

TO BE KEPT CONFIDENTIAL UNTIL AFTER OCTOBER 4, 1989

Exercise Controller/Evaluator Manual

for the

**October 1989 Exercise of the Emergency Plan for
Millstone Nuclear Power Station**

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1. INTRODUCTION

1. INTRODUCTION

1.1 Introduction

This manual contains the necessary information to document the events which are expected to occur during the annual emergency plan exercise at the Millstone Nuclear Power Station which is to be held on October 4, 1989.

The Station and Corporate staffs will fully participate in the exercise. The State of Connecticut and some of the local communities within the 10-mile radius Emergency Planning Zone (EPZ) of the Millstone Station, will partially participate. The objectives of the exercise are outlined in *Section 2*.

This controller/evaluator manual contains certain common information for all controllers/evaluators (e.g., a scenario sequence of events, controller's/evaluator's rules, etc.). It also contains specific information for you, the controller/evaluator (e.g., a *Exercise Controller Guide (ECG)* which details the master scenario sequence of events, your controller actions, your player's expected responses, and the messages that you are to issue to your players).

**FOLLOW THE RULES AND THE SCENARIO SCRIPT, AND KEEP YOUR
CONTROLLER COMMAND POST INFORMED AT ALL TIMES.**

2. SCOPE AND OBJECTIVES

Millstone Unit One
1989 Emergency Preparedness Exercise

2.1 Scope of Exercise

Date: Wednesday, October 4, 1989
Start-End Times: 08:00 a.m. - 03:00 p.m.
Duration: 7 hours (Followed by a critique of 1 hour)
Type of Exercise: Partial participation exercise

Participants:

- Northeast Utilities Service Company
- Northeast Nuclear Energy Company
- U.S. Nuclear Regulatory Commission - Emergency Response Organization
- State of Connecticut - Emergency Response Organization (training purposes only)
- Millstone Station 10-mile EPZ Communities and Host Communities - emergency response organizations - (training purposes only)

Major Objectives:

- Classification, Notification, Command, and Control, Communications
- Activation of EOF, TSC, CR, OSC, Corporate EOC, State EOC, and full staffing
- Radiological Assessment; field team deployment on-site and off-site
- OSC repair team
- Interface with news media
- Recommendations to State
- Data transfer systems

Incident Classifications:

- Up to and including a Site Area Emergency (possible General Emergency based on potential)

Complexity:

- As realistic as possible
- Minimal independent failures
- Slight core damage (less than 10% of clad failure)

Off-Site Consequences:

- No major releases of radiation (EPA PAG's not exceeded offsite)
- No major radiological exposures
- No major contamination
- Possible 2-Mile Evacuation and/or Take Shelter (classification dependent)

2. EXERCISE OBJECTIVES

2.2 Utility Exercise Objectives

1. Demonstrate adequacy of timing and content of implementing procedures and methods (Classification, Notification, Command/Control, etc.) (FYP-1) (NRC-CORE-b,c)
2. Demonstrate capabilities of emergency equipment and communications networks. (FYP-2) (NRC-CORE-d)
3. Demonstrate ability to notify and alert key officials and staff. (FYP-5) (NRC-CORE-c)
4. Demonstrate adequacy of staffing (adequate augmentation, competency, etc.) (FYP-6) (NRC-CORE-g) (NRC-FY-f)
5. Demonstrate adequacy of Emergency Response Facilities (space, comfort, equipment). (FYP-7)
6. Demonstrate ability to disseminate accurate and timely plant parameter data to the Emergency Response Facilities. (FYP-8) (NRC-CORE-a)
7. Demonstrate ability to perform initial and follow-up radiological assessments and projections. (FYP-9) (NRC-FY-N&O)
8. Demonstrate the capability to perform accurate and timely radiological field team measurements. (FYP-10) (NRC-CORE-f) (NRC-FY-N&O)
9. Demonstrate ability to evaluate calculated and measured radiological data and to make proper Protective Action Recommendations. (FYP-11) (NRC-CORE-f)
10. Demonstrate ability to provide for the continuous radiological safety of Station personnel (monitoring, decon, respiratory protection, PCs, K.I., etc.) (FYP-12) (NRC-CORE-e)
11. Demonstrate observation evaluation and critique by Utility and applicable Federal authority. (FYP-14)
12. Demonstrate ability to provide access control and security for Emergency Response Facilities. (FYP-15) (NRC-FY-g)
13. Demonstrate ability to conduct a repair team operation. (FYP-22)
14. Demonstrate ability to conduct a Post-Accident Sampling/Analysis operation. (FYP-24) (NRC-FY-p)

2.2 Utility Exercise Objectives (Cont'd)

15. Demonstrate the capability to specify a shift change at each Emergency Response Facility. (FYP-26) (NRC-CORE-h)
16. Demonstrate ability to effectively interface with the news media.(FYP-27) (NRC-FY-b)

Abbreviations:

FYP - Five Year Plan
CORE - NRC Core Objective
FY - NRC Five Year Objective

2. EXERCISE OBJECTIVES (Cont'd)

2.3 Off-Site Exercise Objectives

(Partial Participation Exercise - Voluntary Off-Site Play)

1. Demonstrate the ability to monitor, understand and use emergency classification levels (ECL) through the appropriate implementation of emergency functions and activities corresponding to ECL's as required by the scenario. The four ECL's are: Notification of Unusual Event, Alert, Site Area Emergency, and General Emergency.

(State & Local EPZ Community - EX-3-1)

2. Demonstrate the ability to fully alert, mobilize and activate personnel for both facility and field based emergency functions.

(State & Local EPZ Community - EX-3-2)

3. Demonstrate the ability to direct, coordinate and control emergency activities.

(State & Local EPZ Community - EX-3-3)

4. Demonstrate the ability to communicate with all appropriate locations, organizations and field personnel.

(State & Local EPZ Community - EX-3-4)

5. Demonstrate the adequacy of facilities, equipment, displays and other materials to support emergency operations.

(State & Local Community - EX-3-5)

6. Demonstrate the ability, within the plume exposure pathway, to project dosage to the public via plume exposure, based on plant and field data.

(State Only - EX-3-10)

7. Demonstrate the ability to make appropriate protective action decisions, based on projected or actual dosage, EPA PAG's, availability of adequate shelter, evacuation time estimates and other relevant factors.

(State & Local EPZ Community - EX-3-11)

8. Demonstrate the ability to initially alert the public within the ten mile EPZ and begin dissemination of an instructional message within the ten mile EPZ and begin dissemination of an instructional message within 15 minutes of a decision by appropriate state and/or local officials.

(State & Local EPZ Community - EX-3-12)

2.3 Off-Site Exercise Objectives (Cont'd)

(Partial Participation Exercise - Voluntary Off-Site Play)

9. Demonstrate the ability to coordinate the formulation and dissemination of accurate information and instructions to the public in a timely fashion after the initial alert and notification has occurred.

(State & Local EPZ Community - EX-3-13)

10. Demonstrate the adequacy of procedures, facilities, equipment and personnel for the registration, radiological monitoring and decontamination of evacuees.

- Evacuees will consist of approximately 30 personnel from Connecticut Yankee and other volunteers.
- Monitoring and decontamination will be based on prepared information.

(State & East Hartford - EX-3-21)

11. Demonstrate the adequacy of facilities, equipment and personnel for congregate care of evacuees.

- Only one (1) facility will be set up to demonstrate congregate care; however, other facilities may be visited by FEMA to check adequacy.

(State & East Hartford - EX-3-22)

Agency Key and Abbreviations:

EPA	-	Emergency Protection Agency
PAG	-	Protective Action Guide
EPZ	-	Emergency Planning Zone
KI	-	Potassium Iodide
EOC	-	Emergency Operations Center
FEMA	-	Federal Emergency Management Agency
EX3	-	Exercise Guidance Memorandum #3
GM17	-	Guidance Memorandum #17

3. SCHEDULED ACTIVITIES

3. SCHEDULED ACTIVITIES

3.1 Dates, Times, Places, and Participating Organizations

Prior to the exercise, a review of the scenario and a controller walk-through will be held on October 2, 1989, for NUSCO and Millstone Station controllers at the Millstone Emergency Operations Facility (EOF). On September 29, 1989 a controller walk-through will be held for state and local controllers at the Millstone EOF.

The annual exercise will be initiated from the Millstone Nuclear Power Station on October 4, 1989. The exercise will be approximately 8 to 8 1/2 hours in duration, including the post-exercise critique.

Immediately following the exercise, a utility self-critique for the players by the controllers/evaluators will be held at the Millstone EOF. An informal critique of the State and locals will be held on October 4, 1989 at the Connecticut Yankee Travel Lodge located in Niantic, CT. starting at 6:00 p.m. The formal NRC inspection exit will occur the day following the exercise at 9:00 a.m. at the Millstone EOF.

Those organizations expected to participate in the exercise include the following:

Northeast Nuclear Energy Company, Millstone Station, Waterford, CT,

Northeast Utilities Service Company (NUSCO), Corporate Headquarters, Berlin, Connecticut,

Connecticut Office of Civil Preparedness,

Connecticut Department of Environmental Protection,

Connecticut Department of Health,

Connecticut State Police,

Connecticut Department of Agriculture,

Connecticut Department of Consumer Protection,

Connecticut Department of Transportation,

Connecticut Department of Social Services, and

Connecticut National Guard,

Town of East Lyme,

Hamlet of Fishers Island,

Town of Groton,
City of Groton,
Town of Ledyard,
Town of Montville,
City of New London,
Town of Old Lyme,
Town of Old Saybrook,
U. S. Dept. of Agriculture (Plum Island),
Town of Waterford.

Reception Area Community

Town of East Hartford

4. SCENARIO

4. SCENARIO

4.1 Sequence of Events

<u>Clock</u>	<u>Location</u>	<u>Significant Event</u>
08:00	MNPS	Exercise Starts.
08:30	MNPS Unit 1 Switchyard	Workers inadvertently open 5T2 and 6T2 breakers simultaneously. This results in a turbine generator load reject. Turbine control system prevents turbine overspeed and also causes a pre-determined amount of control rods to insert.
08:31	MNPS	The Instrument Air System fails due to drier desicant traveling throughout system, fouling air lines and associated air components.
08:55	MNPS	The MSIV's shut, a Reactor scram signal is initiated but rods fail to insert due to scram instrument volume being full; thereby hydraulically locking the scram discharge valves.
08:56	MNPS	"B" train of the Stand By Liquid Control (SLC) System is started by operators; but immediately fails due to pump motor failure.
09:10	MNPS Unit 1 Control Room	The Operations Shift Supervisor declares an incident class SITE AREA EMERGENCY posture code Charlie-Two based on power >3% and all rods not at 00.
09:25	MNPS	The SSSA transmits the SITE AREA EMERGENCY radiopage message.
09:45	MNPS	The EOF is fully activated. The DSEO relieves the SS of the DSEO responsibilities
10:00	MNPS	Emergency repair teams are deployed from OSC.
11:30	MNPS	NRC Site Team arrives and is briefed on the status of the event.
13:00	MNPS	The Torus pressure reaches 63 psig, at which time either the players decide to vent or a message will be given to the players stating that their decision was to vent at this time.
13:30	MNPS	"A" SLC pump has been repaired and the operators start boron injection.
14:00	MNPS	The reactor is fully shut down.
14:30	MNPS	The Emergency Repair Team removes desicant from MSIV air lines and the operators open the MSIV's. An adequate heat sink is established.
15:00	MNPS, CEOC, State, Locals	The exercise is terminated.

4. SCENARIO (Cont'd)

4.2 Scenario Narrative

The scenario starts on October 4, 1989 with all conditions external to the plant as they appear with the exception of the weather which is pre-determined as a cloudy fall day regardless of actual conditions. Internal to the plant however, several conditions exist which are not usual. First, due to prior problems with the Normal Station Services Transformer (NSST), plant loads have been shifted to the Reserve Station Services Transformer (RSST). The NSST and RSST are located in the back side of the turbine building and are directly adjacent to one another. Secondly, the "A" Standby Liquid Control Pump was placed out of service the day before when valve cover gaskets began leaking excessively. A maintenance crew is in the process of effecting repairs as the scenario begins.

At 08:00 exercise play begins in the Unit One Control Room with players receiving a mock shift turnover and a brief on the initial conditions. They will also be briefed on the artificial methods for receiving exercise information. Other station and corporate personnel who would normally be cognizant of the initial condition will be briefed as well by their controllers as they report to their work centers.

The first exercise event takes place at 08:30 when simulated Transmission and Distribution personnel working in the Millstone switch yard, inadvertently drop the connection of Unit 1 to the grid by opening the 5T2 and 6T2 circuit breakers. They immediately phone the Unit One operator to inform him of their actions and steps to correct it. The operator will immediately see the indications of the load reject and responses by the automated protection system (i.e., the turbine steam control valves will be throttled back and 13 key control rods will fully inserted into the reactor to reduce reactor power to a level matching the decreased steam demand).

During normal load reject scenarios the main generator would continue supplying house loads by way of the NSST. However, as an exercise pre-condition, house loads were previously shifted to the RSST. Therefore, generator loads are reduced to only to excitation loads of the Main and Normal Station Services Transformers because the RSST is energized directly from the switchyard.

This event in and of itself is no cause for alarm and Operators will respond to this event in accordance with established procedures. This will include verification of automated actions and preparation for reconnection to the grid.

Unknown to operators at this time, the Hydraulic Control Unit valves (which were activated during the load reject sequence to insert the 13 key control rods) begin leaking to the Scram Discharge Volume. Additionally, a screen which retains the drier desecant in the Instrument Air System fails causing desecant to travel throughout the Instrument Air piping. Desecant deposits are postulated to build up at the Main Steam Isolation Valves (MSIV) and at the Scram Discharge Volume Drain and Vent valves. This will cause them to change state once the air pressure stored in the accumulators is bleeds off. For the MSIVs this will take place and cause the MSIVs to close in 25 minutes or at 08:55. The flow rate into the discharge volume is such that it fills rapidly just prior to MSIV closure, therefore, not allowing operators enough response time to trip early.

At 08:55 due to the events just described, the MSIVs close and the scram discharge volume becomes hydraulically locked.

Upon the MSIV closure a scram signal is generated by the Reactor Protection System. Both the north and south side control rods fail to insert leaving the reactor at power and temporarily without a heat sink.

4. SCENARIO (Cont'd)

Operator will repeatedly attempt to manually scram the reactor with no success. At 08:56 they will attempt to emergency borate however, the connecting rod on the only available Standby Liquid Control Pump fails causing the pump to cease and the motor to heat up which shorts one phase winding to another. This will trip the circuit breaker for the motor. The failure to scram a reactor when it is called for by the RPS on by manual command is technically called an "Anticipated Transient Without Scram" or ATWS event.

By 09:10, an Incident Class Site Area Emergency will be declared by the Shift Supervisor and onsite and offsite emergency organizations will be notified via the radiopager system by 09:25. Shift Supervisor will sound the evacuation alarm after his SAE declaration and security will begin the process of supervising the evacuation and then conducting accountability. Operators will investigate the scram discharge problem, the SLC pump problem and the MSIV closure problem while starting the Isolation Condenser to establish some heat sink. The remainder of the reactor energy will be dumped to the torus by way of the Automatic Pressure Relief System also known as the Safety Relief Valves (SRVs). Operators will also try to open the MSIV bypass, however, the motor for valve MS05 will be postulated to fail upon initiation. This valve is located in the drywell and therefore, inaccessible at this time.

At 09:30 operators will lower reactor vessel water level to Top of Active Fuel in efforts to reduce reactor power. In the process, approximately 1 and 1/2 percent of the fuel pins lose their clad integrity and release their GAP radioactive gas into the reactor vessel and the RCS. This release is small compared to the levels necessary to constitute a failure of the Fuel Clad Barrier as defined in the EAL Tables. However, it is enough activity to register on the drywell rad monitors and be measurable if released to the environment.

Each of the Emergency Organizations will be fully activated by 09:45 and involved in assessing the plant status, organizing repair teams, as well as making decisions as to recommended Protective Actions for the assembled station personnel and the general public. At 10:45 LPCI pumps are stopped due to high torus water temperature causing potential Net Positive Suction Head (NPSH) problems.

LOSS OF RCS = APRV OPEN?

Once the Station Emergency Organization becomes fully aware that the plant is in a continued state of degradation caused by the increasing torus water temperature and eventual increase in torus drywell pressure, the Director will declare a General Emergency, posture code Bravo based on the loss of one barrier (i.e., the RCS) the imminent loss of a second barrier (i.e., the CTMT) and the potential loss of the third (i.e., the Fuel Clad).

may

Upon the Bravo declaration, State and local emergency organizations will begin evacuation of the two-mile EPZ Ring and advise Taking Shelter to residents out to 5 miles in the downwind sector and two adjacent sectors. The downwind sector which is postulated to be the West sector during most of the release phase of the exercise. Prior to 13:00, Torus pressure will near 70 pounds per square inch which is the point where Emergency Operating Procedures call for venting of the primary containment in efforts to save it's structural integrity.

The torus venting process causes radioactivity to be released to the re-initiated Reactor Building Ventilation system which exhausts to the Unit 1 stack and the atmosphere. Radiation levels offsite will be such that they are measurable but pose no immediate health threat.

At 13:30 an Emergency Repair Team completes repairs to the "A" SLC pump and the pump is started resulting in the complete shut down of the reactor by 14:00.

EAL's don't actually happen. Judgment will

4. SCENARIO (Cont'd)

By 14:30 pressure is reduced in the torus such that the release is terminated. Also, an Emergency Repair Team has removed the desecant from the air lines to the MSIVs allowing operators to reestablish the condenser as the main heat sink, thus putting the plant now into a stable configuration.

The fact that the emergency phase of accident is over is communicated offsite and the exercise is terminated at 15:00.

In summary, this scenario contains many independent plant malfunctions some of which are initiated by human error. The seriousness of the event presents itself early on and conditions build to a potential for severe effects until mitigated by successful efforts of the emergency organization.

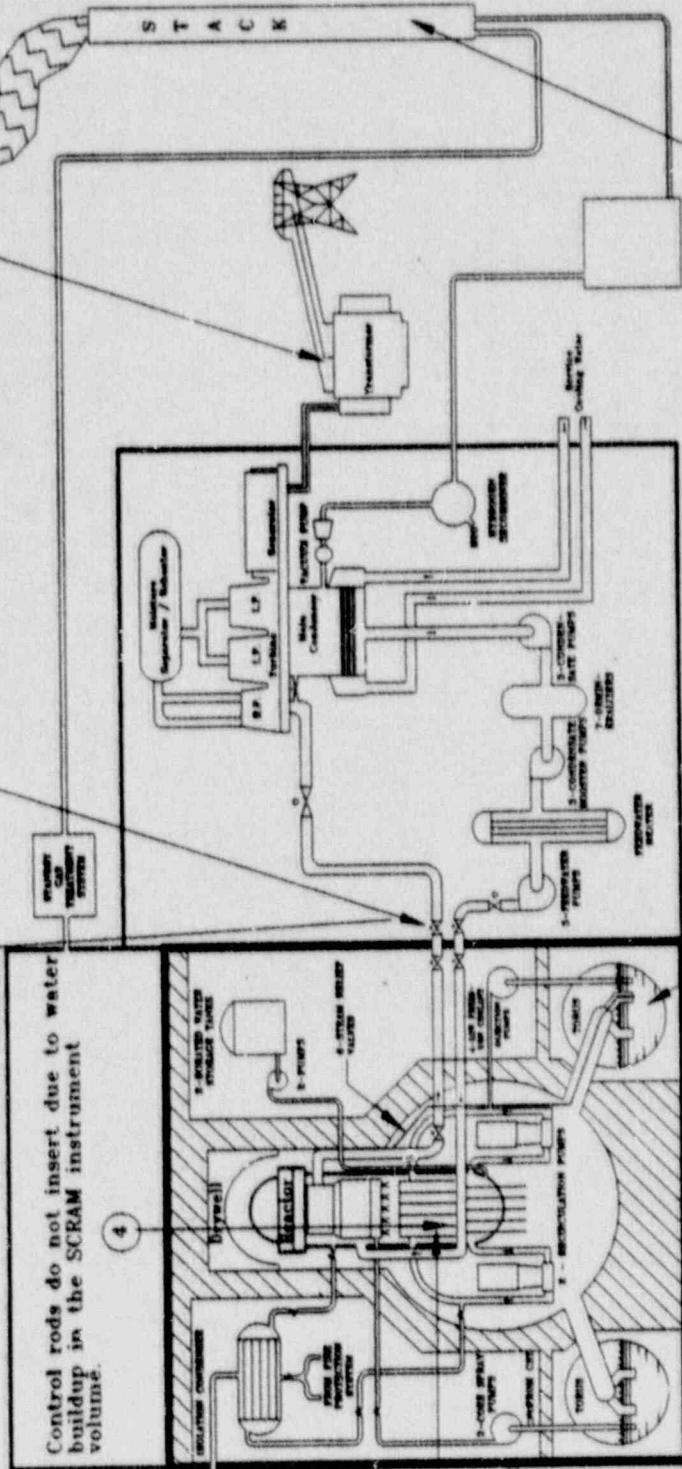
A graphic representation of the scenario just described is contained in Figure 4-1.

Figure 4-1 Millstone Unit One

Inadvertent opening of the 5T2 and 6T2 Breakers result in a Turbine Load Reject Auto SRI signal from RPS (13) rods insert

MSIVs close due to accumulator bleedoff Scram signal initiates, but rods fail to insert

Desiccant plugs instrument Air lines to MSIVs isolates



Slight core damage results from lowering water level to Top of Active Fuel (TAF)

TURBINE BUILDING

PRIMARY CONTAINMENT BUILDING

Torus transient results in a release to the stack

Torus pressure reaches 63 psig Venting causes a slight radiological release

5. SIMULATION LIST

5.1 SIMULATION LIST

1. Evacuation and Accountability

A station evacuation will not be demonstrated for nonplaying station personnel. Actual on-shift personnel will not be evacuated, (i.e., on-shift Operations and Security force will not evacuate). However, five predesignated players will report to each access point to serve as a token assembly group.

2. Equipment Procurement

Neither equipment nor services will actually be procured from organizations that are not participating in the exercise.

3. Repair Parts

Parts required for simulated repairs will not actually be acquired; however, availability to do so will be verified.

4. Entry into High Radiation Areas

No actual entry into high radiation areas will be allowed as part of the exercise. However, all activities associated with simulated entries, such as conducting briefings, issuing dosimetry, and donning protected clothing, will be demonstrated.

5. Protective Clothing

Off-site radiation monitoring teams will not wear protective clothing or respirators; all other players should wear protective clothing if required by simulated conditions.

6. PASS Samples

Real PASS sample collection and analysis will be demonstrated. Data associated with PASS samples will be substituted once the real data is obtained.

7. Air Samples

The initial air samples taken by any player will be in accordance with the established procedure; the taking of subsequent air samples may be simulated if the controller is satisfied that the initial sample was taken properly.

8. Evacuation of Security Guards

The evacuation of security guards not taking part in the exercise will be simulated.

9. Use of Self-Contained Breathing Apparatus (SCBA)

SCBA's, if required by simulated conditions, will be donned and worn with the face piece over the wearer's shoulder unless otherwise directed by a controller. One team member will be allowed to wear the facepiece in order to test communications.

5.1 SIMULATION LIST (Cont'd)

10. Tracking of Expendable Materials

Expendable materials that are simulated to be used, such as silica gel cartridges and SCBA air bottles, will be monitored by the appropriate controller to ensure the adequacy of expendable material inventories is assessed.

11. Radiological Surveys/Dosimetry Distribution

All radiological surveys will be demonstrated. The inventory of radiological kits, equipment operation checks, and dosimeter and TLD distribution to Emergency Organization personnel will also be demonstrated.

12. Personnel Activation

Emergency procedures state all SEO personnel on station shall respond to an ALERT or above declaration. However, for the purposes of the exercise, only the on-call SEO personnel and any additional necessary Emergency Response staff will respond to the notification.

13. Access Control

The demarcation and access control of scenario related radiation areas within the plant area will be simulated. Station access control points will be set up and manned; however, access control will be simulated for persons not taking part in the exercise.

14. Unit II and III Response

Activation of the Unit II and III emergency response facilities (i.e., Unit 1 & 2 Control Rooms and the Unit 2 OSC) will be simulated.

6. CONTROLLER RULES

6.1 CONTROLLER RULES

DO's

1. IF AN ACTUAL CASUALTY OCCURS AND THIS IMPACTS THE EXERCISE, NOTIFY THE CONTROLLER COMMAND POST IMMEDIATELY. STOP EXERCISE PLAY AND RESPOND TO CASUALTY.
2. Know the overall controller's organization (*Figure 6-1*).
3. Identify the players by name and function. Read the players' rules (*Section 7*).
4. Identify yourself to all players and wear your controller badge at all times.
5. IDENTIFY THE PHONE NUMBER WHICH YOU WILL USE TO MAINTAIN COMMUNICATIONS WITH THE CONTROLLER COMMAND POST (*Attachment 12.A.1*).
6. Position yourself in order to maximize your effectiveness in issuing messages and observing the players.
7. Know your player's scenario script and the master scenario thoroughly.
8. Keep the play on schedule by checking your script.
9. There are **TWO** types of controller messages:

COMMAND: To be issued on or about the designated time to provide a player with information necessary to continue the exercise.

CONTINGENCY: To be issued if in the opinion of a controller it is needed to allow action to progress and keep the scenario on track.

Issue **COMMAND** and **CONTINGENCY** messages at the proper times.

10. Remember to call the controller command post by phone approximately once every 60 minutes to report on the status of players' actions, (i.e., on or off schedule).
11. CALL THE CONTROLLER COMMAND POST IMMEDIATELY FOR ADVICE IF YOU HAVE DOUBTS ABOUT WHAT ACTIONS TO TAKE, IF PLAYERS ARE VERY CONFUSED, OR IF PLAYERS DEPART SIGNIFICANTLY FROM THE SCENARIO SCRIPT AND THIS WILL IMPACT THE EXERCISE AND CREATE A MAJOR DELAY. IF NECESSARY, INTERVENE WITH PLAYER ACTION AND PUT PLAY BACK ON SCENARIO TRACK.
12. Allow the players reasonable flexibility to perform their functions and demonstrate their skill, knowledge, and initiative. Acknowledge and record the mitigation of problems and/or corrective action, but do not allow player actions to influence the scripted scenario sequence of events.

6.1 CONTROLLER RULES (Cont'd)

13. Keep a running chronology of all key decisions made by players.
14. Identify yourself to the federal evaluator(s). Make sure they are reasonably aware of all your actions and the players' actions.
15. Ensure that the federal evaluator is in a position to observe specific events, especially those events identified as exercise objective.
16. **MAKE NOTES ON PLAYERS' ACTIONS, THE STRENGTHS AND WEAKNESSES, AND AREAS THAT NEED IMPROVEMENT. USE THE EVALUATOR'S CRITIQUE SHEETS (ATTACHMENT 12.F).**
17. Attend the post-exercise critique session to provide your comments and recommendations to the lead controllers. Lead controllers will make comments during the critique. All controller comments must be completed and reviewed with the chief controller prior to the post-exercise critique.
18. Identify the players' leaders (Director of SEO, Managers, etc.). Work with them at all times.
19. Be at your assigned station at least 20 minutes prior to the commencing of any player action. Call the controller command post to verify communications.
20. **CONTROLLERS AND PLAYERS ENTERING OR LEAVING ESTABLISHED STATION RADIATION CONTROL AREAS MUST OBSERVE ALL NORMAL RADIATION CONTROL PRACTICES. THE PLAYERS MUST FOLLOW ALL RADIATION PROTECTION RULES AS APPLICABLE TO THE EXERCISE. CONTROLLERS ARE EXEMPT FROM THE RADIATION EXPOSURE CONTROL PRACTICES FOR THE EXERCISE SCENARIO RADIATION LEVELS.**

DON'T's

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 player actions during the drill.
5. Don't forget to call the controller command post to provide a status report approximately once every 60 minutes or to seek advice.
6. Don't issue Contingency messages if the action has been or will be carried out by the players (i.e., allow 5 to 10 minutes after the expected action before issuing a contingency message).

