1994

TMI

ANNUAL

EMERGENCY

EXERCISE

TABLE OF CONTENTS

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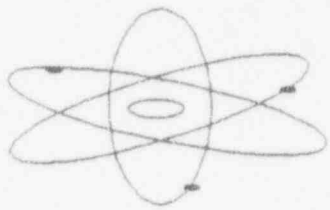

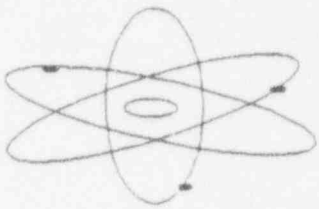

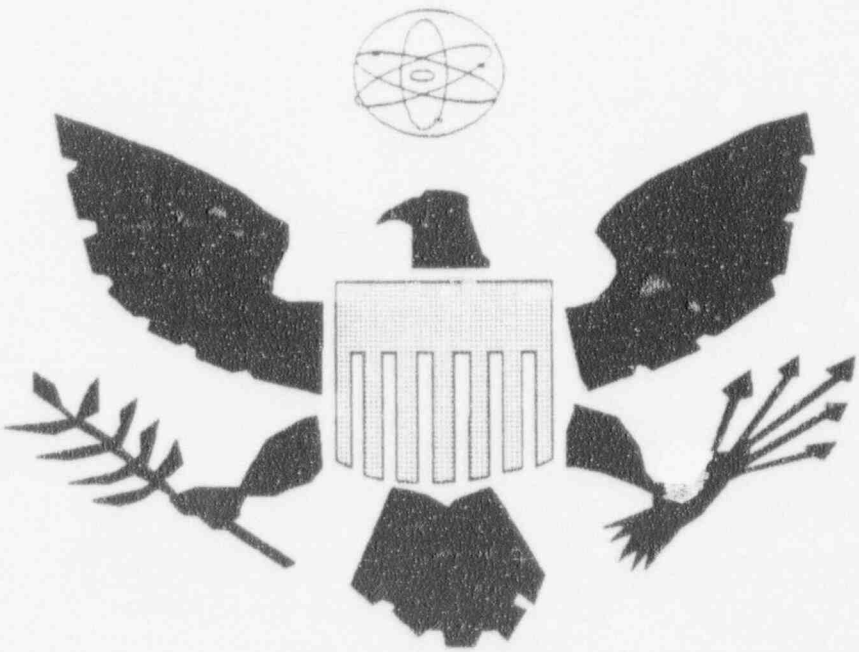

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ACRONYMS/ABBREVIATIONS

ac	Alternating Current
ADV	Atmospheric Dump Valve
AEOF	Annex to the Emergency Operations Facility
A/R	As Read
ATP	Abnormal Transient Procedure
B&W	Babcock and Wilcox
BRP	Pennsylvania Bureau of Radiation Protection
BWST	Borated Water Storage Tank
CC	Cubic Centimeter
C/D	Cooldown
CFM	Cubic Feet per Minute
CFR	Code of Federal Regulations
Ci	Curie
CPM	Counts Per Minute
CRO	Control Room Operator
CW	Circulating Water
DC	Direct Current
DC	Drill Controller
DER	Pennsylvania Department of Environmental Resources
DGI	Digital Graphics Incorporated
DHR	Decay Heat Removal
DOE	U. S. Department of Energy
DPM	Disintegrations Per Minute
EAA	Emergency Assembly Area
EAAC	Emergency Assembly Area Coordinator
EAC	Environmental Assessment Coordinator
EACC	Environmental Assessment Command Center
EAL	Emergency Action Level
EBS	Emergency Broadcast System
ECC	Emergency Control Center
ED	Emergency Director
EFPD	Effective Full Power Day
EFW	Emergency Feedwater
EMA	Emergency Management Agency
ENS	NRC Emergency Notification System
EOC	Emergency Operations Center
EOF	Emergency Operations Facility
EPA	U. S. Environmental Protection Agency
EPIP	Emergency Plan Implementing Procedure
EPZ	Emergency Planning Zone
ERF	Emergency Response Facility
ES	Engineered Safeguards
ESAS	Engineered Safeguards Activation System
ESD	Emergency Support Director
ESO	Emergency Support Organization
FAA	Federal Aviation Administration
FBTL	Fire Brigade Team Leader
FEMA	Federal Emergency Management Agency
FP	Full Power
FRC	Federal Response Center
FRERP	Federal Radiological Emergency Response Plan
FSAR	Final Safety Analysis Report
GeLi	Germanium Lithium (isotopic gamma detection crystal)
GM	Geiger Mueller (radiation detection tube)
GPM	Gallons Per Minute
GPUN	GPU Nuclear Corporation

HP	Health Physics
HPI	High Pressure Injection
HPN	NRC Health Physics Network
IAW	In Accordance With
ICS	Integrated Control System
INPO	Institute of Nuclear Power Operations
IP	In Plant Rover
IREO	Initial Response Emergency Organization
IRAP	Interagency Radiological Assistance Plan
ITS	Important to Safety
JIC	Joint Information Center
KI	Potassium Iodide
kv	Kilovolt
LOCA	Loss of Coolant Accident
LPZ	Low Population Zone
LSA	Low Specific Activity
MAP-5	Post-Accident High Range Iodine Sampler
MCF	Maintenance, Construction, Facilities
MFW	Main Feedwater
MIDAS	Meteorological Information and Dose Acquisition System
MS-V/R	Main Steam - Valve/Relief
MU-P	Make-Up Pump
N/A	Not Applicable
NaI	Sodium Iodine Gamma Isotopic Detection Crystal
NAWAS	National Warning System
NOAA	National Oceanic and Atmospheric Administration
NRC	U. S. Nuclear Regulatory Commission
NWS	U. S. National Weather Service
O/P	Office of the President
OOS	Out of Service
OSC	Operations Support Center
OSH	Off Scale High
OTSG	Once Through Steam Generator
PAG	Protective Action Guides
PAR	Protective Action Recommendation
PAS	Post-Accident Sample
PEMA	Pennsylvania Emergency Management Agency
PD	Plant Data
PI	Public Information
PPB	Parts Per Billion
PPM	Parts Per Million
PRS	Plant Reference Simulator
PTFC	Parsippany Technical Functions Center
QA	Quality Assurance
QCL	Quality Control List
RAA	Remote Assembly Area
RAC	Radiological Assessment Coordinator
R&EC	Radiological and Environmental Controls
RB	Reactor Building
RCP	Reactor Coolant Pump
RCS	Reactor Coolant System
RERP	Radiological Emergency Response Plan
RM-A	Radiation Monitor - Atmospheric
RMC	Radiation Management Corporation
RM-L	Radiation Monitor - Liquid
RM-G	Radiation Monitor - General Area
RMS	Radiation Monitoring System

SCBA	Self-Contained Breathing Apparatus
SCFM	Standard Cubic Feet per Minute
SCM	Subcooling Margin
S/D	Shutdown
SDD	System Design Description
SRO	Senior Reactor Operator
TBV	Turbine Bypass Valve
TLD	Thermoluninescent Dosimeter
TMI	Three Mile Island Nuclear Plant
TS	Technical Specification
TSC	Technical Support Center
V	Volt
U-1	TMI Unit 1
U-2	TMI Unit 2
WG	Waste Gas
WHM	Warehouse Muster
X/Q	Meteorological Dispersion Factor (Chi/Q)

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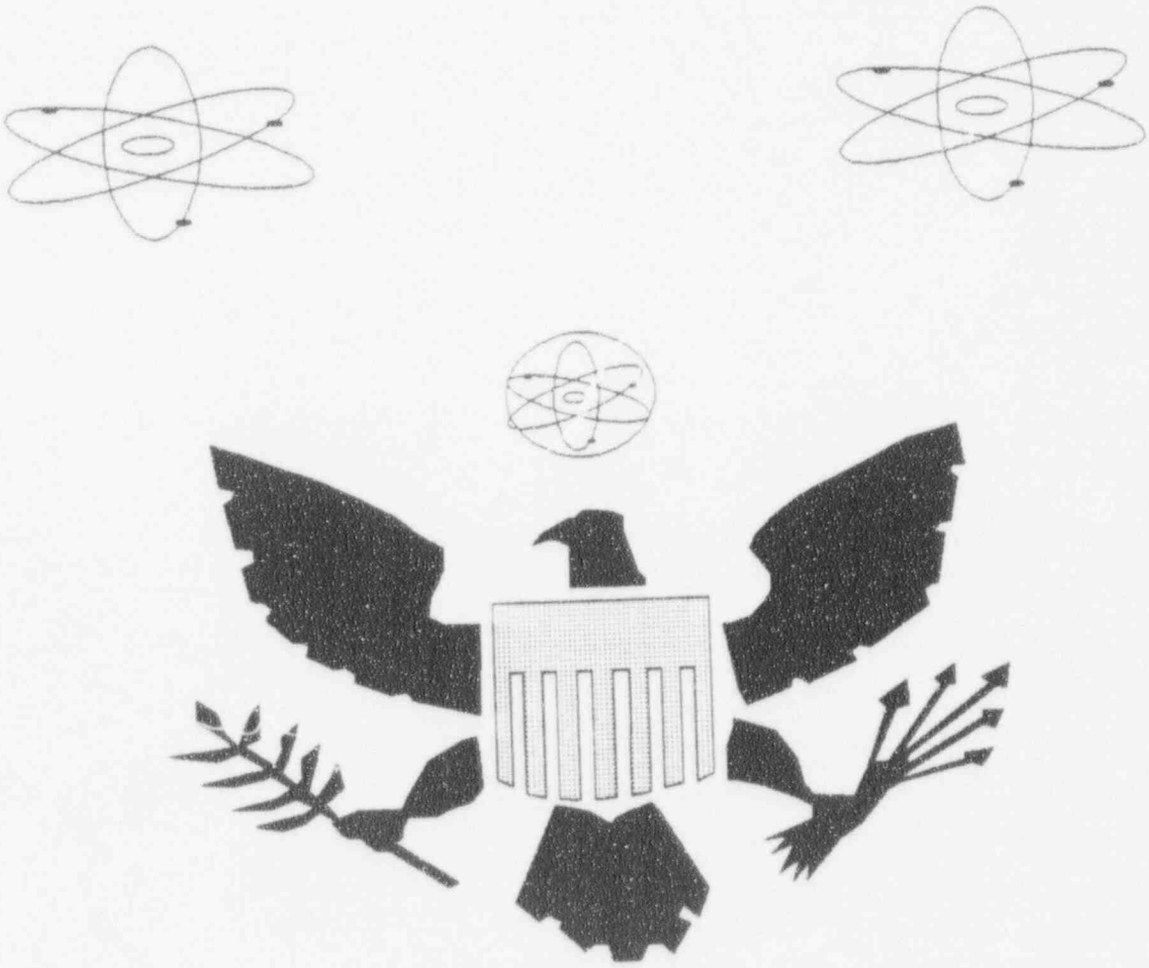

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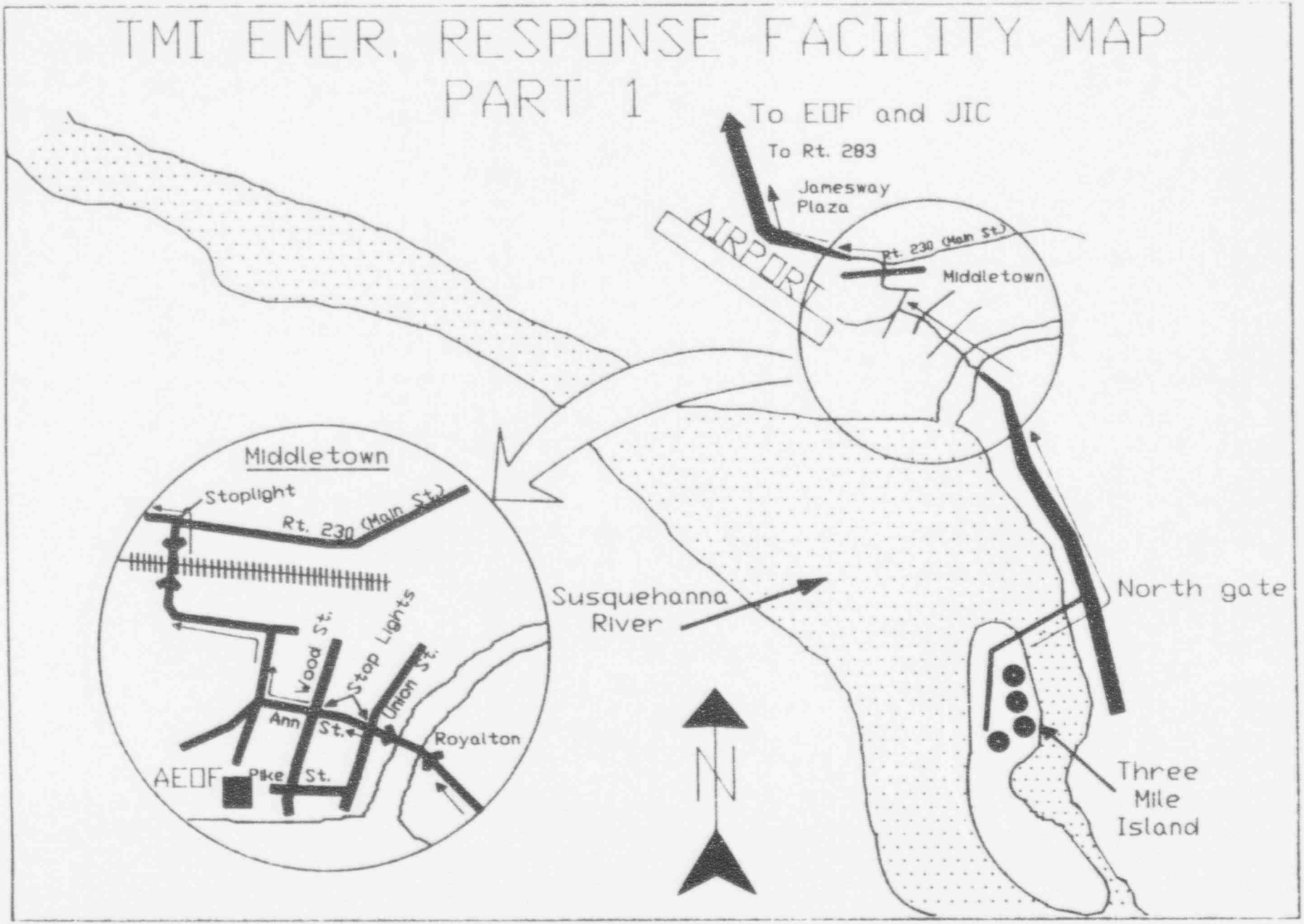
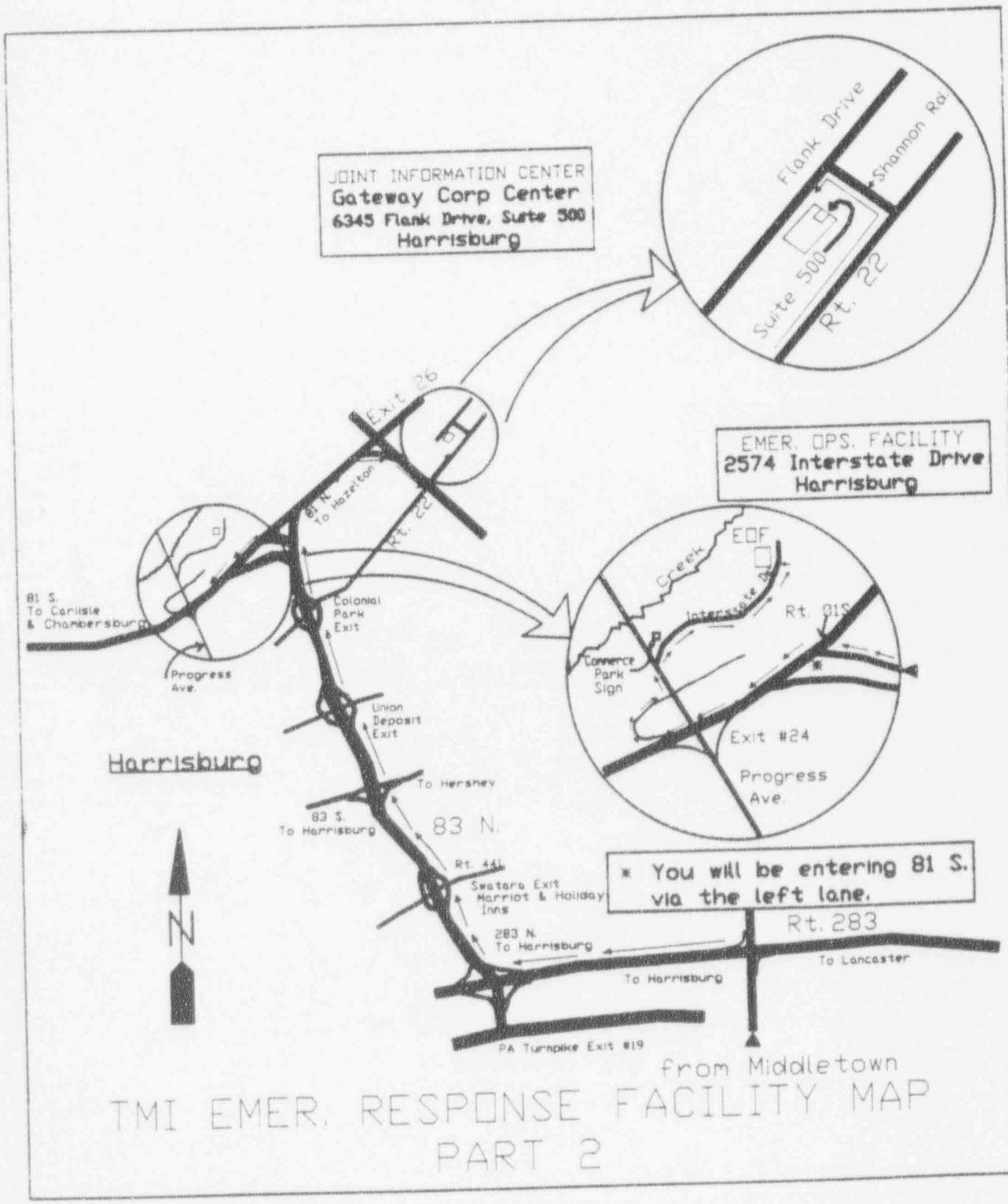

TMI EMER. RESPONSE FACILITY MAP
PART 1
To EOF and JIC
To Rt. 283
Jamesway Plaza
AIRPORT
Rt. 230 (Main St.)
Middletown
Middletown
Stoplight
Rt. 230 (Main St.)
Wood St.
Stop Lights
Union St.
Ann St.
Royalton
AEOF
Pike St.
Susquehanna River
North gate
N
Three Mile Island

2.1



TMI EMER. RESPONSE FACILITY MAP
PART 2

DIRECTIONS TO OFF SITE EMERGENCY RESPONSE FACILITIES

NOTE: These directions are meant to be used in conjunction with the TMI Off Site Emergency Response Facility Map (Page 1 of this brochure). All directions are written as if leaving TMI via the North Gate.

Emergency Operations Facility and the Environmental Assessment Command Center

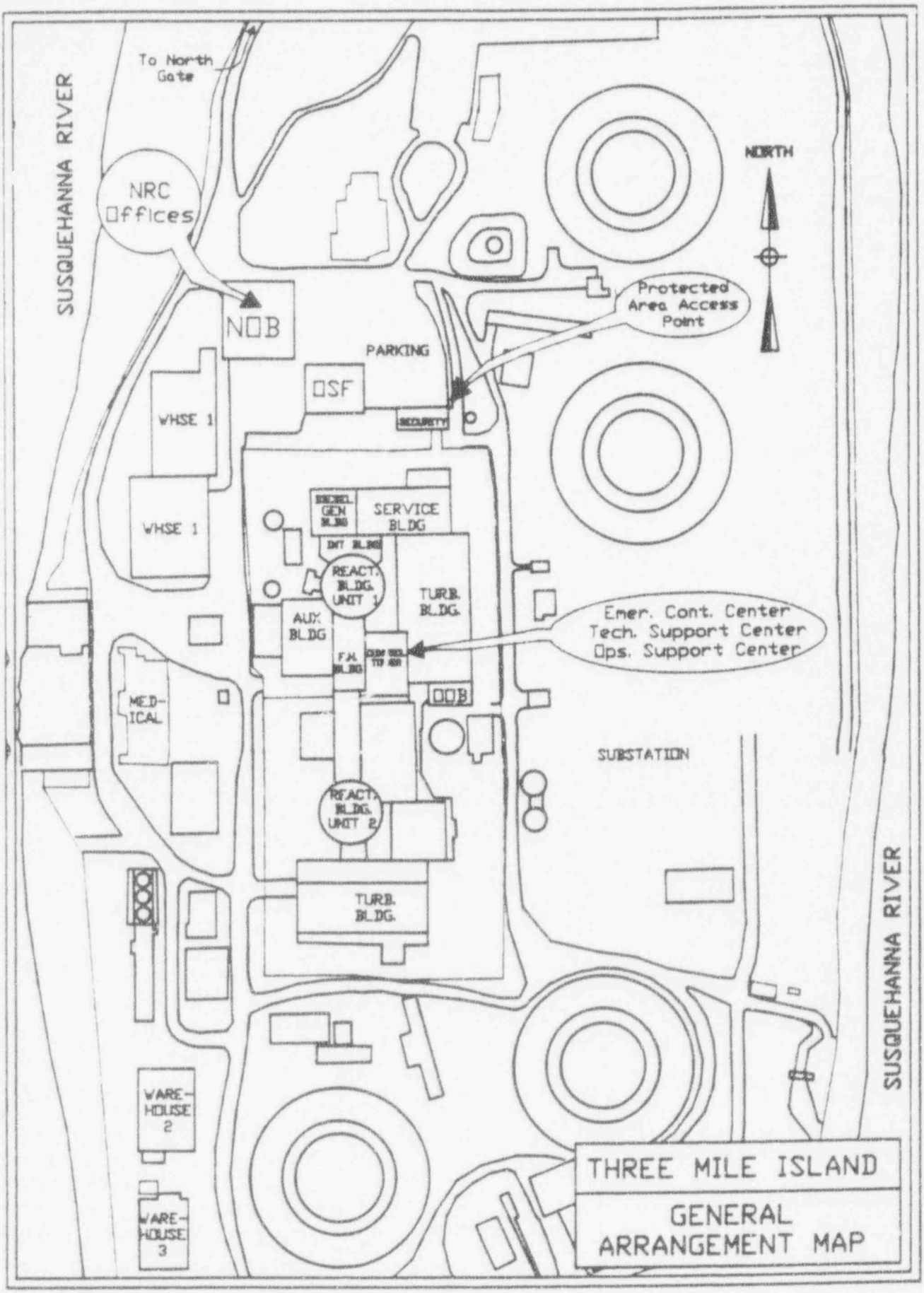
From North Gate, turn left onto Route 441 (North). Proceed 2.1 miles to the traffic light at Middletown. Go straight through the light and straight through the next traffic light to a stop sign. Turn right at the stop sign and bear left to cross the bridge. Upon crossing the bridge, turn left at the traffic light and proceed straight on Route 230 West to the next traffic light (at Jamesway Plaza). Go straight through the light and turn right onto the entrance ramp for Route 283. Proceed straight to the 283 (West) Harrisburg sign. Bear left at the sign and continue onto 283 merge area. Merge onto Route 283 and continue to the next right turn (Interstate 283 Exit) - Merge onto I 283 North and continue straight to the exit for 83 North, 81 North, and 322 West. Proceed straight onto 83 North and continue straight to the junction of Route 81 South (Carlisle). Bear left onto Route 81 South and proceed to Exit 24 (Progress Avenue). Take Exit 24 to the traffic light, turn left on to Progress Avenue and take the next right turn (Interstate Drive). Follow Interstate Drive approximately 0.5 miles to the second building on the left. The number 2574 is on the front of the building.

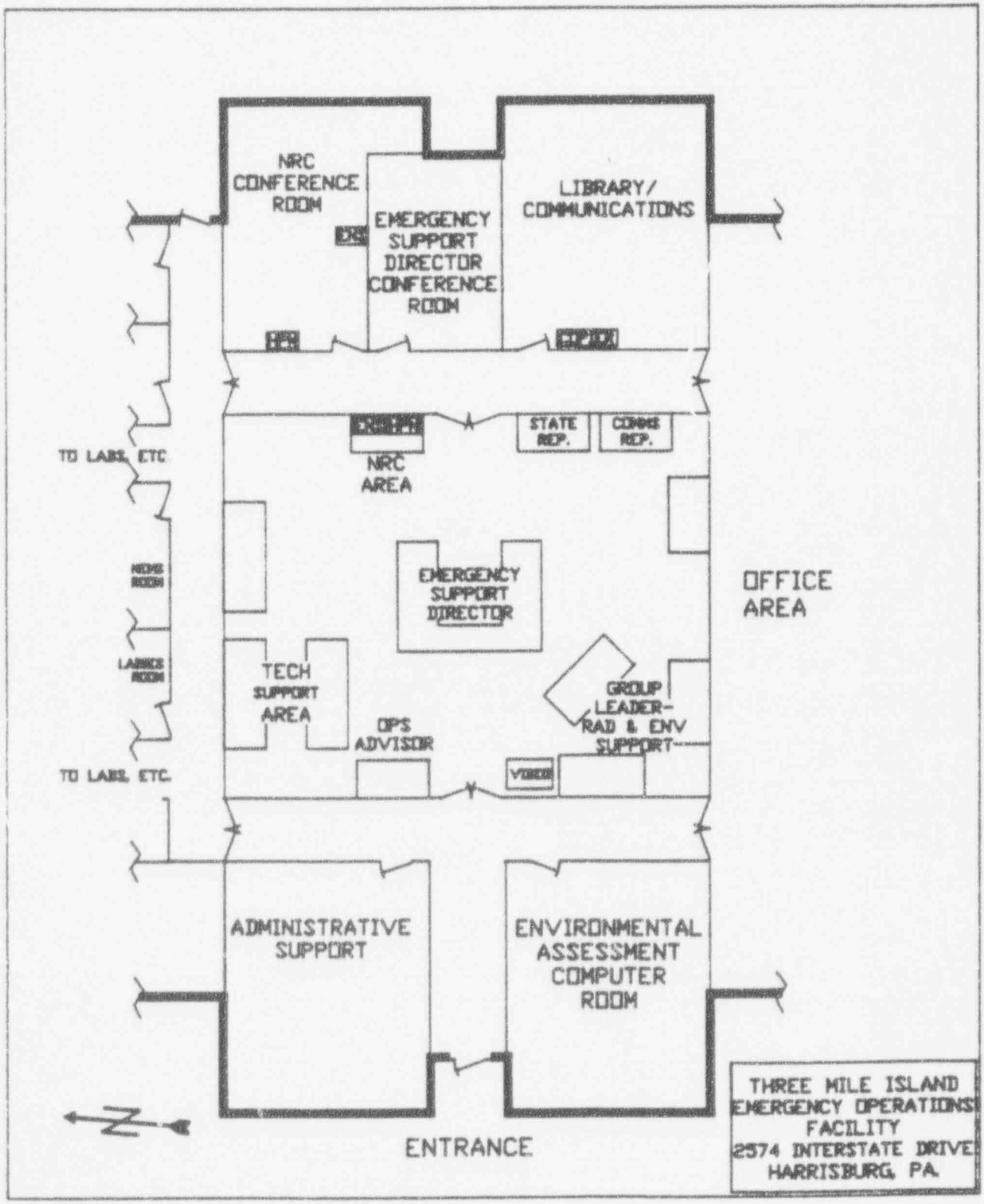
Annex to the Emergency Ops Facility

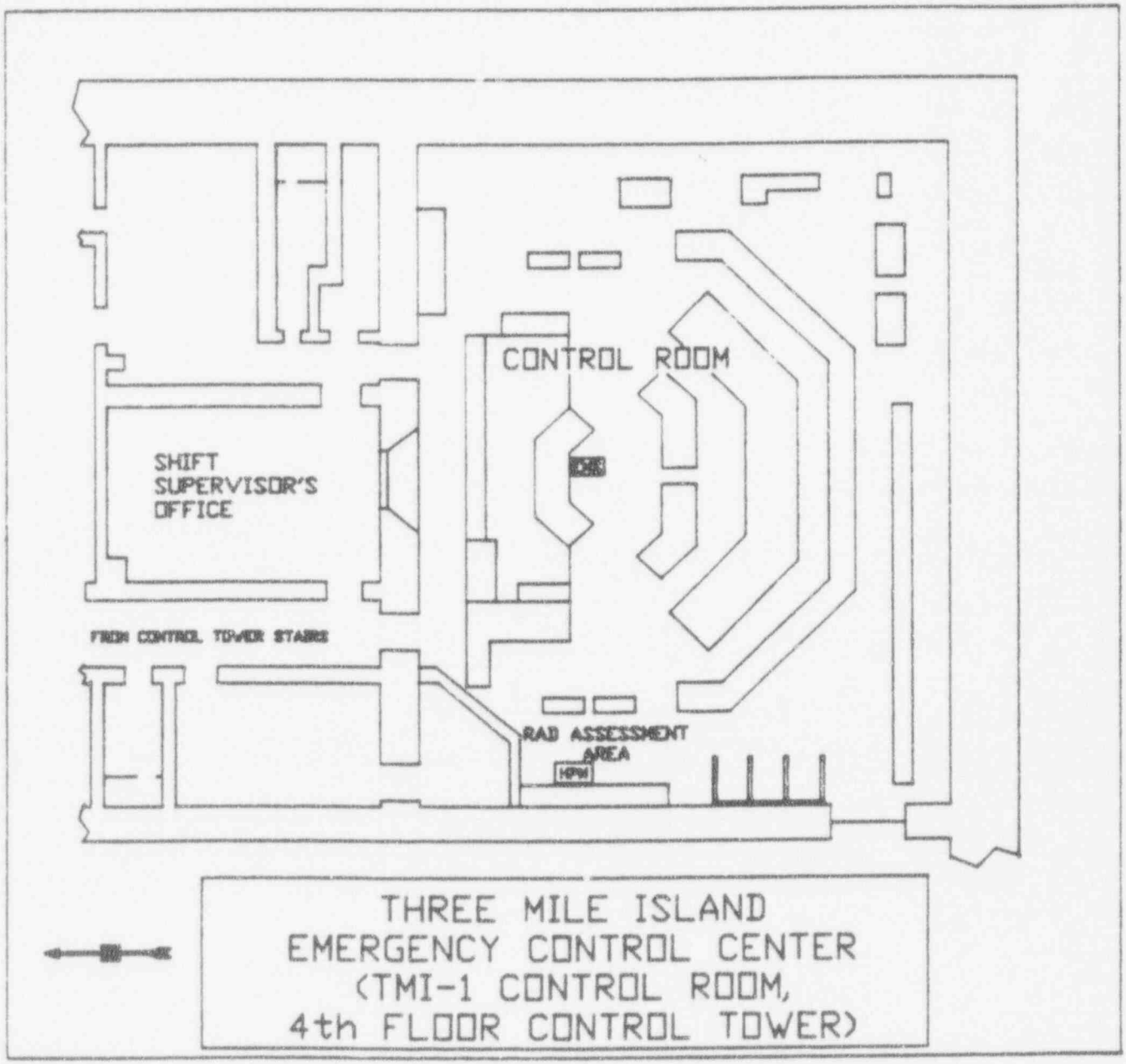
From the North Gate, turn left onto Route 441 N. Proceed 2.1 miles to the traffic light at Middletown. Go straight through the light onto Ann Street. Follow Ann Street to the next traffic light. Turn left at the light onto South Wood Street. Follow S. Wood Street for four blocks (two stop signs). At the second stop sign, turn right (VFW Post 1620 is on the right corner). Proceed straight to the Security Gate at Crawford Station. Note: You must identify yourself on the telephone located to the right outside of the entrance gate. When the gate opens, proceed to the entrance of the Middletown Line Department Facility. The AEOF is located on the first and second floors of Middletown Line Department Facility.

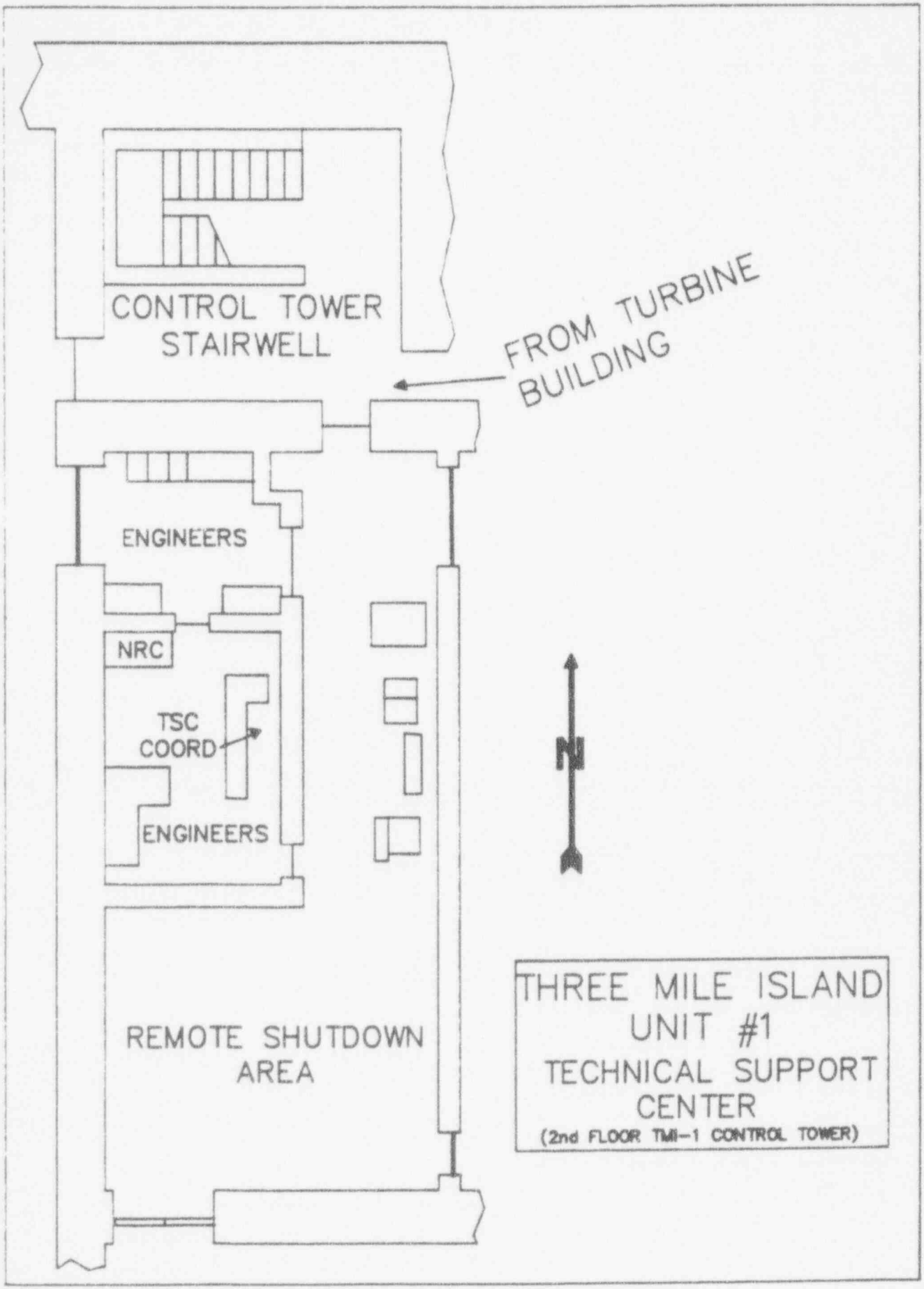
Joint Information Center

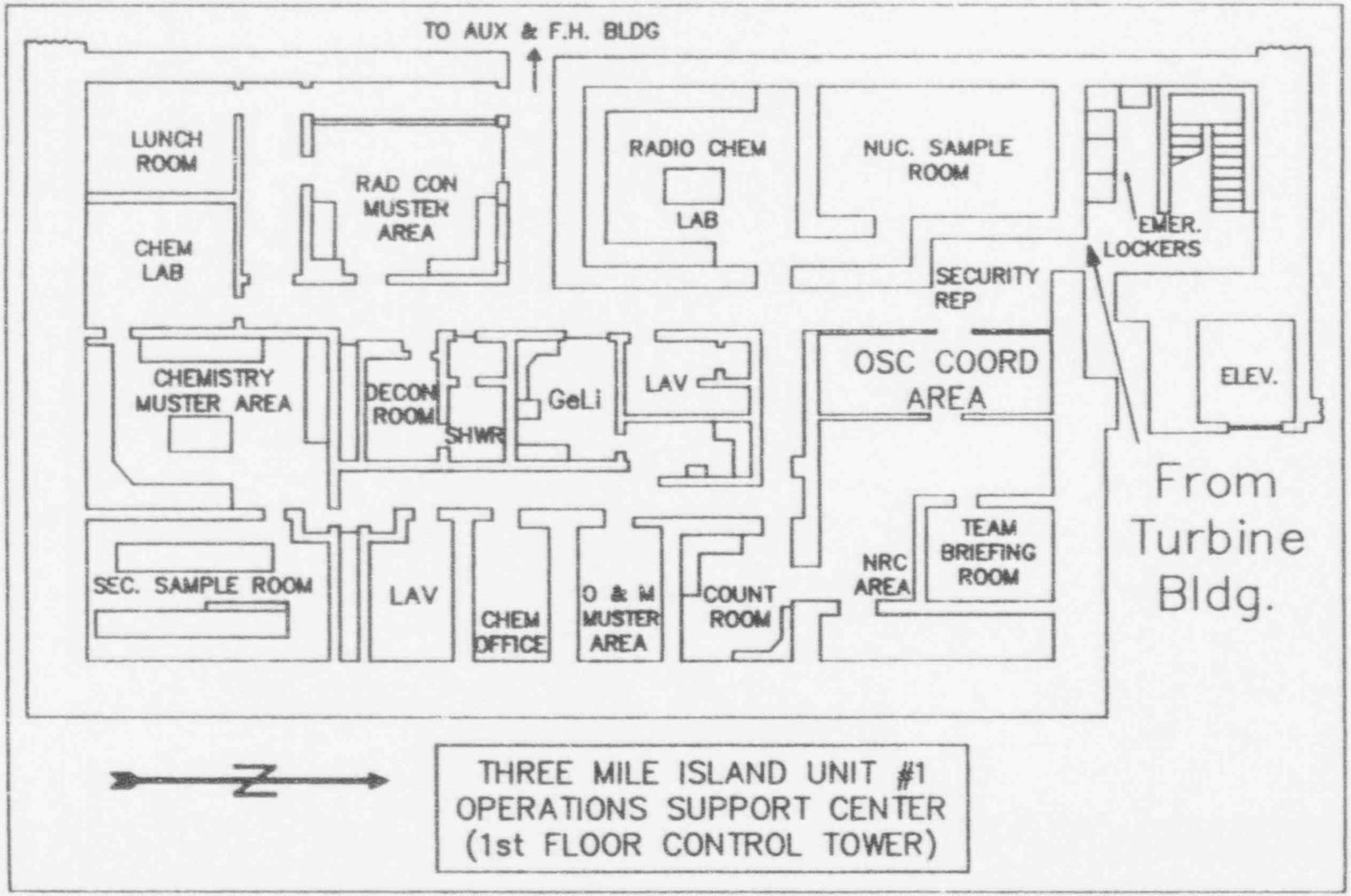
From North Gate, turn left onto Route 441 (North). Proceed 2.1 miles to the traffic light at Middletown. Go straight through the light and straight through the next traffic light to a stop sign. Turn right at the stop sign and bear left to cross the bridge. Upon crossing the bridge, turn left at the traffic light and proceed straight on Route 230 West to the next traffic light (at Jamesway Plaza). Go straight through the light and turn right onto the entrance ramp for Route 283. Proceed straight to the 283 (West) Harrisburg sign. Bear left at the sign and continue onto 283 merge area. Merge onto I 283 North and continue straight to the exit for 83 North, 81 North, and 322 West. Proceed straight onto 83 North and continue straight to the junction of Route 81 North. Bear right onto Route 81 North and proceed to Exit 26. (This is the first exit you can take from Route 81 North). Proceed to the traffic light and turn left. Proceed approximately 0.8 miles, turn left onto Shannon Rd., then left on Flank Drive. The Joint Information Center is at 6345 Flank Drive, Suite 500.

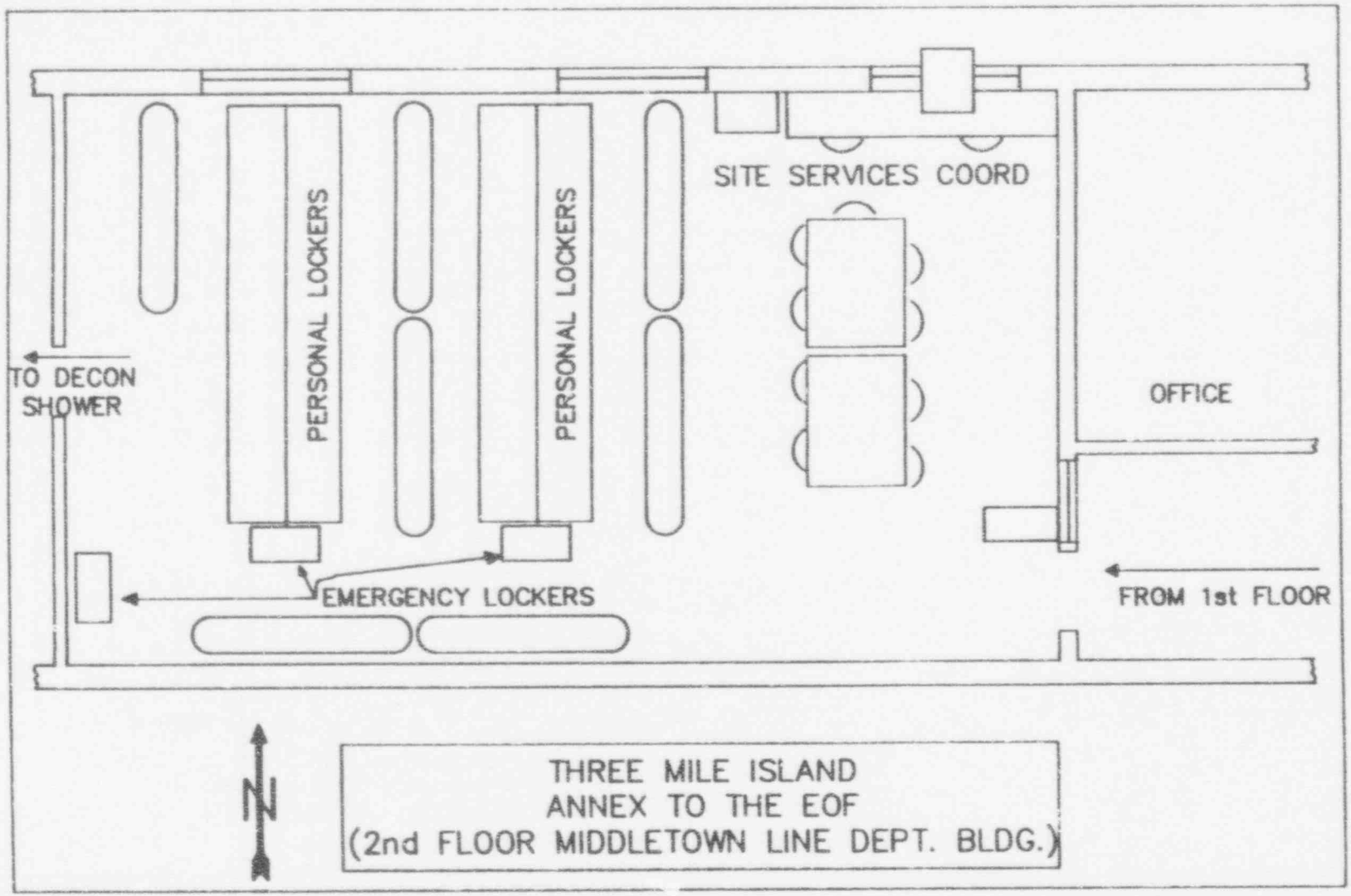

SUSQUEHANNA RIVER
To North Gate
NRC Offices
NOB
PARKING
OSF
SECURITY
WHSE 1
WHSE 1
SERVICE BLDG
REACT. BLDG. UNIT 1
TURB. BLDG.
AUX. BLDG
F.H. BLDG.
OOB
MED-ICAL
REACT. BLDG. UNIT 2
TURB. BLDG.
WARE-HOUSE 2
WARE-HOUSE 3
NORTH
Protected Area Access Point
Emer. Cont. Center
Tech. Support Center
Ops. Support Center
SUBSTATION
SUSQUEHANNA RIVER
THREE MILE ISLAND
GENERAL ARRANGEMENT MAP


NRC CONFERENCE ROOM
EMERGENCY SUPPORT DIRECTOR CONFERENCE ROOM
LIBRARY/ COMMUNICATIONS
STATE REP.
NRC AREA
TO LABS, ETC.
EMERGENCY SUPPORT DIRECTOR
OFFICE AREA
TECH SUPPORT AREA
OPS ADVISOR
GROUP LEADER- RAD & ENV SUPPORT
TO LABS, ETC.
ADMINISTRATIVE SUPPORT
ENVIRONMENTAL ASSESSMENT COMPUTER ROOM
ENTRANCE
THREE MILE ISLAND EMERGENCY OPERATIONS FACILITY
2574 INTERSTATE DRIVE
HARRISBURG, PA.


CONTROL ROOM
SHIFT
SUPERVISOR'S
OFFICE
FROM CONTROL TOWER STAIRS
RAD ASSESSMENT
AREA
HPN
THREE MILE ISLAND
EMERGENCY CONTROL CENTER
(TMI-1 CONTROL ROOM,
4th FLOOR CONTROL TOWER)


CONTROL TOWER
STAIRWELL
FROM TURBINE
BUILDING
ENGINEERS
NRC
TSC
COORD
ENGINEERS
N
REMOTE SHUTDOWN
AREA
THREE MILE ISLAND
UNIT #1
TECHNICAL SUPPORT
CENTER
(2nd FLOOR TMI-1 CONTROL TOWER)


TO AUX & F.H. BLDG
LUNCH ROOM
CHEM LAB
RAD CON MUSTER AREA
RADIO CHEM LAB
NUC. SAMPLE ROOM
EMER. LOCKERS
SECURITY REP
CHEMISTRY MUSTER AREA
DECON ROOM
SHWR
GeLi
LAV
OSC COORD AREA
ELEV.
From Turbine Bldg.
SEC. SAMPLE ROOM
LAV
CHEM OFFICE
O & M MUSTER AREA
COUNT ROOM
NRC AREA
TEAM BRIEFING ROOM
N
THREE MILE ISLAND UNIT #1
OPERATIONS SUPPORT CENTER
(1st FLOOR CONTROL TOWER)


PERSONAL LOCKERS
PERSONAL LOCKERS
SITE SERVICES COORD
TO DECON SHOWER
OFFICE
EMERGENCY LOCKERS
FROM 1st FLOOR
N
THREE MILE ISLAND
ANNEX TO THE EOF
(2nd FLOOR MIDDLETOWN LINE DEPT. BLDG.)

TMI JOINT INFORMATION CENTER
SUITE 500, 6345 FLANK DR. HARRISBURG

2.10

TELEPHONE NUMBERS FOR EMERGENCY RESPONSE FACILITIES

Unit 1

ECC - (Simulator) 948-2069, 2070, 2071
OSC - 948-8082, 8010
RAC - (Simulator) 948-2063
TSC - 948-8774, 8773

EOF

ESD	Support Communications Rep.	Communications Division
948-8966 657-0471	948-8903 657-0739	948-8968
Rad Con	**ESD Operations Advisor**	**PA State Rep.**
657-0629	948-8967	657-1234
Technical Functions Rep.	**AEOF**	**JOINT INFO CENTER**
657-0471 657-3509 (Telecopier)	1st Floor 9-944-6558 2nd Floor 9-944-3668 944-2972, 944-2922	540-4900

Remote Assembly Area (RAA) DIRECTIONS

DIRECTIONS TO THE TMI TRAINING CENTER/RAA

From the North Gate, turn right onto Route 441 (South). Take Route 441 to the TMI Visitors' Center. Turn left into Visitors' Center parking lot. TMI Training Center is located behind the Visitors' Center.

DIRECTIONS TO THE AEOF/RAA

From the North Gate, turn left onto Route 441 North. Proceed 2.1 miles to the traffic light at Middletown. Go straight through the light onto Ann Street. Follow Ann Street to the next traffic light. Turn left at the light onto South Wood Street. Follow South Wood Street for four blocks (two stop signs). At the second stop sign, turn right (VFW Post 1620 is on the right corner). Proceed straight to the Security Gate at Crawford Station. Note: You must identify yourself on the telephone located to the right outside of the entrance gate. When the gate opens, proceed to the entrance of the Middletown Service Center. The AEOF is located on the first and second floors of Middletown Service Center.

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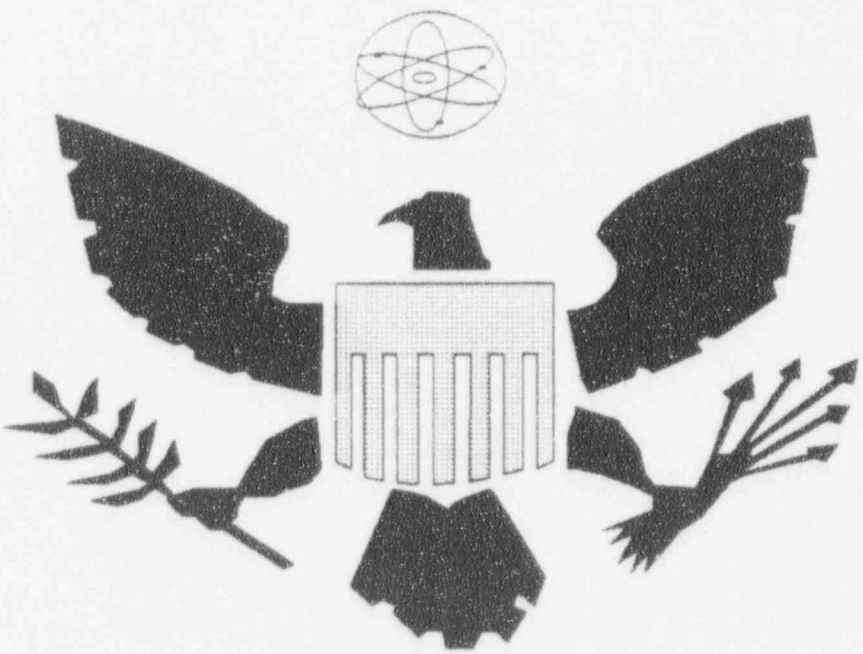

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OBSERVER ASSIGNMENT SHEET			
AREA OF RESPONSIBILITY	OBSERVER	CONTACT PHONE	APPENDICES
GROUP 1			
50. Drill Coordinator (ECC)	G. Simonetti	2059	
51. Plant Data Controller	N. Brown	2059	
52. Simulator Management		2059	
53. Console Operator		2059	
54. Operations Evaluator		2059	
55. Communications		2059	
56. TSC		8742	
57. PTFC		7390	
58. TS at EOF		8966	
GROUP 2			
59. EOF Controller		8966	
60. AEOF		944-2922	
61. Public Information		540-4900	G
62. Rumor Control		540-4960	G
GROUP 3			
63. EACC Controller		540-4501	
64. RAC Controller		2059	
65. Dose Assess Controller	R. Eherts	948-8749	
66. Field Team (On Site)		Radiophone	
67. Field Team (EOF)		Radiophone	
68. Field Team (EOF)		Radiophone	
69. Chemistry		8718	

S = Short Version
L = Long Version

OBSERVER ASSIGNMENT SHEET			
AREA OF RESPONSIBILITY	OBSERVER	CONTACT PHONE	APPENDICES
GROUP 4			
70. In Plant Controller	A. Knoche	8718	
71. In Plt Rov A (Elec.)		8718	
72. In Plt Rov B (Ops.)		8718	
73. In Plt Rov D (RC)		8718	
74. In Plt Rov E (RC)		8718	
75. In Plt Rov E (OPS)		8718	
76. In Plt Rov F (Search and Rescue)		8718	
77. In Plt Rov G. (Elec.)		8718	
78. In Plt Rov H. (Mech.)		8718	
79. Medical Observer			
80. Designated Injured Person			**NO SCENARIO**
GROUP 5			
81. OSC Controller	J. Whitehead	8164/8737	
82. Emergency Assembly		8064/5042	
83. Security (Account)		Radiophone	
84. NSCC			
85. NSCC			
86. NRC			
87. NRC			
88. NRC			
##. **Evacuee**			**NO SCENARIO**
##. **Evacuee**			**NO SCENARIO**
##. **Evacuee**			**NO SCENARIO**

S = Short Version
L = Long Version

THE DRILL COORDINATOR — has the overall responsibility for the implementation of the drill/exercise. All changes to the scenario are authorized by the DRILL COORDINATOR following approval from the affected CONTROLLERS.

CONTROLLERS — are designated for key areas of scenario implementation and also have the responsibility of observing the activities of the drill participants. CONTROLLERS are the ONLY individuals that may change the scenario (data, sequence, etc.). The changes are implemented following authorization from the DRILL COORDINATOR.

OBSERVERS — have the responsibility of monitoring the activities of the drill participants and providing required information (scenario data, messages, etc.).

S = Short Version
L = Long Version

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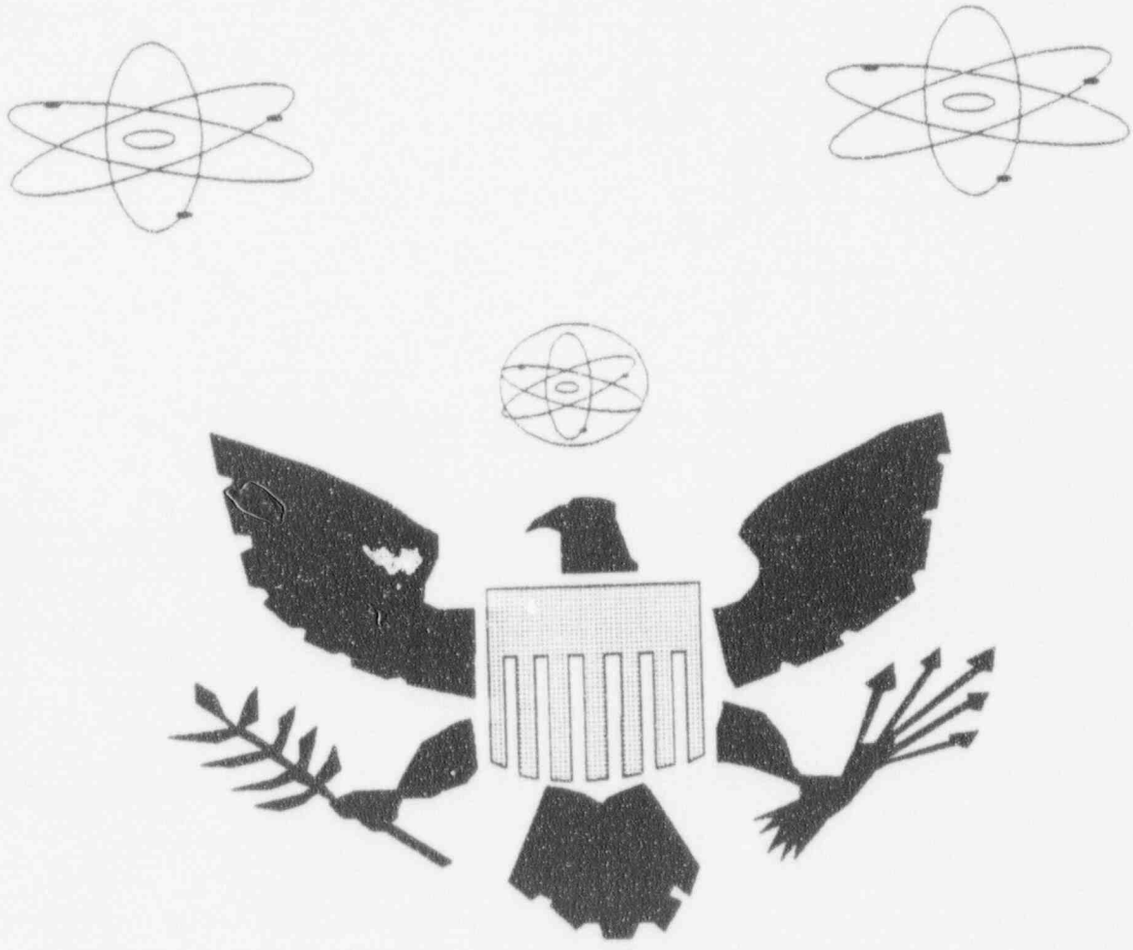

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OBJECTIVES FOR THE 1994 THREE MILE ISLAND NUCLEAR STATION ANNUAL EXERCISE

An exercise will be conducted in order to demonstrate the state of emergency preparedness of the Three Mile Island Nuclear Station (TMI). This will be accomplished through the implementation of the emergency plan dedicated to the response to a TMI incident. This is a non-participation year for the State of Pennsylvania regarding the Three Mile Island Annual Exercise. Therefore, in accordance with I.E. Notice 87-54, escalation to a General Emergency is not required.

The Three Mile Island Station objectives are as follows:

NOTE: Bracketed information refers to the correspondence elements identified in NRC Inspection Procedure 82302, Section 82302-03 Inspection Guidance, Paragraph 03.02.

A. Operational Assessment [a.1, 2]

1. Demonstrate the ability of the control room personnel to recognize (by Plant Reference Simulator indications) that emergency action levels have been reached or exceeded, properly classify the emergency and implement the emergency plan within ≈ 15 minutes of recognition.

2. Demonstrate the ability of the operators to assess plant conditions, effectively utilize engineering support, and implement procedures in order to place the plant in a safe condition, as indicated by the Plant Reference Simulator displays.

3. Demonstrate the ability of the plant personnel to mitigate the in-plant and off-site consequences of a radiological release through operational manipulations.

4. Exhibit the coordination and adequacy of the TMI Emergency Operating Procedures and Emergency Plan Implementing Procedures.

5. Demonstrate the Classified Emergency Termination/Recovery process by implementation or discussion.

B. Radiological Controls and Environmental Assessment [a.5,6; b.14 ,15]

1. Satisfactorily perform radiological and environmental monitoring activities in accordance with prescribed procedures.

2. Properly assess the monitoring data to formulate accurate off-site radiological dose projections.

3. Demonstrate the ability to evaluate monitoring data, off-site radiological dose projections, and plant conditions to arrive at appropriate protective action recommendations within ≈ 15 minutes of the G.E. declaration, if required.

4. Demonstrate the ability to support the radiological assessment process while maintaining personnel radiation exposure as-low-as-reasonably-achievable.

5. Demonstrate that sufficient radiological protection exists for emergency personnel to properly carry out assigned roles and responsibilities in all facilities.

6. Demonstrate the ability to line up for, obtain, and analyze a(n) RCS-PAS within the 3 hour commitment.

NOTE: This will be run in the afternoon as a mini-drill.

7. Demonstrate the ability to obtain and analyze appropriate samples (e.g., grab samples, etc.).

8. Exhibit the proper use of appropriate sample results (e.g., grab samples, etc.) for dose assessment and radiological controls activities.

9. Demonstrate effective coordination of the radiological and environmental assessment process with the Bureau of Radiation Protection.

10. Demonstrate the capability to dispatch a field monitoring team from the facility within 30 minutes of the declaration of an emergency when a release is in progress.

11. Exhibit the ability to develop the initial dose projection within 30 minutes of process initiation and subsequently within ≈ 15 minutes as needed.

C. Emergency Organization [a.7, 8; b.6]

1. Demonstrate that sufficient emergency personnel are available to properly mitigate the consequences of an emergency and support the emergency on a round-the-clock schedule.

2. Exhibit proper response of the emergency personnel to activate emergency response facilities and carry out assigned roles and responsibilities within their allotted 1 hour or 4 hour response time.

NOTE: Response time starts with the activation of the EP Pagers.

3. Demonstrate proper transfer of responsibility between on-shift personnel and incoming emergency personnel.

4. Demonstrate timely briefing and dispatch of Emergency Teams at the OSC.

D. Emergency Response Facilities

1. Demonstrate that sufficient and adequate emergency equipment exists to effectively perform all necessary emergency actions.

2. Demonstrate a viable means of access control exists that restricts entry to authorized personnel only.

3. Show that sufficient space is dedicated in all facilities to allow for proper emergency response.

4. Demonstrate the ability to screen and/or process personnel for access to emergency response facilities.

E. Communications [a.3, 4]

1. Demonstrate that reliable communications systems exist to accomplish notification of off-site agencies within the 15 minute (State and Risk Counties) or 1 hour (NRC) time limits.

2. Demonstrate that adequate emergency communications systems are in place to facilitate transmittal of data among emergency response facilities.

3. Exhibit the ability to effectively utilize emergency communications systems.

4. Demonstrate the ability to adequately alert station personnel of an emergency through the use of alarms and public address systems.

5. Demonstrate that adequate call out procedures exist to provide for mobilization of emergency response personnel within ≈30 minutes of the event declaration.

6. Demonstrate the ability to effectively communicate with emergency teams on-site and off-site.

7. Exhibit data display at each facility which is adequate to support the facilities' mission.

F. Personnel Protection [b.4, 16 ,17]

1. Demonstrate that initial accountability can be accomplished within thirty minutes, and final accountability can be accomplished within sixty minutes of the event declaration.

2. Demonstrate the ability to muster nonessential personnel on site and that adequate provisions exist to carry out an orderly evacuation.

3. Demonstrate proper adherence to personnel protection/safety rules.

4. Demonstrate the capability to radiologically monitor and, if necessary, decontaminate personnel on-site or off-site.

5. Demonstrate that search and/or rescue can be implemented following accountability, if required.

6. Demonstrate the ability to control access to areas with changing radiological conditions in-plant and around the site.

7. Demonstrate the ability to issue KI.

NOTE: This objective will be accomplished by the MEDICAL REPRESENTATIVE walking the OBSERVER through the appropriate procedural actions.

8. Satisfactorily respond to an injured and/or contaminated person without jeopardizing their safety.

G. Public Information [b.2, 9]

1. Demonstrate the ability to develop and disseminate accurate news releases within 1 hour from the time that a major plant event has occurred.

2. Exhibit proper activation of the Joint Information Center.

3. Demonstrate effective rumor control techniques.

4. Demonstrate the ability to conduct news briefings and interface with the news media, elected officials and concerned citizens on a frequency of at least 1 per hour, as required.

H. Critique

1. Demonstrate the capability to properly conduct an exercise critique with the participants in order to identify major strengths and weaknesses.

I. Previously Identified Deficiencies

A. Demonstrate that previously identified deficiencies have been corrected.
NRC INSPECTION REPORT 50-289/93-10
1993 TMI ANNUAL EXERCISE
IDENTIFIED AREAS FOR POTENTIAL IMPROVEMENT

Observer Prompt of Radiological Assessment Coordinator (IFI50-289/93-10-01)

A licensee observer prompted the Radiological Assessment Coordinator (RAC) by instructing him on dose assessment computer start-up and providing input data. The licensee stated that this was due to computer lock-up and loss of the central processing unit when the computer was rebooted.

Radiological Assessment Coordinator Performance (IFI50-289/93-10-02)

The RAC used the wrong iodine spiking factor, which incorrectly resulted in a Site Area Emergency recommendation, though no premature event declaration was made. Later, he provided accurate dose projections for the initial release.

Event Response Realism (IFI50-289/93-10-03)

The Emergency Director (Shift Supervisor) called out the entire Emergency Response Organization (ERO) at the Unusual Event. The licensee's procedures provide this option. However, it is not a normal practice to call out the entire ERO for an Unusual Event. Also, discussions with the licensee indicated that this aspect of exercise performance may be developing into a practice that unnnecessarily differs from the practice for an actual event.

OTSG Leakage Rate Responsibility (IF50-289/93-10-04)

It was unclear whether the ECC or the TSC had the lead in determining the OTSG leakage rate for use in release dosage rate calculations. TSC personnel believed they were responsible, but did not question the announced leakage rates when they differed from TSC calculations.

TSCC Prompt (IFI50-289/93-10-05)

The TSC Observer prompted the TSCC. Specifically, when low pressure injection did not add inventory to the Reactor Coolant System, the TSCC asked the observer if In-line Check Valve CF-V-5B had failed closed. The observer responded that CF-V-5B had not failed, but that Core Flood Tank Outlet Valve CF-V-4B had failed closed. In this case, neither the question nor the response were proper because procedures should have been pursued to determine the reason for the flow problem.

Communications between TSC and ECC (IFI50-289/93-10-06)

Communications between the TSC and the ECC could be improved. For example, the TSC was evaluating the offsite release associated with the steam-driven auxiliary feedwater pump long after the pump had been shifted to non-radioactive auxiliary steam. The TSC staff discovered the shift to auxiliary steam from an ED briefing.

Use of Temperature/Pressure Indicators (IFI50-289/93-10-07)

The TSC evaluated which temperature/pressure indicators to use in determining when to shift to decay heat removal for core cooling. Such information could have already been proceduralized.

EOF Emergency Lighting (IFI50-289/93-10-08)

Normal EOF power loss was a scheduled scenario event. The back-up diesel generator functioned properly and restored power in about eight seconds. During the power loss, there was no emergency lighting in the main room of the EOF. When power was restored, the EOF staff located battery-powered lamps and flashlights. But, most lamps had weak batteries and insufficient replacements were available.

Correctiveness of News Release Information (IFI50-289/93-10-09)

All six licensee news releases were adequate. They were technically correct and easy to understand. However, they also contained misspelled and repeated words, and incomplete sentences. That could result in the appearance of lack of careful preparation/reivew and in degradation of their credibility.

Note: This list of items denotes the level of participation that may result if such action is taken by the participants in response to scenario situations (i.e., if search and rescue is deemed appropriate by the participants, they will be required to actually perform this action rather than simulating it.) It is NOT intended to be an absolute list of actions that will be taken. Actions which affect normal Plant Operation WILL NOT be permitted.

	EVENT	ACTUAL	SIMULATION
1.	Declaration of Emergency	X	
2.	Notification of Off-Site Agencies	X	
3.	Emergency Announcements	X	
4.	Activation of Initial Response Emergency Organization	X	
5.	Activation of Emergency Support Organization	X	
6.	Protected Area Accountability	X	
7.	Sample and Analysis	X	
8.	Evacuation of Site Personnel	X*	
9.	Monitoring at Assembly Area	X	
10.	Decontamination of Contaminated Person(s)		X**
11.	Power Plant Operation		X***
12.	Dispatching of Response Teams (e.g., Radiation Monitoring, Fire Brigade, Repair, etc.)	X	
13.	Public Information (e.g., Rumor Control, News Releases, Joint Information Center Activation, etc.)	X	
14.	Search and Rescue (e.g., Trapped Person, Missing Person)	X	
15.	Evaluate Emergency Responder(s) to meet Fitness For Duty	X	
16.	Medical Response (e.g., Injured person, KI distribution)		X****

* A maximum of 4 personnel will be evacuated to demonstrate the effectiveness of the evacuation process.

** Contamination is simulated by using Lantern mantles. Simulated decontamination is done by following applicable plant procedure(s).

*** Control switches may be operated in the Plant Reference Simulator. All controls in the plant will not be operated. [ACTUAL PLANT CONFIGURATION WILL NOT BE ALTERED.]

**** Response to simulated injuries only as part of the drill. Simulated distribution of KI.

SCOPE

The 1994 Annual Exercise is run from the Plant Reference Simulator (PRS) using REAL TIME dose assessment / field monitoring team data transmissions with ACTUAL meteorological conditions. Using the Simulator and REAL TIME dose assessment adds an important degree of realism to the response of the exercise participants by allowing the exercise to more realistically follow actual player response. This player reactive response enhances the awareness of the Emergency Organization to the event conditions and their subsequent recommendations for mitigation.

The Initial Conditions for this exercise are as stated on the Initial Conditions sheet. For Call-Out purposes **ONLY**, the emergency begins on Wednesday evening (12 hours ahead of the scenario) to simulate a back shift emergency organization response. Therefore there will be a delay for Emergency Responders of about 35 minutes. The maximum number of On-Shift emergency personnel will be the same as a randomly selected back shift complement (Refer to list in Observer Checklist section after Drill Ground Rules). The Emergency Reactor Building (RB) cooling is degraded because of boron buildup on the cooling units inside containment. This increases the RB pressure to sustain the release to the environment for the longest possible time.

An announcement reminding all Drill participants to use Radio Channel 5, will start the exercise. Use of this radio channel allows normal activities to continue on the other radio frequencies without confusion concerning the exercise activities. Shortly after the exercise starts the Reactor Coolant System (RCS) develops a leak into the 'B' Once Through Steam Generator (OTSG). Operators will quantify the leak as greater than 1 but less than 50 gpm which is well within the capability of the Make Up system and declare an UNUSUAL EVENT (EAL A5.1). The Shift Supervisor / Emergency Director will order an orderly shutdown of the plant at a rate of about 5%/minute. During the plant shutdown the operators will attempt to stop the RB purge, that was in progress, but will not be successful. The outside purge valve (AH-V-1A) is stuck full open and the inside purge valve (AH-V-1B) is stuck somewhere between open and closed as indicated by the lights in the control room (Simulator).

The reactor is shutdown and a plant cooldown is initiated. The Operations Evaluator will direct the Shift Supervisor to have the plant cooled down at 90° ± 10° F/Hr. During the cool down the 'B' OTSG Main Steam line ruptures inside the Reactor Building. Additionally the OTSG leak increases in magnitude exceeding the capability of the Make Up system decreasing Sub Cooling Margin (SCM) to < 25°, this is because of the increased stresses on the already damages OTSG tubes. Several actions are required when this condition is met.

SCOPE (Continued)

First the Reactor Coolant pumps are to be stopped changing the cooling mode from forced circulation to natural circulation. Second the emergency level must be upgraded to a SITE AREA EMERGENCY (S5.2.1). The Site Area Emergency initiates the muster/accountability process and actives Emergency Support Organization. Accountability indicates that one person is missing initiating Search and Rescue. The missing individual is located, determined to be injured and contaminated requiring medical assistance with decontamination. All off site support will be simulated. Additionally the medical department will demonstrate the proper control and distribution of KI, in a non-related mini-drill. After non-essential personnel are mustered a mini evacuation will be conducted.

The depressurization of the plant activates the safety systems to keep the core covered and cooled. If the plant operators attempt to use Reactor Building Spray the 'B' pump suction valve, BS-V-3B, will be found closed, it fails to open on the high RB pressure and can not be opened manually. Attempts to use the 'A' train of building spray will be successful. This failure is followed by the tripping of the 'A' Make Up pump, on overcurrent conditions.

The exercise ends when the participants are successful in closing the failed open purge valve (AH-V-1A), returning a Make UP pump (A or B) to service or depressurizing to establish LPI/DHR to provide core cooling, establishing watchbills and evaluating EPIP-TMI-.24.

An RCS-PAS (Reactor Coolant Post Accident Sample) and analysis mini-drill will conducted in the afternoon following this exercise.

DRILL DRILL DRILL

TMI-1 PLANT STATUS **DATE** 05/19/94 **TIME** 0530

PRIMARY PLANT	SECONDARY PLANT
MODE: POWER OPERATIONS **POWER:** 99.66 % 2559.3 MWth **BURNUP:**543 EFPD; **BORON:** 19 ppmB **PRESSURE:**2156 PSIG; **TAVE:** 579 F **RC PUMPS:** 4 **RC FLOW:**144.4 Mlb/hr **RCS LEAK RATE:** Leakage + Losses: .0768 GPM Total Leakage: .0801 GPM Unidentified: .0801 GPM Method A P-S Leakage: 1.14 GPH Method B P-S Leakage: 1.17 GPH	**GENERATION:** 884 MWe; **ACT-PRED:** +4.1 MWe **CNDNSR VAC:** 27.7" Hg; **CW TEMP:** 64 F **OTSG A/B PRESSURE:** 913 / 913 PSIG **OTSG A/B LEVEL:** 58% / 57% Op Range **FW A/B FLOWS:** 5.36 / 5.39 (MLB/HR) **MS Drains Feeding Forward:** 4 **RC TOTAL ACTIVITY:** 10.0 uCi/ml **DOSE EQUIV IODINE:** 1.9 E-2 uCi/ml **CONDENSER OFFGAS:** 7050 CPM @ 24.1 SCFM

CONTINUOUS DAYS ONLINE:546

CHEMISTRY & THERMOHYDRAULIC ABNORMALITIES:
Maintenance and Engineering are evaluating the build up of Boron on the Reactor Building Cooling units. (AH-E-1A/B/C).
Plant Engineering expects that the reactor building cooling system efficiency may be degraded.

SIGNIFICANT EVENTS:
The Met recorders (Direction, Speed and Temperature) are OOS. Use the ED/ESD screen on the computer, if information is needed.
The 'B' Industrial cooler is OOS.

MAJOR EQUIPMENT OUT OF SERVICE / PROBLEM AREAS:
MUP1B is OOS. ADMIN 1038 30 day time clock in effect, started 0800 hours 05/10/94. Rotor off site to be rewound expect on site 05/20/94

MAJOR PLANNED ACTIVITIES AND TESTING FOR THE NEXT 24 HOURS:
Evaluate extent of Boron buildup on the RB coolers and the amount of fouling and implement a cleaning plan.

PDMS:
Cork seal drilling is scheduled to start this afternoon.

COMMENTS:
RB Purge in progress for non-routine safety related corrective maintenance (check RB coolers).

DRILL DRILL DRILL

_____ _____

Shift Technical Advisor **Ops Director, TMI-1**

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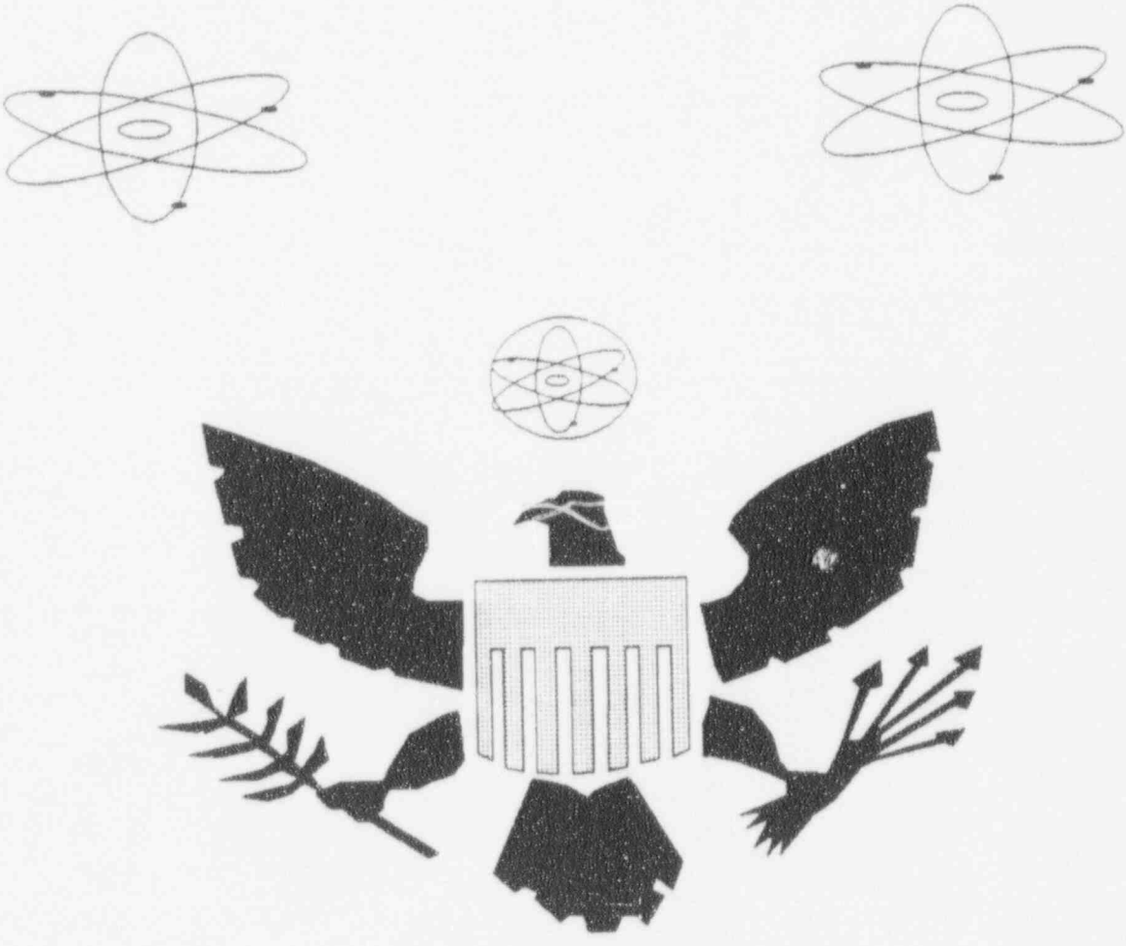

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TIME		MAJOR EVENT	MESSAGE CONTENT	MESSAGE NUMBER (PAGE)	DETAILS/ MESSAGE DELIVERED BY	DETAILS/ MESSAGE DELIVERED TO	EXPECTED ACTIONS
SCENARIO	CLOCK						
T = -30	0700	Initial Conditions	N/A	None	Plant Data Controller/ OSC Controller	Senior Management/ Shift Supervisor/ Shift Foreman/ Group Rad Con Supervisor	Inform drill participants of drill plant conditions.
T = 0	0730	Drill Begins	The time is now T = 0.	DC-1 (10.4)	Drill Coordinator	Drill Observers/ Drill Participants	Start the drill. Change radios to Channel 5.
T = 5	0735	Primary to Secondary Leak in the "B" Steam Generator.	N/A	None	Plant Data	Control Room Staff	Attempt to quantify leak rate. Declare an UNUSUAL EVENT.
T = 10	0740	Plant shut down initiated.	Shut down at 5% per minute.	DC-2* (10.5)	Drill Coordinator	ECC Staff	Shut down at 5% per minute.
T = 10	0740	R.B. Purge Isolation Failure.	N/A	None	Plant Data	Control Room Staff	Dispatch personnel to investigate/ resolve R.B. Purge isolation failure.

* Indicates a Contingency Message. Refer to the Observer Instructions

TIME		MAJOR EVENT	MESSAGE CONTENT	MESSAGE NUMBER (PAGE)	DETAILS/ MESSAGE DELIVERED BY	DETAILS/ MESSAGE DELIVERED TO	EXPECTED ACTIONS
SCENARIO	CLOCK						
T = 30	0800	Information Request	Private boat slipped moorings and drifted to TMI.	PI-1 (10.6)	Public Information Observer	ECC Staff Member	Refer caller to Public Information Department.
T = 40	0810	Plant Cool Down Initiated.	Cool Down at 90°±10°/Hour.	DC-3* (10.7)	Drill Coordinator	ECC Staff	Cool down plant at 90°±10°/Hour.
T = 50	0820	Information Request	TRAFFAX reporter requesting information .	PI-2 (10.8)	Public Information Observer	ECC Staff Member	Refer caller to the Communications Division.
T = 70	0840	Leak Rate Increases. "B" Steam Generator Steam Line Breaks Inside the Reactor Building.	N/A	None	Plant Data	ECC Staff	Attempt to quantify leak rate. Declare a SITE AREA EMERGENCY.
T = 100	0910	Fitness for Duty Testing at the AEOF.	Emergency responder consumed an alcoholic beverage several hours ago.	AE-1 (10.9)	AEOF Observer	Site Services Coordinator	Test B.A.C. I.A.W. EPIP-TMI-.32, Exhibit 7.

* Indicates a Contingency Message. Refer to the Observer Instructions

TIME		MAJOR EVENT	MESSAGE CONTENT	MESSAGE NUMBER (PAGE)	DETAILS/ MESSAGE DELIVERED BY	DETAILS/ MESSAGE DELIVERED TO	EXPECTED ACTIONS
SCENARIO	CLOCK						
T = 115	0925	Muster Complete.	Select three individuals to demonstrate the evacuation process.	EA-1 (10.10)	Emergency Assembly and Site Evacuation Observer	Emergency Assembly Area Coordinator	Comply with direction. NOTE: The three evacuees are pre-designated.
T = 125	0935	Account-ability Complete. One person missing.	N/A	None	Security and Accountability Observer	Site Security	Report status to Emergency Director. Commence Search and Rescue.
T = 130	0940	Evacuation	Initiate a mini evacuation	DC-4 (10.11)	Drill Coordinator	Emergency Director	Commence the evacuation.
T = 140	0950	MU-P-1A fails.	N/A	None	Plant Data	ECC Staff	Dispatch an Emergency Repair Team.
T = 145	0955	Injured (missing) person found.	N/A	None	Medical Observer	Search and Rescue Team	Render first aid. Extricate victim. Report status to OSC and ED.
T = 150	1000	Evacuees arrive at the AEOF	N/A	None	AEOF Observer	AEOF Staff	Decontaminate personnel. Utilize manpower as needed.

* Indicates a Contingency Message. Refer to the Observer Instructions

TIME		MAJOR EVENT	MESSAGE CONTENT	MESSAGE NUMBER (PAGE)	DETAILS/ MESSAGE DELIVERED BY	DETAILS/ MESSAGE DELIVERED TO	EXPECTED ACTIONS
SCENARIO	CLOCK						
T = 155	1005	USNRC Region I contacts Site Security.	NRC Inspector dispatched to TMI.	None	Security and Accountability Observer	Security Shift Supervisor or senior Security Officer	Forward the information to the AEOF.
T = 170	1020	Information Request	Request for TMI ambulance for off-site response.	PI-3 (10.12)	Public Information Observer	EOF Staff Member	Refer caller to the Communications Division or County EMA.
T = 180	1030	MU-P-1A or MU-P-1B returned to service.	N/A	None	In-Plant Rover	Emergency Repair Team	Report status to OSC and ECC.
T = 195	1045	Badging at the AEOF	USNRC Inspector requires site access.	AE-2 (10.13)	AEOF Observer	Site Services Coordinator	Provide badging I.A.W. EPIP-TMI-.32, Exhibit 8.
T = 200	1050	AH-V-1A returned to service	N/A	None	In-Plant Rover	Emergency Repair Team	Report status to OSC and ECC.
T = 205	1055	Information Request	Possible aircraft contamination questioned.	PI-4 (10.14)	Public Information Observer	EOF Staff Member	Refer caller to the Communications Division, County EMA, or PEMA.

* Indicates a Contingency Message. Refer to the Observer Instructions

TIME		MAJOR EVENT	MESSAGE CONTENT	MESSAGE NUMBER (PAGE)	DETAILS/ MESSAGE DELIVERED BY	DETAILS/ MESSAGE DELIVERED TO	EXPECTED ACTIONS
SCENARIO	CLOCK						
T = 210	1100	Potassium Iodide Issuance Walk-Through	N/A	None	Medical Observer	Medical Department Staff	Walk-through the process of issuing Potassium Iodide.
T = 215	1105	Resource Request	Provide contact for technical experts in the field of thermal imaging services.	AE-3 (10.15)	AEOF Observer	AEOF Staff	Refer to the INPO Emergency Resources Manual.
T = 240	1130	Drill ends	The drill is terminated.	DC-5 (10.16)	Drill Coordinator with ED & ESD concurrence	Drill Observers & Participants	Terminate the drill. NOTE: An RCS-PAS exercise will be held in the afternoon, independent of this drill.

* Indicates a Contingency Message. Refer to the Observer Instructions

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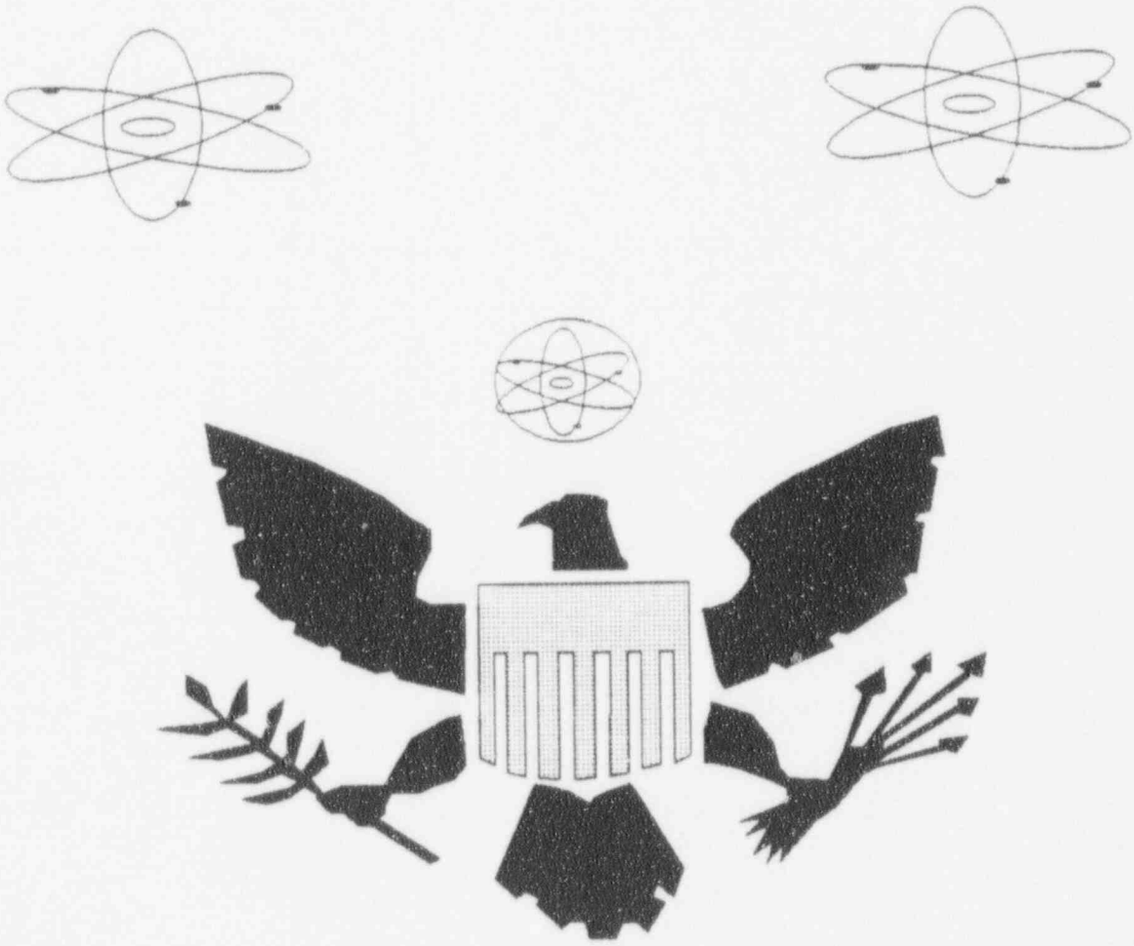

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DRILL COORDINATOR INSTRUCTIONS

1. When all personnel have been briefed (i.e., watch turnover) and the Plant Reference Simulator is lined up for the drill, read Message DC-1 over the plant page and radio system.

2. Several events will occur during the course of the drill that, in reality, could require off-site assistance. Calls are to be simulated with the exception of the Emergency Off-Site Notification process and calls to PEMA regarding the site evacuation process. This information is repeated in the Communications Observer Instructions.

3. The Public Information Observer will call the ECC with Message PI-1 at T = 30 (0800 hours) and Message PI-2 at T = 50 (0820 hours). See the Public Information Observer Instructions for the specific messages. These calls will test the ability of the ECC personnel to deal with distractions and outside agencies during a stressful situation. Monitor the response to these calls.

4. If a shut down rate other than 5% per minute is selected, read Contingency Message DC-2 to the ECC staff at approximately T = 10 (0740 hours).

5. If a cool down rate other than 90° ± 10° per hour is selected at approximately T = 40 (0810 hours), read Contingency Message DC-3 to the ECC staff.

6. At T = 130 (0940 hours) or when muster is complete, direct the Emergency Director to initiate the mini evacuation by reading message DC-4 to him. Verify the Emergency Director consults with the Radiological Assessment Coordinator to consider radiological exposure implications relative to the evacuation route. Provide the Emergency Director with the modified Emergency Report Form for Site Evacuation.

7. At T = 195 (1045 hours), the AEOF Observer will test the ability of the AEOF staff to process a USNRC Inspector for site access, including badging and dosimetry issue. If the Site Services Coordinator, Security Support Coordinator, or other AEOF staff member calls the Emergency Director to verify the authenticity of the individual, direct the ED to confirm the need to process the person.

DRILL COORDINATOR INSTRUCTIONS (Continued)

8. At T = 240 (1130 hours) or when the drill objectives are satisfied and with Emergency Director and Emergency Support Director concurrence, end the drill by reading Message DC-5 over the plant page system. Then read Message DC-5 to the EOF, AEOF, Joint Information Center, and PTFC using commercial or emergency telephones.

9. Contact the Shift Supervisor/Shift Foreman at extension 8070 or 8071 and inform him of the completion of the drill. Inform the plant Shift Supervisor or Shift Foreman that an RCS-PAS drill will be conducted in the afternoon independent of this exercise.

10. At the completion of the drill, ensure all equipment is returned to the proper storage location and the Simulator Control Room is returned to pre-drill conditions.

COMMUNICATIONS OBSERVER INSTRUCTIONS

1. Arrive at the Simulator Shift Supervisor's Office at T = -30 to set up the facility for the drill. Ensure the wall clock in the Simulator Shift Supervisor's Office is synchronized with the clocks in the Replica Simulator. When contacted by the individual merging plant communications systems, perform Section 1 of procedure 6410-SUR-1310.13, Exhibit 6, "Simulator Communications Equipment Set-Up for Drills/Exercises and Return to Normal".

2. During the course of the drill, various events will take place which, in reality, could require off-site assistance. All calls to off-site entities shall be simulated with the exception of the Emergency Off-Site Notification process. Also, calls to PEMA regarding the site evacuation process (refer to Exhibit 1, step 1.17 of EPIP-TMI-.02) should not be simulated. In all other cases, allow the drill participants to produce applicable telephone numbers and explain the contact method, but stop the process at the point that the call would be placed.

3. Off-site notifications are to be performed as follows:

   - The initial notifications shall be performed in their entirety in accordance with the Emergency Off-Site Notifications procedure, EPIP-TMI-.03.

   - Reclassification notifications shall be performed in their entirety in accordance with the Emergency Off-Site Notifications procedure, EPIP-TMI-.03.

   - Closeout notifications shall be performed in their entirety in accordance with the Emergency Off-Site Notifications procedure, EPIP-TMI-.03.

   - The Contact/ Call-Out of Emergency Personnel procedure EPIP-TMI-.04 shall be performed as written.

4. Ensure drill demands placed upon state and county emergency management agencies are held to a minimum. For example, if the Communicator fails to cancel the ring tone on the Notification Line following the initiation of a pre-set conference call, intervene and cancel the ring tone yourself.

COMMUNICATOR INSTRUCTIONS (Continued)

Any intervention performed by the observer to lessen the drill impact on state/county dispatch centers should be noted in your Observer Checklists.

5. Should the USNRC elect not to participate in this drill relative to the use of the Emergency Response Data System (ERDS), the Plant Data Controller will turn off the ERDS modem. The Communicator should perform the steps in Procedure EPIP-TMI-.03, Emergency Off-Site Notifications regardless of the NRC's decision. If the modem is turned off, the CRT indications will differ from those specified in the procedure as follows:

   Modem Status: Fail
   Link Status: Fail
   ERDS Status: Inactive

   Explain to the Communicator that the NRC is not participating via ERDS and give the drill participant credit if the steps were performed properly. Do not allow the Communicator to report the system out of service; simulate that the ERDS system is in service and operating.

6. Do not allow telephone calls to be placed to the 911 Dispatch Center, hospital or any other off-site agency in matters relating to an ambulance.

7. Before securing from the drill, ensure closeout notifications have been completed in accordance with procedures EPIP-TMI-.03, EPIP-TMI-.04, and EPIP-TMI-.27. Verify completion with the EOF Communications Coordinator or Communicators as well as the ECC Communications Coordinator or Communicators.

8. If problems are encountered with any communications hardware, ensure you record information in your Observer Check Lists so that repairs can be arranged following the drill. Include the circuit, the specific extension, and the problem encountered as a minimum. Do not allow the ECC Communications Coordinator to actually call off-site companies for communications repairs during the drill. Bell of Pennsylvania, AT&T, Communications Systems Specialists, Metro-Call, etc. will be contacted through normal channels following the drill.

COMMUNICATOR INSTRUCTIONS (Continued)

9. Verify with the ECC and EOF Communicators that all close-out notifications are complete before completing this step. When contacted by the individual isolating communications systems in the plant, perform Section 2 of procedure 6410-SUR-1310.13, Exhibit 6, "Simulator Communications Equipment Set-Up for Drills/Exercises and Return to Normal".

RAC CONTROLLER INSTRUCTIONS

1. Arrive at the Simulator at T = -30 (0700 hours) to confirm the RAC area is set up and functional for the drill.

2. Following the Accountability Process, one individual will be found to be missing. Search and Rescue will be initiated and a contaminated/injured person will be found. The contamination is minor and superficial and should be removed at the scene, prior to transport to a hospital. Specific information about this event is found in the Medical Observer's Instructions.

3. At T = 210 (1100 hours) or when the contaminated-injured person scenario is completed, the Medical Observer will test the ability of the Medical Department to issue Potassium Iodide. The Observer has all of the information necessary including a pre-prepared EPIP-TMI-.35, Exhibit 1 from the Radiological Assessment Coordinator. It should not be necessary for the Medical Rep to call the RAC as this test is independent of the main exercise. If the Medical Rep does contact the RAC, inform him to verify the need to issue KI to the Medical Observer.

4. At the completion of the drill, ensure all equipment is returned to the proper storage location and the Simulator RAC area is returned to pre-drill conditions.

5. Verify that the Drill Coordinator has informed the Shift Supervisor or Shift Foreman in the plant (i.e., the <u>actual</u> Shift Supervisor or Shift Foreman, not the drill participant personnel) that a drill to obtain an RCS-PAS will be conducted in the afternoon, independent of the completed Annual Exercise.

IN PLANT ROVER INSTRUCTIONS

Note 1: Do not allow drill participants to enter actual contamination, airborne, or high radiation areas. Entry into a radiation area is acceptable provided the ALARA program is observed and entry into the area will enhance drill continuity and realism. Ensure all drill participants are signed on to a valid Radiation Work Permit before entering any actual RWP areas. Ensure observers and participants do not violate site radiological practices. Entry into drill RWP areas shall be in accordance with normal procedures.

Note 2: Do not allow drill participants to actually manipulate, disassemble, open, or take readings on plant equipment. Drill participants will be expected to work on drill "mock-ups" if provided.

Note 3: Ensure extreme caution is exercised in the vicinity of energized, rotating, moving, or hot equipment. Obey all safety rules.

Note 4: Applicable drawings and tech manual pages are provided only for the observers in the In Plant Rover Supplemental Information Package. Do not supply this information to drill participants unless otherwise directed.

Note 5: Do not allow drill participants to simulate procurement of tools, drawings, spare parts, support equipment, etc.

1. **INITIAL CONDITIONS**

   A. A Reactor Building Purge is in progress.

   B. Make Up Pump MU-P-1B is out of service. The high speed gear drive unit has been disassembled and several gear assemblies have been shipped off site to be repaired by the manufacturer. All parts of the unit are scheduled to arrive back at Three Mile Island on Friday, May 20, 1994. A thirty day administrative time clock is in effect in accordance with AP 1038.

IN PLANT ROVER INSTRUCTIONS (Continued)

C. Make Up Pump MU-P-1A is providing seals and is E.S. selected.

D. A problem with boron crystal build up is being experienced in Reactor Building cooling units AH-E-1A, AH-E-1B, and AH-E-1C. The source of the problem is unknown and Engineering and Maintenance are investigating.

E. The "B" Industrial Cooler is out of service for a major overhaul. Multiple components are disassembled to allow for inspection and removal of plastic sheeting. While the system is down for this work, bearing replacements on fans and rebuilding of pumps is also in progress.

F. The wind speed/wind direction meteorological recorder and the temperature/ delta temperature meteorological recorder in the Control Room are out of service.

2. **PRIMARY TO SECONDARY LEAK/LOSS OF COOLANT ACCIDENT**

At T = 5 (0735 hours), a thirty gallon per minute primary to secondary leak will start in the "B" Steam Generator. At T = 70 (0840 hours), the leak rate increases rapidly to approximately 880 gallons per minute. At the same time, a rupture of a steam line off of the "B" Steam Generator occurs inside the Reactor Building. Unless monitored by camera in the early stages of the leak, the exact location of the steam line break will be unavailable to the plant staff. The location of the leak makes this leak unisolable and the conditions in the Reactor Building will deteriorate to the point that an entry will not be attempted.

3. **REACTOR BUILDING PURGE EXHAUST VALVE AH-V-1A**

After the primary to secondary leak is discovered in the "B" Steam Generator, the Control Room staff will attempt to secure the Reactor Building purge any time around T = 10 (0740 hours). During this operation, Reactor Building Purge Exhaust Valve AH-V-1A will not shut, but will remain essentially full open (30°). Additionally, Purge Exhaust

IN PLANT ROVER INSTRUCTIONS (Continued)

Valve AH-V-1B will fail to close fully. The staff may elect to devote resources to the shutting of one or both of these valves or they may initially decide to employ the manpower else where. Once the leak rate increases and the steam line breaks in the Reactor Building however, a high priority will be placed on shutting one or both of these valves.

Station yourself at AH-V-1A at T = 10. An Auxiliary Operator will most likely be dispatched to your location to investigate the valve's failure to close as the Operations Support Center will not be fully functional when this event occurs. Once manned, the OSC will dispatch an Emergency Repair Team.

If available, monitor the briefing and preparation activities of the Emergency Repair Team. Any tools, test equipment, rigging, ladders or scaffolding, and documentation (including prints, drawings, procedures, and technical manuals) necessary to troubleshoot and repair the valve must be produced at the job site. As AH-V-1A is located adjacent to actual contamination and high radiation areas, all drill activities shall take place on the 305 foot elevation floor level. Do <u>not</u> allow personnel to actually take readings on, or work on the valve. Radiological protection requirements including protective clothing worn by the drill participants shall be in accordance with the drill RWP and briefing for this task as determined by the OSC staff. Do <u>not</u> allow the Emergency Repair Team or Auxiliary Operators to violate actual (i.e., non-drill) RWP requirements.

Should the staff attempt to terminate the release using the manual dampers down stream of AH-V-1A, the pressure in the Reactor Building will not allow these dampers to close. If forced, the linkage will fail with the damper blades in the open position.

Have the Emergency Repair Team demonstrate/describe in detail the actions they would take to troubleshoot the valve and actuator. Use the drawings provided as necessary. In each case, the Emergency Repair Team must be able to explain the procedure needed to obtain each item of information

IN PLANT ROVER INSTRUCTIONS (Continued)

before that information is given. Also, the equipment needed to obtain the information must be present and functional at the scene.

The team should verify air pressures is released from the actuator and inspect for any visible external damage. Air has been exhausted and there is no apparent damage visible. An attempt should be made to isolate the problem to either the butterfly valve or the air operated actuator. This process will involve disassembly of the actuator and the drill time should reflect the time that would actually be needed to accomplish each stage of the task. With limit switches and other items of interference removed, the plate allowing access to the valve stem should be removed. When the Repair Team completes describing all actions necessary to disconnect the actuator from the valve, any attempt to operate the actuator will be successful. If the team attempts to rotate the butterfly valve manually, it will not rotate. The valve shaft bearings will be found to be seized. If the repair team describes an action which would allow the valve to rotate through lubrication, mechanical advantage or additional disassembly, the valve will shut if the time is T = 200 (1050 hours) or later. If the time is before T = 200, give the team credit for the repair but do not allow the repair completion to be reported to the OSC or ECC until T = 200 (1050 hours).

As the repair of the purge exhaust valve with the specified failure mode would require several hours to complete, every effort should be made to match drill time actions to real life accomplishment times. In order to allow the drill to progress to the level needed to demonstrate all of the objectives, this valve cannot be reported as being shut until T = 200.

4. **REACTOR BUILDING PURGE EXHAUST VALVE AH-V-1B**

As with AH-V-1A, AH-V-1B will not close at T = 10 (0740 hours). The valve will indicate an intermediate position to the plant staff but will actually be approximately 3% open.

Station yourself at the 1A ES Valves Control Center, unit 1B

IN PLANT ROVER INSTRUCTIONS (Continued)

at T = 10 (0740 hours). Because this valve failure occurs early in the drill, the Operations Support Center will not be fully functional and an Auxiliary Operator will probably be dispatched to investigate AH-V-1B. The circuit breaker for AH-V-1B will be found to be tripped. Attempts to shut the valve after resetting the breaker will result in addition trips.

When an Emergency Repair Team is assembled to troubleshoot AH-V-1B, monitor their briefing, preparation, and troubleshooting activities, if available. Any tools, test equipment, and documentation (including prints, drawings, procedures, and technical manuals) necessary to actually work this task must be produced by the repair team at the job site. Do not allow the team to actually work on, take readings on, or open the 1A ES Valves Control Center.

Have the Emergency Repair Team describe their trouble shooting actions in detail. They should verify power available at the 1A ES Valves Control Center, Unit 1B. If the proper actions are described, the circuit breaker will be found to be functional and power available. When they identify the appropriate conductors using the correct drawings and test for shorts or grounds, none will be found. Efforts should be made to match drill times to accomplish each portion of the task to the amount of time it would take to actually complete the task to allow for realism in the response. As the breaker continues to trip on high current, it can be assumed that the fault lies at the valve.

The steam line rupture will not occur until T = 70 (0840 hours). After investigating the switch gear, it is possible that the staff will decide to make a Reactor Building entry in order to manually shut AH-V-1B. All preparatory actions must be performed by the support and entry teams. After donning the required protective clothing, stop the team at the step-off pad at the entrance to the Reactor Building air lock. Then have the team explain the location of the valve and route of travel to reach it. The team must explain the manual operation of the valve. Inform them that the valve cannot be closed using the manual hand wheel and the valve or operator appears to be internally jammed.

IN PLANT ROVER INSTRUCTIONS (Continued)

Repairs are not possible within the drill time frame.

If the Emergency Repair Team and/or Auxiliary Operator are preparing to enter the Reactor Building at a time nearing T = 70, delay the entry to prevent the complications that would be experienced by having people in the Reactor Building when the steam line ruptures. If they are already simulated to be in the Reactor Building, at T = 65, tell them that they hear a whistling sound and the atmosphere is becoming increasingly hot and humid. Steam starts to become visible and it is obvious that a steam leak is growing in magnitude. If the personnel still do not decide to leave the building, direct them to so. The drill objectives do not include treating scalded and contaminated personnel nor do they address fatalities.

If the personnel were exposed to the initial steam conditions, they must be monitored and decontaminated after their exit from the building. Contamination levels are as shown in the Personnel Contamination Report on page 9.15. No injuries are to be associated with this valve failure.

5. **REACTOR BUILDING COOLING**

As part of the initial conditions, Reactor Building Cooling capacity is degraded. The reduced cooling from these units will elevate Reactor Building pressure.

If an Emergency Repair Team is assembled to investigate the reduction of cooling, monitor their briefing, preparation, and troubleshooting activities. Any hand tools, test equipment, supplemental lighting, and documentation (including prints, drawings, procedures, or technical manuals) necessary to actually perform the task must be produced by the repair team at the job site. Do <u>not</u> allow the drill participants to actually manipulate, adjust, throttle, open, take readings on, or work on the plant equipment.

Have the team explain the actions they would take in detail while at the appropriate location. If the relevant items required to obtain the information are present and

IN PLANT ROVER INSTRUCTIONS (Continued)

demonstrated, and the correct valve, breaker, etc. is identified and located, provide the following information as it is earned. Results will be identical for each of the three R.B. Vent Units. Power is available to all circuitry. The fans units (and any pumps checked) run. Adjustment of valves to increase cooling water flow has no discernable effect. If the repair team is able to check or measure flow to the coolers in the Reactor Building, supply flow will be available. Air flow from the coolers however, will be reduced due to the boron build up. Although an entry into the Reactor Building will probably not be initiated, the cause of the flow blockage may be deduced as being related to the boron crystal build up because of the engineering and maintenance department investigation mentioned in the initial conditions. Cleaning the fouling will not be able to be accomplished during the drill time frame and all decreases and increases in cooling water flow will be controlled by the Plant Data Controller.

6. **MAKE UP PUMP MU-P-1A**

At T = 140 (0950 hours), the "A" Make Up Pump will trip. In order to drive the drill into the conditions necessary to demonstrate the objectives, MU-P-1A will only be inoperable for forty minutes.

If an Emergency Repair Team is tasked with investigating the pump trip, monitor the briefing and any preparations for the assignment. Any items needed to accomplish the task such as hand tools, test equipment, supplemental lighting, protective clothing, documentation (including drawings, prints, procedures, and technical manuals), keys, or ladders must be produced at the job site. Do <u>not</u> allow drill participants to actually manipulate, adjust, disassemble, open, take readings on, or work on plant equipment.

Have the individuals involved explain in detail what they would do to investigate the trip of MU-P-1A. Any trouble shooting must include the ability to locate the components involved. Discussions regarding the electrical trouble shooting should take place at the 1D 4160 volt Switch Gear (Unit 1D7) located on the 338' 6" elevation of the

IN PLANT ROVER INSTRUCTIONS (Continued)

Control Building. The explanation should include any readings taken, the points at which these readings would be taken, and demonstration of the applicable test equipment set up properly and on the correct scales, with test leads used as applicable. Use prints and drawings supplied by the drill participants during these discussions.

If the Emergency Repair Team performs/explains the proper actions to earn the information, inform them that the thermal overloads are tripped for MU-P-1A. Resetting the overloads will result in additional trips if attempts are made to start the pump until T = 180. If the overloads have been reset or the breaker has been exchanged with the one from MU-P-1B and an attempt is made to start the pump anytime after T = 180, MU-P-1A will start and continue to run.

7. **MISCELLANEOUS:**

In order to drive the drill toward the desired result and satisfy the drill objectives, it may be necessary to fail certain components and either prevent or further delay their return to service. To realistically control the Emergency Repair Team's progress toward success, the In-Plant Rover may need to resort to contingency situations. These can include, but are not limited to, tools breaking or missing, torn protective clothing, failed respiratory protection equipment, rounded nut or bolt flats, sheared bolts, etc.

Do not allow any failed component to be returned to service earlier than specified in the drill time line without specific approval from the Plant Data Controller. However, due to extraordinary Emergency Repair Team efforts, it may be necessary to give the repair team credit for an expeditious repair and not allow the Simulator Control Room (ECC) or Operations Support Center to know of the component's availability until permitted by the drill time line or Plant Data Controller.

WORKER CONTAMINATION REPORT

Name	Time	Date
Reactor Building Repair Team	before 0840 hrs	05/19/94

Describe cause of contamination:

Use this data if a team enters the Reactor Building before 0840 hrs without proper protective clothing.

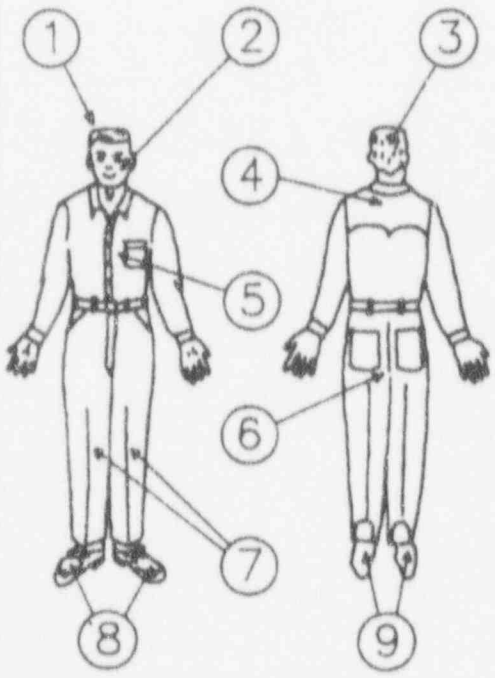
SURVEY DATA

By _____

Date _____

Time _____

Inst. _____



	SURVEY RESULTS (CPM)			
	Initial	1st decon	2nd decon	3rd decon
1	600	120	<100	<100
2	700	150	<100	<100
3	500	<100	<100	<100
4	450	<100	<100	<100
5	600	120	<100	<100
6	500	<100	<100	<100
7	1000	180	120	<100
8	1500	220	150	<100
9	2000	250	180	<100

Remarks:

MEDICAL OBSERVER INSTRUCTIONS

1. Report to the Operations Support Center at T = 0 (0730 hours) with the designated injured individual.

2. Set up the contaminated-injured person scenario at the sump pump area of the 271 foot elevation of the Auxiliary Building (North-East corner of the Heat Exchanger Vault by the stairs) so that it is ready to go at or before T = 125 (0935 hours). Attempt to remain inconspicuous until the Search and Rescue process is initiated.

3. When accountability is completed at approximately T = 125 (0935 hours), the "injured" person will be discovered to be missing which should initiate the Search and Rescue process.

   a. The injured person will not respond to muster and accountability instructions.

   b. The person will not answer if paged.

   c. The person will not evade security but will stay in the location given above.

   d. The individual will not violate security regulations such as piggybacking through key-carded doors.

4. By approximately T = 145 (0955 hours), the person should be located. The reason the individual did not respond to the accountability instructions is due to an injury preventing movement.

5. While performing an inspection in the area, the person slipped on the stairs and fell, causing a fracture of his/her right femur. The person was unable to move due to the pain.

6. The individual came in contact with a radiologically controlled area by the stairs causing contamination as shown on the Personnel Contamination Report on page 9.19. Provide contamination information to the responding personnel only if they take the proper actions to determine the contamination levels. The injured leg is not contaminated.

MEDICAL OBSERVER INSTRUCTIONS (Continued)

7. The person will need to be stabilized, treated, packaged, and transported. Plant EMT's, the Medical Department staff, and an Emergency Repair Team should work in concert to treat and transport the individual.

8. If the emergency responders perform the proper actions to determine such information, the person presents the following signs and symptoms:

Chief Complaint -	Severe upper right leg pain
Mental Status -	Awake, alert, and oriented
Respiratory Status -	No respiratory compromise
Vital signs -	Pulse: 140, strong and regular
	Blood Pressure: 160/110
	Respiration Rate: 20
	Skin: Warm and moist
Injury -	Closed fracture of the right femur. Swelling and discoloration is present. The bone is not angulated but the right leg is slightly shorter than the left.

9. If the first responders request ALS support, inform then that most of the local medic units are committed at a mass transit accident in the area. A mutual aid medic can be requested but there will be a significant delay in response time to the scene.

10. Do <u>not</u> allow an ambulance or medic unit to actually be requested. Site EMT's and/or the Medical Department must treat the patient. Off-site EMS and hospital support have not been arranged for this drill. This mini scenario will end once the patient is packaged for transport.

11. Manual traction should be applied to the leg until a hare traction, Sager, or similar device is applied. An air splint or partially inflated M.A.S.T. may also be used by the medical response personnel. Regardless of the stabilization method used, do not allow the actual cutting of the persons clothing. Once the response personnel produce the equipment necessary to expose the injury, prevent the destruction of the persons clothing and describe the appearance of the injury. However, leg stabilization

MEDICAL OBSERVER INSTRUCTIONS (Continued)

and splinting should actually be performed. If M.A.S.T. trousers are used, do not allow them to be inflated.

12. Once traction is applied to the leg, the patient will express a marked improvement in the pain and vital signs will be as follows. Again, only provide this information if the proper actions are taken to obtain it.

    Vital signs - Pulse: 100, strong and regular
    Blood Pressure: 130/98
    Respiration Rate: 16
    Skin: Warm and dry

13. The response team must stabilize the fracture, and package the patient for transport. When the person has been moved to the Machine Shop, this mini scenario can be terminated.

14. At T = 210 (1100 hours) or when the contaminated/injured person scenario is complete, request the site medical department personnel to walk you through the issuance of Potassium Iodide. The staff should produce and refer to procedure EPIP-TMI-.35, "Thyroid Blocking." You will act as the individual sent by the Radiological Assessment Coordinator to receive the tablets. Provide your copy of EPIP-TMI-.35, Exhibit 1 to the medical representative. Specific information for the medical representative follows.

    a. Simulate the call to Radiation Management Consultants
    b. All paperwork is to be completed.
    c. The KI tablets must be produced but shall not be opened or rendered unusable by the observer.

WORKER CONTAMINATION REPORT

Name	Time	Date
Contaminated Injured Worker	0955 hrs	05/19/94

Describe cause of contamination:

Worker became injured and contaminated in a contaminated area in the plant.

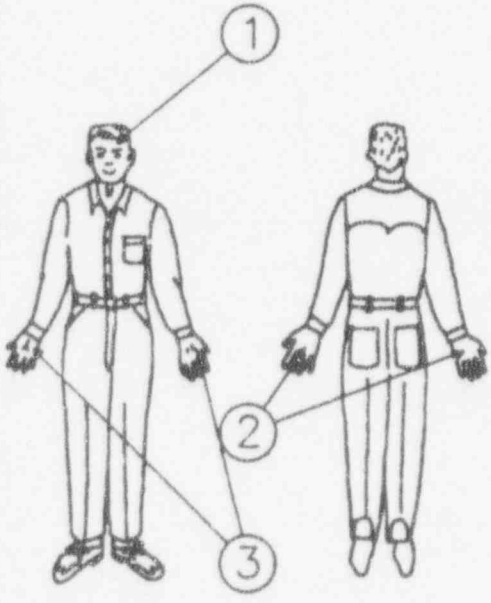
SURVEY DATA

By _____

Date _____

Time _____

Inst. _____



	SURVEY RESULTS (CPM)			
	Initial	1st decon	2nd decon	3rd decon
1	180	<100	<100	<100
2	500	120	<100	<100
3	700	150	<100	<100
4				
5				
6				
7				
8				
9				

Remarks:

PUBLIC INFORMATION OBSERVER INSTRUCTIONS

1. When personnel respond to the Joint Information Center, provide the video tape for simulated Media Broadcast monitoring.

2. At T = 30 (0800 hours), call the ECC at 948-2069, 948-2070, or 948-2071 and read Message PI-1 to the individual answering the telephone. Record the instructions or response from the ECC staff member. The caller should be directed to call the Communications Division.

3. At T = 50 (0820 hours), call the ECC at 948-2070, 948-2071, or 948-2069 and read Message PI-2 to the individual answering the telephone. Record the instructions or response from the ECC staff member. The caller should be directed to call the GPUN Communications Division.

4. At T = 170 (1020 hours), call the EOF at 948-8903, 657-0739, or 657-0471 and read Message PI-3 to the individual answering the phone. The person calling should be instructed to contact the County Emergency Management Agency or the GPUN Communications Division.

5. At T = 205 (1055 hours), call the EOF at 657-0739, 657-0471, or 948-8903 and read Message PI-4 to the individual answering the telephone. Record the response of the EOF staff member. The caller should be directed to the Communications Division, County Emergency Management Agency, or PEMA.

6. At the completion of the exercise, ensure the Joint Information Center is returned to pre-drill conditions.

SECURITY AND ACCOUNTABILITY OBSERVER INSTRUCTIONS

1. When Site Area Emergency Accountability/Mustering is announced, observe the accountability process.

2. When the accountability process is performed, one individual has been staged to be missing. He will fail to respond to the accountability instructions due to an injury sustained while in the Auxiliary Building. The individual will remain inconspicuous until the Search and Rescue process is initiated. Specific information regarding the injuries can be found in the Medical Observer's Instructions. The individual will operate as follows:

   a. The person will not respond to muster and accountability instructions.

   b. The person will not answer if paged.

   c. The person will not evade security but will stay in the location given above.

   d. The individual will not violate security regulations such as piggybacking through key-carded doors.

3. When the Accountability process is complete at approximately T = 125 (0935 hours), inform the Emergency Assembly and Site Evacuation Observer at Warehouse 1 at extension 5500 (or Warehouse 3 at extension 5042). This notification will allow non-essential personnel to return to work inside the protected area.

4. When the individual staged in the first instruction is discovered to be missing, observe Security's involvement in the Search and Rescue process. Should the Security Department ask, the missing individual's supervisor is Geno Simonetti.

5. At approximately T = 155 (1005 hours), inform the Security Shift Supervisor or senior Security Officer that you just received a telephone call from the USNRC Region I Incident Response Team informing you that Inspector Gardner Barnes has been dispatched to Three Mile Island. Inspector Barnes has been instructed to report to the AEOF and he will need

SECURITY AND ACCOUNTABILITY OBSERVER INSTRUCTIONS (Continued)

to receive security badging. Provide your copy of the access authorization document and tell Security that the paper was received over the telecopier a few moments ago. Record the response of the Security Officer and if the information is forwarded to the AEOF.

6. Personnel completing their normal work day who are not directly involved in the drill will be allowed to exit the island.

7. The Emergency Assembly Area muster sheets will be given to a Site Protection Officer or designated individual in accordance with the Emergency Assembly and Site Evacuation procedure (EPIP-TMI-.36). Collect the muster sheets from Site Security and turn them in with your observer comments following the drill.

OSC OBSERVER INSTRUCTIONS

1. At T = -30 (0700 hours), arrive at the OSC and review the Drill Ground Rules and Initial Conditions with the OSC personnel who are to be Drill Participants.

2. During this drill, major plant components will fail and Search and Rescue will be required. Monitor the response of the OSC staff in dealing with the situations, the ability to devote appropriate resources to the various evolutions, and the application of the correct priorities to each incident as set by the Emergency Director.

3. At the completion of the exercise, collect all applicable drill paperwork (completed procedures, training attendance forms, etc.). Ensure all equipment is returned to the proper storage location and that the OSC is returned to pre-drill conditions.

EMERGENCY ASSEMBLY AND SITE EVACUATION OBSERVER INSTRUCTIONS

1. Obtain a vehicle from Transportation before 1500 hours on Wednesday, May 18, 1994.

2. Proceed to Warehouse 1 with the vehicle at T = 0 to observe the activation of the Emergency Assembly Area in accordance with procedure EPIP-TMI-.36. If the Emergency Director chooses Warehouse 3, proceed to Warehouse 3.

3. All nonessential personnel who are not exempt from the drill will participate in muster and accountability.

   a. Personnel working outside of the Protected Area may sign the muster sheet and immediately return to work.

   b. Personnel working inside the Protected Area will muster and wait at the muster area. The Security and Accountability Observer has been instructed to call the Emergency Assembly and Site Evacuation Observer when the accountability process is complete. After you receive this call, direct the non-essential personnel who work within the protected area to return to work. Inform them that they are not to violate any drill related radiological, safety, or security barriers and they must comply with all drill related signs and postings.

4. After all non-essential personnel have been released from the Emergency Assembly Area, tell the Emergency Assembly Area Coordinator to assign you the task of performing the sweep of the out-lying areas. The EAAC is to explain the task to your satisfaction and must produce a vehicle, bull horn, and Exhibit 7 of EPIP-TMI-.36.

5. When the muster is complete, the muster sheets will be given to a Site Protection Officer or designated individual in accordance with the Emergency Assembly and Site Evacuation procedure (EPIP-TMI-.36). When the EAAC is finished with this procedure, collect the signed off copy of EPIP-IMP-.36 minus the muster sheets.

6. Three individuals have been recruited to act as evacuees. Read Message EA-1 to the Emergency Assembly Area Coordinator

EMERGENCY ASSEMBLY AND SITE EVACUATION OBSERVER INSTRUCTIONS (Continued)

(EAAC) to direct him to assemble these people.

7. When the mini-evacuation is ordered by the Emergency Director, accompany the pre-designated evacuees to the designated Remote Assembly Area.

8. The evacuees will be monitored at the designated monitoring station in accordance with EPIP-IMP-.36. Two individuals will be found to be contaminated in accordance with the diagrams on pages 9.26 and 9.27

   Note 1: The observer will place sealed radioactive sources (Lantern mantles) on two of the evacuees to simulate contamination in accordance with the diagrams on pages 9.26 and 9.27 (where practicable).

   Note 2: Provide the information on pages 9.26 and 9.27 as the monitoring is performed. Do not give these sheets to the monitors. Forms from the emergency kit are to be used by the drill participants.

9. The two contaminated individuals will be decontaminated at the AEOF in accordance with EPIP-TMI-.36. Observe the decontamination process in cooperation with the AEOF Observer.

10. All evacuees should remain at the AEOF for the duration of the drill after the monitoring process is complete. Assist the AEOF Observer in monitoring AEOF staff activities.

11. Return the company vehicle to Transportation after completion of the drill (scheduled for return no later than 1400 hours Thursday, May 19, 1994).

EVACUEE CONTAMINATION REPORT

Name	Time	Date
Evacuee #1	0940 hrs	05/19/94

Describe cause of contamination:

Evacuee traversed radioactive plume during evacuaton.

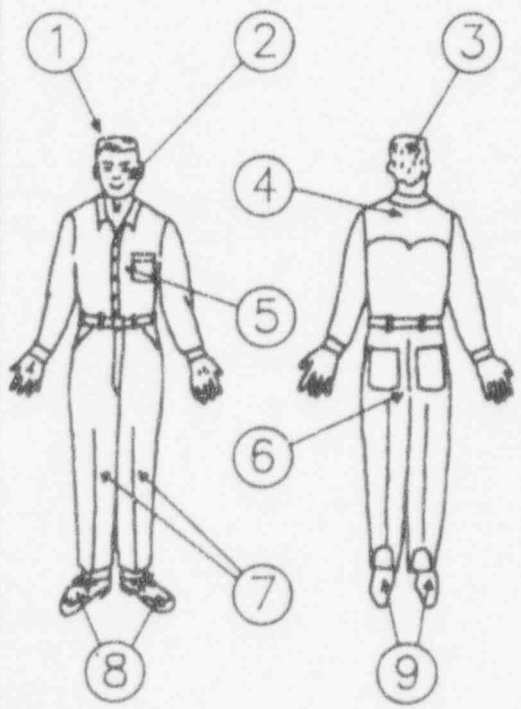
SURVEY DATA

By _____

Date _____

Time _____

Inst. _____



	SURVEY RESULTS (CPM)			
	Initial	1st Decon	2nd Decon	3rd Decon
1	200	120	<100	<100
2	150	120	<100	<100
3	120	<100	<100	<100
4	120	<100	<100	<100
5	150	120	<100	<100
6	200	120	<100	<100
7	150	<100	<100	<100
8	150	<100	<100	<100
9	200	<100	<100	<100

Remarks:

EVACUEE CONTAMINATION REPORT

Name	Time	Date
Evacuee #2	0940 hrs	05/19/94

Describe cause of contamination:

Evacuee traversed radioactive plume during evacuaton.

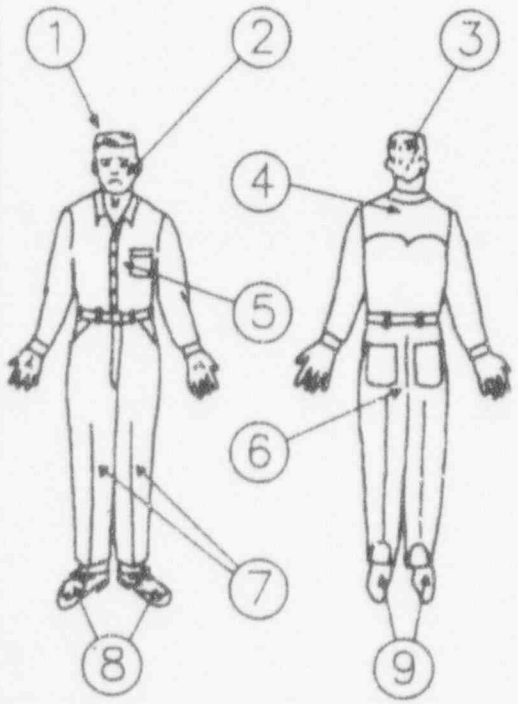
SURVEY DATA

By _____

Date _____

Time _____

Inst. _____



	SURVEY RESULTS (CPM)			
	Initial	1st Decon	2nd Decon	3rd Decon
1	250	180	120	<100
2	200	180	120	<100
3	150	<100	<100	<100
4	150	<100	<100	<100
5	200	150	<100	<100
6	250	180	120	<100
7	200	150	<100	<100
8	200	150	<100	<100
9	250	180	<100	<100

Remarks:

AEOF OBSERVER INSTRUCTIONS

1. Proceed to the AEOF at Crawford Station at T = 0 (0730 hours) to observe the activation process. Unless specifically requested by the Emergency Director, personnel should not begin to man the facility until a Site Area Emergency is declared.

2. At T = 100 (0910 hours), read Message AE-1 to the Site Services Coordinator. You will be playing the part of a member of the Emergency Support Organization whose fitness-for-duty status is questionable. The Site Services Coordinator should direct the Security Support Coordinator to administer a blood alcohol concentration test in accordance with Procedure EPIP-TMI-.32, Exhibit 7, "Annex to the Emergency Operations Facility Fitness for Duty Determination Instructions". All tests administered will result in a zero percent blood alcohol concentration.

3. Any time after T = 150 (1000 hours) and depending on the Remote Assembly Area selected, the contaminated evacuees from the plant will arrive at the AEOF. Monitor the decontamination process to ensure compliance with procedure 6610-ADM-4330.02, "Personnel Contamination Monitoring and Decontamination". The Emergency Assembly and Site Evacuation Observer is available to monitor the decontamination process if other AEOF activities require your attention.

   Note 1: All parts of the decontamination process must be performed except showering and the actual removal of clothing.

   Note 2: Refer to pages 9.26 and 9.27 for the number of times each person must be decontaminated and the levels of contamination involved.

   Note 3: Lantern mantles are used (where appropriate) to simulate contamination.

4. At T = 195 (1045 hours), read Message AE-2 to the Site Services Coordinator. You will be playing the part of an NRC Inspector requiring access onto Three Mile Island. The Security Support Coordinator should have received

AEOF OBSERVER INSTRUCTIONS (Continued)

notification from the Site Security Department that USNRC Inspector Gardner Barnes has been dispatched to Three Mile Island and will need to be processed for badging. The required access authorization document has been telecopied by the NRC to the TMI Processing Center. Inquire if this was done and record the response in your Observer Checklists. If requested, provide your copy of the access authorization sheet to the AEOF staff. Follow the directions of the AEOF staff during the badging process. You will be required to complete the items specified in Procedure EPIP-TMI-.32, Exhibit 8, "NRC TMI Access Authorization Checklist". Checklist guidance follows and the item number shown in Exhibit 8 is referenced.

A. You are a representative with a "Q" clearance, have been authorized access by the Regional Office, and a simulated letter of access authorization has been forwarded to the Security Support Coordinator. (I.A.,Item 2)

B. Temporary Issue Paperwork and TLD issue is required. (I.B.,Items 1 and 2)

C. When required to view the G.E.T. video tape, ask the staff to produce the tape to verify their knowledge of its location, but actual viewing by the Observer is not necessary. (I.C.,Item 2)

D. The Whole Body Count may be waived. (I.C.,Item 4)

E. You are to be granted Unescorted RWP Access- No respirator areas. (I.D)

F. Items necessary to complete the Practical Factors section must be produced but the actual performance of the practical factors by the Observer is not necessary. (I.D.,Item 2)

G. Have Security demonstrate the ability to issue a security badge at the AEOF.

AEOF OBSERVER INSTRUCTIONS (Continued)

A qualified instructor must administer the G.E.T. and practical factors sections of the processing. Log in your Observer Instructions if a qualified instructor was available and used.

5. At the completion of the processing, return the security badge and dosimetry to the individual(s) from whom they were obtained. An actual trip to the TMI site is not to be made.

6. If in-plant activities necessitate additional personnel resources or procurement of repair parts or supplies, monitor the response by the AEOF staff to provide the requested support. Do not allow calls to actually be placed to vendors, suppliers, nor the call-out of bargaining unit personnel.

7. At T = 215 (1105 hours), read Message AE-3 to the AEOF staff. You are informing them of a request by the Emergency Support Director to locate technical experts in the field of thermal imaging services. Have the AEOF staff explain how they would find such an item. They should refer to the INPO Emergency Resources manual where such expertise is referenced in the "Technical Experts" Section, pages 3-2, 3-3, and 3-4. Record in your observer notes if the INPO Emergency Resources Manual was used. Do not allow the AEOF staff to actually place any telephone calls to any off-site agencies, companies, or vendors. Ensure all information is provided to you and not the EOF as the EOF is not involved with this mini-scenario.

8. The Emergency Assembly and Site Evacuation Observer is available to assist you in monitoring AEOF activities once the evacuees arrive.

9. At the completion of the exercise, ensure all equipment is returned to the proper storage location and the AEOF is returned to pre-drill conditions. Ensure all drill personnel have exited the facility.

TSC OBSERVER INSTRUCTIONS

1. Arrive at the Technical Support Center at T = -30 (0700 hours) to set up the data link to the Simulator. Observe the TSC activation process when the Initial Response Emergency Organization is called out. Depending on the time required to identify and declare the event, the TSC personnel could begin to man the facility any time after T = 5 (0735 hours).

2. During the course of the drill, equipment failures will be experienced. As well as taxing the personnel manning the Emergency Repair Teams, TSC Engineers will undoubtedly be requested to assist in returning equipment to service or provide suggestions for backup equipment.

3. At the completion of the drill, ensure all equipment is returned to its proper storage location and the TSC is returned to pre-drill conditions.

EOF CONTROLLER INSTRUCTIONS

1. Arrive at the EOF any time before T = 0 (0730 hours), to observe the activation process. Personnel should not man the facility until they are called out upon declaration of the Site Area Emergency unless the Emergency Director orders an earlier activation.

2. The Public Information Observer will call the EOF at T = 170 (1020 hours) with Message PI-3. The caller will play the role of a nursing home staff member requesting information about the TMI site ambulance. The communicator should direct the caller to the County Emergency Management Agency or the GPUN Communications division. Monitor the EOF Communicator's response to the call and record it on your Observer Comment sheets.

3. At T = 195 (1045 hours), the AEOF Observer will test the ability of the AEOF staff to process an NRC Inspector for site access. If the Site Services Coordinator or other AEOF staff member calls the Emergency Support Director to verify the individual's authenticity, direct the ESD to confirm the need to process the person.

4. At T = 205 (1055 hours), the Public Information Observer will call the EOF with Message PI-4 in the role of a airline worker seeking a radiological survey of an aircraft that flew over Three Mile Island. Monitor the conversation to see if the caller is referred to the Communications Division, the County Emergency Management Agency, or PEMA.

5. If dose projections, Protective Action Recommendations, etc. are in progress, do not allow items 2, 3, and 4 to reduce your attention to the monitoring of the more significant items in the drill. Regardless of the items being observed however, do <u>not</u> allow calls to be placed to outside entities with the exception of those specified in the Communications Observer Instructions.

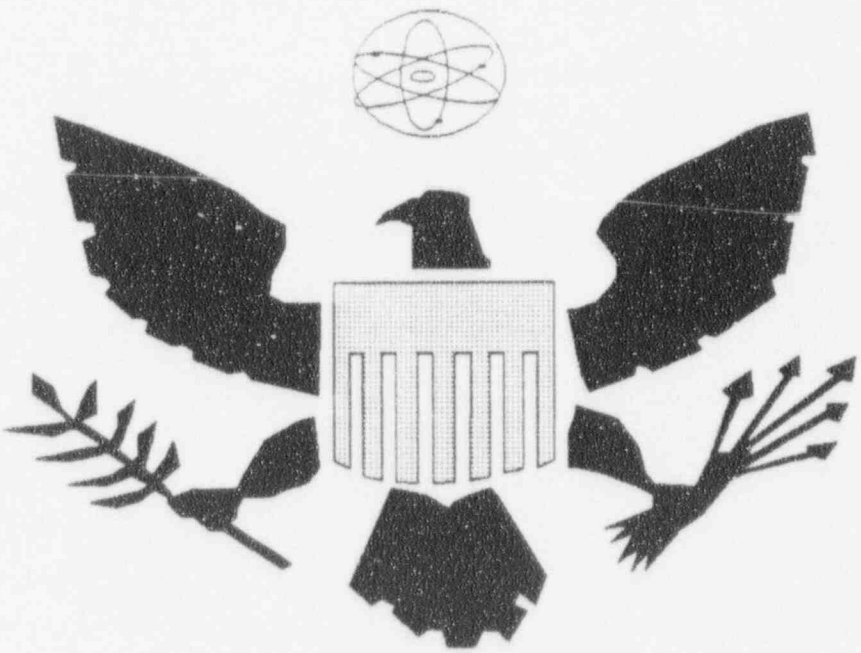
6. At the completion of the drill, ensure all equipment is returned to its proper storage location and the EOF is returned to pre-drill conditions.

EOF TECHNICAL SUPPORT OBSERVER INSTRUCTIONS

1. Arrive at the Emergency Operations Facility at T = -30 (0700 hours) to set up the data link to the Simulator. Observe the EOF activation process when the Emergency Support Organization is called out. The EOF should be manned following the declaration of a Site Area Emergency at approximately T = 70 (0840 hours) but may be manned earlier at the Emergency Director's discretion.

2. At the completion of the drill, ensure all equipment is returned to its proper storage location and the EOF is returned to pre-drill conditions

INTENTIONALLY



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MESSAGES / ANNOUNCEMENTS

Unless provided in this section, normal plant procedures will be used to make announcements. All announcements and messages shall be preceded and ended with the statement:

"THIS IS A DRILL. THIS IS A DRILL."

GPU Nuclear EMERGENCY REPORT FORM - TMI
(Press Firmly and Write Clearly)

ANNUAL EXERCISE
MAY 19, 1994

EXAMPLE - SITE AREA EMERGENCY

(Select) ☐ This is a drill. This is a drill. ☐ This is **NOT** a drill. This is **NOT** a drill.

EMERGENCY CLASSIFICATION

(Select One) ☐ An Unusual Event has been declared ☐ A Site Area Emergency has been declared
☐ An Alert has been declared ☐ A General Emergency has been declared
☐ The event has been terminated

at ______________________ *on* ______________________
Emergency Classification Time *Emergency Classification Date*

(Select) This represents: ☐ An initial Classification Status ☐ An escalation in Classification Status
☐ No change in Classification Status ☐ A reduction in Classification Status

EVENT DESCRIPTION
(Be brief and non-technical: provide plant status)

____

____

____

There is: ☐ No release in progress ☐ An airborne release in progress ☐ A liquid release in progress

EMERGENCY RESPONSE

All members of the following organizations report to their stations Fit-For-Duty

(Select) ☑ On-Shift Emergency Organization (Required for all emergencies)
☐ **and** Initial Response Emergency Organization - (Required for Alert and greater)
☐ Facility access limited, report as follows: ______________________
☐ **and** Emergency Support Organization - (Required for Site Area and General Emergencies)

MUSTER/EVACUATION

All PREDESIGNATED EVACUEES

(Select) ☐ Remain at your stations and await further instructions.
☐ In radiologically controlled areas, report to the Rad-Con access point.
☐ Those outside radiologically controlled areas, REPORT TO:
☐ Your supervisor and await futher instructions

(Muster) Required for Site Area Emergency.
☐ Warehouse 1 ☐ Warehouse 3 (describe route, if applicable)
via ______________________

(Evacuation) After muster for S.A.E. Required for General Emergency.
☐ Training Center ☐ AEOF (Crawford Station)
via (describe route) ______________________
using the ☐ North Bridge ☐ South Bridge ☐ North and South Bridge
Assemble with your supervisor and await further instructions.

For a General Emergency, provide PAR below.

PROTECTIVE ACTION RECOMMENDATION

Circle one to Select
Shelter/Evacuate _____ mile radius
Shelter/Evacuate _____ miles down wind in the affected and adjacent sectors (list sectors below):
____

METEOROLOGICAL CONDITIONS

Wind direction is from ______________________ *and the wind speed is* ______________________.

RADIOLOGICAL INSTRUCTIONS
(Required for radiological events)

☐ No smoking, drinking, or eating until further notice.
☐ Sound station emergency alarm
(Select) ☐ This is a drill. This is a drill. ☐ This is **NOT** a drill. This is **NOT** a drill.

[redacted] Approved - ED/ESD

Distribution: Green - Offsite Notification; **White** - ED/ESD; **Yellow** ... **ge: Pink** - Contact/Call Out

N5465B (08 93)

GPU Nuclear

EMERGENCY REPORT FORM - TMI
(Press Firmly and Write Clearly)

ANNUAL EXERCISE
MAY 19, 1994

EXAMPLE - GENERAL EMERGENCY

(Select) ☐ This is a drill. This is a drill. ☐ This is **NOT** a drill. This is **NOT** a drill.

EMERGENCY CLASSIFICATION

(Select One)
☐ An Unusual Event has been declared
☐ An Alert has been declared
☐ A Site Area Emergency has been declared
☐ A General Emergency has been declared
☐ The event has been terminated

at _____ *on* _____
Emergency Classification Time *Emergency Classification Date*

(Select) This represents:
☐ An initial Classification Status
☐ An escalation in Classification Status
☐ No change in Classification Status
☐ A reduction in Classification Status

EVENT DESCRIPTION
(Be brief and non-technical: provide plant status)

There is: ☐ No release in progress ☐ An airborne release in progress ☐ A liquid release in progress

EMERGENCY RESPONSE

All members of the following organizations report to their stations Fit-For-Duty

(Select)
☑ On-Shift Emergency Organization — **(Required for all emergencies)**
☐ and Initial Response Emergency Organization — **(Required for Alert and greater)**
☐ Facility access limited, report as follows: _____
☐ and Emergency Support Organization — **(Required for Site Area and General Emergencies)**

MUSTER/EVACUATION

All non-essential personnel

(Select)
☐ Remain at your stations and await further instructions.
☐ In radiologically controlled areas, report to the Rad-Con access point.
☐ Those outside radiologically controlled areas, REPORT TO:
☐ Your supervisor and await futher instructions
☐ Warehouse 1 ☐ Warehouse 3 **(describe route, if applicable)**
via _____

(Muster) Required for Site Area Emergency.

(Evacuation) After muster for S.A.E. Required for General Emergency.

☐ **SITE EVACUATION IS NOT REQUIRED FOR THIS DRILL EXCEPT FOR PRE-DESIGNATED EVACUEES.**
SITE EVACUATION IS NOT REQUIRED FOR THIS DRILL EXCEPT FOR PRE-DESIGNATED EVACUEES.

For a General Emergency, provide PAR below.

PROTECTIVE ACTION RECOMMENDATION

Circle one to Select
Shelter/Evacuate ____ mile radius
Shelter/Evacuate ____ miles down wind in the affected and adjacent sectors (list sectors below):

METEOROLOGICAL CONDITIONS

Wind direction is from _____ *and the wind speed is* _____

RADIOLOGICAL INSTRUCTIONS
(Required for radiological events)

☐ No smoking, drinking, or eating until further notice.
☐ Sound station emergency alarm

(Select) ☐ This is a drill. This is a drill. ☐ This is **NOT** a drill. This is **NOT** a drill.

Approved - ED/ESD

Distribution: **Green** - Offsite Notification; **White** - ED/ESD; **Yello** ge; **Pink** - Contact/Call Out

NS-1465B (0R 93)

MESSAGE: DC-1 T = 0 / 0730 Hours
Scenario/ Clock

FROM: Drill Coordinator

TO: Drill Controllers, Observers, Participants

HOW GIVEN: Plant Page System

MESSAGE: ATTENTION ALL PERSONNEL. ATTENTION ALL PERSONNEL.

The time is now T = 0. All drill participants issued radios switch to Channel 5. All drill participants issued radios switch to Channel 5.

THIS IS A DRILL. THIS IS A DRILL.

MESSAGE: DC-2* T = 10 / 0740 Hours
Scenario/ Clock

FROM: Drill Coordinator

TO: ECC Staff

HOW GIVEN: Verbally

MESSAGE: THIS IS A DRILL. THIS IS A DRILL.

Shut down at a rate of 5% per minute.

THIS IS A DRILL. THIS IS A DRILL.

* Denotes a contingency message. Refer to your observer instructions.

MESSAGE: PI-1 T = 30 / 0800 Hours
Scenario/ Clock

FROM: Public Information Observer

TO: ECC Staff Member

HOW GIVEN: By Telephone (dial 948-2069, 948-2070, or 948-2071)

MESSAGE: THIS IS A DRILL. THIS IS A DRILL.

Good morning sir (ma'am). My name is Ernie King. My boat slipped its mooring lines and drifted down to Three Mile Island. Can I have my wife drive me on to Three Mile Island so I can recover my boat?

THIS IS A DRILL. THIS IS A DRILL.

MESSAGE: DC-3* T = 40 / 0810 Hours
Scenario/ Clock

FROM: Drill Coordinator

TO: ECC Staff

HOW GIVEN: Verbally

MESSAGE: THIS IS A DRILL. THIS IS A DRILL.

Cool down at a rate of 90 degrees ± 10 degrees an hour.

THIS IS A DRILL. THIS IS A DRILL.

* Denotes a contingency message. Refer to your observer instructions.

MESSAGE: PI-2 T = 50 / 0820 Hours
Scenario/ Clock

FROM: Public Information Observer

TO: ECC Staff Member

HOW GIVEN: By Telephone (dial 948-2070, 948-2071, or 948-2069)

MESSAGE: THIS IS A DRILL. THIS IS A DRILL.

Good morning. This is Theo Eaton in the TRAFFAX Command Center. We've been monitoring your radio frequencies and understand that you are having an emergency at Three Mile Island. Can you tell me if this will affect the traffic patterns around Three Mile Island?

Is it possible you will call for an evacuation?

THIS IS A DRILL. THIS IS A DRILL.

MESSAGE: AE-1 T = 100 / 0910 Hours
Scenario/ Clock

FROM: AEOF Observer

TO: Site Services Coordinator

HOW GIVEN: Verbally

MESSAGE: THIS IS A DRILL. THIS IS A DRILL.

Hey, listen. I was out late last night helping a friend celebrate his retirement from the Naval Reserve. I let him do most of the drinking, but I had a couple myself. I had my last beer only about three hours ago. I really am sober and all, but I had to let you know.

THIS IS A DRILL. THIS IS A DRILL.

MESSAGE: EA-1 T = 115 / 0925 Hours
Scenario/ Clock

FROM: Emergency Assembly and Site Evacuation Observer

TO: Emergency Assembly Area Coordinator

HOW GIVEN: Verbally

MESSAGE: THIS IS A DRILL. THIS IS A DRILL.

Assemble three individuals to demonstrate the site evacuation process. Three individuals have already been recruited to act as the evacuees

THIS IS A DRILL. THIS IS A DRILL.

MESSAGE: DC-4 T = 130 / 0940 Hours
Scenario/ Clock

FROM: Drill Coordinator

TO: Emergency Director

HOW GIVEN: Verbally

MESSAGE: THIS IS A DRILL. THIS IS A DRILL.

Instruct the Emergency Assembly Area Coordinator to initiate the mini evacuation.

THIS IS A DRILL. THIS IS A DRILL.

MESSAGE: PI-3 T = 170 / 1020 Hours
Scenario/ Clock

FROM: Public Information Observer

TO: EOF Staff Member

HOW GIVEN: By Telephone (dial 948-8903, 657-0739, or 657-0471)

MESSAGE: THIS IS A DRILL. THIS IS A DRILL.

Hello. This is John Dunant from the Jurassic Retirement Home. We're trying to arrange for transportation for our patients should an evacuation order be issued. We understand you have an ambulance at Three Mile Island. Would that be available for relocating some of our patients?

THIS IS A DRILL. THIS IS A DRILL.

MESSAGE: AE-2 T = 195 / 1045 Hours
Scenario/ Clock

FROM: AEOF Observer

TO: Site Services Coordinator

HOW GIVEN: Verbally

MESSAGE: THIS IS A DRILL. THIS IS A DRILL.

Hello. My name is Gardner Barnes from the Nuclear Regulatory Commission. I was instructed to report here for processing so that I would be ready to go onto the site if so directed.

THIS IS A DRILL. THIS IS A DRILL.

MESSAGE: PI-4 T = 205 / 1055 Hours
Scenario/ Clock

FROM: Public Information Observer

TO: EOF Staff Member

HOW GIVEN: By Telephone (dial 657-0739, 657-0471, or 948-8903)

MESSAGE: THIS IS A DRILL. THIS IS A DRILL.

Hello. This is Gus Whitehead from Londonderry Air at Harrisburg International Airport. One of our planes just landed after flying directly over Three Mile Island. It's been all over the radio that you guys are having an emergency down there. Can you send someone up to monitor our aircraft so we know it's not contaminated?

THIS IS A DRILL. THIS IS A DRILL.

MESSAGE: AE-3 T = 215 / 1105 Hours
Scenario/ Clock

FROM: AEOF Observer

TO: AEOF Staff

HOW GIVEN: Verbally

MESSAGE: THIS IS A DRILL. THIS IS A DRILL.

The EOF wants you to locate technical experts in the field of thermal imaging services. Provide all information to me on how you would find this kind of technical expert. Do not call the EOF.

THIS IS A DRILL. THIS IS A DRILL.

MESSAGE: DC-5 T = 240 / 1130 Hours
Scenario/ Clock

FROM: Drill Coordinator

TO: Drill Participants/Controllers/Observers

HOW GIVEN: Plant Page and Telephone (See Observer Instructions)

MESSAGE: ATTENTION ALL PERSONNEL. ATTENTION ALL PERSONNEL.

The drill is terminated. The drill is terminated.

DRILL GROUND RULES

1. Approach and perform all tasks with the same attitude, professionalism, and enthusiasm as if the situation were real. Do not assume that certain actions are unimportant because "This is only a drill". All actions are to be performed and not simulated, unless the action will result in personnel harm, damage to plant equipment or change the actual plant status.
(For example: 1) Procurement of repair parts via a vendor or warehouse,
2) Troubleshooting a failed component by use of test equipment,
3) Checking for a pulse and breathing on a simulated injured unconscious person).

   Although a task may appear to be redundant, inconvenient or a waste of materials, the task should still be performed in that it provides a realistic sense of timing and assures the observer that the action can and will be performed during actual accident (emergency) conditions.

2. Actually sign-off procedures as actions are performed, unless otherwise directed. Used procedures will be replaced following the drill. To minimize conflict between drill conditions and actual plant status precede and end communications with "This is a drill! This is a drill!"
(This is to include the plant page, radio and intercom as a minimum.) Off site notifications and emergency personnel call outs are actually performed.

3. Ensure that observers are aware of your activity by verbalizing your actions (For example: procedures used, actions initiated, personnel contacted, decisions made, etc.). Let the observer know WHAT you are doing, WHY you are doing it, HOW you will do it and WHAT procedures you will use. This will promote a more accurate observer evaluation.

   Plant data is provided to selected emergency response facilities (TSC, EOF, PTFC) via data links to CRT's from the Plant Reference Simulator. If Simulator indications are questionable, check with the facility observer or Plant Data Controller to validate the indications prior to taking actions.

   If in doubt, ASK.

DRILL GROUND RULES (Continued)

4. Prompting by drill observers is not allowed. Observers will only provide information which is normally available by visible or audible inspection. (For example: meter readings but not historical trends, instruments currently alarming, etc.)

5. Obey all plant page announcements. For example, do not eat, drink or smoke after the "no eating, drinking or smoking" announcement is made. Unless otherwise announced, personnel muster and accountability will be performed for nonexempt personnel. Site evacuation will be demonstrated using only designed individuals, unless otherwise announced.

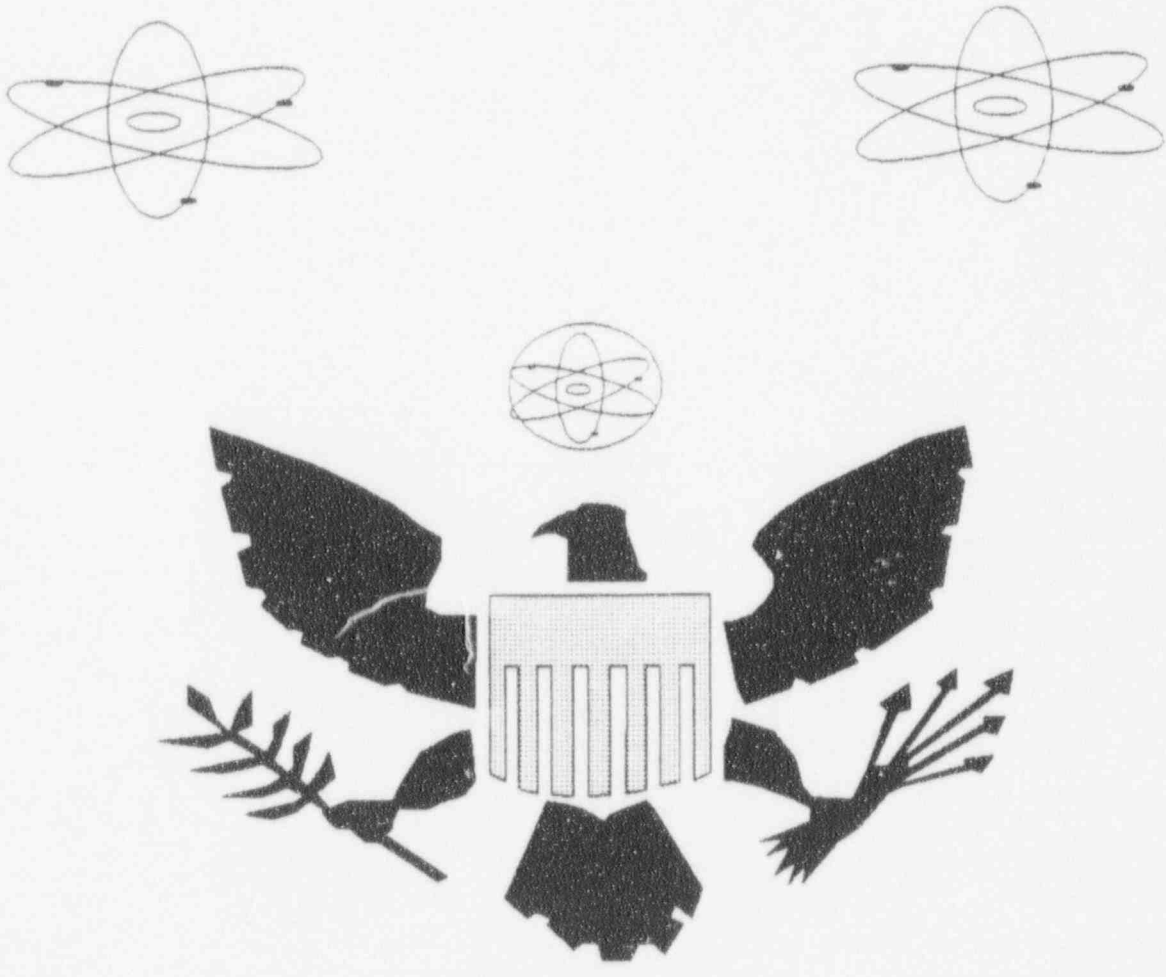
   Additionally, Radiological Controls and Security requirements are to be followed. This means:
   1) Do not violate drill Rad Con barriers,
   2) Follow Rad Con instructions (e.g., wearing respirators and/or PC's),
   3) Do not violate Security procedures (i.e., piggybacking, etc.)

6. Drills are run from the Simulator. Therefore, calls normally made to the Control Room are to be directed to the Simulator Control Room, if they pertain to the drill. During the drill, the Simulator is accessible by Plant page (use the red button), radio (channel 4) and telephone (948-2069, 948-2070, 948-2071, or 948-2063 [RAC]).

The following is a breakdown, by discipline and number, of personnel working on a randomly selected shift for the 1994 Annual Exercise. This is the maximum number that will be allowed to participate at the beginning of the drill. Any number between this maximum and the minimum on-shift staffing level required by the Emergency Plan is acceptable. For "CALL OUT" purposes the 'simulated' start time is 7:00 PM although the actual start time is 3:15 PM. To simulate acutal response from home "BEEPER" paged individuals will be allowed to respond in 35 minutes.

Section	Breakdown	**Total Number**
Security	SPSS -1 SSPO -3 SPO -8	**12**
Warehouse	Stockkeeper B -2	**2**
TMI-1 Ops	SS -1 SF -2 CRO -4 AO - 6	**13**
TMI-1 Rad Waste	Supr -1 Tech -3	**4**
TMI-1 Chemistry	Tech -1	**1**
TMI-1 Rad Con	GRCS -1 Tech -4	**5**
TMI-1 Maintenance	Supr -1 Tool room -1 I & C -3 Repair -2 Machine -2 Electric -2	**11**
Utility	Utility -4 Util/Janitor -0	**4**
STA	STA -1	**1**
Misc.	QA -0	**0**

INTENTIONALLY



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BLACK INK ONLY **Training Attendance Form** Page ___ of ___

Office Use Only

Received	Entered	Filed
Date _____ Initials ____	Date _____ Initials ____	Date _____ Initials ___

Program No. 10.6.01 Title EMERGENCY PLAN DRILL (93-04)
Cycle/Week N/A Location TMI Unit 1 Group No. _____

Course No. .006 Course Occurrence Status (A/C) _____
Course Revision _____ Course Completion Date _____

Course Description ANNUAL EXERCISE

Lesson No. AD Taken Date _____ Lesson Status (C/M) _____
Lesson Revision _____ Lesson Plan No. _____ Instructor SSN ___-___-____
Actual Hours _____ Mode DRL Lesson Completion Date 05/19/94

Lesson Description ANNUAL EXERCISE 1994 , DRILL 94-03

Social Security Number	Exam P/F/I/E	Grade (%)	Printed Name	Signature	***
___-___-____	____	____	_____	_____	____
___-___-____	____	____	_____	_____	____
___-___-____	____	____	_____	_____	____
___-___-____	____	____	_____	_____	____
___-___-____	____	____	_____	_____	____
___-___-____	____	____	_____	_____	____
___-___-____	____	____	_____	_____	____
* * * * * * * * * * * * * * * *					
___-___-____	____	____	_____	_____	____
___-___-____	____	____	_____	_____	____
___-___-____	____	____	_____	_____	____
___-___-____	____	____	_____	_____	____
___-___-____	____	____	_____	_____	____
___-___-____	____	____	_____	_____	____
___-___-____	____	____	_____	_____	____

*** Make entry for this column only if directed by instructor.

See reverse for Mode, Date, Status, Grade and Actual hours format. N 2071

Social Security Number	Exam P/F/I/E	Grade (%)	Printed Name	Signature	***
___-___-___					
___-___-___					
___-___-___					
___-___-___					
___-___-___					
___-___-___					
___-___-___					

Method of Evaluation

- ☐ Written (Catagory Type _____)
- ☐ Oral
- ☐ Practical Factor
- ☐ Other _____

- ☐ TCR
- ☐ Blank Exam
- ☐ Exam Key
- ☐ Student Exam

Attachments

- ☐ Exam Cover Sheet
- ☐ Seating Chart
- ☐ Other _____

Instructor Comments _____

I hereby acknowledge that the persons listed on this Training Attendance Form have attended the indicated training as specified.

Submitted by _____ _____ _____

Signature | Social Security Number | Date

-OR-

_____ XXX XX XXXX _____

Instructor Signature | SSN on front | Date

Mode Format

Basic prin sim	(BPS)	On-the-job	(OJT)
Correspondence	(CCS)	Originator	(ORG)
Drill	(DRL)	On-shift training	(OST)
Examination	(EXM)	Replica sim	(RPS)
Film	(FLM)	School	(SCH)
Laboratory	(LAB)	Seminar	(SEM)
Lecture	(LEC)	Videotape	(VTP)

Date Format

MM/DD/YY
Example: 01/21/89

Grade Format

Pass	(P)
Fail	(F)
Incomplete	(I)

Status Format

Active	(A)
Complete	(C)
Make up	(M)

Actual Hours Format

XXX.X
Example: 40.0

BLACK INK ONLY | Training Attendance Form | Page ____ of ____

Office Use Only

Received	Entered	Filed
Date _____ Initials ____	Date _____ Initials ____	Date _____ Initials ____

Program No. 10.6.01 Title EMERGENCY PLAN DRILL (94-03)
Cycle/Week N/A Location TMI Unit 1 Group No. _____

Course No. 006 Course Occurrence Status (A/C) _____
Course Revision _____ Course Completion Date _____

Course Description ANNUAL EXERCISE

Lesson No. AD Taken Date _____ Lesson Status (C/M) _____
Lesson Revision _____ Lesson Plan No. _____ Instructor SSN ___-___-____
Actual Hours _____ Mode DRL Lesson Completion Date 05/19/94

Lesson Description ANNUAL EXERCISE 1994, DRILL 94-03

Social Security Number	Exam P/F/I/E	Grade (%)	Printed Name	Signature	***
___-___-____					
___-___-____					
___-___-____					
___-___-____					
___-___-____					
___-___-____					
___-___-____					
* * * * * * * * * * * * * * * *					
___-___-____					
___-___-____					
___-___-____					
___-___-____					
___-___-____					
___-___-____					
___-___-____					

*** Make entry for this column only if directed by instructor.

See reverse for Mode, Date, Status, Grade and Actual hours format. N 2071

Social Security Number	Exam P/F/I/E	Grade (%)	Printed Name	Signature	***
___-___-___					
___-___-___					
___-___-___					
___-___-___					
___-___-___					
___-___-___					
___-___-___					

Method of Evaluation

- ☐ Written (Category Type _____)
- ☐ Oral
- ☐ Practical Factor
- ☐ Other _____

- ☐ TCR
- ☐ Blank Exam
- ☐ Exam Key
- ☐ Student Exam

Attachments

- ☐ Exam Cover Sheet
- ☐ Seating Chart
- ☐ Other _____

Instructor Comments _____

I hereby acknowledge that the persons listed on this Training Attendance Form have attended the indicated training as specified.

Submitted by _____
Signature

___ ___ ___
Social Security Number

_____
Date

-OR-

_____
Instructor Signature

XXX XX XXXX
SSN on front

_____
Date

Mode Format

Basic prin sim	(BPS)	On-the-job	(OJT)
Correspondence	(CCS)	Originator	(ORG)
Drill	(DRL)	On-shift training	(OST)
Examination	(EXM)	Replica sim	(RPS)
Film	(FLM)	School	(SCH)
Laboratory	(LAB)	Seminar	(SEM)
Lecture	(LEC)	Videotape	(VTP)

Date Format
MM/DD/YY
Example: 01/21/89

Grade Format

Pass	(P)
Fail	(F)
Incomplete	(I)

Status Format

Active	(A)
Complete	(C)
Make up	(M)

Actual Hours Format
XXX.X
Example: 40.0

OBSERVERS NAME:

NOTE: Please take the time to write constructive and positive comments, as well as deficiencies. For each deficiencies write a recommendation to correct the problem and identify the appropriate priority for the deficiency.

PRIORITY 1 This item is a regulatory or safety issue and must be resolved in no more than 15 working days.

PRIORITY 2 This item involves Emergency Preparedness Program corrections and must be resolved in no more than 45 days.

PRIORITY 3 This item involves significant improvements to the Emergency Preparedness Program and is to be resolved in no more than 90 days.

PRIORITY 4 This item involves minor procedure enhancements to the EP program and should be included in the next scheduled substantive procedure change or during the annual review, whichever comes first.

COMMENTS/DEFICIENCIES	RECOMMENDATIONS/REMARKS	PRIORITY

COMMENTS/DEFICIENCIES	RECOMMENDATIONS/REMARKS	PRIORITY

COMMENTS/DEFICIENCIES	RECOMMENDATIONS/REMARKS	PRIORITY

COMMENTS/DEFICIENCIES	RECOMMENDATIONS/REMARKS	PRIORITY

EMERGENCY DRILL
OBSERVER SEQUENCE OF EVENTS SHEET
(OPTIONAL)

OBSERVERS NAME: _____

TIME	SEQUENCE OF EVENTS / ITEMS TO NOTE OR OF INTEREST

EMERGENCY DRILL
OBSERVER SEQUENCE OF EVENTS SHEET
(OPTIONAL)

OBSERVERS NAME: _____

TIME	SEQUENCE OF EVENTS / ITEMS TO NOTE OR OF INTEREST

EMERGENCY DRILL
OBSERVER SEQUENCE OF EVENTS SHEET
(OPTIONAL)

OBSERVERS NAME: _____

TIME	SEQUENCE OF EVENTS / ITEMS TO NOTE OR OF INTEREST

EMERGENCY DRILL
OBSERVER SEQUENCE OF EVENTS SHEET
(OPTIONAL)

OBSERVERS NAME: _____

TIME	SEQUENCE OF EVENTS / ITEMS TO NOTE OR OF INTEREST

APPENDIX A

NOTE: THIS IS A PLAYER REACTIVE DRILL RUN IN 'REAL TIME' FROM THE PLANT REFERENCE SIMULATOR AND NO BACK UP DATA WILL BE USED. THE SIMULATOR WILL BE RESET, IF REQUIRED TO CONTINUE/COMPLETE THE DRILL. CONFIRMATORY DATA WILL BE COLLECTED AND FILED AFTER THE DRILL.

The supporting DATA in the Appendices was developed from a verification run of the Plant Reference Simulator and assumed meteorological conditions. This verification data was reviewed and compiled by Emergency Preparedness, Licensed Operator Training and Radiological Engineering personnel.

This DATA is provided ONLY for your review.

Actual drill data will be collected during the PLAYER REACTIVE exercise. The actual drill data will vary depending on the response of the players and prevailing weather (actual) conditions the day of the drill.

