____	_____
34. Did operators obtain release rate and offsite dose assessment information from the appropriate radiological monitoring systems when required?	_____	_____	_____
35. Was a calculator or computer immediately available for performing dose projection calculations?	_____	_____	_____
36. Were dose projection calculations performed efficiently and accurately?	_____	_____	_____
37. Were emergency supplies and equipment, such as respirators and protective clothing available to Control Room personnel?	_____	_____	_____
38. Was the ambient noise level in the Control Room acceptable?	_____	_____	_____
39. Was access to the Control Room restricted to specific individuals?	_____	_____	_____
40. Was a post-drill/exercise critique held to evaluate Control Room performance?	_____	_____	_____

-Technical Support Center (TSC) Controller-

		<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
1.	Did the security organization initiate a search of the TSC in a timely manner?	_____	_____	_____
2.	Was the TSC incorporated into the protected area?	_____	_____	_____
3.	Were 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?	_____	_____	_____
6.	Were TSC personnel aware of their assigned work areas?	_____	_____	_____
7.	Were TSC personnel familiar with their assigned duties and responsibilities?	_____	_____	_____
8.	Did applicable personnel in the TSC refer to and utilize their checklists?	_____	_____	_____
9.	Did TSC personnel have up-to-date phone listings for onsite and offsite contacts?	_____	_____	_____
10.	Was command control authority transferred from the Control Room to the TSC according to procedures?	_____	_____	_____
11.	Did communications contain the statement "this is a drill," 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?	_____	_____	_____

-Technical Support Center (TSC) Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
15. Did the Site Emergency Coordinator demonstrate the ability to maintain command control over all emergency response activities conducted from the TSC?	_____	_____	_____
16. Were plant status briefings periodically conducted by the Site Emergency Coordinator?	_____	_____	_____
17. If necessary, did the Site Emergency Coordinator make offsite protective action recommendations in a proper and timely manner?	_____	_____	_____
18. Were manpower and staffing requirements for protracted operations assessed?	_____	_____	_____
19. Did TSC personnel demonstrate, if necessary, the ability to identify the need for outside assistance when station capabilities were exceeded?	_____	_____	_____
20. Did TSC personnel demonstrate the ability to classify the emergency condition in a timely manner?	_____	_____	_____
21. Did technical personnel demonstrate their ability to react to escalating emergency classification?	_____	_____	_____
22. Did the TSC Accident Assessment Team demonstrate the ability to gather, assess, and disseminate information to help mitigate the emergency conditions?	_____	_____	_____
23. Did the TSC staff adequately Support the Control Room staff's efforts to identify the cause of an incident, mitigate the consequences of that incident, and place the unit in a safe and stable conditions?	_____	_____	_____
24. Did TSC personnel demonstrate the ability to respond to mitigating circumstances and properly de-escalate the emergency situation?	_____	_____	_____
25. Were the notification procedures available and used for mobilizing onsite emergency response personnel and augmenting the emergency response staff?	_____	_____	_____

-Technical Support Center (TSC) Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
26. Were communication links established with other emergency response facilities in a timely manner?	_____	_____	_____
27. Did TSC personnel properly communicate with:			
a. Control Room?	_____	_____	_____
b. OSC?	_____	_____	_____
c. EOF?	_____	_____	_____
28. Did the Logistic Support Director notify the Emergency Security Team Leader of anticipated emergency vehicle access to the site necessary to Support emergency response activities?	_____	_____	_____
29. Were necessary modifications to the security program coordinated with the Emergency Security Team Leader 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?	_____	_____	_____
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?	_____	_____	_____
38. Were the correct procedures and methods used for making dose projection calculations?	_____	_____	_____

-Technical Support Center (TSC) Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
39. Were dose projections performed in a timely manner?	_____	_____	_____
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-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
1. Was the Emergency Response Manager notified following the Notification of Unusual Event and Alert declarations?	_____	_____	_____
2. Was the EOF activated in a timely manner?	_____	_____	_____
3. Were EOF personnel aware of their assigned work areas?	_____	_____	_____
4. Was the EOF activated as prescribed in the emergency plan implementing procedures?	_____	_____	_____
5. Were security controls exercised concerning personnel permitted access to the EOF?	_____	_____	_____
6. Was there a clear and precise transfer of responsibility from the TSC staff to the EOF staff?	_____	_____	_____
7. Did the Emergency Response Manager declare the EOF operational prior to accepting full responsibility for offsite activities?	_____	_____	_____
8. Did the Emergency Response Manager maintain command control over the emergency response activities conducted from the EOF?	_____	_____	_____
9. Was there a clear dissemination of authority and control in the EOF organization?	_____	_____	_____
10. Did the EOF staff initiate and coordinate activities in an efficient and timely manner?	_____	_____	_____
11. Were procedures available to, and used by, EOF personnel?	_____	_____	_____
12. Did EOF personnel have up-to-date phone listings for onsite and offsite emergency contacts?	_____	_____	_____
13. Were current plant status announcements and periodic updates made?	_____	_____	_____
14. Did communications contain the statement "this is a drill," 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?	_____	_____	_____