IDENTIFICATION BADGE COLOR CODE

Controllers:

Station - blue
Corporate - blue
State - yellow
Towns - yellow

Participants:

All players - white
Contaminated Individual - red

Federal Observers:

FEMA - green
NRC - green

Others:

Visitors - orange
Media - yellow

7. PLAYER RULES

7.1 PLAYER RULES

All exercise players (at least the leaders of the players' groups) should read and follow the rules given below. This is important to the successful demonstration of emergency response capabilities.

1. ALL RADIO AND TELEPHONE COMMUNICATIONS MUST BE PRECEDED AND FOLLOWED BY THE PHRASE.....

"THIS IS A DRILL."

2. Identify your controllers by their identification badges. The controllers are the evaluators.
3. Federal agency observers may be present. You can identify them by their identification badges.
4. Identify yourself by name and function to the exercise controllers.
5. Play out actions as much as possible in accordance with your emergency plan and implementing procedures, as if it were an actual emergency. Check with your controller if in doubt. Stop short of spending money. It is to your advantage to play out as many of your actions as possible.
6. PERIODICALLY SPEAK OUT LOUD, identify your key actions and decisions to the controller. This may seem artificial, but it will assist in the evaluation process and is to your benefit.
7. If you are in doubt about conditions, ask your controller for clarification. The controller can give you information that you could legitimately access if the event were real but will not prompt or coach you.
8. The controller will periodically issue messages or instructions designed to initiate response actions. You must accept these messages. They are essential to keeping the exercise scenario on schedule.
9. If the controller intervenes and recommends that you redirect or reconsider your play actions, it is for a good reason. Listen to the controller. This is essential to the overall success of the exercise for all participating groups.
10. If you disagree with the controller, you can ask him/her to reconsider or consult with the chief controller. You must, however, accept his/her word as final and proceed. This is particularly true for the station emergency response facilities, as their actions can delay or speed up the entire exercise and impact other activities.

7.1 PLAYER RULES (Cont'd)

11. Always respond to the controller's and/or Federal evaluator's questions in a timely manner.
12. You must play as if radiation levels are actually present, in accordance with the information you have received. This will require that you wear radiation dosimeters, observe good radiation protection practices, and are aware of and minimize your radiation exposure. Identify the individuals in your emergency response organization who are responsible for informing you of these items. Follow their instructions.
13. The controllers are not subject to artificial or exercise radiation. Do not let this confuse you or cause you to act unwisely.
14. If you enter actual station radiation control areas, observe all station radiation protection practices and procedures. No one (including the controller) is exempt from normal station radiation protection practices and procedures.
15. Demonstrate your knowledge of the emergency plan, emergency actions, and procedures.
16. **UTILIZE STATUS BOARDS, LOG BOOKS, THREE-PART INTEROFFICE MEMOS, ETC., AS MUCH AS POSSIBLE TO DOCUMENT AND RECORD YOUR ACTIONS, INSTRUCTIONS, AND REPORTS TO YOUR CO-PLAYERS. RECONSTRUCTION OF ALL EVENTS THAT OCCURRED DURING THE EXERCISE MAY BE REQUIRED.**
17. Do not waste time by entering into conversations with people not involved in the exercise.
18. You may answer questions directed to you by a controller. If a question is misdirected to you or you do not know the answer, refer it to your lead player.
19. Make a mental note of items which you feel will improve the emergency plan and implementing procedures. Provide these comments to your lead player, or chief controller, who will ensure these items are considered and incorporated as appropriate.
20. A post-exercise critique of the exercise will be held immediately after the exercise is terminated. Provide your input to your lead player or the controller. This will help in the overall evaluation which the controller will present to the chief controller.

8. VISITOR RULES

8.1 VISITOR RULES

1. THE EVENT TIMES AND SCENARIO ARE CONFIDENTIAL AND SHOULD BE KEPT CONFIDENTIAL DURING THE EXERCISE. DO NOT DISCUSS THEM WITH THE PLAYERS OR LEAVE SCENARIO INFORMATION UNATTENDED.
2. Visitors should not participate in the exercise nor interfere in the actions taken by the exercise players, controllers, and evaluators.
3. Identification badges are to be worn on the upper front of the torso, so as to be clearly visible. Badges should be returned at the end of the exercise or critique. Identify yourself to the drill controllers.
4. If you have questions, contact the controller of the location you are visiting.

9. DEFINITIONS

9.1 DEFINITIONS

- ALERT (Posture Code CHARLIE-ONE) - An emergency classification which is defined as an actual or potential substantial degradation of the level of safety of the plant.
- Clock Time - The real (or clock) time sequence of events.
- Controller - A member of the station, corporate office, state, local community or consultants who has the authority to take actions necessary to ensure continuity of the exercise without hindering or aiding the player's initiative, free-play, and decision-making processes. These controllers can also be evaluators (distinct from federal agency evaluators).
- Critique - A meeting of key personnel that participated in the exercise. A critique is usually held shortly after the conclusion of the exercise; the exercise controllers/evaluators review the operations and the performance of participating individuals or groups.
- Emergency Action Levels (EALs) - Specific threshold conditions that may be used to designate a particular classification or level of emergency.
- Evaluator - An evaluator may be assigned to one or more activities or functions for the purpose of evaluating, recording, and reporting the strengths and weaknesses, and making recommendations for improvements.
- Federal Agency Evaluators - These are agents of the Nuclear Regulatory Commission (NRC) or the Federal Emergency Management Agency (FEMA) who will evaluate the player's performance.
- GENERAL EMERGENCY (Posture Code BRAVO/ALPHA) - An emergency classification which is defined as actual or imminent substantial core degradation or melting with potential loss of containment integrity.
- Player - A member of the emergency response organization who responds to the postulated emergency and acts in accordance with the emergency plan and procedures.
- Scenario - The hypothetical sequence of events of the exercise.
- Scenario Time - The elapsed time of the exercise.
- SITE AREA EMERGENCY (Posture Code CHARLIE-TWO) - An emergency classification which is defined as actual or likely major failures of plant functions needed for the protection of the public.
- UNUSUAL EVENT (Posture Code DELTA ONE/DELTA-TWO) - An emergency classification which is defined as a potential degradation of the level of safety of the plant.
- Visitor - An individual who does not participate, but rather observes the actions of the players.

10. EXERCISE EVALUATION CRITERIA

10.1 EXERCISE EVALUATION CRITERIA

I. General

A. Purpose

The purpose of this evaluation is to ensure that a mechanism exists for evaluating key actions of the utility participants during the exercise. Both adequate and inadequate performance will be rated so that future training efforts may be redirected to ensure that a satisfactory level of knowledge is achieved by the emergency response organization.

B. Implementation

Once the evaluation has been performed, it is the responsibility of the controller (and other evaluators) to review and summarize the results of the evaluation during the post-exercise critique.

II. Evaluation Standards

E Exceptional: Personnel and equipment always functioned without error every time and there were no problems encountered. All personnel and equipment functioned at a level much greater than could reasonably be anticipated.

FM Fully Meets Requirements: Personnel and equipment performed in accordance with the emergency plan and implementing procedure requirements, with few minor exceptions. Any errors noted were not severe and could be corrected without undue labor and/or expense.

U Unable to Meet Requirements: Personnel and/or equipment were unable to perform as required and/or there were numerous and/or serious deficiencies.

N/A Not applicable.

III. Evaluation Overview (i.e., generic questions for all locations to determine emergency response adequacy)

A. Performance

1. **Command Functions** - Did the player properly direct the activities of other components?
2. **Notification/Activation of Emergency Response Staff** - Were supporting activities/staffs promptly and properly notified/activated, as applicable?
3. **Assessment and Evaluation** - Was information promptly and correctly received, assessed, documented, and appropriate action taken?
4. **Personnel Function** - Did personnel know and carry out their assigned duties with efficiency and without undue direction?

10.1 EXERCISE EVALUATION CRITERIA (Cont'd)

5. **Communications** - Did the participants establish and maintain communications in their area of responsibility? Was the information timely, accurate, appropriate, and concise?
6. **Record Keeping** - Were status boards, logs and/or records adequately maintained that documented significant events, actions, and corrective actions which would allow reconstruction of the emergency events and conditions?

B. Facilities and Equipment

1. **Physical Facilities** - Was the allocated area functional by virtue of its size and location? Was there enough necessary furniture, adequate ventilation, rest rooms, office supplies, etc., to support the operation? Could the area support the number of personnel assigned to it?
2. **Resource Materials** - Were there resource materials readily available to assess the emergency situation and to plan corrective actions - maps, reference books, copies of emergency plans and procedures?
3. **Communications Equipment** - Was the on-site and off-site communications equipment adequate in quantity, operability and availability? Did personnel know how to use the equipment properly and efficiently?
4. **Emergency Equipment** - Was emergency equipment readily available, adequate in quantity, operability and availability? Did personnel know how to use the equipment properly and efficiently?
5. **Personnel Quantity** - Were there enough trained personnel to carry out the operation? Too few? Too many?
6. **Area Access Control** - Did all designated personnel arrive at their area promptly and stay in their assigned area for the duration of the exercise? Was there an identification system developed and used that effectively identified authorized personnel and their assigned duties?

C. Overall Evaluation

1. **Performance** - As a whole, was the command-level control of the exercise satisfactory? Were command and support personnel kept informed of the situations as they developed and did they respond to needs as they developed? Were communications effective? Are records adequate to support future reconstruction of the sequence of events?
2. **Facilities and Equipment** - Were material assets adequate to support the operation or were they part of the problem? Were there any notable shortages or excesses of equipment or trained personnel? Was equipment and personnel management effective?

10.1 EXERCISE EVALUATION CRITERIA (Cont'd)

IV. Evaluation Summary

- A. Describe any overall problems or inadequacies noted during the exercise in the area being evaluated (such as participant performance, equipment readiness, familiarity with equipment, etc.). Include a description of the problem, its outcome or effect, and recommended corrective actions to resolve the problem.
- B. After completing the evaluation form, determine the overall performance of the area being evaluated.
- C. The controllers and evaluators are to sign the completed evaluation form and promptly return it as directed.

11. STATION CRITIQUE

11.1 STATION CRITIQUE

The following controllers are expected to attend and speak at the critique meeting. These controllers should be prepared to summarize comments from other controllers in their work area. They should use the critique sheet (*Form 11-1*) to prepare their comments.

Lead Controller

Evaluation Area

DSEO

EOF and Site Area Activities

TSC

TSC Activities

OSC

OSC Activities

Control Room

CR Activities

MRCA

On-Site Rad Protection

MRDA

Off-Site Rad Protection (including Field Teams)

Corporate*

Corporate EOC Activities & State interface

*The Corporate EOC comments may be received via telecopier and read during the critique.

11.1 Station and Corporate Controller Critique Summary Sheet

The exercise critique will be held following the exercise at the OSC and will be attended by players and predesignated controllers (speakers) from each area evaluated. The critiques should list each item by:

- a. Deficiencies of corporate/station procedures or known commitments; the finding should specifically state the cause of the deficiency if known (i.e., inadequate material, procedure, training, etc.).
- b. Operational fixes that should be made (i.e., equipment failure not related to station procedures),
- c. Players inability to demonstrate knowledge of procedures,
- d. Recommend corrective actions, and
- e. Good practices.

It is extremely important to list the items by priority of importance. This information will be used during the NRC critique, so be as brief and clear as possible. Limit your oral critique to 5 minutes.

After reviewing the critique items, the lead controllers should address the positive items observed during the exercise.

FORM 11-1

Critique Sheet

A. Corporate/Station Procedure Deficiencies

B. Operational (equipment)

C. Training Problems

D. Recommended Corrective Actions

E. Good Practices

Note: These summary sheets and all controller comment sheets should be returned to Ed Molloy or Walt Buch.

12. APPENDICES

12. APPENDICES

NOTE

Appendices have limited distribution. Only the information that is directly applicable to the controller area of evaluation has been included in the controller's package.

12.A.1 CONTROLLER LIST

12.A.1 CONTROLLER LIST

<u>Location / Name</u>	<u>Control Activity</u>
1. <u>Controller Command Post</u>	Millstone Nuclear Power Plant
E. Molloy	Chief Controller
T. Dembek	Command Post
A. Damian	Command Post
C. Borea	Command Post
2. <u>Control Room</u>	Control Room Controller
D. Aloï	Lead Controller
P. Benyeda	Operations SS / MTSC
R. Matheny	Plant Data
T. Reyher	PC OPS/Plant Data
C. Hines	CRDC
M. Ross	SSSA
W. Eakin	Rad Data
R. Doherty/R. J. King	On-Shift HP Tech
J. Kelly	On-Shift Chem Tech
D. Dvorak	PEO
R. Boughton	PEO
3. <u>EOF</u>	
W. Buch	Lead Controller
H. Haynes	DSEO Controller
S. Torf	MRCA / HP Control Pt.
J. Kangley	MRDA
C. Hill	MPI / MES
R. Griswald	MCR
C. Tabone	MOC/
P. Anhalt	Evacuation / Accountability
P. Anhalt/P. Weekley	MOS/TIC
A. King	EMT #3
J. Glaub	EMT #4
J. Waggoner	EMT #5
J. Bennett	EMT NAP
P. Strickland	EMT SAP
M. Meehan	OFIS Observer
J. Stetz	NRC

12.A.1 CONTROLLER LIST (Cont'd)

<u>Location / Name</u>	<u>Control Activity</u>
4. <u>OSC</u>	
R. Palmieri/D. Yapchanic	Lead Controller
To Be Named	PEO Controller
J. Langworthy	OSC - HP Control
C. Maxson	ERT
D. Peterson	ERT
B. Denny	ERT
A. Masto	ERT
5. <u>TSC</u>	
D. Meekhoff	Lead Controller
6. <u>Corporate Office (NUSCO)/ Berlin EOC</u>	
G. Baston	Lead Controller
R. Crandall	CMRCA/CMTSC
T. Quattrochi	FTDC/RAE
R. Ball	Meteorologist
7. <u>State EOC</u>	
D. Dienst	EOC Controller
R. Piccoli	State Field Teams
M. Warmath	State Field Teams
M. Birch	State EOC
8. <u>Local EOC</u>	
James Carlson	City of Groton
Donna Carlson	Montville
L. Osiecki	East Hartford
Mike Stein	New Haven
9. <u>Siren Controller</u>	
G. Kelly	Berlin
10. <u>NRC Interface</u>	
T. McCance	King of Prussia

12.A.2 PLAYER LIST

12.B.1 STATION EXERCISE CONTROLLER GUIDE

12.B.2 CORPORATE EXERCISE CONTROLLER GUIDE

Corporate Exercise Controller Guide

October 1989

Abbreviations and Acronyms

CEOC	- Corporate Emergency Operations Center	EOF	- Emergency Operations Facility
CMEC	- Corporate Manager of External Communications	EPZ	- Exposure Pathway Zone
CMPI	- Corporate Manager of Public Information	FTDC	- Field Team Data Coordinator
CMRCA	- Corporate Manager of Radiological Consequence Assessment		
CMOR	- Corporate Manager of Resources	GPM	- Gallons Per Minute
CMTS	- Corporate Manager of Technical Support	LOCA	- Loss of Coolant Accident
CONI	- Corporate Organization Nuclear Incident	MNPS	- Millstone Nuclear Power Station
DCEO	- Director of Corporate Emergency Operations	MT	- Meteorological Team
DO	- Duty Officer	MRCA	- Manager of Radiological Consequence Assessment
		MRI	- Manager of Regional Information
DSEO	- Director of Station Emergency Organization	NESS	- Nuclear Emergency Status System
EC	- Exercise Controller	NU	- Northeast Utilities
EDAN	- Environmental Data Acquisition Network	RAB	- Radiological Assessment Branch
EMT	- Emergency Monitoring Team		
		RMT	- Radiological Monitoring Team
EOC	- Emergency Operations Center	SS	- Shift Supervisor
EOF	- Emergency Operations Facility	TSO	- Time Sharing Option
		OFIS	- Offsite Based Information System

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CORPORATE CONTROLLER GUIDE

MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCEN-ARIO TIME	CLOCK TIME/PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/PLAYER	SUMMARY OF ACTIONS
0:00	08:00 MMPS	<p>Initial Conditions: ***** Known to players at start of the exercise: Unit 1 is operating at 100 percent power. Unit 2 and 3 are also operating at 100 percent power. The "A" train of the Standby Liquid Control (SLC) system is Out Of Service for repair. Repairs are ongoing and will be completed within 4 to 6 hours. "B" train is still in service. Transmission and Distribution (T&D) electricians are performing maintenance in the switchyard area at this time. Station electrical loads have been placed on the Reserve Station Service Transformer (RSST). In preparation of T&D maintenance NSST is still on line but unloaded.</p>							

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CORPORATE CONTROLLER GUIDE

MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
0:50	08:30 1HPS	The T&D electricians in Unit 1 switchyard inadvertently open 5T2 and 6T2 breakers between the 345 KV B Bus and the switchyard which results in turbine generator load reject.							
		The turbine protection system senses the load reject and throttles back the turbine control valves to prevent overspeed.							
		The turbine protection system also allows a select number of reactor control rods (13) to be inserted into the core (SRI).							
		Blowby leakage begins to accumulate in scram discharge volume.							

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MASTER SCENARIO			CONTROLLER'S MESSAGE					PLAYER'S ACTION	
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	HSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
0:31	08:31 MNPS	Instrument air dryer desicant cartridge failure causes loose desicant to travel through instrument air lines and collect at various valve controllers. This causes instrument air to become isolated from MSIVs and held temporarily only open by the accumulators.							
0:35	08:35 MNPS	SS notifies the Duty Officer (DO) of plant conditons.							
0:45	08:45		CR NOTE	08:45	***CONTROLLER NOTE*** Call controller command post to leave your phone number and to synchronize watches.				

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MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCENARIO TIME	CLOCK TIME / PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME / PLAYER	SUMMARY OF ACTIONS
			CEOC-1	08:45	***COMMAND*** Initial plant conditions: Plant operating at 100% power. The "A" train of the Standby Liquid Control (SLC) system is out of service due to pump failure. "B" train is still in service. Transmission and Distribution (T&D) electricians are performing maintenance in the switchyard area at this time. Station electrical loads have been placed on the Reserve Station Service Transformer (RSST). In preparation of T&D maintenance RSST is still on line but unloaded.	CEOC EC	NUC OPS		
0:54	08:54 MNPS	Discharge volume vent and drain valves close due to desiccant fouling in the instrument air system.							

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MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	Msg #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
0:55	08:55 MNP5	MSIVs close due to accumulator bleed off. Reactor scram signal generated on MSIV closure. Control rods do not insert due to scram discharge volume being hydraulically locked. Vessel pressure increases and begins blowing down to Torus through Safety Relief Valves (SRVs). Recirc pumps trip. Motor operator to main steam drain valves burns out upon operator initiation.							

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MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
0:56	08:56 MNPS	<p>Iso Condenser and ECCS systems function as designed, however they can not provide enough of a heat sink for the reactor. Torus pressure and temperature begin to trend upward slowly.</p> <p>"B" train of SLC system started by operators immediately fails. No S/C injection.</p> <p>Manual and ATWS scrams fail to insert rods.</p>							
1:10	09:10 MNPS	Shift Supervisor declares a SITE AREA EMERGENCY, posture code Charlie-Two based on scram signal and plant > 3% power (ATWS).							
1:15	09:15 MNPS	<p>OSS sounds station evacuation alarm and provides instructions to station personnel.</p> <p>Preetermined evacuees proceed to the assembly areas.</p>							

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CORPORATE CONTROLLER GUIDE

MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
1:25	09:25 HNPS	SSSA transmits the radiopager message for SITE AREA EMERGENCY.						09:25 CEOC PLAY- ERS	Receive radiopager notification of SITE AREA EMERGENCY, posture code Charlie-Two.
1:30	09:30 HNPS	Director, Managers and support staff begin to arrive at the Emergency Operations facility (EOF) and the Corporate Emergency Operations Center (CEOC) to assume emergency response duties.						09:30 DCEO, DO	Telephone call-back system and complete Incident Report Form (IRF).
	HNPS	Reactor water level lowered to the top of active fuel. Some fuel rods (1.5%) begin to lose clad integrity due to water level fluctuations.						CEOC PLAY- ERS	Managers and support staff begin to arrive. Corporate EOC and work centers are staffed and activated.
	State Local	State and local officials will begin activation of their EOC's and notification of their staff.							
1:32	09:32							09:32 CEOC PLAY- ERS	Call in to code-a-phone system. Acknowledge notification. Report expected time of arrival.

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CORPORATE CONTROLLER GUIDE

MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
1:35	09:35		MEF-1	09:35	<p>***COMMAND*** Issue meteorological data sheet.</p> <p>***CONTROLLER NOTE*** Hand out meteorological data sheets for this and all previous time buffers at the time when the meteorological team arrives at the Corporate EOC and has accessed the appropriate data display/printout from EDAN.</p>	MT EC	MT	09:35 MT	Notifies Weather Services Corporation of Incident. Requests that they prepare forecasting information.
1:40	09:40							MT	Obtain met. data.
1:45	09:45 HNPS	The EOF is fully activated. The DSEO relieves the SS of the DSEO responsibilities.						09:40 DU	Obtains information from the station concerning the time and status of safety equipment which may have been affected. Maintains the events chronology status board.
	HNPS	An emergency repair team is manned and deployed to investigate the problem with the "A" PLC pump motor.						09:45 DC	Activates the computerized plant parameter status program. Obtains printout and distributes to the EOC staff (CONI 7.01).
								DCED	Assumes control of Corporate emergency response organization. Notifies EOF that Corporate EOC is activated and requests an update on the situation.

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CORPORATE CONTROLLER GUIDE

MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
1:50	09:50 State Local	The State and Local EOC's are staffed and fully operational.	CMPI-1	09:50	***** RUMOR ***** This is the Hartford Courant. What is happening at MP. I heard a message on the scanner. Are you having a large un-planned release of radiation? Do you have a statement? What should the public do? NOTE: Brief Director on response. ***** RUMOR *****	CEOC	CMPI	09:50 CMPI	Reviews call-in tape to verify notification of on-call staff. Makes backup phone calls as necessary. Obtains radiological data from station. Determine potential release rates and resulting radiological doses (CONI 4.01/4.04/4.08). Activates OFIS. Sets up per CONI 4.05. Obtains technical information from station. Coordinates the assessment of plant systems and supports the resolution of the incident. Responds to rumor.

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MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
	CEOC	<p>***RUMOR***</p> <p>This is the Hartford Courant. What is happening at MP. I heard a message on the scanner. Are you having a large unplanned release of radiation? Do you have a statement? What should the public do?</p> <p>***RUMOR***</p>	MET-2	09:50	<p>***COMMAND***</p> <p>Issue meteorological data sheet.</p>	MT EC	MT	DCEO	Advises staff of station status.
1:55	09:55 MNS	State DEP liaison arrives at Site 30F.						DCEO MT	<p>Sets up communication with DCEO and State Agency.</p> <p>Obtain met. data.</p> <p>Obtains forecast from Weather Services Corporation.</p> <p>Makes calls to staff who have not responded after checking code-a-phones. Available for call-out to assume CHEC & CHOR duties.</p>

MP EXERCISE - OCT 4, 1989
CORPORATE CONTROLLER GUIDE

MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
2:00	10:00 MHPS	Chemistry people requested.	CMPI-2	10:00	***** RUMOR ***** This is WFSB 3. We heard from several sources that there is something going on at HP and we need details for a story we are writing. NOTE: Brief Director on response. ***** RUMOR *****	CEOC EC	CMPI	10:00 CMPI	Responds to rumor.
	CEOC	DCEO dispatches a NU executive representative and staff to go to the State EOC and provide State communication interface.						DO	Updates events chronology status boards.
	CEOC	*****RUMOR***** This is WFSB 3. We heard from special sources that there is something going on at HP and we need details for a story we are writing. *****RUMOR*****						DCEO	Dispatches an individual to the State Media Center and one to the State EOC at the same location in Hartford.

MP EXERCISE - OCT 4, 1989
CORPORATE CONTROLLER GUIDE

MASTER SCENARIO			CONTROLLER'S MESSAGE					PLAYER'S ACTION	
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
2:05	10:05 MNPS	<p>***PUBLIC INQUIRY***</p> <p>A local resident who knows someone at the plant has heard there are problems at MP and has started calling neighbors to warn them to the possibility of an evacuation of the area. One of the neighbors has called and wants to know if this is just a rumor or is something actually wrong.</p> <p>***PUBLIC INQUIRY***</p>	MET-3	10:05	<p>***COMMAND***</p> <p>Issue meteorological data sheet.</p>	HT EC	HT	<p>HT Maintains Met. Status board in CEOC.</p> <p>CMPI Obtains information and prepares news releases for use by the State Media Center (CONI 8.01).</p> <p>CMRCA Obtains radiological data from station. Determine potential release rates and resulting radiological doses (CONI 4.01/4.04/4.08).</p> <p>10:05 RAE Begins to perform "What If" analyses of radiological consequences.</p> <p>HT Obtain updated met. data.</p>	

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CORPORATE CONTROLLER GUIDE

MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
2:10	10:10 CEOC	<p>***RUMOR** This is WTIC. What is happening at MP? Is there an accident? What is NU doing? Have federal officials been notified? ***RUMOR***</p>	CMP1-3	10:10	<p>***** RUMOR ***** This is WTIC. What is happening. Is there an accident? What is NU doing? Have federal officials been notified? NOTE: Brief Director on response. ***** RUMOR *****</p>	CEOC EC	CMPI	10:10 DCEC	<p>Informs senior NU management. Approves press release.</p>
2:15	10:15							<p>CMEC CMOR CMPI</p>	<p>Arrive at Corporate EOC to carry out call-out duties. Responds to Rumor.</p>
								<p>10:15 CMEC CMRCA</p>	<p>Obtains updated plant parameter data information from station. Obtains radiological data from station. Determine potential release rates and resulting radiological doses (CONI 4.01/4.84/4.88).</p>
								FTDC	<p>Assumes control of deployed off-site Emergency Monitoring Teams (EMTs). Corporate Field Team Data Coordinator directs off-site station EMTs by radio.</p>

MP EXERCISE - OCT 4, 1989
CORPORATE CONTROLLER GUIDE

MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
2:20	10:20 HNPS	An emergency repair team is manned and deployed to investigate the problem with the Instrument Air desiccant fouling.	MET-4	10:20	***COMMAND*** Issue meteorological data sheet.	MT EC	MT	10:20 DO	Updates events chronology status boards.
								MT	Obtain updated met. data.
								FTDC	Discusses strategy for EMT sampling with Corporate Manager of Radiological Consequence Assessment.
2:22	10:22							10:22 CHRES	Determines any additional needs of the station in terms of personnel and equipment. Establishes a rotating staff schedule (CONI 6.91).
2:25	10:25							10:25 DCEO	Advises staff of station status.
2:30	10:30 HNPS	Emergency repair teams are deployed to investigate instrument air problem and to complete repairs to the "A" SIC pump.	CMPI-4	10:30	***CONTINGENCY*** Prepare an initial news release. ***CONTROLLER NOTE** Issue only if initial news release has not been prepared for release.	CEOC EC	CMPI	10:30 CMEC	Obtains updated plant parameter data information from station.