GPU NUCLEAR CORPORATION
MIDDLETOWN, PA

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

TIME 0730 (CLOCK) T= 0 (SCENARIO)

I. REACTIVITY CONTROL

NEUTRON FLUX 6.0000 CPS (NI-1 LOG COUNT) -3.9908 AMPS (NI-3 LOG AMP) 100.15 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	100.0	100.0	100.0	100.0	100.0	100.0	93.5	30.0

GEN. MW 884.65

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	601.7 F	601.7 F
TC (WR)	556.4 F	556.5 F
RC FLOW (LBM/HR)	72 E6	72 E6
RC PRESSURE	2152.1 PSIG	
PRESSURIZER LEVEL	217 IN	

RC PUMP OPERATION (ON) A B C D

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 32.2 F

5 HIGHEST CORE THERMOCOUPLE 615 F

MAKEUP FLOW INTO RCS 16.7 GPM

LET DOWN FLOW OUT OF RCS 46.97 GPM

MAKEUP TANK LEVEL 81.02 IN

SAFETY SYSTEMS

HPI FLOW	(16A)	(16B)	(16C)	(16D)
	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

CFT LEVEL/PRESS	CFT-1A	CFT-1B
	13.04 FT/ 600.8 PSIG	13.04FT/ 600.4 PSIG

LPI FLOW	DH-V4A	DH-V4B
	0.0 GPM	0.0 GPM

BWST LEVEL 56.22 FT

DIESEL GEN. STATUS	(1A)	(1B)
	STBY	STBY

EMERG. FEED FLOW (GPM)	(A)	(B)
	0.0	0.0

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	212 IN	212 IN
OTSG LEVEL (OP)	60 %	60 %
OTSG PRESS.	912.2 PSIG	912.1 PSIG
FEED FLOW (LBM/HR)	5.4 E6	5.4 E6
SHELL TEMP.	524.6 F	524.6 F
CONDENSATE TANK LEVEL	14.61 FT	14.61 FT
MAIN CONDENSER PRESSURE	3.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT PURGE VALVE POSITION	OP AH-V1A	OP V1B	CL V1C	CL V1D

CONTAINMENT H2 CONCENTRATION 0 %

R BLDG. TEMP/PRESS. 109.3 F/ 14.57 PSIA

BLDG. SPRAY FLOW	BS-P1A	BS-P1B
	0 GPM	0 GPM

RB FANS OPERATION	1A	1B	1C
	ON	ON	ON

RB WATER LEVEL	SUMP	FLOOD
	20.7 IN	0.0 IN

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	1A	1B	1C
	0 PSIG	20 PSIG	0 PSIG

BLEED TANK LEVEL	RCB-T1A	T1B	T1C
	60 %	40 %	40 %

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	T1A	T1B
	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

0 HR 0 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
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NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 0735 (CLOCK) T= 5 (SCENARIO)

NEUTRON FLUX 6.0000 CPS (NI-1 LOG COUNT) -3.9907 AMPS (NI-3 LOG AMP) 100.19 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	100.0	100.0	100.0	100.0	100.0	100.0	93.5	30.0

GEN. MW 884.73

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	601.7 F	601.7 F
TC (WR)	556.4 F	556.4 F
RC FLOW (LBM/HR)	72 E6	72 E6
RC PRESSURE	2150.5 PSIG	
PRESSURIZER LEVEL	217 IN	
RC PUMP OPERATION (ON)	A B C D	
PRZR HEATERS OPERABLE (YES/NO)	YES	
DEGREES SUB_COOLING(INCORE)	32.1 F	
5 HIGHEST CORE THERMOCOUPLE	615 F	
MAKEUP FLOW INTO RCS	20.1 GPM	
LET DOWN FLOW OUT OF RCS	46.92 GPM	
MAKEUP TANK LEVEL	80.98 IN	

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

	CFT-1A	CFT-1B
CFT LEVEL/PRESS	13.04 FT/ 600.8 PSIG	13.04FT/ 600.4 PSIG

	DH-V4A	DH-V4B
LPI FLOW	0.0 GPM	0.0 GPM

BWST LEVEL 56.22 FT

	STBY (1A)	STBY (1B)
DIESEL GEN. STATUS		
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	212 IN	211 IN
OTSG LEVEL (OP)	60 %	60 %
OTSG PRESS.	912.6 PSIG	912.6 PSIG
FEED FLOW (LBM/HR)	5.4 E6	5.4 E6
SHELL TEMP.	524.6 F	524.6 F
CONDENSATE TANK LEVEL	14.61 FT	14.61 FT
MAIN CONDENSER PRESSURE	3.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT

	"A"	"B"
PURGE VALVE POSITION	OP AH-V1A / CL V1C	OP V1B / CL V1D
CONTAINMENT H2 CONCENTRATION	0 %	
R BLDG. TEMP/PRESS.	109.3 F/ 14.57 PSIA	
BLDG. SPRAY FLOW	0 GPM (BS-P1A)	0 GPM (BS-P1B)
RB FANS OPERATION	ON (1A) / ON (1B)	ON (1C)
RB WATER LEVEL	20.7 IN (SUMP)	0.0 IN (FLOOD)

RADWASTE SYSTEM

	1A	1B	1C
WG DECAY TANK PRESSURES	0 PSIG	20 PSIG	0 PSIG
BLEED TANK LEVEL	60 % (RCB-T1A)	40 % (T1B)	40 % (T1C)

WMW LEVEL 5.9 FT

	T1A	T1B
EVAP COND. TANK LEVEL	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

0 HR 5 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

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I. REACTIVITY CONTROL

TIME 0740 (CLOCK) T= 10 (SCENARIO)

NEUTRON FLUX 6.0000 CPS (NI-1 LOG COUNT) -3.9963 AMPS (NI-3 LOG AMP) 100.24 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	100.0	100.0	100.0	100.0	100.0	100.0	93.5	30.0

GEN. MW 884.63

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	601.7 F	601.7 F
TC (WR)	556.4 F	556.4 F
RC FLOW (LBM/HR)	72 E6	72 E6
RC PRESSURE	2147.6 PSIG	
PRESSURIZER LEVEL	213 IN	

RC PUMP OPERATION (ON) A B C D

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 32.2 F

5 HIGHEST CORE THERMOCOUPLE 615 F

MAKEUP FLOW INTO RCS 46.0 GPM

LET DOWN FLOW OUT OF RCS 46.89 GPM

MAKEUP TANK LEVEL 77.64 IN

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

CFT LEVEL/PRESS 13.04 FT/ 600.8 PSIG (CFT-1A) 13.04FT/ 600.4 PSIG (CFT-1B)

LPI FLOW 0.0 GPM (DH-V4A) 0.0 GPM (DH-V4B)

BWST LEVEL 56.22 FT

DIESEL GEN. STATUS STBY (1A) STBY (1B)

EMERG. FEED FLOW (GPM) 0.0 (A) 0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	211 IN	211 IN
OTSG LEVEL (OP)	60 %	60 %
OTSG PRESS.	913.0 PSIG	912.9 PSIG
FEED FLOW (LBM/HR)	5.4 E6	5.4 E6
SHELL TEMP.	524.8 F	524.9 F
CONDENSATE TANK LEVEL	14.60 FT	14.60 FT
MAIN CONDENSER PRESSURE	3.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT

	"A"	"B"		
PURGE VALVE POSITION	OP AH-V1A	OP V1B	CL V1C	CL V1D
CONTAINMENT H2 CONCENTRATION	0 %			
R BLDG. TEMP/PRESS.	109.3 F/ 14.57 PSIA			
BLDG. SPRAY FLOW	0 GPM (BS-P1A)	0 GPM (BS-P1B)		
RB FANS OPERATION	ON (1A)	ON (1B)	ON (1C)	
RB WATER LEVEL	20.7 IN (SUMP)	0.0 IN (FLOOD)		

RADWASTE SYSTEM

	1A	1B	1C
WG DECAY TANK PRESSURES	0 PSIG	20 PSIG	0 PSIG
BLEED TANK LEVEL	60 % (RCB-T1A)	40 % (T1B)	40 % (T1C)

WMW LEVEL 5.9 FT

	T1A	T1B
EVAP COND. TANK LEVEL	0 FT	3 FT
AUX BLDG. SUMP LEVEL	30.0%	

0 HR 10 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

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I. REACTIVITY CONTROL

TIME 0745 (CLOCK) T= 15 (SCENARIO)

NEUTRON FLUX 6.0000 CPS (NI-1 LOG COUNT) -4.0960 AMPS (NI-3 LOG AMP) 79.58 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	100.0	100.0	100.0	100.0	100.0	100.0	69.0	30.0

GEN. MW 696.62

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	597.7 F	597.7 F
TC (WR)	561.8 F	561.8 F
RC FLOW (LBM/HR)	72 E6	72 E6

RC PRESSURE 2177.9 PSIG

PRESSURIZER LEVEL 220 IN

RC PUMP OPERATION (ON) A B C D

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 40.9 F

5 HIGHEST CORE THERMOCOUPLE 608 F

MAKEUP FLOW INTO RCS 13.4 GPM

LET DOWN FLOW OUT OF RCS 47.23 GPM

MAKEUP TANK LEVEL 74.46 IN

SAFETY SYSTEMS

HPI FLOW	(16A)	(16B)	(16C)	(16D)
	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

CFT LEVEL/PRESS 13.04 FT/ 600.8 PSIG (CFT-1A) 13.04FT/ 600.4 PSIG (CFT-1B)

LPI FLOW 0.0 GPM (DH-V4A) 0.0 GPM (DH-V4B)

BWST LEVEL 56.22 FT

DIESEL GEN. STATUS STBY (1A) STBY (1B)

EMERG. FEED FLOW (GPM) 0.0 (A) 0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	163 IN	163 IN
OTSG LEVEL (OP)	45 %	45 %
OTSG PRESS.	901.5 PSIG	902.1 PSIG
FEED FLOW (LBM/HR)	4.1 E6	4.1 E6
SHELL TEMP.	531.1 F	531.1 F
CONDENSATE TANK LEVEL	14.60 FT	14.61 FT
MAIN CONDENSER PRESSURE	2.9	IN HG
TURBINE BYPASS VALVE POSITION	11.3 %	0.0 %

CONTAINMENT

	"A"	"B"
PURGE VALVE POSITION	OP AH-V1A	OP V1B / CL V1C / CL V1D
CONTAINMENT H2 CONCENTRATION	0 %	

R BLDG. TEMP/PRESS. 109.3 F/ 14.57 PSIA

BLDG. SPRAY FLOW 0 GPM (BS-P1A) 0 GPM (BS-P1B)

RB FANS OPERATION ON (1A) ON (1B) ON (1C)

RB WATER LEVEL 20.7 IN (SUMP) 0.0 IN (FLOOD)

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	1A	1B	1C
	0 PSIG	20 PSIG	0 PSIG

BLEED TANK LEVEL	RCB-T1A	T1B	T1C
	60 %	40 %	40 %

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	T1A	T1B
	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

0 HR 15 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
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NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 0750 (CLOCK) T= 20 (SCENARIO)

NEUTRON FLUX 6.0000 CPS (NI-1 LOG COUNT) -4.2399 AMPS (NI-3 LOG AMP) 37.21 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	100.0	100.0	100.0	100.0	100.0	100.0	28.2	30.0

GEN. MW 455.51

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	592.5 F	592.5 F
TC (WR)	567.1 F	567.1 F
RC FLOW (LBM/HR)	71 E6	71 E6
RC PRESSURE	2138.6 PSIG	
PRESSURIZER LEVEL	215 IN	

RC PUMP OPERATION (ON) A B C D

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 46.5 F

5 HIGHEST CORE THERMOCOUPLE 600 F

MAKEUP FLOW INTO RCS 36.6 GPM

LET DOWN FLOW OUT OF RCS 46.92 GPM

MAKEUP TANK LEVEL 73.55 IN

SAFETY SYSTEMS

HPI FLOW	(16A)	(16B)	(16C)	(16D)
	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

CFT LEVEL/PRESS	CFT-1A	CFT-1B
	13.04 FT/ 600.8 PSIG	13.04FT/ 600.4 PSIG

LPI FLOW	DH-V4A	DH-V4B
	0.0 GPM	0.0 GPM

BWST LEVEL 56.22 FT

DIESEL GEN. STATUS		
	STBY (1A)	STBY (1B)

EMERG. FEED FLOW (GPM)		
	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	100 IN	100 IN
OTSG LEVEL (OP)	26 %	26 %
OTSG PRESS.	889.4 PSIG	889.5 PSIG
FEED FLOW (LBM/HR)	2.8 E6	2.8 E6
SHELL TEMP.	530.4 F	530.4 F
CONDENSATE TANK LEVEL	14.63 FT	14.68 FT
MAIN CONDENSER PRESSURE	2.5 IN HG	
TURBINE BYPASS VALVE POSITION	9.6 %	9.0 %

CONTAINMENT

PURGE VALVE POSITION	OP AH-V1A	OP V1B	CL V1C	CL V1D

CONTAINMENT H2 CONCENTRATION 0 %

R BLDG. TEMP/PRESS. 109.3 F/ 14.57 PSIA

BLDG. SPRAY FLOW	BS-P1A	BS-P1B
	0 GPM	0 GPM

RB FANS OPERATION	1A	1B	1C
	ON	ON	ON

RB WATER LEVEL	SUMP	FLOOD
	20.7 IN	0.0 IN

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	1A	1B	1C
	0 PSIG	20 PSIG	0 PSIG

BLEED TANK LEVEL	RCB-T1A	T1B	T1C
	60 %	40 %	40 %

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	T1A	T1B
	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

0 HR 20 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
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I. REACTIVITY CONTROL

TIME 0755 (CLOCK) T= 25 (SCENARIO)

NEUTRON FLUX 6.0000 CPS (NI-1 LOG COUNT) -4.4469 AMPS (NI-3 LOG AMP) 35.51 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)	GEN. MW
	100.0	100.0	100.0	100.0	100.0	83.0	7.9	30.0	253.59

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	588.6 F	588.6 F
TC (WR)	573.0 F	572.9 F
RC FLOW (LBM/HR)	71 E6	71 E6
RC PRESSURE	2157.8 PSIG	
PRESSURIZER LEVEL	220 IN	
RC PUMP OPERATION (ON)	A B C D	
PRZR HEATERS OPERABLE (YES/NO)	YES	
DEGREES SUB_COOLING(INCORE)	54.4 F	
5 HIGHEST CORE THERMOCOUPLE	593 F	
MAKEUP FLOW INTO RCS	91.3 GPM	
LET DOWN FLOW OUT OF RCS	46.73 GPM	
MAKEUP TANK LEVEL	69.58 IN	

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

	CFT-1A	CFT-1B
CFT LEVEL/PRESS	13.04 FT/ 600.8 PSIG	13.04FT/ 600.3 PSIG
LPI FLOW	0.0 GPM	0.0 GPM
	DH-V4A	DH-V4B

BWST LEVEL 56.22 FT

	STBY (1A)	STBY (1B)
DIESEL GEN. STATUS		
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	60 IN	59 IN
OTSG LEVEL (OP)	13 %	13 %
OTSG PRESS.	881.7 PSIG	881.9 PSIG
FEED FLOW (LBM/HR)	1.7 E6	1.7 E6
SHELL TEMP.	527.0 F	527.0 F
CONDENSATE TANK LEVEL	14.68 FT	14.85 FT
MAIN CONDENSER PRESSURE	2.1 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %
	"A"	"B"

CONTAINMENT				
PURGE VALVE POSITION	OP AH-V1A	OP V1B	CL V1C	CL V1D
CONTAINMENT H2 CONCENTRATION	0 %			
R BLDG. TEMP/PRESS.	109.3 F/ 14.57 PSIA			
BLDG. SPRAY FLOW	0 GPM	0 GPM		
	BS-P1A	BS-P1B		
RB FANS OPERATION	ON	ON	ON	
	1A	1B	1C	
RB WATER LEVEL	20.7 IN	0.0 IN		
	SUMP	FLOOD		

RADWASTE SYSTEM

	1A	1B	1C
WG DECAY TANK PRESSURES	0 PSIG	20 PSIG	0 PSIG
BLEED TANK LEVEL	60 %	40 %	40 %
	RCB-T1A	T1B	T1C

WMW LEVEL 5.9 FT

	T1A	T1B
EVAP COND. TANK LEVEL	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

0 HR 25 MIN

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 0800 (CLOCK) T= 30 (SCENARIO)

NEUTRON FLUX 6.0000 CPS (NI-1 LOG COUNT) -4.5919 AMPS (NI-3 LOG AMP) 24.96 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	100.0	100.0	100.0	100.0	100.0	58.3	0.0	30.0

GEN. MW 173.92

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	580.9 F	580.9 F
TC (WR)	569.6 F	569.6 F
RC FLOW (LBM/HR)	71 E6	71 E6
RC PRESSURE	2109.9 PSIG	
PRESSURIZER LEVEL	211 IN	
RC PUMP OPERATION (ON)	A B C D	
PRZR HEATERS OPERABLE (YES/NO)	YES	
DEGREES SUB_COOLING(INCORE)	60.1 F	
5 HIGHEST CORE THERMOCOUPLE	584 F	
MAKEUP FLOW INTO RCS	261.9 GPM	
LET DOWN FLOW OUT OF RCS	46.42 GPM	
MAKEUP TANK LEVEL	64.15 IN	

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

	CFT-1A	CFT-1B
CFT LEVEL/PRESS	13.04 FT/ 600.7 PSIG	13.04FT/ 600.3 PSIG

	DH-V4A	DH-V4B
LPI FLOW	0.0 GPM	0.0 GPM

BWST LEVEL	56.22 FT	
DIESEL GEN. STATUS	STBY (1A)	STBY (1B)
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	47 IN	47 IN
OTSG LEVEL (OP)	8 %	8 %
OTSG PRESS.	893.5 PSIG	893.5 PSIG
FEED FLOW (LBM/HR)	1.2 E6	1.2 E6
SHELL TEMP.	525.0 F	525.0 F
CONDENSATE TANK LEVEL	14.72 FT	14.95 FT
MAIN CONDENSER PRESSURE	1.8 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT

	"A"	"B"
PURGE VALVE POSITION	OP AH-V1A	OP V1B / CL V1C / CL V1D
CONTAINMENT H2 CONCENTRATION	0 %	
R BLDG. TEMP/PRESS.	109.4 F/ 14.62 PSIA	
BLDG. SPRAY FLOW	0 GPM	0 GPM

	BS-P1A	BS-P1B
RB FANS OPERATION	ON	ON

	1A	1B	1C
RB WATER LEVEL	20.7 IN	0.0 IN	
	SUMP	FLOOD	

RADWASTE SYSTEM

	1A	1B	1C
WG DECAY TANK PRESSURES	0 PSIG	20 PSIG	0 PSIG
BLEED TANK LEVEL	60 %	40 %	40 %
	RCB-T1A	T1B	T1C
WMW LEVEL	5.9 FT		
EVAP COND. TANK LEVEL	0 FT	3 FT	
	T1A	T1B	
AUX BLDG. SUMP LEVEL	30.0%		

0 HR 30 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

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I. REACTIVITY CONTROL

TIME 0805 (CLOCK) T= 35 (SCENARIO)

NEUTRON FLUX 6.0000 CPS (NI-1 LOG COUNT) -4.8160 AMPS (NI-3 LOG AMP) 14.86 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD) 100.0 (GP 1) 100.0 (GP 2) 100.0 (GP 3) 100.0 (GP 4) 100.0 (GP 5) 35.8 (GP 6) 0.0 (GP 7) 30.0 (GP 8)

GEN. MW 55.23

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	564.8 F	564.8 F
TC (WR)	557.4 F	557.4 F
RC FLOW (LBM/HR)	71 E6	71 E6
RC PRESSURE	2113.4 PSIG	
PRESSURIZER LEVEL	189 IN	

RC PUMP OPERATION (ON) A B C D

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 77.6 F

5 HIGHEST CORE THERMOCOUPLE 567 F

MAKEUP FLOW INTO RCS 261.8 GPM

LET DOWN FLOW OUT OF RCS 46.22 GPM

MAKEUP TANK LEVEL 70.17 IN

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

	CFT-1A	CFT-1B
CFT LEVEL/PRESS	13.04 FT/ 600.6 PSIG	13.04FT/ 600.2 PSIG

	DH-V4A	DH-V4B
LPI FLOW	0.0 GPM	0.0 GPM

BWST LEVEL 56.11 FT

	STBY (1A)	STBY (1B)
DIESEL GEN. STATUS		
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	50 IN	50 IN
OTSG LEVEL (OP)	9 %	9 %
OTSG PRESS.	908.1 PSIG	908.1 PSIG
FEED FLOW (LBM/HR)	0.8 E6	0.8 E6
SHELL TEMP.	521.2 F	521.1 F
CONDENSATE TANK LEVEL	14.75 FT	14.89 FT
MAIN CONDENSER PRESSURE	1.7 IN HG	
TURBINE BYPASS VALVE POSITION	24.8 %	25.4 %

CONTAINMENT	"A"	"B"
PURGE VALVE POSITION	OP AH-V1A	OP V1B / CL V1C / CL V1D
CONTAINMENT H2 CONCENTRATION	0 %	
R BLDG. TEMP/PRESS.	109.5 F/ 14.67 PSIA	
BLDG. SPRAY FLOW	0 GPM (BS-P1A)	0 GPM (BS-P1B)
RB FANS OPERATION	ON 1A / ON 1B / ON 1C	
RB WATER LEVEL	20.7 IN (SUMP)	0.0 IN (FLOOD)

RADWASTE SYSTEM

	1A	1B	1C
WG DECAY TANK PRESSURES	0 PSIG	20 PSIG	0 PSIG
BLEED TANK LEVEL	60 %	40 %	40 %

	RCB-T1A	T1B	T1C
WMW LEVEL	5.9 FT		
EVAP COND. TANK LEVEL	0 FT	3 FT	

	T1A	T1B
AUX BLDG. SUMP LEVEL	30.0%	

0 HR 35 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

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NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 0810 (CLOCK) T= 40 (SCENARIO)

NEUTRON FLUX 6.0000 CPS (NI-1 LOG COUNT) -5.0989 AMPS (NI-3 LOG AMP) 7.78 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	100.0 (GP 1)	100.0 (GP 2)	100.0 (GP 3)	100.0 (GP 4)	99.8 (GP 5)	24.9 (GP 6)	0.0 (GP 7)	30.0 (GP 8)

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	553.4 F	553.3 F
TC (WR)	548.5 F	548.5 F
RC FLOW (LBM/HR)	71 E6	71 E6
RC PRESSURE	2099.8 PSIG	
PRESSURIZER LEVEL	190 IN	

RC PUMP OPERATION (ON) A B C D

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 89.2 F

5 HIGHEST CORE THERMOCOUPLE 555 F

MAKEUP FLOW INTO RCS 129.8 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 81.70 IN

SAFETY SYSTEMS

HPI FLOW	0.0 GPM (16A)	0.0 GPM (16B)	0.0 GPM (16C)	0.0 GPM (16D)

CFT LEVEL/PRESS	13.04 FT/ 600.6 PSIG CFT-1A	13.04FT/ 600.2 PSIG CFT-1B
LPI FLOW	0.0 GPM DH-V4A	0.0 GPM DH-V4B

BWST LEVEL 56.02 FT

DIESEL GEN. STATUS STBY (1A) STBY (1B)

EMERG. FEED FLOW (GPM) 0.0 (A) 0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	52 IN	52 IN
OTSG LEVEL (OP)	9 %	9 %
OTSG PRESS.	895.7 PSIG	895.7 PSIG
FEED FLOW (LBM/HR)	0.6 E6	0.6 E6
SHELL TEMP.	514.9 F	514.8 F
CONDENSATE TANK LEVEL	14.67 FT	14.81 FT
MAIN CONDENSER PRESSURE	1.5 IN HG	
TURBINE BYPASS VALVE POSITION	40.4 %	41.0 %

CONTAINMENT

	"A"	"B"		
PURGE VALVE POSITION	OP AH-V1A	OP V1B	CL V1C	CL V1D

CONTAINMENT H2 CONCENTRATION 0 %

R BLDG. TEMP/PRESS. 109.5 F/ 14.70 PSIA

BLDG. SPRAY FLOW 0 GPM 0 GPM

RB FANS OPERATION	BS-P1A ON	ON	BS-P1B ON

RB WATER LEVEL	1A 20.7 IN (SUMP)	1B 0.0 IN (FLOOD)	1C

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	0 PSIG 1A	20 PSIG 1B	0 PSIG 1C
BLEED TANK LEVEL	60 % RCB-T1A	40 % T1B	40 % T1C

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	0 FT T1A	3 FT T1B

AUX BLDG. SUMP LEVEL 30.0%

0 HR 40 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
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I. REACTIVITY CONTROL

TIME 0815 (CLOCK) T= 45 (SCENARIO)

NEUTRON FLUX 6.0000 CPS (NI-1 LOG COUNT) -5.8245 AMPS (NI-3 LOG AMP) 1.45 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	100.0	100.0	100.0	100.0	80.5	5.6	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	546.4 F	546.4 F
TC (WR)	544.6 F	544.6 F
RC FLOW (LBM/HR)	72 E6	72 E6
RC PRESSURE	2151.2 PSIG	
PRESSURIZER LEVEL	200 IN	

RC PUMP OPERATION (ON) A B C D

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 100.5 F

5 HIGHEST CORE THERMOCOUPLE 547 F

MAKEUP FLOW INTO RCS 124.4 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 87.79 IN

SAFETY SYSTEMS

HPI FLOW	(16A)	(16B)	(16C)	(16D)
	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

CFT LEVEL/PRESS 13.04 FT/ 600.5 PSIG (CFT-1A) 13.04FT/ 600.1 PSIG (CFT-1B)

LPI FLOW 0.0 GPM (DH-V4A) 0.0 GPM (DH-V4B)

BWST LEVEL 55.98 FT

DIESEL GEN. STATUS STBY (1A) STBY (1B)

EMERG. FEED FLOW (GPM) 0.0 (A) 0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	43 IN	43 IN
OTSG LEVEL (OP)	8 %	8 %
OTSG PRESS.	895.8 PSIG	895.9 PSIG
FEED FLOW (LBM/HR)	0.2 E6	0.1 E6
SHELL TEMP.	513.4 F	513.6 F
CONDENSATE TANK LEVEL	14.63 FT	14.75 FT
MAIN CONDENSER PRESSURE	1.4 IN HG	
TURBINE BYPASS VALVE POSITION	19.2 %	19.8 %

CONTAINMENT

	"A"	"B"
PURGE VALVE POSITION	OP AH-V1A	OP V1B / CL V1C / CL V1D
CONTAINMENT H2 CONCENTRATION	0 %	
R BLDG. TEMP/PRESS.	109.5 F/ 14.70 PSIA	
BLDG. SPRAY FLOW	0 GPM (BS-P1A)	0 GPM (BS-P1B)
RB FANS OPERATION	ON (1A)	ON (1B) / ON (1C)
RB WATER LEVEL	20.7 IN (SUMP)	0.0 IN (FLOOD)

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	1A	1B	1C
	0 PSIG	20 PSIG	0 PSIG

BLEED TANK LEVEL	RCB-T1A	T1B	T1C
	60 %	40 %	40 %

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL 0 FT (T1A) 3 FT (T1B)

AUX BLDG. SUMP LEVEL 30.0%

0 HR 45 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
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I. REACTIVITY CONTROL

TIME 0820 (CLOCK) T= 50 (SCENARIO)

NEUTRON FLUX 5.1397 CPS (NI-1 LOG COUNT) -9.7897 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	543.2 F	543.2 F
TC (WR)	542.5 F	542.4 F
RC FLOW (LBM/HR)	72 E6	72 E6
RC PRESSURE	2017.0 PSIG	
PRESSURIZER LEVEL	230 IN	
RC PUMP OPERATION (ON)	A B C D	
PRZR HEATERS OPERABLE (YES/NO)	YES	
DEGREES SUB_COOLING(INCORE)	94.5 F	
5 HIGHEST CORE THERMOCOUPLE	544 F	
MAKEUP FLOW INTO RCS	2.2 GPM	
LET DOWN FLOW OUT OF RCS	0.00 GPM	
MAKEUP TANK LEVEL	85.37 IN	

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

	CFT-1A	CFT-1B
CFT LEVEL/PRESS	13.04 FT/ 600.5 PSIG	13.04FT/ 600.1 PSIG
LPI FLOW	0.0 GPM	0.0 GPM
	DH-V4A	DH-V4B

BWST LEVEL 55.98 FT

	STBY (1A)	STBY (1B)
DIESEL GEN. STATUS		
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	42 IN	42 IN
OTSG LEVEL (OP)	7 %	7 %
OTSG PRESS.	917.3 PSIG	917.5 PSIG
FEED FLOW (LBM/HR)	0.1 E6	0.1 E6
SHELL TEMP.	525.4 F	525.7 F
CONDENSATE TANK LEVEL	14.59 FT	14.70 FT
MAIN CONDENSER PRESSURE	1.4 IN HG	
TURBINE BYPASS VALVE POSITION	6.6 %	6.4 %

CONTAINMENT

	"A"	"B"
PURGE VALVE POSITION	OP AH-V1A	OP V1B / CL V1C / CL V1D
CONTAINMENT H2 CONCENTRATION	0 %	
R BLDG. TEMP/PRESS.	109.6 F/ 14.70 PSIA	
BLDG. SPRAY FLOW	0 GPM	0 GPM
RB FANS OPERATION	BS-P1A ON / 1A	BS-P1B ON / 1B / ON / 1C
RB WATER LEVEL	20.7 IN SUMP	0.0 IN FLOOD

RADWASTE SYSTEM

	1A	1B	1C
WG DECAY TANK PRESSURES	0 PSIG	20 PSIG	0 PSIG
BLEED TANK LEVEL	60 %	40 %	40 %
	RCB-T1A	T1B	T1C

WMW LEVEL 5.9 FT

	T1A	T1B
EVAP COND. TANK LEVEL	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

0 HR 50 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

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I. REACTIVITY CONTROL

TIME 0825 T= 55
(CLOCK) (SCENARIO)

NEUTRON FLUX 3.5225 CPS (NI-1 LOG COUNT) -10.9467 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	30.0	

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	542.7 F	542.6 F
TC (WR)	541.8 F	541.8 F
RC FLOW (LBM/HR)	71 E6	71 E6
RC PRESSURE	1563.3 PSIG	
PRESSURIZER LEVEL	211 IN	

RC PUMP OPERATION (ON) A B C D

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 60.2 F

5 HIGHEST CORE THERMOCOUPLE 543 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 40.55 GPM

MAKEUP TANK LEVEL 101.18 IN

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	0.0 GPM	0.0 PM	0.0 GPM	0.0 GPM

	CFT-1A	CFT-1B
CFT LEVEL/PRESS	13.04 FT/ 600.5 PSIG	13.04FT/ 600.1 PSIG
LPI FLOW	0.0 GPM (DH-V4A)	0.0 GPM (DH-V4B)

BWST LEVEL 55.98 FT

DIESEL GEN. STATUS	STBY (1A)	STBY (1B)
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	45 IN	45 IN
OTSG LEVEL (OP)	8 %	8 %
OTSG PRESS.	906.8 PSIG	906.7 PSIG
FEED FLOW (LBM/HR)	0.1 E6	0.1 E6
SHELL TEMP.	514.3 F	515.5 F
CONDENS/TE TANK LEVEL	14.55 FT	14.65 FT
MAIN CONDENSER PRESSURE	1.4 IN HG	
TURBINE BYPASS VALVE POSITION	7.0 %	7.6 %

CONTAINMENT

	"A"	"B"
PURGE VALVE POSITION	OP AH-V1A	OP V1B / CL V1C / CL V1D
CONTAINMENT H2 CONCENTRATION	0 %	
R BLDG. TEMP/PRESS.	109.6 F/ 14.70 PSIA	
BLDG. SPRAY FLOW	0 GPM	0 GPM
RB FANS OPERATION	BS-P1A ON	BS-P1B ON
	1A ON	1B ON / 1C ON
RB WATER LEVEL	20.7 IN (SUMP)	0.0 IN (FLOOD)

RADWASTE SYSTEM

	1A	1B	1C
WG DECAY TANK PRESSURES	0 PSIG	20 PSIG	0 PSIG
BLEED TANK LEVEL	60 % (RCB-T1A)	40 % (T1B)	40 % (T1C)

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	T1A	T1B
	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

0 HR 55 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

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I. REACTIVITY CONTROL

TIME 0830 T= 60
(CLOCK) (SCENARIO)

NEUTRON FLUX	2.5888 CPS	-10.9990 AMPS	0.00 %
	(NI-1 LOG COUNT)	(NI-3 LOG AMP)	(NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	GEN. MW	0.00
	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)		

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	532.6 F	532.6 F
TC (WR)	530.9 F	530.8 F
RC FLOW (LBM/HR)	35 E6	35 E6
RC PRESSURE	1341.2 PSIG	
PRESSURIZER LEVEL	138 IN	
RC PUMP OPERATION (ON)	B	C
PRZR HEATERS OPERABLE (YES/NO)	YES	
DEGREES SUB_COOLING(INCORE)	50.1 F	
5 HIGHEST CORE THERMOCOUPLE	533 F	
MAKEUP FLOW INTO RCS	106.7 GPM	
LET DOWN FLOW OUT OF RCS	90.89 GPM	
MAKEUP TANK LEVEL	92.03 IN	

SAFETY SYSTEMS

HPI FLOW	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM
	(16A)	(16B)	(16C)	(16D)
CFT LEVEL/PRESS	13.04 FT/ 600.5 PSIG		13.04FT/ 600.1 PSIG	
	CFT-1A		CFT-1B	
LPI FLOW	0.0 GPM		0.0 GPM	
	DH-V4A		DH-V4B	
BWST LEVEL	55.98 FT			
DIESEL GEN. STATUS	STBY (1A)		STBY (1B)	
EMERG. FEED FLOW (GPM)	0.0 (A)		0.0 (B)	

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	43 IN	42 IN
OTSG LEVEL (OP)	7 %	7 %
OTSG PRESS.	832.8 PSIG	819.0 PSIG
FEED FLOW (LBM/HR)	0.1 E6	0.1 E6
SHELL TEMP.	507.5 F	505.3 F
CONDENSATE TANK LEVEL	14.52 FT	14.62 FT
MAIN CONDENSER PRESSURE	1.4 IN HG	
TURBINE BYPASS VALVE POSITION	8.2 %	11.6 %
	"A"	"B"

CONTAINMENT

PURGE VALVE POSITION	OP AH-V1A	OP V1B	CL V1C	CL V1D
CONTAINMENT H2 CONCENTRATION	0 %			
R BLDG. TEMP/PRESS.	109.6 F/ 14.70 PSIA			
BLDG. SPRAY FLOW	0 GPM	0 GPM		
	BS-P1A	BS-P1B		
RB FANS OPERATION	ON	ON	ON	
	1A	1B	1C	
RB WATER LEVEL	20.7 IN	0.0 IN		
	SUMP	FLOOD		

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	0 PSIG	20 PSIG	0 PSIG
	1A	1B	1C
BLEED TANK LEVEL	60 %	40 %	40 %
	RCB-T1A	T1B	T1C
WMW LEVEL	5.9 FT		
EVAP COND. TANK LEVEL	0 FT	3 FT	
	T1A	T1B	
AUX BLDG. SUMP LEVEL	30.0%		

1 HR 0 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

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I. REACTIVITY CONTROL

TIME 0835 (CLOCK) T= 65 (SCENARIO)

NEUTRON FLUX 2.4916 CPS (NI-1 LOG COUNT) -10.9961 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

	RCS	A. LOOP	B. LOOP
TH (WR)		528.1 F	528.1 F
TC (WR)		526.5 F	526.5 F
RC FLOW (LBM/HR)		35 E6	35 E6
RC PRESSURE		1277.1 PSIG	
PRESSURIZER LEVEL		139 IN	
RC PUMP OPERATION (ON)		B	C
PRZR HEATERS OPERABLE (YES/NO)	YES		
DEGREES SUBCOOLING(INCORE)		48.3 F	
5 HIGHEST THERMOCOUPLE		528 F	
MAKEUP FLOW INTO RCS		154.6 GPM	
LET DOWN FLOW OUT OF RCS		88.69 GPM	
MAKEUP TANK LEVEL		64.33 IN	

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

	CFT-1A	CFT-1B
CFT LEVEL/PRESS	13.04 FT/ 600.5 PSIG	13.04FT/ 600.1 PSIG

	DH-V4A	DH-V4B
LPI FLOW	0.0 GPM	0.0 GPM

BWST LEVEL 55.98 FT

	STBY (1A)	STBY (1B)
DIESEL GEN. STATUS		
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	42 IN	42 IN
OTSG LEVEL (OP)	7 %	7 %
OTSG PRESS.	801.5 PSIG	796.1 PSIG
FEED FLOW (LBM/HR)	0.1 E6	0.1 E6
SHELL TEMP.	507.0 F	504.6 F
CONDENSATE TANK LEVEL	14.48 FT	14.62 FT
MAIN CONDENSER PRESSURE	1.4 IN HG	
TURBINE BYPASS VALVE POSITION	8.0 %	9.3 %

CONTAINMENT

	"A"	"B"
PURGE VALVE POSITION	OP AH-V1A	OP V1B / CL V1C / CL V1D
CONTAINMENT H2 CONCENTRATION	0 %	
R BLDG. TEMP/PRESS.	109.5 F/ 14.70 PSIA	
BLDG. SPRAY FLOW	0 GPM	0 GPM
RB FANS OPERATION	BS-P1A ON / 1A ON / 1B	BS-P1B ON / 1C ON
RB WATER LEVEL	20.7 IN SUMP	0.0 IN FLOOD

RADWASTE SYSTEM

	1A	1B	1C
WG DECAY TANK PRESSURES	0 PSIG	20 PSIG	0 PSIG
BLEED TANK LEVEL	60 %	40 %	40 %
	RCB-T1A	T1B	T1C
WMW LEVEL	5.9 FT		
EVAP COND. TANK LEVEL	0 FT	3 FT	
	T1A	T1B	
AUX BLDG. SUMP LEVEL	30.0%		

1 HR 5 MIN

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I. REACTIVITY CONTROL

TIME 0840 (CLOCK) T= 70 (SCENARIO)

NEUTRON FLUX 2.4500 CPS (NI-1 LOG COUNT) -10.9980 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)	GEN. MW
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	524.4 F	521.8 F
TC (WR)	511.2 F	510.7 F
RC FLOW (LBM/HR)	35 E6	36 E6
RC PRESSURE	1144.8 PSIG	
PRESSURIZER LEVEL	94 IN	
RC PUMP OPERATION (ON)	B	C
PRZR HEATERS OPERABLE (YES/NO)	YES	
DEGREES SUB_COOLING(INCORE)	43.2 F	
5 HIGHEST CORE THERMOCOUPLE	520 F	
MAKEUP FLOW INTO RCS	204.5 GPM	
LET DOWN FLOW OUT OF RCS	0.00 GPM	
MAKEUP TANK LEVEL	73.51 IN	

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM
CFT LEVEL/PRESS	13.04 FT/ 598.9 PSIG (CFT-1A)		13.04FT/ 598.5 PSIG (CFT-1B)	
LPI FLOW	0.0 GPM (DH-V4A)		0.0 GPM (DH-V4B)	
BWST LEVEL	55.85 FT			
DIESEL GEN. STATUS	STBY (1A)		STBY (1B)	
EMERG. FEED FLOW (GPM)	0.0 (A)		0.0 (B)	

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	41 IN	69 IN
OTSG LEVEL (OP)	6 %	17 %
OTSG PRESS.	758.5 PSIG	363.4 PSIG
FEED FLOW (LBM/HR)	0.2 E6	0.0 E6
SHELL TEMP.	499.5 F	481.3 F
CONDENSATE TANK LEVEL	14.45 FT	14.61 FT
MAIN CONDENSER PRESSURE	1.4 IN HG	
TURBINE BYPASS VALVE POSITION	9.1 % ("A")	9.3 % ("B")

CONTAINMENT

PURGE VALVE POSITION	OP AH-V1A	OP V1B	CL V1C	CL V1D
CONTAINMENT H2 CONCENTRATION	0 %			
R BLDG. TEMP/PRESS.	133.1 F/ 15.98 PSIA			
BLDG. SPRAY FLOW	0 GPM (BS-P1A)	0 GPM (BS-P1B)		
RB FANS OPERATION	ON 1A	ON 1B	ON 1C	
RB WATER LEVEL	20.7 IN (SUMP)	0.0 IN (FLOOD)		

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	0 PSIG 1A	20 PSIG 1B	0 PSIG 1C
BLEED TANK LEVEL	60 % RCB-T1A	40 % T1B	40 % T1C
WMW LEVEL	5.9 FT		
EVAP COND. TANK LEVEL	0 FT T1A	3 FT T1B	
AUX BLDG. SUMP LEVEL	30.0%		

1 HR 10 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
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NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 0845 (CLOCK) T= 75 (SCENARIO)

NEUTRON FLUX 2.3870 CPS (NI-1 LOG COUNT) -10.9980 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	447.4 F	441.5 F
TC (WR)	442.8 F	361.5 F
RC FLOW (LBM/HR)	4 E6	4 E6
RC PRESSURE	544.9 PSIG	
PRESSURIZER LEVEL	6 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) NO

DEGREES SUB_COOLING(INCORE) 42.5 F

5 HIGHEST CORE THERMOCOUPLE 436 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 74.52 IN

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	232.5 GPM	232.5 GPM	251.6 GPM	251.6 GPM
CFT LEVEL/PRESS	12.90 FT/ 575.8 PSIG (CFT-1A)		12.90FT/ 575.5 PSIG (CFT-1B)	
LPI FLOW	0.0 GPM (DH-V4A)		0.0 GPM (DH-V4B)	

BWST LEVEL 55.12 FT

DIESEL GEN. STATUS	STBY (1A)	STBY (1B)
EMERG. FEED FLOW (GPM)	130.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	65 IN	55 IN
OTSG LEVEL (OP)	6 %	7 %
OTSG PRESS.	427.4 PSIG	75.1 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	456.4 F	337.7 F
CONDENSATE TANK LEVEL	14.32 FT	14.56 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	5.1 %	0.0 %

CONTAINMENT

	"A"	"B"
PURGE VALVE POSITION	OP AH-V1A / OP V1B / CL V1C / CL V1D	
CONTAINMENT H2 CONCENTRATION	0 %	
R BLDG. TEMP/PRESS.	208.6 F/ 24.82 PSIA	
BLDG. SPRAY FLOW	0 GPM (BS-P1A)	0 GPM (BS-P1B)
RB FANS OPERATION	OF (1A) / OF (1B) / OF (1C)	
RB WATER LEVEL	47.5 IN (SUMP)	0.0 IN (FLOOD)

RADWASTE SYSTEM

	1A	1B	1C
WG DECAY TANK PRESSURES	0 PSIG	20 PSIG	0 PSIG
BLEED TANK LEVEL	60 % (RCB-T1A)	40 % (T1B)	40 % (T1C)

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	T1A	T1B
	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

1 HR 15 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
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I. REACTIVITY CONTROL

TIME 0850 (CLOCK) T= 80 (SCENARIO)

NEUTRON FLUX 2.2020 CPS (NI-1 LOG COUNT) -10.9980 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	344.3 F	343.6 F
TC (WR)	357.7 F	317.4 F
RC FLOW (LBM/HR)	5 E6	5 E6
RC PRESSURE	190.6 PSIG	
PRESSURIZER LEVEL	6 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) NO

DEGREES SUB_COOL.NG(INCORE) 34.5 F

5 HIGHEST CORE THERMOCOUPLE 350 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 75.12 IN

SAFETY SYSTEMS

HPI FLOW	(16A)	(16B)	(16C)	(16D)
	250.2 GPM	250.2 GPM	269.2 GPM	269.2 GPM

CFT LEVEL/PRESS	CFT-1A	CFT-1B
	4.50 FT/ 221.9 PSIG	4.51FT/ 221.8 PSIG

LPI FLOW	DH-V4A	DH-V4B
	0.0 GPM	0.0 GPM

BWST LEVEL 54.30 FT

DIESEL GEN. STATUS	STBY (1A)	STBY (1B)
EMERG. FEED FLOW (GPM)	145.6 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	78 IN	91 IN
OTSG LEVEL (OP)	10 %	18 %
OTSG PRESS.	171.8 PSIG	45.2 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	393.3 F	301.5 F
CONDENSATE TANK LEVEL	14.25 FT	14.49 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT

	"A"			"B"		
PURGE VALVE POSITION	OP AH-V1A	OP V1B	CL V1C	CL V1D		
CONTAINMENT H2 CONCENTRATION	0 %					
R BLDG. TEMP/PRESS.	226.1 F/ 26.40 PSIA					
BLDG. SPRAY FLOW	0 GPM	0 GPM				
RB FANS OPERATION	BS-P1A OF	OF	BS-P1B OF			
	1A	1B	1C			
RB WATER LEVEL	73.1 IN SUMP	0.0 IN FLOOD				

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	1A	1B	1C
	0 PSIG	20 PSIG	0 PSIG

BLEED TANK LEVEL	RCB-T1A	T1B	T1C
	60 %	40 %	40 %

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	T1A	T1B
	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

1 HR 20 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 0855 (CLOCK) T= 85 (SCENARIO)

NEUTRON FLUX 2.0802 CPS (NI-1 LOG COUNT) -10.9976 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD) 0.0 (GP 1) 0.0 (GP 2) 0.0 (GP 3) 0.0 (GP 4) 0.0 (GP 5) 0.0 (GP 6) 0.0 (GP 7) 30.0 (GP 8)

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	285.3 F	285.2 F
TC (WR)	295.8 F	276.8 F
RC FLOW (LBM/HR)	7 E6	7 E6
RC PRESSURE	172.8 PSIG	
PRESSURIZER LEVEL	33 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) NO

DEGREES SUB_COOLING(INCORE) 91.5 F

5 HIGHEST CORE THERMOCOUPLE 285 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 75.54 IN

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	243.6 GPM	243.6 GPM	263.6 GPM	263.6 GPM

	CFT-1A	CFT-1B
CFT LEVEL/PRESS	3.01 FT/ 200.5 PSIG	3.02FT/ 200.5 PSIG

	DH-V4A	DH-V4B
LPI FLOW	721.1 GPM	2916.1 GPM

BWST LEVEL 53.12 FT

	STBY (1A)	STBY (1B)
DIESEL GEN. STATUS		
EMERG. FEED FLOW (GPM)	152.7 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	96 IN	120 IN
OTSG LEVEL (OP)	13 %	21 %
OTSG PRESS.	51.4 PSIG	23.4 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	301.4 F	268.0 F
CONDENSATE TANK LEVEL	14.18 FT	14.42 FT
MAIN CONDENSER PRESSURE	1.3	IN HG
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT

	"A"	"B"		
PURGE VALVE POSITION	OP AH-V1A	OP V1B	CL V1C	CL V1D
CONTAINMENT H2 CONCENTRATION	0 %			
R BLDG. TEMP/PRESS.	216.4 F/ 24.39 PSIA			
BLDG. SPRAY FLOW	0 GPM (BS-P1A)	0 GPM (BS-P1B)		
RB FANS OPERATION	OF 1A	OF 1B	OF 1C	
RB WATER LEVEL	90.0 IN (SUMP)	0.1 IN (FLOOD)		

RADWASTE SYSTEM

	1A	1B	1C
WG DECAY TANK PRESSURES	0 PSIG	20 PSIG	0 PSIG
BLEED TANK LEVEL	60 % (RCB-T1A)	40 % (T1B)	40 % (T1C)

WMW LEVEL 5.9 FT

	T1A	T1B
EVAP COND. TANK LEVEL	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

1 HR 25 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

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I. REACTIVITY CONTROL

TIME 0900 (CLOCK) T= 90 (SCENARIO)

NEUTRON FLUX 1.9927 CPS (NI-1 LOG COUNT) -10.9980 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	261.2 F	261.3 F
TC (WR)	259.7 F	252.2 F
RC FLOW (LBM/HR)	E6	7 E6
RC PRESSURE	172.5 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 116.9 F

5 HIGHEST CORE THERMOCOUPLE 259 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 78.58 IN

SAFETY SYSTEMS

HPI FLOW	(16A)	(16B)	(16C)	(16D)
	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

CFT LEVEL/PRESS	CFT-1A	CFT-1B
	0.00 FT/ 156.3 PSIG	0.00FT/ 156.3 PSIG

LPI FLOW	DH-V4A	DH-V4B
	881.3 GPM	2916.9 GPM

BWST LEVEL 51.55 FT

DIESEL GEN. STATUS	(1A)	(1B)
	STBY	STBY

EMERG. FEED FLOW (GPM)	(A)	(B)
	154.5	0.0

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	114 IN	183 IN
OTSG LEVEL (OP)	16 %	28 %
OTSG PRESS.	18.8 PSIG	10.0 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	258.5 F	244.2 F
CONDENSATE TANK LEVEL	14.11 FT	14.37 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT

PURGE VALVE POSITION	OP AH-V1A	OP V1B	CL V1C	CL V1D

CONTAINMENT H2 CONCENTRATION 0 %

R BLDG. TEMP/PRESS. 202.9 F/ 21.32 PSIA

BLDG. SPRAY FLOW	BS-P1A	BS-P1B
	0 GPM	0 GPM

RB FANS OPERATION	1A	1B	1C
	OF	OF	OF

RB WATER LEVEL	SUMP	FLOOD
	90.0 IN	0.5 IN

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	1A	1B	1C
	0 PSIG	20 PSIG	0 PSIG

BLEED TANK LEVEL	RCB-T1A	T1B	T1C
	60 %	40 %	40 %

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	T1A	T1B
	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

1 HR 30 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 0905 (CLOCK) T= 95 (SCENARIO)

NEUTRON FLUX 1.9356 CPS (NI-1 LOG COUNT) -10.9995 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	252.8 F	252.8 F
TC (WR)	253.8 F	246.4 F
RC FLOW (LBM/HR)	8 E6	8 E6
RC PRESSURE	175.0 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 124.0 F

5 HIGHEST CORE THERMOCOUPLE 253 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 87.31 IN

SAFETY SYSTEMS

HPI FLOW	(16A)	(16B)	(16C)	(16D)
	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

CFT LEVEL/PRESS	CFT-1A	CFT-1B
	0.00 FT/ 158.9 PSIG	0.00FT/ 158.9 PSIG

LPI FLOW	DH-V4A	DH-V4B
	876.1 GPM	2920.8 GPM

BWST LEVEL 50.79 FT

DIESEL GEN. STATUS	STBY (1A)	STBY (1B)
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	261 IN
OTSG LEVEL (OP)	13 %	50 %
OTSG PRESS.	18.4 PSIG	9.2 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	256.0 F	239.9 F
CONDENSATE TANK LEVEL	14.07 FT	14.33 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT	"A"	"B"
PURGE VALVE POSITION	OP AH-V1A / OP V1B	CL V1C / CL V1D
CONTAINMENT H2 CONCENTRATION	0 %	
R BLDG. TEMP/PRESS.	193.2 F/ 18.78 PSIA	
BLDG. SPRAY FLOW	0 GPM (BS-P1A)	0 GPM (BS-P1B)
RB FANS OPERATION	OF 1A / OF 1B	OF 1C
RB WATER LEVEL	90.0 IN (SUMP)	0.8 IN (FLOOD)

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	1A	1B	1C
	0 PSIG	20 PSIG	0 PSIG

BLEED TANK LEVEL	RCB-T1A	T1B	T1C
	60 %	40 %	40 %

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	T1A	T1B
	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

1 HR 35 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

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I. REACTIVITY CONTROL

TIME 0910 (CLOCK) T= 100 (SCENARIO)

NEUTRON FLUX 1.9713 CPS (NI-1 LOG COUNT) -10.9961 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	258.2 F	258.3 F
TC (WR)	255.6 F	244.0 F
RC FLOW (LBM/HR)	7 E6	7 E6
RC PRESSURE	131.2 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 98.4 F

5 HIGHEST CORE THERMOCOUPLE 258 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 90.25 IN

SAFETY SYSTEMS

HPI FLOW	(16A)	(16B)	(16C)	(16D)
	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

CFT LEVEL/PRESS	CFT-1A	CFT-1B
	0.00 FT/ 141.7 PSIG	0.00FT/ 141.7 PSIG

LPI FLOW	DH-V4A	DH-V4B
	0.0 GPM	2918.8 GPM

BWST LEVEL 50.58 FT

DIESEL GEN. STATUS	STBY (1A)	STBY (1B)
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	341 IN
OTSG LEVEL (OP)	13 %	79 %
OTSG PRESS.	18.0 PSIG	10.5 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	255.2 F	242.3 F
CONDENSATE TANK LEVEL	14.04 FT	14.29 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT

	"A"	"B"		
PURGE VALVE POSITION	OP AH-V1A	OP V1B	CL V1C	CL V1D

CONTAINMENT H2 CONCENTRATION 0 %

R BLDG. TEMP/PRESS. 182.7 F/ 17.12 PSIA

BLDG. SPRAY FLOW 0 GPM (BS-P1A) 0 GPM (BS-P1B)

RB FANS OPERATION	1A	1B	1C
	OF	OF	OF

RB WATER LEVEL	SUMP	FLOOD
	90.0 IN	1.0 IN

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	1A	1B	1C
	0 PSIG	20 PSIG	0 PSIG

BLEED TANK LEVEL	RCB-T1A	T1B	T1C
	60 %	40 %	40 %

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	T1A	T1B
	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

1 HR 40 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

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I. REACTIVITY CONTROL

TIME 0915 (CLOCK) T= 105 (SCENARIO)

NEUTRON FLUX 2.0215 CPS (NI-1 LOG COUNT) -10.9976 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

	RCS	A. LOOP	B. LOOP
TH (WR)		254.3 F	254.4 F
TC (WR)		253.9 F	242.4 F
RC FLOW (LBM/HR)		6 E6	6 E6
RC PRESSURE	109.1 PSIG		
PRESSURIZER LEVEL	400 IN		

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB COOLING(INCORE) 89.0 F

5 HIGHEST CORE THERMOCOUPLE 255 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 90.22 IN

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

CFT LEVEL/PRESS 0.00 FT/ 119.4 PSIG (CFT-1A) 0.00FT/ 119.4 PSIG (CFT-1B)

	DH-V4A	DH-V4B
LPI FLOW	0.0 GPM	2917.3 GPM

BWST LEVEL 50.56 FT

DIESEL GEN. STATUS STBY (1A) STBY (1B)

EMERG. FEED FLOW (GPM) 0.0 (A) 0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	390 IN
OTSG LEVEL (OP)	13 %	97 %
OTSG PRESS.	17.8 PSIG	9.3 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	254.9 F	239.4 F
CONDENSATE TANK LEVEL	14.00 FT	14.25 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 % ("A")	0.0 % ("B")

CONTAINMENT

	AH-V1A	V1B	V1C	V1D
PURGE VALVE POSITION	OP	OP	CL	CL

CONTAINMENT H2 CONCENTRATION 0 %

R BLDG. TEMP/PRESS. 178.1 F/ 16.03 PSIA

BLDG. SPRAY FLOW 0 GPM (BS-P1A) 0 GPM (BS-P1B)

RB FANS OPERATION	1A	1B	1C
	OF	OF	OF

RB WATER LEVEL	SUMP	FLOOD
	90.0 IN	1.2 IN

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	1A	1B	1C
	0 PSIG	20 PSIG	0 PSIG

BLEED TANK LEVEL	RCB-T1A	T1B	T1C
	60 %	40 %	40 %

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	T1A	T1B
	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

1 HR 45 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 0920 (CLOCK) T= 110 (SCENARIO)

NEUTRON FLUX 2.0231 CPS (NI-1 LOG COUNT) -10.9960 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	30.0	

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	248.0 F	248.2 F
TC (WR)	251.0 F	237.6 F
RC FLOW (LBM/HR)	7 E6	7 E6
RC PRESSURE	105.4 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 94.3 F

5 HIGHEST CORE THERMOCOUPLE 247 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 90.21 IN

SAFETY SYSTEMS

HPI FLOW	(16A)	(16B)	(16C)	(16D)
	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

CFT LEVEL/PRESS 0.00 FT/ 111.2 PSIG (CFT-1A) 0.00FT/ 111.2 PSIG (CFT-1B)

LPI FLOW 1127.2 GPM (DH-V4A) 2922.1 GPM (DH-V4B)

BWST LEVEL 50.29 FT

DIESEL GEN. STATUS	STBY (1A)	STBY (1B)

EMERG. FEED FLOW (GPM) 0.0 (A) 0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	429 IN
OTSG LEVEL (OP)	14 %	100 %
OTSG PRESS.	17.4 PSIG	11.1 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	253.9 F	240.6 F
CONDENSATE TANK LEVEL	13.97 FT	14.22 FT
MAIN CONDENSER PRESSURE	1.3	IN HG
TURBINE BYPASS VALVE POSITION	0.0 % ("A")	0.0 % ("B")

CONTAINMENT

PURGE VALVE POSITION	OP AH-V1A	OP V1B	CL V1C	CL V1D

CONTAINMENT H2 CONCENTRATION 0 %

R BLDG. TEMP/PRESS. 173.1 F/ 15.60 PSIA

BLDG. SPRAY FLOW 0 GPM (BS-P1A) 0 GPM (BS-P1B)

RB FANS OPERATION	1A	1B	1C
	OF	OF	OF

RB WATER LEVEL	SUMP	FLOOD
	90.0 IN	1.5 IN

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	1A	1B	1C
	0 PSIG	20 PSIG	0 PSIG

BLEED TANK LEVEL	RCB-T1A	T1B	T1C
	60 %	40 %	40 %

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	T1A	T1B
	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

1 HR 50 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
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NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 0925 (CLOCK) T= 115 (SCENARIO)

NEUTRON FLUX 1.8602 CPS (NI-1 LOG COUNT) -10.9958 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	245.2 F	245.4 F
TC (WR)	248.1 F	235.4 F
RC FLOW (LBM/HR)	7 E6	7 E6
RC PRESSURE	109.1 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 98.9 F

5 HIGHEST CORE THERMOCOUPLE 244 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 90.25 IN

SAFETY SYSTEMS

HPI FLOW	(16A)	(16B)	(16C)	(16D)
	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

CFT LEVEL/PRESS	CFT-1A	CFT-1B
	0.00 FT/ 111.2 PSIG	0.00FT/ 111.2 PSIG

LPI FLOW	DH-V4A	DH-V43
	1108.1 GPM	2939.5 GPM

BWST LEVEL 49.89 FT

DIESEL GEN. STATUS	STBY (1A)	STBY (1B)
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	437 IN
OTSG LEVEL (OP)	14 %	100 %
OTSG PRESS.	16.8 PSIG	12.4 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	252.8 F	238.9 F
CONDENSATE TANK LEVEL	13.94 FT	14.19 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 % "A"	0.0 % "B"

CONTAINMENT

PURGE VALVE POSITION	OP AH-V1A	OP V1B	CL V1C	CL V1D

CONTAINMENT H2 CONCENTRATION 0 %

R BLDG. TEMP/PRESS. 171.1 F/ 15.55 PSIA

BLDG. SPRAY FLOW	BS-P1A	BS-P1B
	0 GPM	0 GPM

RB FANS OPERATION	1A	1B	1C
	OF	OF	OF

RB WATER LEVEL	SUMP	FLOOD
	90.0 IN	1.8 IN

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	1A	1B	1C
	0 PSIG	20 PSIG	0 PSIG

BLEED TANK LEVEL	RCB-T1A	T1B	T1C
	60 %	40 %	40 %

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	T1A	T1B
	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

1 HR _' MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 0930 (CLOCK) T= 120 (SCENARIO)

NEUTRON FLUX 1.6974 CPS (NI-1 LOG COUNT) -10.9956 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	242.5 F	242.6 F
TC (WR)	245.2 F	233.3 F
RC FLOW (LBM/HR)	7 E6	7 E6
RC PRESSURE	112.8 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 103.5 F

5 HIGHEST CORE THERMOCOUPLE 242 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 90.30 IN

SAFETY SYSTEMS

HPI FLOW	(16A)	(16B)	(16C)	(16D)
	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

CFT LEVEL/PRESS	CFT-1A	CFT-1B
	0.00 FT/ 111.3 PSIG	0.00FT/ 111.3 PSIG

LPI FLOW	DH-V4A	DH-V4B
	1088.9 GPM	2957.0 GPM

BWST LEVEL 49.50 FT

DIESEL GEN. STATUS	STBY (1A)	STBY (1B)
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	446 IN
OTSG LEVEL (OP)	14 %	100 %
OTSG PRESS.	16.2 PSIG	13.8 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	251.6 F	237.2 F
CONDENSATE TANK LEVEL	13.92 FT	14.17 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT

	"A"	"B"
PURGE VALVE POSITION	OP AH-V1A	OP V1B / CL V1C / CL V1D
CONTAINMENT H2 CONCENTRATION	0 %	
R BLDG. TEMP/PRESS.	169.2 F/ 15.49 PSIA	
BLDG. SPRAY FLOW	0 GPM	0 GPM
RB FANS OPERATION	BS-P1A OF	BS-P1B OF / OF
RB WATER LEVEL	1A 90.0 IN	1B 2.2 IN / 1C
	SUMP	FLOOD

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	1A	1B	1C
	0 PSIG	20 PSIG	0 PSIG

BLEED TANK LEVEL	RCB-T1A	T1B	T1C
	60 %	40 %	40 %

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	T1A	T1B
	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

2 HR 0 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 0935 (CLOCK) T= 125 (SCENARIO)

NEUTRON FLUX 1.5345 CPS (NI-1 LOG COUNT) -10.9954 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	239.7 F	239.9 F
TC (WR)	242.3 F	231.2 F
RC FLOW (LBM/HR)	7 E6	7 E6
RC PRESSURE	116.5 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 108.1 F

5 HIGHEST CORE THERMOCOUPLE 239 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 90.34 IN

SAFETY SYSTEMS

HPI FLOW	(16A)	(16B)	(16C)	(16D)
	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

CFT LEVEL/PRESS	CFT-1A	CFT-1B
	0.00 FT/ 111.4 PSIG	0.00FT/ 111.4 PSIG

LPI FLOW	DH-V4A	DH-V4B
	1069.8 GPM	2974.4 GPM

BWST LEVEL 49.10 FT

DIESEL GEN. STATUS	STBY (1A)	STBY (1B)
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	455 IN
OTSG LEVEL (OP)	14 %	100 %
OTSG PRESS.	15.6 PSIG	15.2 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	250.4 F	235.5 F
CONDENSATE TANK LEVEL	13.90 FT	14.14 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT

	"A"	"B"		
PURGE VALVE POSITION	OP AH-V1A	OP V1B	CL V1C	CL V1D

CONTAINMENT H2 CONCENTRATION 0 %

R BLDG. TEMP/PRESS. 167.2 F/ 15.43 PSIA

BLDG. SPRAY FLOW 0 GPM (BS-P1A) 0 GPM (BS-P1B)

RB FANS OPERATION	1A	1B	1C
	OF	OF	OF

RB WATER LEVEL	SUMP	FLOOD
	90.0 IN	2.5 IN

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	1A	1B	1C
	0 PSIG	20 PSIG	0 PSIG

BLEED TANK LEVEL	RCB-T1A	T1B	T1C
	60 %	40 %	40 %

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	T1A	T1B
	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

2 HR 5 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 0940 (CLOCK) T= 130 (SCENARIO)

NEUTRON FLUX 1.3716 CPS (NI-1 LOG COUNT) -10.9952 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	237.0 F	237.1 F
TC (WR)	239.4 F	229.1 F
RC FLOW (LBM/HR)	7 E6	7 E6
RC PRESSURE	120.2 PSIG	
PRESSURIZER LEVEL	400 IN	
RC PUMP OPERATION (ON)		
PRZR HEATERS OPERABLE (YES/NO)	YES	
DEGREES SUB_COOLING(INCORE)	112.7 F	
5 HIGHEST CORE THERMOCOUPLE	236 F	
MAKEUP FLOW INTO RCS	0.0 GPM	
LET DOWN FLOW OUT OF RCS	0.00 GPM	
MAKEUP TANK LEVEL	90.38 IN	

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

	CFT-1A	CFT-1B
CFT LEVEL/PRESS	0.00 FT/ 111.4 PSIG	0.00FT/ 111.4 PSIG

	DH-V4A	DH-V4B
LPI FLOW	1050.7 GPM	2991.9 GPM

BWST LEVEL 48.71 FT

	STBY (1A)	STBY (1B)
DIESEL GEN. STATUS		
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	464 IN
OTSG LEVEL (OP)	14 %	100 %
OTSG PRESS.	15.0 PSIG	16.5 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	249.2 F	233.8 F
CONDENSATE TANK LEVEL	13.87 FT	14.12 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT

	"A"	"B"		
PURGE VALVE POSITION	OP AH-V1A	OP V1B	CL V1C	CL V1D
CONTAINMENT H2 CONCENTRATION	0 %			
R BLDG. TEMP/PRESS.	165.3 F/ 15.37 PSIA			
BLDG. SPRAY FLOW	0 GPM (BS-P1A)	0 GPM (BS-P1B)		
RB FANS OPERATION	OF 1A	OF 1B	OF 1C	
RB WATER LEVEL	90.0 IN (SUMP)	2.8 IN (FLOOD)		

RADWASTE SYSTEM

	1A	1B	1C
WG DECAY TANK PRESSURES	0 PSIG	20 PSIG	0 PSIG
BLEED TANK LEVEL	60 % (RCB-T1A)	40 % (T1B)	40 % (T1C)
WMW LEVEL	5.9 FT		
EVAP COND. TANK LEVEL	0 FT (T1A)	3 FT (T1B)	
AUX BLDG. SUMP LEVEL	30.0%		

2 HR 10 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
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NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 0945 (CLOCK) T= 135 (SCENARIO)

NEUTRON FLUX 1.2088 CPS (NI-1 LOG COUNT) -10.9950 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	234.2 F	234.4 F
TC (WR)	236.5 F	226.9 F
RC FLOW (LBM/HR)	7 E6	7 E6
RC PRESSURE	123.9 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 117.3 F

5 HIGHEST CORE THERMOCOUPLE 234 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 90.42 IN

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

	CFT-1A	CFT-1B
CFT LEVEL/PRESS	0.00 FT/ 111.5 PSIG	0.00FT/ 111.5 PSIG

	DH-V4A	DH-V4B
LPI FLOW	1031.6 GPM	3009.3 GPM

BWST LEVEL 48.31 FT

	STBY (1A)	STBY (1B)
DIESEL GEN. STATUS		
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	473 IN
OTSG LEVEL (OP)	14 %	100 %
OTSG PRESS.	14.4 PSIG	17.9 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	248.0 F	232.1 F
CONDENSATE TANK LEVEL	13.85 FT	14.09 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT	"A"	"B"
PURGE VALVE POSITION	OP AH-V1A	OP V1B / CL V1C / CL V1D
CONTAINMENT H2 CONCENTRATION	0 %	
R BLDG. TEMP/PRESS.	163.3 F/ 15.31 PSIA	
BLDG. SPRAY FLOW	0 GPM	0 GPM
RB FANS OPERATION	BS-P1A OF	BS-P1B OF
	1A OF	1B OF / 1C OF
RB WATER LEVEL	90.0 IN SUMP	3.2 IN FLOOD

RADWASTE SYSTEM

	1A	1B	1C
WG DECAY TANK PRESSURES	0 PSIG	20 PSIG	0 PSIG
BLEED TANK LEVEL	60 % RCB-T1A	40 % T1B	40 % T1C
WMW LEVEL	5.9 FT		
EVAP COND. TANK LEVEL	0 FT T1A	3 FT T1B	
AUX BLDG. SUMP LEVEL	30.0%		

2 HR 15 MIN

ECC/1SC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
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NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 0950 (CLOCK) T= 140 (SCENARIO)

NEUTRON FLUX 1.0459 CPS (NI-1 LOG COUNT) -10.9947 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)	GEN. MW
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	231.5 F	231.6 F
TC (WR)	233.6 F	224.8 F
RC FLOW (LBM/HR)	7 E6	7 E6
RC PRESSURE	127.6 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 121.9 F

5 HIGHEST CORE THERMOCOUPLE 231 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 90.47 IN

SAFETY SYSTEMS

HPI FLOW	(16A)	(16B)	(16C)	(16D)
	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

CFT LEVEL/PRESS	CFT-1A	CFT-1B
	0.00 FT/ 111.5 PSIG	0.00FT/ 111.5 PSIG

LPI FLOW	DH-V4A	DH-V4B
	1012.5 GPM	3026.8 GPM

BWST LEVEL 47.92 FT

DIESEL GEN. STATUS	STBY (1A)	STBY (1B)
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	481 IN
OTSG LEVEL (OP)	14 %	100 %
OTSG PRESS.	13.9 PSIG	19.3 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	246.9 F	230.4 F
CONDENSATE TANK LEVEL	13.83 FT	14.07 FT
MAIN CONDENSER PRESSURE	1.3	IN HG
TURBINE BYPASS VALVE POSITION	0.0 % "A"	0.0 % "B"

CONTAINMENT PURGE VALVE POSITION	OP AH-V1A	OP V1B	CL V1C	CL V1D
CONTAINMENT H2 CONCENTRATION	0 %			
R BLDG. TEMP/PRESS.	161.3 F/ 15.25 PSIA			

BLDG. SPRAY FLOW	BS-P1A	BS-P1B
	0 GPM	0 GPM

RB FANS OPERATION	1A	1B	1C
	OF	OF	OF

RB WATER LEVEL	SUMP	FLOOD
	90.0 IN	3.5 IN

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	1A	1B	1C
	0 PSIG	20 PSIG	0 PSIG

BLEED TANK LEVEL	RCB-T1A	T1B	T1C
	60 %	40 %	40 %

WWW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	T1A	T1B
	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

2 HR 20 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
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NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 0955 T= 145
(CLOCK) (SCENARIO)

NEUTRON FLUX 0.8831 CPS (NI-1 LOG COUNT) -10.9945 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	30.0	

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	228.7 F	228.9 F
TC (WR)	230.7 F	222.7 F
RC FLOW (LBM/HR)	8 E6	7 E6
RC PRESSURE	131.3 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 126.5 F

5 HIGHEST CORE THERMOCOUPLE 228 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 90.51 IN

SAFETY SYSTEMS

HPI FLOW	(16A)	(16B)	(16C)	(16D)
	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

CFT LEVEL/PRESS	CFT-1A	CFT-1B
	0.00 FT/ 111.6 PSIG	0.00FT/ 111.6 PSIG
LPI FLOW	DH-V4A	DH-V4B
	993.4 GPM	3044.2 GPM

BWST LEVEL 47.52 FT

DIESEL GEN. STATUS	STBY (1A)	STBY (1B)
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	490 IN
OTSG LEVEL (OP)	14 %	100 %
OTSG PRESS.	13.3 PSIG	20.6 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	245.7 F	228.7 F
CONDENSATE TANK LEVEL	13.80 FT	14.05 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT	"A"	"B"
PURGE VALVE POSITION	OP AH-V1A	OP V1B / CL V1C / CL V1D
CONTAINMENT H2 CONCENTRATION	0 %	
R BLDG. TEMP/PRESS.	159.4 F/ 15.19 PSIA	
BLDG. SPRAY FLOW	0 GPM (BS-P1A)	0 GPM (BS-P1B)
RB FANS OPERATION	OF 1A / OF 1B / OF 1C	
RB WATER LEVEL	90.0 IN SUMP	3.9 IN FLOOD

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	1A	1B	1C
	0 PSIG	20 PSIG	0 PSIG
BLEED TANK LEVEL	60 % (RCB-T1A)	40 % T1B	40 % T1C

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	T1A	T1B
	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

2 HR 25 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 1000 (CLOCK) T= 150 (SCENARIO)

NEUTRON FLUX 0.7202 CPS (NI-1 LOG COUNT) -10.9943 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	226.0 F	226.1 F
TC (WR)	227.8 F	220.6 F
RC FLOW (LBM/HR)	8 E6	8 E6
RC PRESSURE	134.9 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 131.1 F

5 HIGHEST CORE THERMOCOUPLE 226 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 90.55 IN

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

CFT LEVEL/PRESS 0.00 FT/ 111.7 PSIG (CFT-1A) 0.00FT/ 111.7 PSIG (CFT-1B)

LPI FLOW 974.3 GPM (DH-V4A) 3061.7 GPM (DH-V4B)

BWST LEVEL 47.13 FT

DIESEL GEN. STATUS STBY (1A) STBY (1B)

EMERG. FEED FLOW (GPM) 0.0 (A) 0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	499 IN
OTSG LEVEL (OP)	14 %	100 %
OTSG PRESS.	12.7 PSIG	22.0 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	244.5 F	227.0 F
CONDENSATE TANK LEVEL	13.78 FT	14.02 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT

	"A"	"B"		
PURGE VALVE POSITION	OP AH-V1A	OP V1B	CL V1C	CL V1D

CONTAINMENT H2 CONCENTRATION 0 %

R BLDG. TEMP/PRESS. 157.4 F/ 15.13 PSIA

BLDG. SPRAY FLOW 0 GPM (BS-P1A) 0 GPM (BS-P1B)

RB FANS OPERATION	1A	1B	1C
	OF	OF	OF

RB WATER LEVEL	SUMP	FLOOD
	90.0 IN	4.2 IN

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	1A	1B	1C
	0 PSIG	20 PSIG	0 PSIG

BLEED TANK LEVEL	RCB-T1A	T1B	T1C
	60 %	40 %	40 %

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	T1A	T1B
	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

2 HR 30 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 1005 (CLOCK) T= 155 (SCENARIO)

NEUTRON FLUX 0.5573 CPS (NI-1 LOG COUNT) -10.9941 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	223.2 F	223.3 F
TC (WR)	224.9 F	218.4 F
RC FLOW (LBM/HR)	8 E6	8 E6
RC PRESSURE	138.6 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 135.7 F

5 HIGHEST CORE THERMOCOUPLE 223 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 90.59 IN

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

CFT LEVEL/PRESS	CFT-1A	CFT-1B
	0.00 FT/ 111.7 PSIG	0.00FT/ 111.7 PSIG

LPI FLOW	DH-V4A	DH-V4B
	955.1 GPM	3079.1 GPM

BWST LEVEL 46.73 FT

DIESEL GEN. STATUS	STBY (1A)	STBY (1B)
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	508 IN
OTSG LEVEL (OP)	14 %	100 %
OTSG PRESS.	12.1 PSIG	23.4 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	243.3 F	225.3 F
CONDENSATE TANK LEVEL	13.76 FT	14.00 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 % "A"	0.0 % "B"

CONTAINMENT

PURGE VALVE POSITION	OP AH-V1A	OP V1B	CL V1C	CL V1D
CONTAINMENT H2 CONCENTRATION		0 %		

R BLDG. TEMP/PRESS. 155.4 F/ 15.07 PSIA

BLDG. SPRAY FLOW	BS-P1A	BS-P1B
	0 GPM	0 GPM

RB FANS OPERATION	1A	1B	1C
	OF	OF	OF

RB WATER LEVEL	SUMP	FLOOD
	90.0 IN	4.5 IN

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	1A	1B	1C
	0 PSIG	20 PSIG	0 PSIG

BLEED TANK LEVEL	RCB-T1A	T1B	T1C
	60 %	40 %	40 %

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	T1A	T1B
	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

2 HR 35 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 1010 (CLOCK) T= 160 (SCENARIO)

NEUTRON FLUX 0.3945 CPS (NI-1 LOG COUNT) -10.9939 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	30.0	

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	220.5 F	220.6 F
TC (WR)	222.0 F	216.3 F
RC FLOW (LBM/HR)	8 E6	8 E6
RC PRESSURE	142.3 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 140.3 F

5 HIGHEST CORE THERMOCOUPLE 220 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 90.64 IN

SAFETY SYSTEMS

HPI FLOW	(16A)	(16B)	(16C)	(16D)
	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

CFT LEVEL/PRESS 0.00 FT/ 111.8 PSIG (CFT-1A) 0.00FT/ 111.8 PSIG (CFT-1B)

LPI FLOW 936.0 GPM (DH-V4A) 3096.5 GPM (DH-V4B)

BWST LEVEL 46.34 FT

DIESEL GEN. STATUS STBY (1A) STBY (1B)

EMERG. FEED FLOW (GPM) 0.0 (A) 0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	517 IN
OTSG LEVEL (OP)	14 %	100 %
OTSG PRESS.	11.5 PSIG	24.7 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	242.1 F	223.6 F
CONDENSATE TANK LEVEL	13.73 FT	13.97 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 % ("A")	0.0 % ("B")

CONTAINMENT

PURGE VALVE POSITION	OP AH-V1A	OP V1B	CL V1C	CL V1D
CONTAINMENT H2 CONCENTRATION		0 %		

R BLDG. TEMP/PRESS. 153.5 F/ 15.01 PSIA

BLDG. SPRAY FLOW 0 GPM (BS-P1A) 0 GPM (BS-P1B)

RB FANS OPERATION OF (1A) OF (1B) OF (1C)

RB WATER LEVEL 90.0 IN (SUMP) 4.9 IN (FLOOD)

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	1A	1B	1C
	0 PSIG	20 PSIG	0 PSIG

BLEED TANK LEVEL	RCB-T1A	T1B	T1C
	60 %	40 %	40 %

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	T1A	T1B
	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

2 HR 40 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 1015 (CLOCK) T= 165 (SCENARIO)

NEUTRON FLUX 0.2316 CPS (NI-1 LOG COUNT) -10.9937 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	217.7 F	217.8 F
TC (WR)	219.1 F	214.2 F
RC FLOW (LBM/HR)	8 E6	8 E6
RC PRESSURE	146.0 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 144.9 F

5 HIGHEST CORE THERMOCOUPLE 218 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 90.68 IN

SAFETY SYSTEMS

HPI FLOW	(16A)	(16B)	(16C)	(16D)
	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

CFT LEVEL/PRESS 0.00 FT/ 111.8 PSIG (CFT-1A) 0.00FT/ 111.8 PSIG (CFT-1B)

LPI FLOW 916.9 GPM (DH-V4A) 3114.0 GPM (DH-V4B)

BWST LEVEL 45.94 FT

DIESEL GEN. STATUS STBY (1A) STBY (1B)

EMERG. FEED FLOW (GPM) 0.0 (A) 0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	525 IN
OTSG LEVEL (OP)	14 %	100 %
OTSG PRESS.	10.9 PSIG	26.1 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	241.0 F	221.9 F
CONDENSATE TANK LEVEL	13.71 FT	13.95 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 % ("A")	0.0 % ("B")

CONTAINMENT

PURGE VALVE POSITION	OP AH-V1A	OP V1B	CL V1C	CL V1D

CONTAINMENT H2 CONCENTRATION 0 %

R BLDG. TEMP/PRESS. 151.5 F/ 14.96 PSIA

BLDG. SPRAY FLOW 0 GPM (BS-P1A) 0 GPM (BS-P1B)

RB FANS OPERATION OF (1A) OF (1B) OF (1C)

RB WATER LEVEL 90.0 IN (SUMP) 5.2 IN (FLOOD)

RADWASTE SYSTEM

WG DECAY TANK PRESSURES 0 PSIG (1A) 20 PSIG (1B) 0 PSIG (1C)

BLEED TANK LEVEL 60 % (RCB-T1A) 40 % (T1B) 40 % (T1C)

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL 0 FT (T1A) 3 FT (T1B)

AUX BLDG. SUMP LEVEL 30.0%

2 HR 45 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 1020 (CLOCK) T= 170 (SCENARIO)

NEUTRON FLUX 0.0688 CPS (NI-1 LOG COUNT) -10.9935 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

	RCS	A. LOOP	B. LOOP
TH (WR)		215.0 F	215.1 F
TC (WR)		216.2 F	212.1 F
RC FLOW (LBM/HR)		8 E6	8 E6
RC PRESSURE	149.7 PSIG		
PRESSURIZER LEVEL	400 IN		

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 149.5 F

5 HIGHEST CORE THERMOCOUPLE 215 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 90.72 IN

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

	CFT-1A	CFT-1B
CFT LEVEL/PRESS	0.00 FT/ 111.9 PSIG	0.00FT/ 111.9 PSIG
LPI FLOW	897.8 GPM	3131.4 GPM
	DH-V4A	DH-V4B

BWST LEVEL 45.54 FT

	STBY (1A)	STBY (1B)
DIESEL GEN. STATUS		
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	534 IN
OTSG LEVEL (OP)	14 %	100 %
OTSG PRESS.	10.3 PSIG	27.5 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	239.8 F	220.2 F
CONDENSATE TANK LEVEL	13.69 FT	13.92 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %
	"A"	"B"

CONTAINMENT

PURGE VALVE POSITION	OP AH-V1A	OP V1B	CL V1C	CL V1D

CONTAINMENT H2 CONCENTRATION 0 %

R BLDG. TEMP/PRESS. 149.6 F/ 14.90 PSIA

BLDG. SPRAY FLOW 0 GPM 0 GPM

RB FANS OPERATION	BS-P1A		BS-P1B	
	OF		OF	
	1A		1B	1C

RB WATER LEVEL	SUMP	FLOOD
	90.0 IN	5.5 IN

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	1A	1B	1C
	0 PSIG	20 PSIG	0 PSIG

BLEED TANK LEVEL	RCB-T1A	T1B	T1C
	60 %	40 %	40 %

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	T1A	T1B
	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

2 HR 50 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 1025 (CLOCK) T= 175 (SCENARIO)

NEUTRON FLUX -.0941 CPS (NI-1 LOG COUNT) -10.9933 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	212.2 F	212.3 F
TC (WR)	213.3 F	209.9 F
RC FLOW (LBM/HR)	8 E6	8 E6
RC PRESSURE	153.4 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 154.1 F

5 HIGHEST CORE THERMOCOUPLE 212 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 90.76 IN

SAFETY SYSTEMS

HPI FLOW	(16A)	(16B)	(16C)	(16D)
	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

CFT LEVEL/PRESS	CFT-1A	CFT-1B
	0.00 FT/ 112.0 PSIG	0.00FT/ 112.0 PSIG

LPI FLOW	DH-V4A	DH-V4B
	878.7 GPM	3148.9 GPM

BWST LEVEL 45.15 FT

DIESEL GEN. STATUS	STBY (1A)	STBY (1B)
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	543 IN
OTSG LEVEL (OP)	14 %	100 %
OTSG PRESS.	9.8 PSIG	28.8 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	238.6 F	218.4 F
CONDENSATE TANK LEVEL	13.66 FT	13.90 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT

	"A"	"B"
PURGE VALVE POSITION	OP AH-V1A, OP V1B, CL V1C, CL V1D	
CONTAINMENT H2 CONCENTRATION	0 %	
R BLDG. TEMP/PRESS.	147.6 F/ 14.84 PSIA	
BLDG. SPRAY FLOW	0 GPM	0 GPM
RB FANS OPERATION	BS-P1A OF, 1A OF	BS-P1B OF, 1B OF, 1C OF
RB WATER LEVEL	90.0 IN SUMP	5.9 IN FLOOD

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	1A	1B	1C
	0 PSIG	20 PSIG	0 PSIG

BLEED TANK LEVEL	RCB-T1A	T1B	T1C
	60 %	40 %	40 %

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	T1A	T1B
	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

2 HR 55 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 1030 (CLOCK) T= 180 (SCENARIO)

NEUTRON FLUX -.2570 CPS (NI-1 LOG COUNT) -10.9930 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	209.5 F	209.6 F
TC (WR)	210.4 F	207.8 F
RC FLOW (LBM/HR)	8 E6	8 E6
RC PRESSURE	157.1 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 158.7 F

5 HIGHEST CORE THERMOCOUPLE 210 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 90.81 IN

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

	CFT-1A	CFT-1B
CFT LEVEL/PRESS	0.00 FT/ 112.0 PSIG	0.00FT/ 112.0 PSIG

	DH-V4A	DH-V4B
LPI FLOW	859.6 GPM	3166.3 GPM

BWST LEVEL 44.75 FT

	STBY (1A)	STBY (1B)
DIESEL GEN. STATUS		
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	552 IN
OTSG LEVEL (OP)	14 %	100 %
OTSG PRESS.	9.2 PSIG	30.2 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	237.4 F	216.7 F
CONDENSATE TANK LEVEL	13.64 FT	13.87 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT

	"A"	"B"
PURGE VALVE POSITION	OP AH-V1A	OP V1B / CL V1C / CL V1D
CONTAINMENT H2 CONCENTRATION	0 %	
R BLDG. TEMP/PRESS.	145.6 F/ 14.78 PSIA	
BLDG. SPRAY FLOW	0 GPM	0 GPM

RB FANS OPERATION	BS-P1A	BS-P1B
	OF	OF

	1A	1B	1C
	OF	OF	OF

RB WATER LEVEL	SUMP	FLOOD
	90.0 IN	6.2 IN

RADWASTE SYSTEM

	1A	1B	1C
WG DECAY TANK PRESSURES	0 PSIG	20 PSIG	0 PSIG
BLEED TANK LEVEL	60 %	40 %	40 %
	RCB-T1A	T1B	T1C

WMW LEVEL 5.9 FT

	T1A	T1B
EVAP COND. TANK LEVEL	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

3 HR 0 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 1035 (CLOCK) T= 185 (SCENARIO)

NEUTRON FLUX -.4198 CPS (NI-1 LOG COUNT) -10.9928 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	206.7 F	206.8 F
TC (WR)	207.5 F	205.7 F
RC FLOW (LBM/HR)	8 E6	8 E6
RC PRESSURE	160.8 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 163.3 F

5 HIGHEST CORE THERMOCOUPLE 207 F

MAKEUP FLOW INTO PCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 90.85 IN

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

	CFT-1A	CFT-1B
CFT LEVEL/PRESS	0.00 FT/ 112.1 PSIG	0.00FT/ 112.1 PSIG

	DH-V4A	DH-V4B
LPI FLOW	840.5 GPM	3183.8 GPM

BWST LEVEL 44.36 FT

	STBY (1A)	STBY (1B)
DIESEL GEN. STATUS		
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	561 IN
OTSG LEVEL (OP)	14 %	100 %
OTSG PRESS.	8.6 PSIG	31.6 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	236.3 F	215.0 F
CONDENSATE TANK LEVEL	13.62 FT	13.85 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT

	"A"	"B"		
PURGE VALVE POSITION	OP AH-V1A	OP V1B	CL V1C	CL V1D
CONTAINMENT H2 CONCENTRATION	0 %			
R BLDG. TEMP/PRESS.	143.7 F/ 14.72 PSIA			
BLDG. SPRAY FLOW	0 GPM (BS-P1A)	0 GPM (BS-P1B)		
RB FANS OPERATION	OF 1A	OF 1B	OF 1C	
RB WATER LEVEL	90.0 IN (SUMP)	6.5 IN (FLOOD)		

RADWASTE SYSTEM

	1A	1B	1C
WG DECAY TANK PRESSURES	0 PSIG	20 PSIG	0 PSIG
BLEED TANK LEVEL	60 % (RCB-T1A)	40 % (T1B)	40 % (T1C)

WMW LEVEL 5.9 FT

	T1A	T1B
EVAP COND. TANK LEVEL	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

3 HR 5 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 1040 (CLOCK) T= 190 (SCENARIO)

NEUTRON FLUX -.5827 CPS (NI-1 LOG COUNT) -10.9926 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

	RCS	A. LOOP	B. LOOP
TH (WR)		204.0 F	204.0 F
TC (WR)		204.6 F	203.6 F
RC FLOW (LBM/HR)		8 E6	8 E6
RC PRESSURE	164.5 PSIG		
PRESSURIZER LEVEL	400 IN		

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 167.9 F

5 HIGHEST CORE THERMOCOUPLE 204 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 90.89 IN

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

	CFT-1A	CFT-1B
CFT LEVEL/PRESS	0.00 FT/ 112.1 PSIG	0.00FT/ 112.1 PSIG
LPI FLOW	821.4 GPM (DH-V4A)	3201.2 GPM (DH-V4B)

BWST LEVEL 43.96 FT

	STBY (1A)	STBY (1B)
DIESEL GEN. STATUS		
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	569 IN
OTSG LEVEL (OP)	14 %	100 %
OTSG PRESS.	8.0 PSIG	32.9 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	235.1 F	213.3 F
CONDENSATE TANK LEVEL	13.59 FT	13.83 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT	"A"	"B"
PURGE VALVE POSITION	OP AH-V1A / OP V1B	CL V1C / CL V1D
CONTAINMENT H2 CONCENTRATION	0 %	
R BLDG. TEMP/PRESS.	141.7 F/ 14.66 PSIA	
BLDG. SPRAY FLOW	0 GPM (BS-P1A)	0 GPM (BS-P1B)
RB FANS OPERATION	OF 1A / OF 1B	OF 1C
RB WATER LEVEL	90.0 IN (SUMP)	6.9 IN (FLOOD)

RADWASTE SYSTEM

	1A	1B	1C
WG DECAY TANK PRESSURES	0 PSIG	20 PSIG	0 PSIG
BLEED TANK LEVEL	60 % (RCB-T1A)	40 % (T1B)	40 % (T1C)

WMW LEVEL 5.9 FT

	T1A	T1B
EVAP COND. TANK LEVEL	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

3 HR 10 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 1045 (CLOCK) T= 195 (SCENARIO)

NEUTRON FLUX -.7455 CPS (NI-1 LOG COUNT) -10.9924 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	201.2 F	201.3 F
TC (WR)	201.7 F	201.4 F
RC FLOW (LBM/HR)	8 E6	8 E6
RC PRESSURE	168.2 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 172.5 F

5 HIGHEST CORE THERMOCOUPLE 202 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 90.93 IN

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

	CFT-1A	CFT-1B
CFT LEVEL/PRESS	0.00 FT/ 112.2 PSIG	0.00FT/ 112.2 PSIG

	DH-V4A	DH-V4B
LPI FLOW	802.2 GPM	3218.7 GPM

BWST LEVEL 43.57 FT

	STBY (1A)	STBY (1B)
DIESEL GEN. STATUS		
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	578 IN
OTSG LEVEL (OP)	15 %	100 %
OTSG PRESS.	7.4 PSIG	34.3 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	233.9 F	211.6 F
CONDENSATE TANK LEVEL	13.57 FT	13.80 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT

	"A"	"B"
PURGE VALVE POSITION	OP AH-V1A	OP V1B / CL V1C / CL V1D
CONTAINMENT H2 CONCENTRATION	0 %	
R BLDG. TEMP/PRESS.	139.7 F/ 14.60 PSIA	
BLDG. SPRAY FLOW	0 GPM	0 GPM
RB FANS OPERATION	BS-P1A: OF	BS-P1B: OF / OF
	1A	1B / 1C
RB WATER LEVEL	90.0 IN SUMP	7.2 IN FLOOD

RADWASTE SYSTEM

	1A	1B	1C
WG DECAY TANK PRESSURES	0 PSIG	20 PSIG	0 PSIG
BLEED TANK LEVEL	60 %	40 %	40 %
	RCB-T1A	T1B	T1C

WMW LEVEL 5.9 FT

	T1A	T1B
EVAP COND. TANK LEVEL	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

3 HR 15 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 1050 (CLOCK) T= 200 (SCENARIO)

NEUTRON FLUX -.9084 CPS (NI-1 LOG COUNT) -10.9922 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	198.5 F	198.5 F
TC (WR)	198.8 F	199.3 F
RC FLOW (LBM/HR)	9 E6	8 E6
RC PRESSURE	171.9 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 177.1 F

5 HIGHEST CORE THERMOCOUPLE 199 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 90.98 IN

SAFETY SYSTEMS

HPI FLOW	(16A)	(16B)	(16C)	(16D)
	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

CFT LEVEL/PRESS	CFT-1A	CFT-1B
	0.00 FT/ 112.2 PSIG	0.00FT/ 112.2 PSIG

LPI FLOW	DH-V4A	DH-V4B
	783.1 GPM	3236.1 GPM

BWST LEVEL 43.17 FT

DIESEL GEN. STATUS	STBY (1A)	STBY (1B)
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	587 IN
OTSG LEVEL (OP)	15 %	100 %
OTSG PRESS.	6.8 PSIG	35.7 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	232.7 F	209.9 F
CONDENSATE TANK LEVEL	13.55 FT	13.78 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT

	"A"	"B"
PURGE VALVE POSITION	CL AH-V1A	OP V1B / CL V1C / CL V1D
CONTAINMENT H2 CONCENTRATION	0 %	
R BLDG. TEMP/PRESS.	137.8 F/ 14.54 PSIA	
BLDG. SPRAY FLOW	0 GPM	0 GPM
RB FANS OPERATION	BS-P1A OF	BS-P1B OF / OF
	1A	1B / 1C
RB WATER LEVEL	90.0 IN SUMP	7.6 IN FLOOD

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	1A	1B	1C
	0 PSIG	20 PSIG	0 PSIG

BLEED TANK LEVEL	RCB-T1A	T1B	T1C
	60 %	40 %	40 %

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	T1A	T1B
	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

3 HR 20 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 1055 (CLOCK) T= 205 (SCENARIO)

NEUTRON FLUX -.9145 CPS (NI-1 LOG COUNT) -10.9929 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	197.3 F	197.4 F
TC (WR)	197.7 F	198.1 F
RC FLOW (LBM/HR)	9 E6	8 E6
RC PRESSURE	171.8 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 178.2 F

5 HIGHEST CORE THERMOCOUPLE 198 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 91.04 IN

SAFETY SYSTEMS

HPI FLOW	(16A)	(16B)	(16C)	(16D)
	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

CFT LEVEL/PRESS	CFT-1A	CFT-1B
	0.00 FT/ 112.3 PSIG	0.00FT/ 112.3 PSIG

LPI FLOW	DH-V4A	DH-V4B
	782.9 GPM	3236.2 GPM

BWST LEVEL 43.01 FT

DIESEL GEN. STATUS	STBY (1A)	STBY (1B)
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	587 IN
OTSG LEVEL (OP)	15 %	100 %
OTSG PRESS.	6.5 PSIG	35.6 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	231.9 F	208.6 F
CONDENSATE TANK LEVEL	13.54 FT	13.77 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT

	"A"	"B"		
PURGE VALVE POSITION	CL AH-V1A	OP V1B	CL V1C	CL V1D

CONTAINMENT H2 CONCENTRATION 0 %

R BLDG. TEMP/PRESS. 137.7 F/ 14.53 PSIA

BLDG. SPRAY FLOW	BS-P1A	BS-P1B
	0 GPM	0 GPM

RB FANS OPERATION	1A	1B	1C
	OF	OF	OF

RB WATER LEVEL	SUMP	FLOOD
	90.0 IN	7.7 IN

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	1A	1B	1C
	0 PSIG	20 PSIG	0 PSIG

BLEED TANK LEVEL	RCB-T1A	T1B	T1C
	60 %	40 %	40 %

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	T1A	T1B
	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

3 HR 25 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 1100 (CLOCK) T= 210 (SCENARIO)

NEUTRON FLUX -.9206 CPS (NI-1 LOG COUNT) -10.9936 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	196.2 F	196.2 F
TC (WR)	196.5 F	196.8 F
RC FLOW (LBM/HR)	9 E6	8 E6
RC PRESSURE	171.8 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 179.4 F

5 HIGHEST CORE THERMOCOUPLE 197 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 91.11 IN

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

	CFT-1A	CFT-1B
CFT LEVEL/PRESS	0.00 FT/ 112.3 PSIG	0.00FT/ 112.3 PSIG

	DH-V4A	DH-V4B
LPI FLOW	782.7 GPM	3236.3 GPM

BWST LEVEL 42 85 FT

	STBY (1A)	STBY (1B)
DIESEL GEN. STATUS		
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	587 IN
OTSG LEVEL (OP)	15 %	100 %
OTSG PRESS.	6.2 PSIG	35.6 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	231.1 F	207.2 F
CONDENSATE TANK LEVEL	13.53 FT	13.75 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT

	"A"	"B"
PURGE VALVE POSITION	CL AH-V1A / OP V1B	CL V1C / CL V1D
CONTAINMENT H2 CONCENTRATION	0 %	
R BLDG. TEMP/PRESS.	137.5 F/ 14.53 PSIA	
BLDG. SPRAY FLOW	0 GPM	0 GPM
RB FANS OPERATION	BS-P1A: OF	BS-P1B: OF
	1A: OF	1B: OF / 1C: OF
RB WATER LEVEL	90.0 IN SUMP	7.9 IN FLOOD

RADWASTE SYSTEM

	1A	1B	1C
WG DECAY TANK PRESSURES	0 PSIG	20 PSIG	0 PSIG
BLEED TANK LEVEL	60 %	40 %	40 %
	RCB-T1A	T1B	T1C
WMW LEVEL	5.9 FT		
EVAP COND. TANK LEVEL	0 FT	3 FT	
	T1A	T1B	
AUX BLDG. SUMP LEVEL	30.0%		

3 HR 30 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 1105 (CLOCK) T= 215 (SCENARIO)

NEUTRON FLUX -.9266 CPS (NI-1 LOG COUNT) -10.9944 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	195.0 F	195.0 F
TC (WR)	195.3 F	195.6 F
RC FLOW (LBM/HR)	9 E6	8 E6
RC PRESSURE	171.7 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 180.5 F

5 HIGHEST CORE THERMOCOUPLE 195 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 91.18 IN

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

CFT LEVEL/PRESS 0.00 FT/ 112.3 PSIG (CFT-1A) 0.00FT/ 112.3 PSIG (CFT-1B)

LPI FLOW 782.4 GPM (DH-V4A) 3236.4 GPM (DH-V4B)

BWST LEVEL 42.69 FT

DIESEL GEN. STATUS STBY (1A) STBY (1B)

EMERG. FEED FLOW (GPM) 0.0 (A) 0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	588 IN
OTSG LEVEL (OP)	15 %	100 %
OTSG PRESS.	5.9 PSIG	35.6 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	230.3 F	205.8 F
CONDENSATE TANK LEVEL	13.51 FT	13.74 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 % ("A")	0.0 % ("B")

CONTAINMENT

	CL	OP	CL	CL
PURGE VALVE POSITION	AH-V1A	V1B	V1C	V1D

CONTAINMENT H2 CONCENTRATION 0 %

R BLDG. TEMP/PRESS. 137.4 F/ 14.52 PSIA

BLDG. SPRAY FLOW 0 GPM (BS-P1A) 0 GPM (BS-P1B)

RB FANS OPERATION	1A	1B	1C
	OF	OF	OF

RB WATER LEVEL 90.0 IN (SUMP) 8.0 IN (FLOOD)

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	1A	1B	1C
	0 PSIG	20 PSIG	0 PSIG

BLEED TANK LEVEL	RCB-T1A	T1B	T1C
	60 %	40 %	40 %

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL 0 FT (T1A) 3 FT (T1B)

AUX BLDG. SUMP LEVEL 30.0%

3 HR 35 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 1110 (CLOCK) T= 220 (SCENARIO)

NEUTRON FLUX -.9327 CPS (NI-1 LOG COUNT) -10.9951 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	193.8 F	193.9 F
TC (WR)	194.1 F	194.4 F
RC FLOW (LBM/HR)	9 E6	8 E6
RC PRESSURE	171.6 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 181.7 F

5 HIGHEST CORE THERMOCOUPLE 194 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 91.25 IN

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

	CFT-1A	CFT-1B
CFT LEVEL/PRESS	0.00 FT/ 112.3 PSIG	0.00FT/ 112.3 PSIG

	DH-V4A	DH-V4B
LPI FLOW	782.2 GPM	3236.5 GPM

BWST LEVEL 42.53 FT

	STBY (1A)	STBY (1B)
DIESEL GEN. STATUS		
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	588 IN
OTSG LEVEL (OP)	15 %	100 %
OTSG PRESS.	5.6 PSIG	35.6 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	229.6 F	204.4 F
CONDENSATE TANK LEVEL	13.50 FT	13.73 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT

	"A"	"B"
PURGE VALVE POSITION	CL AH-V1A / OP V1B	CL V1C / CL V1D
CONTAINMENT H2 CONCENTRATION	0 %	
R BLDG. TEMP/PRESS.	137.3 F/ 14.51 PSIA	
BLDG. SPRAY FLOW	0 GPM	0 GPM
RB FANS OPERATION	BS-P1A OF / 1A OF	BS-P1B OF / 1B OF / 1C OF
RB WATER LEVEL	90.0 IN SUMP	8.2 IN FLOOD

RADWASTE SYSTEM

	1A	1B	1C
WG DECAY TANK PRESSURES	0 PSIG	20 PSIG	0 PSIG
BLEED TANK LEVEL	60 %	40 %	40 %

	RCB-T1A	T1B	T1C
WMW LEVEL	5.9 FT		
EVAP COND. TANK LEVEL	0 FT	3 FT	

	T1A	T1B
AUX BLDG. SUMP LEVEL	30.0%	

3 HR 40 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 11' T= 225
(CLOCK) (SCENARIO)

NEUTRON FLUX -.9388 CPS -10.9958 AMPS 0.00 %
(NI-1 LOG COUNT) (NI-3 LOG AMP) (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0
	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	192.7 F	192.7 F
TC (WR)	192.9 F	193.1 F
RC FLOW (LBM/HR)	9 E6	8 E6
RC PRESSURE	171.6 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 182.8 F

5 HIGHEST CORE THERMOCOUPLE 193 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 91.32 IN

SAFETY SYSTEMS

HPI FLOW	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM
	(16A)	(16B)	(16C)	(16D)

CFT LEVEL/PRESS 0.00 FT/ 112.3 PSIG (CFT-1A) 0.00FT/ 112.3 PSIG (CFT-1B)

LPI FLOW	782.0 GPM	3236.6 GPM
	DH-V4A	DH-V4B

BWST LEVEL 42.37 FT

DIESEL GEN. STATUS	STBY (1A)	STBY (1B)
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	588 IN
OTSG LEVEL (OP)	15 %	100 %
OTSG PRESS.	5.3 PSIG	35.6 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	228.8 F	203.0 F
CONDENSATE TANK LEVEL	13.49 FT	13.72 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %
	"A"	"B"

CONTAINMENT

PURGE VALVE POSITION	CL AH-V1A	OP V1B	CL V1C	CL V1D

CONTAINMENT H2 CONCENTRATION 0 %

R BLDG. TEMP/PRESS. 137.2 F/ 14.51 PSIA

BLDG. SPRAY FLOW 0 GPM (BS-P1A) 0 GPM (BS-P1B)

RB FANS OPERATION OF (1A) OF (1B) OF (1C)

RB WATER LEVEL 90.0 IN (SUMP) 8.4 IN (FLOOD)

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	0 PSIG (1A)	20 PSIG (1B)	0 PSIG (1C)
BLEED TANK LEVEL	60 % (RCB-T1A)	40 % (T1B)	40 % (T1C)

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	0 FT (T1A)	3 FT (T1B)

AUX BLDG. SUMP LEVEL 30.0%

3 HR 45 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 1120 (CLOCK) T= 230 (SCENARIO)

NEUTRON FLUX -.9449 CPS (NI-1 LOG COUNT) -10.9965 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	191.5 F	191.5 F
TC (WR)	191.8 F	191.9 F
RC FLOW (LBM/HR)	9 E6	8 E6
RC PRESSURE	171.5 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 183.9 F

5 HIGHEST CORE THERMOCOUPLE 192 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 91.38 IN

SAFETY SYSTEMS

HPI FLOW	(16A)	(16B)	(16C)	(16D)
	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

CFT LEVEL/PRESS	CFT-1A	CFT-1B
	0.00 FT/ 112.3 PSIG	0.00FT/ 112.3 PSIG

LPI FLOW	DH-V4A	DH-V4B
	781.8 GPM	3236.7 GPM

BWST LEVEL 42.20 FT

DIESEL GEN. STATUS	STBY (1A)	STBY (1B)
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	588 IN
OTSG LEVEL (OP)	15 %	100 %
OTSG PRESS.	5.0 PSIG	35.6 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	228.0 F	201.7 F
CONDENSATE TANK LEVEL	13.48 FT	13.71 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT

	"A"	"B"
PURGE VALVE POSITION	CL AH-V1A, OP V1B	CL V1C, CL V1D
CONTAINMENT H2 CONCENTRATION	0 %	
R BLDG. TEMP/PRESS.	137.0 F/ 14.50 PSIA	
BLDG. SPRAY FLOW	0 GPM	0 GPM
RB FANS OPERATION	BS-P1A OF, 1A	BS-P1B OF, 1B, OF, 1C
RB WATER LEVEL	90.0 IN SUMP	8.5 IN FLOOD

RADWASTE SYSTEM

WG DECAY TANK PRESSURES	1A	1B	1C
	0 PSIG	20 PSIG	0 PSIG

BLEED TANK LEVEL	RCB-T1A	T1B	T1C
	60 %	40 %	40 %

WMW LEVEL 5.9 FT

EVAP COND. TANK LEVEL	T1A	T1B
	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

3 HR 50 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 1125 (CLOCK) T= 235 (SCENARIO)

NEUTRON FLUX -.9510 CPS (NI-1 LOG COUNT) -10.9973 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	190.3 F	190.4 F
TC (WR)	190.6 F	190.7 F
RC FLOW (LBM/HR)	9 E6	8 E6
RC PRESSURE	171.4 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 185.1 F

5 HIGHEST CORE THERMOCOUPLE 191 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 91.45 IN

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

	CFT-1A	CFT-1B
CFT LEVEL/PRESS	0.00 FT/ 112.3 PSIG	0.00FT/ 112.3 PSIG

	DH-V4A	DH-V4B
LPI FLOW	781.5 GPM	3236.8 GPM

BWST LEVEL 42.04 FT

	STBY (1A)	STBY (1B)
DIESEL GEN. STATUS		
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	589 IN
OTSG LEVEL (OP)	15 %	100 %
OTSG PRESS.	4.7 PSIG	35.5 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	227.2 F	200.3 F
CONDENSATE TANK LEVEL	13.47 FT	13.70 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT

	"A"	"B"		
PURGE VALVE POSITION	CL AH-V1A	OP V1B	CL V1C	CL V1D
CONTAINMENT H2 CONCENTRATION	0 %			
R BLDG. TEMP/PRESS.	136.9 F/ 14.49 PSIA			
BLDG. SPRAY FLOW	0 GPM	0 GPM		

	BS-P1A	BS-P1B
RB FANS OPERATION	OF	OF

	1A	1B	1C
RB FANS OPERATION	OF	OF	OF
RB WATER LEVEL	90.0 IN	8.7 IN	
	SUMP	FLOOD	

RADWASTE SYSTEM

	1A	1B	1C
WG DECAY TANK PRESSURES	0 PSIG	20 PSIG	0 PSIG
BLEED TANK LEVEL	60 %	40 %	40 %
	RCB-T1A	T1B	T1C

WMW LEVEL 5.9 FT

	T1A	T1B
EVAP COND. TANK LEVEL	0 FT	3 FT

AUX BLDG. SUMP LEVEL 30.0%

3 HR 55 MIN

ECC/TSC/EOF/PTFC INFORMATION (PLANT STATUS-OPERATIONS LINE)

ANNUAL EXERCISE
1994 ANNUAL

NOTE: THIS DATA IS TYPICALLY IN THE SAME FORM AS ON THE CRT, WHERE IT IS NORMALLY DISPLAYED.

I. REACTIVITY CONTROL

TIME 1130 (CLOCK) T= 240 (SCENARIO)

NEUTRON FLUX -.9571 CPS (NI-1 LOG COUNT) -10.9980 AMPS (NI-3 LOG AMP) 0.00 % (NI-5 POWER)

BORON CONCENTRATION 15 PPM

CRD POSITION (%WD)	(GP 1)	(GP 2)	(GP 3)	(GP 4)	(GP 5)	(GP 6)	(GP 7)	(GP 8)
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0

GEN. MW 0.00

II. COOLING

RCS	A. LOOP	B. LOOP
TH (WR)	189.2 F	189.2 F
TC (WR)	189.4 F	189.4 F
RC FLOW (LBM/HR)	9 E6	8 E6
RC PRESSURE	171.4 PSIG	
PRESSURIZER LEVEL	400 IN	

RC PUMP OPERATION (ON)

PRZR HEATERS OPERABLE (YES/NO) YES

DEGREES SUB_COOLING(INCORE) 186.2 F

5 HIGHEST CORE THERMOCOUPLE 190 F

MAKEUP FLOW INTO RCS 0.0 GPM

LET DOWN FLOW OUT OF RCS 0.00 GPM

MAKEUP TANK LEVEL 91.52 IN

SAFETY SYSTEMS

	(16A)	(16B)	(16C)	(16D)
HPI FLOW	0.0 GPM	0.0 GPM	0.0 GPM	0.0 GPM

	CFT-1A	CFT-1B
CFT LEVEL/PRESS	0.00 FT/ 112.3 PSIG	0.00FT/ 112.3 PSIG
LPI FLOW	781.3 GPM	3236.8 GPM
	DH-V4A	DH-V4B

BWST LEVEL 41.88 FT

	STBY (1A)	STBY (1B)
DIESEL GEN. STATUS		
EMERG. FEED FLOW (GPM)	0.0 (A)	0.0 (B)

SECONDARY PLANT	A. LOOP	B. LOOP
OTSG LEVEL (WR)	116 IN	589 IN
OTSG LEVEL (OP)	15 %	100 %
OTSG PRESS.	4.4 PSIG	35.5 PSIG
FEED FLOW (LBM/HR)	0.0 E6	0.0 E6
SHELL TEMP.	226.4 F	198.9 F
CONDENSATE TANK LEVEL	13.46 FT	13.69 FT
MAIN CONDENSER PRESSURE	1.3 IN HG	
TURBINE BYPASS VALVE POSITION	0.0 %	0.0 %

CONTAINMENT

	"A"			"B"		
PURGE VALVE POSITION	CL AH-V1A	OP V1B	CL V1C	CL V1D		
CONTAINMENT H2 CONCENTRATION	0 %					
R BLDG. TEMP/PRESS.	136.8 F/ 14.49 PSIA					
BLDG. SPRAY FLOW	0 GPM		0 GPM			
RB FANS OPERATION	BS-P1A OF		OF	BS-P1B OF		
	1A		1B		1C	
RB WATER LEVEL	90.0 IN		8.9 IN			
	SUMP		FLOOD			

RADWASTE SYSTEM

	1A	1B	1C
WG DECAY TANK PRESSURES	0 PSIG	20 PSIG	0 PSIG
BLEED TANK LEVEL	60 %	40 %	40 %
	RCB-T1A	T1B	T1C

WMW LEVEL 5.9 FT

	T1A	T1B
EVAP COND. TANK LEVEL	0 FT	3 FT
AUX BLDG. SUMP LEVEL	30.0%	

4 HR 0 MIN

TIME	9-G	8-F	9-E	5-G	6-L	7-M	10-M	13-H	12-F	4-E	2-G	2-L	5-O	12-O	14-M	13-C
0	605.0	606.4	607.5	607.5	606.0	607.5	610.9	615.7	603.0	609.5	608.7	597.6	602.4	604.0	599.3	582.2
1	605.0	606.4	607.5	607.5	606.0	607.5	610.9	615.7	603.0	609.5	608.7	597.6	602.4	604.0	599.3	582.2
2	605.0	606.4	607.5	607.5	606.0	607.5	610.9	615.7	603.0	609.5	608.7	597.6	602.4	604.0	599.3	582.2
3	605.0	606.4	607.5	607.5	606.0	607.5	610.9	615.7	603.0	609.5	608.7	597.6	602.4	604.0	599.3	582.2
4	605.0	606.4	607.5	607.5	606.0	607.5	610.9	615.7	603.0	609.5	608.7	597.6	602.4	604.0	599.3	582.2
5	605.0	606.4	607.5	607.5	606.0	607.4	610.9	615.7	603.0	609.4	608.6	597.6	602.4	604.0	599.3	582.2
6	605.0	606.4	607.5	607.5	606.0	607.4	610.8	615.7	603.0	609.5	608.6	597.6	602.4	604.0	599.3	582.2
7	604.9	606.3	607.4	607.4	605.9	607.4	610.8	615.7	603.0	609.4	608.6	597.5	602.4	604.0	599.3	582.2
8	604.9	606.4	607.5	607.5	606.0	607.4	610.8	615.7	603.0	609.4	608.6	597.6	602.4	604.0	599.3	582.2
9	604.9	606.4	607.4	607.4	605.9	607.4	610.8	615.7	603.0	609.4	608.6	597.5	602.4	604.0	599.3	582.2
10	604.9	606.3	607.4	607.4	605.9	607.4	610.8	615.7	603.0	609.4	608.6	597.5	602.4	604.0	599.3	582.2
11	604.7	606.1	607.0	607.1	605.6	607.0	610.4	615.1	602.6	609.0	608.2	597.3	602.0	603.5	598.9	582.1
12	603.5	604.9	605.9	605.8	604.4	605.9	609.0	613.6	601.7	607.7	606.9	596.6	601.1	602.6	598.2	582.3
13	601.9	603.2	604.1	604.2	602.8	604.1	607.2	611.4	600.1	605.8	605.1	595.3	599.6	601.0	596.8	581.6
14	600.9	602.1	602.9	603.0	601.7	602.9	605.8	609.8	599.1	604.6	603.9	594.6	598.7	600.0	596.1	581.7
15	600.2	601.3	602.2	602.2	601.0	602.2	604.9	608.6	598.5	603.7	603.1	594.3	598.2	599.4	595.6	582.2
16	598.8	599.9	600.7	600.7	599.6	600.7	603.2	606.8	597.4	602.1	601.5	593.4	596.9	598.1	594.6	582.0
17	597.9	598.9	599.7	599.6	598.6	599.6	602.0	605.4	596.5	601.0	600.4	592.7	596.1	597.1	593.9	582.1
18	596.5	597.4	598.2	598.1	597.2	598.1	600.3	603.5	595.2	599.4	598.9	591.7	594.8	595.9	592.8	581.7
19	595.3	596.2	596.8	596.8	595.9	596.8	598.9	601.8	594.1	598.0	597.5	590.8	593.8	594.7	591.9	581.6
20	594.2	594.9	595.6	595.6	594.7	595.6	597.5	600.2	593.1	596.7	596.2	590.1	592.8	593.7	591.0	581.5
21	593.1	593.8	594.3	594.3	593.6	594.3	596.1	598.5	592.0	595.2	594.8	589.2	591.6	592.5	590.0	581.3
22	592.9	593.6	594.0	594.1	593.3	593.9	595.7	597.9	591.8	594.9	594.5	589.2	591.5	592.2	590.0	581.9
23	591.5	592.1	592.7	592.6	591.9	592.7	594.1	596.3	590.7	593.5	593.1	588.2	590.4	591.1	588.9	581.4
24	590.5	591.1	591.6	591.5	590.9	591.4	592.8	594.7	589.6	592.2	591.9	587.5	589.4	590.0	588.2	581.4
25	589.7	590.2	590.6	590.6	590.0	590.6	591.7	593.4	589.0	591.2	591.0	587.1	588.8	589.3	587.7	581.8
26	588.0	588.5	588.8	588.8	588.3	588.8	589.8	591.3	587.4	589.4	589.1	585.8	587.3	587.7	586.3	581.2
27	588.0	588.4	588.7	588.7	588.3	588.7	589.5	590.8	587.5	589.2	589.0	586.1	587.4	587.8	586.5	582.1
28	587.2	587.6	587.7	587.6	587.3	587.7	588.5	589.8	586.6	588.1	587.9	585.0	586.3	586.6	585.5	581.2
29	584.4	584.8	585.1	585.1	584.7	585.1	586.0	587.2	583.9	585.6	585.4	582.5	583.7	584.1	582.9	578.4
30	581.7	582.1	582.3	582.4	582.0	582.4	583.2	584.5	581.2	582.8	582.6	579.8	581.0	581.5	580.2	575.9
31	578.5	578.8	579.1	579.0	578.7	579.1	579.7	580.9	578.1	579.4	579.2	576.7	577.9	578.1	577.2	573.5
32	574.4	574.6	575.0	574.8	574.5	574.7	575.4	576.2	573.8	575.1	575.0	572.7	573.5	573.9	572.9	569.7
33	571.1	571.4	571.5	571.6	571.1	571.5	572.1	573.1	570.5	571.8	571.6	569.4	570.3	570.6	569.7	566.3
34	568.2	568.5	568.9	568.7	568.4	568.8	569.3	570.2	567.7	569.0	568.9	566.6	567.7	567.9	566.9	563.6
35	565.3	565.5	565.7	565.7	565.5	565.8	566.3	567.2	565.0	566.1	566.0	564.1	564.9	565.2	564.4	561.5
36	562.9	563.1	563.2	563.1	562.9	563.2	563.7	564.5	562.5	563.4	563.3	561.5	562.3	562.5	561.8	559.2
37	562.6	562.8	562.9	562.9	562.7	562.9	563.5	564.2	562.3	563.2	563.1	561.4	562.2	562.4	561.7	559.1
38	560.7	560.8	560.8	560.9	560.8	560.8	561.3	561.7	560.2	560.8	560.7	559.5	560.0	560.3	559.6	557.6
39	556.9	557.0	557.1	557.0	556.8	557.1	557.3	557.9	556.6	557.2	557.1	556.0	556.4	556.5	556.1	554.3
40	553.5	553.6	553.8	553.7	553.6	553.8	554.1	554.6	553.2	553.9	553.8	552.6	553.2	553.3	552.8	551.0
41	552.0	552.0	552.2	552.1	552.0	552.2	552.5	553.0	551.7	552.3	552.2	551.1	551.6	551.7	551.3	549.6
42	550.6	550.7	550.8	550.8	550.6	550.8	551.0	551.4	550.4	550.9	550.8	550.0	550.3	550.4	550.1	548.8
43	549.1	549.2	549.3	549.3	549.2	549.3	549.4	549.7	548.9	549.3	549.3	548.6	548.9	549.0	548.6	547.6
44	547.4	547.4	547.5	547.5	547.4	547.5	547.6	547.9	547.2	547.5	547.5	547.0	547.2	547.3	547.0	546.2
45	546.4	546.4	546.5	546.5	546.4	546.5	546.6	546.7	546.2	546.5	546.5	546.0	546.2	546.2	546.0	545.3
46	544.5	544.6	544.6	544.6	544.6	544.6	544.7	544.8	544.5	544.7	544.6	544.4	544.5	544.5	544.4	543.9
47	543.6	543.6	543.6	543.6	543.6	543.6	543.7	543.8	543.5	543.6	543.6	543.4	543.5	543.5	543.4	543.0
48	542.2	542.2	542.2	542.2	542.2	542.2	542.3	542.4	542.2	542.3	542.3	542.1	542.1	542.2	542.1	541.8
49	543.2	543.2	543.2	543.2	543.2	543.2	543.3	543.4	543.1	543.3	543.2	543.0	543.1	543.1	543.1	542.7
50	543.3	543.3	543.3	543.3	543.3	543.3	543.4	543.5	543.3	543.4	543.4	543.2	543.3	543.4	543.2	542.9
51	543.8	543.8	543.8	543.8	543.8	543.8	543.9	544.0	543.8	543.9	543.9	543.7	543.8	543.8	543.8	543.4
52	544.0	544.0	544.0	544.0	544.0	544.0	544.1	544.2	543.9	544.1	544.0	543.8	543.9	544.0	543.9	543.6
53	543.3	543.3	543.3	543.3	543.3	543.3	543.4	543.5	543.3	543.4	543.3	543.1	543.2	543.2	543.2	542.8
54	542.8	542.8	542.8	542.8	542.8	542.8	542.9	543.0	542.8	542.9	542.9	542.7	542.8	542.8	542.7	542.4
55	542.7	542.7	542.7	542.7	542.7	542.7	542.8	542.8	542.6	542.7	542.7	542.5	542.6	542.6	542.5	542.2
56	542.2	542.2	542.3	542.2	542.2	542.3	542.3	542.4	542.1	542.3	542.2	542.0	542.1	542.1	542.1	541.7
57	541.8	541.8	541.8	541.8	541.8	541.8	541.9	542.0	541.7	541.8	541.8	541.6	541.7	541.7	541.6	541.3
58	539.5	539.5	539.4	539.6	539.2	539.4	539.4	539.7	539.2	539.3	539.3	538.9	539.0	538.9	538.9	538.2
59	535.2	535.3	535.4	535.3	535.2	535.4	535.4	535.5	535.0	535.3	535.3	534.8	535.0	535.0	534.9	534.1
60	532.5	532.5	532.5	532.6	532.5	532.5	532.7	532.8	532.4	532.5	532.5	532.1	532.3	532.4	532.1	531.5

TIME	9-G	8-F	9-E	5-G	6-L	7-M	10-M	13-H	12-F	4-E	2-G	2-L	5-O	12-O	14-M	13-C
61	530.6	530.7	530.7	530.7	530.7	530.7	530.8	531.0	530.5	530.8	530.7	530.3	530.5	530.5	530.4	529.7
62	530.5	530.5	530.5	530.5	530.5	530.5	530.7	530.8	530.4	530.6	530.6	530.2	530.4	530.4	530.3	529.7
63	530.6	530.6	530.7	530.7	530.6	530.7	530.8	531.0	530.5	530.8	530.7	530.4	530.5	530.6	530.4	529.8
64	529.9	529.8	529.9	529.8	529.8	529.9	529.9	530.2	529.7	529.9	529.8	529.4	529.6	529.6	529.5	528.9
65	528.0	528.1	528.0	528.1	528.0	528.0	528.2	528.3	527.9	528.0	528.0	527.6	527.8	527.9	527.6	527.0
66	526.6	526.7	526.7	526.7	526.7	526.7	526.8	527.0	526.5	526.8	526.7	526.3	526.5	526.5	526.4	525.8
67	526.2	526.3	526.3	526.3	526.2	526.3	526.4	526.6	526.1	526.4	526.3	526.0	526.1	526.2	526.0	525.4
68	525.5	525.5	525.6	525.5	525.5	525.6	525.7	525.8	525.4	525.6	525.6	525.2	525.4	525.4	525.2	524.6
69	524.1	524.2	524.2	524.2	524.1	524.2	524.3	524.4	524.0	524.2	524.1	523.8	523.9	524.0	523.8	523.2
70	519.3	519.5	516.9	519.3	519.1	516.5	519.4	517.1	515.5	513.4	513.3	514.1	512.3	510.7	511.8	510.1
71	484.2	484.3	484.7	484.4	484.2	484.7	484.6	485.4	484.2	484.4	484.3	482.8	483.7	483.5	483.4	481.7
72	471.4	472.0	472.6	472.4	471.8	472.1	474.3	476.2	469.8	473.1	472.7	467.4	469.2	470.8	468.2	459.7
73	457.6	458.5	458.4	458.9	458.2	458.4	462.2	465.0	455.4	459.3	458.7	451.8	454.5	456.9	454.1	441.6
74	449.6	450.7	451.1	451.2	450.3	451.4	455.6	459.8	447.5	452.7	451.9	442.8	446.9	450.2	446.4	430.6
75	429.3	430.5	431.4	430.4	430.0	430.3	435.2	438.0	425.3	431.4	430.4	422.1	425.0	428.2	423.2	407.7
76	408.8	409.6	409.2	409.5	409.3	410.6	413.1	415.7	406.5	409.9	409.3	404.5	407.2	407.9	405.3	394.0
77	398.1	398.7	399.0	398.8	398.5	399.9	401.4	404.0	396.8	399.6	399.1	394.6	397.2	397.7	395.6	386.5
78	390.2	390.9	390.6	390.9	390.6	391.7	393.8	396.1	388.2	391.2	390.7	386.3	388.6	389.7	386.8	376.9
79	338.1	338.4	339.3	338.4	338.2	339.2	339.0	340.6	338.2	338.4	338.3	336.2	337.3	337.0	336.7	334.0
80	346.6	346.9	347.1	347.1	346.8	347.3	348.2	349.6	345.9	347.7	347.4	344.6	345.9	346.4	345.0	339.8
81	340.5	341.2	341.7	341.4	341.0	341.6	343.3	345.3	339.1	342.2	341.3	337.0	338.9	339.9	337.5	329.4
82	321.9	322.6	319.9	322.5	322.0	320.0	318.4	323.6	316.8	316.4	316.0	314.0	313.5	311.6	311.8	304.4
83	304.2	304.3	304.7	304.4	304.3	304.7	304.8	305.5	303.6	304.5	304.4	302.9	303.7	303.6	303.3	301.4
84	291.8	291.9	292.3	292.0	291.8	291.7	292.4	292.6	291.1	292.1	291.4	290.3	290.6	291.1	290.2	288.1
85	284.1	284.3	284.3	284.3	284.2	284.3	284.6	285.1	283.9	284.5	284.4	283.5	283.9	284.0	283.6	282.1
86	279.1	279.3	279.6	279.3	279.2	279.6	279.7	280.5	278.5	279.4	279.3	277.9	278.7	278.5	278.3	276.4
87	270.4	270.5	270.4	270.6	270.5	270.4	270.9	271.1	269.9	270.3	270.2	269.4	269.6	269.9	269.3	267.6
88	259.9	260.0	260.4	260.0	259.9	260.4	260.3	261.1	259.9	260.0	260.0	258.6	259.4	259.1	259.0	257.5
89	259.6	259.7	259.7	259.8	259.7	259.8	260.0	260.3	259.6	259.9	259.8	259.3	259.6	259.7	259.5	258.6
90	258.7	258.8	258.8	258.9	258.6	258.8	259.0	259.5	258.4	258.9	258.8	258.0	258.3	258.4	258.1	256.7
91	257.6	257.7	257.8	257.8	257.7	257.8	258.0	258.4	257.4	258.0	257.9	257.1	257.4	257.7	257.2	255.8
92	256.4	256.6	256.7	256.7	256.5	256.7	257.2	257.7	256.1	256.9	256.7	255.4	255.9	256.2	255.5	253.3
93	255.4	255.5	255.6	255.7	255.4	255.6	256.0	256.7	255.0	255.8	255.7	254.3	254.9	255.1	254.5	252.3
94	253.5	253.6	253.8	253.8	253.6	253.8	254.2	254.9	253.2	254.0	253.9	252.5	253.1	253.3	252.7	250.5
95	252.2	252.3	252.4	252.5	252.3	252.4	252.9	253.5	251.8	252.6	252.5	251.2	251.7	252.0	251.3	249.2
96	250.6	250.8	251.0	250.9	250.7	251.0	251.3	252.0	250.4	251.1	251.0	249.6	250.3	250.4	249.9	247.7
97	254.2	254.3	254.4	254.5	254.3	254.4	254.9	255.4	253.9	254.7	254.6	253.3	253.9	254.1	253.5	251.5
98	254.6	254.7	254.9	254.9	254.7	254.9	255.3	255.8	254.4	255.2	255.1	253.9	254.5	254.6	254.1	252.2
99	255.9	256.1	256.2	256.2	256.1	256.2	256.7	257.1	255.7	256.4	256.3	255.1	255.6	255.9	255.3	253.2
100	256.5	256.7	256.8	256.8	256.7	256.8	257.3	257.8	256.3	257.1	257.0	255.7	256.3	256.5	255.9	253.8
101	257.2	257.5	257.6	257.6	257.4	257.6	258.1	258.9	257.0	257.9	257.8	256.0	256.8	257.0	256.4	253.8
102	252.9	253.1	253.3	253.3	253.1	253.4	253.8	254.5	252.7	253.6	253.5	251.9	252.6	252.8	252.2	249.7
103	254.3	254.5	254.6	254.6	254.4	254.7	255.2	255.9	254.2	255.0	254.8	253.2	253.9	254.1	253.5	250.8
104	253.4	253.6	253.7	253.7	253.5	253.7	254.2	255.0	253.0	254.0	253.9	252.2	253.0	253.2	252.5	249.8
105	253.0	253.2	253.4	253.3	253.1	253.4	253.9	254.7	252.6	253.7	253.5	251.8	252.6	252.8	252.0	249.3
106	252.3	252.5	252.7	252.7	252.5	252.7	253.2	254.0	252.0	253.0	252.8	251.2	251.9	252.2	251.4	248.8
107	252.1	252.3	252.5	252.5	252.2	252.5	253.0	253.7	251.8	252.7	252.6	251.0	251.7	252.0	251.2	248.6
108	246.7	246.9	247.2	247.0	246.9	246.9	247.5	248.0	246.3	247.2	247.1	245.6	246.3	246.4	245.6	243.4
109	246.2	246.4	246.7	246.5	246.3	246.4	247.0	247.4	245.8	246.7	246.6	245.0	245.8	245.9	245.1	242.9
110	245.7	245.9	246.1	246.0	245.8	245.9	246.4	246.9	245.2	246.2	246.1	244.5	245.3	245.3	244.6	242.4
111	245.2	245.3	245.6	245.4	245.3	245.3	245.9	246.4	244.7	245.6	245.5	244.0	244.7	244.8	244.1	241.8
112	244.6	244.8	245.1	244.9	244.7	244.8	245.4	245.9	244.2	245.1	245.0	243.5	244.2	244.3	243.5	241.3
113	244.1	244.3	244.5	244.4	244.2	244.3	244.8	245.3	243.6	244.6	244.5	242.9	243.7	243.7	243.0	240.8
114	243.6	243.7	244.0	243.9	243.7	243.7	244.3	244.8	243.1	244.1	243.9	242.4	243.1	243.2	242.5	240.3
115	243.0	243.2	243.5	243.3	243.1	243.2	243.8	244.3	242.6	243.5	243.4	241.9	242.6	242.7	242.0	239.8
116	242.5	242.7	242.9	242.8	242.6	242.7	243.2	243.7	242.1	243.0	242.9	241.3	242.1	242.2	241.4	239.2
117	242.0	242.2	242.4	242.3	242.1	242.1	242.7	243.2	241.5	242.5	242.3	240.8	241.5	241.6	240.9	238.7
118	241.4	241.6	241.9	241.7	241.5	241.6	242.2	242.7	241.0	241.9	241.8	240.3	241.0	241.1	240.4	238.2
119	240.9	241.1	241.3	241.2	241.0	241.1	241.6	242.1	240.5	241.4	241.3	239.8	240.5	240.6	239.9	237.7
120	240.4	240.6	240.8	240.7	240.5	240.6	241.1	241.6	239.9	240.9	240.8	239.2	240.0	240.0	239.3	237.2

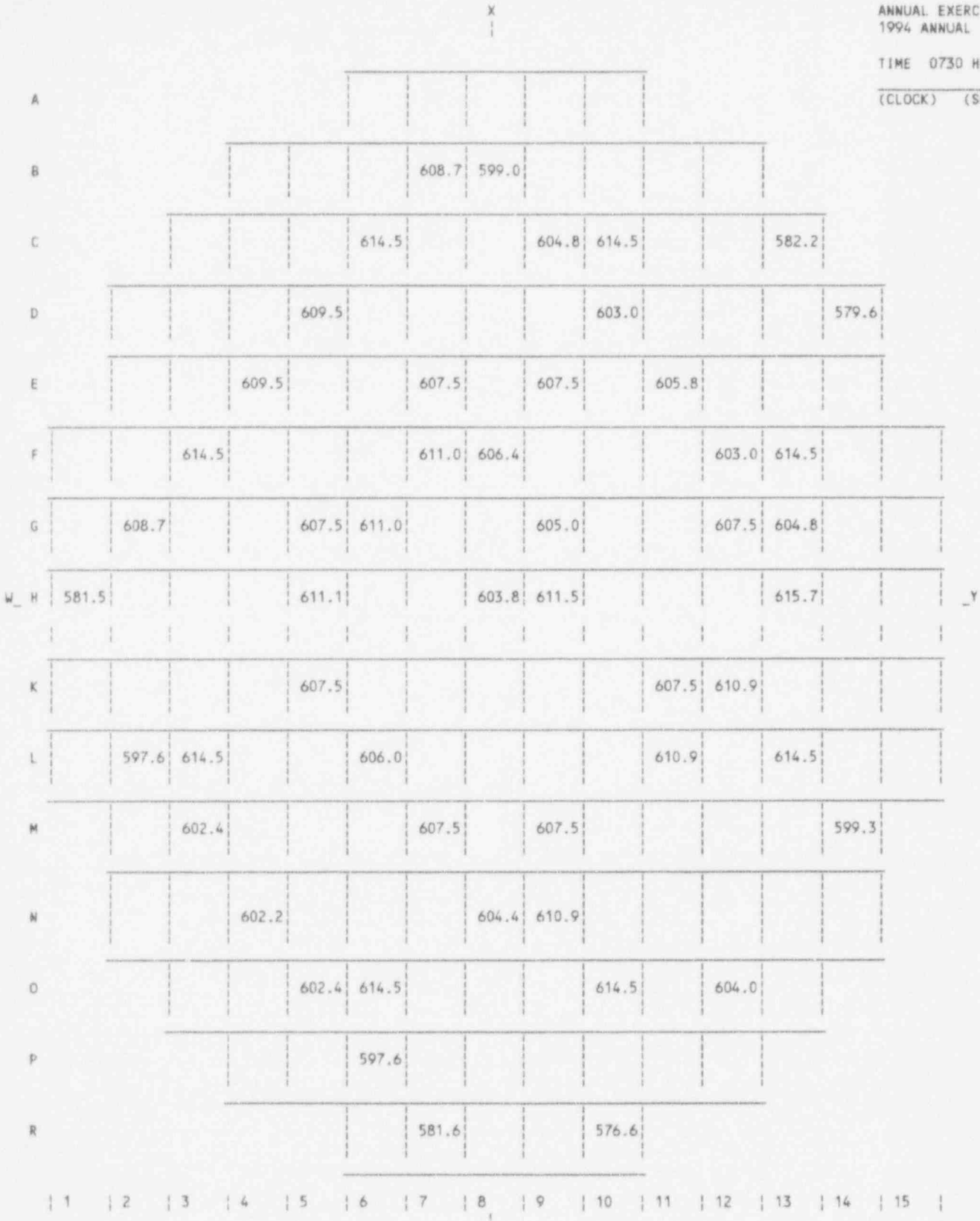
TIME	9-G	8-F	9-E	5-G	6-L	7-M	10-M	13-H	12-F	4-E	2-G	2-L	5-O	12-O	14-M	13-C
121	239.8	240.0	240.3	240.1	240.0	240.0	240.6	241.1	239.4	240.3	240.2	238.7	239.4	239.5	238.8	236.6
122	239.3	239.5	239.7	239.6	239.4	239.5	240.0	240.5	238.9	239.8	239.7	238.2	238.9	239.0	238.3	236.1
123	238.8	239.0	239.2	239.1	238.9	239.0	239.5	240.0	238.4	239.3	239.2	237.7	238.4	238.5	237.8	235.6
124	238.3	238.4	238.7	238.5	238.4	238.4	239.0	239.5	237.8	238.7	238.6	237.1	237.8	237.9	237.2	235.1
125	237.7	237.9	238.1	238.0	237.8	237.9	238.4	238.9	237.3	238.2	238.1	236.6	237.3	237.4	236.7	234.6
126	237.2	237.4	237.6	237.5	237.3	237.4	237.9	238.4	236.8	237.7	237.6	236.1	236.8	236.9	236.2	234.0
127	236.7	236.8	237.1	237.0	236.8	236.8	237.4	237.9	236.2	237.1	237.0	235.6	236.3	236.3	235.7	233.5
128	236.1	236.3	236.5	236.4	236.2	236.3	236.9	237.3	235.7	236.6	236.5	235.0	235.7	235.8	235.1	233.0
129	235.6	235.8	236.0	235.9	235.7	235.8	236.3	236.8	235.2	236.1	236.0	234.5	235.2	235.3	234.6	232.5
130	235.1	235.2	235.5	235.4	235.2	235.3	235.8	236.3	234.7	235.5	235.4	234.0	234.7	234.8	234.1	232.0
131	234.5	234.7	234.9	234.8	234.6	234.7	235.3	235.7	234.1	235.0	234.9	233.5	234.1	234.2	233.6	231.4
132	234.0	234.2	234.4	234.3	234.1	234.2	234.7	235.2	233.6	234.5	234.4	232.9	233.6	233.7	233.0	230.9
133	233.5	233.7	233.9	233.8	233.6	233.7	234.2	234.7	233.1	234.0	233.8	232.4	233.1	233.2	232.5	230.4
134	232.9	233.1	233.3	233.2	233.1	233.1	233.7	234.1	232.6	233.4	233.3	231.9	232.5	232.7	232.0	229.9
135	232.4	232.6	232.8	232.7	232.5	232.6	233.1	233.6	232.0	232.9	232.8	231.3	232.0	232.1	231.5	229.4
136	231.9	232.1	232.3	232.2	232.0	232.1	232.6	233.1	231.5	232.4	232.3	230.8	231.5	231.6	230.9	228.8
137	231.4	231.5	231.7	231.6	231.5	231.5	232.1	232.5	231.0	231.8	231.7	230.3	231.0	231.1	230.4	228.3
138	230.8	231.0	231.2	231.1	230.9	231.0	231.5	232.0	230.4	231.3	231.2	229.8	230.4	230.5	229.9	227.8
139	230.3	230.5	230.7	230.6	230.4	230.5	231.0	231.5	229.9	230.8	230.7	229.2	229.9	230.0	229.3	227.3
140	229.8	229.9	230.1	230.0	229.9	230.0	230.5	230.9	229.4	230.2	230.1	228.7	229.4	229.5	228.8	226.8
141	229.2	229.4	229.6	229.5	229.3	229.4	229.9	230.4	228.9	229.7	229.6	228.2	228.8	229.0	228.3	226.2
142	228.7	228.9	229.1	229.0	228.8	228.9	229.4	229.9	228.3	229.2	229.1	227.7	228.3	228.4	227.8	225.7
143	228.2	228.3	228.5	228.5	228.3	228.4	228.9	229.3	227.8	228.6	228.5	227.1	227.8	227.9	227.2	225.2
144	227.6	227.8	228.0	227.9	227.8	227.8	228.3	228.8	227.3	228.1	228.0	226.6	227.3	227.4	226.7	224.7
145	227.1	227.3	227.5	227.4	227.2	227.3	227.8	228.3	226.7	227.6	227.5	226.1	226.7	226.8	226.2	224.2
146	226.6	226.8	227.0	226.9	226.7	226.8	227.3	227.7	226.2	227.0	226.9	225.6	226.2	226.3	225.7	223.6
147	226.1	226.2	226.4	226.3	226.2	226.2	226.7	227.2	225.7	226.5	226.4	225.0	225.7	225.8	225.1	223.1
148	225.5	225.7	225.9	225.8	225.6	225.7	226.2	226.7	225.2	226.0	225.9	224.5	225.1	225.3	224.6	222.6
149	225.0	225.2	225.4	225.3	225.1	225.2	225.7	226.2	224.6	225.4	225.3	224.0	224.6	224.7	224.1	222.1
150	224.5	224.6	224.8	224.7	224.6	224.7	225.1	225.6	224.1	224.9	224.8	223.5	224.1	224.2	223.6	221.6
151	223.9	224.1	224.3	224.2	224.0	224.1	224.6	225.1	223.6	224.4	224.3	222.9	223.5	223.7	223.0	221.0
152	223.4	223.6	223.8	223.7	223.5	223.6	224.1	224.6	223.0	223.8	223.8	222.4	223.0	223.1	222.5	220.5
153	222.9	223.0	223.2	223.1	223.0	223.1	223.5	224.0	222.5	223.3	223.2	221.9	222.5	222.6	222.0	220.0
154	222.3	222.5	222.7	222.6	222.4	222.5	223.0	223.5	222.0	222.8	222.7	221.4	222.0	222.1	221.5	219.5
155	221.8	222.0	222.2	222.1	221.9	222.0	222.5	223.0	221.5	222.3	222.2	220.8	221.4	221.6	220.9	219.0
156	221.3	221.4	221.6	221.6	221.4	221.5	221.9	222.4	220.9	221.7	221.6	220.3	220.9	221.0	220.4	218.4
157	220.7	220.9	221.1	221.0	220.9	220.9	221.4	221.9	220.4	221.2	221.1	219.8	220.4	220.5	219.9	217.9
158	220.2	220.4	220.6	220.5	220.3	220.4	220.9	221.4	219.9	220.7	220.6	219.2	219.8	220.0	219.4	217.4
159	219.7	219.9	220.0	220.0	219.8	219.9	220.4	220.8	219.4	220.1	220.0	218.7	219.3	219.4	218.8	216.9
160	219.2	219.3	219.5	219.4	219.3	219.4	219.8	220.3	218.8	219.6	219.5	218.2	218.8	218.9	218.3	216.4
161	218.6	218.8	219.0	218.9	218.7	218.8	219.3	219.8	218.3	219.1	219.0	217.7	218.3	218.4	217.8	215.8
162	218.1	218.3	218.4	218.4	218.2	218.3	218.8	219.2	217.8	218.5	218.4	217.1	217.7	217.9	217.3	215.3
163	217.6	217.7	217.9	217.8	217.7	217.8	218.2	218.7	217.2	218.0	217.9	216.6	217.2	217.3	216.7	214.8
164	217.0	217.2	217.4	217.3	217.1	217.2	217.7	218.2	216.7	217.5	217.4	216.1	216.7	216.8	216.2	214.3
165	216.5	216.7	216.8	216.8	216.6	216.7	217.2	217.6	216.2	216.9	216.8	215.6	216.1	216.3	215.7	213.8
166	216.0	216.1	216.3	216.2	216.1	216.2	216.6	217.1	215.7	216.4	216.3	215.0	215.6	215.8	215.2	213.2
167	215.4	215.6	215.8	215.7	215.5	215.6	216.1	216.6	215.1	215.9	215.8	214.5	215.1	215.2	214.6	212.7
168	214.9	215.1	215.2	215.2	215.0	215.1	215.6	216.0	214.6	215.3	215.3	214.0	214.6	214.7	214.1	212.2
169	214.4	214.5	214.7	214.7	214.5	214.6	215.0	215.5	214.1	214.8	214.7	213.5	214.0	214.2	213.6	211.7
170	213.9	214.0	214.2	214.1	214.0	214.1	214.5	215.0	213.5	214.3	214.2	212.9	213.5	213.6	213.1	211.2
171	213.3	213.5	213.6	213.6	213.4	213.5	214.0	214.4	213.0	213.7	213.7	212.4	213.0	213.1	212.5	210.6
172	212.8	212.9	213.1	213.1	212.9	213.0	213.4	213.9	212.5	213.2	213.1	211.9	212.4	212.6	212.0	210.1
173	212.3	212.4	212.6	212.5	212.4	212.5	212.9	213.4	212.0	212.7	212.6	211.4	211.9	212.1	211.5	209.6
174	211.7	211.9	212.0	212.0	211.8	211.9	212.4	212.8	211.4	212.2	212.1	210.8	211.4	211.5	211.0	209.1
175	211.2	211.4	211.5	211.5	211.3	211.4	211.8	212.3	210.9	211.6	211.5	210.3	210.8	211.0	210.4	208.6
176	210.7	210.8	211.0	210.9	210.8	210.9	211.3	211.8	210.4	211.1	211.0	209.8	210.3	210.5	209.9	208.0
177	210.1	210.3	210.4	210.4	210.2	210.3	210.8	211.2	209.8	210.6	210.5	209.2	209.8	209.9	209.4	207.5
178	209.6	209.8	209.9	209.9	209.7	209.8	210.2	210.7	209.3	210.0	209.9	208.7	209.3	209.4	208.9	207.0
179	209.1	209.2	209.4	209.3	209.2	209.3	209.7	210.2	208.8	209.5	209.4	208.2	208.7	208.9	208.3	206.5
180	208.5	208.7	208.8	208.8	208.6	208.8	209.2	209.6	208.3	209.0	208.9	207.7	208.2	208.4	207.8	206.0

TIME	9-G	8-F	9-E	5-G	6-L	7-M	10-M	13-H	12-F	4-E	2-G	2-L	5-O	12-O	14-M	13-C
181	208.0	208.2	208.3	208.3	208.1	208.2	208.6	209.1	207.7	208.4	208.3	207.1	207.7	207.8	207.3	205.4
182	207.5	207.6	207.8	207.7	207.6	207.7	208.1	208.6	207.2	207.9	207.8	206.6	207.1	207.3	206.8	204.9
183	207.0	207.1	207.2	207.2	207.1	207.2	207.6	208.0	206.7	207.4	207.3	206.1	206.6	206.8	206.2	204.4
184	206.4	206.6	206.7	206.7	206.5	206.6	207.0	207.5	206.2	206.8	206.7	205.6	206.1	206.2	205.7	203.9
185	205.9	206.0	206.2	206.2	206.0	206.1	206.5	207.0	205.6	206.3	206.2	205.0	205.6	205.7	205.2	203.4
186	205.4	205.5	205.6	205.6	205.5	205.6	206.0	206.5	205.1	205.8	205.7	204.5	205.0	205.2	204.6	202.8
187	204.8	205.0	205.1	205.1	204.9	205.1	205.5	205.9	204.6	205.2	205.2	204.0	204.5	204.7	204.1	202.3
188	204.3	204.5	204.6	204.6	204.4	204.5	204.9	205.4	204.0	204.7	204.6	203.5	204.0	204.1	203.6	201.8
189	203.8	203.9	204.0	204.0	203.9	204.0	204.4	204.9	203.5	204.2	204.1	202.9	203.4	203.6	203.1	201.3
190	203.2	203.4	203.5	203.5	203.3	203.5	203.9	204.3	203.0	203.6	203.6	202.4	202.9	203.1	202.5	200.8
191	202.7	202.9	203.0	203.0	202.8	202.9	203.3	203.8	202.5	203.1	203.0	201.9	202.4	202.5	202.0	200.2
192	202.2	202.3	202.4	202.4	202.3	202.4	202.8	203.3	201.9	202.6	202.5	201.4	201.8	202.0	201.5	199.7
193	201.7	201.8	201.9	201.9	201.8	201.9	202.3	202.7	201.4	202.1	202.0	200.8	201.3	201.5	201.0	199.2
194	201.1	201.3	201.4	201.4	201.2	201.3	201.7	202.2	200.9	201.5	201.4	200.3	200.8	201.0	200.4	198.7
195	200.6	200.7	200.8	200.8	200.7	200.8	201.2	201.7	200.3	201.0	200.9	199.8	200.3	200.4	199.9	198.2
196	200.1	200.2	200.3	200.3	200.2	200.3	200.7	201.1	199.8	200.5	200.4	199.3	199.7	199.9	199.4	197.6
197	199.5	199.7	199.8	199.8	199.6	199.8	200.1	200.6	199.3	199.9	199.8	198.7	199.2	199.4	198.9	197.1
198	199.0	199.1	199.2	199.3	199.1	199.2	199.6	200.1	198.8	199.4	199.3	198.2	198.7	198.9	198.3	196.6
199	198.5	198.6	198.7	198.7	198.6	198.7	199.1	199.5	198.2	198.9	198.8	197.7	198.1	198.3	197.8	196.1
200	197.9	198.1	198.2	198.2	198.0	198.2	198.5	199.0	197.7	198.3	198.2	197.1	197.6	197.8	197.3	195.6
201	197.7	197.8	197.9	198.0	197.8	197.9	198.3	198.8	197.5	198.1	198.0	196.9	197.4	197.6	197.1	195.3
202	197.5	197.6	197.7	197.7	197.6	197.7	198.1	198.5	197.2	197.9	197.8	196.7	197.1	197.3	196.8	195.1
203	197.2	197.4	197.5	197.5	197.3	197.5	197.8	198.3	197.0	197.6	197.6	196.4	196.9	197.1	196.6	194.9
204	197.0	197.1	197.2	197.3	197.1	197.2	197.6	198.1	196.8	197.4	197.3	196.2	196.7	196.9	196.4	194.6
205	196.8	196.9	197.0	197.0	196.9	197.0	197.4	197.8	196.5	197.2	197.1	196.0	196.4	196.6	196.1	194.4
206	196.5	196.7	196.8	196.8	196.6	196.8	197.1	197.6	196.3	196.9	196.9	195.7	196.2	196.4	195.9	194.2
207	196.3	196.4	196.5	196.6	196.4	196.5	196.9	197.4	196.1	196.7	196.6	195.5	196.0	196.2	195.7	193.9
208	196.1	196.2	196.3	196.3	196.2	196.3	196.7	197.1	195.8	196.5	196.4	195.3	195.7	195.9	195.4	193.7
209	195.8	196.0	196.1	196.1	195.9	196.1	196.4	196.9	195.6	196.2	196.2	195.0	195.5	195.7	195.2	193.5
210	195.6	195.7	195.8	195.9	195.7	195.8	196.2	196.7	195.4	196.0	195.9	194.8	195.3	195.5	195.0	193.2
211	195.4	195.5	195.6	195.6	195.5	195.6	196.0	196.4	195.1	195.8	195.7	194.6	195.0	195.2	194.7	193.0
212	195.1	195.3	195.4	195.4	195.2	195.4	195.7	196.2	194.9	195.5	195.5	194.4	194.8	195.0	194.5	192.8
213	194.9	195.0	195.1	195.2	195.0	195.1	195.5	196.0	194.7	195.3	195.2	194.1	194.6	194.8	194.3	192.5
214	194.7	194.8	194.9	194.9	194.8	194.9	195.3	195.7	194.4	195.1	195.0	193.9	194.3	194.5	194.0	192.3
215	194.4	194.6	194.7	194.7	194.5	194.7	195.0	195.5	194.2	194.8	194.8	193.7	194.1	194.3	193.8	192.1
216	194.2	194.3	194.4	194.5	194.3	194.4	194.8	195.3	194.0	194.6	194.5	193.4	193.9	194.1	193.6	191.8
217	194.0	194.1	194.2	194.2	194.1	194.2	194.6	195.0	193.7	194.4	194.3	193.2	193.6	193.8	193.3	191.6
218	193.7	193.9	194.0	194.0	193.8	194.0	194.3	194.8	193.5	194.1	194.1	193.0	193.4	193.6	193.1	191.4
219	193.5	193.6	193.7	193.8	193.6	193.7	194.1	194.6	193.3	193.9	193.8	192.7	193.2	193.4	192.9	191.1
220	193.3	193.4	193.5	193.5	193.4	193.5	193.9	194.3	193.0	193.7	193.6	192.5	192.9	193.1	192.6	190.9
221	193.0	193.2	193.3	193.3	193.1	193.3	193.6	194.1	192.8	193.4	193.4	192.3	192.7	192.9	192.4	190.7
222	192.8	192.9	193.1	193.0	192.9	193.0	193.4	193.8	192.6	193.2	193.1	192.0	192.5	192.7	192.2	190.5
223	192.6	192.7	192.8	192.8	192.7	192.8	193.2	193.6	192.3	193.0	192.9	191.8	192.2	192.4	191.9	190.2
224	192.3	192.5	192.6	192.6	192.4	192.6	192.9	193.4	192.1	192.8	192.7	191.6	192.0	192.2	191.7	190.0
225	192.1	192.2	192.4	192.3	192.2	192.3	192.7	193.1	191.9	192.5	192.4	191.3	191.8	192.0	191.5	189.8
226	191.9	192.0	192.1	192.1	192.0	192.1	192.5	192.9	191.6	192.3	192.2	191.1	191.5	191.7	191.2	189.5
227	191.6	191.8	191.9	191.9	191.7	191.9	192.2	192.7	191.4	192.1	192.0	190.9	191.3	191.5	191.0	189.3
228	191.4	191.5	191.7	191.6	191.5	191.6	192.0	192.4	191.2	191.8	191.7	190.6	191.1	191.3	190.8	189.1
229	191.2	191.3	191.4	191.4	191.3	191.4	191.7	192.2	190.9	191.6	191.5	190.4	190.9	191.0	190.5	188.8
230	190.9	191.1	191.2	191.2	191.0	191.2	191.5	192.0	190.7	191.4	191.3	190.2	190.6	190.8	190.3	188.6
231	190.7	190.8	191.0	190.9	190.8	190.9	191.3	191.7	190.5	191.1	191.0	189.9	190.4	190.6	190.1	188.4
232	190.5	190.6	190.7	190.7	190.6	190.7	191.0	191.5	190.2	190.9	190.8	189.7	190.2	190.3	189.8	188.1
233	190.2	190.4	190.5	190.5	190.3	190.5	190.8	191.3	190.0	190.7	190.6	189.5	189.9	190.1	189.6	187.9
234	190.0	190.1	190.3	190.2	190.1	190.2	190.6	191.0	189.8	190.4	190.3	189.2	189.7	189.9	189.4	187.7
235	189.8	189.9	190.0	190.0	189.9	190.0	190.3	190.8	189.5	190.2	190.1	189.0	189.5	189.6	189.1	187.4
236	189.5	189.7	189.8	189.8	189.6	189.8	190.1	190.6	189.3	190.0	189.9	188.8	189.2	189.4	188.9	187.2
237	189.3	189.4	189.6	189.5	189.4	189.5	189.9	190.3	189.1	189.7	189.6	188.5	189.0	189.2	188.7	187.0
238	189.1	189.2	189.3	189.3	189.2	189.3	189.6	190.1	188.8	189.5	189.4	188.3	188.8	188.9	188.4	186.7
239	188.8	189.0	189.1	189.1	188.9	189.1	189.4	189.9	188.6	189.3	189.2	188.1	188.5	188.7	188.2	186.5
240	188.6	188.7	188.9	188.8	188.7	188.8	189.2	189.6	188.4	189.0	188.9	187.8	188.3	188.5	188.0	186.3

ANNUAL EXERCISE
1994 ANNUAL

TIME 0730 HRS. T=0

(CLOCK) (SCENARIO)



RCS PRESSURE 2152.1

AVG 5 HI INCORE 615.0

INCORE READOUT

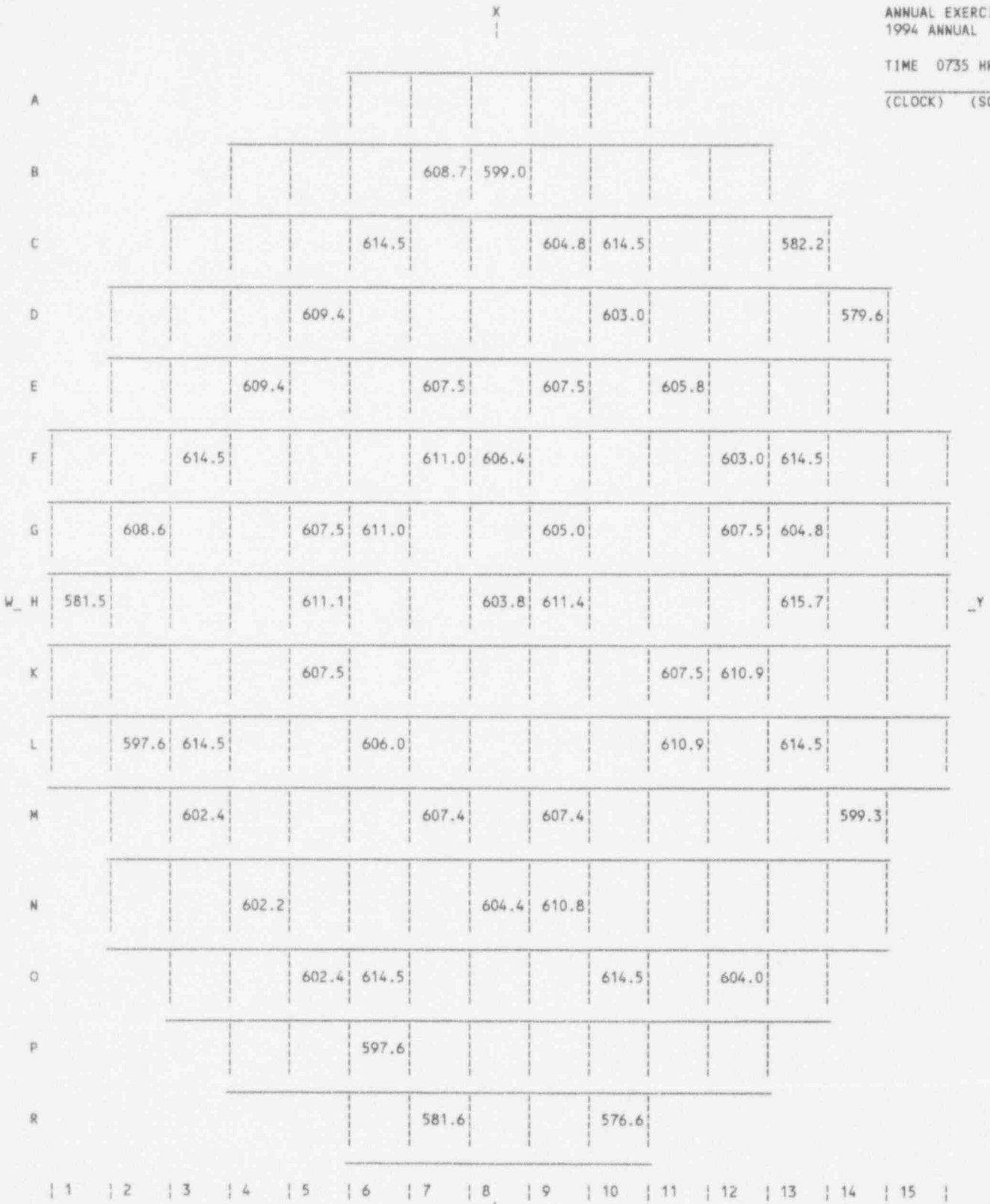
INCORE T/C SCM 32.2

0 HR 0 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0735 HRS. T=5

(CLOCK) (SCENARIO)



RCS PRESSURE 2150.5

AVG 5 HI INCORE 615.0

INCORE READOUT

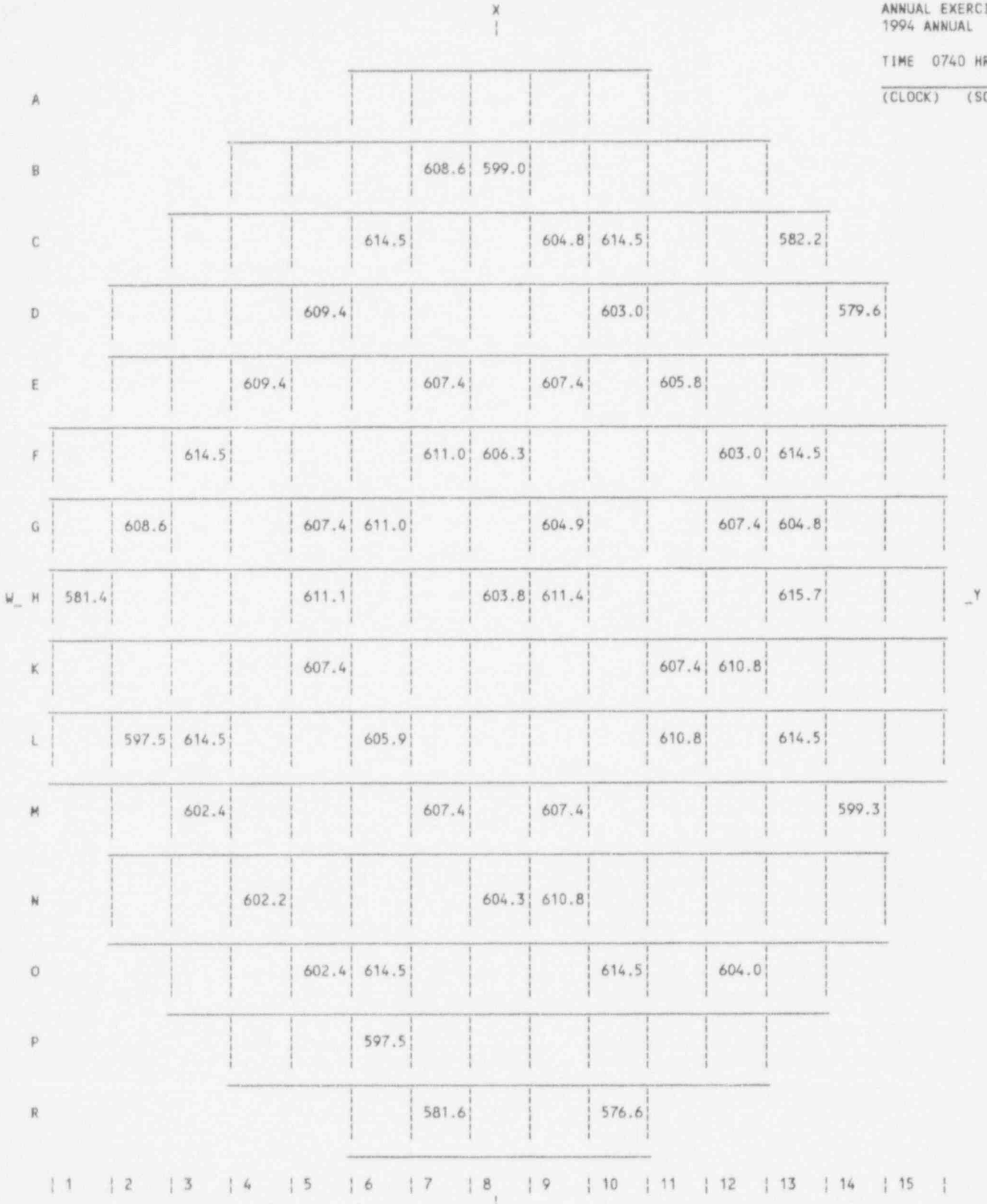
INCORE T/C SCN 32.1

0 HR 5 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0740 HRS. T=10

(CLOCK) (SCENARIO)



RCS PRESSURE 2147.6

INCORE READOUT

AVG 5 HI INCORE 614.8

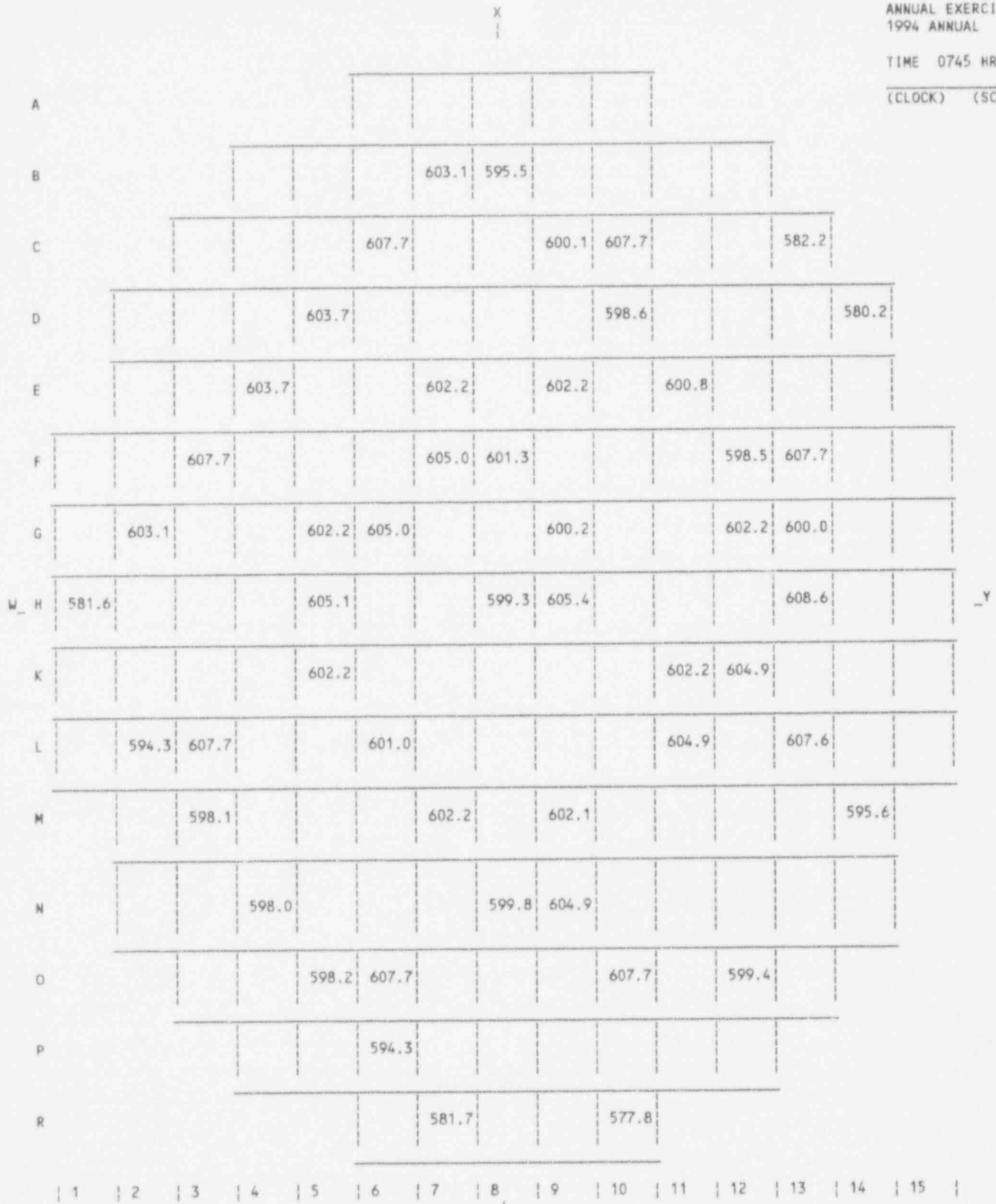
INCORE T/C SCM 32.2

0 HR 10 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0745 HRS. T=15

(CLOCK) (SCENARIO)



RCS PRESSURE 2177.9

INCORE READOUT

AVG 5 HI INCORE 608.1

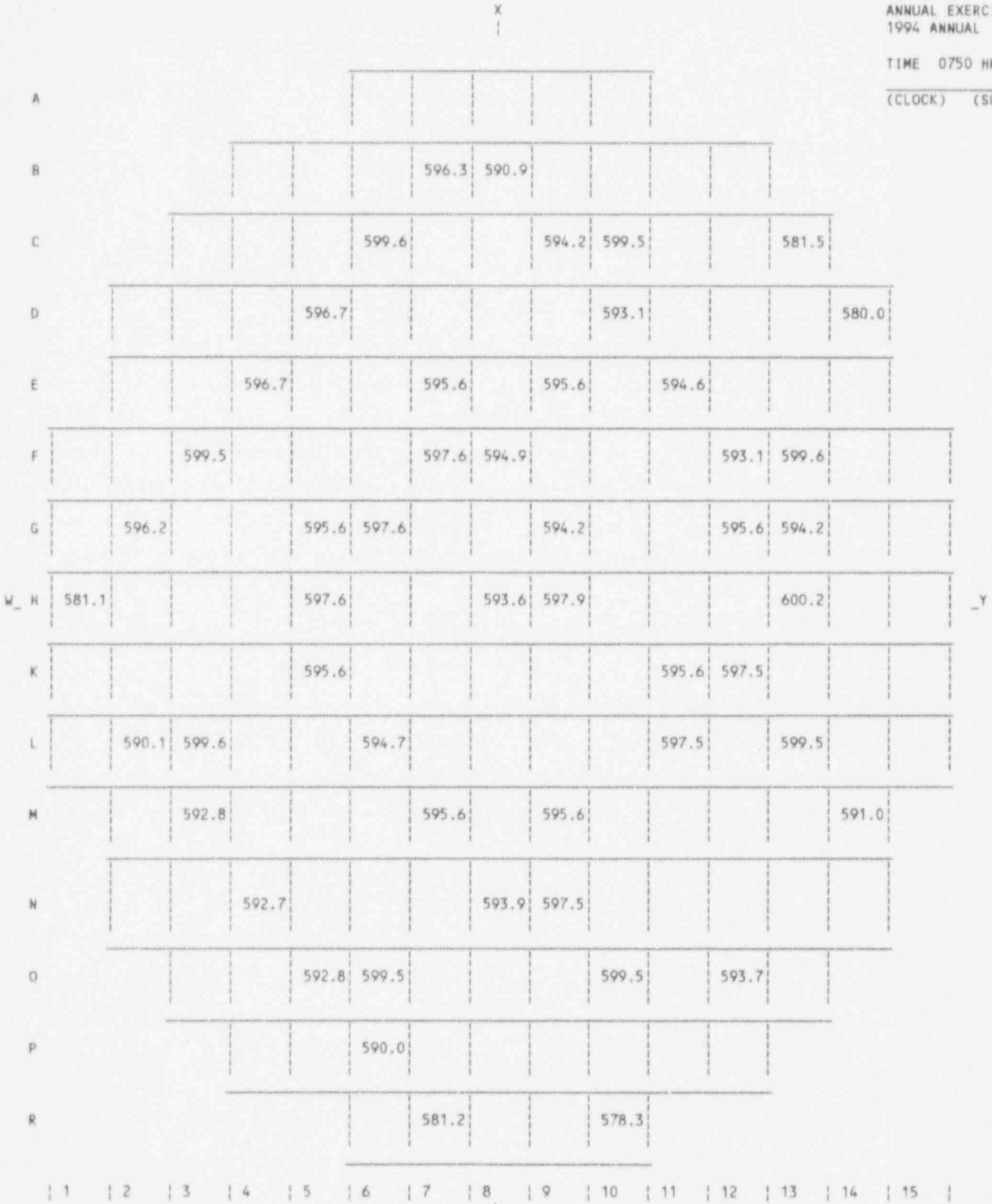
INCORE T/C SCM 40.9

0 HR 15 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0750 HRS. T=20

(CLOCK) (SCENARIO)



RCS PRESSURE 2138.6

AVG 5 HI INCORE 599.9

INCORE READOUT

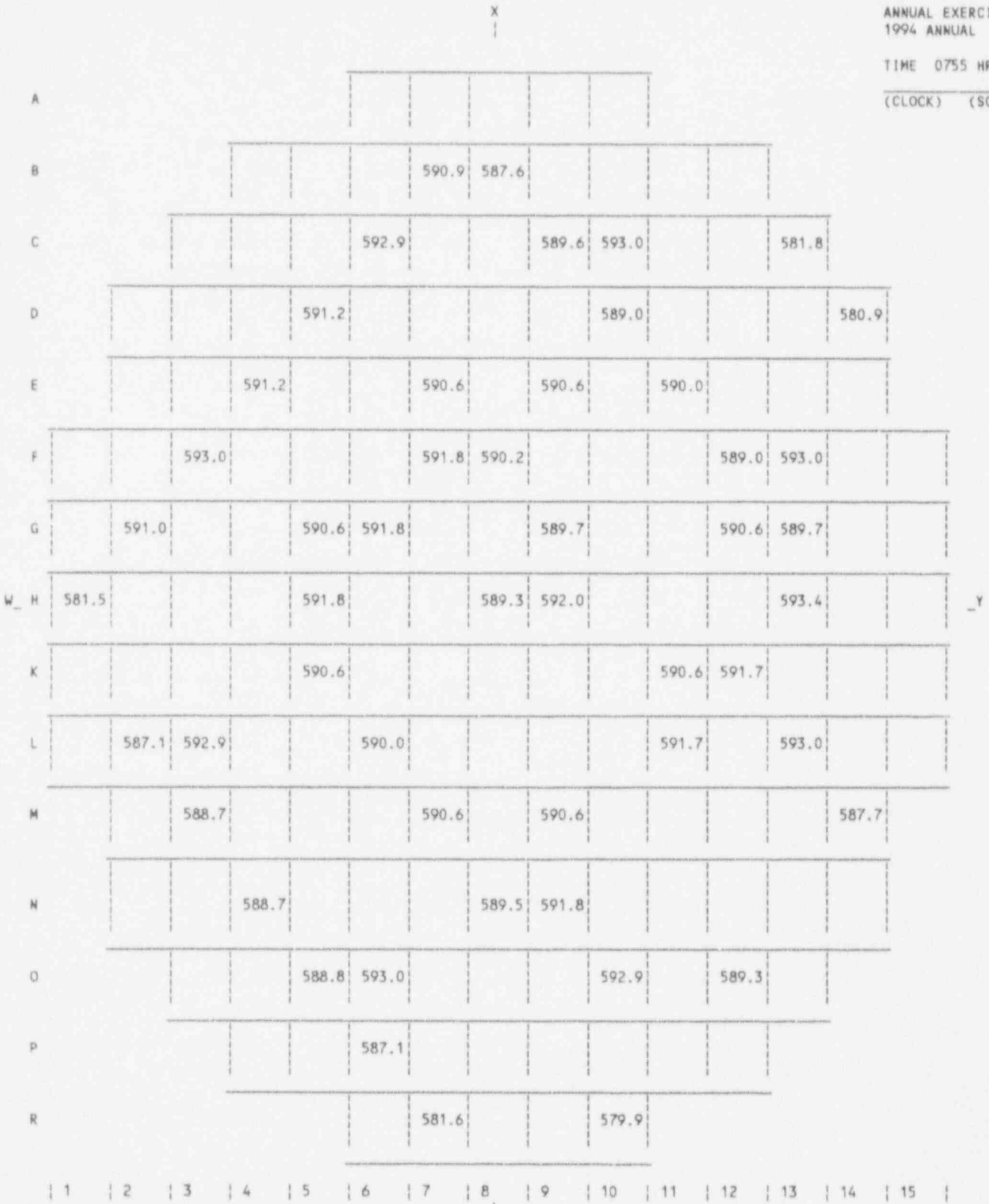
INCORE T/C SCM 46.5

0 HR 20 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0755 HRS. T=25

(CLOCK) (SCENARIO)

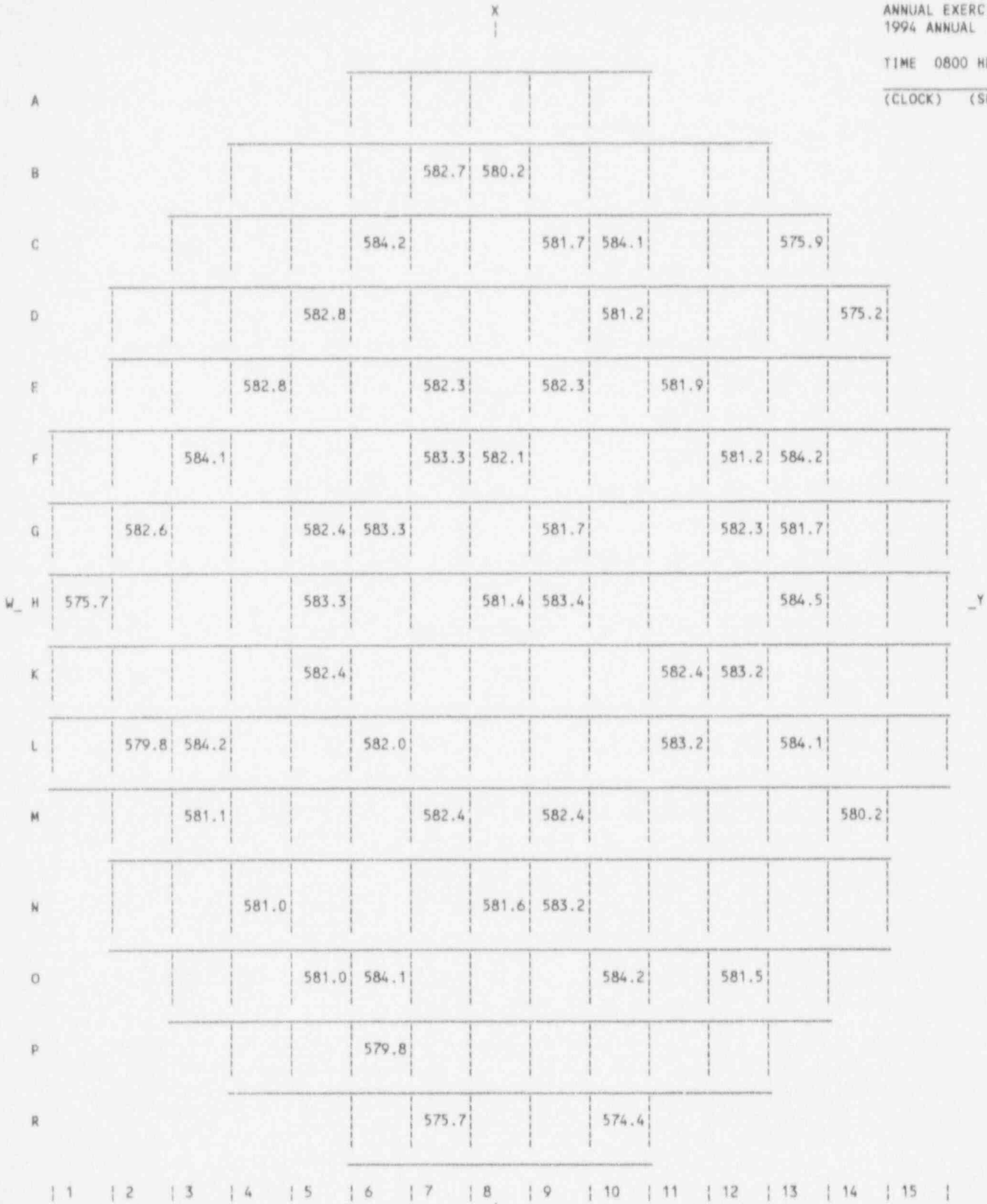


0 HR 25 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0800 HRS. T=30

(CLOCK) (SCENARIO)



RCS PRESSURE 2109.9

INCORE READOUT

AVG 5 HI INCORE 584.3

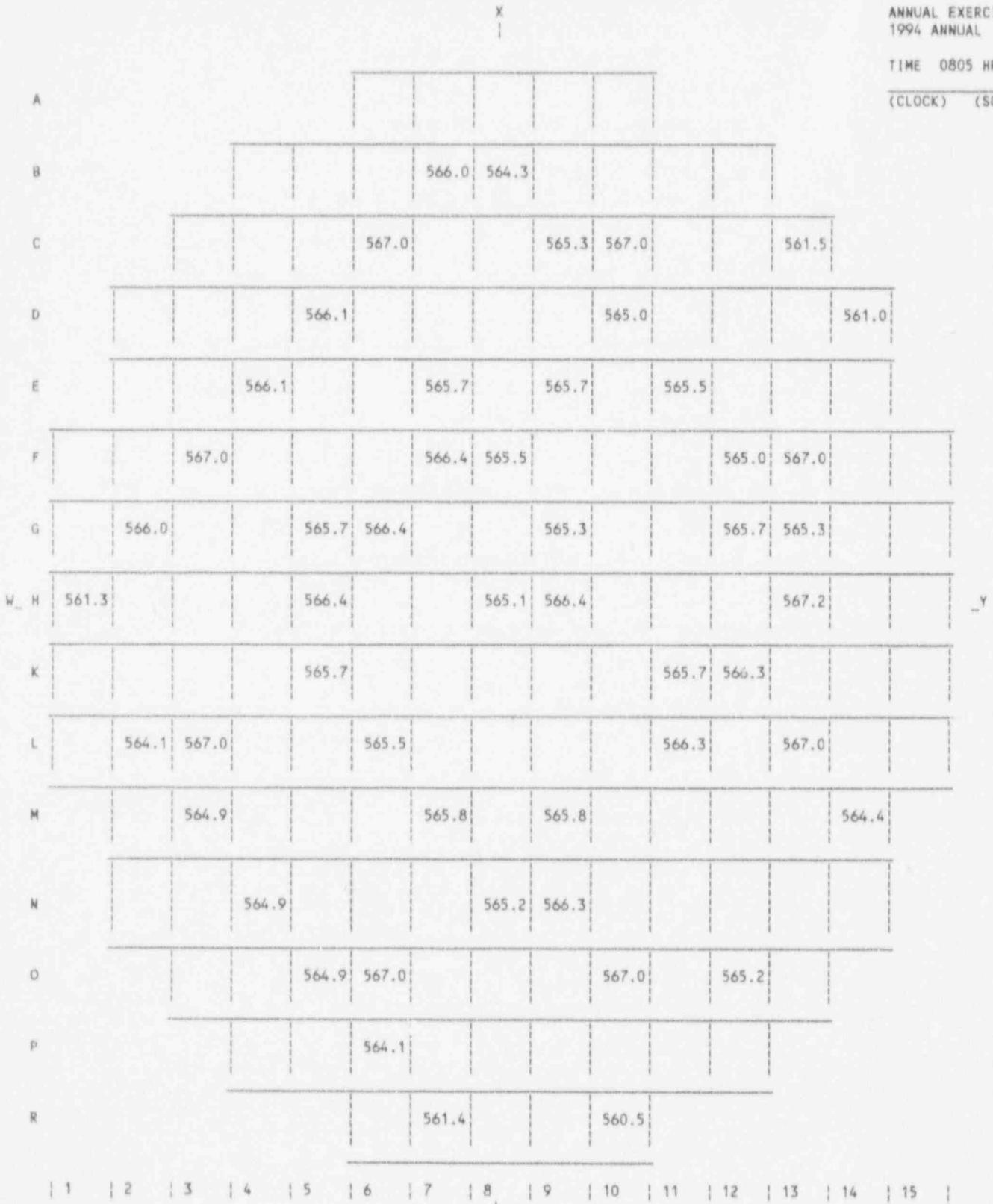
INCORE T/C SCM 60.1

0 HR 30 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0805 HRS. T=35

(CLOCK) (SCENARIO)