-Emergency Operations Facility (EOF) Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
16. Did the EOF staff perform manpower projections to support contracted operations and notify the Administrative and Logistic Manager accordingly?	_____	_____	_____
17. Did the EOF staff demonstrate the ability to obtain outside resources when station capabilities were exceeded?	_____	_____	_____
18. Were communicators correctly assigned and communication checks performed in a timely fashion?	_____	_____	_____
19. Were dedicated communication links available and operational?	_____	_____	_____
20. Were the communication links between the EOF and other locations, including mobile personnel, effective?	_____	_____	_____
21. Following changes in the emergency classification level, were notifications made to the proper authorities when required?	_____	_____	_____
22. Did the EOF staff inform and update the appropriate County, State, and Federal emergency response personnel in a timely manner?	_____	_____	_____
23. Did EOF personnel demonstrate the ability to gather, assess, and disseminate information regarding the status of emergency conditions and the status of emergency response activities in a timely manner?	_____	_____	_____
24. Did the EOF staff demonstrate the ability to Support the TSC staff's efforts to identify the cause of an incident, mitigate the consequences of that incident, and place the unit in a safe and stable condition?	_____	_____	_____
25. Did the EOF staff demonstrate the ability to analyze current plant conditions and identify projected trends and potential consequences?	_____	_____	_____
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?	_____	_____	_____

-Emergency Operations Facility (EOF) Controller-

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



-Emergency Operations Facility (EOF) Controller-

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

-Plant Monitoring Team Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
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?	_____	_____	_____
5. Were the survey instruments and radios functionally checked prior to starting on the survey and were the instrument calibrations current?	_____	_____	_____
6. Was personnel dosimetry available and issued to the team members?	_____	_____	_____
7. Were teams supplied with appropriate high-range personnel dosimeters?	_____	_____	_____
8. Were procedures followed while taking samples?	_____	_____	_____
9. Were appropriate precautions taken in the handling and storing of any high-level samples?	_____	_____	_____
10. Were samples collected in a timely manner?	_____	_____	_____
11. Were samples analyzed within the required time limit?	_____	_____	_____
12. Were emergency monitoring procedures available to, and used by, team personnel?	_____	_____	_____
13. Were the capabilities in place for dealing with both heavily contaminated personnel and those individuals only slightly contaminated?	_____	_____	_____

-Plant Monitoring Team Controller-

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

-Environmental Monitoring Teams Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
1. Did team members arrive at the staging area and prepare themselves in a timely manner?	_____	_____	_____
2. Was the team equipped with the following supplies:			
a. Survey instruments?	_____	_____	_____
b. Air samplers?	_____	_____	_____
c. Radio?	_____	_____	_____
d. Maps?	_____	_____	_____
e. Protective clothing?	_____	_____	_____
f. Respiratory protection equipment?	_____	_____	_____
3. With respect to the team's vehicle:			
a. Was it fully gassed?	_____	_____	_____
b. Were the keys readily available?	_____	_____	_____
c. Was a release survey completed prior to deployment?	_____	_____	_____
4. Prior to deployment, was a team leader identified?	_____	_____	_____
5. Prior to deployment, did team personnel perform preoperational checks on the following equipment:			
a. Radio?	_____	_____	_____
b. Survey meters?	_____	_____	_____
c. Sampling equipment?	_____	_____	_____
6. Were the instruments calibrated within the current calendar quarter or within the prescribed schedule?	_____	_____	_____
7. Was the team briefed prior to dispatch?	_____	_____	_____
8. Was the vehicle properly designed or modified to hold team members, and monitoring, protective, safety, and auxiliary equipment?	_____	_____	_____
9. Were there enough team members to adequately conduct survey and sampling activities?	_____	_____	_____
10. Was the vehicle and/or team equipped with an adequate radio system that permitted unimpeded transmission and reception of data and instructions?	_____	_____	_____