SAS

MP EXERCISE - OCT 4, 1989
CORPORATE CONTROLLER GUIDE

MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
	HNPS CEOC	TSC and Corporate TSC discuss potential core damage and loss of containment if ATWS continues as well as corrective actions.							
2:55	10:35		MET-5	10:35	***COMMAND*** Issue meteorological data sheet.	MT EC	MT	10:35 MT CMRCA	Obtain updated met. data. Sets up communication with DEP at State Armory and transfers data on event. Ensures MET data is sent to station & DEP at Armory.

SAS

MP EXERCISE - OCT 4, 1989
CORPORATE CONTROLLER GUIDE

MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
2:59	10:39 HMPS	<p>***PUBLIC INQUIRY***</p> <p>A local nursing home administrator has called to confirm a story heard on a news station that reported major nuclear fuel problems at the Millstone Nuclear Power Station "which could result in health problems to the public".</p> <p>The report indicated that the information was received from a "Spokesperson" from one of the towns near the plant and that reports of the "accident" had not been confirmed, but that access to the nuclear plant had been stopped. Is this true?</p> <p>***PUBLIC INQUIRY***</p>							

MP EXERCISE - OCT 4, 1989
CORPORATE CONTROLLER GUIDE

MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
2:45	10:45 MPS	LPCI shutdown due to Net Positive Suction Head curves (NPSH).	CMP1-5	10:45	***** RUMOR ***** The wife of a con- struction worker calls to ask about her husband. She heard there is an accident and is very concerned. NOTE: Brief Director on response. ***** RUMOR *****	CEOC EC	CMP1	10:45 CHEC	Obtains updated plant parameter data information from station.
		*****RUMOR*** The wife of a construction worker calls to ask about her husband. She heard there is an accident and is very concerned. *****RUMOR***						CMP1	Responds to Rumor.
								CMP1	Obtains radiological data from station. Determine potential rel- ease rates and resulting radiolog- ical doses (CONI 4.01/4.04/4.06).
2:50	10:50		MT-6	10:50	***COMMAND*** Issue meteorological data sheet.	MT EC	MT	10:50 MT	Obtain updated met. data. Obtains forecast from Weather Services Corporation.

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MP EXERCISE - OCT 4, 1989
CORPORATE CONTROLLER GUIDE

MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSE #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
2:55	10:55							10:55 DCEO	Advises staff of station status.
3:00	11:00 MNPS MPCS CEOC	Torus begins to boil. Corporate and Station EDC staff discuss possible venting options.						11:00 DCEO CMEC	Discuss possible venting options. Obtains updated plant parameter data information from station.
3:05	11:05	There is an FBI agent with proper I.D. at the gate wanting access to the EOF.	MEI-7	11:05	***COMMAND*** Issue meteorological data sheet.	MT EC	MT	11:05 MT	Obtain updated met. data.
3:15	11:15							11:15 CMEC	Obtains updated plant parameter data information from station.
3:20	11:20 MNPS	Open all (6) SRVs due to heat capacity temperature limit.	MEI-8	11:20	***COMMAND*** Issue meteorological data sheet.	MT EC	MT	11:20 DCEO MT	Advises staff of station status. Obtain updated met. data.

HP EXERCISE - OCT 4, 1989
CORPORATE CONTROLLER GUIDE

MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
3:30	11:30 CEOC	<p>***RUMOR*** Radiation is being released and the plant is out of control.</p> <p>***RUMOR***</p>	CMPI-6	11:30	<p>***** RUMOR ***** The radiation is being released and the plant is out of control. NOTE: Brief Director on response. ***** RUMOR *****</p>	CEOC EC	CMPI	11:30 CHEC	Obtains updated plant parameter data information from station.
3:51	11:31 MNPS	<p>***PUBLIC INQUIRY*** A local radio station called. They have received word that the access road to the plant has been blocked and cars are being turned away from the area. Has there been some type of accident and/or release of radiation that is being kept secret from the public?</p> <p>***PUBLIC INQUIRY***</p>						CMPI	Responds to rumor.

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MP EXERCISE - OCT 4, 1989
CORPORATE CONTROLLER GUIDE

MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
3:35	11:35 HNPS	NRC Site team arrives and is briefed on the status of events. NRC dispatches a person to Berlin and State EOC. NRC establishes contact over ENS.	MET-9	11:35	***COMMAND*** Issue meteorological data sheet.	MT EC	MT	11:35 MT	Obtain updated met. data.
3:45	11:45							11:45 CMEC	Obtains updated plant parameter data information from station.
								CHPCA	Obtains radiological data from station. Determine potential release rates and resulting radiological doses (CONI 4.01/4.04/4.06).
3:50	11:50		MET-10	11:50	***COMMAND*** Issue meteorological data sheet.	MT EC	MT	11:50 DCEO	Advises staff of station status.
								MT	Obtain updated met. data.
								CHPCA	Obtains forecast from Weather Services Corporation.
									Prepares an assessment of potential releases and offsite protective actions under certain assumptions.
4:00	12:00 HNPS	DCEO may declare a GENERAL EMERGENCY, posture code Bravo.						12:00 CMEC	Obtains updated plant parameter data information from station.

NP EXERCISE - OCT 4, 1989
CORPORATE CONTROLLER GUIDE

MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
4:05	12:05 CEOC	MRC arrives at Berlin EOC.	MET-11	12:05	***COMMAND*** Issue meteorological data sheet.	MT EC	MT	12:05 MT	Obtain updated met. data.
4:12	12:12 HMPS	<p>***PUBLIC INQUIRY***</p> <p>The wife of one of the employees has called in to inquire into the whereabouts of her husband. It seems that he was supposed to call her at 10:00 but hasn't. She wants to know his whereabouts and if anyone is unaccounted for at the plant. His name is Walter H. Buch.</p> <p>***PUBLIC INQUIRY***</p>							

MP EXERCISE - OCT 4, 1989
CORPORATE CONTROLLER GUIDE

MASTER SCENARIO			CONTROLLER'S MESSAGE					PLAYER'S ACTION	
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
4:15	12:15 HNPS	SSSA transmits the radiopager message for GENERAL EMERGENCY.	CMPI-7	12:15	<p>***** RUMOR *****</p> <p>A Waterford resident has heard Millstone employees speak about an accident at the plant. She wants to know what is going on and if it is safe to stay in the area.</p> <p>NOTE: Brief Director on response.</p> <p>***** RUMOR *****</p>	CEOC EC	CMPI	12:15 DCEO	Receive radiopager notification of GENERAL EMERGENCY, posture code Bravo.
	CEOC	<p>***RUMOR***</p> <p>A Waterford resident has heard MP employees speak about an accident at the plant. She wants to know what is going on and if it is safe to stay in the area.</p> <p>***RUMOR***</p>						DCEO	Decisions on venting options discussed.
								CHEC	Obtains updated plant parameter data information from station.
								CMPI	Responds to Rumor.

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MO. EXERCISE - OCT 4, 1989
CORPORATE CONTROLLER GUIDE

MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
4:17	12:17							CMRCA	Obtains radiological data from station. Determine potential release rates and resulting radiological doses (CONI 4.01/4.04/4.08).
4:20	12:20		MET- 12	12:20	***COMMAND*** Issue meteorological data sheet.	MT EC	MT	12:17 DO	Telephone call-back system and complete Incident Report Form (IRF).
4:30	12:30							12:20 DCE0	Advises staff of station status.
4:35	12:35		MET- 13	12:35	***COMMAND*** Issue meteorological data sheet.	MT EC	MT	MT	Obtain updated met. data.
4:45	12:45							12:30 CHEC	Obtains updated plant parameter data information from station.
								12:35 MT	Obtain updated met. data.
								12:45 CHEC	Obtains updated plant parameter data information from station.
								CMRCA	Obtains radiological data from station. Determine potential release rates and resulting radiological doses (CONI 4.01/4.04/4.08).
4:50	12:50		MET- 14	12:50	***COMMAND*** Issue meteorological data sheet.	MT EC	MT	12:50 DCE0	Advises staff of station status.

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CORPORATE CONTROLLER GUIDE

MASTER SCENARIO			CONTROLLER'S MESSAGE					PLAYER'S ACTION	
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
5:00	13:00 HNPS	Torus pressure reaches 63 psig. Either the players decide to vent the Torus to prevent containment failure OR a message will be given to the players stating that their decision was to vent at this time.						HT 13:00 CHEC	Obtain updated met. data. Obtains forecast from Weather Services Corporation. Obtains updated plant parameter data information from station.
5:05	13:05		ME-13	13:05	***COMMAND*** Issue meteorological data sheet.	HT EC	HT	13:05 HT	Obtain updated met. data.
5:15	13:15							13:15 CHEC CHRCA	Obtains updated plant parameter data information from station. Obtains radiological data from station. Determine potential release rates and resulting radiological doses (CONI 4.01/4.04/4.08).
5:20	13:20		ME-14	13:20	***COMMAND*** Issue meteorological data sheet.	HT EC	HT	13:20 DCEO	Advises staff of station status.

MP EXERCISE - OCT 4, 1989
CORPORATE CONTROLLER GUIDE

MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCENARIO TIME	CLOCK TIME/PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/PLAYER	SUMMARY OF ACTIONS
								MT	Obtain updated met. data.
5:29	13:29 MNPS	Repair team completes work on "A" SLC pump.							
5:30	13:30 MNPS	"A" SLC pump motor has been repaired and operators start it. Reactor begins to shutdown.						13:30 CHEC	Obtains updated plant parameter data information from station.
5:35	13:35		MET-17	13:35	***COMMAND*** Issue meteorological data sheet.	MT EC	MT	13:35 MT	Obtain updated met. data.
5:45	13:45							13:45 CHEC	Obtains updated plant parameter data information from station.
5:50	13:50		MET-18	13:50	***COMMAND*** Issue meteorological data sheet.	MT EC	MT	13:50 DCEO	Advises staff of station status.
								MT	Obtain updated met. data. Obtains forecast from Weather Services Corporation.
6:00	14:00 MNPS	Reactor is now fully shutdown.						14:00 CHEC	Obtains updated plant parameter data information from station.
6:05	14:05		MET-19	14:05	***COMMAND*** Issue meteorological data sheet.	MT EC	MT	14:05 MT	Obtain updated met. data.

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CORPORATE CONTROLLER GUIDE

MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
6:15	14:15							14:15 CMEC	Obtains updated plant parameter data information from station.
								CMRCA	Obtains radiological data from station. Determine potential release rates and resulting radiological doses (CONI 4.01/4.04/4.08).
6:20	14:20		MET-29	14:20	##### Issue meteorological data sheet.	MT EC	MT	14:20 DCEO	Advise staff of station status.
								MT	Obtain updated met. data.
6:30	14:30 MNPS	Pressure in the Torus is reduced. Release is stopped.	CMPI-8	14:30	##### An East time resident called and said that WTNH (channel 8) News has reported that a Chernobyl-like accident is occurring at the Millstone plant and that residents are fleeing the area. NOTE: Brief Director on response. #####	CEOC EC	CMPI	14:30 CMEC	Obtains updated plant parameter data information from station.
	MNPS	Emergency repair team removes desicant out of MSIV air lines.						CMPI	Responds to Rumor.

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MP EXERCISE - OCT 4, 1989
 CORPORATE CONTROLLER GUIDE

MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
	CEOC	***RUMOR*** A East Lyme resident called and said that WTNH (channel 8) news has reported that a Chernobyl-like accident is occurring at the Millstone plant and that residents are fleeing the area. ***RUMOR***							
6:31	14:31 MNPS	Operators open MSIVs. An adequate heat sink is established.							
6:35	14:35		MET-21	14:35	***CORPMSG*** Issue meteorological data sheet.	MT EC	MT	14:35 MT	Obtain updated met. data.
6:45	14:45							14:45 CMEC	Obtains updated plant parameter data information from station.
6:50	14:50		MET-22	14:50	***CORPMSG*** Issue meteorological data sheet.	MT EC	MT	14:50 DCEO MT	Advises staff of station status. Obtain updated met. data. Obtains forecast from Weather Services Corporation.

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NP EXERCISE CONTROL GUIDE
CORPORATE CONTROLLER GUIDE

MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
7:00	15:00 HNPS	Exercise is terminated.	CEOC-1	15:00	***FORWARD*** (Stop Exercise play. Key players and controllers are to report to the Corporate CEOC for a critique.	CEOC EC	ALL	15:00 ALL KEY PLAY- ERS	Report to CEOC and commence critique.
7:05	15:05 HNPS	SSSA transmits the Exercise closeout message.							
8:00	16:00 HNPS	Exercise Critique in the EOF.							

12.B.3 STATE EXERCISE CONTROLLER GUIDE

ABBREVIATIONS AND ACRONYMS

CNG -	Connecticut National Guard	Gov -	Governor
CPD -	Civil Preparedness Director	Gov Off -	Governors Office
CSP -	Connecticut State Police	Hlth Ser -	Health Services
DEP -	Department of Environmental Protection	IRF -	Incident Report Form
DEP,RCU, Dir. -	Department of Environmental Protection, Radiation Control Unit, Director	KI -	Potassium Iodide
DOA -	Department of Agriculture	MA -	Massachusetts
DOE -	Department of Energy	MNPS -	Millstone Nuclear Power Station
DOH -	Department of Health	NRC -	Nuclear Regulatory Commission
DOT -	Department of Transportation	NU -	Northeast Utilities
EBS -	Emergency Broadcast System	NY -	New York
EC -	Exercise Controller	OCP -	Office of Civil Preparedness
EOC -	Emergency Operations Center	PIO -	Public Information Officer
EOF -	Emergency Operations Facility	RCU -	Radiation Control Unit
EPZ -	Emergency Planning Zone	ST -	State
FDA -	Federal Drug Administration	State Wrng Point -	State Warning Point
FEMA -	Federal Emergency Management Agency		

HP EXERCISE - OCTOBER 4, 1989
STATE EXERCISE CONTROLLER GUIDE

MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
0:00	08:00 MNPS	<p>Initial Conditions:</p> <p>***** Known to players at start of the exercise:</p> <p>Unit 1 is operating at 100 percent power.</p> <p>Unit 2 and 3 are also operating at 100 percent power.</p> <p>The "A" train of the Standby Liquid Control (SLC) system is Out Of Service for repair. Repairs are ongoing and will be completed within 4 to 6 hours.</p> <p>"B" train is still in service.</p> <p>Transmission and Distribution (T&D) electricians are performing maintenance in the switchyard area at this time.</p> <p>Station electrical loads have been placed on the Reserve Station Service Transformer (RSST). In preparation of T&D maintenance NSST is still on line but unloaded.</p>		08:00	<p>Initial Message:</p> <p>***CONTROLLER NOTE*** Player conditions of plant will be available to Corporate liason (initial cond) when he arrives at EOC.</p>				

MP EXERCISE - OCTOBER 4, 1963
STATE EXERCISE CONTROLLER GUIDE

MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
0:30	08:30 MNPS	The T&D electricians in Unit 1 switchyard inadvertently open 512 and 612 breakers between the 345 KV B Bus and the switchyard which results in turbine generator load reject.							
		The turbine protection system senses the load reject and throttles back the turbine control valves to prevent overspeed.							
		The turbine protection system also allows a select number of reactor control rods (13) to be inserted into the core (SRI).							
		Slowly leakage begins to accumulate in scram discharge volume.							

MP EXERCISE - OCTOBER 4, 1989
STATE EXERCISE CONTROLLER GEORGE

MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
0:31	08:31 MNPS	Instrument air dryer desiccant cartridge failure causes loose desiccant to travel through instrument air lines and collect at various valve controllers. This causes instrument air to become isolated from MSIVs and held temporarily only open by the accumulators.							
0:35	08:35 MNPS	SS notifies the Duty Officer (DO) of plant conditions.							
0:54	08:54 MNPS	Discharge volume vent and drain valves close due to desiccant fouling in the instrument air system.							

MP EXERCISE - OCTOBER 4, 1989
STATE EXERCISE CONTROLLER GUIDE

MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
0:55	08:55 MPS	MSIVs close due to accumulator bleed off. Reactor scram signal generated on MSIV closure. Control rods do not insert due to scram discharge volume being hydraulically locked. Vessel pressure increases and begins blowing down to Torus through Safety Relief Valves (SRVs). Recirc pumps trip. Motor operator to main steam drain valves burns out upon operator initiation.							

SAS

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STATE EXERCISE CONTROLLER GUIDE

MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
0:56	08:56 MNPS	Iso Condenser and ECCS systems function as designed. However they can not provide enough of a heat sink for the reactor. Torus pressure and temperature begin to trend upwards slowly.							
1:10	09:10 MNPS	"B" train of SLC system started by operators immediately fails. No SLC injection. Manual and ATWS scrams fail to insert rods.							
1:15	09:15 MNPS	Shift Supervisor declares a SITE AREA EMERGENCY, posture code Charlie-Two based on scram signal and plant > 3% power (ATWS). DSS sounds station evacuation alarm and provides instructions to station personnel. Predetermined evacuees proceed to the assembly areas.							

MP EXERCISE - OCTOBER 4, 1989
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MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
1:25	09:25 MNPS	SSSA transmits the radiopager message for SITE AREA EMERGENCY.						09:25 Gov Off., CPD,	Receive radiopager notification of incident class SITE AREA EMERGENCY Posture Code Charlie-Two.
1:30	09:30 MNPS	Director, Managers and support staff begin to arrive at the Emergency Operations facility (EOF) and the Corporate Emergency Operations Center (CEOC) to assume emergency response duties.						09:30 DEP RCU Dir.,	Telephone call-back system. Receive details of the incident.
	MNPS	Reactor water level lowered to the top of active fuel. Some fuel rods (1.5%) begin to lose clad integrity due to water level fluctuations.						CSP Troops F&K,	Complete incident report form (IRF) based on information provided.
	State Local	State and local officials will begin activation of their EOC's and notification of their staff.						State Wrng. Point, CPD	Acknowledge receipt of notification.

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STATE EXERCISE CONTROLLER GUIDE

MASTER SCENARIO			CONTROLLER'S MESSAGE					PLAYER'S ACTION	
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
1:35	09:35							Gov. Off., DEP RCU Dir., CSP Troop FBK, CPD, State Wrng. Point	<p>Receive radiopager notification of incident class SITE AREA EMERGENCY Posture Code Charlie-Two.</p> <p>Telephone call-back system.</p> <p>Receive details of the incident.</p> <p>Complete incident report form based on information provided.</p> <p>Acknowledge receipt of notification.</p>
								Gov. Off.	<p>Receives backup telephone notification of incident class SITE AREA EMERGENCY Posture Code Charlie-Two from NU Public Information Officer.</p>
								09:35 Gov. Off.	<p>Notifies Gov. of incident class SITE AREA EMERGENCY, Posture Code Charlie-Two.</p>
								State Wrng. Point	<p>Notifies CSP Commissioner of an incident class SITE AREA EMERGENCY, Posture Code Charlie-Two.</p>
								CSP	<p>Notify Governor of incident class SITE AREA EMERGENCY, Posture Code Charlie-Two using a State policeman.</p>

HP EXERCISE - OCTOBER 4, 1989
STATE EXERCISE CONTROLLER GUIDE

MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
1:36	09:36							DEP RCU Dir.	Notifies DEP Commissioner of incident class SITE AREA EMERGENCY, Posture Code Charlie-Two.
								Gov. Off.	Notifies Gov. of incident class SITE AREA EMERGENCY, Posture Code Charlie-Two.
								State Wrng. Point	Notifies CSP Commissioner, Colonel, and District Manager of an incident class SITE AREA EMERGENCY, Posture Code Charlie-Two.
								09:36 Gov. Off., DEP RCU Dir., CSP, State Wrng. Point, CPD	Stand by for further information.
1:40	09:40							09:40 DEP RCU Dir.	Notifies DEP Commissioner of incident class SITE AREA EMERGENCY, Posture Code Charlie-Two.
								Gov.	Directs that the State EOC be activated and State Commissioners report to State EOC.
								OEM	Operational Officer alerts EBS.

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MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
1:41	09:41								Requests 24-hour coverage (simulate).
								09:41 OEM	Notifies all State Commissioners of incident class SITE AREA EMERGENCY, Posture Code Charlie-Two and directs them to report to State EOC. Activates Civil Air Patrol.
1:42	09:42							09:42 State Comm.	Acknowledge order to report to State EOC.
1:43	09:43							09:43 OEM	State EOC is being staffed to support the incident class SITE AREA EMERGENCY, Posture Code Charlie-Two. Communications systems are tested with Area Coordinator posts and Northeast Utilities.
								CPD	Directs that the Joint Media Center be activated and prepared to support operations.
								OEM	State EOC personnel begin to activate their support staff to assist in emergency response should plant conditions deteriorate.

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STATE EXERCISE CONTROLLER GUIDE

MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
1:45	09:45 MNPS	The EOF is fully activated. The DSEO relieves the SS of the DSEO responsibilities.	SEOC-1	09:45	***CONTINGENCY*** Direct CPD to have State Commissioners report to State EOC.	SEOC EC	Gov.	09:45 DEP	Notifies states of NY, MA, and RI; also, notifies DOE, NRC, FDA, New England Interstate Radiation Assistance Plan, and Federal Radiological Monitoring and Assessment Plan.
	MNPS	An emergency repair team is manned and deployed to investigate the problem with the "A" SLC pump motor.							
1:46	09:46							09:46 EOC	Berlin EOC sets up formal communications with the State DEP for meteorological information, Rad information, etc.
1:48	09:48							09:48 EOC	Governor, or representative, arrives at State EOC.
1:49	09:49							09:49 EOF	State DEP representative arrives at EOF(Site) in order to establish communications with Site and report information directly to Hartford EOC DEP office.
1:50	09:50 State Local	The State and Local EOC's are staffed and fully operational.						09:50 Area	State Area offices set up communications with EPZ communities within their responsibility.

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MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
	CEOC	<p>****RUMOR****</p> <p>This is the Hartford Courant. What is happening at MP. I heard a message on the scanner. Are you having a large unplanned release of radiation? Do you have a statement? What should the public do?</p> <p>****RUMOR****</p>						State Local	State and local EOC's are fully operational.
1:55	09:55 MNPS	State DEP liason arrives at Site EOF.						09:55 DEP	Deploys fie'd monitoring teams based on CPD or DEP determination of affected areas.
	State	<p>State begins coordination with local communities on 1st EBS concerning Site Area Emergency & simulated siren activation.</p> <p>State DEP begins deployment of Field Teams.</p>							

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MASTER SCENARIO			CONTROLLER'S MESSAGE					PLAYER'S ACTION	
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
2:00	10:00 HNPS	Chemistry sample requested.	SEOC-2	10:00	<p>***COMMAND*** Activate City of New Haven to demonstrate their ability to monitor and provide relocation to a designated number of evacuees (offline demo.) Note: Ensure staff knows that this is done offline from the actions you would really take in order to make a demonstration.</p>	SEOC EC	GEM	10:00 DEP	<p>Sets up system for monitoring Plume and food pathways. Project food pathway doses.</p>
	CEOC	DCEO dispatches a (1) executive representative and staff to go to the State EOC and provide State communication interface.						DEP RCU Dir.	Directs a radiation control unit (RCU) person to report to Millstones EOC.
	CEOC	<p>***RUMOR*** This is WFSB 3. We heard from special sources that there is something going on at MP and we need details for a story we are writing. ***RUMOR***</p>							

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MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
2:05	10:05 HNPS	<p>***PUBLIC INQUIRY***</p> <p>A local resident who knows someone at the plant has heard there are problems at MP and has started calling neighbors to warn them to the possibility of an evacuation of the area. One of the neighbors has called and wants to know if this is just a rumor or is something actually wrong.</p> <p>***PUBLIC INQUIRY***</p> <p>***RUMOR***</p> <p>This is WTIC. What is happening at MP? Is there an accident? What is NU doing? Have federal officials been notified?</p> <p>***RUMOR***</p>							
2:10	10:10 CEOC								
2:20	10:20 HNPS	<p>An emergency repair team is named and deployed to investigate the problem with the Instrument Air desiccant fouling.</p>							

10/04/89 - OCTOBER 4, 1989
 ISE CONTROLLER GUIDE

MASTER SCENARIO			CONTROLLER'S MESSAGE					PLAYER'S ACTION	
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
2:30	10:30 MNPS	Emergency repair teams are deployed to investigate instrument air problem and to complete repairs to the "A" SLC pump.	SEOC-3	10:30	<p>*** RUMOR *****</p> <p>Residents are calling in local & state officials that a "grayish blue" mist is coming from plant. Please verify.</p> <p>*** RUMOR *****</p>	SEOC EC	OEM	10:30 EOC	Nusco representative to the State EOC arrives.
	State	<p>***RUMOR***</p> <p>Residents are calling in local & state officials that a "grayish blue" mist is coming from plant. Please verify.</p> <p>***RUMOR***</p>						CPD	<p>Identifies protective actions being taken by local communities by communicating with Area Coordinators. Determines protective actions appropriate for incident conditions: Control food/water/milk. Immediate take shelter/access control for 2-mile radius and 5 miles downwind. Extend to 10 miles downwind if necessary.</p> <p>Activates EBS and public warning as appropriate. Note: The Public Alerting will take place at 11:40 by pre-arrangement.</p>
	MNPS CEOC	TSC and Corporate TSC discuss potential core damage and loss of containment if ATWS continues as well as corrective actions.							

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MASTER SCENARIO			CONTROLLER'S MESSAGE					PLAYER'S ACTION	
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
2:39	10:39 MNPS	<p>***PUBLIC INQUIRY***</p> <p>A local nursing home administrator has called to confirm a story heard on a news station that reported major nuclear fuel problems at the Millstone Nuclear Power Station "which could result in health problems to the public".</p> <p>The report indicated that the information was received from a "Spokesperson" from one of the towns near the plant and that reports of the "accident" had not been confirmed, but that access to the nuclear plant had been stopped. Is this true?</p> <p>***PUBLIC INQUIRY***</p>							

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MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
2:45	10:45 MNPS	LPCI shutdown due to Net Positive Suction Head curves (NPSH).	SEOC-4	10:45	<p>***COMMAND*** Activate Town of East Hartford to demonstrate their ability to monitor and provide relocation to a designated number of evacuees (offline demo.) Note: Ensure staff knows that this is done offline from the actions you would really take in order to make a demonstration.</p>	SEOC EC	OEM		
	CEOC	<p>***RUMOR*** The wife of a construction worker calls to ask about her husband. She heard there is an accident and is very concerned. ***RUMOR***</p>							
3:00	11:00 MNPS	Torus begins to boil.							
	MNPS CEOC	Corporate and Station EOC staff discuss possible venting options.							

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MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
	MNPS	There is an FBI agent with proper I.D. at the gate wanting access to the EOF.							
	State	State sets up Media Center.							
3:06	11:06		SEOC-5	11:06	<p>***CONTROLLER NOTE*** Issue the following only if the indicated actions have not been carried out.</p> <p>***CONTINGENCY*** Request Department of Public Safety to activate the State Media Center, including notifying Media Center Public Information Supervisors.</p>	SEOC EC	OEN		
3:20	11:20 MNPS	Open all (6) SR's due to heat capacity temperature limit.							
3:30	11:30 CEOC	Radiation is being released and the plant is out of control.							
		RUMOR							

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MASTER SCENARIO			CONTROLLER'S MESSAGE					PLAYER'S ACTION	
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
3:31	11:31 MNPS	<p>***PUBLIC INQUIRY***</p> <p>A local radio station called. They have received word that the access road to the plant has been blocked and cars are being turned away from the area. Has there been some type of accident and/or release of radiation that is being kept secret from the public?</p> <p>***PUBLIC INQUIRY***</p>							
3:35	11:35 MNPS	NRC Site team arrives and is briefed on the status of events. NRC dispatches a person to Berlin and State EOC. NRC establishes contact over ENS.	SEOC-6	11:35	<p>***COMMAND***</p> <p>Inform State OEM to initiate steps to broadcast EBS message and to activate the local Public Alerting Systems by roll call.</p> <p>Special Note: Done offline from real event.</p>	SEOC EC	OEM		
3:40	11:40							11:40 OEM Area Off.	Completes activation of actual test of PAS for local EPZ communities.