RCS PRESSURE 2113.4

AVG 5 HI INCORE 567.0

INCORE READOUT

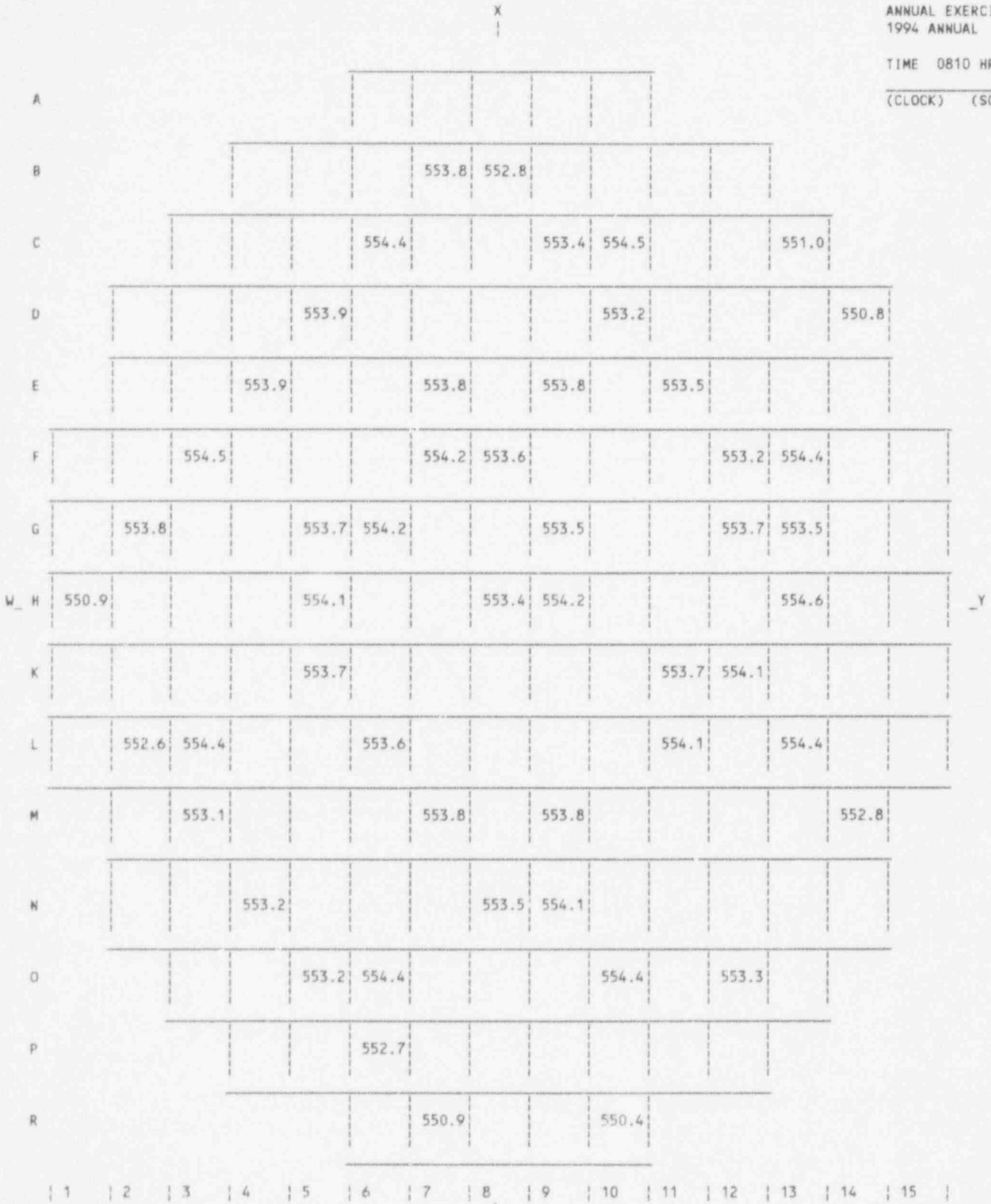
INCORE T/C SCM 77.6

0 HR 35 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0810 HRS. T=40

(CLOCK) (SCENARIO)



RCS PRESSURE 2099.8

INCORE READOUT

AVG 5 HI INCORE 554.5

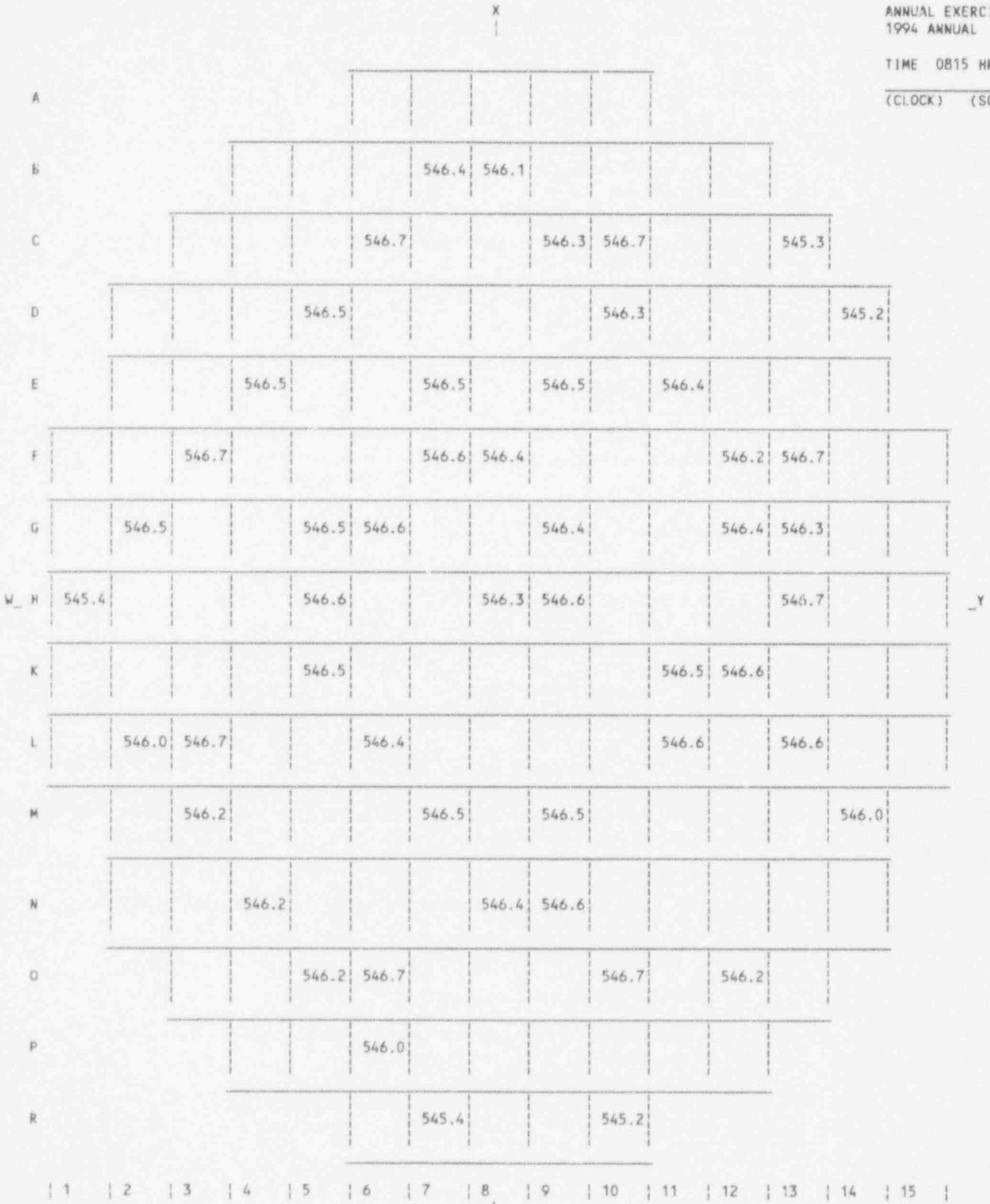
INCORE T/C SCM 89.2

0 HR 40 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0815 HRS. T=45

(CLOCK) (SCENARIO)



RCS PRESSURE 2151.2

INCORE READOUT

AVG 5 HI INCORE 546.7

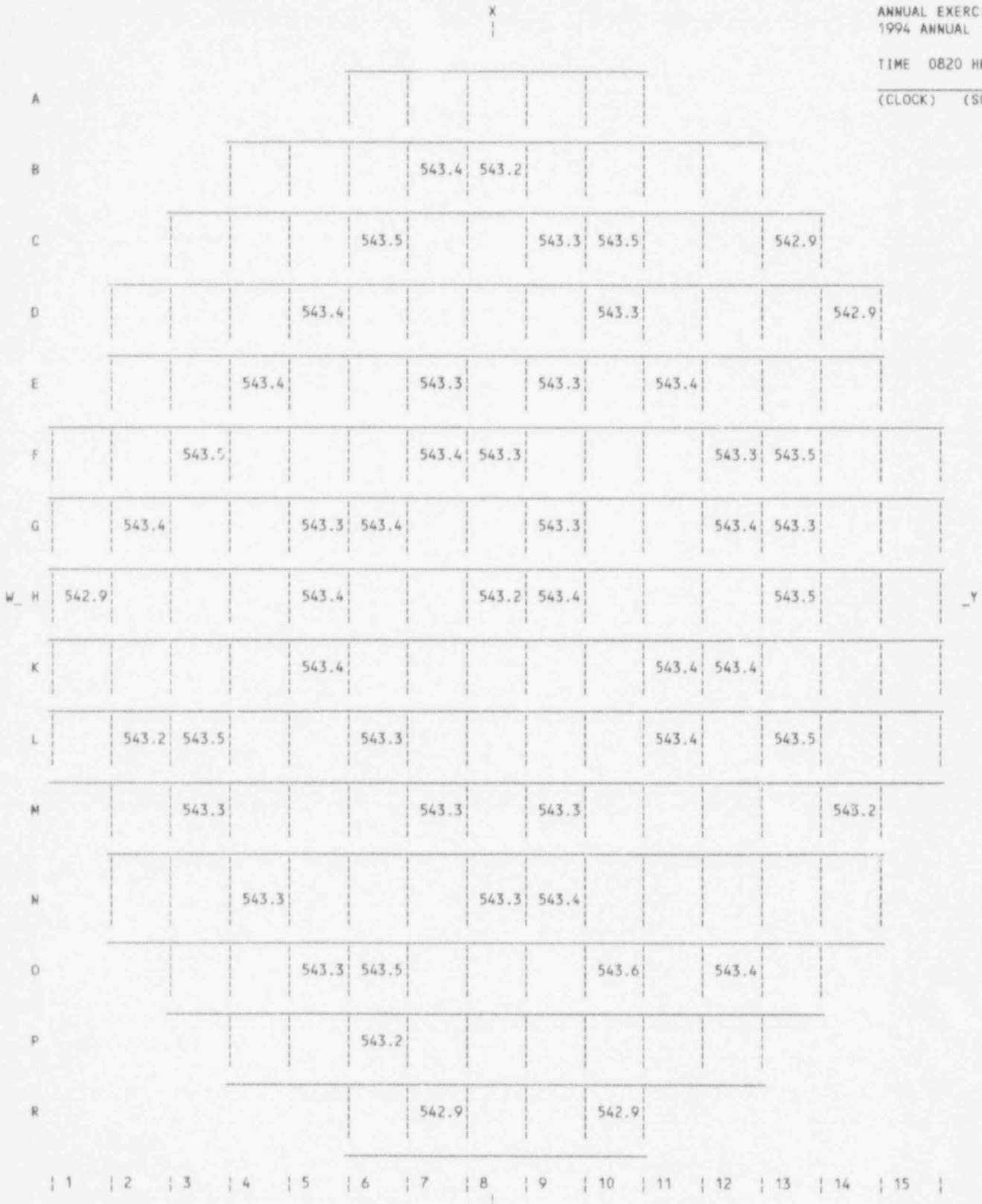
INCORE T/C SCM 100.5

0 HR 45 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0820 HRS. T=50

(CLOCK) (SCENARIO)



RCS PRESSURE 2017.0

AVG 5 HI INCORE 543.6

INCORE READOUT

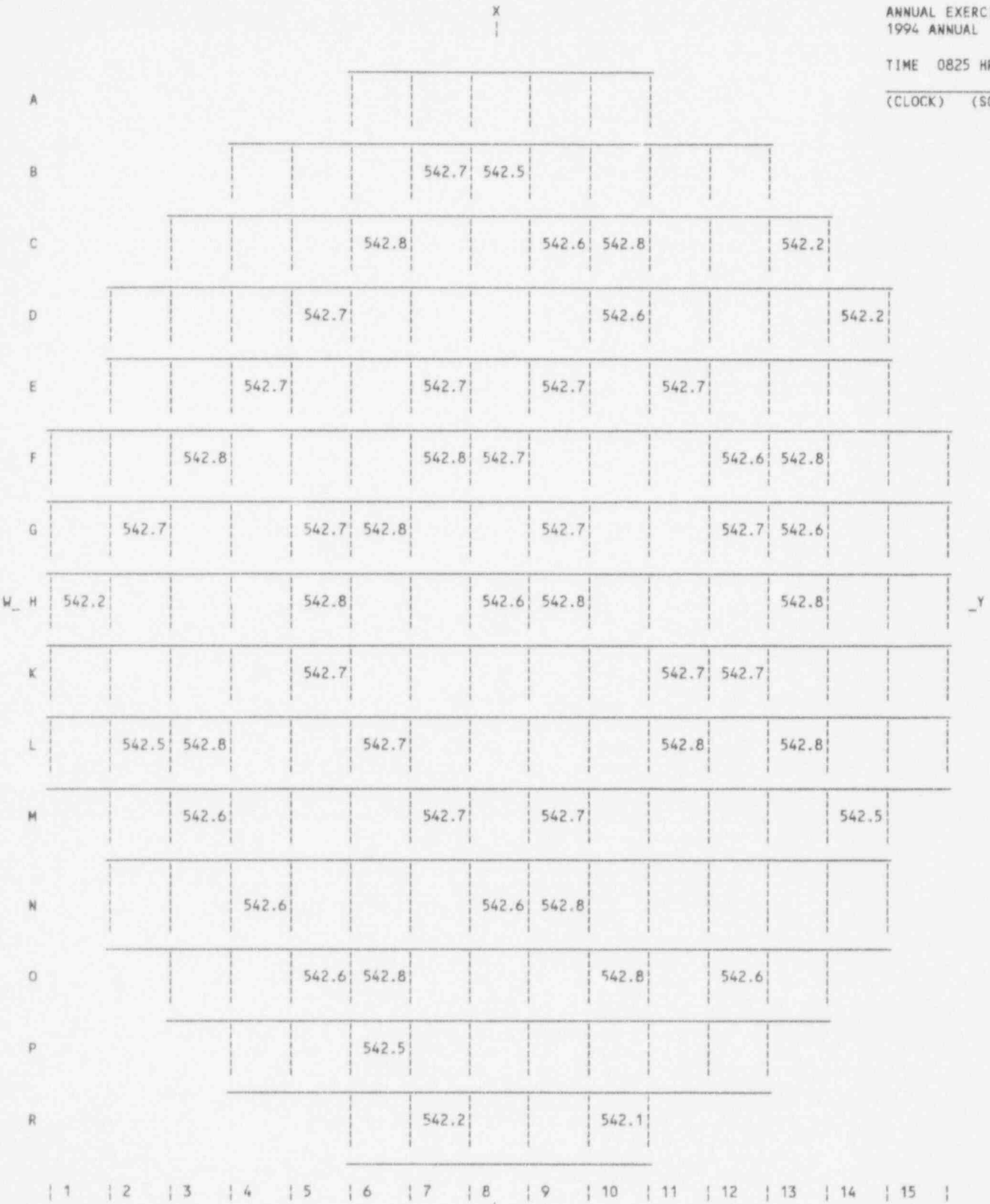
INCORE T/C SCM 94.5

0 HR 50 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0825 HRS. T=55

(CLOCK) (SCENARIO)



RCS PRESSURE 1563.3

AVG 5 HI INCORE 542.8

INCORE READOUT

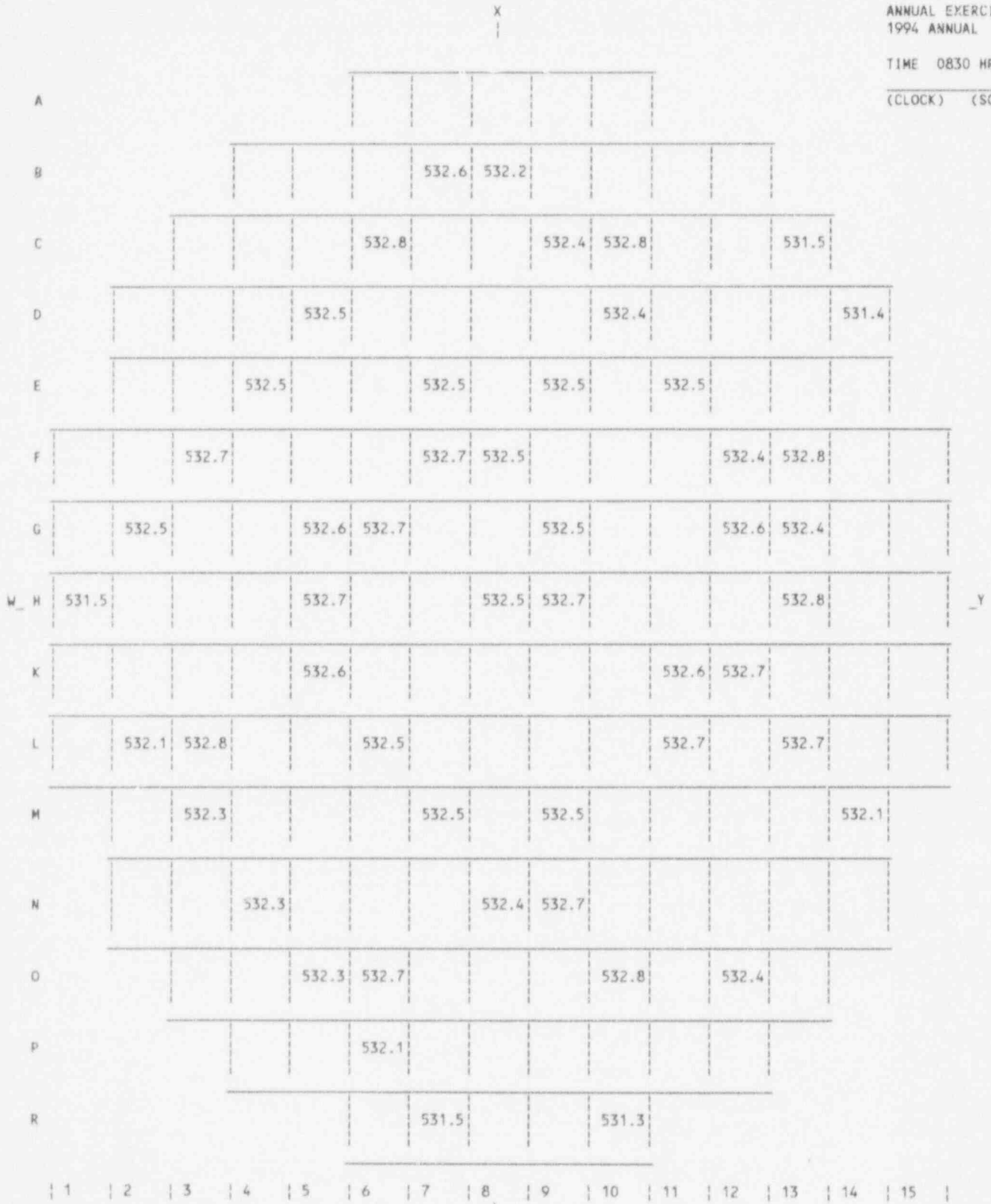
INCORE T/C SCM 60.2

0 HR 55 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0830 HRS. T=60

(CLOCK) (SCENARIO)



RCS PRESSURE 1341.2

AVG 5 HI INCORE 532.8

INCORE READOUT

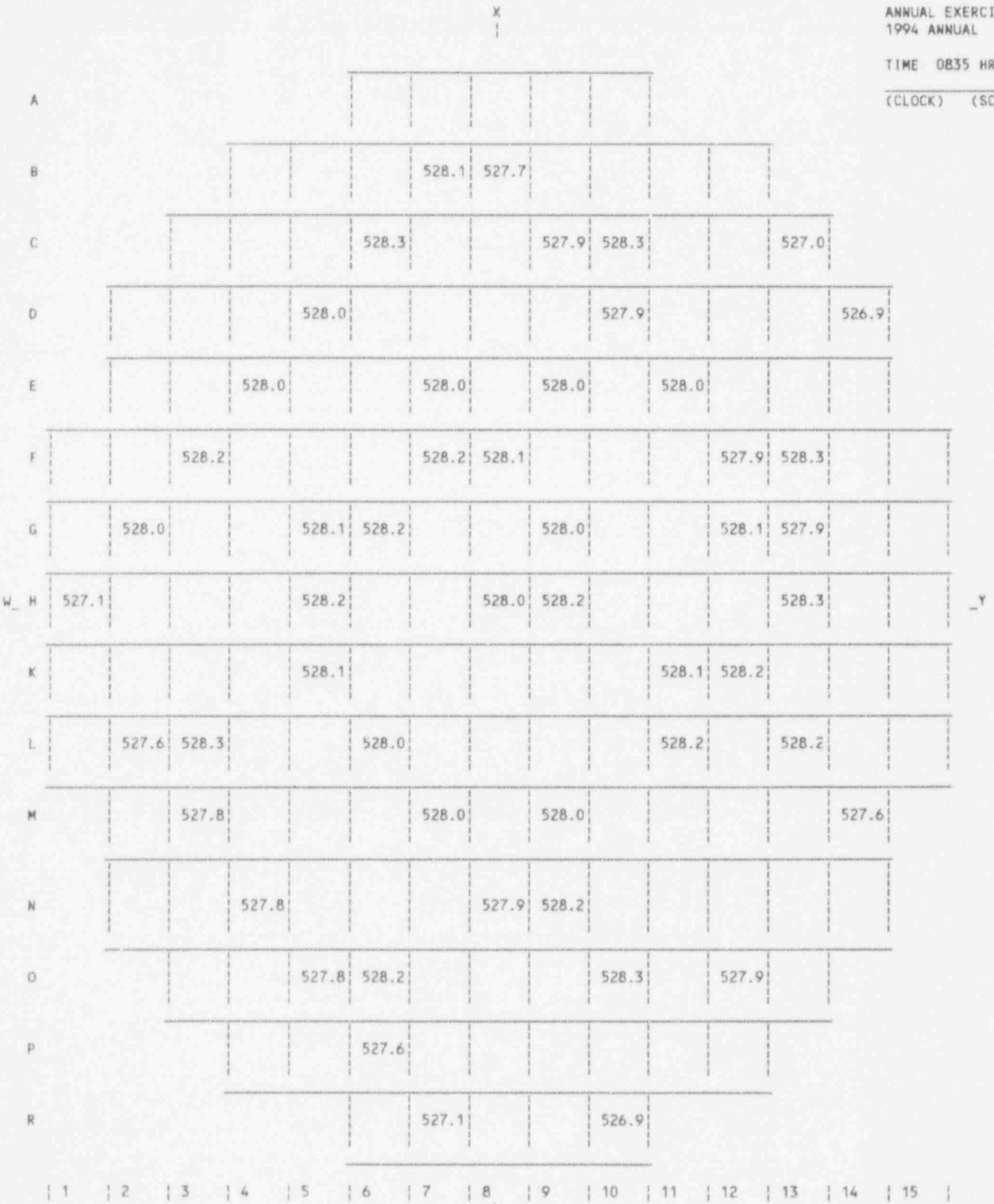
INCORE T/C SCM 50.1

1 HR 0 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0835 HRS. T=65

(CLOCK) (SCENARIO)



RCS PRESSURE 1277.1

INCORE READOUT

AVG 5 HI INCORE 528.3

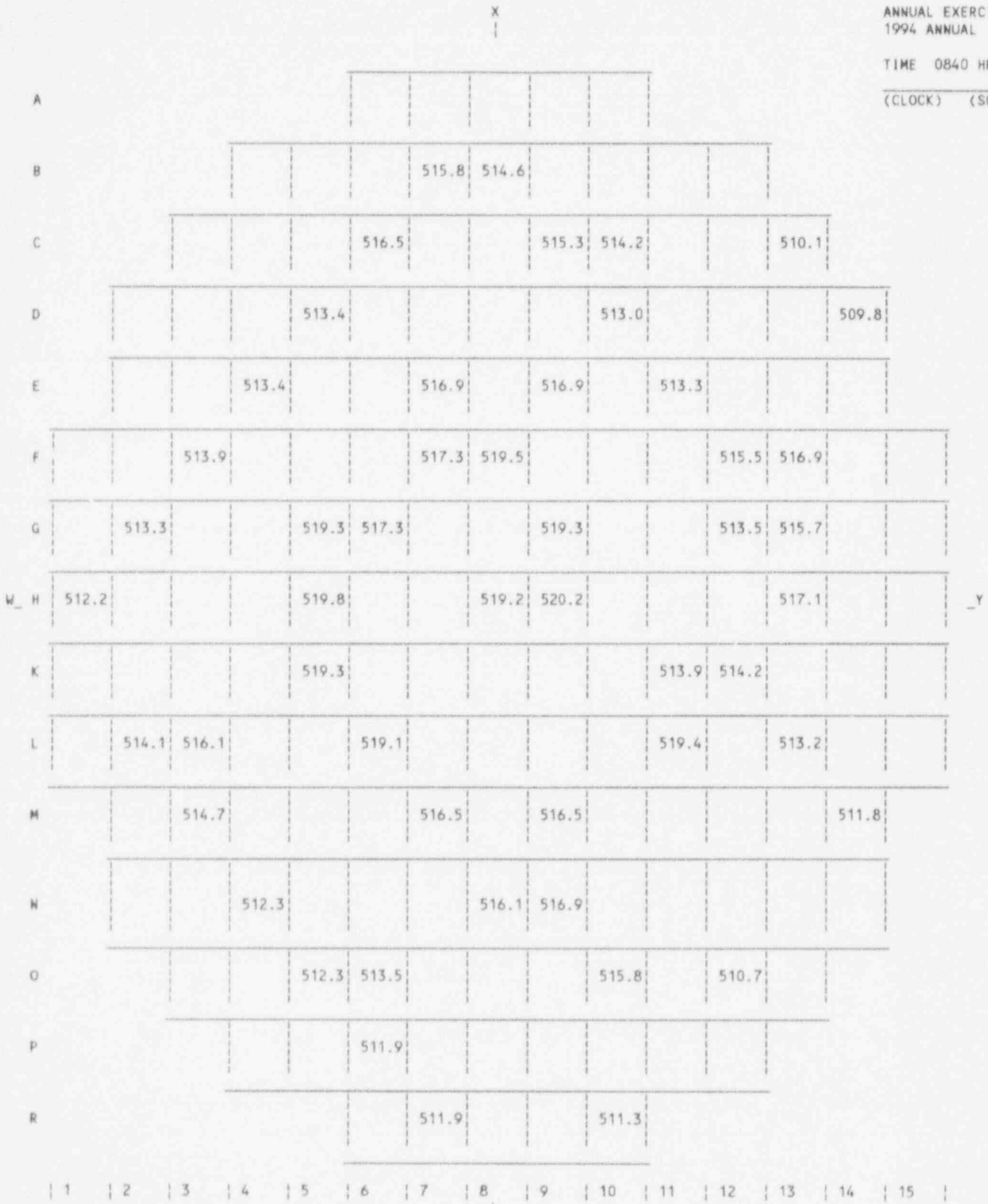
INCORE T/C SCM 48.3

1 HR 5 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0840 HRS. T=70

(CLOCK) (SCENARIO)



RCS PRESSURE 1144.8

INCORE READOUT

AVG 5 HI INCORE 519.6

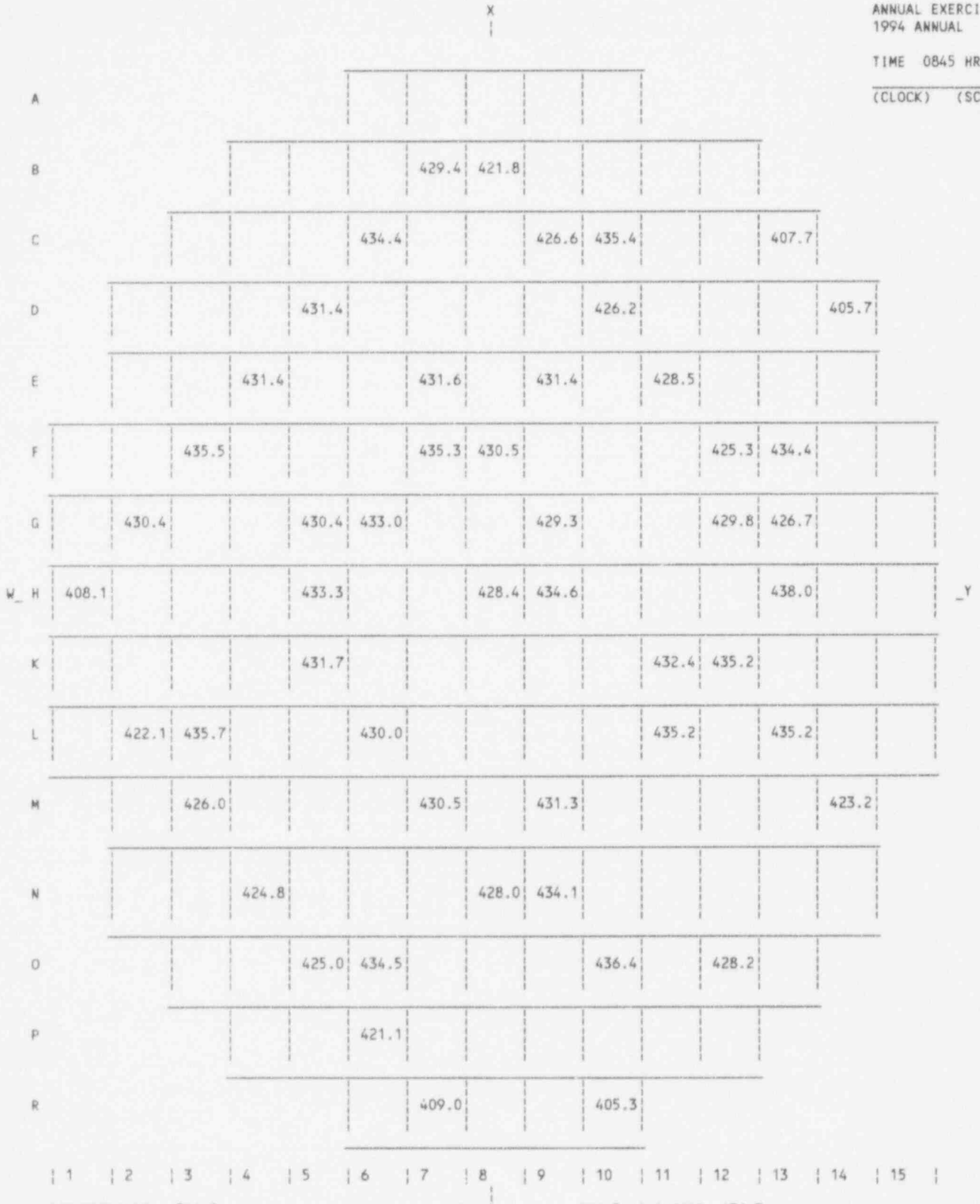
INCORE T/C SCM 43.2

1 HR 10 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0845 HRS. T=75

(CLOCK) (SCENARIO)



RCS PRESSURE 544.9

AVG 5 HI INCORE 436.3

INCORE READOUT

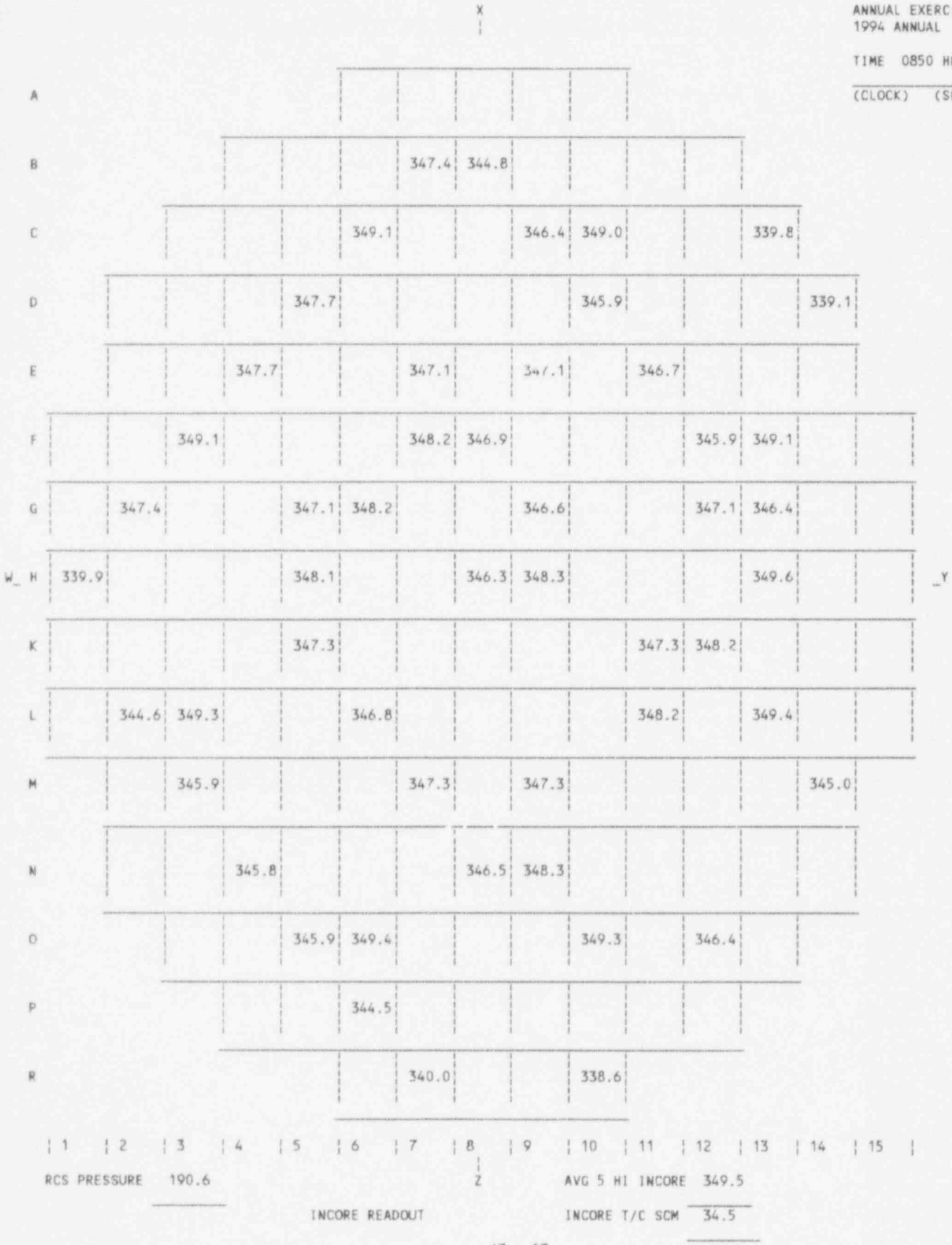
INCORE T/C SCM 42.5

1 HR 15 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0850 HRS. T=80

(CLOCK) (SCENARIO)

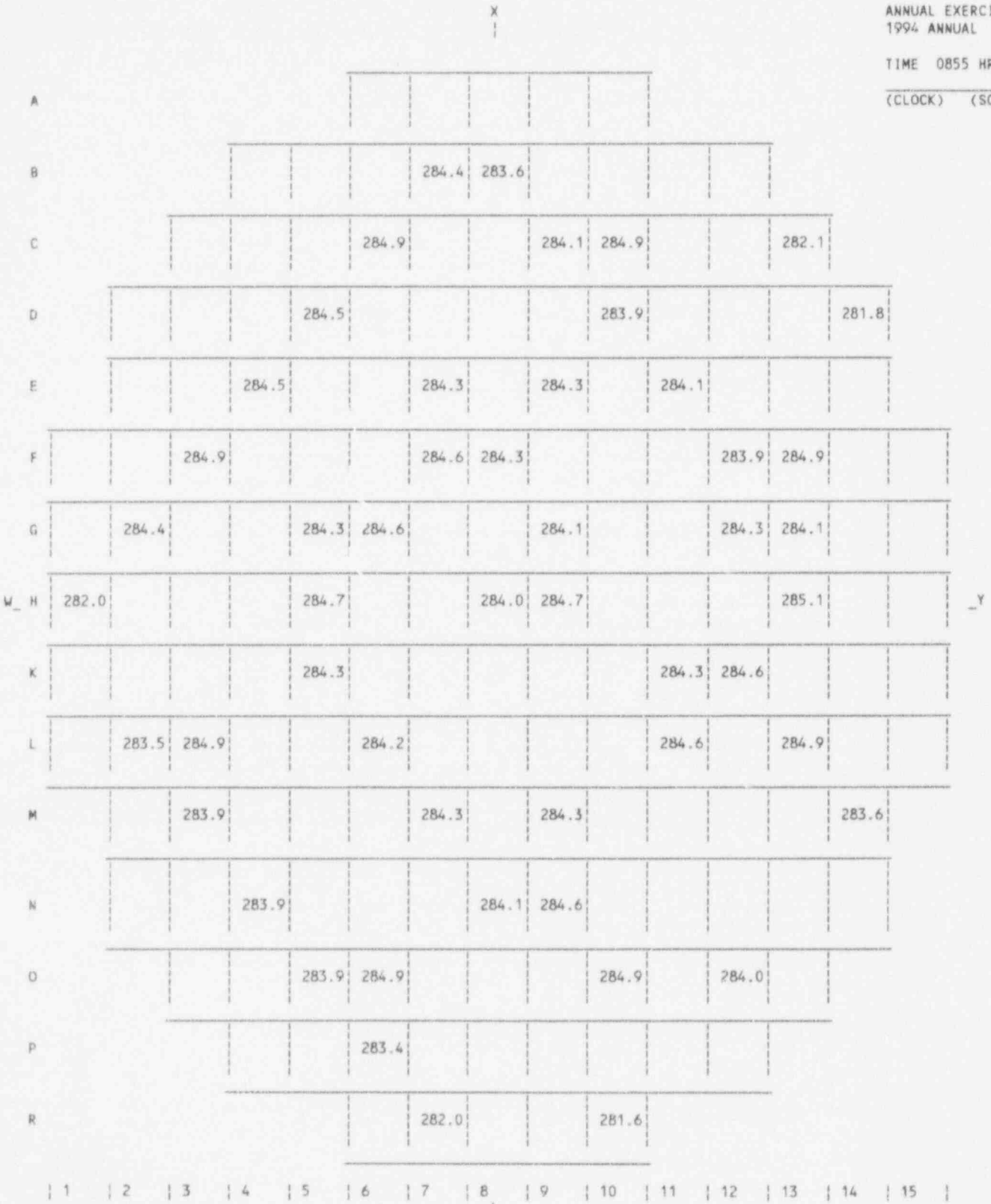


1 HR 20 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0855 HRS. T=85

(CLOCK) (SCENARIO)



RCS PRESSURE 172.8

AVG 5 HI INCORE 285.0

INCORE READOUT

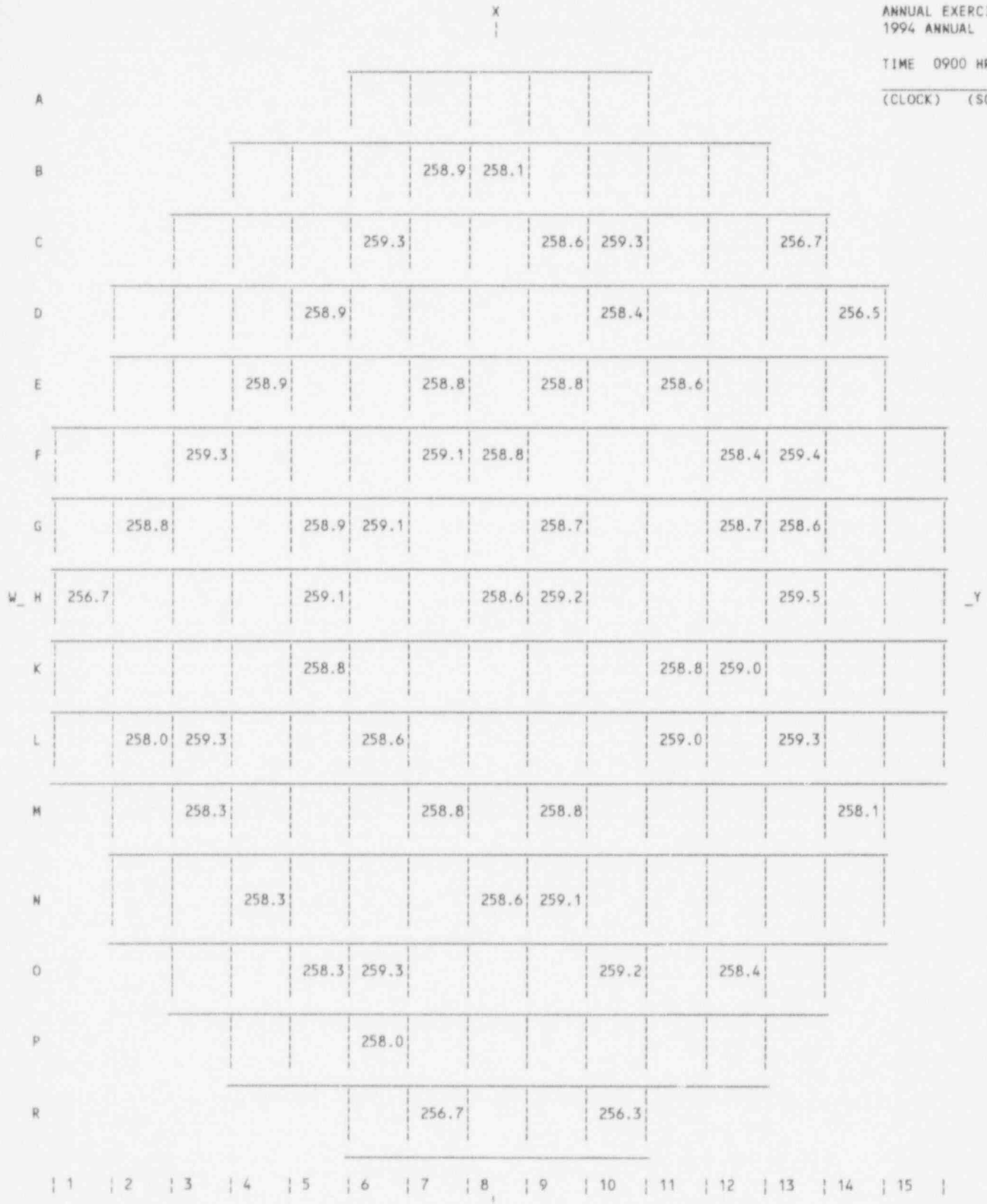
INCORE T/C SCM 91.5

1 HR 25 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0900 HRS. T=90

(CLOCK) (SCENARIO)



RCS PRESSURE 172.5

INCORE READOUT

AVG 5 HI INCORE 259.4

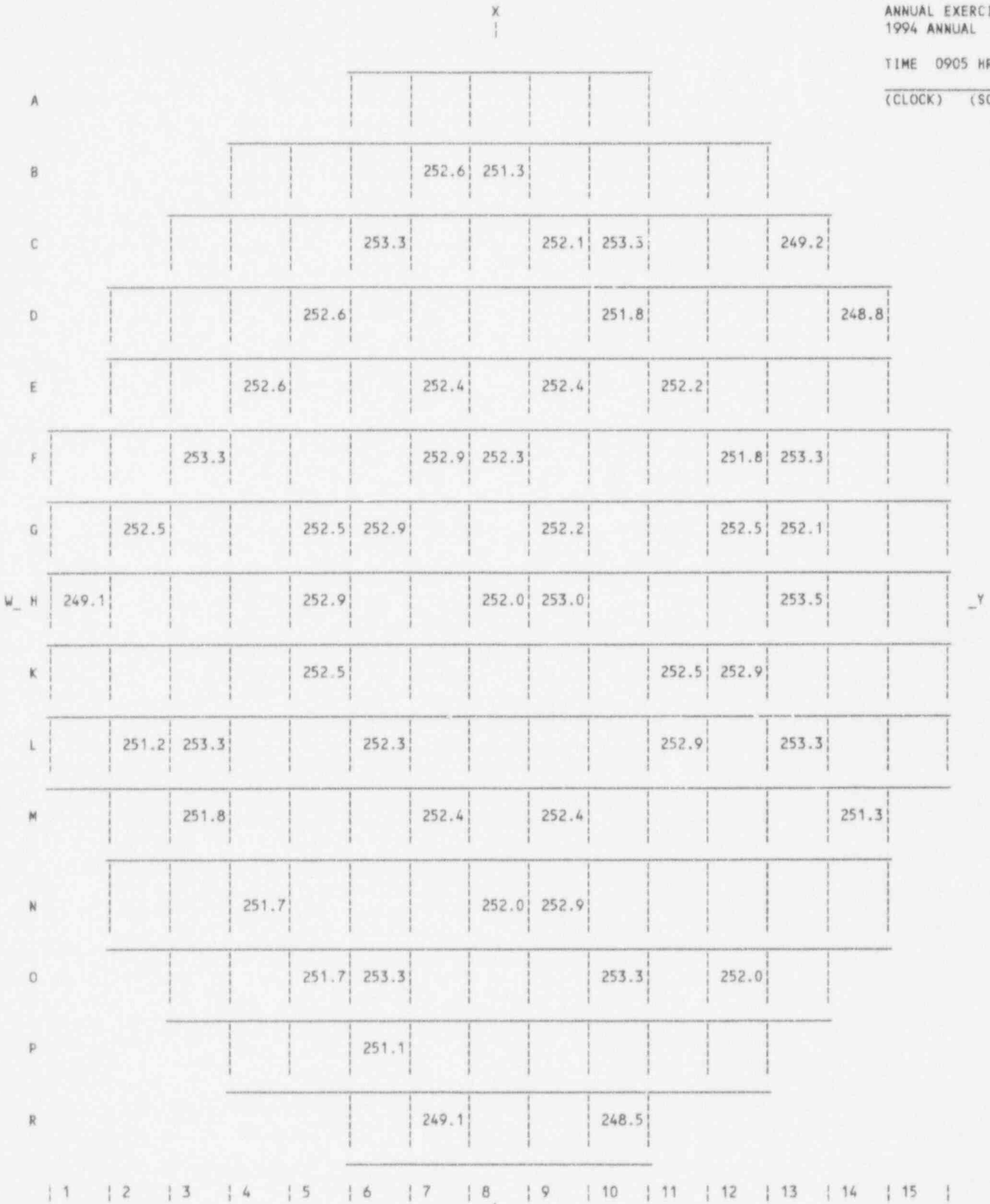
INCORE T/C SCM 116.9

1 HR 30 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0905 HRS. T=95

(CLOCK) (SCENARIO)



RCS PRESSURE 175.0

AVG 5 HI INCORE 253.4

INCORE READOUT

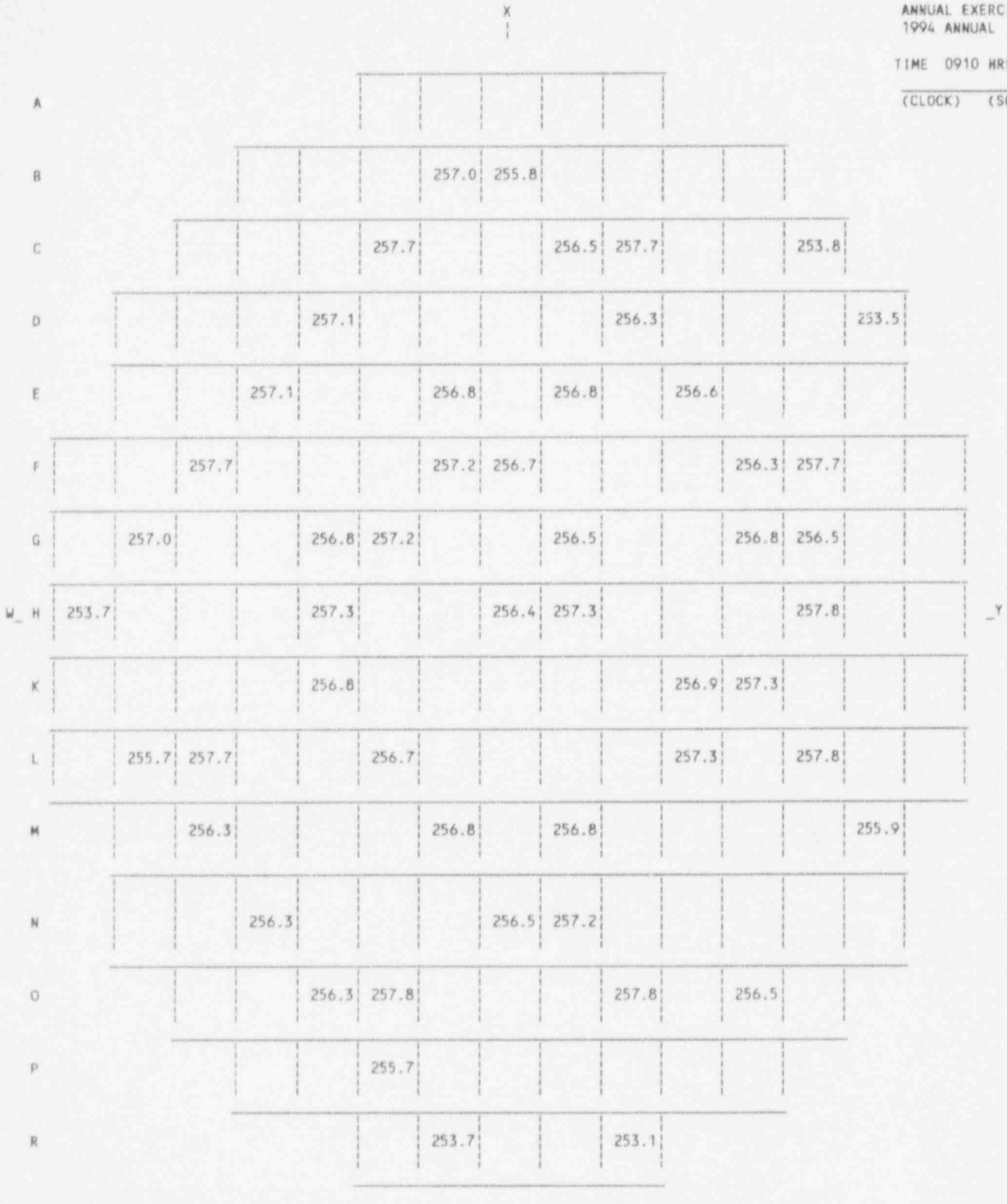
INCORE T/C SCM 124.0

1 HR 35 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0910 HRS. T=100

(CLOCK) (SCENARIO)



RCS PRESSURE 131.2

AVG 5 HI INCORE 257.8

INCORE READOUT

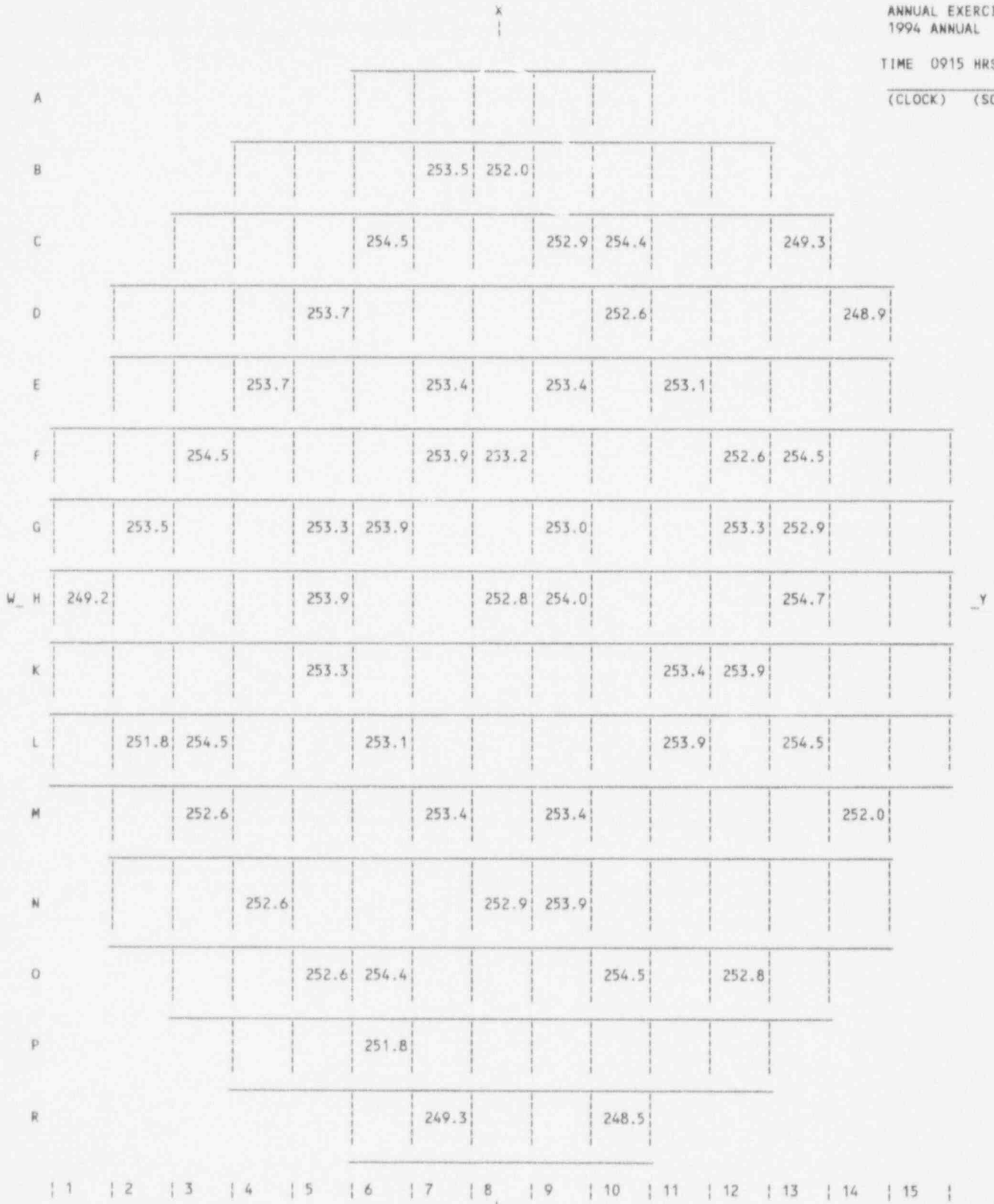
INCORE T/C SCM 98.4

1 HR 40 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0915 HRS. T=105

(CLOCK) (SCENARIO)

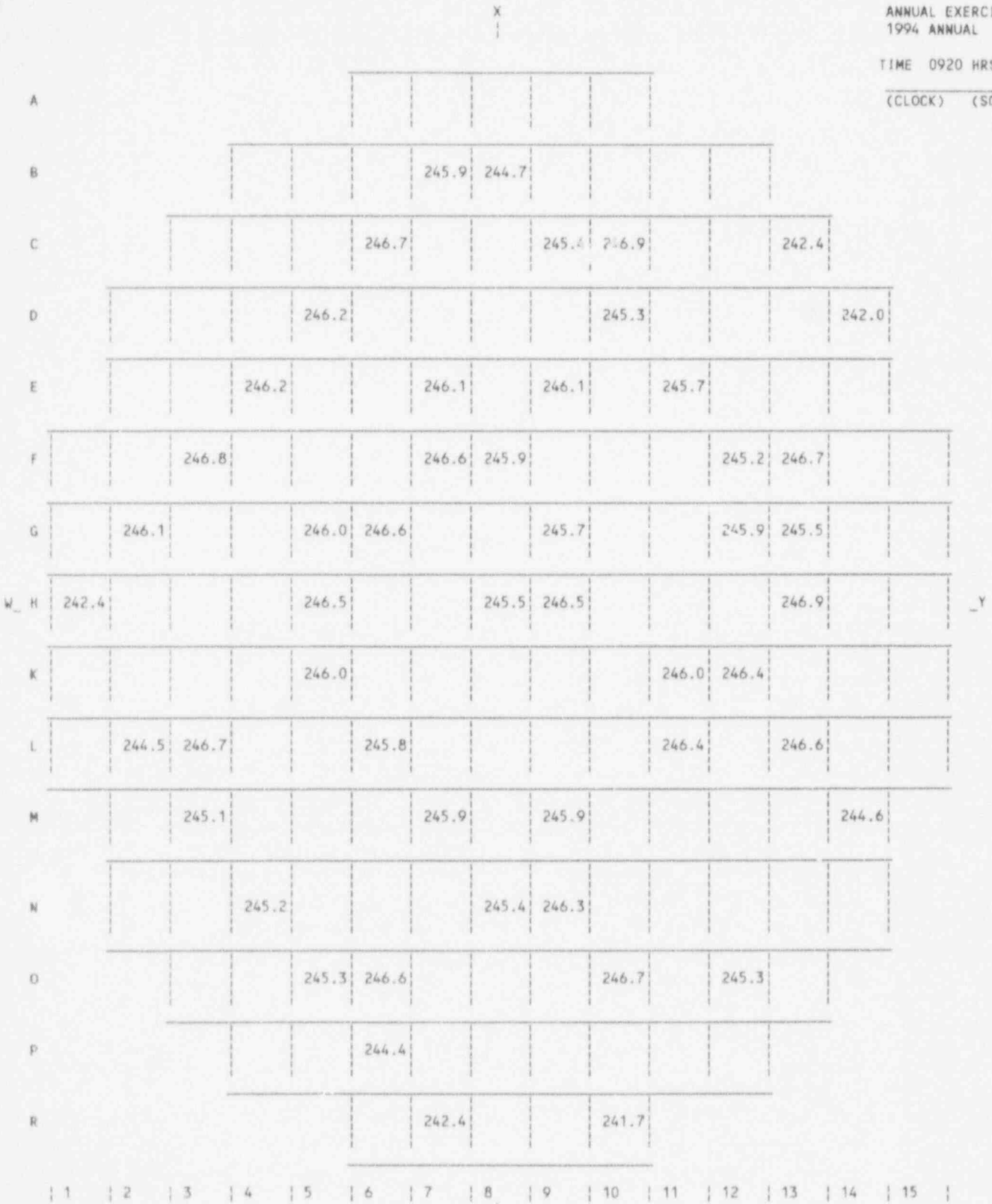


1 HR 45 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0920 HRS. T=110

(CLOCK) (SCENARIO)

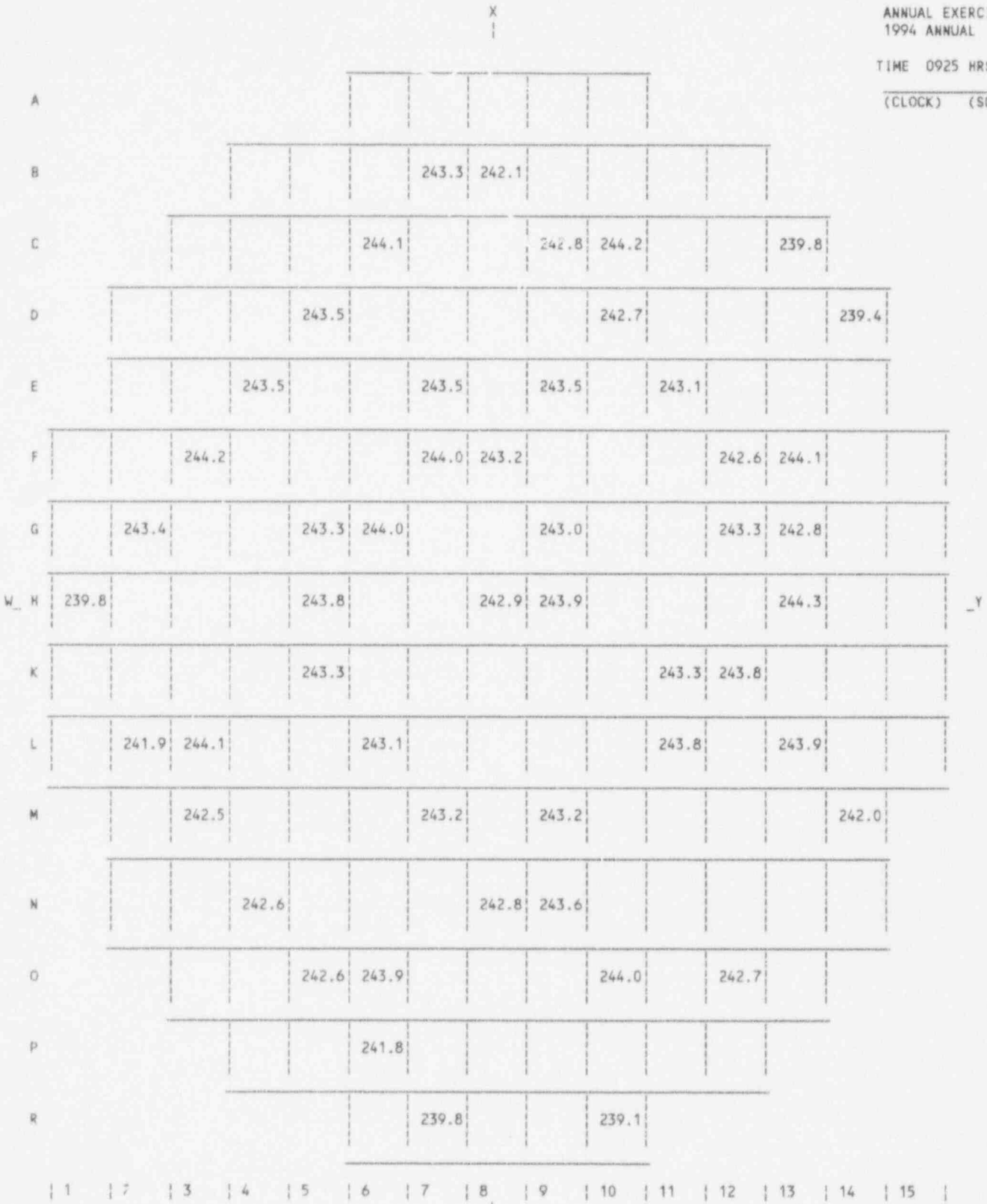


1 HR 50 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0925 HRS. T=115

(CLOCK) (SCENARIO)



RCS PRESSURE 109.1

AVG 5 HI INCORE 244.2

INCORE READOUT

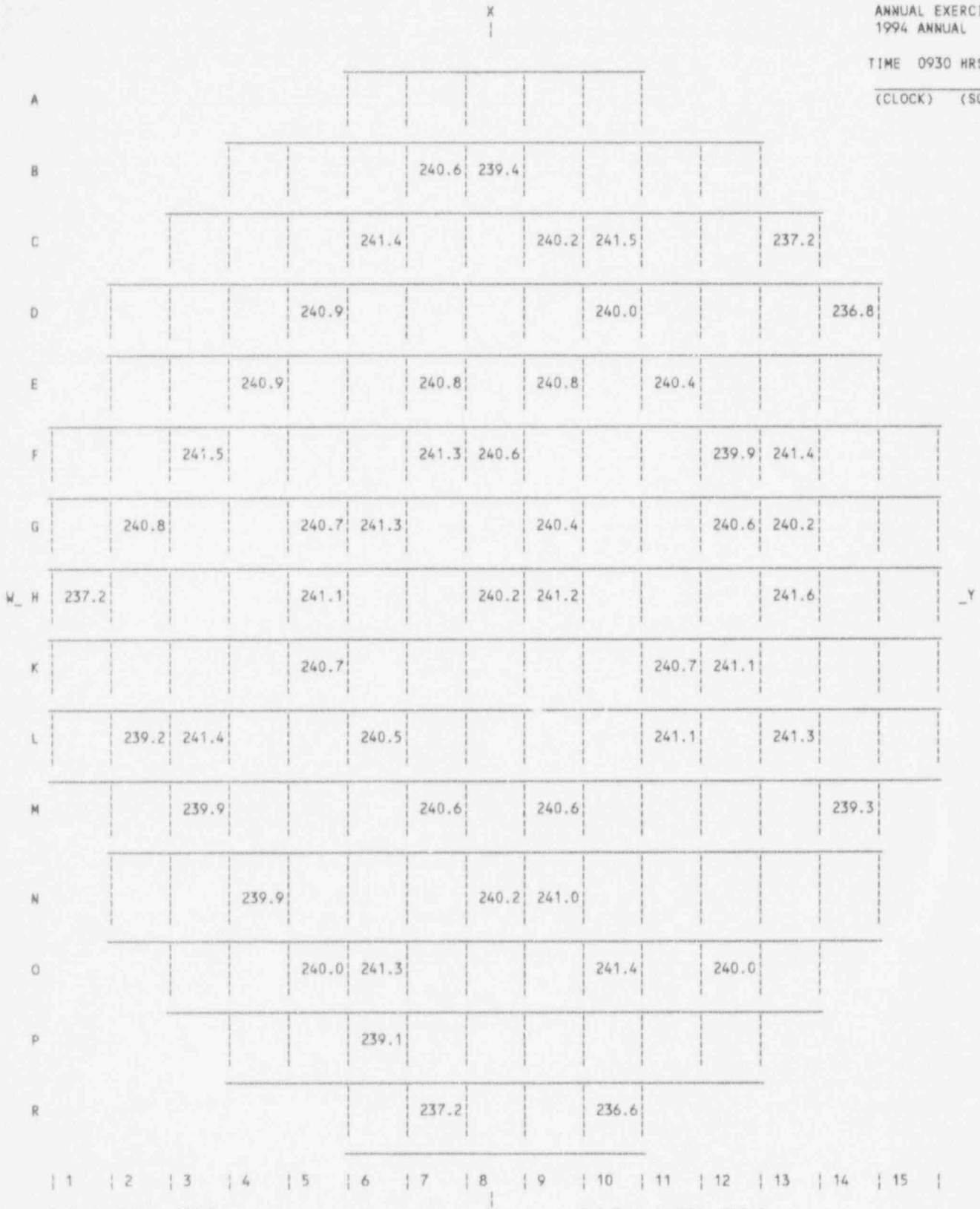
INCORE T/C SCM 98.9

1 HR 55 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0930 HRS. T=120

(CLOCK) (SCENARIO)



RCS PRESSURE 112.8

AVG 5 HI INCORE 241.6

INCORE READOUT

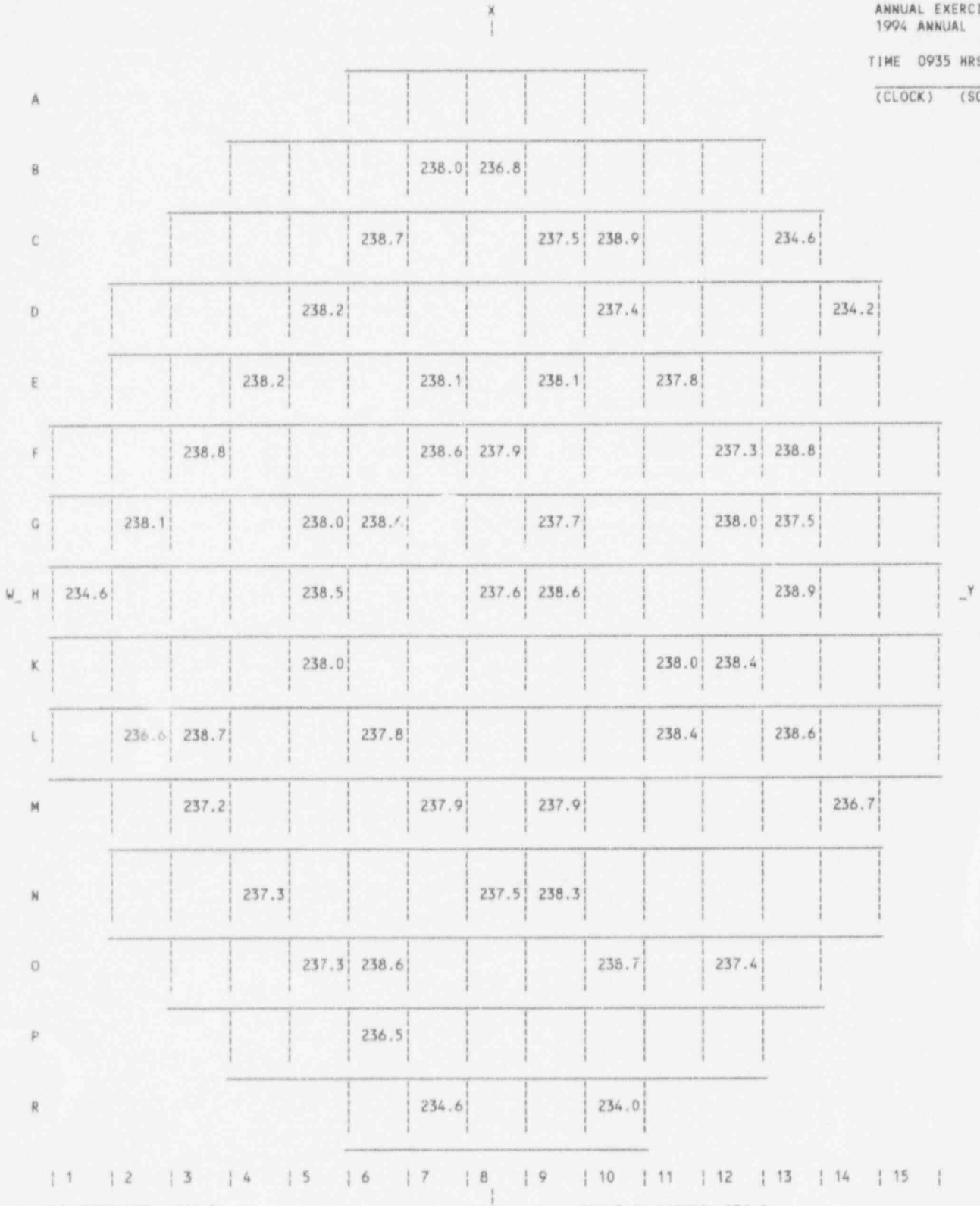
INCORE T/C SCM 103.5

2 HR 0 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0935 HRS. T=125

(CLOCK) (SCENARIO)



RCS PRESSURE 116.5

AVG 5 HI INCORE 238.9

INCORE READOUT

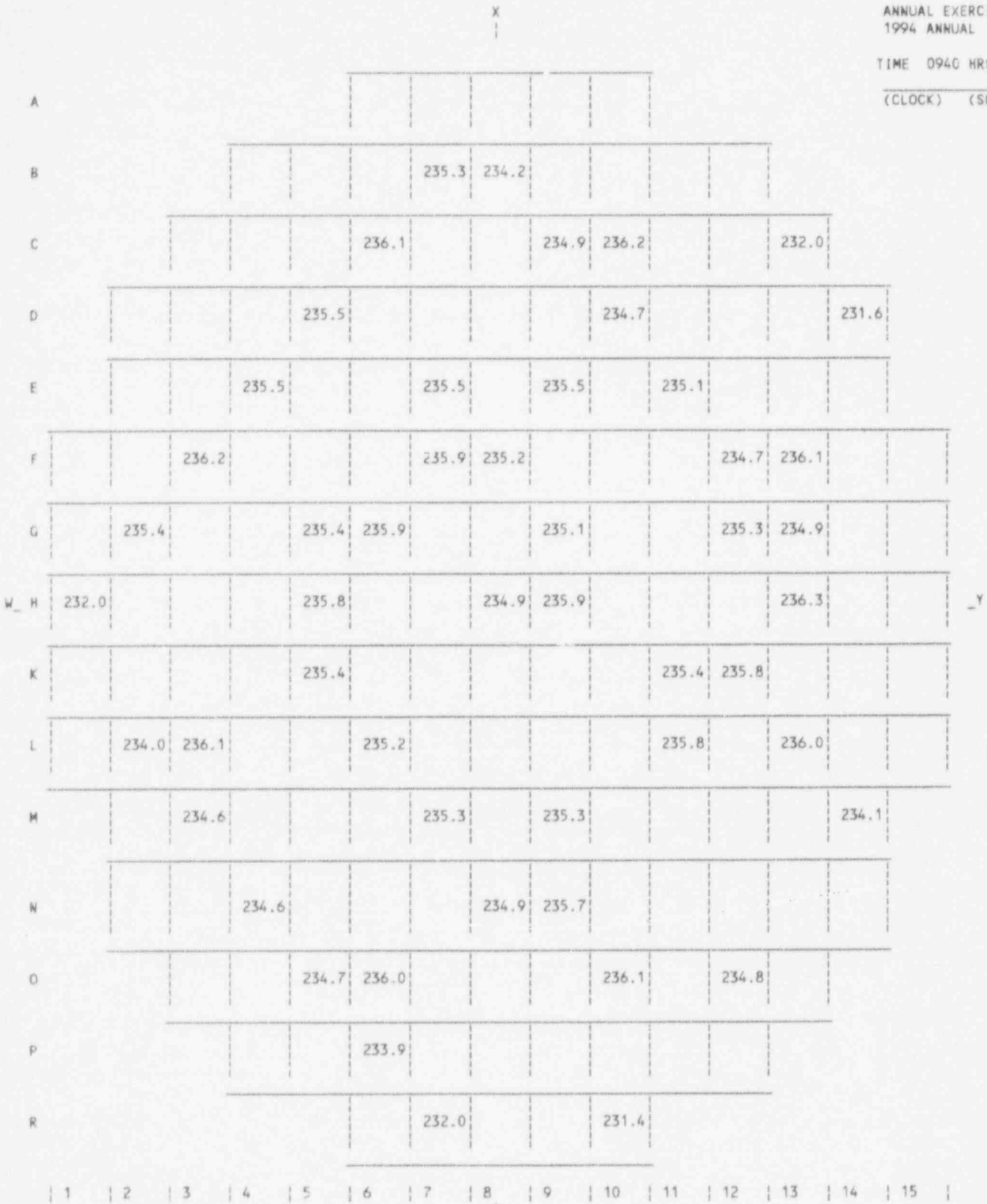
INCORE T/C SCM 108.1

2 HR 5 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0940 HRS. T=130

(CLOCK) (SCENARIO)



RCS PRESSURE 120.2

INCORE READOUT

AVG 5 HI INCORE 236.2

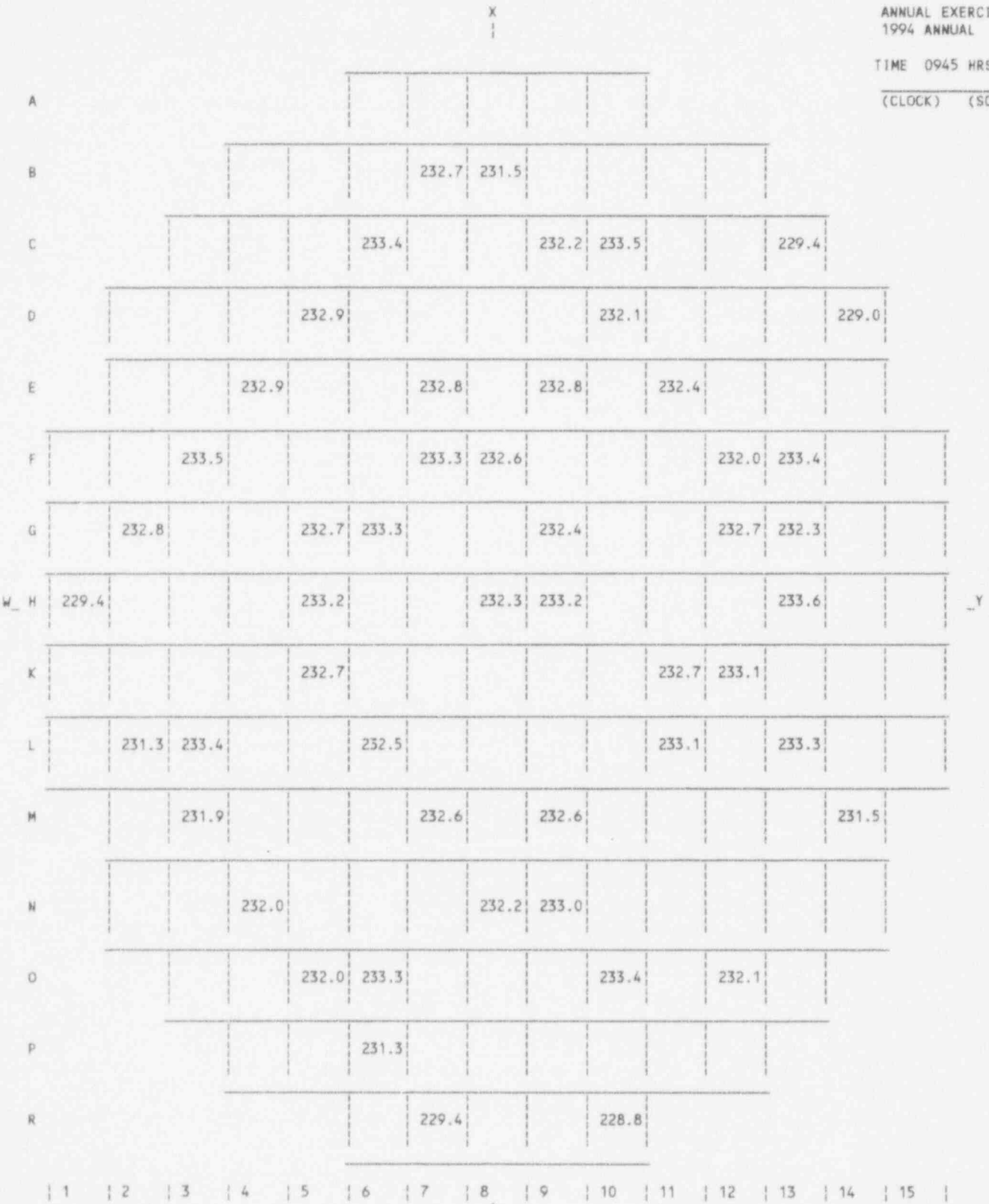
INCORE T/C SCM 112.7

2 HR 10 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0945 HRS. T=135

(CLOCK) (SCENARIO)

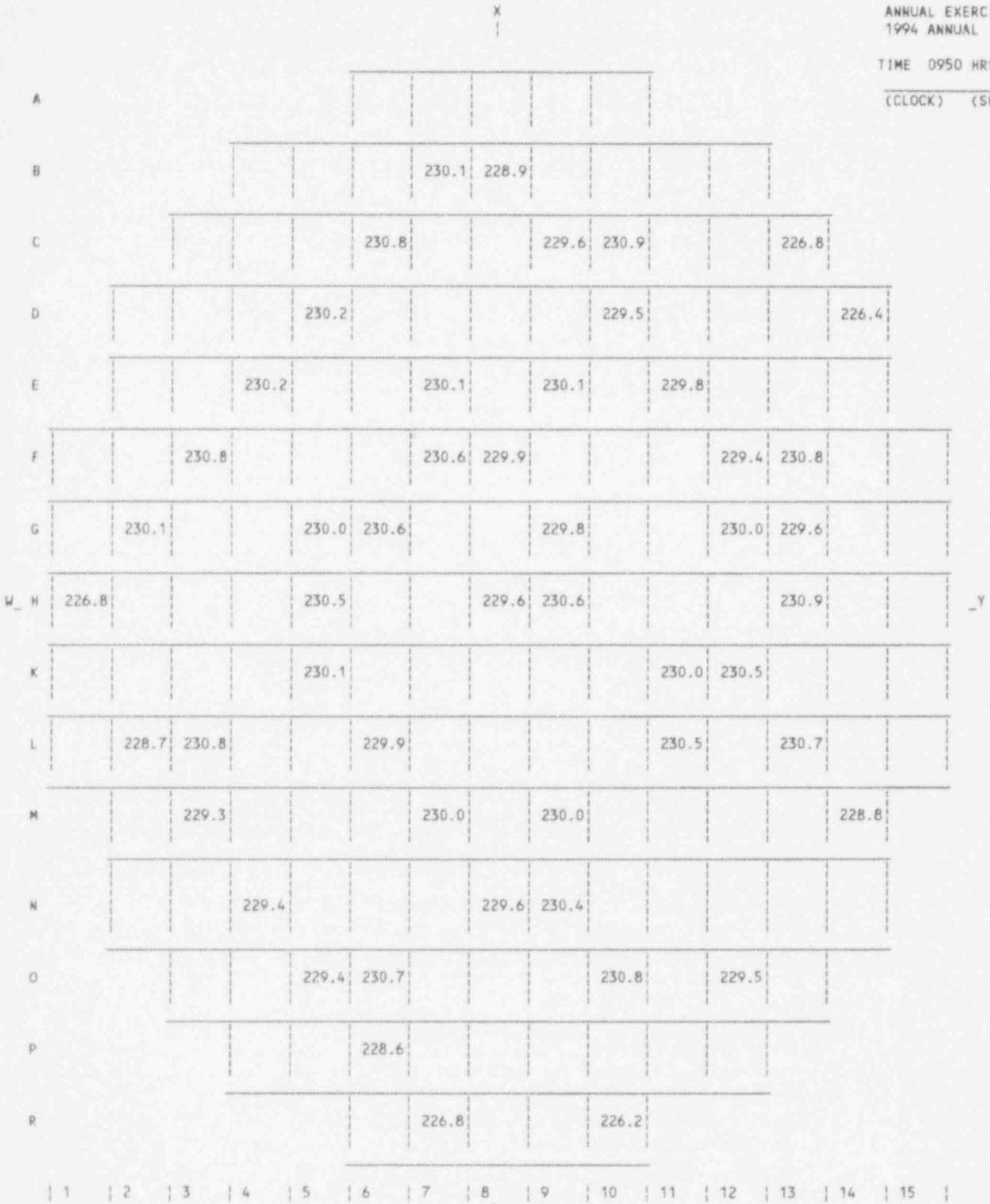


2 HR 15 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0950 HRS. T=140

(CLOCK) (SCENARIO)



RCS PRESSURE 127.6

INCORE READOUT

AVG 5 HI INCORE 230.9

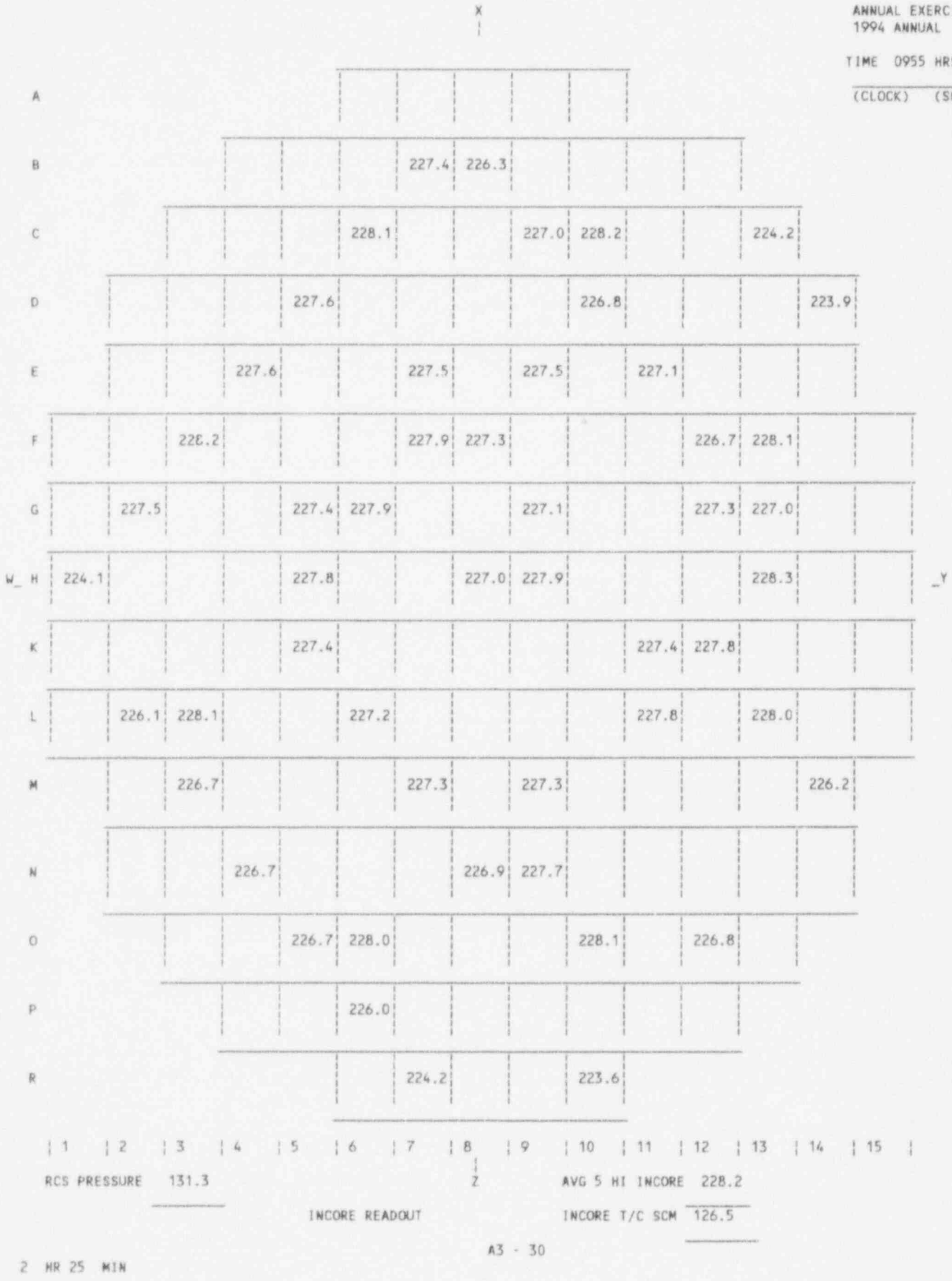
INCORE T/C SCM 121.9

2 HR 20 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 0955 HRS. T=145

(CLOCK) (SCENARIO)

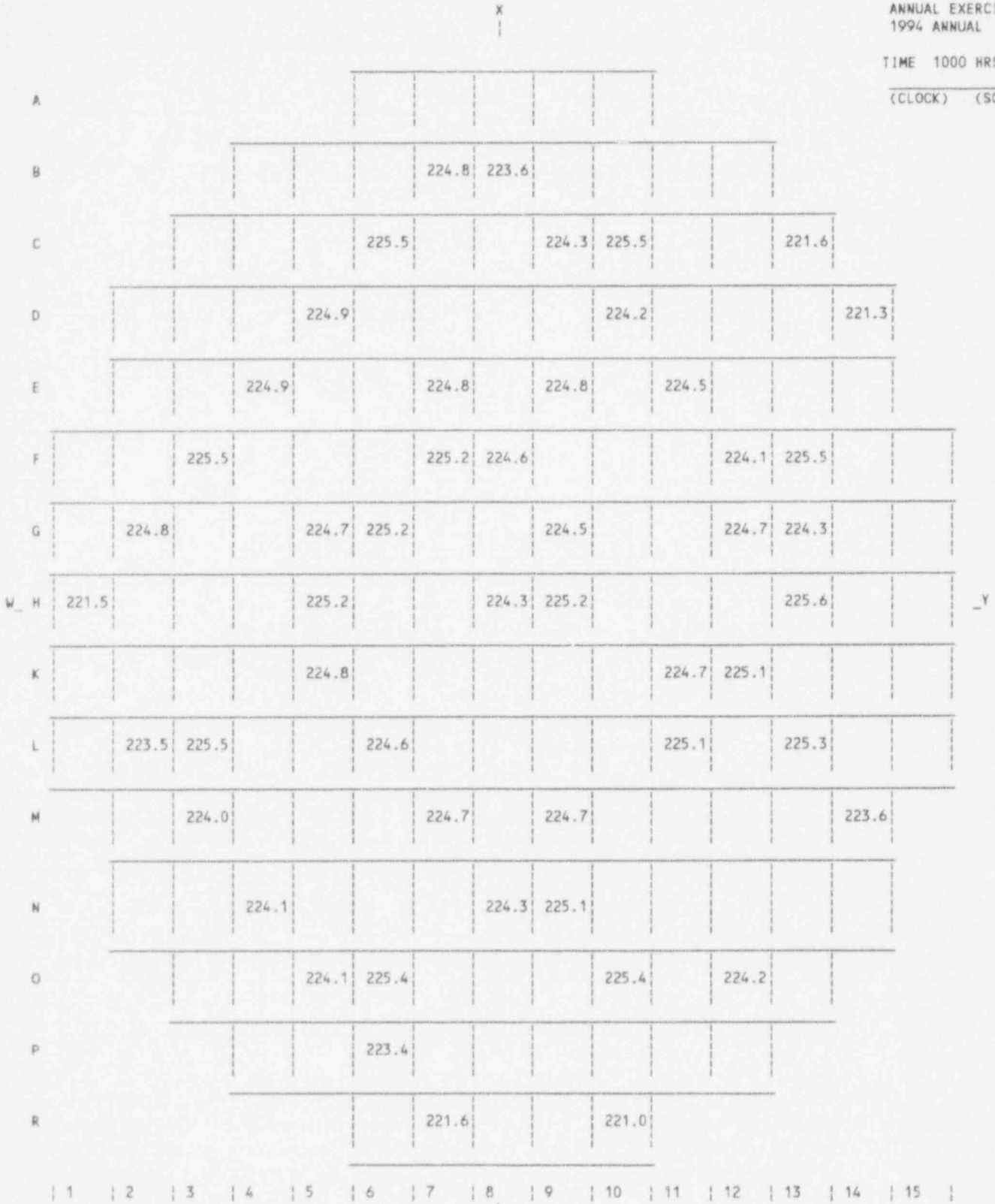


2 HR 25 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 1000 HRS. T=150

(CLOCK) (SCENARIO)



RCS PRESSURE 134.9

AVG 5 HI INCORE 225.6

INCORE READOUT

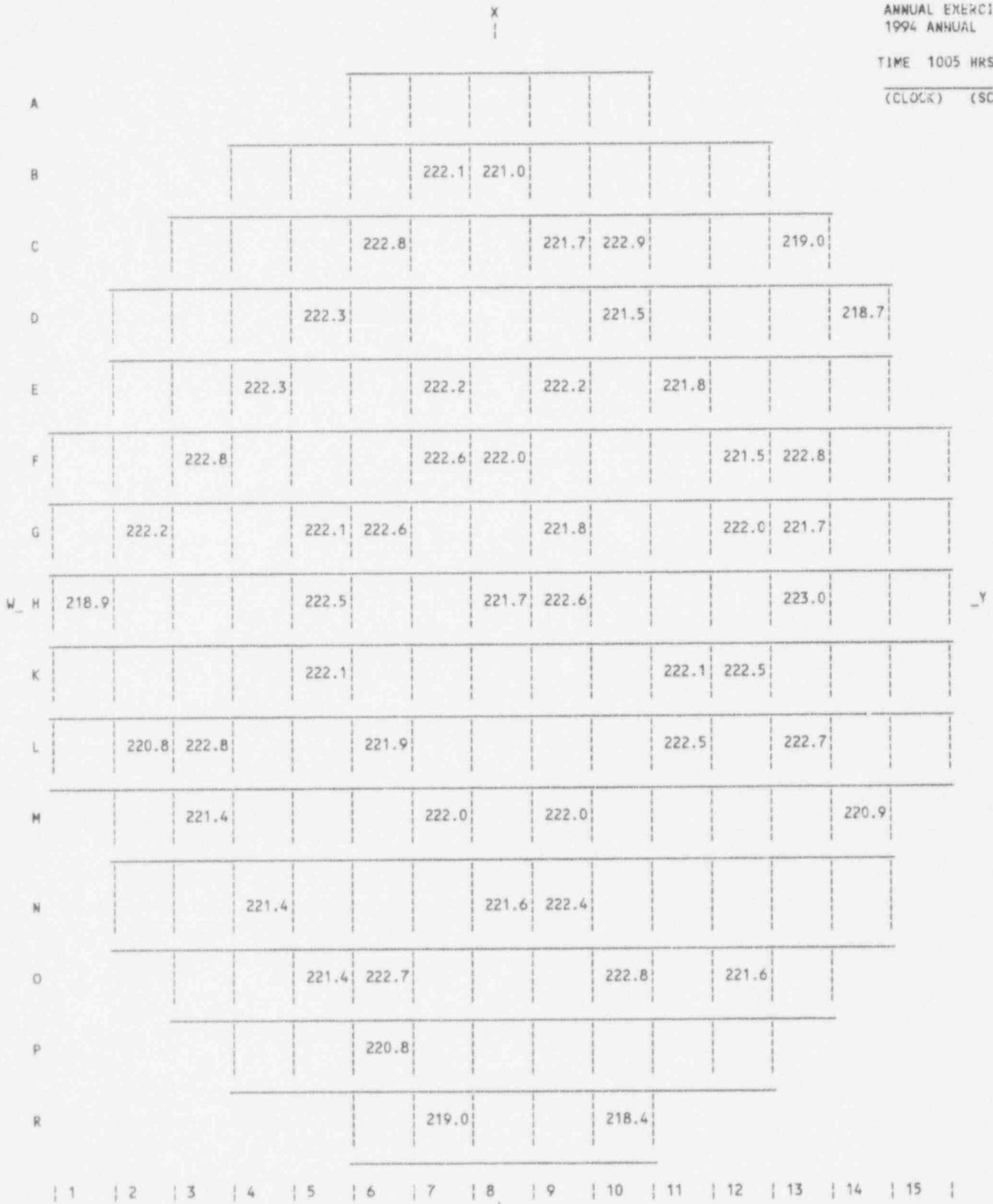
INCORE T/C SCM 131.1

2 HR 30 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 1005 HRS. T=155

(CLOCK) (SCENARIO)



RCS PRESSURE 138.6

INCORE READOUT

AVG 5 HI INCORE 222.9

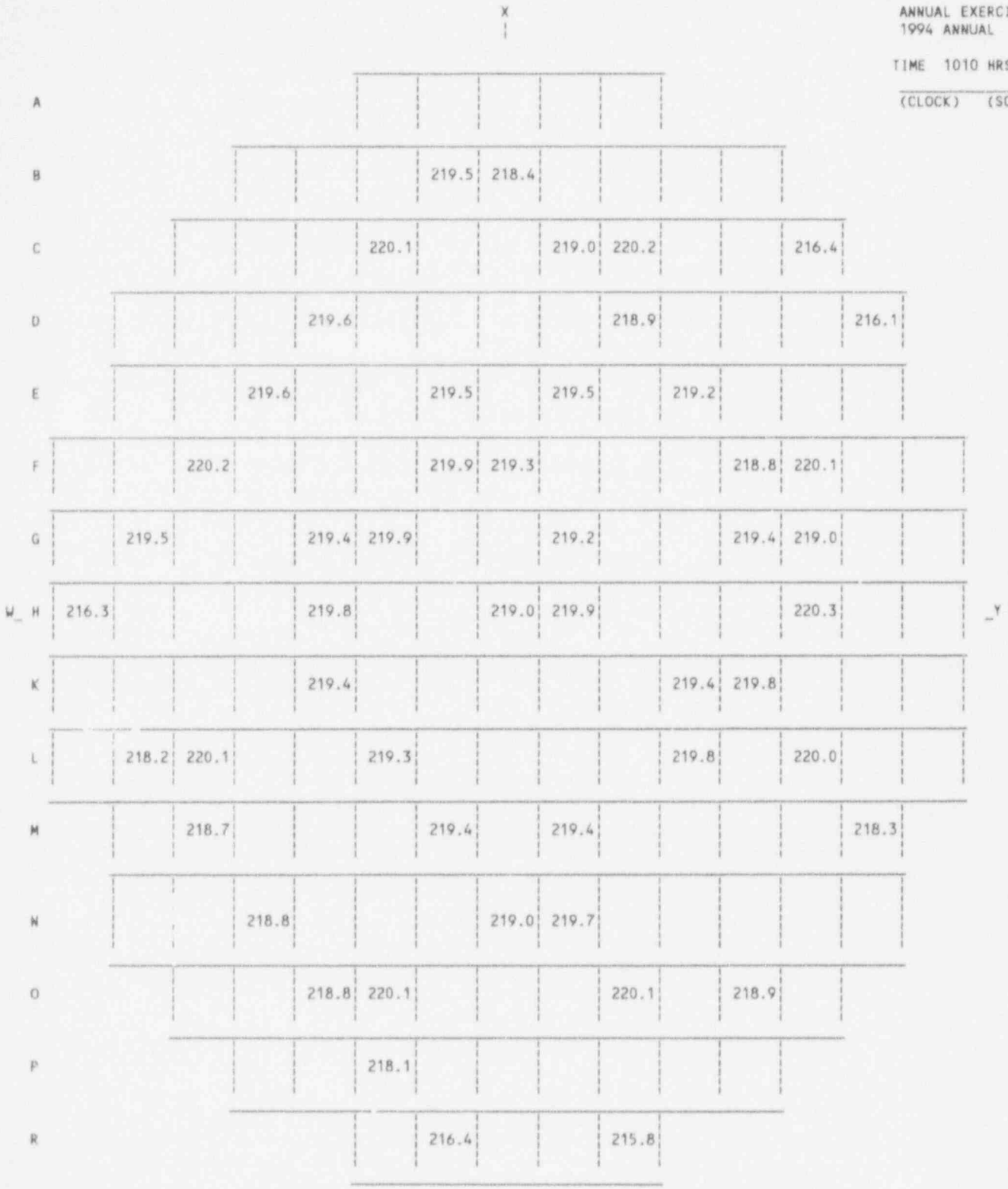
INCORE T/C SCM 135.7

2 HR 35 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 1010 HRS. T=160

(CLOCK) (SCENARIO)



RCS PRESSURE 142.3

AVG 5 HI INCORE 220.2

INCORE READOUT

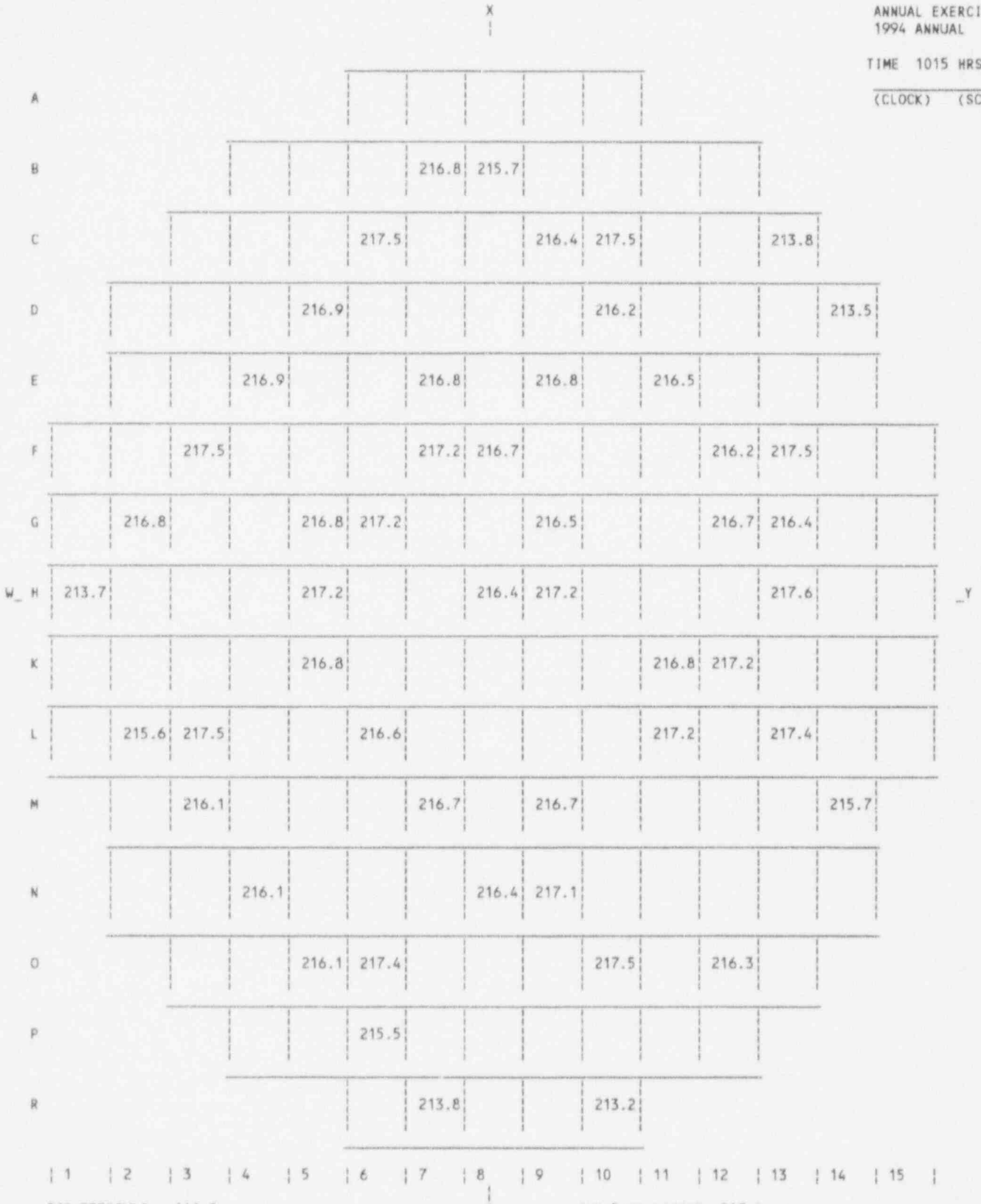
INCORE T/C SCM 140.3

2 HR 40 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 1015 HRS. T=165

(CLOCK) (SCENARIO)



RCS PRESSU. : 146.0

AVG 5 HI INCORE 217.6

INCORE READOUT

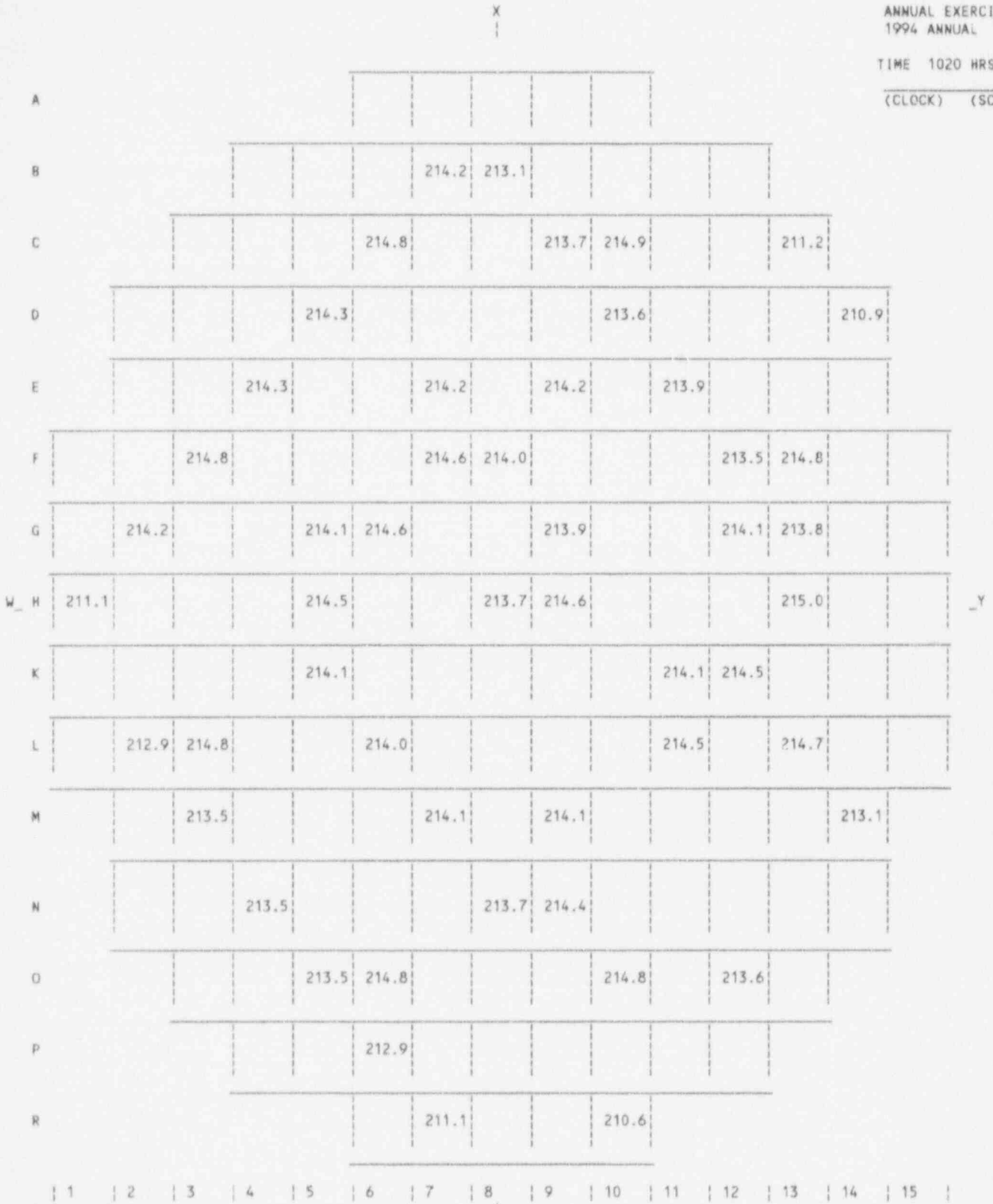
INCORE T/C SCM 144.9

2 HR 45 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 1020 HRS. T=170

(CLOCK) (SCENARIO)



RCS PRESSURE 149.7

AVG 5 HI INCORE 214.9

INCORE READOUT

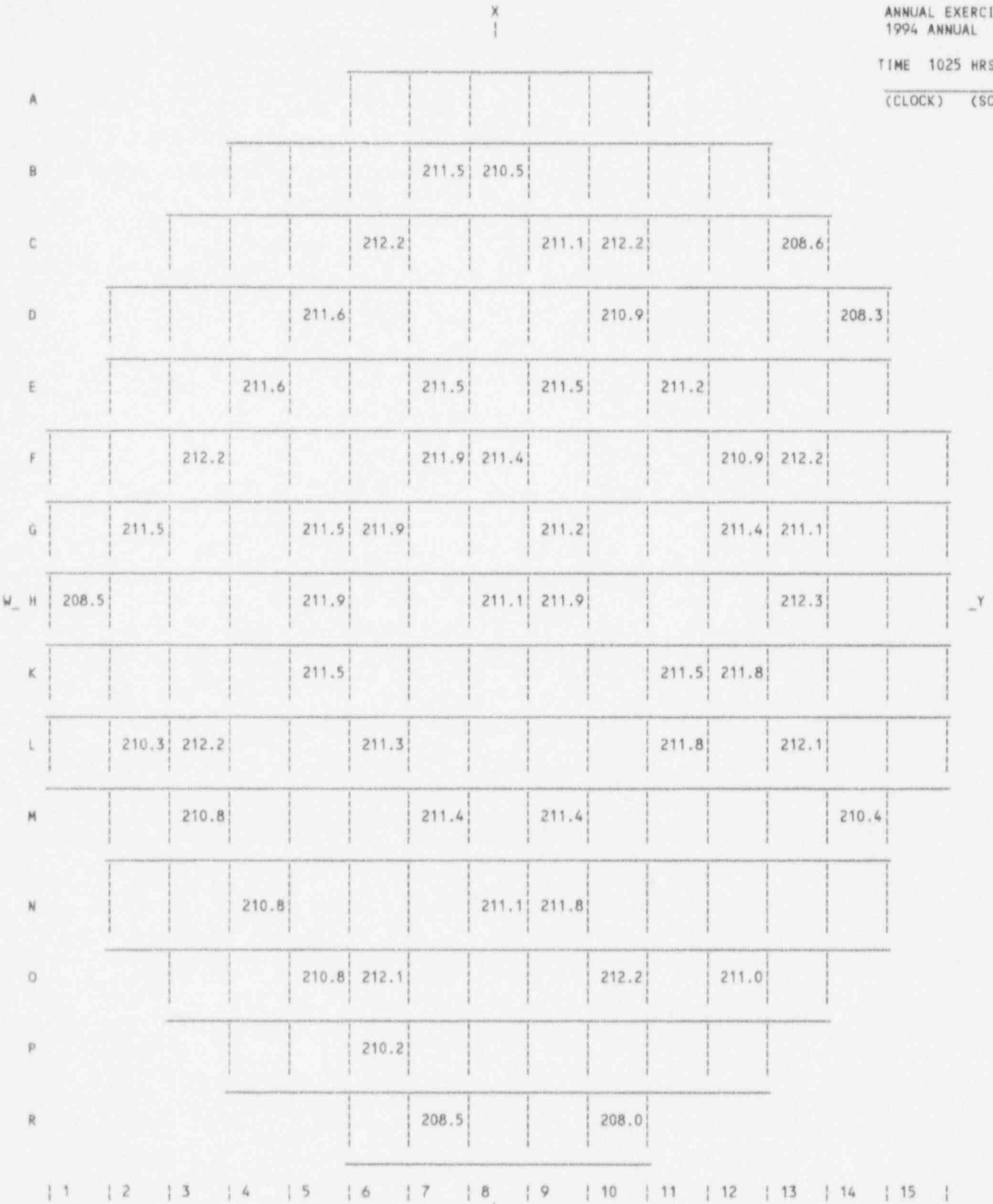
INCORE T/C SCM 149.5

2 HR 50 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 1025 HRS. T=175

(CLOCK) (SCENARIO)

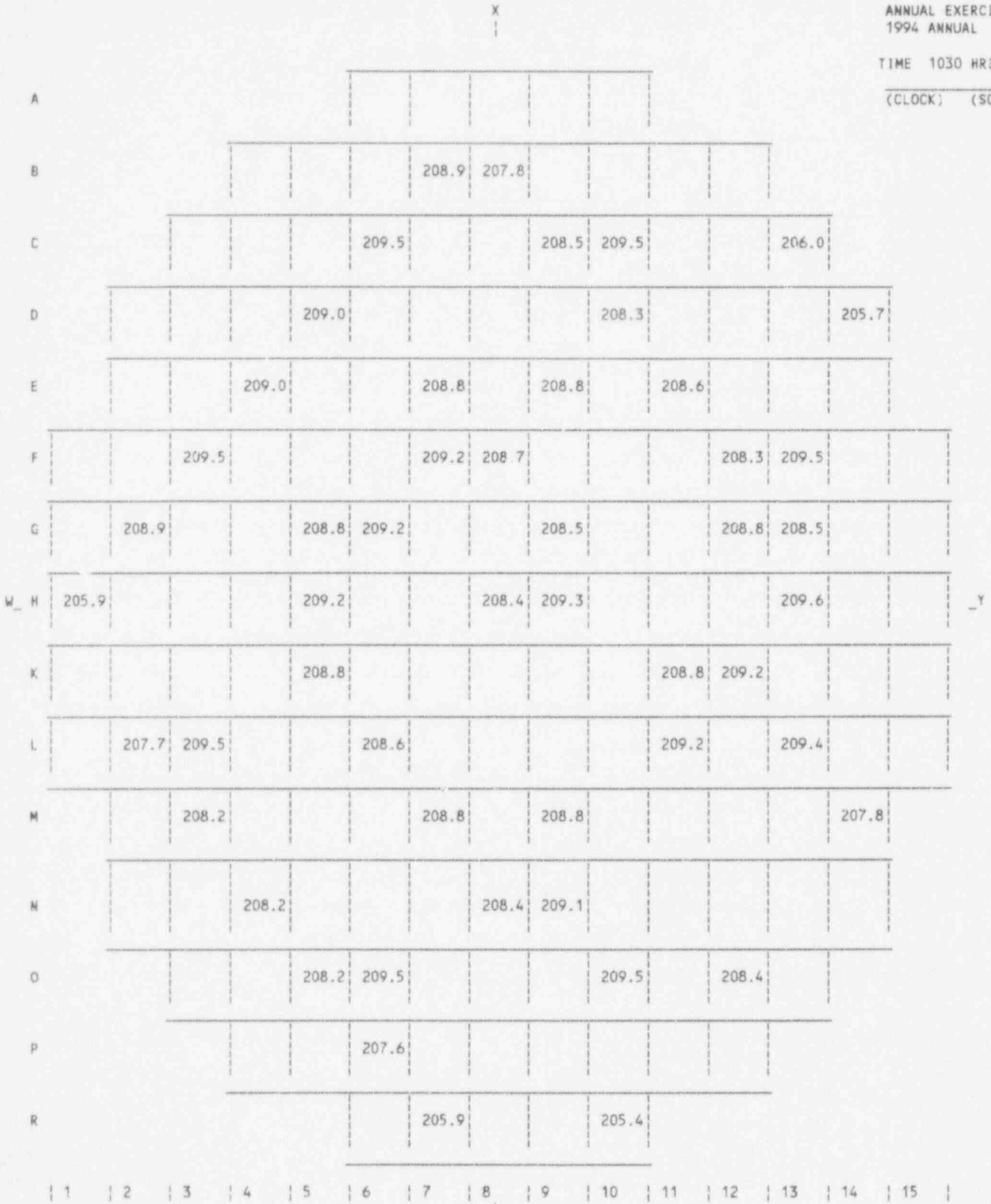


2 HR 55 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 1030 HRS. T=180

(CLOCK) (SCENARIO)



RCS PRESSURE 157.1

AVG 5 HI INCORE 209.6

INCORE READOUT

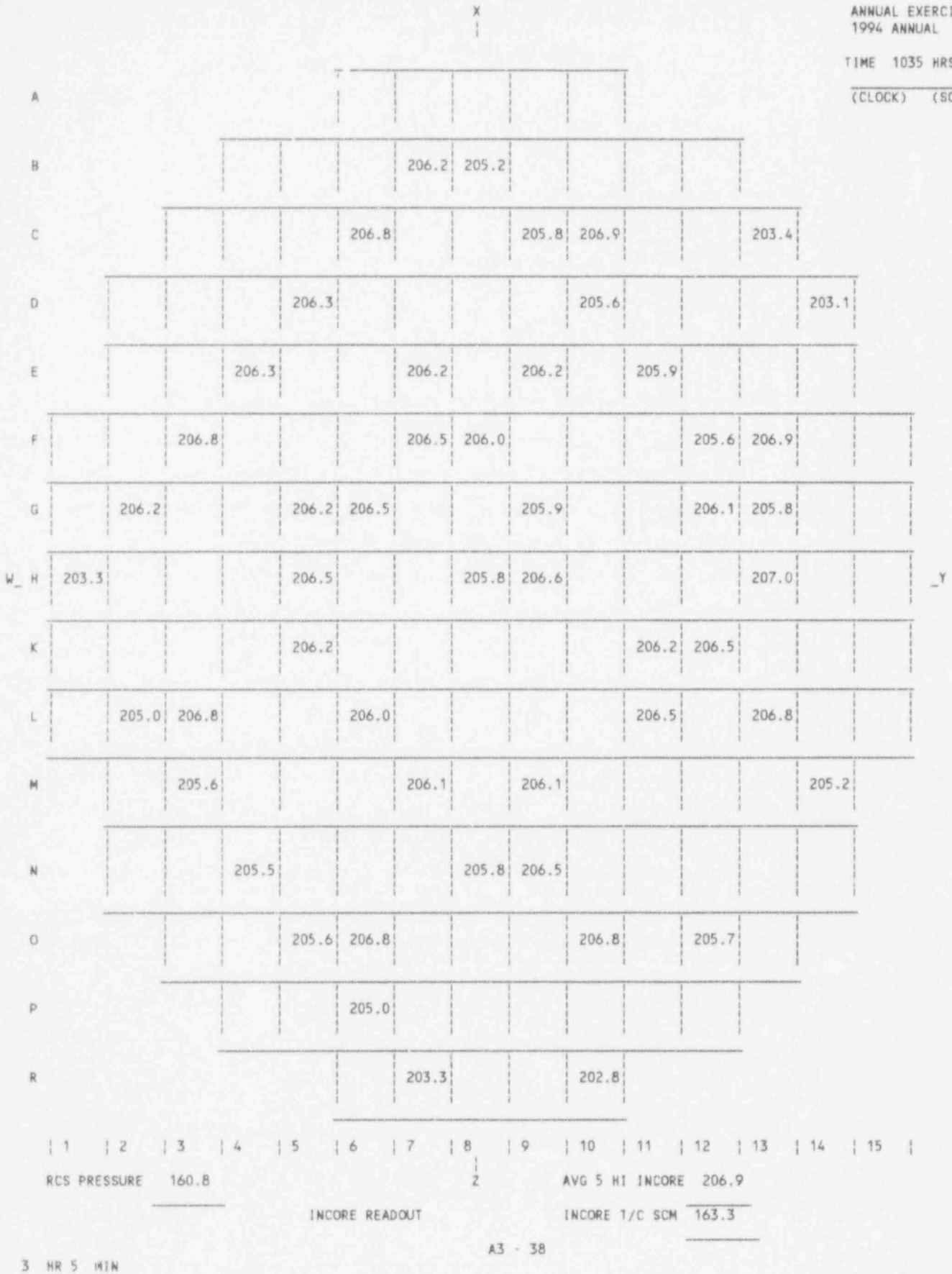
INCORE T/C SCM 158.7

3 HR 0 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 1035 HRS. T=185

(CLOCK) (SCENARIO)



RCS PRESSURE 160.8

AVG 5 HI INCORE 206.9

INCORE READOUT

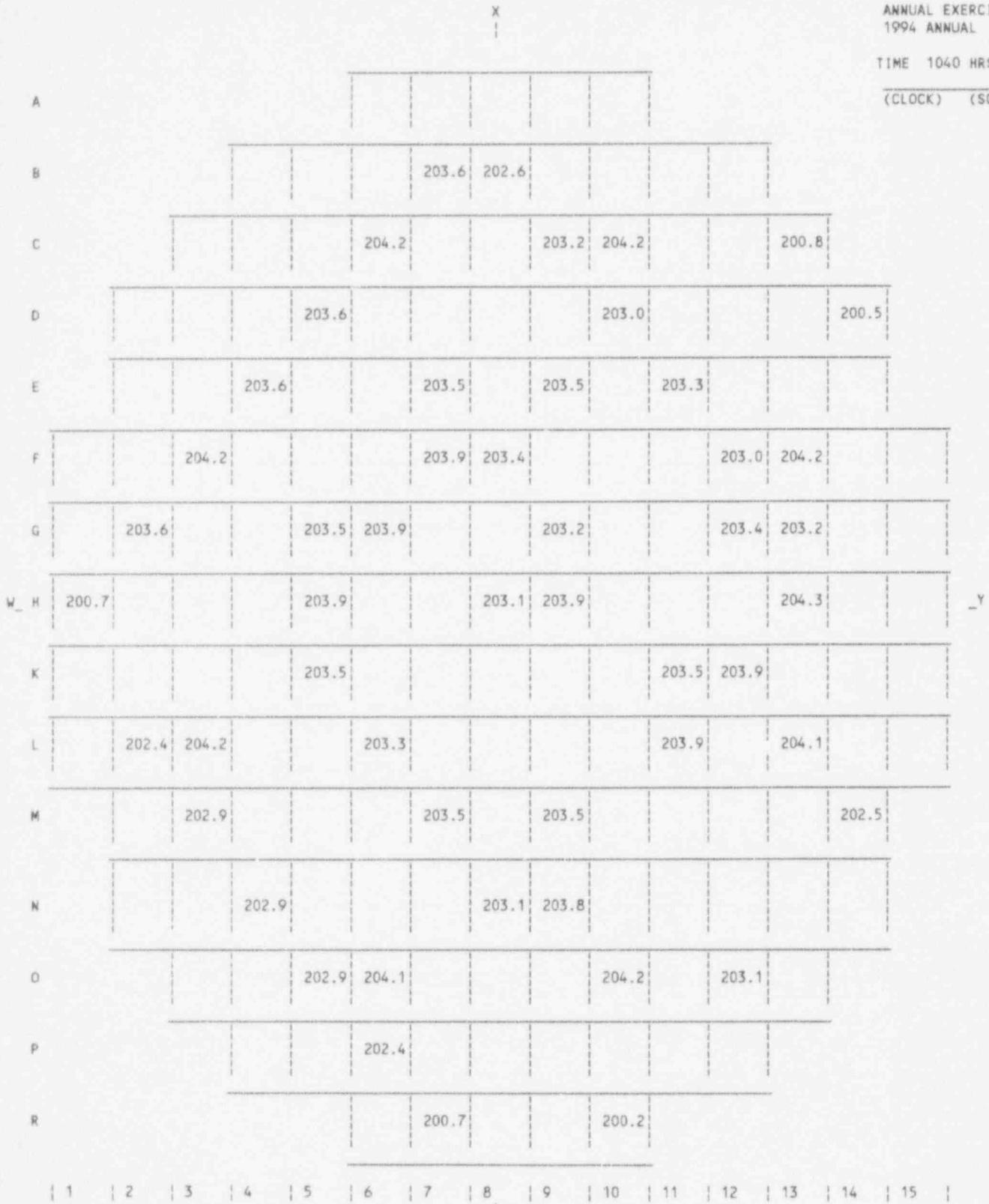
INCORE T/C SCM 163.3

3 HR 5 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 1040 HRS. T=190

(CLOCK) (SCENARIO)



RCS PRESSURE 164.5

AVG 5 HI INCORE 204.3

INCORE READOUT

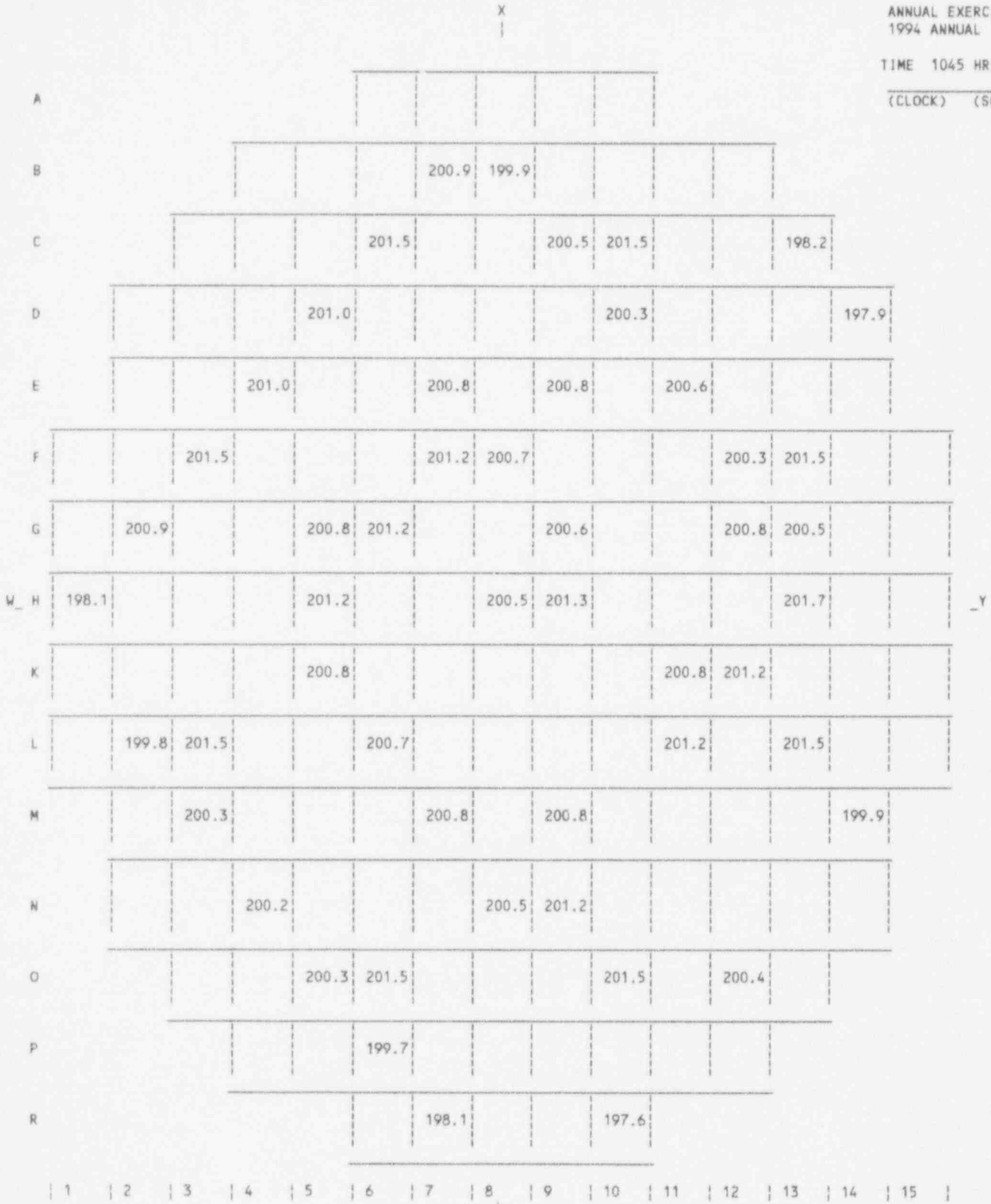
INCORE T/C SCM 167.9

3 HR 10 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 1045 HRS. T=195

(CLOCK) (SCENARIO)



RCS PRESSURE 168.2

INCORE READOUT

AVG 5 HI INCORE 201.6

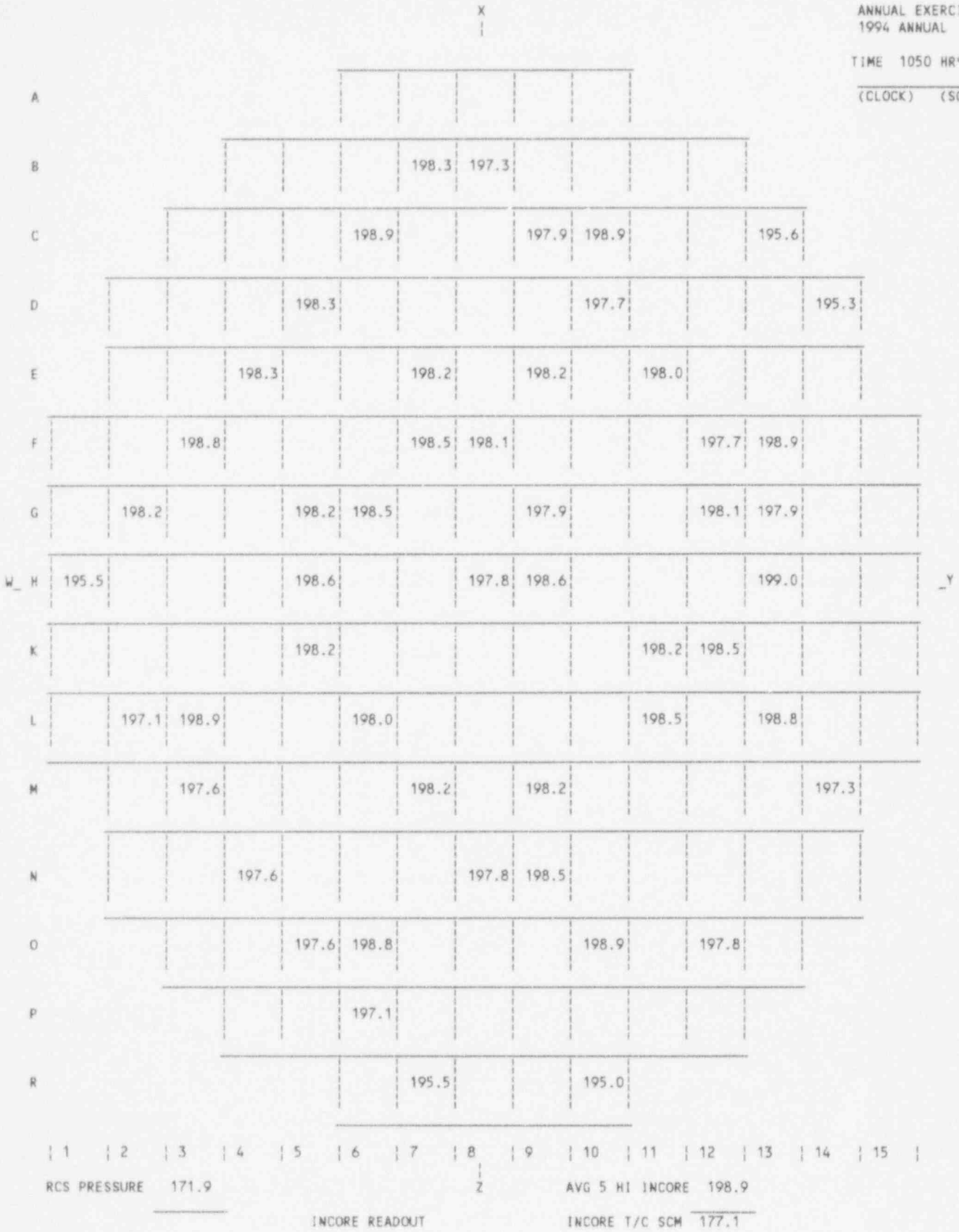
INCORE T/C SCM 172.5

3 HR 15 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 1050 HRS. T=200

(CLOCK) (SCENARIO)



RCS PRESSURE 171.9

AVG 5 HI INCORE 198.9

INCORE READOUT

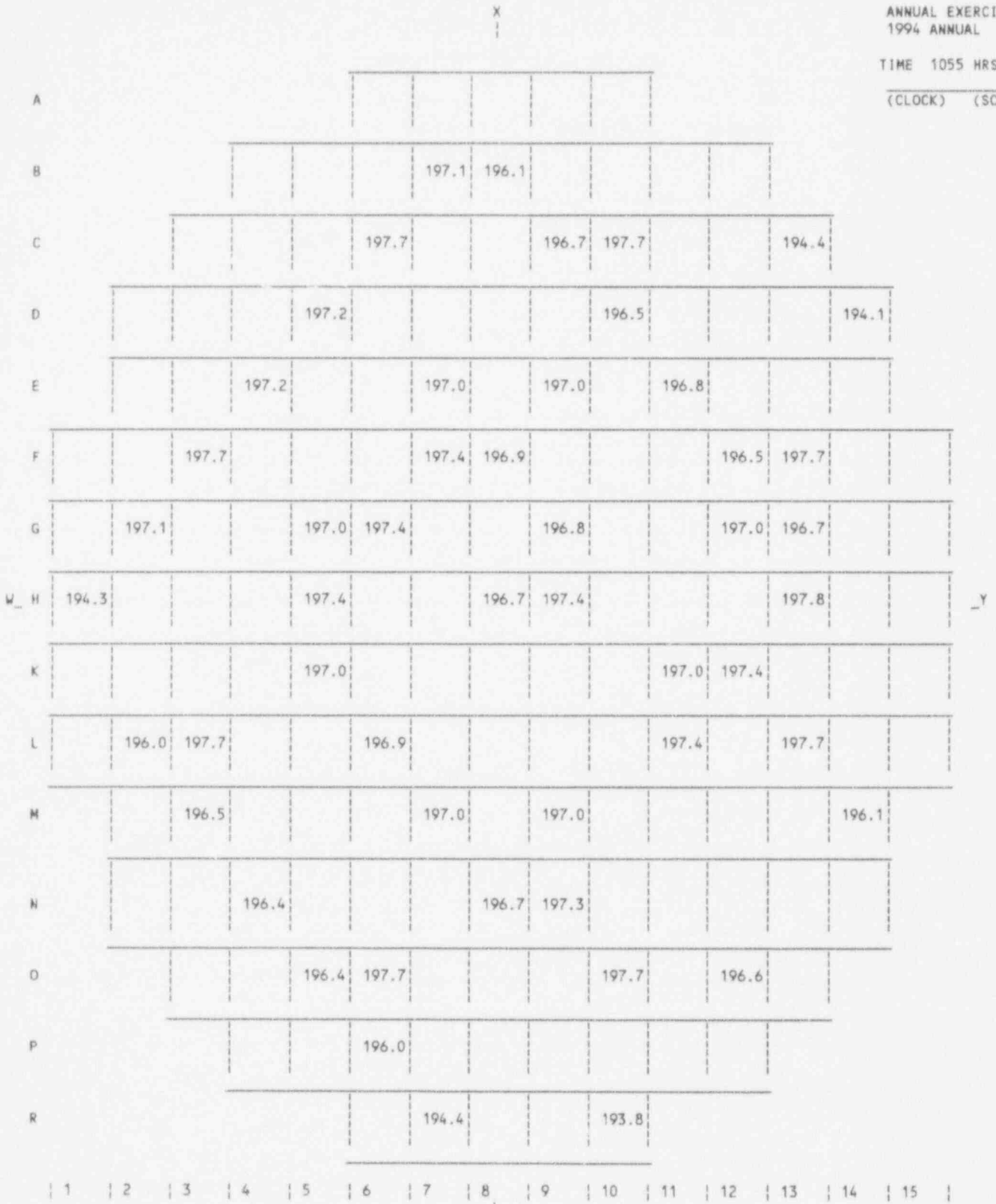
INCORE T/C SCM 177.1

3 HR 20 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 1055 HRS. T=205

(CLOCK) (SCENARIO)



RCS PRESSURE 171.8

AVG 5 HI INCORE 197.8

INCORE READOUT

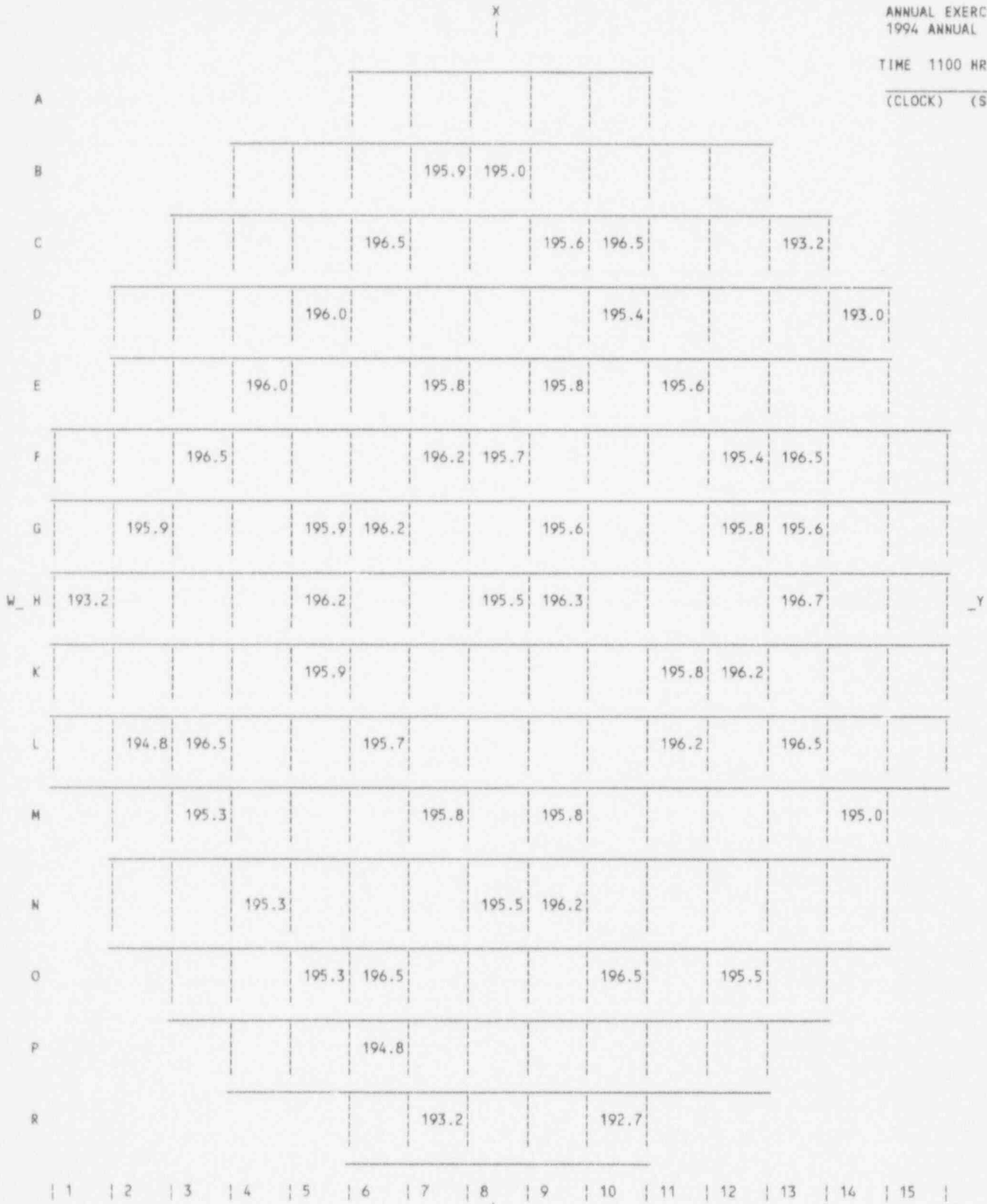
INCORE T/C SCM 178.2

3 HR 25 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 1100 HRS. T=210

(CLOCK) (SCENARIO)



RCS PRESSURE 171.8

INCORE READOUT

AVG 5 HI INCORE 196.6

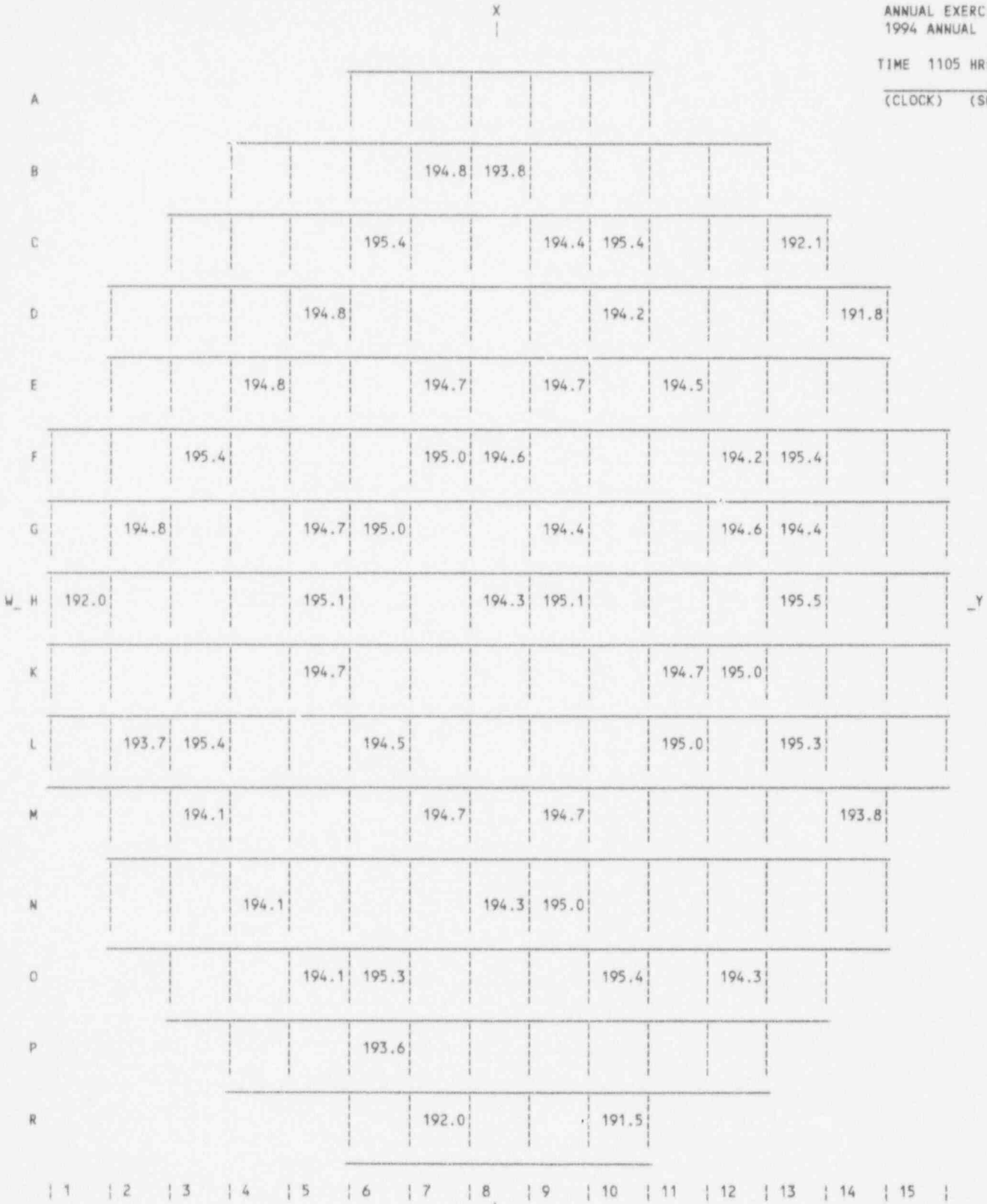
INCORE T/C SCM 179.4

3 HR 30 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 1105 HRS. T=215

(CLOCK) (SCENARIO)



3 HR 35 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 1110 HRS. T=220

(CLOCK) (SCENARIO)

RCS PRESSURE 171.6

AVG 5 HI INCORE 194.2

INCORE READOUT

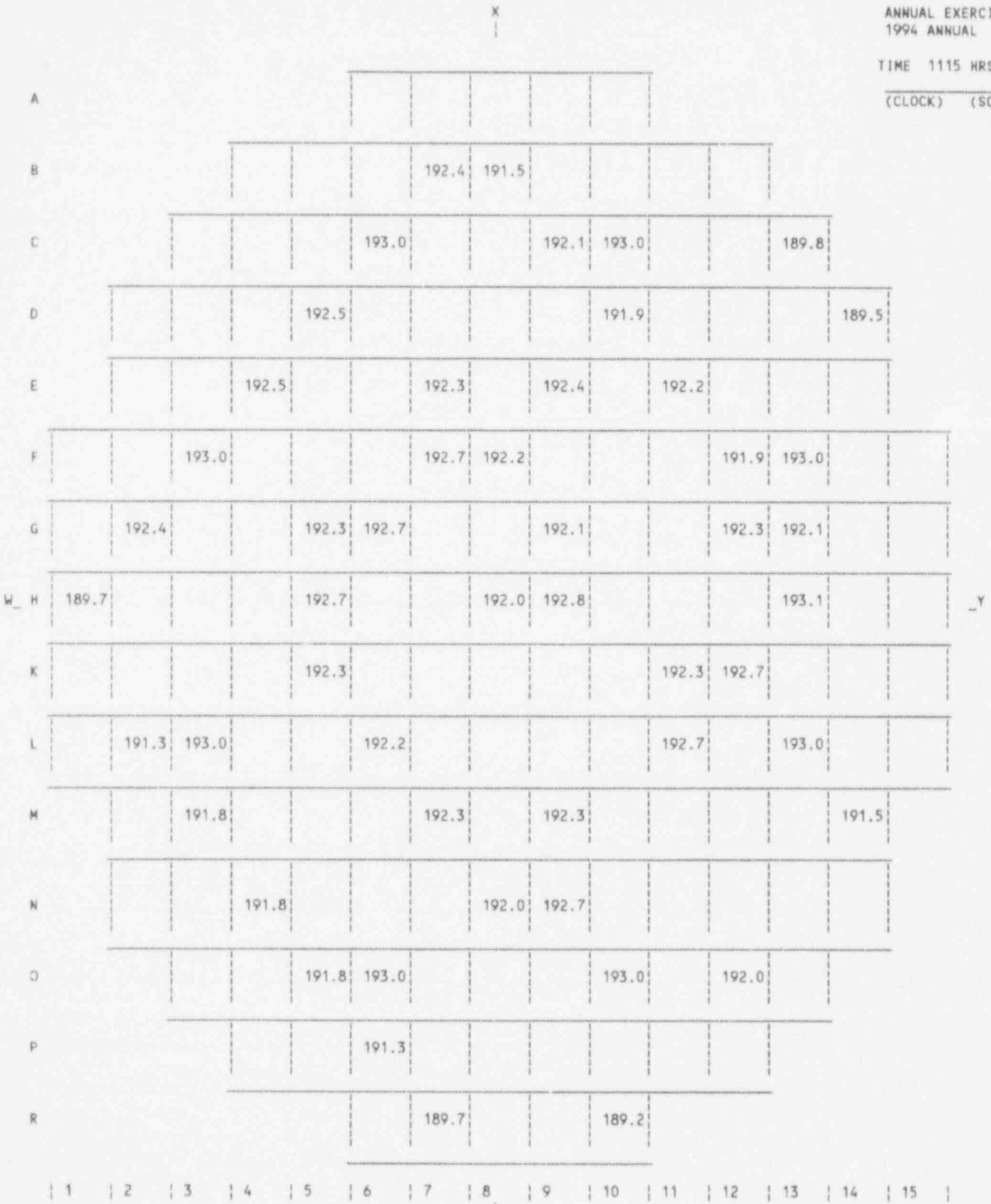
INCORE T/C SCM 181.7

3 HR 40 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 1115 HRS. T=225

(CLOCK) (SCENARIO)



RCS PRESSURE 171.6

INCORE READOUT

AVG 5 HI INCORE 193.1

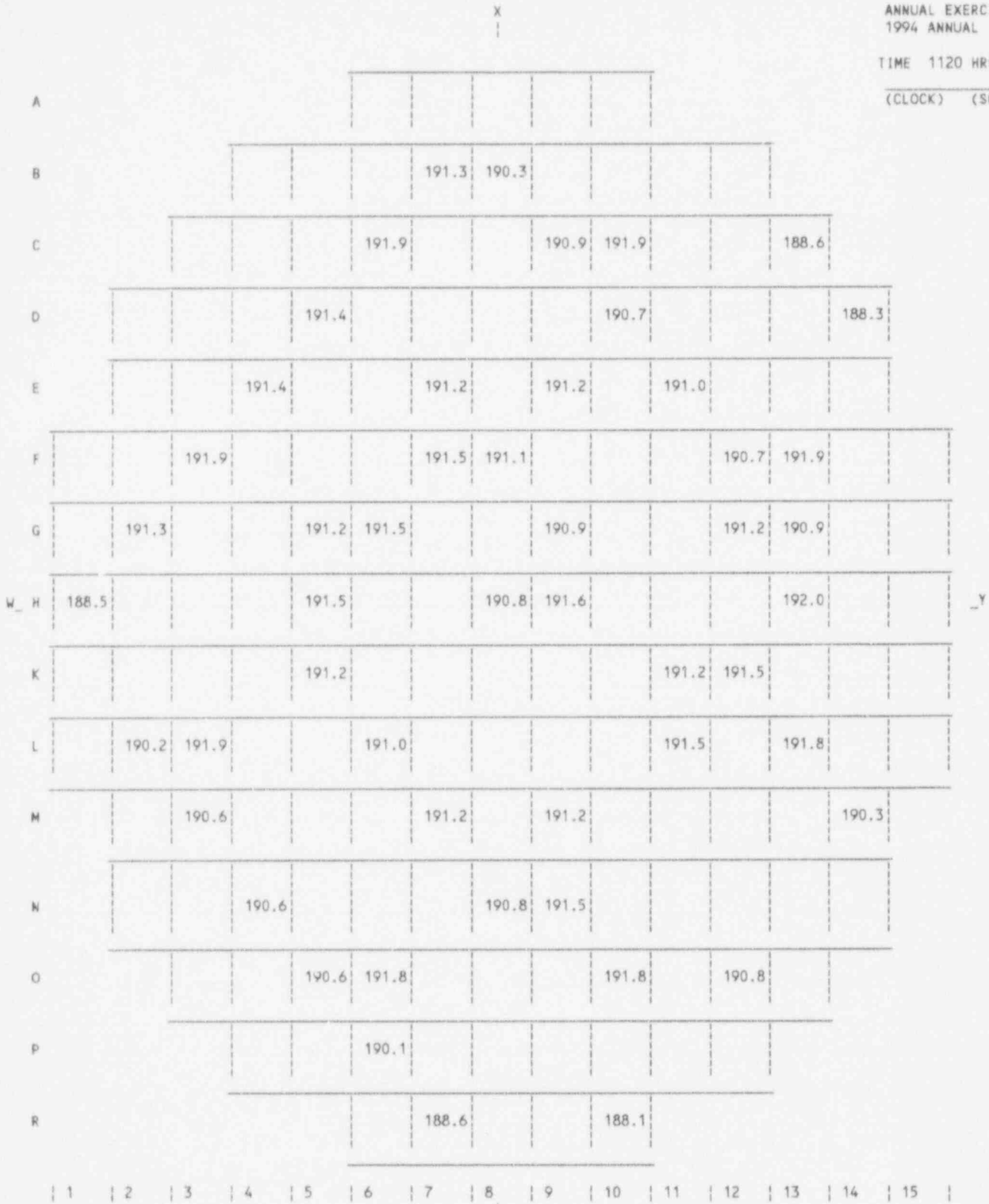
INCORE T/C SCM 182.8

3 HR 45 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 1120 HRS. T=230

(CLOCK) (SCENARIO)



RCS PRESSURE 171.5

INCORE READOUT

AVG 5 HI INCORE 191.9

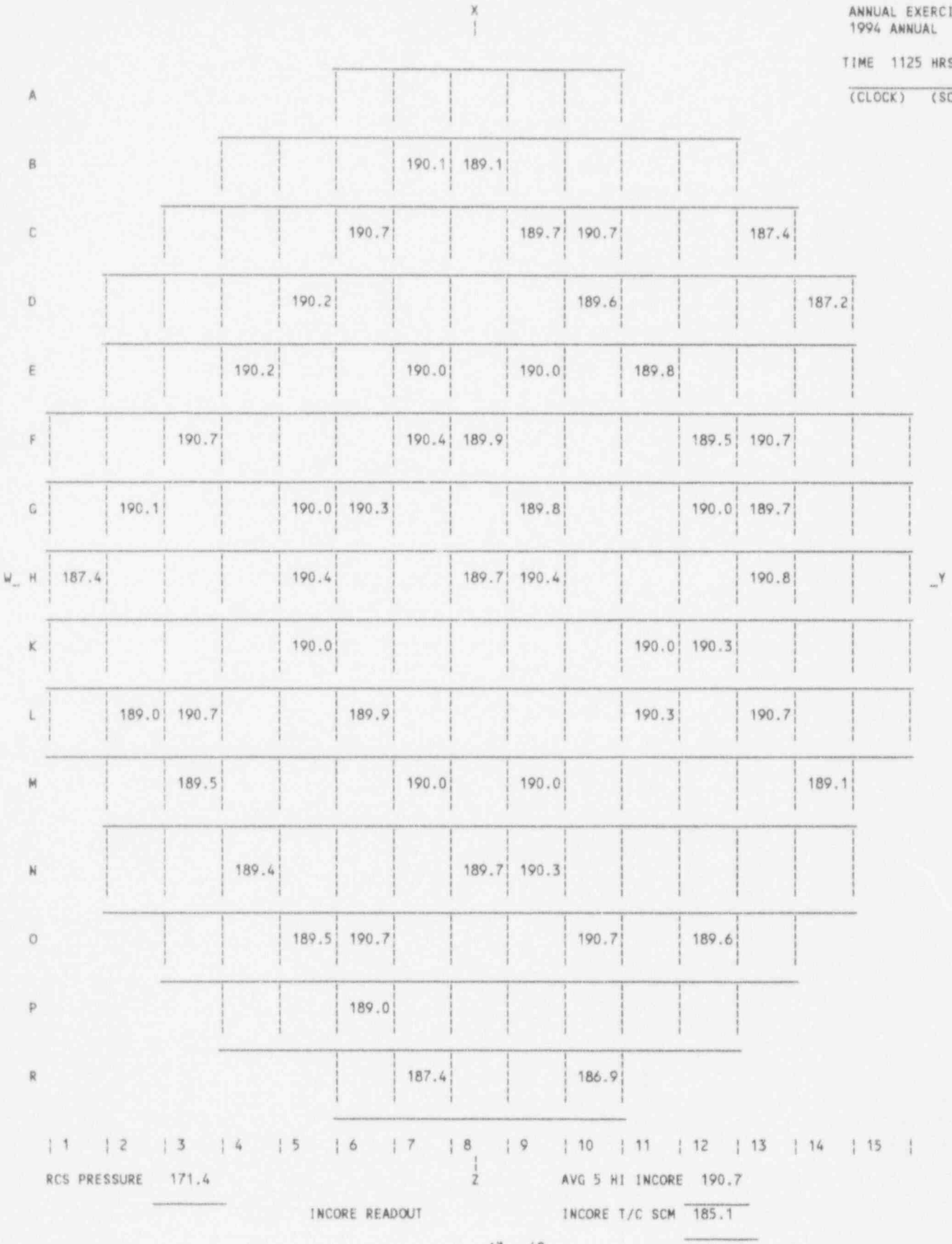
INCORE T/C SCM 183.9

3 HR 50 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 1125 HRS. T=235

(CLOCK) (SCENARIO)

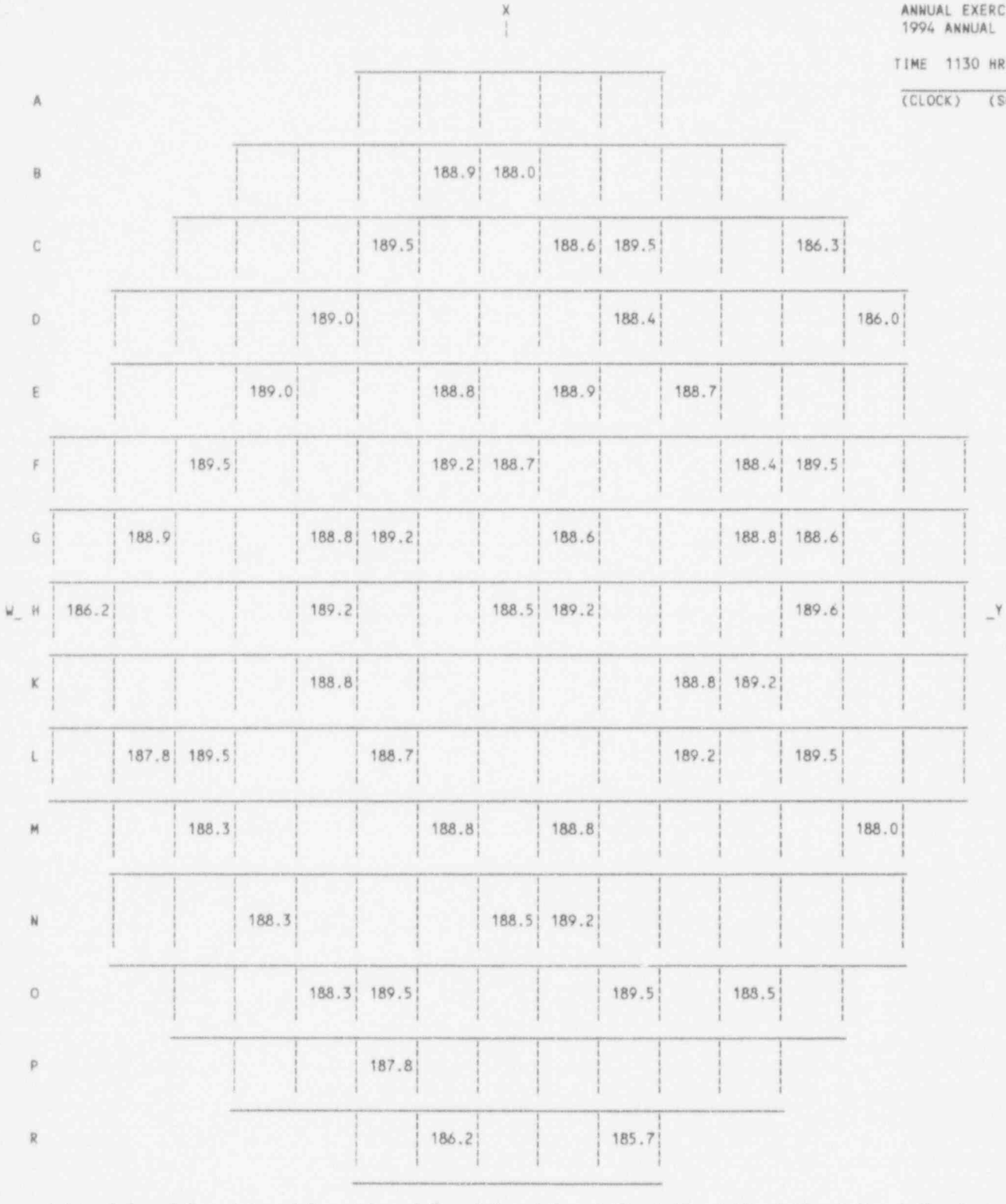


3 HR 55 MIN

ANNUAL EXERCISE
1994 ANNUAL

TIME 1130 HRS. T=240

(CLOCK) (SCENARIO)



RCS PRESSURE 171.4

INCORE READOUT

AVG 5 HI INCORE 189.6

INCORE T/C SCM 186.2

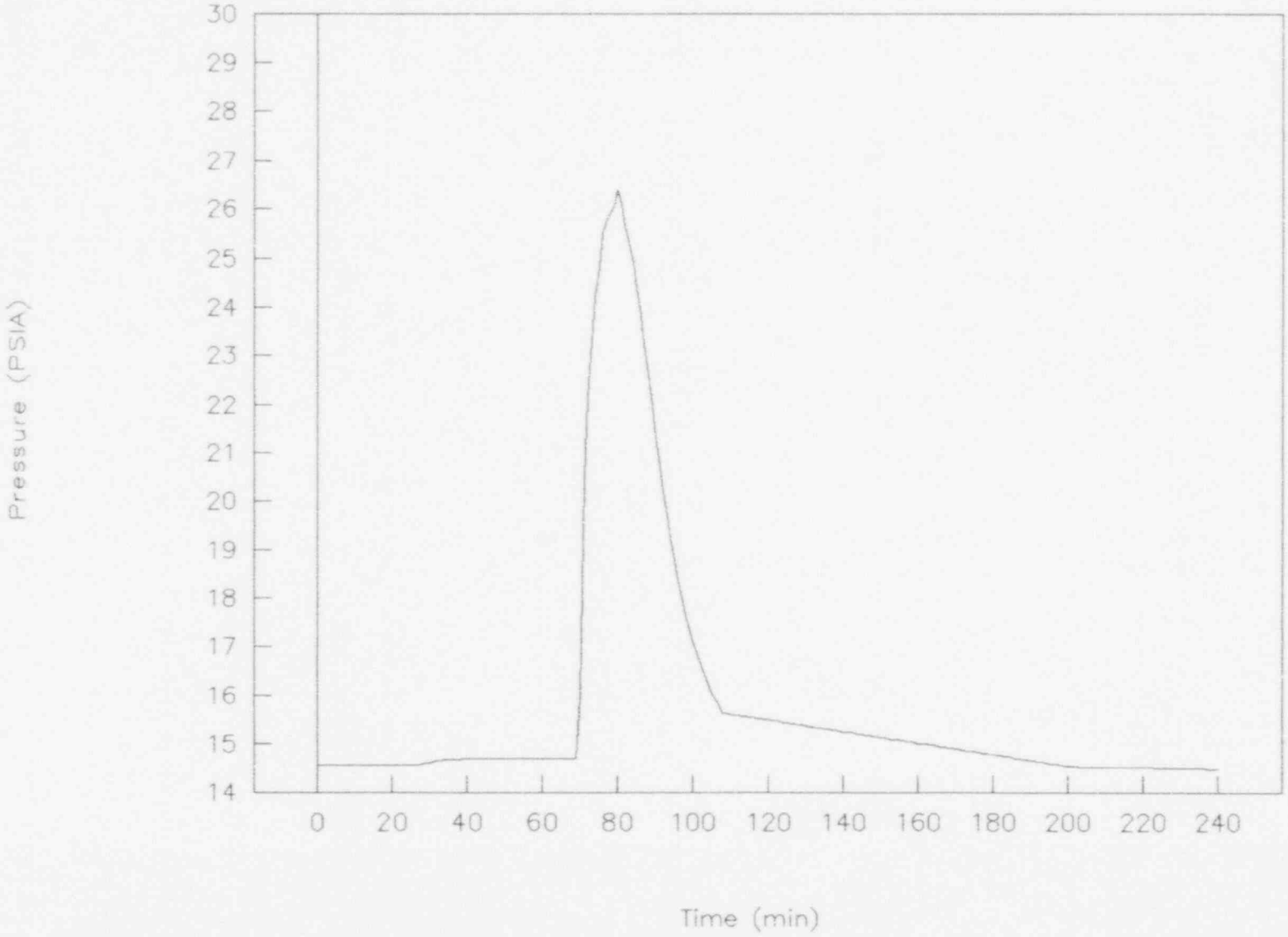
4 HR 0 MIN

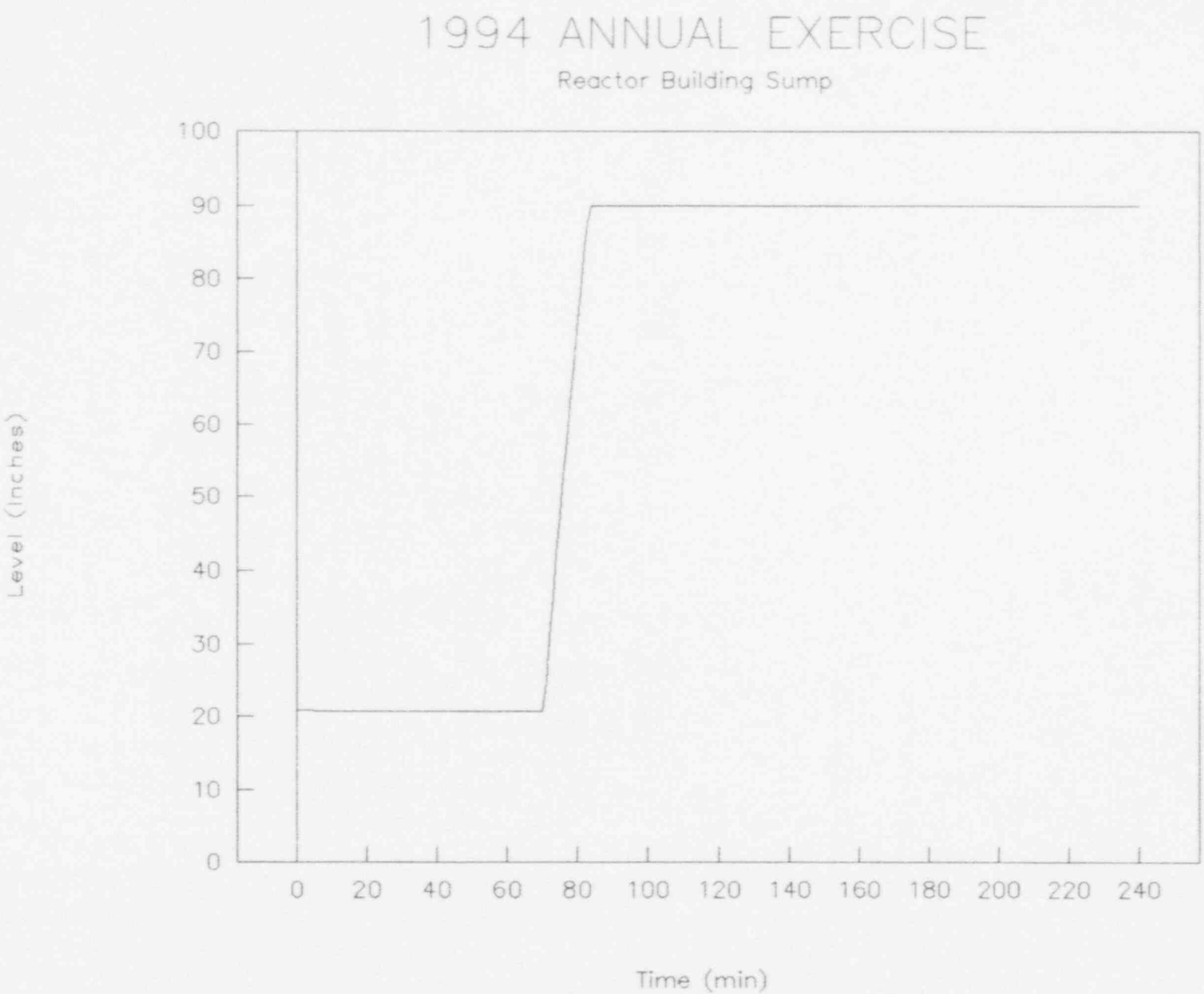
BORON CONCENTRATION VS. TIME

TIME	BORON	TIME	BORON	TIME	BORON	TIME	BORON	TIME	BORON
0	15	60	65	120	1293	180	1683	240	1885
1	15	61	65	121	1300	181	1689		
2	15	62	65	122	1306	182	1696		
3	15	63	66	123	1313	183	1702		
4	15	64	66	124	1319	184	1709		
5	15	65	68	125	1326	185	1715		
6	15	66	76	126	1332	186	1722		
7	15	67	80	127	1339	187	1728		
8	15	68	82	128	1345	188	1735		
9	15	69	84	129	1352	189	1741		
10	15	70	90	130	1358	190	1748		
11	15	71	129	131	1365	191	1754		
12	15	72	178	132	1371	192	1761		
13	15	73	234	133	1378	193	1767		
14	15	74	285	134	1384	194	1774		
15	15	75	365	135	1391	195	1780		
16	15	76	420	136	1397	196	1786		
17	15	77	444	137	1404	197	1793		
18	15	78	484	138	1410	198	1799		
19	15	79	707	139	1417	199	1806		
20	15	80	685	140	1423	200	1812		
21	15	81	763	141	1430	201	1814		
22	15	82	802	142	1436	202	1816		
23	15	83	836	143	1443	203	1818		
24	15	84	877	144	1449	204	1820		
25	15	85	916	145	1456	205	1821		
26	15	86	962	146	1462	206	1823		
27	15	87	1023	147	1469	207	1825		
28	15	88	1114	148	1475	208	1827		
29	15	89	1120	149	1482	209	1829		
30	15	90	1143	150	1488	210	1831		
31	25	91	1156	151	1495	211	1832		
32	37	92	1171	152	1501	212	1834		
33	41	93	1186	153	1508	213	1836		
34	40	94	1201	154	1514	214	1838		
35	40	95	1215	155	1521	215	1840		
36	40	96	1228	156	1527	216	1841		
37	40	97	1217	157	1533	217	1843		
38	45	98	1213	158	1540	218	1845		
39	52	99	1208	159	1546	219	1847		
40	58	100	1204	160	1553	220	1849		
41	65	101	1200	161	1559	221	1850		
42	65	102	1197	162	1566	222	1852		
43	65	103	1194	163	1572	223	1854		
44	65	104	1191	164	1579	224	1856		
45	65	105	1188	165	1585	225	1858		
46	65	106	1185	166	1592	226	1860		
47	65	107	1183	167	1598	227	1861		
48	65	108	1216	168	1605	228	1863		
49	66	109	1222	169	1611	229	1865		
50	66	110	1229	170	1618	230	1867		
51	66	111	1235	171	1624	231	1869		
52	66	112	1242	172	1631	232	1870		
53	65	113	1248	173	1637	233	1872		
54	65	114	1255	174	1644	234	1874		
55	65	115	1261	175	1650	235	1876		
56	65	116	1268	176	1657	236	1878		
57	65	117	1274	177	1663	237	1879		
58	65	118	1281	178	1670	238	1881		
59	65	119	1287	179	1676	239	1883		