-Environmental Monitoring Teams Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
11. Did the EOF provide adequate instructions regarding what measurements were to be performed?	_____	_____	_____
12. Did the radio communications contain the statement, "this is a drill," or a similar statement?	_____	_____	_____
13. Were radio communications clear, concise, and accurate?	_____	_____	_____
14. Were communications properly maintained?	_____	_____	_____
15. Did the Environmental Monitoring Coordinator exhibit good ALARA practices in directing team?	_____	_____	_____
16. Was information transmitted to the EOF communicator in a timely manner?	_____	_____	_____
17. Was the team kept apprised of the status of the emergency situation?	_____	_____	_____
18. Were dose rate measurements taken to verify radiation levels while in transit to monitoring and/or sampling sites?	_____	_____	_____
19. Was the team able to find the monitoring and/or sampling locations?	_____	_____	_____
20. Did the team demonstrate a knowledge of proper survey and sampling techniques?	_____	_____	_____
21. Did team personnel know how to operate and/or handle monitoring, sampling, and auxiliary equipment?	_____	_____	_____
22. Were air samplers run for an appropriate time interval?	_____	_____	_____
23. Were samples counted outside the plume?	_____	_____	_____
24. Was the proper procedure used for field counting of airborne samples?	_____	_____	_____
25. Were good sample handling techniques used to avoid cross-contamination?	_____	_____	_____

-Environmental Monitoring Teams Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
26. Was raw field data converted correctly to uCi/cc for both particulate and iodine airborne samples?	_____	_____	_____
27. Were vehicle surveys performed periodically?	_____	_____	_____
28. Was the team aware of sample drop location(s)?	_____	_____	_____
29. Did the team members keep track of their individual exposure?	_____	_____	_____
30. Were pocket dosimeters checked on a regular basis?	_____	_____	_____
31. Were data sheets properly filled out and maintained?	_____	_____	_____
32. Were standby areas clearly identified to the team?	_____	_____	_____
33. Were spare batteries available for portable radios?	_____	_____	_____
34. Were backup instruments available in case of a failure of the primary instruments?	_____	_____	_____
35. Were the team members and vehicle properly surveyed upon completion of their monitoring tasks?	_____	_____	_____
36. Were the team members debriefed upon their return?	_____	_____	_____
37. Upon return, was equipment returned to its original status?	_____	_____	_____

-Medical Emergency Controller-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
1. Was the information concerning the event transmitted properly to the Control Room?	_____	_____	_____
2. Was the response team organized and dispatched quickly?	_____	_____	_____
3. Prior to deployment, was a team leader identified and properly briefed?	_____	_____	_____
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?	_____	_____	_____
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?	_____	_____	_____
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?	_____	_____	_____

-Medical Emergency Controller-

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

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
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?	_____	_____	_____
4. Was there a clear dissemination of authority and control in the organization?	_____	_____	_____
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?	_____	_____	_____
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?	_____	_____	_____
11. Were accurate and timely information releases made to the general public and the news media?	_____	_____	_____
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?	_____	_____	_____

-Assembly, Accountability, and Evacuation Controllers-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
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?	_____	_____	_____
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?	_____	_____	_____
10. Were these steps coordinated with the Site Emergency Coordinator?	_____	_____	_____

-SAMPLE TEAMS (PASS) CONTROLLER-

	<u>Yes</u>	<u>No</u>	<u>Not Observed</u>
1. Were the team members selected familiar with sample retrieval procedures/practices?	_____	_____	_____
2. Was health physics coverage provided for sample retrieval assistance where radiation hazards existed?	_____	_____	_____
3. Was the team given an adequate briefing on radiation hazards and contamination problems?	_____	_____	_____
4. Was a team leader identified?	_____	_____	_____
5. Was a predetermined route established prior to departure and then used by the team?	_____	_____	_____
6. Did the team have appropriate equipment?	_____	_____	_____
7. Were operational checks performed on the equipment?	_____	_____	_____
8. Did the team use good sample retrieval practices (Dosimetry, Surveys, etc.)?	_____	_____	_____
9. Were team members familiar with equipment operation?	_____	_____	_____
10. Were communications maintained?>	_____	_____	_____
11. Did communications contain the statement "This is a drill" or a similar statement?	_____	_____	_____
12. Were the procedures sufficient to provide acceptable and accurate results?	_____	_____	_____
13. Did the lab technicians observe good lab practices (e.g., Hot sample shielding and disposal)?	_____	_____	_____
14. Were the protective clothing requirements adequate?	_____	_____	_____

CAROLINA POWER AND LIGHT COMPANY  
ROBINSON NUCLEAR PROJECT DEPARTMENT

1989 EMERGENCY PREPAREDNESS  
ANNUAL EXERCISE

CRITIQUE WORKSHEET

Primary Areas for Evaluation:

___ Control Room	___ State EOC	___ Environmental Monitoring
___ TSC	___ Lee EOC	___ Teams
___ OSC	___ Darlington EOC	___ State Monitoring Teams
___ EOF	___ Chesterfield EOC	___ HE&EC Environmental Teams
___ HCC	___ Plant Monitoring Team	___ 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: \_\_\_\_\_

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:**



Drill/Exercise Type: Annual Exercise 89-03

Name: \_\_\_\_\_

Date: November 13-14, 1989

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Drill/Exercise Type: Annual Exercise 89-03

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Drill/Exercise Type: Annual Exercise 89-03

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Drill/Exercise Type: Annual Exercise 89-03

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