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MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
3:45	11:45		SEOC-7	11:45	***COMMAND*** Call the Town of East Hartford and ask them if they can handle another 3000 evacuees by nightfall (6 pm.) and what facilities they can use.	SEOC EC	OEM		
3:50	11:50		SEOC-8	11:50	***CONTINGENCY*** Direct CSP to prepare to set up access control at priority access control points for the 2-mile EPZ. As per State Police Plan.	SEOC EC	OEM		
4:00	12:00 MNPS	DSEO may declare a GENERAL EMERGENCY, posture code Bravo.							
4:05	12:05 CEOC	NRC arrives at Berlin EOC.						12:05 State	Detailed discussion with State EOC & NU, NRC as need for venting containment.

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MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
4:12	12:12 MNPS	<p>***PUBLIC INQUIRY***</p> <p>The wife of one of the employees has called in to inquire into the whereabouts of her husband. It seems that he was supposed to call her at 10:00 but hasn't. She wants to know his whereabouts and if anyone is unaccounted for at the plant. His name is Walter H. Buch.</p> <p>***PUBLIC INQUIRY***</p>							
4:15	12:15 MNPS	SSSA transmits the radiopager message for GENERAL EMERGENCY.						12:15 Gov. Off., DEP RCU Dir., CSP Troops F&K, CPD, State Wrng. Point	<p>Receive radiopager notification of incident class GENERAL EMERGENCY, Posture Code Bravo.</p> <p>Telephone call-back system.</p> <p>Receive details of the incident.</p> <p>Complete incident report form based on information provided.</p> <p>Acknowledge receipt of notification.</p>

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MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
	CEOC	<p>***RUMOR***</p> <p>A Waterford resident has heard MP employees speak about an accident at the plant. She wants to know what is going on and if it is safe to stay in the area.</p> <p>***RUMOR***</p>						Gov. Off.	Receives telephone notification of incident class GENERAL EMERGENCY, Posture Code Bravo from NU PIO.
4:20	12:20 State	<p>State & locals coordinate on protective action measures for public & coordinate issuance of EBS message.</p> <p>NRC arrives at State EOC to set up liason function and media liason.</p> <p>State DEP & NU discuss the potential consequences of doses as a result of venting and/or containment failure.</p>						Gov. Off.	Notifies Governor of incident class GENERAL EMERGENCY, Posture Code Bravo.
								12:20 State PIO	Makes announcement and briefing to the Joint Media Center, including notification of media center public information supervisors.

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MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
4:30	12:30		SEOC-9	12:30	***COMMAND*** FEMA has called asking for a full report on events. have someone from your staff brief the State exercise controller.	SEOC EC	OEM	12:30 Gov.	Assess need to take action if FDA's preventive/PAG levels for food pathways are exceeded.
4:35	12:35							12:35 Gov.	Reviews incident class GENERAL EMERGENCY, Posture Code Bravo.
4:40	12:40 State	State executes PARs for 2-mile evacuation & 5-mile down wind shelter & discusses other PARs.						12:40 CPD	Identifies protective actions being taken by local communities by communicating with Area Coordinators. Determines protective actions appropriate for incident conditions: Monitor food/water/milk. Consider placing milk animals on stored feed. Alerts EBS. Simulates activation of public warning system once authorized. Note: The Public Alerting will take place at 11:40 by pre-arrangement.
								PIO, CPD	Prepare media announcement based on preliminary information.
								CSP	Issue dosimeters to CSP personnel. Personnel check and charge dosimeters. Deliver emergency dosimeters (token amounts).

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MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
4:45	12:45		SEOC- 10	12:45	***CONTINGENCY*** Issue dosimetry to CSP personnel.	SEOC EC	CSP	12:45 Hlth. Ser., DOA, DEP	<p>Gov. Directs DEP, DOA and Health Services to prepare to sample water, air, produce and milk and to simulate placing milk animals on stored feed in downwind areas.</p> <p>PIO Receive EBS message from local communities.</p> <p>Direct key personnel to report to duty stations.</p>
4:50	12:50							12:50 OEM	<p>Requests U.S. Coast Guard at New Haven and Harbor Masters to prepare to set up access control at 2-mile radius EPZ.</p> <p>Operations Officer calls Area Coordinator offices and State agencies to request staffing status and to test communications between the State EOC and Area Coordinator offices.</p> <p>Area Coordinator offices call EPZ towns to request staffing and operations status.</p> <p>Directs CSP to prepare to set up access control at priority access control points for the 2-mile EPZ.</p>
								PIO, CPD	Prepare media announcement based on informational updates.

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MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
4:55	12:55		SEOC-11	12:55	***CONTINGENCY*** State should set up tabletop discussion on KI and inform local government of decisions. If KI is authorized for State workers, set up distribution policy.	SEOC EC	OEM	CPD	Notifies FEMA, Red Cross, and Salvation Army.
			SEOC-12	12:55	***CONTINGENCY*** Request U.S. Coast Guard to set up access control on the Connecticut River.	SEOC EC	DOT		
5:00	13:00 HNPS	Torus pressure reaches 63 psig. Either the players decide to vent the Torus to prevent containment failure OR a message will be given to the players stating that their decision was to vent at this time.						13:00 DEP	Notifies states of NY, MA, and RI; also, notifies DOE, NRC, FDA, New England Interstate Radiation Assistance Plan, and Federal Radiological Monitoring and Assessment Plan. Telephones EBS to stand by (simulate).

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MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
5:05	13:05	State MU & State discuss need for additional PARs or need to consider longer term extensions of PAR distances.						13:05 Hlth. Ser.	Direct the Director of Emergency Medical Services to report to health office. Commissioner mobilizes personnel. Personnel notified to report to duty sta- tions, activate radio analysis lab, and prepare to analyze samples.
5:15	13:15							13:15 Gov. Off., DEP RCU Dir., CSP Troop F&K, CPD, State Mng. Point	Receive radiopager notification of plant conditions update. Telephone call-back system. Receive details. Complete incident report form based on information provided.
5:16	13:16							13:16 OEM Staff	Review current status of assign- ments of State personnel. Main- tain communications with OEM Area Coordinators.

HP EXERCISE - OCTOBER 4, 1989
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MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
5:20	13:20							CPD	Identifies protective actions being taken by local communities by communicating with Area Coordinators.
								OEM	Operations Officer determines staffing status of local communities.
								13:20 Gov.	Directs Dept. of Consumer Protection to prepare appropriate controls on retail food and milk.
								OEM Admin. Off.	Plans for accommodating outside emergency personnel.
									Develops State EOC staffing plan, including shift change personnel, for all State agencies involved in the emergency.
								Hlth. Ser.	Maintain exposure record for emergency workers.
5:29	13:29 MNPS	Repair team completes work on "A" SLC pump.							
5:30	13:30 MNPS	"A" SLC pump motor has been repaired and operators start it. Reactor begins to shutdown.							
6:00	14:00 MNPS	Reactor is now fully shutdown.							

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MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
6:30	14:30 HMPS	Pressure in the Torus is reduced. Release is stopped.							
	HMPS	Emergency repair team removes desiccant out of MSIV air lines.							
	CEDC	<p>***RUMOR***</p> <p>A East Lyme resident called and said that WTNH (channel 8) news has reported that a Chernobyl-like accident is occurring at the Millstone plant and that residents are fleeing the area.</p> <p>***RUMOR***</p>							
6:31	14:31 HMPS	Operators open MSIVs. An adequate heat sink is established.							
7:00	15:00 HMPS	Exercise is terminated.	SEDC-13	15:00	***COMMAND*** Stop Exercise play.	SEDC	ALL		

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MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
7:05	15:05 MNPS	SSSA transmits the Exercise closeout message.						15:05 Gov. Off., DEP RCU Dir., CSP Troop FBK, State Wrng. Point	Receive radiopager notification of exercise termination. Telephone call-back system. Receive details of the message. Acknowledge receipt of notification.
7:10	15:10							15:10 DEP RCU Dir. CSP	Notifies DEP Commissioner of exercise termination. Notifies States of NY, MA, and RI of exercise termination.
7:15	15:15							15:15 ALL	Critique/discuss the exercise emergency response with evaluators.
8:00	16:00 MNPS	Exercise Critique in the EOF.							

12.B.4 LOCAL EXERCISE CONTROLLER GUIDE

LOCAL COMMUNITY EXERCISE CONTROLLERS GUIDE

ABBREVIATIONS AND ACRONYMS

CEO -	Chief Executive Officer	EL -	East Lyme
CPD -	Civil Preparedness Director	FI -	Fishers Island
DEP -	Department of Environmental Protection	GC -	Groton City
EBS -	Emergency Broadcast System	GT -	Groton Town
EOC -	Emergency Operations Center	LD -	Ledyard
EPZ -	Emergency Planning Zone	PI -	Plum Island
FC -	Fire Chief	MV -	Montville
HD -	Health Director	NL -	New London
IRF -	Incident Report Form	OL -	Old Lyme
MGR -	Manager	OS -	Old Saybrook
MINPS -	Millstone Nuclear Power Station	WF -	Waterford
OCP -	Office of Civil Preparedness		
PIO -	Public Information Officer		
RDO -	Radiological Defense Officer		
SLEO -	Senior Law Enforcement Officer		

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MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
0:00	08:00 HNPS	<p>Initial Conditions:</p> <p>***** Known to players at start of the exercise:</p> <p>Unit 1 is operating at 100 percent power.</p> <p>Unit 2 and 3 are also operating at 100 percent power.</p> <p>The "A" train of the Standby Liquid Control (SLC) system is Out Of Service for repair. Repairs are ongoing and will be completed within 4 to 6 hours.</p> <p>"B" train is still in service.</p> <p>Transmission and Distribution (T&D) electricians are performing maintenance in the switchyard area at this time.</p> <p>Station electrical loads have been placed on the Reserve Station Service Transformer (RSST). In preparation of T&D maintenance NSST is still on line but unloaded.</p>	All-1	08:00	<p>***CONTROLLER NOTE*** The siren activation will occur at 11:40 as an independent test. Coordinated by the State OEM area offices. However, if public protective actions are taken, there should be a simulation of the siren activation at that time.</p>	EC	CEO CPD		

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MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
			GC-1 GT-1	08:30	<p>##CONTROLLER NOTES## The Town of Groton and City of Groton will do a school bus demonstration off-line from the scenario. The time has not been pre- established and their Host Community of Norwich will not participate in it.</p>	EC	CEO CFD		

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MASTER SCENARIO			CONTROLLER'S MESSAGE					PLAYER'S ACTION	
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
0:30	08:30 MNPS	<p>The T&U electricians in Unit 1 switchyard inadvertently open 5T2 and 6T2 breakers between the 345 KV B Bus and the switchyard which results in turbine generator load reject.</p> <p>The turbine protection system senses the load reject and throttles back the turbine control valves to prevent overspeed.</p> <p>The turbine protection system also allows a select number of reactor control rods (13) to be inserted into the core (SRI).</p> <p>Blowby leakage begins to accumulate in scum discharge volume.</p>	GC-2 OL-1	08:30	<p>***CONTROLLER NOTE*** The City of Groton and Town of Old Lyme may do a decontamination drill. This will be done off-line from the scenario and no pre-established time has been set for these demonstrations.</p>	EC	CEO CPD		

SAS

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MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
0:31	08:31 MNPS	Instrument air dryer desiccant cartridge failure causes loose desiccant to travel through instrument air lines and collect at various valve controllers. This causes instrument air to become isolated from MSIVs and held temporarily only open by the accumulators.							
0:35	08:35 MNPS	SS notifies (the Duty Officer (DO) of plant conditions.							
0:54	08:54 MNPS	Discharge volume vent and drain valves close due to desiccant fouling in the instrument air system.							

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MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
0:55	08:55 RMP5	<p>MSIVs close due to accumulator bleed off.</p> <p>Reactor scram signal generated on MSIV closure.</p> <p>Control rods do not insert due to scram discharge volume being hydraulically locked.</p> <p>Vessel pressure increases and begins blowing down to Torus through Safety Relief Valves (SRVs).</p> <p>Recirc pumps trip.</p> <p>Motor operator to main steam drain valves burns out upon operator initiation.</p>							

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MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
0:56	08:56 MPS	Iso Condenser and ECCS systems function as designed. However they can not provide enough of a heat sink for the reactor. Torus pressure and temperature begin to trend upwards slowly.							
1:10	09:10 MPS	"B" train of SLC system started by operators immediately fails. No SLC injection. Manual and ATWS scrams fail to insert rods.							
1:15	09:15 MPS	Shift Supervisor declares a SITE AREA EMERGENCY, posture code Charlie-Two based on scram signal and plant > 3% power (ATWS). OSS sounds station evacuation alarm and provides instructions to station personnel. Predetermined evacuees proceed to the assembly areas.							

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MASTER SCENARIO			CONTROLLER'S MESSAGE					PLAYER'S ACTION	
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
1:25	09:25 HNPS	SSSA transmits the radiopager message for SITE AREA EMERGENCY.						09:25 CEO, (ALL)	Receive radiopager notification that an incident class SITE AREA EMERGENCY, Posture Code Charlie-Two is in progress at MP.
								CEO (ALL)	Telephones MP to complete IRF and to acknowledge receipt of notification.
1:30	09:30 HNPS	Director, Managers and support staff begin to arrive at the Emergency Operations facility (EOF) and the Corporate Emergency Operations Center (CEOC) to assume emergency response duties.	OL-2	09:30	**** COMMAND **** Send a bus to transport evacuees to New Haven by routes specified on the bus routing map.	EC	CEO		
	HNPS	Reactor water level lowered to the top of active fuel. Some fuel rods (1.5%) begin to lose clad integrity due to water level fluctuations.							
	State Local	State and local officials will begin activation of their EOC's and notification of their staff.							

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MASTER SCENARIO			CONTROLLER'S MESSAGE					PLAYER'S ACTION	
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
1:35	09:35							09:35 CEO (ALL)	Notify key agency heads that an SITE AREA EMERGENCY, Posture Code Charlie-Two is in progress at MP. May direct some personnel to report to the Town EOC, or to their duty stations.
1:36	09:36							09:36 CEO (ALL)	Reports to and activates the town EOC. Notifies town officials.
1:41	09:41							09:41 CPD (ALL)	Direct Civil Preparedness and other applicable personnel to report to EOC/duty stations, issue dosimeters to emergency workers, and prepare radiological equipment for use.
								Key Agency Heads (ALL)	Direct Constables, Fire Department Personnel, Ambulance Service Personnel, Highway Department, School Department and Health Department personnel to go on standby status.
1:42	09:42							09:42 CPD (ALL)	Initiates use of status boards in the EOCs.
1:43	09:43							09:43 CEO (ALL)	Consult with State EOC via Area Coordinator and the CPD to determine protective actions to be taken.
1:45	09:45 MNPS	The EOC is fully activated. The DSEO relieves the SS of the DSEO responsibilities.						09:45 CEO, CPD (ALL)	Local officials begin making call-outs for staff to support the EOC operations.

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MASTER SCENARIO			CONTROLLER'S MESSAGE					PLAYER'S ACTION	
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
	State	State begins coordination with local communities on 1st EBS concerning Site Area Emergency & simulated siren activation. State DEP begins deployment of Field Teams.							
2:00	10:00 HNPS	Chemistry sample requested.	NH-1	10:00	###COMMAND### Begin your demonstration of EOC activation and set up of your congregate care facilities. Note: Ensure staff knows that this is done offline from the actions you would really take in order to make a demonstration.	EC	CEO	10:00 CEO (ALL)	EPZ communities establish contact with adjacent communities and determine ways to deal with rumors. Maintain contact with State DEN.
	CEOC	DCEO dispatches a NU executive representative and staff to go to the State EOC and provide State communication interface.						NH	The City EOC is activated for the special off-line drill with Old Lyme.

MP EXERCISE - OCTOBER 4, 1989
LOCAL EXERCISE CONTROLLER GUIDE

MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
	CEOC	<p>###RUMOR### This is WFSB 3. We heard from special sources that there is something going on at MP and we need details for a story we are writing. ###RUMOR###</p>						NH Disp	<p>The New Haven Dispatch receives a request from the State OEM to activate New Haven's Congregate Care Facility.</p>
								NH	<p>The City of New Haven will be activated by State OEM to demonstrate their ability to monitor and provide relocation to a designated number of evacuees (offline Demonstration). Note: This is done offline from the actions they would really take in order to make a demonstration to FEMA.</p>

MP EXERCISE - OCTOBER 4, 1969
LOCAL EXERCISE CONTROLLER GUIDE

MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCEN-ARID TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
2:05	10:05 MNPS	<p>***PUBLIC INQUIRY***</p> <p>A local resident who knows someone at the plant has heard there are problems at MP and has started calling neighbors to warn them to the possibility of an evacuation of the area. One of the neighbors has called and wants to know if this is just a rumor or is something actually wrong.</p> <p>***PUBLIC INQUIRY***</p>							
2:10	10:10 CEOC	<p>***RUMOR***</p> <p>This is MJC. What is happening at MP? Is there an accident? What is NU doing? Have federal officials been notified?</p> <p>***RUMOR***</p>	NH-2	10:10	<p>***CONTINGENCY***</p> <p>Set up communications with the State OEM area office in Meriden.</p>	FC	CEO		
2:20	10:20 MNPS	<p>An emergency repair team is manned and deployed to investigate the problem with the Instrument Air desiccant fouling.</p>							

MP EXERCISE - OCTOBER 4, 1989
LOCAL EXERCISE CONTROLLER GUIDE

MASTER SCENARIO			CONTROLLER'S MESSAGE					PLAYER'S ACTION	
SCEN- ARI- TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
2:25	10:25							10:25 CEO (ALL)	Local communities receive updated information on plant status and current meteorology through State OEM.
2:30	10:30 MNPS	Emergency repair teams are deployed to investigate instrument air problem and to complete repairs to the "A" SLC pump.	NH-3	10:30	***CONTINGENCY*** Set up Southern's decontamination facility and prepare the facility to accept evacuees. Coordinate with the Red Cross.	EC	CEO	10:30 CEO OL	Old Lyme sends a bus to pick up evacuees performing an offline drill with New Haven.
	State	***RUMOR*** Residents are calling in local & state officials that a "grayish blue" mist is coming from plant. Please verify. ***RUMOR***	HV-1	10:30	***COMMAND*** Send a bus to transport evacuees to East Hartford by routes specified on the bus routing map.	EC	CEO	CEO HV	Montville sends a bus to pick up evacuees performing an offline drill with East Hartford.
	MNPS CEOC	TSC and Corporate TSC discuss potential core damage and loss of containment if ATWS continues as well as corrective actions.						NH	New Haven is activated to demonstrate its capability for congregate care and evacuee registration.

MP EXERCISE - OCTOBER 4, 1989
LOCAL EXERCISE CONTROLLER GUIDE

MASTER SCENARIO			CONTROLLER'S MESSAGE				PLAYER'S ACTION		
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
2:39	10:39 MNPS	<p>***PUBLIC INQUIRY***</p> <p>A local nursing home administrator has called to confirm a story heard on a news station that reported major nuclear fuel problems at the Millstone Nuclear Power Station "Which could result in health problems to the public".</p> <p>The report indicated that the information was received from a "Spokesperson" from one of the towns near the plant and that reports of the "accident" had not been confirmed, but that access to the nuclear plant had been stopped. Is this true?</p> <p>***PUBLIC INQUIRY***</p>	MV-2	10:39	<p>***** COMMAND *****</p> <p>You have heard reports from local residents that a news report on WVTI is indicating that there is a massive accident at Millstone and that local officials are ordering the public to evacuate. The national guard is supposedly being mobilized.</p>	EC	CEO	10:39 MV	Respond to rumor.
2:45	10:45 MNPS	LPCI shutdown due to Net Positive Suction Head curves (NPSH).							

HP EXERCISE - OCTOBER 4, 1989
LOCAL EXERCISE CONTROLLER GUIDE

MASTER SCENARIO			CONTROLLER'S MESSAGE					PLAYER'S ACTION	
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
	CEOC	<p>***RUMOR***</p> <p>The wife of a construction worker calls to ask about her husband. She heard there is an accident and is very concerned.</p> <p>***RUMOR***</p>							
3:00	11:00 MNPS	Torus begins to boil.	EH-1	11:00	<p>***COMMAND***</p> <p>Begin your demonstration of EOC activation and set up of your congregate care facilities.</p> <p>Note: Ensure staff knows that this is done offline from the actions you would really take in order to make a demonstration.</p>	EC	CEOC	11:00 EH	The town EOC is activated for the special off-line drill with Montville.
	MNPS CEOC	Corporate and Station EOC staff discuss possible venting options.						EH Disp	The East Hartford Dispatcher receives a request from the State OEM to activate East Hartford's Congregate Care Facility.

MP EXERCISE - OCTOBER 4, 1989
LOCAL EXERCISE CONTROLLER GUIDE

MASTER SCENARIO			CONTROLLER'S MESSAGE					PLAYER'S ACTION	
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
	HNPS	There is an FBI agent with proper I.D. at the gate wanting access to the EDF.						EH	The Town of East Hartford will be activated by State OEM to demonstrate their ability to monitor and provide relocation to a designated number of evacuees (offline Demonstration). Note: This is done offline from the actions they would really take in order to make a demonstration to FEMA.
3:10	11:10 State	State sets up Media Center.	EH-2	11:10	***CONTINGENCY*** Set up communications with the State OEM area office in Rocky Hill.	EC	CEO		
3:20	11:20 HNPS	Open all (6) SRVs due to heat capacity temperature limit.							
3:30	11:30 CEOC	***RUMOR*** Radiation is being released and the plant is out of control. ***RUMOR***	EH-3	11:30	***CONTINGENCY*** Set up the High School decontamination facility and prepare the facility to accept evacuees. Coordinate with the Red Cross.	EC	CEO	11:30 EH	East Hartford is activated to demonstrate its capability for congregate care and evacuee registration.

MP EXERCISE - OCTOBER 6, 1969
LOCAL EXERCISE CONTROLLER GUIDE

MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
3:31	11:31 HMPS	<p>***PUBLIC INQUIRY***</p> <p>A local radio station called. They have received word that the access road to the plant has been blocked and cars are being turned away from the area. Has there been some type of accident and/or release of radiation that is being kept secret from the public?</p> <p>***PUBLIC INQUIRY***</p>	ALL-2	11:30	<p>***COMMAND***</p> <p>Establish contact with Area OCP HQ in order to synchronize activation of PAS at 11:40 a.m. and the issuance of EBS instructions.</p>	EC	CEO		
3:35	11:35 HMPS	<p>NPC Site team arrives and is briefed on the status of events. NRC dispatches a person to Berlin and State EOC. NRC establishes contact over ENS.</p>							

MP EXERCISE - OCTOBER 4, 1989
LOCAL EXERCISE CONTROLLER GUIDE

MASTER SCENARIO			CONTROLLER'S MESSAGE					PLAYER'S ACTION	
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
3:40	11:40		EN-4	11:40	<p>***COMMAND***</p> <p>You have just been informed that an ABC and CBS news crew will be shortly arriving at your EOC. Set up your plan for handling the situation and coordination with the State.</p>	EC	CEO	11:40 EBS	State EBS and activation of Public Alerting System takes place within EPZ.
4:00	12:00 HNPS	DSED may declare a GENERAL EMERGENCY, posture code Bravo.							
4:05	12:05 CEOC	NRC arrives at Berlin EOC.							
4:12	12:12 HNPS	<p>***PUBLIC INQUIRY***</p> <p>The wife of one of the employees has called in to inquire into the whereabouts of her husband. It seems that he was supposed to call her at 10:00 but hasn't. She wants to know his whereabouts and if anyone is unaccounted for at the plant. His name is Walter H. Buch.</p> <p>***PUBLIC INQUIRY***</p>							

MP EXERCISE - OCTOBER 4, 1989
LOCAL EXERCISE CONTROLLER GUIDE

MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCENARIO TIME	CLOCK TIME/ TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ TIME/ PLAYER	SUMMARY OF ACTIONS
4:15	12:15 MIPS	SSA transmits the radiopager message for GENERAL EMERGENCY.	EH-5	12:15	<p>***COMMAND*** Several residents have called you requesting to know if the evacuees are a radiation hazard and what is the Police doing to quarantine them. Please respond.</p>	EC	CEO	12:15 CEO (ALL)	Receive radiopager notification of GENERAL EMERGENCY, Posture Code BRAVO, in progress at NP.
	CEDC	<p>***RUMOR*** A Waterford resident has heard MP employees speak about an accident at the plant. She wants to know what is going on and if it is safe to stay in the area. ***RUMOR***</p>							

MP EXERCISE - OCTOBER 4, 1989
LOCAL EXERCISE CONTROLLER GUIDE

MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
4:20	12:20 State	State & locals coordinate on protective action measures for public & coordinate issuance of EBS message. NBC arrives at State EOC to set up liaison function and media liaison. State DEP & MU discuss the potential consequences of doses as a result of venting and/or containment failure.						12:20 CEO (ALL)	Telephone MP to obtain additional information, complete the ICF and acknowledge receipt of notification.
4:24	12:24							12:26 CEO (ALL)	Establish communications with town/city agencies, neighboring towns, and DEM Area Coordinator.
4:25	12:25		MV-3	12:25	see COMMANDERS Call the State EOC to ask if it is true that farm animals should be put on stored feed and that fields in the area must be decontaminated prior to planting.	EC	CEO	12:25 MV	Brief agency heads on new developments at MP. Confer with the State Area Coordinator and neighboring towns regarding protective actions. Respond to rumor.

MP EXERCISE - OCTOBER 4, 1989
LOCAL EXERCISE CONTROLLER GUIDE

MASTER SCENARIO			CONTROLLER'S MESSAGE					PLAYER'S ACTION	
SCENARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
4:30	12:30		EH-6	12:30	<p>***** COMMAND ***** RUMOR One radio station is carrying reports that East Hartford is not staffed to respond to the evacuation around Millstone. Prepare response and communicate to the State rumor control at 246-1819. RUMOR</p>	EC	CEO	12:30 CEO	<p>Take shelter within the two-mile EPZ. Simulate notifying the State Warning Point to issue prepared messages on the Emergency Broadcast System (EBS). Simulate notifying the public within the affected area via the Civil Preparedness Public Alerting System. Note: The actual test of the EBS and PAS will be at 11:40.</p>
4:40	12:40 State	State executes PARs for 2-mile evacuation & 5-mile down wind shelter & discusses other PARs.							
5:00	13:00 MHPS	<p>Torus pressure reaches 63 psig.</p> <p>Either the players decide to vent the Torus to prevent containment failure</p> <p>OR</p> <p>a message will be given to the players stating that their decision was to vent at this time.</p>							EH Respond to rumor.

MP EXERCISE - OCTOBER 4, 1989
LOCAL EXERCISE CONTROLLER GUIDE

MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
5:15	State	MJ & State discuss need for additional PARs or need to consider longer term extensions of PAR distances.						13:15 CEO (ALL)	Receive radiopager notification of updated plant information.
5:29	MNPS	Repair team completes work on "A" SLC pump.							
5:30	MNPS	"A" SLC pump motor has been repaired and operators start it. Reactor begins to shutdown.							
6:00	MNPS	Reactor is now fully shutdown.							
6:30	MNPS	Pressure in the Torus is reduced. Release is stopped.							
	MNPS	Emergency repair team removes desiccant out of MSIV air lines.							