1994 ANNUAL EXERCISE

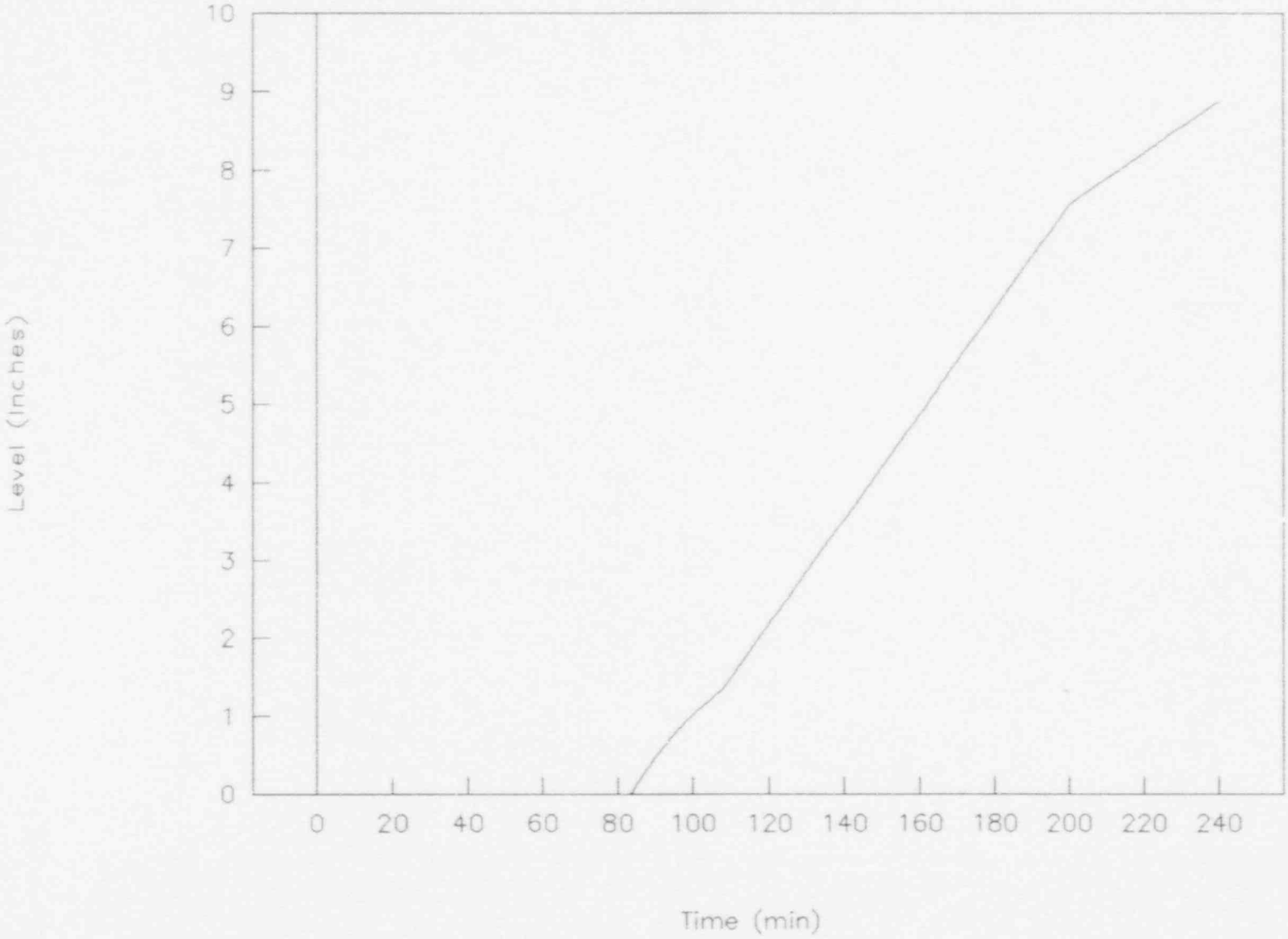
RB Pressure

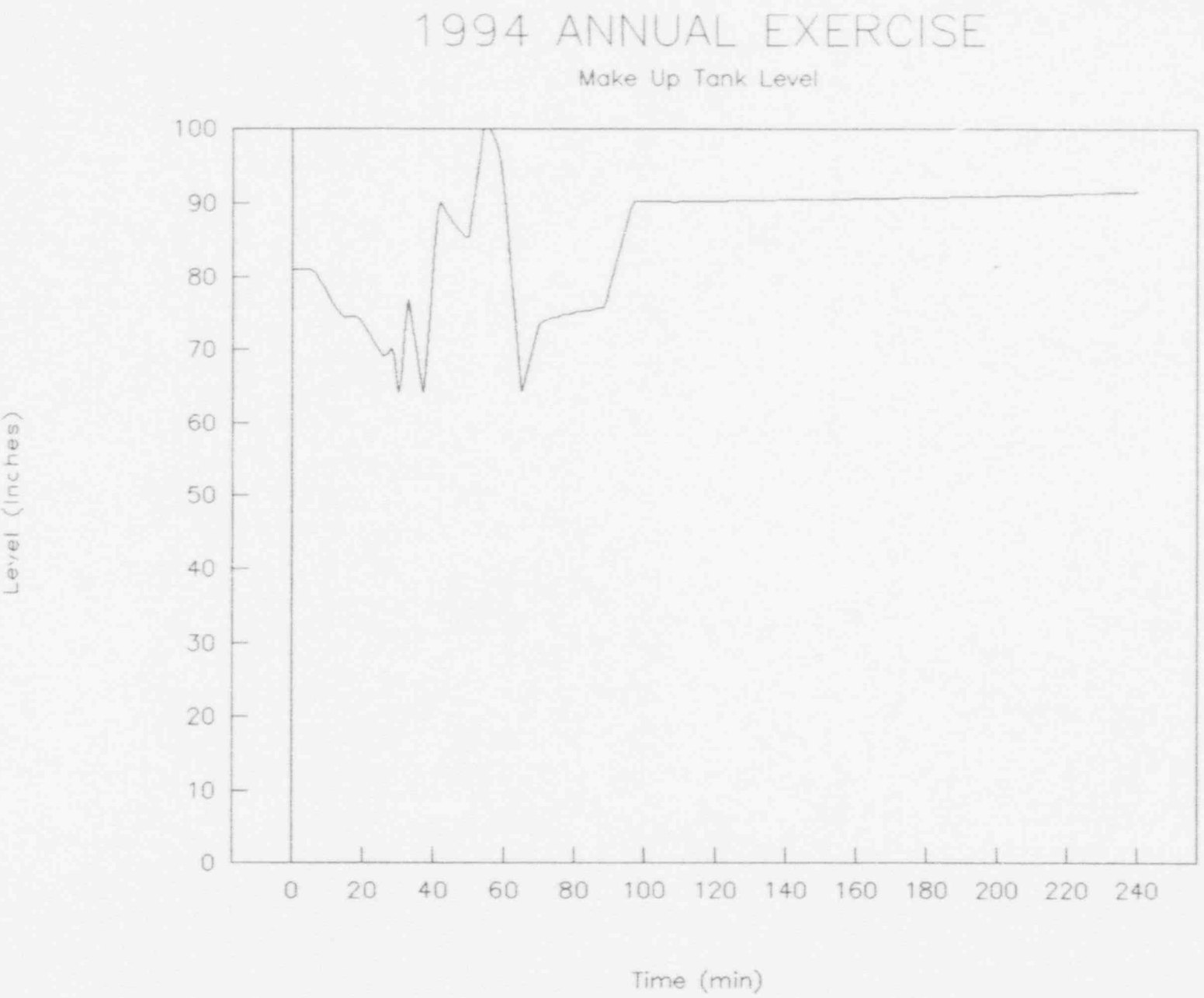


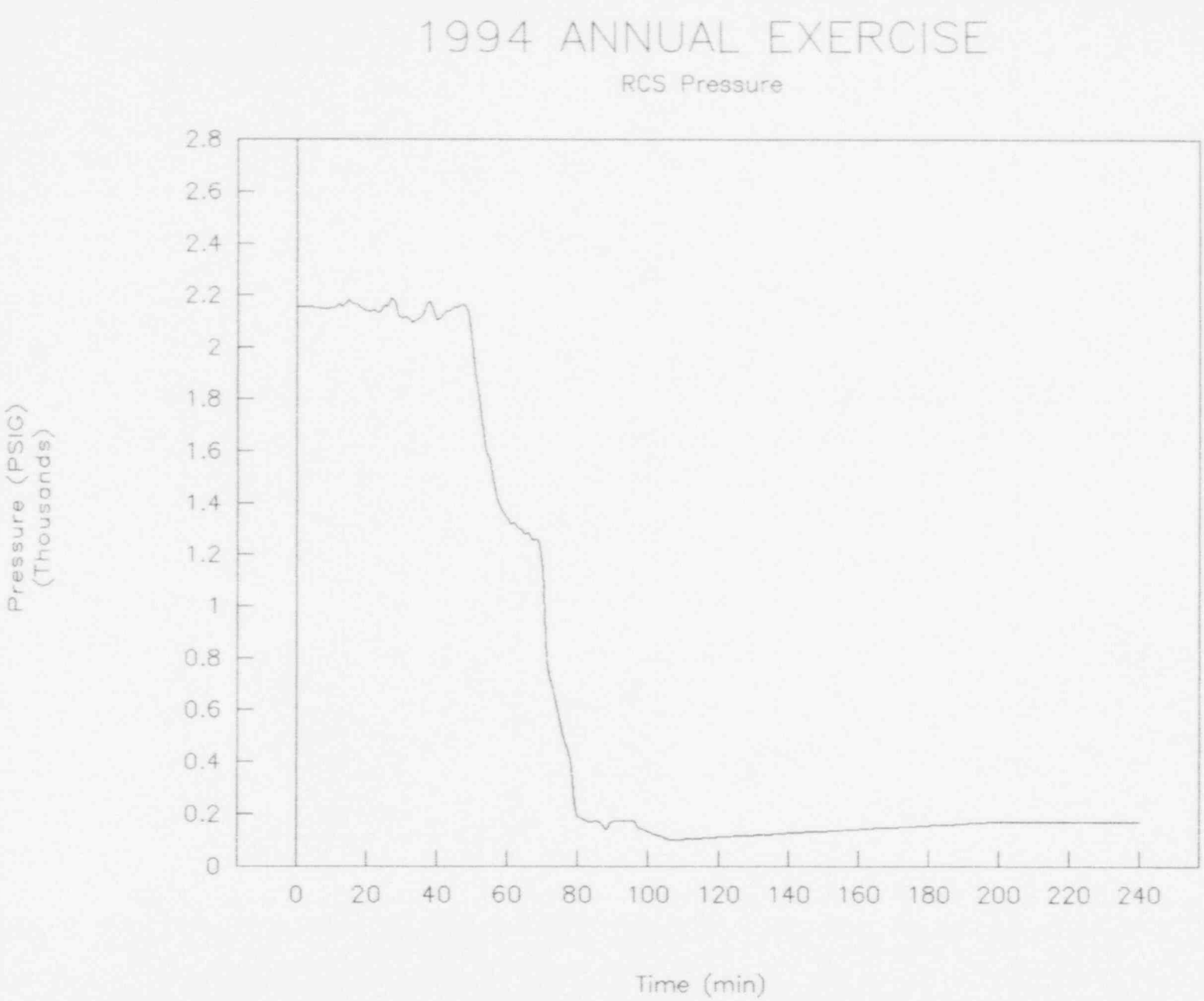

1994 ANNUAL EXERCISE
Reactor Building Sump
Level (Inches)
100
90
80
70
60
50
40
30
20
10
0
0
20
40
60
80
100
120
140
160
180
200
220
240
Time (min)

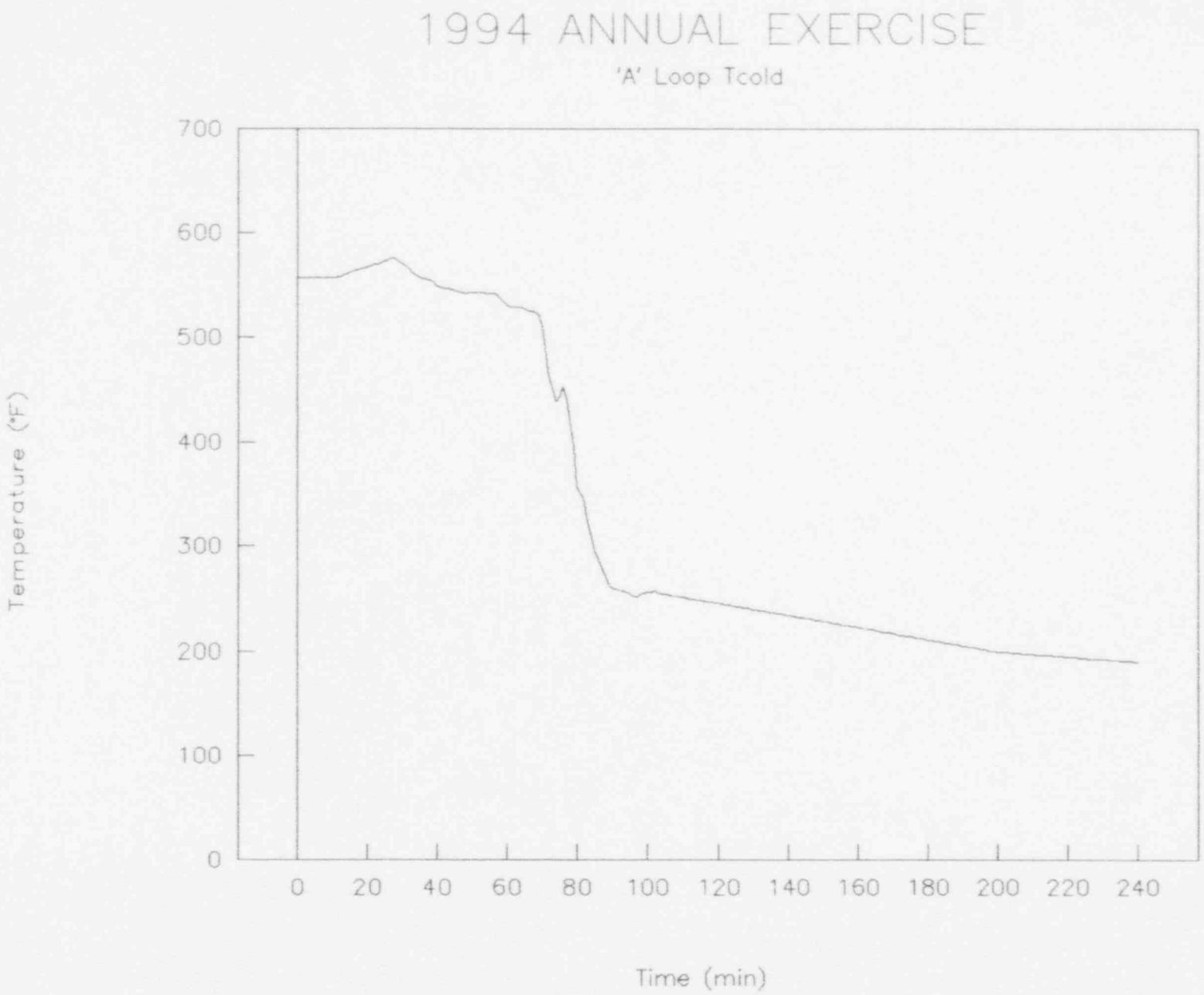
1994 ANNUAL EXERCISE

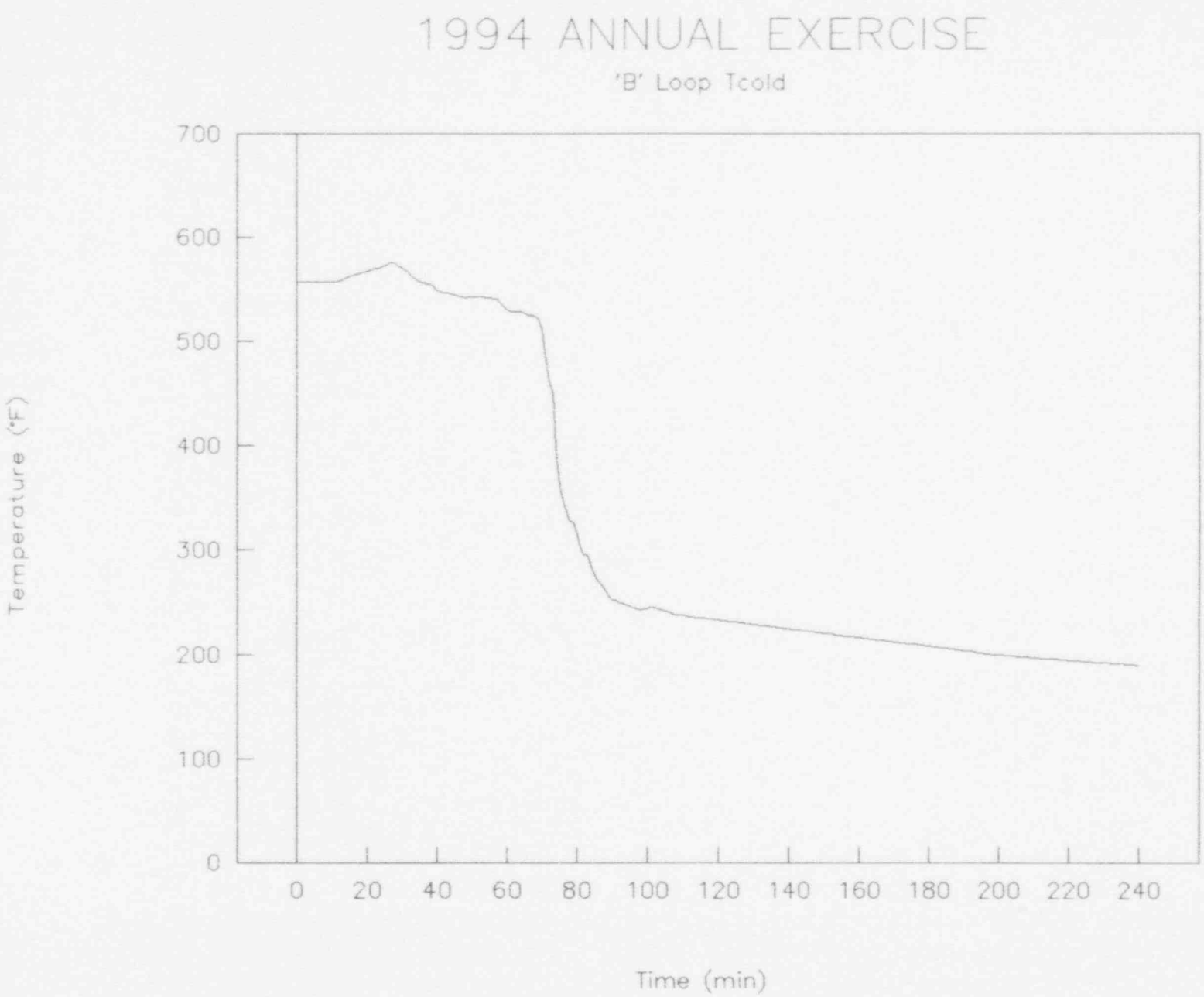
Reactor Building Floor




1994 ANNUAL EXERCISE
Make Up Tank Level
Level (inches)
100
90
80
70
60
50
40
30
20
10
0
0
20
40
60
80
100
120
140
160
180
200
220
240
Time (min)

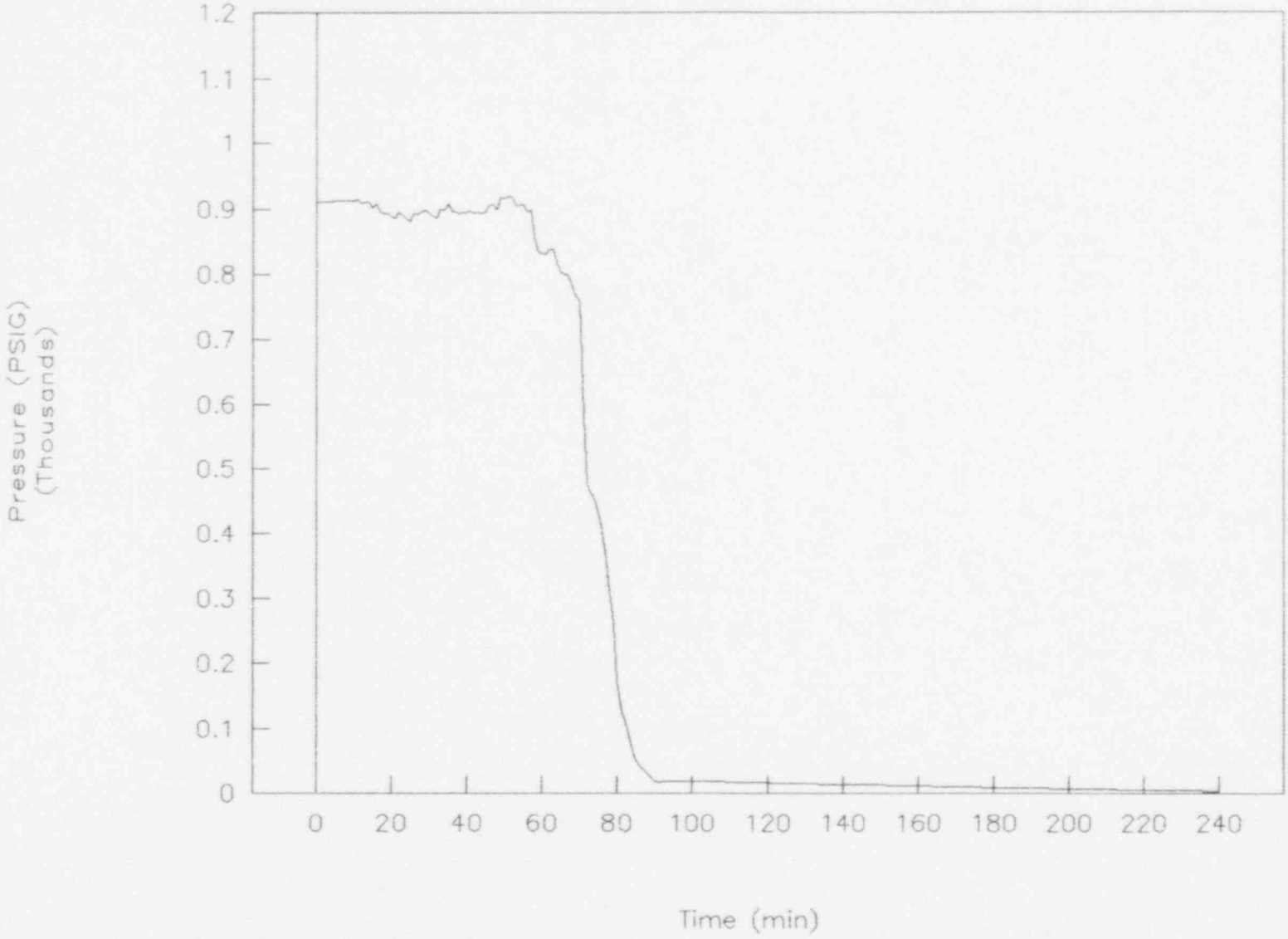

1994 ANNUAL EXERCISE
RCS Pressure
Pressure (PSIG)
(Thousands)
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0
20
40
60
80
100
120
140
160
180
200
220
240
Time (min)

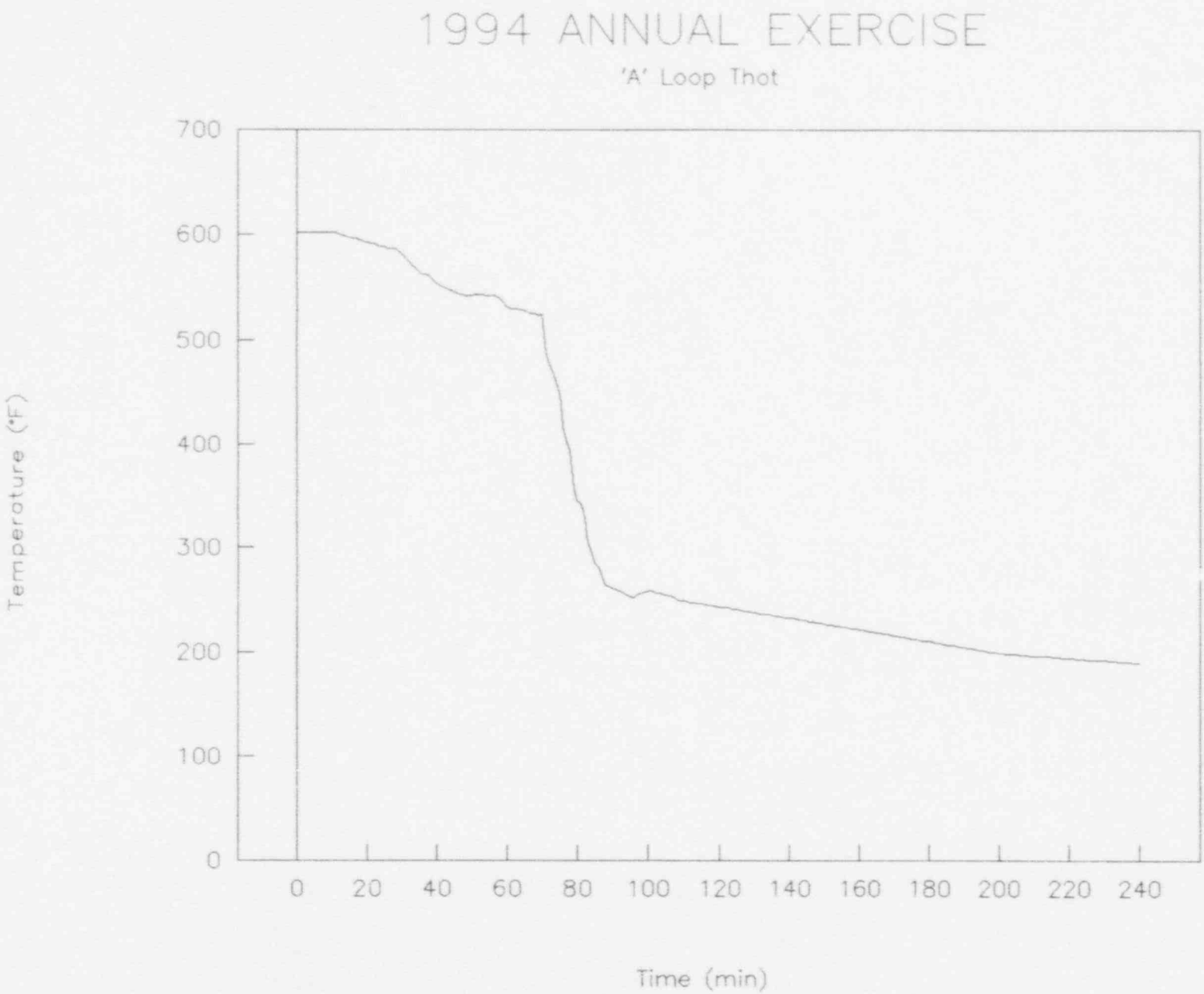

1994 ANNUAL EXERCISE
'A' Loop Tcold
Temperature (°F)
700
600
500
400
300
200
100
0
0
20
40
60
80
100
120
140
160
180
200
220
240
Time (min)


1994 ANNUAL EXERCISE
'B' Loop Tcold
Temperature (°F)
700
600
500
400
300
200
100
0
0
20
40
60
80
100
120
140
160
180
200
220
240
Time (min)

1994 ANNUAL EXERCISE

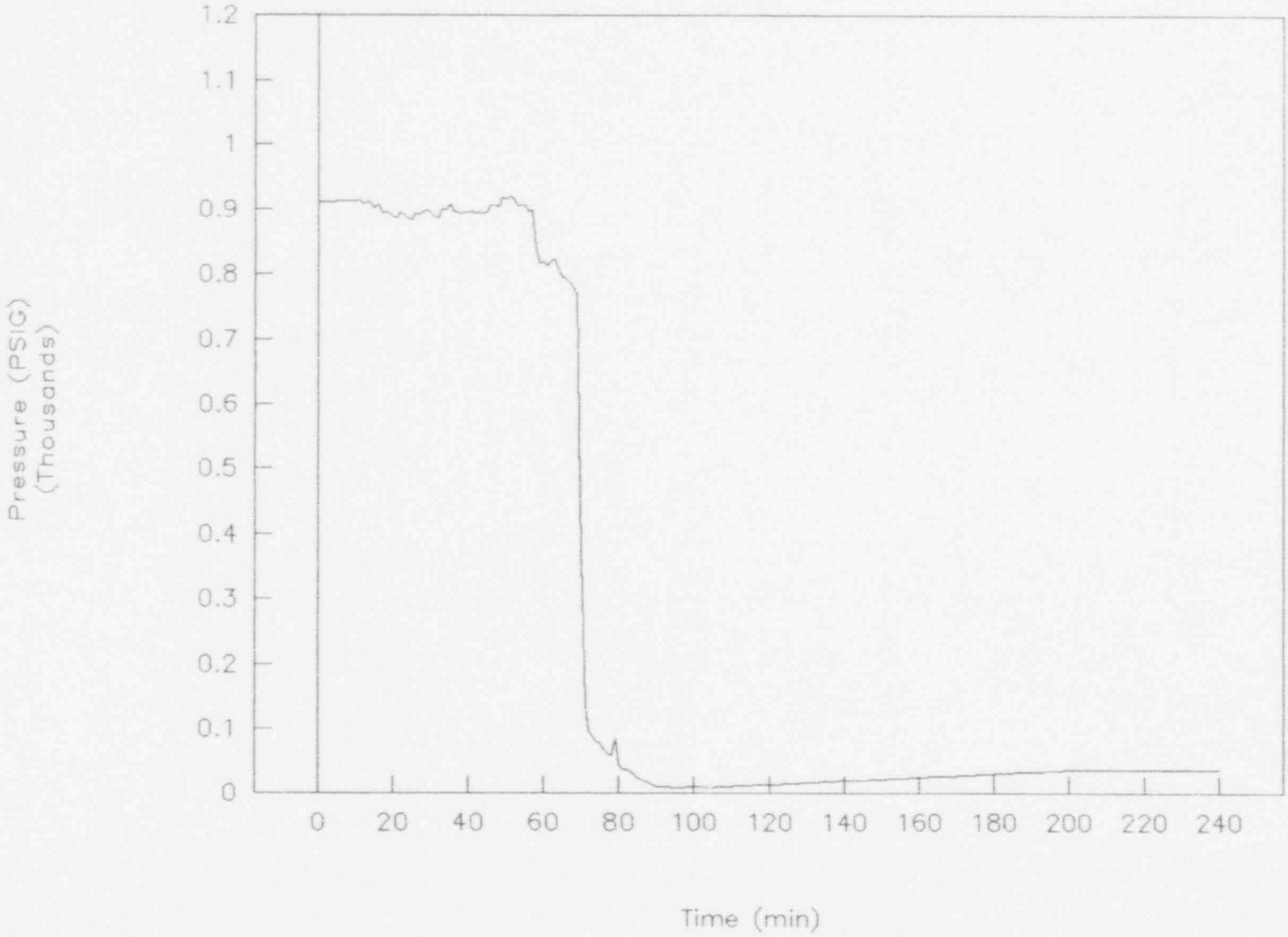
'A' OTSG Pressure




1994 ANNUAL EXERCISE
'A' Loop Thot
Temperature (°F)
700
600
500
400
300
200
100
0
0
20
40
60
80
100
120
140
160
180
200
220
240
Time (min)

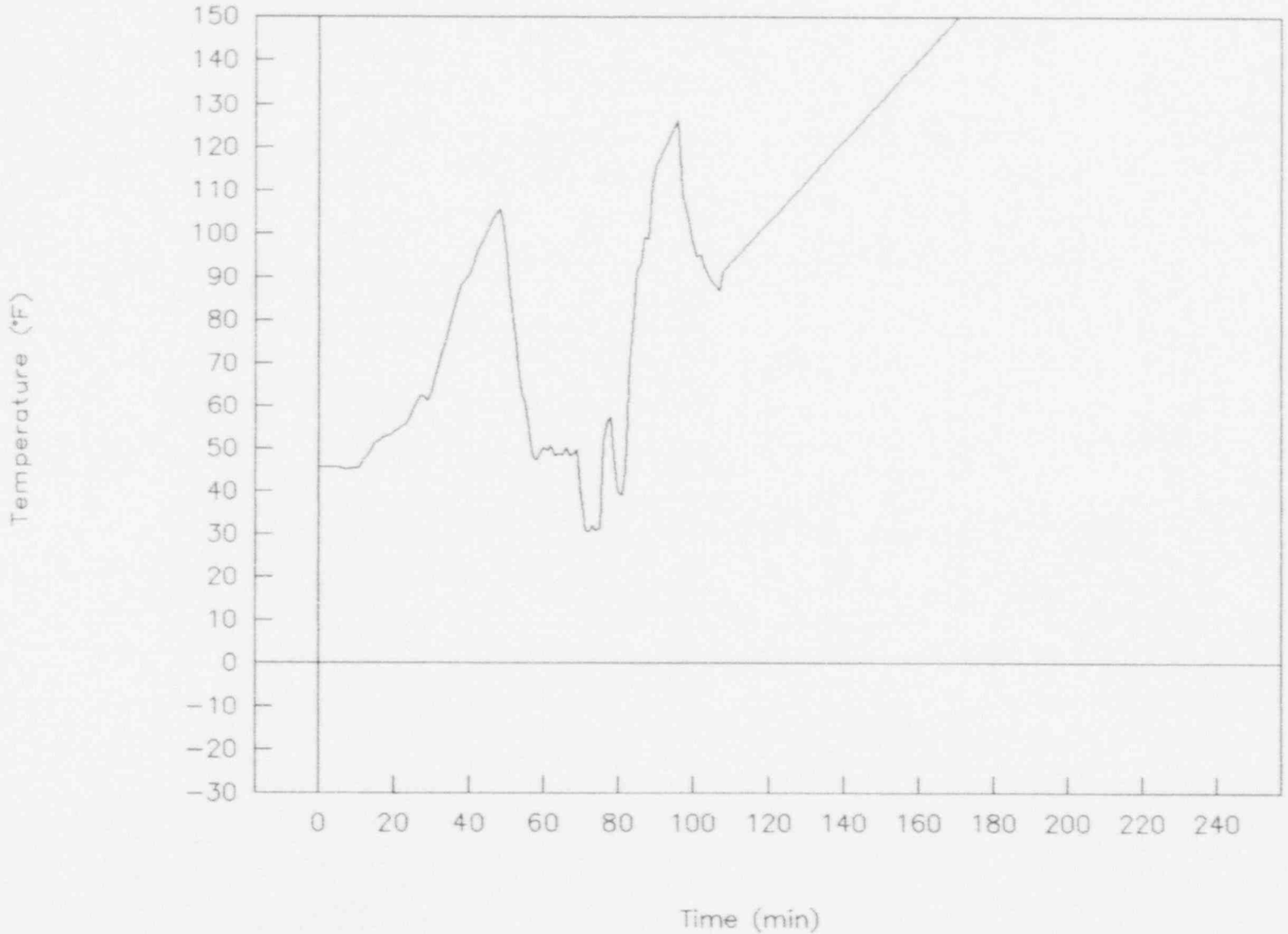
1994 ANNUAL EXERCISE

'B' OTSG Pressure



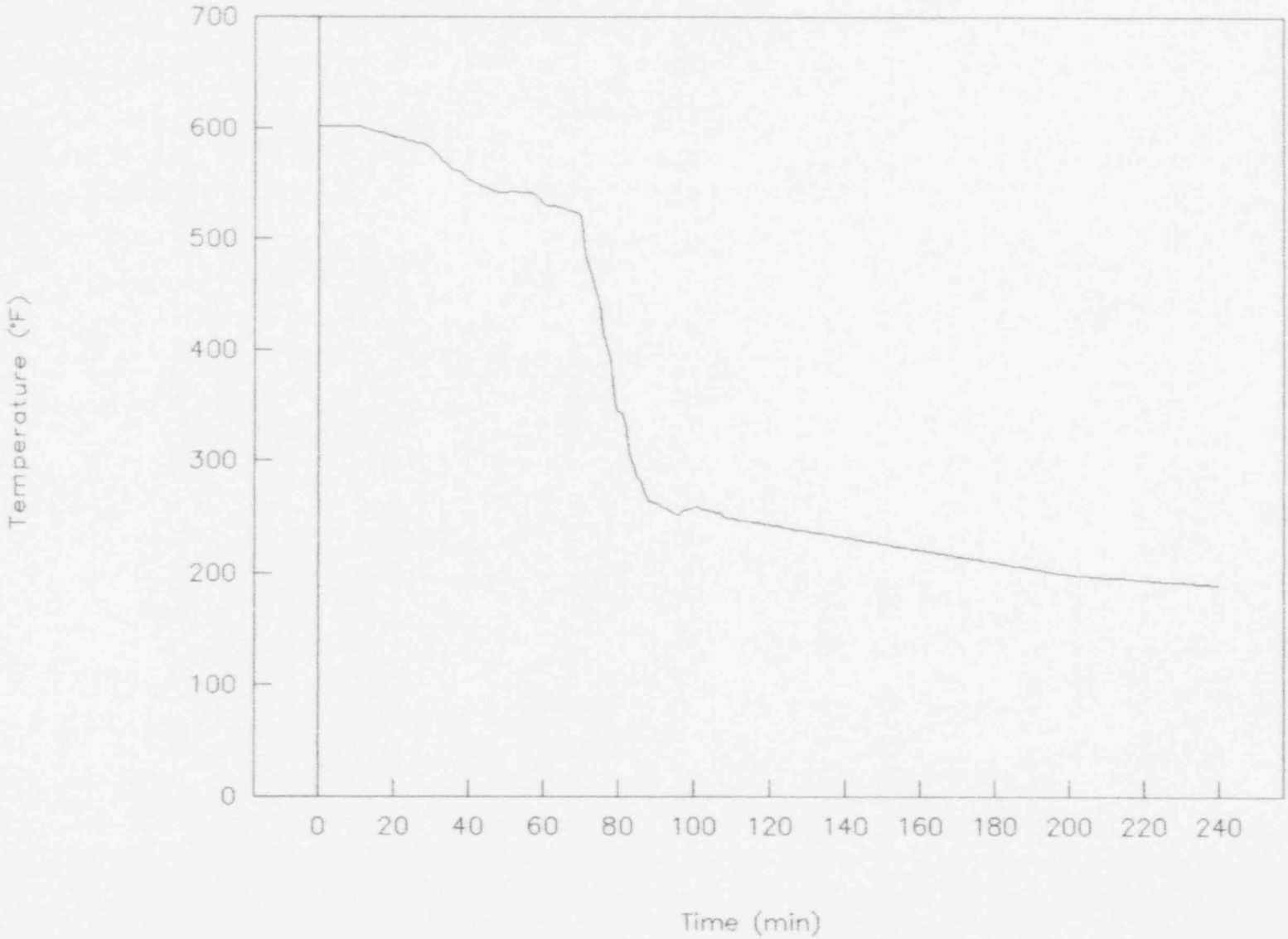
1994 ANNUAL EXERCISE

'A' Loop Subcooling Margin



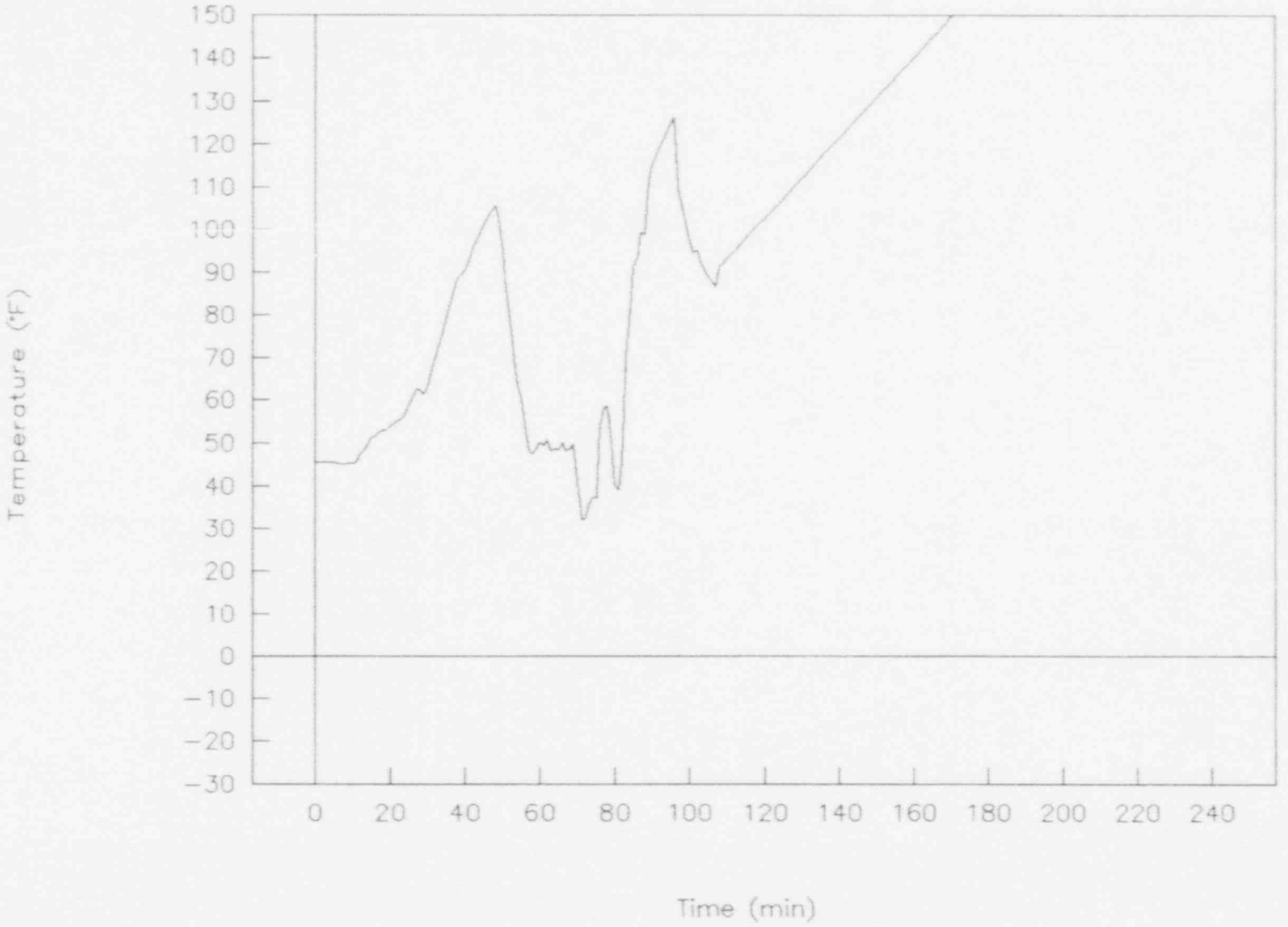
1994 ANNUAL EXERCISE

'B' Loop Thot



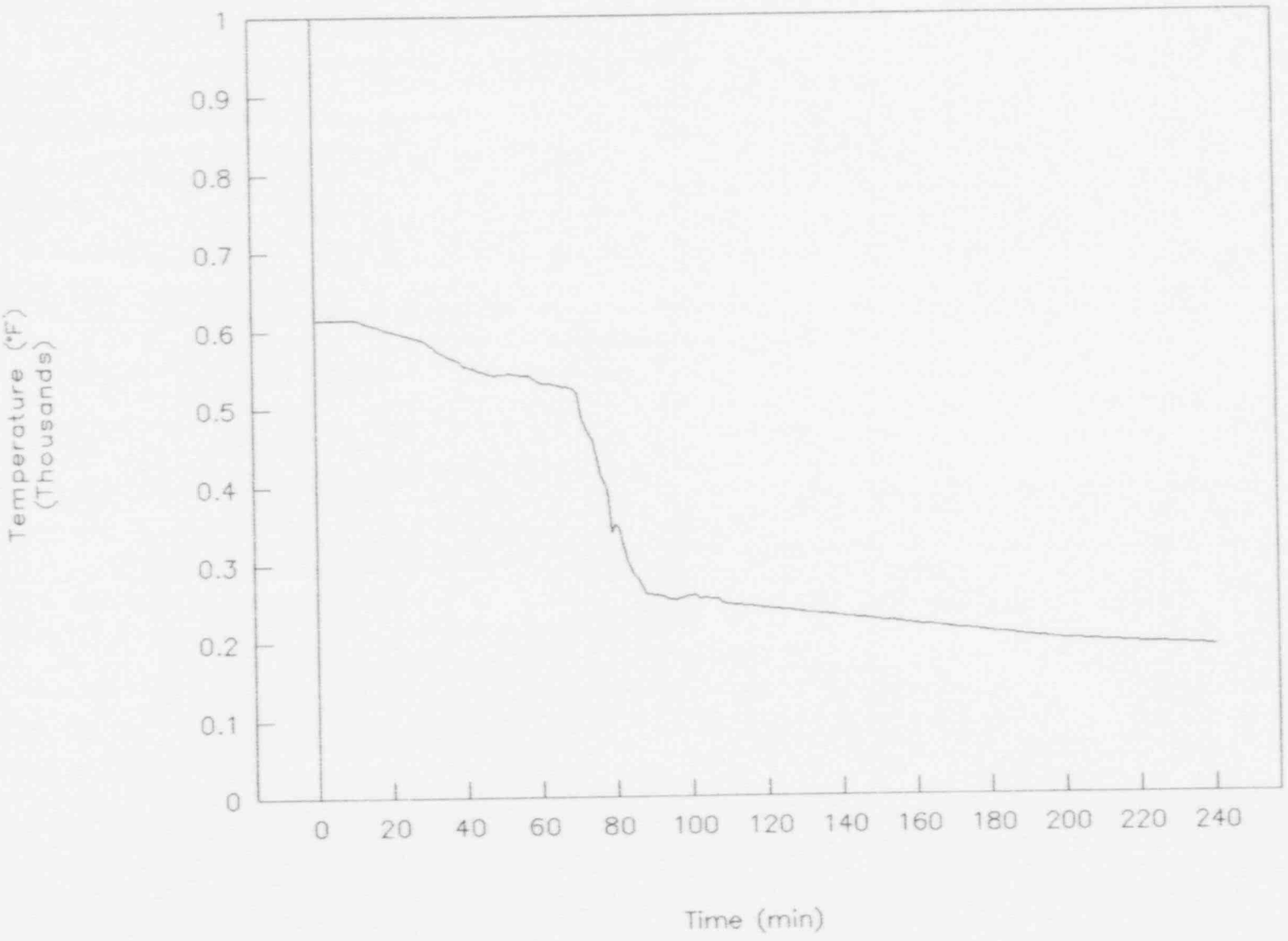
1994 ANNUAL EXERCISE

'B' Loop Subcooling Margin



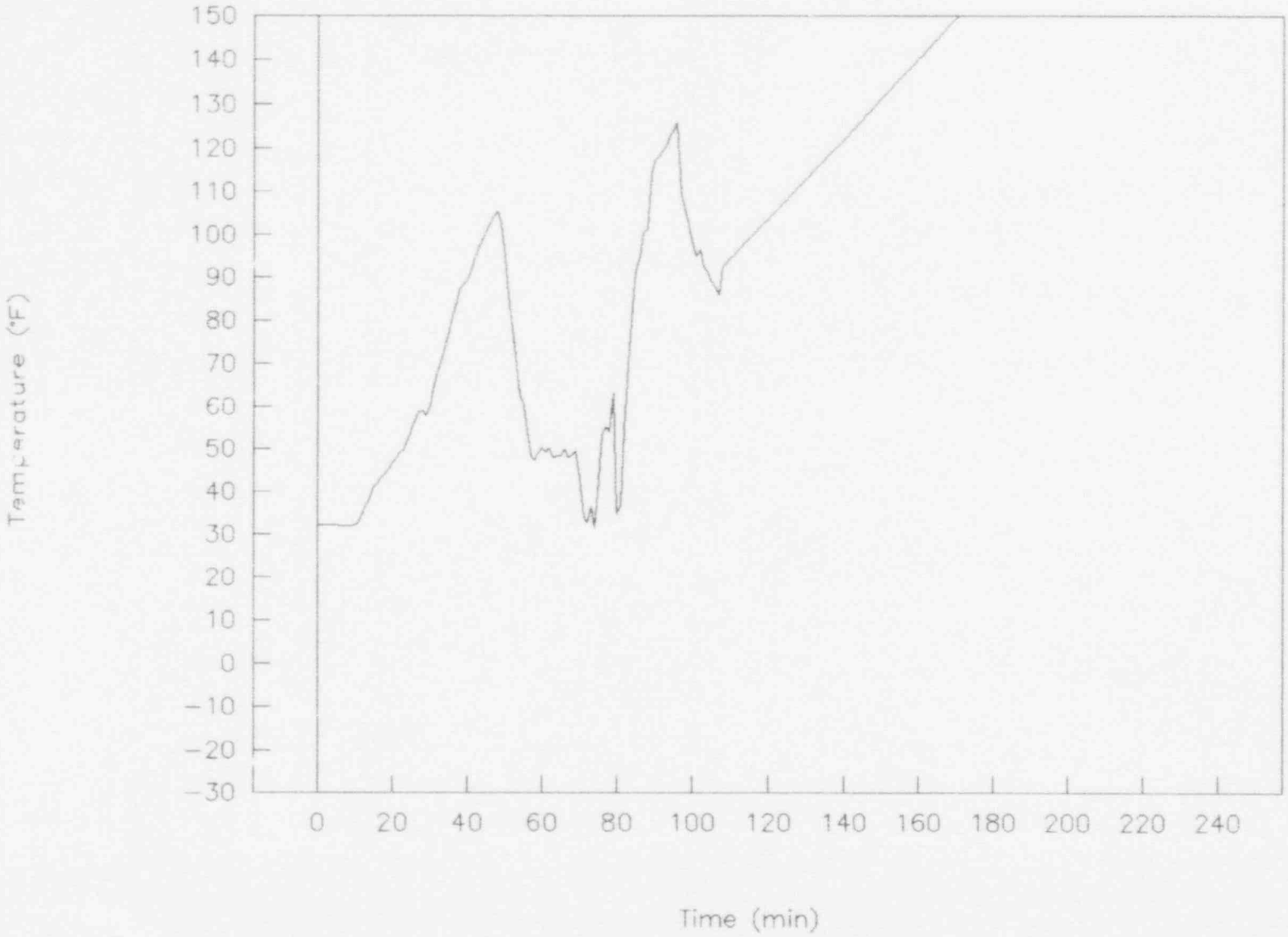
1994 ANNUAL EXERCISE

Average 5 High Incore T/C



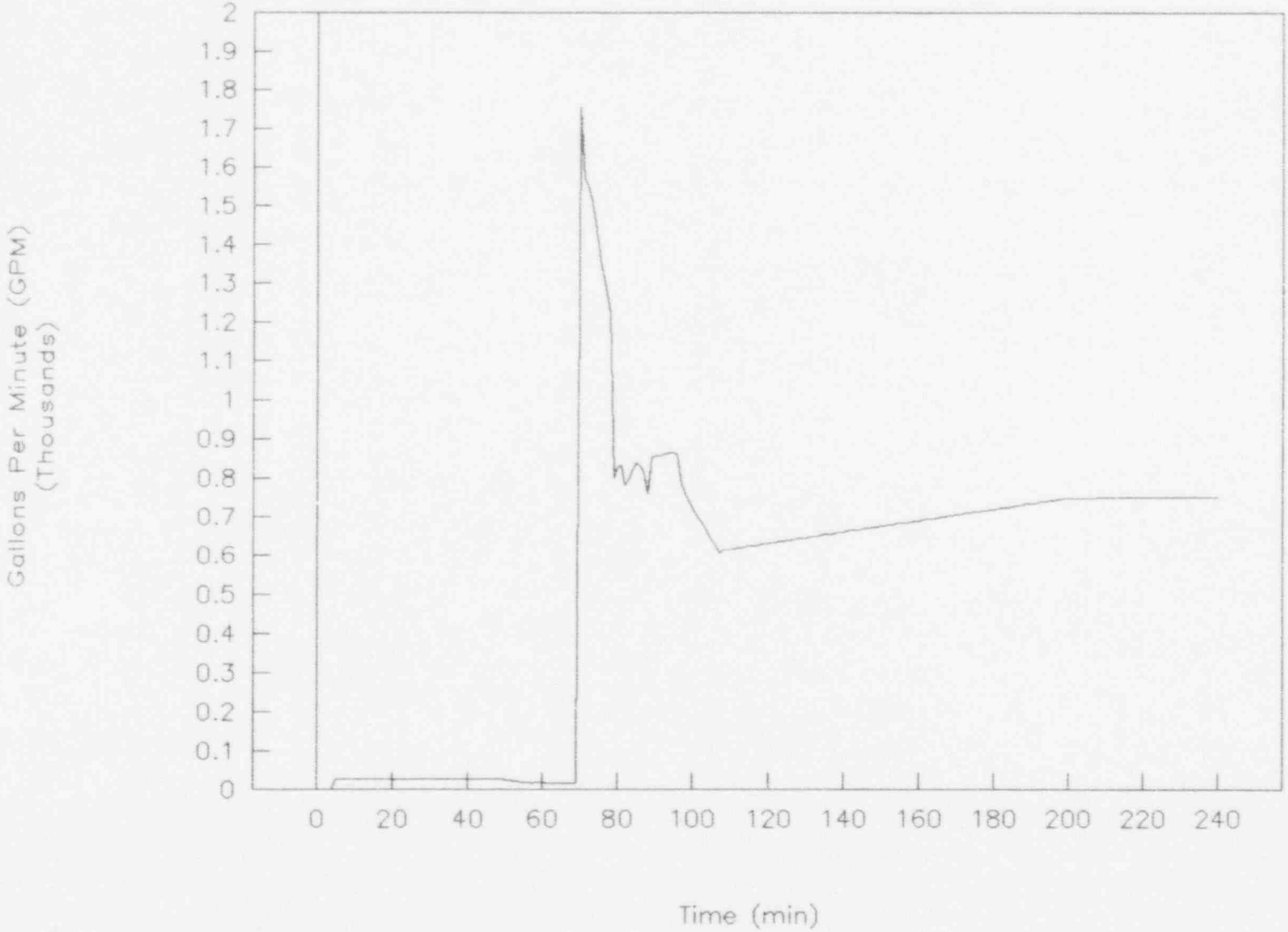
1994 ANNUAL EXERCISE

Incore Subcooling Margin



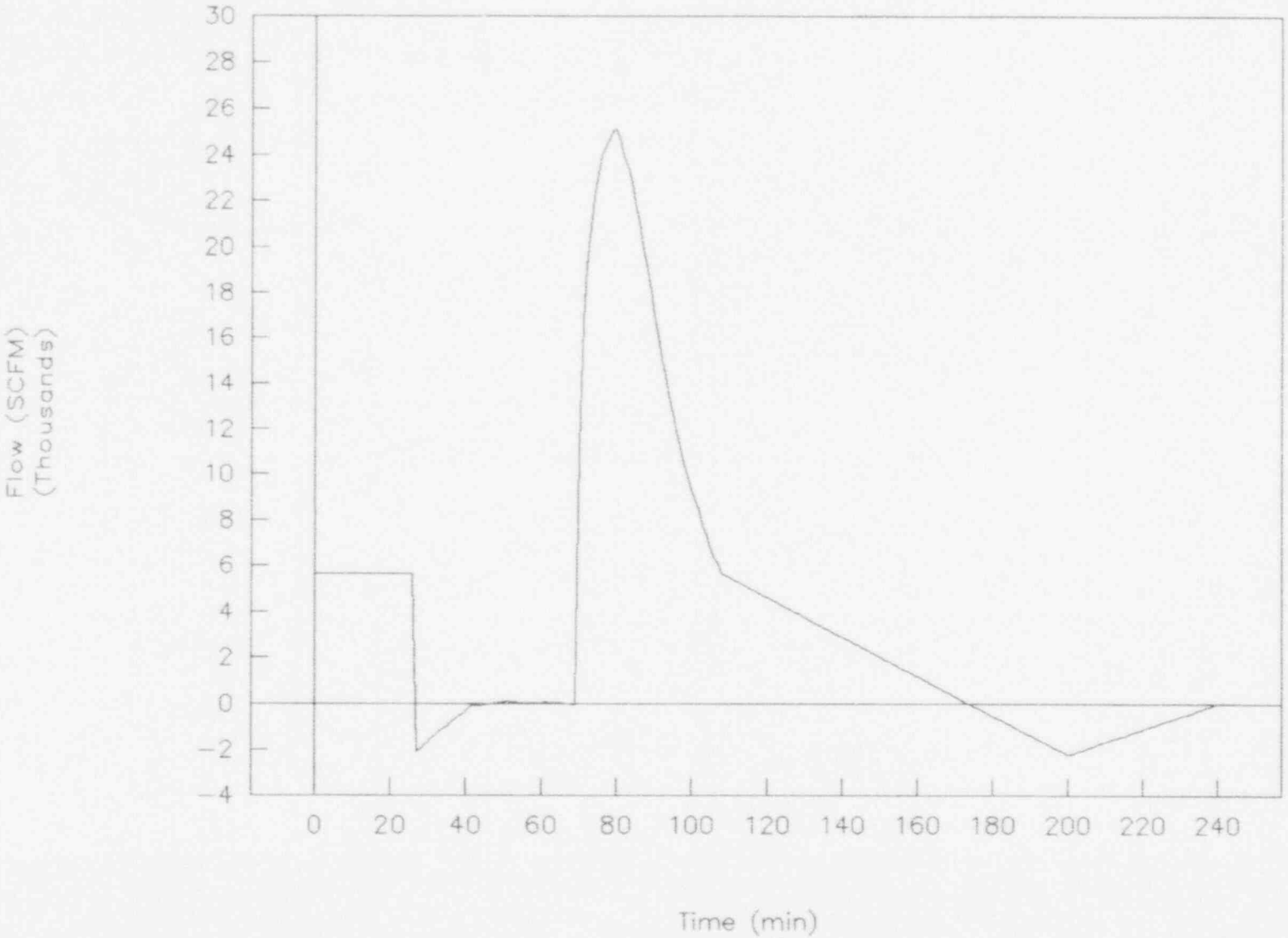
1994 ANNUAL EXERCISE

'B' OTSG Leak rate



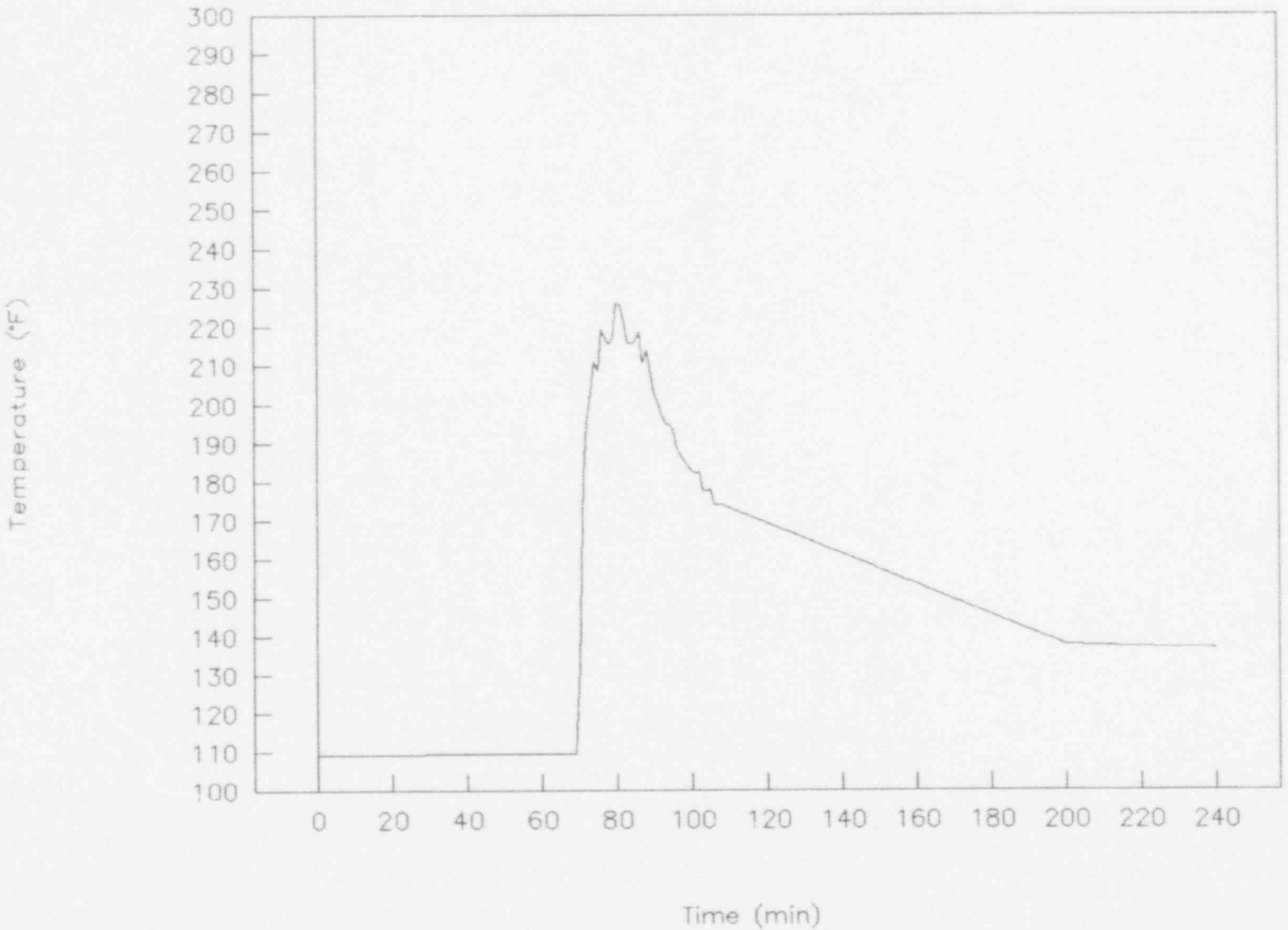
1994 ANNUAL EXERCISE

RB Purge Flow



1994 ANNUAL EXERCISE

RB Temperature

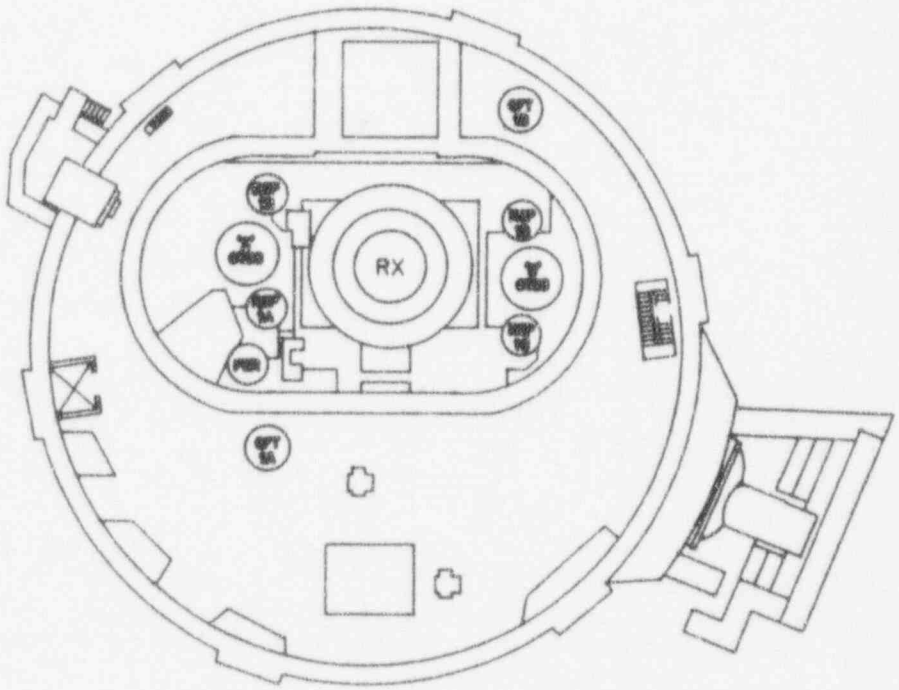


APPENDIX B
INPLANT RADIOLOGICAL CONTROLS DATA

TABLE OF CONTENTS

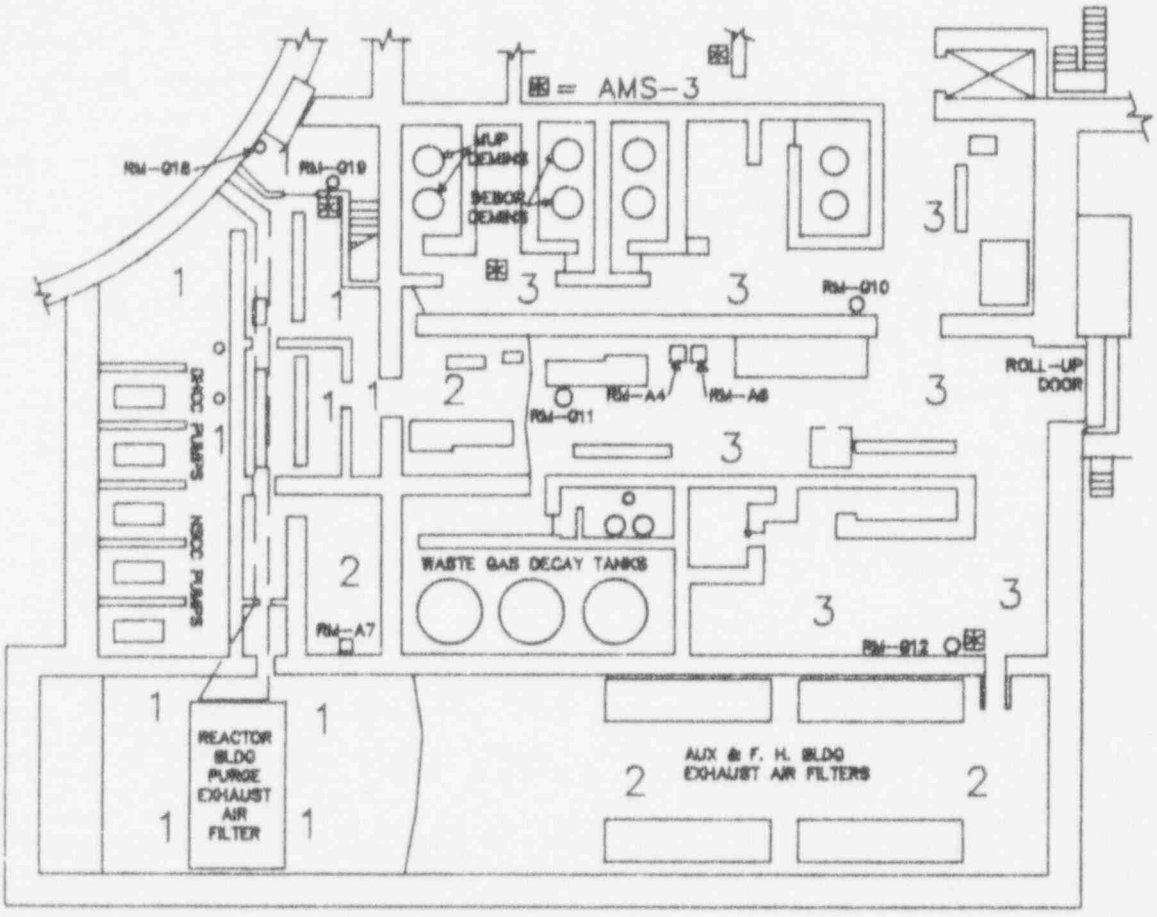
BLDG – REACTOR CONT ELEV. – ALL

ANNUAL EXERCISE
DATE: 05/19/94



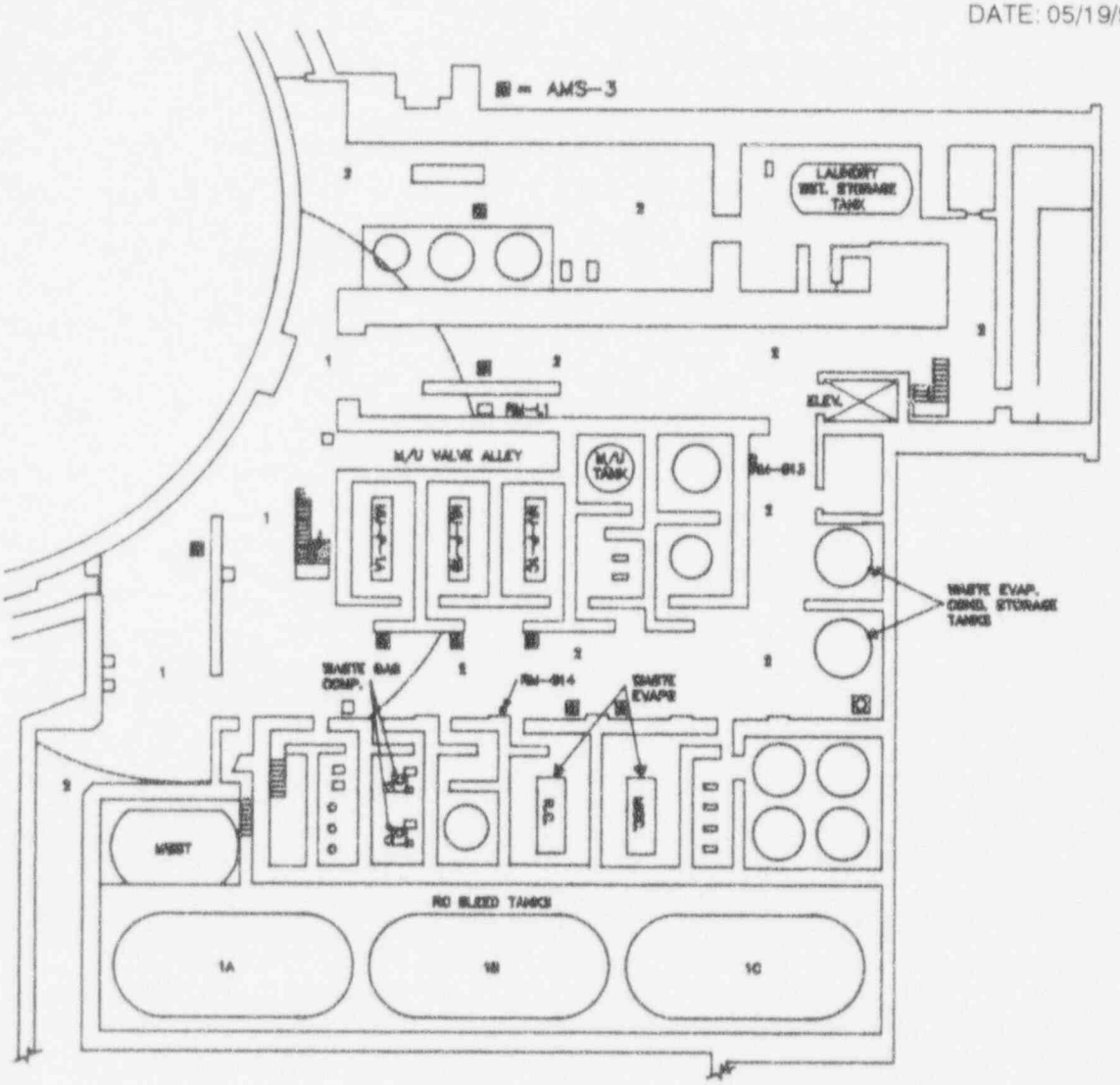
		TIME								
LOCATION	TYPE OF READING	(0730-0735)	(0736-0800)	(0801-0830)	(0831-0900)	(0901-0930)	(0931-1000)	(1001-1030)	(1031-1100)	(1101-END)
ZONE #1	CW MR/HR	500	503	504	1101	2153	2830	3154	3193	10614
346' & ABOVE	OW MR/HR	550	553	555	1211	2368	3113	3469	3512	11675
ZONE #2	CW MR/HR	120	121	121	240	451	586	651	659	2143
BELOW 346'	OW MR/HR	132	133	133	264	496	645	716	724	2357
ALL ZONES CONTAM.	CPM/100CM ^ 2	A/R	4	28	8E+03	5E+04	1E+05	2E+05	3E+05	3E+05
	MR/HR	A/R	A/R	A/R	1	4	10	17	23	28

BLDG – AUX ELEV. – 305' ANNUAL EXERCISE
DATE: 05/19/94



LOCATION	TYPE OF READING	TIME (0730-0735)	(0736-0800)	(0801-0830)	(0831-0900)	(0901-0930)	(0931-1000)	(1001-1030)	(1031-1100)	(1101-END)
ZONE #1	CW MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
	OW MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
ZONE #2	CW MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
	OW MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
ZONE #3	CW MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
	OW MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
WITHIN 10 ft.	CW MR/HR	A/R	A/R	A/R	23	62	89	107	117	59
OF PURGE DUCT	OW MR/HR	A/R	A/R	A/R	23	62	89	107	117	59
AT 1 FOOT FROM	CW MR/HR	A/R	0.3	0.7	377	1026	1481	1788	1953	976
PURGE DUCT	OW MR/HR	A/R	0.3	0.7	377	1026	1481	1788	1953	976
ZONE #1 AMS-3's	CPM	400	400	400	400	400	400	400	400	400
	ALARM STATUS	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE
ZONE #2&3 AMS-3's	CPM	400	400	400	400	400	400	400	400	400
	ALARM STATUS	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE
ZONE #1 CONTAM.	CPM/100CM ^ 2	A/R	A/R	A/R	0	0	0	0	0	0
	MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
ZONE #2 CONTAM.	CPM/100CM ^ 2	A/R	A/R	A/R	0	0	0	0	0	0
	MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
ZONE #3 CONTAM.	CPM/100CM ^ 2	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
	MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R

BLDG – AUX ELEV. – 281' ANNUAL EXERCISE
DATE: 05/19/94

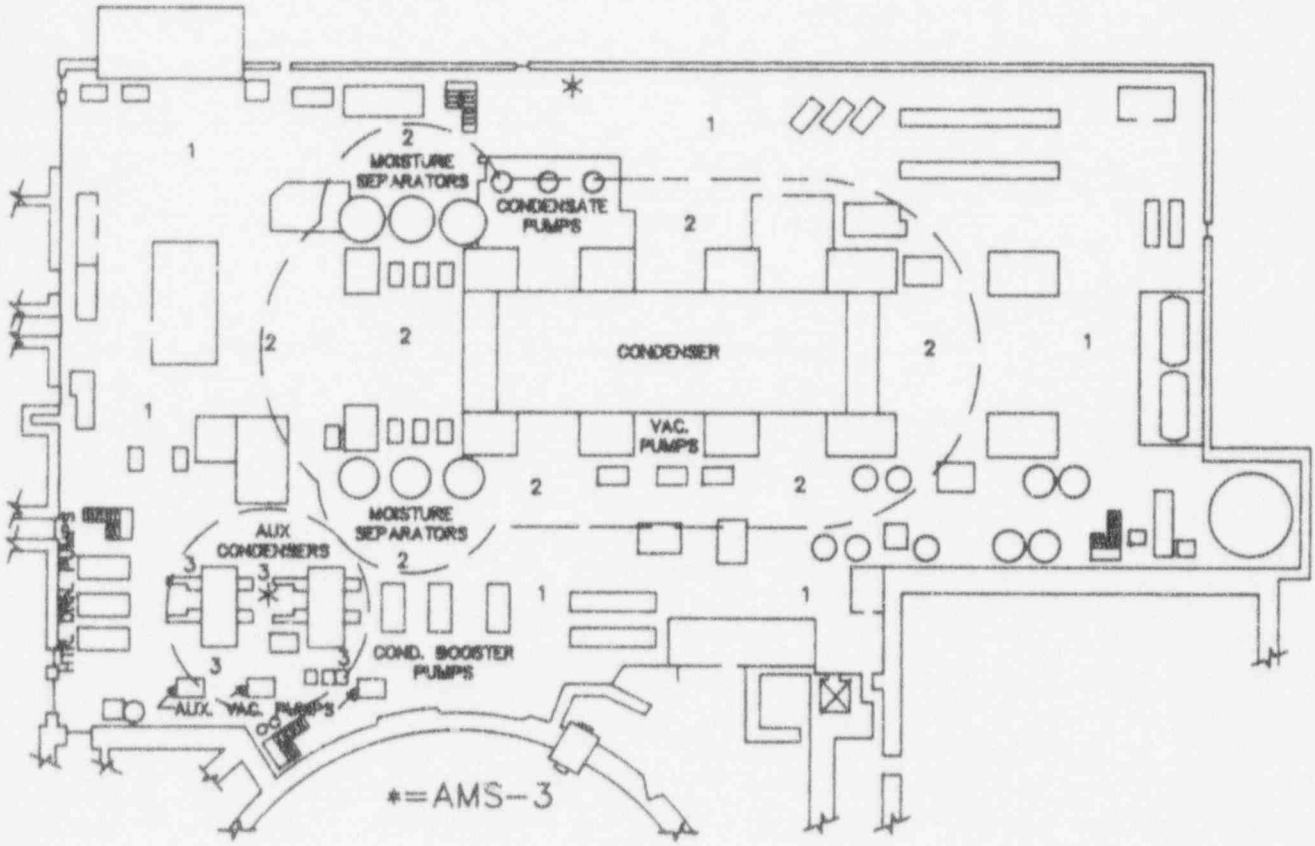


LOCATION	TYPE OF READING	TIME (0730-0735)	(0736-0800)	(0801-0830)	(0831-0900)	(0901-0930)	(0931-1000)	(1001-1030)	(1031-1100)	(1101-END)
ZONE #1	CW MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
	OW MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
ZONE #2	CW MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
	OW MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
DECAY HEAT	CONT. R/HR	A/R	A/R	A/R	A/R	1.6	1.4	1.2	1.0	0.8
DROP LINE(S)	3 FEET R/HR	A/R	A/R	A/R	A/R	0.3	0.3	0.2	0.2	0.2
SAMPLE/LETDOWN	CONT. MR/HR	17	17	17	43	38	34	29	24	19
LINES *	1 FOOT MR/HR	0.7	0.7	0.7	1.8	1.6	1.4	1.2	1.0	0.8
ZONE #1 AMS-3's	CPM	400	401	401	406	406	405	404	404	403
	ALARM STATUS	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE
ZONE #2 AMS-3's	CPM	400	400	400	403	402	402	402	401	401
	ALARM STATUS	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE
ZONE #1 CONTAM	CPM/100CM ^ 2	A/R	0	0	0	0	0	0	0	0
	MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
ZONE #2 CONTAM	CPM/100CM ^ 2	A/R	A/R	0	0	0	0	0	0	0
	MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R

*IF FLOW EXISTS

BLDG – TURBINE ELEV. – 305'

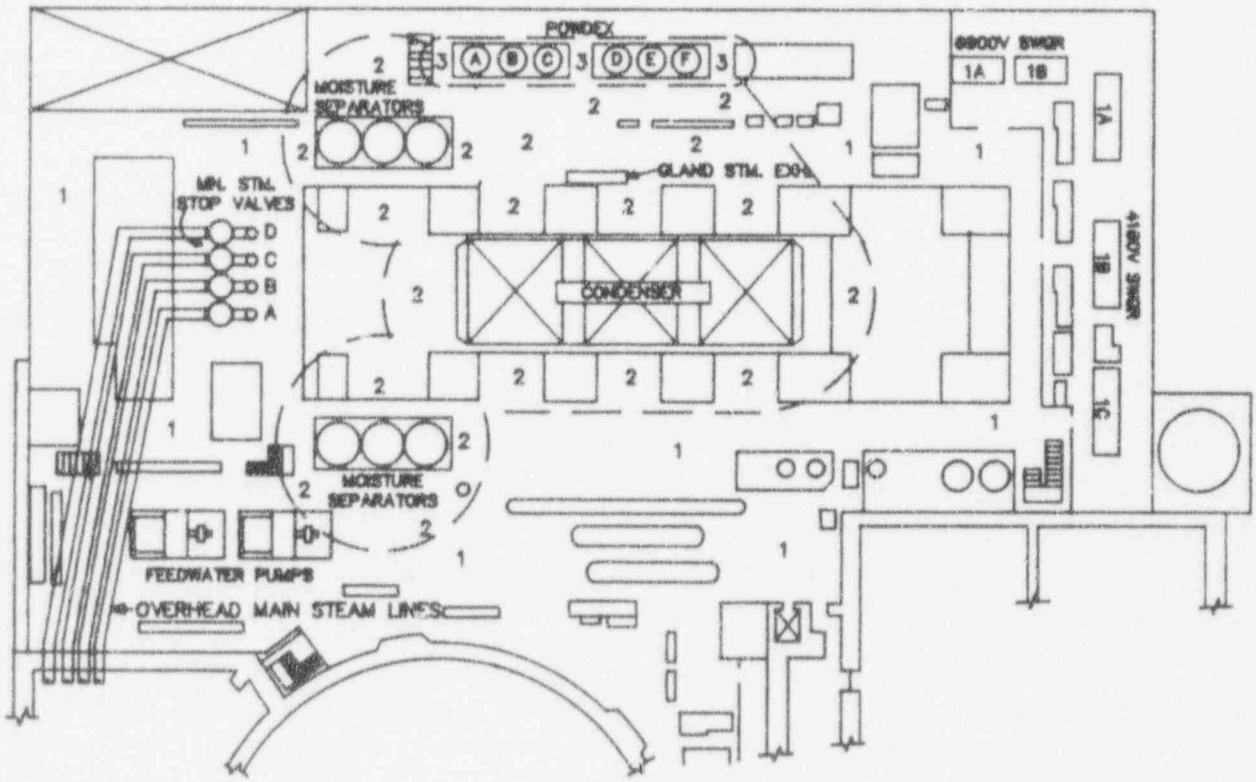
ANNUAL EXERCISE
DATE: 05/19/94



		TIME								
LOCATION	TYPE OF READING	(0730-0735)	(0736-0800)	(0801-0830)	(0831-0900)	(0901-0930)	(0931-1000)	(1001-1030)	(1031-1100)	(1101-END)
ZONE #1	CW MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
GENERAL AREA	OW MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
ZONE #2 NEAR	CW MR/HR	A/R	2.3	3.1	1.5	0.8	0.4	A/R	A/R	A/R
MAIN COND.	OW MR/HR	A/R	2.3	3.1	1.5	0.8	0.4	A/R	A/R	A/R
ZONE #3 NEAR	CW MR/HR	A/R	0.5	0.6	0.3	A/R	A/R	A/R	A/R	A/R
AUX. COND.	OW MR/HR	A/R	0.5	0.7	0.3	A/R	A/R	A/R	A/R	A/R
AMS-3 READING	CPM	500	519	538	538	538	538	538	538	538
	ALARM STATUS	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE
CONTAMINATION	CPM/100CM^2	A/R	1	2	2	2	2	2	2	2
	MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R

BLDG – TURBINE ELEV – 322'

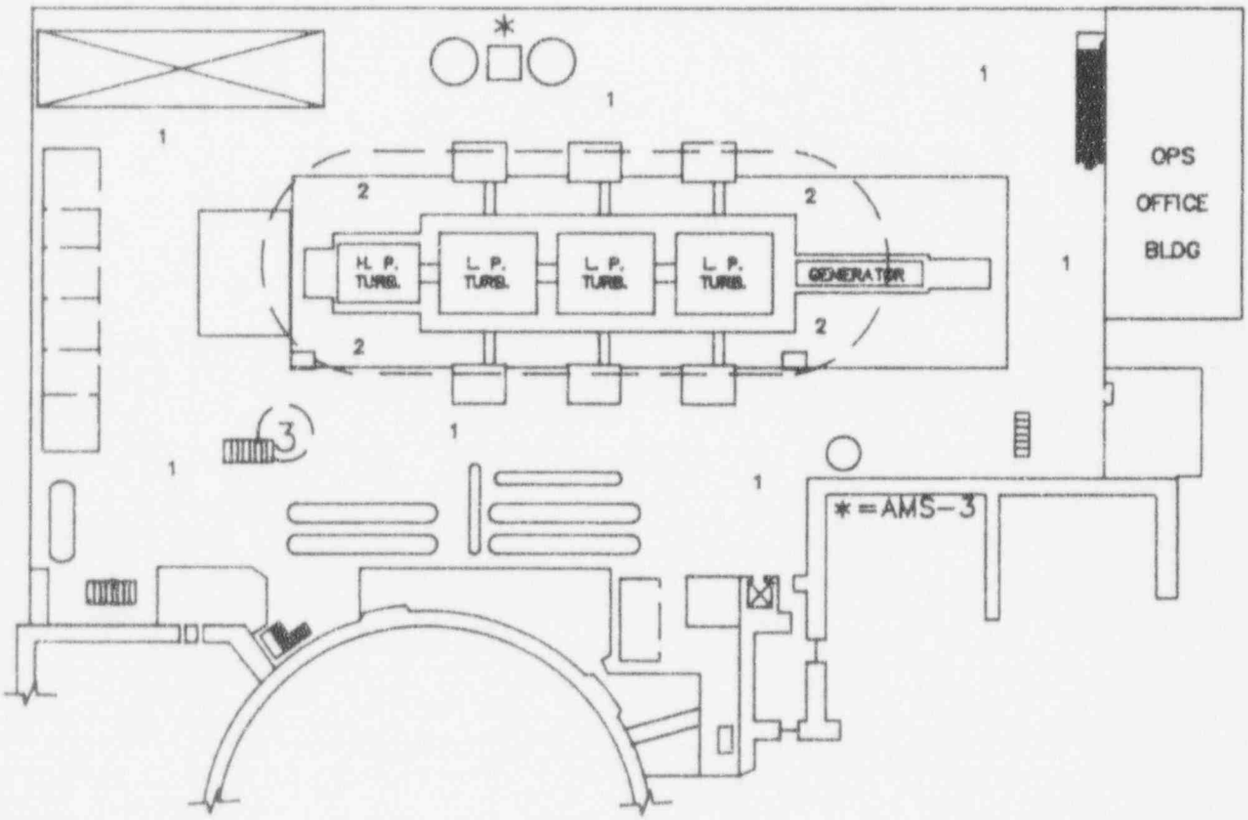
ANNUAL EXERCISE
DATE: 05/19/94



LOCATION	TYPE OF READING	TIME (0730-0735)	(0736-0800)	(0801-0830)	(0831-0900)	(0901-0930)	(0931-1000)	(1001-1030)	(1031-1100)	(1101-END)
ZONE #1	CW MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
GENERAL AREA	OW MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
ZONE #2 NEAR	CW MR/HR	A/R	2.3	3.1	1.5	0.8	0.4	A/R	A/R	A/R
MAIN COND.	OW MR/HR	A/R	2.3	3.1	1.5	0.8	0.4	A/R	A/R	A/R
ZONE #3 NEAR	CONT. MR/HR	A/R	29	43	22	11	5.4	2.7	1.4	0.7
POWDEX VESSELS	@1FT MR/HR	A/R	16	24	12	6	3.0	1.5	0.7	0.4
	@6FT MR/HR	A/R	8	12	6	3.0	1.5	0.7	0.4	A/R
A&B MAIN STEAM	CONT. MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
LINE READINGS	@6FT MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
C&D MAIN STEAM	CONT. MR/HR	A/R	2.1	1.8	0.9	0.4	0.2	A/R	A/R	A/R
LINE READINGS	@6FT MR/HR	A/R	0.3	0.3	A/R	A/R	A/R	A/R	A/R	A/R
TURB BYP STEAM	CONT. MR/HR	A/R	0.4	0.6	0.3	0.1	A/R	A/R	A/R	A/R
LINE READINGS	@3 FT MR/HR	A/R	0.1	0.2	A/R	A/R	A/R	A/R	A/R	A/R
CONTAMINATION	CPM/100CM^2	A/R	1	2	2	2	2	2	2	2
	MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R

BLDG – TURBINE ELEV. – 355'

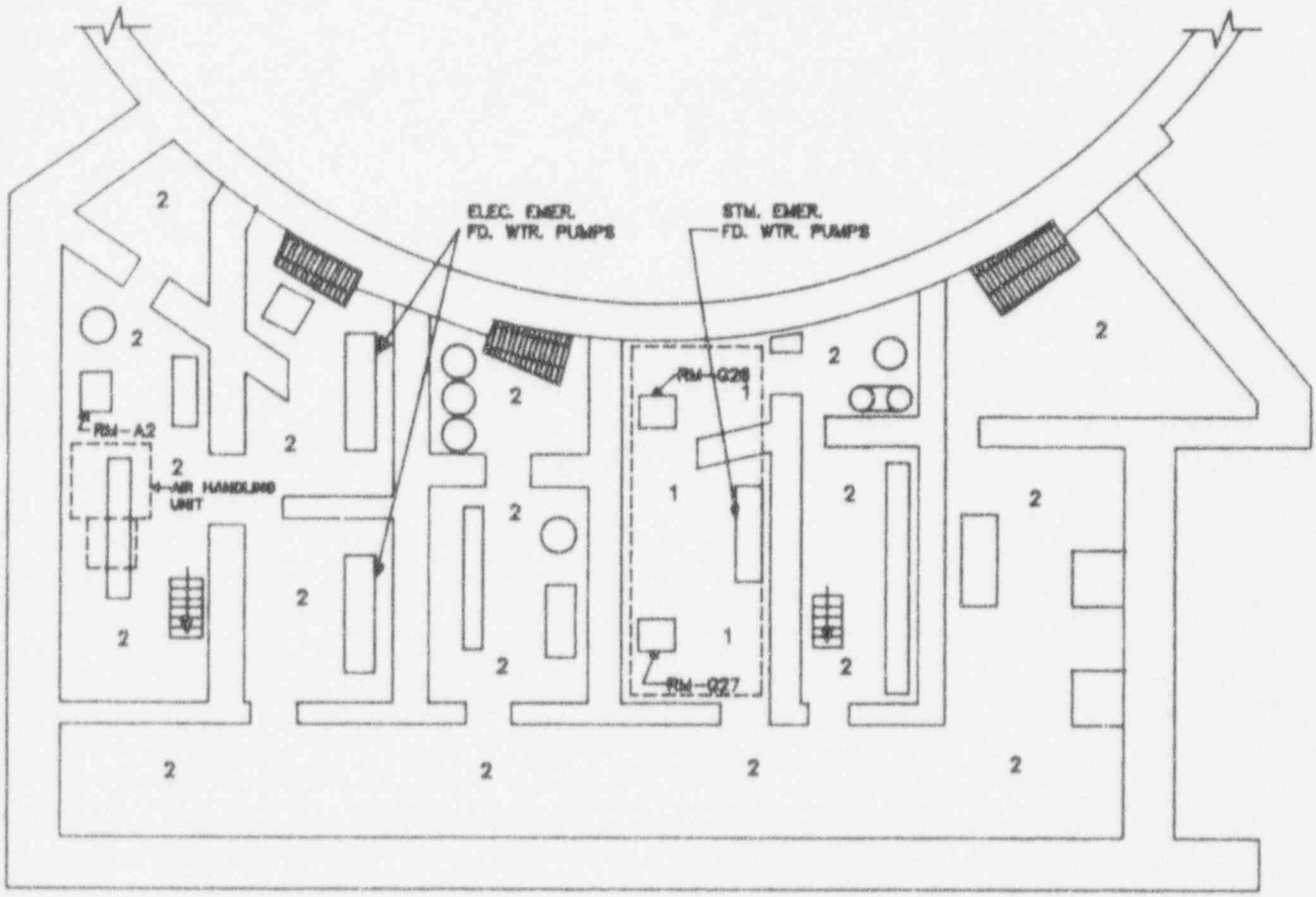
ANNUAL EXERCISE
DATE: 05/19/94



		TIME								
LOCATION	TYPE OF READING	(0730-0735)	(0736-0800)	(0801-0830)	(0831-0900)	(0901-0930)	(0931-1000)	(1001-1030)	(1031-1100)	(1101-END)
ZONE #1	CW MR/HR	A/R	0.6	0.8	0.4	0.2	A/R	A/R	A/R	A/R
GENERAL AREA	OW MR/HR	A/R	0.6	0.9	0.4	0.2	A/R	A/R	A/R	A/R
ZONE #2 NEAR	CONT. MR/HR	A/R	21	28	14	7	3.5	1.8	0.9	0.4
MAIN TURBINE	@10FT MR/HR	A/R	3.2	4.2	2.1	1.1	0.5	0.3	A/R	A/R
ZONE #3 NEAR	CONT. MR/HR	A/R	12	16	8	3.9	2.0	1.0	0.5	0.2
OFFGAS STACK	@10FT MR/HR	A/R	1.7	2.2	1.1	0.6	0.3	A/R	A/R	A/R
A&B MAIN STEAM	CONT. MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
LINE READINGS	@6FT MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
C&D MAIN STEAM	CONT. MR/HR	A/R	2.1	1.8	0.9	0.4	0.2	A/R	A/R	A/R
LINE READINGS	@6FT MR/HR	A/R	0.3	0.3	A/R	A/R	A/R	A/R	A/R	A/R
AMS-3 READING	CPM	500	519	538	538	538	538	538	538	538
	ALARM STATUS	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE
CONTAMINATION	CPM/100CM ^ 2	A/R	1	2	2	2	2	2	2	2
	MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R

BLDG – INTERMEDIATE ELEV. – 295'

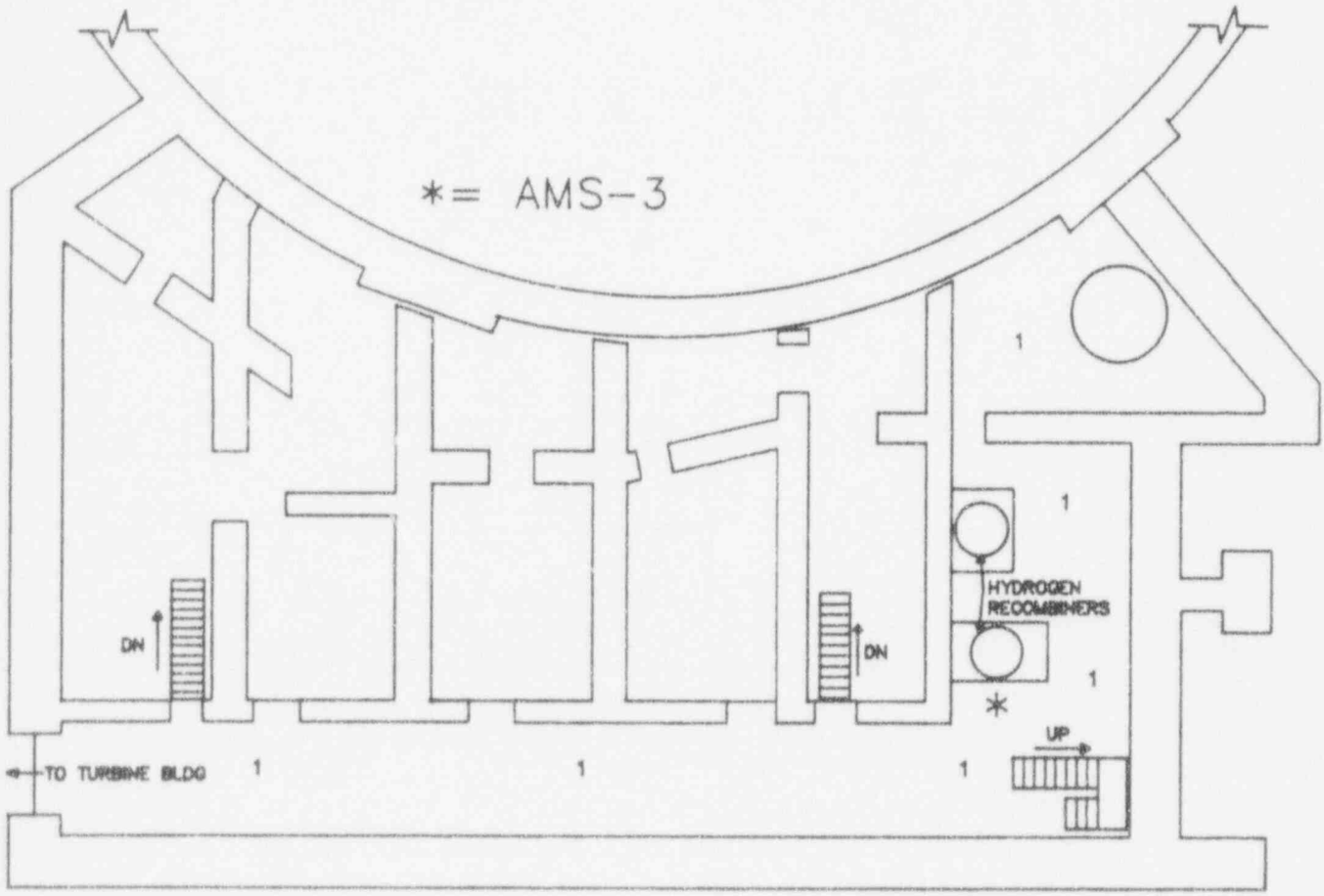
ANNUAL EXERCISE
DATE: 05/19/94



LOCATION	TYPE OF READING	TIME (0730-0735)	(0736-0800)	(0801-0830)	(0831-0900)	(0901-0930)	(0931-1000)	(1001-1030)	(1031-1100)	(1101-END)
ZONE #1	CW MR/HR	A/R	A/R	A/R	1.3	0.9	0.7	0.6	0.6	0.4
EFP #1 CUBICLE	OW MR/HR	A/R	A/R	A/R	1.5	1.0	0.7	0.7	0.6	0.5
ZONE #2	CW MR/HR	A/R	A/R	A/R	0.5	0.4	0.3	0.2	0.2	0.2
GENERAL AREA	OW MR/HR	A/R	A/R	A/R	0.6	0.4	0.3	0.3	0.2	0.2
ZONE 1 STEAM	CONT. MR/HR	A/R	1.0	0.9	88	59	45	41	37	29
LINE READINGS	@3 FT MR/HR	A/R	A/R	A/R	1.3	0.9	0.7	0.6	0.6	0.4
CONT. W/ RMA-2	CW MR/HR	A/R	A/R	A/R	0.5	0.4	0.3	0.2	0.2	0.2
	OW MR/HR	A/R	A/R	A/R	0.6	0.4	0.3	0.3	0.2	0.2
ZONE 1 CONTAM	CPM/100CM^2	A/R	1	2	123	203	264	320	370	410
	MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
ZONE 2 CONTAM	CPM/100CM^2	A/R	0	1	36	59	76	93	107	119
	MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R

BLDG – INTERMEDIATE ELEV – 305'

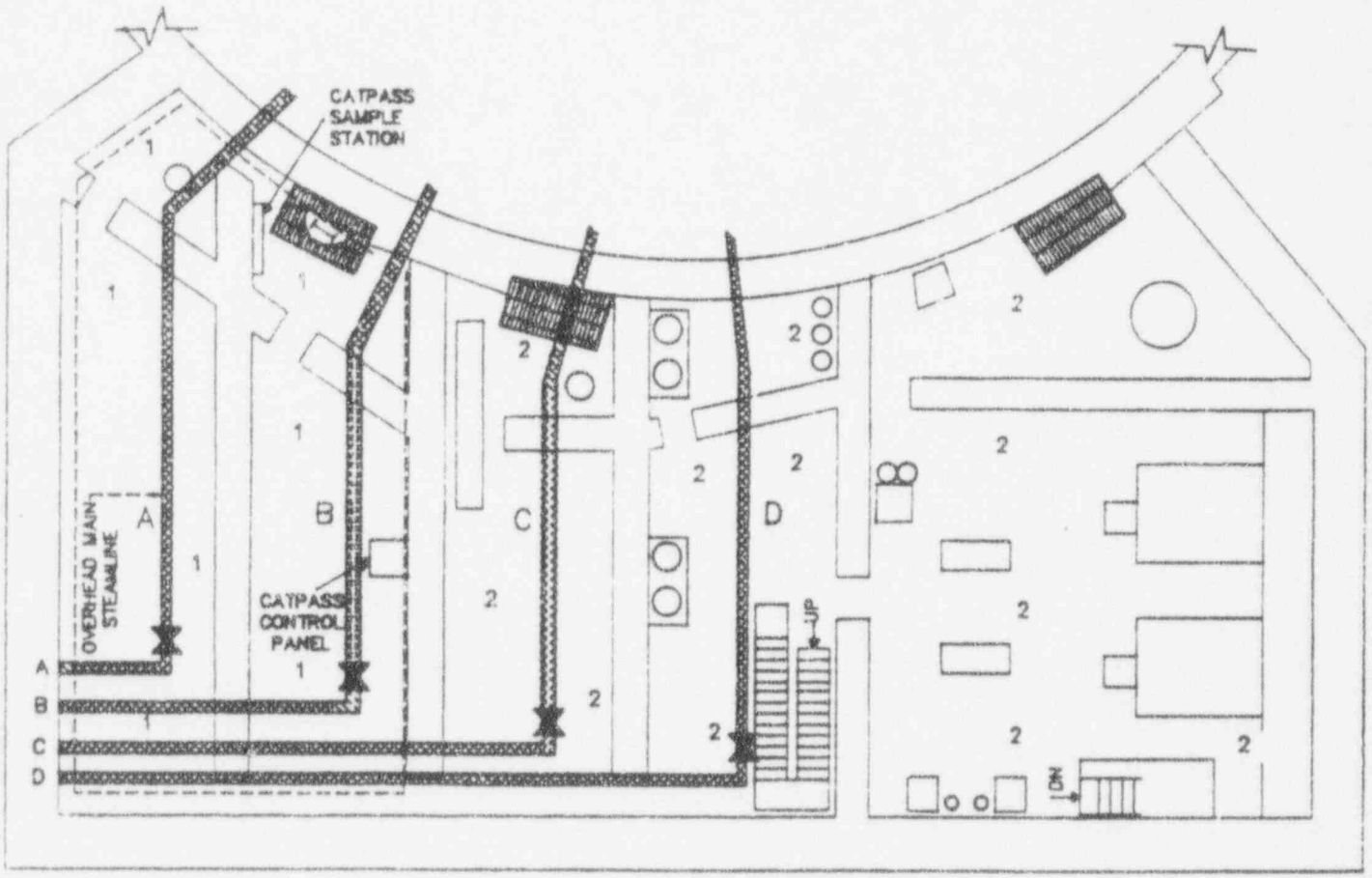
ANNUAL EXERCISE
DATE: 05/19/94



		TIME								
LOCATION	TYPE OF READING	(0730-0735)	(0736-0800)	(0801-0830)	(0831-0900)	(0901-0930)	(0931-1000)	(1001-1030)	(1031-1100)	(1101-END)
ZONE #1	CW MR/HR	A/R	A/R	A/R	0.2	0.1	A/R	A/R	A/R	A/R
GENERAL AREA	OW MR/HR	A/R	A/R	A/R	0.2	0.1	A/R	A/R	A/R	A/R
AMS–3 READING	CPM	500	503	507	858	1045	1149	1215	1238	1204
	ALARM STATUS	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE
ZONE #1 CONTAM	CPM/100CM ^ 2	A/R	0	0	13	22	29	35	41	45
	MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R

BLDG – INTERMEDIATE ELEV – 322'

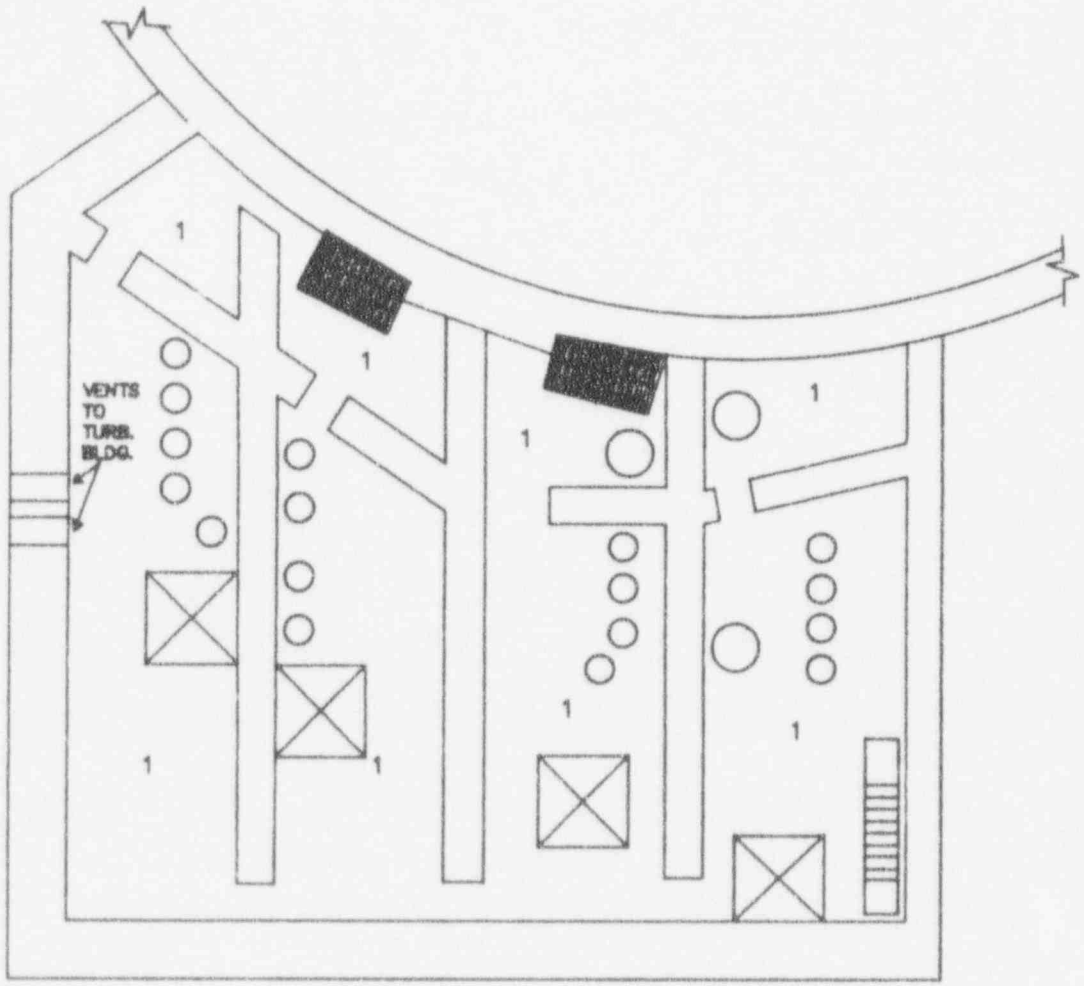
ANNUAL EXERCISE
DATE: 05/19/94



LOCATION	TYPE OF READING	TIME (0730-0735)	(0736-0800)	(0801-0830)	(0831-0900)	(0901-0930)	(0931-1000)	(1001-1030)	(1031-1100)	(1101-END)
ZONE #1 C&D MN	CW MR/HR	A/R	A/R	A/R	6	4.3	3.2	3.0	2.7	2.1
STM LINE CUBICLES	OW MR/HR	A/R	A/R	A/R	7	4.7	3.6	3.3	2.9	2.3
ZONE #2	CW MR/HR	A/R	A/R	A/R	0.4	0.2	0.2	0.2	0.1	0.1
GENERAL AREA	OW MR/HR	A/R	A/R	A/R	0.4	0.3	0.2	0.2	0.2	0.1
A & B MAIN STEAM	CONT MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
LINE READINGS	@6 FT MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
C & D MAIN STEAM	CONT MR/HR	A/R	2.1	2.8	181	211	196	182	166	143
LINE READINGS	@6 FT MR/HR	A/R	0.3	0.4	27	32	29	27	25	21
ZONE #1 CONTAM	CPM/100CM ^ 2	A/R	1.2	2.3	123	203	264	320	370	410
	MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
ZONE #2 CONTAM	CPM/100CM ^ 2	A/R	0	1	28	47	61	74	85	94
	MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R

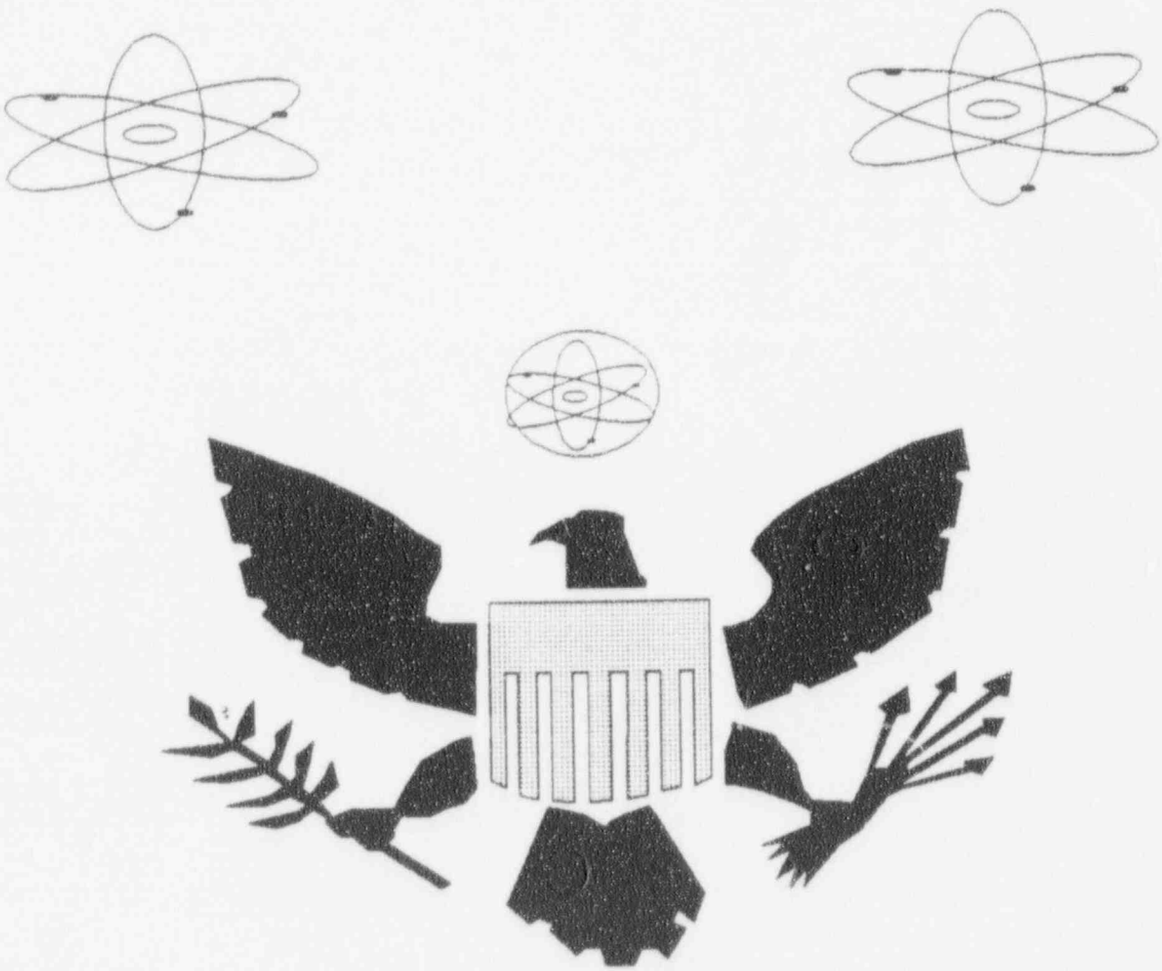
BLDG- INTERMEDIATE ELEV. - 355'

ANNUAL EXERCISE
DATE: 05/19/94



		TIME								
LOCATION	TYPE OF READING	(0730-0735)	(0736-0800)	(0801-0830)	(0831-0900)	(0901-0930)	(0931-1000)	(1001-1030)	(1031-1100)	(1101-END)
ZONE #1	CW MR/HR	A/R	A/R	A/R	0.1	A/R	A/R	A/R	A/R	A/R
GENERAL AREA	OW MR/HR	A/R	A/R	A/R	0.1	A/R	A/R	A/R	A/R	A/R
A & B MAIN STEAM	CONT MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
LINE READINGS	@6 FT MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R
C & D MAIN STEAM	CONT MR/HR	A/R	2.1	2.8	181	211	196	182	166	143
LINE READINGS	@6 FT MR/HR	A/R	0.3	0.4	27	32	29	27	25	21
ZONE #1 CONTAM	CPM/100CM ^ 2	A/R	1.9	3.9	204	338	439	533	617	683
	MR/HR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R

INTENTIONALLY



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APPENDIX C

NOTE: THIS IS A PLAYER REACTIVE DRILL RUN IN 'REAL TIME' FROM THE PLANT REFERENCE SIMULATOR AND NO BACK UP DATA WILL BE USED. THE SIMULATOR WILL BE RESET, IF REQUIRED TO CONTINUE/COMPLETE THE DRILL. CONFIRMATORY DATA WILL BE COLLECTED AND FILED AFTER THE DRILL.

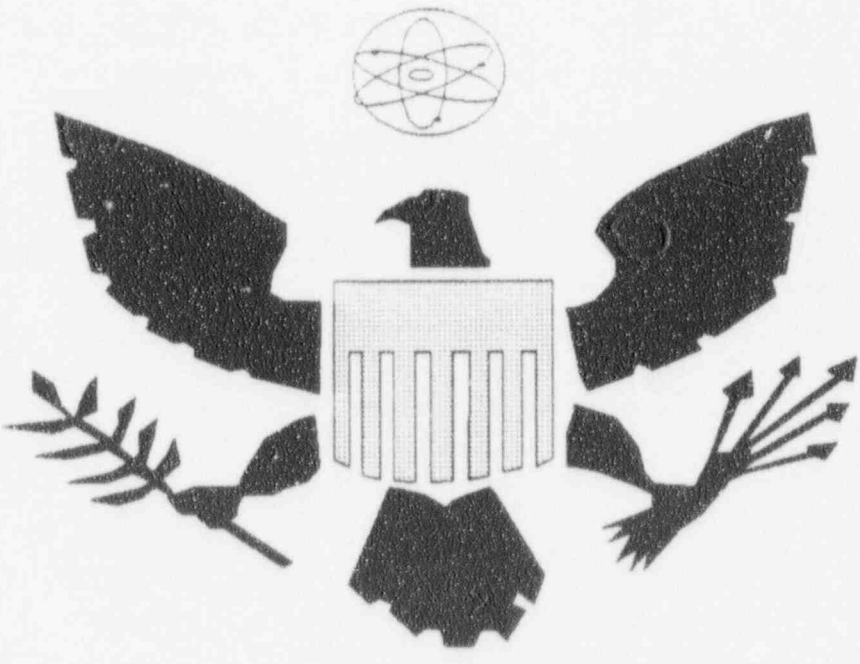
The supporting DATA in the Appendices was developed from a verification run of the Plant Reference Simulator and assumed meteorological conditions. This verification data was reviewed and compiled by Emergency Preparedness, Licensed Operator Training and Radiological Engineering personnel.

This DATA is provided ONLY for your review.

Actual drill data will be collected during the PLAYER REACTIVE exercise. The actual drill data will vary depending on the response of the players and prevailing weather (actual) conditions the day of the drill.

GPU NUCLEAR CORPORATION
MIDDLETOWN, PA

INTENTIONALLY



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1994 ANNUAL EXERCISE
Appendix C

RADIOCHEMISTRY DATA

Revision 1
03/02/94

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

REACTOR COOLANT Concentrations (uci/ml)

Scenario Time in Minutes 0

Dose Rate(contact) 2.7E+02 mrem/hr		Dose Rate(1 foot) 2.3E+01 mrem/hr		Dose Rate(3 feet) 2.5E+00 mrem/hr	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	1.4E-01	Cs_137	6.0E-04		
Kr_85	<MDA	Cs_138	5.2E-02		
Kr_87	1.3E-01	Ba_137m	<MDA		
Kr_88	3.4E-01	Ba_139	<MDA		
Rb_88	8.6E-02	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	3.2E-04		
Sr_92	<MDA	Ar_41	2.4E-02		
Y_90 *	<MDA	Co_58	4.0E-05		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	2.8E-03		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	6.4E-02	Ru_103	<MDA		
Xe_133	4.0E+00	Ru_106 *	<MDA		
Xe_135m	3.2E-02	Te_129m	<MDA		
Xe_135	6.1E-01	Te_131m	<MDA		
Xe_138	8.0E-01	Te_132	<MDA		
I_131	8.4E-03	Sb_127	<MDA		
I_132	2.1E-02	Sb_129	<MDA		
I_133	2.9E-02	Np_239	<MDA		
I_134	4.2E-02	Tritium *	3.7E+00		
I_135	2.4E-02	Boron **	<MDA		

Total REACTOR COOLANT Beta Gamma Activity=1.0E+01

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

ALPHA OTSG Concentrations (uci/ml)

Scenario Time in Minutes 0

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable	Dose Rate(3 feet) less than detectable
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	1.4E-08	Cs_137	<MDA
Kr_85	<MDA	Cs_138	<MDA
Kr_87	1.3E-08	Ba_137m	<MDA
Kr_88	3.3E-08	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	<MDA
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	<MDA	Ru_103	<MDA
Xe_133	4.0E-07	Ru_106 *	<MDA
Xe_135m	<MDA	Te_129m	<MDA
Xe_135	6.0E-08	Te_131m	<MDA
Xe_138	7.9E-08	Te_132	<MDA
I_131	<MDA	Sb_127	<MDA
I_132	<MDA	Sb_129	<MDA
I_133	<MDA	Np_239	<MDA
I_134	<MDA	Tritium *	3.7E-07
I_135	<MDA	Boron **	<MDA

Total ALPHA OTSG Beta Gamma Activity=1.0E-06

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

BRAVO OTSG Concentrations (uci/ml)

Scenario Time in Minutes 0

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	5.6E-05	Cs_137	2.4E-07		
Kr_85	<MDA	Cs_138	2.1E-05		
Kr_87	5.1E-05	Ba_137m	<MDA		
Kr_88	1.3E-04	Ba_139	<MDA		
Rb_88	3.4E-05	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	1.3E-07		
Sr_92	<MDA	Ar_41	9.5E-06		
Y_90 *	<MDA	Co_58	1.6E-08		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	1.1E-06		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	2.5E-05	Ru_103	<MDA		
Xe_133	1.6E-03	Ru_106 *	<MDA		
Xe_135m	1.3E-05	Te_129m	<MDA		
Xe_135	2.4E-04	Te_131m	<MDA		
Xe_138	3.2E-04	Te_132	<MDA		
I_131	3.3E-06	Sb_127	<MDA		
I_132	8.3E-06	Sb_129	<MDA		
I_133	1.1E-05	Np_239	<MDA		
I_134	1.7E-05	Tritium *	1.5E-03		
I_135	9.6E-06	Boron **	<MDA		

Total BRAVO OTSG Beta Gamma Activity=4.0E-03

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSATE Concentrations (uci/ml)

Scenario Time in Minutes 0

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	5.4E-08		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	9.0E-08	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	2.5E-08		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	2.2E-08	Sb_129	<MDA		
I_133	3.0E-08	Np_239	<MDA		
I_134	4.3E-08	Tritium *	<MDA		
I_135	2.5E-08	Boron **	<MDA		

Total CONDENSATE Beta Gamma Activity=3.1E-07

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

POWDEX EFFLUENT Concentrations (uci/ml)

Scenario Time in Minutes 0

Dose Rate(contact) less than detectable

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	<MDA	Cs_137	<MDA
Kr_85	<MDA	Cs_138	<MDA
Kr_87	<MDA	Ba_137m	<MDA
Kr_88	<MDA	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	<MDA
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	<MDA	Ru_103	<MDA
Xe_133	<MDA	Ru_106 *	<MDA
Xe_135m	<MDA	Te_129m	<MDA
Xe_135	<MDA	Te_131m	<MDA
Xe_138	<MDA	Te_132	<MDA
I_131	<MDA	Sb_127	<MDA
I_132	<MDA	Sb_129	<MDA
I_133	<MDA	Np_239	<MDA
I_134	<MDA	Tritium *	<MDA
I_135	<MDA	Boron **	<MDA

Total POWDEX EFFLUENT Beta Gamma Activity=3.0E-08

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS Concentrations (uci/ml)

Scenario Time in Minutes 0

Dose Rate(contact)	Dose Rate(1 foot)	Dose Rate(3 feet)
8.8E+00 mrem/hr	7.4E-01 mrem/hr	less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	4.7E-03	Cs_137	1.5E-07
Kr_85	<MDA	Cs_138	1.3E-05
Kr_87	4.3E-03	Ba_137m	<MDA
Kr_88	1.1E-02	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	8.0E-08
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	2.1E-03	Ru_103	<MDA
Xe_133	1.3E-01	Ru_106 *	<MDA
Xe_135m	1.1E-03	Te_129m	<MDA
Xe_135	2.0E-02	Te_131m	<MDA
Xe_138	2.7E-02	Te_132	<MDA
I_131	2.1E-06	Sb_127	<MDA
I_132	5.2E-06	Sb_129	<MDA
I_133	7.2E-06	Np_239	<MDA
I_134	1.1E-05	Tritium *	1.2E-01
I_135	6.1E-06	Boron **	<MDA

Total CONDENSER OFFGAS Beta Gamma Activity=3.3E-01

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

FEEDWATER Concentrations (uci/ml)

Scenario Time in Minutes 0

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	3.0E-08		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	4.5E-08	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	1.3E-08		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	1.2E-08	Sb_129	<MDA		
I_133	1.6E-08	Np_239	<MDA		
I_134	2.4E-08	Tritium *	<MDA		
I_135	1.4E-08	Boron **	<MDA		

Total FEEDWATER Beta Gamma Activity=1.7E-07

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

Reactor Building Airborne Concentrations (uci/ml)

Scenario Time in Minutes 0

Dose Rate(contact) Dose Rate(1 foot) Dose Rate(3 feet)

less than detectable less than detectable less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	<MDA	Cs_137	<MDA
Kr_85	<MDA	Cs_138	<MDA
Kr_87	<MDA	Ba_137m	<MDA
Kr_88	<MDA	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	<MDA
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	<MDA	Ru_103	<MDA
Xe_133	<MDA	Ru_106 *	<MDA
Xe_135m	<MDA	Te_129m	<MDA
Xe_135	<MDA	Te_131m	<MDA
Xe_138	<MDA	Te_132	<MDA
I_131	<MDA	Sb_127	<MDA
I_132	<MDA	Sb_129	<MDA
I_133	<MDA	Np_239	<MDA
I_134	<MDA	Tritium *	<MDA
I_135	<MDA	Boron **	<MDA

Total Reactor Building Airborne Beta Gamma Activity= <MDA

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS MAP-5 Concentrations (uci/ml)

Scenario Time in Minutes 0

	CHANNEL 1	CHANNEL 2	CHANNEL 3
DOSE RATE (CONTACT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (1 FOOT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (3 FEET) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
I_131 (CONCENTRATION UCI/ML)	2.1E-06	1.9E-07	1.6E-08
I_132 (CONCENTRATION UCI/ML)	5.2E-06	4.7E-07	3.9E-08
I_133 (CONCENTRATION UCI/ML)	7.2E-06	6.6E-07	5.5E-08
I_134 (CONCENTRATION UCI/ML)	1.1E-05	9.6E-07	8.0E-08
I_135 (CONCENTRATION UCI/ML)	6.1E-06	5.5E-07	4.6E-08

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

REACTOR COOLANT Concentrations (uci/ml)

Scenario Time in Minutes 15

Dose Rate(contact) 2.7E+02 mrem/hr

Dose Rate(1 foot) 2.3E+01 mrem/hr

Dose Rate(3 feet) 2.5E+00 mrem/hr

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	1.4E-01	Cs_137	6.0E-04
Kr_85	<MDA	Cs_138	5.2E-02
Kr_87	1.3E-01	Ba_137m	<MDA
Kr_88	3.4E-01	Ba_139	<MDA
Rb_88	8.6E-02	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	3.2E-04
Sr_92	<MDA	Ar_41	2.4E-02
Y_90 *	<MDA	Co_58	4.0E-05
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	2.8E-03
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	6.4E-02	Ru_103	<MDA
Xe_133	4.0E+00	Ru_106 *	<MDA
Xe_135m	3.2E-02	Te_129m	<MDA
Xe_135	6.1E-01	Te_131m	<MDA
Xe_138	8.0E-01	Te_132	<MDA
I_131	8.4E-03	Sb_127	<MDA
I_132	2.1E-02	Sb_129	<MDA
I_133	2.9E-02	Np_239	<MDA
I_134	4.2E-02	Tritium *	3.7E+00
I_135	2.4E-02	Boron **	<MDA

Total REACTOR COOLANT Beta Gamma Activity=1.0E+01

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

ALPHA OTSG Concentrations (uci/ml)

Scenario Time in Minutes 15

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	1.4E-08	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	<MDA		
Kr_87	1.3E-08	Ba_137m	<MDA		
Kr_88	3.3E-08	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	4.0E-07	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	6.0E-08	Te_131m	<MDA		
Xe_138	7.9E-08	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	<MDA	Tritium *	3.7E-07		
I_135	<MDA	Boron **	<MDA		

Total ALPHA OTSG Beta Gamma Activity=1.0E-06

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

BRAVO OTSG Concentrations (uci/ml)

Scenario Time in Minutes 15

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	5.6E-05	Cs_137	2.4E-07		
Kr_85	<MDA	Cs_138	2.1E-05		
Kr_87	5.1E-05	Ba_137m	<MDA		
Kr_88	1.3E-04	Ba_139	<MDA		
Rb_88	3.4E-05	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	1.3E-07		
Sr_92	<MDA	Ar_41	9.5E-06		
Y_90 *	<MDA	Co_58	1.6E-08		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	1.1E-06		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	2.5E-05	Ru_103	<MDA		
Xe_133	1.6E-03	Ru_106 *	<MDA		
Xe_135m	1.3E-05	Te_129m	<MDA		
Xe_135	2.4E-04	Te_131m	<MDA		
Xe_138	3.2E-04	Te_132	<MDA		
I_131	3.3E-06	Sb_127	<MDA		
I_132	8.3E-06	Sb_129	<MDA		
I_133	1.1E-05	Np_239	<MDA		
I_134	1.7E-05	Tritium *	1.5E-03		
I_135	9.6E-06	Boron **	<MDA		

Total BRAVO OTSG Beta Gamma Activity=4.0E-03

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSATE Concentrations (uci/ml)

Scenario Time in Minutes 15

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	8.1E-08		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	1.3E-07	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	3.8E-08		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	1.3E-08	Sb_127	<MDA		
I_132	3.2E-08	Sb_129	<MDA		
I_133	4.5E-08	Np_239	<MDA		
I_134	6.5E-08	Tritium *	<MDA		
I_135	3.8E-08	Boron **	<MDA		

Total CONDENSATE Beta Gamma Activity=4.7E-07

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

POWDEX EFFLUENT Concentrations (uci/ml)

Scenario Time in Minutes 15

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	1.1E-08		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	<MDA	Tritium *	<MDA		
I_135	<MDA	Boron **	<MDA		

Total POWDEX EFFLUENT Beta Gamma Activity=5.9E-08

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS Concentrations (uci/ml)

Scenario Time in Minutes 15

Dose Rate(contact)	Dose Rate(1 foot)	Dose Rate(3 feet)
1.3E+01 mrem/hr	1.1E+00 mrem/hr	less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	7.0E-03	Cs_137	2.3E-07
Kr_85	<MDA	Cs_138	2.0E-05
Kr_87	6.4E-03	Ba_137m	<MDA
Kr_88	1.7E-02	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	1.2E-07
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	3.2E-03	Ru_103	<MDA
Xe_133	2.0E-01	Ru_106 *	<MDA
Xe_135m	1.6E-03	Te_129m	<MDA
Xe_135	3.0E-02	Te_131m	<MDA
Xe_138	4.0E-02	Te_132	<MDA
I_131	3.2E-06	Sb_127	<MDA
I_132	7.8E-06	Sb_129	<MDA
I_133	1.1E-05	Np_239	<MDA
I_134	1.6E-05	Tritium *	1.9E-01
I_135	9.1E-06	Boron **	<MDA

Total CONDENSER OFFGAS Beta Gamma Activity=4.9E-01

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

FEEDWATER Concentrations (uci/ml)

Scenario Time in Minutes 15

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)		Nuclide	Concentration(uci/ml)	
Kr_83m	<MDA		Cs_136	<MDA	
Kr_85m	<MDA		Cs_137	<MDA	
Kr_85	<MDA		Cs_138	6.0E-08	
Kr_87	<MDA		Ba_137m	<MDA	
Kr_88	<MDA		Ba_139	<MDA	
Rb_88	9.1E-08		Ba_140	<MDA	
Sr_89 *	<MDA		La_140	<MDA	
Sr_90 *	<MDA		Ce_144 *	<MDA	
Sr_91	<MDA		Cs_134	<MDA	
Sr_92	<MDA		Ar_41	2.5E-08	
Y_90 *	<MDA		Co_58	<MDA	
Y_91	<MDA		Mn_54	<MDA	
Mo_99	<MDA		Na_24	<MDA	
Xe_131m	<MDA		Rb_89	<MDA	
Xe_133m	<MDA		Ru_103	<MDA	
Xe_133	<MDA		Ru_106 *	<MDA	
Xe_135m	<MDA		Te_129m	<MDA	
Xe_135	<MDA		Te_131m	<MDA	
Xe_138	<MDA		Te_132	<MDA	
I_131	<MDA		Sb_127	<MDA	
I_132	2.4E-08		Sb_129	<MDA	
I_133	3.4E-08		Np_239	<MDA	
I_134	4.9E-08		Tritium *	<MDA	
I_135	2.8E-08		Boron **	<MDA	

Total FEEDWATER Beta Gamma Activity=3.5E-07

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

Reactor Building Airborne Concentrations (uci/ml)

Scenario Time in Minutes 15

Dose Rate(contact) less than detectable

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	<MDA	Cs_137	<MDA
Kr_85	<MDA	Cs_138	<MDA
Kr_87	<MDA	Ba_137m	<MDA
Kr_88	<MDA	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	<MDA
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	<MDA	Ru_103	<MDA
Xe_133	<MDA	Ru_106 *	<MDA
Xe_135m	<MDA	Te_129m	<MDA
Xe_135	<MDA	Te_131m	<MDA
Xe_138	<MDA	Te_132	<MDA
I_131	<MDA	Sb_127	<MDA
I_132	<MDA	Sb_129	<MDA
I_133	<MDA	Np_239	<MDA
I_134	<MDA	Tritium *	<MDA
I_135	<MDA	Boron **	<MDA

Total Reactor Building Airborne Beta Gamma Activity= <MDA

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS MAP-5 Concentrations (uci/ml)

Scenario Time in Minutes 15

	CHANNEL 1	CHANNEL 2	CHANNEL 3
DOSE RATE (CONTACT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (1 FOOT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (3 FEET) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
I_131 (CONCENTRATION UCI/ML)	3.2E-06	2.9E-07	2.4E-08
I_132 (CONCENTRATION UCI/ML)	7.8E-06	7.1E-07	5.9E-08
I_133 (CONCENTRATION UCI/ML)	1.1E-05	9.8E-07	8.2E-08
I_134 (CONCENTRATION UCI/ML)	1.6E-05	1.4E-06	1.2E-07
I_135 (CONCENTRATION UCI/ML)	9.1E-06	8.3E-07	6.9E-08

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

REACTOR COOLANT Concentrations (uci/ml)

Scenario Time in Minutes 30

Dose Rate(contact) 2.7E+02 mrem/hr		Dose Rate(1 foot) 2.3E+01 mrem/hr		Dose Rate(3 feet) 2.5E+00 mrem/hr	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	1.4E-01	Cs_137	6.0E-04		
Kr_85	<MDA	Cs_138	5.2E-02		
Kr_87	1.3E-01	Ba_137m	<MDA		
Kr_88	3.4E-01	Ba_139	<MDA		
Rb_88	8.6E-02	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	3.2E-04		
Sr_92	<MDA	Ar_41	2.4E-02		
Y_90 *	<MDA	Co_58	4.0E-05		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	2.8E-03		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	6.4E-02	Ru_103	<MDA		
Xe_133	4.0E+00	Ru_106 *	<MDA		
Xe_135m	3.2E-02	Te_129m	<MDA		
Xe_135	6.1E-01	Te_131m	<MDA		
Xe_138	8.0E-01	Te_132	<MDA		
I_131	8.4E-03	Sb_127	<MDA		
I_132	2.1E-02	Sb_129	<MDA		
I_133	2.9E-02	Np_239	<MDA		
I_134	4.2E-02	Tritium *	5.7E+00		
I_135	2.4E-02	Boron **	<MDA		

Total REACTOR COOLANT Beta Gamma Activity=1.0E+01

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

ALPHA OTSG Concentrations (uci/ml)

Scenario Time in Minutes 30

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)		Nuclide	Concentration(uci/ml)	
Kr_83m	<MDA		Cs_136	<MDA	
Kr_85m	1.4E-08		Cs_137	<MDA	
Kr_85	<MDA		Cs_138	<MDA	
Kr_87	1.3E-08		Ba_137m	<MDA	
Kr_88	3.3E-08		Ba_139	<MDA	
Rb_88	<MDA		Ba_140	<MDA	
Sr_89 *	<MDA		La_140	<MDA	
Sr_90 *	<MDA		Ce_144 *	<MDA	
Sr_91	<MDA		Cs_134	<MDA	
Sr_92	<MDA		Ar_41	<MDA	
Y_90 *	<MDA		Co_58	<MDA	
Y_91	<MDA		Mn_54	<MDA	
Mo_99	<MDA		Na_24	<MDA	
Xe_131m	<MDA		Rb_89	<MDA	
Xe_133m	<MDA		Ru_103	<MDA	
Xe_133	4.0E-07		Ru_106 *	<MDA	
Xe_135m	<MDA		Te_129m	<MDA	
Xe_135	6.0E-08		Te_131m	<MDA	
Xe_138	7.9E-08		Te_132	<MDA	
I_131	<MDA		Sb_127	<MDA	
I_132	<MDA		Sb_129	<MDA	
I_133	<MDA		Np_239	<MDA	
I_134	<MDA		Tritium *	3.7E-07	
I_135	<MDA		Boron **	<MDA	

Total ALPHA OTSG Beta Gamma Activity=1.0E-06

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

BRAVO OTSG Concentrations (uci/ml)

Scenario Time in Minutes 30

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	5.6E-05	Cs_137	2.4E-07		
Kr_85	<MDA	Cs_138	2.1E-05		
Kr_87	5.1E-05	Ba_137m	<MDA		
Kr_88	1.3E-04	Ba_139	<MDA		
Rb_88	3.4E-05	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	1.3E-07		
Sr_92	<MDA	Ar_41	9.5E-06		
Y_90 *	<MDA	Co_58	1.6E-08		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	1.1E-06		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	2.5E-05	Ru_103	<MDA		
Xe_133	1.6E-03	Ru_106 *	<MDA		
Xe_135m	1.3E-05	Te_129m	<MDA		
Xe_135	2.4E-04	Te_131m	<MDA		
Xe_138	3.2E-04	Te_132	<MDA		
I_131	3.3E-06	Sb_127	<MDA		
I_132	8.3E-06	Sb_129	<MDA		
I_133	1.1E-05	Np_239	<MDA		
I_134	1.7E-05	Tritium *	1.5E-03		
I_135	9.6E-06	Boron **	<MDA		

Total BRAVO OTSG Beta Gamma Activity=4.0E-03

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSATE Concentrations (uci/ml)

Scenario Time in Minutes 30

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	9.4E-08		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	1.6E-07	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	4.4E-08		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	1.5E-08	Sb_127	<MDA		
I_132	3.8E-08	Sb_129	<MDA		
I_133	5.2E-08	Np_239	<MDA		
I_134	7.6E-08	Tritium *	<MDA		
I_135	4.4E-08	Boron **	<MDA		

Total CONDENSATE Beta Gamma Activity=5.4E-07

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

POWDEX EFFLUENT Concentrations (uci/ml)

Scenario Time in Minutes 30

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	1.5E-08		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	1.1E-08	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	1.2E-08	Tritium *	1.1E-08		
I_135	<MDA	Boron **	<MDA		

Total POWDEX EFFLUENT Beta Gamma Activity=8.2E-08

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS Concentrations (uci/ml)

Scenario Time in Minutes 30

Dose Rate(contact) 1.5E+01 mrem/hr

Dose Rate(1 foot) 1.3E+00 mrem/hr

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	8.2E-03	Cs_137	2.6E-07
Kr_85	<MDA	Cs_138	2.3E-05
Kr_87	7.5E-03	Ba_137m	<MDA
Kr_88	2.0E-02	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	1.4E-07
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	3.7E-03	Ru_103	<MDA
Xe_133	2.3E-01	Ru_106 *	<MDA
Xe_135m	1.9E-03	Te_129m	<MDA
Xe_135	3.5E-02	Te_131m	<MDA
Xe_138	4.7E-02	Te_132	<MDA
I_131	3.7E-06	Sb_127	<MDA
I_132	9.1E-06	Sb_129	<MDA
I_133	1.3E-05	Np_239	<MDA
I_134	1.8E-05	Tritium *	2.2E-01
I_135	1.1E-05	Boron **	<MDA

Total CONDENSER OFFGAS Beta Gamma Activity=5.7E-01

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

FEEDWATER Concentrations (uci/ml)

Scenario Time in Minutes 30

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	8.5E-08		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	1.2E-07	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	3.5E-08		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	1.4E-08	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	1.4E-08	Sb_127	<MDA		
I_132	3.4E-08	Sb_129	<MDA		
I_133	4.7E-08	Np_239	<MDA		
I_134	6.8E-08	Tritium *	1.3E-08		
I_135	3.9E-08	Boron **	<MDA		

Total FEEDWATER Beta Gamma Activity=4.9E-07

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

Reactor Building Airborne Concentrations (uci/ml)

Scenario Time in Minutes 30

Dose Rate(contact) less than detectable

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	<MDA	Cs_137	<MDA
Kr_85	<MDA	Cs_138	<MDA
Kr_87	<MDA	Ba_137m	<MDA
Kr_88	<MDA	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	<MDA
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	<MDA	Ru_103	<MDA
Xe_133	<MDA	Ru_106 *	<MDA
Xe_135m	<MDA	Te_129m	<MDA
Xe_135	<MDA	Te_131m	<MDA
Xe_138	<MDA	Te_132	<MDA
I_131	<MDA	Sb_127	<MDA
I_132	<MDA	Sb_129	<MDA
I_133	<MDA	Np_239	<MDA
I_134	<MDA	Tritium *	<MDA
I_135	<MDA	Boron **	<MDA

Total Reactor Building Airborne Beta Gamma Activity= <MDA

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS MAP-5 Concentrations (uci/ml)

Scenario Time in Minutes 30

	CHANNEL 1	CHANNEL 2	CHANNEL 3
DOSE RATE (CONTACT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (1 FOOT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (3 FEET) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
I_131 (CONCENTRATION UCI/ML)	3.7E-06	3.3E-07	2.8E-08
I_132 (CONCENTRATION UCI/ML)	9.1E-06	8.3E-07	6.9E-08
I_133 (CONCENTRATION UCI/ML)	1.3E-05	1.1E-06	9.6E-08
I_134 (CONCENTRATION UCI/ML)	1.8E-05	1.7E-06	1.4E-07
I_135 (CONCENTRATION UCI/ML)	1.1E-05	9.6E-07	8.0E-08

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

REACTOR COOLANT Concentrations (uci/ml)

Scenario Time in Minutes 45

Dose Rate(contact)		Dose Rate(1 foot)		Dose Rate(3 feet)	
2.7E+02 mrem/hr		2.3E+01 mrem/hr		2.5E+00 mrem/hr	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	1.4E-01	Cs_137	6.0E-04		
Kr_85	<MDA	Cs_138	5.2E-02		
Kr_87	1.3E-01	Ba_137m	<MDA		
Kr_88	3.4E-01	Ba_139	<MDA		
Rb_88	8.6E-02	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	3.2E-04		
Sr_92	<MDA	Ar_41	2.4E-02		
Y_90 *	<MDA	Co_58	4.0E-05		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	2.8E-03		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	6.4E-02	Ru_103	<MDA		
Xe_133	4.0E+00	Ru_106 *	<MDA		
Xe_135m	3.2E-02	Te_129m	<MDA		
Xe_135	6.1E-01	Te_131m	<MDA		
Xe_138	8.0E-01	Te_132	<MDA		
I_131	8.4E-03	Sb_127	<MDA		
I_132	2.1E-02	Sb_129	<MDA		
I_133	2.9E-02	Np_239	<MDA		
I_134	4.2E-02	Tritium *	3.7E+00		
I_135	2.4E-02	Boron **	<MDA		

Total REACTOR COOLANT Beta Gamma Activity=1.0E+01

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

ALPHA OTSG Concentrations (uci/ml)

Scenario Time in Minutes 45

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	1.4E-08	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	<MDA		
Kr_87	1.3E-08	Ba_137m	<MDA		
Kr_88	3.3E-08	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	4.0E-07	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	6.0E-08	Te_131m	<MDA		
Xe_138	7.9E-08	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	<MDA	Tritium *	3.7E-07		
I_135	<MDA	Boron **	<MDA		

Total ALPHA OTSG Beta Gamma Activity=1.0E-06

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

BRAVO OTSG Concentrations (uci/ml)

Scenario Time in Minutes 45

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	5.6E-05	Cs_137	2.4E-07		
Kr_85	<MDA	Cs_138	2.1E-05		
Kr_87	5.1E-05	Ba_137m	<MDA		
Kr_88	1.3E-04	Ba_139	<MDA		
Rb_88	3.4E-05	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	1.3E-07		
Sr_92	<MDA	Ar_41	9.5E-06		
Y_90 *	<MDA	Co_58	1.6E-08		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	1.1E-06		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	2.5E-05	Ru_103	<MDA		
Xe_133	1.6E-03	Ru_106 *	<MDA		
Xe_135m	1.3E-05	Te_129m	<MDA		
Xe_135	2.4E-04	Te_131m	<MDA		
Xe_138	3.2E-04	Te_132	<MDA		
I_131	3.3E-06	Sb_127	<MDA		
I_132	8.3E-06	Sb_129	<MDA		
I_133	1.1E-05	Np_239	<MDA		
I_134	1.7E-05	Tritium *	1.5E-03		
I_135	9.6E-06	Boron **	<MDA		

Total BRAVO OTSG Beta Gamma Activity=4.0E-03

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSATE Concentrations (uci/ml)

Scenario Time in Minutes 45

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	1.0E-07		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	1.7E-07	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	4.7E-08		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	1.6E-08	Sb_127	<MDA		
I_132	4.0E-08	Sb_129	<MDA		
I_133	5.6E-08	Np_239	<MDA		
I_134	8.1E-08	Tritium *	<MDA		
I_135	4.7E-08	Boron **	<MDA		

Total CONDENSATE Beta Gamma Activity=5.8E-07

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

POWDEX EFFLUENT Concentrations (uci/ml)

Scenario Time in Minutes 45

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	1.7E-08		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	1.4E-08	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	1.4E-08	Tritium *	1.3E-08		
I_135	<MDA	Boron **	<MDA		

Total POWDEX EFFLUENT Beta Gamma Activity=9.7E-08

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS Concentrations (uci/ml)

Scenario Time in Minutes 45

Dose Rate(contact) 1.7E+01 mrem/hr

Dose Rate(1 foot) 1.4E+00 mrem/hr

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	8.8E-03	Cs_137	2.8E-07
Kr_85	<MDA	Cs_138	2.4E-05
Kr_87	8.0E-03	Ba_137m	<MDA
Kr_88	2.1E-02	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	1.5E-07
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	4.0E-03	Ru_103	<MDA
Xe_133	2.5E-01	Ru_106 *	<MDA
Xe_135m	2.0E-03	Te_129m	<MDA
Xe_135	3.8E-02	Te_131m	<MDA
Xe_138	5.0E-02	Te_132	<MDA
I_131	3.9E-06	Sb_127	<MDA
I_132	9.8E-06	Sb_129	<MDA
I_133	1.4E-05	Np_239	<MDA
I_134	2.0E-05	Tritium *	2.3E-01
I_135	1.1E-05	Boron **	<MDA

Total CONDENSER OFFGAS Beta Gamma Activity=6.1E-01

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

FEEDWATER Concentrations (uci/ml)

Scenario Time in Minutes 45

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	1.0E-07		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	1.5E-07	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	4.1E-08		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	1.8E-08	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	1.6E-08	Sb_127	<MDA		
I_132	4.1E-08	Sb_129	<MDA		
I_133	5.6E-08	Np_239	<MDA		
I_134	8.2E-08	Tritium *	1.6E-08		
I_135	4.7E-08	Boron **	<MDA		

Total FEEDWATER Beta Gamma Activity=5.8E-07

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

Reactor Building Airborne Concentrations (uci/ml)

Scenario Time in Minutes 45

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	<MDA		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	<MDA	Tritium *	<MDA		
I_135	<MDA	Boron **	<MDA		

Total Reactor Building Airborne Beta Gamma Activity= <MDA

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS MAP-5 Concentrations (uci/ml)

Scenario Time in Minutes 45

	CHANNEL 1	CHANNEL 2	CHANNEL 3
DOSE RATE (CONTACT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (1 FOOT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (3 FEET) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
I_131 (CONCENTRATION UCI/ML)	3.9E-06	3.6E-07	3.0E-08
I_132 (CONCENTRATION UCI/ML)	9.8E-06	8.9E-07	7.4E-08
I_133 (CONCENTRATION UCI/ML)	1.4E-05	1.2E-06	1.0E-07
I_134 (CONCENTRATION UCI/ML)	2.0E-05	1.8E-06	1.5E-07
I_135 (CONCENTRATION UCI/ML)	1.1E-05	1.0E-06	8.6E-08

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

REACTOR COOLANT Concentrations (uci/ml)

Scenario Time in Minutes 60

Dose Rate(contact)		Dose Rate(1 foot)		Dose Rate(3 feet)	
8.3E+02 mrem/hr		6.9E+01 mrem/hr		7.7E+00 mrem/hr	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	1.7E-01	Cs_137	6.6E-02		
Kr_85	<MDA	Cs_138	5.7E+00		
Kr_87	1.5E-01	Ba_137m	<MDA		
Kr_88	4.0E-01	Ba_139	<MDA		
Rb_88	8.6E-02	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	3.5E-02		
Sr_92	<MDA	Ar_41	2.4E-02		
Y_90 *	<MDA	Co_58	4.0E-05		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	2.8E-03		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	7.7E-02	Ru_103	<MDA		
Xe_133	4.8E+00	Ru_106 *	<MDA		
Xe_135m	3.8E-02	Te_129m	<MDA		
Xe_135	7.3E-01	Te_131m	<MDA		
Xe_138	9.6E-01	Te_132	<MDA		
I_131	9.2E-01	Sb_127	<MDA		
I_132	2.3E+00	Sb_129	<MDA		
I_133	3.2E+00	Np_239	<MDA		
I_134	4.6E+00	Tritium *	3.7E+00		
I_135	2.7E+00	Boron **	<MDA		

Total REACTOR COOLANT Beta Gamma Activity=3.1E+01

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

ALPHA OTSG Concentrations (uci/ml)

Scenario Time in Minutes 60

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	1.7E-08	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	5.7E-07		
Kr_87	1.5E-08	Ba_137m	<MDA		
Kr_88	4.0E-08	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	4.8E-07	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	7.2E-08	Te_131m	<MDA		
Xe_138	9.5E-08	Te_132	<MDA		
I_131	9.2E-08	Sb_127	<MDA		
I_132	2.3E-07	Sb_129	<MDA		
I_133	3.1E-07	Np_239	<MDA		
I_134	4.6E-07	Tritium *	3.7E-07		
I_135	2.6E-07	Boron **	<MDA		

Total ALPHA OTSG Beta Gamma Activity=3.0E-06

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

BRAVO OTSG Concentrations (uci/ml)

Scenario Time in Minutes 60

Dose Rate(contact)		Dose Rate(1 foot)	Dose Rate(3 feet)
3.3E-01 mrem/hr		less than detectable	less than detectable
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	6.7E-05	Cs_137	2.6E-05
Kr_85	<MDA	Cs_138	2.3E-03
Kr_87	6.1E-05	Ba_137m	<MDA
Kr_88	1.6E-04	Ba_139	<MDA
Rb_88	3.4E-05	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	1.4E-05
Sr_92	<MDA	Ar_41	9.5E-06
Y_90 *	<MDA	Co_58	1.6E-08
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	1.1E-06
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	3.0E-05	Ru_103	<MDA
Xe_133	1.9E-03	Ru_106 *	<MDA
Xe_135m	1.5E-05	Te_129m	<MDA
Xe_135	2.9E-04	Te_131m	<MDA
Xe_138	3.8E-04	Te_132	<MDA
I_131	3.7E-04	Sb_127	<MDA
I_132	9.1E-04	Sb_129	<MDA
I_133	1.3E-03	Np_239	<MDA
I_134	1.8E-03	Tritium *	1.5E-03
I_135	1.1E-03	Boron **	<MDA

Total BRAVO OTSG Beta Gamma Activity=1.2E-02

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSATE Concentrations (uci/ml)

Scenario Time in Minutes 60

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	5.2E-08		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	8.4E-08	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	2.3E-08		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	2.1E-08	Sb_129	<MDA		
I_133	2.9E-08	Np_239	<MDA		
I_134	4.2E-08	Tritium *	<MDA		
I_135	2.4E-08	Boron **	<MDA		

Total CONDENSATE Beta Gamma Activity=3.0E-07

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

POWDEX EFFLUENT Concentrations (uci/ml)

Scenario Time in Minutes 60

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	1.4E-08		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	1.1E-08	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	1.1E-08	Tritium *	<MDA		
I_135	<MDA	Boron **	<MDA		

Total POWDEX EFFLUENT Beta Gamma Activity=7.7E-08

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS Concentrations (uci/ml)

Scenario Time in Minutes 60

Dose Rate(contact) 8.3E+00 mrem/hr

Dose Rate(1 foot) 6.9E-01 mrem/hr

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	4.4E-03	Cs_137	1.4E-07
Kr_85	<MDA	Cs_138	1.3E-05
Kr_87	4.0E-03	Ba_137m	<MDA
Kr_88	1.1E-02	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	7.7E-08
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	2.0E-03	Ru_103	<MDA
Xe_133	1.3E-01	Ru_106 *	<MDA
Xe_135m	1.0E-03	Te_129m	<MDA
Xe_135	1.9E-02	Te_131m	<MDA
Xe_138	2.5E-02	Te_132	<MDA
I_131	2.0E-06	Sb_127	<MDA
I_132	5.0E-06	Sb_129	<MDA
I_133	7.0E-06	Np_239	<MDA
I_134	1.0E-05	Tritium *	1.2E-01
I_135	5.8E-06	Boron **	<MDA

Total CONDENSER OFFGAS Beta Gamma Activity=3.1E-01

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

FEEDWATER Concentrations (uci/ml)

Scenario Time in Minutes 60

Dose Rate(contact) Dose Rate(1 foot) Dose Rate(3 feet)

less than detectable less than detectable less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	<MDA	Cs_137	<MDA
Kr_85	<MDA	Cs_138	8.4E-08
Kr_87	<MDA	Ba_137m	<MDA
Kr_88	<MDA	Ba_139	<MDA
Rb_88	1.2E-07	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	<MDA
Sr_92	<MDA	Ar_41	3.3E-08
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	<MDA	Ru_103	<MDA
Xe_133	1.6E-08	Ru_106 *	<MDA
Xe_135m	<MDA	Te_129m	<MDA
Xe_135	<MDA	Te_131m	<MDA
Xe_138	<MDA	Te_132	<MDA
I_131	1.4E-08	Sb_127	<MDA
I_132	3.3E-08	Sb_129	<MDA
I_133	4.6E-08	Np_239	<MDA
I_134	6.8E-08	Tritium *	1.5E-08
I_135	3.9E-08	Boron **	<MDA

Total FEEDWATER Beta Gamma Activity=4.8E-07

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

Reactor Building Airborne Concentrations (uci/ml)

Scenario Time in Minutes 60

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)		Nuclide	Concentration(uci/ml)	
Kr_83m	<MDA		Cs_136	<MDA	
Kr_85m	<MDA		Cs_137	<MDA	
Kr_85	<MDA		Cs_138	<MDA	
Kr_87	<MDA		Ba_137m	<MDA	
Kr_88	<MDA		Ba_139	<MDA	
Rb_88	<MDA		Ba_140	<MDA	
Sr_89 *	<MDA		La_140	<MDA	
Sr_90 *	<MDA		Ce_144 *	<MDA	
Sr_91	<MDA		Cs_134	<MDA	
Sr_92	<MDA		Ar_41	<MDA	
Y_90 *	<MDA		Co_58	<MDA	
Y_91	<MDA		Mn_54	<MDA	
Mo_99	<MDA		Na_24	<MDA	
Xe_131m	<MDA		Rb_89	<MDA	
Xe_133m	<MDA		Ru_103	<MDA	
Xe_133	<MDA		Ru_106 *	<MDA	
Xe_135m	<MDA		Te_129m	<MDA	
Xe_135	<MDA		Te_131m	<MDA	
Xe_138	<MDA		Te_132	<MDA	
I_131	<MDA		Sb_127	<MDA	
I_132	<MDA		Sb_129	<MDA	
I_133	<MDA		Np_239	<MDA	
I_134	<MDA		Tritium *	<MDA	
I_135	<MDA		Boron **	<MDA	

Total Reactor Building Airborne Beta Gamma Activity= <MDA

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS MAP-5 Concentrations (uci/ml)

Scenario Time in Minutes 60

	CHANNEL 1	CHANNEL 2	CHANNEL 3
DOSE RATE (CONTACT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (1 FOOT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (3 FEET) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
I_131 (CONCENTRATION UCI/ML)	2.0E-06	1.8E-07	1.5E-08
I_132 (CONCENTRATION UCI/ML)	5.0E-06	4.6E-07	3.8E-08
I_133 (CONCENTRATION UCI/ML)	7.0E-06	6.3E-07	5.3E-08
I_134 (CONCENTRATION UCI/ML)	1.0E-05	9.2E-07	7.7E-08
I_135 (CONCENTRATION UCI/ML)	5.8E-06	5.3E-07	4.4E-08

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

REACTOR COOLANT Concentrations (uci/ml)

Scenario Time in Minutes 75

Dose Rate(contact) 7.4E+02 mrem/hr		Dose Rate(1 foot) 6.2E+01 mrem/hr		Dose Rate(3 feet) 6.9E+00 mrem/hr	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	1.6E-01	Cs_137	6.6E-02		
Kr_85	<MDA	Cs_138	4.1E+00		
Kr_87	1.3E-01	Ba_137m	<MDA		
Kr_88	3.8E-01	Ba_139	<MDA		
Rb_88	4.8E-02	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	3.5E-02		
Sr_92	<MDA	Ar_41	2.2E-02		
Y_90 *	<MDA	Co_58	4.0E-05		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	2.8E-03		
Xe_131m	7.3E-04	Rb_89	<MDA		
Xe_133m	7.7E-02	Ru_103	<MDA		
Xe_133	4.8E+00	Ru_106 *	<MDA		
Xe_135m	4.1E-02	Te_129m	<MDA		
Xe_135	7.7E-01	Te_131m	<MDA		
Xe_138	4.6E-01	Te_132	<MDA		
I_131	9.2E-01	Sb_127	<MDA		
I_132	2.1E+00	Sb_129	<MDA		
I_133	3.1E+00	Np_239	<MDA		
I_134	3.8E+00	Tritium *	3.7E+00		
I_135	2.6E+00	Boron **	6.0E+00		

Total REACTOR COOLANT Beta Gamma Activity=2.7E+01

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

ALPHA OTSG Concentrations (uci/ml)

Scenario Time in Minutes 75

Dose Rate(contact) less than detectable

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	1.6E-08	Cs_137	<MDA
Kr_85	<MDA	Cs_138	4.1E-07
Kr_87	1.3E-08	Ba_137m	<MDA
Kr_88	3.8E-08	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	<MDA
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	<MDA	Ru_103	<MDA
Xe_133	4.8E-07	Ru_106 *	<MDA
Xe_135m	<MDA	Te_129m	<MDA
Xe_135	7.6E-08	Te_131m	<MDA
Xe_138	4.6E-08	Te_132	<MDA
I_131	9.2E-08	Sb_127	<MDA
I_132	2.1E-07	Sb_129	<MDA
I_133	3.1E-07	Np_239	<MDA
I_134	3.8E-07	Tritium *	3.7E-07
I_135	2.6E-07	Boron **	<MDA

Total ALPHA OTSG Beta Gamma Activity=2.7E-06

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

BRAVO OTSG Concentrations (uci/ml)

Scenario Time in Minutes 75

Dose Rate(contact)		Dose Rate(1 foot)	Dose Rate(3 feet)
2.9E-01 mrem/hr		less than detectable	less than detectable
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	6.4E-05	Cs_137	2.6E-05
Kr_85	<MDA	Cs_138	1.6E-03
Kr_87	5.3E-05	Ba_137m	<MDA
Kr_88	1.5E-04	Ba_139	<MDA
Rb_88	1.9E-05	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	1.4E-05
Sr_92	<MDA	Ar_41	8.7E-06
Y_90 *	<MDA	Co_58	1.6E-08
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	1.1E-06
Xe_131m	2.9E-07	Rb_89	<MDA
Xe_133m	3.1E-05	Ru_103	<MDA
Xe_133	1.9E-03	Ru_106 *	<MDA
Xe_135m	1.6E-05	Te_129m	<MDA
Xe_135	3.0E-04	Te_131m	<MDA
Xe_138	1.8E-04	Te_132	<MDA
I_131	3.7E-04	Sb_127	<MDA
I_132	8.4E-04	Sb_129	<MDA
I_133	1.2E-03	Np_239	<MDA
I_134	1.5E-03	Tritium *	1.5E-03
I_135	1.0E-03	Boron **	<MDA

Total BRAVO OTSG Beta Gamma Activity=1.1E-02

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSATE Concentrations (uci/ml)

Scenario Time in Minutes 75

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	2.7E-08		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	4.2E-08	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	1.2E-08		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	1.1E-08	Sb_129	<MDA		
I_133	1.5E-08	Np_239	<MDA		
I_134	2.2E-08	Tritium *	<MDA		
I_135	1.3E-08	Boron **	<MDA		

Total CONDENSATE Beta Gamma Activity=1.5E-07

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

POWDEX EFFLUENT Concentrations (uci/ml)

Scenario Time in Minutes 75

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	<MDA		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	<MDA	Tritium *	<MDA		
I_135	<MDA	Boron **	<MDA		

Total POWDEX EFFLUENT Beta Gamma Activity=5.3E-08

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS Concentrations (uci/ml)

Scenario Time in Minutes 75

Dose Rate(contact) Dose Rate(1 foot) Dose Rate(3 feet)

5.4E+00 mrem/hr less than detectable less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	2.2E-03	Cs_137	7.7E-08
Kr_85	<MDA	Cs_138	6.5E-06
Kr_87	2.0E-03	Ba_137m	<MDA
Kr_88	5.3E-03	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	4.1E-08
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	1.0E-03	Ru_103	<MDA
Xe_133	6.3E-02	Ru_106 *	<MDA
Xe_135m	5.0E-04	Te_129m	<MDA
Xe_135	9.5E-03	Te_131m	<MDA
Xe_138	1.3E-02	Te_132	<MDA
I_131	1.1E-06	Sb_127	<MDA
I_132	2.6E-06	Sb_129	<MDA
I_133	3.7E-06	Np_239	<MDA
I_134	5.3E-06	Tritium *	5.8E-02
I_135	3.1E-06	Boron **	<MDA

Total CONDENSER OFFGAS Beta Gamma Activity=1.7E-01

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

FEEDWATER Concentrations (uci/ml)

Scenario Time in Minutes 75

Dose Rate(contact) less than detectable

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	<MDA	Cs_137	<MDA
Kr_85	<MDA	Cs_138	6.0E-08
Kr_87	<MDA	Ba_137m	<MDA
Kr_88	<MDA	Ba_139	<MDA
Rb_88	8.0E-08	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	<MDA
Sr_92	<MDA	Ar_41	2.2E-08
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	<MDA	Ru_103	<MDA
Xe_133	1.3E-08	Ru_106 *	<MDA
Xe_135m	<MDA	Te_129m	<MDA
Xe_135	<MDA	Te_131m	<MDA
Xe_138	<MDA	Te_132	<MDA
I_131	<MDA	Sb_127	<MDA
I_132	2.4E-08	Sb_129	<MDA
I_133	3.3E-08	Np_239	<MDA
I_134	4.9E-08	Tritium *	1.2E-08
I_135	2.8E-08	Boron **	<MDA

Total FEEDWATER Beta Gamma Activity=3.4E-07

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

Reactor Building Airborne Concentrations (uci/ml)

Scenario Time in Minutes 75

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	1.6E-05	Cs_137	6.3E-06		
Kr_85	<MDA	Cs_138	4.0E-04		
Kr_87	1.3E-05	Ba_137m	<MDA		
Kr_88	3.6E-05	Ba_139	<MDA		
Rb_88	4.6E-06	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	3.4E-06		
Sr_92	<MDA	Ar_41	2.1E-06		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	2.7E-07		
Xe_131m	7.0E-08	Rb_89	<MDA		
Xe_133m	7.4E-06	Ru_103	<MDA		
Xe_133	4.6E-04	Ru_106 *	<MDA		
Xe_135m	4.0E-06	Te_129m	<MDA		
Xe_135	7.4E-05	Te_131m	<MDA		
Xe_138	4.4E-05	Te_132	<MDA		
I_131	8.9E-05	Sb_127	<MDA		
I_132	2.0E-04	Sb_129	<MDA		
I_133	3.0E-04	Np_239	<MDA		
I_134	3.7E-04	Tritium *	3.6E-04		
I_135	2.5E-04	Boron **	<MDA		

Total Reactor Building Airborne Beta Gamma Activity=2.6E-03

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS MAP-5 Concentrations (uci/ml)

Scenario Time in Minutes 75

	CHANNEL 1	CHANNEL 2	CHANNEL 3
DOSE RATE (CONTACT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (1 FOOT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (3 FEET) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
I_131 (CONCENTRATION UCI/ML)	1.1E-06	9.7E-08	<MDA
I_132 (CONCENTRATION UCI/ML)	2.6E-06	2.4E-07	2.0E-08
I_133 (CONCENTRATION UCI/ML)	3.7E-06	3.3E-07	2.8E-08
I_134 (CONCENTRATION UCI/ML)	5.3E-06	4.8E-07	4.0E-08
I_135 (CONCENTRATION UCI/ML)	3.1E-06	2.8E-07	2.3E-08

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

REACTOR COOLANT Concentrations (uci/ml)

Scenario Time in Minutes 90

Dose Rate(contact)		Dose Rate(1 foot)		Dose Rate(3 feet)	
6.8E+02 mrem/hr		5.6E+01 mrem/hr		6.3E+00 mrem/hr	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	1.6E-01	Cs_137	6.6E-02		
Kr_85	<MDA	Cs_138	3.0E+00		
Kr_87	1.2E-01	Ba_137m	<MDA		
Kr_88	3.6E-01	Ba_139	<MDA		
Rb_88	2.7E-02	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	3.5E-02		
Sr_92	<MDA	Ar_41	2.0E-02		
Y_90 *	<MDA	Co_58	4.0E-05		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	2.7E-03		
Xe_131m	1.5E-03	Rb_89	<MDA		
Xe_133m	7.7E-02	Ru_103	<MDA		
Xe_133	4.8E+00	Ru_106 *	<MDA		
Xe_135m	5.2E-02	Te_129m	<MDA		
Xe_135	8.0E-01	Te_131m	<MDA		
Xe_138	2.2E-01	Te_132	<MDA		
I_131	9.2E-01	Sb_127	<MDA		
I_132	2.0E+00	Sb_129	<MDA		
I_133	3.1E+00	Np_239	<MDA		
I_134	3.1E+00	Tritium *	3.7E+00		
I_135	2.5E+00	Boron **	1.9E+01		

Total REACTOR COOLANT Beta Gamma Activity=2.5E+01

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

ALPHA OTSG Concentrations (uci/ml)

Scenario Time in Minutes 90

Dose Rate(contact) Dose Rate(1 foot) Dose Rate(3 feet)

less than detectable less than detectable less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	1.5E-08	Cs_137	<MDA
Kr_85	<MDA	Cs_138	2.9E-07
Kr_87	1.2E-08	Ba_137m	<MDA
Kr_88	3.5E-08	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	<MDA
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	<MDA	Ru_103	<MDA
Xe_133	4.8E-07	Ru_106 *	<MDA
Xe_135m	<MDA	Te_129m	<MDA
Xe_135	7.9E-08	Te_131m	<MDA
Xe_138	2.2E-08	Te_132	<MDA
I_131	9.2E-08	Sb_127	<MDA
I_132	1.9E-07	Sb_129	<MDA
I_133	3.1E-07	Np_239	<MDA
I_134	3.1E-07	Tritium *	3.7E-07
I_135	2.5E-07	Boron **	<MDA

Total ALPHA OTSG Beta Gamma Activity=2.5E-06

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

BRAVO OTSG Concentrations (uci/ml)

Scenario Time in Minutes 90

Dose Rate(contact) 2.7E-01 mrem/hr

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	6.2E-05	Cs_137	2.6E-05
Kr_85	<MDA	Cs_138	1.2E-03
Kr_87	4.6E-05	Ba_137m	<MDA
Kr_88	1.4E-04	Ba_139	<MDA
Rb_88	1.1E-05	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	1.4E-05
Sr_92	<MDA	Ar_41	7.9E-06
Y_90 *	<MDA	Co_58	1.6E-08
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	1.1E-06
Xe_131m	5.8E-07	Rb_89	<MDA
Xe_133m	3.1E-05	Ru_103	<MDA
Xe_133	1.9E-03	Ru_106 *	<MDA
Xe_135m	2.1E-05	Te_129m	<MDA
Xe_135	3.2E-04	Te_131m	<MDA
Xe_138	8.8E-05	Te_132	<MDA
I_131	3.7E-04	Sb_127	<MDA
I_132	7.8E-04	Sb_129	<MDA
I_133	1.2E-03	Np_239	<MDA
I_134	1.2E-03	Tritium *	1.5E-03
I_135	1.0E-03	Boron **	<MDA

Total BRAVO OTSG Beta Gamma Activity=1.0E-02

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSATE Concentrations (uci/ml)

Scenario Time in Minutes 90

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	1.4E-08		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	2.1E-08	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	1.2E-08	Tritium *	<MDA		
I_135	<MDA	Boron **	<MDA		

Total CONDENSATE Beta Gamma Activity=8.0E-08

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

POWDEX EFFLUENT Concentrations (uci/ml)

Scenario Time in Minutes 90

Dose Rate(contact) less than detectable

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	<MDA	Cs_137	<MDA
Kr_85	<MDA	Cs_138	<MDA
Kr_87	<MDA	Ba_137m	<MDA
Kr_88	<MDA	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	<MDA
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	<MDA	Ru_103	<MDA
Xe_133	<MDA	Ru_106 *	<MDA
Xe_135m	<MDA	Te_129m	<MDA
Xe_135	<MDA	Te_131m	<MDA
Xe_138	<MDA	Te_132	<MDA
I_131	<MDA	Sb_127	<MDA
I_132	<MDA	Sb_129	<MDA
I_133	<MDA	Np_239	<MDA
I_134	<MDA	Tritium *	<MDA
I_135	<MDA	Boron **	<MDA

Total POWDEX EFFLUENT Beta Gamma Activity=3.4E-08

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS Concentrations (uci/ml)

Scenario Time in Minutes 90

Dose Rate(contact) 2.1E+00 mrem/hr

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	1.1E-03	Cs_137	4.2E-08
Kr_85	<MDA	Cs_138	3.5E-06
Kr_87	1.0E-03	Ba_137m	<MDA
Kr_88	2.6E-03	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	2.3E-08
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	1.5E-08	Rb_89	<MDA
Xe_133m	5.0E-04	Ru_103	<MDA
Xe_133	3.1E-02	Ru_106 *	<MDA
Xe_135m	2.5E-04	Te_129m	<MDA
Xe_135	4.8E-03	Te_131m	<MDA
Xe_138	6.3E-03	Te_132	<MDA
I_131	5.9E-07	Sb_127	<MDA
I_132	1.4E-06	Sb_129	<MDA
I_133	2.0E-06	Np_239	<MDA
I_134	2.9E-06	Tritium *	2.9E-02
I_135	1.7E-06	Boron **	<MDA

Total CONDENSER OFFGAS Beta Gamma Activity=7.7E-02

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

FEEDWATER Concentrations (uci/ml)

Scenario Time in Minutes 90

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	4.0E-08		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	5.1E-08	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	1.4E-08		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	1.6E-08	Sb_129	<MDA		
I_133	2.3E-08	Np_239	<MDA		
I_134	3.3E-08	Tritium *	<MDA		
I_135	1.9E-08	Boron **	<MDA		

Total FEEDWATER Beta Gamma Activity=2.3E-07

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

Reactor Building Airborne Concentrations (uci/ml)

Scenario Time in Minutes 90

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)		Nuclide	Concentration(uci/ml)	
Kr_83m	<MDA		Cs_136	<MDA	
Kr_85m	3.0E-05		Cs_137	1.3E-05	
Kr_85	<MDA		Cs_138	5.7E-04	
Kr_87	2.2E-05		Ba_137m	<MDA	
Kr_88	6.9E-05		Ba_139	<MDA	
Rb_88	5.1E-06		Ba_140	<MDA	
Sr_89 *	<MDA		La_140	<MDA	
Sr_90 *	<MDA		Ce_144 *	<MDA	
Sr_91	<MDA		Cs_134	6.8E-06	
Sr_92	<MDA		Ar_41	3.8E-06	
Y_90 *	<MDA		Co_58	<MDA	
Y_91	<MDA		Mn_54	<MDA	
Mo_99	<MDA		Na_24	5.3E-07	
Xe_131m	2.8E-07		Rb_89	<MDA	
Xe_133m	1.5E-05		Ru_103	<MDA	
Xe_133	9.3E-04		Ru_106 *	<MDA	
Xe_135m	1.0E-05		Te_129m	<MDA	
Xe_135	1.5E-04		Te_131m	<MDA	
Xe_138	4.2E-05		Te_132	<MDA	
I_131	1.8E-04		Sb_127	<MDA	
I_132	3.8E-04		Sb_129	<MDA	
I_133	6.0E-04		Np_239	<MDA	
I_134	6.0E-04		Tritium *	7.1E-04	
I_135	4.8E-04		Boron **	<MDA	

Total Reactor Building Airborne Beta Gamma Activity=4.8E-03

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS MAP-5 Concentrations (uci/ml)

Scenario Time in Minutes 90

	CHANNEL 1	CHANNEL 2	CHANNEL 3
DOSE RATE (CONTACT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (1 FOOT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (3 FEET) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
I_131 (CONCENTRATION UCI/ML)	5.9E-07	5.4E-08	<MDA
I_132 (CONCENTRATION UCI/ML)	1.4E-06	1.3E-07	1.1E-08
I_133 (CONCENTRATION UCI/ML)	2.0E-06	1.8E-07	1.5E-08
I_134 (CONCENTRATION UCI/ML)	2.9E-06	2.6E-07	2.2E-08
I_135 (CONCENTRATION UCI/ML)	1.7E-06	1.5E-07	1.3E-08

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

REACTOR COOLANT Concentrations (uci/ml)

Scenario Time in Minutes 105

Dose Rate(contact) 6.3E+02 mrem/hr		Dose Rate(1 foot) 5.3E+01 mrem/hr		Dose Rate(3 feet) 5.8E+00 mrem/hr	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	1.5E-01	Cs_137	6.6E-02		
Kr_85	<MDA	Cs_138	2.1E+00		
Kr_87	1.0E-01	Ba_137m	<MDA		
Kr_88	3.4E-01	Ba_139	<MDA		
Rb_88	1.5E-02	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	3.5E-02		
Sr_92	<MDA	Ar_41	1.8E-02		
Y_90 *	<MDA	Co_58	4.0E-05		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	2.7E-03		
Xe_131m	2.2E-03	Rb_89	<MDA		
Xe_133m	7.8E-02	Ru_103	<MDA		
Xe_133	4.9E+00	Ru_106 *	<MDA		
Xe_135m	6.7E-02	Te_129m	<MDA		
Xe_135	8.3E-01	Te_131m	<MDA		
Xe_138	1.1E-01	Te_132	<MDA		
I_131	9.2E-01	Sb_127	<MDA		
I_132	1.8E+00	Sb_129	<MDA		
I_133	3.1E+00	Np_239	<MDA		
I_134	2.6E+00	Tritium *	3.7E+00		
I_135	2.5E+00	Boron **	5.4E+01		