MP EXERCISE - OCTOBER 4, 1989
LOCAL EXERCISE CONTROLLER GUIDE

MASTER SCENARIO		CONTROLLER'S MESSAGE				PLAYER'S ACTION			
SCEN- ARIO TIME	CLOCK TIME/ PLACE	KEY EVENT	MSG #	TIME	MESSAGE CONTENT	FROM	TO	CLOCK TIME/ PLAYER	SUMMARY OF ACTIONS
	CEOC	<p>###RUMOR### A East Lyme resident called and said that WTNH (channel 8) news has reported that a Chernobyl-like accident is occurring at the Millstone plant and that residents are fleeing the area.</p> <p>###RUMOR###</p>							
6:51	14:31 MIPS	Operators open MSIVs. An adequate heat sink is established.							
7:00	15:00 MIPS	Exercise is terminated.							
7:05	15:05 MIPS	SSSA transmits the Exercise closeout message.						15:05 CED (ALL)	Receive radiopager message terminating the exercise.
7:30	15:30							15:30 (ALL)	Critique/discuss exercise emergency response.
8:00	16:00 MIPS	Exercise Critique in the EDF.							

12.C.1 CONTROLLER - SPECIFIC MESSAGES

THIS IS A DRILL

Haynes

CONTROLLER MESSAGE FORM

MESSAGE # DSEO
1

CLOCK TIME: 09:45

FROM: DSEO
EC

TO: DSEO

CONTINGENCY

MESSAGE: THIS IS A DRILL

***** CONTINGENCY *****

Announce over the EOF page and to
the MCRO that you have assumed
the position of Director of
Station Emergency Operations.

THIS IS A DRILL

THIS IS A DRILL

THIS IS A DRILL

CONTROLLER MESSAGE FORM

MESSAGE # DSEO
3

CLOCK TIME: 12:50

FROM: CR
EC

TO: DSEO

MESSAGE: THIS IS A DRILL

**** CONTINGENCY *****

Direct the MCRO to prepare to
vent the torus at 13:00.

THIS IS A DRILL

CONTINGENCY

12.C.2 SUCCESS PATH GUIDE

**EMERGENCY EXERCISE
SUCCESS PATH ACTIVITIES**

Activity	Probable Start to Completion Times	Probable Repair/ERT Personnel	Scenario Activity/ Corrective Action Allowed	Success Path Comments	Responsible Controller
1. SLC pump "A" repair	08:00-13:40	2 - Mechanics 1 - H. P. Tech.	Yes	<ul style="list-style-type: none"> • Will be a success path • Augmented by OSC • Controllers will delay until 1355 	C. Maxson
2. Alternate SLC injection	08:30-End	2 - Operators	No	<ul style="list-style-type: none"> • Good idea • Controllers will allow up to point of preparing to inject, then stop 	P. Benyeda
3.a. Instrument Air desiccant problem	08:35-14:45	2 - Mechanics	Yes	<ul style="list-style-type: none"> • Controllers will delay until 1445 	D. Yapchanyk
3.b. MSIV opening	08:35-14:45	2 - Mechanics	Yes	<ul style="list-style-type: none"> • MSIV's will not be opened until the return of Instrument Air. See 3.a. 	D. Yapchanyk
4. Scram Instrument volume drains	08:55-End	2 - Operators	No	<ul style="list-style-type: none"> • Good idea • Cannot let happen until Instrument Air is returned. See 3.a. 	P. Benyeda
5. SLC pump "B" repair	08:38-End	1 - Mechanics 1 - Electrician	No	<ul style="list-style-type: none"> • Will not be a success path • Major repair job 	C. Maxson
6. MS05 motor repair	08:57-End	2 - Mechanics	No	<ul style="list-style-type: none"> • Will not be a success path • Valve motor inaccessible 	P. Benyeda

DETAILED HARDWARE SCENARIO

1. Mechanical Malfunction

A. "A" Standby Liquid Control Pump

The "A" SLC pump is out of service for replacement of all three discharge valve cover gaskets. The leakage is so excessive that running the pump will not inject any flow to vessel.

At the start of the drill, two mechanics will be in the process of beginning the work to remove and replace the old gaskets in accordance with *Procedure MP726.2*. They will be supplied with an approved work order and package containing all necessary parts and tools. As no contact with the real SLC pump "A" will be allowed, the workers will be brought down to the railroad access bay in the Reactor Building where a substitute pump will be located. This pump is not identical to the real pump, but similar enough to enable the same kind of work to be performed on it.

Sometime between 08:30 and 08:55, controllers will inform the workers that they inadvertently snapped a bolt on the pump. The response by the workers will be to stop the job and notify their job supervisor and be on standby to resume the job after a new work order has been prepared. A controller will simulate the job supervisor's role in re-assessing the job and rewriting the work order.

Once the station evacuation alarm is sounded, the workers will proceed to the Operations Support Center (OSC) by procedure. Later in the scenario, it will become extremely important to return the "A" SLC pump to service. The Manager of Operations Support (MOSC) will expedite the repair process by completing the revised work order and sending the workers back down to the job. A replacement stud will have to be located in the warehouse and tools will be needed to drill the old stud out and tap in the new one.

Additionally, all emergency condition precautions will have to be considered before they are dispatched. They include: RWP's, PC's, respirators, emergency dosimetry, possible HP Tech accompaniment, special briefings, etc.

Once dispatched, the team will return to the mockup pump and proceed with the revised work order plan. Controllers will actually have them remove the gasket covers and simulate the amount of time it would take to replace the postulated broken stud. The job will be completed by 13:30 and the pump returned to service soon thereafter.

At some time during the course of events, these players may be requested to inspect the "B" SLC pump which fails at 08:56. Controllers will provide the required feedback to allow their assessment to be performed.

B. Scram Instrument Discharge Volumes Hydraulically Locked

Unknown to operators, after the select rod insertion evolution the scram instrument volumes water level increases as a result of valve leakage following the select rod insertion. The level detection circuitry for the scram instrument volumes does not detect the level increase until it fills and thereby hydraulically locking the scram discharge valves.

DETAILED HARDWARE SCENARIO

2. Electrical Malfunction

A. "B" Standby Liquid Control Pump

Following the ATWS, the "B" SLC pump is manually started to borate the core. However, a connecting rod in the pump fails. The pump seizes causing a phase to phase motor winding failure, resulting in tripping the breaker.

Electricians are dispatched to investigate the failure of the "B" pump. The electricians go to the breaker compartment of the MCC (MCC * E-1 (2-1) compt. #2) and identify the breaker has tripped. Subsequent meggar tests of the motor terminals reveals a phase to ground winding failure. Replacement of the "B" pump motor with the motor from the "A" pump is discussed; however, dismissed due to the magnitude of the job, relative to fixing the "A" pump. Also, it is identified that the pump could be the cause of the motor failure.

B. MS05 Motor Failure

When operators attempt to open main steam drain valves using MS05, the motor experiences high current, damaging the motor windings and disabling the motor. Operation of the main steam drain valves is prevented. MS05 is located inside the dry well, thereby restricting access to MS05 prior to reactor shutdown.

3. Reactor Fuel

A small percentage of rods fail (~ 1.5%) following water level reduction to the Top of Active Fuel (TAF) to two thirds core height level bands called for in the Emergency Operating Procedures (EOP's). This small fraction of fuel failure results from local dry out of high-power rods which uncover while maintaining core-wide water level in the 2/3 core height to TAF band.

12.D. PLANT PARAMETER DATA

START TIME -----	STOP TIME -----	TYPE ----	MESSAGE -----
00:00	00:05	COMMENT	Start Exercise
00:30	00:32	COMMENT	Operators observ load reject and select rod insert.
00:31	00:32	COMMENT	Operators run recirc pumps back to minimum speed.
00:55	00:56	COMMENT	All MSIVs Closed. All SRVs open.
00:56	00:57	COMMENT	Iso-Condenser initiated. APR indicates 2 SRVs open
01:21	01:23	COMMENT	Group 2 Isolation on Low Water Level.
02:15	02:16	COMMENT	Operators throttle back on LPCI flow.
02:45	02:46	COMMENT	Operators secure LPCI due to NPSH problems.
03:00	03:02	COMMENT	Operators begin vessel blowdown
05:00	05:02	COMMENT	Operators jumper RB ventilation and open 18" Torus vent.
05:30	05:31	COMMENT	Operators start "A" SLC Pump
06:00	06:02	COMMENT	Rx is fully shutdown
06:30	06:32	COMMENT	Operators open MSIVs
07:00	07:05	COMMENT	End Exercise

	NO. OF SRVs OPEN (0-6)	NO. OF CORE SPRAY PMPS (R/A)	CS A FLOW RATE (GPM)	CS B FLOW RATE (GPM)	NO. OF LPCI PMPS (R/A)	A LPCI INJECTION FLOW RATE (GPM)	B LPCI INJECTION FLOW RATE (GPM)
ALARM L	-1	-1	-1	-1	-1	-1	-1
ALARM H	99	9999	6001	6001	9999	9999	9999
SCALE L	0	0	0	0	0	0	0
SCALE H	99	9999	6000	6000	9999	9999	9999
08:00	0	0/2	0	0	0/4	0	0
08:15	0	0/2	0	0	0/4	0	0
08:30	0	0/2	0	0	0/4	0	0
08:31	0	0/2	0	0	0/4	0	0
08:35	0	0/2	0	0	0/4	0	0
08:45	0	0/2	0	0	0/4	0	0
08:50	0	0/2	0	0	0/4	0	0
08:55	6	0/2	0	0	4/0	9000	9000
08:55:10	6	0/2	0	0	4/0	9000	9000
08:56	3	0/2	0	0	4/0	9000	9000
09:00	3	0/2	0	0	4/0	9000	9000
09:05	3	0/2	0	0	4/0	9000	9000
09:15	3	0/2	0	0	4/0	9000	9000
09:30	1	2/0	0	0	4/0	9000	9000
09:45	1	2/0	0	0	4/0	9000	9000
10:00	1	2/0	0	0	4/0	9000	9000
10:15	1	0/2	0	0	4/0	8000	8000
10:30	1	0/2	0	0	4/0	6000	6000
10:45	1	0/2	0	0	0/4	0	0
11:00	3	0/2	0	0	0/4	0	0
11:15	5	0/2	0	0	0/4	0	0
11:30	6	0/2	0	0	0/4	0	0
11:45	6	0/2	0	0	0/4	0	0
12:00	6	0/2	0	0	0/4	0	0
12:15	6	0/2	0	0	0/4	0	0
12:30	6	0/2	0	0	0/4	0	0
12:45	6	0/2	0	0	0/4	0	0
13:00	6	0/2	0	0	0/4	0	0
13:10	6	0/2	0	0	0/4	0	0
13:15	6	0/2	0	0	0/4	0	0
13:20	6	0/2	0	0	0/4	0	0
13:30	6	0/2	0	0	0/4	0	0
13:40	6	0/2	0	0	0/4	0	0
13:45	6	0/2	0	0	0/4	0	0
13:50	6	0/2	0	0	0/4	0	0
14:00	0	0/2	0	0	0/4	0	0
14:15	0	0/2	0	0	0/4	0	0
14:30	0	0/2	0	0	0/4	0	0
14:45	0	0/2	0	0	0/4	0	0
15:00	0	0/2	0	0	0/4	0	0

15:40 27-SEP-1989

	A LPCI TOTAL SYS FLOW (%)	B LPCI TOTAL SYS FLOW (%)	NO. OF EMER. SVC WATER PMPS (R/A)	DRYWELL PRESSURE LOW RANGE (PSIG)	DRYWELL TEMP (F)	SUPPRESS CHMBER PRESS LOW RANGE (PSIG)	DRYWELL BULK TEMP (F)
ALARM L	-1	-1	-1	-1.00	-1	-1.00	-1
ALARM H	101	101	101	2.00	999	2.00	999
SCALE L	0	0	0	0.00	0	-0.15	0
SCALE H	100	100	100	7.00	999	5.00	999
08:00	0	0	0/4	0.90	132	0.00	132
08:15	0	0	0/4	0.90	132	0.00	132
08:30	0	0	0/4	0.90	132	0.00	132
08:31	0	0	0/4	0.90	132	0.00	132
08:35	0	0	0/4	0.90	129	0.00	129
08:45	0	0	0/4	0.85	127	0.00	127
08:50	0	0	0/4	0.85	127	0.00	127
08:55	50	50	4/0	0.85	127	0.00	127
08:55:10	50	50	4/0	0.86	127	0.00	127
08:56	50	50	4/0	0.90	127	0.00	127
09:00	50	50	4/0	1.00	128	0.00	128
09:05	50	50	4/0	1.00	128	0.00	128
09:15	50	50	4/0	1.10	128	0.00	128
09:30	50	50	4/0	1.20	128	0.20	128
09:45	50	50	4/0	1.25	129	0.25	129
10:00	50	50	4/0	1.35	129	0.35	129
10:15	44	44	4/0	1.40	131	0.40	131
10:30	33	33	4/0	1.40	133	0.40	133
10:45	0	0	0/4	1.45	136	1.00	136
11:00	0	0	0/4	1.50	138	1.00	138
11:15	0	0	0/4	6.50a	140	6.00s	140
11:30	0	0	0/4	12.50s	160	12.00s	160
11:45	0	0	0/4	17.50s	170	17.00s	170
12:00	0	0	0/4	26.00s	190	25.50s	190
12:15	0	0	0/4	34.00s	200	33.50s	200
12:30	0	0	0/4	42.00s	210	41.50s	210
12:45	0	0	0/4	50.00s	240	49.50s	240
13:00	0	0	0/4	57.00s	260	56.50s	260
13:10	0	0	0/4	60.00s	275	59.17s	275
13:15	0	0	0/4	61.00s	275	60.50s	275
13:20	0	0	0/4	65.00s	276	63.50s	276
13:30	0	0	0/4	70.00s	277	69.50s	277
13:40	0	0	0/4	72.00s	280	70.83s	280
13:45	0	0	0/4	72.00s	280	71.50s	280
13:50	0	0	0/4	71.00s	277	69.17s	277
14:00	0	0	0/4	65.00s	276	64.50s	276
14:15	0	0	0/4	54.00s	260	53.50s	260
14:30	0	0	0/4	41.00s	230	40.50s	230
14:45	0	0	0/4	35.00s	210	34.50s	210
15:00	0	0	0/4	28.00s	195	27.50s	195

	DRYWELL/ TORUS DELTA P	ISO CONDENSER (A/U)	ISO CONDENSER INITIATED (Y/N)	ISO COND TUBE SIDE PRESS (PSIG)	ISO COND SHELL SIDE TEMP (F)	ISO CONDENSER LEVEL (FT)	MSIVs OPEN/ CLOSED (O/C)
ALARM L	-1.0	-1	-1	900	-1	5.8	-1
ALARM H	99.0	99	99	1050	120	8.3	99
SCALE L	0.0	0	0	900	0	0.0	0
SCALE H	99.0	99	99	1050	250	11.0	99
08:00	1.0	A	N	1035	65	6.5	OPEN
08:15	1.0	A	N	1035	65	6.5	OPEN
08:30	1.0	A	N	1035	65	6.5	OPEN
08:31	1.0	A	N	1020	65	6.5	OPEN
08:35	1.0	A	N	960	65	6.5	OPEN
08:45	1.0	A	N	960	65	6.5	OPEN
08:50	1.0	A	N	960	65	6.5	OPEN
08:55	1.0	A	Y	960	65	6.5	CLSD
08:55:10	1.0	A	Y	1095s	67	6.5	CLSD
08:56	1.0	A	Y	1000	80	6.5	CLSD
09:00	1.0	A	Y	1000	139a	6.4	CLSD
09:05	1.0	A	Y	1000	212a	6.4	CLSD
09:15	1.0	A	Y	1000	212a	6.2	CLSD
09:30	1.0	A	Y	1000	212a	6.0	CLSD
09:45	1.0	A	Y	1000	212a	6.3	CLSD
10:00	1.0	A	Y	1000	212a	6.0	CLSD
10:15	1.0	A	Y	1000	212a	6.3	CLSD
10:30	1.0	A	Y	1000	212a	6.0	CLSD
10:45	1.0	A	Y	1000	212a	6.3	CLSD
11:00	0.5	A	Y	800s	212a	6.0	CLSD
11:15	0.5	A	Y	400s	212a	6.3	CLSD
11:30	0.5	A	Y	250s	212a	6.0	CLSD
11:45	0.5	A	Y	250s	212a	6.3	CLSD
12:00	0.5	A	Y	250s	212a	6.0	CLSD
12:15	0.5	A	Y	250s	212a	6.3	CLSD
12:30	0.5	A	Y	250s	212a	6.0	CLSD
12:45	0.5	A	Y	250s	212a	6.3	CLSD
13:00	0.5	A	Y	250s	212a	6.0	CLSD
13:10	0.5	A	Y	250s	212a	6.4	CLSD
13:15	0.5	A	Y	250s	212a	6.3	CLSD
13:20	0.5	A	Y	250s	212a	6.2	CLSD
13:30	0.5	A	Y	250s	212a	6.0	CLSD
13:40	0.5	A	Y	117s	212a	6.4	CLSD
13:45	0.5	A	Y	50s	212a	6.3	CLSD
13:50	0.5	A	Y	50s	212a	6.2	CLSD
14:00	0.5	A	Y	50s	212a	6.0	CLSD
14:15	0.5	A	N	50s	212a	6.3	CLSD
14:30	0.5	A	N	50s	200a	6.0	CLSD
14:45	0.5	A	N	50s	150a	6.5	OPEN
15:00	0.5	A	N	50s	100	6.5	OPEN

	MAIN STM DRAINS OPEN/CLOS (O/C)	SUPPRESS POOL WATER TEMP (F)	RX VSL LVL WIDE RANGE YARWAY-A (IN.)	RX VSL LVL WIDE RANGE YARWAY-B (IN.)	RX VSL PRESS WIDE RANGE (PSIG)	NO. OF SHUTDOWN COOL PMPs (R/A)	RWCU SYSTEM OPERATING (Y/N)
ALARM L	-1	-1.0	-301	-301	-1	-1	-1
ALARM H	99	85.0	61	61	1501	9999	99
SCALE L	0	0.0	-340	-340	0	0	0
SCALE H	99	300.0	60	60	1500	9999	99
08:00	CLSD	81.0	60	60	1035	0/2	Y
08:15	CLSD	81.0	60	60	1035	0/2	Y
08:30	CLSD	81.0	60	60	1035	0/2	Y
08:31	CLSD	81.0	60	60	1020	0/2	Y
08:35	CLSD	81.0	60	60	960	0/2	Y
08:45	CLSD	81.0	60	60	960	0/2	Y
08:50	CLSD	81.0	60	60	960	0/2	Y
08:55	CLSD	81.0	60	60	960	0/2	Y
08:55:10	CLSD	82.0	60	60	1095	0/2	Y
08:56	CLSD	85.0a	60	60	1000	0/2	N
09:00	CLSD	90.0a	60	60	1000	0/2	N
09:05	CLSD	100.0a	60	60	1000	0/2	N
09:15	CLSD	110.0a	60	60	1000	0/2	N
09:30	CLSD	120.0a	-175	-175	1000	0/2	N
09:45	CLSD	130.0a	-173	-173	1000	0/2	N
10:00	CLSD	145.0a	-172	-172	1000	0/2	N
10:15	CLSD	165.0a	-170	-170	1000	0/2	N
10:30	CLSD	180.0a	-168	-168	1000	0/2	N
10:45	CLSD	195.0a	-167	-167	1000	0/2	N
11:00	CLSD	212.0a	-165	-165	800	0/2	N
11:15	CLSD	230.0a	-160	-160	400	0/2	N
11:30	CLSD	245.0a	-160	-160	250	0/2	N
11:45	CLSD	255.0a	-160	-160	250	0/2	N
12:00	CLSD	270.0a	-150	-150	250	0/2	N
12:15	CLSD	281.0a	-150	-150	250	0/2	N
12:30	CLSD	289.0a	-145	-145	250	0/2	N
12:45	CLSD	295.0a	-145	-145	250	0/2	N
13:00	CLSD	296.0a	-140	-140	250	0/2	N
13:10	CLSD	297.0a	-130	-130	250	0/2	N
13:15	CLSD	300.0a	-130	-130	250	0/2	N
13:20	CLSD	302.0s	-130	-130	250	0/2	N
13:30	CLSD	306.0s	-130	-130	250	0/2	N
13:40	CLSD	307.0s	-130	-130	117	0/2	N
13:45	CLSD	307.0s	-121	-121	50	0/2	N
13:50	CLSD	306.0s	-106	-106	50	0/2	N
14:00	CLSD	302.0s	-77	-77	50	0/2	N
14:15	CLSD	295.0a	-24	-24	50	0/2	N
14:30	CLSD	290.0a	30	30	50	0/2	N
14:45	CLSD	280.0a	30	30	50	0/2	N
15:00	CLSD	270.0a	30	30	50	0/2	N

	A RECIRC PMP SPEED (%)	B RECIRC PMP SPEED (%)	RX COOLANT TEMP (F)	RX POWER (%)	RX VESSEL NARROW RANGE PRESSURE (PSIG)	RX VESSEL LEVEL NARROW RANGE YARWAY-A	RX VESSEL LEVEL NARROW RANGE YARWAY-B
ALARM L	-1	-1	-1	-1	900	-20	-20
ALARM H	101	101	601	101	1050	40	40
SCALE L	0	0	0	0	900	-50	-50
SCALE H	100	100	600	100	1050	50	50
08:00	88	88	550	100	1035	30	30
08:15	88	88	550	100	1035	30	30
08:30	88	88	550	100	1035	30	30
08:31	88	88	542	88	1020	36	36
08:35	32	32	540	42	960	30	30
08:45	32	32	540	40	960	30	30
08:50	32	32	540	40	960	30	30
08:55	32	32	540	40	960	30	30
08:55:10	32	32	557	40	1096s	30	30
08:56	32	32	548	38	1000	30	30
09:00	0	0	548	35	1000	30	30
09:05	0	0	548	35	1000	30	30
09:15	0	0	548	35	1000	30	30
09:30	0	0	548	12	1000	-50a	-50a
09:45	0	0	548	12	1000	-50a	-50a
10:00	0	0	548	12	1000	-50a	-50a
10:15	0	0	548	12	1000	-50a	-50a
10:30	0	0	548	12	1000	-50a	-50a
10:45	0	0	548	12	1000	-50a	-50a
11:00	0	0	520	12	800s	-50a	-50a
11:15	0	0	450	12	400s	-50a	-50a
11:30	0	0	405	12	250s	-50a	-50a
11:45	0	0	405	12	250s	-50a	-50a
12:00	0	0	405	12	250s	-50a	-50a
12:15	0	0	405	12	250s	-50a	-50a
12:30	0	0	405	12	250s	-50a	-50a
12:45	0	0	405	12	250s	-50a	-50a
13:00	0	0	405	12	250s	-50a	-50a
13:10	0	0	405	12	250s	-50a	-50a
13:20	0	0	405	12	250s	-50a	-50a
13:30	0	0	405	12	250s	-50a	-50a
13:40	0	0	333	10	117s	-50a	-50a
13:45	0	0	297	9	50s	-50a	-50a
13:50	0	0	297	7	50s	-50a	-50a
14:00	0	0	297	0	50s	-50a	-50a
14:15	0	0	297	0	50s	-24a	-24a
14:30	0	0	297	0	50s	30	30
14:45	0	0	297	0	50s	30	30
15:00	0	0	297	0	50s	30	30

	FEEDWATER FLOW (MLB/HR)	TOTAL STEAM FLOW	CRD PUMPS RUN/AVAIL	CONTROL ROD DRIVE EXHAUST FLOW	STANDBY LIQUID CONTROL PUMPS RUN/AVAIL	15:40 27-SEP-1989 STAND-BY LIQUID CONTROL TANK LEVEL	HOTWELL LEVEL-A
ALARM L	-1.0	-1.0	-1	-1	-1	-1	34
ALARM H	11.0	11.0	9999	51	9999	101	60
SCALE L	0.0	0.0	0	0	0	0	0
SCALE H	10.0	10.0	9999	50	9999	100	75
08:00	8.0	8.0	1/1	25	0/1	67	40
08:15	8.0	8.0	1/1	25	0/1	67	40
08:30	8.0	8.0	1/1	25	0/1	67	40
08:31	7.2	7.2	1/1	25	0/1	67	40
08:35	3.4	3.4	1/1	25	0/1	67	40
08:45	3.2	3.2	1/1	25	0/1	67	40
08:50	3.2	3.2	1/1	25	0/1	67	40
08:55	3.2	3.2	1/1	25	0/1	67	40
08:55:10	3.2	0.0	1/1	25	0/1	67	40
08:56	3.2	0.0	1/1	25	0/0	67	40
09:00	3.2	0.0	1/1	25	0/0	67	40
09:05	3.1	0.0	1/1	25	0/0	67	40
09:15	3.0	0.0	1/1	25	0/0	67	40
09:30	0.1	0.0	1/1	25	0/0	67	40
09:45	0.6	0.0	1/1	25	0/0	67	40
10:00	0.6	0.0	1/1	25	0/0	67	40
10:15	0.6	0.0	1/1	25	0/0	67	40
10:30	0.6	0.0	1/1	25	0/0	67	40
10:45	0.6	0.0	1/1	25	0/0	67	40
11:00	0.6	0.0	1/1	25	0/0	67	40
11:15	0.6	0.0	1/1	25	0/0	67	40
11:30	0.6	0.0	1/1	25	0/0	67	40
11:45	0.6	0.0	1/1	25	0/0	67	40
12:00	0.6	0.0	1/1	25	0/0	67	40
12:15	0.6	0.0	1/1	25	0/0	67	40
12:30	0.6	0.0	1/1	25	0/0	67	40
12:45	0.6	0.0	1/1	25	0/0	67	40
13:00	0.6	0.0	1/1	25	0/0	67	40
13:10	0.6	0.0	1/1	25	0/0	67	40
13:15	0.6	0.0	1/1	25	0/0	67	40
13:20	0.6	0.0	1/1	25	0/0	67	40
13:30	0.6	0.0	1/1	25	1/0	67	40
13:40	0.6	0.0	1/1	25	1/0	46	40
13:45	1.5	0.0	1/1	25	1/0	35	40
13:50	1.5	0.0	1/1	25	1/0	24	40
14:00	1.5	0.0	1/1	25	1/0	14	40
14:15	1.5	0.0	1/1	25	0/1	5	40
14:30	1.5	0.0	1/1	25	0/1	5	40
14:45	0.0	0.0	1/1	25	0/1	5	40
15:00	0.0	0.0	1/1	25	0/1	5	40

	HOTWELL LEVEL-B	CST LEVEL	FEEDWATER TEMPERATURE	RX FEED PUMPS RUN/AVAIL	CONDENSAT -BOOSTER PUMPS RUN/AVAIL	CONDENSAT PUMPS	TBCCW PUMPS
ALARM L	34	62.3	-1	-1	-1	-1	-1
ALARM H	60	98.0	501	9999	9999	9999	9999
SCALE L	0	0.0	0	0	0	0	0
SCALE H	75	100.0	500	9999	9999	9999	9999
08:00	40	76.0	369	2/1	3/0	3/0	2/1
08:15	40	76.0	369	2/1	3/0	3/0	2/1
08:30	40	76.0	369	2/1	3/0	3/0	2/1
08:31	40	76.0	340	1/2	2/1	2/1	2/1
08:35	40	76.0	339	1/2	2/1	2/1	2/1
08:45	40	76.0	338	1/2	2/1	2/1	2/1
08:50	40	76.0	337	1/2	2/1	2/1	2/1
08:55	40	76.0	336	1/2	2/1	2/1	2/1
08:55:10	40	76.0	336	1/2	2/1	2/1	2/1
08:56	40	76.0	336	1/2	2/1	2/1	2/1
09:00	40	76.0	335	1/2	2/1	2/1	2/1
09:05	40	76.0	330	1/2	2/1	2/1	2/1
09:15	40	76.0	300	1/2	2/1	2/1	2/1
09:30	40	75.0	250	1/2	2/1	2/1	2/1
09:45	40	74.0	200	1/2	2/1	2/1	2/1
10:00	40	74.0	150	1/2	2/1	2/1	2/1
10:15	40	73.0	150	1/2	2/1	2/1	2/1
10:30	40	73.0	150	1/2	2/1	2/1	2/1
10:45	40	73.0	150	1/2	2/1	2/1	2/1
11:00	40	73.0	150	1/2	2/1	2/1	2/1
11:15	40	73.0	150	1/2	2/1	2/1	2/1
11:30	40	72.0	150	1/2	2/1	2/1	2/1
11:45	40	72.0	150	1/2	2/1	2/1	2/1
12:00	40	72.0	150	1/2	2/1	2/1	2/1
12:15	40	72.0	150	1/2	2/1	2/1	2/1
12:30	40	72.0	150	1/2	2/1	2/1	2/1
12:45	40	72.0	150	1/2	2/1	2/1	2/1
13:00	40	72.0	150	1/2	2/1	2/1	2/1
13:10	40	72.0	150	1/2	2/1	2/1	2/1
13:15	40	72.0	150	1/2	2/1	2/1	2/1
13:20	40	72.0	150	1/2	2/1	2/1	2/1
13:30	40	72.0	150	1/2	2/1	2/1	2/1
13:40	40	72.0	150	1/2	2/1	2/1	2/1
13:45	40	72.0	150	1/2	2/1	2/1	2/1
13:50	40	72.0	150	1/2	2/1	2/1	2/1
14:00	40	72.0	150	1/2	2/1	2/1	2/1
14:15	40	72.0	150	1/2	2/1	2/1	2/1
14:30	40	72.0	150	1/2	2/1	2/1	2/1
14:45	40	72.0	150	1/2	2/1	2/1	2/1
15:00	40	72.0	150	1/2	2/1	2/1	2/1

	TBSCCW PUMPS	RBCCW PUMPS	SERVICE WATER PUMPS	MAIN CIRC PUMPS	INSTRUMEN AIR COMPRESSO S	STATION AIR COMPRESSO S	NOT USED
ALARM L	-1	-1	-1	-1	-1	-1	-1
ALARM H	9999	9999	9999	9999	9999	9999	9999
SCALE L	0	0	0	0	0	0	0
SCALE H	9999	9999	9999	9999	9999	9999	9999
08:00	1/1	1/1	2/2	4/0	1/1	0/1	0
08:15	1/1	1/1	2/2	4/0	1/1	0/1	0
08:30	1/1	1/1	2/2	4/0	1/1	0/1	0
08:31	1/1	1/1	2/2	4/0	1/1	0/1	0
08:35	1/1	1/1	2/2	4/0	1/1	0/1	0
08:45	1/1	1/1	2/2	4/0	1/1	0/1	0
08:50	1/1	1/1	2/2	4/0	1/1	0/1	0
08:55	1/1	1/1	2/2	4/0	1/1	0/1	0
08:55:10	1/1	1/1	2/2	4/0	1/1	0/1	0
08:55	1/1	1/1	2/2	4/0	1/1	0/1	0
09:00	1/1	1/1	2/2	4/0	1/1	0/1	0
09:05	1/1	1/1	2/2	4/0	1/1	0/1	0
09:15	1/1	1/1	2/2	4/0	1/1	0/1	0
09:30	1/1	1/1	2/2	4/0	1/1	0/1	0
09:45	1/1	1/1	2/2	4/0	1/1	0/1	0
10:00	1/1	1/1	2/2	4/0	1/1	0/1	0
10:15	1/1	1/1	2/2	4/0	1/1	0/1	0
10:30	1/1	1/1	2/2	4/0	1/1	0/1	0
10:45	1/1	1/1	2/2	4/0	1/1	0/1	0
11:00	1/1	1/1	2/2	4/0	1/1	0/1	0
11:15	1/1	1/1	2/2	4/0	1/1	0/1	0
11:30	1/1	1/1	2/2	4/0	1/1	0/1	0
11:45	1/1	1/1	2/2	4/0	1/1	0/1	0
12:00	1/1	1/1	2/2	4/0	1/1	0/1	0
12:15	1/1	1/1	2/2	4/0	1/1	0/1	0
12:30	1/1	1/1	2/2	4/0	1/1	0/1	0
12:45	1/1	1/1	2/2	4/0	1/1	0/1	0
13:00	1/1	1/1	2/2	4/0	1/1	0/1	0
13:10	1/1	1/1	2/2	4/0	1/1	0/1	0
13:15	1/1	1/1	2/2	4/0	1/1	0/1	0
13:20	1/1	1/1	2/2	4/0	1/1	0/1	0
13:30	1/1	1/1	2/2	4/0	1/1	0/1	0
13:40	1/1	1/1	2/2	4/0	1/1	0/1	0
13:45	1/1	1/1	2/2	4/0	1/1	0/1	0
13:50	1/1	1/1	2/2	4/0	1/1	0/1	0
14:00	1/1	1/1	2/2	4/0	1/1	0/1	0
14:15	1/1	1/1	2/2	4/0	1/1	0/1	0
14:30	1/1	1/1	2/2	4/0	1/1	0/1	0
14:45	1/1	1/1	2/2	4/0	1/1	0/1	0
15:00	1/1	1/1	2/2	4/0	1/1	0/1	0

	EMERGENCY COND TRANSFER PUMP RUNNING	MAIN CONDENSER VACUUM	NO. OF BYPASS VALVES OPEN	MAIN GENERATOR	RSST	NSST	DIESEL
ALARM L	-1	-1.0	-1	-1	-1	-1	-1
ALARM H	99	5.0	99	99	99	99	99
SCALE L	0	0.0	0	0	0	0	0
SCALE H	99	30.0	99	99	99	99	99
08:00	N	2.0	0	R	R	U	A
08:15	N	2.0	0	R	R	U	A
08:30	N	2.0	0	R	R	U	A
08:31	N	2.0	4	R	R	U	A
08:35	N	2.0	4	R	R	U	A
08:45	N	2.0	4	R	R	U	A
08:50	N	2.0	4	R	R	U	A
08:55	N	2.0	0	U	R	U	A
08:55:10	N	2.0	0	U	R	U	A
08:56	N	2.0	0	U	R	U	A
09:00	N	4.0	0	U	R	U	A
09:05	N	4.0	0	U	R	U	A
09:15	Y	4.0	0	U	R	U	A
09:30	Y	4.0	0	U	R	U	A
09:45	Y	4.0	0	U	R	U	A
10:00	Y	4.0	0	U	R	U	A
10:15	Y	4.0	0	U	R	U	A
10:30	Y	4.0	0	U	R	U	A
10:45	Y	4.0	0	U	R	U	A
11:00	Y	4.0	0	U	R	U	A
11:15	Y	4.0	0	U	R	U	A
11:30	Y	4.0	0	U	R	U	A
11:45	Y	4.0	0	U	R	U	A
12:00	Y	4.0	0	U	R	U	A
12:15	Y	4.0	0	U	R	U	A
12:30	Y	4.0	0	U	R	U	A
12:45	Y	4.0	0	U	R	U	A
13:00	Y	4.0	0	U	R	U	A
13:10	Y	4.0	0	U	R	U	A
13:15	Y	4.0	0	U	R	U	A
13:20	Y	4.0	0	U	R	U	A
13:30	Y	4.0	0	U	R	U	A
13:40	Y	4.0	0	U	R	U	A
13:45	Y	4.0	0	U	R	U	A
13:50	Y	4.0	0	U	R	U	A
14:00	Y	4.0	0	U	R	U	A
14:15	N	4.0	0	U	R	U	A
14:30	N	4.0	2	U	R	U	A
14:45	N	4.0	2	U	R	U	A
15:00	N	4.0	2	U	R	U	A

	GAS TURBINE	STACK LOW RANGE, CH 1 (CPS)	STACK LOW RANGE, CH 2	STACK HI RANGE (UC/CC)	RX BLDG VENT EXHAUST	ISO COND RAD LEVEL ARM 6 (mR/hr)	MAIN STEAM LINES (mr/hr)
ALARM L	-1	0	-1	-1.0E+00	0	0.10	-1
ALARM H	99	30	30	1.0E-01	11	10.00	750
SCALE L	0	0	0	1.0E-05	0	0.01	0
SCALE H	99	1000000	1000000	1.0E+05	1000	100.00	1000000
08:00	A	10	10	0.0E+00s	10	2.00	250
08:15	A	10	10	0.0E+00s	10	2.00	250
08:30	A	10	10	0.0E+00s	10	2.00	250
08:31	A	10	10	0.0E+00s	10	2.00	100
08:35	A	10	10	0.0E+00s	10	2.00	100
08:45	A	10	10	0.0E+00s	10	2.00	100
08:50	A	10	10	0.0E+00s	10	2.00	100
08:55	A	10	10	0.0E+00s	10	2.00	100
08:55:10	A	10	10	0.0E+00s	10	15.00a	97
08:56	A	10	10	0.0E+00s	10	15.00a	81
09:00	A	10	10	0.0E+00s	10	15.00a	5
09:05	A	10	10	0.0E+00s	10	11.67a	5
09:15	A	10	10	0.0E+00s	10	5.00	5
09:30	R	10	10	0.0E+00s	10	10.00a	5
09:45	A	10	10	0.0E+00s	10	10.00a	5
10:00	A	10	10	0.0E+00s	10	10.00a	5
10:15	A	10	10	0.0E+00s	10	5.00	5
10:30	A	10	10	0.0E+00s	10	5.00	5
10:45	A	10	10	0.0E+00s	10	5.00	5
11:00	A	10	10	0.0E+00s	10	5.00	5
11:15	A	10	10	0.0E+00s	10	5.00	5
11:30	A	10	10	0.0E+00s	10	5.00	5
11:45	A	10	10	0.0E+00s	10	5.00	5
12:00	A	10	10	0.0E+00s	10	5.00	5
12:15	A	10	10	0.0E+00s	10	5.00	5
12:30	A	10	10	0.0E+00s	10	5.00	5
12:45	A	10	10	0.0E+00s	10	5.00	5
13:00	A	10	10	0.0E+00s	10	5.00	5
13:10	A	10	10	4.0E-01a	642a	5.00	5
13:15	A	10	10	3.0E-01a	480a	5.00	5
13:20	A	10	10	2.0E-01a	393a	5.00	5
13:30	A	10	10	1.0E-01a	220a	5.00	5
13:40	A	10	10	1.0E-01a	147a	3.67	5
13:45	A	10	10	1.0E-01a	110a	3.00	5
13:50	A	10	10	1.0E-01a	93a	2.67	5
14:00	A	10	10	0.0E+00s	60a	2.00	5
14:15	A	10	10	0.0E+00s	25a	2.00	5
14:30	A	10	10	0.0E+00s	12a	2.00	5
14:45	A	10	10	0.0E+00s	12a	2.00	5
15:00	A	10	10	0.0E+00s	12a	2.00	5

	OFF GAS (mr/hr)	DRYWELL W.R. BACKUP ARM 12 (mR/hr)	TORUS ARM NO. 17 (mr/hr)	TURB BLDG OPER FLR ARM 19 (mr/hr)	WIND DIRECTION 142 FT (DEG)	WIND DIRECTION 374 FT (DEG)	WIND SPEED, 142 FT (MPH)
ALARM L	-1	-1	-1	-1	-1.0	-1.0	-1.0
ALARM H	30	50	50	50	361.0	361.0	101.0
SCALE L	0	10	1	1	0.0	1.0	0.0
SCALE H	1000000	1000000	10000	10000	360.0	360.0	100.0
08:00	10	30	10	11	109.0	101.0	11.0
08:15	10	30	10	11	112.0	100.0	11.0
08:30	10	30	10	11	118.0	99.0	10.0
08:31	5	29	10	7	118.0	99.0	10.0
08:35	5	27	10	7	118.0	99.0	10.0
08:45	5	20	10	7	123.0	101.0	11.0
08:50	5	18	10	7	123.0	101.0	11.0
08:55	4	17	10	7	123.0	101.0	11.0
08:55:10	4	17	13	7	123.0	101.0	11.0
08:56	4	16	28	7	123.0	101.0	11.0
09:00	4	15	100a	7	123.0	100.0	11.0
09:05	4	15	80a	7	123.0	100.0	11.0
09:15	4	15	40	7	106.0	96.0	11.0
09:30	4	15	40	7	105.0	92.0	11.0
09:45	4	15	40	7	101.0	89.0	11.0
10:00	4	15	40	6	102.0	90.0	11.0
10:15	3	15	40	6	108.0	101.0	13.0
10:30	3	15	40	6	109.0	101.0	14.0
10:45	3	180a	20	6	112.0	101.0	13.0
11:00	3	1800a	20	6	105.0	98.0	11.0
11:15	3	3700a	20	6	98.0	91.0	10.0
11:30	3	6500a	20	6	94.0	90.0	11.0
11:45	3	6500a	20	6	90.0	88.0	10.0
12:00	3	6500a	20	6	95.0	92.0	13.0
12:15	3	6300a	20	6	91.0	92.0	12.0
12:30	3	6000a	20	5	92.0	90.0	11.0
12:45	2	5800a	20	5	92.0	91.0	11.0
13:00	2	5500a	10	5	100.0	101.0	11.0
13:10	2	3700a	10	5	100.0	101.0	11.0
13:20	2	2800a	10	5	107.0	101.0	13.0
13:25	2	2367a	10	5	107.0	101.0	13.0
13:30	2	1500a	10	5	97.0	100.0	12.0
13:40	2	1033a	10	5	97.0	100.0	12.0
13:45	2	800a	10	5	104.0	100.0	12.0
13:50	2	633a	10	5	104.0	100.0	12.0
14:00	2	300a	10	5	98.0	101.0	12.0
14:15	2	200a	10	5	87.0	84.0	10.0
14:30	2	50a	10	5	96.0	86.0	11.0
14:45	2	50a	10	5	99.0	97.0	12.0
15:00	2	50a	10	5	94.0	94.0	11.0

	WIND SPEED, 374 FT (MPH)	DELTA-T 33/142 FT (DEG F)	DELTA-T,3 /374 FT (DEG F)	STACK FLOW RATE (SCFM)	SBGT SYSTEM ONLINE (Y/N)	SBGT SYSTEM FLOW (SCFM)	TORUS LEVEL WIDE RANGE (FT)
ALARM L	-1.0	-9.00	-9.00	-1	1	-1	-1.0
ALARM H	101.0	19.00	19.00	300001	99	300001	26.0
SCALE L	0.0	-9.00	-9.00	0	0	0	0.0
SCALE H	100.0	18.00	18.00	300000	99	300000	25.0
08:00	13.0	4.50	7.40	170000	N	0	13.5
08:15	14.0	2.90	7.00	170000	N	0	13.5
08:30	14.0	0.40	5.80	170000	N	C	13.5
08:31	14.0	0.40	5.80	170000	N	0	13.5
08:35	14.0	0.40	5.80	170000	N	0	13.5
08:45	14.0	-0.40	4.70	170000	N	0	13.5
08:50	14.0	-0.40	4.70	170000	N	0	13.5
08:55	14.0	-0.40	4.70	170000	N	0	13.5
08:55:10	14.0	-0.40	4.70	170000	N	0	13.5
08:56	14.0	-0.40	4.70	170000	N	0	13.5
09:00	14.0	-0.90	4.50	170000	N	0	13.6
09:05	14.0	-0.90	4.50	170000	N	0	13.6
09:15	16.0	0.70	5.80	170000	N	0	13.7
09:30	14.0	1.80	5.20	20000	Y	2100	14.0
09:45	12.0	1.60	3.60	20000	Y	2100	14.4
10:00	12.0	0.00	0.50	20000	Y	2100	14.7
10:15	16.0	-0.20	0.20	20000	Y	2100	14.9
10:30	17.0	-0.20	0.90	20000	Y	2100	15.2
10:45	18.0	-0.20	1.60	20000	Y	2100	15.5
11:00	16.0	0.00	2.30	20000	Y	2100	15.8
11:15	12.0	-0.20	0.00	20000	Y	2100	16.2
11:30	13.0	-0.20	-0.20	20000	Y	2100	16.6
11:45	11.0	-0.20	-0.50	20000	Y	2100	17.0
12:00	13.0	-0.50	-0.90	20000	Y	2100	17.4
12:15	13.0	-0.40	-0.40	20000	Y	2100	17.8
12:30	13.0	-0.40	-0.70	20000	Y	2100	18.2
12:45	12.0	-0.40	-0.70	20000	Y	2100	18.6
13:00	13.0	-0.20	0.00	20000	Y	2100	19.0
13:10	13.0	-0.20	0.00	202944	Y	2100	19.3
13:20	14.0	-0.20	0.70	208000	Y	2100	19.4
13:25	14.0	-0.20	0.70	208000	Y	2100	19.4
13:30	13.0	-0.50	-0.40	208000	Y	2100	19.5
13:40	13.0	-0.50	-0.40	198000	Y	2100	19.4
13:45	13.0	-0.70	-0.50	193000	Y	2100	19.4
13:50	13.0	-0.70	-0.50	185667	Y	2100	19.4
14:00	13.0	-0.70	-0.70	171000	Y	2100	19.4
14:15	10.0	-0.70	-0.20	170000	Y	2100	19.4
14:30	10.0	-0.50	-0.40	170000	Y	2100	19.4
14:45	12.0	-0.70	-0.20	170000	Y	2100	19.4
15:00	11.0	-0.50	-0.20	170000	Y	2100	19.4

	TORUS PRESSURE WIDE RANGE (PSIG)	DRYWELL HI RANGE (PSIG)	TORUS BOTTOM PRESS (PSIG)	DRYWELL HIGH RAD RD 23 (R/hr)	NORTH CRD AREA ARM 13 (mR/hr)	SD COOL CUBICLE ARM 14 (mR/hr)	RX BLDG ACCESS ARM 15 (mR/hr)
ALARM L	-1.00	-1.00	-1.00	-1	-1.00	-1.00	-1.00
ALARM H	99.00	99.00	99.00	100	50.00	20.00	2.50
SCALE L	-1.00	-1.00	-1.00	0	0.01	0.01	0.01
SCALE H	99.00	99.00	99.00	1000000	100.00	100.00	100.00
08:00	0.00	0.90	6.00	9	5.00	4.00	0.20
08:15	0.00	0.90	6.00	9	5.00	4.00	0.20
08:30	0.00	0.90	6.00	9	5.00	4.00	0.20
08:31	0.00	0.90	6.00	4	5.00	2.00	0.20
08:35	0.00	0.90	6.00	4	5.00	2.00	0.20
08:45	0.00	0.85	6.00	3	5.00	2.00	0.20
08:50	0.00	0.85	6.00	2	5.00	2.00	0.20
08:55	0.00	0.85	6.00	2	5.00	2.00	0.20
08:55:10	0.00	0.86	6.00	2	5.00	800.00s	0.20
08:56	0.00	0.90	6.00	2	5.00	774.79s	0.20
09:00	0.00	1.00	6.00	1	5.00	653.78s	0.20
09:05	0.00	1.00	6.00	1	5.00	502.52s	0.20
09:15	0.00	1.10	6.00	0	5.00	200.00s	0.20
09:30	0.20	1.20	6.20	0	5.00	185.00s	0.20
09:45	0.25	1.25	6.25	0	5.00	170.00s	0.20
10:00	0.35	1.35	6.35	0	5.00	155.00s	0.20
10:15	0.40	1.40	6.40	0	5.00	140.00s	0.20
10:30	0.40	1.40	6.40	0	5.00	125.00s	0.20
10:45	1.00	1.45	7.00	5	5.00	110.00s	0.20
11:00	1.00	1.50	7.00	50	5.00	103.33s	0.20
11:15	6.00	6.50	12.00	100a	5.00	96.67a	0.20
11:30	12.00	12.50	23.00	180a	5.00	90.00a	0.20
11:45	17.00	17.50	23.00	180a	5.00	83.33a	0.20
12:00	25.50	26.00	31.50	180a	5.00	76.67a	0.20
12:15	33.50	34.00	39.50	179a	5.00	70.00a	0.20
12:30	41.50	42.00	47.50	178a	5.00	63.33a	0.20
12:45	49.50	50.00	55.50	176a	5.00	56.67a	0.20
13:00	56.50	57.00	62.50	175a	5.00	50.00a	0.20
13:10	59.17	60.00	65.17	118a	5.00	33.33a	0.20
13:15	60.50	61.00	66.50	90	5.00	25.00a	0.20
13:20	63.50	65.00	69.50	77	5.00	20.67a	0.20
13:30	69.50	70.00	75.50	50	5.00	12.00	0.20
13:40	70.83	72.00	76.83	33	5.00	8.00	0.20
13:45	71.50	72.00	77.50	25	5.00	6.00	0.20
13:50	69.17	71.00	75.17	20	5.00	5.33	0.20
14:00	64.50	65.00	70.50	10	5.00	4.00	0.20
14:15	53.50	54.00	59.50	6	5.00	4.00	0.20
14:30	40.50	41.00	46.50	2	5.00	4.00	0.20
14:45	34.50	35.00	40.50	2	5.00	4.00	0.20
15:00	27.50	28.00	33.50	2	5.00	4.00	0.20

	CTMT HYDROGEN CONCEN (%)	CTMT OXYGEN CONCEN (%)	Ambient Temperatu e (F)	Core Flow (Mlb/Hr)	CSF-RPV-N M	CSF-CTMT- UM	CSF-RPV-C LOR
ALARM L	-1.00	-1.00	-100.0	-1.0	-99999	-99999	-99999
ALARM H	99.00	99.00	110.0	999.0	999999	99999	99999
SCALE L	0.00	0.00	-100.0	-1.0	-99999	-99999	-99999
SCALE H	99.00	99.00	110.0	999.0	999999	99999	99999
08:00	0.00	0.00	50.9	69.0	2	2	GREEN
08:15	0.00	0.00	51.1	69.0	2	2	GREEN
08:30	0.00	0.00	50.9	69.0	2	2	GREEN
08:31	0.00	0.00	50.9	61.4	2	2	GREEN
08:35	0.00	0.00	50.9	31.0	2	2	GREEN
08:45	0.00	0.00	50.7	31.0	2	2	GREEN
08:50	0.00	0.00	50.7	31.0	2	2	GREEN
08:55	0.00	0.00	50.7	31.0	1	1	RED
08:55:10	0.00	0.00	50.7	31.0	1	1	RED
08:56	0.00	0.00	50.7	31.0	1	1	RED
09:00	0.00	0.00	50.0	22.0	1	1	RED
09:05	0.00	0.00	50.0	22.0	1	1	RED
09:15	0.00	0.00	49.8	22.0	1	1	RED
09:30	0.00	0.00	50.9	2.0	1	1	RED
09:45	0.00	0.00	52.3	0.2	1	1	RED
10:00	0.00	0.00	55.2	0.2	1	1	RED
10:15	0.00	0.00	53.0	0.2	1	1	RED
10:30	0.00	0.00	54.5	0.2	1	1	RED
10:45	0.00	0.00	53.6	0.2	1	1	RED
11:00	0.00	0.00	53.6	0.2	1	1	RED
11:15	0.00	0.00	55.4	0.2	1	1	RED
11:30	0.00	0.00	56.1	0.2	1	1	RED
11:45	0.00	0.00	56.5	0.2	1	1	RED
12:00	0.00	0.00	56.3	0.2	1	1	RED
12:15	0.00	0.00	56.3	0.2	1	1	RED
12:30	0.00	0.00	56.7	0.2	1	1	RED
12:45	0.00	0.00	56.8	0.2	1	1	RED
13:00	0.00	0.00	56.3	0.2	1	1	RED
13:10	0.00	0.00	56.3	0.2	1	1	RED
13:15	0.00	0.00	55.0	0.2	1	1	RED
13:20	0.00	0.00	55.0	0.2	1	1	RED
13:30	0.00	0.00	55.6	0.2	1	1	RED
13:40	0.00	0.00	55.6	0.2	1	1	RED
13:45	0.00	0.00	54.9	2.0	1	1	RED
13:50	0.00	0.00	54.9	2.0	1	1	RED
14:00	0.00	0.00	53.6	2.0	1	1	RED
14:15	0.00	0.00	52.9	2.0	1	1	RED
14:30	0.00	0.00	50.9	2.0	1	1	RED
14:45	0.00	0.00	50.2	2.0	1	1	RED
15:00	0.00	0.00	50.2	2.0	1	1	RED

CSF-CTMT-
OLOR

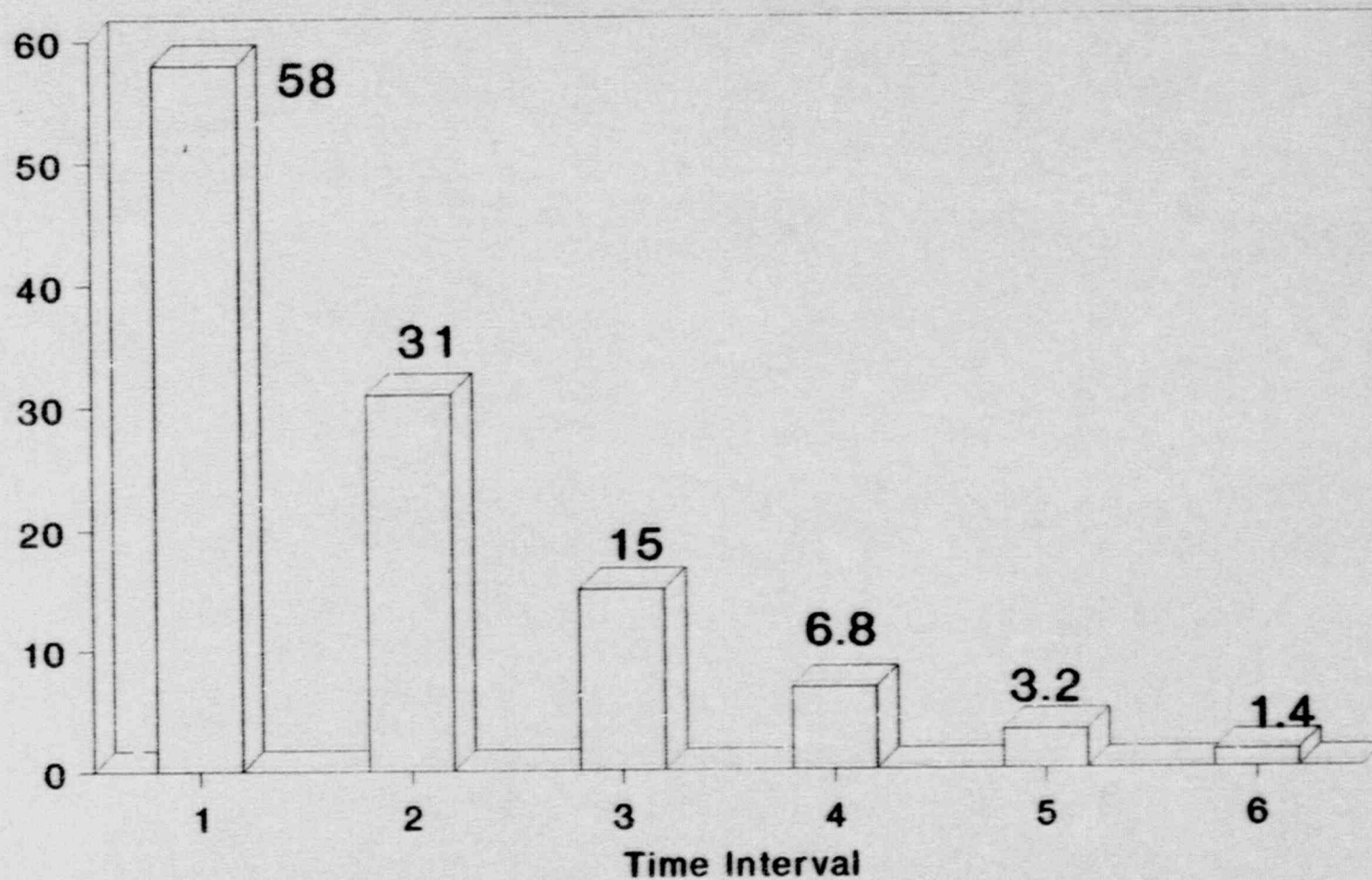
ALARM L	-999999
ALARM H	999999
SCALE L	-999999
SCALE H	999999