Total REACTOR COOLANT Beta Gamma Activity=2.3E+01

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

ALPHA OTSG Concentrations (uci/ml)

Scenario Time in Minutes 105

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	1.5E-08	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	2.1E-07		
Kr_87	1.0E-08	Ba_137m	<MDA		
Kr_88	3.3E-08	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	4.8E-07	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	8.3E-08	Te_131m	<MDA		
Xe_138	1.1E-08	Te_132	<MDA		
I_131	9.1E-08	Sb_127	<MDA		
I_132	1.8E-07	Sb_129	<MDA		
I_133	3.1E-07	Np_239	<MDA		
I_134	2.6E-07	Tritium *	3.7E-07		
I_135	2.4E-07	Boron **	<MDA		

Total ALPHA OTSG Beta Gamma Activity=2.3E-06

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

BRAVO OTSG Concentrations (uci/ml)

Scenario Time in Minutes 105

Dose Rate(contact)		Dose Rate(1 foot)	Dose Rate(3 feet)
2.5E-01 mrem/hr		less than detectable	less than detectable
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	5.9E-05	Cs_137	2.6E-05
Kr_85	<MDA	Cs_138	8.4E-04
Kr_87	4.0E-05	Ba_137m	<MDA
Kr_88	1.3E-04	Ba_139	<MDA
Rb_88	5.9E-06	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	1.4E-05
Sr_92	<MDA	Ar_41	7.2E-06
Y_90 *	<MDA	Co_58	1.6E-08
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	1.1E-06
Xe_131m	8.7E-07	Rb_89	<MDA
Xe_133m	3.1E-05	Ru_103	<MDA
Xe_133	1.9E-03	Ru_106 *	<MDA
Xe_135m	2.7E-05	Te_129m	<MDA
Xe_135	3.3E-04	Te_131m	<MDA
Xe_138	4.2E-05	Te_132	<MDA
I_131	3.7E-04	Sb_127	<MDA
I_132	7.2E-04	Sb_129	<MDA
I_133	1.2E-03	Np_239	<MDA
I_134	1.0E-03	Tritium *	1.5E-03
I_135	9.7E-04	Boron **	<MDA

Total BRAVO OTSG Beta Gamma Activity=9.3E-03

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSATE Concentrations (uci/ml)

Scenario Time in Minutes 105

Dose Rate(contact) less than detectable

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	<MDA	Cs_137	<MDA
Kr_85	<MDA	Cs_138	<MDA
Kr_87	<MDA	Ba_137m	<MDA
Kr_88	<MDA	Ba_139	<MDA
Rb_88	1.1E-08	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	<MDA
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	<MDA	Ru_103	<MDA
Xe_133	<MDA	Ru_106 *	<MDA
Xe_135m	<MDA	Te_129m	<MDA
Xe_135	<MDA	Te_131m	<MDA
Xe_138	<MDA	Te_132	<MDA
I_131	<MDA	Sb_127	<MDA
I_132	<MDA	Sb_129	<MDA
I_133	<MDA	Np_239	<MDA
I_134	<MDA	Tritium *	<MDA
I_135	<MDA	Boron **	<MDA

Total CONDENSATE Beta Gamma Activity=4.3E-08

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

POWDEX EFFLUENT Concentrations (uci/ml)

Scenario Time in Minutes 105

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)		Nuclide	Concentration(uci/ml)	
Kr_83m	<MDA		Cs_136	<MDA	
Kr_85m	<MDA		Cs_137	<MDA	
Kr_85	<MDA		Cs_138	<MDA	
Kr_87	<MDA		Ba_137m	<MDA	
Kr_88	<MDA		Ba_139	<MDA	
Rb_88	<MDA		Ba_140	<MDA	
Sr_89 *	<MDA		La_140	<MDA	
Sr_90 *	<MDA		Ce_144 *	<MDA	
Sr_91	<MDA		Cs_134	<MDA	
Sr_92	<MDA		Ar_41	<MDA	
Y_90 *	<MDA		Co_58	<MDA	
Y_91	<MDA		Mn_54	<MDA	
Mo_99	<MDA		Na_24	<MDA	
Xe_131m	<MDA		Rb_89	<MDA	
Xe_133m	<MDA		Ru_103	<MDA	
Xe_133	<MDA		Ru_106 *	<MDA	
Xe_135m	<MDA		Te_129m	<MDA	
Xe_135	<MDA		Te_131m	<MDA	
Xe_138	<MDA		Te_132	<MDA	
I_131	<MDA		Sb_127	<MDA	
I_132	<MDA		Sb_129	<MDA	
I_133	<MDA		Np_239	<MDA	
I_134	<MDA		Tritium *	<MDA	
I_135	<MDA		Boron **	<MDA	

Total POWDEX EFFLUENT Beta Gamma Activity=2.1E-08

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS Concentrations (uci/ml)

Scenario Time in Minutes 105

Dose Rate(contact) 1.0E+00 mrem/hr

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	5.5E-04	Cs_137	2.5E-08
Kr_85	<MDA	Cs_138	1.9E-06
Kr_87	5.0E-04	Ba_137m	<MDA
Kr_88	1.3E-03	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	1.4E-08
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	2.6E-08	Rb_89	<MDA
Xe_133m	2.5E-04	Ru_103	<MDA
Xe_133	1.6E-02	Ru_106 *	<MDA
Xe_135m	1.3E-04	Te_129m	<MDA
Xe_135	2.4E-03	Te_131m	<MDA
Xe_138	3.1E-03	Te_132	<MDA
I_131	3.5E-07	Sb_127	<MDA
I_132	8.4E-07	Sb_129	<MDA
I_133	1.2E-06	Np_239	<MDA
I_134	1.6E-06	Tritium *	1.5E-02
I_135	1.0E-06	Boron **	<MDA

Total CONDENSER OFFGAS Beta Gamma Activity=3.9E-02

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

FEEDWATER Concentrations (uci/ml)

Scenario Time in Minutes 105

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable	Dose Rate(3 feet) less than detectable
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	<MDA	Cs_137	<MDA
Kr_85	<MDA	Cs_138	2.6E-08
Kr_87	<MDA	Ba_137m	<MDA
Kr_88	<MDA	Ba_139	<MDA
Rb_88	3.1E-08	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	<MDA
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	<MDA	Ru_103	<MDA
Xe_133	<MDA	Ru_106 *	<MDA
Xe_135m	<MDA	Te_129m	<MDA
Xe_135	<MDA	Te_131m	<MDA
Xe_138	<MDA	Te_132	<MDA
I_131	<MDA	Sb_127	<MDA
I_132	1.1E-08	Sb_129	<MDA
I_133	1.5E-08	Np_239	<MDA
I_134	2.1E-08	Tritium *	<MDA
I_135	1.3E-08	Boron **	<MDA

Total FEEDWATER Beta Gamma Activity=1.5E-07

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

Reactor Building Airborne Concentrations (uci/ml)

Scenario Time in Minutes 105

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	4.3E-05	Cs_137	1.9E-05		
Kr_85	<MDA	Cs_138	6.1E-04		
Kr_87	2.9E-05	Ba_137m	<MDA		
Kr_88	9.7E-05	Ba_139	<MDA		
Rb_88	4.3E-06	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	1.0E-05		
Sr_92	<MDA	Ar_41	5.2E-06		
Y_90 *	<MDA	Co_58	1.2E-08		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	7.8E-07		
Xe_131m	6.3E-07	Rb_89	<MDA		
Xe_133m	2.2E-05	Ru_103	<MDA		
Xe_133	1.4E-03	Ru_106 *	<MDA		
Xe_135m	1.9E-05	Te_129m	<MDA		
Xe_135	2.4E-04	Te_131m	<MDA		
Xe_138	3.1E-05	Te_132	<MDA		
I_131	2.7E-04	Sb_127	<MDA		
I_132	5.2E-04	Sb_129	<MDA		
I_133	8.9E-04	Np_239	<MDA		
I_134	7.4E-04	Tritium *	1.1E-03		
I_135	7.1E-04	Boron **	<MDA		

Total Reactor Building Airborne Beta Gamma Activity=6.7E-03

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS MAP-5 Concentrations (uci/ml)

Scenario Time in Minutes 105

	CHANNEL 1	CHANNEL 2	CHANNEL 3
DOSE RATE (CONTACT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (1 FOOT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (3 FEET) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
I_131 (CONCENTRATION UCI/ML)	3.5E-07	3.2E-08	<MDA
I_132 (CONCENTRATION UCI/ML)	8.4E-07	7.6E-08	<MDA
I_133 (CONCENTRATION UCI/ML)	1.2E-06	1.1E-07	<MDA
I_134 (CONCENTRATION UCI/ML)	1.6E-06	1.4E-07	1.2E-08
I_135 (CONCENTRATION UCI/ML)	1.0E-06	9.1E-08	<MDA

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

REACTOR COOLANT Concentrations (uci/ml)

Scenario Time in Minutes 120

Dose Rate(contact) 6.0E+02 mrem/hr		Dose Rate(1 foot) 5.0E+01 mrem/hr		Dose Rate(3 feet) 5.5E+00 mrem/hr	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	1.4E-01	Cs_137	6.6E-02		
Kr_85	<MDA	Cs_138	1.5E+00		
Kr_87	8.9E-02	Ba_137m	<MDA		
Kr_88	3.2E-01	Ba_139	<MDA		
Rb_88	8.3E-03	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	3.5E-02		
Sr_92	<MDA	Ar_41	1.6E-02		
Y_90 *	<MDA	Co_58	4.0E-05		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	2.7E-03		
Xe_131m	2.9E-03	Rb_89	<MDA		
Xe_133m	7.8E-02	Ru_103	<MDA		
Xe_133	4.9E+00	Ru_106 *	<MDA		
Xe_135m	8.4E-02	Te_129m	<MDA		
Xe_135	8.7E-01	Te_131m	<MDA		
Xe_138	5.1E-02	Te_132	<MDA		
I_131	9.2E-01	Sb_127	<MDA		
I_132	1.7E+00	Sb_129	<MDA		
I_133	3.1E+00	Np_239	<MDA		
I_134	2.1E+00	Tritium *	3.7E+00		
I_135	2.4E+00	Boron **	1.7E+02		

Total REACTOR COOLANT Beta Gamma Activity=2.2E+01

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

ALPHA OTSG Concentrations (uci/ml)

Scenario Time in Minutes 120

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	1.4E-08	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	1.5E-07		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	3.1E-08	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	4.8E-07	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	8.6E-08	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	9.1E-08	Sb_127	<MDA		
I_132	1.7E-07	Sb_129	<MDA		
I_133	3.0E-07	Np_239	<MDA		
I_134	2.1E-07	Tritium *	3.7E-07		
I_135	2.4E-07	Boron **	<MDA		

Total ALPHA OTSG Beta Gamma Activity=2.2E-06

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

BRAVO OTSG Concentrations (uci/ml)

Scenario Time in Minutes 120

Dose Rate(contact) Dose Rate(1 foot) Dose Rate(3 feet)

2.4E-01 mrem/hr less than detectable less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	5.7E-05	Cs_137	2.6E-05
Kr_85	<MDA	Cs_138	6.1E-04
Kr_87	3.5E-05	Ba_137m	<MDA
Kr_88	1.3E-04	Ba_139	<MDA
Rb_88	3.3E-06	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	1.4E-05
Sr_92	<MDA	Ar_41	6.5E-06
Y_90 *	<MDA	Co_58	1.6E-08
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	1.1E-06
Xe_131m	1.2E-06	Rb_89	<MDA
Xe_133m	3.1E-05	Ru_103	<MDA
Xe_133	1.9E-03	Ru_106 *	<MDA
Xe_135m	3.4E-05	Te_129m	<MDA
Xe_135	3.4E-04	Te_131m	<MDA
Xe_138	2.0E-05	Te_132	<MDA
I_131	3.7E-04	Sb_127	<MDA
I_132	6.7E-04	Sb_129	<MDA
I_133	1.2E-03	Np_239	<MDA
I_134	8.4E-04	Tritium *	1.5E-03
I_135	9.5E-04	Boron **	<MDA

Total BRAVO OTSG Beta Gamma Activity=8.8E-03

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSATE Concentrations (uci/ml)

Scenario Time in Minutes 120

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)		Nuclide	Concentration(uci/ml)	
Kr_83m	<MDA		Cs_136	<MDA	
Kr_85m	<MDA		Cs_137	<MDA	
Kr_85	<MDA		Cs_138	<MDA	
Kr_87	<MDA		Ba_137m	<MDA	
Kr_88	<MDA		Ba_139	<MDA	
Rb_88	<MDA		Ba_140	<MDA	
Sr_89 *	<MDA		La_140	<MDA	
Sr_90 *	<MDA		Ce_144 *	<MDA	
Sr_91	<MDA		Cs_134	<MDA	
Sr_92	<MDA		Ar_41	<MDA	
Y_90 *	<MDA		Co_58	<MDA	
Y_91	<MDA		Mn_54	<MDA	
Mo_99	<MDA		Na_24	<MDA	
Xe_131m	<MDA		Rb_89	<MDA	
Xe_133m	<MDA		Ru_103	<MDA	
Xe_133	<MDA		Ru_106 *	<MDA	
Xe_135m	<MDA		Te_129m	<MDA	
Xe_135	<MDA		Te_131m	<MDA	
Xe_138	<MDA		Te_132	<MDA	
I_131	<MDA		Sb_127	<MDA	
I_132	<MDA		Sb_129	<MDA	
I_133	<MDA		Np_239	<MDA	
I_134	<MDA		Tritium *	<MDA	
I_135	<MDA		Boron **	<MDA	

Total CONDENSATE Beta Gamma Activity=2.5E-08

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

POWDEX EFFLUENT Concentrations (uci/ml)

Scenario Time in Minutes 120

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	<MDA		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	<MDA	Tritium *	<MDA		
I_135	<MDA	Boron **	<MDA		

Total POWDEX EFFLUENT Beta Gamma Activity=1.3E-08

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS Concentrations (uci/ml)

Scenario Time in Minutes 120

Dose Rate(contact)		Dose Rate(1 foot)	Dose Rate(3 feet)
5.2E-01 mrem/hr		less than detectable	less than detectable
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	2.8E-04	Cs_137	1.7E-08
Kr_85	<MDA	Cs_138	1.0E-06
Kr_87	2.5E-04	Ba_137m	<MDA
Kr_88	6.6E-04	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	<MDA
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	3.7E-08	Rb_89	<MDA
Xe_133m	1.3E-04	Ru_103	<MDA
Xe_133	7.9E-03	Ru_106 *	<MDA
Xe_135m	6.4E-05	Te_129m	<MDA
Xe_135	1.2E-03	Te_131m	<MDA
Xe_138	1.6E-03	Te_132	<MDA
I_131	2.3E-07	Sb_127	<MDA
I_132	5.2E-07	Sb_129	<MDA
I_133	8.0E-07	Np_239	<MDA
I_134	9.3E-07	Tritium *	7.3E-03
I_135	6.5E-07	Boron **	<MDA

Total CONDENSER OFFGAS Beta Gamma Activity=1.9E-02

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

FEEDWATER Concentrations (uci/ml)

Scenario Time in Minutes 120

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	1.6E-08		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	1.8E-08	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	1.4E-08	Tritium *	<MDA		
I_135	<MDA	Boron **	<MDA		

Total FEEDWATER Beta Gamma Activity=9.2E-08

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

Reactor Building Airborne Concentrations (uci/ml)

Scenario Time in Minutes 120

Dose Rate(contact) 2.3E-01 mrem/hr		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)		Nuclide		Concentration(uci/ml)
Kr_83m	<MDA		Cs_136		<MDA
Kr_85m	5.5E-05		Cs_137		2.5E-05
Kr_85	<MDA		Cs_138		5.9E-04
Kr_87	3.4E-05		Ba_137m		<MDA
Kr_88	1.2E-04		Ba_139		<MDA
Rb_88	3.2E-06		Ba_140		<MDA
Sr_89 *	<MDA		La_140		<MDA
Sr_90 *	<MDA		Ce_144 *		<MDA
Sr_91	<MDA		Cs_134		1.4E-05
Sr_92	<MDA		Ar_41		6.3E-06
Y_90 *	<MDA		Co_58		1.5E-08
Y_91	<MDA		Mn_54		<MDA
Mo_99	<MDA		Na_24		1.0E-06
Xe_131m	1.1E-06		Rb_89		<MDA
Xe_133m	3.0E-05		Ru_103		<MDA
Xe_133	1.9E-03		Ru_106 *		<MDA
Xe_135m	3.2E-05		Te_129m		<MDA
Xe_135	3.3E-04		Te_131m		<MDA
Xe_138	2.0E-05		Te_132		<MDA
I_131	3.5E-04		Sb_127		<MDA
I_132	6.5E-04		Sb_129		<MDA
I_133	1.2E-03		Np_239		<MDA
I_134	8.1E-04		Tritium *		1.4E-03
I_135	9.2E-04		Boron **		<MDA

Total Reactor Building Airborne Beta Gamma Activity=8.5E-03

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS MAP-5 Concentrations (uci/ml)

Scenario Time in Minutes 120

	CHANNEL 1	CHANNEL 2	CHANNEL 3
DOSE RATE (CONTACT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (1 FOOT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (3 FEET) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
I_131 (CONCENTRATION UCI/ML)	2.3E-07	2.1E-08	<MDA
I_132 (CONCENTRATION UCI/ML)	5.2E-07	4.8E-08	<MDA
I_133 (CONCENTRATION UCI/ML)	8.0E-07	7.2E-08	<MDA
I_134 (CONCENTRATION UCI/ML)	9.3E-07	8.4E-08	<MDA
I_135 (CONCENTRATION UCI/ML)	6.5E-07	5.9E-08	<MDA

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

REACTOR COOLANT Concentrations (uci/ml)

Scenario Time in Minutes 135

Dose Rate(contact) 5.7E+02 mrem/hr		Dose Rate(1 foot) 4.7E+01 mrem/hr		Dose Rate(3 feet) 5.3E+00 mrem/hr
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)	
Kr_83m	<MDA	Cs_136	<MDA	
Kr_85m	1.4E-01	Cs_137	6.6E-02	
Kr_85	<MDA	Cs_138	1.1E+00	
Kr_87	7.8E-02	Ba_137m	<MDA	
Kr_88	3.0E-01	Ba_139	<MDA	
Rb_88	4.6E-03	Ba_140	<MDA	
Sr_89 *	<MDA	La_140	<MDA	
Sr_90 *	<MDA	Ce_144 *	<MDA	
Sr_91	<MDA	Cs_134	3.5E-02	
Sr_92	<MDA	Ar_41	1.5E-02	
Y_90 *	<MDA	Co_58	4.0E-05	
Y_91	<MDA	Mn_54	<MDA	
Mo_99	<MDA	Na_24	2.6E-03	
Xe_131m	3.7E-03	Rb_89	<MDA	
Xe_133m	7.8E-02	Ru_103	<MDA	
Xe_133	4.9E+00	Ru_106 *	<MDA	
Xe_135m	1.0E-01	Te_129m	<MDA	
Xe_135	9.0E-01	Te_131m	<MDA	
Xe_138	2.4E-02	Te_132	<MDA	
I_131	9.2E-01	Sb_127	<MDA	
I_132	1.6E+00	Sb_129	<MDA	
I_133	3.0E+00	Np_239	<MDA	
I_134	1.7E+00	Tritium *	3.7E+00	
I_135	2.3E+00	Boron **	2.6E+02	

Total REACTOR COOLANT Beta Gamma Activity=2.1E+01

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

ALPHA OTSG Concentrations (uci/ml)

Scenario Time in Minutes 135

Dose Rate(contact) less than detectable

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	1.4E-08	Cs_137	<MDA
Kr_85	<MDA	Cs_138	1.1E-07
Kr_87	<MDA	Ba_137m	<MDA
Kr_88	3.0E-08	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	<MDA
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	<MDA	Ru_103	<MDA
Xe_133	4.9E-07	Ru_106 *	<MDA
Xe_135m	1.0E-08	Te_129m	<MDA
Xe_135	8.9E-08	Te_131m	<MDA
Xe_138	<MDA	Te_132	<MDA
I_131	9.1E-08	Sb_127	<MDA
I_132	1.5E-07	Sb_129	<MDA
I_133	3.0E-07	Np_239	<MDA
I_134	1.7E-07	Tritium *	3.7E-07
I_135	2.3E-07	Boron **	<MDA

Total ALPHA OTSG Beta Gamma Activity=2.1E-06

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

BRAVO OTSG Concentrations (uci/ml)

Scenario Time in Minutes 135

Dose Rate(contact) 2.3E-01 mrem/hr		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)		Nuclide	Concentration(uci/ml)	
Kr_83m	<MDA		Cs_136	<MDA	
Kr_85m	5.5E-05		Cs_137	2.6E-05	
Kr_85	<MDA		Cs_138	4.4E-04	
Kr_87	3.1E-05		Ba_137m	<MDA	
Kr_88	1.2E-04		Ba_139	<MDA	
Rb_88	1.8E-06		Ba_140	<MDA	
Sr_89 *	<MDA		La_140	<MDA	
Sr_90 *	<MDA		Ce_144 *	<MDA	
Sr_91	<MDA		Cs_134	1.4E-05	
Sr_92	<MDA		Ar_41	5.9E-06	
Y_90 *	<MDA		Co_58	1.6E-08	
Y_91	<MDA		Mn_54	<MDA	
Mo_99	<MDA		Na_24	1.0E-06	
Xe_131m	1.4E-06		Rb_89	<MDA	
Xe_133m	3.1E-05		Ru_103	<MDA	
Xe_133	1.9E-03		Ru_106 *	<MDA	
Xe_135m	4.1E-05		Te_129m	<MDA	
Xe_135	3.6E-04		Te_131m	<MDA	
Xe_138	9.7E-06		Te_132	<MDA	
I_131	3.7E-04		Sb_127	<MDA	
I_132	6.2E-04		Sb_129	<MDA	
I_133	1.2E-03		Np_239	<MDA	
I_134	6.9E-04		Tritium *	1.5E-03	
I_135	9.2E-04		Boron **	<MDA	

Total BRAVO OTSG Beta Gamma Activity=8.3E-03

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSATE Concentrations (uci/ml)

Scenario Time in Minutes 135

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	<MDA		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	<MDA	Tritium *	<MDA		
I_135	<MDA	Boron **	<MDA		

Total CONDENSATE Beta Gamma Activity=1.5E-08

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

POWDEX EFFLUENT Concentrations (uci/ml)

Scenario Time in Minutes 135

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	<MDA		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	<MDA	Tritium *	<MDA		
I_135	<MDA	Boron **	<MDA		

Total POWDEX EFFLUENT Beta Gamma Activity= <MDA

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS Concentrations (uci/ml)

Scenario Time in Minutes 135

Dose Rate(contact) 2.6E-01 mrem/hr

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	1.4E-04	Cs_137	1.3E-08
Kr_85	<MDA	Cs_138	5.8E-07
Kr_87	1.3E-04	Ba_137m	<MDA
Kr_88	3.3E-04	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	<MDA
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	4.9E-08	Rb_89	<MDA
Xe_133m	6.4E-05	Ru_103	<MDA
Xe_133	4.0E-03	Ru_106 *	<MDA
Xe_135m	3.3E-05	Te_129m	<MDA
Xe_135	6.1E-04	Te_131m	<MDA
Xe_138	7.8E-04	Te_132	<MDA
I_131	1.8E-07	Sb_127	<MDA
I_132	3.6E-07	Sb_129	<MDA
I_133	5.9E-07	Np_239	<MDA
I_134	5.7E-07	Tritium *	3.7E-03
I_135	4.7E-07	Boron **	<MDA

Total CONDENSER OFFGAS Beta Gamma Activity=9.8E-03

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

FEEDWATER Concentrations (uci/ml)

Scenario Time in Minutes 135

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	1.0E-08		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	1.1E-08	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	<MDA	Tritium *	<MDA		
I_135	<MDA	Boron **	<MDA		

Total FEEDWATER Beta Gamma Activity=5.8E-08

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

Reactor Building Airborne Concentrations (uci/ml)

Scenario Time in Minutes 135

Dose Rate(contact)		Dose Rate(1 foot)	Dose Rate(3 feet)
2.7E-01 mrem/hr		less than detectable	less than detectable
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	6.6E-05	Cs_137	3.2E-05
Kr_85	<MDA	Cs_138	5.3E-04
Kr_87	3.7E-05	Ba_137m	<MDA
Kr_88	1.4E-04	Ba_139	<MDA
Rb_88	2.2E-06	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	1.7E-05
Sr_92	<MDA	Ar_41	7.2E-06
Y_90 *	<MDA	Co_58	1.9E-08
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	1.3E-06
Xe_131m	1.8E-06	Rb_89	<MDA
Xe_133m	3.8E-05	Ru_103	<MDA
Xe_133	2.4E-03	Ru_106 *	<MDA
Xe_135m	4.9E-05	Te_129m	<MDA
Xe_135	4.3E-04	Te_131m	<MDA
Xe_138	1.2E-05	Te_132	<MDA
I_131	4.4E-04	Sb_127	<MDA
I_132	7.5E-04	Sb_129	<MDA
I_133	1.5E-03	Np_239	<MDA
I_134	8.4E-04	Tritium *	1.8E-03
I_135	1.1E-03	Boron **	<MDA

Total Reactor Building Airborne Beta Gamma Activity=1.0E-02

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS MAP-5 Concentrations (uci/ml)

Scenario Time in Minutes 135

	CHANNEL 1	CHANNEL 2	CHANNEL 3
DOSE RATE (CONTACT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (1 FOOT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (3 FEET) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
I_131 (CONCENTRATION UCI/ML)	1.8E-07	1.6E-08	<MDA
I_132 (CONCENTRATION UCI/ML)	3.6E-07	3.3E-08	<MDA
I_133 (CONCENTRATION UCI/ML)	5.9E-07	5.3E-08	<MDA
I_134 (CONCENTRATION UCI/ML)	5.7E-07	5.2E-08	<MDA
I_135 (CONCENTRATION UCI/ML)	4.7E-07	4.3E-08	<MDA

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

REACTOR COOLANT Concentrations (uci/ml)

Scenario Time in Minutes 150

Dose Rate(contact)		Dose Rate(1 foot)		Dose Rate(3 feet)	
5.5E+02 mrem/hr		4.6E+01 mrem/hr		5.1E+00 mrem/hr	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	1.3E-01	Cs_137	6.6E-02		
Kr_85	<MDA	Cs_138	7.9E-01		
Kr_87	6.8E-02	Ba_137m	<MDA		
Kr_88	2.8E-01	Ba_139	<MDA		
Rb_88	2.6E-03	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	3.5E-02		
Sr_92	<MDA	Ar_41	1.4E-02		
Y_90 *	<MDA	Co_58	4.0E-05		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	2.6E-03		
Xe_131m	4.4E-03	Rb_89	<MDA		
Xe_133m	7.8E-02	Ru_103	<MDA		
Xe_133	4.9E+00	Ru_106 *	<MDA		
Xe_135m	1.2E-01	Te_129m	<MDA		
Xe_135	9.3E-01	Te_131m	<MDA		
Xe_138	1.2E-02	Te_132	<MDA		
I_131	9.2E-01	Sb_127	<MDA		
I_132	1.4E+00	Sb_129	<MDA		
I_133	3.0E+00	Np_239	<MDA		
I_134	1.4E+00	Tritium *	3.7E+00		
I_135	2.3E+00	Boron **	3.2E+02		

Total REACTOR COOLANT Beta Gamma Activity=2.0E+01

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

ALPHA OTSG Concentrations (uci/ml)

Scenario Time in Minutes 150

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	1.3E-08	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	7.8E-08		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	2.8E-08	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	4.9E-07	Ru_106 *	<MDA		
Xe_135m	1.2E-08	Te_129m	<MDA		
Xe_135	9.2E-08	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	9.1E-08	Sb_127	<MDA		
I_132	1.4E-07	Sb_129	<MDA		
I_133	3.0E-07	Np_239	<MDA		
I_134	1.4E-07	Tritium *	3.7E-07		
I_135	2.2E-07	Boron **	<MDA		

Total ALPHA OTSG Beta Gamma Activity=2.0E-06

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

BRAVO OTSG Concentrations (uci/ml)

Scenario Time in Minutes 150

Dose Rate(contact) 2.2E-01 mrem/hr

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	5.3E-05	Cs_137	2.6E-05
Kr_85	<MDA	Cs_138	3.1E-04
Kr_87	2.7E-05	Ba_137m	<MDA
Kr_88	1.1E-04	Ba_139	<MDA
Rb_88	1.0E-06	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	1.4E-05
Sr_92	<MDA	Ar_41	5.4E-06
Y_90 *	<MDA	Co_58	1.6E-08
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	1.0E-06
Xe_131m	1.7E-06	Rb_89	<MDA
Xe_133m	3.1E-05	Ru_103	<MDA
Xe_133	1.9E-03	Ru_106 *	<MDA
Xe_135m	4.8E-05	Te_129m	<MDA
Xe_135	3.7E-04	Te_131m	<MDA
Xe_138	4.6E-06	Te_132	<MDA
I_131	3.6E-04	Sb_127	<MDA
I_132	5.7E-04	Sb_129	<MDA
I_133	1.2E-03	Np_239	<MDA
I_134	5.7E-04	Tritium *	1.5E-03
I_135	9.0E-04	Boron **	<MDA

Total BRAVO OTSG Beta Gamma Activity=8.0E-03

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSATE Concentrations (uci/ml)

Scenario Time in Minutes 150

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	<MDA		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	<MDA	Tritium *	<MDA		
I_135	<MDA	Boron **	<MDA		

Total CONDENSATE Beta Gamma Activity=1.0E-08

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

POWDEX EFFLUENT Concentrations (uci/ml)

Scenario Time in Minutes 150

Dose Rate(contact) less than detectable

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	<MDA	Cs_137	<MDA
Kr_85	<MDA	Cs_138	<MDA
Kr_87	<MDA	Ba_137m	<MDA
Kr_88	<MDA	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	<MDA
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	<MDA	Ru_103	<MDA
Xe_133	<MDA	Ru_106 *	<MDA
Xe_135m	<MDA	Te_129m	<MDA
Xe_135	<MDA	Te_131m	<MDA
Xe_138	<MDA	Te_132	<MDA
I_131	<MDA	Sb_127	<MDA
I_132	<MDA	Sb_129	<MDA
I_133	<MDA	Np_239	<MDA
I_134	<MDA	Tritium *	<MDA
I_135	<MDA	Boron **	<MDA

Total POWDEX EFFLUENT Beta Gamma Activity= <MDA

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS Concentrations (uci/ml)

Scenario Time in Minutes 150

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	7.1E-05	Cs_137	1.0E-08		
Kr_85	<MDA	Cs_138	3.4E-07		
Kr_87	6.4E-05	Ba_137m	<MDA		
Kr_88	1.7E-04	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	6.1E-08	Rb_89	<MDA		
Xe_133m	3.3E-05	Ru_103	<MDA		
Xe_133	2.0E-03	Ru_106 *	<MDA		
Xe_135m	1.7E-05	Te_129m	<MDA		
Xe_135	3.1E-04	Te_131m	<MDA		
Xe_138	3.9E-04	Te_132	<MDA		
I_131	1.5E-07	Sb_127	<MDA		
I_132	2.7E-07	Sb_129	<MDA		
I_133	4.8E-07	Np_239	<MDA		
I_134	3.8E-07	Tritium *	1.9E-03		
I_135	3.8E-07	Boron **	<MDA		

Total CONDENSER OFFGAS Beta Gamma Activity=5.0E-03

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

FEEDWATER Concentrations (uci/ml)

Scenario Time in Minutes 150

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	<MDA		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	<MDA	Tritium *	<MDA		
I_135	<MDA	Boron **	<MDA		

Total FEEDWATER Beta Gamma Activity=3.6E-08

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

Reactor Building Airborne Concentrations (uci/ml)

Scenario Time in Minutes 150

Dose Rate(contact) 3.2E-01 mrem/hr

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	7.7E-05	Cs_137	3.8E-05
Kr_85	<MDA	Cs_138	4.6E-04
Kr_87	3.9E-05	Ba_137m	<MDA
Kr_88	1.6E-04	Ba_139	<MDA
Rb_88	1.5E-06	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	2.0E-05
Sr_92	<MDA	Ar_41	7.8E-06
Y_90 *	<MDA	Co_58	2.3E-08
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	1.5E-06
Xe_131m	2.5E-06	Rb_89	<MDA
Xe_133m	4.5E-05	Ru_103	<MDA
Xe_133	2.8E-03	Ru_106 *	<MDA
Xe_135m	6.9E-05	Te_129m	<MDA
Xe_135	5.3E-04	Te_131m	<MDA
Xe_138	6.7E-06	Te_132	<MDA
I_131	5.3E-04	Sb_127	<MDA
I_132	8.3E-04	Sb_129	<MDA
I_133	1.7E-03	Np_239	<MDA
I_134	8.3E-04	Tritium *	2.1E-03
I_135	1.3E-03	Boron **	<MDA

Total Reactor Building Airborne Beta Gamma Activity=1.2E-02

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS MAP-5 Concentrations (uci/ml)

Scenario Time in Minutes 150

	CHANNEL 1	CHANNEL 2	CHANNEL 3
DOSE RATE (CONTACT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (1 FOOT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (3 FEET) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
I_131 (CONCENTRATION UCI/ML)	1.5E-07	1.3E-08	<MDA
I_132 (CONCENTRATION UCI/ML)	2.7E-07	2.5E-08	<MDA
I_133 (CONCENTRATION UCI/ML)	4.8E-07	4.4E-08	<MDA
I_134 (CONCENTRATION UCI/ML)	3.8E-07	3.4E-08	<MDA
I_135 (CONCENTRATION UCI/ML)	3.8E-07	3.4E-08	<MDA

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

REACTOR COOLANT Concentrations (uci/ml)

Scenario Time in Minutes 165

Dose Rate(contact		Dose Rate(1 foot)		Dose Rate(3 feet)
5.3E+02 mrem/hr		4.4E+01 mrem/hr		4.9E+00 mrem/hr
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)	
Kr_83m	<MDA	Cs_136	<MDA	
Kr_85m	1.3E-01	Cs_137	6.6E-02	
Kr_85	<MDA	Cs_138	5.7E-01	
Kr_87	5.9E-02	Ba_137m	<MDA	
Kr_88	2.6E-01	Ba_139	<MDA	
Rb_88	1.4E-03	Ba_140	<MDA	
Sr_89 *	<MDA	La_140	<MDA	
Sr_90 *	<MDA	Ce_144 *	<MDA	
Sr_91	<MDA	Cs_134	3.5E-02	
Sr_92	<MDA	Ar_41	1.2E-02	
Y_90 *	<MDA	Co_58	4.0E-05	
Y_91	<MDA	Mn_54	<MDA	
Mo_99	<MDA	Na_24	2.6E-03	
Xe_131m	5.1E-03	Rb_89	<MDA	
Xe_133m	7.9E-02	Ru_103	<MDA	
Xe_133	4.9E+00	Ru_106 *	<MDA	
Xe_135m	1.4E-01	Te_129m	<MDA	
Xe_135	9.6E-01	Te_131m	<MDA	
Xe_138	5.6E-03	Te_132	<MDA	
I_131	9.2E-01	Sb_127	<MDA	
I_132	1.3E+00	Sb_129	<MDA	
I_133	3.0E+00	Np_239	<MDA	
I_134	1.2E+00	Tritium *	3.7E+00	
I_135	2.2E+00	Boron **	4.2E+02	

Total REACTOR COOLANT Beta Gamma Activity=2.0F+01

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

ALPHA OTSG Concentrations (uci/ml)

Scenario Time in Minutes 165

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	1.3E-08	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	5.6E-08		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	2.6E-08	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	4.9E-07	Ru_106 *	<MDA		
Xe_135m	1.4E-08	Te_129m	<MDA		
Xe_135	9.5E-08	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	9.1E-08	Sb_127	<MDA		
I_132	1.3E-07	Sb_129	<MDA		
I_133	3.0E-07	Np_239	<MDA		
I_134	1.2E-07	Tritium *	3.7E-07		
I_135	2.2E-07	Boron **	<MDA		

Total ALPHA OTSG Beta Gamma Activity=1.9E-06

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

BRAVO OTSG Concentrations (uci/ml)

Scenario Time in Minutes 165

Dose Rate(contact) 2.1E-01 mrem/hr

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	5.1E-05	Cs_137	2.6E-05
Kr_85	<MDA	Cs_138	2.3E-04
Kr_87	2.3E-05	Ba_137m	<MDA
Kr_88	1.1E-04	Ba_139	<MDA
Rb_88	5.7E-07	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	1.4E-05
Sr_92	<MDA	Ar_41	4.9E-06
Y_90 *	<MDA	Co_58	1.6E-08
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	1.0E-06
Xe_131m	2.0E-06	Rb_89	<MDA
Xe_133m	3.1E-05	Ru_103	<MDA
Xe_133	2.0E-03	I'' 106 *	<MDA
Xe_135m	5.5E-05	'e_129m	<MDA
Xe_135	3.8E-04	Te_131m	<MDA
Xe_138	2.2E-06	Te_132	<MDA
I_131	3.6E-04	Sb_127	<MDA
I_132	5.3E-04	Sb_129	<MDA
I_133	1.2E-03	Np_239	<MDA
I_134	4.7E-04	Tritium *	1.5E-03
I_135	8.7E-04	Boron **	<MDA

Total BRAVO OTSG Beta Gamma Activity=7.8E-03

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSATE Concentrations (uci/ml)

Scenario Time in Minutes 165

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	<MDA		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	<MDA	Tritium *	<MDA		
I_135	<MDA	Boron **	<MDA		

Total CONDENSATE Beta Gamma Activity= <MDA

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

POWDEX EFFLUENT Concentrations (uci/ml)

Scenario Time in Minutes 165

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	<MDA		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	<MDA	Tritium *	<MDA		
I_135	<MDA	Boron **	<MDA		

Total POWDEX EFFLUENT Beta Gamma Activity= <MDA

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS Concentrations (uci/ml)

Scenario Time in Minutes 165

Dose Rate(contact) 5.4E+00 mrem/hr

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	3.6E-05	Cs_137	<MDA
Kr_85	<MDA	Cs_138	2.1E-07
Kr_87	3.2E-05	Ba_137m	<MDA
Kr_88	8.7E-05	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	<MDA
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	7.3E-08	Rb_89	<MDA
Xe_133m	1.7E-05	Ru_103	<MDA
Xe_133	1.1E-03	Ru_106 *	<MDA
Xe_135m	9.8E-06	Te_129m	<MDA
Xe_135	1.6E-04	Te_131m	<MDA
Xe_138	2.0E-04	Te_132	<MDA
I_131	1.3E-07	Sb_127	<MDA
I_132	2.2E-07	Sb_129	<MDA
I_133	4.3E-07	Np_239	<MDA
I_134	2.6E-07	Tritium *	9.7E-04
I_135	3.3E-07	Boron **	<MDA

Total CONDENSER OFFGAS Beta Gamma Activity=1.7E-01

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

FEEDWATER Concentrations (uci/ml)

Scenario Time in Minutes 165

Dose Rate(contact) less than detectable

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	<MDA	Cs_137	<MDA
Kr_85	<MDA	Cs_138	<MDA
Kr_87	<MDA	Ba_137m	<MDA
Kr_88	<MDA	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	<MDA
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	<MDA	Ru_103	<MDA
Xe_133	<MDA	Ru_106 *	<MDA
Xe_135m	<MDA	Te_129m	<MDA
Xe_135	<MDA	Te_131m	<MDA
Xe_138	<MDA	Te_132	<MDA
I_131	<MDA	Sb_127	<MDA
I_132	<MDA	Sb_129	<MDA
I_133	<MDA	Np_239	<MDA
I_134	<MDA	Tritium *	<MDA
I_135	<MDA	Boron **	<MDA

Total FEEDWATER Beta Gamma Activity=2.4E-08

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

Reactor Building Airborne Concentrations (uci/ml)

Scenario Time in Minutes 165

Dose Rate(contact) 3.6E-01 mrem/hr

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	8.6E-05	Cs_137	4.4E-05
Kr_85	<MDA	Cs_138	3.8E-04
Kr_87	4.0E-05	Ba_137m	<MDA
Kr_88	1.8E-04	Ba_139	<MDA
Rb_88	9.6E-07	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	2.4E-05
Sr_92	<MDA	Ar_41	8.3E-06
Y_90 *	<MDA	Co_58	2.7E-08
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	1.7E-06
Xe_131m	3.4E-06	Rb_89	<MDA
Xe_133m	5.3E-05	Ru_103	<MDA
Xe_133	3.3E-03	Ru_106 *	<MDA
Xe_135m	9.3E-05	Te_129m	<MDA
Xe_135	6.4E-04	Te_131m	<MDA
Xe_138	3.8E-06	Te_132	<MDA
I_131	6.2E-04	Sb_127	<MDA
I_132	9.0E-04	Sb_129	<MDA
I_133	2.0E-03	Np_239	<MDA
I_134	7.9E-04	Tritium *	2.5E-03
I_135	1.5E-03	Boron **	<MDA

Total Reactor Building Airborne Beta Gamma Activity=1.3E-02

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS MAP-5 Concentrations (uci/ml)

Scenario Time in Minutes 165

	CHANNEL 1	CHANNEL 2	CHANNEL 3
DOSE RATE (CONTACT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (1 FOOT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (3 FEET) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
I_131 (CONCENTRATION UCI/ML)	1.3E-07	1.2E-08	<MDA
I_132 (CONCENTRATION UCI/ML)	2.2E-07	2.0E-08	<MDA
I_133 (CONCENTRATION UCI/ML)	4.3E-07	3.9E-08	<MDA
I_134 (CONCENTRATION UCI/ML)	2.6E-07	2.4E-08	<MDA
I_135 (CONCENTRATION UCI/ML)	3.3E-07	3.0E-08	<MDA

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

REACTOR COOLANT Concentrations (uci/ml)

Scenario Time in Minutes 180

Dose Rate(contact)		Dose Rate(1 foot)		Dose Rate(3 feet)	
5.1E+02 mrem/hr		4.3E+01 mrem/hr		4.8E+00 mrem/hr	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	1.2E-01	Cs_137	6.6E-02		
Kr_85	<MDA	Cs_138	4.1E-01		
Kr_87	5.2E-02	Ba_137m	<MDA		
Kr_88	2.5E-01	Ba_139	<MDA		
Rb_88	8.0E-04	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	3.5E-02		
Sr_92	<MDA	Ar_41	1.1E-02		
Y_90 *	<MDA	Co_58	4.0E-05		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	2.6E-03		
Xe_131m	5.8E-03	Rb_89	<MDA		
Xe_133m	7.9E-02	Ru_103	<MDA		
Xe_133	4.9E+00	Ru_106 *	<MDA		
Xe_135m	1.6E-01	Te_129m	<MDA		
Xe_135	9.9E-01	Te_131m	<MDA		
Xe_138	2.7E-03	Te_132	<MDA		
I_131	9.2E-01	Sb_127	<MDA		
I_132	1.2E+00	Sb_129	<MDA		
I_133	3.0E+00	Np_239	<MDA		
I_134	9.7E-01	Tritium *	3.7E+00		
I_135	2.1E+00	Boron **	4.5E+02		

Total REACTOR COOLANT Beta Gamma Activity=1.9E+01

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

ALPHA OTSG Concentrations (uci/ml)

Scenario Time in Minutes 180

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	1.2E-08	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	4.0E-08		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	2.5E-08	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	4.9E-07	Ru_106 *	<MDA		
Xe_135m	1.5E-08	Te_129m	<MDA		
Xe_135	9.8E-08	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	9.1E-08	Sb_127	<MDA		
I_132	1.2E-07	Sb_129	<MDA		
I_133	2.9E-07	Np_239	<MDA		
I_134	9.6E-08	Tritium *	3.7E-07		
I_135	2.1E-07	Boron **	<MDA		

Total ALPHA OTSG Beta Gamma Activity=1.9E-06

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

BRAVO OTSG Concentrations (uci/ml)

Scenario Time in Minutes 180

Dose Rate(contact) 2.0E-01 mrem/hr

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	4.9E-05	Cs_137	2.6E-05
Kr_85	<MDA	Cs_138	1.6E-04
Kr_87	2.0E-05	Ba_137m	<MDA
Kr_88	9.9E-05	Ba_139	<MDA
Rb_88	3.2E-07	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	1.4E-05
Sr_92	<MDA	Ar_41	4.5E-06
Y_90 *	<MDA	Co_58	1.6E-08
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	1.0E-06
Xe_131m	2.3E-06	Rb_89	<MDA
Xe_133m	3.1E-05	Ru_103	<MDA
Xe_133	2.0E-03	Ru_106 *	<MDA
Xe_135m	6.2E-05	Te_129m	<MDA
Xe_135	3.9E-04	Te_131m	<MDA
Xe_138	1.1E-06	Te_132	<MDA
I_131	3.6E-04	Sb_127	<MDA
I_132	4.9E-04	Sb_129	<MDA
I_133	1.2E-03	Np_239	<MDA
I_134	3.9E-04	Tritium *	1.5E-03
I_135	8.5E-04	Boron **	<MDA

Total BRAVO OTSG Beta Gamma Activity=7.6E-03

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSATE Concentrations (uci/ml)

Scenario Time in Minutes 180

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	<MDA		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	<MDA	Tritium *	<MDA		
I_135	<MDA	Boron **	<MDA		

Total CONDENSATE Beta Gamma Activity= <MDA

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

POWDEX EFFLUENT Concentrations (uci/ml)

Scenario Time in Minutes 180

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	<MDA		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	<MDA	Tritium *	<MDA		
I_135	<MDA	Boron **	<MDA		

Total POWDEX EFFLUENT Beta Gamma Activity= <MDA

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS Concentrations (uci/ml)

Scenario Time in Minutes 180

Dose Rate(contact) less than detectable

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	1.9E-05	Cs_137	<MDA
Kr_85	<MDA	Cs_138	1.3E-07
Kr_87	1.7E-05	Ba_137m	<MDA
Kr_88	4.5E-05	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	<MDA
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	8.5E-08	Rb_89	<MDA
Xe_133m	9.1E-06	Ru_103	<MDA
Xe_133	5.7E-04	Ru_106 *	<MDA
Xe_135m	6.2E-06	Te_129m	<MDA
Xe_135	9.0E-05	Te_131m	<MDA
Xe_138	9.8E-05	Te_132	<MDA
I_131	1.2E-07	Sb_127	<MDA
I_132	1.9E-07	Sb_129	<MDA
I_133	4.0E-07	Np_239	<MDA
I_134	1.9E-07	Tritium *	5.2E-04
I_135	3.0E-07	Boron **	<MDA

Total CONDENSER OFFGAS Beta Gamma Activity=1.4E-03

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

FEEDWATER Concentrations (uci/ml)

Scenario Time in Minutes 180

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)		Nuclide	Concentration(uci/ml)	
Kr_83m	<MDA		Cs_136	<MDA	
Kr_85m	<MDA		Cs_137	<MDA	
Kr_85	<MDA		Cs_138	<MDA	
Kr_87	<MDA		Ba_137m	<MDA	
Kr_88	<MDA		Ba_139	<MDA	
Rb_88	<MDA		Ba_140	<MDA	
Sr_89 *	<MDA		La_140	<MDA	
Sr_90 *	<MDA		Ce_144 *	<MDA	
Sr_91	<MDA		Cs_134	<MDA	
Sr_92	<MDA		Ar_41	<MDA	
Y_90 *	<MDA		Co_58	<MDA	
Y_91	<MDA		Mn_54	<MDA	
Mo_99	<MDA		Na_24	<MDA	
Xe_131m	<MDA		Rb_89	<MDA	
Xe_133m	<MDA		Ru_103	<MDA	
Xe_133	<MDA		Ru_106 *	<MDA	
Xe_135m	<MDA		Te_129m	<MDA	
Xe_135	<MDA		Te_131m	<MDA	
Xe_138	<MDA		Te_132	<MDA	
I_131	<MDA		Sb_127	<MDA	
I_132	<MDA		Sb_129	<MDA	
I_133	<MDA		Np_239	<MDA	
I_134	<MDA		Tritium *	<MDA	
I_135	<MDA		Boron **	<MDA	

Total FEEDWATER Beta Gamma Activity=1.6E-08

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

Reactor Building Airborne Concentrations (uci/ml)

Scenario Time in Minutes 180

Dose Rate(contact) 4.0E-01 mrem/hr

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	9.5E-05	Cs_137	5.1E-05
Kr_85	<MDA	Cs_138	3.1E-04
Kr_87	4.0E-05	Ba_137m	<MDA
Kr_88	1.9E-04	Ba_139	<MDA
Rb_88	6.1E-07	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	2.7E-05
Sr_92	<MDA	Ar_41	8.7E-06
Y_90 *	<MDA	Co_58	3.1E-08
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	2.0E-06
Xe_131m	4.5E-06	Rb_89	<MDA
Xe_133m	6.1E-05	Ru_103	<MDA
Xe_133	3.8E-03	Ru_106 *	<MDA
Xe_135m	1.2E-04	Te_129m	<MDA
Xe_135	7.6E-04	Te_131m	<MDA
Xe_138	2.1E-06	Te_132	<MDA
I_131	7.1E-04	Sb_127	<MDA
I_132	9.5E-04	Sb_129	<MDA
I_133	2.3E-03	Np_239	<MDA
I_134	7.5E-04	Tritium *	2.9E-03
I_135	1.6E-03	Boron **	<MDA

Total Reactor Building Airborne Beta Gamma Activity=1.5E-02

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

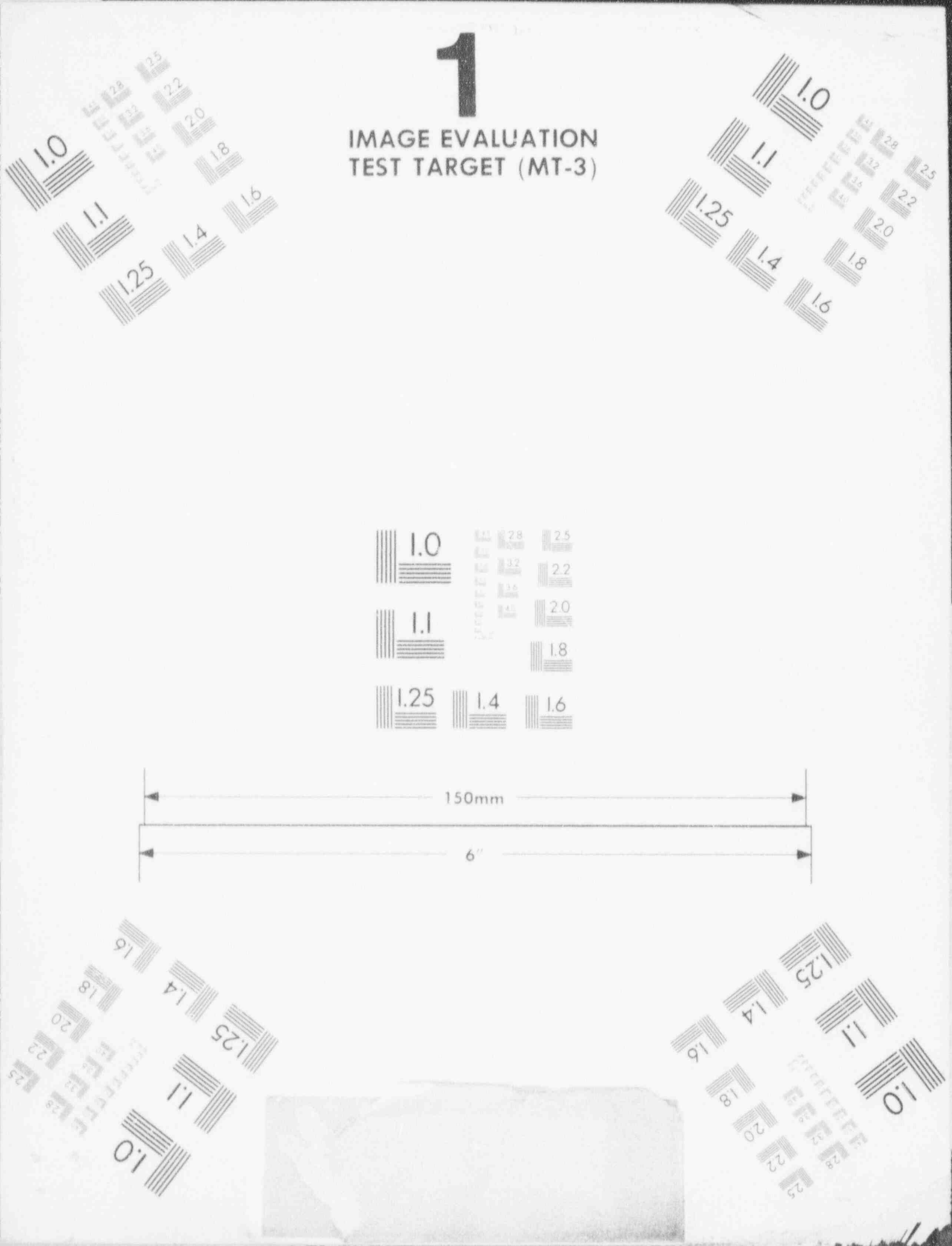
APPENDIX C 1994 ANNUAL EXERCISE

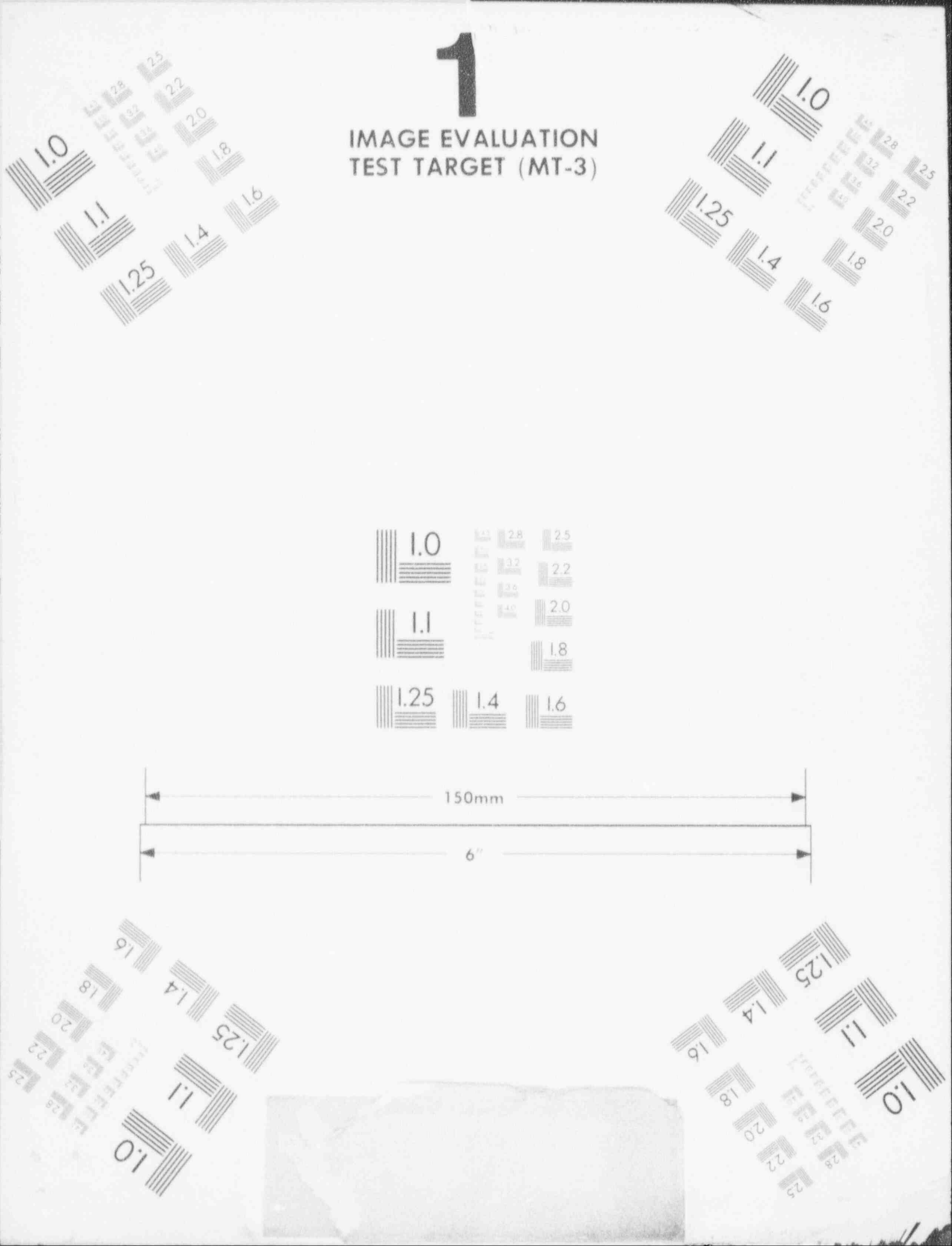
RADIOCHEMISTRY DATA

CONDENSER OFFGAS MAP-5 Concentrations (uci/ml)

Scenario Time in Minutes 180

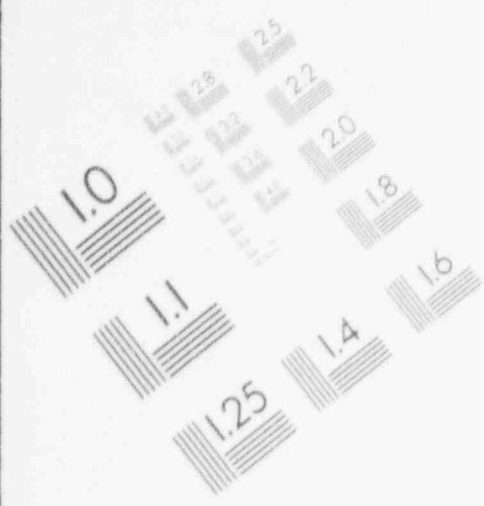
	CHANNEL 1	CHANNEL 2	CHANNEL 3
DOSE RATE (CONTACT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (1 FOOT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (3 FEET) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
I_131 (CONCENTRATION UCI/ML)	1.2E-07	1.1E-08	<MDA
I_132 (CONCENTRATION UCI/ML)	1.9E-07	1.7E-08	<MDA
I_133 (CONCENTRATION UCI/ML)	4.0E-07	3.6E-08	<MDA
I_134 (CONCENTRATION UCI/ML)	1.9E-07	1.7E-08	<MDA
I_135 (CONCENTRATION UCI/ML)	3.0E-07	2.7E-08	<MDA

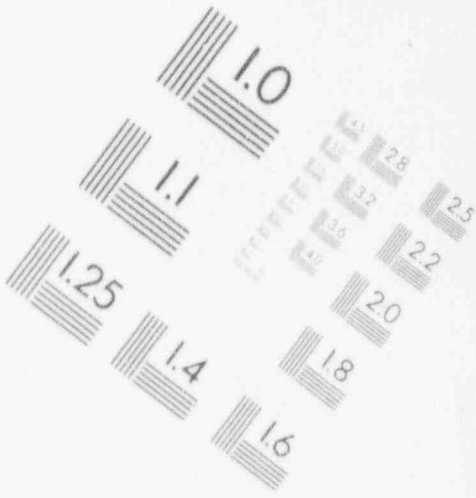

1
IMAGE EVALUATION
TEST TARGET (MT-3)
1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0
150mm
6"

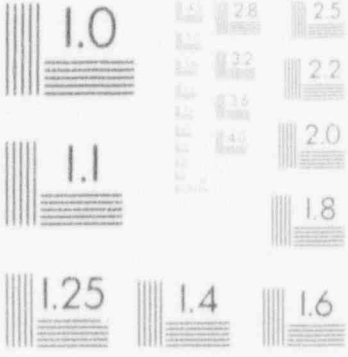

1
IMAGE EVALUATION
TEST TARGET (MT-3)
1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0
150mm
6"

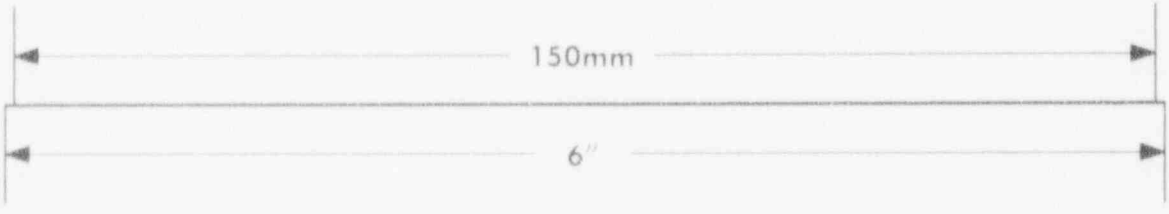
1

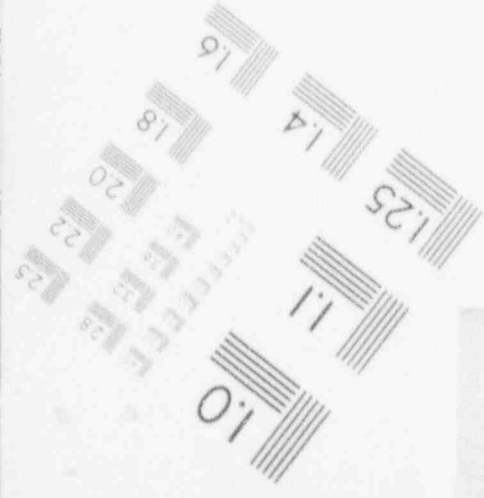
IMAGE EVALUATION TEST TARGET (MT-3)

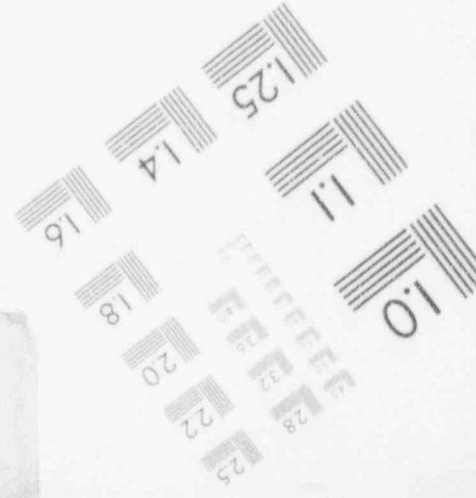


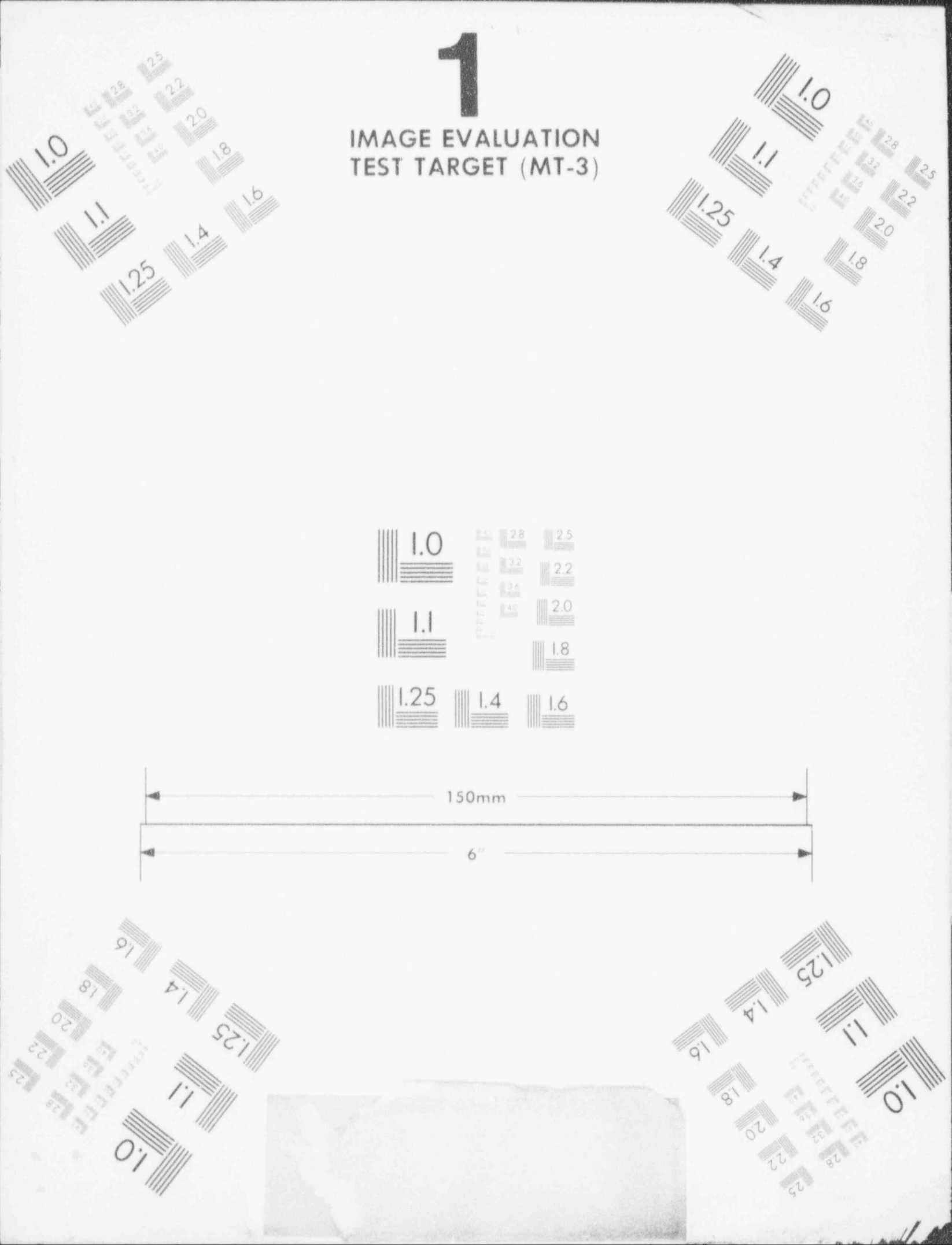











1
IMAGE EVALUATION
TEST TARGET (MT-3)
1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0
150mm
6"

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

REACTOR COOLANT Concentrations (uci/ml)

Scenario Time in Minutes 195

Dose Rate(contact)		Dose Rate(1 foot)		Dose Rate(3 feet)	
5.0E+02 mrem/hr		4.2E+01 mrem/hr		4.7E+00 mrem/hr	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	1.2E-01	Cs_137	6.6E-02		
Kr_85	<MDA	Cs_138	2.9E-01		
Kr_87	4.5E-02	Ba_137m	<MDA		
Kr_88	2.3E-01	Ba_139	<MDA		
Rb_88	4.4E-04	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	3.5E-02		
Sr_92	<MDA	Ar_41	1.0E-02		
Y_90 *	<MDA	Co_58	4.0E-05		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	2.5E-03		
Xe_131m	6.6E-03	Rb_89	<MDA		
Xe_133m	7.9E-02	Ru_103	<MDA		
Xe_133	5.0E+00	Ru_106 *	<MDA		
Xe_135m	1.7E-01	Te_129m	<MDA		
Xe_135	1.0E+00	Te_131m	<MDA		
Xe_138	1.3E-03	Te_132	<MDA		
I_131	9.2E-01	Sb_127	<MDA		
I_132	1.1E+00	Sb_129	<MDA		
I_133	2.9E+00	Np_239	<MDA		
I_134	8.0E-01	Tritium *	3.7E+00		
I_135	2.1E+00	Boron **	4.4E+02		

Total REACTOR COOLANT Beta Gamma Activity=1.9E+01

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

ALPHA OTSG Concentrations (uci/ml)

Scenario Time in Minutes 195

Dose Rate(contact) less than detectable

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	1.2E-08	Cs_137	<MDA
Kr_85	<MDA	Cs_138	2.9E-08
Kr_87	<MDA	Ba_137m	<MDA
Kr_88	2.3E-08	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	<MDA
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	<MDA	Ru_103	<MDA
Xe_133	4.9E-07	Ru_106 *	<MDA
Xe_135m	1.7E-08	Te_129m	<MDA
Xe_135	1.0E-07	Te_131m	<MDA
Xe_138	<MDA	Te_132	<MDA
I_131	9.1E-08	Sb_127	<MDA
I_132	1.1E-07	Sb_129	<MDA
I_133	2.9E-07	Np_239	<MDA
I_134	7.9E-08	Tritium *	3.7E-07
I_135	2.1E-07	Boron **	<MDA

Total ALPHA OTSG Beta Gamma Activity=1.9E-06

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

BRAVO OTSG Concentrations (uci/ml)

Scenario Time in Minutes 195

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	4.7E-05	Cs_137	2.6E-05		
Kr_85	<MDA	Cs_138	1.2E-04		
Kr_87	1.8E-05	Ba_137m	<MDA		
Kr_88	9.3E-05	Ba_139	<MDA		
Rb_88	1.8E-07	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	1.4E-05		
Sr_92	<MDA	Ar_41	4.1E-06		
Y_90 *	<MDA	Co_58	1.6E-08		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	1.0E-06		
Xe_131m	2.6E-06	Rb_89	<MDA		
Xe_133m	3.1E-05	Ru_103	<MDA		
Xe_133	2.0E-03	Ru_106 *	<MDA		
Xe_135m	6.8E-05	Te_129m	<MDA		
Xe_135	4.0E-04	Te_131m	<MDA		
Xe_138	5.1E-07	Te_132	<MDA		
I_131	3.6E-04	Sb_127	<MDA		
I_132	4.6E-04	Sb_129	<MDA		
I_133	1.2E-03	Np_239	<MDA		
I_134	3.2E-04	Tritium *	1.5E-03		
I_135	8.3E-04	Boron **	<MDA		

Total BRAVO OTSG Beta Gamma Activity=7.4E-03

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSATE Concentrations (uci/ml)

Scenario Time in Minutes 195

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	<MDA		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	<MDA	Tritium *	<MDA		
I_135	<MDA	Boron **	<MDA		

Total CONDENSATE Beta Gamma Activity= <MDA

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

POWDEX EFFLUENT Concentrations (uci/ml)

Scenario Time in Minutes 195

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	<MDA		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	<MDA	Tritium *	<MDA		
I_135	<MDA	Boron **	<MDA		

Total POWDEX EFFLUENT Beta Gamma Activity= <MDA

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS Concentrations (uci/ml)

Scenario Time in Minutes 195

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	1.1E-05	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	8.3E-08		
Kr_87	8.7E-06	Ba_137m	<MDA		
Kr_88	2.5E-05	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	9.7E-08	Rb_89	<MDA		
Xe_133m	5.2E-06	Ru_103	<MDA		
Xe_133	3.3E-04	Ru_106 *	<MDA		
Xe_135m	4.5E-06	Te_129m	<MDA		
Xe_135	5.4E-05	Te_131m	<MDA		
Xe_138	4.9E-05	Te_132	<MDA		
I_131	1.2E-07	Sb_127	<MDA		
I_132	1.7E-07	Sb_129	<MDA		
I_133	3.8E-07	Np_239	<MDA		
I_134	1.5E-07	Tritium *	2.9E-04		
I_135	2.8E-07	Boron **	<MDA		

Total CONDENSER OFFGAS Beta Gamma Activity=7.7E-04

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

FEEDWATER Concentrations (uci/ml)

Scenario Time in Minutes 195

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	<MDA		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	<MDA	Tritium *	<MDA		
I_135	<MDA	Boron **	<MDA		

Total FEEDWATER Beta Gamma Activity=1.1E-08

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

Reactor Building Airborne Concentrations (uci/ml)

Scenario Time in Minutes 195

Dose Rate(contact)		Dose Rate(1 foot)	Dose Rate(3 feet)
4.4E-01 mrem/hr		less than detectable	less than detectable
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	1.0E-04	Cs_137	5.7E-05
Kr_85	<MDA	Cs_138	2.5E-04
Kr_87	3.9E-05	Ba_137m	<MDA
Kr_88	2.0E-04	Ba_139	<MDA
Rb_88	3.8E-07	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	3.0E-05
[illegible]_92	<MDA	Ar_41	8.9E-06
Y_90 *	<MDA	Co_58	3.5E-0[illegible]
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	2.2E-06
Xe_131m	5.7E-06	Rb_89	<MDA
Xe_133m	6.8E-05	Ru_103	<MDA
Xe_133	4.3E-03	Ru_106 *	<MDA
Xe_135m	1.5E-04	Te_129m	<MDA
Xe_135	8.8E-04	Te_131m	<MDA
Xe_138	1.1E-06	Te_132	<MDA
I_131	7.9E-04	Sb_127	<MDA
I_132	9.9E-04	Sb_129	<MDA
I_133	2.5E-03	Np_239	<MDA
I_134	6.9E-04	Tritium *	3.2E-03
I_135	1.8E-03	Boron **	<MDA

Total Reactor Building Airborne Beta Gamma Activity=1.6E-02

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS MAP-5 Concentrations (uci/ml)

Scenario Time in Minutes 195

	CHANNEL 1	CHANNEL 2	CHANNEL 3
DOSE RATE (CONTACT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (1 FOOT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (3 FEET) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
I_131 (CONCENTRATION UCI/ML)	1.2E-07	1.1E-08	<MDA
I_132 (CONCENTRATION UCI/ML)	1.7E-07	1.5E-08	<MDA
I_133 (CONCENTRATION UCI/ML)	3.8E-07	3.5E-08	<MDA
I_134 (CONCENTRATION UCI/ML)	1.5E-07	1.3E-08	<MDA
I_135 (CONCENTRATION UCI/ML)	2.8E-07	2.5E-08	<MDA

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

REACTOR COOLANT Concentrations (uci/ml)

Scenario Time in Minutes 210

Dose Rate(contact) 4.9E+02 mrem/hr		Dose Rate(1 foot) 4.1E+01 mrem/hr		Dose Rate(3 feet) 4.6E+00 mrem/hr	
Nuclide	Concentration(uci/ml)		Nuclide	Concentration(uci/ml)	
Kr_83m	<MDA		Cs_136	<MDA	
Kr_85m	1.1E-01		Cs_137	6.6E-02	
Kr_85	<MDA		Cs_138	2.1E-01	
Kr_87	3.9E-02		Ba_137m	<MDA	
Kr_88	2.2E-01		Ba_139	<MDA	
Rb_88	2.5E-04		Ba_140	<MDA	
Sr_89 *	<MDA		La_140	<MDA	
Sr_90 *	<MDA		Ce_144 *	<MDA	
Sr_91	<MDA		Cs_134	3.5E-02	
Sr_92	<MDA		Ar_41	9.3E-03	
Y_90 *	<MDA		Co_58	4.0E-05	
Y_91	<MDA		Mn_54	<MDA	
Mo_99	<MDA		Na_24	2.5E-03	
Xe_131m	7.3E-03		Rb_89	<MDA	
Xe_133m	7.9E-02		Ru_103	<MDA	
Xe_133	5.0E+00		Ru_106 *	<MDA	
Xe_135m	1.9E-01		Te_129m	<MDA	
Xe_135	1.0E+00		Te_131m	<MDA	
Xe_138	6.2E-04		Te_132	<MDA	
I_131	9.2E-01		Sb_127	<MDA	
I_132	1.1E+00		Sb_129	<MDA	
I_133	2.9E+00		Np_239	<MDA	
I_134	6.6E-01		Tritium *	3.7E+00	
I_135	2.0E+00		Boron **	8.7E+02	

Total REACTOR COOLANT Beta Gamma Activity=1.8E+01

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

ALPHA OTSG Concentrations (uci/ml)

Scenario Time in Minutes 210

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	1.1E-08	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	2.1E-08		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	2.2E-08	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	4.9E-07	Ru_106 *	<MDA		
Xe_135m	1.9E-08	Te_129m	<MDA		
Xe_135	1.0E-07	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	9.1E-08	Sb_127	<MDA		
I_132	1.1E-07	Sb_129	<MDA		
I_133	2.9E-07	Np_239	<MDA		
I_134	6.5E-08	Tritium *	3.7E-07		
I_135	2.0E-07	Boron **	<MDA		

Total ALPHA OTSG Beta Gamma Activity=1.8E-06

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

BRAVO OTSG Concentrations (uci/ml)

Scenario Time in Minutes 210

Dose Rate(contact) Dose Rate(1 foot) Dose Rate(3 feet)

less than detectable less than detectable less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	4.5E-05	Cs_137	2.6E-05
Kr_85	<MDA	Cs_138	8.4E-05
Kr_87	1.6E-05	Ba_137m	<MDA
Kr_88	8.8E-05	Ba_139	<MDA
Rb_88	9.8E-08	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	1.4E-05
Sr_92	<MDA	Ar_41	3.7E-06
Y_90 *	<MDA	Co_58	1.6E-08
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	9.9E-07
Xe_131m	2.9E-06	Rb_89	<MDA
Xe_133m	3.1E-05	Ru_103	<MDA
Xe_133	2.0E-03	Ru_106 *	<MDA
Xe_135m	7.5E-05	Te_129m	<MDA
Xe_135	4.1E-04	Te_131m	<MDA
Xe_138	2.4E-07	Te_132	<MDA
I_131	3.6E-04	Sb_127	<MDA
I_132	4.2E-04	Sb_129	<MDA
I_133	1.2E-03	Np_239	<MDA
I_134	2.6E-04	Tritium *	1.5E-03
I_135	8.1E-04	Boron **	<MDA

Total BRAVO OTSG Beta Gamma Activity=7.3E-03

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSATE Concentrations (uci/ml)

Scenario Time in Minutes 210

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	<MDA		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	<MDA	Tritium *	<MDA		
I_135	<MDA	Boron **	<MDA		

Total CONDENSATE Beta Gamma Activity= <MDA

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

POWDEX EFFLUENT Concentrations (uci/ml)

Scenario Time in Minutes 210

Dose Rate(contact) less than detectable

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	<MDA	Cs_137	<MDA
Kr_85	<MDA	Cs_138	<MDA
Kr_87	<MDA	Ba_137m	<MDA
Kr_88	<MDA	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	<MDA
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	<MDA	Ru_103	<MDA
Xe_133	<MDA	Ru_106 *	<MDA
Xe_135m	<MDA	Te_129m	<MDA
Xe_135	<MDA	Te_131m	<MDA
Xe_138	<MDA	Te_132	<MDA
I_131	<MDA	Sb_127	<MDA
I_132	<MDA	Sb_129	<MDA
I_133	<MDA	Np_239	<MDA
I_134	<MDA	Tritium *	<MDA
I_135	<MDA	Boron **	<MDA

Total POWDEX EFFLUENT Beta Gamma Activity= <MDA

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS Concentrations (uci/ml)

Scenario Time in Minutes 210

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	6.2E-06	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	5.4E-08		
Kr_87	4.7E-06	Ba_137m	<MDA		
Kr_88	1.4E-05	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	1.1E-07	Rb_89	<MDA		
Xe_133m	3.3E-06	Ru_103	<MDA		
Xe_133	2.0E-04	Ru_106 *	<MDA		
Xe_135m	3.8E-06	Te_129m	<MDA		
Xe_135	3.5E-05	Te_131m	<MDA		
Xe_138	2.4E-05	Te_132	<MDA		
I_131	1.2E-07	Sb_127	<MDA		
I_132	1.5E-07	Sb_129	<MDA		
I_133	3.7E-07	Np_239	<MDA		
I_134	1.1E-07	Tritium *	1.8E-04		
I_135	2.7E-07	Boron **	<MDA		

Total CONDENSER OFFGAS Beta Gamma Activity=4.7E-04

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

FEEDWATER Concentrations (uci/ml)

Scenario Time in Minutes 210

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	<MDA		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	<MDA	Tritium *	<MDA		
I_135	<MDA	Boron **	<MDA		

Total FEEDWATER Beta Gamma Activity= <MDA

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

Reactor Building Airborne Concentrations (uci/ml)

Scenario Time in Minutes 210

Dose Rate(contact) 4.7E-01 mrem/hr

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	1.1E-04	Cs_137	6.3E-05
Kr_85	<MDA	Cs_138	2.0E-04
Kr_87	3.8E-05	Ba_137m	<MDA
Kr_88	2.1E-04	Ba_139	<MDA
Rb_88	2.4E-07	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	3.4E-05
Sr_92	<MDA	Ar_41	9.0E-06
Y_90 *	<MDA	Co_58	3.8E-08
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	2.4E-06
Xe_131m	7.0E-06	Rb_89	<MDA
Xe_133m	7.6E-05	Ru_103	<MDA
Xe_133	4.8E-03	Ru_106 *	<MDA
Xe_135m	1.8E-04	Te_129m	<MDA
Xe_135	1.0E-03	Te_131m	<MDA
Xe_138	5.9E-07	Te_132	<MDA
I_131	8.8E-04	Sb_127	<MDA
I_132	1.0E-03	Sb_129	<MDA
I_133	2.8E-03	Np_239	<MDA
I_134	6.3E-04	Tritium *	3.6E-03
I_135	2.0E-03	Boron **	<MDA

Total Reactor Building Airborne Beta Gamma Activity=1.8E-02

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS MAP-5 Concentrations (uci/ml)

Scenario Time in Minutes 210

	CHANNEL 1	CHANNEL 2	CHANNEL 3
DOSE RATE (CONTACT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (1 FOOT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (3 FEET) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
I_131 (CONCENTRATION UCI/ML)	1.2E-07	1.1E-08	<MDA
I_132 (CONCENTRATION UCI/ML)	1.5E-07	1.4E-08	<MDA
I_133 (CONCENTRATION UCI/ML)	3.7E-07	3.4E-08	<MDA
I_134 (CONCENTRATION UCI/ML)	1.1E-07	1.0E-08	<MDA
I_135 (CONCENTRATION UCI/ML)	2.7E-07	2.4E-08	<MDA

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

REACTOR COOLANT Concentrations (uci/ml)

Scenario Time in Minutes 225

Dose Rate(contact)		Dose Rate(1 foot)		Dose Rate(3 feet)	
4.9E+02 mrem/hr		4.0E+01 mrem/hr		4.5E+00 mrem/hr	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	1.1E-01	Cs_137	6.6E-02		
Kr_85	<MDA	Cs_138	1.5E-01		
Kr_87	3.4E-02	Ba_137m	<MDA		
Kr_88	2.1E-01	Ba_139	<MDA		
Rb_88	1.4E-04	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	3.5E-02		
Sr_92	<MDA	Ar_41	8.5E-03		
Y_90 *	<MDA	Co_58	4.0E-05		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	2.5E-03		
Xe_131m	8.0E-03	Rb_89	<MDA		
Xe_133m	8.0E-02	Ru_103	<MDA		
Xe_133	5.0E+00	Ru_106 *	<MDA		
Xe_135m	2.1E-01	Te_129m	<MDA		
Xe_135	1.1E+00	Te_131m	<MDA		
Xe_138	3.0E-04	Te_132	<MDA		
I_131	9.1E-01	Sb_127	<MDA		
I_132	9.9E-01	Sb_129	<MDA		
I_133	2.9E+00	Np_239	<MDA		
I_134	5.4E-01	Tritium *	3.7E+00		
I_135	2.0E+00	Boron **	1.0E+03		

Total REACTOR COOLANT Beta Gamma Activity=1.8E+01

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

ALPHA OTSG Concentrations (uci/ml)

Scenario Time in Minutes 225

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	1.1E-08	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	1.5E-08		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	2.1E-08	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	5.0E-07	Ru_106 *	<MDA		
Xe_135m	2.0E-08	Te_129m	<MDA		
Xe_135	1.1E-07	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	9.1E-08	Sb_127	<MDA		
I_132	9.8E-08	Sb_129	<MDA		
I_133	2.9E-07	Np_239	<MDA		
I_134	5.4E-08	Tritium *	3.7E-07		
I_135	2.0E-07	Boron **	<MDA		

Total ALPHA OTSG Beta Gamma Activity=1.8E-06

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

BRAVO OTSG Concentrations (uci/ml)

Scenario Time in Minutes 225

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	4.3E-05	Cs_137	2.6E-05		
Kr_85	<MDA	Cs_138	6.0E-05		
Kr_87	1.4E-05	Ba_137m	<MDA		
Kr_88	8.3E-05	Ba_139	<MDA		
Rb_88	5.5E-08	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	1.4E-05		
Sr_92	<MDA	Ar_41	3.4E-06		
Y_90 *	<MDA	Co_58	1.6E-08		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	9.8E-07		
Xe_131m	3.2E-06	Rb_89	<MDA		
Xe_133m	3.2E-05	Ru_103	<MDA		
Xe_133	2.0E-03	Ru_106 *	<MDA		
Xe_135m	8.1E-05	Te_129m	<MDA		
Xe_135	4.2E-04	Te_131m	<MDA		
Xe_138	1.2E-07	Te_132	<MDA		
I_131	3.6E-04	Sb_127	<MDA		
I_132	3.9E-04	Sb_129	<MDA		
I_133	1.1E-03	Np_239	<MDA		
I_134	2.1E-04	Tritium *	1.5E-03		
I_135	7.8E-04	Boron **	<MDA		

Total BRAVO OTSG Beta Gamma Activity=7.1E-03

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSATE Concentrations (uci/ml)

Scenario Time in Minutes 225

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	<MDA		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	<MDA	Tritium *	<MDA		
I_135	<MDA	Boron **	<MDA		

Total CONDENSATE Beta Gamma Activity= <MDA

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

POWDEX EFFLUENT Concentrations (uci/ml)

Scenario Time in Minutes 225

Dose Rate(contact) less than detectable

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	<MDA	Cs_137	<MDA
Kr_85	<MDA	Cs_138	<MDA
Kr_87	<MDA	Ba_137m	<MDA
Kr_88	<MDA	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	<MDA
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	<MDA	Ru_103	<MDA
Xe_133	<MDA	Ru_106 *	<MDA
Xe_135m	<MDA	Te_129m	<MDA
Xe_135	<MDA	Te_131m	<MDA
Xe_138	<MDA	Te_132	<MDA
I_131	<MDA	Sb_127	<MDA
I_132	<MDA	Sb_129	<MDA
I_133	<MDA	Np_239	<MDA
I_134	<MDA	Tritium *	<MDA
I_135	<MDA	Boron **	<MDA

Total POWDEX EFFLUENT Beta Gamma Activity= <MDA

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS Concentrations (uci/ml)

Scenario Time in Minutes 225

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	4.0E-06	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	3.7E-08		
Kr_87	2.6E-06	Ba_137m	<MDA		
Kr_88	8.8E-06	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	1.2E-07	Rb_89	<MDA		
Xe_133m	2.3E-06	Ru_103	<MDA		
Xe_133	1.4E-04	Ru_106 *	<MDA		
Xe_135m	3.6E-06	Te_129m	<MDA		
Xe_135	2.7E-05	Te_131m	<MDA		
Xe_138	1.2E-05	Te_132	<MDA		
I_131	1.2E-07	Sb_127	<MDA		
I_132	1.4E-07	Sb_129	<MDA		
I_133	3.7E-07	Np_239	<MDA		
I_134	9.1E-08	Tritium *	1.2E-04		
I_135	2.6E-07	Boron **	<MDA		

Total CONDENSER OFFGAS Beta Gamma Activity=3.2E-04

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

FEEDWATER Concentrations (uci/ml)

Scenario Time in Minutes 225

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	<MDA		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	<MDA	Tritium *	<MDA		
I_135	<MDA	Boron **	<MDA		

Total FEEDWATER Beta Gamma Activity= <MDA

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

Reactor Building Airborne Concentrations (uci/ml)

Scenario Time in Minutes 225

Dose Rate(contact) 5.1E-01 mrem/hr

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	1.2E-04	Cs_137	7.0E-05
Kr_85	<MDA	Cs_138	1.6E-04
Kr_87	3.6E-05	Ba_137m	<MDA
Kr_88	2.2E-04	Ba_139	<MDA
Rb_88	1.5E-07	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	3.7E-05
Sr_92	<MDA	Ar_41	9.0E-06
Y_90 *	<MDA	Co_58	4.2E-08
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	2.6E-06
Xe_131m	8.5E-06	Rb_89	<MDA
Xe_133m	8.4E-05	Ru_103	<MDA
Xe_133	5.3E-03	Ru_106 *	<MDA
Xe_135m	2.2E-04	Te_129m	<MDA
Xe_135	1.1E-03	Te_131m	<MDA
Xe_138	3.1E-07	Te_132	<MDA
I_131	9.7E-04	Sb_127	<MDA
I_132	1.0E-02	Sb_129	<MDA
I_133	3.1E-03	Np_239	<MDA
I_134	5.7E-04	Tritium *	3.9E-03
I_135	2.1E-03	Boron **	<MDA

Total Reactor Building Airborne Beta Gamma Activity=1.9E-02

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS MAP-5 Concentrations (uci/ml)

Scenario Time in Minutes 225

	CHANNEL 1	CHANNEL 2	CHANNEL 3
DOSE RATE (CONTACT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (1 FOOT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (3 FEET) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
I_131 (CONCENTRATION UCI/ML)	1.2E-07	1.1E-08	<MDA
I_132 (CONCENTRATION UCI/ML)	1.4E-07	1.2E-08	<MDA
I_133 (CONCENTRATION UCI/ML)	3.7E-07	3.3E-08	<MDA
I_134 (CONCENTRATION UCI/ML)	9.1E-08	<MDA	<MDA
I_135 (CONCENTRATION UCI/ML)	2.6E-07	2.3E-08	<MDA

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

REACTOR COOLANT Concentrations (uci/ml)

Scenario Time in Minutes 240

Dose Rate(contact)		Dose Rate(1 foot)		Dose Rate(3 feet)
4.8E+02 mrem/hr		4.0E+01 mrem/hr		4.4E+00 mrem/hr
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)	
Kr_83m	<MDA	Cs_136	<MDA	
Kr_85m	1.1E-01	Cs_137	6.6E-02	
Kr_85	<MDA	Cs_138	1.1E-01	
Kr_87	3.0E-02	Ba_137m	<MDA	
Kr_88	2.0E-01	Ba_139	<MDA	
Rb_88	7.7E-05	Ba_140	<MDA	
Sr_89 *	<MDA	La_140	<MDA	
Sr_90 *	<MDA	Ce_144 *	<MDA	
Sr_91	<MDA	Cs_134	3.5E-02	
Sr_92	<MDA	Ar_41	7.7E-03	
Y_90 *	<MDA	Co_58	4.0E-05	
Y_91	<MDA	Mn_54	<MDA	
Mo_99	<MDA	Na_24	2.4E-03	
Xe_131m	8.7E-03	Rb_89	<MDA	
Xe_133m	8.0E-02	Ru_103	<MDA	
Xe_133	5.0E+00	Ru_106 *	<MDA	
Xe_135m	2.2E-01	Te_129m	<MDA	
Xe_135	1.1E+00	Te_131m	<MDA	
Xe_138	1.4E-04	Te_132	<MDA	
I_131	9.1E-01	Sb_127	<MDA	
I_132	9.1E-01	Sb_129	<MDA	
I_133	2.9E+00	Np_239	<MDA	
I_134	4.5E-01	Tritium *	3.7E+00	
I_135	1.9E+00	Boron **	1.1E+03	

Total REACTOR COOLANT Beta Gamma Activity=1.8E+01

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

ALPHA OTSG Concentrations (uci/ml)

Scenario Time in Minutes 240

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	1.0E-08	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	1.1E-08		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	1.9E-08	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	5.0E-07	Ru_106 *	<MDA		
Xe_135m	2.2E-08	Te_129m	<MDA		
Xe_135	1.1E-07	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	9.1E-08	Sb_127	<MDA		
I_132	9.1E-08	Sb_129	<MDA		
I_133	2.8E-07	Np_239	<MDA		
I_134	4.4E-08	Tritium *	3.7E-07		
I_135	1.9E-07	Boron **	<MDA		

Total ALPHA OTSG Beta Gamma Activity=1.8E-06

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

BRAVO OTSG Concentrations (uci/ml)

Scenario Time in Minutes 240

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	4.2E-05	Cs_137	2.6E-05		
Kr_85	<MDA	Cs_138	4.3E-05		
Kr_87	1.2E-05	Ba_137m	<MDA		
Kr_88	7.8E-05	Ba_139	<MDA		
Rb_88	3.1E-08	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	1.4E-05		
Sr_92	<MDA	Ar_41	3.1E-06		
Y_90 *	<MDA	Co_58	1.6E-08		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	9.7E-07		
Xe_131m	3.5E-06	Rb_89	<MDA		
Xe_133m	3.2E-05	Ru_103	<MDA		
Xe_133	2.0E-03	Ru_106 *	<MDA		
Xe_135m	8.8E-05	Te_129m	<MDA		
Xe_135	4.3E-04	Te_131m	<MDA		
Xe_138	5.6E-08	Te_132	<MDA		
I_131	3.6E-04	Sb_127	<MDA		
I_132	3.6E-04	Sb_129	<MDA		
I_133	1.1E-03	Np_239	<MDA		
I_134	1.8E-04	Tritium *	1.5E-03		
I_135	7.6E-04	Boron **	<MDA		

Total BRAVO OTSG Beta Gamma Activity=7.0E-03

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSATE Concentrations (uci/ml)

Scenario Time in Minutes 240

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	<MDA		
Kr_87	<MDA	Ba_137m	MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	<MDA	Tritium *	<MDA		
I_135	<MDA	Boron **	<MDA		

Total CONDENSATE Beta Gamma Activity= <MDA

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

POWDEX EFFLUENT Concentrations (uci/ml)

Scenario Time in Minutes 240

Dose Rate(contact) less than detectable		Dose Rate(1 foot) less than detectable		Dose Rate(3 feet) less than detectable	
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)		
Kr_83m	<MDA	Cs_136	<MDA		
Kr_85m	<MDA	Cs_137	<MDA		
Kr_85	<MDA	Cs_138	<MDA		
Kr_87	<MDA	Ba_137m	<MDA		
Kr_88	<MDA	Ba_139	<MDA		
Rb_88	<MDA	Ba_140	<MDA		
Sr_89 *	<MDA	La_140	<MDA		
Sr_90 *	<MDA	Ce_144 *	<MDA		
Sr_91	<MDA	Cs_134	<MDA		
Sr_92	<MDA	Ar_41	<MDA		
Y_90 *	<MDA	Co_58	<MDA		
Y_91	<MDA	Mn_54	<MDA		
Mo_99	<MDA	Na_24	<MDA		
Xe_131m	<MDA	Rb_89	<MDA		
Xe_133m	<MDA	Ru_103	<MDA		
Xe_133	<MDA	Ru_106 *	<MDA		
Xe_135m	<MDA	Te_129m	<MDA		
Xe_135	<MDA	Te_131m	<MDA		
Xe_138	<MDA	Te_132	<MDA		
I_131	<MDA	Sb_127	<MDA		
I_132	<MDA	Sb_129	<MDA		
I_133	<MDA	Np_239	<MDA		
I_134	<MDA	Tritium *	<MDA		
I_135	<MDA	Boron **	<MDA		

Total POWDEX EFFLUENT Beta Gamma Activity= <MDA

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

CONDENSER OFFGAS Concentrations (uci/ml)

Scenario Time in Minutes 240

Dose Rate(contact) less than detectable

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	2.9E-06	Cs_137	<MDA
Kr_85	<MDA	Cs_138	2.5E-08
Kr_87	1.6E-06	Ba_137m	<MDA
Kr_88	6.1E-06	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	<MDA
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	1.3E-07	Rb_89	<MDA
Xe_133m	1.8E-06	Ru_103	<MDA
Xe_133	1.1E-04	Ru_106 *	<MDA
Xe_135m	3.7E-06	Te_129m	<MDA
Xe_135	2.2E-05	Te_131m	<MDA
Xe_138	6.1E-06	Te_132	<MDA
I_131	1.1E-07	Sb_127	<MDA
I_132	1.3E-07	Sb_129	<MDA
I_133	3.6E-07	Np_239	<MDA
I_134	7.3E-08	Tritium *	9.0E-05
I_135	2.5E-07	Boron **	<MDA

Total CONDENSER OFFGAS Beta Gamma Activity=2.5E-04

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

FEEDWATER Concentrations (uci/ml)

Scenario Time in Minutes 240

Dose Rate(contact) less than detectable

Dose Rate(1 foot) less than detectable

Dose Rate(3 feet) less than detectable

Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	<MDA	Cs_137	<MDA
Kr_85	<MDA	Cs_138	<MDA
Kr_87	<MDA	Ba_137m	<MDA
Kr_88	<MDA	Ba_139	<MDA
Rb_88	<MDA	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	<MDA
Sr_92	<MDA	Ar_41	<MDA
Y_90 *	<MDA	Co_58	<MDA
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	<MDA
Xe_131m	<MDA	Rb_89	<MDA
Xe_133m	<MDA	Ru_103	<MDA
Xe_133	<MDA	Ru_106 *	<MDA
Xe_135m	<MDA	Te_129m	<MDA
Xe_135	<MDA	Te_131m	<MDA
Xe_138	<MDA	Te_132	<MDA
I_131	<MDA	Sb_127	<MDA
I_132	<MDA	Sb_129	<MDA
I_133	<MDA	Np_239	<MDA
I_134	<MDA	Tritium *	<MDA
I_135	<MDA	Boron **	<MDA

Total FEEDWATER Beta Gamma Activity= <MDA

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

RADIOCHEMISTRY DATA

Reactor Building Airborne Concentrations (uci/ml)

Scenario Time in Minutes 240

Dose Rate(contact)		Dose Rate(1 foot)	Dose Rate(3 feet)
5.5E-01 mrem/hr		less than detectable	less than detectable
Nuclide	Concentration(uci/ml)	Nuclide	Concentration(uci/ml)
Kr_83m	<MDA	Cs_136	<MDA
Kr_85m	1.2E-04	Cs_137	7.6E-05
Kr_85	<MDA	Cs_138	1.3E-04
Kr_87	3.4E-05	Ba_137m	<MDA
Kr_88	2.3E-04	Ba_139	<MDA
Rb_88	8.9E-08	Ba_140	<MDA
Sr_89 *	<MDA	La_140	<MDA
Sr_90 *	<MDA	Ce_144 *	<MDA
Sr_91	<MDA	Cs_134	4.1E-05
Sr_92	<MDA	Ar_41	8.9E-06
Y_90 *	<MDA	Co_58	4.6E-08
Y_91	<MDA	Mn_54	<MDA
Mo_99	<MDA	Na_24	2.8E-06
Xe_131m	1.0E-05	Rb_89	<MDA
Xe_133m	9.2E-05	Ru_103	<MDA
Xe_133	5.8E-03	Ru_106 *	<MDA
Xe_135m	2.5E-04	Te_129m	<MDA
Xe_135	1.3E-03	Te_131m	<MDA
Xe_138	1.6E-07	Te_132	<MDA
I_131	1.1E-03	Sb_127	<MDA
I_132	1.1E-03	Sb_129	<MDA
I_133	3.3E-03	Np_239	<MDA
I_134	5.1E-04	Tritium *	4.3E-03
I_135	2.2E-03	Boron **	<MDA

Total Reactor Building Airborne Beta Gamma Activity=2.0E-02

* denotes pure beta emitter for liquid scintillation analysis

** denotes boron concentration in PPM

APPENDIX C 1994 ANNUAL EXERCISE

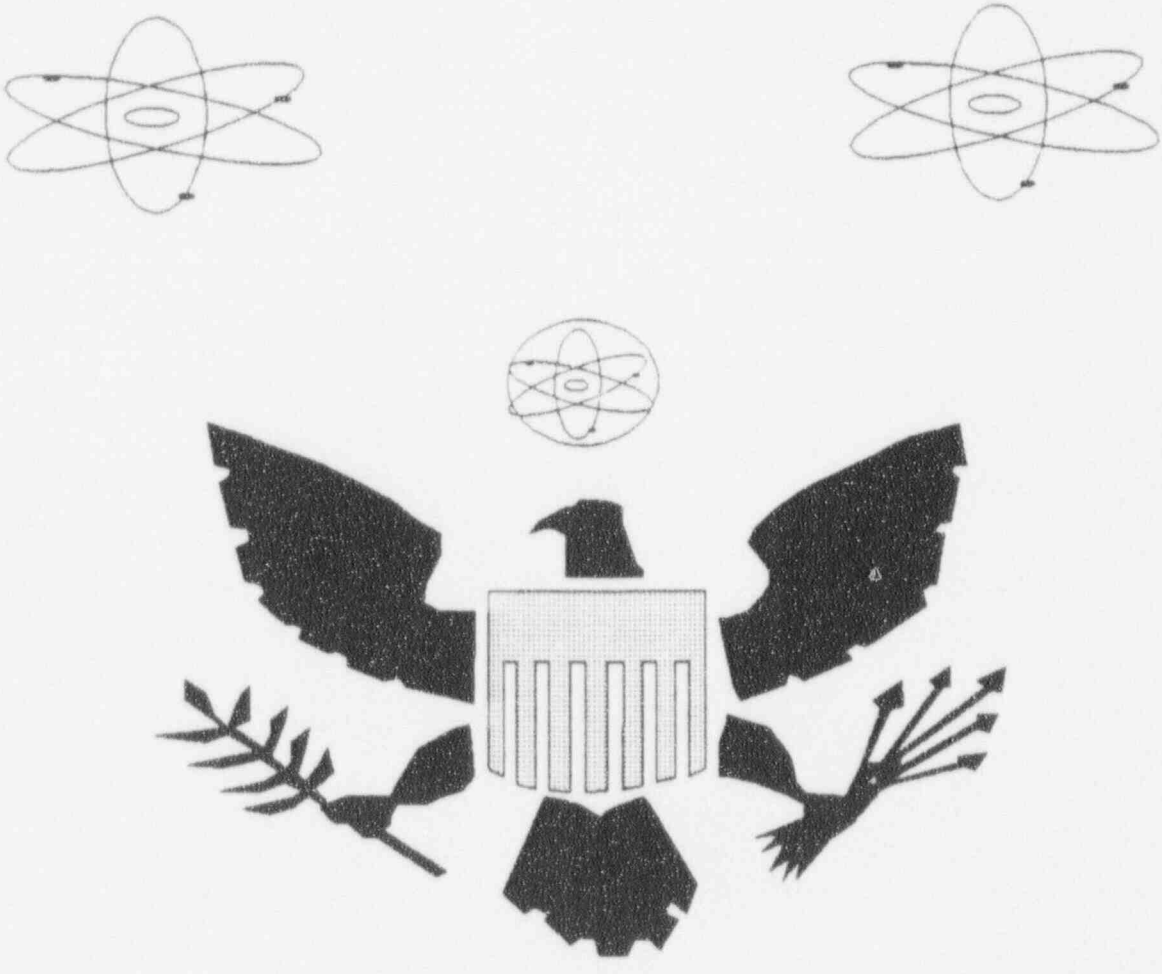
RADIOCHEMISTRY DATA

CONDENSER OFFGAS MAP-5 Concentrations (uci/ml)

Scenario Time in Minutes 240

	CHANNEL 1	CHANNEL 2	CHANNEL 3
DOSE RATE (CONTACT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (1 FOOT) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
DOSE RATE (3 FEET) MREM/HR	BACKGROUND	BACKGROUND	BACKGROUND
I_131 (CONCENTRATION UCI/ML)	1.1E-07	1.0E-08	<MDA
I_132 (CONCENTRATION UCI/ML)	1.3E-07	1.1E-08	<MDA
I_133 (CONCENTRATION UCI/ML)	3.6E-07	3.3E-08	<MDA
I_134 (CONCENTRATION UCI/ML)	7.3E-08	<MDA	<MDA
I_135 (CONCENTRATION UCI/ML)	2.5E-07	2.3E-08	<MDA

INTENTIONALLY



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APPENDIX D

NOTE: THIS IS A PLAYER REACTIVE DRILL RUN IN 'REAL TIME' FROM THE PLANT REFERENCE SIMULATOR AND NO BACK UP DATA WILL BE USED. THE SIMULATOR WILL BE RESET, IF REQUIRED TO CONTINUE/COMPLETE THE DRILL. CONFIRMATORY DATA WILL BE COLLECTED AND FILED AFTER THE DRILL.

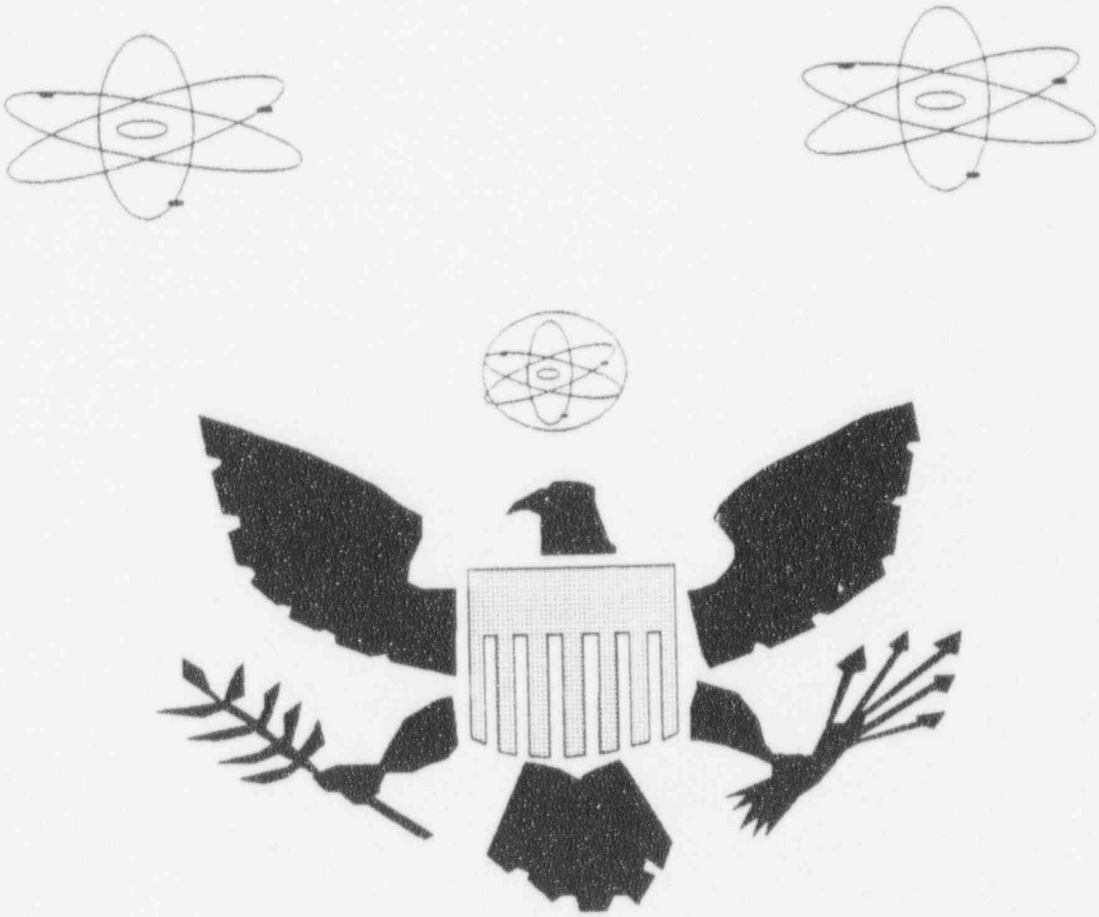
Tho supporting DATA in the Appendices was developed from a verification run of the Plant Reference Simulator and assumed meteorological conditions. This verification data was reviewed and compiled by Emergency Preparedness, Licensed Operator Training and Radiological Engineering personnel.

This DATA is provided ONLY for your review.

Actual drill data will be collected during the PLAYER REACTIVE exercise. The actual drill data will vary depending on the response of the players and prevailing weather (actual) conditions the day of the drill.

GPU NUCLEAR CORPORATION
MIDDLETOWN, PA

INTENTIONALLY



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1994 ANNUAL EXERCISE
Appendix D

METEORLOGICAL AND DOSE ASSESSMENT DATA

Revision 1
03/02/94

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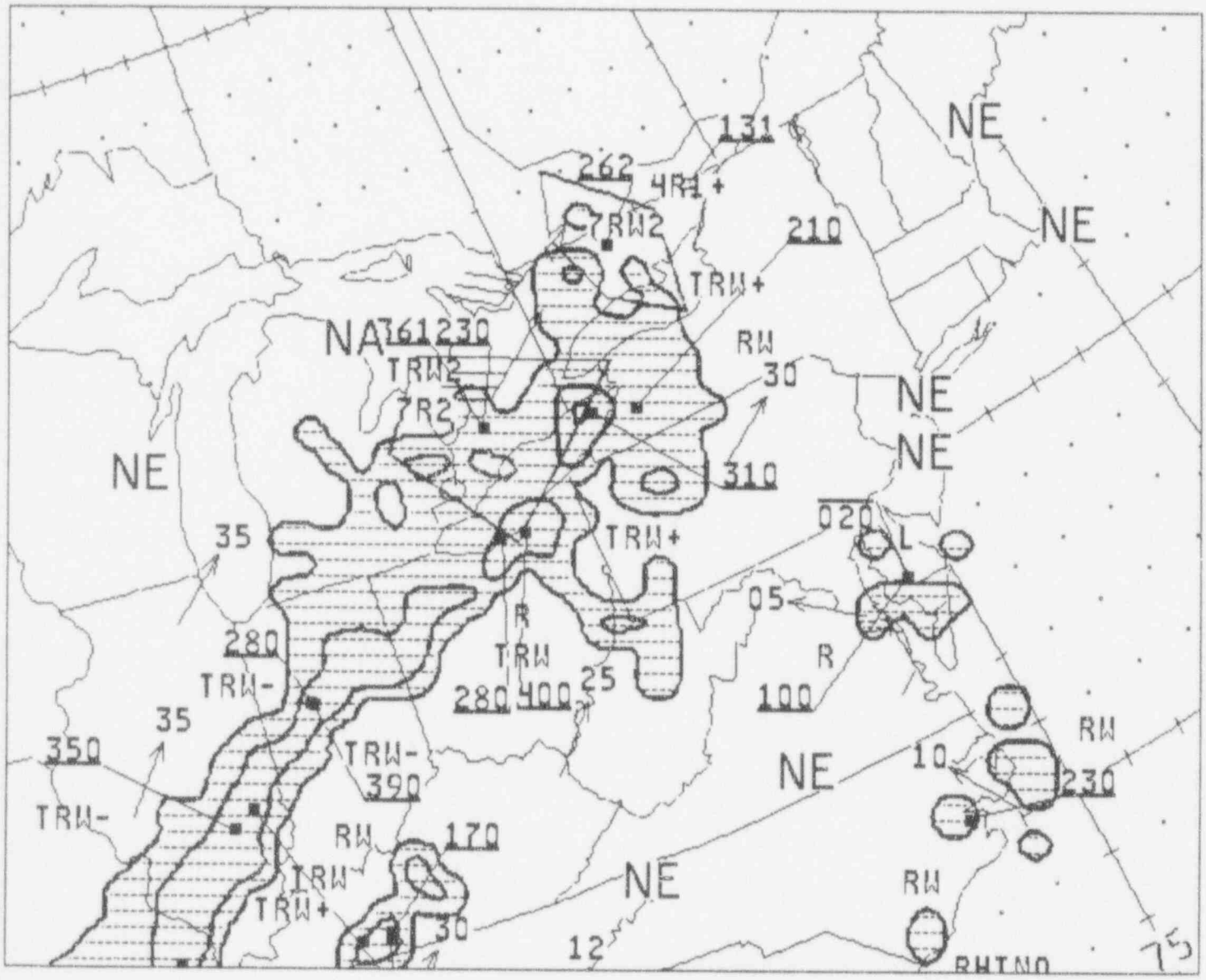
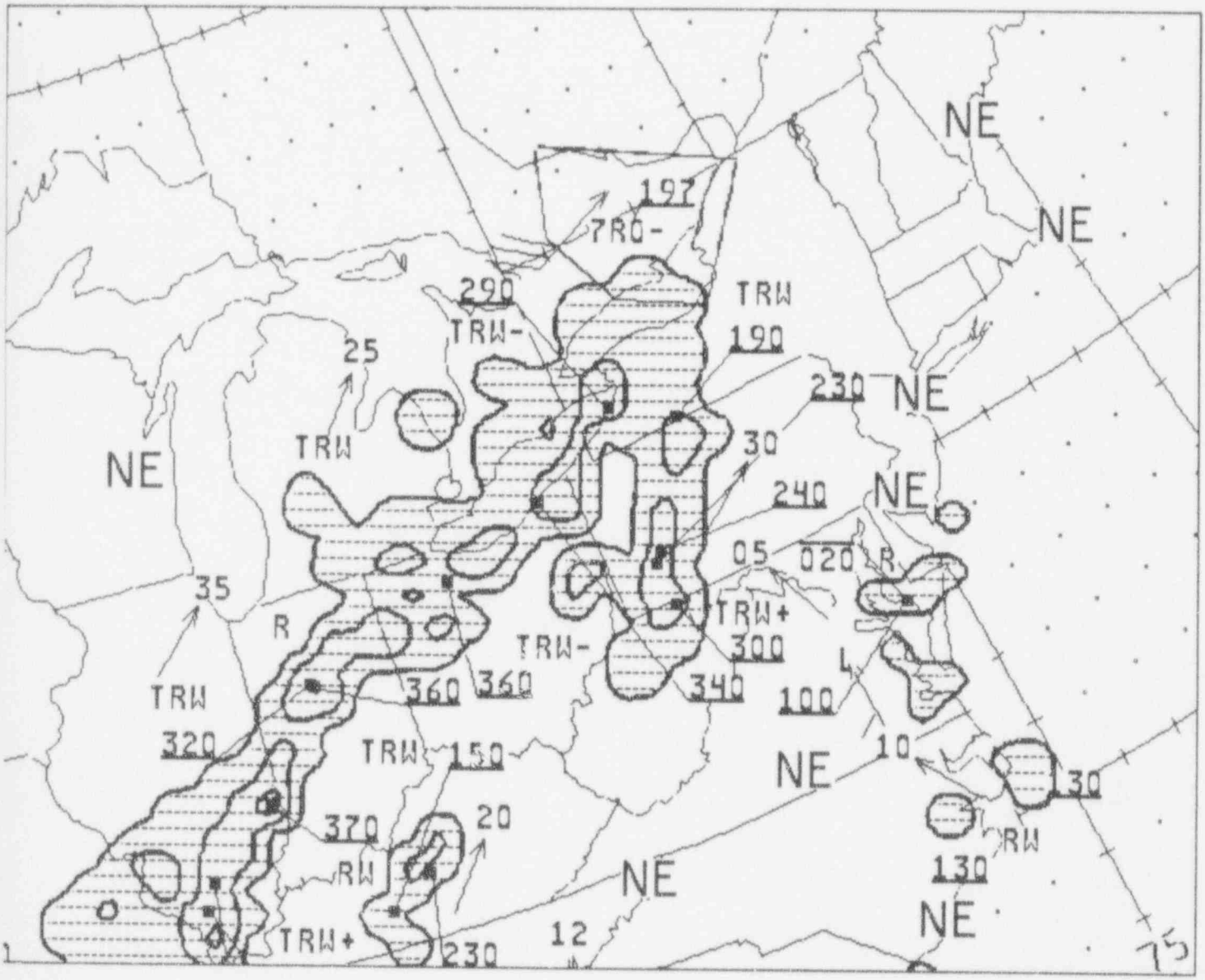


RADAR - NE

10:04 am



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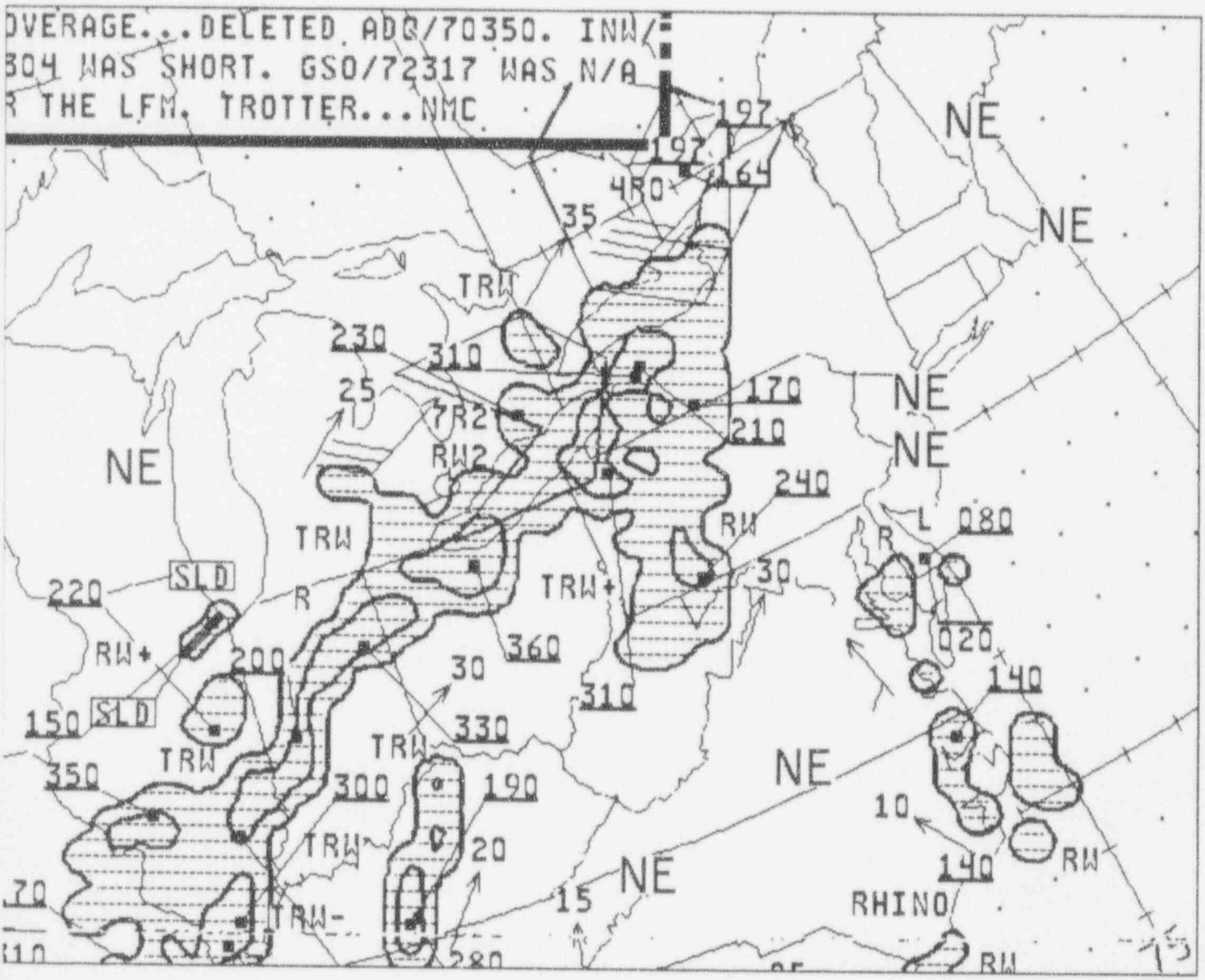
11:05 am



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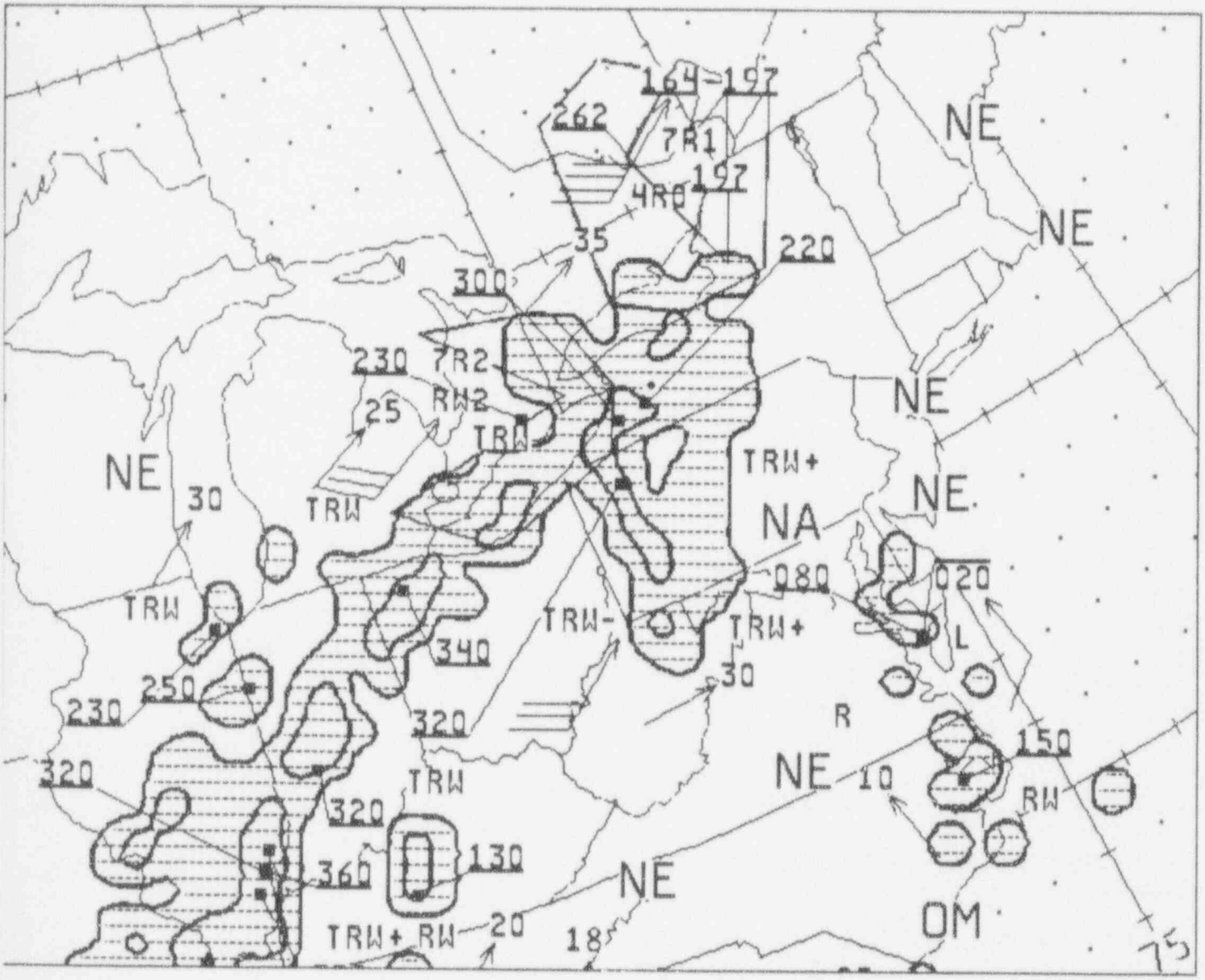
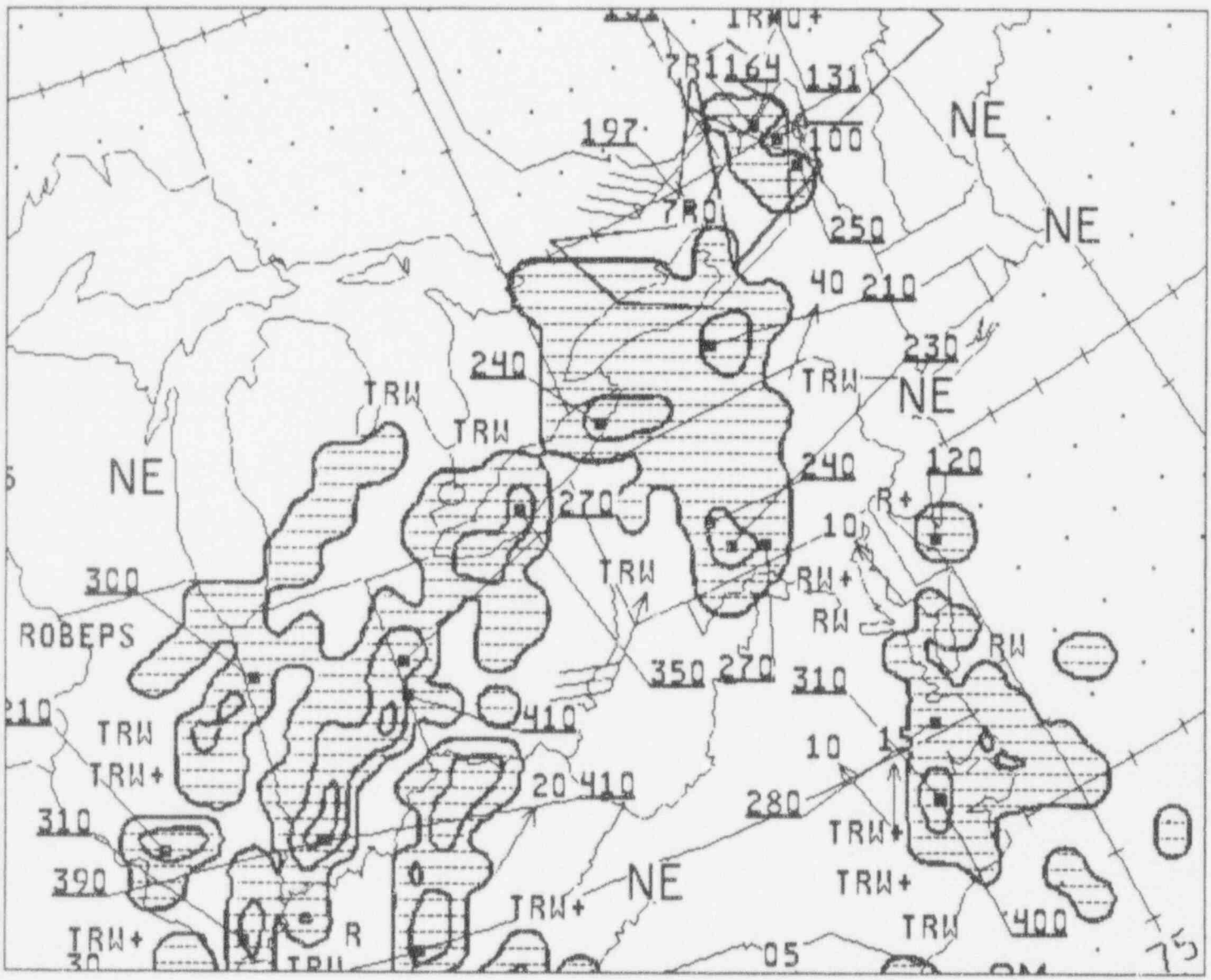


RADAR - NE

02:00 pm



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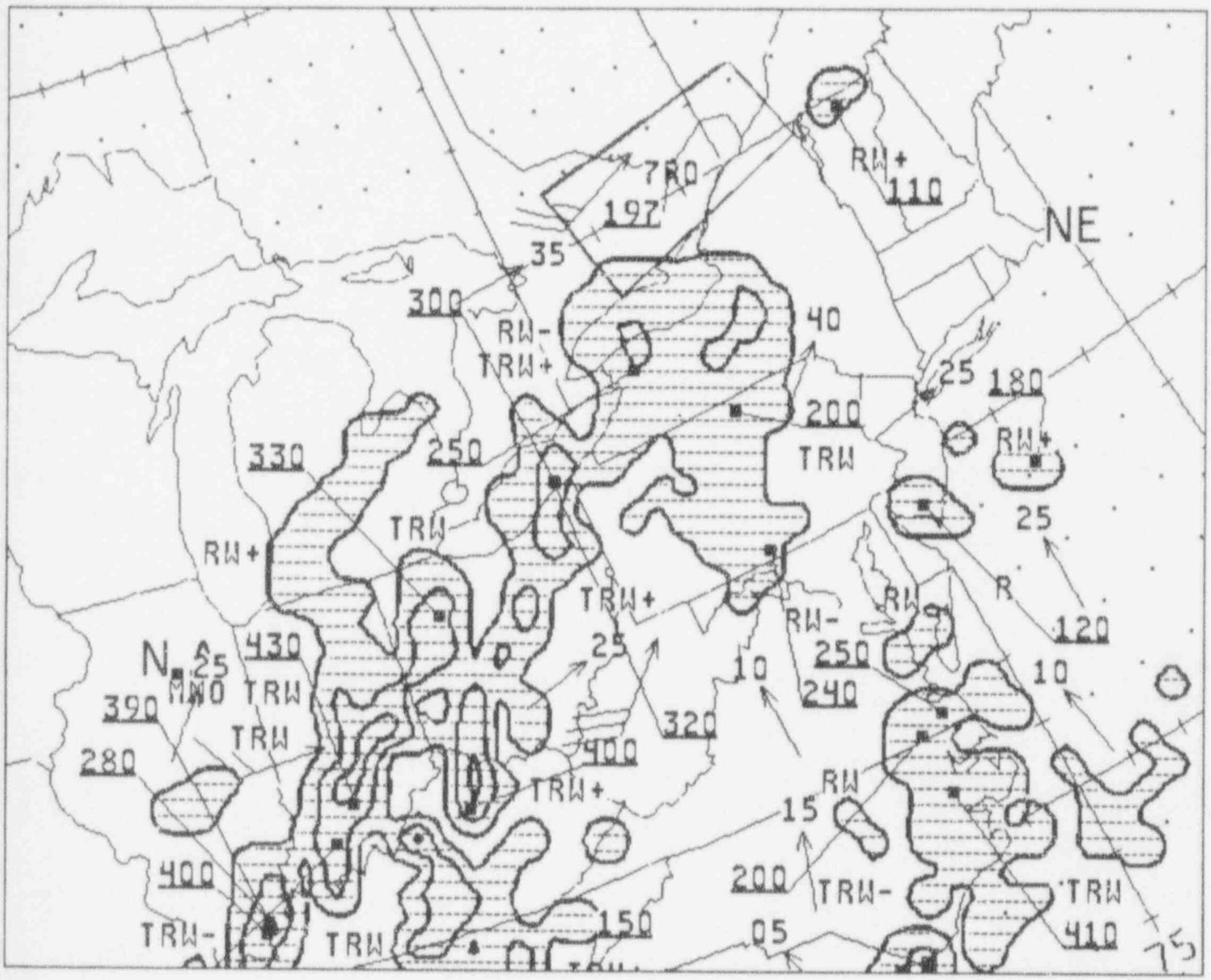

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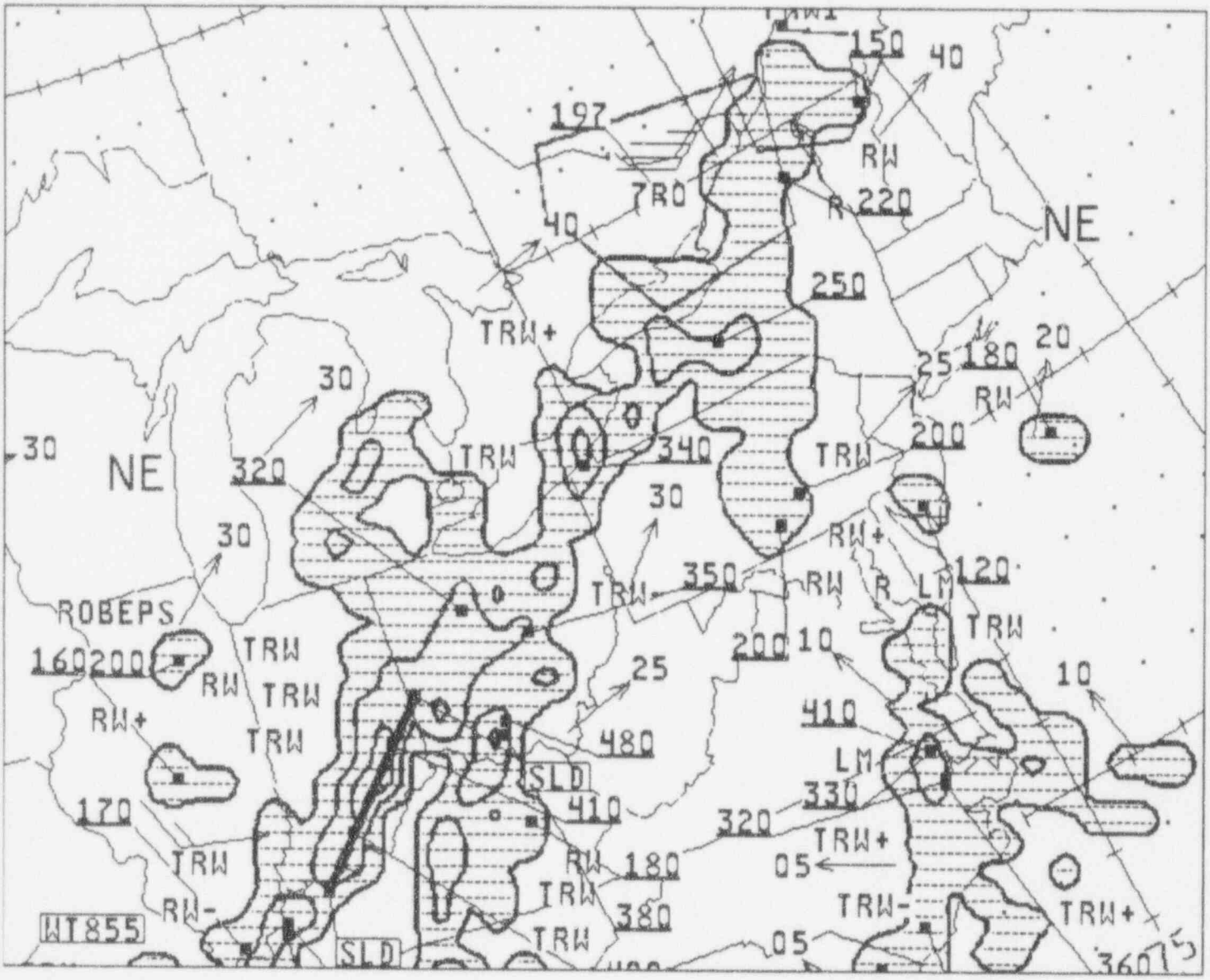
04:01 pm



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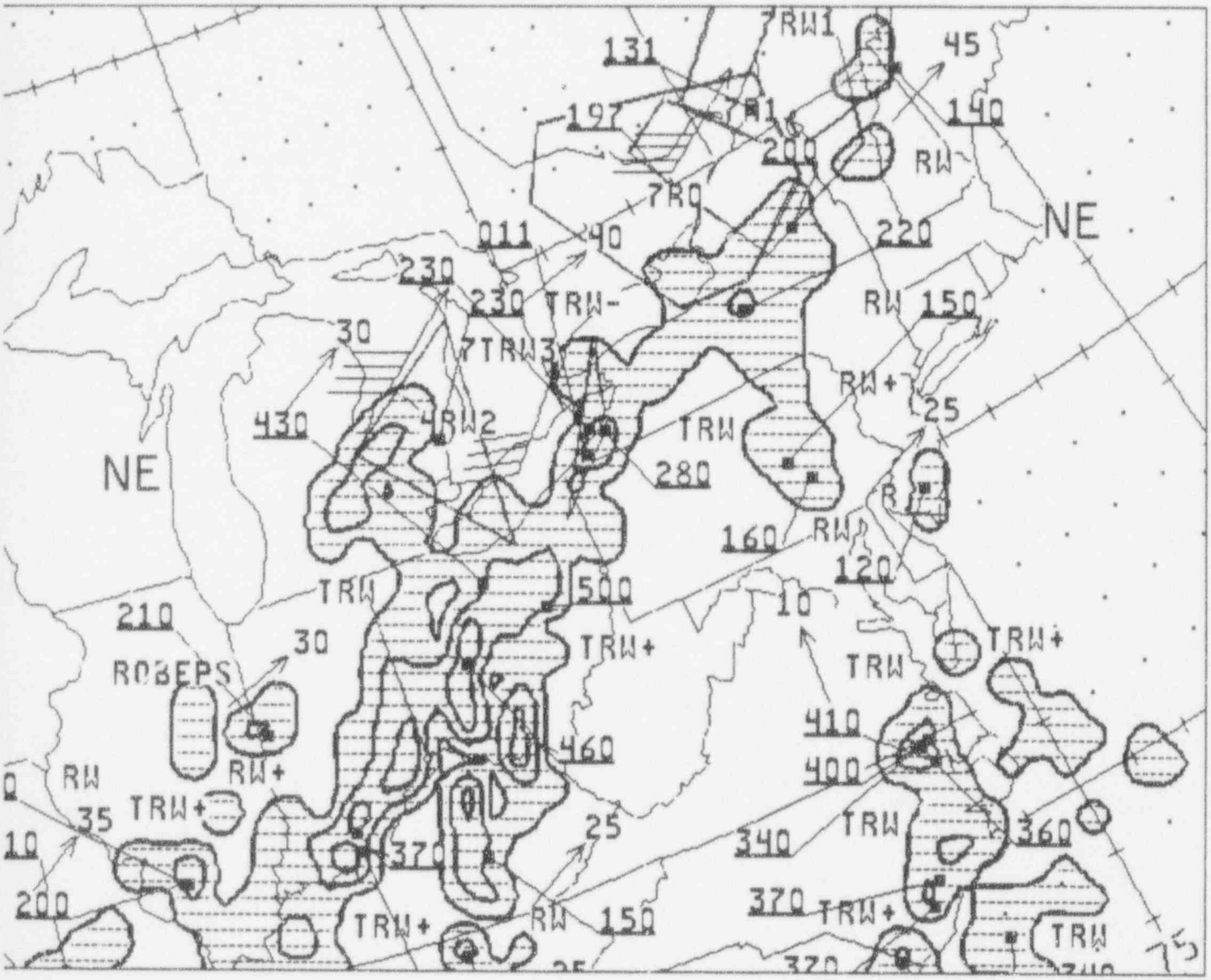

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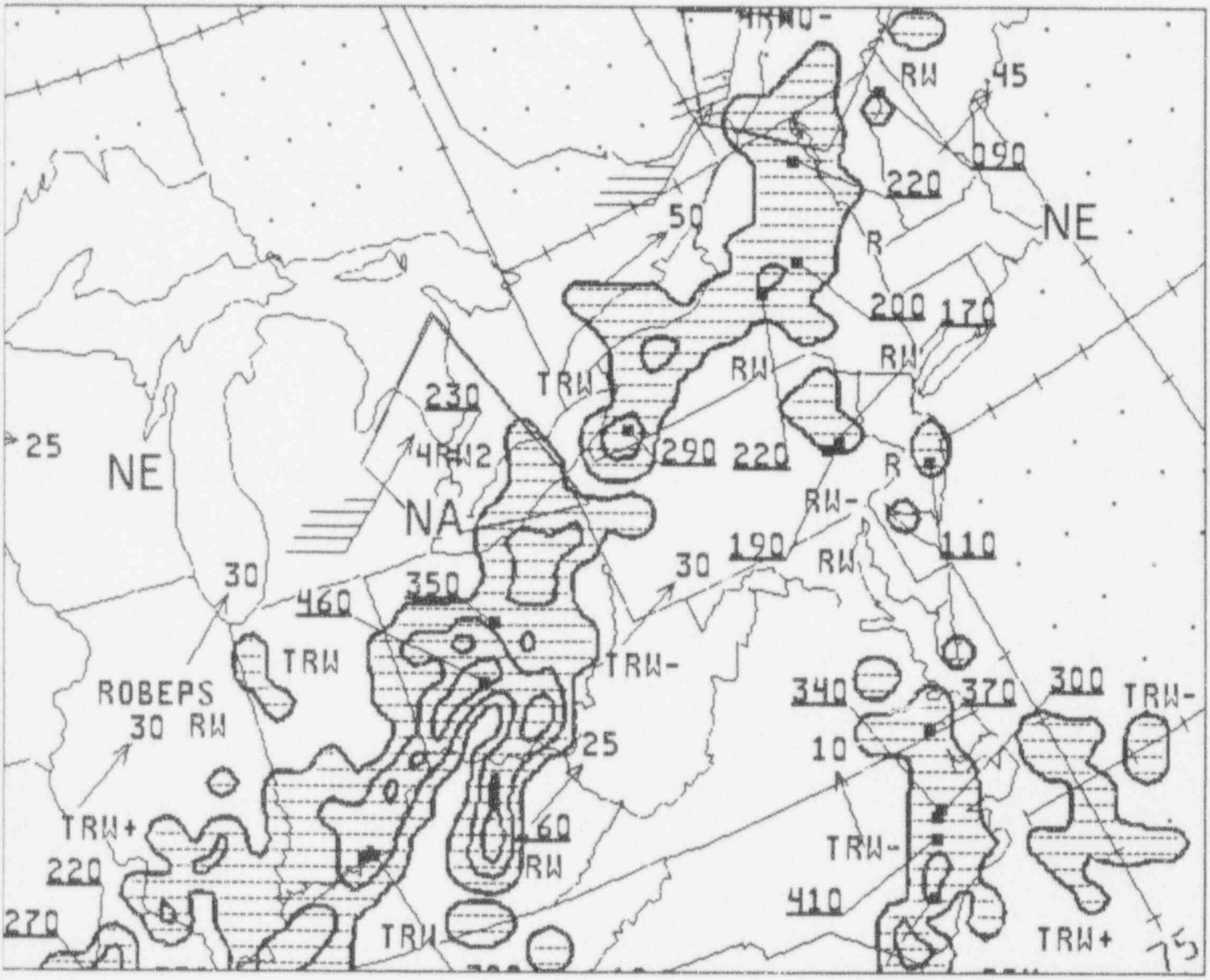

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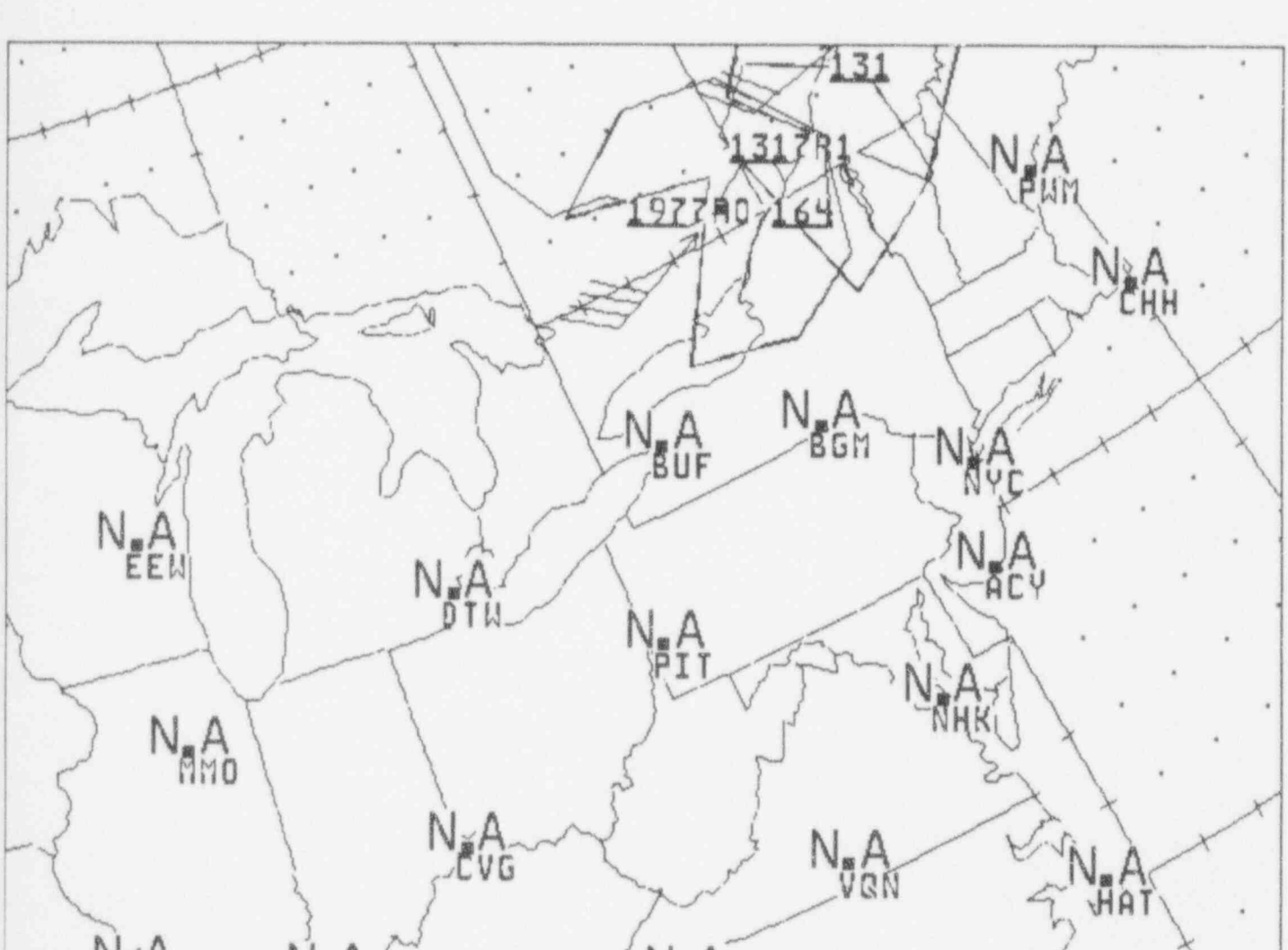

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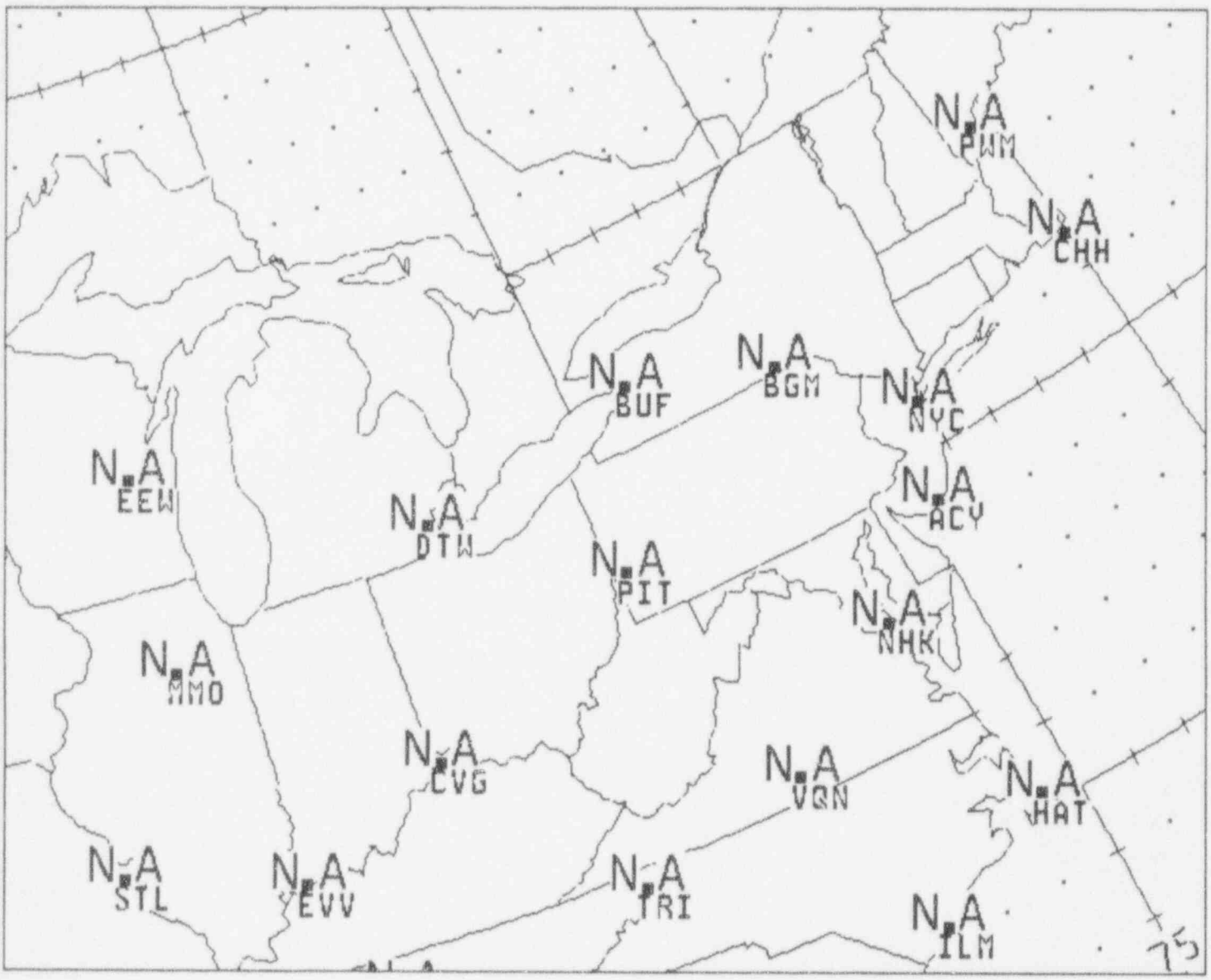

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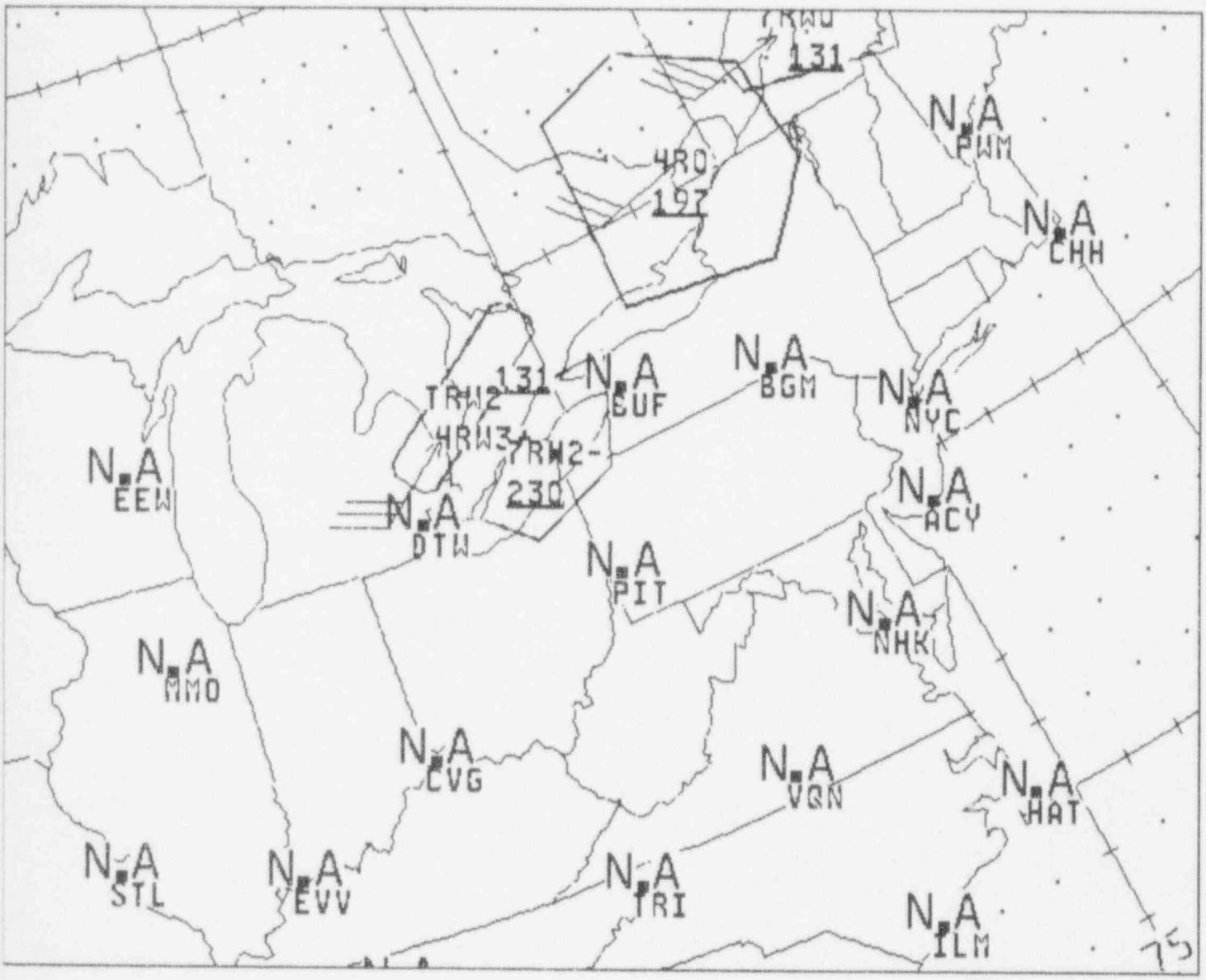

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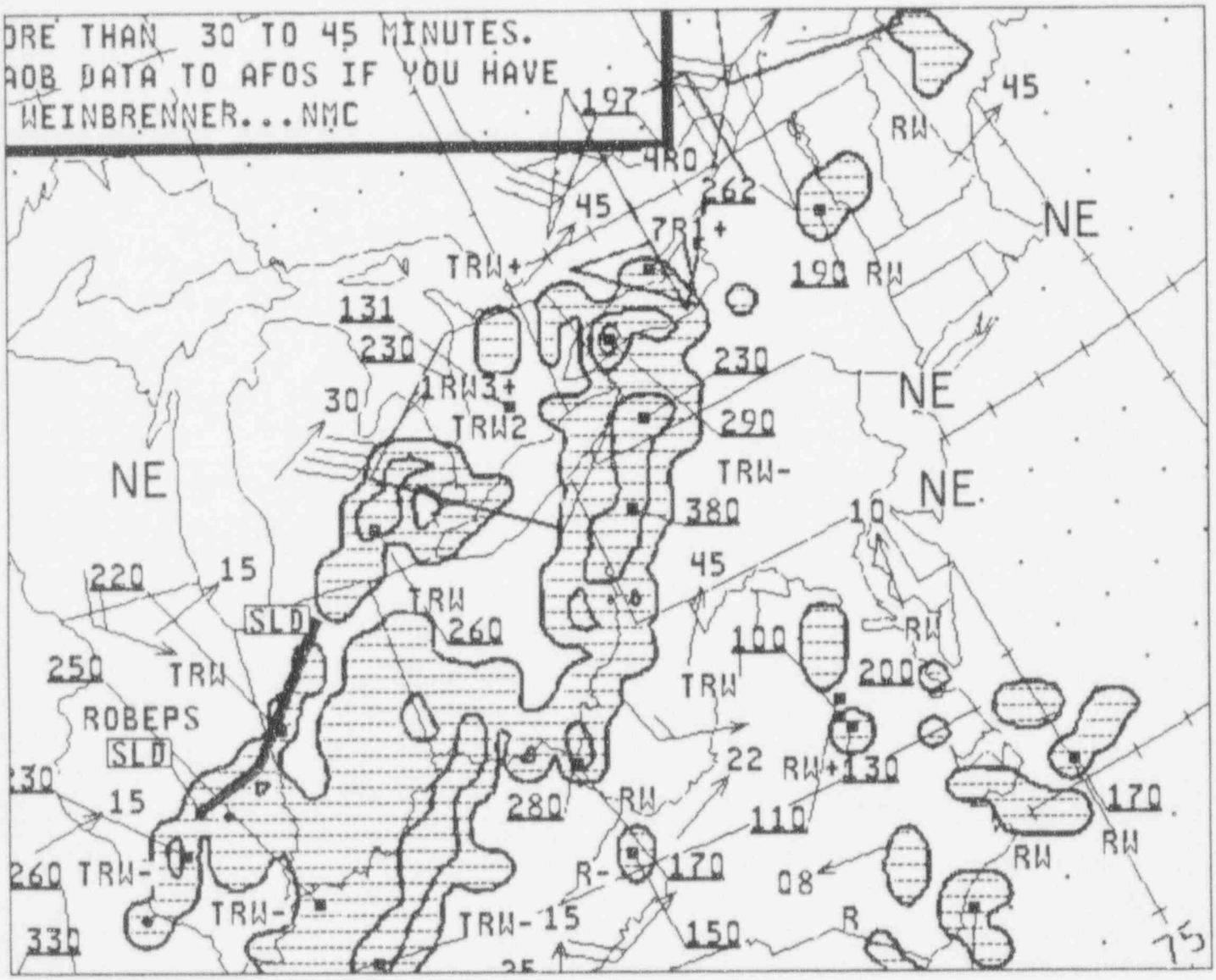

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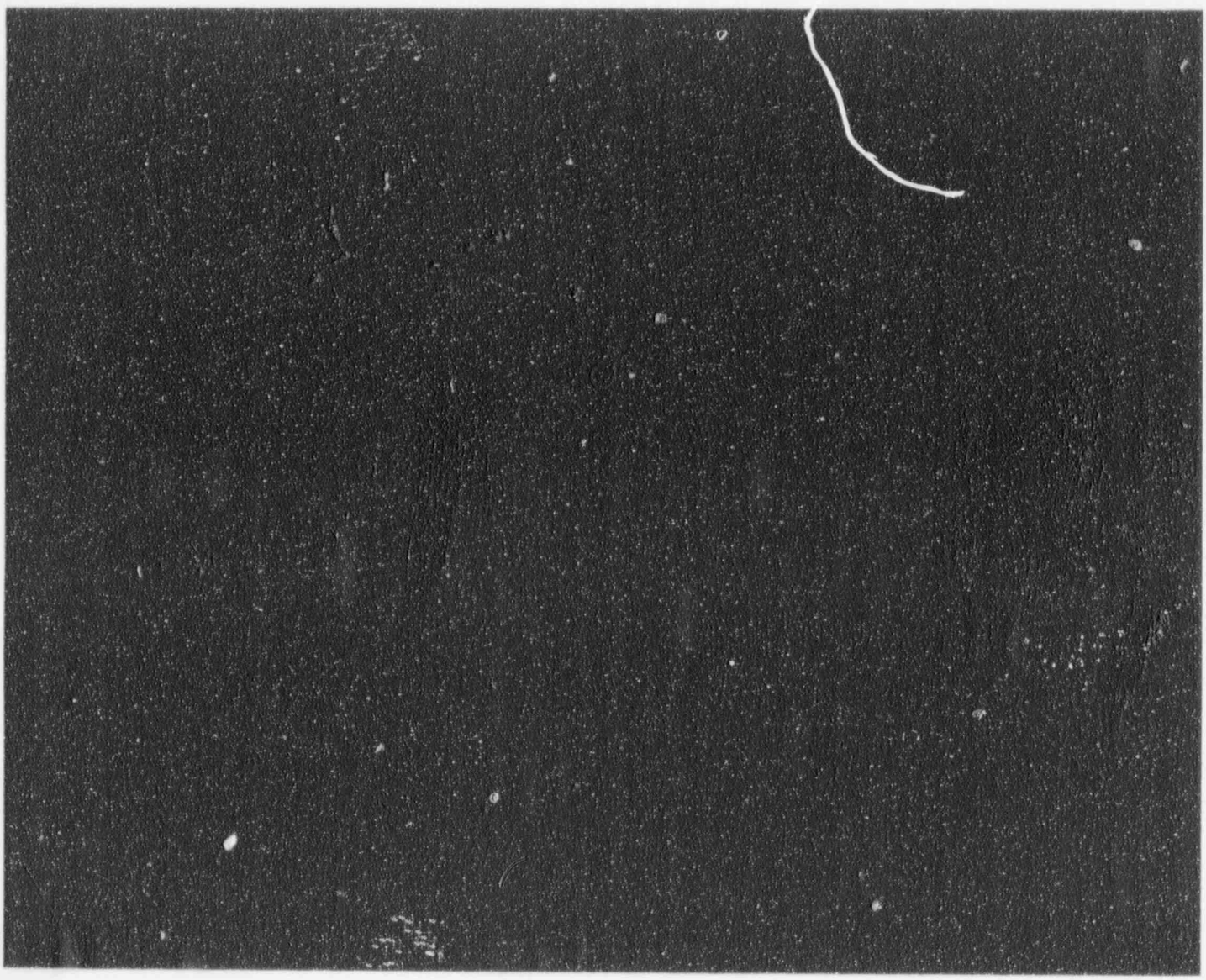

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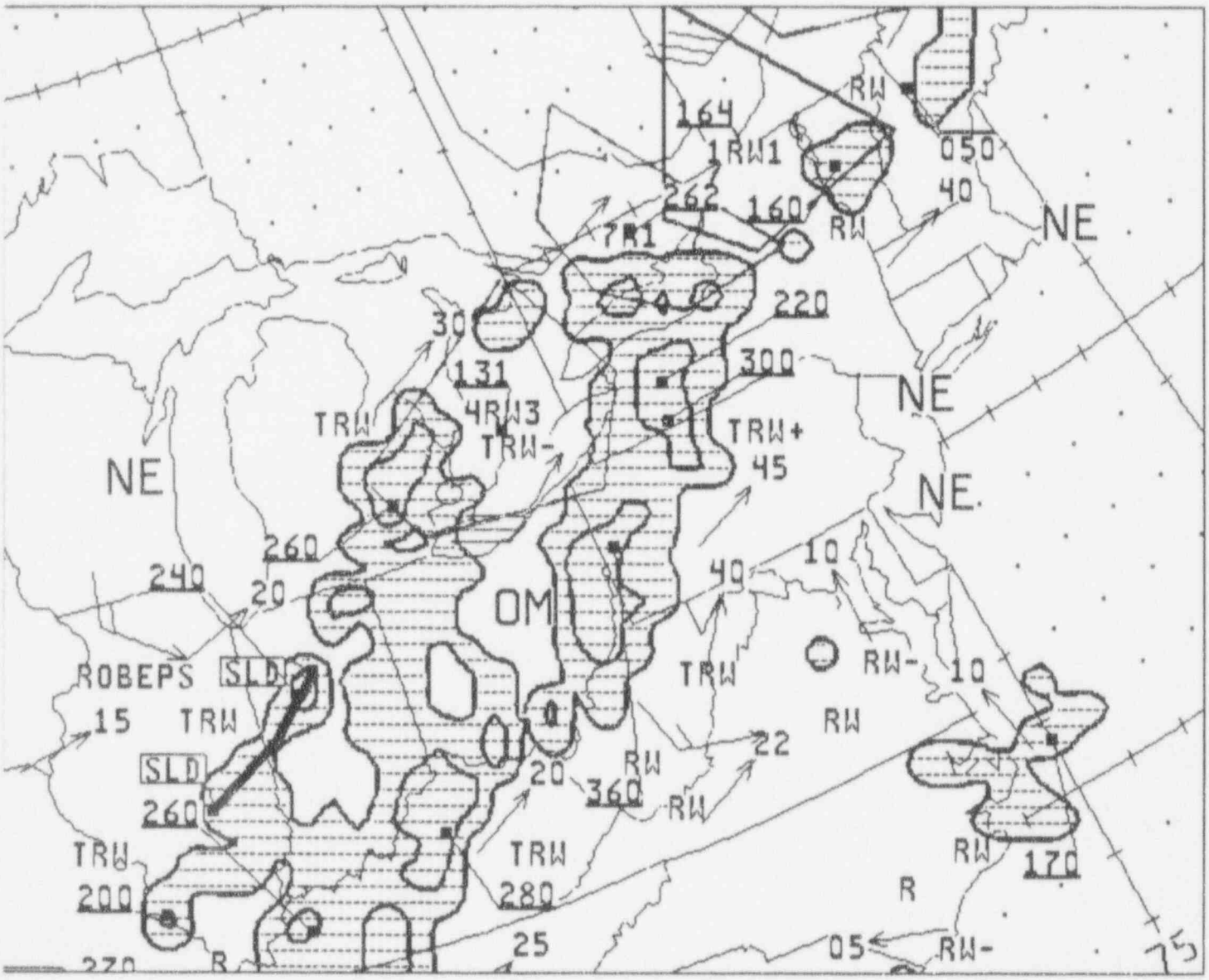

RADAR - NE

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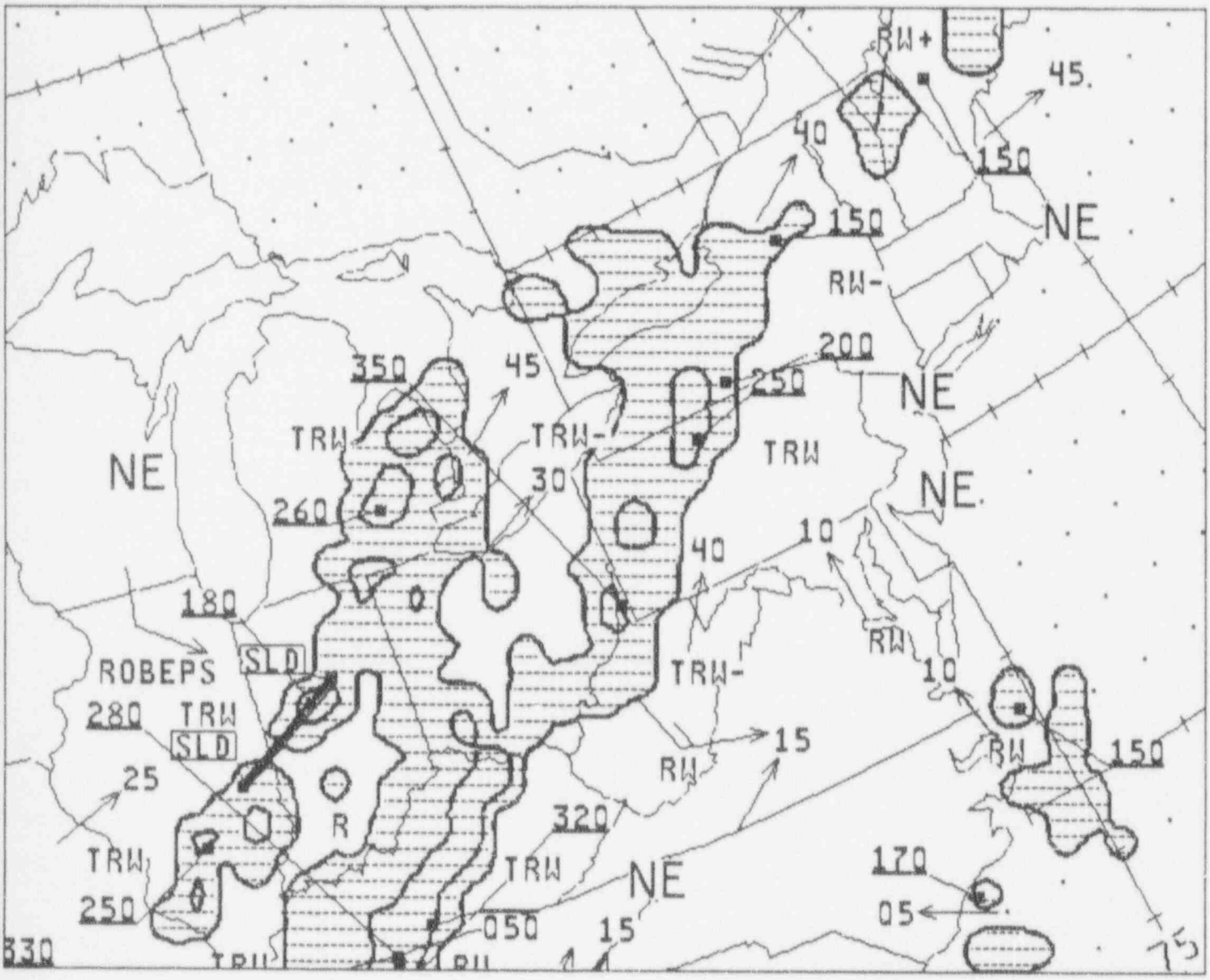

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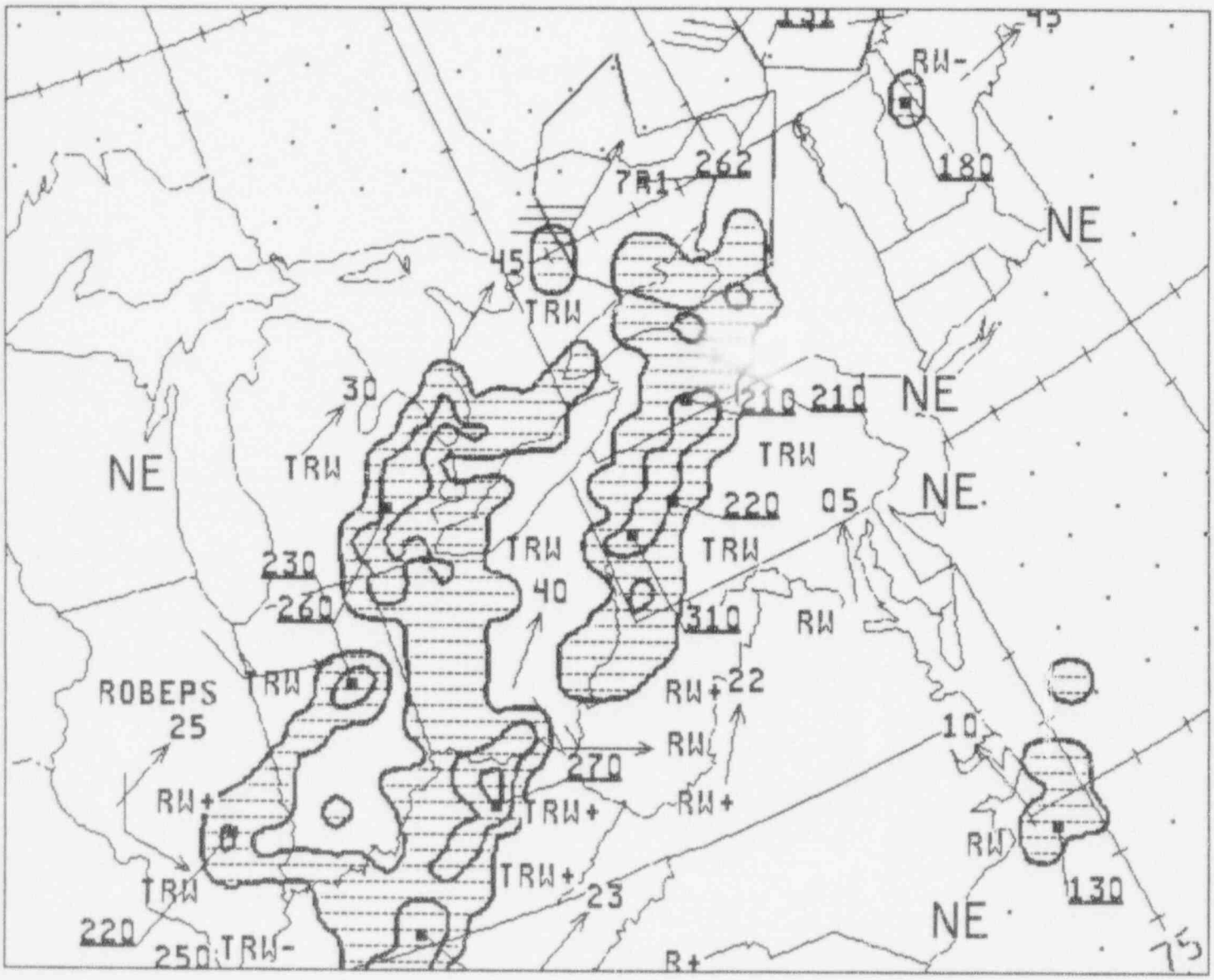