08:00	GREEN
08:15	GREEN
08:30	GREEN
08:31	GREEN
08:35	GREEN
08:45	GREEN
08:50	GREEN
08:55	RED
08:55:10	RED
08:56	RED
09:00	RED
09:05	RED
09:15	RED
09:30	RED
09:45	RED
10:00	RED
10:15	RED
10:30	RED
10:45	RED
11:00	RED
11:15	RED
11:30	RED
11:45	RED
12:00	RED
12:15	RED
12:30	RED
12:45	RED
13:00	RED
13:10	RED
13:15	RED
13:20	RED
13:30	RED
13:40	RED
13:45	RED
13:50	RED
14:00	RED
14:15	RED
14:30	RED
14:45	RED
15:00	RED

12.E.1 RADIOLOGICAL RELEASE DATA

MP 1 Fall 1989 Exercise

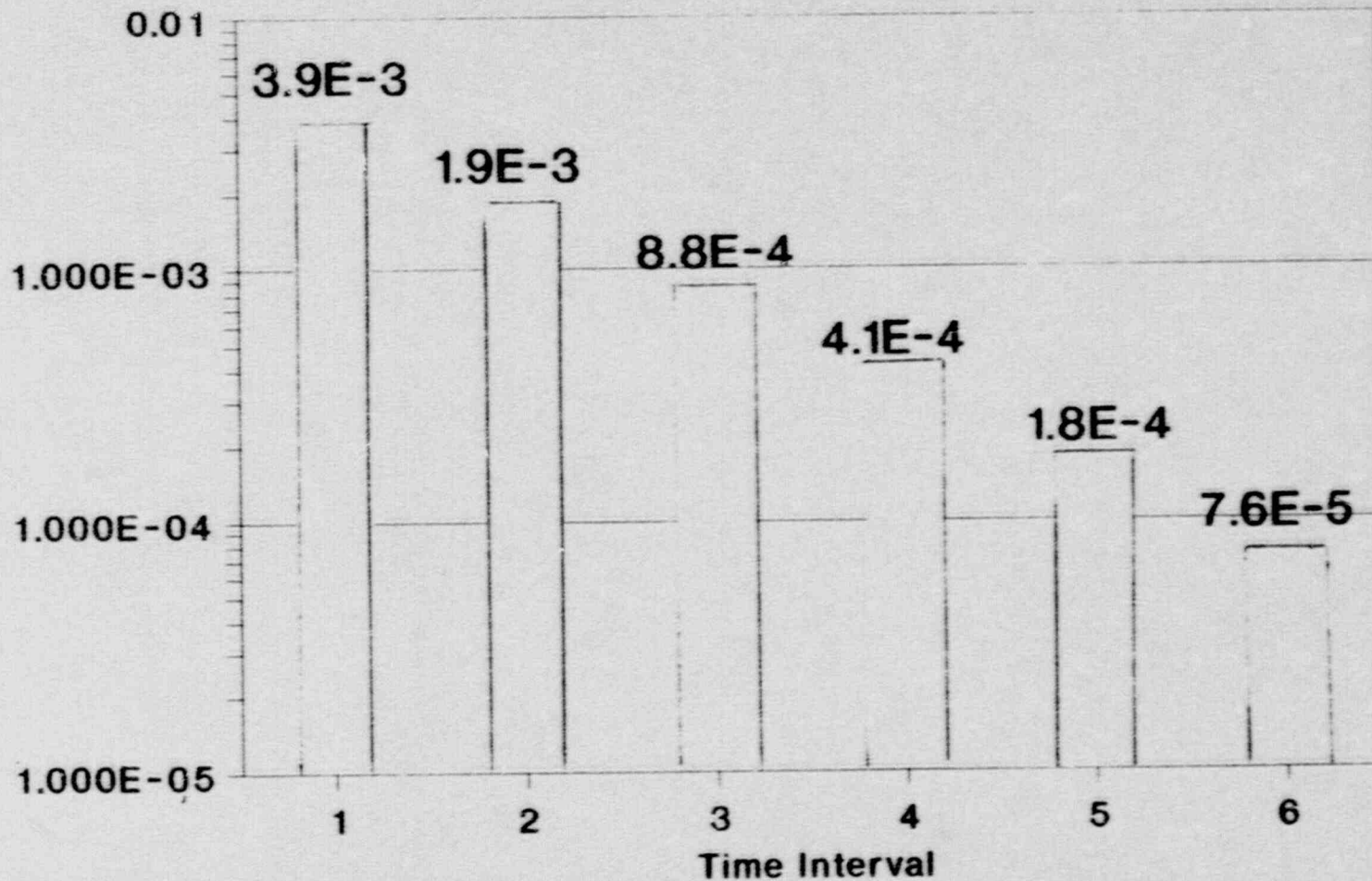
Noble Gas Release Rate (curies/second)



Release starts at 1300. Intervals are 15 minutes each.

MP 1 Fall 1989 Exercise

Iodine Release Rate (curies/second)



Release starts at 1300. Intervals are 15 minutes each.

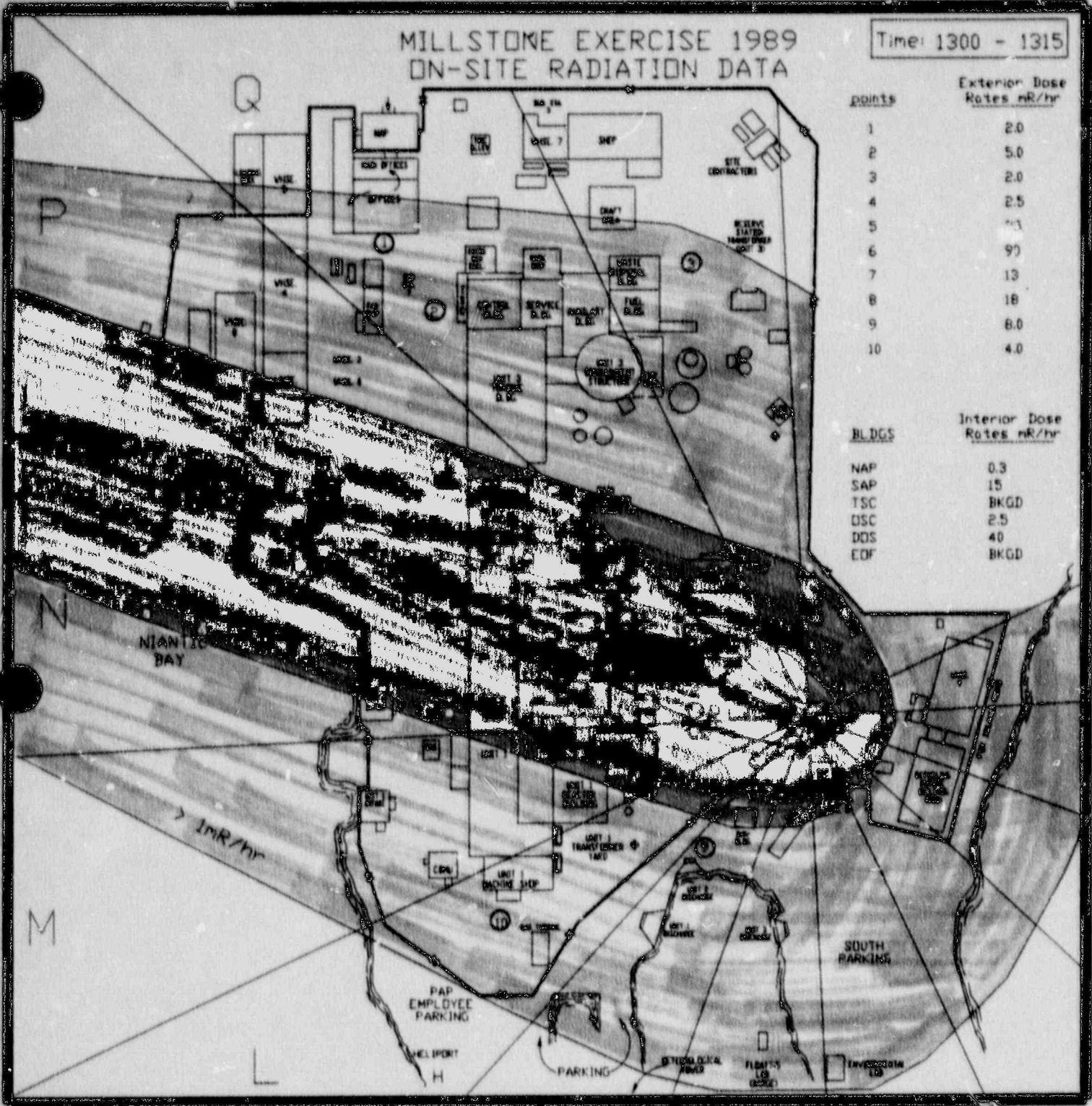
12.E.2 IN-PLANT RADIOLOGICAL DATA

12.E.3 ON-SITE RADIOLOGICAL DATA

H. HAYNES

MILLSTONE EXERCISE 1989 ON-SITE RADIATION DATA

Time: 1300 - 1315



points	Exterior Dose Rates nR/hr
1	2.0
2	5.0
3	2.0
4	2.5
5	1.3
6	9.0
7	1.3
8	1.8
9	8.0
10	4.0

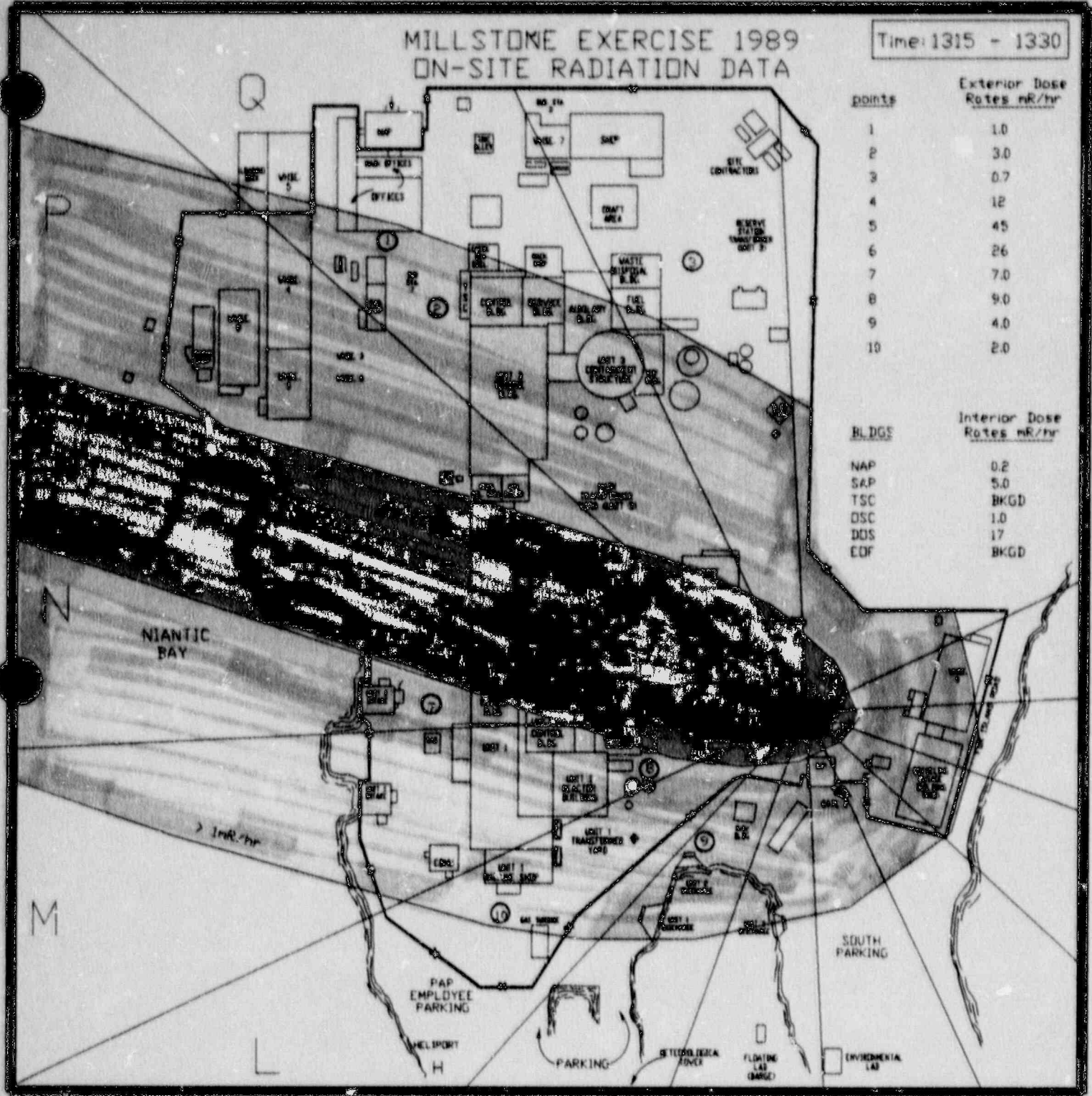
BLDGS	Interior Dose Rates nR/hr
NAP	0.3
SAP	15
TSC	BKGD
DSC	2.5
DOS	40
EDF	BKGD

MILLSTONE EXERCISE 1989 ON-SITE RADIATION DATA

Time: 1315 - 1330

points	Exterior Dose Rates nR/hr
1	1.0
2	3.0
3	0.7
4	12
5	45
6	26
7	7.0
8	9.0
9	4.0
10	2.0

BLDGS	Interior Dose Rates nR/hr
NAP	0.2
SAP	5.0
TSC	BKGD
DSC	1.0
DDS	17
EDF	BKGD



NIANTIC BAY

SOUTH PARKING

PAP EMPLOYEE PARKING

HELIPORT

PARKING

ST. THOMAS POWER

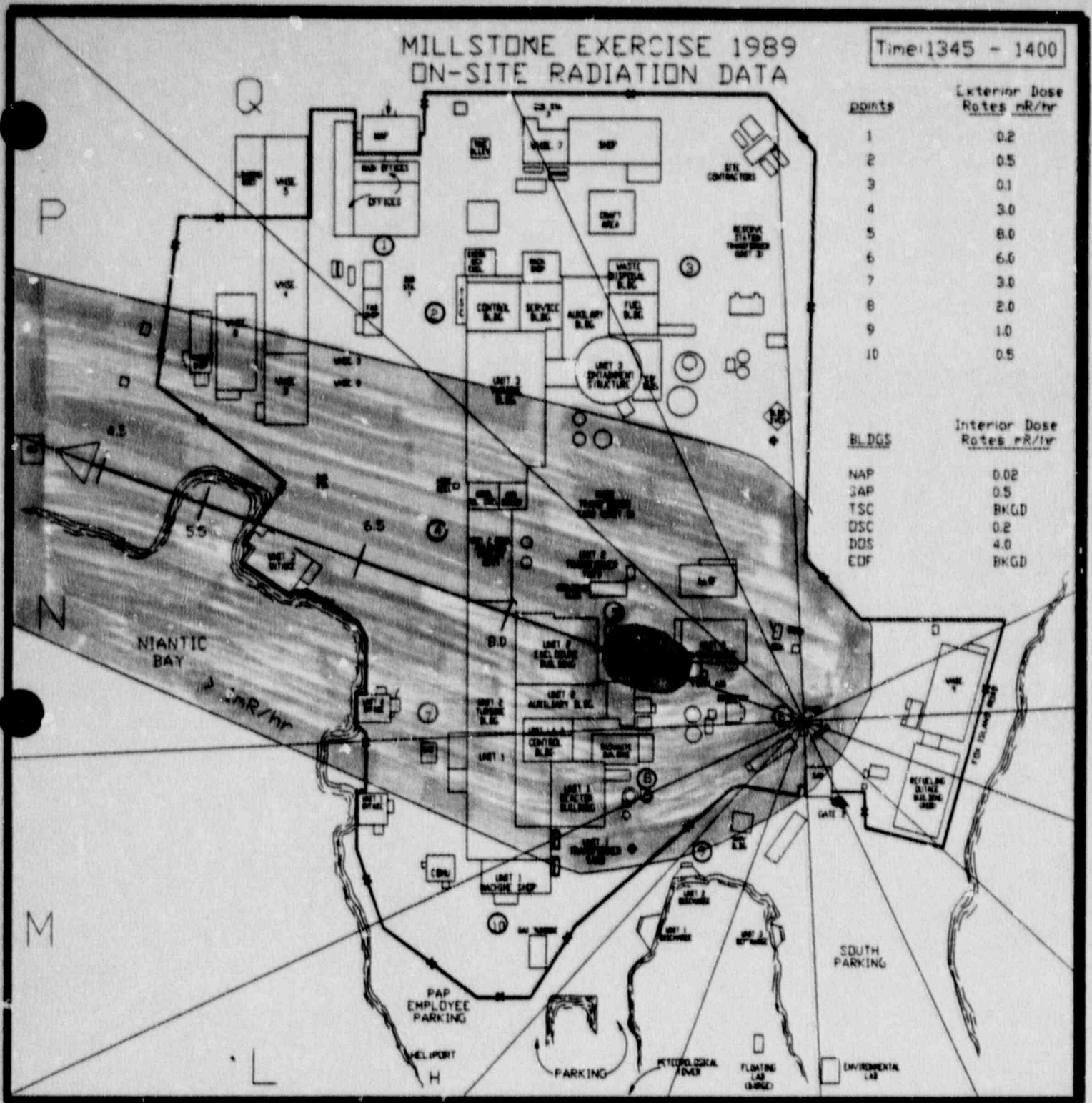
FLOATING LAB (BARGE)

ENVIRONMENTAL LAB

> 1mR/hr

MILLSTONE EXERCISE 1989 ON-SITE RADIATION DATA

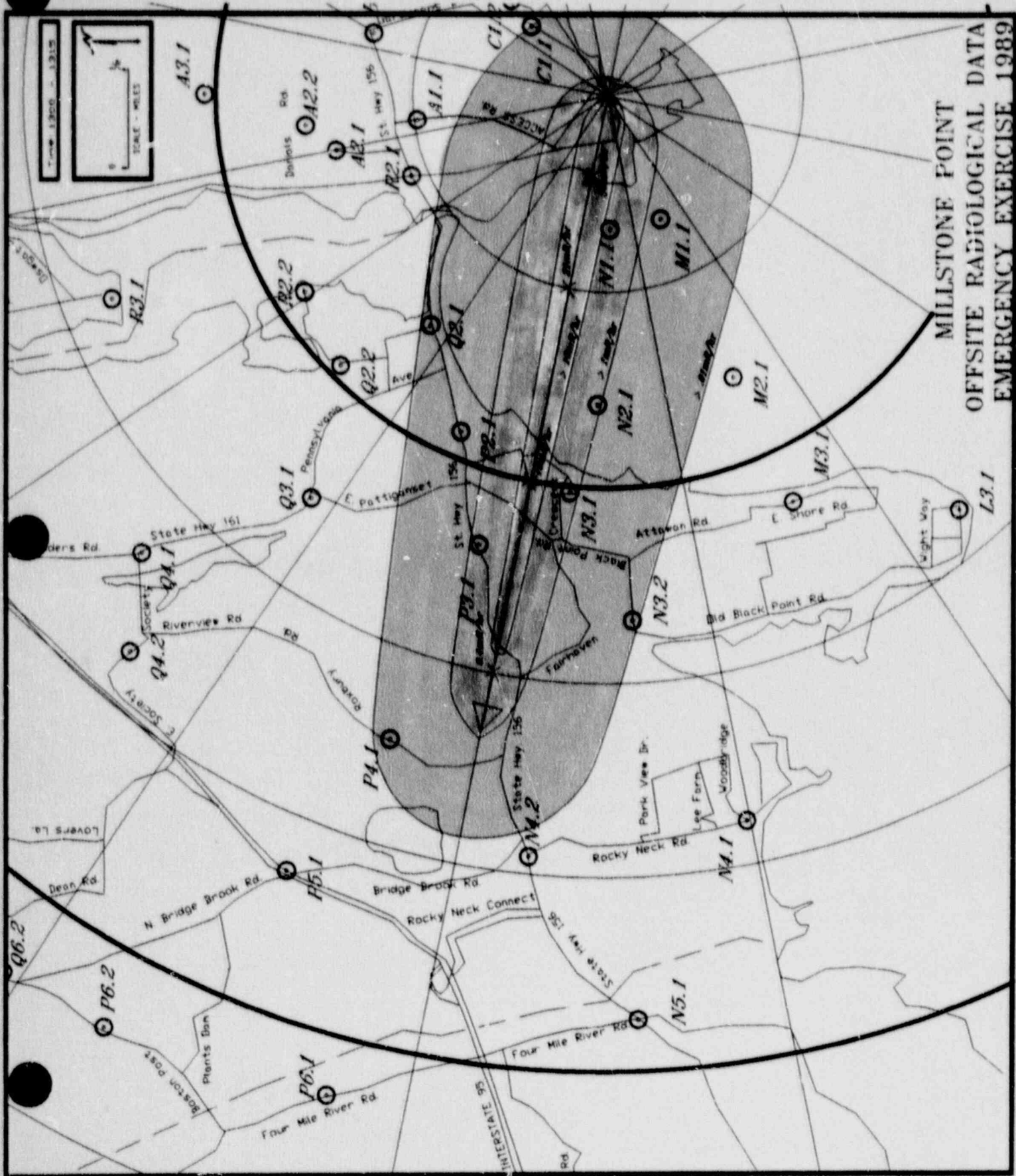
Time: 1345 - 1400



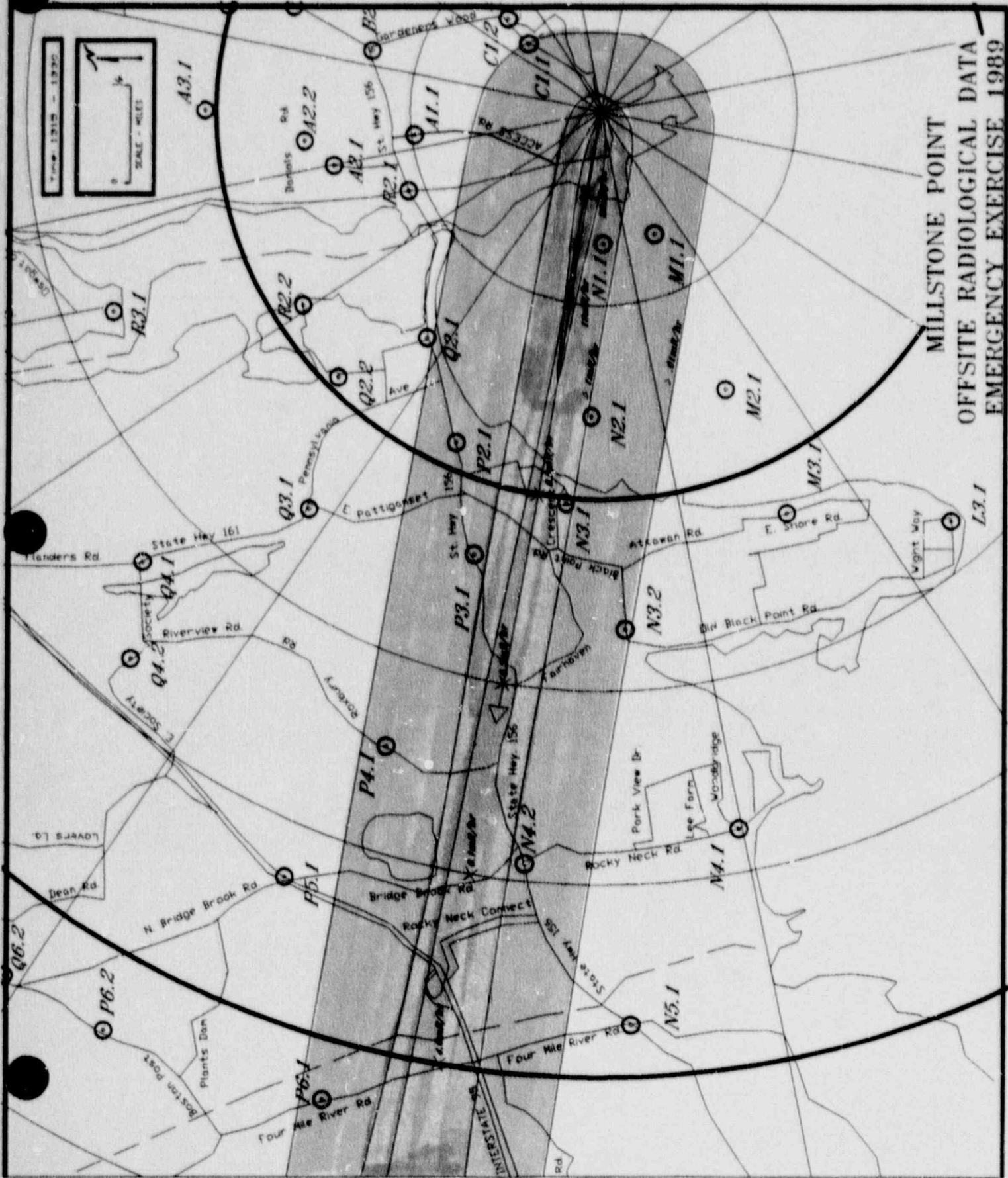
points	Exterior Dose Rates mR/hr
1	0.2
2	0.5
3	0.1
4	3.0
5	8.0
6	6.0
7	3.0
8	2.0
9	1.0
10	0.5

BLDGs	Interior Dose Rates mR/hr
NAP	0.02
SAP	0.5
TSC	BKGD
DSC	0.2
DDS	4.0
EDF	BKGD

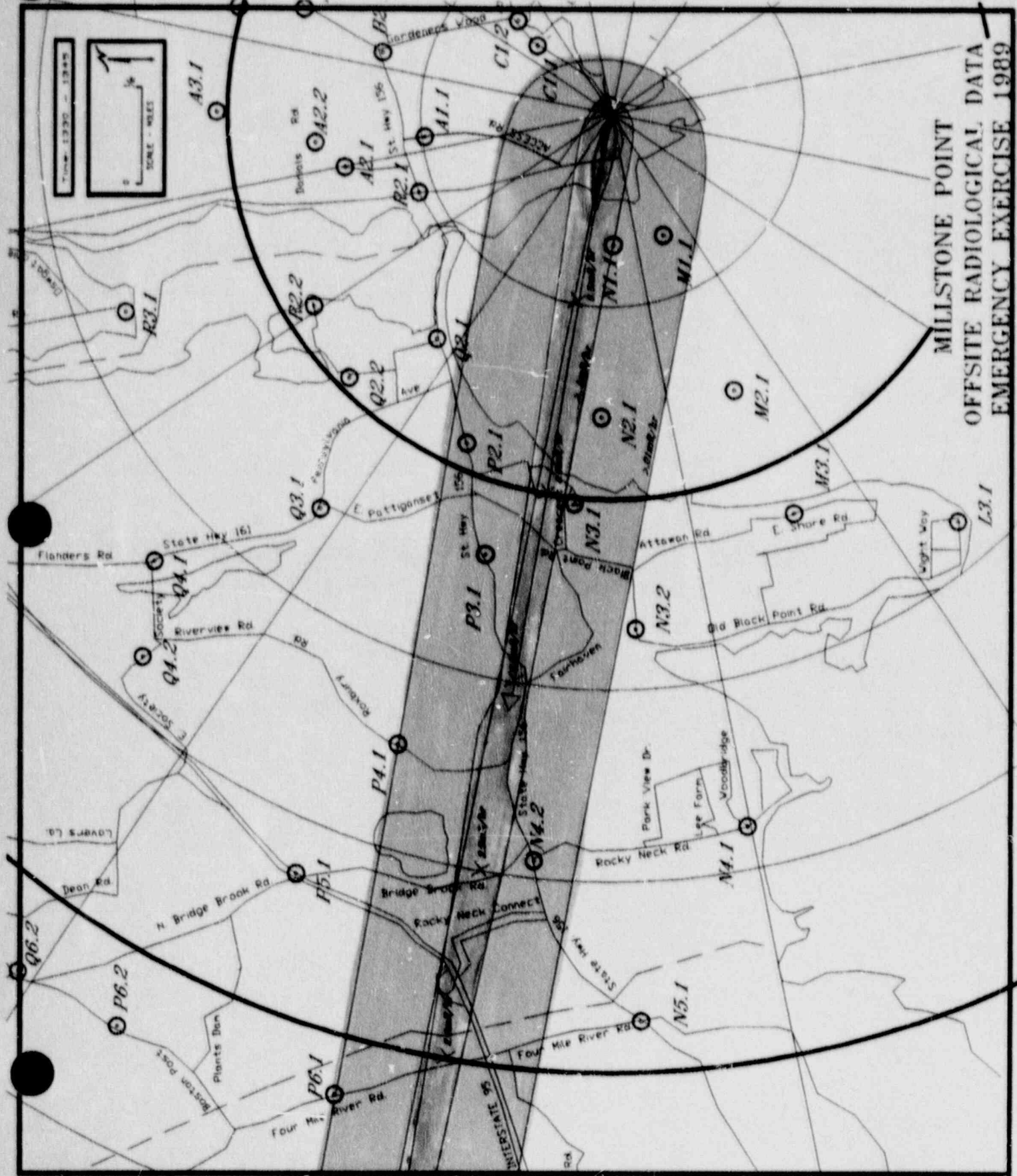
12.E.4 OFF-SITE RADIOLOGICAL DATA



MILLSTONE POINT
 OFFSITE RADIOLOGICAL DATA
 EMERGENCY EXERCISE 1989



**MILLSTONE POINT
OFFSITE RADIOLOGICAL DATA
EMERGENCY EXERCISE 1989**



MILLSTONE POINT
 OFFSITE RADIOLOGICAL DATA
 EMERGENCY EXERCISE 1989



A3.1

A2.2

A1.1

R2.1

R3.1

R2.2

Q2.2

Q3.1

Q2.1

P2.1

N1.1

N2.1

M2.1

M3.1

L3.1

Flinders Rd

State Hwy 161

Rivervie Rd

St Hwy 156

Attawon Rd

E Shore Rd

Old Black Point Rd

N. Bridge Brook Rd

Bridge Brook Rd

Rocky Neck Rd

Park View Dr.

Lee Farm

Woodyridge

P6.2

P6.1

Four Mile River Rd

Four Mile River Rd

N5.1

INTERSTATE 96

LOVENS LA.

Dean Rd

Plants Den

Boston Post

Rocky Neck Connect

State Hwy 156

State Hwy 156

Woodyside

Old Black Point Rd

E Shore Rd

Attawon Rd

St Hwy 156

State Hwy 161

Rivervie Rd

Flinders Rd

N. Bridge Brook Rd

Bridge Brook Rd

Rocky Neck Rd

Park View Dr.

Lee Farm

Woodyridge

P6.2

P6.1

Four Mile River Rd

Four Mile River Rd

N5.1

INTERSTATE 96

LOVENS LA.

Dean Rd

Plants Den

Boston Post

Rocky Neck Connect

State Hwy 156

State Hwy 156

Woodyside

Old Black Point Rd

E Shore Rd

Attawon Rd

St Hwy 156

State Hwy 161

Rivervie Rd

Flinders Rd

N. Bridge Brook Rd

Bridge Brook Rd

Rocky Neck Rd

Park View Dr.

Lee Farm

Woodyridge

P6.2

P6.1

Four Mile River Rd

Four Mile River Rd

N5.1

INTERSTATE 96

LOVENS LA.

Dean Rd

Plants Den

Boston Post

Rocky Neck Connect

State Hwy 156

State Hwy 156

Woodyside

Old Black Point Rd

E Shore Rd

Attawon Rd

St Hwy 156

State Hwy 161

Rivervie Rd

Flinders Rd

N. Bridge Brook Rd

Bridge Brook Rd

Rocky Neck Rd

Park View Dr.

Lee Farm

Woodyridge

P6.2

P6.1

Four Mile River Rd

Four Mile River Rd

N5.1

INTERSTATE 96

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St Hwy 156

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Rivervie Rd

Flinders Rd

N. Bridge Brook Rd

Bridge Brook Rd

Rocky Neck Rd

Park View Dr.

Lee Farm

Woodyridge

P6.2

P6.1

Four Mile River Rd

Four Mile River Rd

N5.1

INTERSTATE 96

LOVENS LA.

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State Hwy 156

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Attawon Rd

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State Hwy 161

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P6.1

Four Mile River Rd

Four Mile River Rd

N5.1

INTERSTATE 96

LOVENS LA.

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State Hwy 156

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Rocky Neck Rd

Park View Dr.

Lee Farm

Woodyridge

P6.2

P6.1

Four Mile River Rd

Four Mile River Rd

N5.1

INTERSTATE 96

LOVENS LA.

Dean Rd

Plants Den

Boston Post

Rocky Neck Connect

State Hwy 156

State Hwy 156

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State Hwy 161

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Park View Dr.

Lee Farm

Woodyridge

P6.2

P6.1

Four Mile River Rd

Four Mile River Rd

N5.1

INTERSTATE 96

LOVENS LA.

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P6.2

P6.1

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N5.1

INTERSTATE 96

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Rocky Neck Rd

Park View Dr.

Lee Farm

Woodyridge

P6.2

P6.1

Four Mile River Rd

Four Mile River Rd

N5.1

INTERSTATE 96

LOVENS LA.

Dean Rd

Plants Den

Boston Post

Rocky Neck Connect

State Hwy 156

State Hwy 156

Woodyside

Old Black Point Rd

E Shore Rd

Attawon Rd

St Hwy 156

State Hwy 161

Rivervie Rd

Flinders Rd

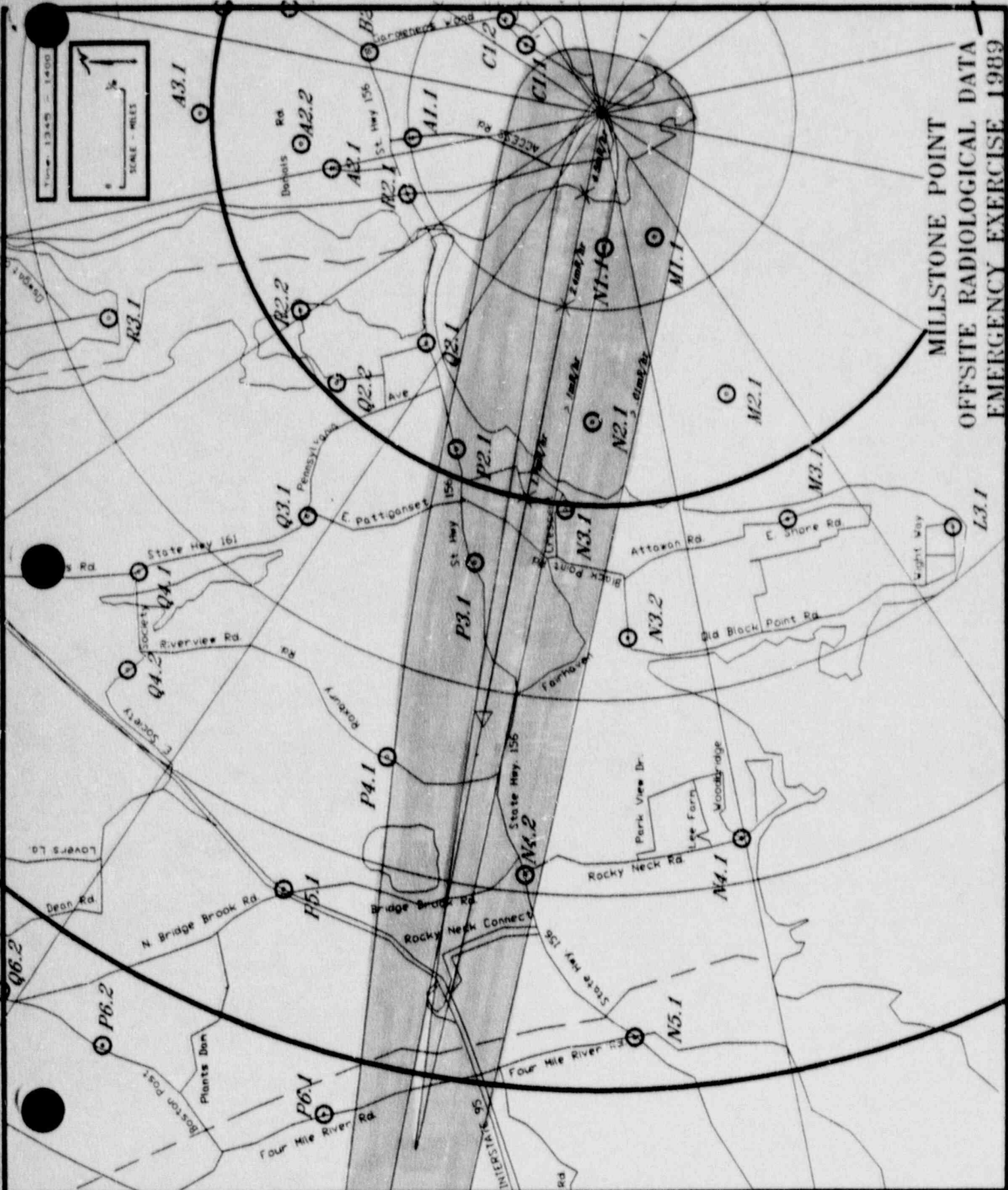
N. Bridge Brook Rd

Bridge Brook Rd

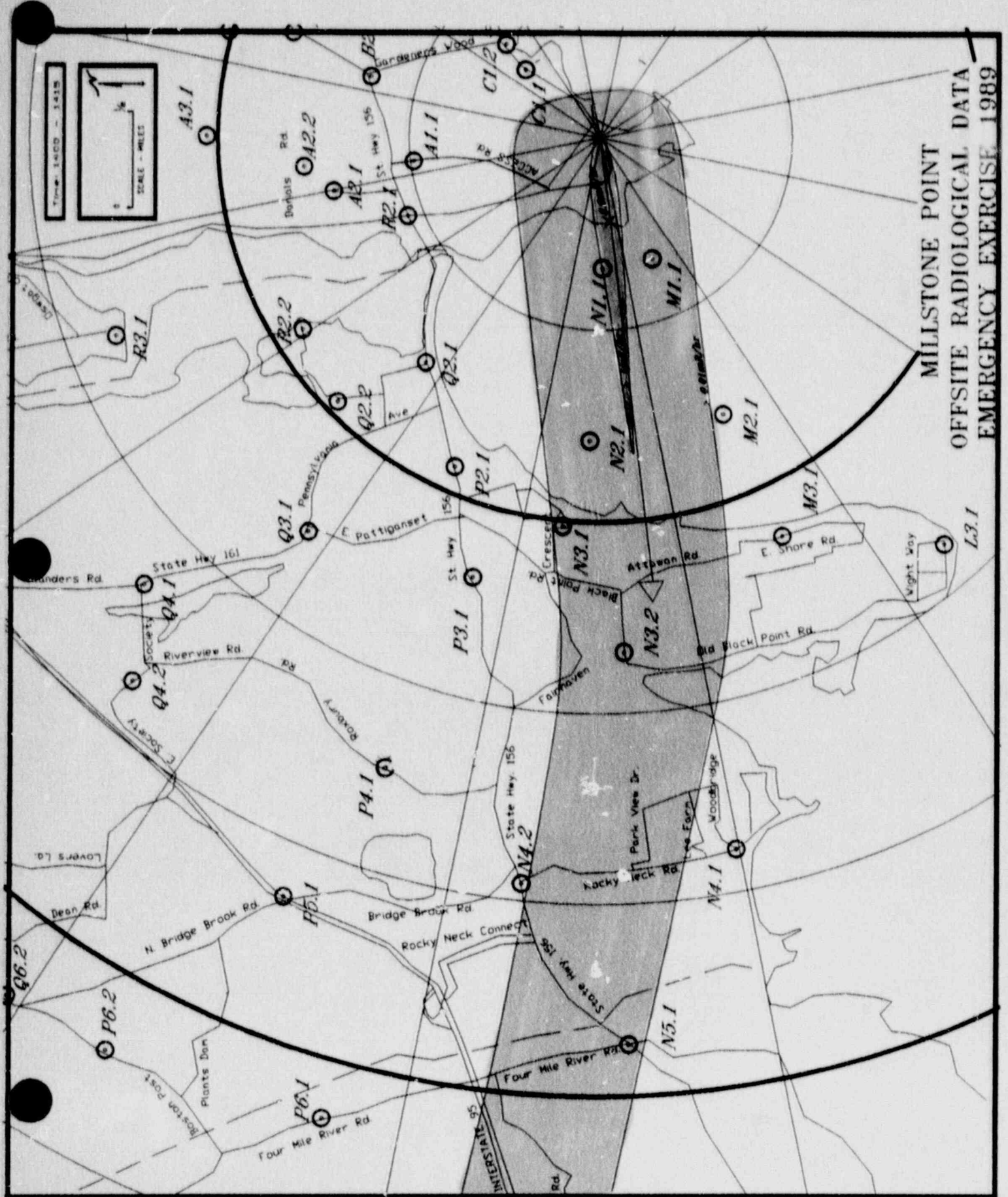
Rocky Neck Rd

Park View Dr.

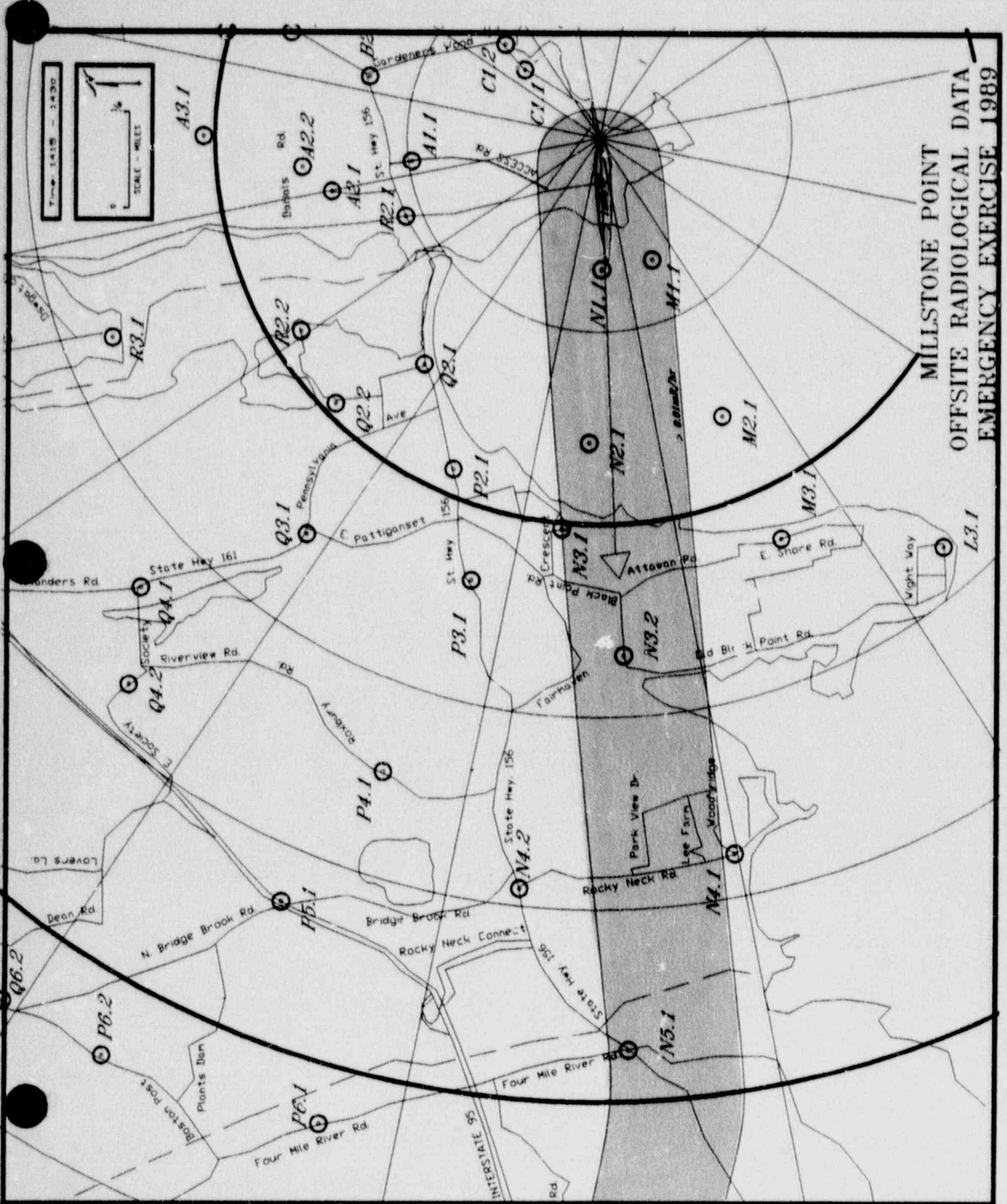
Lee Farm



MILLSTONE POINT
 OFFSITE RADIOLOGICAL DATA
 EMERGENCY EXERCISE 1989



MILLSTONE POINT
 OFFSITE RADIOLOGICAL DATA
 EMERGENCY EXERCISE 1989



MILLSTONE POINT
 OFFSITE RADIOLOGICAL DATA
 EMERGENCY EXERCISE 1989

12.F. METEOROLOGICAL DATA

MP MET TOWER

CLOCK TIME	HH:MM EST	JUL DAY	AT033 (C)	WD033 (DEG)	WS033 (M/S)	WD142 (DEG)	WS142 (M/S)	DT142 (C)	SC 142	WD374 (DEG)	WS374 (M/S)	DT374 (C)	SC 374	DWD 142	DWD 374
0700	0600	277	9.7	107.2	4.8	113.0	5.2	-0.3	D	101.1	5.2	2.1	F	WNW	W
0715	0615	277	9.8	111.4	5.0	117.0	5.5	-0.1	E	100.2	5.7	2.6	F	WNW	W
0730	0630	277	9.9	112.3	4.1	105.4	4.7	0.3	E	100.4	5.9	3.6	F	WNW	W
0745	0645	277	10.6	129.5	3.2	101.3	4.3	2.0	G	98.8	5.5	3.5	F	WNW	W
0800	0700	277	10.5	141.7	3.9	109.0	4.9	2.5	G	100.8	5.7	4.1	F	WNW	W
0815	0715	277	10.6	132.4	4.2	111.7	5.0	1.6	G	100.0	6.2	3.9	F	WNW	W
0830	0730	277	10.5	125.4	4.4	117.5	4.6	0.2	E	99.0	6.2	3.2	F	WNW	W
0845	0745	277	10.4	127.7	4.5	122.5	4.9	-0.2	D	100.8	6.4	2.6	F	WNW	W
0900	0800	277	10.0	123.1	4.4	123.4	4.8	-0.5	D	100.1	6.4	2.5	F	WNW	W
0915	0815	277	9.9	116.0	4.4	106.0	4.7	0.4	E	96.0	7.2	3.2	F	WNW	W
0930	0830	277	10.5	120.7	4.3	105.0	5.0	1.0	F	92.0	6.4	2.9	F	WNW	W
0945	0845	277	11.3	113.7	4.2	101.1	4.9	0.9	F	89.4	5.4	2.0	F	W	W
1000	0900	277	12.9	106.0	4.5	101.7	4.8	0.0	E	89.6	5.2	0.3	E	WNW	W
1015	0915	277	12.8	107.1	5.1	108.4	5.8	-0.1	E	101.1	7.0	0.1	E	WNW	W
1030	0930	277	12.5	107.6	5.5	109.1	6.2	-0.1	E	100.6	7.4	0.5	E	WNW	W
1045	0945	277	12.0	112.3	4.9	111.8	5.6	-0.1	E	101.1	7.3	0.9	E	WNW	W
1100	1000	277	12.0	108.3	4.5	104.6	5.0	0.0	E	97.7	7.1	1.3	E	WNW	W
1115	1015	277	13.0	99.7	4.1	97.5	4.5	-0.1	E	91.1	5.5	0.0	E	W	W
1130	1030	277	13.4	96.8	4.4	94.4	4.8	-0.1	E	89.7	5.6	-0.1	E	W	W
1145	1045	277	13.6	94.2	4.1	90.4	4.4	-0.1	E	88.4	5.0	-0.3	E	W	W
1200	1100	277	13.5	93.7	5.5	95.3	5.7	-0.3	D	92.2	5.7	-0.5	E	W	W
1215	1115	277	13.5	90.6	4.8	91.1	5.2	-0.2	D	92.4	5.8	-0.2	E	W	W
1230	1130	277	13.7	92.7	4.8	92.0	5.0	-0.2	D	90.3	5.7	-0.4	E	W	W
1245	1145	277	13.8	91.5	4.9	91.6	5.0	-0.2	D	90.6	5.4	-0.4	E	W	W
1300	1200	277	13.5	100.2	4.7	100.0	5.0	-0.1	E	100.7	5.6	0.0	E	W	W
1315	1215	277	12.8	103.1	5.3	106.6	5.9	0.1	E	101.1	6.2	0.4	E	WNW	W
1330	1230	277	13.1	94.7	5.2	97.4	5.2	-0.3	D	99.8	5.7	-0.2	E	W	W
1345	1245	277	12.7	99.0	5.4	104.0	5.4	-0.4	D	100.1	5.7	-0.3	E	WNW	W
1400	1300	277	12.0	97.3	5.2	98.0	5.2	-0.4	D	101.0	5.8	-0.4	E	W	W
1415	1315	277	11.6	84.8	4.4	86.9	4.4	-0.4	D	83.8	4.6	-0.1	E	W	W
1430	1330	277	10.5	93.4	5.1	96.3	5.1	-0.3	D	85.7	4.3	-0.2	E	W	W
1445	1345	277	10.1	95.7	5.2	99.3	5.2	-0.4	D	96.6	5.3	-0.1	E	W	W
1500	1400	277	10.2	89.5	5.0	94.2	5.0	-0.3	D	94.1	5.1	0.1	E	W	W
1515	1415	277	10.2	89.5	5.6	93.6	5.6	-0.4	D	90.4	6.0	0.2	E	W	W
1530	1430	277	10.3	89.2	6.0	93.0	6.0	-0.4	D	88.2	6.0	0.1	E	W	W
1545	1445	277	10.2	89.3	6.4	94.4	6.4	-0.4	D	90.5	6.8	0.1	E	W	W
1600	1500	277	10.3	92.8	6.5	96.6	6.5	-0.4	D	94.1	6.7	0.1	E	W	W

12.G. CHEMISTRY DATA

Millstone Unit 1
Reactor Coclant Data

Time 07:00

<u>Isotope</u>	<u>µci/ml</u>
Xe 135m	1.38E-03
Xe 135	8.96E-05
I 131	3.72E-06
I 132	3.63E-04
I 133	1.44E-04
I 134	1.04E-03
I 135	3.00E-04

Millstone Unit 1
Reactor Coolant Data
PASS Sample

Time 11:00

<u>Isotope</u>	<u>µci/ml</u>
Kr 83m	4.3E-04
Kr 85m	2.2E-03
Kr 85	6.4E-05
Kr 87	2.3E-03
Kr 88	3.8E-03
Kr 89	4.7E-04
Xe 131m	5.3E-05
Xe 133m	5.9E-04
Xe 133	1.7E-02
Xe 135m	1.3E-05
Xe 135	1.9E-03
Xe 138	6.3E-05
I 131	8.1E+00
I 132	6.0E+00
I 133	1.6E+01
I 134	3.7E+00
I 135	1.2E+01
Rb 88	1.6E-06
Cs 134	2.7E-02
Cs 137	1.7E-02

Millstone Unit 1
Torus Water Data

Time 11:00

<u>Isotope</u>	<u>μCi/ml</u>
Kr 83m	4.6E-05
Kr 85m	2.3E-04
Kr 85	6.8E-06
Kr 87	2.5E-04
Kr 88	4.0E-04
Kr 89	5.0E-05
Xe 131m	5.7E-06
Xe 133m	6.4E-05
Xe 133	1.8E-03
Xe 135m	1.4E-06
Xe 135	2.1E-04
Xe 138	6.9E-06
I 131	8.6E-02
I 132	6.6E-02
I 133	1.7E-01
I 134	3.9E-02
I 135	1.3E-01
Rb 88	1.7E-09

Millstone Unit 1
Drywell and Torus Air Data

Time 11:00

<u>Isotope</u>	<u>μCi/cc</u>
Kr 83m	1.7E-01
Kr 85m	8.6E-01
Kr 85	2.5E-02
Kr 87	9.2E-01
Kr 88	1.5E+00
Kr 89	1.8E-01
Xe 131m	2.1E-02
Xe 133m	2.4E-01
Xe 133	6.6E+00
Xe 135m	5.2E-03
Xe 135	7.6E-01
Xe 138	2.5E-02
I 131	3.2E-04
I 132	2.4E-04
I 133	6.2E-04
I 134	1.5E-04
I 135	4.8E-04
Rb 88	-

Millstone Unit 1
Stack Sample Results

Time 13:45

<u>Isotope</u>	<u>µci/cc</u>
Kr 83m	2.0E-3
Kr 85m	7.4E-3
Kr 85	4.2E-4
Kr 87	2.8E-3
Kr 88	1.3E-2
Kr 89	-
Xe 131m	2.8E-4
Xe 133m	1.4E-3
Xe 133	5.9E-2
Xe 135m	5.6E-3
Xe 135	4.8E-2
Xe 138	-
I 131	4.5E-6
I 132	2.0E-6
I 133	8.9E-6
I 134	4.8E-7
I 135	6.1E-6
Rb 88	-

12.H STATE AND/OR TOWN EVENTS

State Events

<u>Scenario Time</u>	<u>Clock Time</u>	<u>Event Description</u>
02:00	10:00	The State activates the New Haven Congregate Care Center for Millstone site, Old Lyme evacuees.
02:45	10:45	The State activates the East Hartford Congregate Care Center for Millstone site, Montville evacuees.
03:35	11:35	State activates EBS and Public Warning System.

Town Events

<u>Scenario Time</u>	<u>Clock Time</u>	<u>Event Description</u>
01:30	09:30	Old Lyme demonstrates the ability to evacuate to New Haven.
02:00	10:00	New Haven begins demonstration of Host Community activities.
02:30	10:30	Montville demonstrates the ability to evacuate to East Hartford.
03:00	11:00	East Hartford begins demonstration of Host Community activities.