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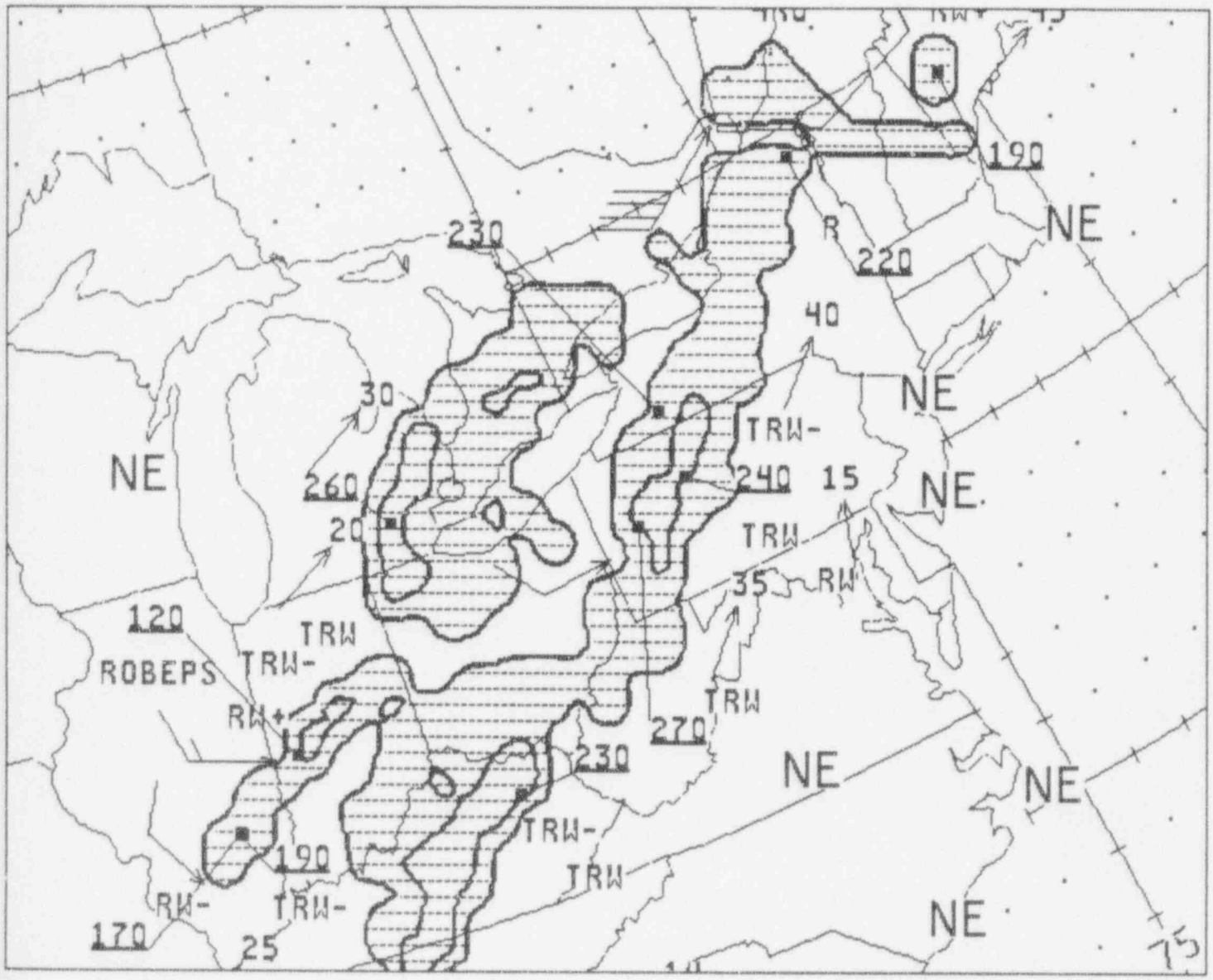

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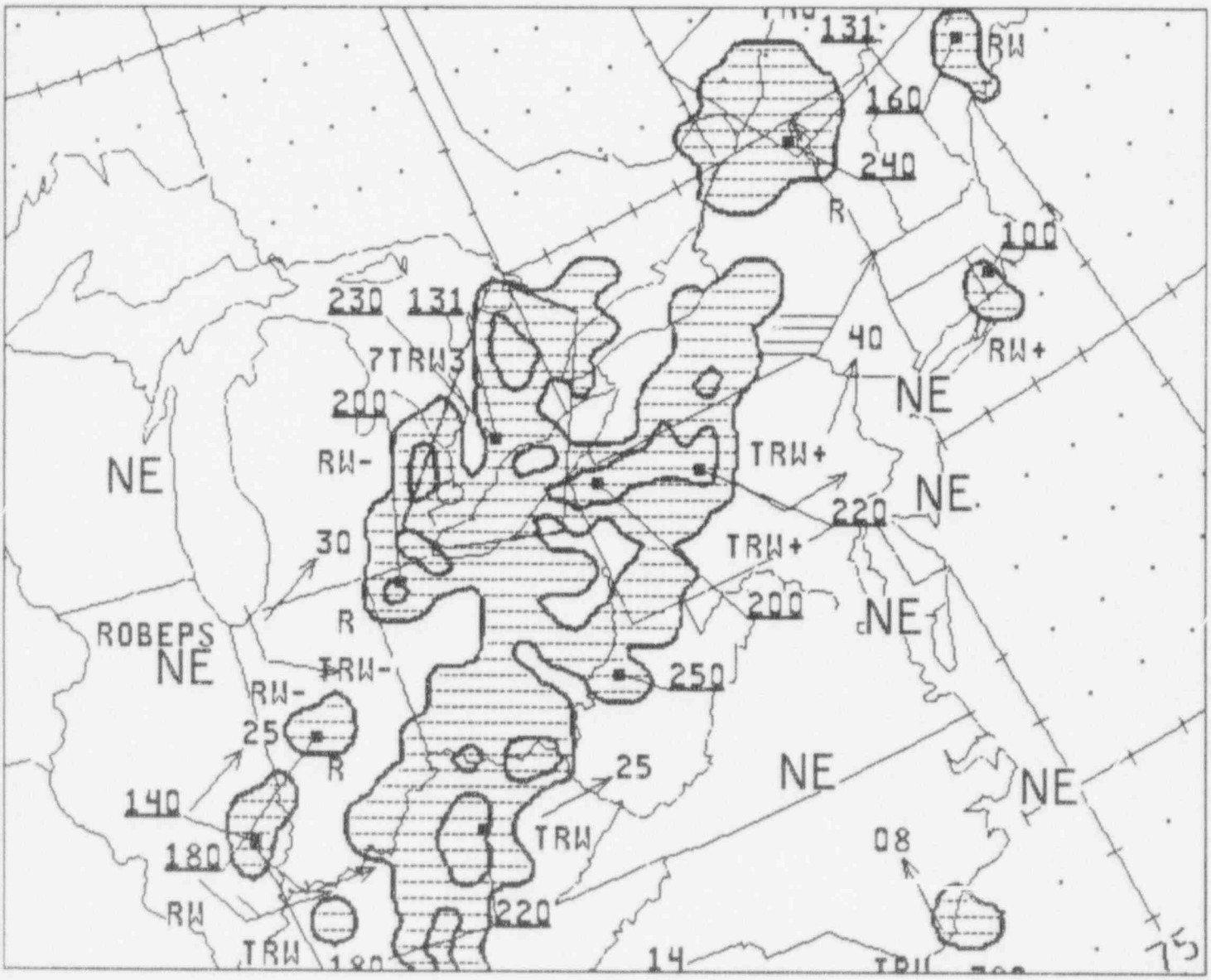

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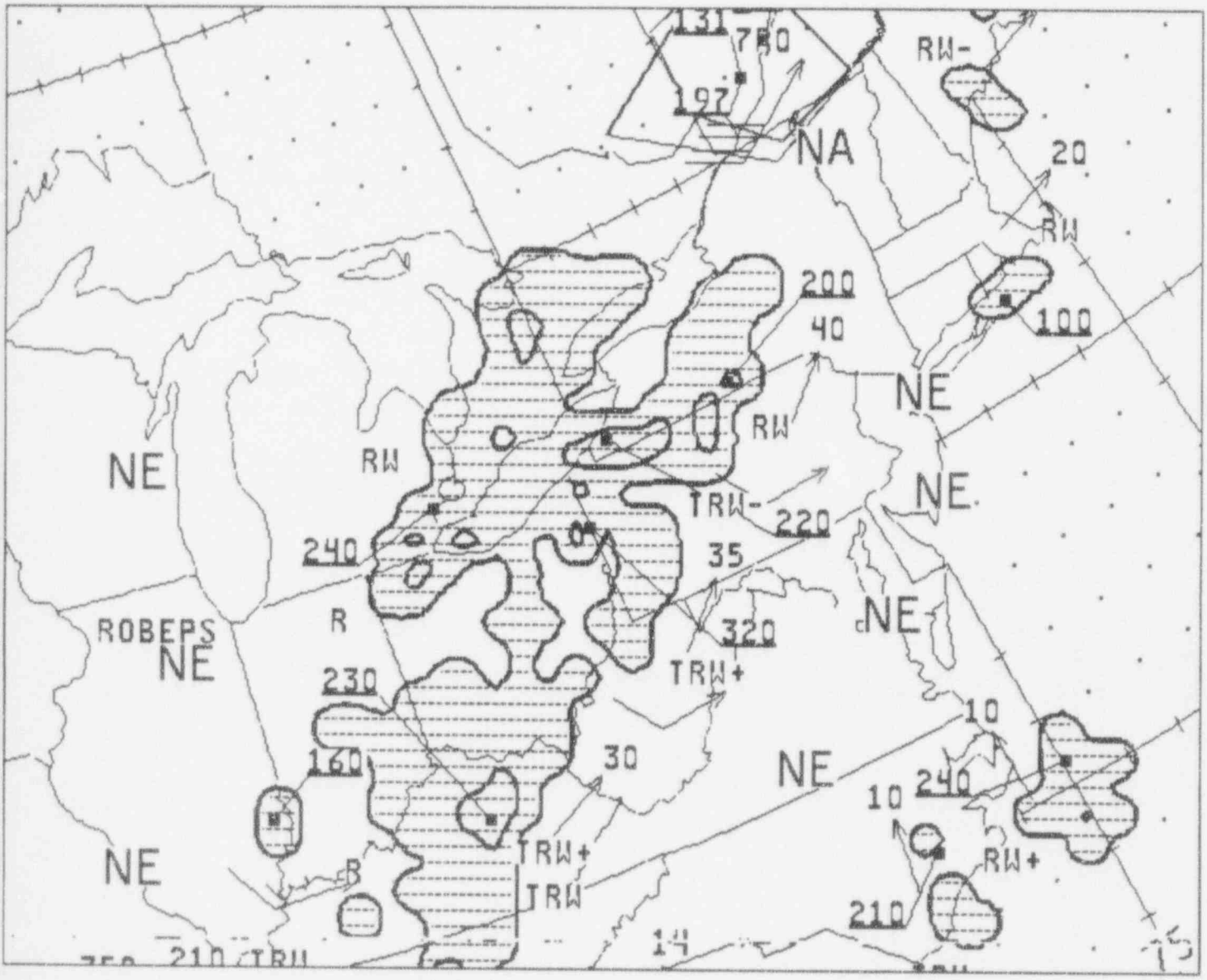

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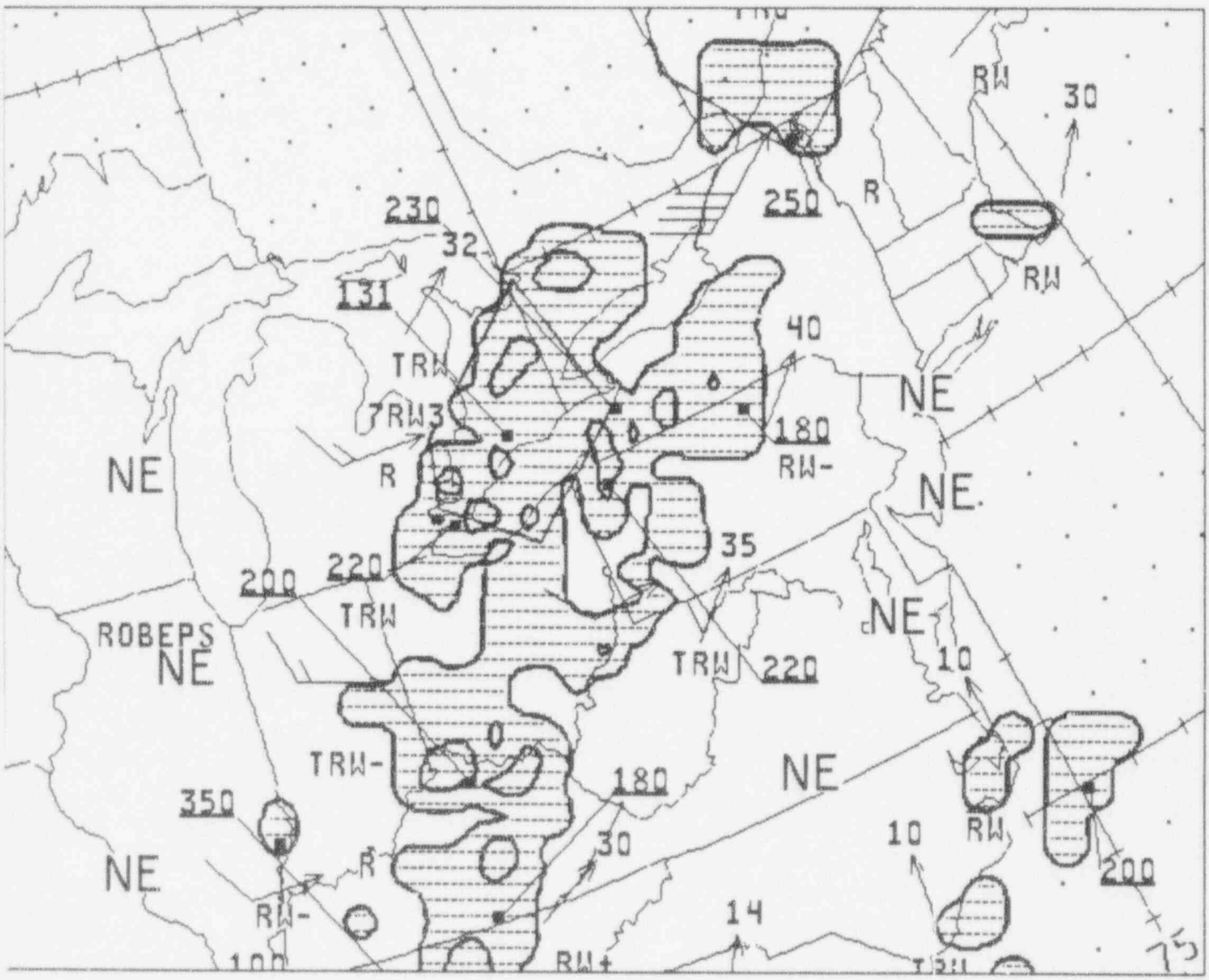

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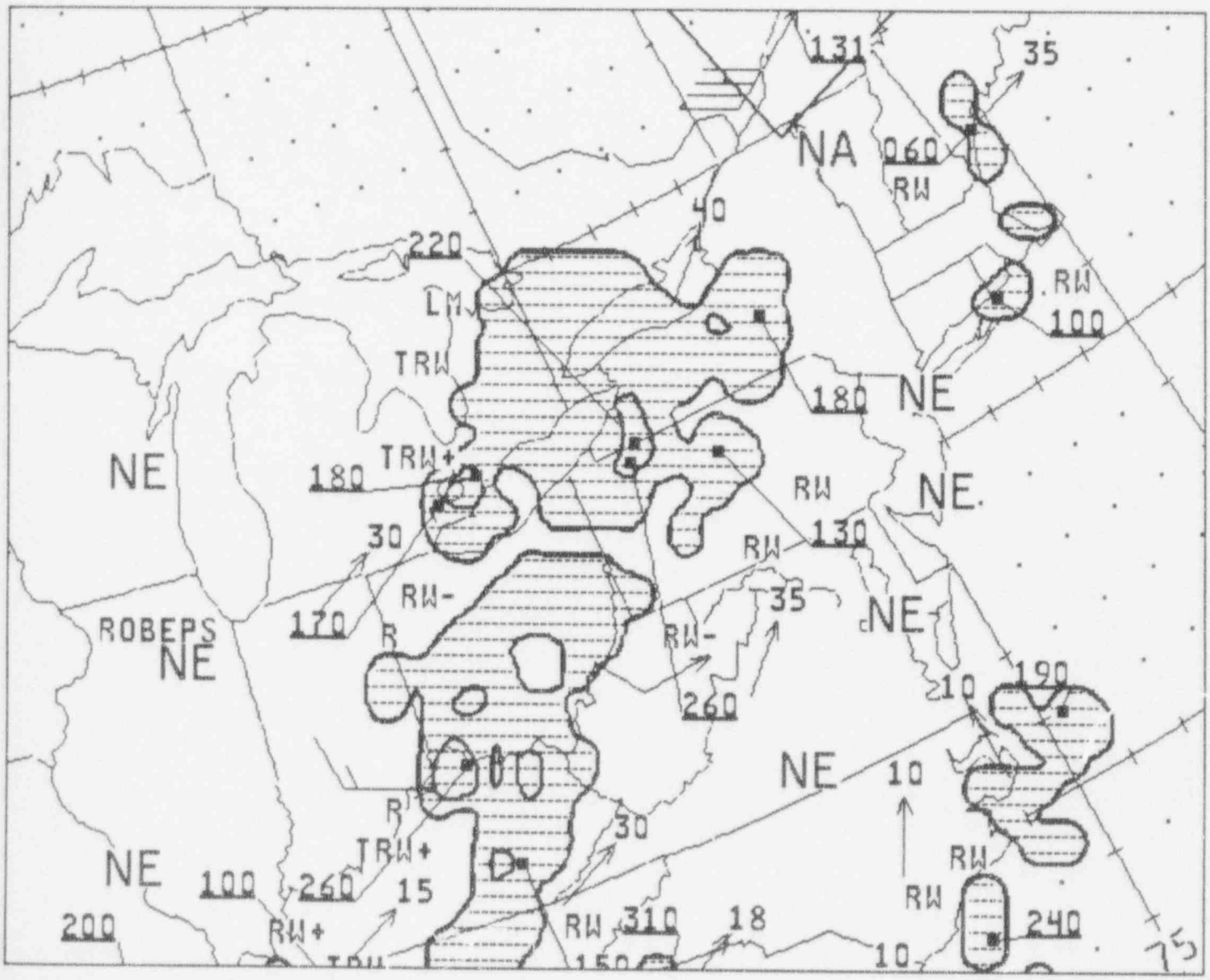

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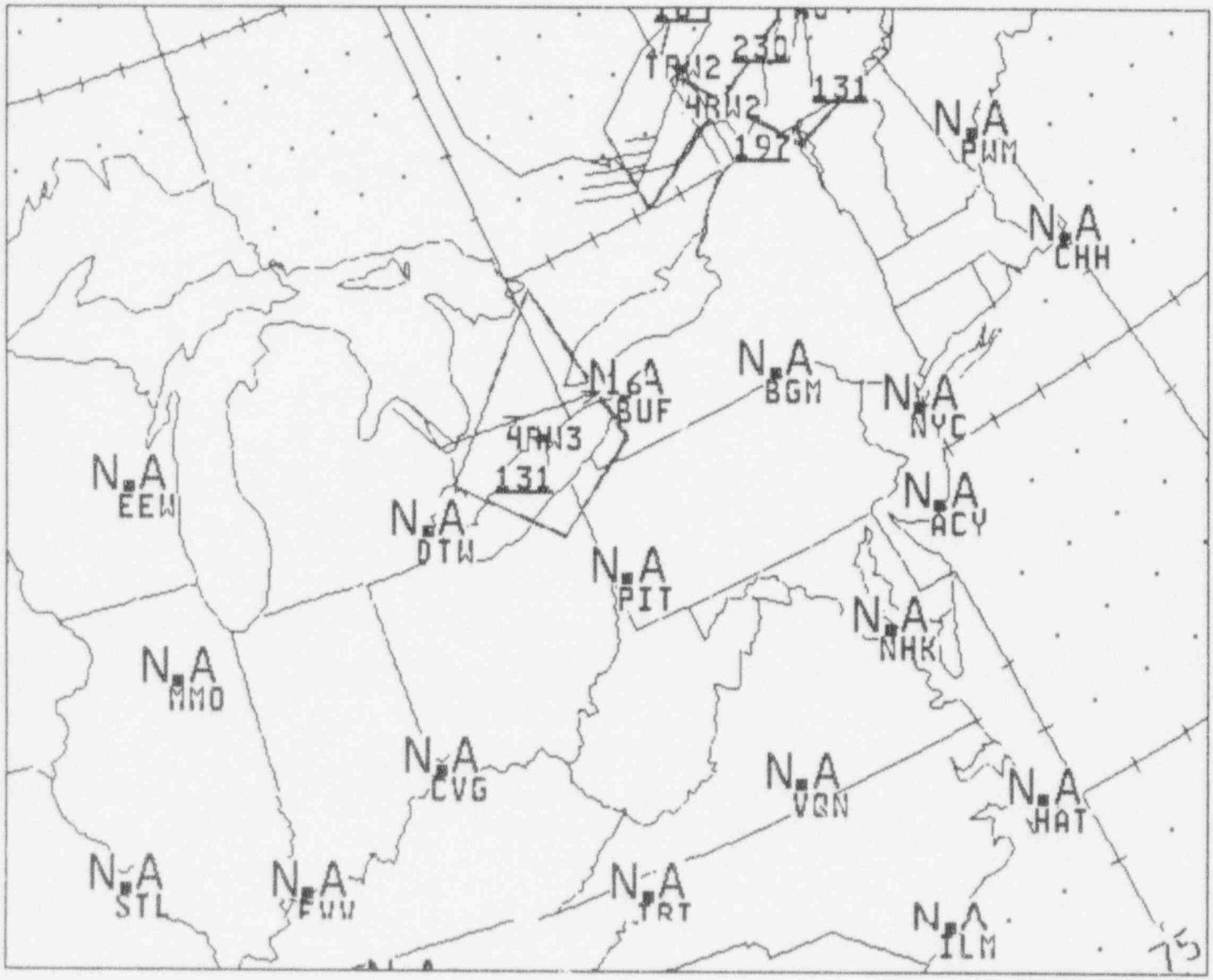

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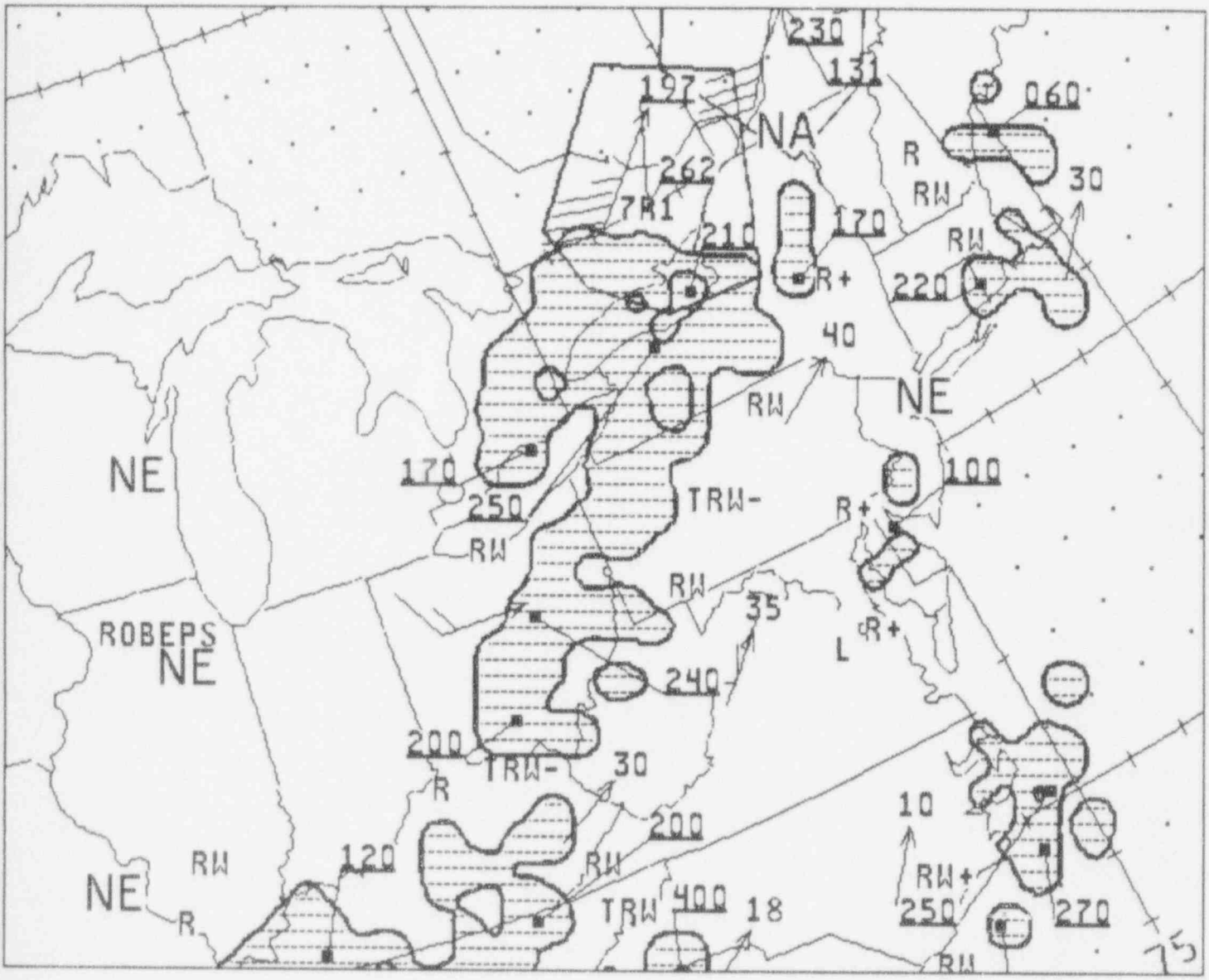

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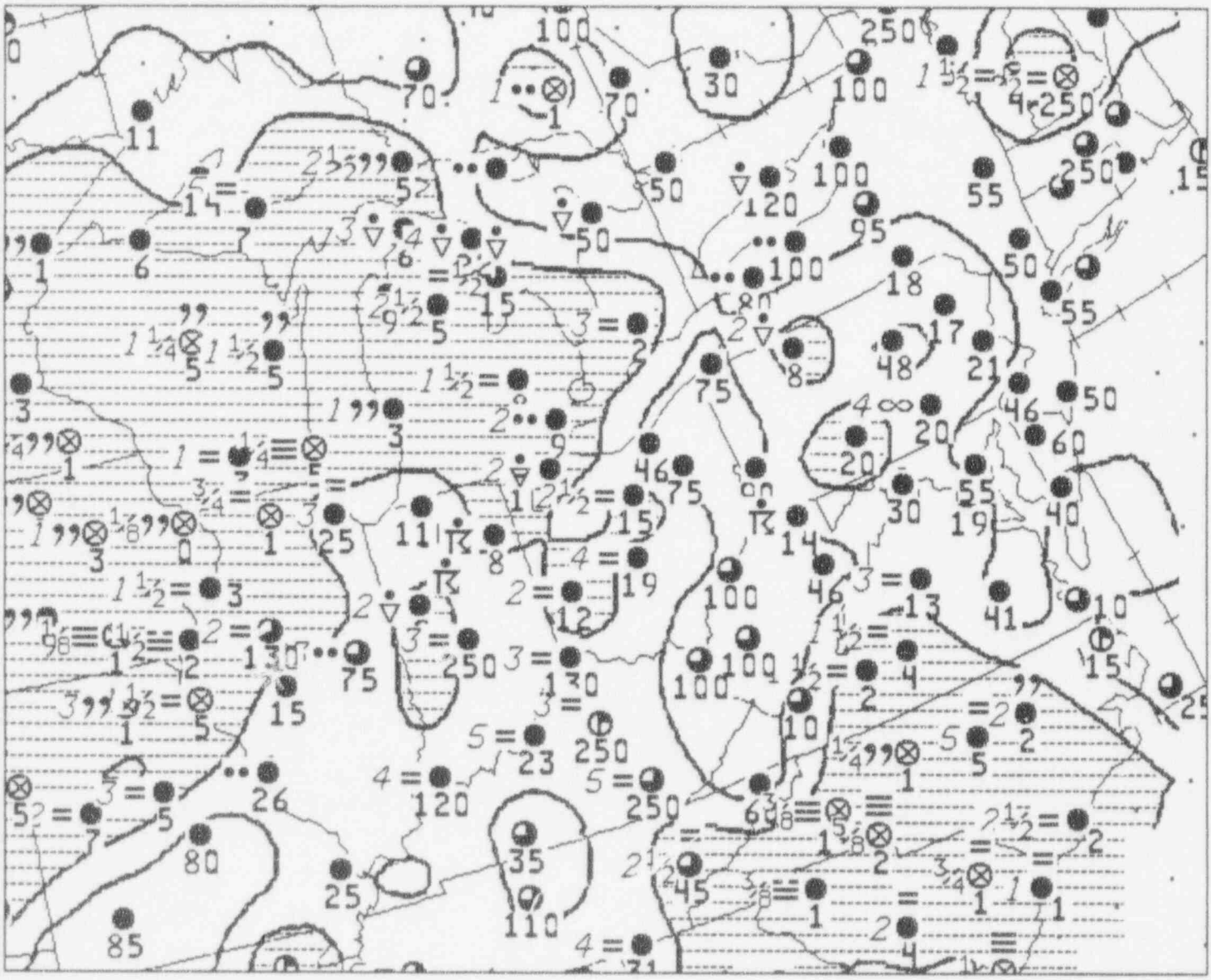

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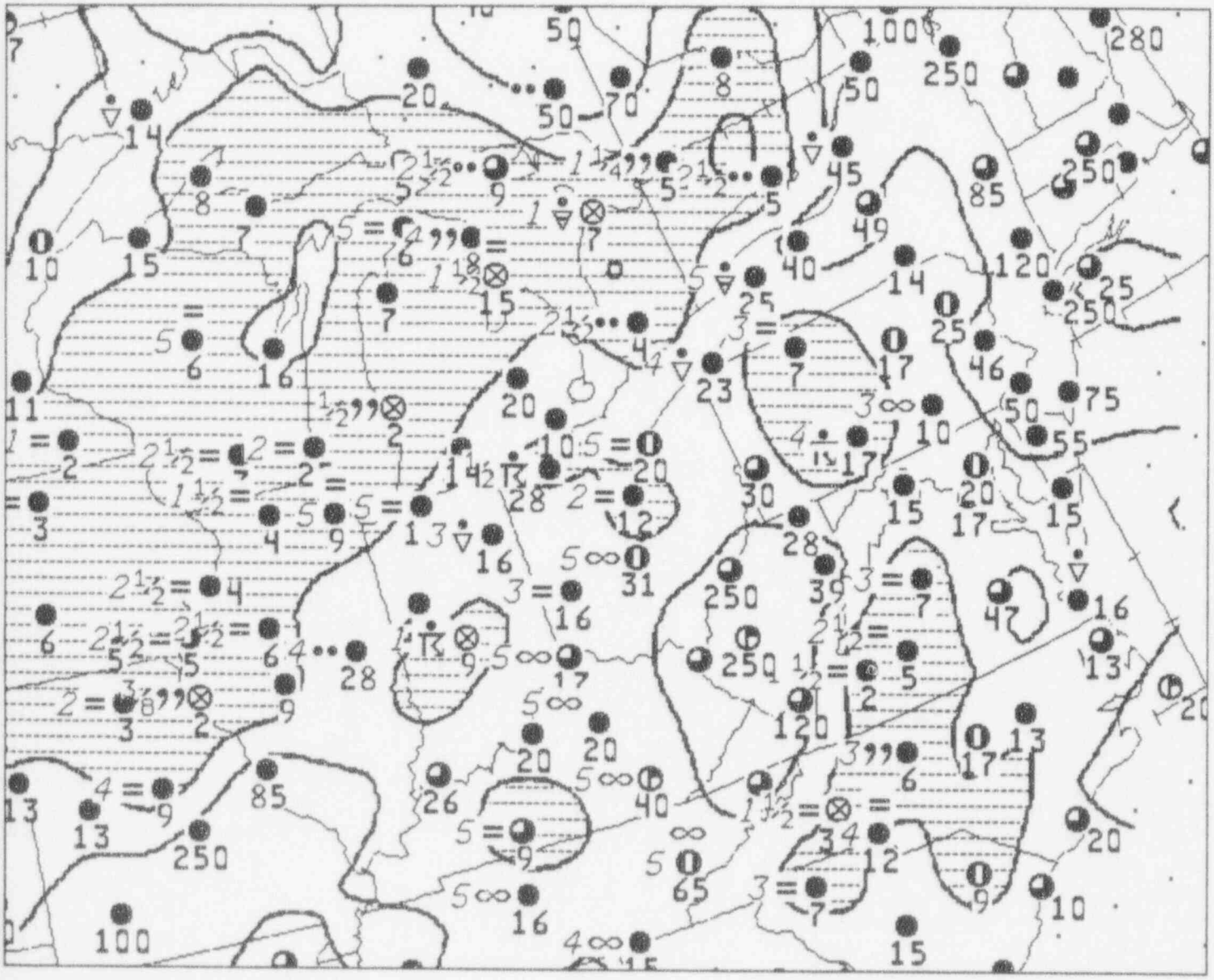

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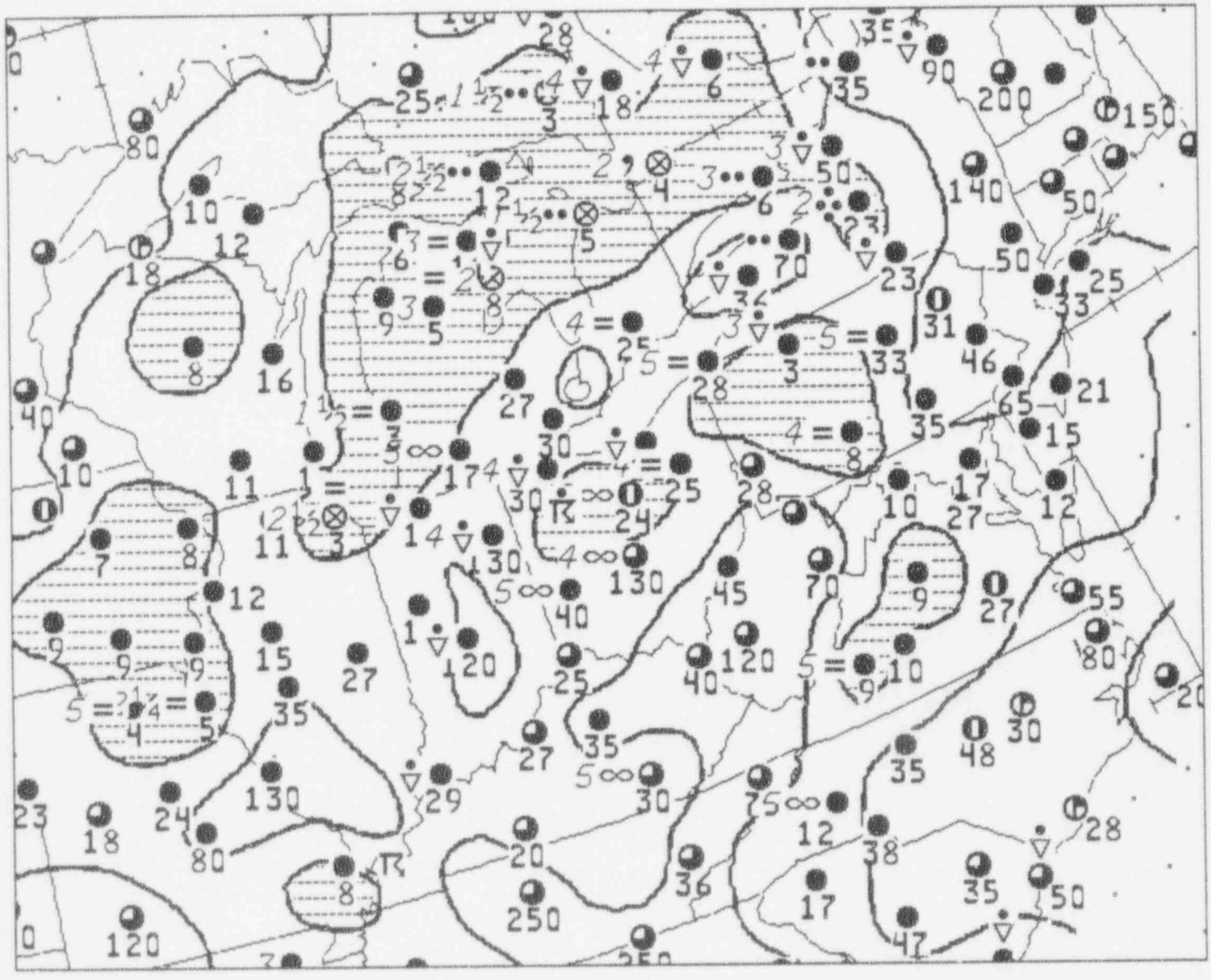

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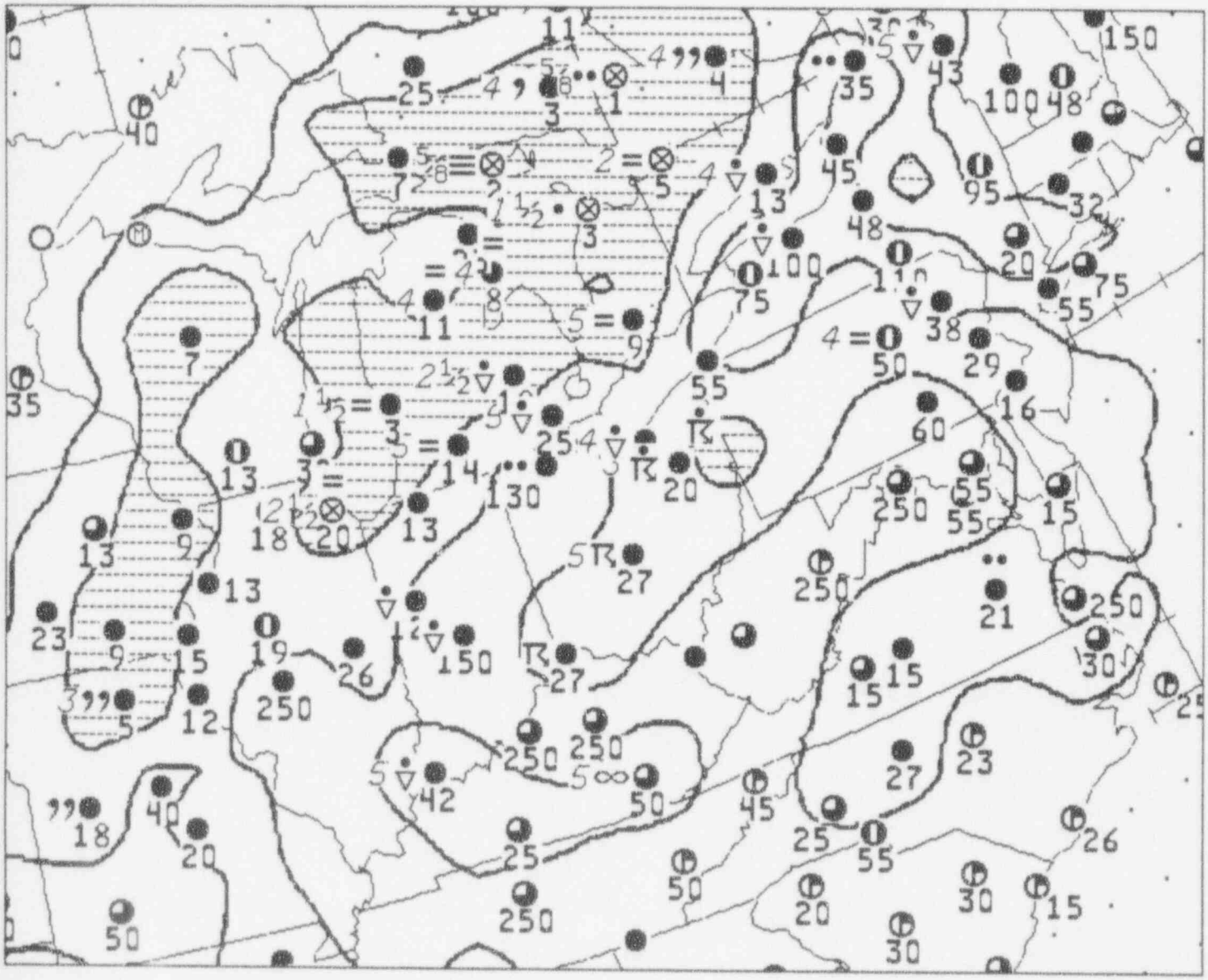

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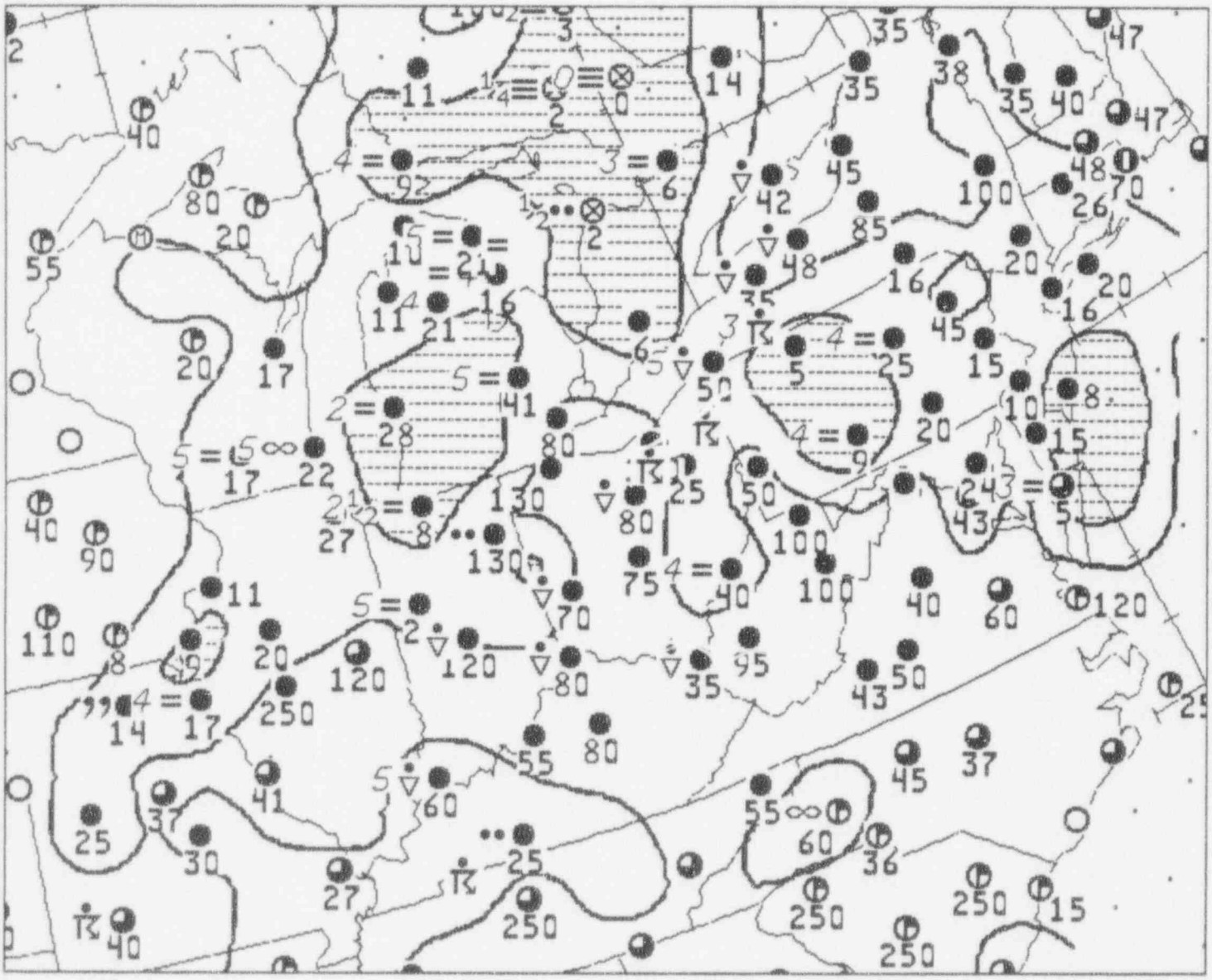

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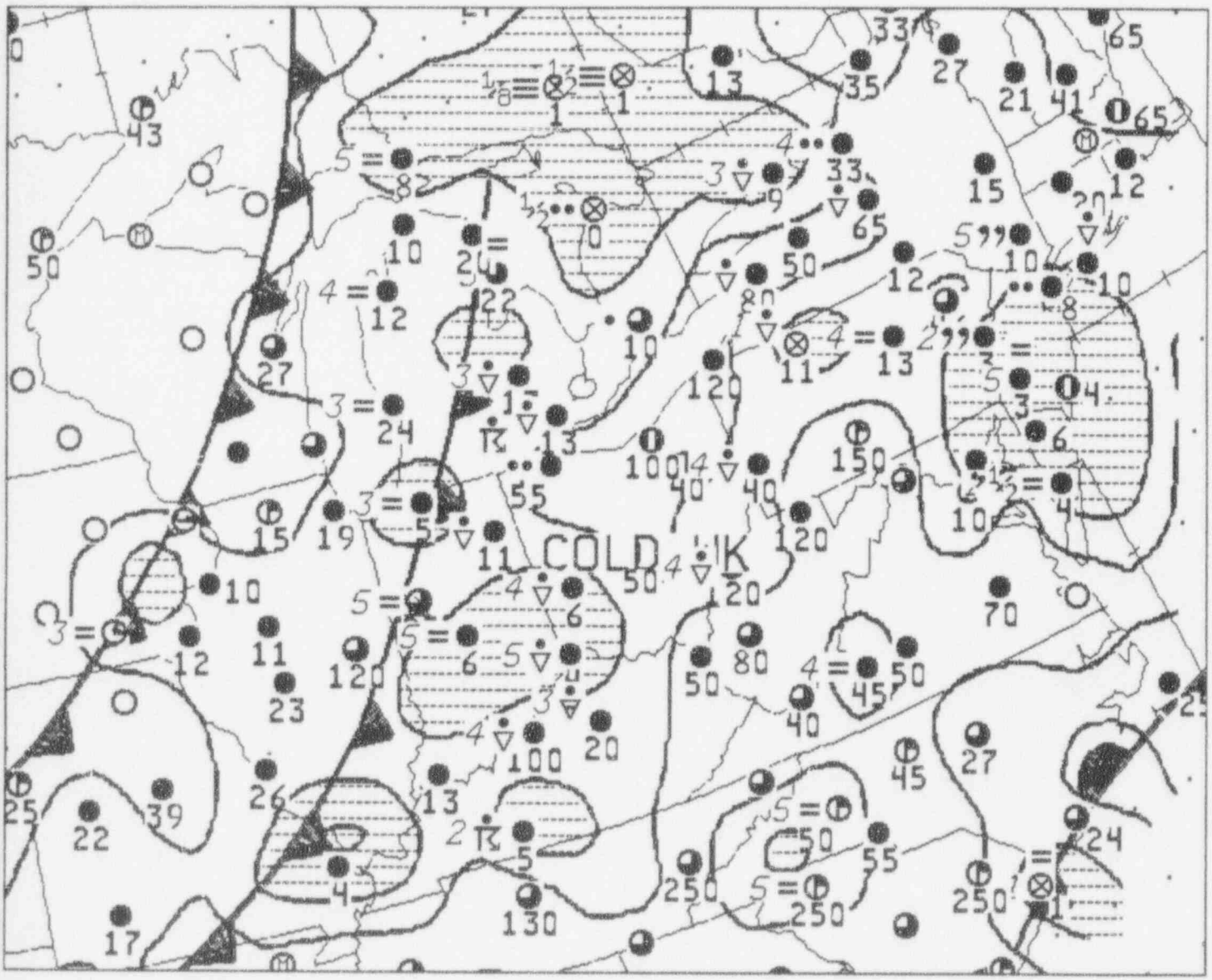
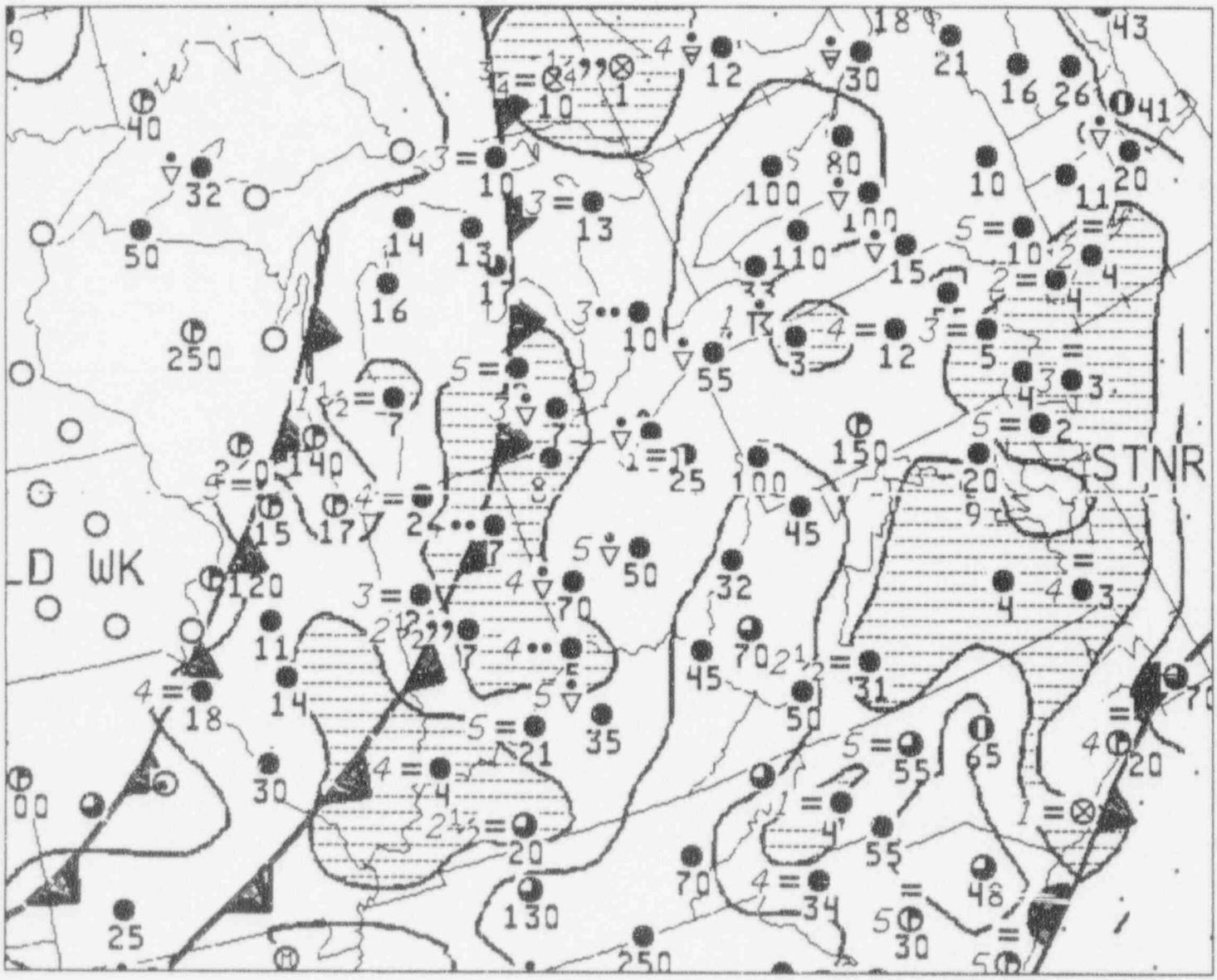


WX DEPICTION - NE

04:04 am



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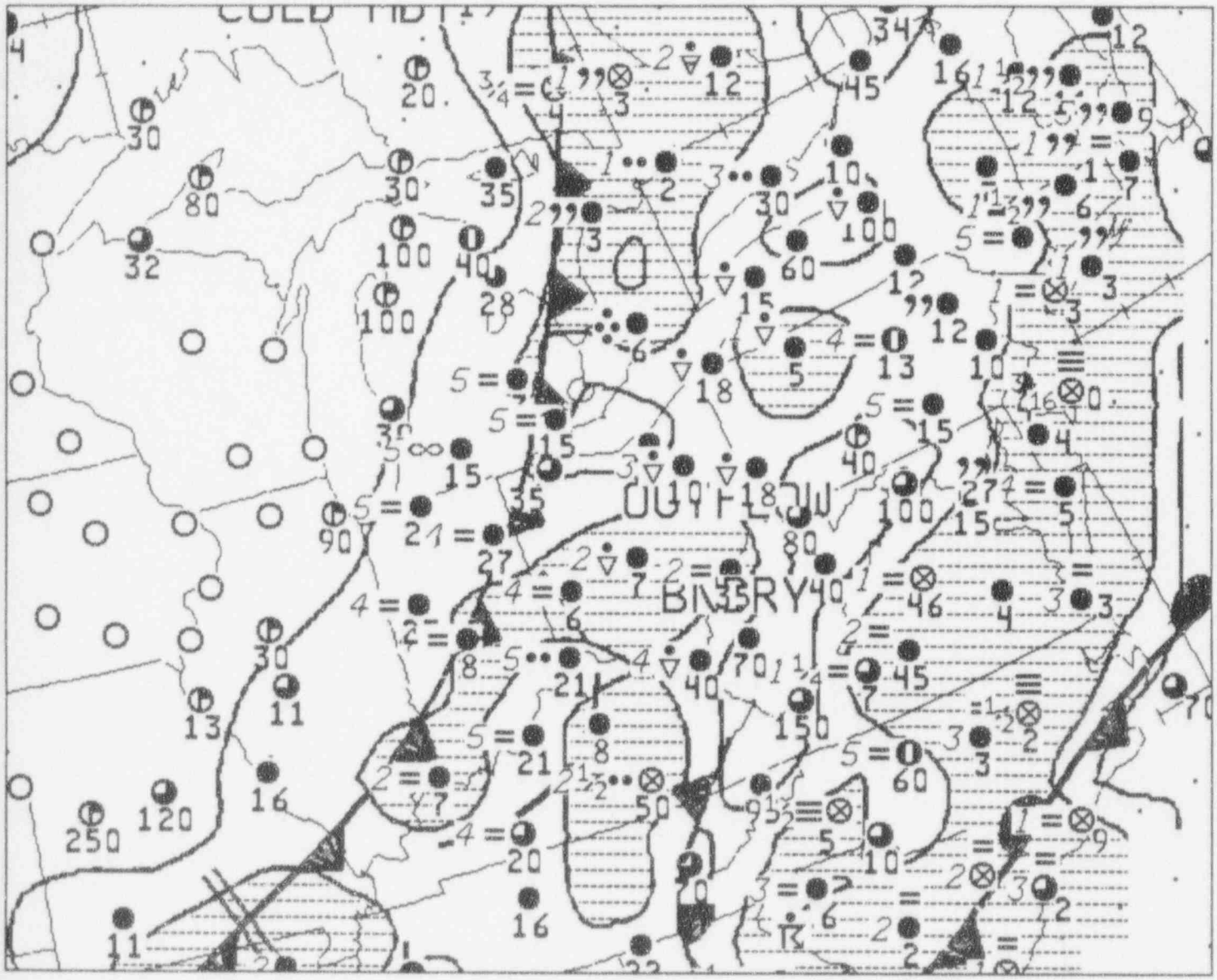
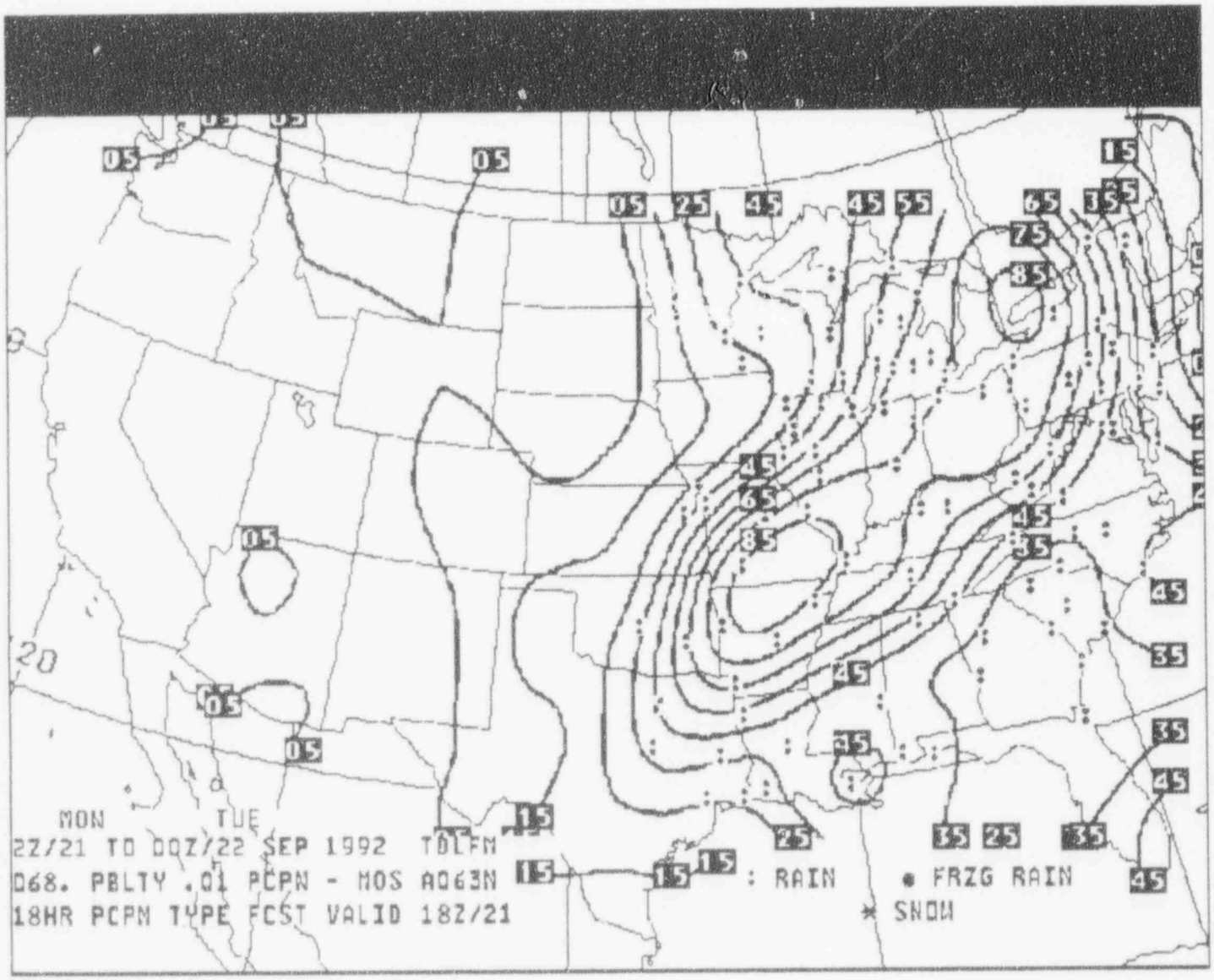


PRECIP PROB - 18HR

08:00 am



PRECIP PROB - 18HR

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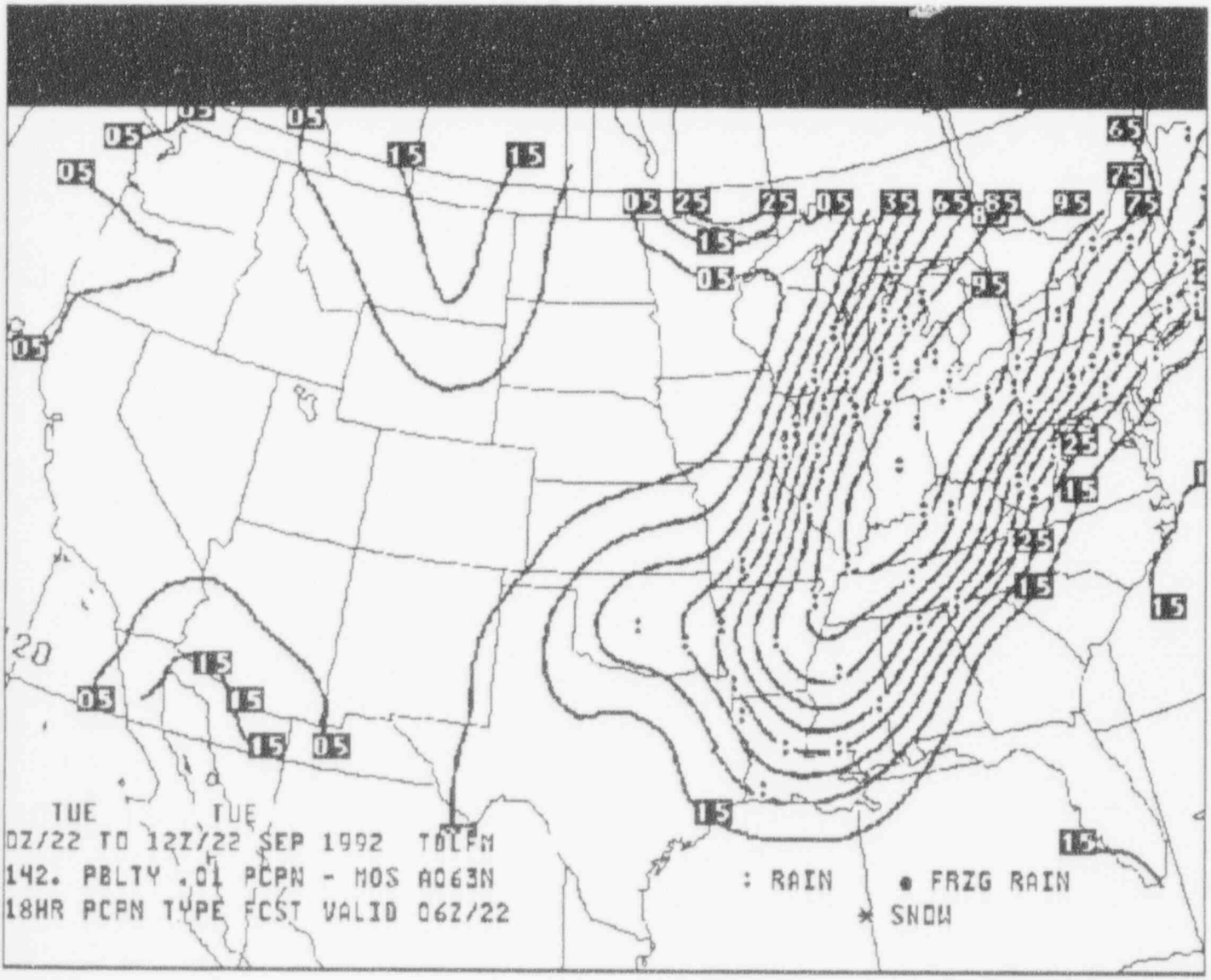
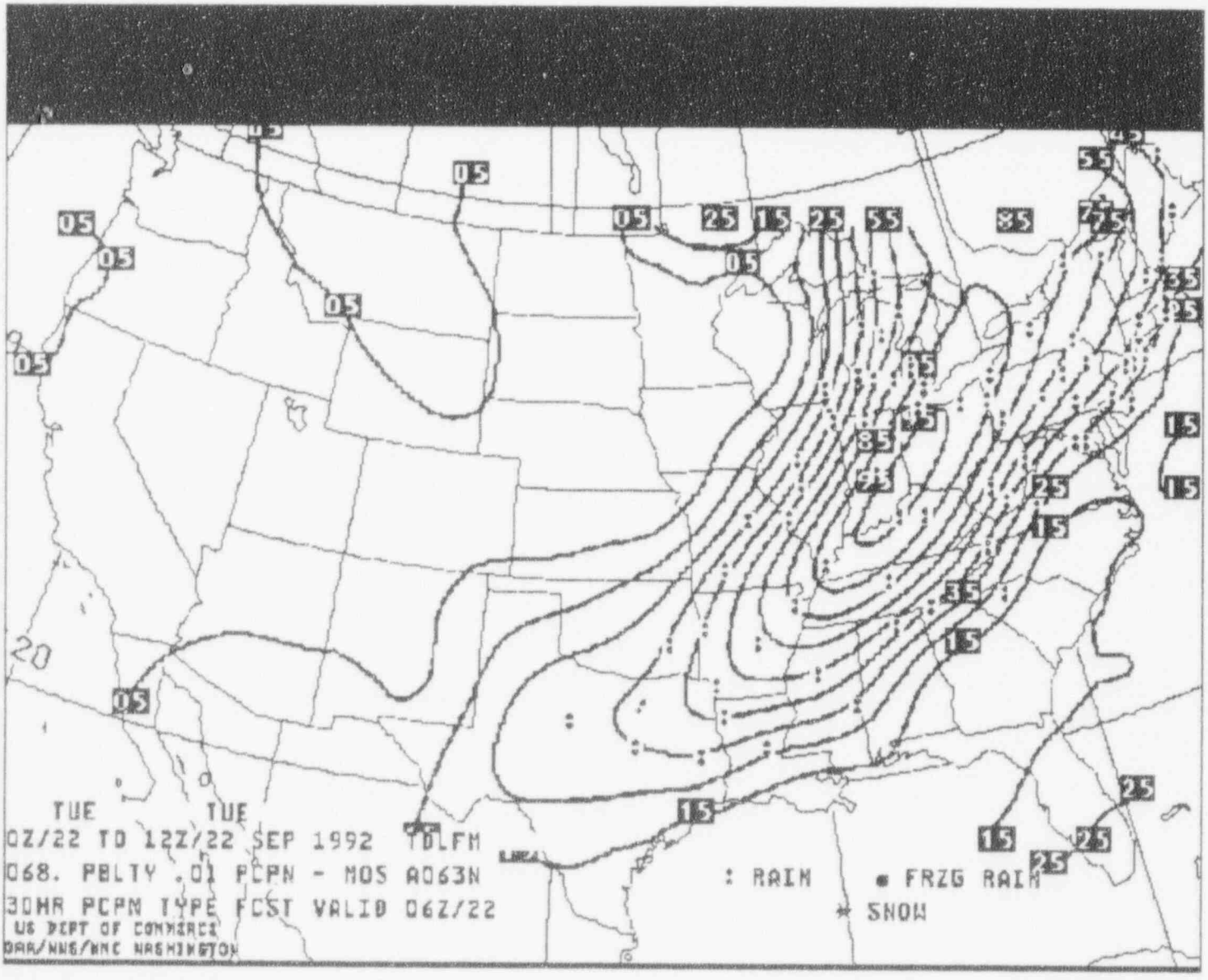


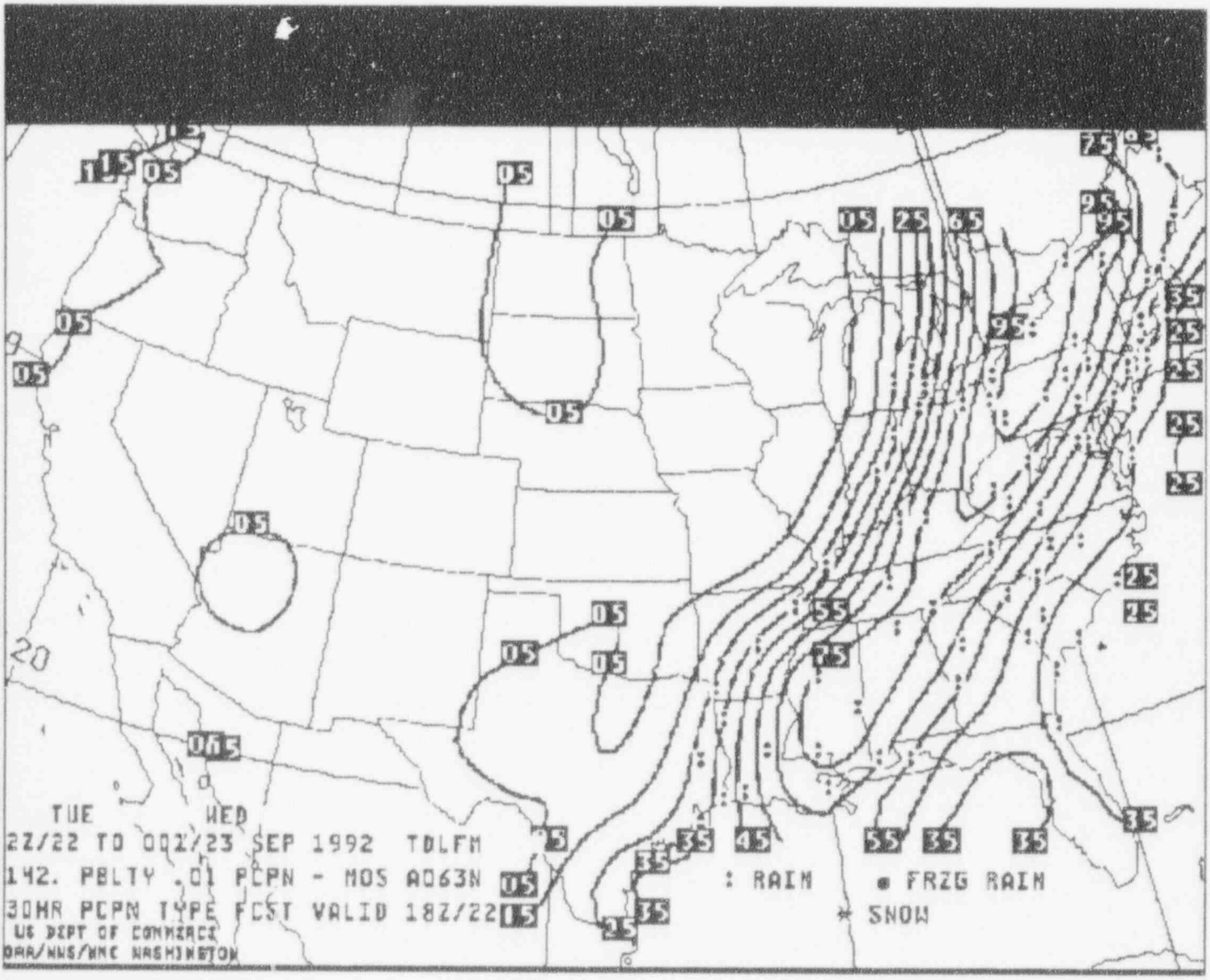
PRECIP PROB - 30HR

08:00 am



PRECIP PROB - 30HR

12:09 pm



PRECIP PROB - 42HR

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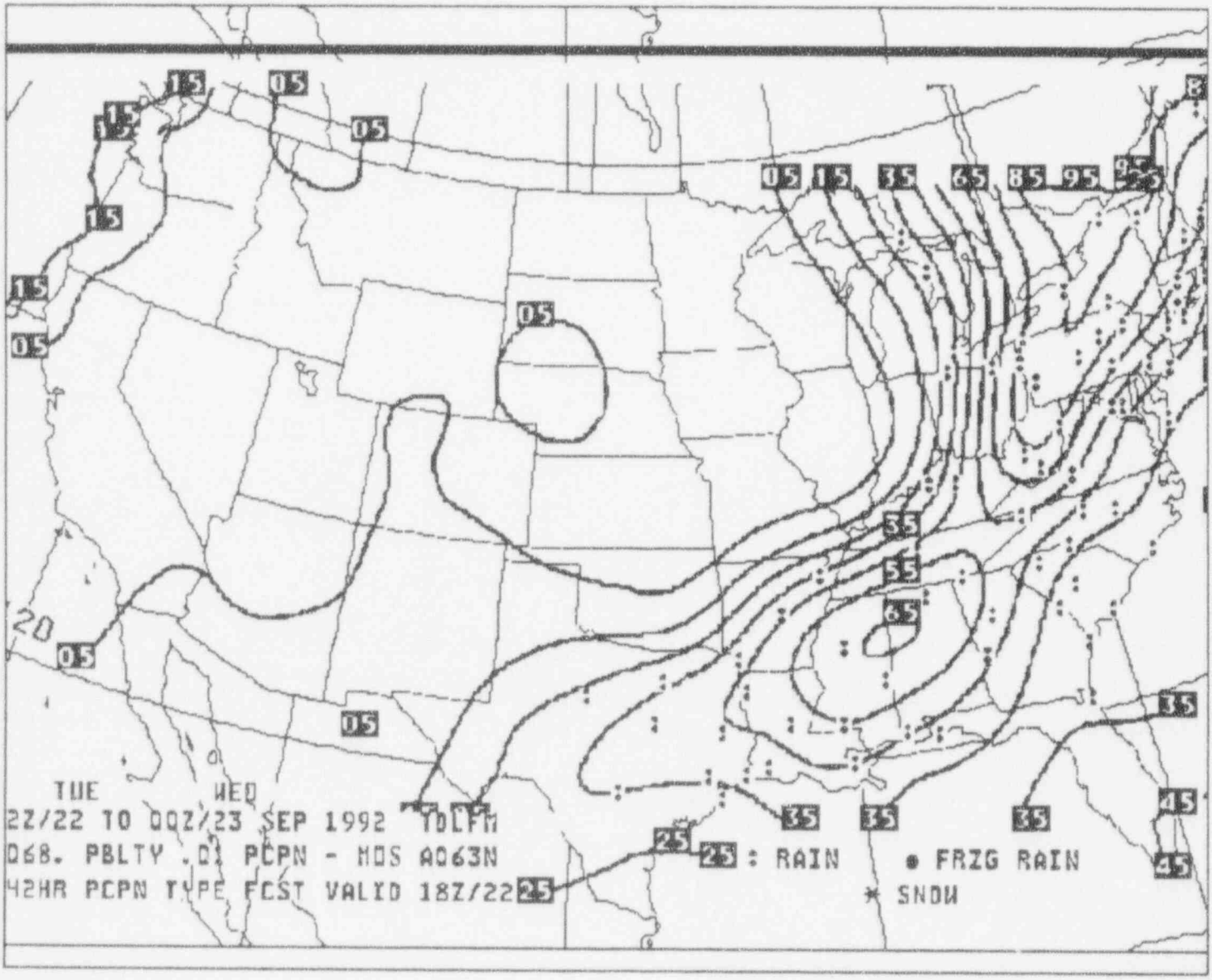

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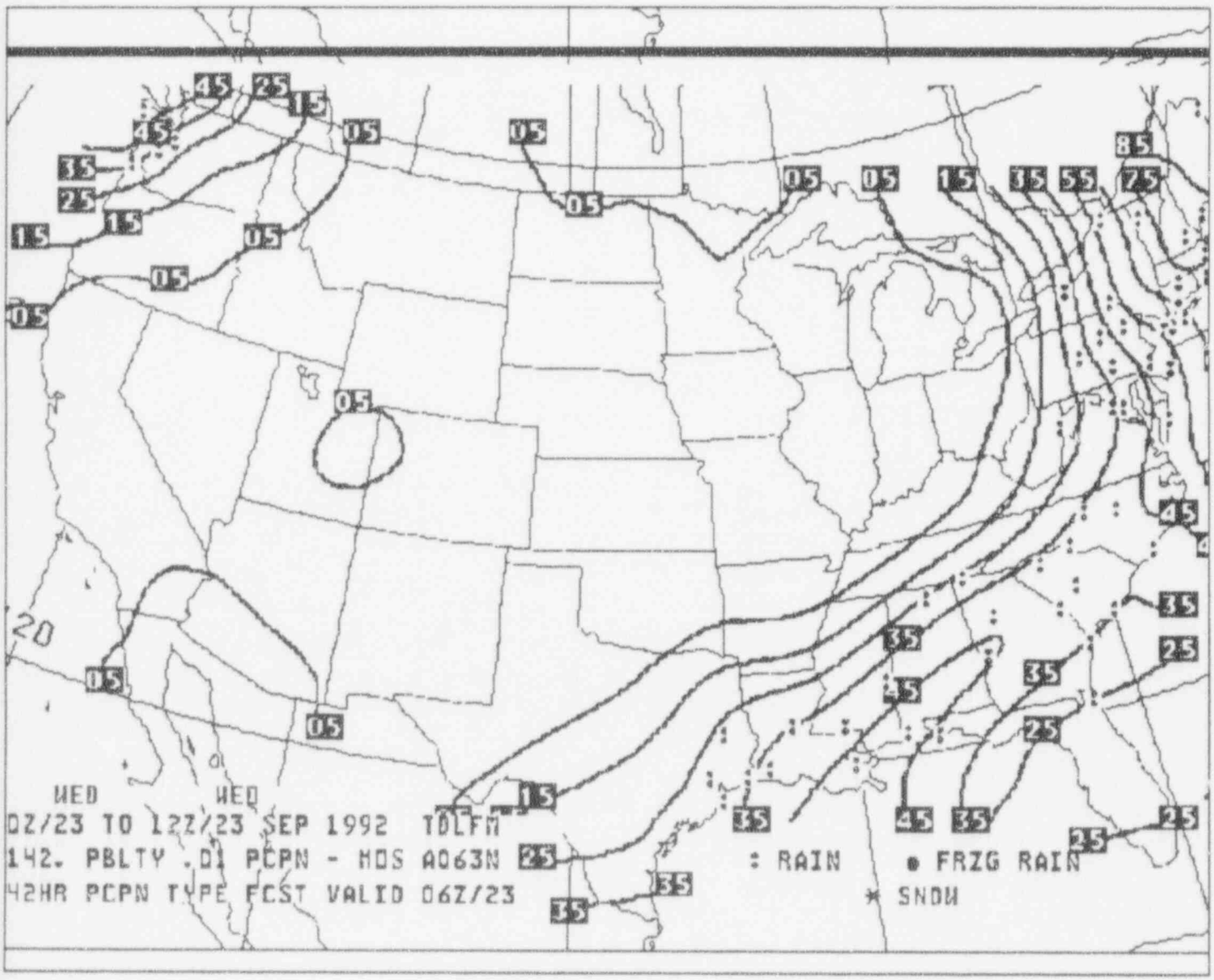

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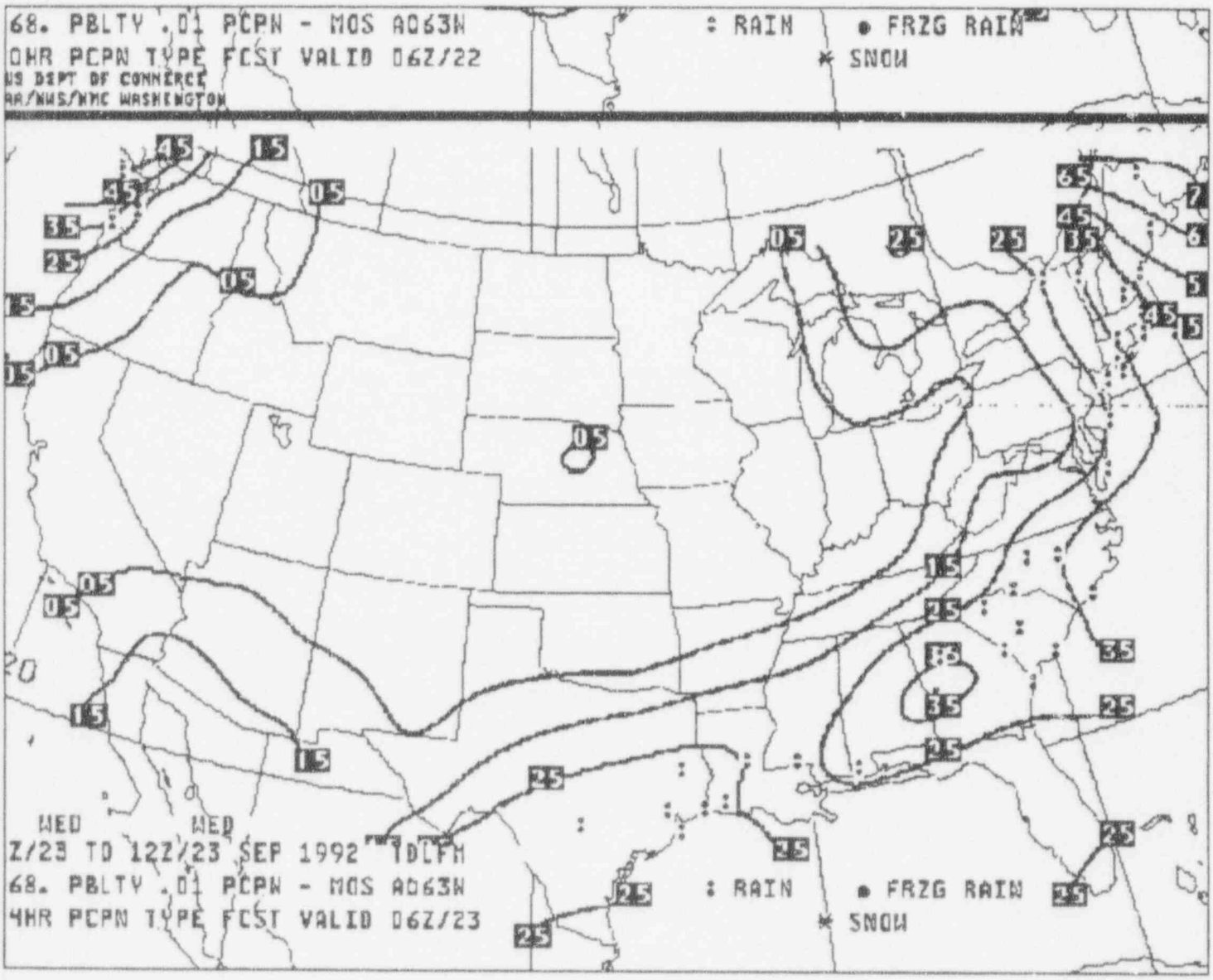
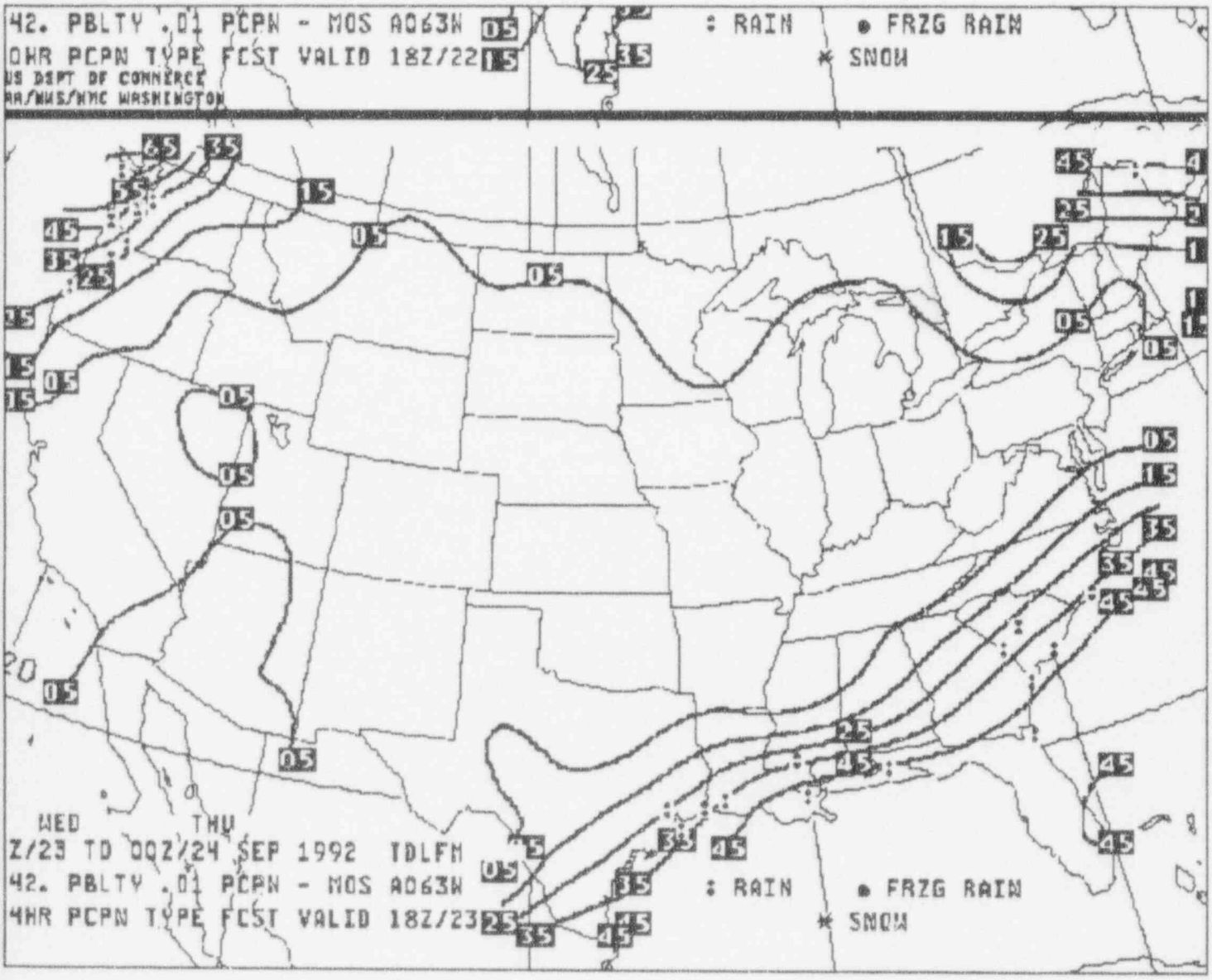


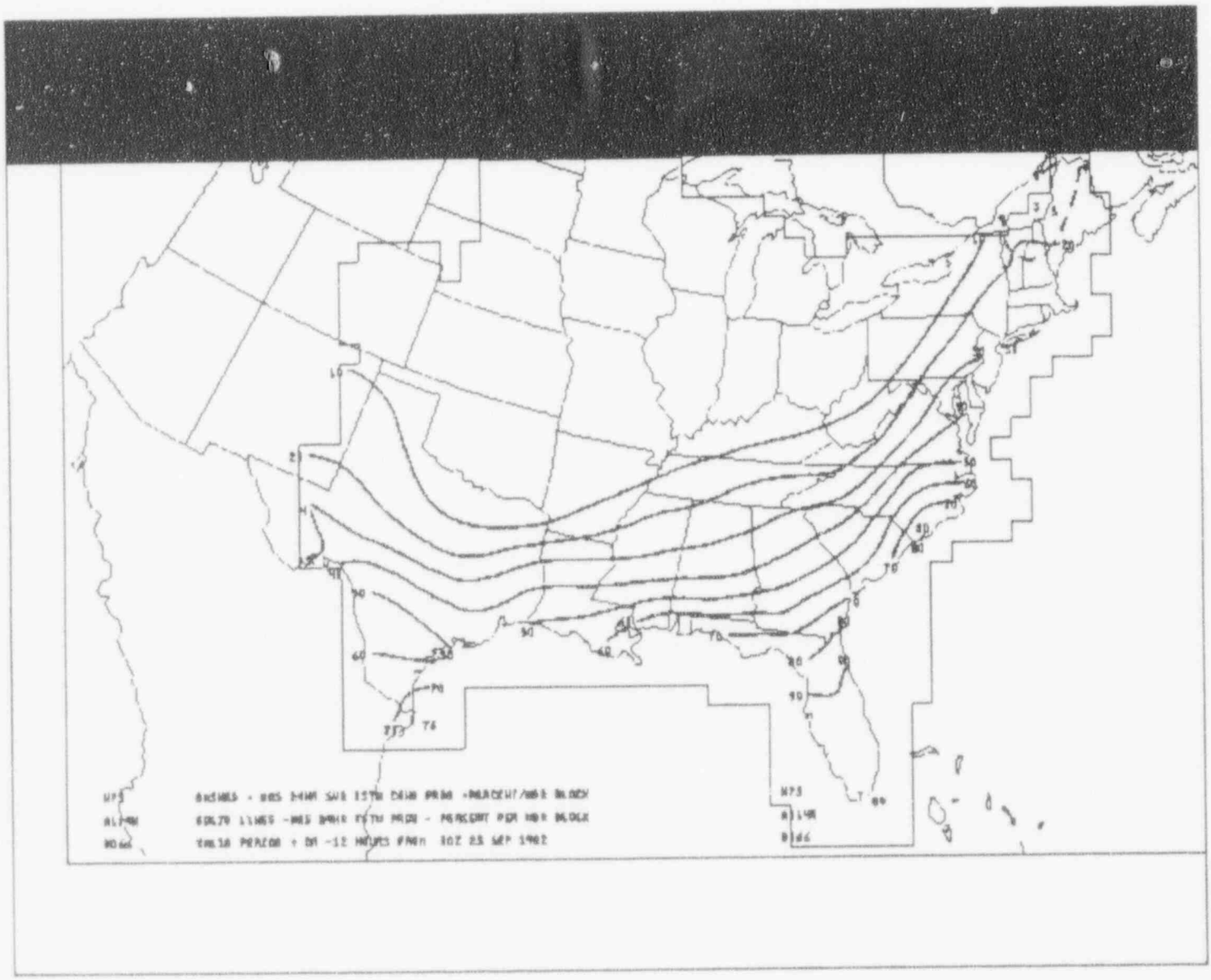
PRECIP PROB - 54HR

12:09 pm



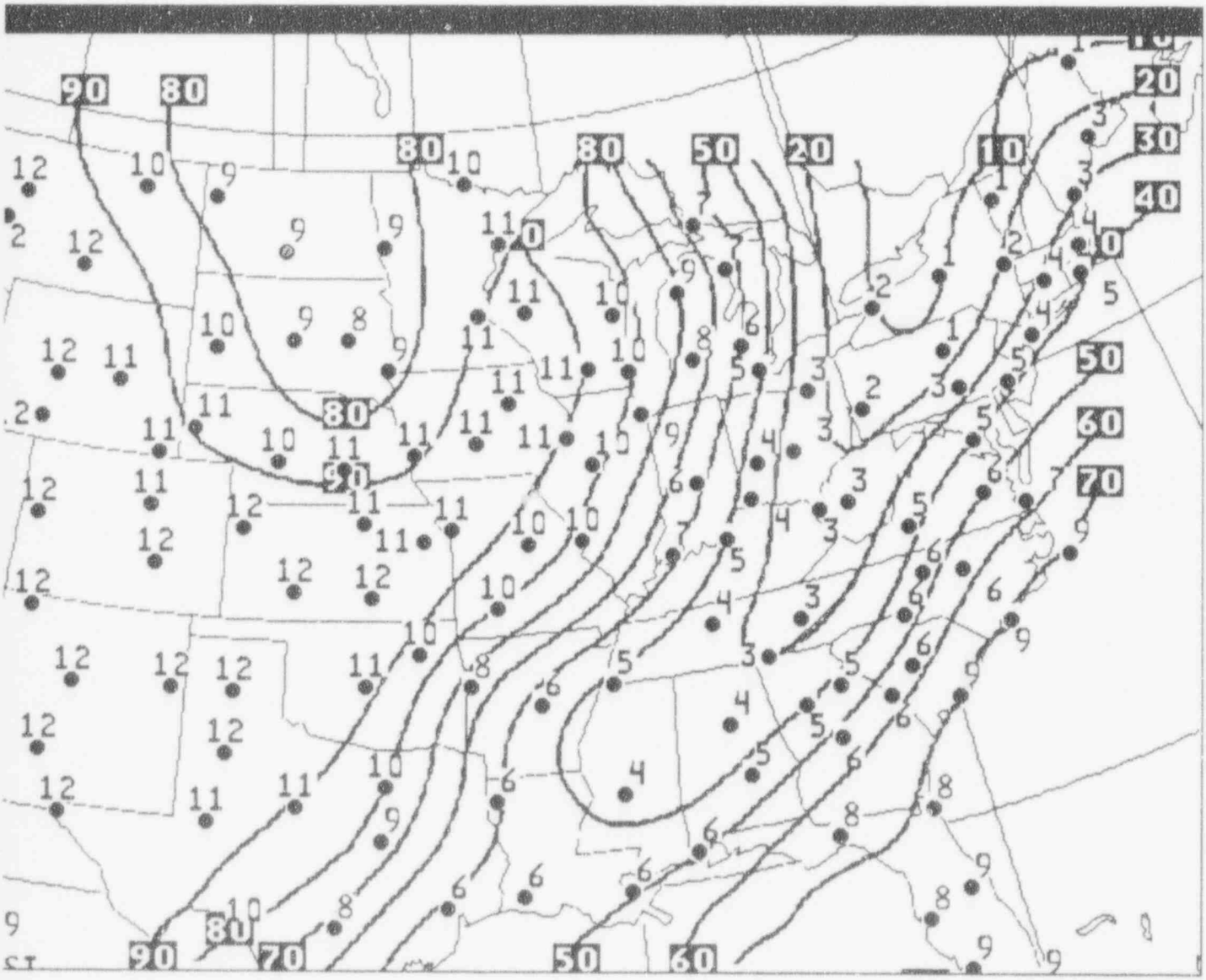
TSTM/SVR TSTM

00:45 am



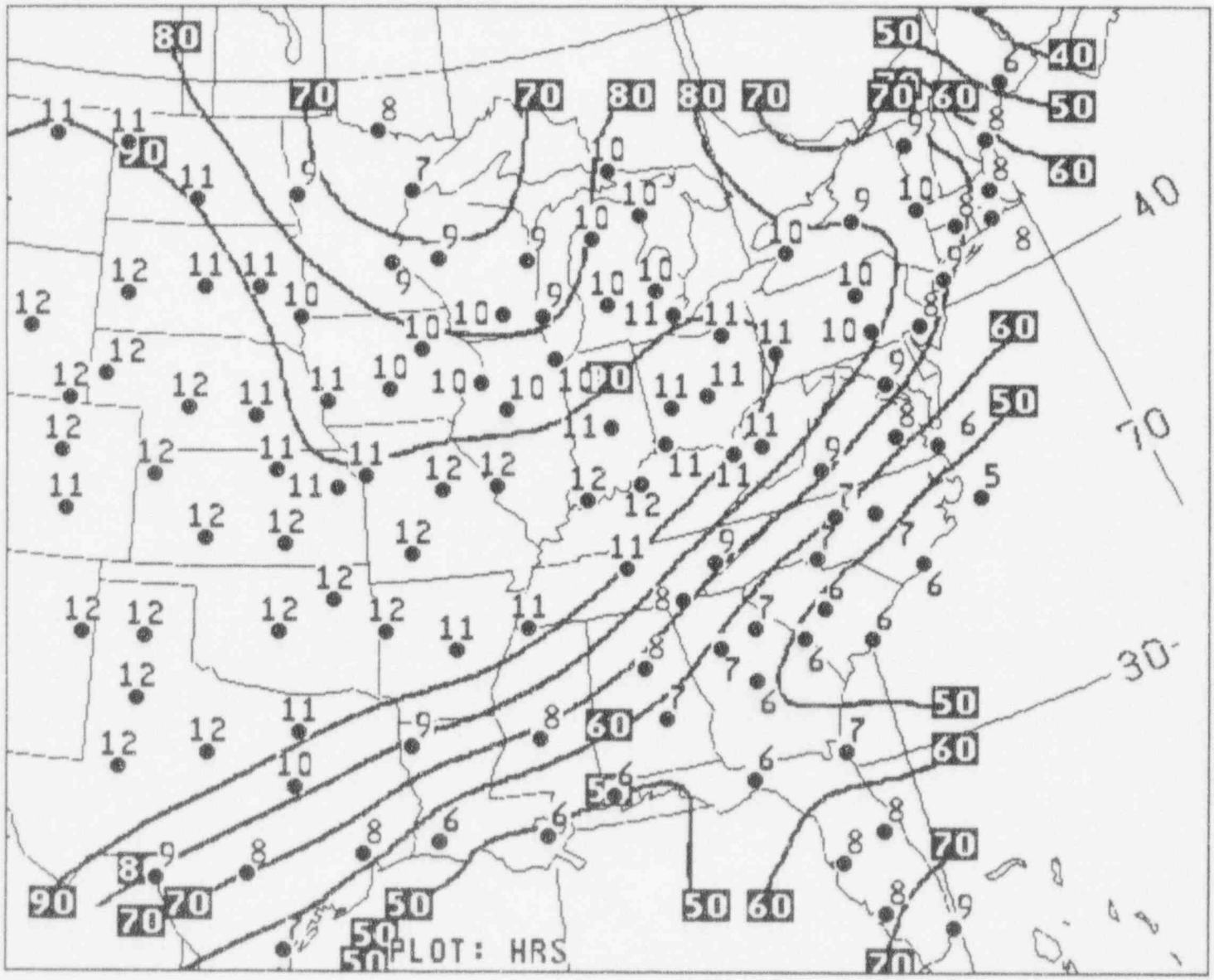
PROG 24HR SUN

11:09 am



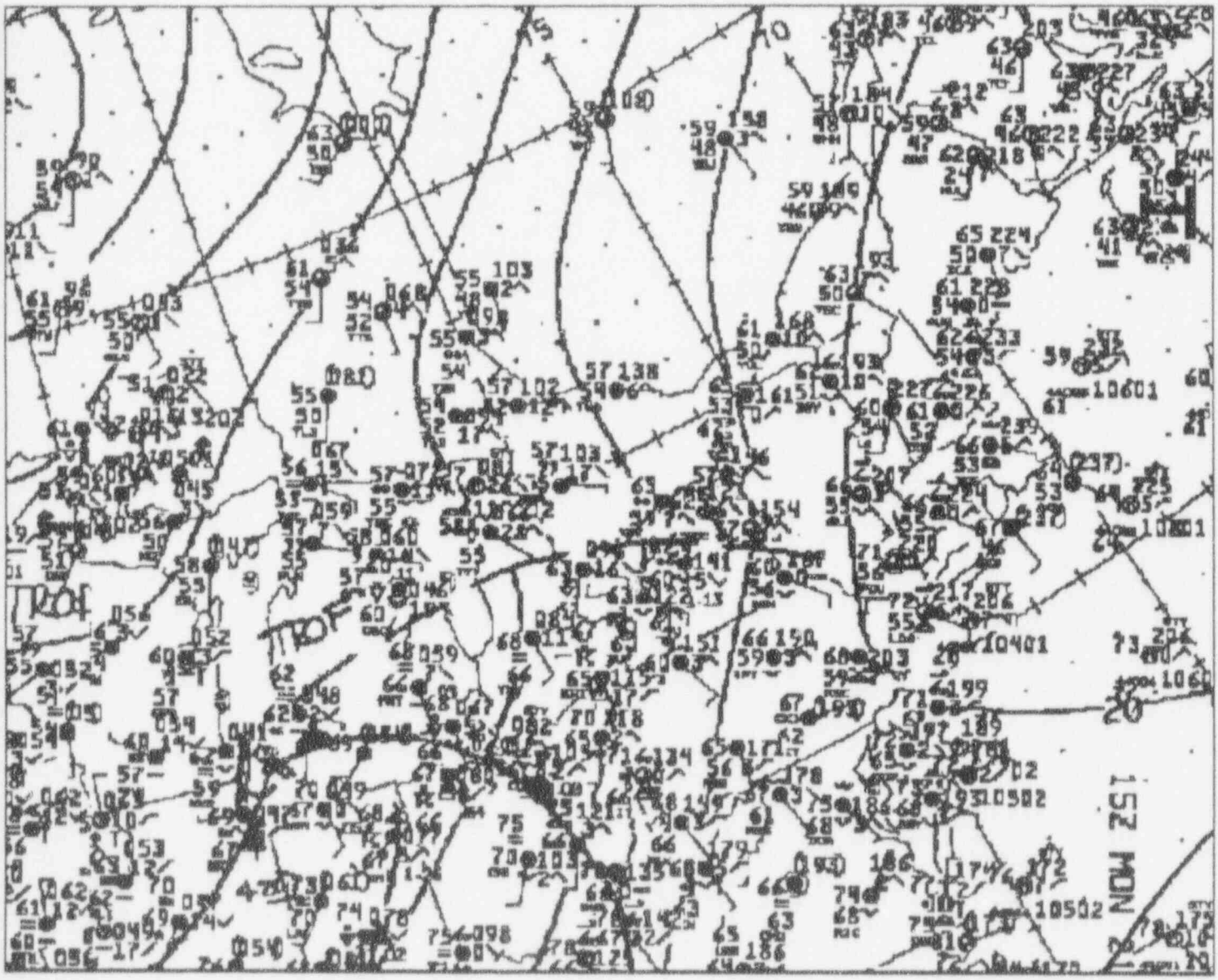
PROG 48HR SUN

11:09 am



SFC ANAL. - NE

. . . 01:00 pm



SFC ANAL. - NE

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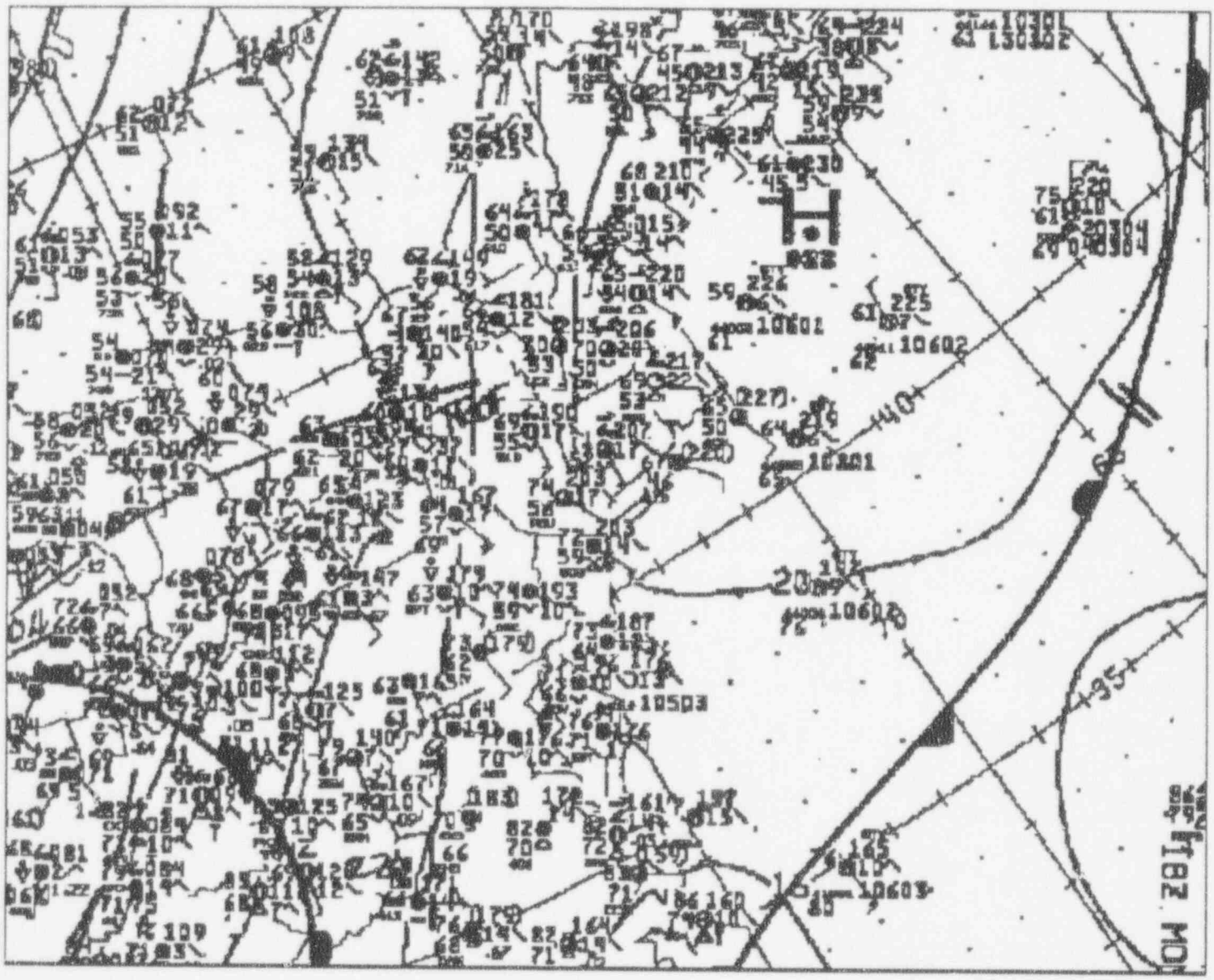

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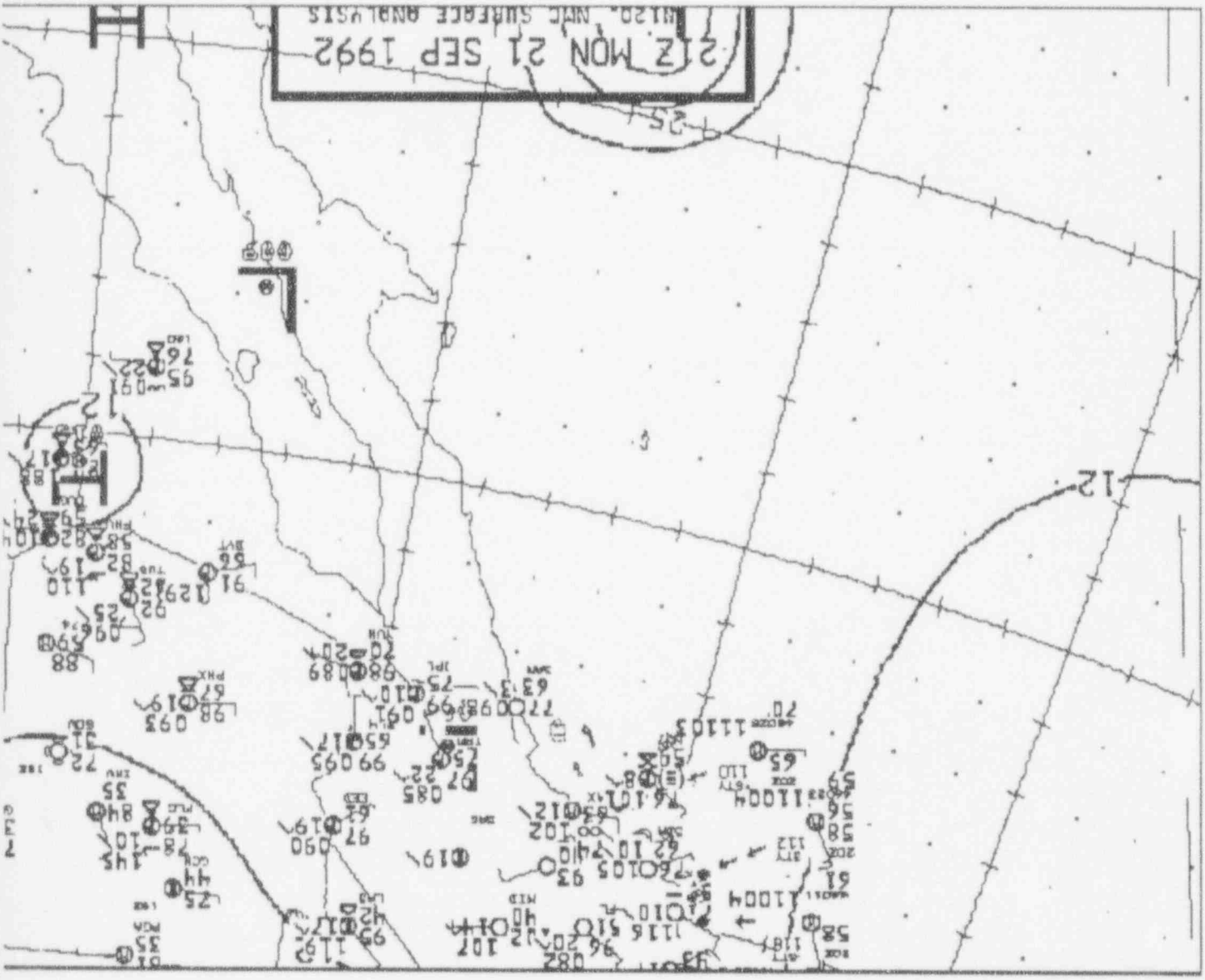
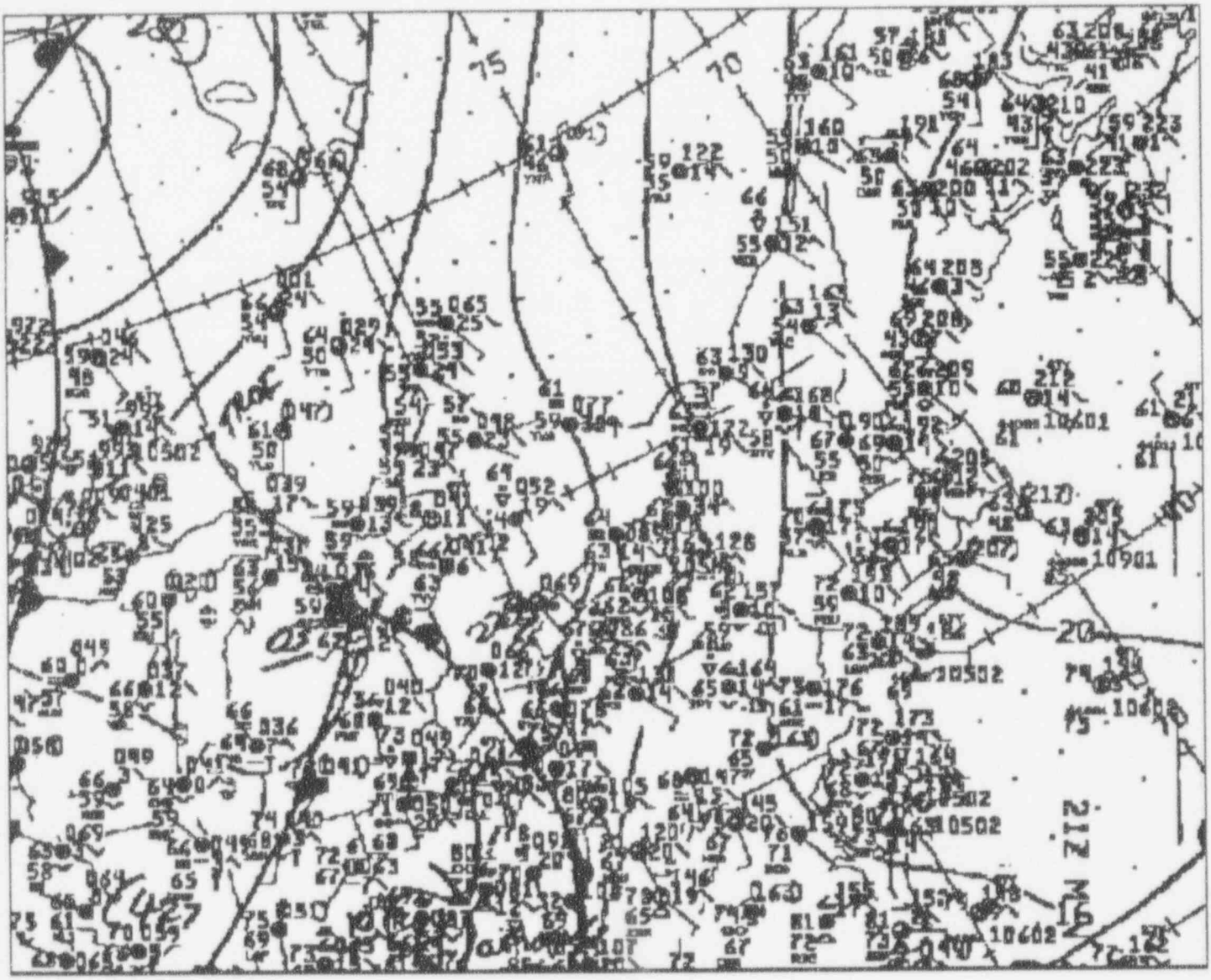
06:52 pm



SFC ANAL. - NE

07:00 pm



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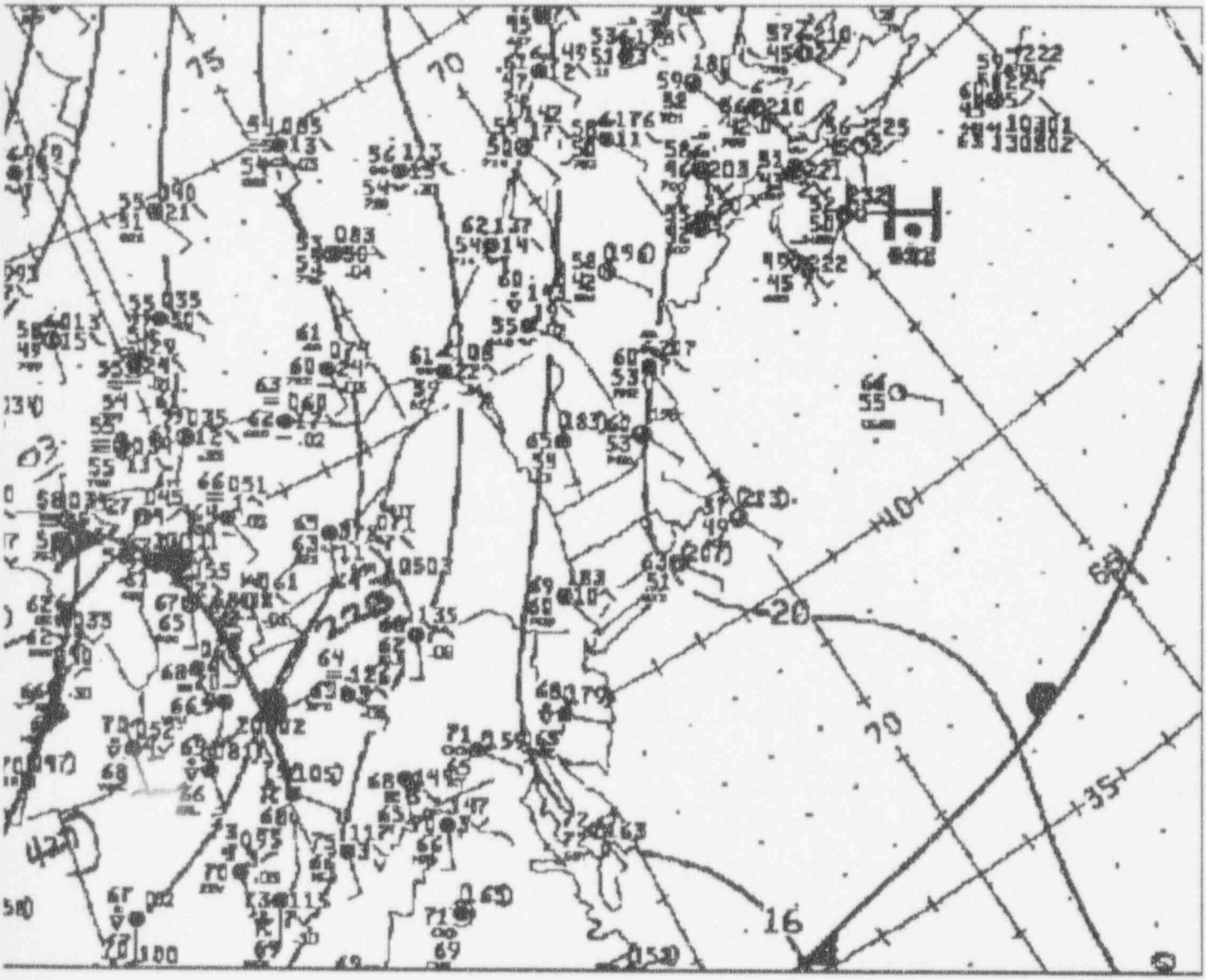

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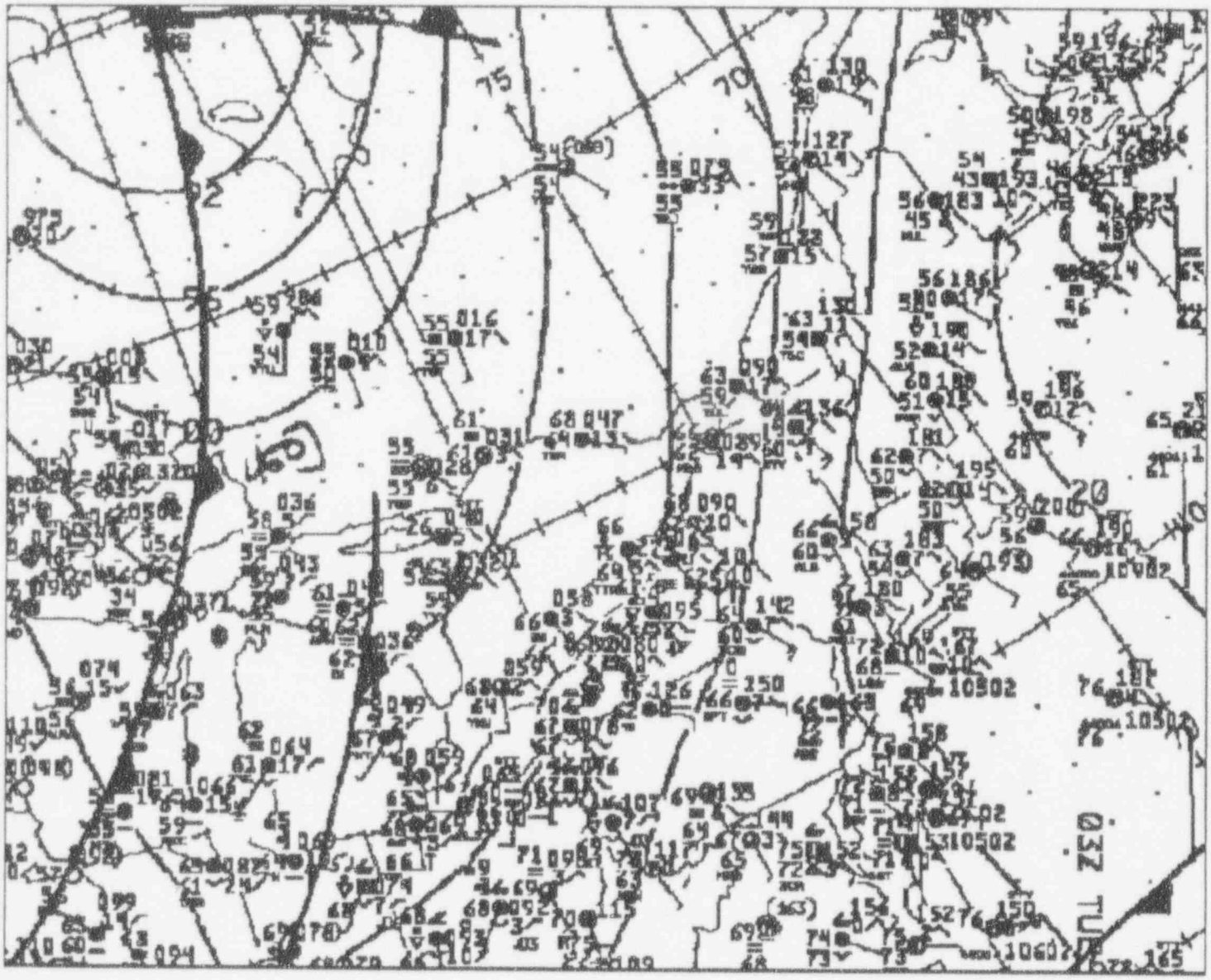
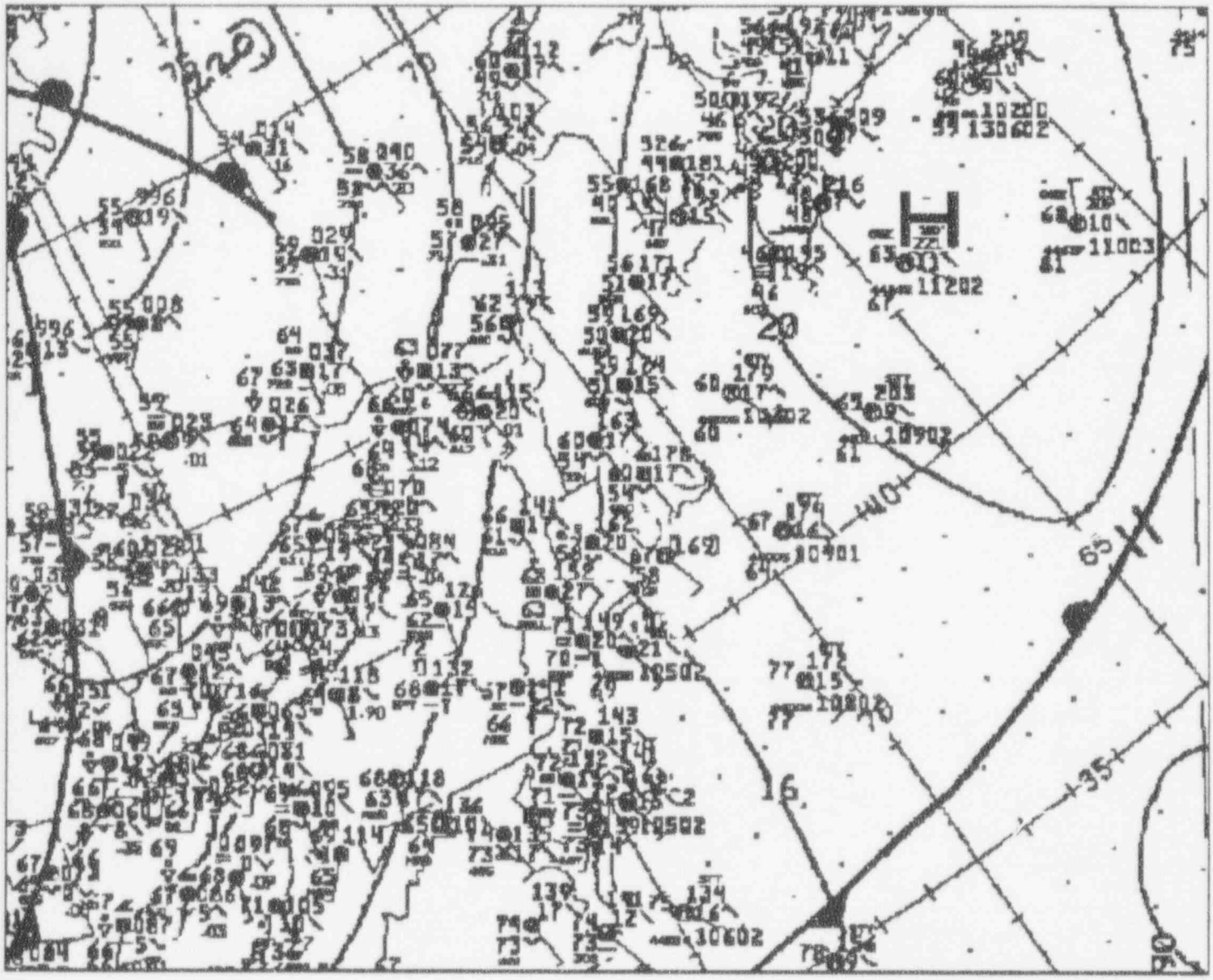


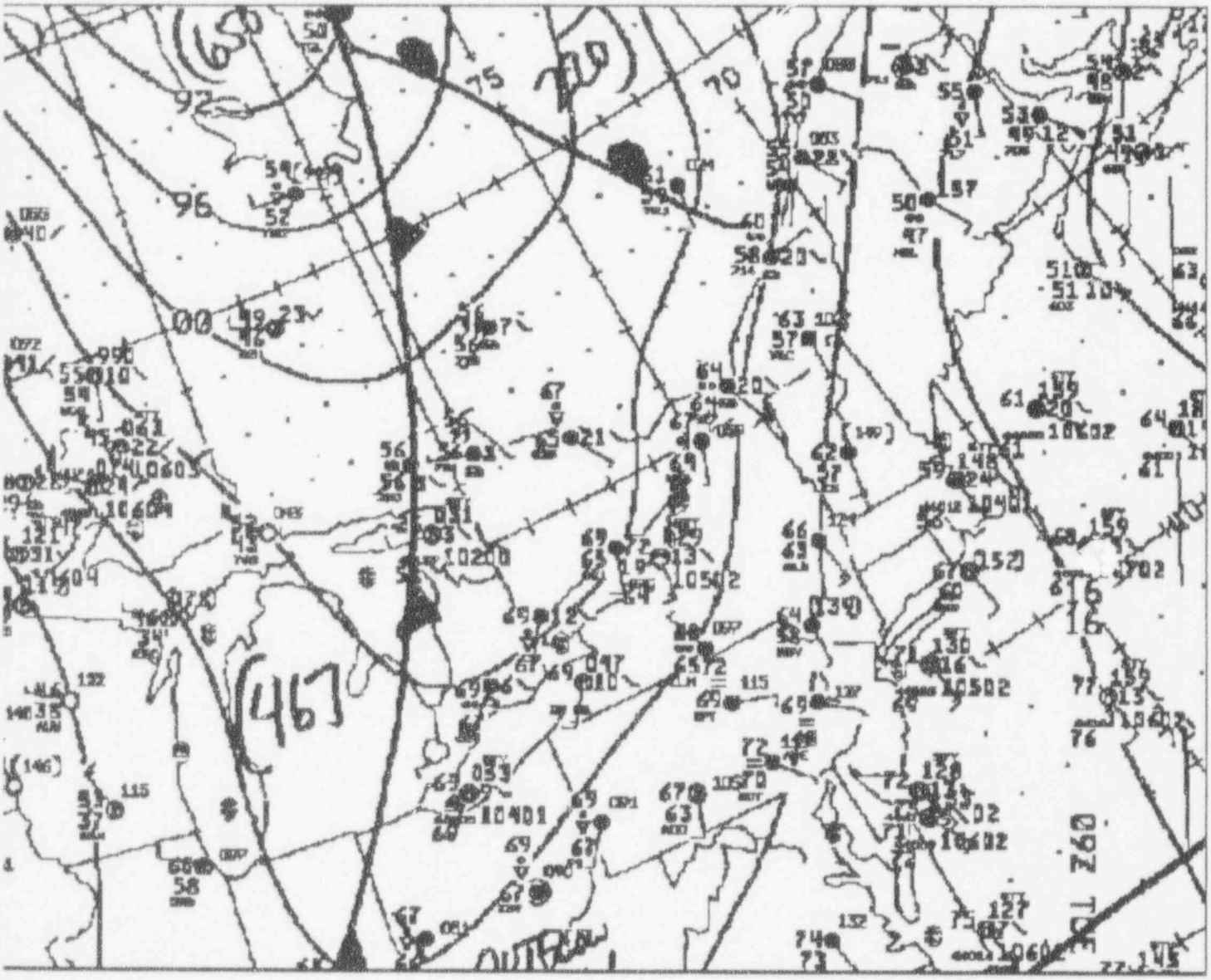
SFC ANAL. - NE

03:49 am



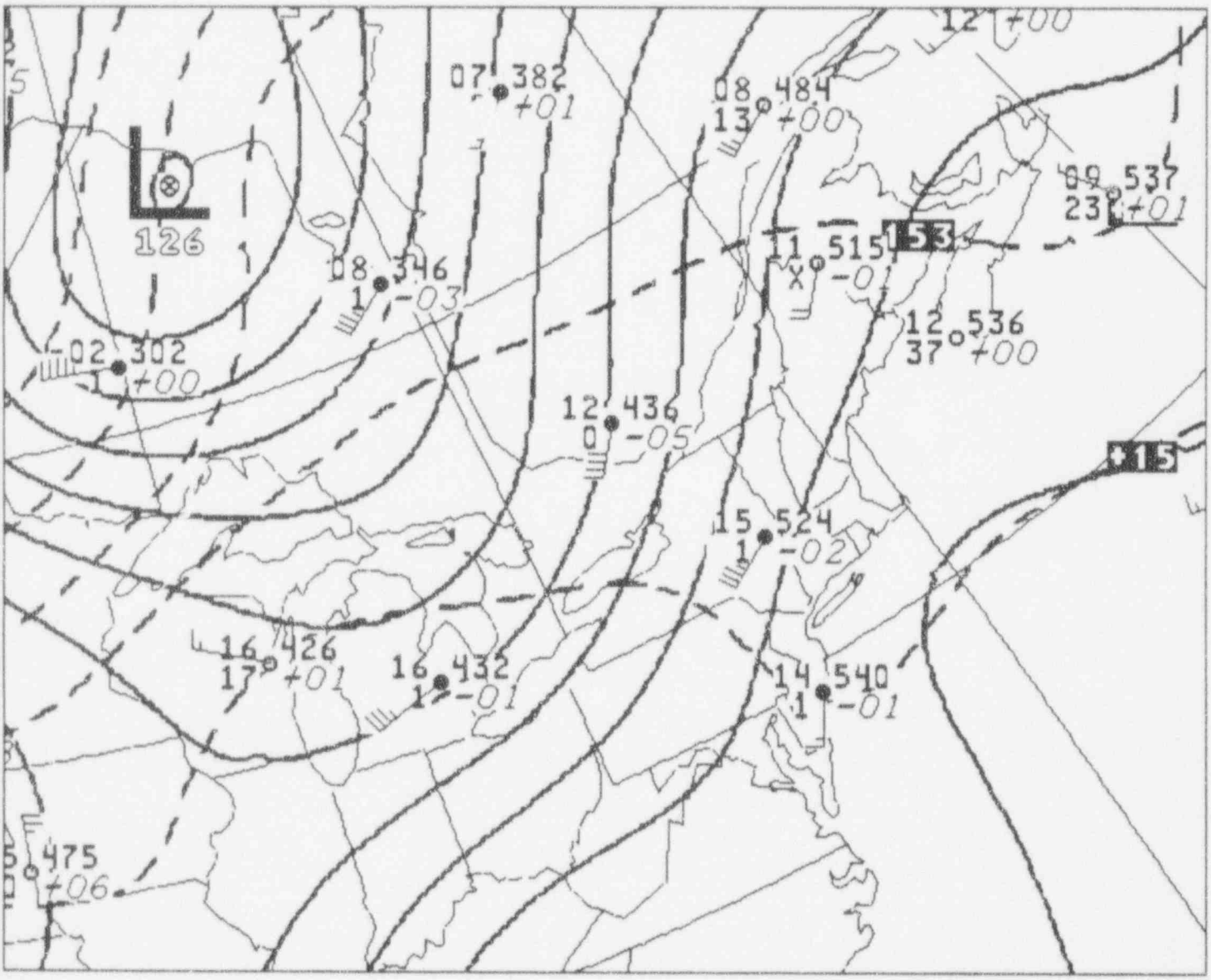
SFC ANAL. - NE

06:34 am



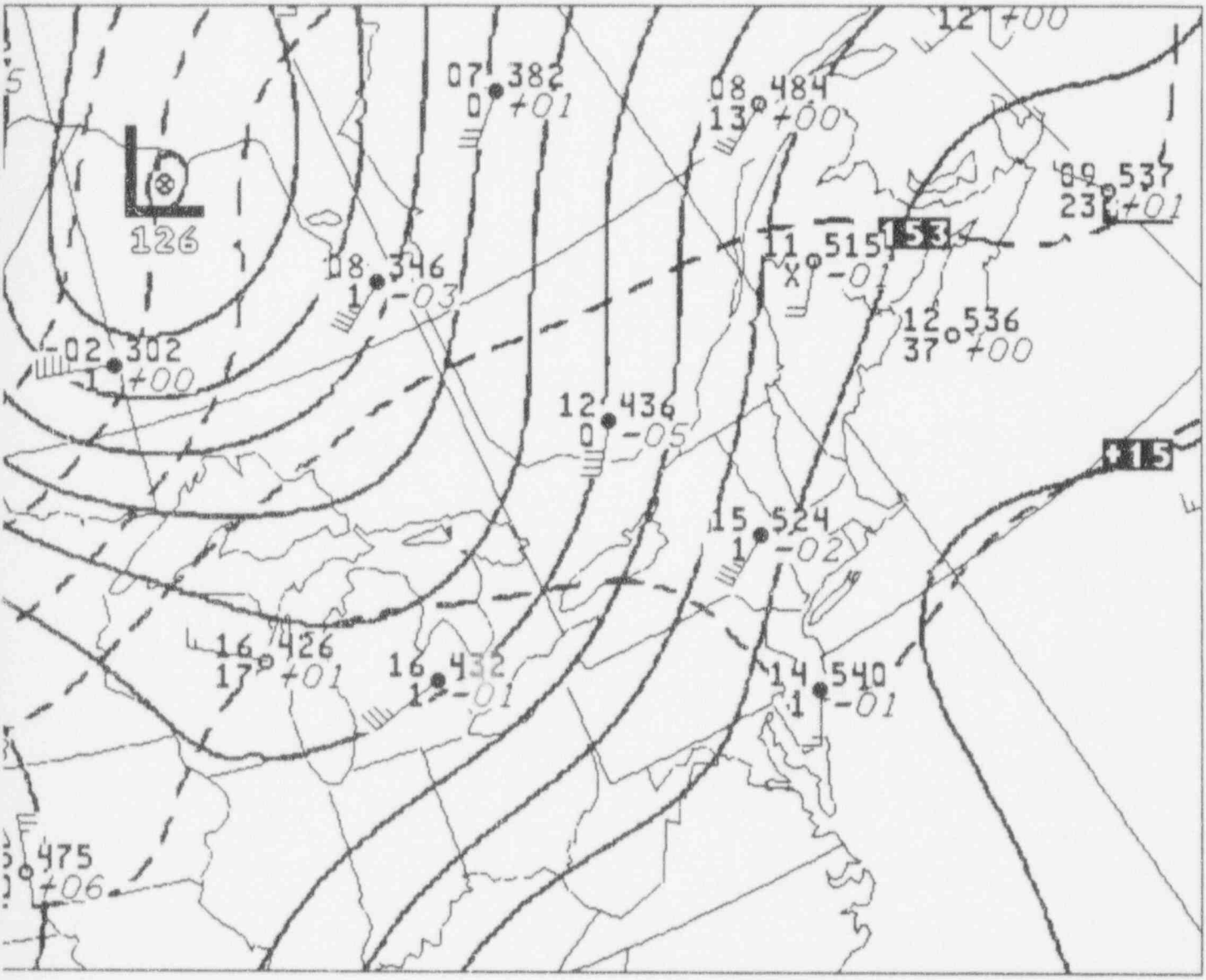
850MB ANAL. - NE

07:01 am



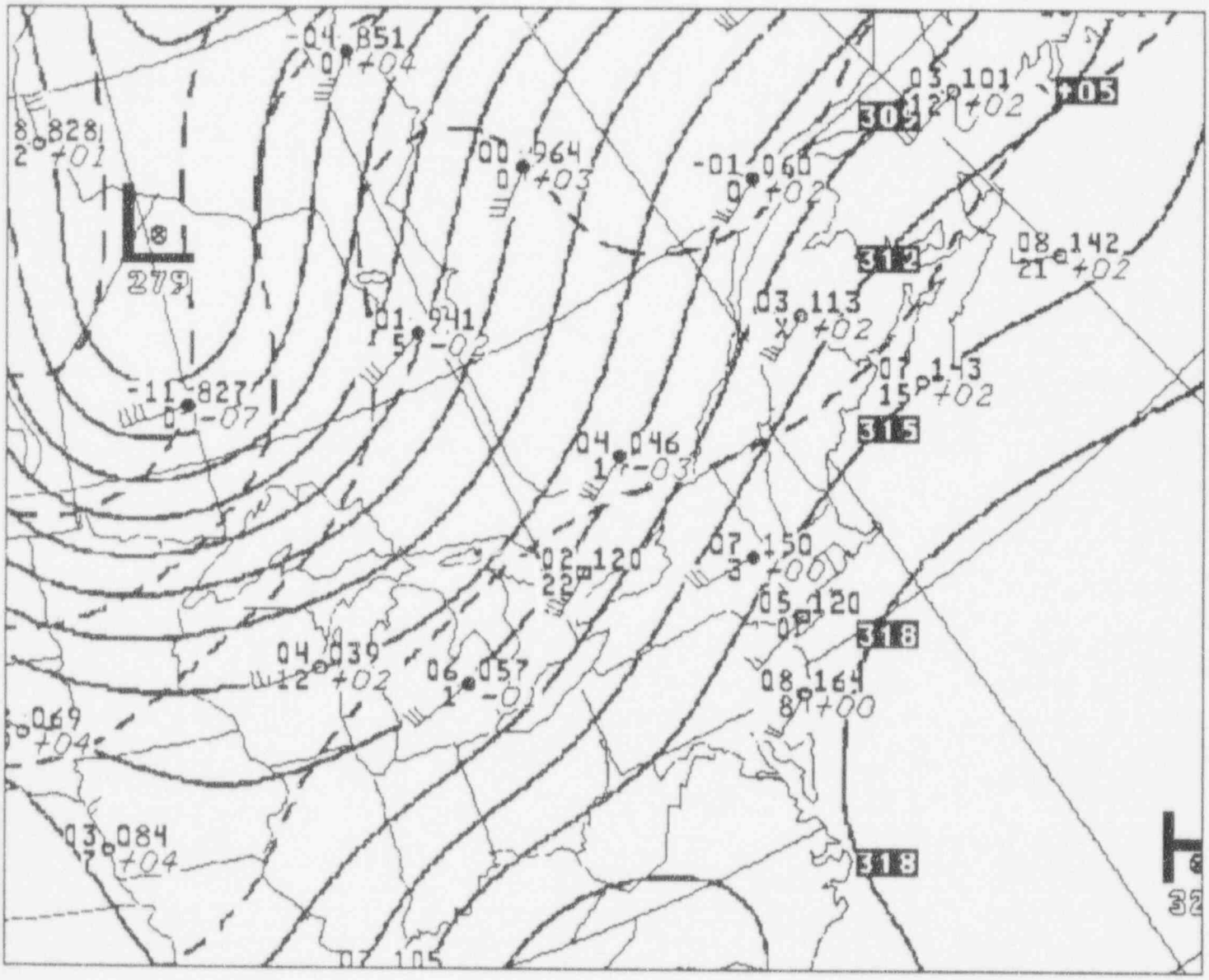
850MB ANAL. - NE

10:27 pm



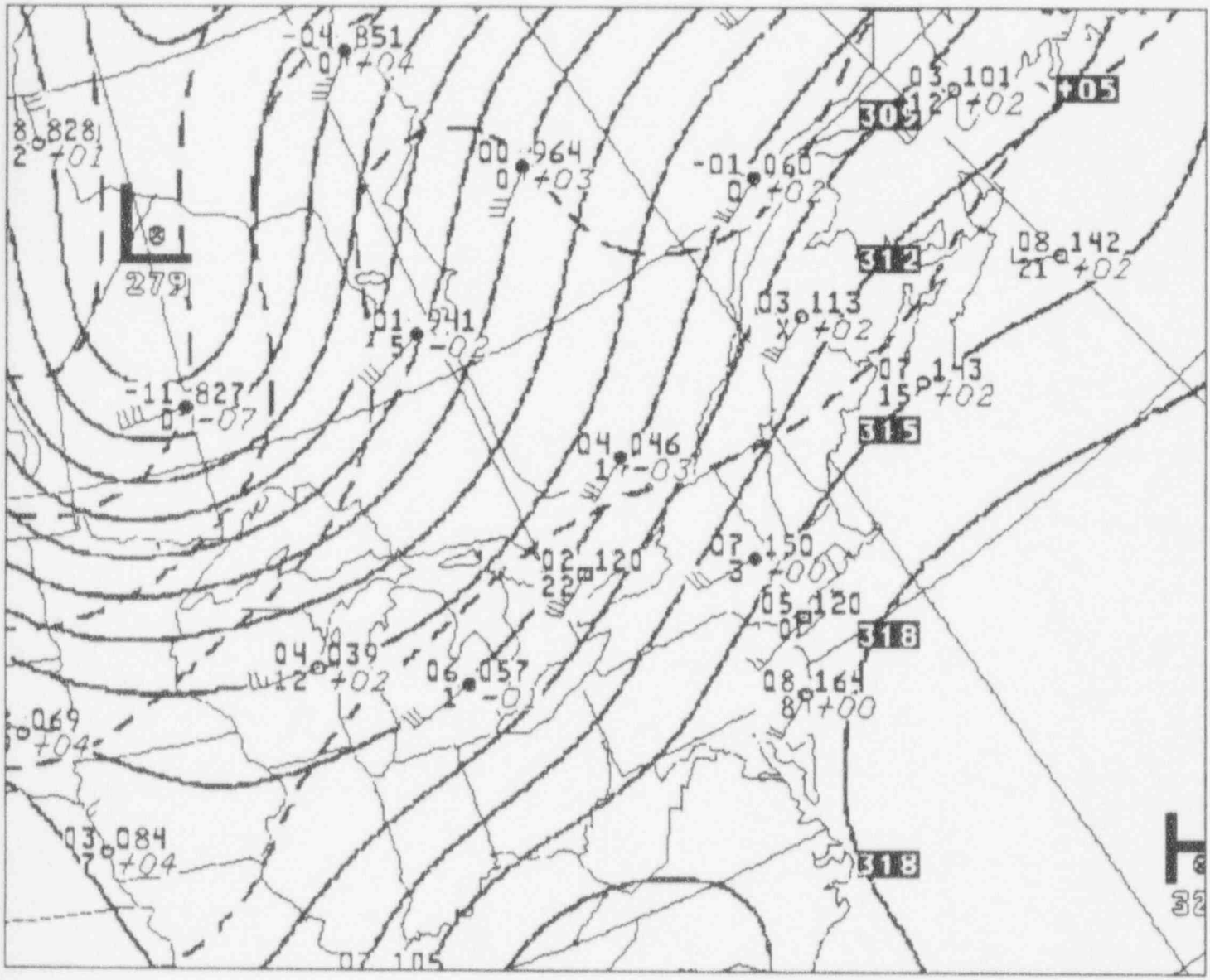
700MB ANAL. - NE

06:52 am



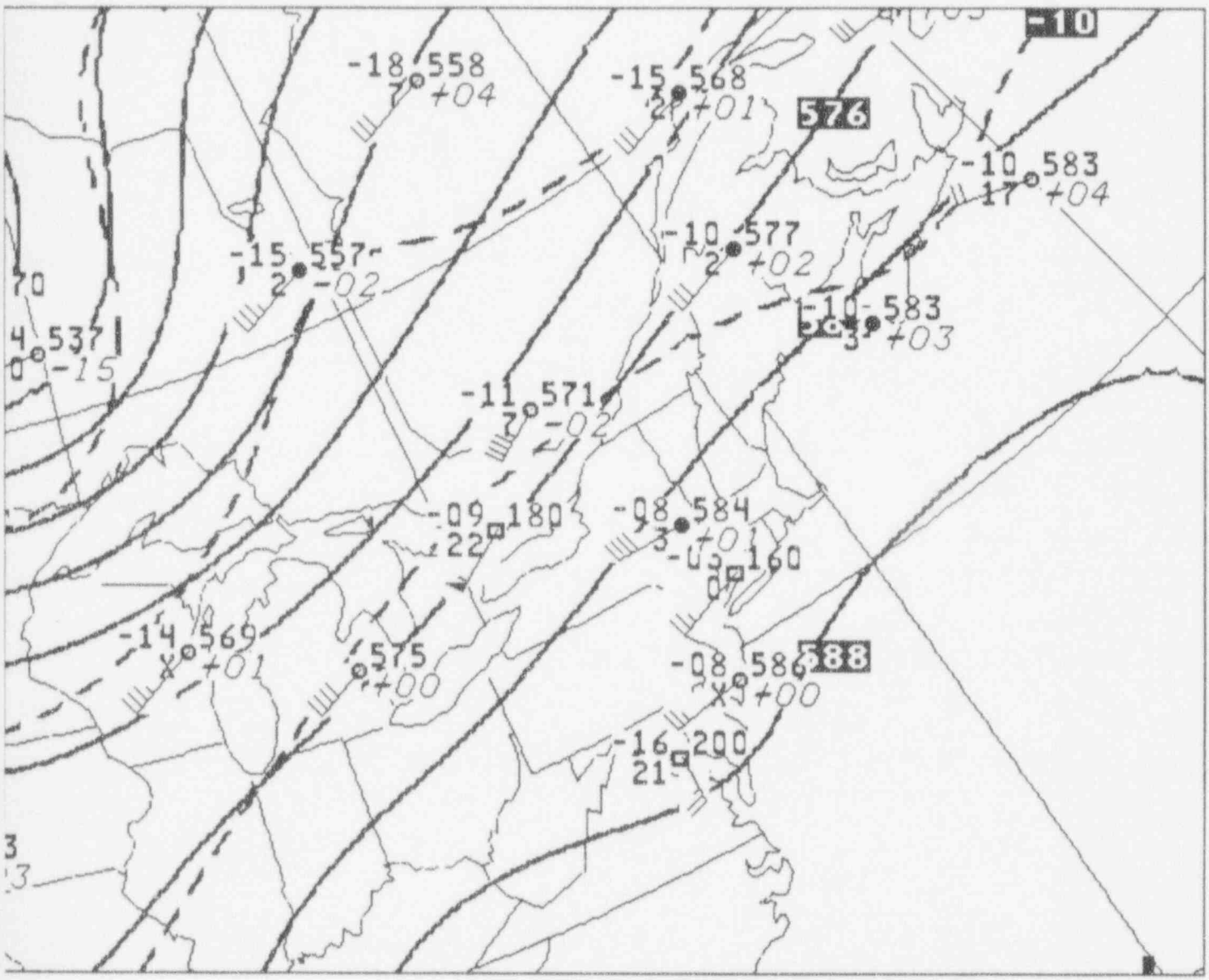
700MB ANAL. - NE

10:32 pm



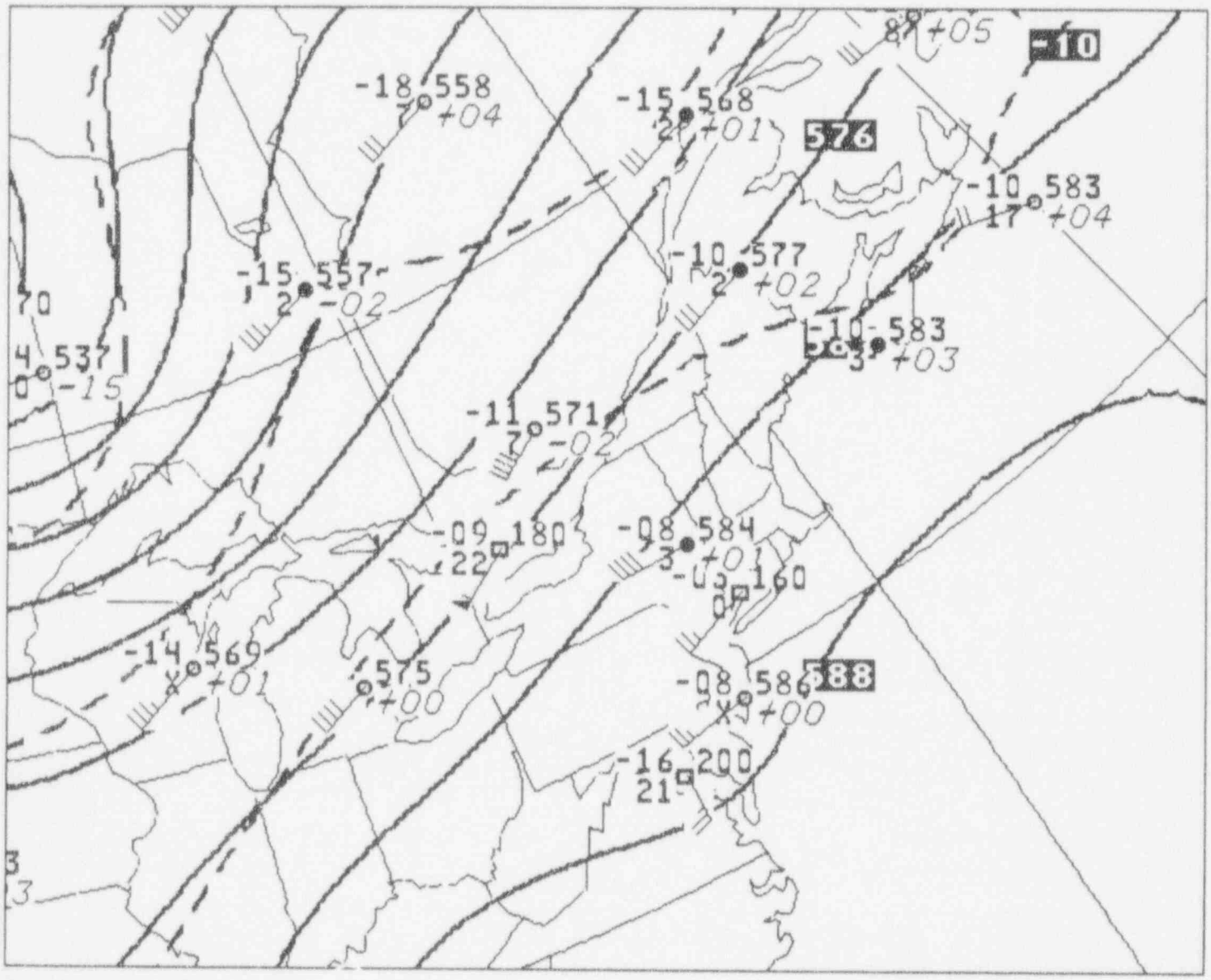
500MB ANAL. - NE

10:36 pm



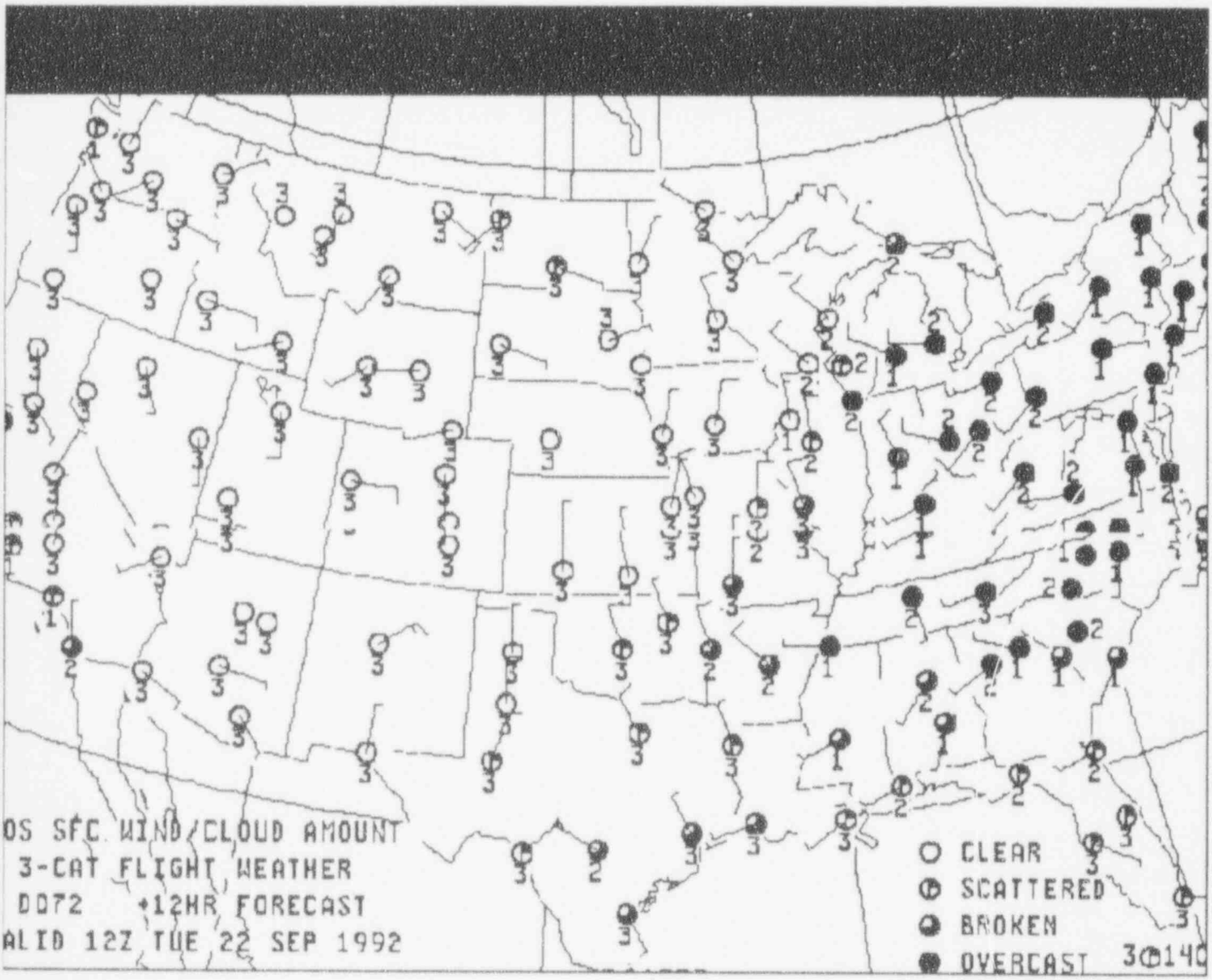
500MB ANAL. - NE

06:43 am



FCST-12HR WIND/CLD

00:42 am



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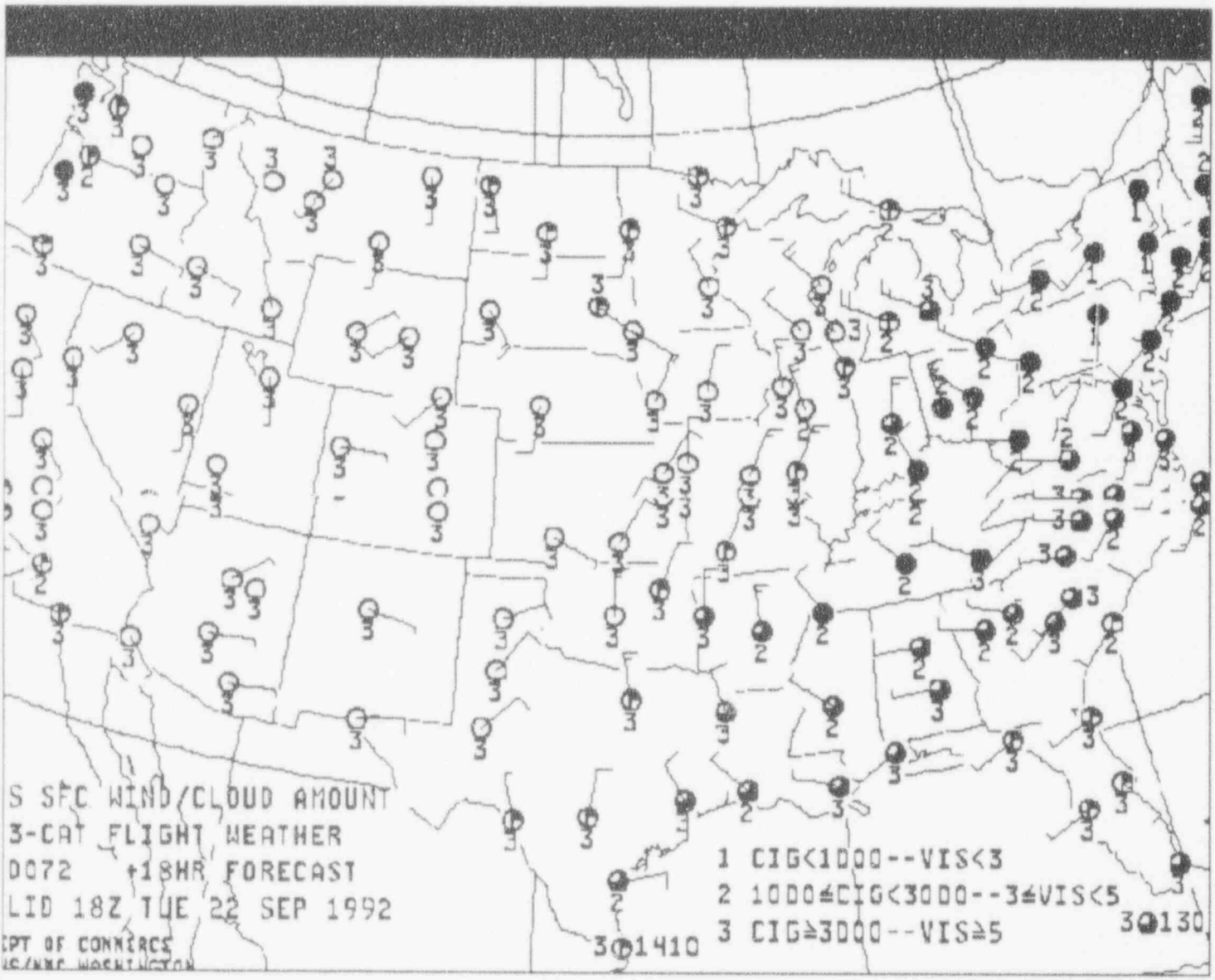
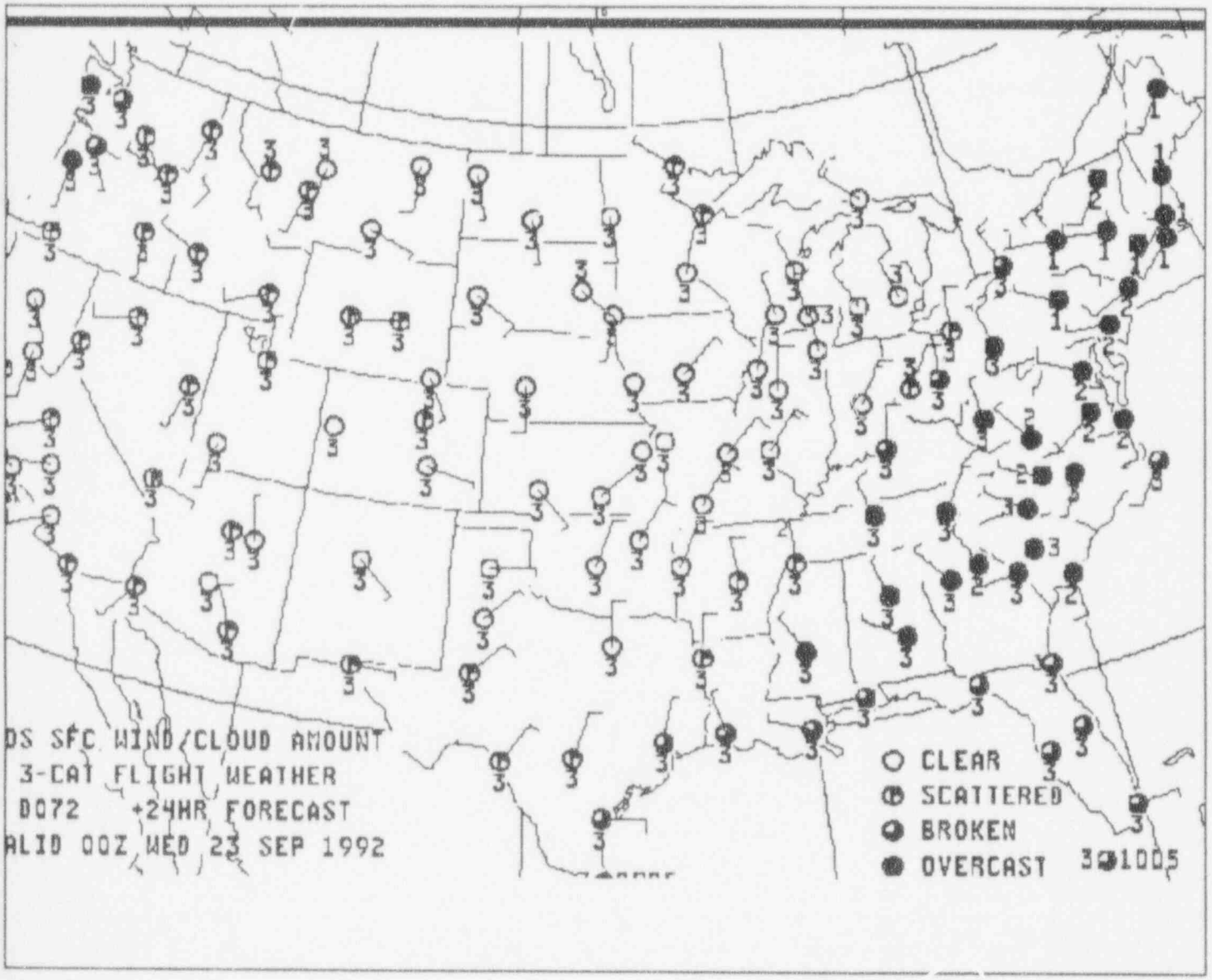
00:43 am



FCST-24HR WIND/CLD

00:43 am



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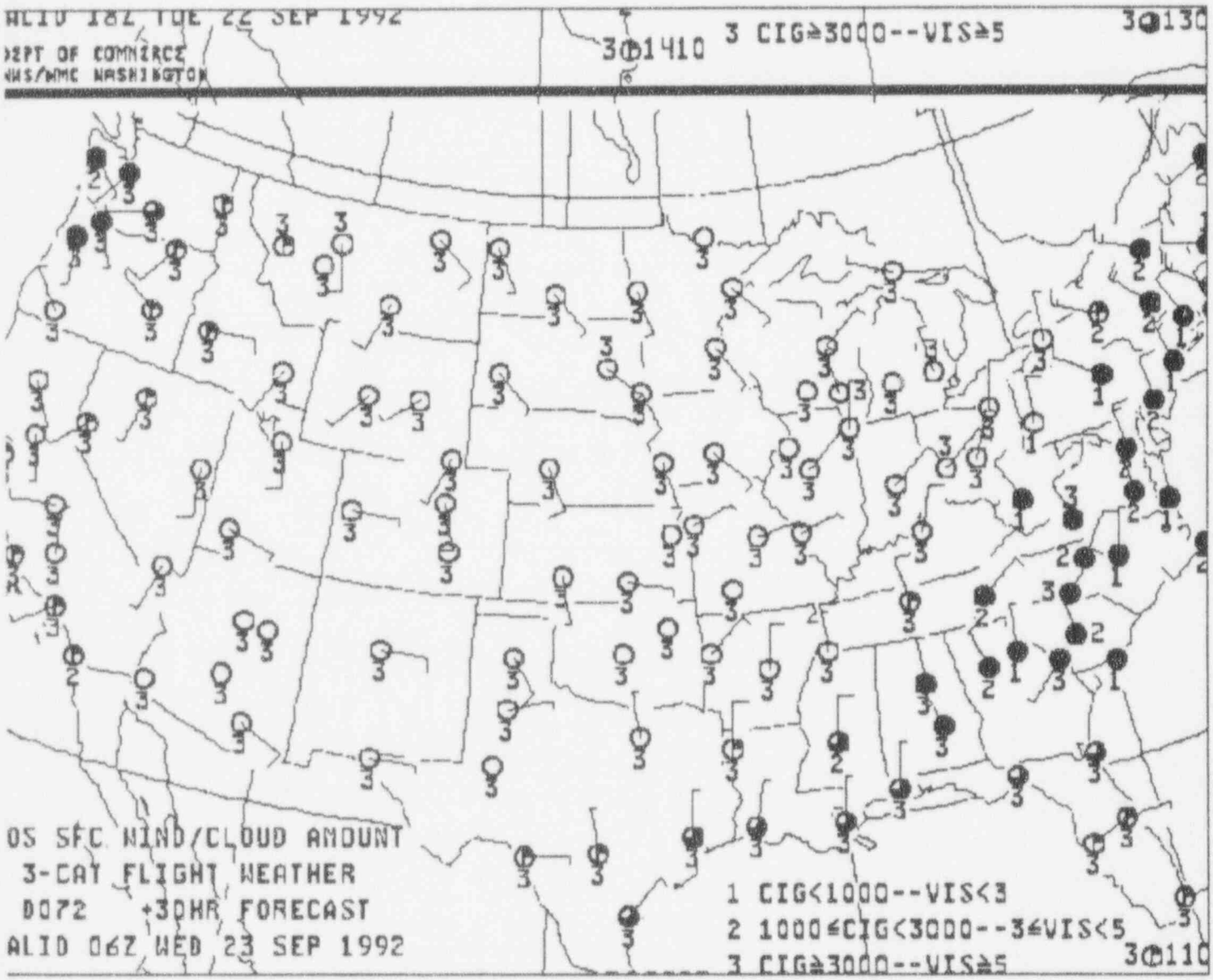
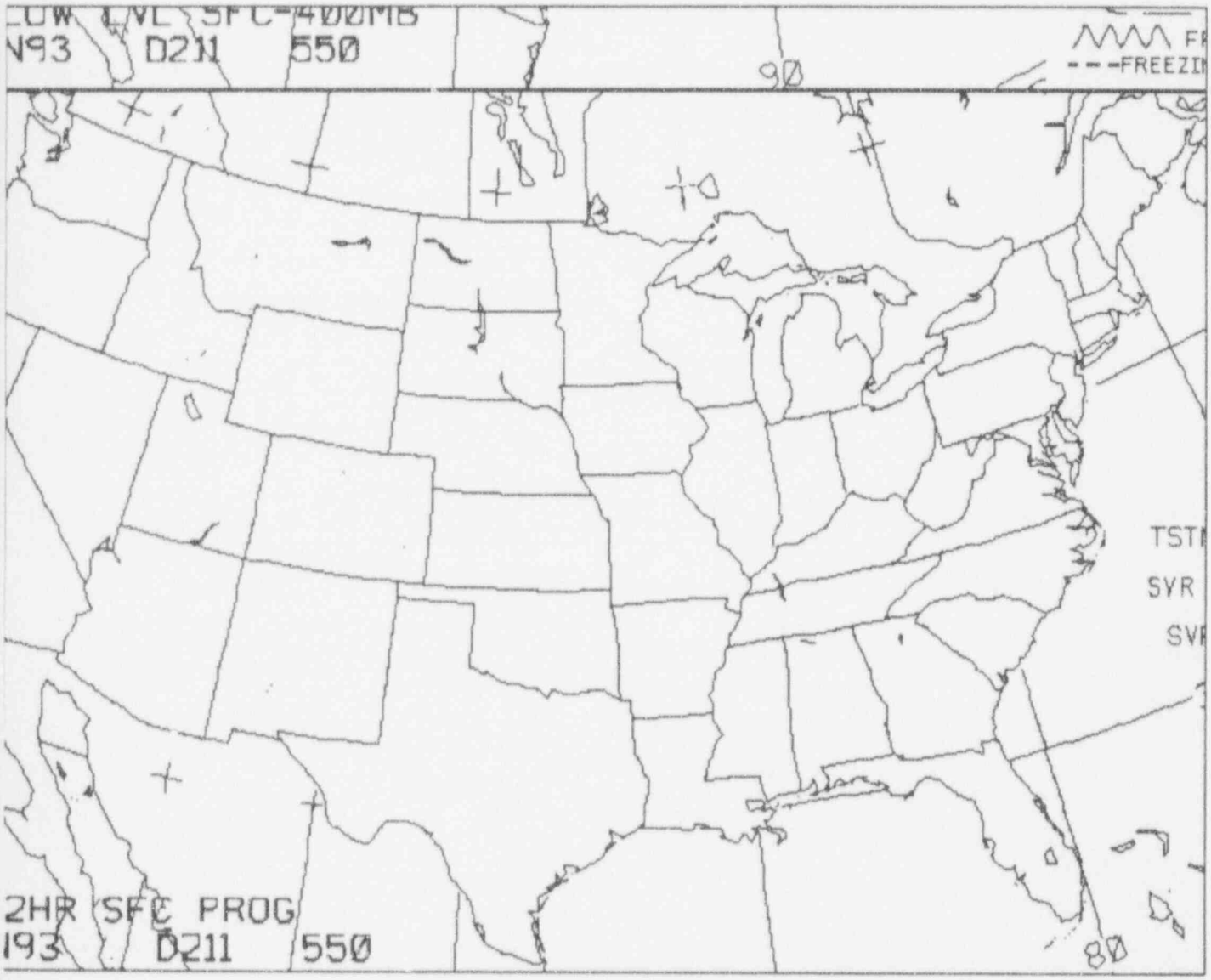
00:43 am



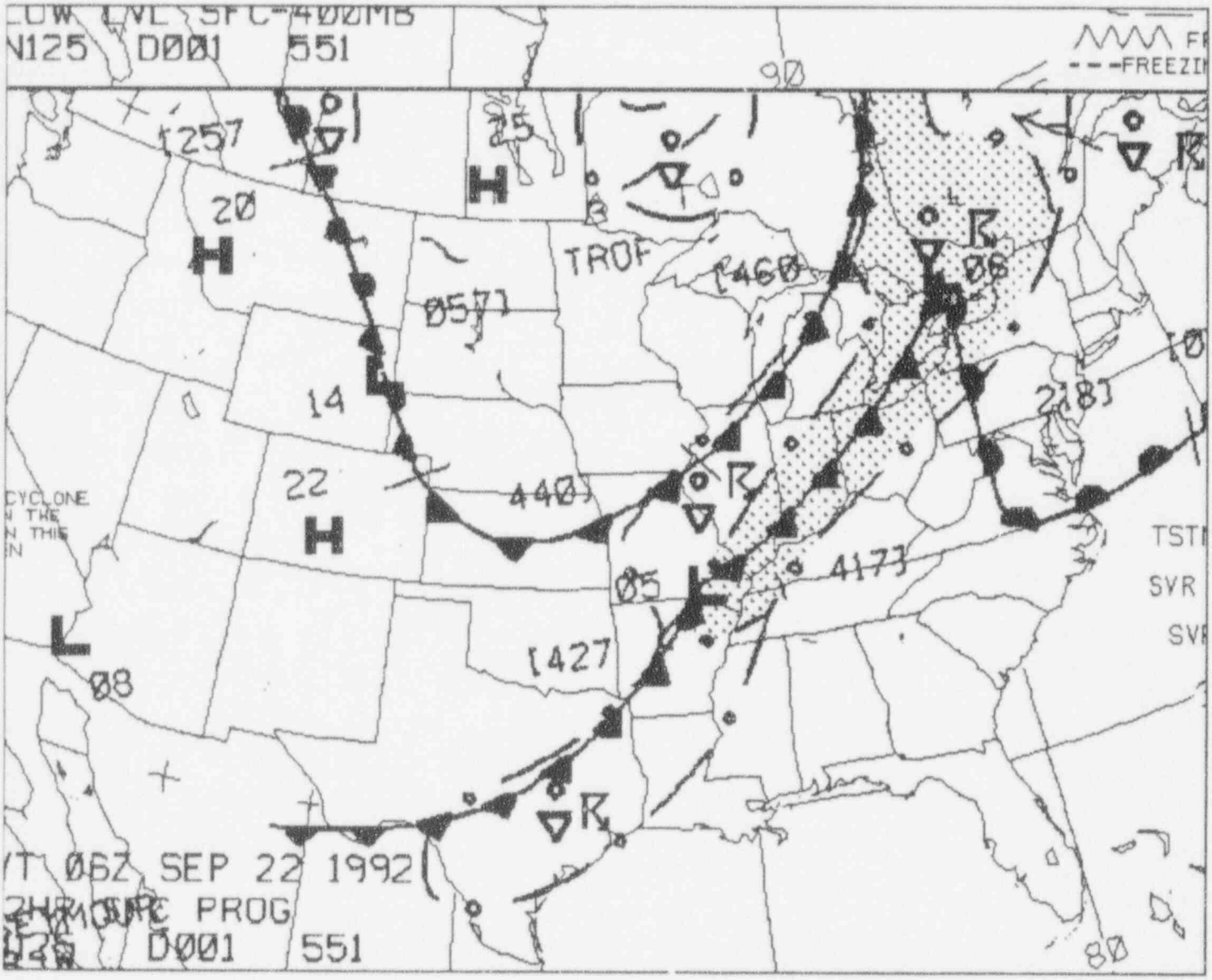
PROG 12HR SFC

03:13 pm



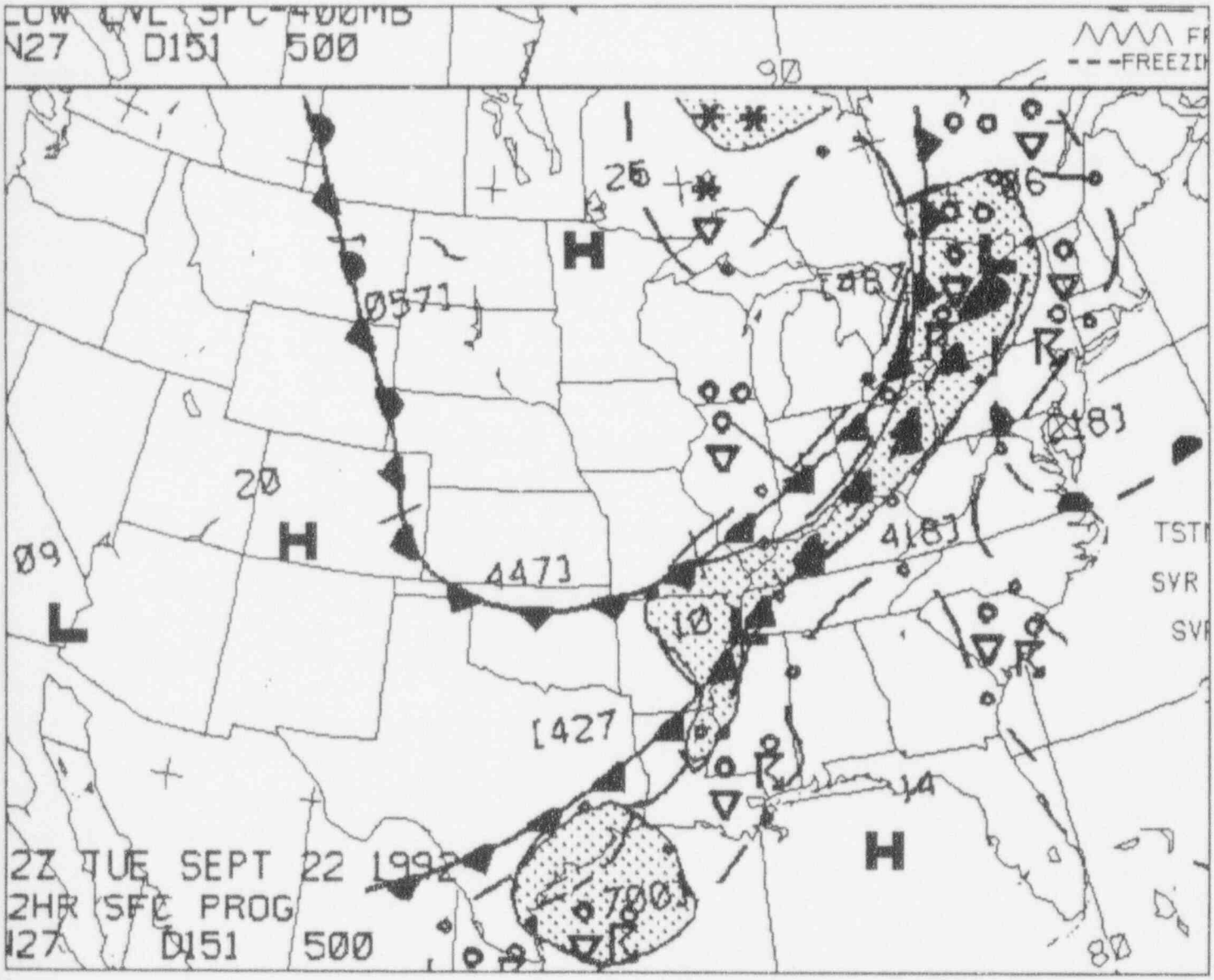
PROG 12HR SFC

08:01 pm



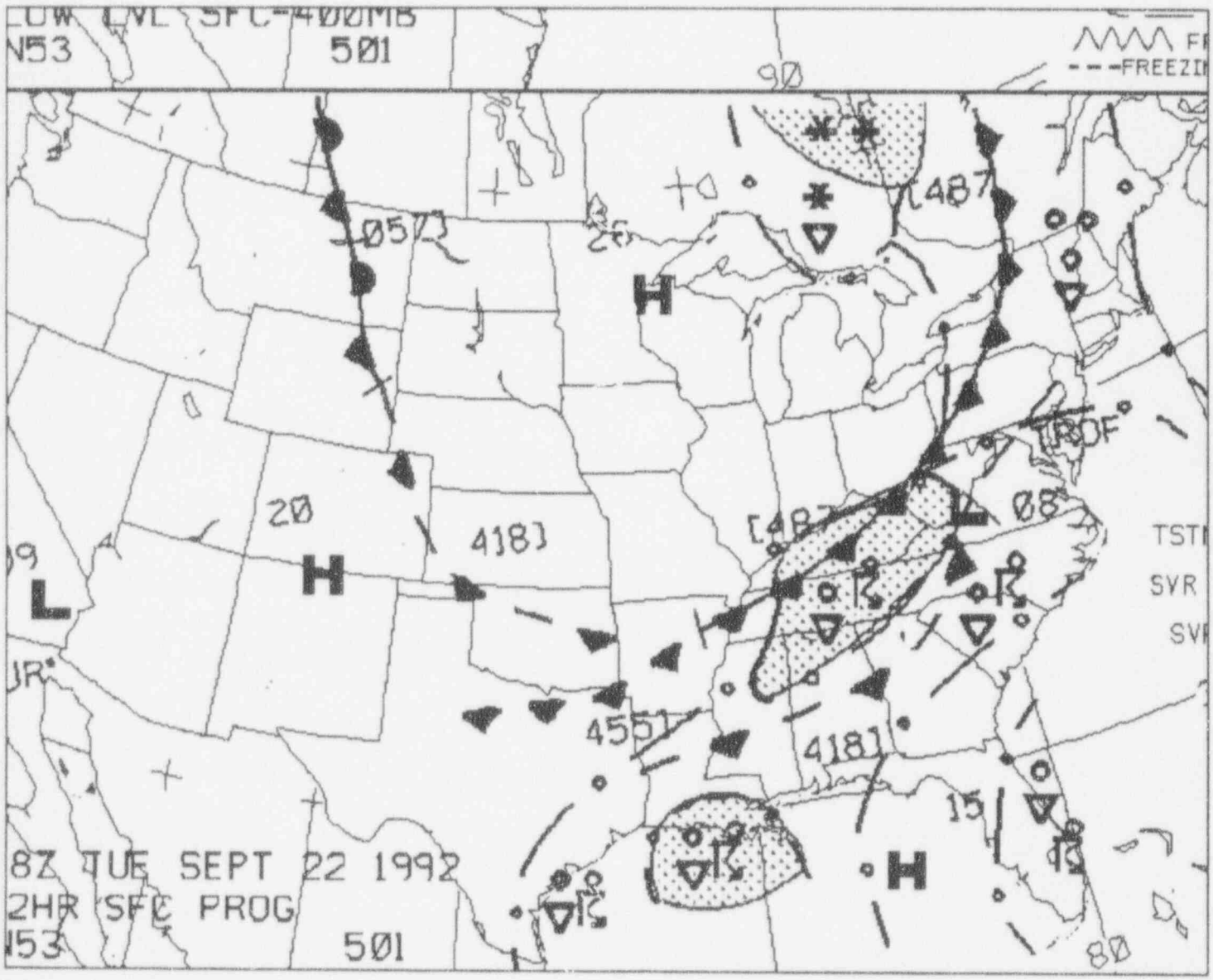
PROG 12HR SFC

01:45 am



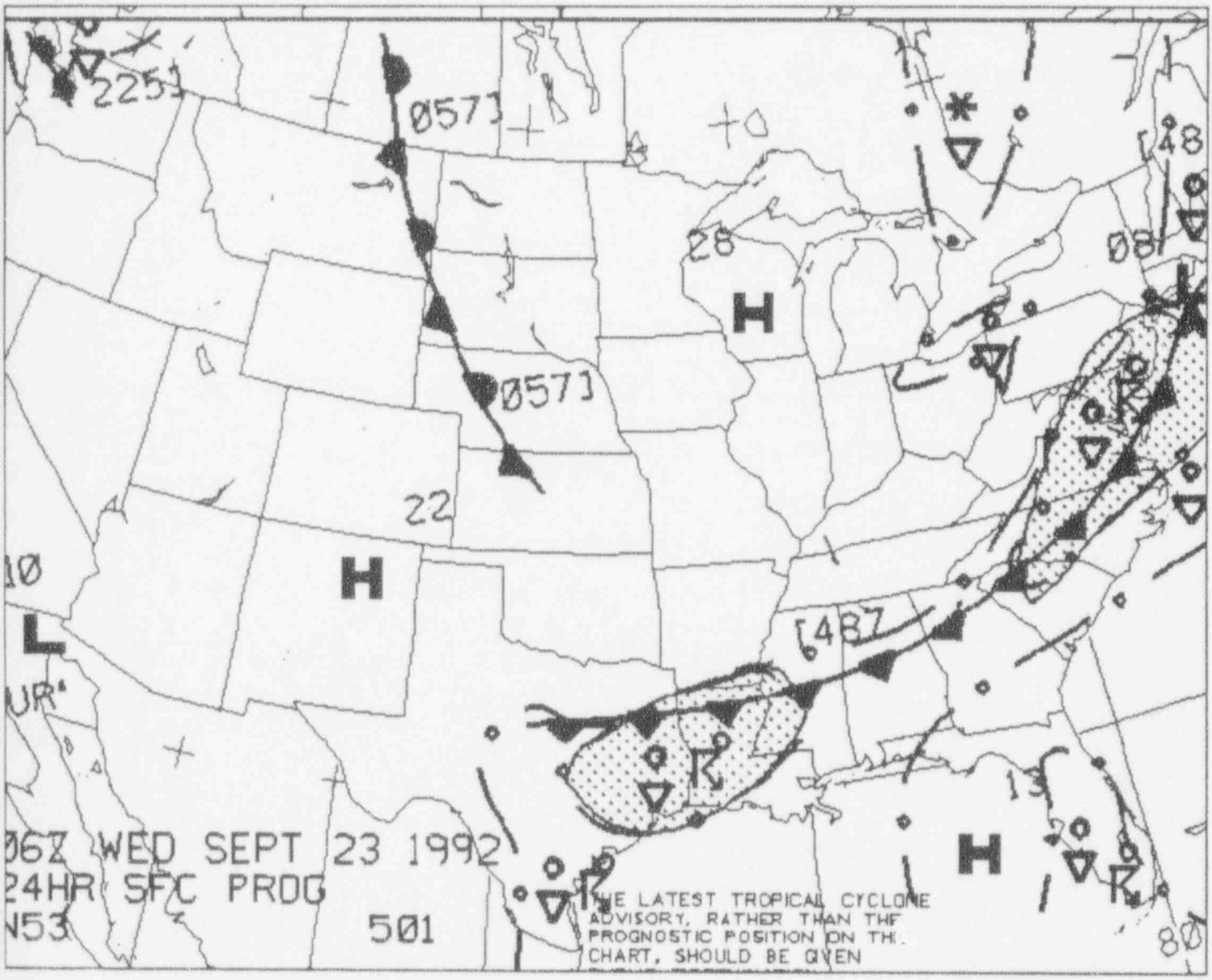
PROG 12HR SFC

06:05 am



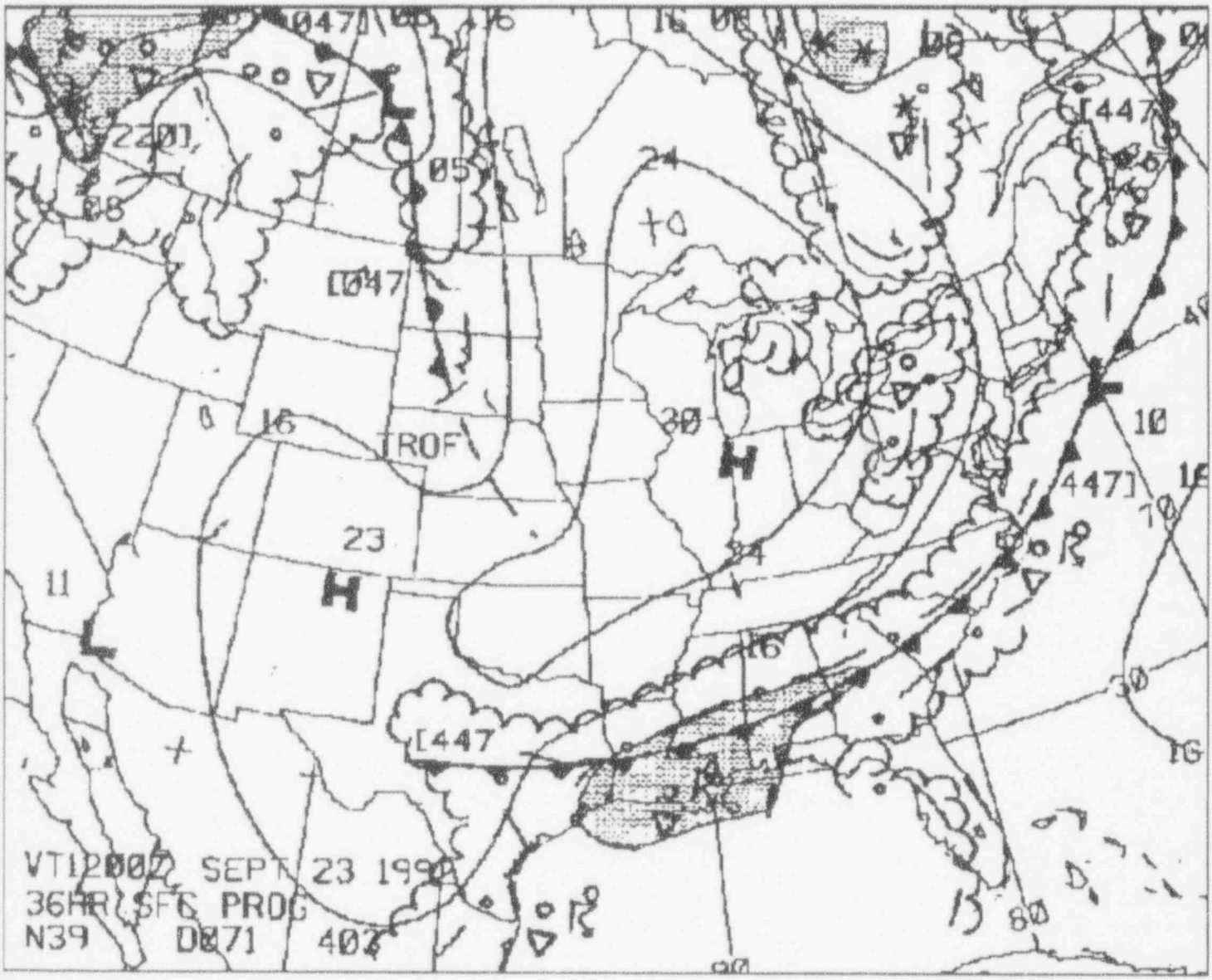
PROG 24HR SFC

06:05 am



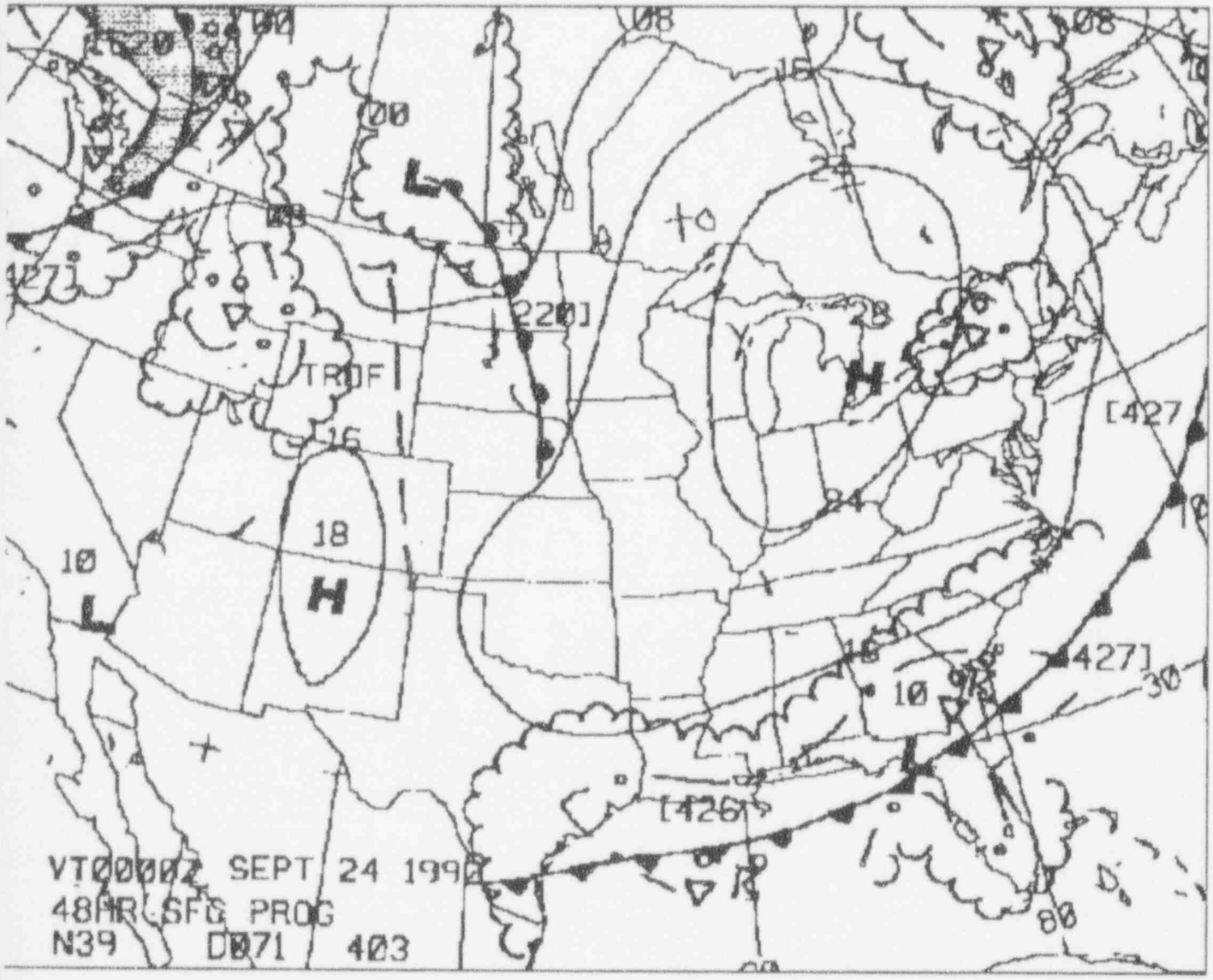
PROG 36HR SFC

03:02 am



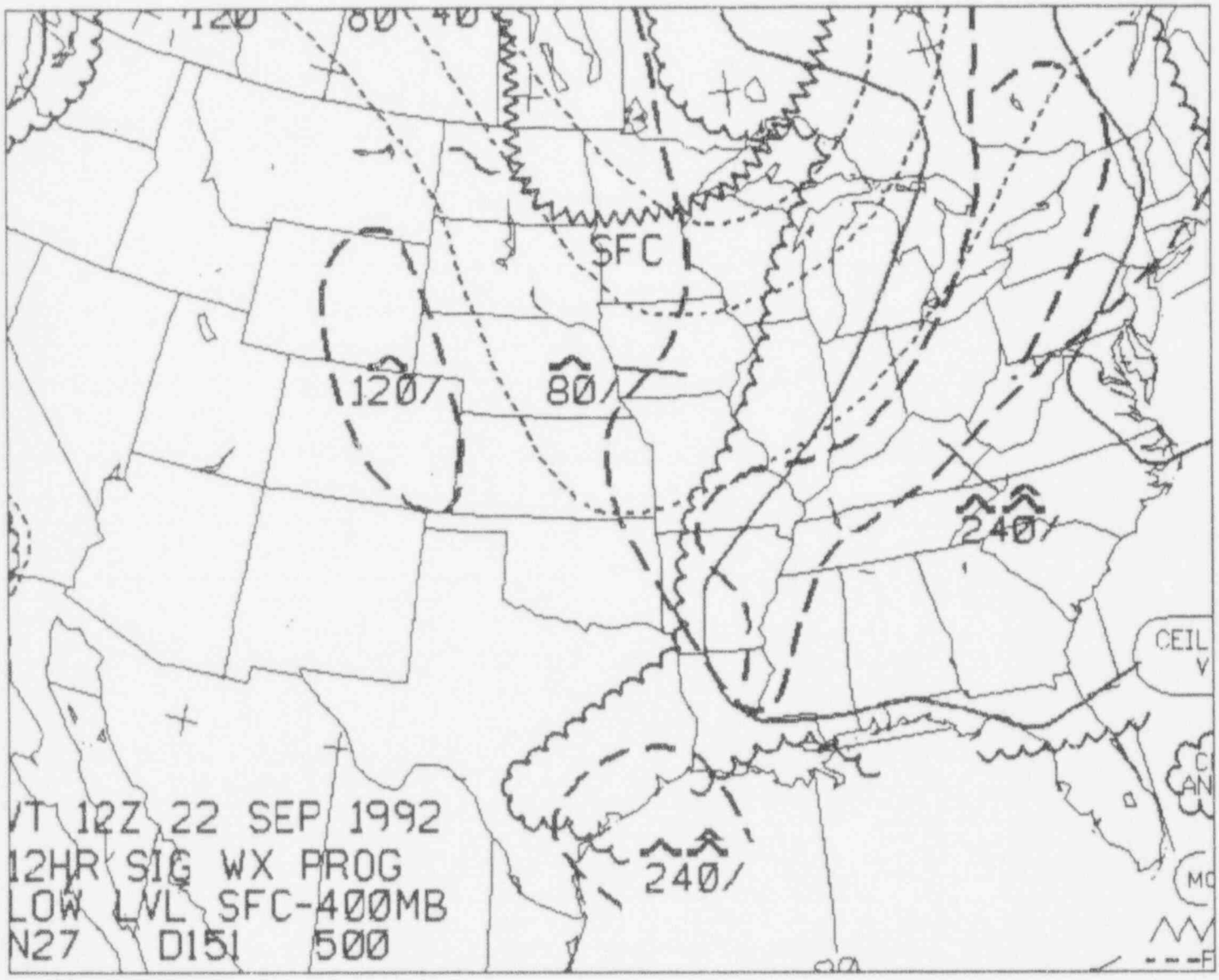
PROG 48HR SFC

03:02 am



LO LVL SIG WX 12HR

01:45 am



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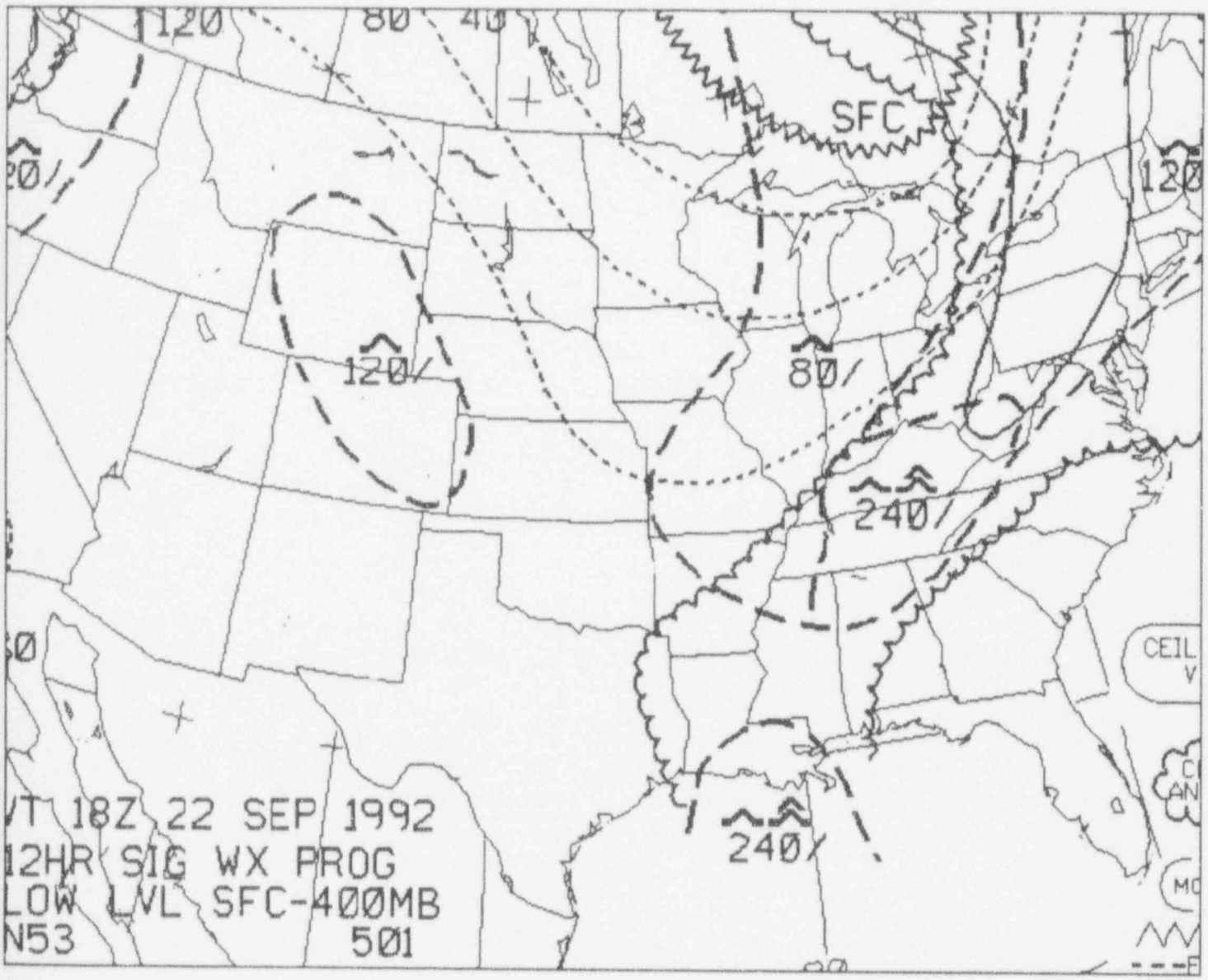

PROG 48HR SFC

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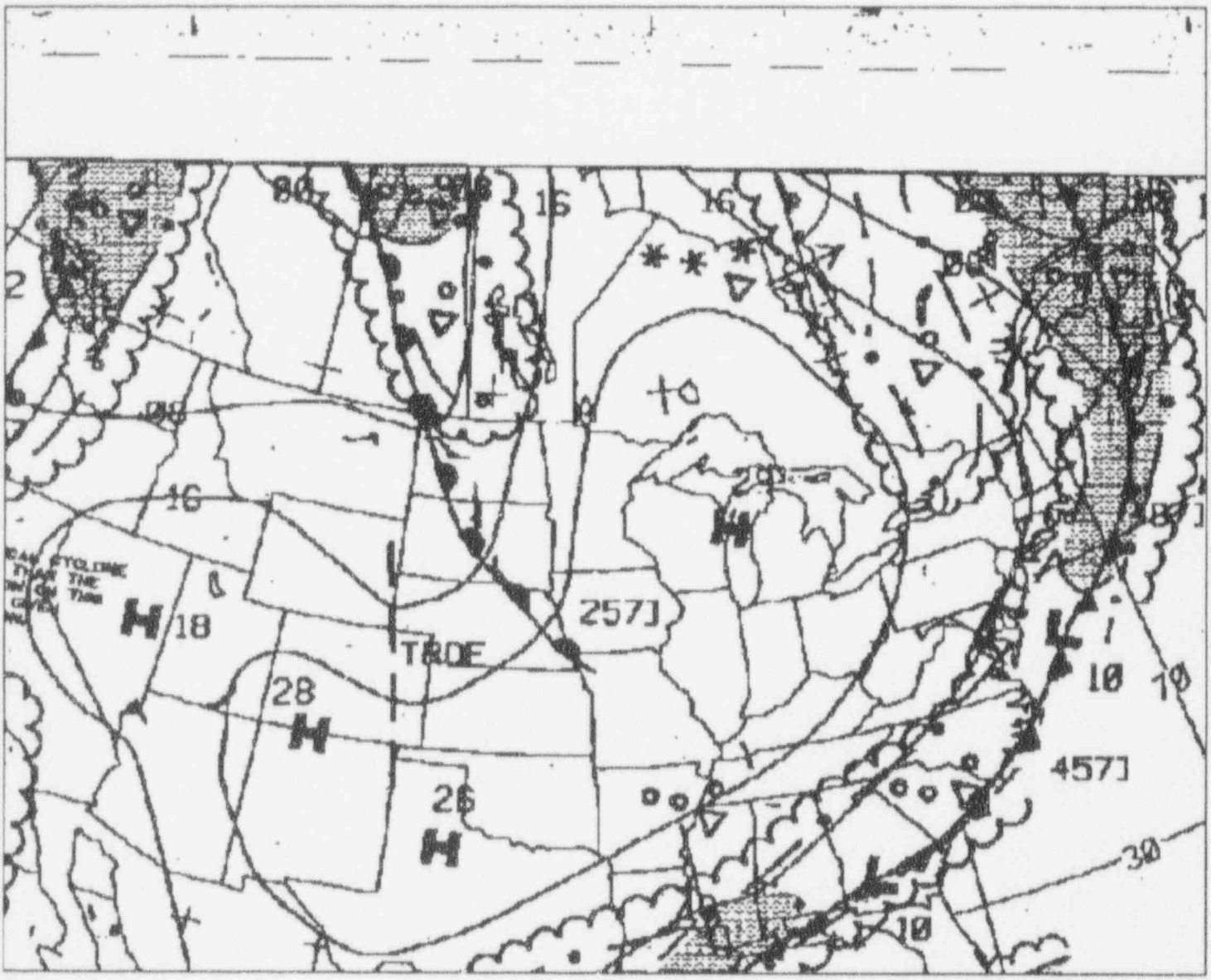
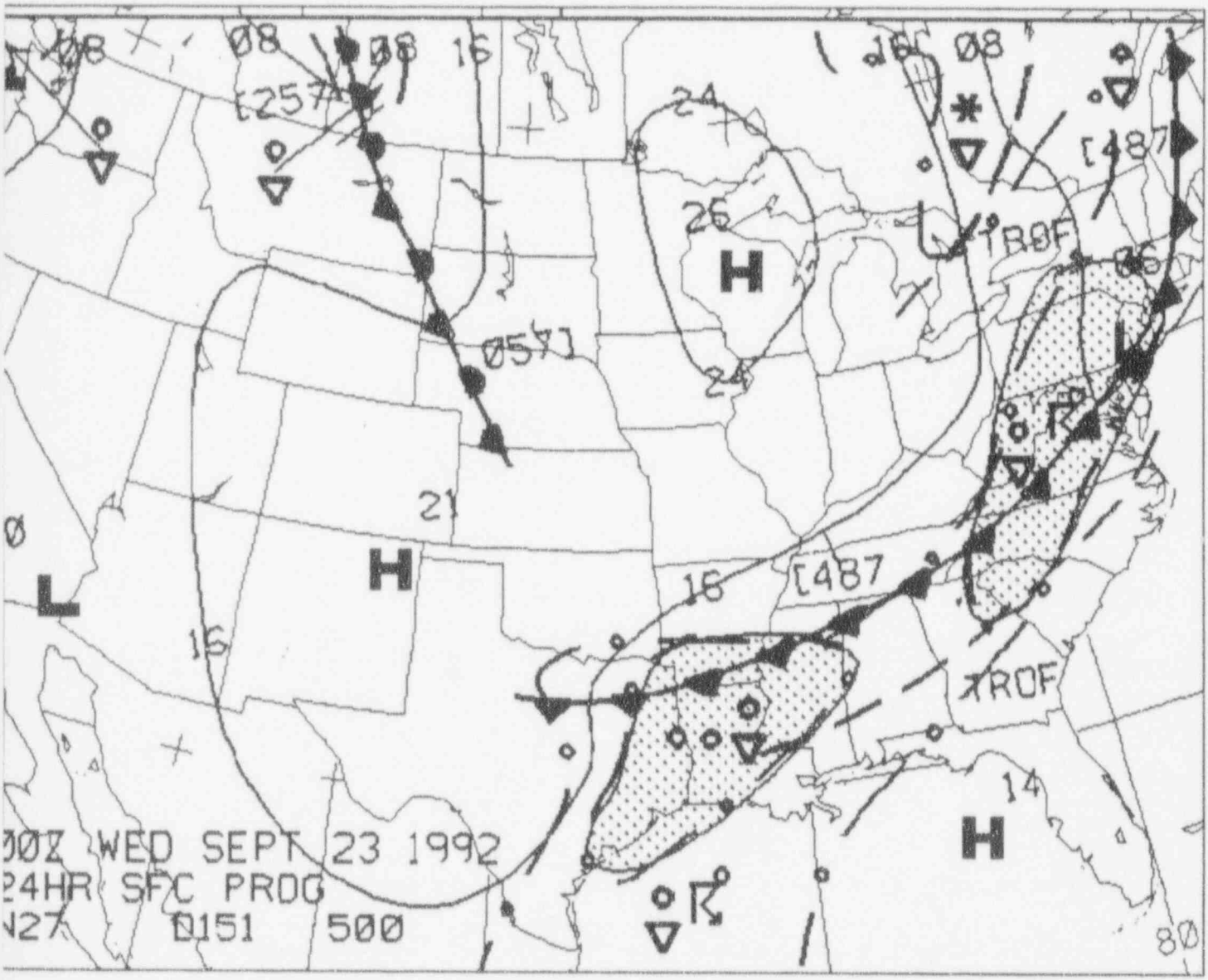


PROG 24HR SFC

01:45 am



PROG 36HR SFC

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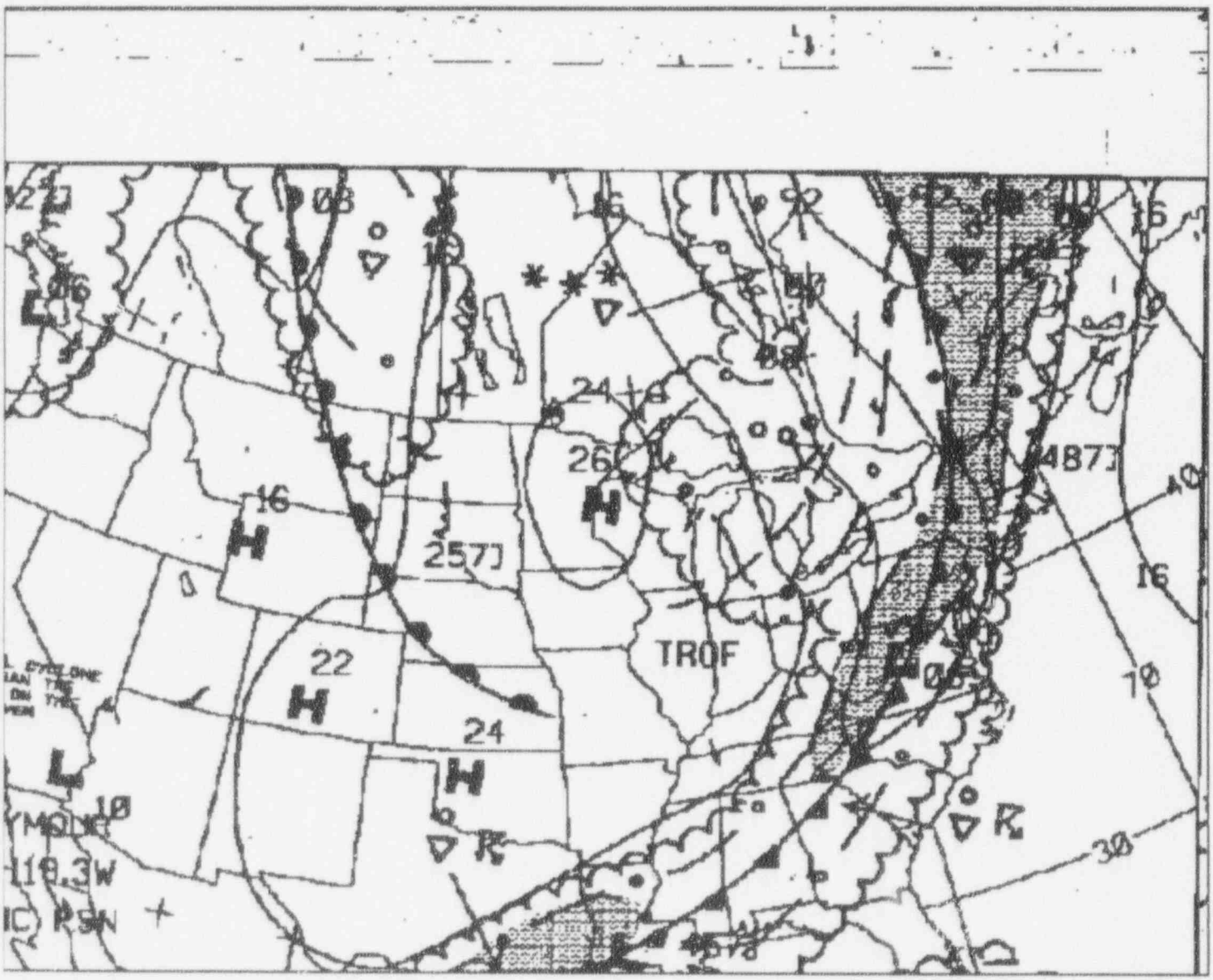
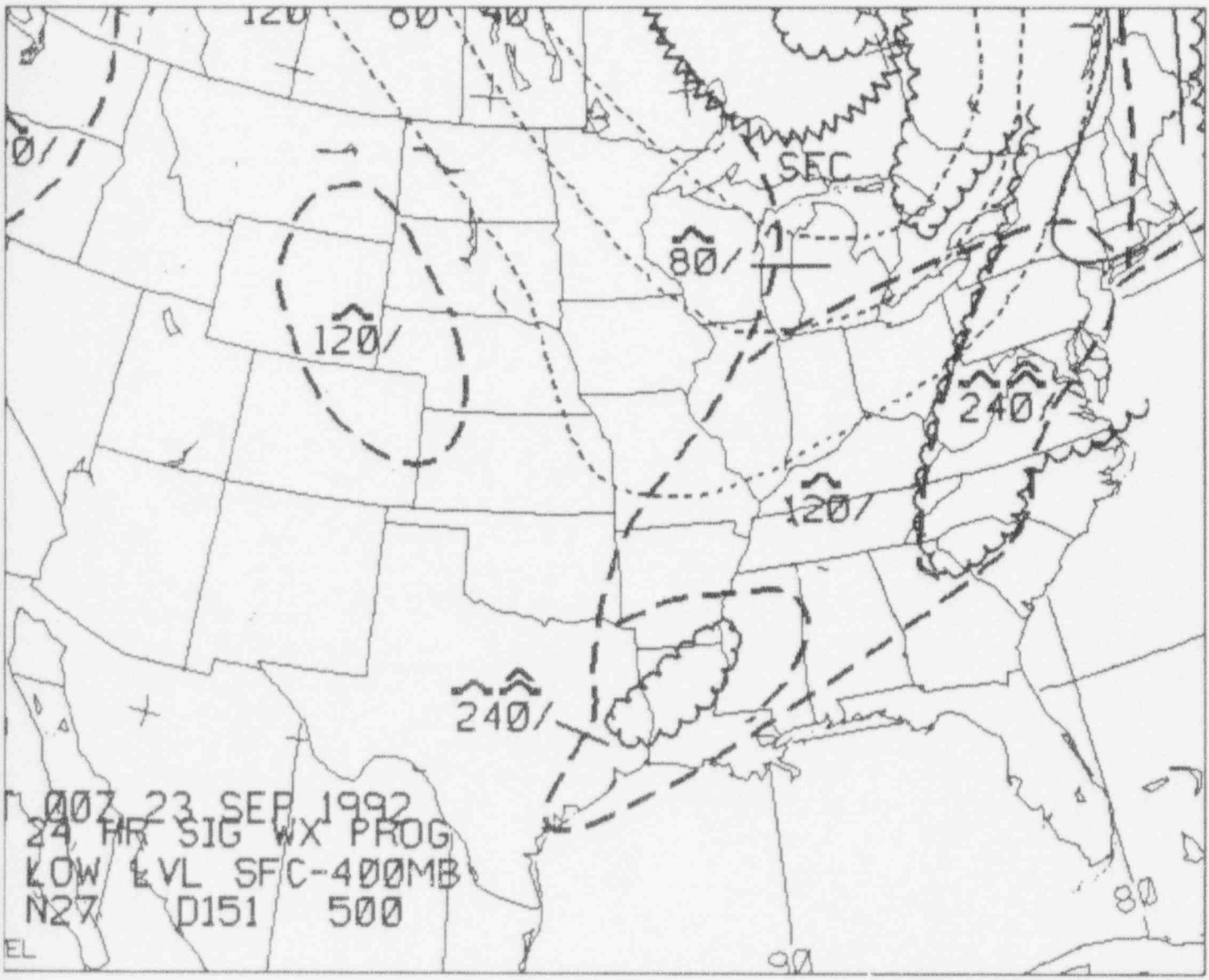


LO LVL SIG WX 24HR

01:45 am



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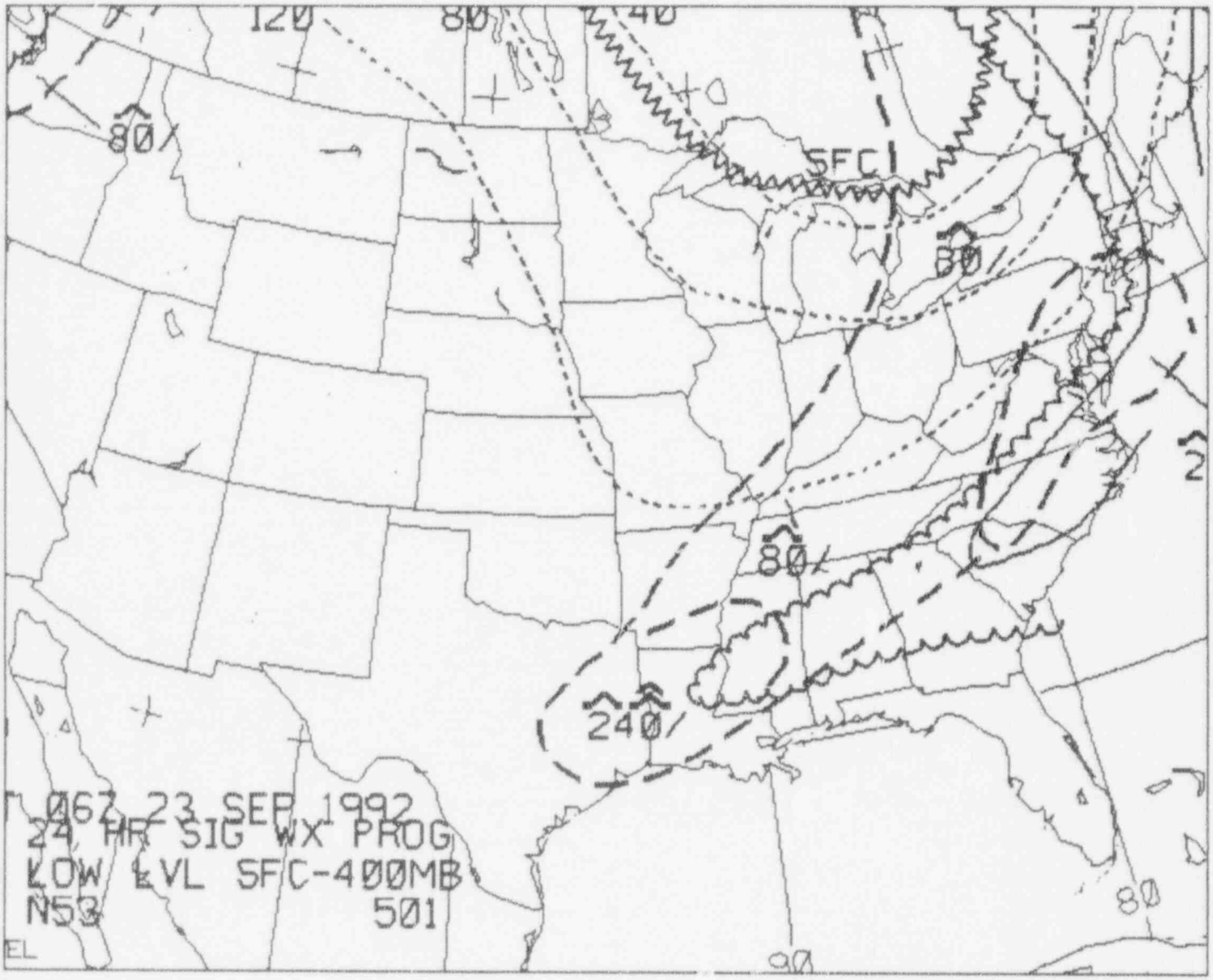
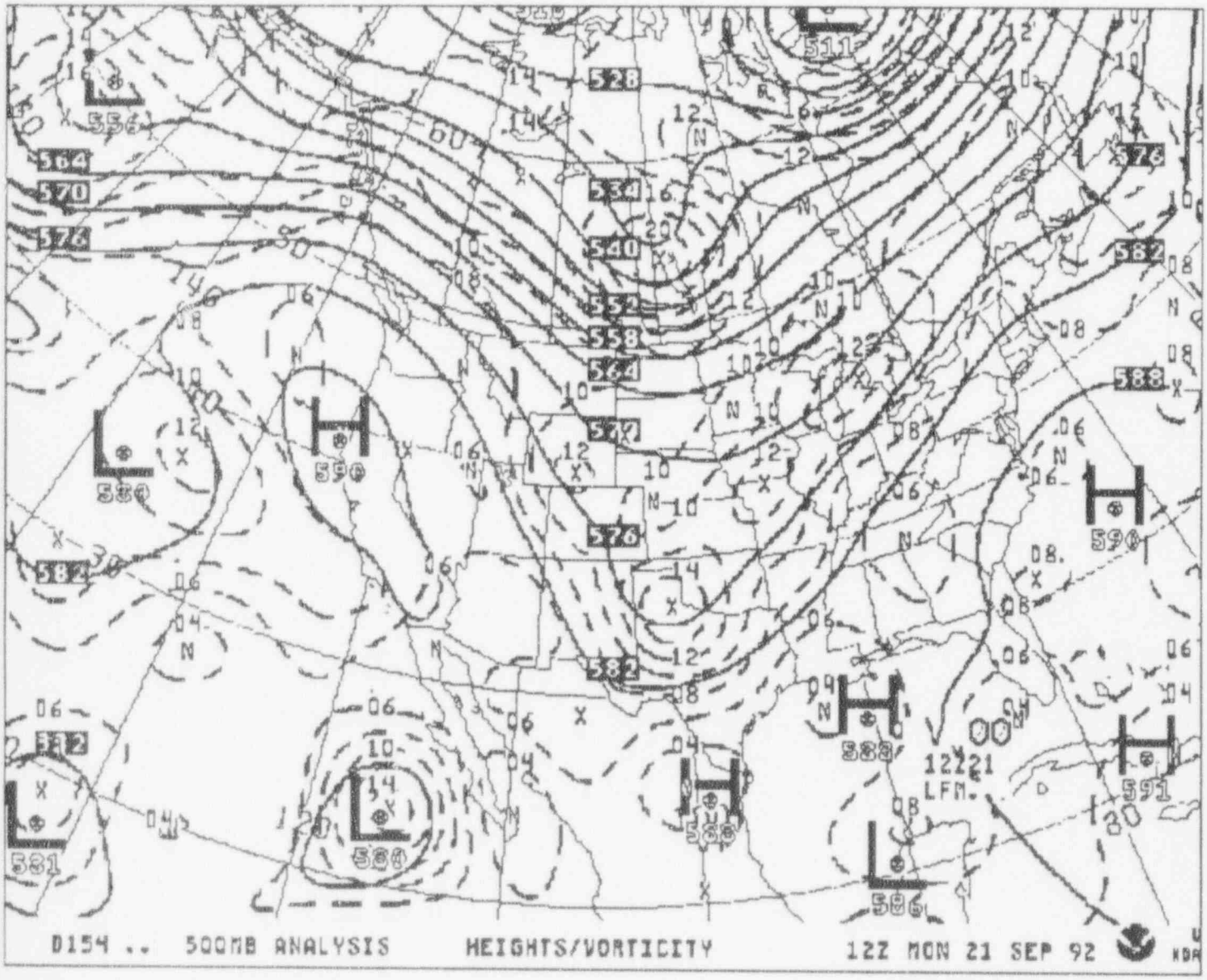


LFM 00HR 500MB HTS/VORT

10:47 am



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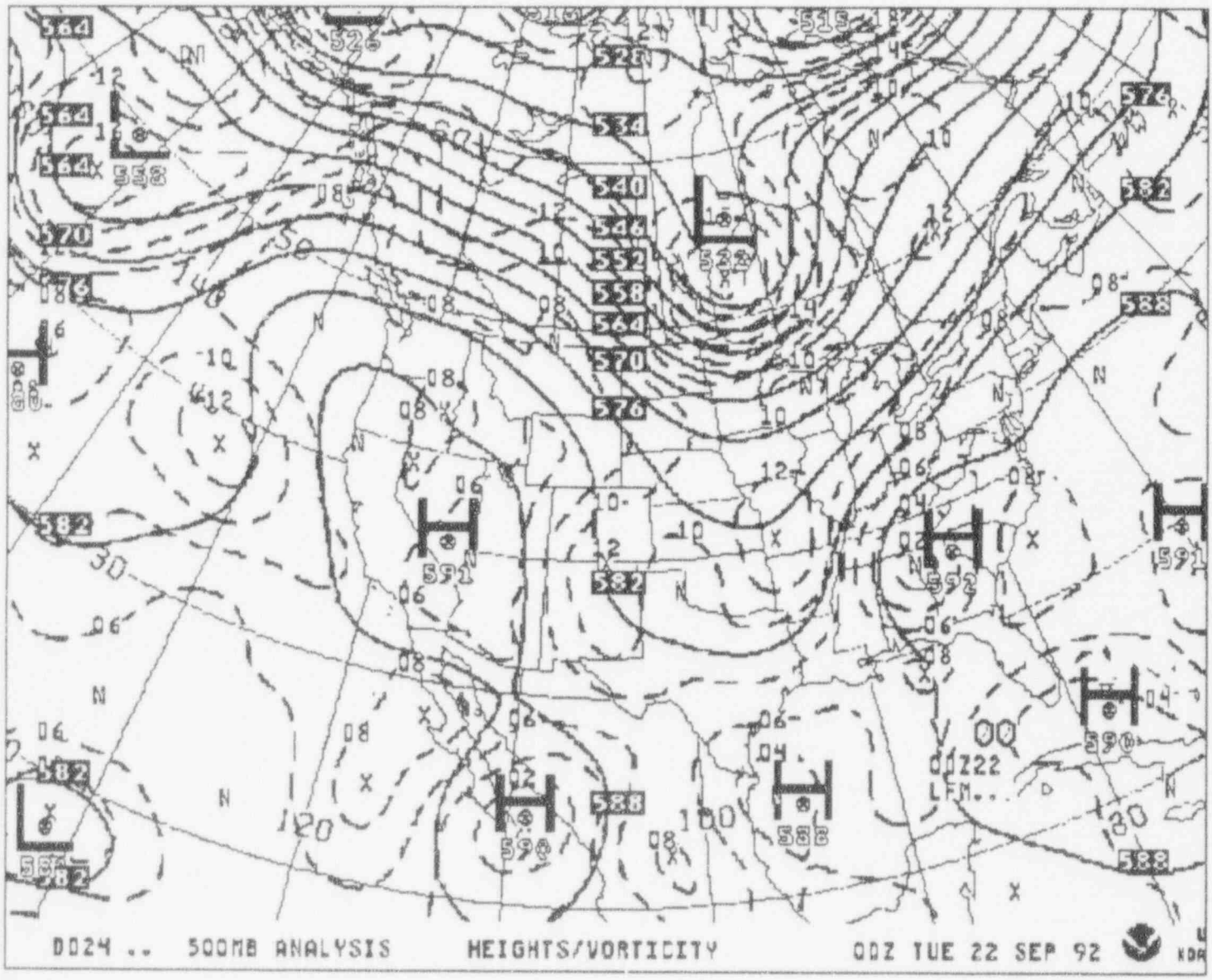

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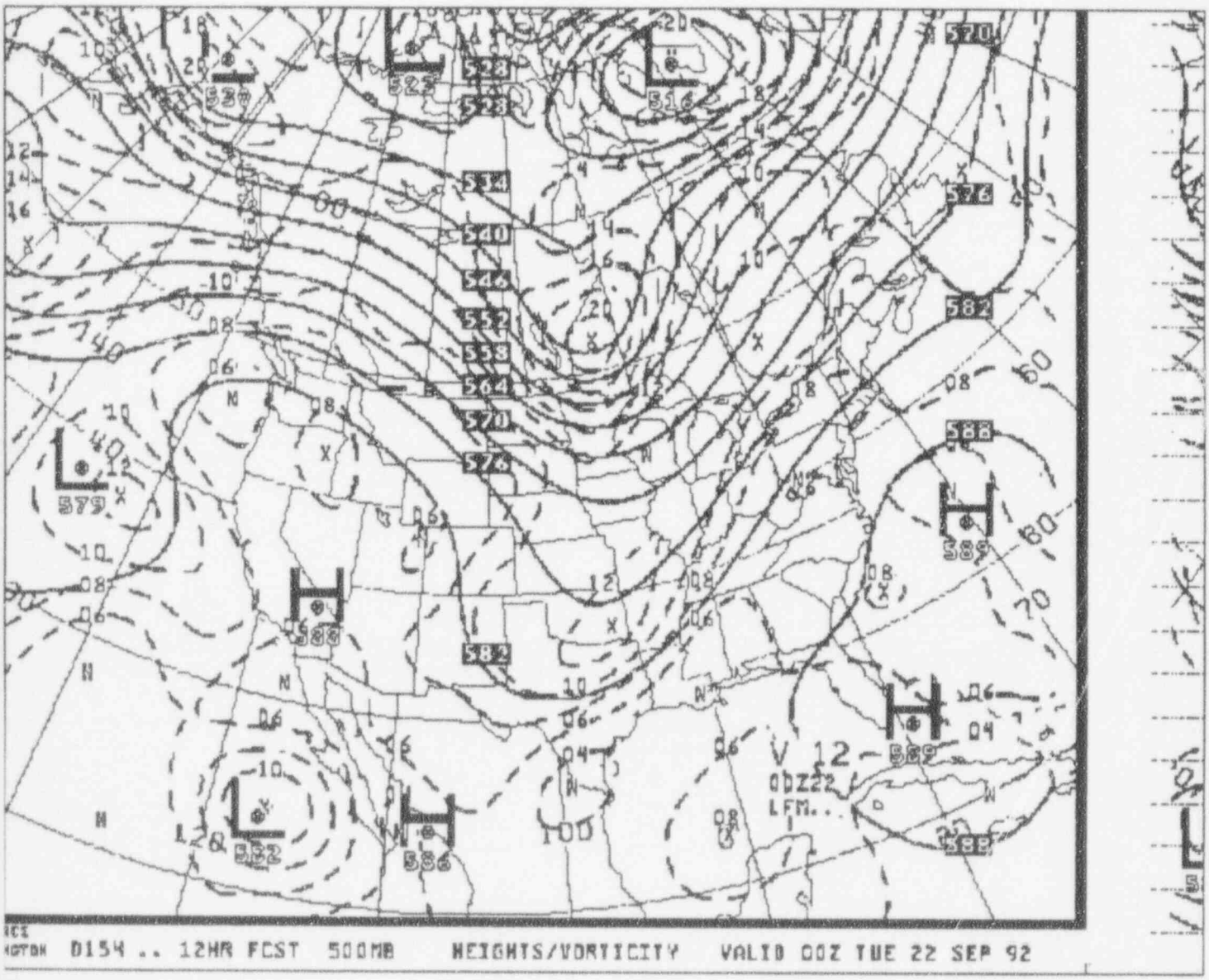

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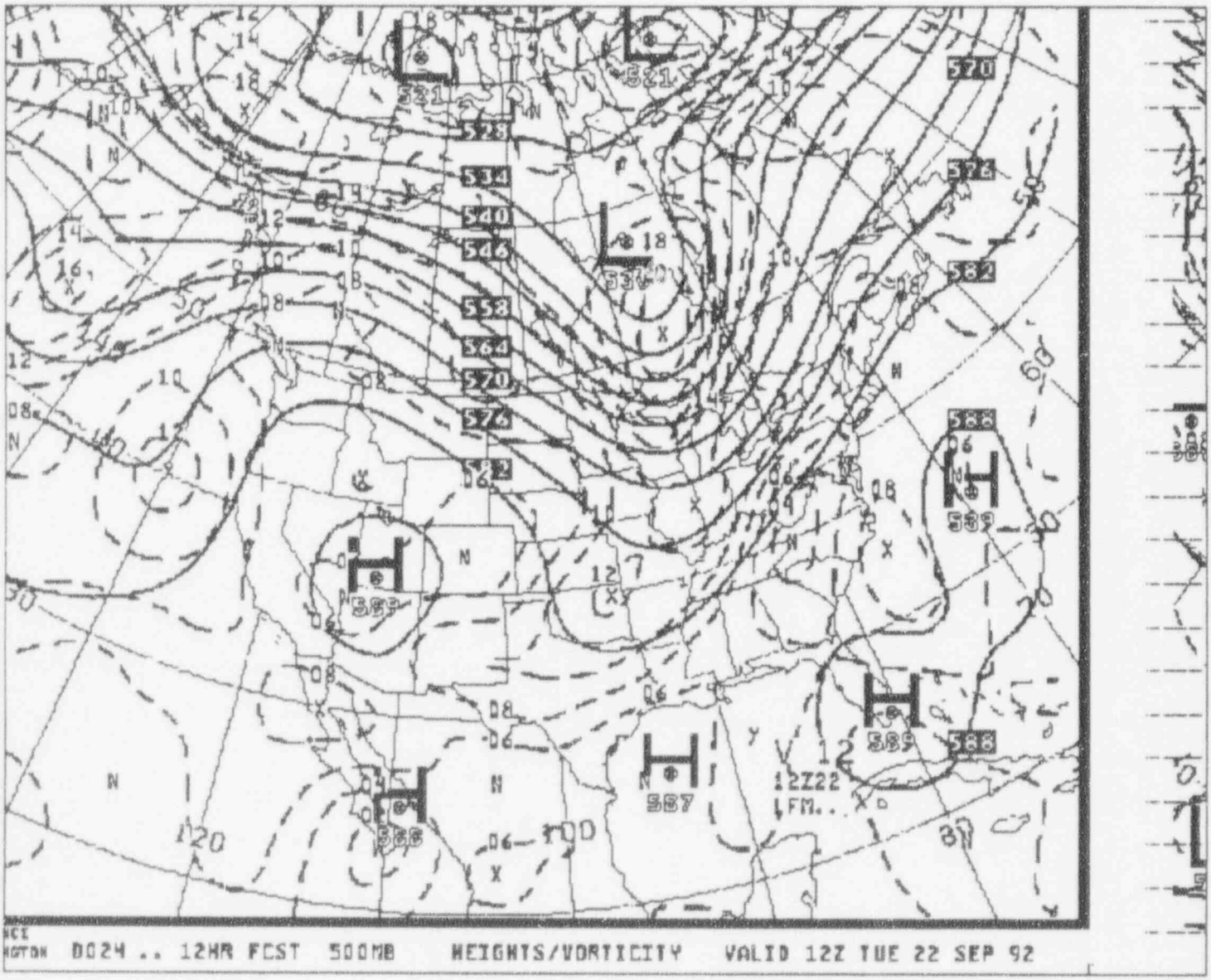

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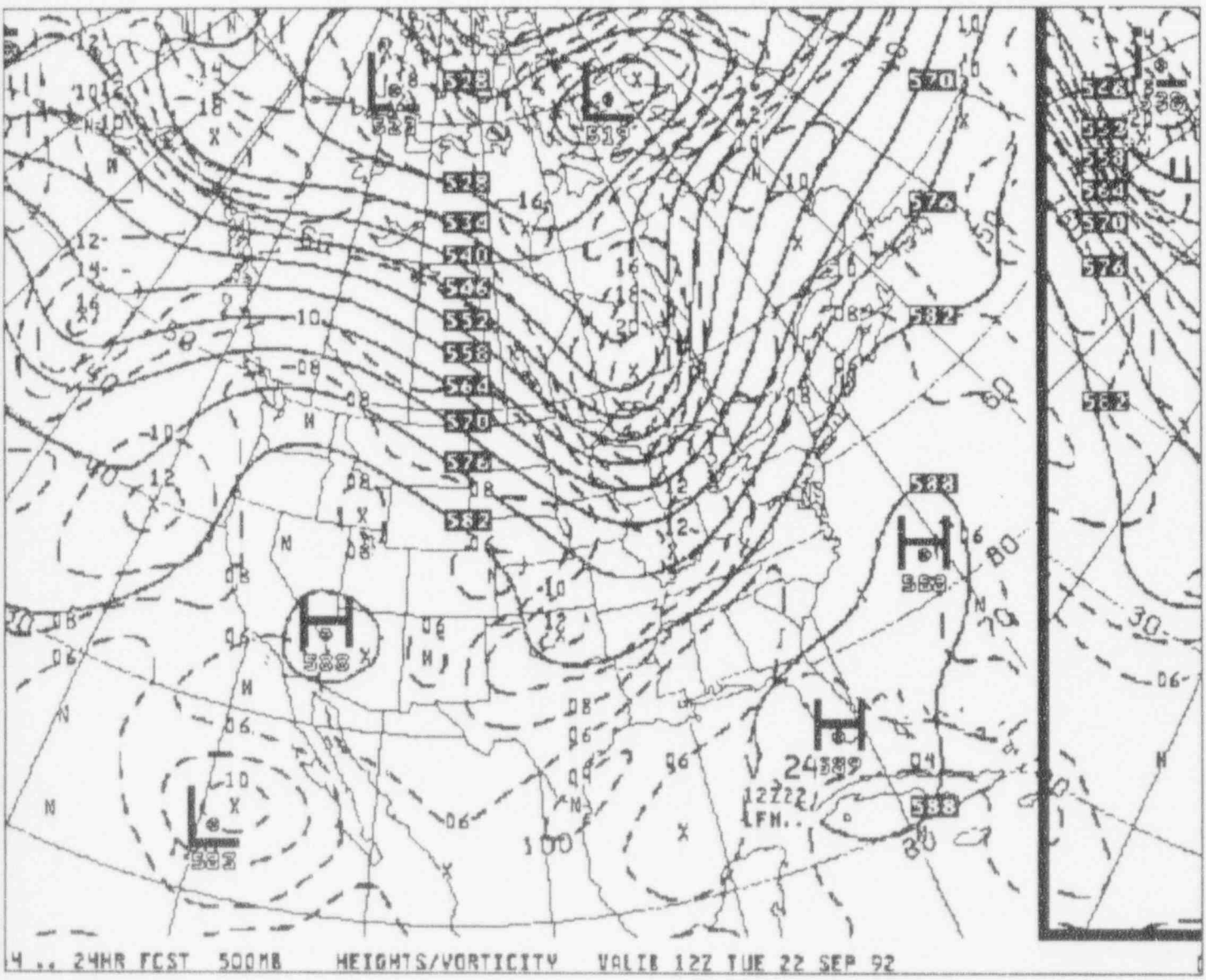

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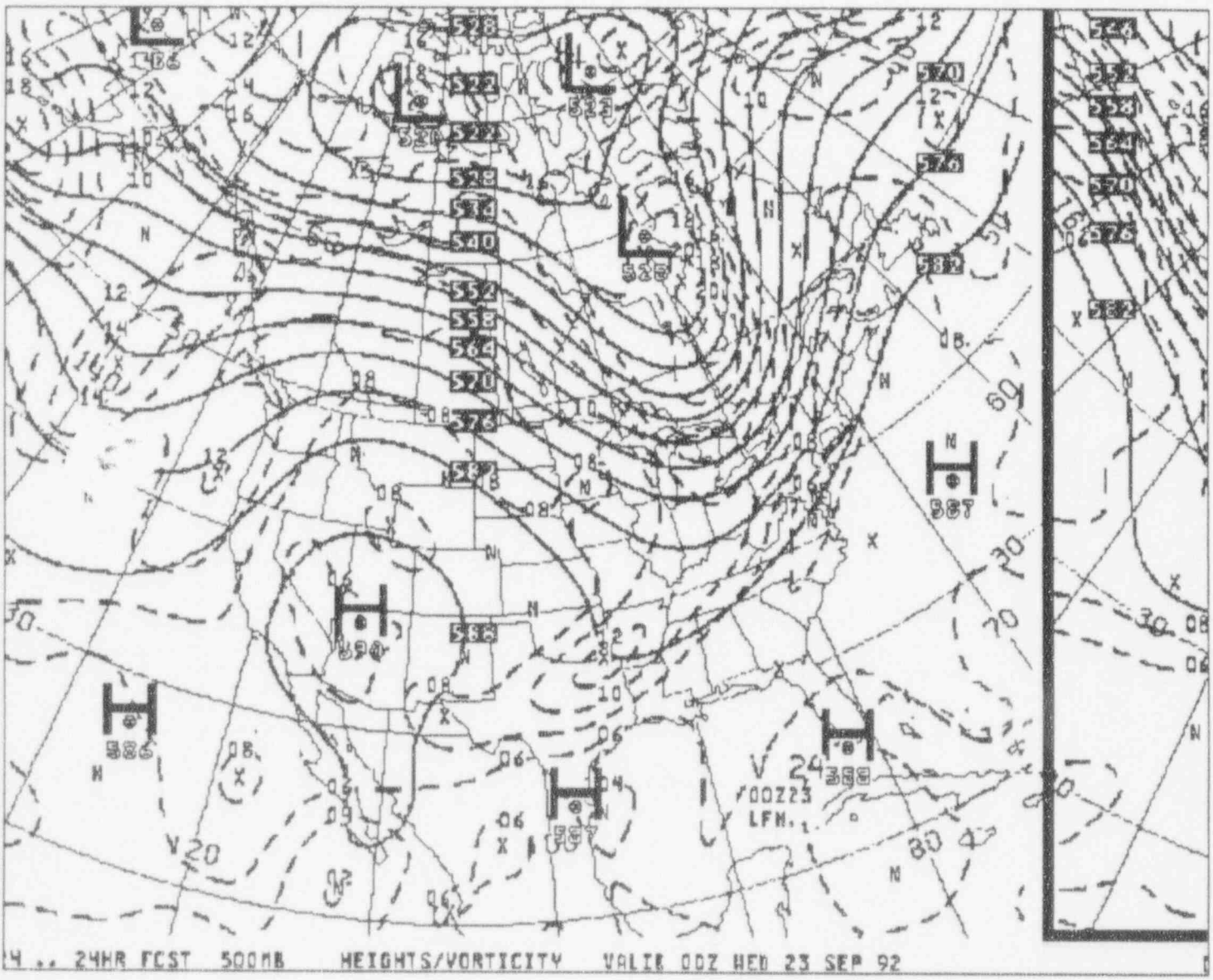

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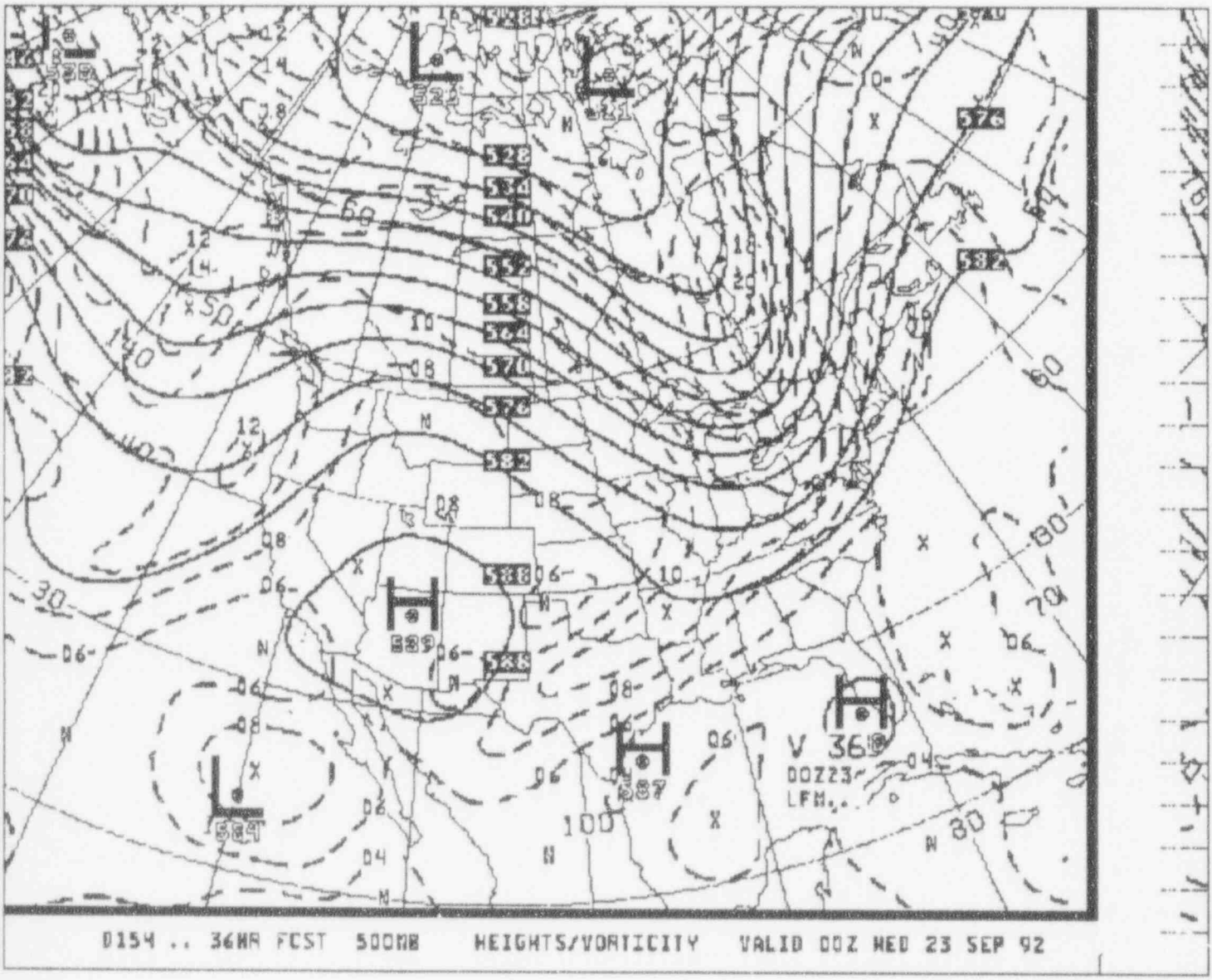

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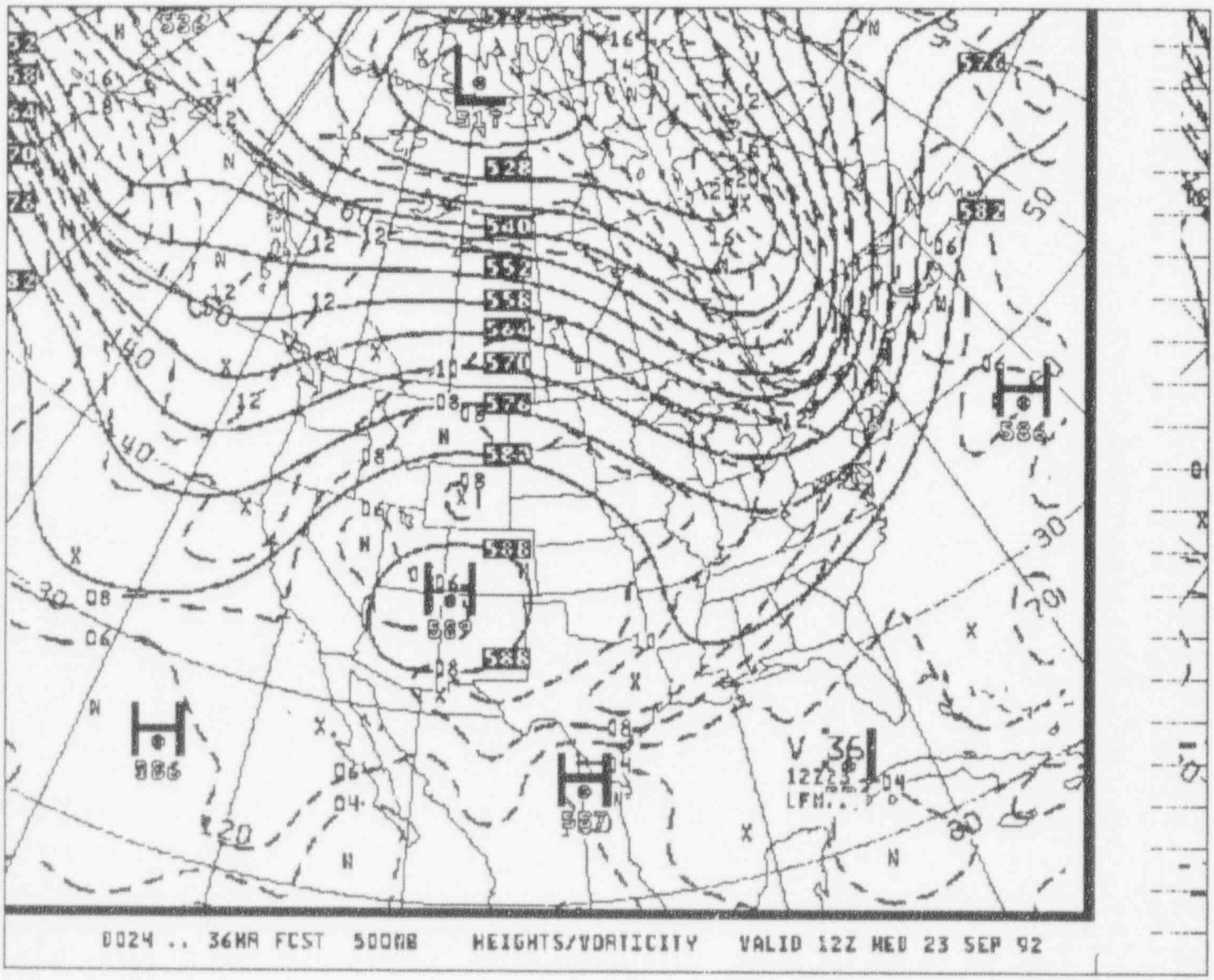
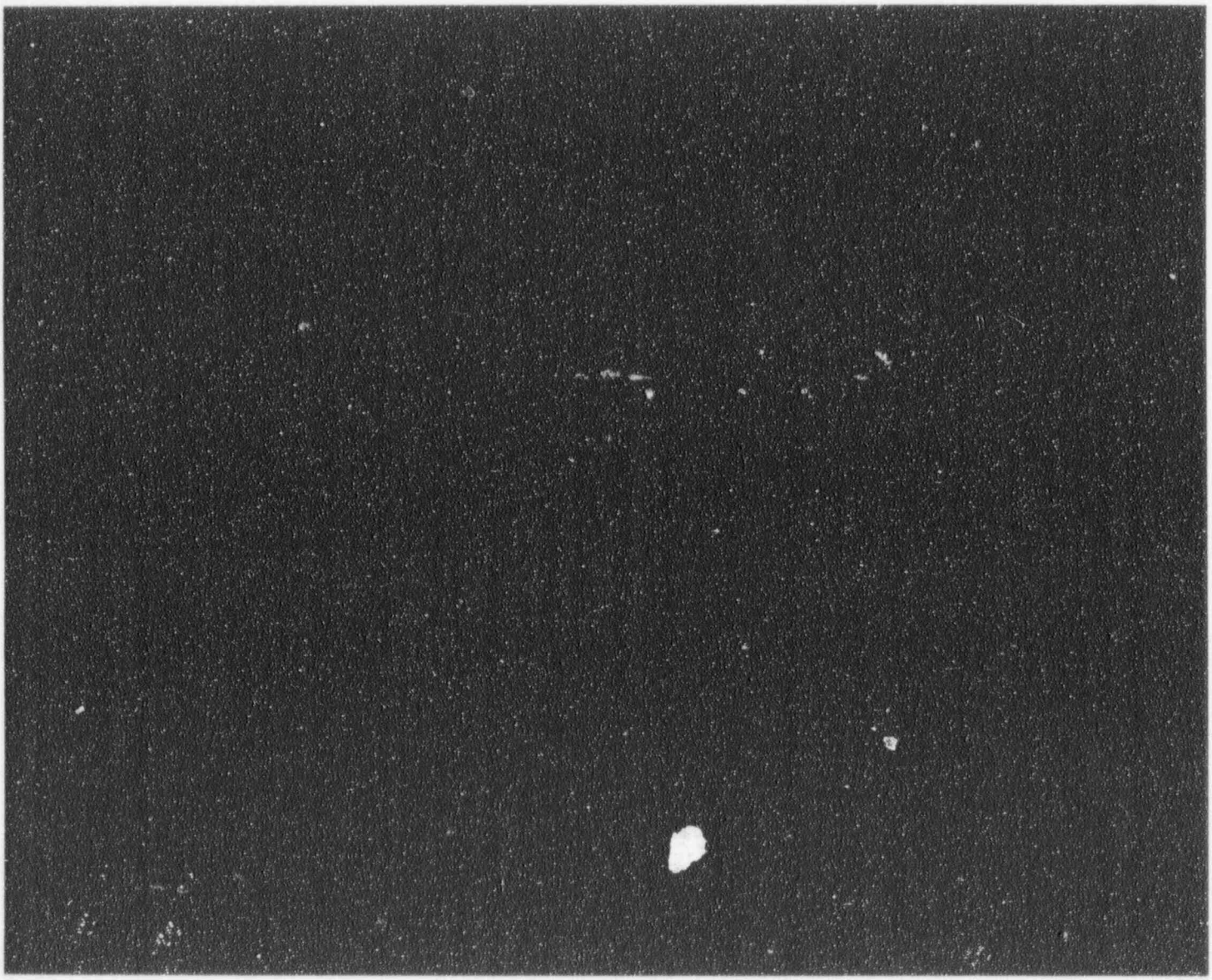


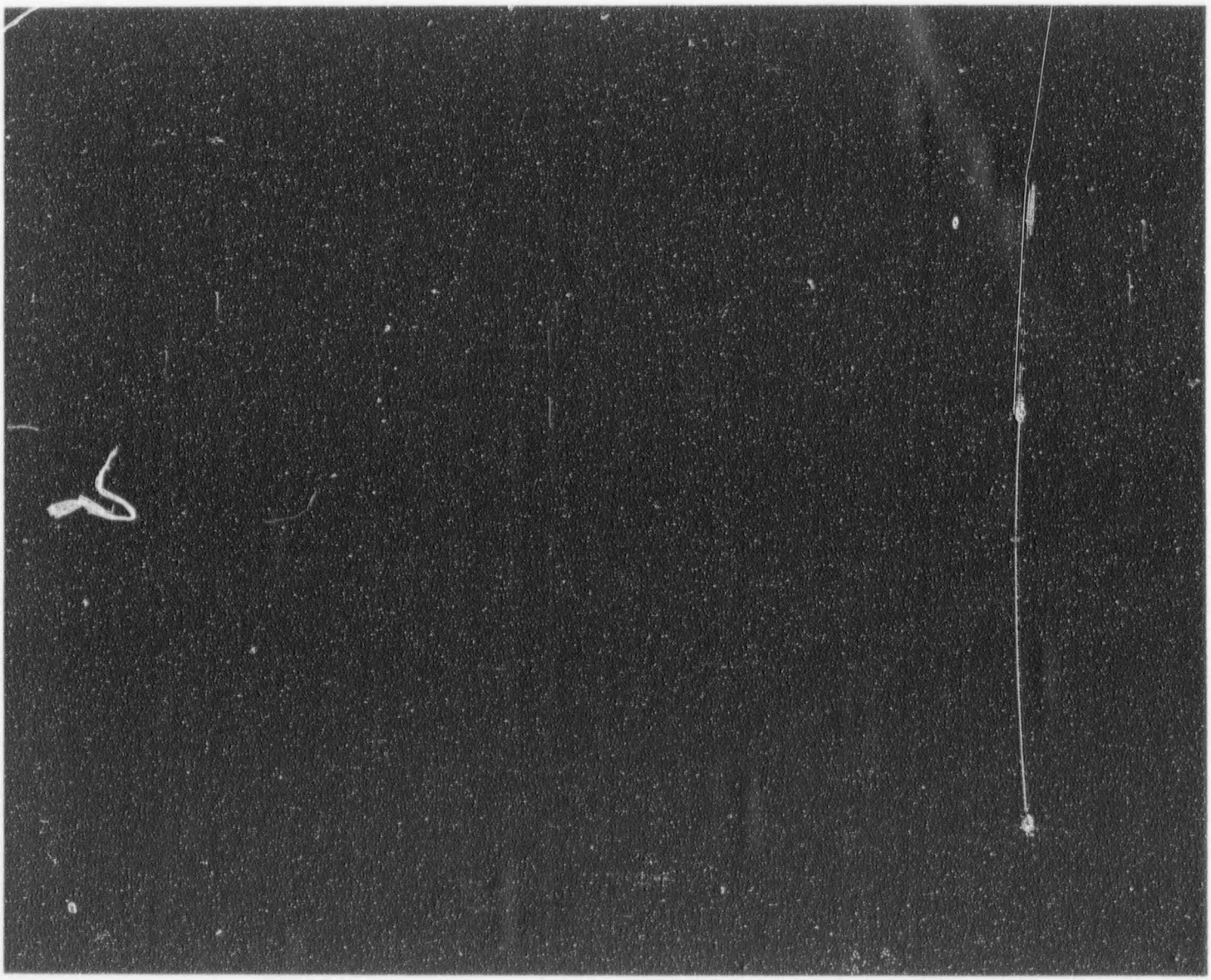
NGM 00-48 SFC/THCK

05:29 am



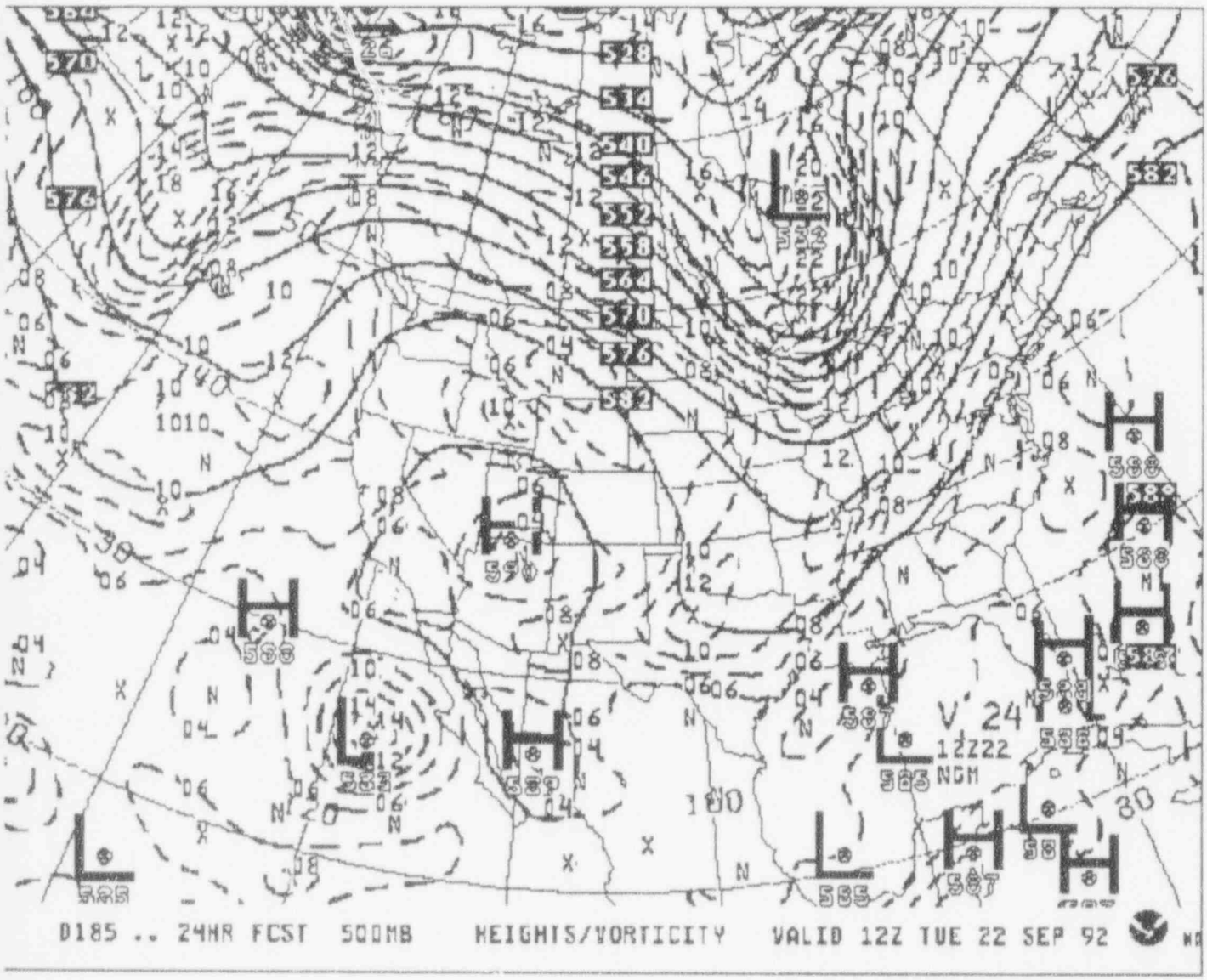
NGM 00-48 SFC/THCK

05:33 am



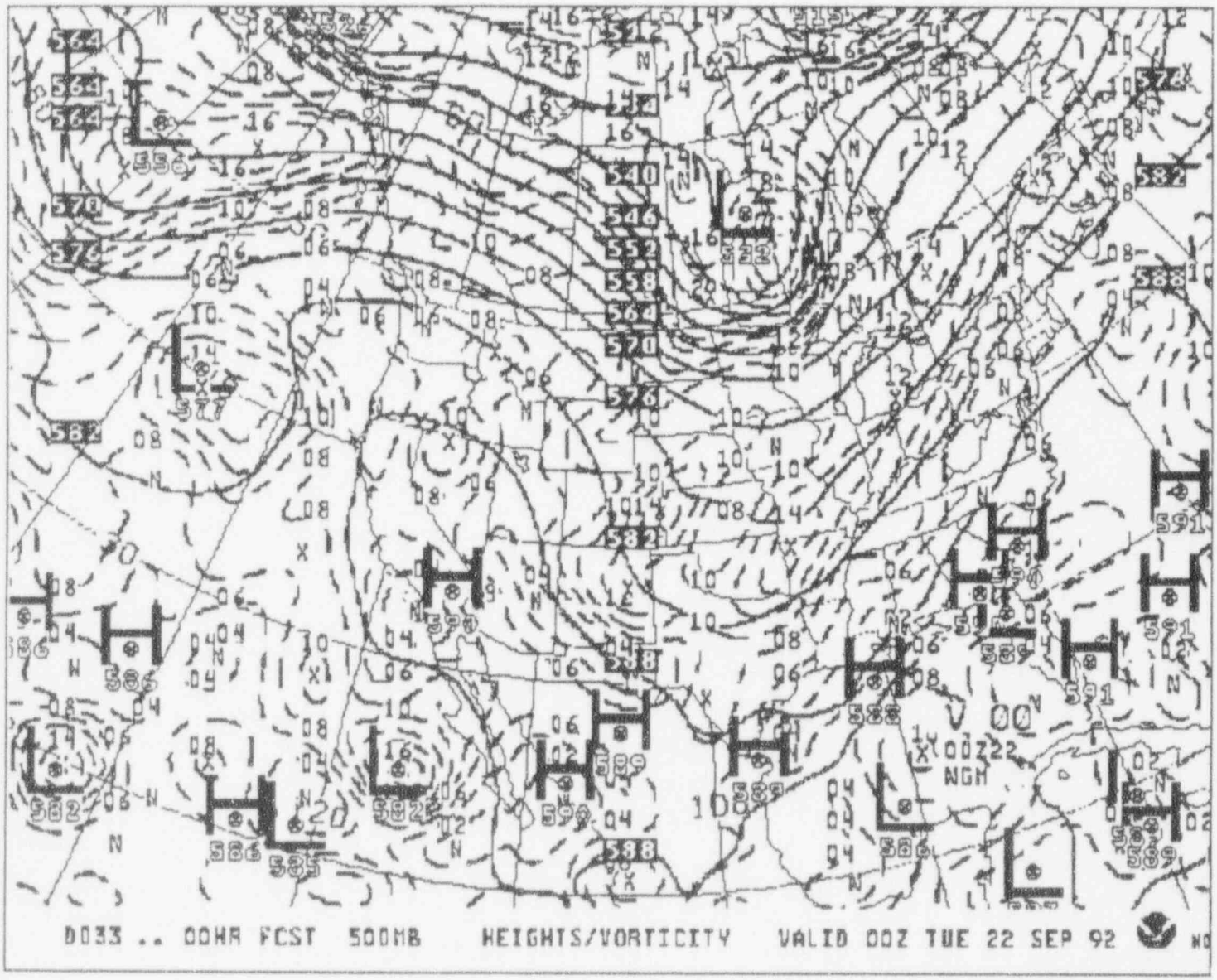
NGM 00-48 500MB

01:38 pm



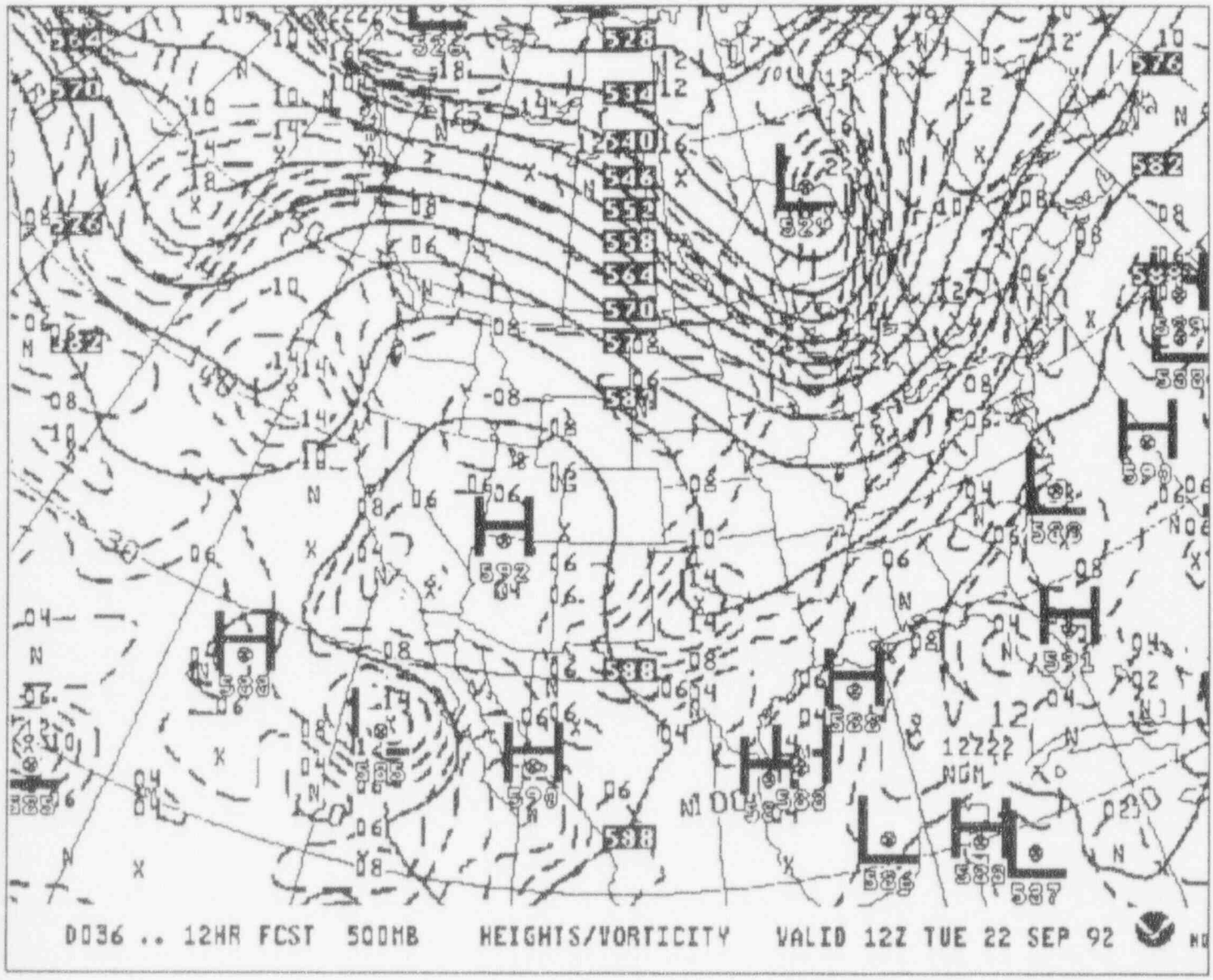
NGM 00-48 500MB

11:46 pm



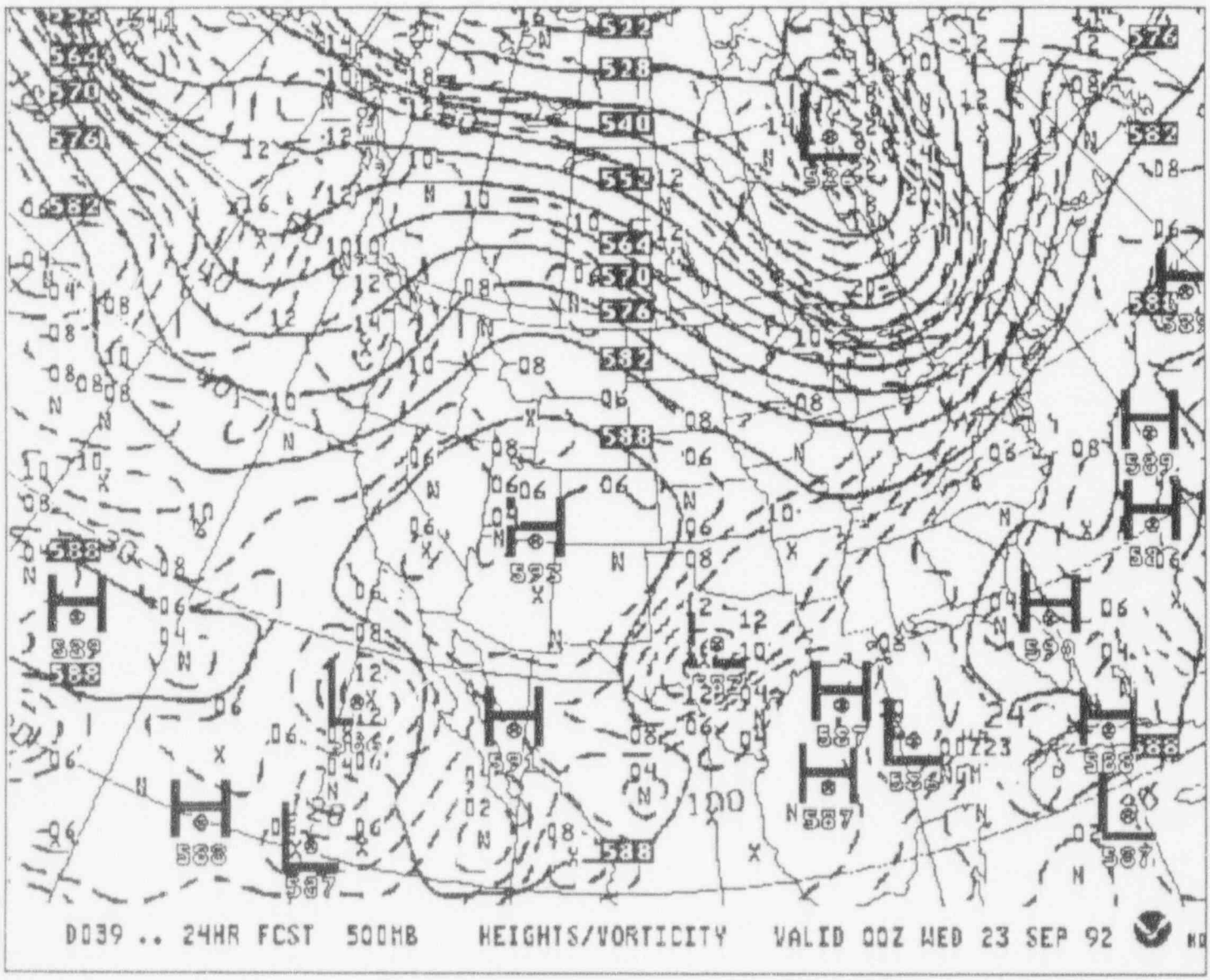
NGM 00-48 500MB

11:58 pm



NGM 00-48 500MB

00:06 am



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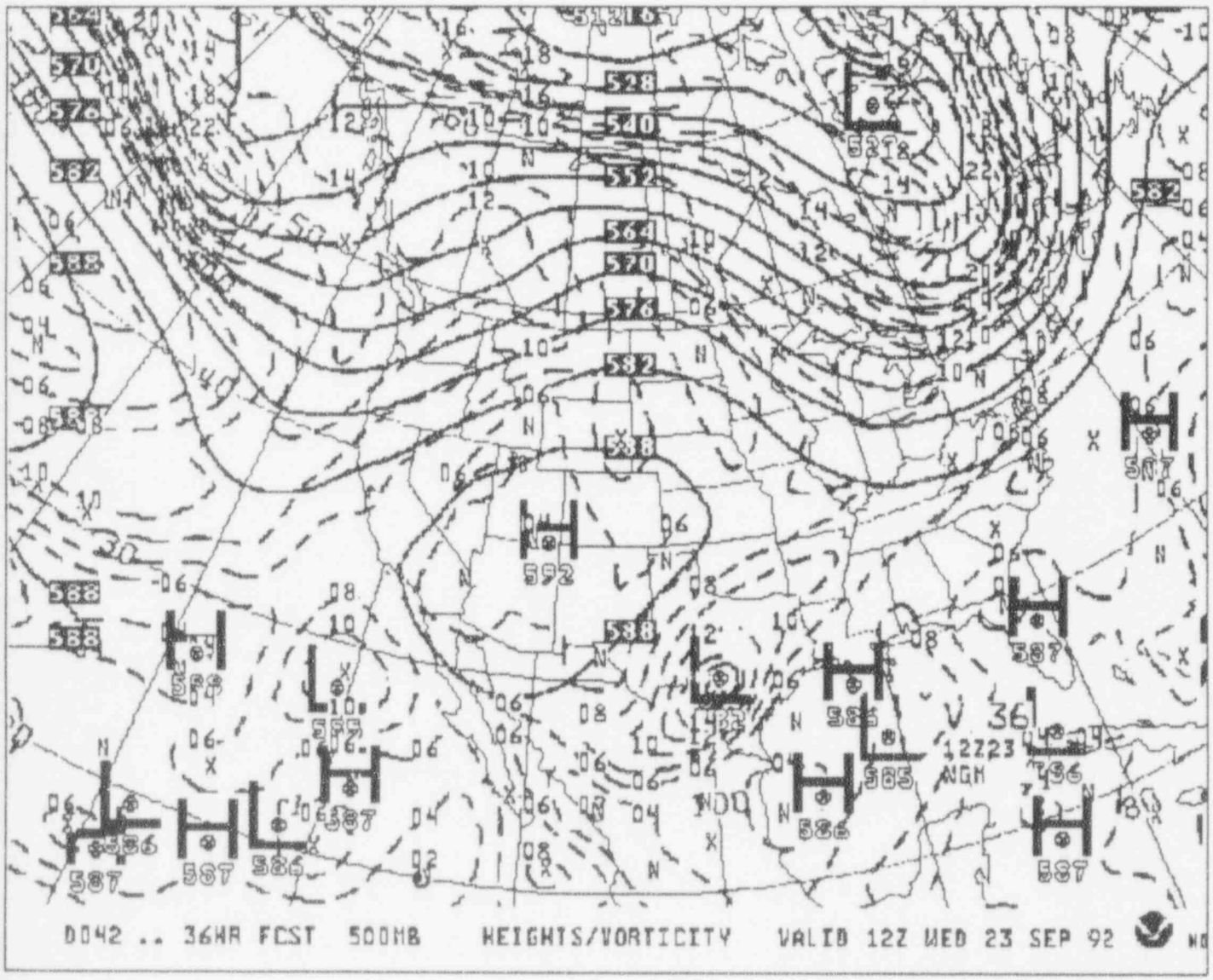

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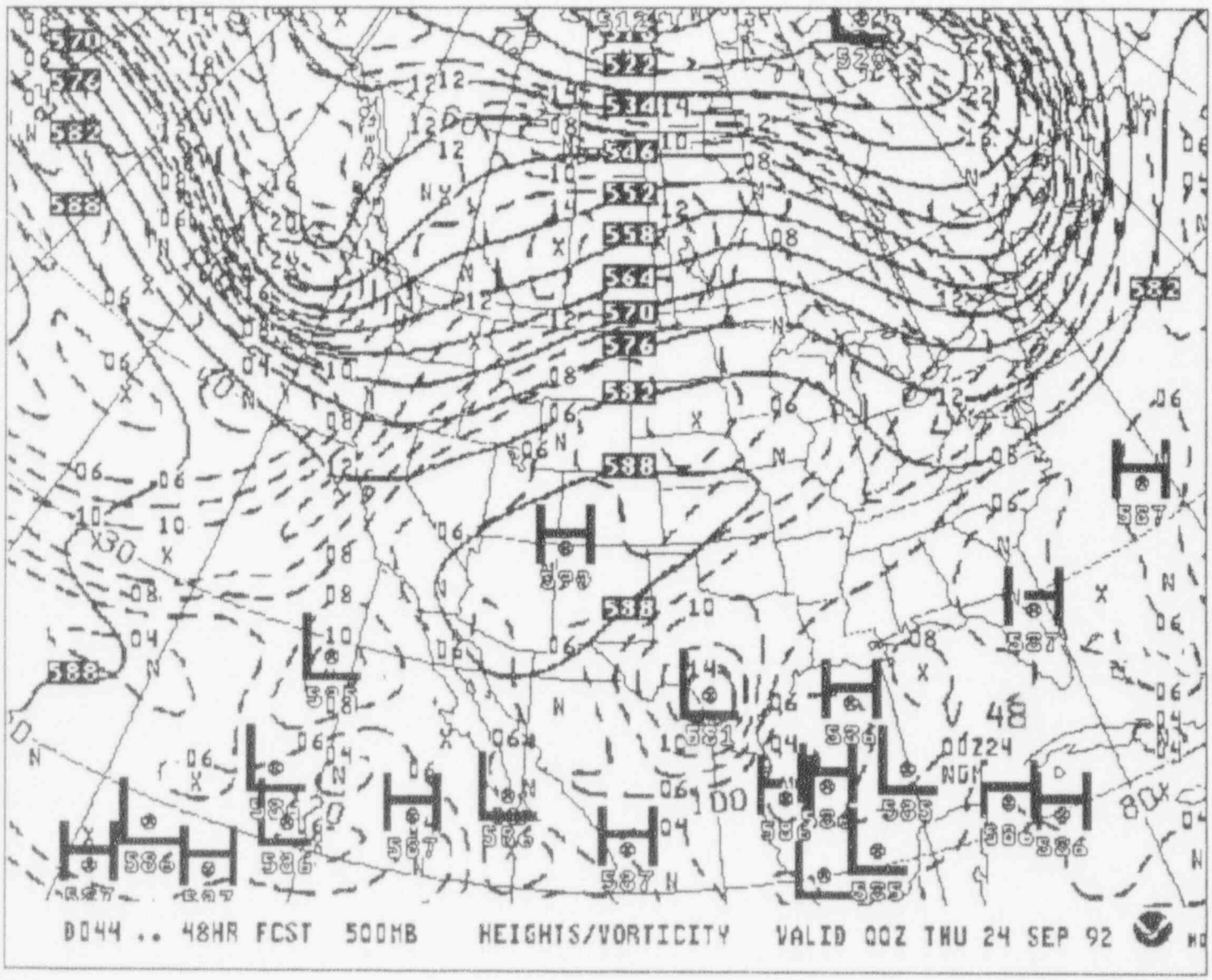

NGM 00-48 500MB

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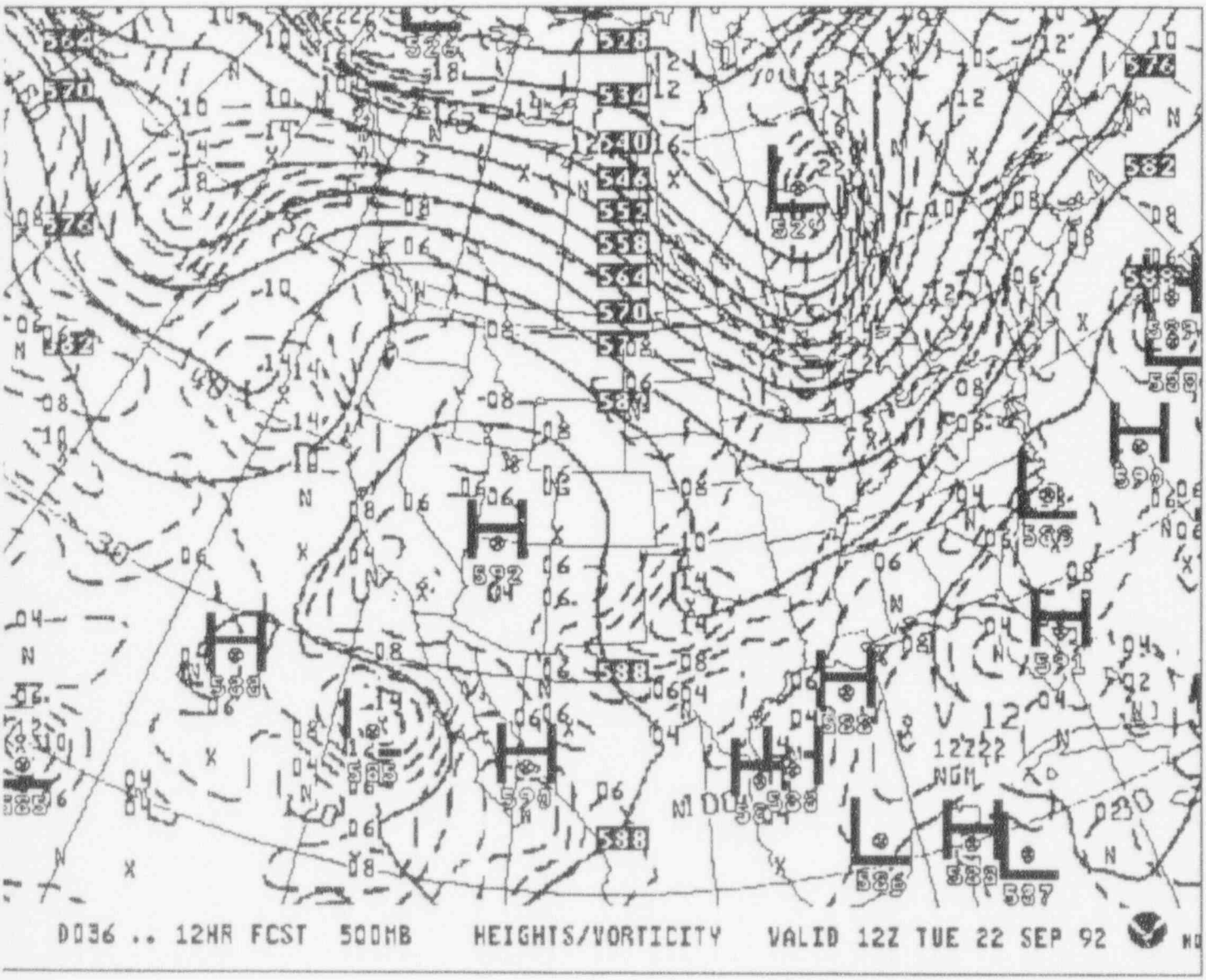


NGM 00-48 500MB

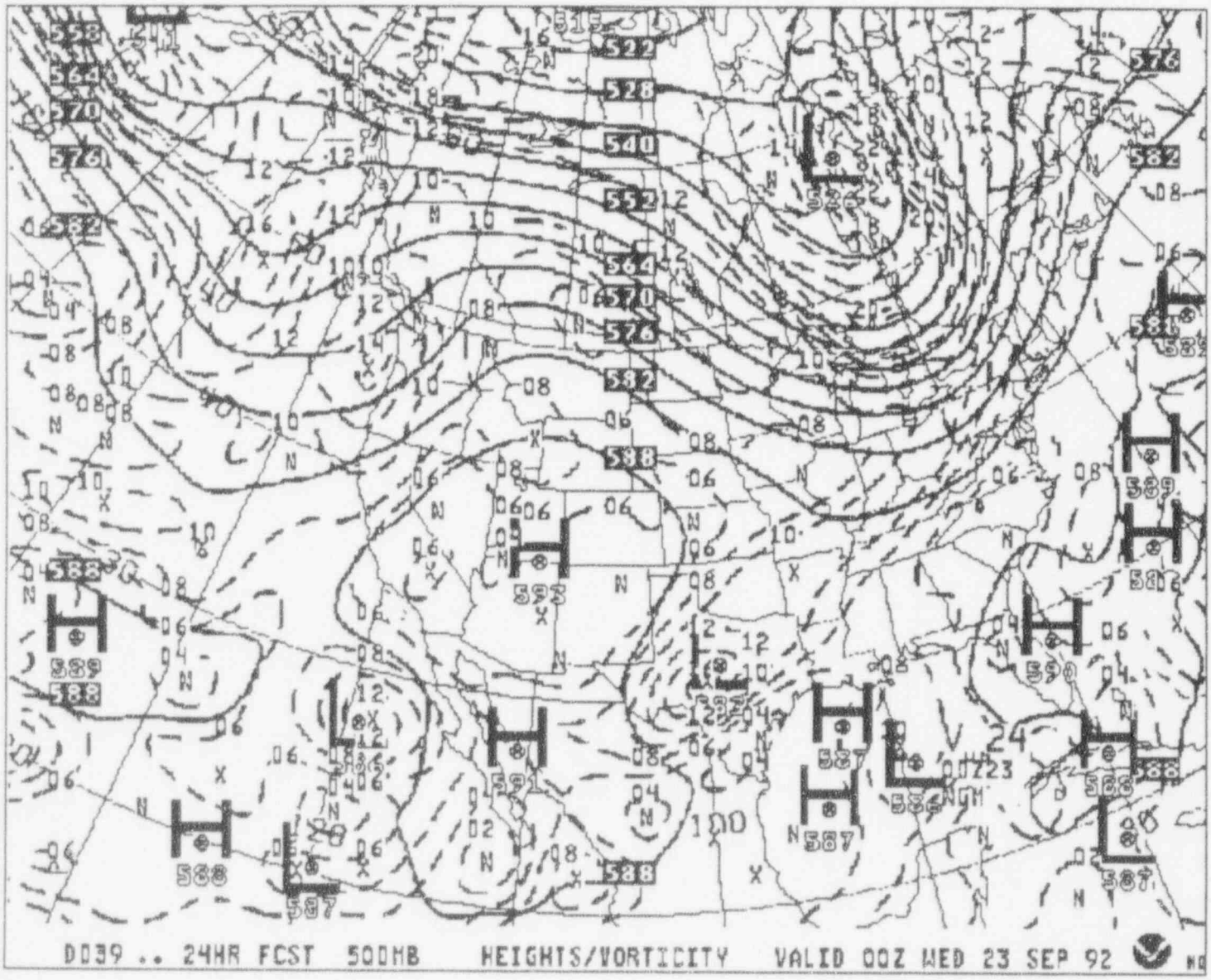
05:29 am

NGM 00-48 500MB

05:33 am

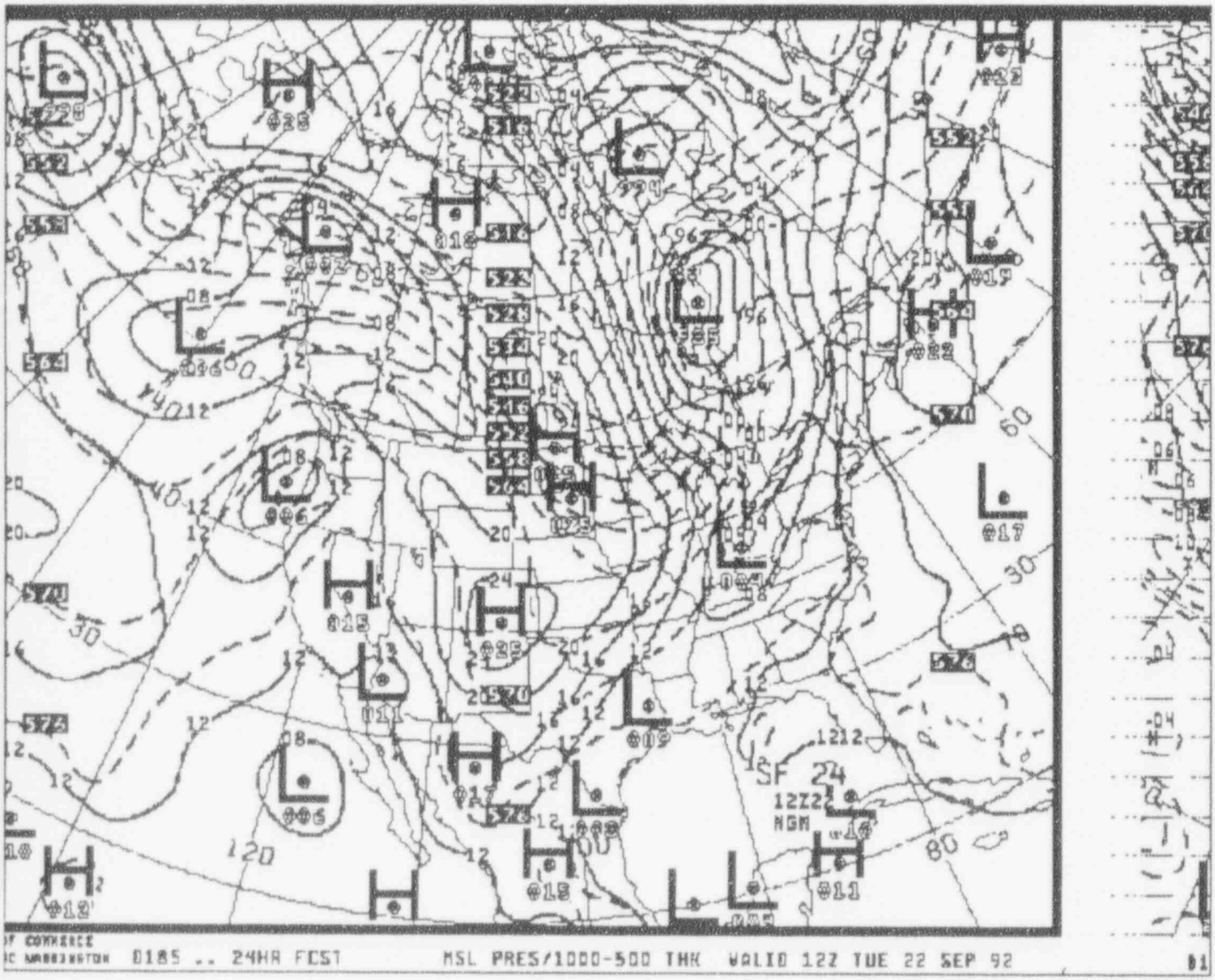
NGM 00-48 500MB

05:44 am



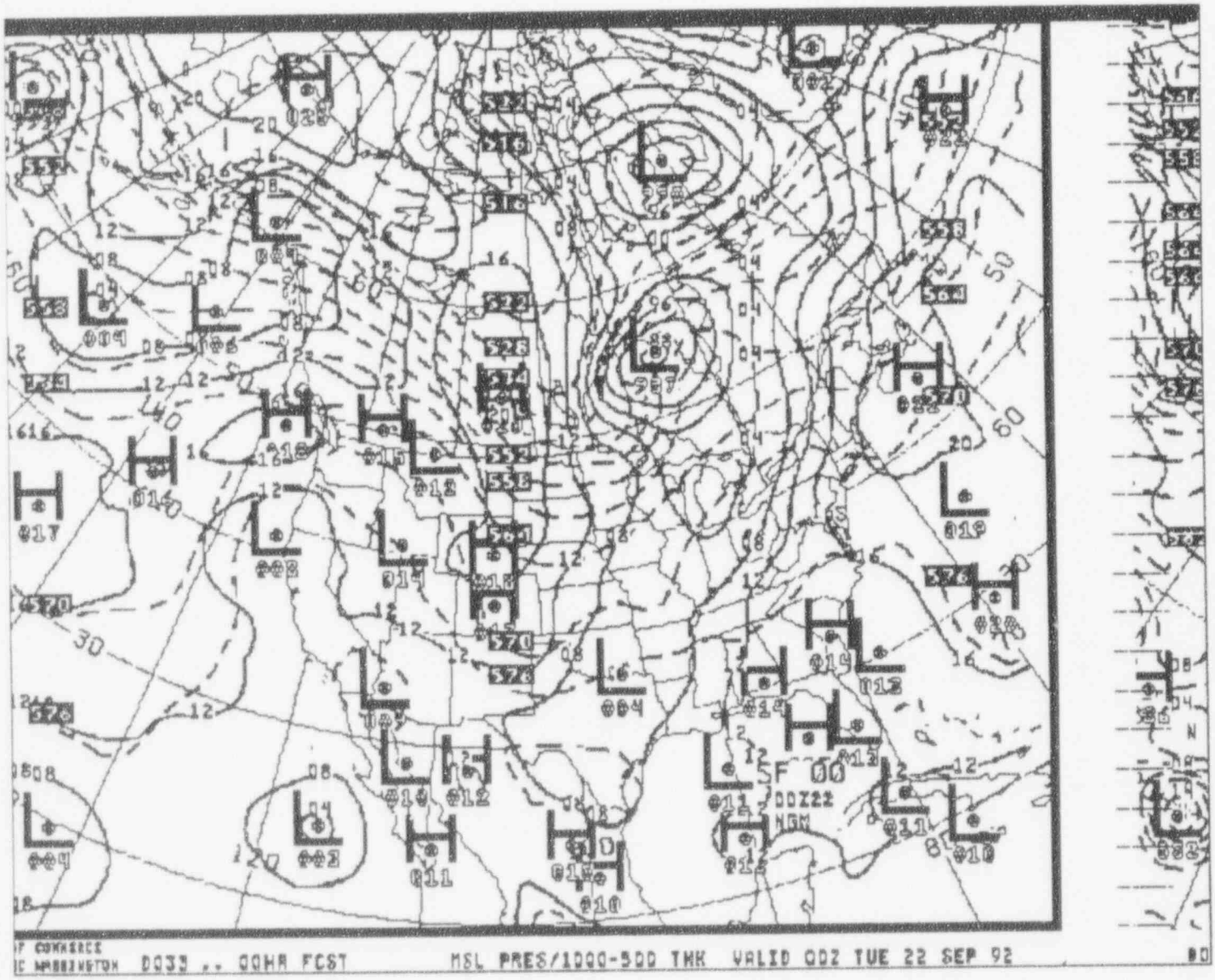
NGM 00-48 SFC/THCK

01:38 pm



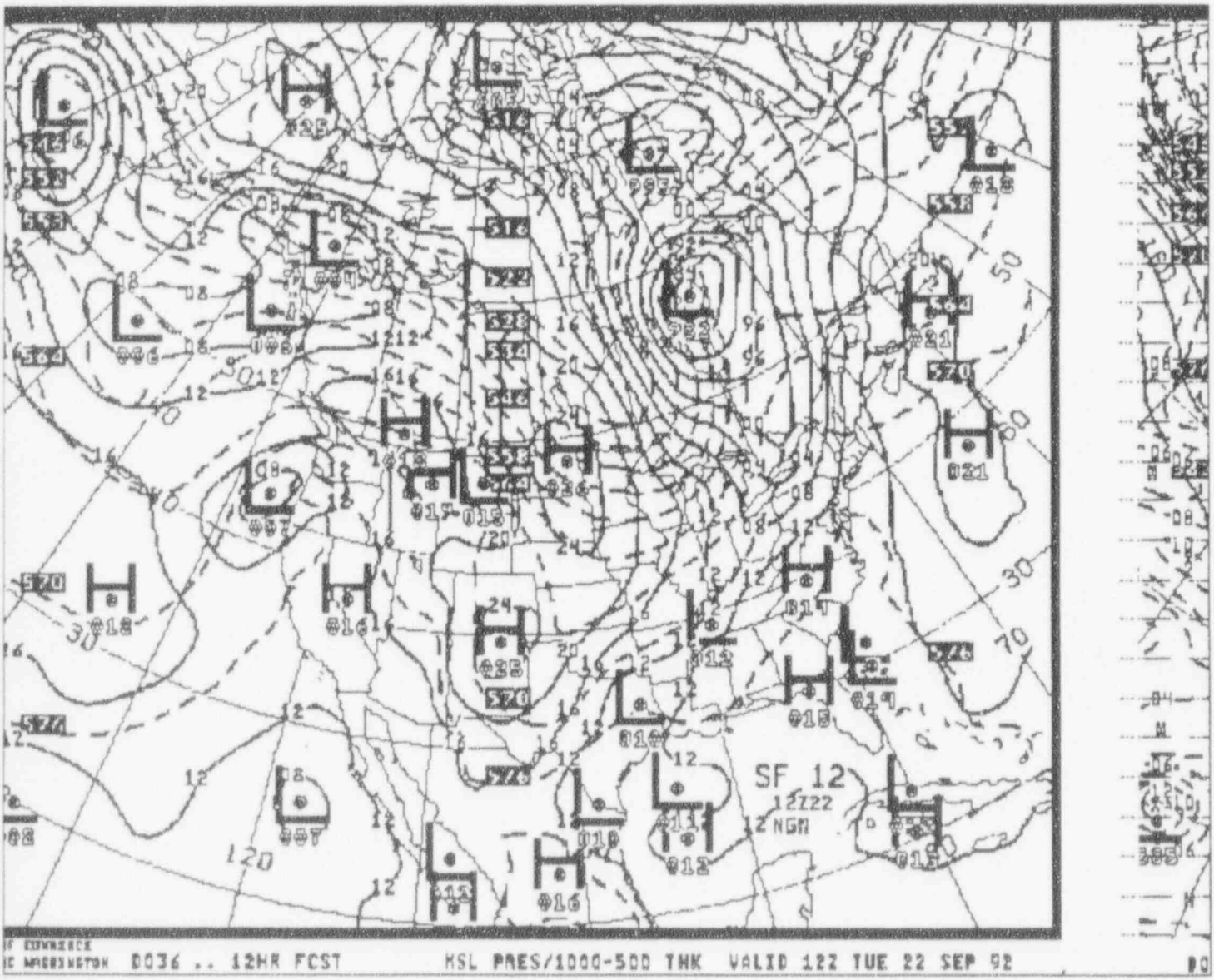
NGM 00-48 SFC/THCK

11:47 pm



NGM 00-48 SFC/THCK

11:58 pm



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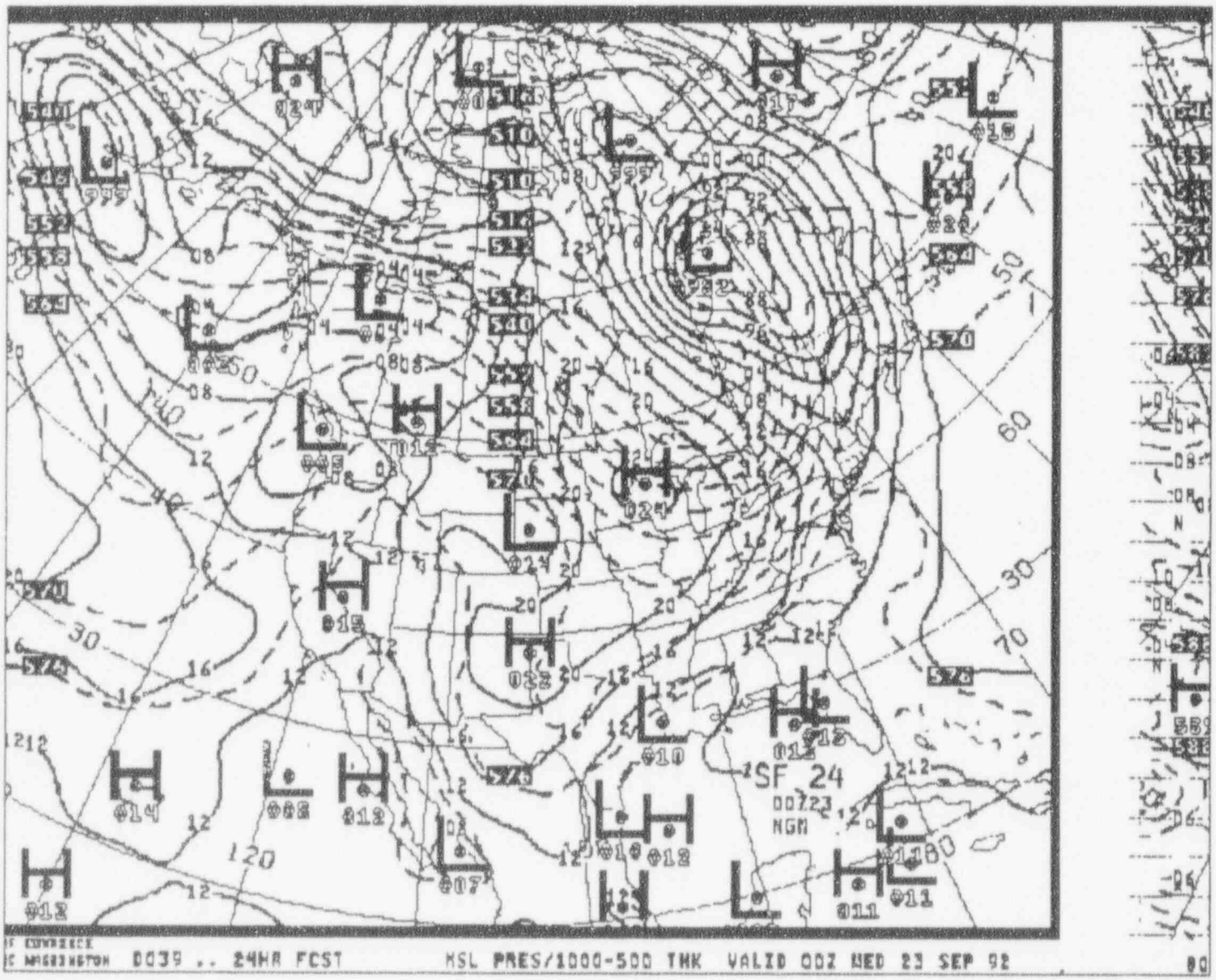
00:06 am



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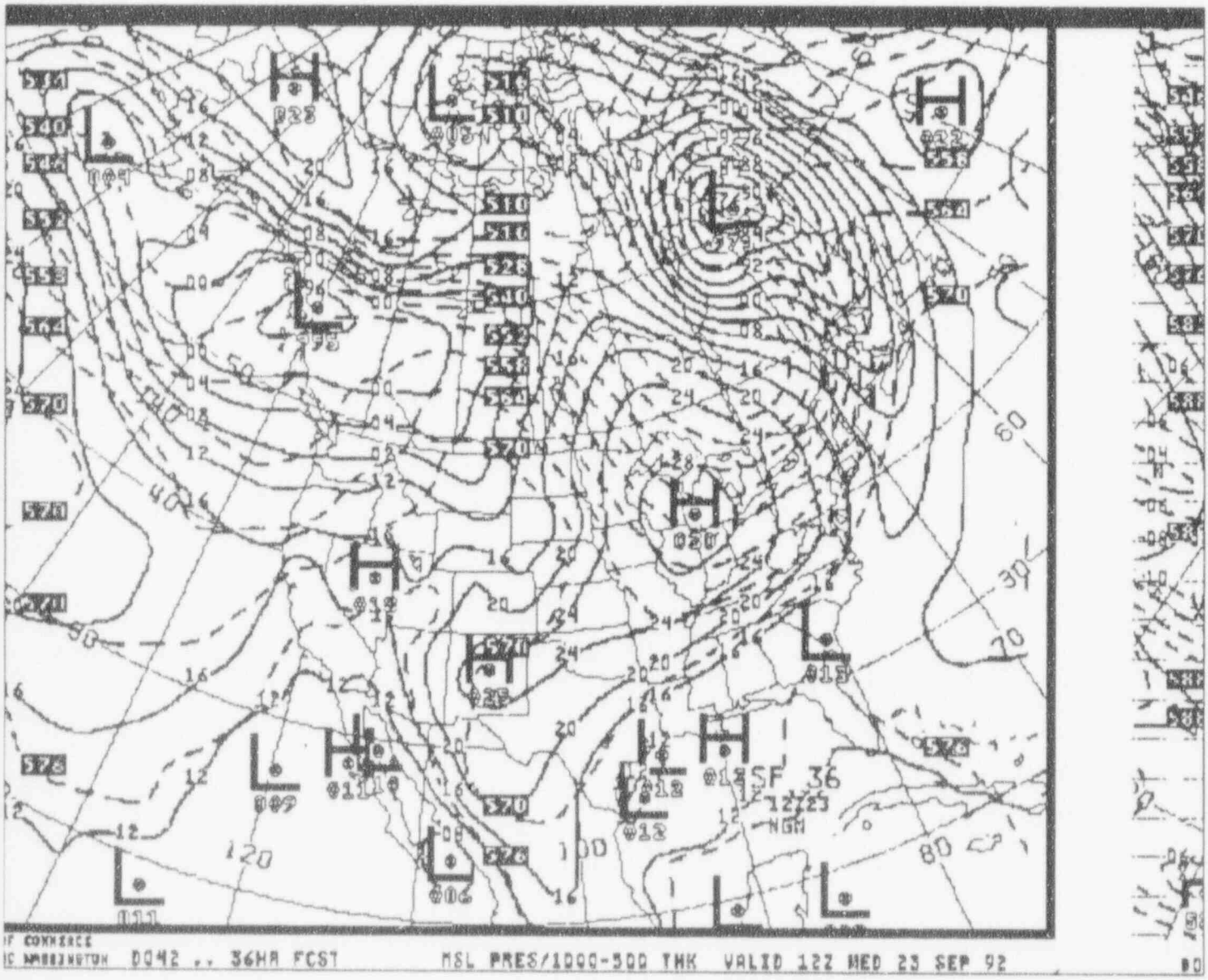
00:14 am



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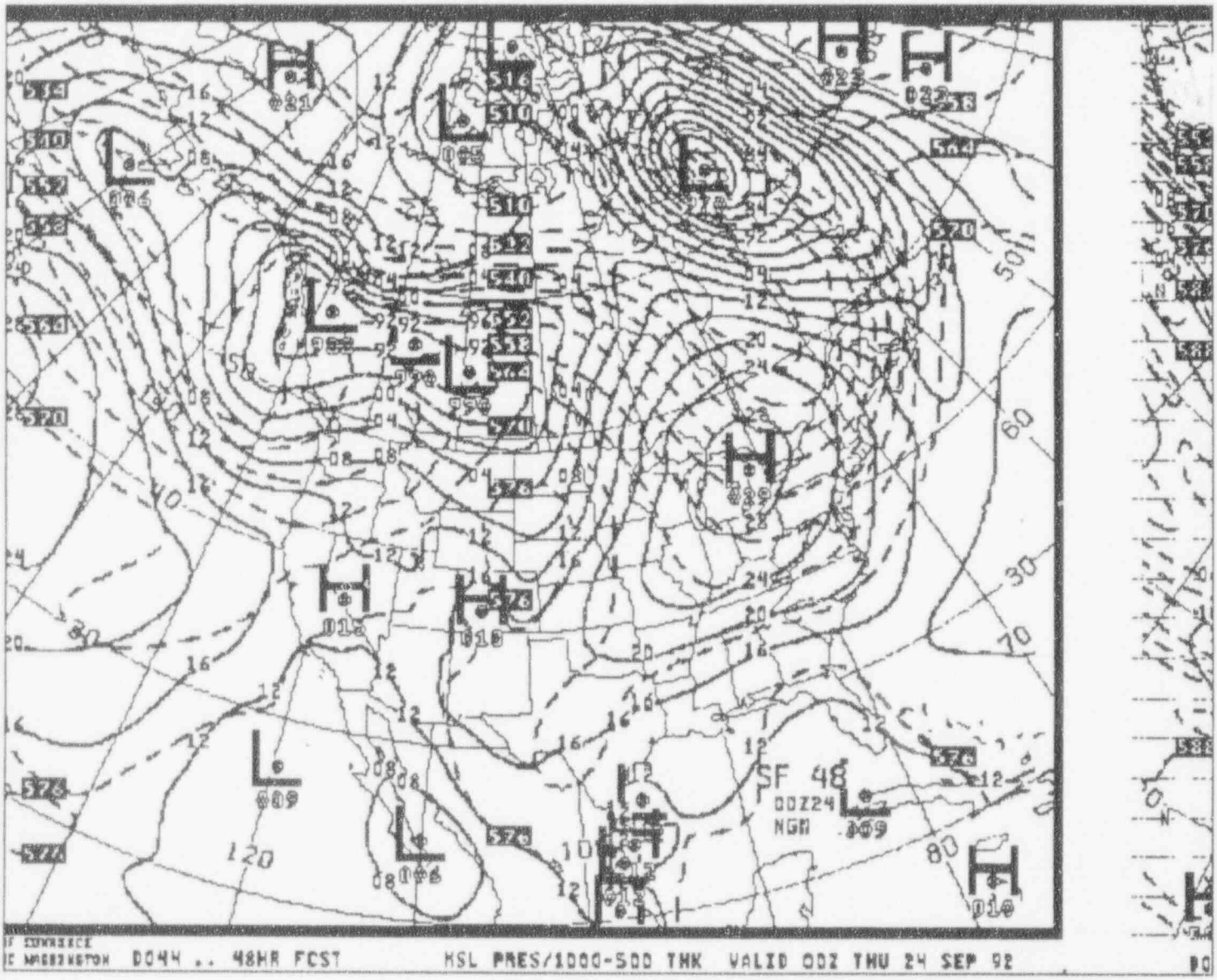
00:31 am



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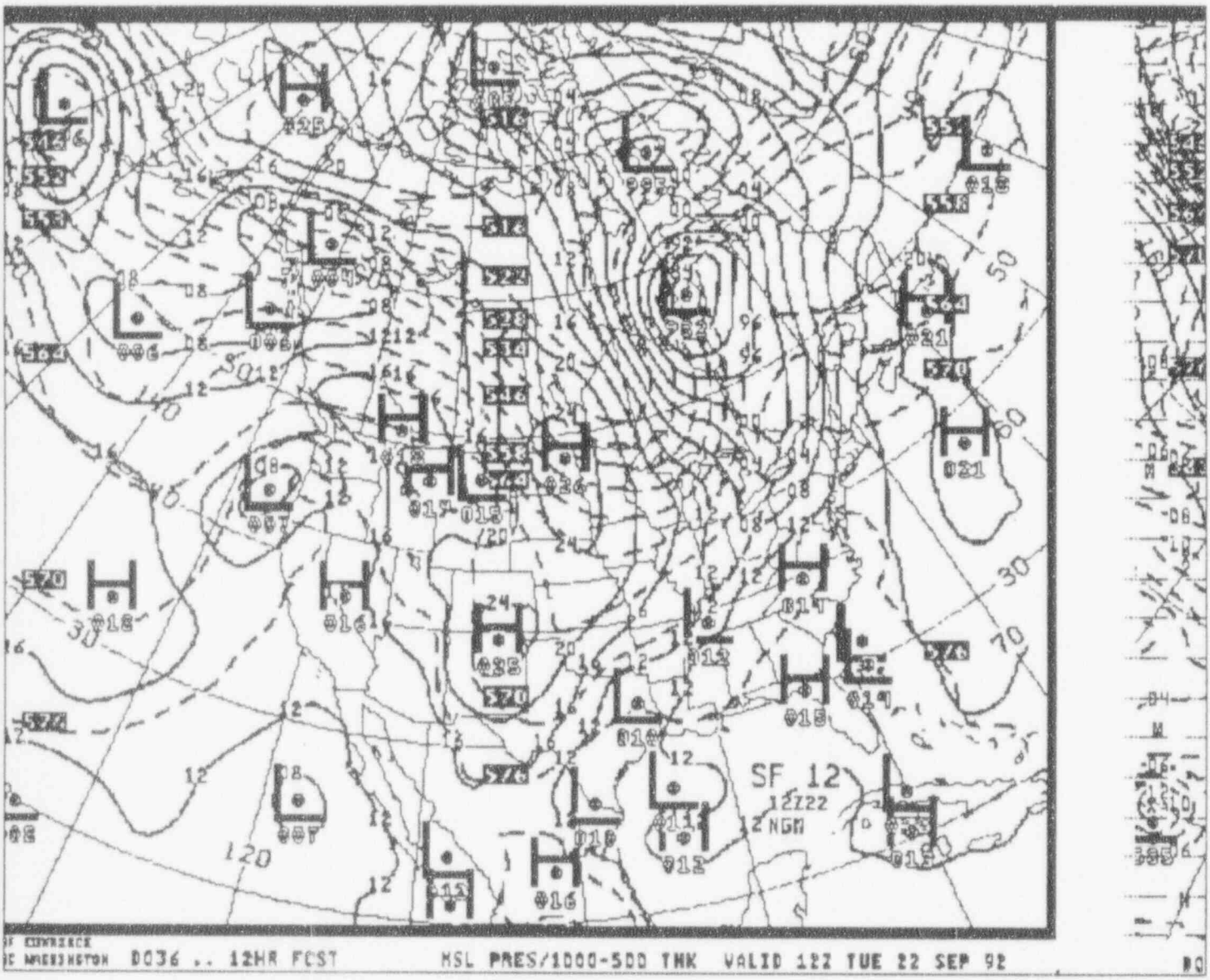

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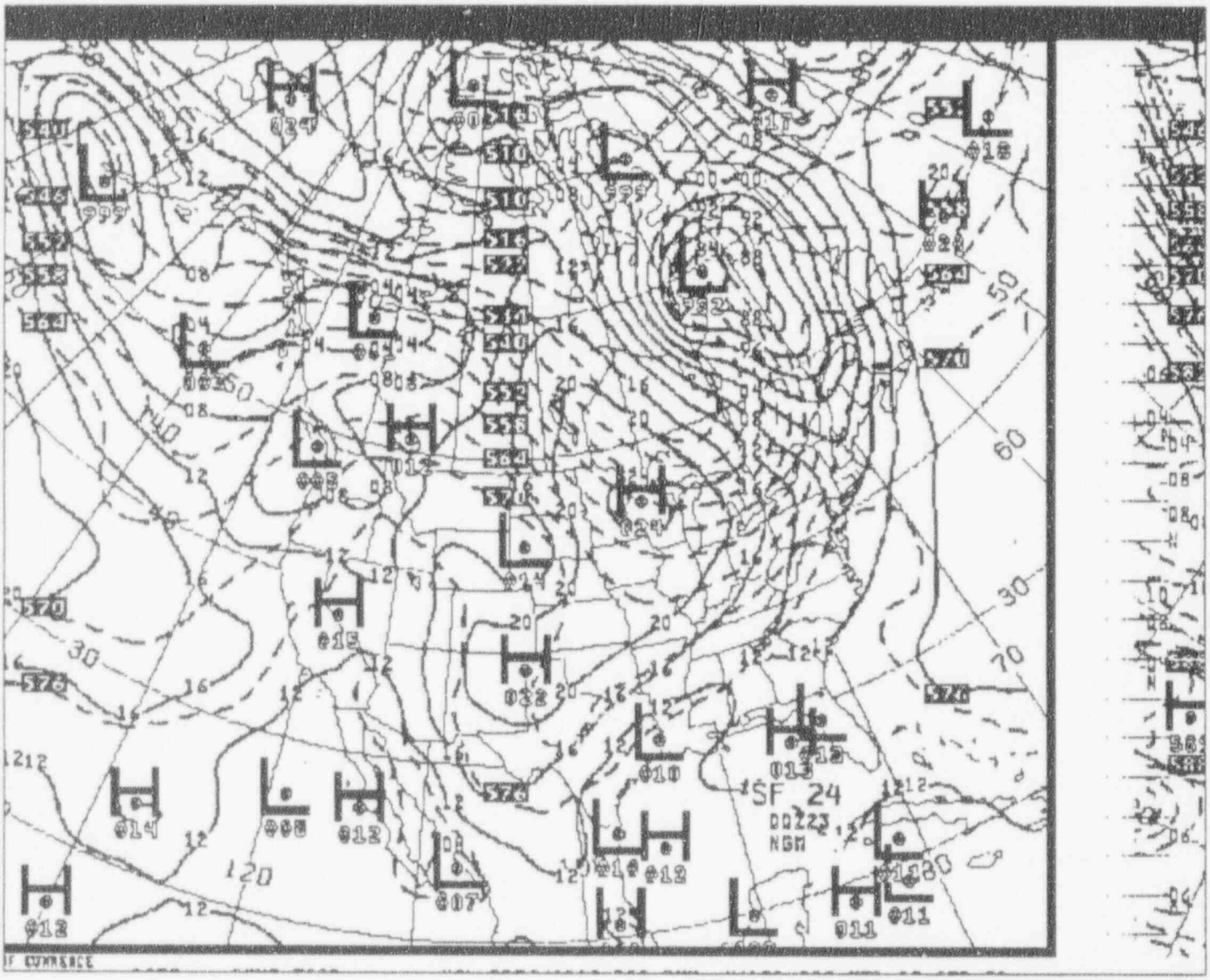
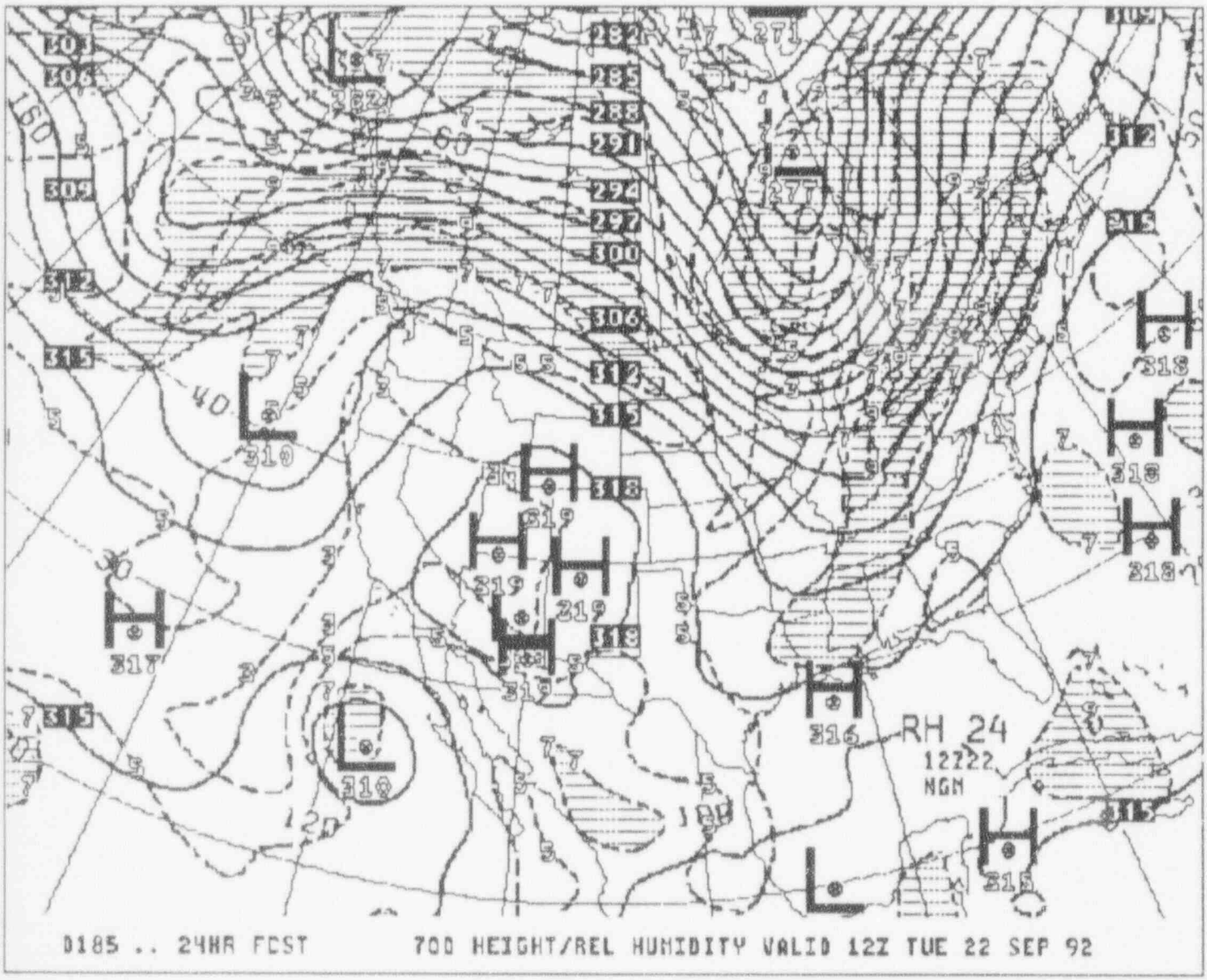


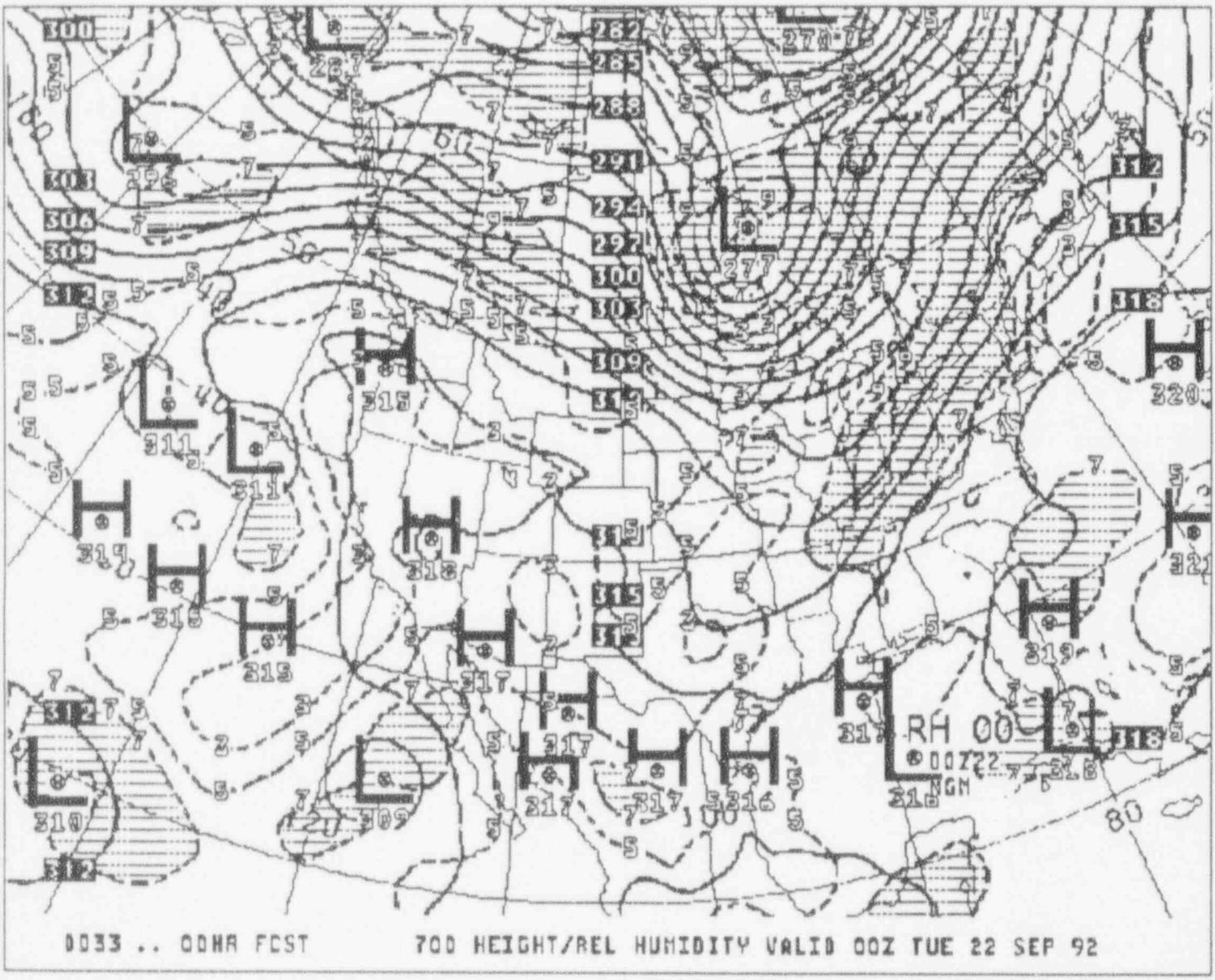
NGM 00-48 700 HT/RH

01:39 pm



NGM 00-48 700 HT/RH

11:47 pm



NGM 00-48 700 HT/RH

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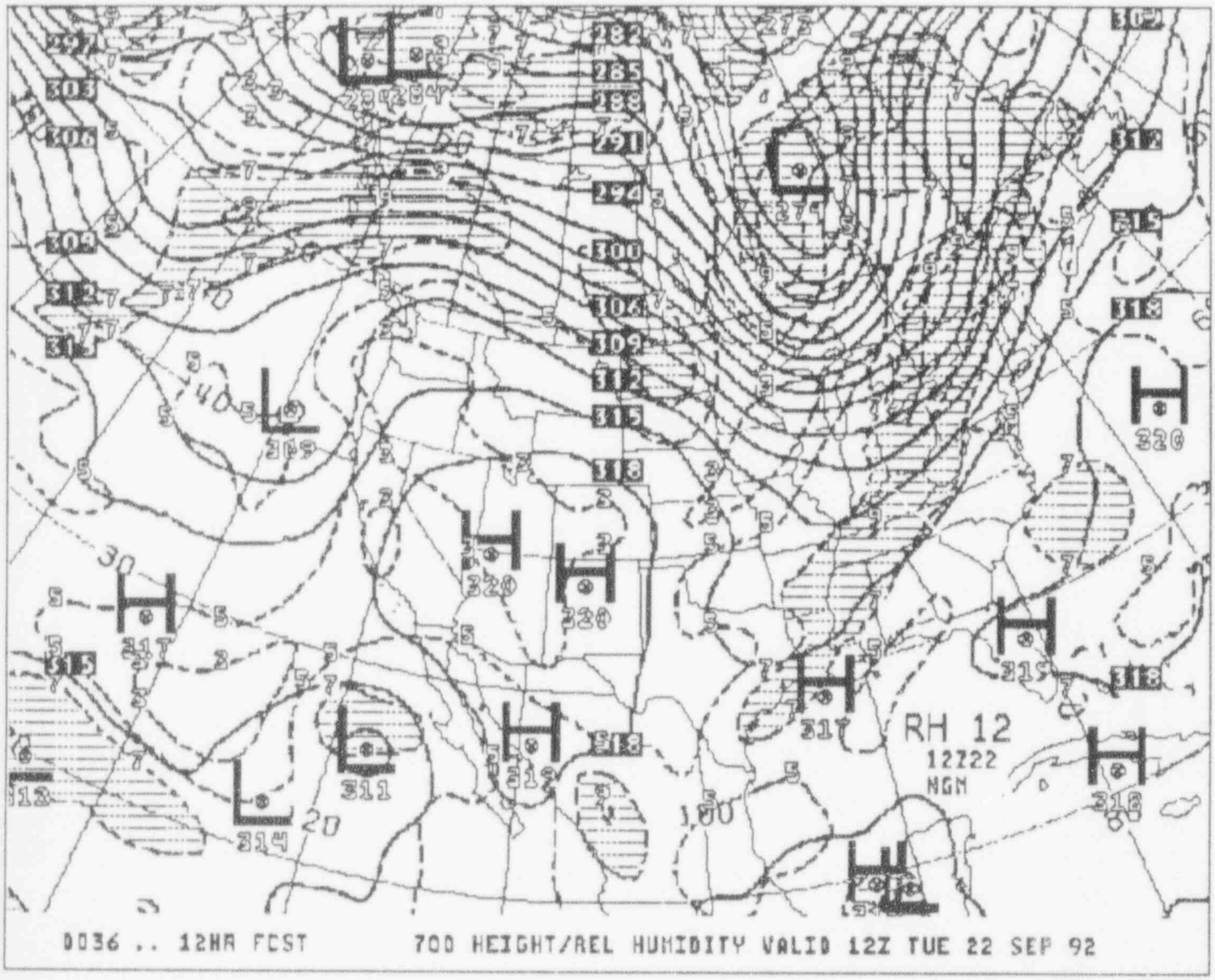
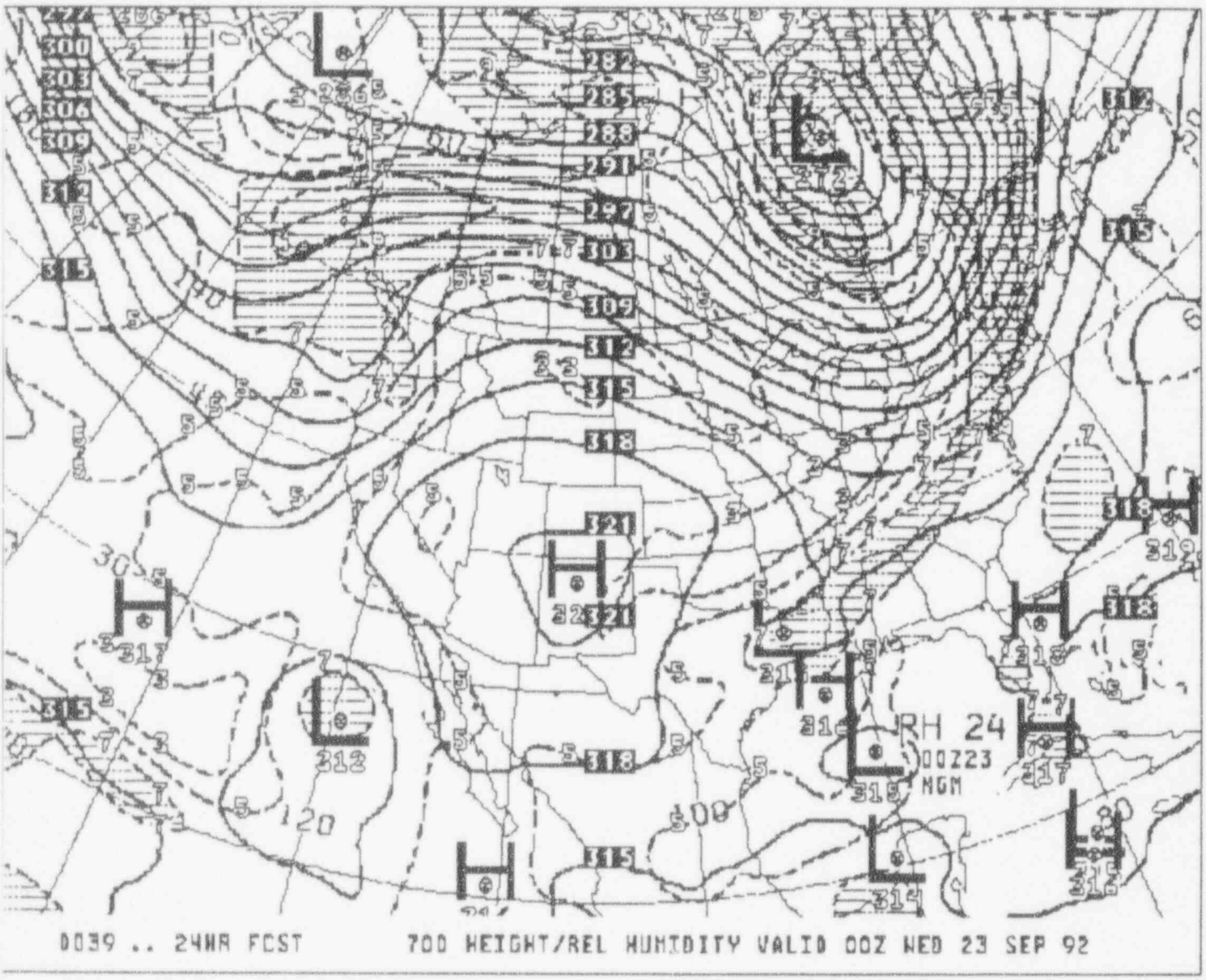


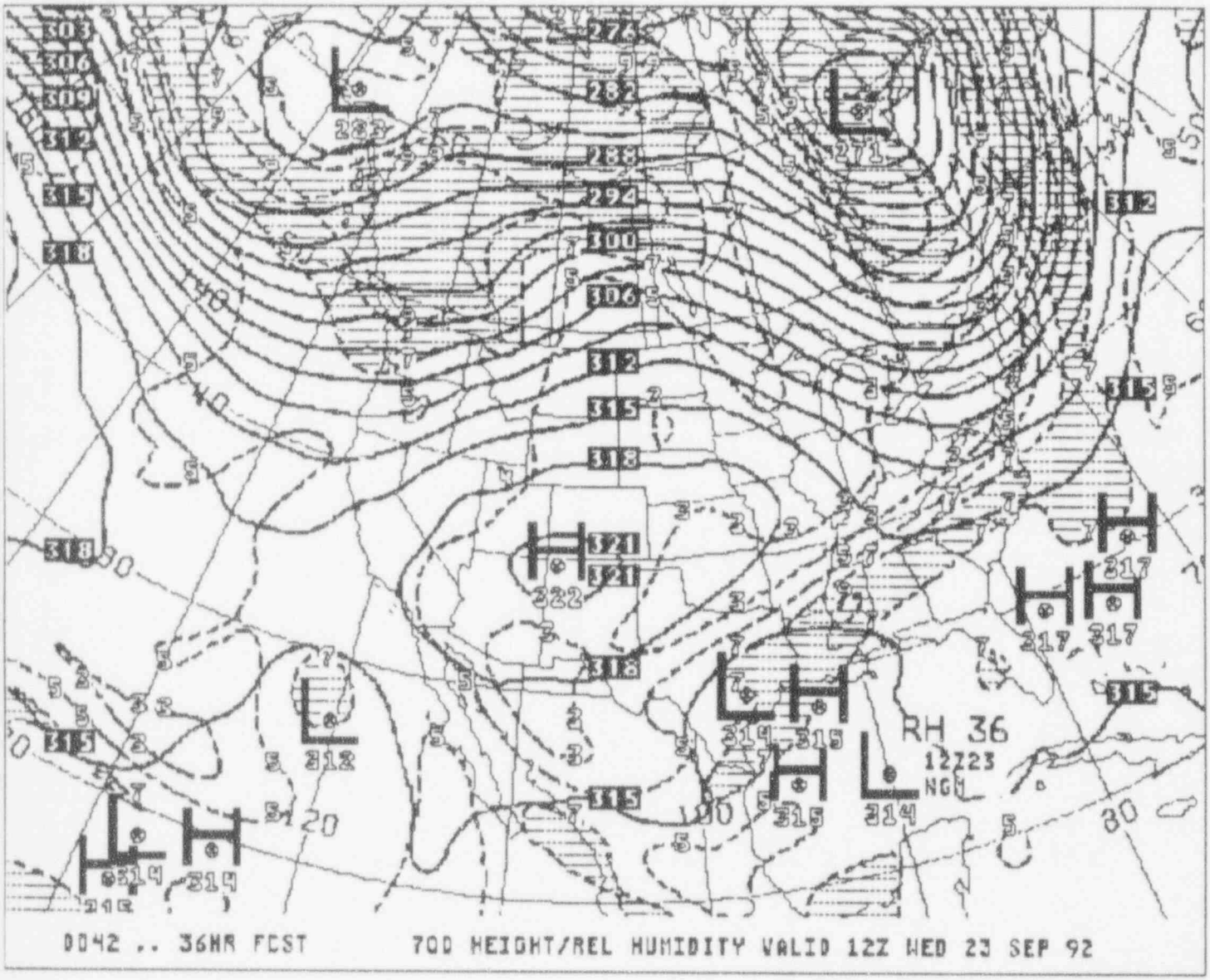
NGM 00-48 700 HT/RH

00:06 am



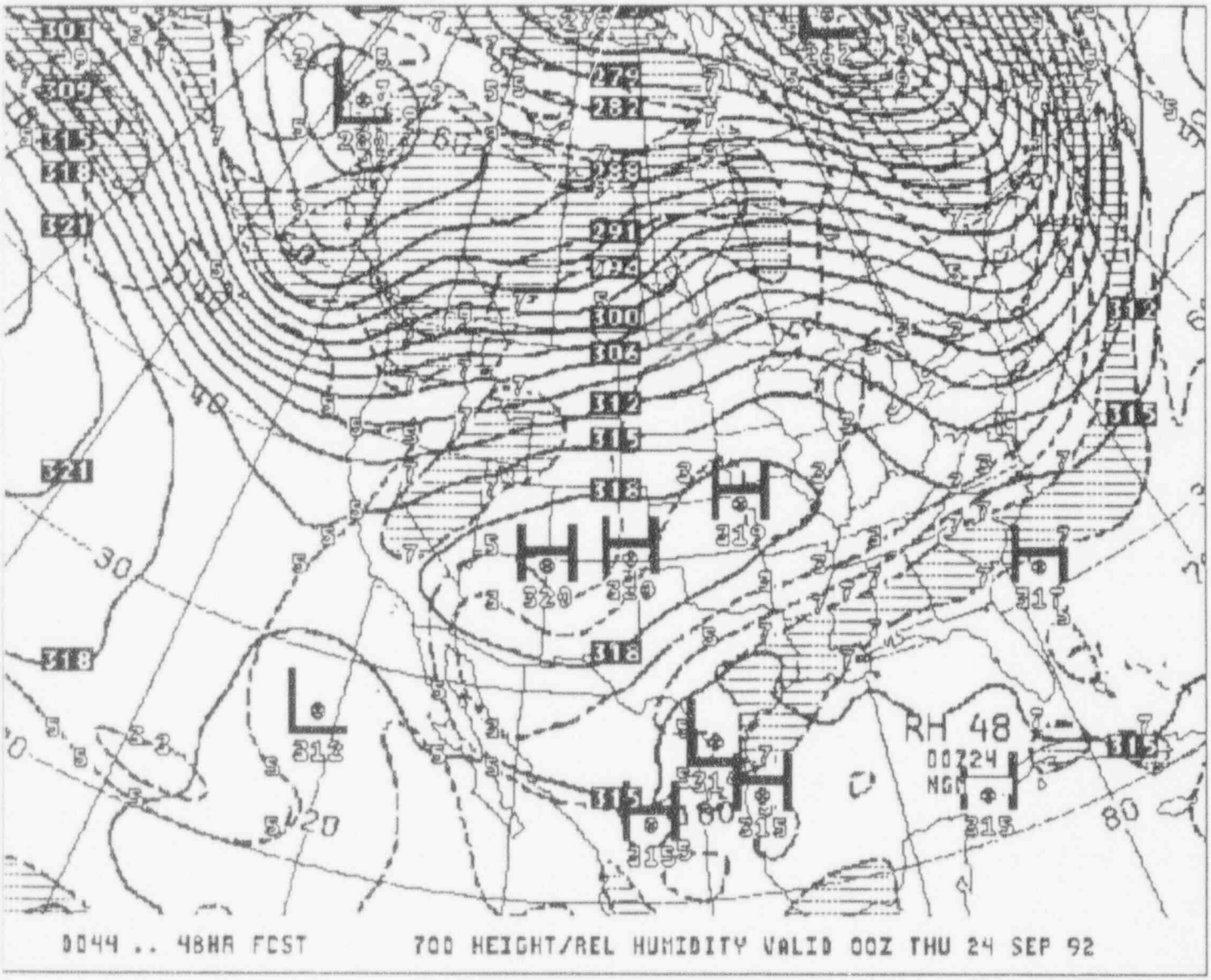
NGM 00-48 700 HT/RH

00:14 am



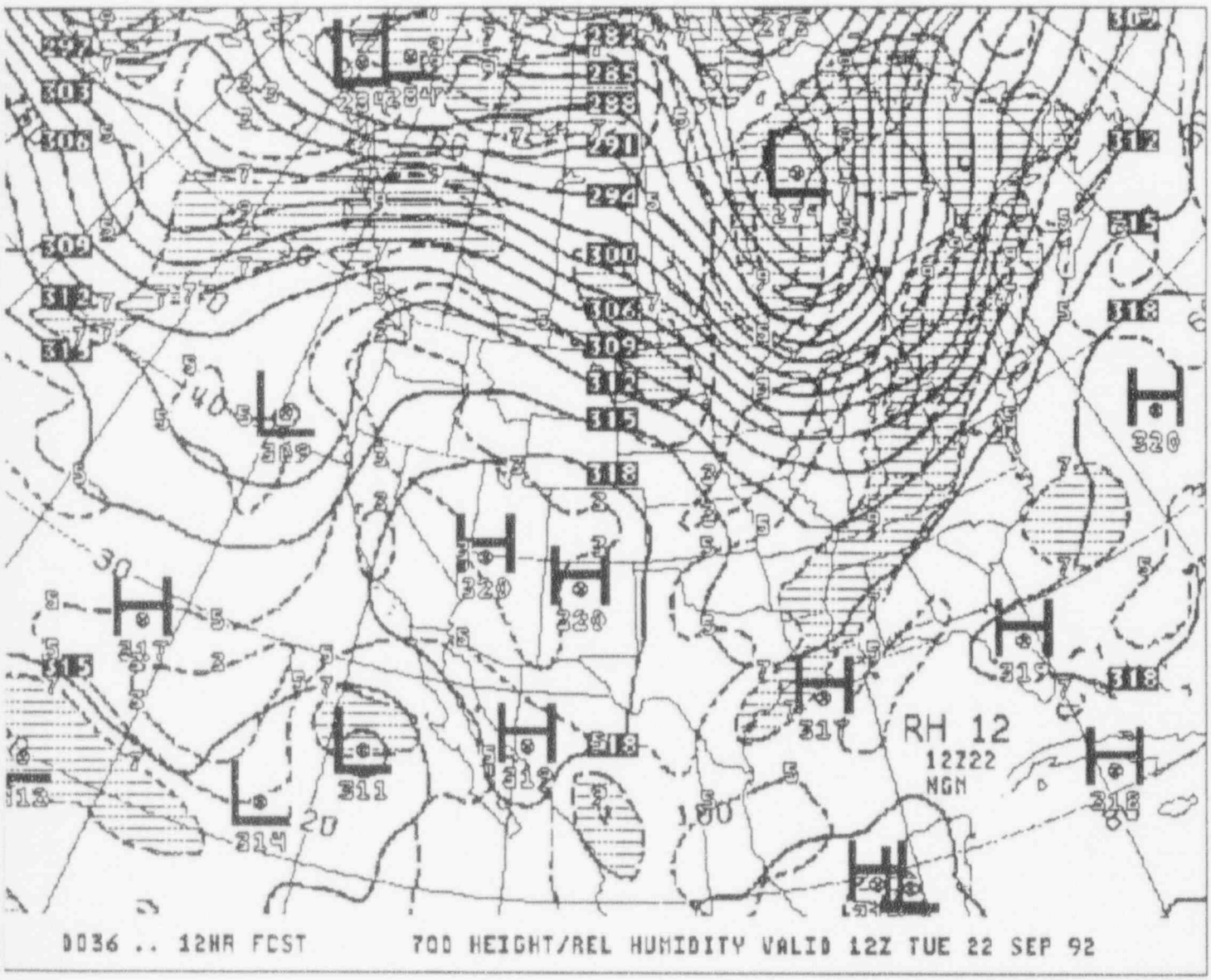
NGM 00-48 700 HT/RH

00:31 am



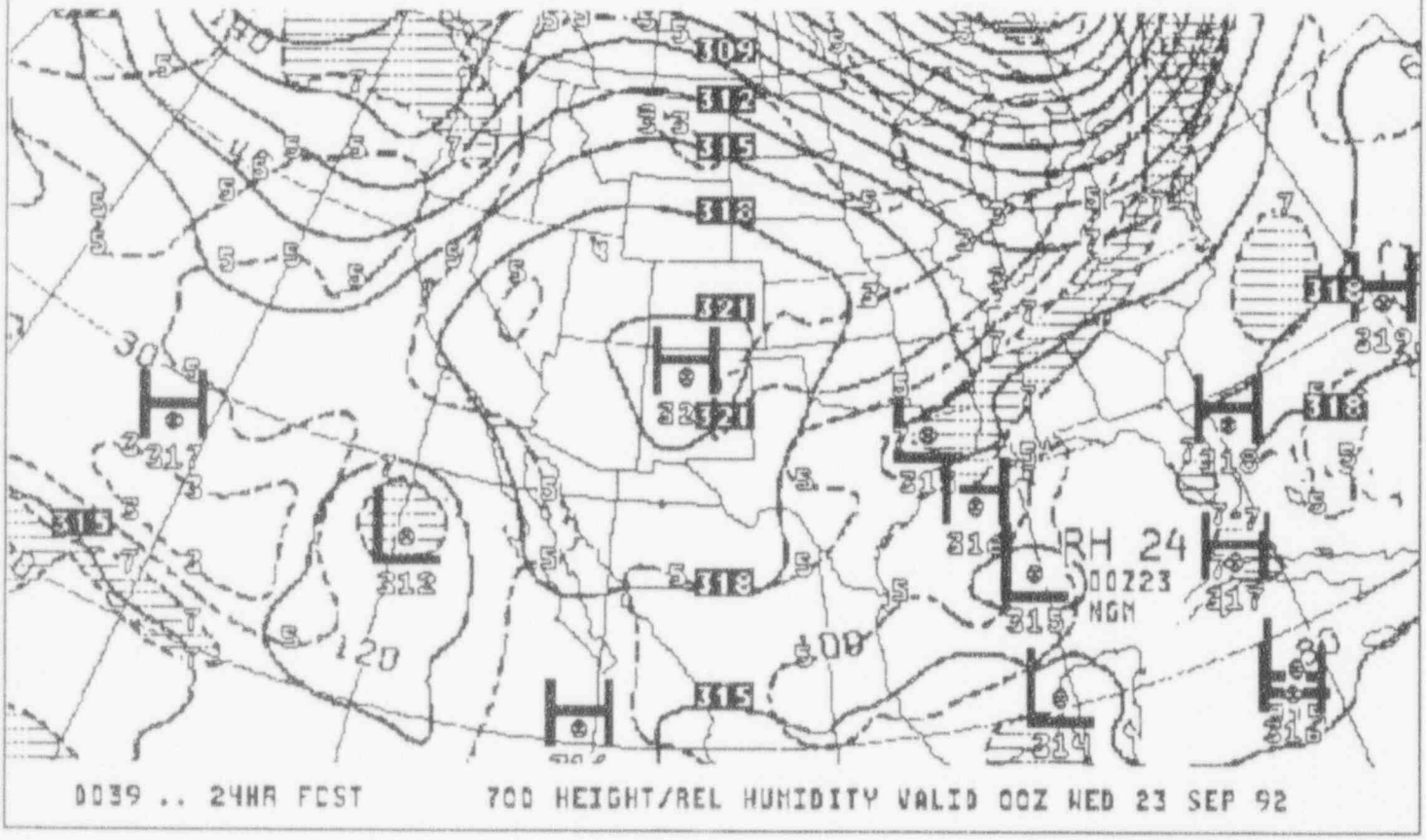
NGM 00-48 700 HT/RH

05:19 am



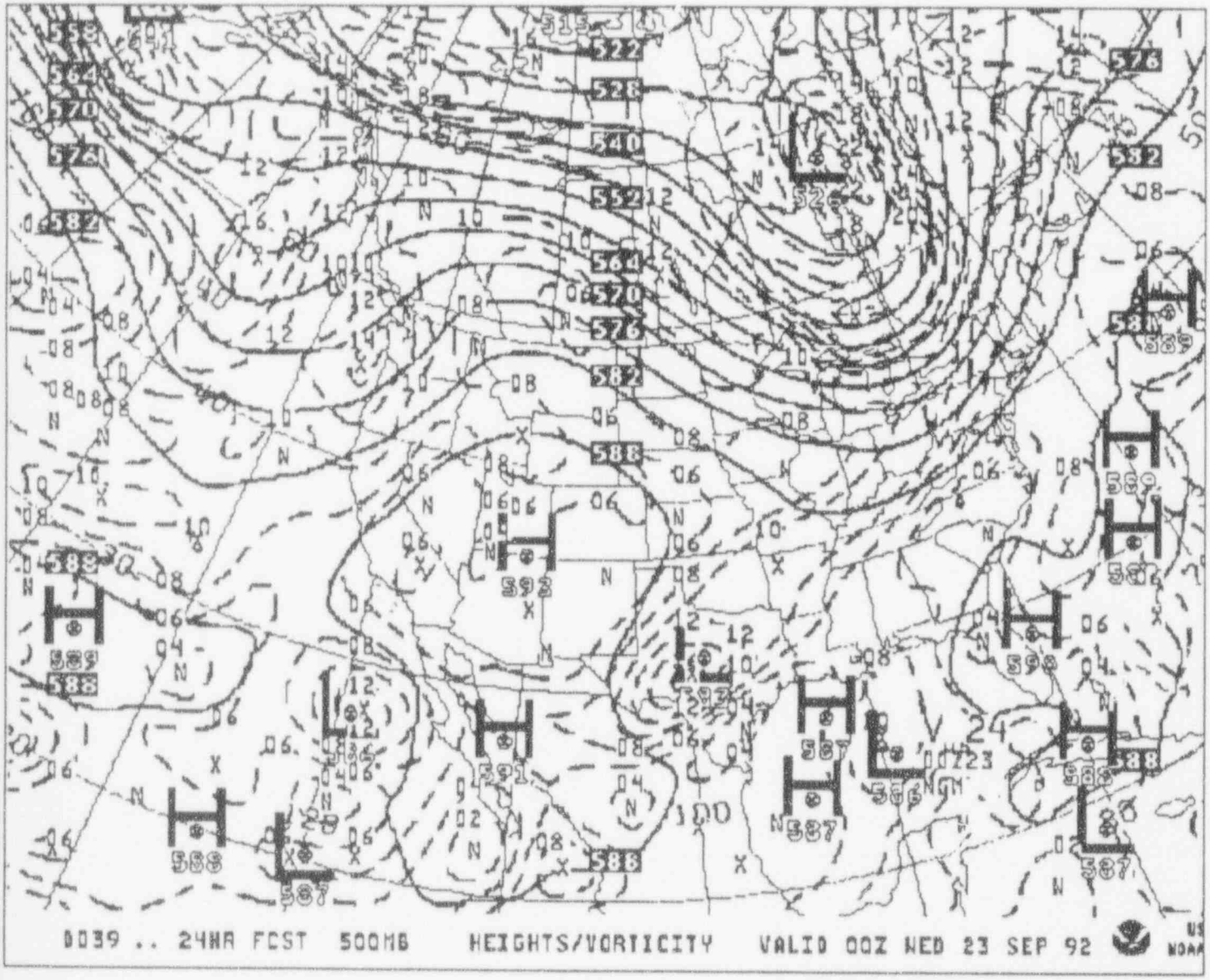
NGM 00-48 700 HT/RH

05:29 am



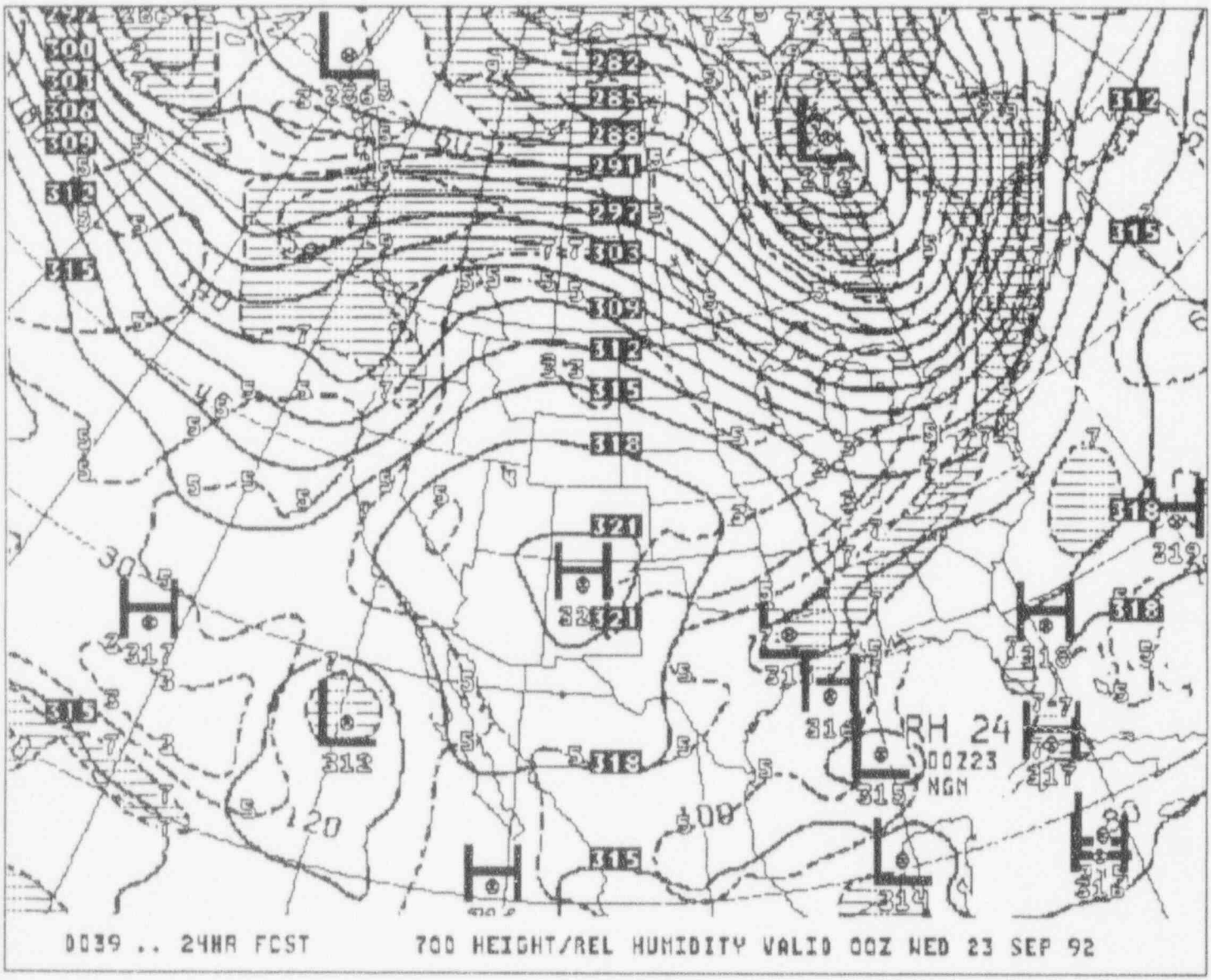
NGM 00-48 700 HT/RH

05:33 am



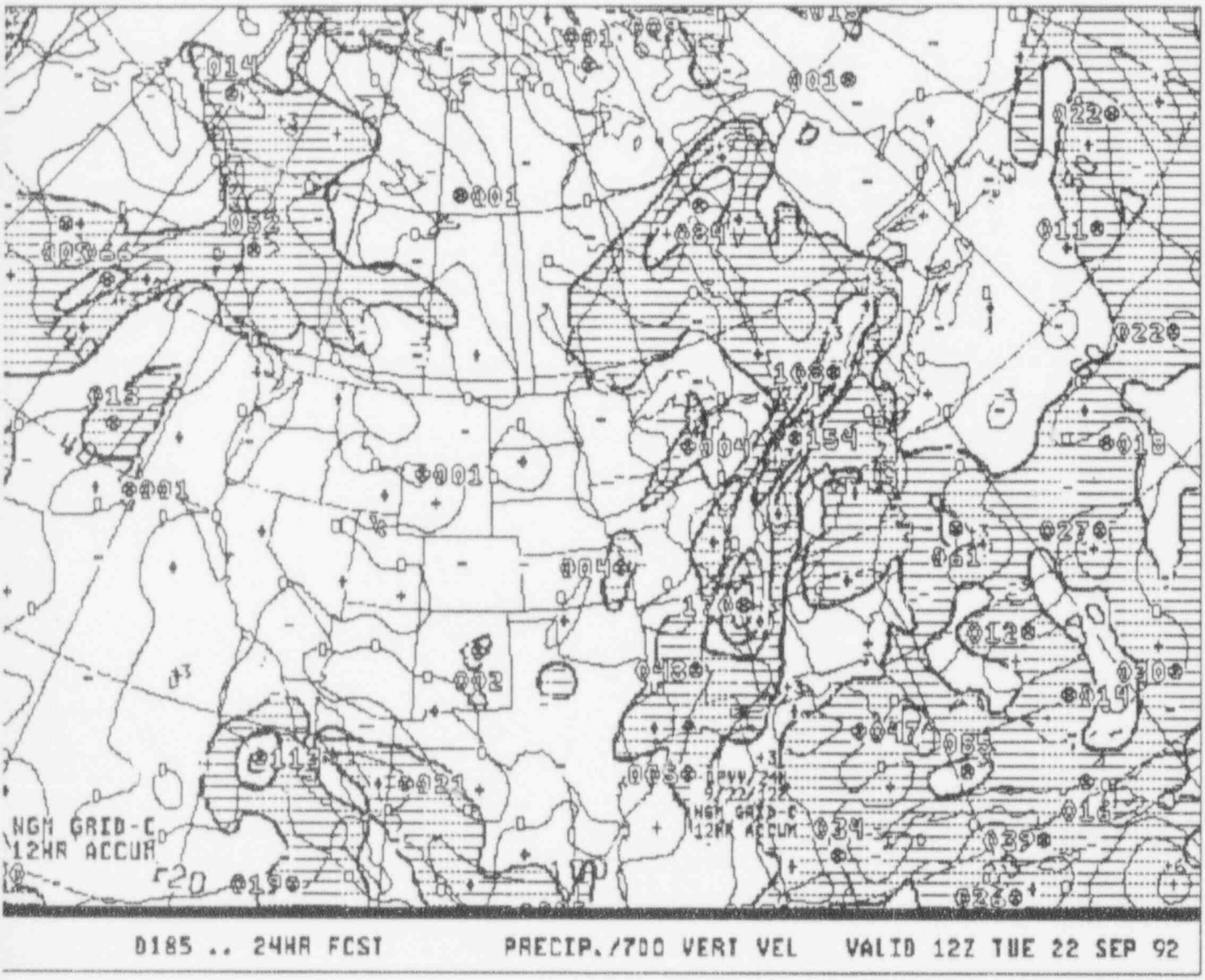
NGM 00-48 700 HT/RH

05:44 am



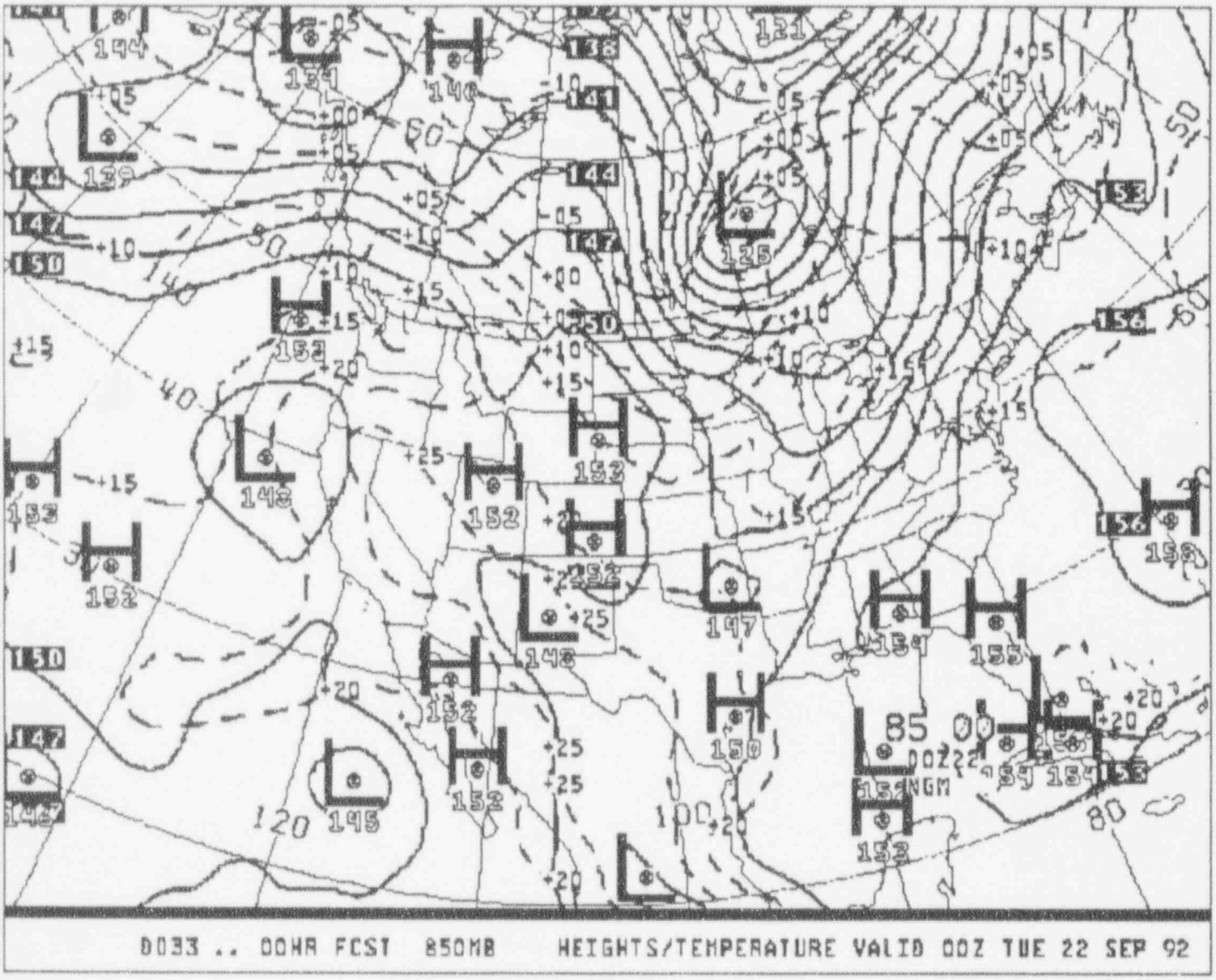
NGM 00-48 VV/QPF

01:39 pm



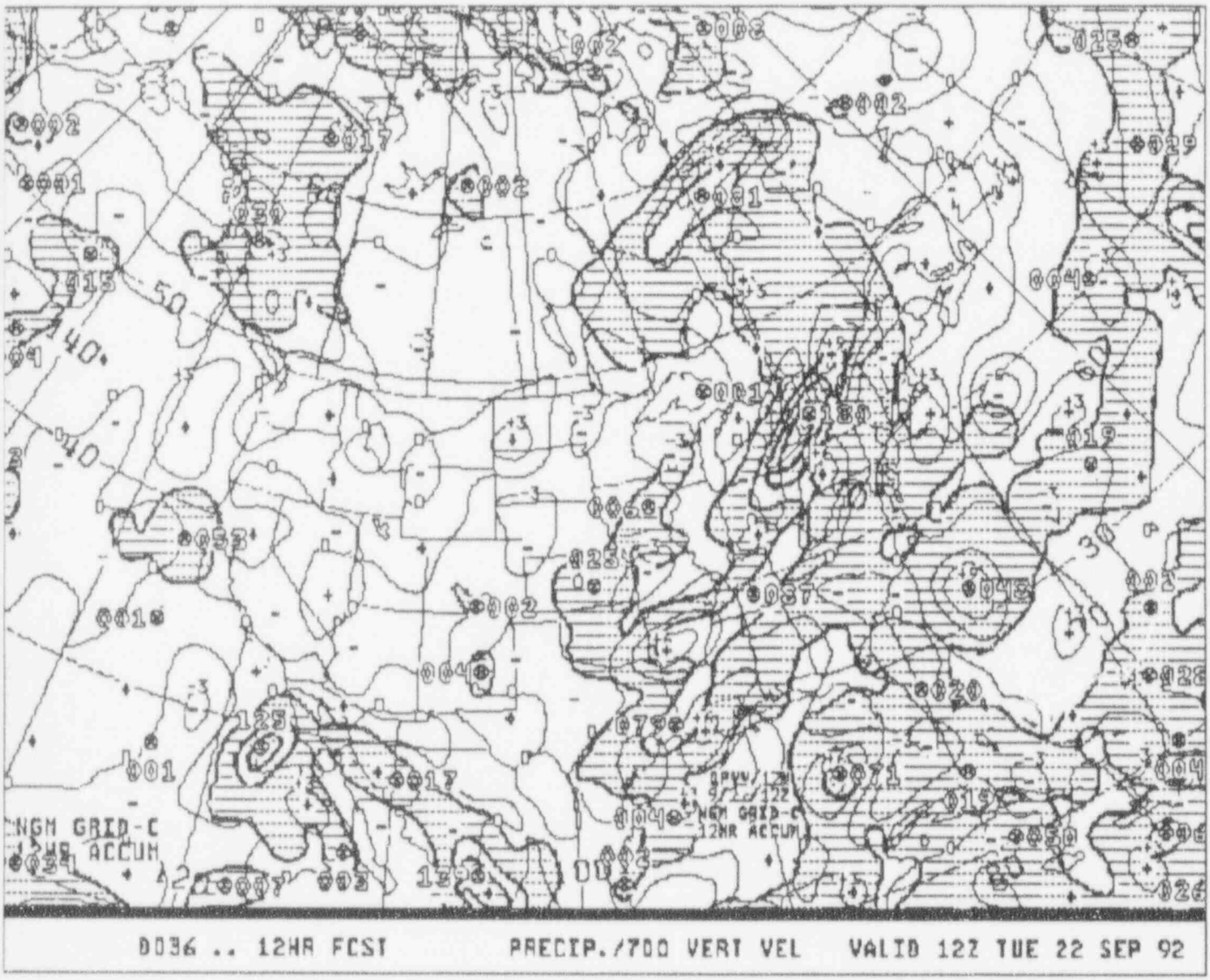
NGM 00-48 VV/QPF

11:47 pm



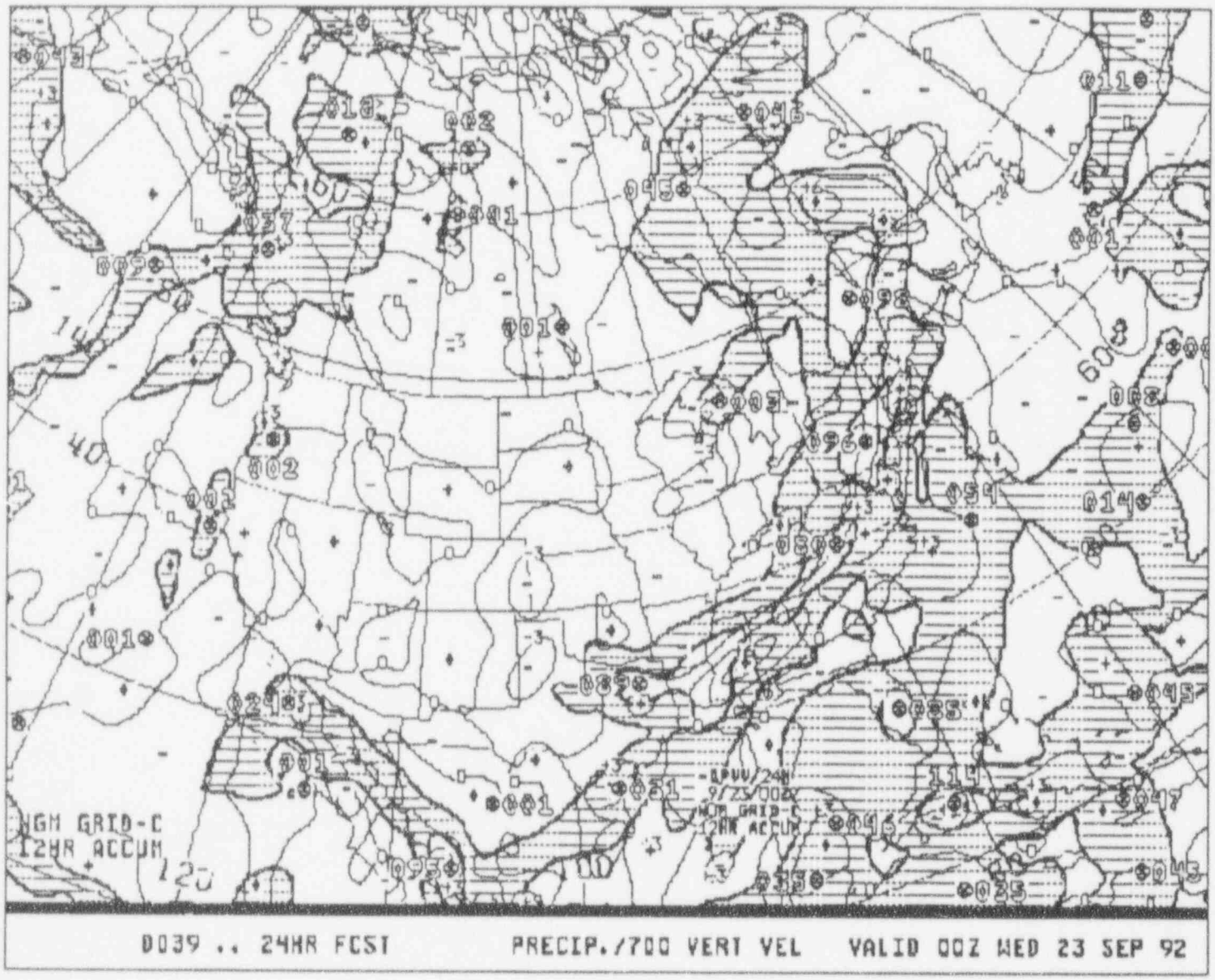
NGM 00-48 VV/QPF

11:59 pm



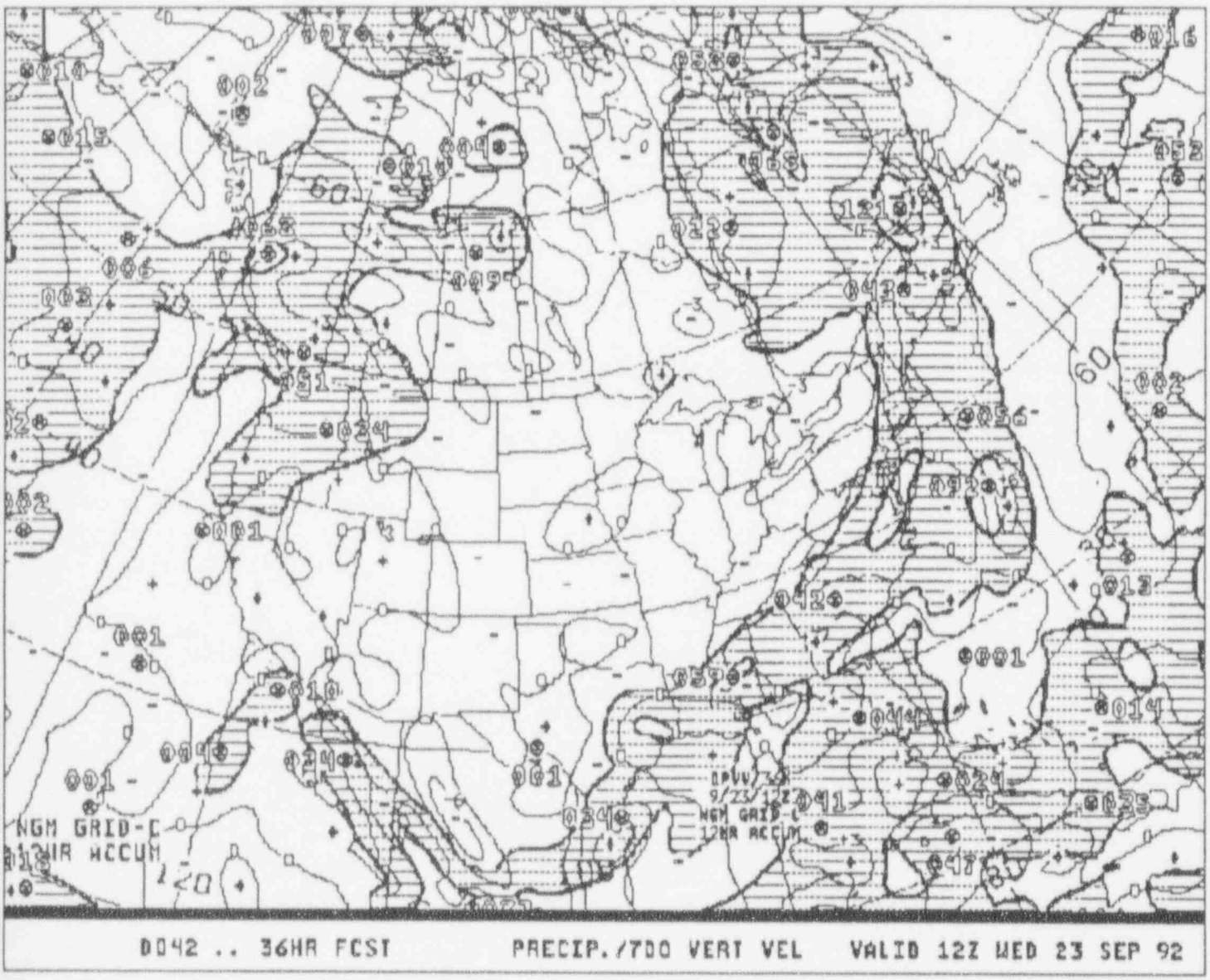
NGM 00-48 VV/QPF

00:07 am



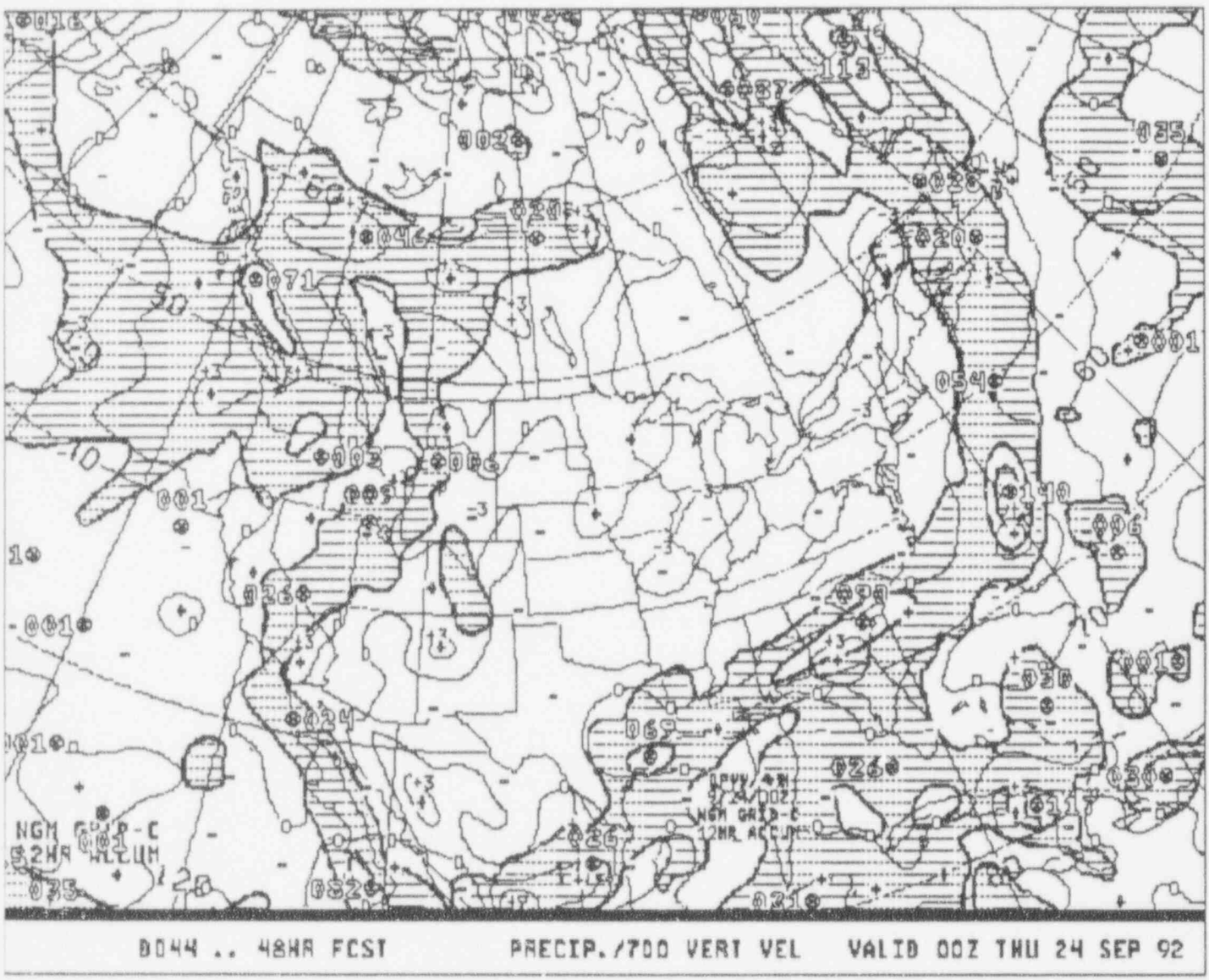
NGM 00-48 VV/QPF

00:14 am



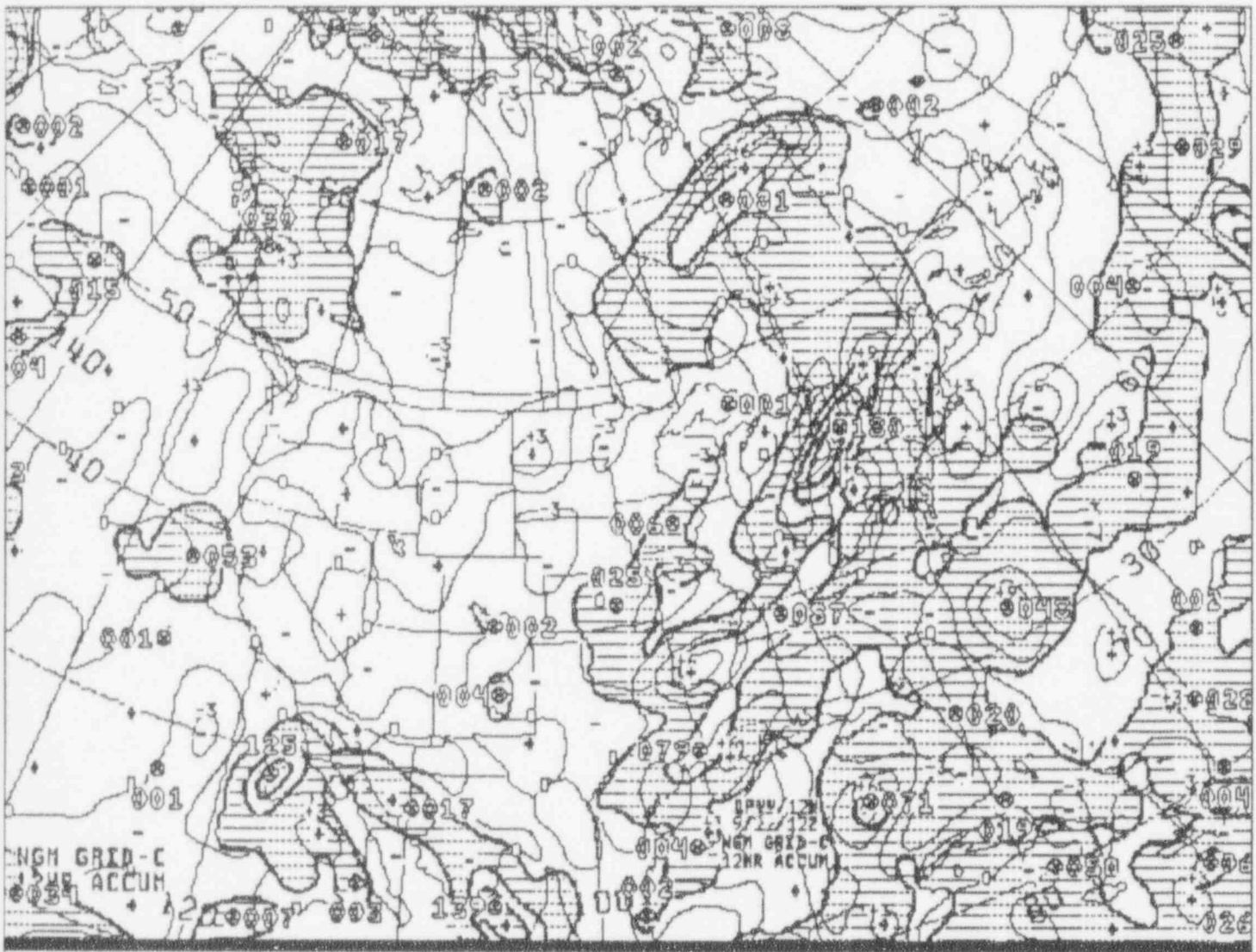
NGM 00-48 VV/QPF

00:32 am



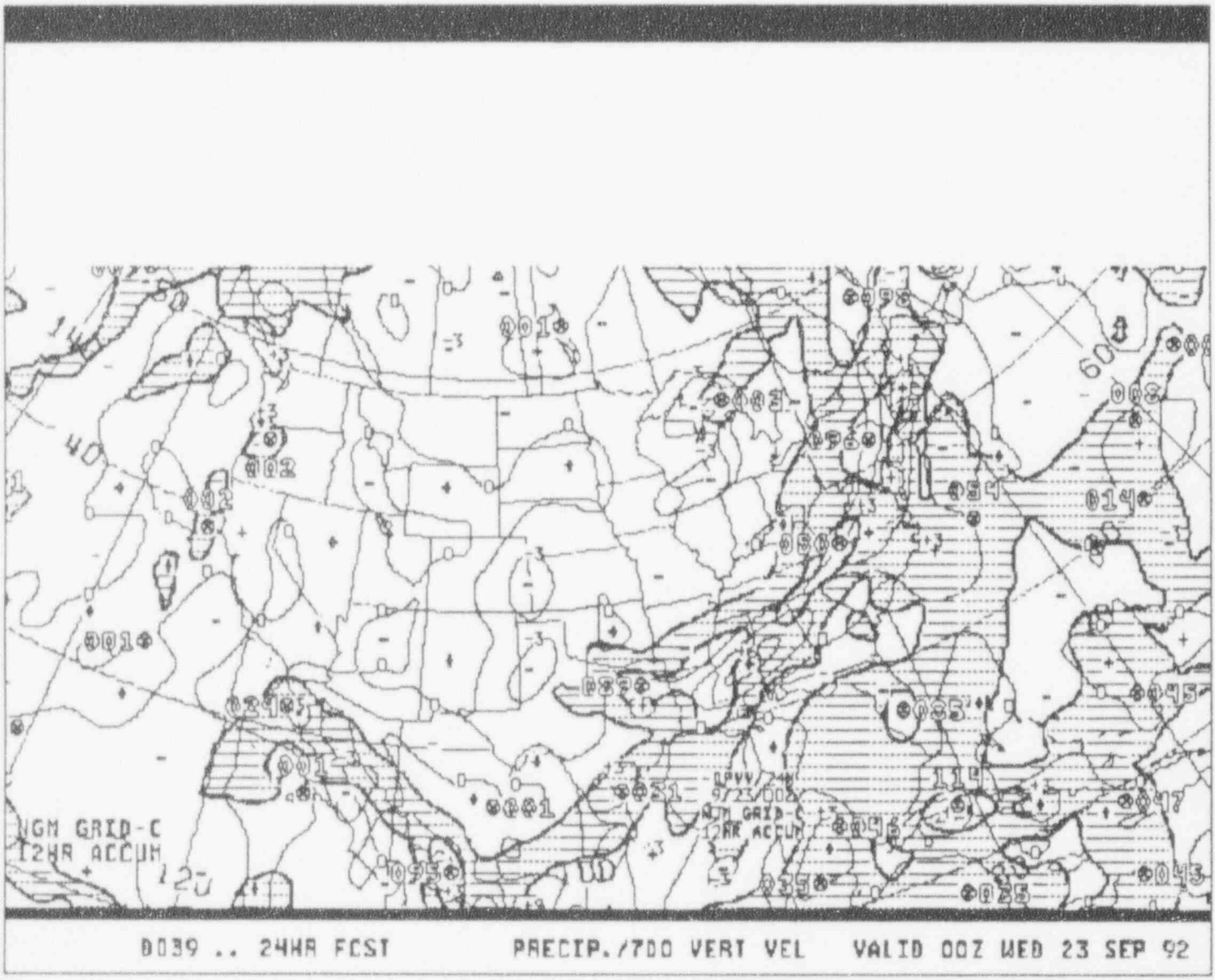
NGM 00-48 VV/QPF

05:20 am



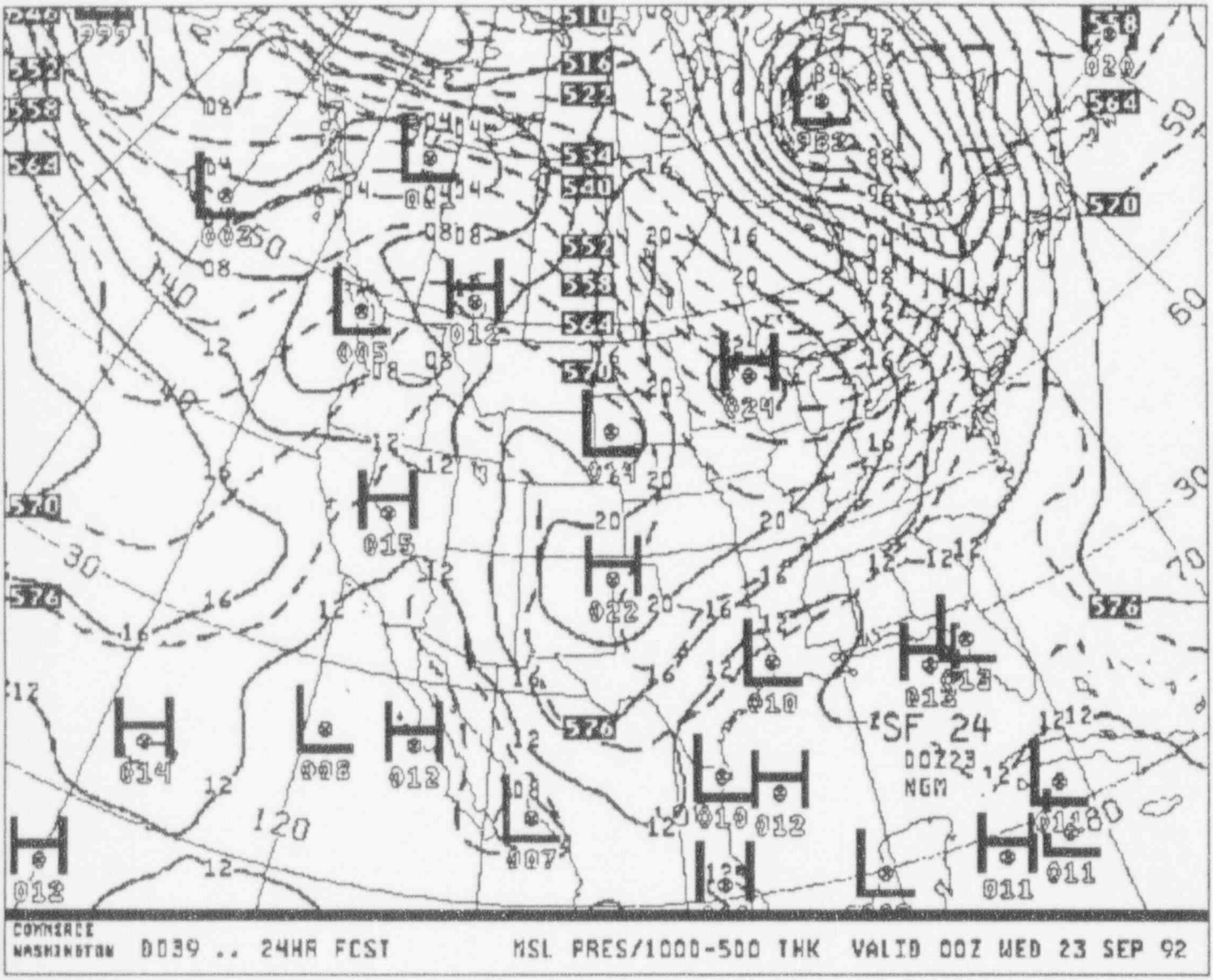
NGM 00-48 VV/QPF

05:29 am



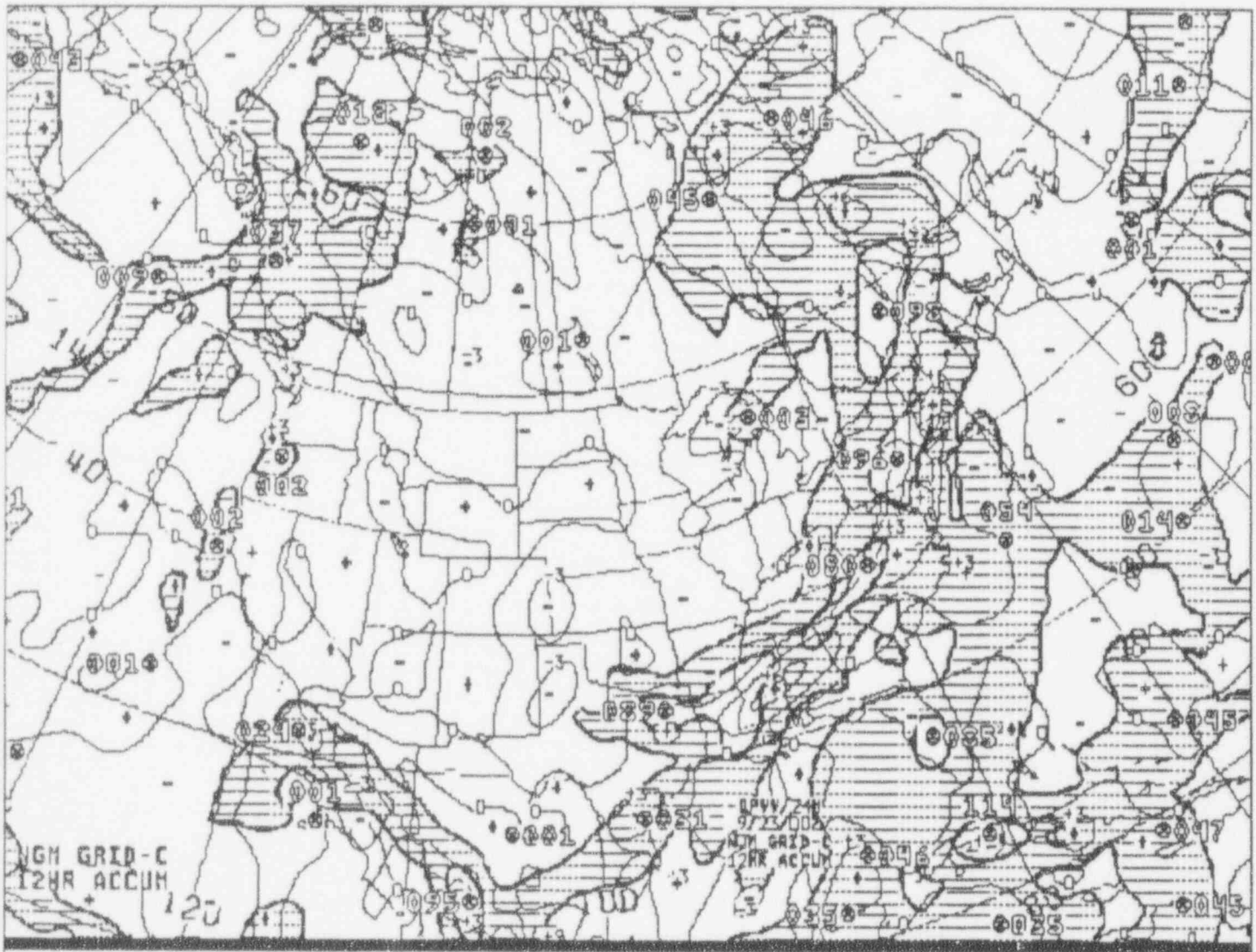
NGM 00-48 VV/QPF

05:33 am



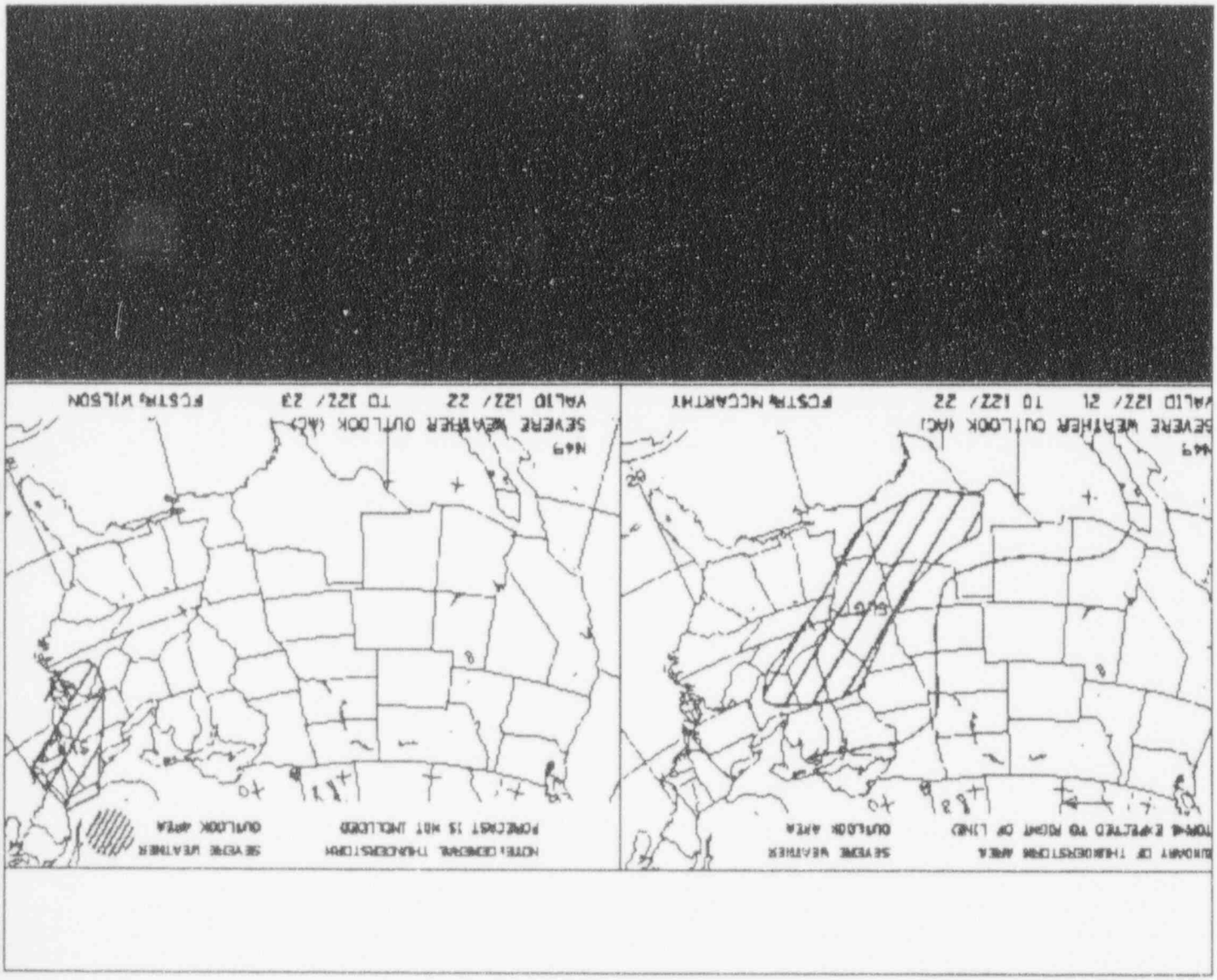
NGM 00-48 VV/QPF

05:44 am



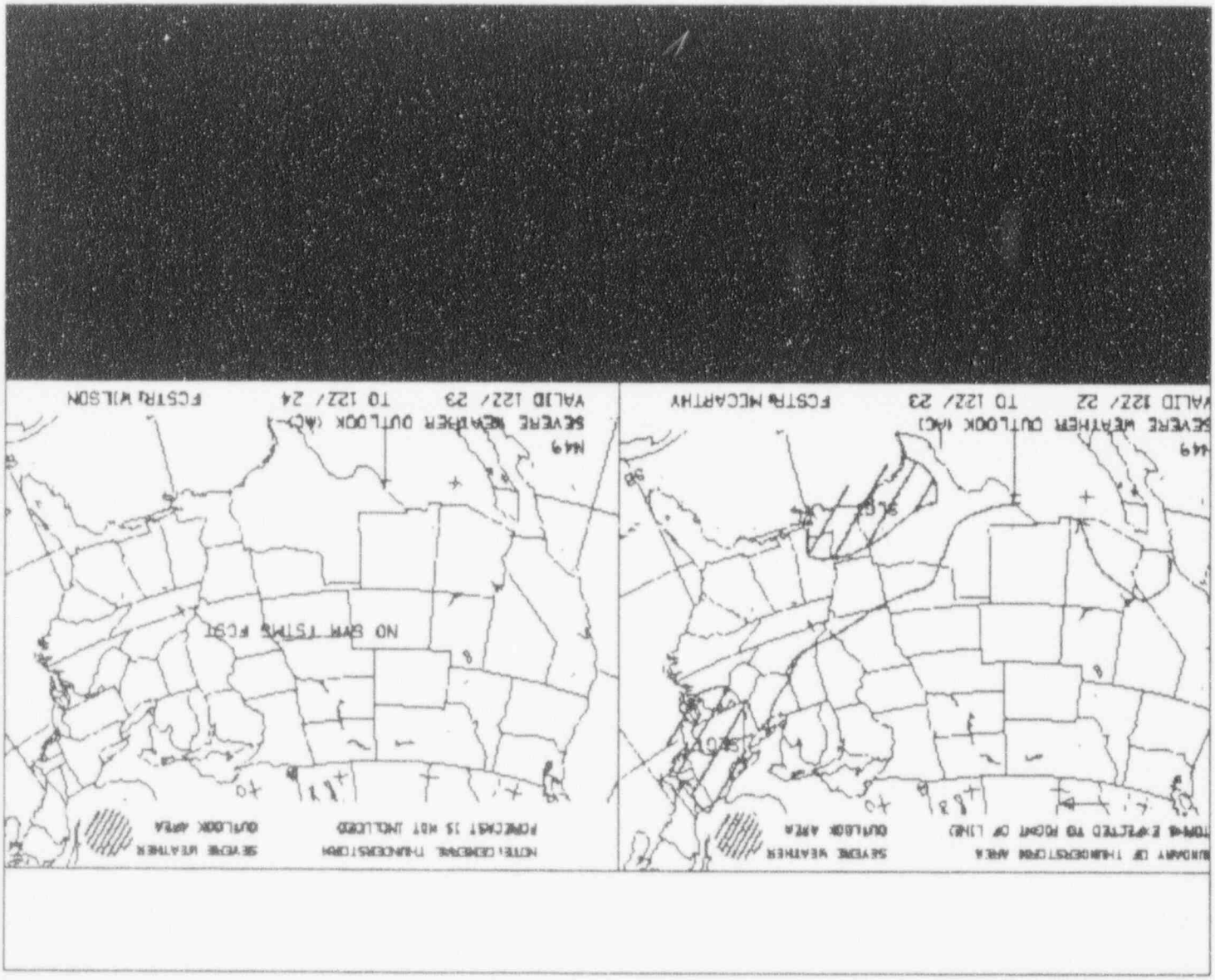
SEVERE WX OUTLOOK

05:36 am



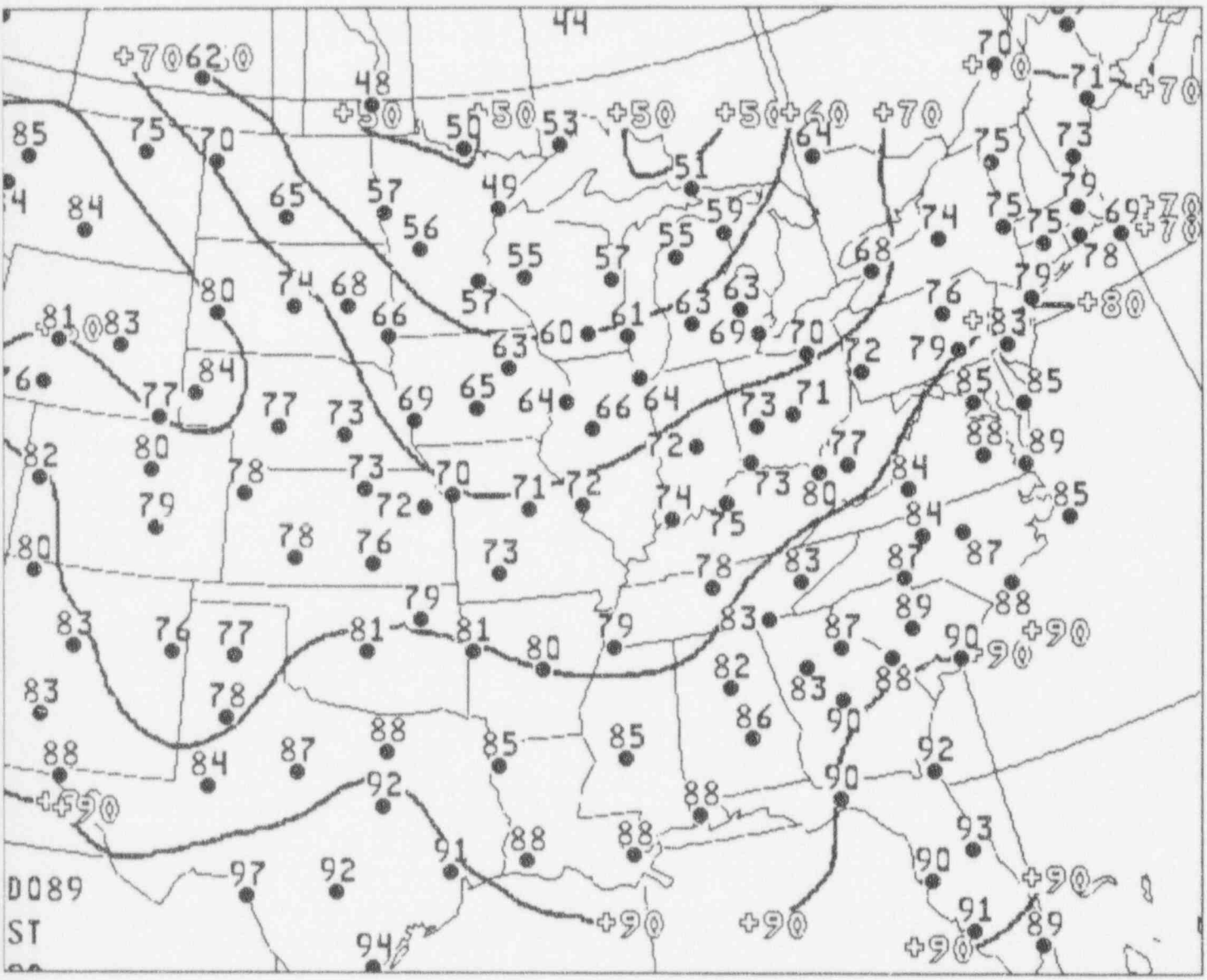
SEVERE WX OUTLOOK

05:46 am



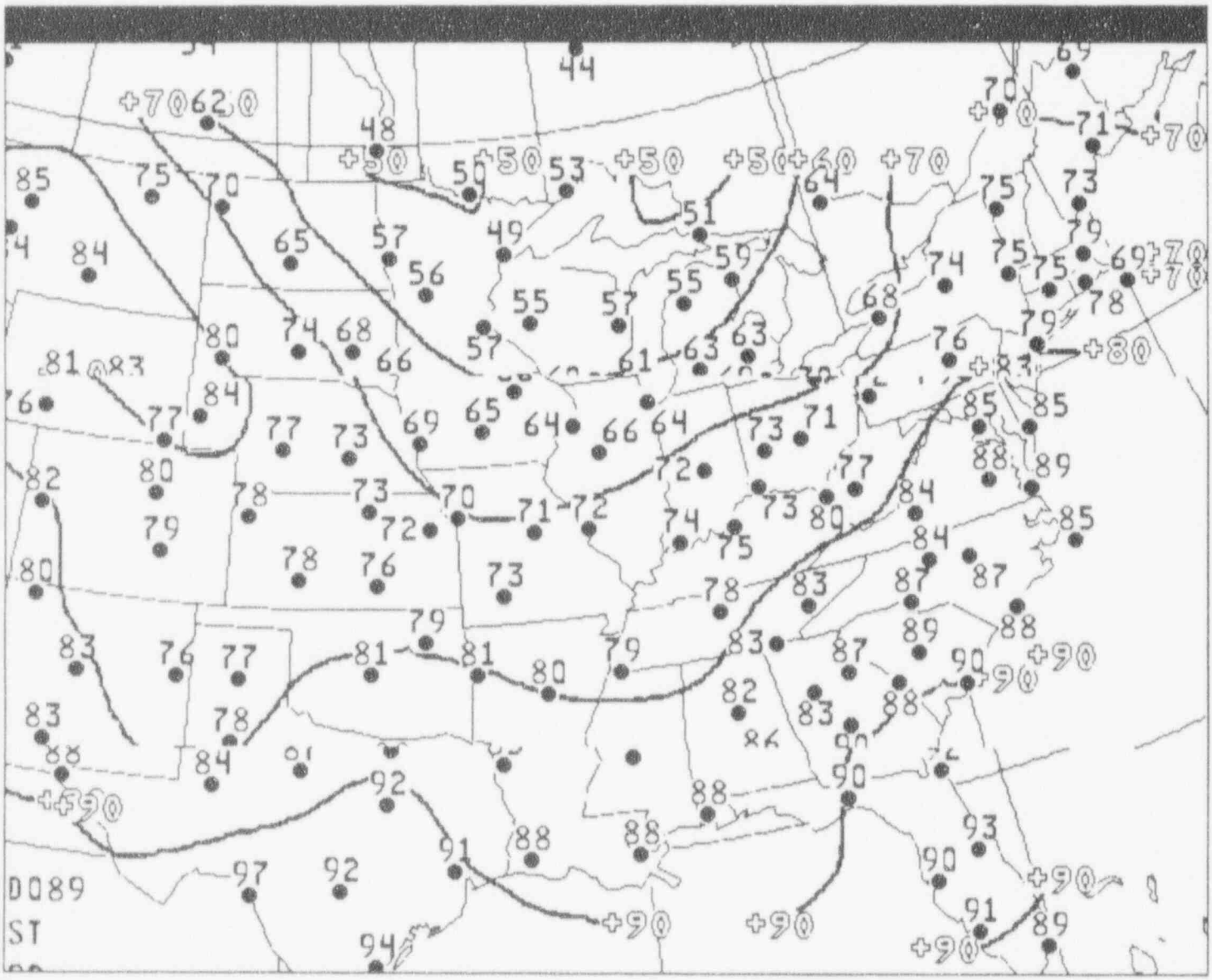
PROG MAX/MIN TEMPS-12

00:35 am



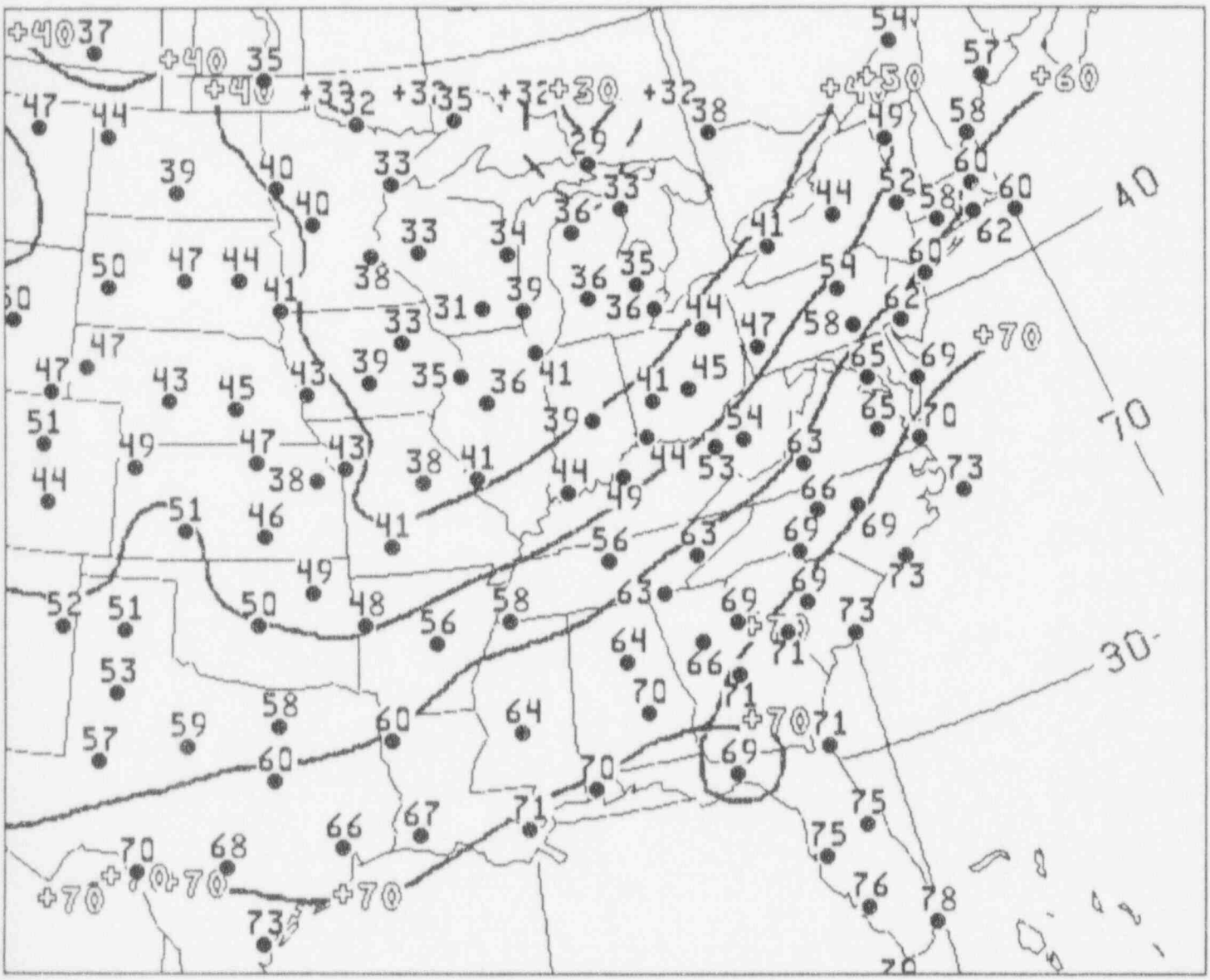
PROG MAX/MIN TEMPS-12

08:45 am



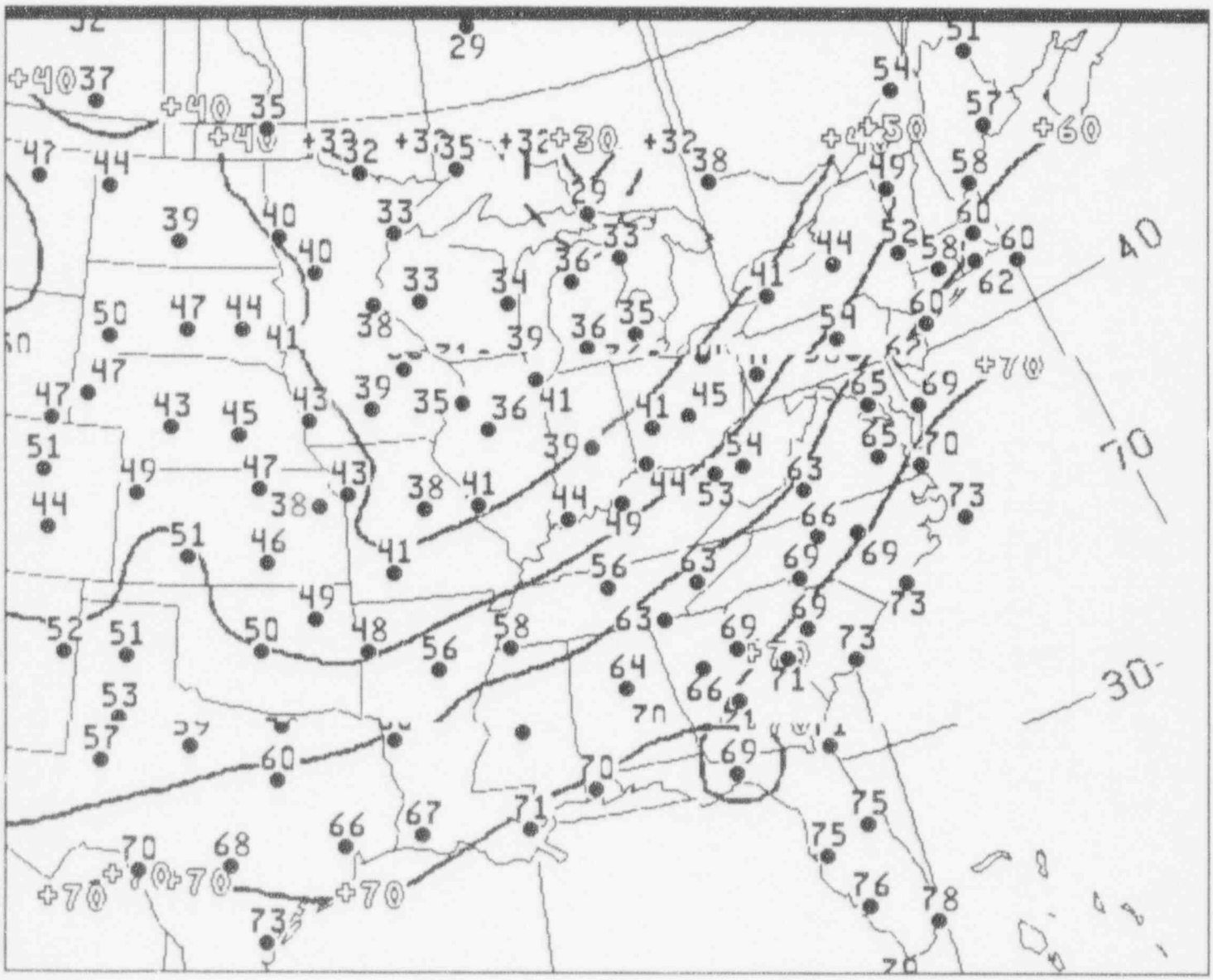
PROG MAX/MIN TEMPS-24

00:35 am



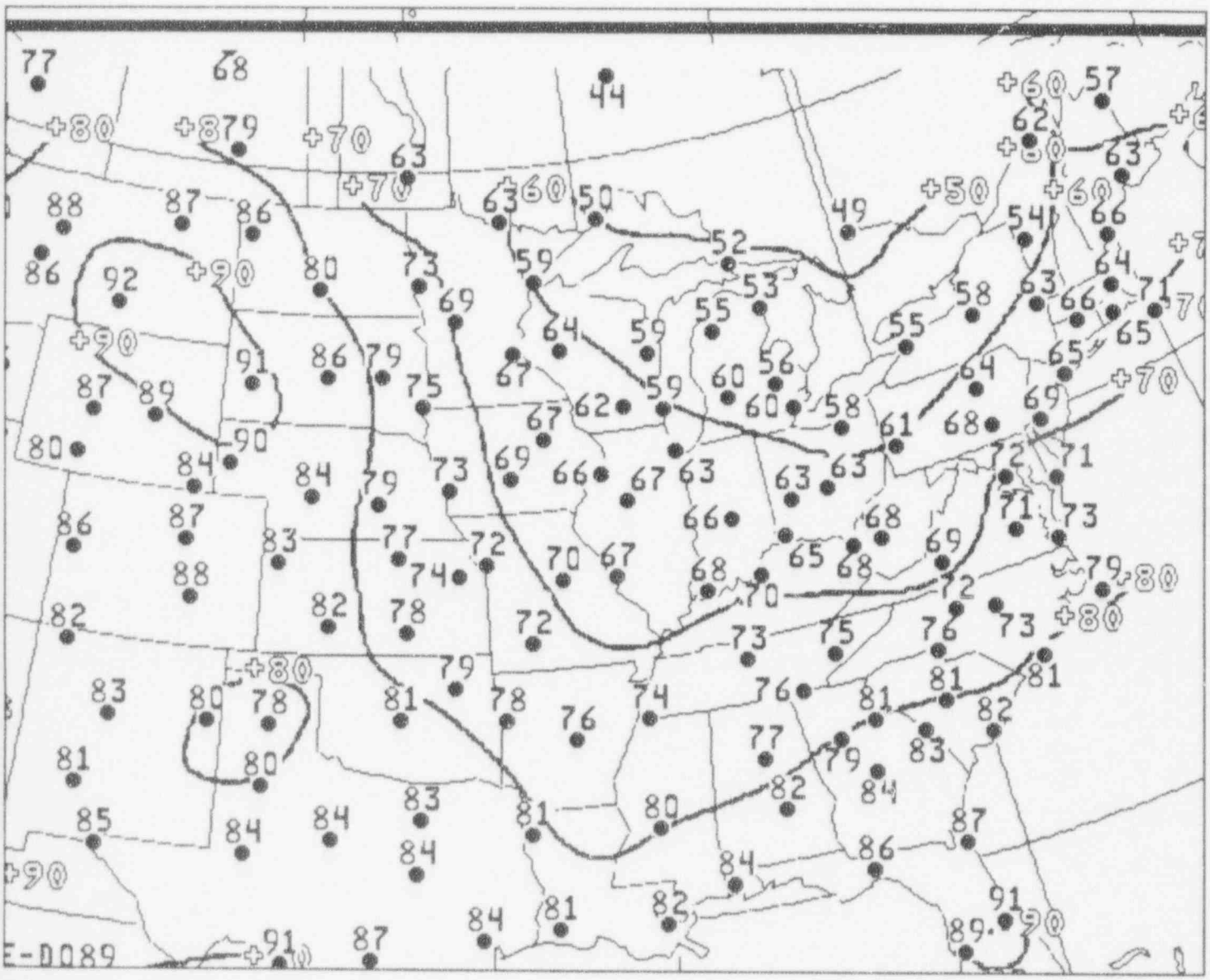
PROG MAX/MIN TEMPS-24

08:45 am



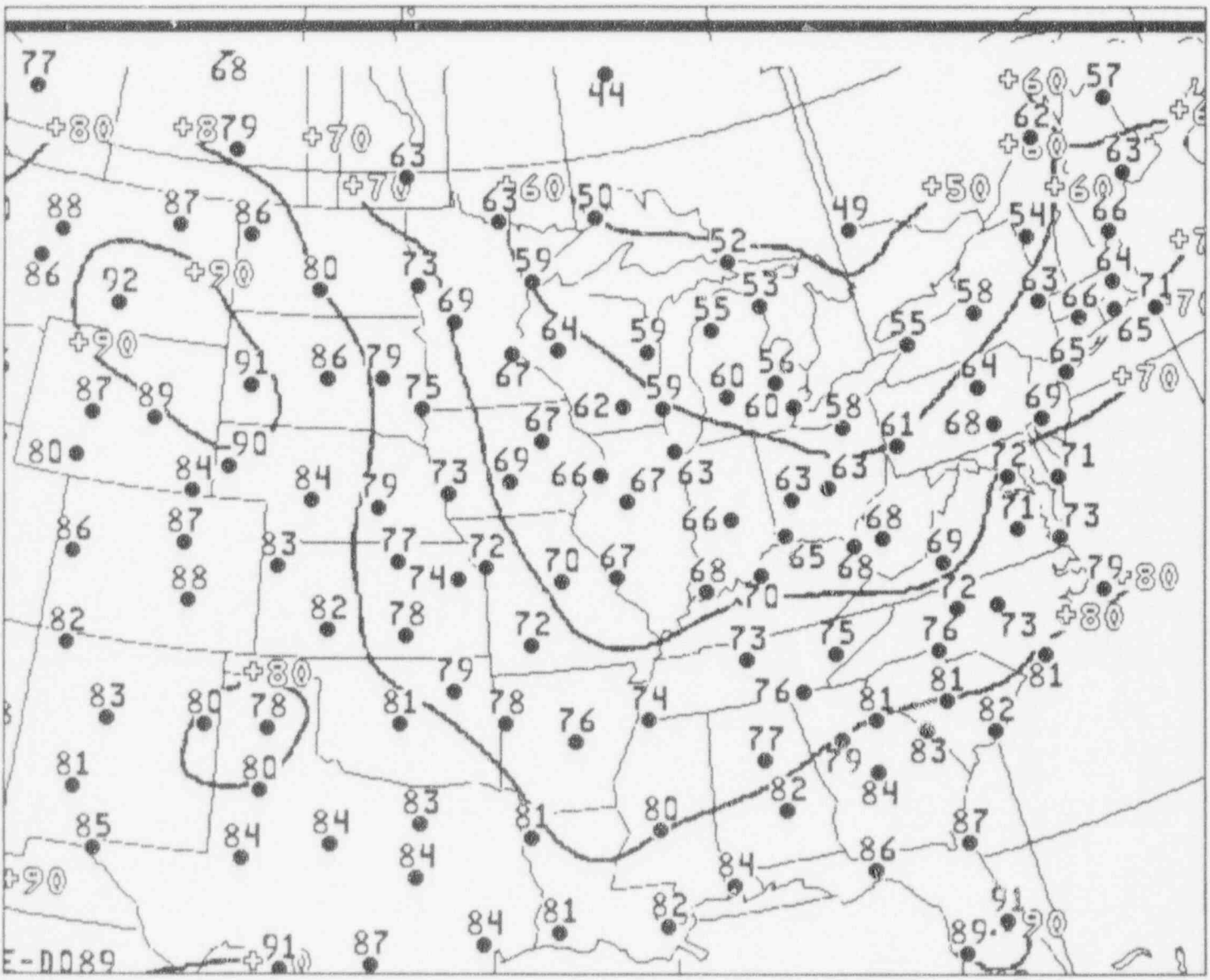
PROG MAX/MIN TEMPS-36

00:35 am



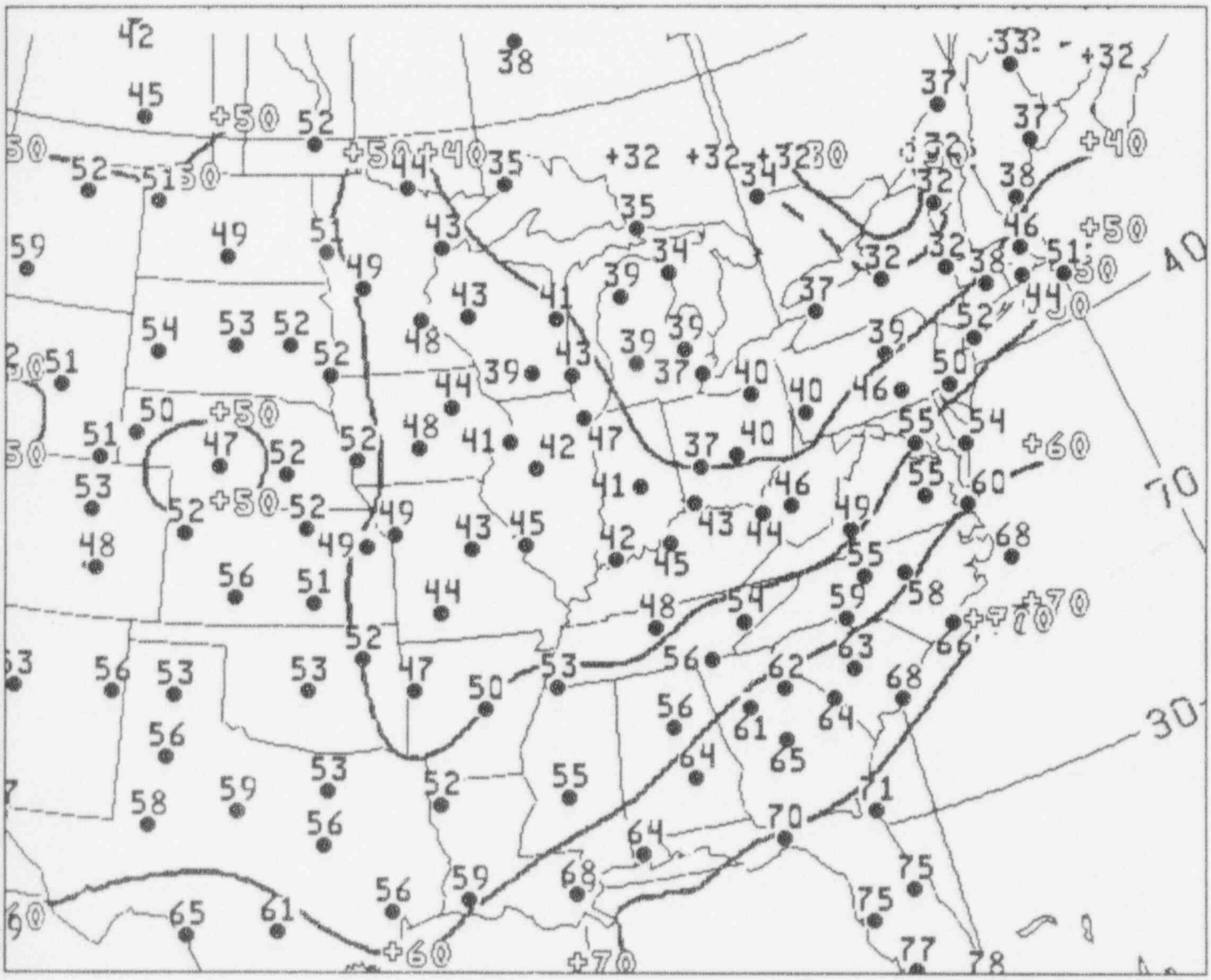
PROG MAX/MIN TEMPS-36

08:45 am



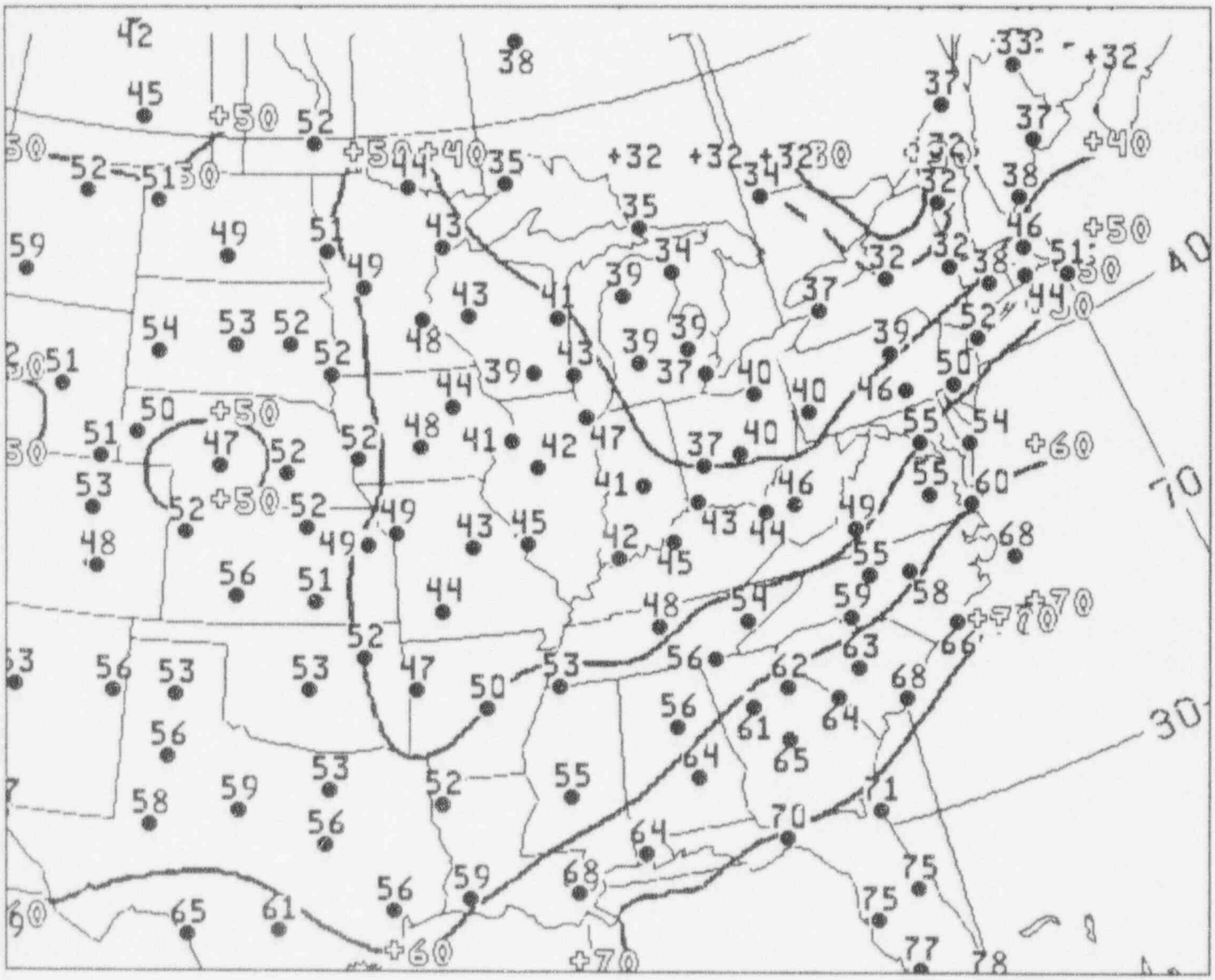
PROG MAX/MIN TEMPS-48

00:35 am



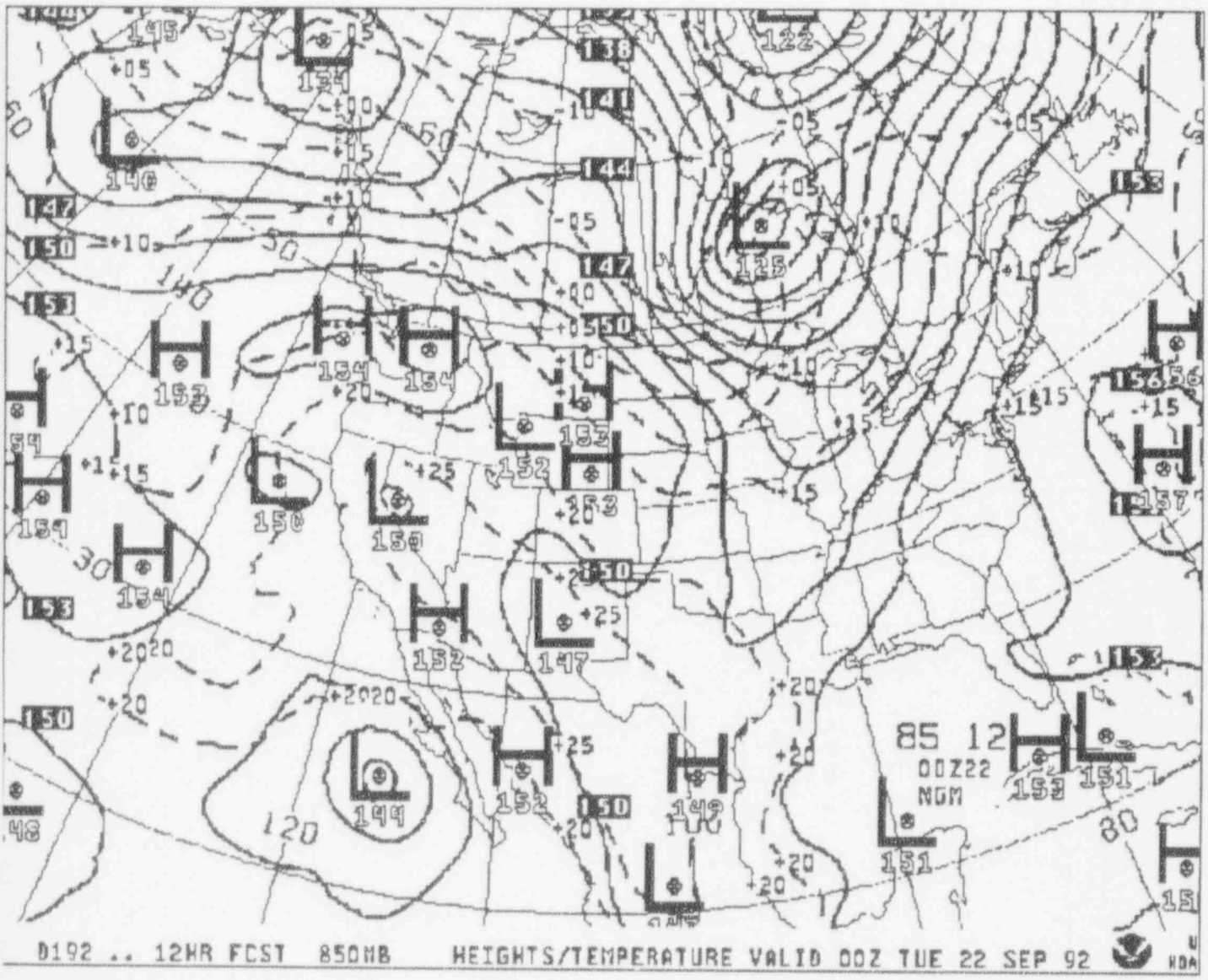
PROG MAX/MIN TEMPS-48

08:46 am



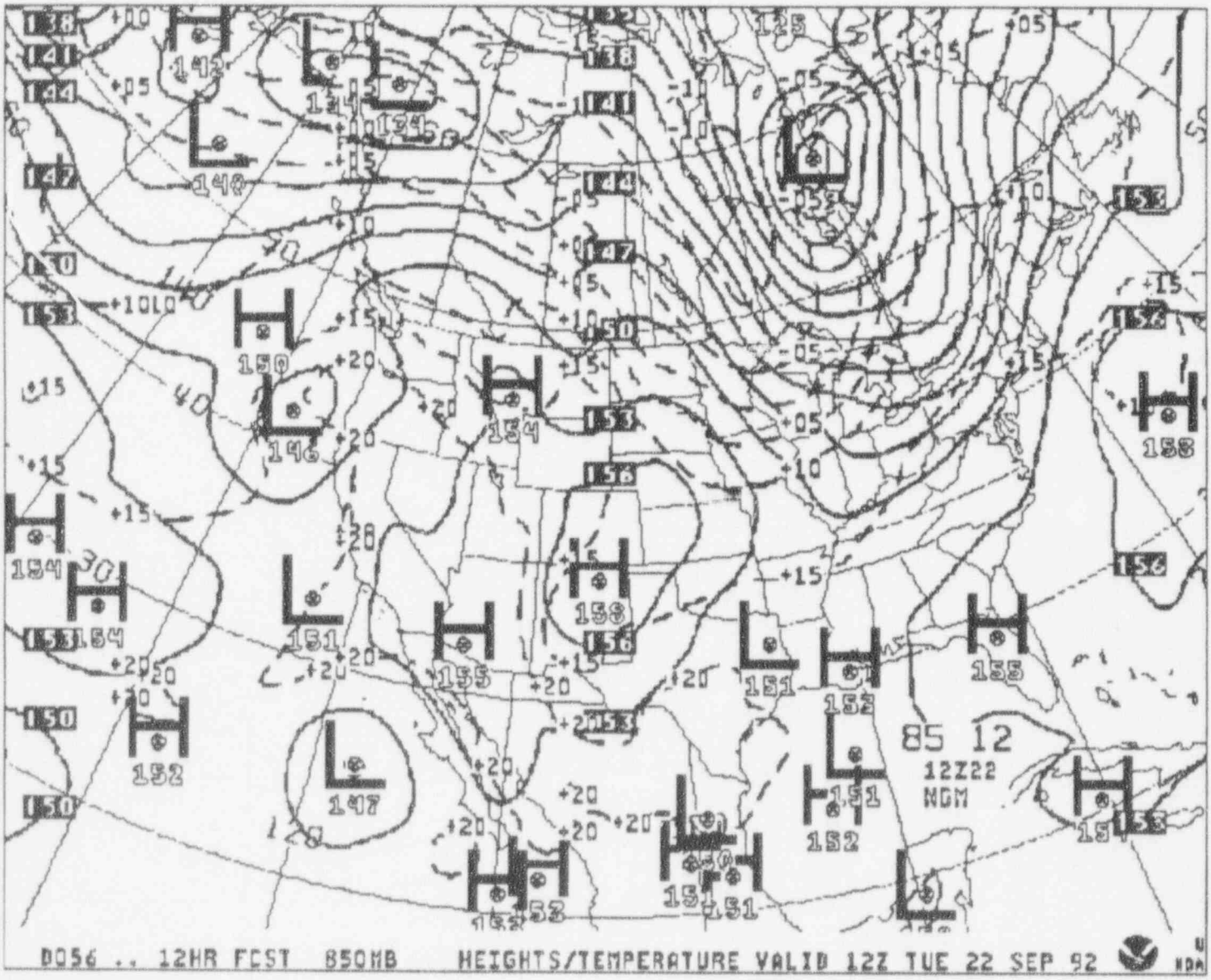
PROG 12HR 850MB HT/TMP

01:10 pm



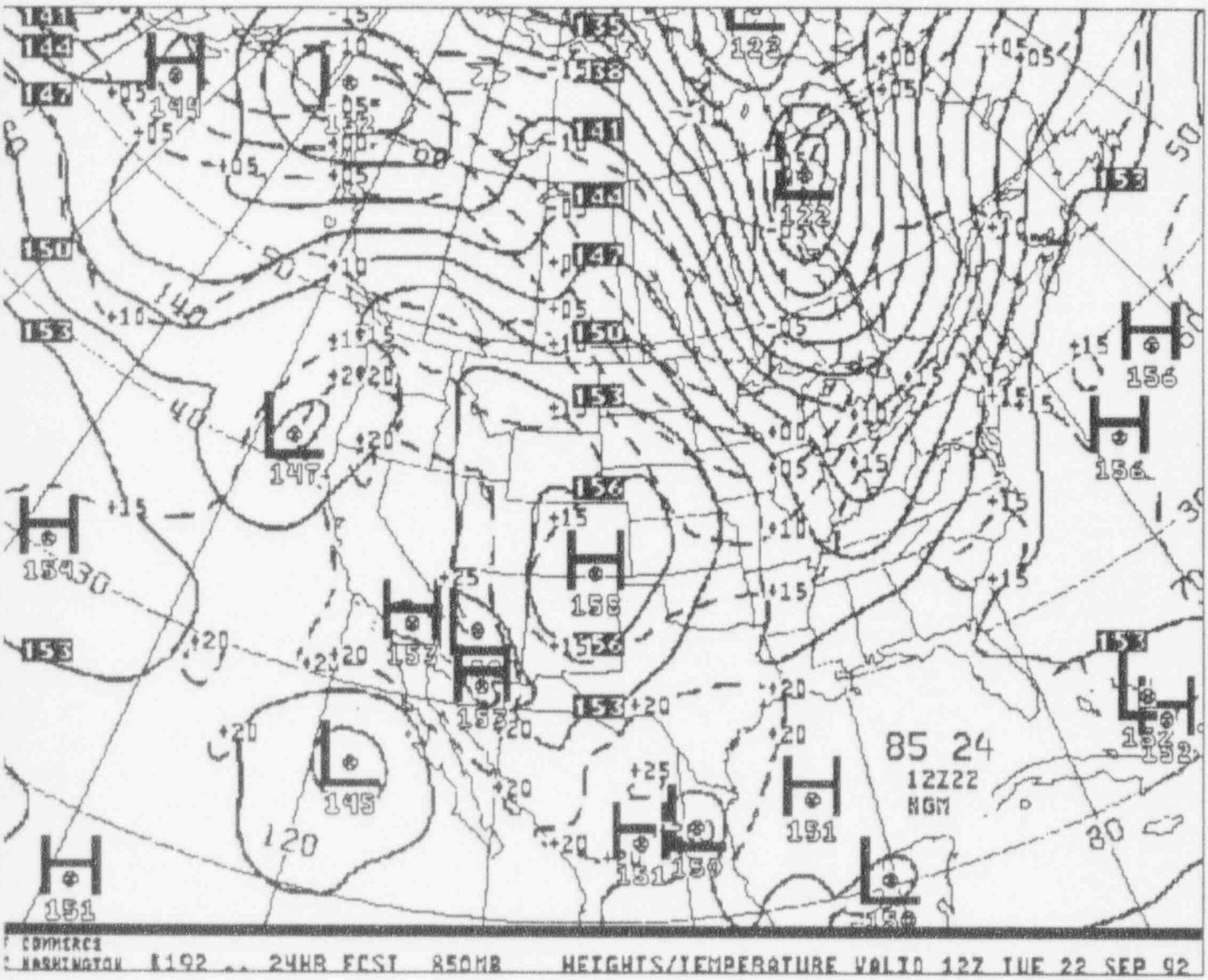
PROG 12HR 850MB HT/TMP

00:58 am



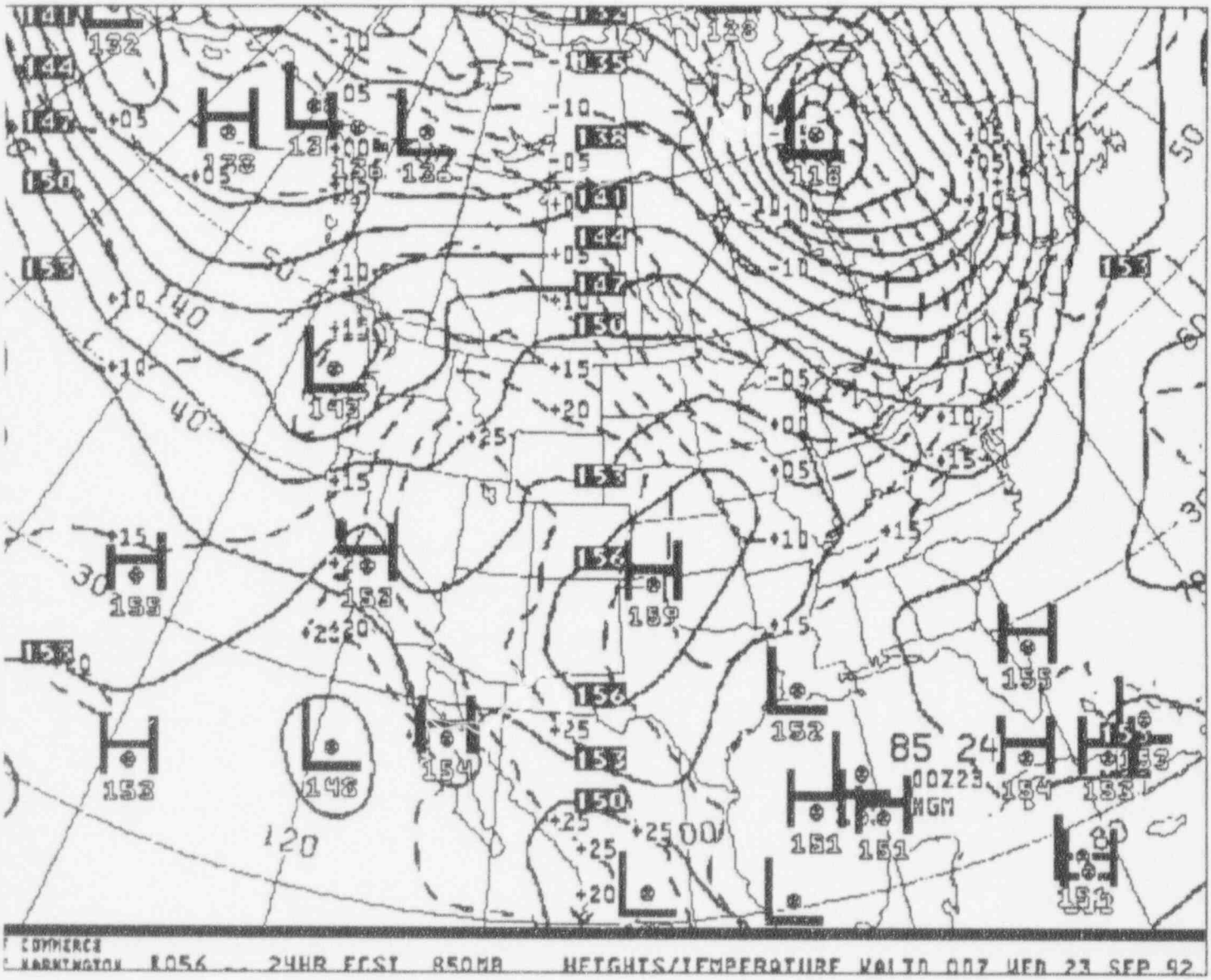
PROG 24HR 850MB HT/TMP

01:10 pm



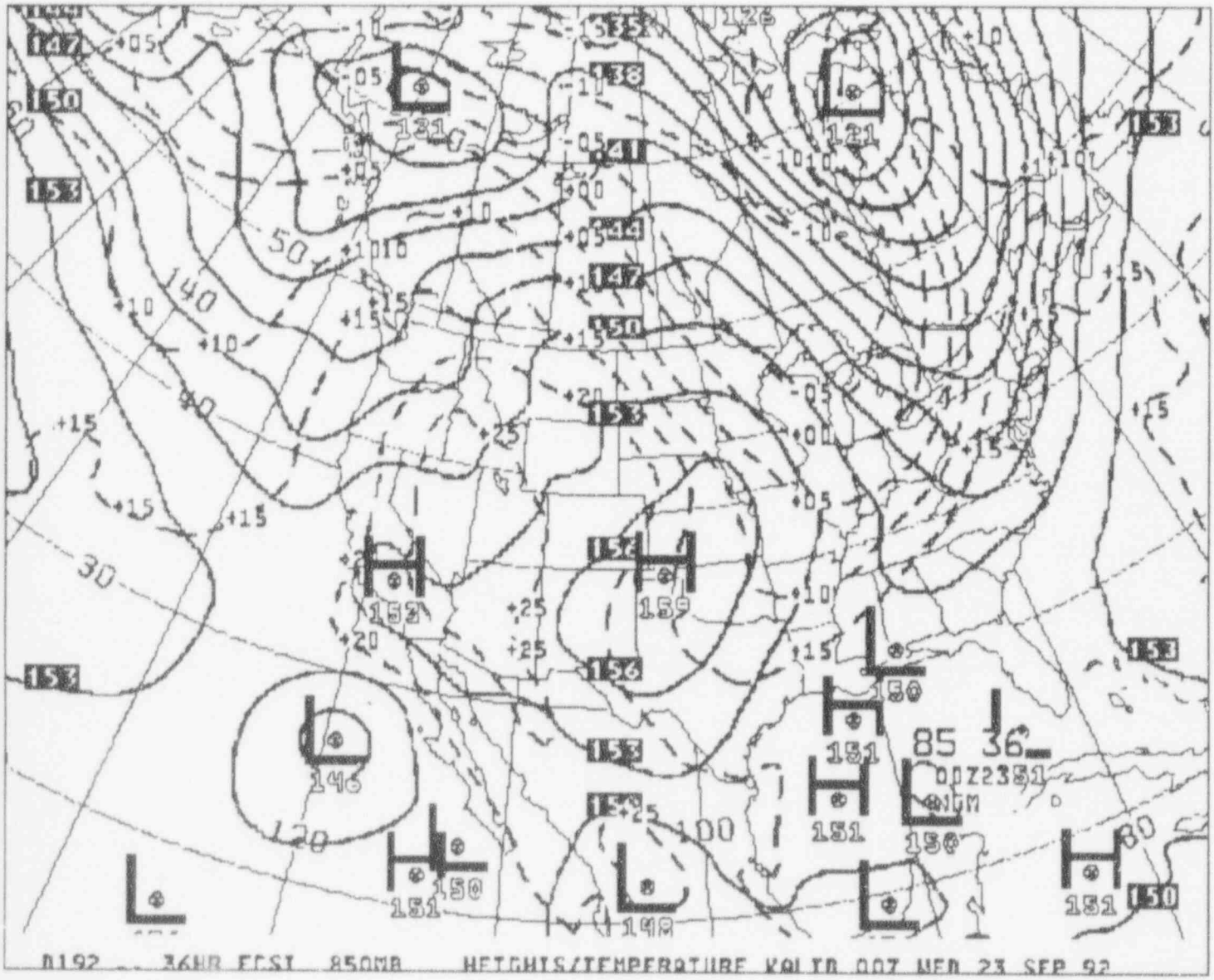
PROG 24HR 850MB HT/TMP

00:59 am



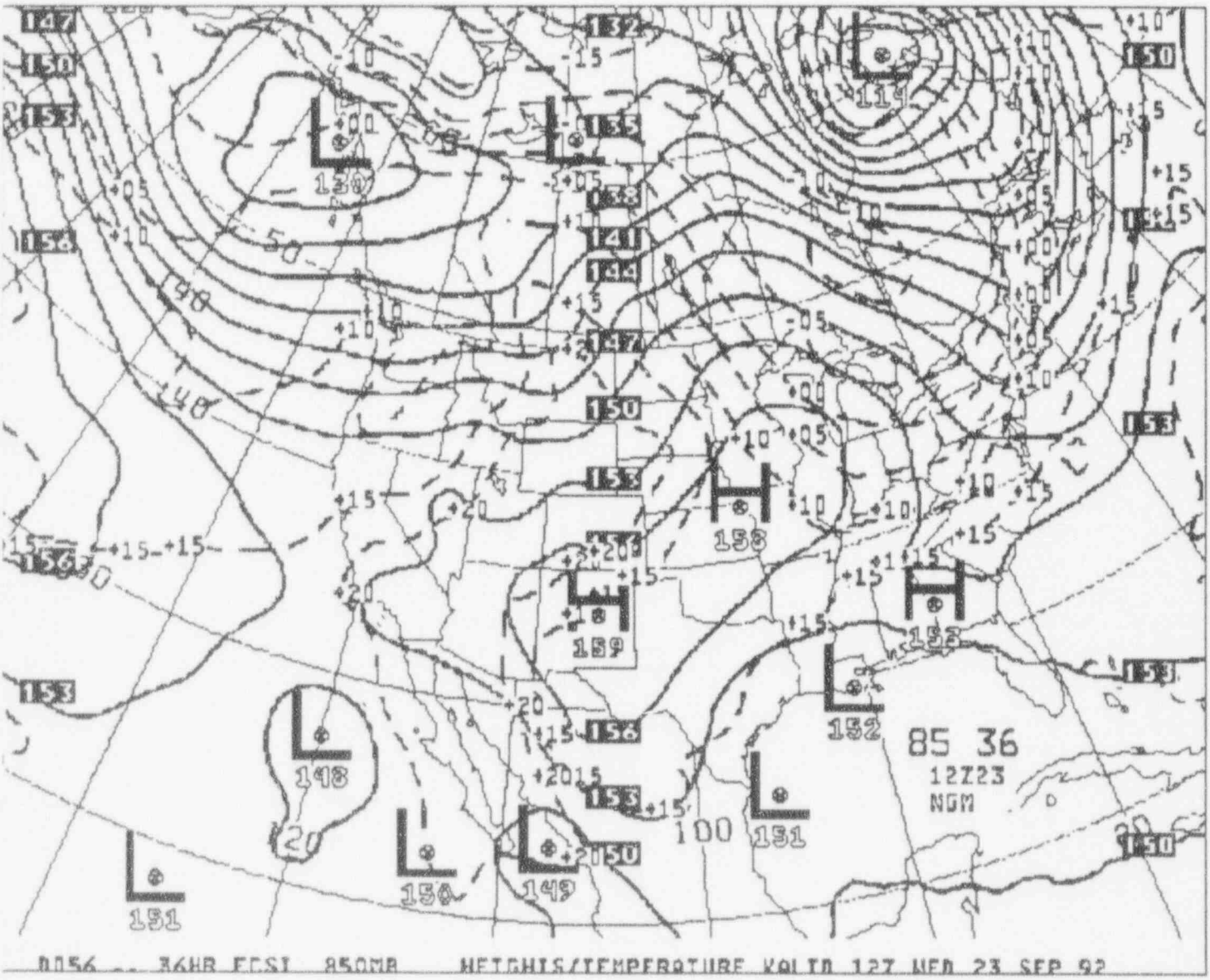
PROG 36HR 850MB HT/TMP

01:10 pm



PROG 36HR 850MB HT/TMP

00:59 am



Three Mile Island Unit One

Selection of Met Data

	A Sensor	B Sensor	USE	Units
100 Ft Wind Speed	Missing	Missing	2.3	MpH
150 Ft Wind Speed	Missing	Missing		MpH
100 Ft Wind Direction	Missing	Missing	198	Degrees
150 Ft Wind Direction	Missing	Missing		Degrees
150 Ft- 33 Ft Delta T	Missing	Missing	-0.6	Degrees F

Three Mile Island Unit One

Selection of Met Data

	A Sensor	B Sensor	USE	Units
100 Ft Wind Speed	Missing	Missing	2.2	MpH
150 Ft Wind Speed	Missing	Missing		MpH
100 Ft Wind Direction	Missing	Missing	160	Degrees
150 Ft Wind Direction	Missing	Missing		Degrees
150 Ft- 33 Ft Delta T	Missing	Missing	-0.6	Degrees F

Three Mile Island Unit One Ver 91.00 14:07 09-24-1992

Selection of Met Data

	A Sensor	B Sensor	USE	Units
100 Ft Wind Speed	Missing	Missing	6.1	MpH
150 Ft Wind Speed	Missing	Missing		MpH
100 Ft Wind Direction	Missing	Missing	189	Degrees
150 Ft Wind Direction	Missing	Missing		Degrees
150 Ft- 33 Ft Delta T	Missing	Missing	-0.9	Degrees F

Three Mile Island Unit One Ver 91.00 14:07 09-24-1992

Selection of Met Data

	A Sensor	B Sensor	USE	Units
100 Ft Wind Speed	Missing	Missing	6.2	MpH
150 Ft Wind Speed	Missing	Missing		MpH
100 Ft Wind Direction	Missing	Missing	192	Degrees
150 Ft Wind Direction	Missing	Missing		Degrees
150 Ft- 33 Ft Delta T	Missing	Missing	-0.9	Degrees F

Three Mile Island Unit One Ver 91.00 14:07 09-24-1992

Selection of Met Data

	A Sensor	B Sensor	USE	Units
100 Ft Wind Speed	Missing	Missing	6.3	MpH
150 Ft Wind Speed	Missing	Missing		MpH
100 Ft Wind Direction	Missing	Missing	202	Degrees
150 Ft Wind Direction	Missing	Missing		Degrees
150 Ft- 33 Ft Delta T	Missing	Missing	-0.9	Degrees F

Three Mile Island Unit One Ver 91.00 14:23 09-24-1992

Selection of Met Data

	A Sensor	B Sensor	USE	Units
100 Ft Wind Speed	Missing	Missing	7.6	MpH
150 Ft Wind Speed	Missing	Missing		MpH
100 Ft Wind Direction	Missing	Missing	200	Degrees
150 Ft Wind Direction	Missing	Missing		Degrees
150 Ft- 33 Ft Delta T	Missing	Missing	-0.8	Degrees F

Selection of Met Data

	A Sensor	B Sensor	USE	Units
100 Ft Wind Speed	Missing	Missing	7.8	MpH
150 Ft Wind Speed	Missing	Missing		MpH
100 Ft Wind Direction	Missing	Missing	201	Degrees
150 Ft Wind Direction	Missing	Missing		Degrees
150 Ft- 33 Ft Delta T	Missing	Missing	-1.1	Degrees F

Selection of Met Data

	A Sensor	B Sensor	USE	Units
100 Ft Wind Speed	Missing	Missing	6.9	MpH
150 Ft Wind Speed	Missing	Missing		MpH
100 Ft Wind Direction	Missing	Missing	211	Degrees
150 Ft Wind Direction	Missing	Missing		Degrees
150 Ft- 33 Ft Delta T	Missing	Missing	-1.3	Degrees F

Selection of Met Data

	A Sensor	B Sensor	USE	Units
100 Ft Wind Speed	Missing	Missing	9.3	MpH
150 Ft Wind Speed	Missing	Missing		MpH
100 Ft Wind Direction	Missing	Missing	201	Degrees
150 Ft Wind Direction	Missing	Missing		Degrees
150 Ft- 33 Ft Delta T	Missing	Missing	-1.0	Degrees F

Selection of Met Data

	A Sensor	B Sensor	USE	Units
100 Ft Wind Speed	Missing	Missing	7.8	MpH
150 Ft Wind Speed	Missing	Missing		MpH
100 Ft Wind Direction	Missing	Missing	207	Degrees
150 Ft Wind Direction	Missing	Missing		Degrees
150 Ft- 33 Ft Delta T	Missing	Missing	-2.1	Degrees F

Selection of Met Data

	A Sensor	B Sensor	USE	Units
100 Ft Wind Speed	Missing	Missing	7.2	MpH
150 Ft Wind Speed	Missing	Missing		MpH
100 Ft Wind Direction	Missing	Missing	205	Degrees
150 Ft Wind Direction	Missing	Missing		Degrees
150 Ft- 33 Ft Delta T	Missing	Missing	-3.9	Degrees F

Selection of Met Data

	A Sensor	B Sensor	USE	Units
100 Ft Wind Speed	Missing	Missing	10.0	MpH
150 Ft Wind Speed	Missing	Missing		MpH
100 Ft Wind Direction	Missing	Missing	201	Degrees
150 Ft Wind Direction	Missing	Missing		Degrees
150 Ft- 33 Ft Delta T	Missing	Missing	-4.2	Degrees F

Three Mile Island Unit One Ver 91.00 14:25 09-24-1992

Selection of Met Data

	A Sensor	B Sensor	USE	Units
100 Ft Wind Speed	Missing	Missing	10.7	MpH
150 Ft Wind Speed	Missing	Missing		MpH
100 Ft Wind Direction	Missing	Missing	207	Degrees
150 Ft Wind Direction	Missing	Missing		Degrees
150 Ft- 33 Ft Delta T	Missing	Missing	-4.5	Degrees F

Selection of Met Data

	A Sensor	B Sensor	USE	Units
100 Ft Wind Speed	Missing	Missing	8.8	MpH
150 Ft Wind Speed	Missing	Missing		MpH
100 Ft Wind Direction	Missing	Missing	206	Degrees
150 Ft Wind Direction	Missing	Missing		Degrees
150 Ft- 33 Ft Delta T	Missing	Missing	-4.6	Degrees F

Selection of Met Data

	A Sensor	B Sensor	USE	Units
100 Ft Wind Speed	Missing	Missing	7.5	MpH
150 Ft Wind Speed	Missing	Missing		MpH
100 Ft Wind Direction	Missing	Missing	202	Degrees
150 Ft Wind Direction	Missing	Missing		Degrees
150 Ft- 33 Ft Delta T	Missing	Missing	-4.8	Degrees F

Selection of Met Data

	A Sensor	B Sensor	USE	Units
100 Ft Wind Speed	Missing	Missing	9.9	MpH
150 Ft Wind Speed	Missing	Missing		MpH
100 Ft Wind Direction	Missing	Missing	212	Degrees
150 Ft Wind Direction	Missing	Missing		Degrees
150 Ft- 33 Ft Delta T	Missing	Missing	0.0	Degrees F

Selection of Met Data

	A Sensor	B Sensor	USE	Units
100 Ft Wind Speed	Missing	Missing	9.7	MpH
150 Ft Wind Speed	Missing	Missing		MpH
100 Ft Wind Direction	Missing	Missing	209	Degrees
150 Ft Wind Direction	Missing	Missing		Degrees
150 Ft- 33 Ft Delta T	Missing	Missing	0.0	Degrees F

Selection of Met Data

	A Sensor	B Sensor	USE	Units
100 Ft Wind Speed	Missing	Missing	10.6	MpH
150 Ft Wind Speed	Missing	Missing		MpH
100 Ft Wind Direction	Missing	Missing	218	Degrees
150 Ft Wind Direction	Missing	Missing		Degrees
150 Ft- 33 Ft Delta T	Missing	Missing	-4.6	Degrees F

Selection of Met Data

	A Sensor	B Sensor	USE	Units
100 Ft Wind Speed	Missing	Missing	9.4	MpH
150 Ft Wind Speed	Missing	Missing		MpH
100 Ft Wind Direction	Missing	Missing	215	Degrees
150 Ft Wind Direction	Missing	Missing		Degrees
150 Ft- 33 Ft Delta T	Missing	Missing	-4.7	Degrees F

ED/ESD DOSE ASSESSMENT DISPLAY

TIME: "08:00:22" DATE: "05-19-1994" CALCULATION # 1

ACTIONS TO BE TAKEN BASED UPON THIS DOSE CALCULATION:

DO NOT DECLARE AN EMERGENCY ACTION LEVEL

DO NOT ISSUE A PROTECTIVE ACTION RECOMMENDATION

BASIS OF ASSESSMENT

MAX TOTAL WHOLE BODY DOSE (TEDE)	5.0E-04 MREM AT	2.0 MILES
MAX CHILD THYROID DOSE (CDE)	4.2E-03 MREM AT	2.0 MILES

THIS IS A AUTOMATIC CALCULATION USING DATA FROM THE PPC AND NETWORK
PATHWAYS: CONDENSER OFFGAS/STATION VENT/RB PURGE/DIRECT STEAM
WIND SPEED(MPH): 6.1 WIND FROM(DEG): 189 DELTA TEMP:-.9
RELEASE DURATION IN HRS: 6 NRC DAMAGE CLASS: 1

ED/ESD DOSE ASSESSMENT DISPLAY

TIME: "08:30:22" DATE: "05-19-1994" CALCULATION # 1

ACTIONS TO BE TAKEN BASED UPON THIS DOSE CALCULATION:

DO NOT DECLARE AN EMERGENCY ACTION LEVEL

DO NOT ISSUE A PROTECTIVE ACTION RECOMMENDATION

BASIS OF ASSESSMENT

MAX TOTAL WHOLE BODY DOSE (TEDE)	5.2E-04 MREM AT	2.0 MILES
MAX CHILD THYROID DOSE (CDE)	4.4E-03 MREM AT	2.0 MILES

THIS IS A AUTOMATIC CALCULATION USING DATA FROM THE PPC AND NETWORK
PATHWAYS: CONDENSER OFFGAS/STATION VENT/RB PURGE/DIRECT STEAM
WIND SPEED(MPH): 6.3 WIND FROM(DEG): 202 DELTA TEMP:-.9
RELEASE DURATION IN HRS: 6 NRC DAMAGE CLASS: 1

ED/ESD DOSE ASSESSMENT DISPLAY

TIME: "09:00:22" DATE: "05-19-1994" CALCULATION # 1

ACTIONS TO BE TAKEN BASED UPON THIS DOSE CALCULATION:

DECLARE AN UNUSUAL EVENT PER U1.1

DO NOT ISSUE A PROTECTIVE ACTION RECOMMENDATION

BASIS OF ASSESSMENT

MAX TOTAL WHOLE BODY DOSE (TEDE)	7.2E-02 MREM AT	0.4 MILES
MAX CHILD THYROID DOSE (CDE)	5.2E-01 MREM AT	0.4 MILES

THIS IS A AUTOMATIC CALCULATION USING DATA FROM THE PPC AND NETWORK
PATHWAYS: CONDENSER OFFGAS/STATION VENT/RB PURGE/DIRECT STEAM
WIND SPEED(MPH): 7.8 WIND FROM(DEG): 201 DELTA TEMP:-1.1
RELEASE DURATION IN HRS: 4 NRC DAMAGE CLASS: 1

ED/ESD DOSE ASSESSMENT DISPLAY

TIME: "09:30:22" DATE: "05-19-1994" CALCULATION # 1

ACTIONS TO BE TAKEN BASED UPON THIS DOSE CALCULATION:

DECLARE AN UNUSUAL EVENT PER U1.1

DO NOT ISSUE A PROTECTIVE ACTION RECOMMENDATION

BASIS OF ASSESSMENT

MAX TOTAL WHOLE BODY DOSE (TEDE)	1.1E-01 MREM AT	0.4 MILES
MAX CHILD THYROID DOSE (CDE)	8.0E-01 MREM AT	0.4 MILES

THIS IS A AUTOMATIC CALCULATION USING DATA FROM THE PPC AND NETWORK
PATHWAYS: CONDENSER OFFGAS/STATION VENT/RB PURGE/DIRECT STEAM
WIND SPEED(MPH): 9.3 WIND FROM(DEG): 201 DELTA TEMP:-1
RELEASE DURATION IN HRS: 4 NRC DAMAGE CLASS: 1

ED/ESD DOSE ASSESSMENT DISPLAY

TIME: "10:00:22" DATE: "05-19-1994" CALCULATION # 1

ACTIONS TO BE TAKEN BASED UPON THIS DOSE CALCULATION:

DECLARE AN UNUSUAL EVENT PER U1.1

DO NOT ISSUE A PROTECTIVE ACTION RECOMMENDATION

BASIS OF ASSESSMENT

MAX TOTAL WHOLE BODY DOSE (TEDE)	4.2E-02	MREM AT	0.4 MILES
MAX CHILD THYROID DOSE (CDE)	3.0E-01	MREM AT	0.4 MILES

THIS IS A AUTOMATIC CALCULATION USING DATA FROM THE PPC AND NETWORK
PATHWAYS: CONDENSER OFFGAS/STATION VENT/RB PURGE/DIRECT STEAM
WIND SPEED(MPH): 7.2 WIND FROM(DEG): 205 DELTA TEMP:-3.9
RELEASE DURATION IN HRS: 2.5 NRC DAMAGE CLASS: 1

ED/ESD DOSE ASSESSMENT DISPLAY

TIME: "10:30:22" DATE: "05-19-1994" CALCULATION # 1

ACTIONS TO BE TAKEN BASED UPON THIS DOSE CALCULATION:

DECLARE AN UNUSUAL EVENT PER U1.1

DO NOT ISSUE A PROTECTIVE ACTION RECOMMENDATION

BASIS OF ASSESSMENT

MAX TOTAL WHOLE BODY DOSE (TEDE)	2.3E-02 MREM AT	0.4 MILES
MAX CHILD THYROID DOSE (CDE)	1.7E-01 MREM AT	0.4 MILES

THIS IS A AUTOMATIC CALCULATION USING DATA FROM THE PPC AND NETWORK
PATHWAYS: CONDENSER OFFGAS/STATION VENT/RB PURGE/DIRECT STEAM
WIND SPEED(MPH): 10.7 WIND FROM(DEG): 207 DELTA TEMP:-4.5
RELEASE DURATION IN HRS: 2 NRC DAMAGE CLASS: 1

ED/ESD DOSE ASSESSMENT DISPLAY

TIME: "11:00:22" DATE: "05-19-1994" CALCULATION # 1

ACTIONS TO BE TAKEN BASED UPON THIS DOSE CALCULATION:

DECLARE AN UNUSUAL EVENT PER U1.1

DO NOT ISSUE A PROTECTIVE ACTION RECOMMENDATION

BASIS OF ASSESSMENT

MAX TOTAL WHOLE BODY DOSE (TEDE)	7.5E-02 MREM AT	0.4 MILES
MAX CHILD THYROID DOSE (CDE)	5.4E-01 MREM AT	0.4 MILES

THIS IS A AUTOMATIC CALCULATION USING DATA FROM THE PPC AND NETWORK
PATHWAYS: CONDENSER OFFGAS/STATION VENT/RB PURGE/DIRECT STEAM
WIND SPEED(MPH): 7.5 WIND FROM(DEG): 202 DELTA TEMP:-4.8
RELEASE DURATION IN HRS: 2 NRC DAMAGE CLASS: 1

APPENDIX E

NOTE: THIS IS A PLAYER REACTIVE DRILL RUN IN 'REAL TIME' FROM THE PLANT REFERENCE SIMULATOR AND NO BACK UP DATA WILL BE USED. THE SIMULATOR WILL BE RESET, IF REQUIRED TO CONTINUE/COMPLETE THE DRILL. CONFIRMATORY DATA WILL BE COLLECTED AND FILED AFTER THE DRILL.

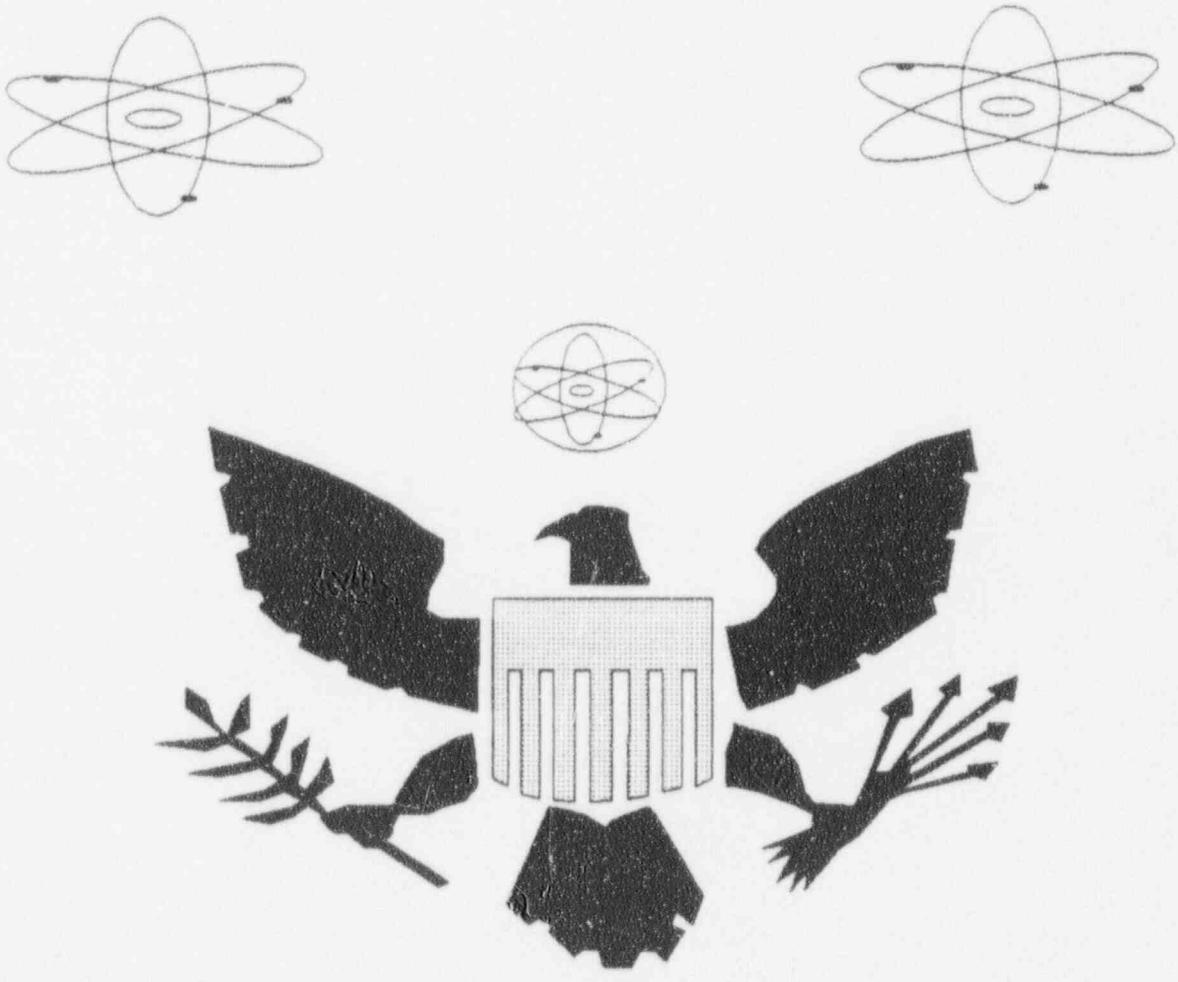
The supporting DATA in the Appendices was developed from a verification run of the Plant Reference Simulator and assumed meteorological conditions. This verification data was reviewed and compiled by Emergency Preparedness, Licensed Operator Training and Radiological Engineering personnel.

This DATA is provided ONLY for your review.

Actual drill data will be collected during the PLAYER REACTIVE exercise. The actual drill data will vary depending on the response of the players and prevailing weather (actual) conditions the day of the drill.

GPU NUCLEAR CORPORATION
MIDDLETOWN, PA

INTENTIONALLY



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1994 ANNUAL EXERCISE
Appendix E

RMS DATA

Revision 1
03/02/94

APPENDIX E 1994 ANNUAL EXERCISE

RADIATION MONITORING SYSTEM DATA / AREA GAMMA MONITORS

Scenario Time in Minutes 0

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RM-G1	mR/hr	1.0E-01	none
*	RM-G2	mR/hr	1.0E-01	none
*	RM-G3	mR/hr	5.0E-01	none
	RM-G4	mR/hr	1.0E-01	none
	RM-G5	mR/hr	7.0E-01	none
	RM-G6	mR/hr	2.5E+02	none
	RM-G7	mR/hr	2.5E+02	none
	RM-G8	mR/hr	5.0E+00	none
	RM-G9	mR/hr	1.0E+00	none
	RM-G10	mR/hr	1.0E-01	none
	RM-G11	mR/hr	3.0E-01	none
	RM-G12	mR/hr	1.0E-01	none
	RM-G13	mR/hr	1.0E-01	none
	RM-G14	mR/hr	1.0E-01	none
	RM-G15	mR/hr	1.0E-01	none
*	RM-G16	mR/hr	1.0E-01	none
*	RM-G17	mR/hr	1.0E-01	none
*	RM-G18	mR/hr	6.0E-01	none
	RM-G19	mR/hr	1.0E+00	none
	RM-G20	mR/hr	3.0E-01	none
	RM-G21	mR/hr	3.0E+01	none
	RM-G22	R/hr	1.0E-01	none
	RM-G23	R/hr	1.0E-01	none
	RM-G24	mR/hr	1.0E-01	none
	RM-G25	mR/hr	3.0E+01	none
	RM-G26	CPM	1.0E+02	none
	RM-G27	CPM	1.2E+03	alert alarm

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

APPENDIX E 1994 ANNUAL EXERCISE

RADIATION MONITORING SYSTEM DATA / ATMOSPHERIC MONITORS

Scenario Time in Minutes 0

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RMA-1 Part	CPM	1.0E+02	none
	RMA-1 Iodine	CPM	8.0E+01	none
	RMA-1 Gas	CPM	5.0E+01	none
	RMA-2 Part	CPM	2.1E+03	none
	RMA-2 Iodine	CPM	3.0E+02	none
	RMA-2 Gas	CPM	1.2E+03	none
	RMA-4 Part	CPM	2.0E+02	none
	RMA-4 Iodine	CPM	2.0E+02	none
	RMA-4 Gas	CPM	3.0E+01	none
	RMA-5 Gas	CPM	1.0E+06	offscale high
	RMA-5 HIGH Gas	CPM	1.3E+04	alert alarm
	RMA-6 Part	CPM	3.0E+02	none
	RMA-6 Iodine	CPM	5.0E+01	none
	RMA-6 Gas	CPM	3.0E+01	none
	RMA-7 Gas	CPM	1.5E+02	none
	RMA-8 Part	CPM	3.0E+01	none
	RMA-8 Iodine	CPM	2.0E+02	none
	RMA-8 Gas	CPM	6.0E+01	none
	RMA-8 HIGH Gas	CPM	1.0E-01	none
	RMA-9 Part	CPM	8.0E+01	none
	RMA-9 Iodine	CPM	5.0E+01	none
	RMA-9 Gas	CPM	1.0E+02	none
	RMA-9 HIGH Gas	CPM	1.0E-01	none
*	RMA-12 Part	CPM	1.5E+02	none
*	RMA-12 Iodine	CPM	2.0E+01	none
*	RMA-12 Gas	CPM	5.0E+01	none
	RMA-15 Gas	CPM	1.0E+06	offscale high

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

APPENDIX E 1994 ANNUAL EXERCISE

RADIATION MONITORING SYSTEM DATA / LIQUID MONITORS

Scenario Time in Minutes 0

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
*	RM-L1 Low	CPM	1.0E+04	none
*	RM-L1 High	CPM	2.0E+02	none
	RM-L2	CPM	1.5E+02	none
	RM-L3	CPM	1.5E+02	none
	RM-L4	CPM	1.0E+02	none
	RM-L5	CPM	5.0E+02	none
	RM-L6	CPM	5.0E+02	none
	RM-L7	CPM	1.5E+02	none
	RM-L9	CPM	1.8E+04	none
*	RM-L10	CPS	8.0E+00	none
*	RM-L11	CPM	6.0E+01	none
	RM-L12	CPM	6.0E+01	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

APPENDIX E 1994 ANNUAL EXERCISE

RADIATION MONITORING SYSTEM DATA / AREA GAMMA MONITORS

Scenario Time in Minutes 15

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RM-G1	mR/hr	1.0E-01	none
*	RM-G2	mR/hr	1.0E-01	none
*	RM-G3	mR/hr	5.0E-01	none
	RM-G4	mR/hr	1.0E-01	none
	RM-G5	mR/hr	7.0E-01	none
	RM-G6	mR/hr	2.5E+02	none
	RM-G7	mR/hr	2.5E+02	none
	RM-G8	mR/hr	5.0E+00	none
	RM-G9	mR/hr	1.0E+00	none
	RM-G10	mR/hr	1.0E-01	none
	RM-G11	mR/hr	3.0E-01	none
	RM-G12	mR/hr	1.0E-01	none
	RM-G13	mR/hr	1.0E-01	none
	RM-G14	mR/hr	1.0E-01	none
	RM-G15	mR/hr	1.0E-01	none
*	RM-G16	mR/hr	1.0E-01	none
*	RM-G17	mR/hr	1.0E-01	none
*	RM-G18	mR/hr	6.0E-01	none
	RM-G19	mR/hr	1.0E+00	none
	RM-G20	mR/hr	3.0E-01	none
	RM-G21	mR/hr	3.0E+01	none
	RM-G22	R/hr	1.0E-01	none
	RM-G23	R/hr	1.0E-01	none
	RM-G24	mR/hr	1.0E-01	none
	RM-G25	mR/hr	4.5E+01	none
	RM-G26	CPM	1.0E+02	none
	RM-G27	CPM	1.2E+03	alert alarm

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

APPENDIX E 1994 ANNUAL EXERCISE

RADIATION MONITORING SYSTEM DATA / ATMOSPHERIC MONITORS

Scenario Time in Minutes 15

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RMA-1 Part	CPM	1.0E+02	none
	RMA-1 Iodine	CPM	8.0E+01	none
	RMA-1 Gas	CPM	5.0E+01	none
	RMA-2 Part	CPM	2.1E+03	none
	RMA-2 Iodine	CPM	3.0E+02	none
	RMA-2 Gas	CPM	1.2E+03	none
	RMA-4 Part	CPM	2.0E+02	none
	RMA-4 Iodine	CPM	2.0E+02	none
	RMA-4 Gas	CPM	3.0E+01	none
	RMA-5 Gas	CPM	1.0E+06	offscale high
	RMA-5 HIGH Gas	CPM	2.0E+04	alert alarm
	RMA-6 Part	CPM	3.0E+02	none
	RMA-6 Iodine	CPM	5.0E+01	none
	RMA-6 Gas	CPM	3.0E+01	none
	RMA-7 Gas	CPM	1.5E+02	none
	RMA-8 Part	CPM	3.0E+01	none
	RMA-8 Iodine	CPM	2.0E+02	none
	RMA-8 Gas	CPM	6.0E+01	none
	RMA-8 HIGH Gas	CPM	1.0E-01	none
	RMA-9 Part	CPM	8.0E+01	none
	RMA-9 Iodine	CPM	5.0E+01	none
	RMA-9 Gas	CPM	1.0E+02	none
	RMA-9 HIGH Gas	CPM	1.0E-01	none
*	RMA-12 Part	CPM	1.5E+02	none
*	RMA-12 Iodine	CPM	2.0E+01	none
*	RMA-12 Gas	CPM	5.0E+01	none
	RMA-15 Gas	CPM	1.0E+06	offscale high

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

APPENDIX E 1994 ANNUAL EXERCISE

RADIATION MONITORING SYSTEM DATA / LIQUID MONITORS

Scenario Time in Minutes 15

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
*	RM-L1 Low	CPM	1.0E+04	none
*	RM-L1 High	CPM	2.0E+02	none
	RM-L2	CPM	1.5E+02	none
	RM-L3	CPM	1.5E+02	none
	RM-L4	CPM	1.0E+02	none
	RM-L5	CPM	5.0E+02	none
	RM-L6	CPM	5.0E+02	none
	RM-L7	CPM	1.5E+02	none
	RM-L9	CPM	1.8E+04	none
*	RM-L10	CPS	8.0E+00	none
*	RM-L11	CPM	6.0E+01	none
	RM-L12	CPM	6.0E+01	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

APPENDIX E 1994 ANNUAL EXERCISE

RADIATION MONITORING SYSTEM DATA / AREA GAMMA MONITORS

Scenario Time in Minutes 30

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RM-G1	mR/hr	1.0E-01	none
*	RM-G2	mR/hr	1.0E-01	none
*	RM-G3	mR/hr	5.0E-01	none
	RM-G4	mR/hr	1.0E-01	none
	RM-G5	mR/hr	7.0E-01	none
	RM-G6	mR/hr	2.5E+02	none
	RM-G7	mR/hr	2.5E+02	none
	RM-G8	mR/hr	5.0E+00	none
	RM-G9	mR/hr	1.0E+00	none
	RM-G10	mR/hr	1.0E-01	none
	RM-G11	mR/hr	3.0E-01	none
	RM-G12	mR/hr	1.0E-01	none
	RM-G13	mR/hr	1.0E-01	none
	RM-G14	mR/hr	1.0E-01	none
	RM-G15	mR/hr	1.0E-01	none
*	RM-G16	mR/hr	1.0E-01	none
*	RM-G17	mR/hr	1.0E-01	none
*	RM-G18	mR/hr	6.0E-01	none
	RM-G19	mR/hr	1.0E+00	none
	RM-G20	mR/hr	3.0E-01	none
	RM-G21	mR/hr	3.0E+01	none
	RM-G22	R/hr	1.0E-01	none
	RM-G23	R/hr	1.0E-01	none
	RM-G24	mR/hr	1.0E-01	none
	RM-G25	mR/hr	5.3E+01	none
	RM-G26	CPM	1.0E+02	none
	RM-G27	CPM	1.2E+03	alert alarm

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

APPENDIX E 1994 ANNUAL EXERCISE

RADIATION MONITORING SYSTEM DATA / ATMOSPHERIC MONITORS

Scenario Time in Minutes 30

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RMA-1 Part	CPM	1.0E+02	none
	RMA-1 Iodine	CPM	8.0E+01	none
	RMA-1 Gas	CPM	5.0E+01	none
	RMA-2 Part	CPM	2.1E+03	none
	RMA-2 Iodine	CPM	3.0E+02	none
	RMA-2 Gas	CPM	1.2E+03	none
	RMA-4 Part	CPM	2.0E+02	none
	RMA-4 Iodine	CPM	2.0E+02	none
	RMA-4 Gas	CPM	3.0E+01	none
	RMA-5 Gas	CPM	1.0E+06	offscale high
	RMA-5 HIGH Gas	CPM	2.3E+04	alert alarm
	RMA-6 Part	CPM	3.0E+02	none
	RMA-6 Iodine	CPM	5.0E+01	none
	RMA-6 Gas	CPM	3.0E+01	none
	RMA-7 Gas	CPM	1.5E+02	none
	RMA-8 Part	CPM	3.0E+01	none
	RMA-8 Iodine	CPM	2.0E+02	none
	RMA-8 Gas	CPM	6.0E+01	none
	RMA-8 HIGH Gas	CPM	1.0E-01	none
	RMA-9 Part	CPM	8.0E+01	none
	RMA-9 Iodine	CPM	5.0E+01	none
	RMA-9 Gas	CPM	1.0E+02	none
	RMA-9 HIGH Gas	CPM	1.0E-01	none
*	RMA-12 Part	CPM	1.5E+02	none
*	RMA-12 Iodine	CPM	2.0E+01	none
*	RMA-12 Gas	CPM	5.0E+01	none
	RMA-15 Gas	CPM	1.0E+06	offscale high

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

APPENDIX E 1994 ANNUAL EXERCISE

RADIATION MONITORING SYSTEM DATA / LIQUID MONITORS

Scenario Time in Minutes 30

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
*	RM-L1 Low	CPM	1.0E+04	none
*	RM-L1 High	CPM	2.0E+02	none
	RM-L2	CPM	1.5E+02	none
	RM-L3	CPM	1.5E+02	none
	RM-L4	CPM	1.0E+02	none
	RM-L5	CPM	5.0E+02	none
	RM-L6	CPM	5.0E+02	none
	RM-L7	CPM	1.5E+02	none
	RM-L9	CPM	1.8E+04	none
*	RM-L10	CPS	8.0E+00	none
*	RM-L11	CPM	6.0E+01	none
	RM-L12	CPM	6.0E+01	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

APPENDIX E 1994 ANNUAL EXERCISE

RADIATION MONITORING SYSTEM DATA / AREA GAMMA MONITORS

Scenario Time in Minutes 45

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RM-G1	mR/hr	1.0E-01	none
*	RM-G2	mR/hr	1.0E-01	none
*	RM-G3	mR/hr	5.0E-01	none
	RM-G4	mR/hr	1.0E-01	none
	RM-G5	mR/hr	7.0E-01	none
	RM-G6	mR/hr	2.5E+02	none
	RM-G7	mR/hr	2.5E+02	none
	RM-G8	mR/hr	5.0E+00	none
	RM-G9	mR/hr	1.0E+00	none
	RM-G10	mR/hr	1.0E-01	none
	RM-G11	mR/hr	3.0E-01	none
	RM-G12	mR/hr	1.0E-01	none
	RM-G13	mR/hr	1.0E-01	none
	RM-G14	mR/hr	1.0E-01	none
	RM-G15	mR/hr	1.0E-01	none
*	RM-G16	mR/hr	1.0E-01	none
*	RM-G17	mR/hr	1.0E-01	none
*	RM-G18	mR/hr	6.0E-01	none
	RM-G19	mR/hr	1.0E+00	none
	RM-G20	mR/hr	3.0E-01	none
	RM-G21	mR/hr	3.0E+01	none
	RM-G22	R/hr	1.0E-01	none
	RM-G23	R/hr	1.0E-01	none
	RM-G24	mR/hr	1.0E-01	none
	RM-G25	mR/hr	5.7E+01	none
	RM-G26	CPM	1.0E+02	none
	RM-G27	CPM	1.2E+03	alert alarm

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / ATMOSPHERIC MONITORS

Scenario Time in Minutes 45

	RMS CHANNEL	UNITS	READING	ALARM CONDITION
	RMA-1 Part	CPM	1.0E+02	none
	RMA-1 Iodine	CPM	8.0E+01	none
	RMA-1 Gas	CPM	5.0E+01	none
	RMA-2 Part	CPM	2.1E+03	none
	RMA-2 Iodine	CPM	3.0E+02	none
	RMA-2 Gas	CPM	1.2E+03	none
	RMA-4 Part	CPM	2.0E+02	none
	RMA-4 Iodine	CPM	2.0E+02	none
	RMA-4 Gas	CPM	3.0E+01	none
	RMA-5 Gas	CPM	1.0E+06	offscale high
	RMA-5 HIGH Gas	CPM	2.5E+04	alert alarm
	RMA-6 Part	CPM	3.0E+02	none
	RMA-6 Iodine	CPM	5.0E+01	none
	RMA-6 Gas	CPM	3.0E+01	none
	RMA-7 Gas	CPM	1.5E+02	none
	RMA-8 Part	CPM	3.0E+01	none
	RMA-8 Iodine	CPM	2.0E+02	none
	RMA-8 Gas	CPM	6.0E+01	none
	RMA-8 HIGH Gas	CPM	1.0E-01	none
	RMA-9 Part	CPM	8.0E+01	none
	RMA-9 Iodine	CPM	5.0E+01	none
	RMA-9 Gas	CPM	1.0E+02	none
	RMA-9 HIGH Gas	CPM	1.0E-01	none
*	RMA-12 Part	CPM	1.5E+02	none
*	RMA-12 Iodine	CPM	2.0E+01	none
*	RMA-12 Gas	CPM	5.0E+01	none
	RMA-15 Gas	CPM	1.0E+06	offscale high

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

APPENDIX E 1994 ANNUAL EXERCISE

RADIATION MONITORING SYSTEM DATA / LIQUID MONITORS

Scenario Time in Minutes 45

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
*	RM-L1 Low	CPM	1.0E+04	none
*	RM-L1 High	CPM	2.0E+02	none
	RM-L2	CPM	1.5E+02	none
	RM-L3	CPM	1.5E+02	none
	RM-L4	CPM	1.0E+02	none
	RM-L5	CPM	5.0E+02	none
	RM-L6	CPM	5.0E+02	none
	RM-L7	CPM	1.5E+02	none
	RM-L9	CPM	1.8E+04	none
*	RM-L10	CPS	8.0E+00	none
*	RM-L11	CPM	6.0E+01	none
	RM-L12	CPM	6.0E+01	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / AREA GAMMA MONITORS

Scenario Time in Minutes 60

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RM-G1	mR/hr	1.0E-01	none
*	RM-G2	mR/hr	1.0E-01	none
*	RM-G3	mR/hr	5.0E-01	none
	RM-G4	mR/hr	1.0E-01	none
	RM-G5	mR/hr	7.0E-01	none
	RM-G6	mR/hr	2.5E+02	none
	RM-G7	mR/hr	2.5E+02	none
	RM-G8	mR/hr	5.0E+00	none
	RM-G9	mR/hr	1.0E+00	none
	RM-G10	mR/hr	1.0E-01	none
	RM-G11	mR/hr	3.0E-01	none
	RM-G12	mR/hr	1.0E-01	none
	RM-G13	mR/hr	1.0E-01	none
	RM-G14	mR/hr	1.0E-01	none
	RM-G15	mR/hr	1.0E-01	none
*	RM-G16	mR/hr	1.0E-01	none
*	RM-G17	mR/hr	1.0E-01	none
*	RM-G18	mR/hr	6.0E-01	none
	RM-G19	mR/hr	1.0E+00	none
	RM-G20	mR/hr	3.0E-01	none
	RM-G21	mR/hr	3.0E+01	none
	RM-G22	R/hr	1.0E-01	none
	RM-G23	R/hr	1.0E-01	none
	RM-G24	mR/hr	1.0E-01	none
	RM-G25	mR/hr	2.9E+01	none
	RM-G26	CPM	1.0E+02	none
	RM-G27	CPM	3.7E+03	high alarm

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / ATMOSPHERIC MONITORS

Scenario Time in Minutes 60

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RMA-1 Part	CPM	1.0E+02	none
	RMA-1 Iodine	CPM	8.0E+01	none
	RMA-1 Gas	CPM	5.0E+01	none
	RMA-2 Part	CPM	2.1E+03	none
	RMA-2 Iodine	CPM	3.0E+02	none
	RMA-2 Gas	CPM	1.2E+03	none
	RMA-4 Part	CPM	2.0E+02	none
	RMA-4 Iodine	CPM	2.0E+02	none
	RMA-4 Gas	CPM	3.0E+01	none
	RMA-5 Gas	CPM	1.0E+06	offscale high
	RMA-5 HIGH Gas	CPM	1.2E+04	alert alarm
	RMA-6 Part	CPM	3.0E+02	none
	RMA-6 Iodine	CPM	5.0E+01	none
	RMA-6 Gas	CPM	3.0E+01	none
	RMA-7 Gas	CPM	1.5E+02	none
	RMA-8 Part	CPM	3.0E+01	none
	RMA-8 Iodine	CPM	2.0E+02	none
	RMA-8 Gas	CPM	6.0E+01	none
	RMA-8 HIGH Gas	CPM	1.0E-01	none
	RMA-9 Part	CPM	8.0E+01	none
	RMA-9 Iodine	CPM	5.0E+01	none
	RMA-9 Gas	CPM	1.0E+02	none
	RMA-9 HIGH Gas	CPM	1.0E-01	none
*	RMA-12 Part	CPM	1.5E+02	none
*	RMA-12 Iodine	CPM	2.0E+01	none
*	RMA-12 Gas	CPM	5.0E+01	none
	RMA-15 Gas	CPM	1.0E+06	offscale high

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / LIQUID MONITORS

Scenario Time in Minutes 60

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
*	RM-L1 Low	CPM	2.7E+04	none
*	RM-L1 High	CPM	5.4E+02	none
	RM-L2	CPM	1.5E+02	none
	RM-L3	CPM	1.5E+02	none
	RM-L4	CPM	1.0E+02	none
	RM-L5	CPM	5.0E+02	none
	RM-L6	CPM	5.0E+02	none
	RM-L7	CPM	1.5E+02	none
	RM-L9	CPM	1.8E+04	none
*	RM-L10	CPS	8.0E+00	none
*	RM-L11	CPM	6.0E+01	none
	RM-L12	CPM	6.0E+01	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / AREA GAMMA MONITORS

Scenario Time in Minutes 75

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RM-G1	mR/hr	1.0E-01	none
*	RM-G2	mR/hr	1.0E-01	none
*	RM-G3	mR/hr	5.0E-01	none
	RM-G4	mR/hr	1.0E-01	none
	RM-G5	mR/hr	1.1E+00	none
	RM-G6	mR/hr	1.1E+03	none
	RM-G7	mR/hr	1.9E+03	none
	RM-G8	mR/hr	2.1E+01	none
	RM-G9	mR/hr	1.0E+00	none
	RM-G10	mR/hr	1.0E-01	none
	RM-G11	mR/hr	3.0E-01	none
	RM-G12	mR/hr	1.0E-01	none
	RM-G13	mR/hr	1.0E-01	none
	RM-G14	mR/hr	1.0E-01	none
	RM-G15	mR/hr	1.0E-01	none
*	RM-G16	mR/hr	1.0E-01	none
*	RM-G17	mR/hr	1.0E-01	none
*	RM-G18	mR/hr	6.0E-01	none
	RM-G19	mR/hr	1.0E+00	none
	RM-G20	mR/hr	3.0E-01	none
	RM-G21	mR/hr	2.1E+05	high alarm
	RM-G22	R/hr	2.1E+00	none
	RM-G23	R/hr	1.6E+00	none
	RM-G24	mR/hr	1.0E-01	none
	RM-G25	mR/hr	1.1E+01	none
	RM-G26	CPM	1.0E+02	none
	RM-G27	CPM	2.2E+03	alert alarm

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / ATMOSPHERIC MONITORS

Scenario Time in Minutes 75

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RMA-1 Part	CPM	1.0E+02	none
	RMA-1 Iodine	CPM	8.0E+01	none
	RMA-1 Gas	CPM	5.0E+01	none
	RMA-2 Part	CPM	1.0E+06	offscale high
	RMA-2 Iodine	CPM	1.0E+06	offscale high
	RMA-2 Gas	CPM	6.7E+04	high alarm
	RMA-4 Part	CPM	2.0E+02	none
	RMA-4 Iodine	CPM	2.0E+02	none
	RMA-4 Gas	CPM	3.0E+01	none
	RMA-5 Gas	CPM	1.0E+06	offscale high
	RMA-5 HIGH Gas	CPM	4.4E+03	alert alarm
	RMA-6 Part	CPM	3.0E+02	none
	RMA-6 Iodine	CPM	5.0E+01	none
	RMA-6 Gas	CPM	3.0E+01	none
	RMA-7 Gas	CPM	1.5E+02	none
	RMA-8 Part	CPM	3.0E+01	none
	RMA-8 Iodine	CPM	2.0E+02	none
	RMA-8 Gas	CPM	6.0E+01	none
	RMA-8 HIGH Gas	CPM	1.0E-01	none
	RMA-9 Part	CPM	1.0E+06	offscale high
	RMA-9 Iodine	CPM	1.0E+06	offscale high
	RMA-9 Gas	CPM	6.8E+04	none
	RMA-9 HIGH Gas	CPM	1.0E-01	none
*	RMA-12 Part	CPM	1.5E+02	none
*	RMA-12 Iodine	CPM	2.0E+01	none
*	RMA-12 Gas	CPM	5.0E+01	none
	RMA-15 Gas	CPM	1.0E+06	offscale high

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

APPENDIX E 1994 ANNUAL EXERCISE

RADIATION MONITORING SYSTEM DATA / LIQUID MONITORS

Scenario Time in Minutes 75

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
*	RM-L1 Low	CPM	5.5E+04	none
*	RM-L1 High	CPM	1.1E+03	none
	RM-L2	CPM	1.5E+02	none
	RM-L3	CPM	1.5E+02	none
	RM-L4	CPM	1.0E+02	none
	RM-L5	CPM	5.0E+02	none
	RM-L6	CPM	5.0E+02	none
	RM-L7	CPM	1.5E+02	none
	RM-L9	CPM	1.8E+04	none
*	RM-L10	CPS	8.0E+00	none
*	RM-L11	CPM	6.0E+01	none
	RM-L12	CPM	6.0E+01	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / AREA GAMMA MONITORS

Scenario Time in Minutes 90

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RM-G1	mR/hr	1.0E-01	none
*	RM-G2	mR/hr	1.0E-01	none
*	RM-G3	mR/hr	5.0E-01	none
	RM-G4	mR/hr	1.0E-01	none
	RM-G5	mR/hr	1.9E+00	none
	RM-G6	mR/hr	1.9E+03	alert alarm
	RM-G7	mR/hr	3.5E+03	none
	RM-G8	mR/hr	3.9E+01	none
	RM-G9	mR/hr	1.0E+00	none
	RM-G10	mR/hr	1.0E-01	none
	RM-G11	mR/hr	3.0E-01	none
	RM-G12	mR/hr	1.0E-01	none
	RM-G13	mR/hr	1.0E-01	none
	RM-G14	mR/hr	1.0E-01	none
	RM-G15	mR/hr	1.0E-01	none
*	RM-G16	mR/hr	1.0E-01	none
*	RM-G17	mR/hr	1.0E-01	none
*	RM-G18	mR/hr	6.0E-01	none
	RM-G19	mR/hr	1.0E+00	none
	RM-G20	mR/hr	3.0E-01	none
	RM-G21	mR/hr	3.9E+05	high alarm
	RM-G22	R/hr	3.9E+00	none
	RM-G23	R/hr	2.9E+00	none
	RM-G24	mR/hr	1.0E-01	none
	RM-G25	mR/hr	4.8E+00	none
	RM-G26	CPM	1.0E+02	none
	RM-G27	CPM	1.5E+03	alert alarm

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / ATMOSPHERIC MONITORS

Scenario Time in Minutes 90

	RMS CHANNEL	UNITS	READING	ALARM CONDITION
	RMA-1 Part	CPM	1.0E+02	none
	RMA-1 Iodine	CPM	8.0E+01	none
	RMA-1 Gas	CPM	5.0E+01	none
	RMA-2 Part	CPM	1.0E+06	offscale high
	RMA-2 Iodine	CPM	1.0E+06	offscale high
	RMA-2 Gas	CPM	1.2E+05	high alarm
	RMA-4 Part	CPM	2.0E+02	none
	RMA-4 Iodine	CPM	2.0E+02	none
	RMA-4 Gas	CPM	3.0E+01	none
	RMA-5 Gas	CPM	1.0E+06	offscale high
	RMA-5 HIGH Gas	CPM	1.7E+03	alert alarm
	RMA-6 Part	CPM	3.0E+02	none
	RMA-6 Iodine	CPM	5.0E+01	none
	RMA-6 Gas	CPM	3.0E+01	none
	RMA-7 Gas	CPM	1.5E+02	none
	RMA-8 Part	CPM	3.0E+01	none
	RMA-8 Iodine	CPM	2.0E+02	none
	RMA-8 Gas	CPM	6.0E+01	none
	RMA-8 HIGH Gas	CPM	1.0E-01	none
	RMA-9 Part	CPM	1.0E+06	offscale high
	RMA-9 Iodine	CPM	1.0E+06	offscale high
	RMA-9 Gas	CPM	1.2E+05	alert alarm
	RMA-9 HIGH Gas	CPM	1.0E-01	none
*	RMA-12 Part	CPM	1.5E+02	none
*	RMA-12 Iodine	CPM	2.0E+01	none
*	RMA-12 Gas	CPM	5.0E+01	none
	RMA-15 Gas	CPM	1.0E+06	offscale high

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / LIQUID MONITORS

Scenario Time in Minutes 90

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
*	RM-L1 Low	CPM	5.3E+04	none
*	RM-L1 High	CPM	1.0E+03	none
	RM-L2	CPM	1.5E+02	none
	RM-L3	CPM	1.5E+02	none
	RM-L4	CPM	1.0E+02	none
	RM-L5	CPM	5.0E+02	none
	RM-L6	CPM	5.0E+02	none
	RM-L7	CPM	1.5E+02	none
	RM-L9	CPM	1.8E+04	none
*	RM-L10	CPS	8.0E+00	none
*	RM-L11	CPM	6.0E+01	none
	RM-L12	CPM	6.0E+01	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / AREA GAMMA MONITORS

Scenario Time in Minutes 105

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RM-G1	mR/hr	1.0E-01	none
*	RM-G2	mR/hr	1.0E-01	none
*	RM-G3	mR/hr	5.0E-01	none
	RM-G4	mR/hr	1.0E-01	none
	RM-G5	mR/hr	2.7E+00	none
	RM-G6	mR/hr	2.7E+03	high alarm
	RM-G7	mR/hr	4.8E+03	none
	RM-G8	mR/hr	5.4E+01	none
	RM-G9	mR/hr	1.0E+00	none
	RM-G10	mR/hr	1.0E-01	none
	RM-G11	mR/hr	3.0E-01	none
	RM-G12	mR/hr	1.0E-01	none
	RM-G13	mR/hr	1.0E-01	none
	RM-G14	mR/hr	1.0E-01	none
	RM-G15	mR/hr	1.0E-01	none
*	RM-G16	mR/hr	1.0E-01	none
*	RM-G17	mR/hr	1.0E-01	none
*	RM-G18	mR/hr	6.0E-01	none
	RM-G19	mR/hr	1.0E+00	none
	RM-G20	mR/hr	3.0E-01	none
	RM-G21	mR/hr	5.4E+05	high alarm
	RM-G22	R/hr	5.4E+00	none
	RM-G23	R/hr	4.0E+00	none
	RM-G24	mR/hr	1.0E-01	none
	RM-G25	mR/hr	2.2E+00	none
	RM-G26	CPM	1.0E+02	none
	RM-G27	CPM	1.1E+03	alert alarm

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / ATMOSPHERIC MONITORS

Scenario Time in Minutes 105

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RMA-1 Part	CPM	1.0E+02	none
	RMA-1 Iodine	CPM	8.0E+01	none
	RMA-1 Gas	CPM	5.0E+01	none
	RMA-2 Part	CPM	1.0E+06	offscale high
	RMA-2 Iodine	CPM	1.0E+06	offscale high
	RMA-2 Gas	CPM	1.7E+05	high alarm
	RMA-4 Part	CPM	2.0E+02	none
	RMA-4 Iodine	CPM	2.0E+02	none
	RMA-4 Gas	CPM	3.0E+01	none
	RMA-5 Gas	CPM	1.0E+06	offscale high
	RMA-5 HIGH Gas	CPM	7.4E+02	alert alarm
	RMA-6 Part	CPM	3.0E+02	none
	RMA-6 Iodine	CPM	5.0E+01	none
	RMA-6 Gas	CPM	3.0E+01	none
	RMA-7 Gas	CPM	1.5E+02	none
	RMA-8 Part	CPM	3.0E+01	none
	RMA-8 Iodine	CPM	2.0E+02	none
	RMA-8 Gas	CPM	6.0E+01	none
	RMA-8 HIGH Gas	CPM	1.0E-01	none
	RMA-9 Part	CPM	1.0E+06	offscale high
	RMA-9 Iodine	CPM	1.0E+06	offscale high
	RMA-9 Gas	CPM	1.7E+05	alert alarm
	RMA-9 HIGH Gas	CPM	1.0E-01	none
*	RMA-12 Part	CPM	1.5E+02	none
*	RMA-12 Iodine	CPM	2.0E+01	none
*	RMA-12 Gas	CPM	5.0E+01	none
	RMA-15 Gas	CPM	1.0E+06	offscale high

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

APPENDIX E 1994 ANNUAL EXERCISE

RADIATION MONITORING SYSTEM DATA / LIQUID MONITORS

Scenario Time in Minutes 105

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
*	RM-L1 Low	CPM	5.1E+04	none
*	RM-L1 High	CPM	1.0E+03	none
	RM-L2	CPM	1.5E+02	none
	RM-L3	CPM	1.5E+02	none
	RM-L4	CPM	1.0E+02	none
	RM-L5	CPM	5.0E+02	none
	RM-L6	CPM	5.0E+02	none
	RM-L7	CPM	1.5E+02	none
	RM-L9	CPM	1.8E+04	none
*	RM-L10	CPS	8.0E+00	none
*	RM-L11	CPM	6.0E+01	none
	RM-L12	CPM	6.0E+01	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / AREA GAMMA MONITORS

Scenario Time in Minutes 120

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RM-G1	mR/hr	1.0E-01	none
*	RM-G2	mR/hr	1.0E-01	none
*	RM-G3	mR/hr	5.0E-01	none
	RM-G4	mR/hr	1.0E-01	none
	RM-G5	mR/hr	3.4E+00	none
	RM-G6	mR/hr	3.4E+03	high alarm
	RM-G7	mR/hr	6.1E+03	none
	RM-G8	mR/hr	6.8E+01	none
	RM-G9	mR/hr	1.0E+00	none
	RM-G10	mR/hr	1.0E-01	none
	RM-G11	mR/hr	3.0E-01	none
	RM-G12	mR/hr	1.0E-01	none
	RM-G13	mR/hr	1.0E-01	none
	RM-G14	mR/hr	1.0E-01	none
	RM-G15	mR/hr	1.0E-01	none
*	RM-G16	mR/hr	1.0E-01	none
*	RM-G17	mR/hr	1.0E-01	none
*	RM-G18	mR/hr	6.0E-01	none
	RM-G19	mR/hr	1.0E+00	none
	RM-G20	mR/hr	3.0E-01	none
	RM-G21	mR/hr	6.8E+05	high alarm
	RM-G22	R/hr	6.8E+00	none
	RM-G23	R/hr	5.1E+00	none
	RM-G24	mR/hr	1.0E-01	none
	RM-G25	mR/hr	1.0E+00	none
	RM-G26	CPM	1.0E+02	none
	RM-G27	CPM	8.9E+02	alert alarm

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / ATMOSPHERIC MONITORS

Scenario Time in Minutes 120

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RMA-1 Part	CPM	1.0E+02	none
	RMA-1 Iodine	CPM	8.0E+01	none
	RMA-1 Gas	CPM	5.0E+01	none
	RMA-2 Part	CPM	1.0E+06	offscale high
	RMA-2 Iodine	CPM	1.0E+06	offscale high
	RMA-2 Gas	CPM	2.2E+05	high alarm
	RMA-4 Part	CPM	2.0E+02	none
	RMA-4 Iodine	CPM	2.0E+02	none
	RMA-4 Gas	CPM	3.0E+01	none
	RMA-5 Gas	CPM	9.1E+05	high alarm
	RMA-5 HIGH Gas	CPM	3.4E+02	alert alarm
	RMA-6 Part	CPM	3.0E+02	none
	RMA-6 Iodine	CPM	5.0E+01	none
	RMA-6 Gas	CPM	3.0E+01	none
	RMA-7 Gas	CPM	1.5E+02	none
	RMA-8 Part	CPM	3.0E+01	none
	RMA-8 Iodine	CPM	2.0E+02	none
	RMA-8 Gas	CPM	6.0E+01	none
	RMA-8 HIGH Gas	CPM	1.0E-01	none
	RMA-9 Part	CPM	1.0E+06	offscale high
	RMA-9 Iodine	CPM	1.0E+06	offscale high
	RMA-9 Gas	CPM	2.2E+05	alert alarm
	RMA-9 HIGH Gas	CPM	1.0E-01	none
*	RMA-12 Part	CPM	1.5E+02	none
*	RMA-12 Iodine	CPM	2.0E+01	none
*	RMA-12 Gas	CPM	5.0E+01	none
	RMA-15 Gas	CPM	9.0E+05	high alarm

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / LIQUID MONITORS

Scenario Time in Minutes 120

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
*	RM-L1 Low	CPM	5.0E+04	none
*	RM-L1 High	CPM	9.8E+02	none
	RM-L2	CPM	1.5E+02	none
	RM-L3	CPM	1.5E+02	none
	RM-L4	CPM	1.0E+02	none
	RM-L5	CPM	5.0E+02	none
	RM-L6	CPM	5.0E+02	none
	RM-L7	CPM	1.5E+02	none
	RM-L9	CPM	1.8E+04	none
*	RM-L10	CPS	8.0E+00	none
*	RM-L11	CPM	6.0E+01	none
	RM-L12	CPM	6.0E+01	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / AREA GAMMA MONITORS

Scenario Time in Minutes 135

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RM-G1	mR/hr	1.0E-01	none
*	RM-G2	mR/hr	1.0E-01	none
*	RM-G3	mR/hr	5.0E-01	none
	RM-G4	mR/hr	1.0E-01	none
	RM-G5	mR/hr	4.0E+00	none
	RM-G6	mR/hr	4.0E+03	high alarm
	RM-G7	mR/hr	7.3E+03	none
	RM-G8	mR/hr	8.1E+01	none
	RM-G9	mR/hr	1.0E+00	none
	RM-G10	mR/hr	1.0E-01	none
	RM-G11	mR/hr	3.0E-01	none
	RM-G12	mR/hr	1.0E-01	none
	RM-G13	mR/hr	1.0E-01	none
	RM-G14	mR/hr	1.0E-01	none
	RM-G15	mR/hr	1.0E-01	none
*	RM-G16	mR/hr	1.0E-01	none
*	RM-G17	mR/hr	1.0E-01	none
*	RM-G18	mR/hr	6.0E-01	none
	RM-G19	mR/hr	1.0E+00	none
	RM-G20	mR/hr	3.0E-01	none
	RM-G21	mR/hr	8.1E+05	high alarm
	RM-G22	R/hr	8.1E+00	none
	RM-G23	R/hr	6.1E+00	none
	RM-G24	mR/hr	1.0E-01	none
	RM-G25	mR/hr	5.1E-01	none
	RM-G26	CPM	1.0E+02	none
	RM-G27	CPM	7.6E+02	alert alarm

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

APPENDIX E 1994 ANNUAL EXERCISE

RADIATION MONITORING SYSTEM DATA / ATMOSPHERIC MONITORS

Scenario Time in Minutes 135

	RMS CHANNEL	UNITS	READING	ALARM CONDITION
	RMA-1 Part	CPM	1.0E+02	none
	RMA-1 Iodine	CPM	8.0E+01	none
	RMA-1 Gas	CPM	5.0E+01	none
	RMA-2 Part	CPM	1.0E+06	offscale high
	RMA-2 Iodine	CPM	1.0E+06	offscale high
	RMA-2 Gas	CPM	2.7E+05	high alarm
	RMA-4 Part	CPM	2.0E+02	none
	RMA-4 Iodine	CPM	2.0E+02	none
	RMA-4 Gas	CPM	3.0E+01	none
	RMA-5 Gas	CPM	4.5E+05	high alarm
	RMA-5 HIGH Gas	CPM	1.6E+02	alert alarm
	RMA-6 Part	CPM	3.0E+02	none
	RMA-6 Iodine	CPM	5.0E+01	none
	RMA-6 Gas	CPM	3.0E+01	none
	RMA-7 Gas	CPM	1.5E+02	none
	RMA-8 Part	CPM	3.0E+01	none
	RMA-8 Iodine	CPM	2.0E+02	none
	RMA-8 Gas	CPM	6.0E+01	none
	RMA-8 HIGH Gas	CPM	1.0E-01	none
	RMA-9 Part	CPM	1.0E+06	offscale high
	RMA-9 Iodine	CPM	1.0E+06	offscale high
	RMA-9 Gas	CPM	2.7E+05	alert alarm
	RMA-9 HIGH Gas	CPM	1.0E-01	none
*	RMA-12 Part	CPM	1.5E+02	none
*	RMA-12 Iodine	CPM	2.0E+01	none
*	RMA-12 Gas	CPM	5.0E+01	none
	RMA-15 Gas	CPM	4.4E+05	high alarm

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / LIQUID MONITORS

Scenario Time in Minutes 135

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
*	RM-L1 Low	CPM	4.9E+04	none
*	RM-L1 High	CPM	9.6E+02	none
	RM-L2	CPM	1.5E+02	none
	RM-L3	CPM	1.5E+02	none
	RM-L4	CPM	1.0E+02	none
	RM-L5	CPM	5.0E+02	none
	RM-L6	CPM	5.0E+02	none
	RM-L7	CPM	1.5E+02	none
	RM-L9	CPM	1.8E+04	none
*	RM-L10	CPS	8.0E+00	none
*	RM-L11	CPM	6.0E+01	none
	RM-L12	CPM	6.0E+01	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / AREA GAMMA MONITORS

Scenario Time in Minutes 150

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RM-G1	mR/hr	1.0E-01	none
*	RM-G2	mR/hr	1.0E-01	none
*	RM-G3	mR/hr	5.0E-01	none
	RM-G4	mR/hr	1.0E-01	none
	RM-G5	mR/hr	4.7E+00	none
	RM-G6	mR/hr	4.7E+03	high alarm
	RM-G7	mR/hr	8.4E+03	none
	RM-G8	mR/hr	9.3E+01	none
	RM-G9	mR/hr	1.0E+00	none
	RM-G10	mR/hr	1.0E-01	none
	RM-G11	mR/hr	3.0E-01	none
	RM-G12	mR/hr	1.0E-01	none
	RM-G13	mR/hr	1.0E-01	none
	RM-G14	mR/hr	1.0E-01	none
	RM-G15	mR/hr	1.0E-01	none
*	RM-G16	mR/hr	1.0E-01	none
*	RM-G17	mR/hr	1.0E-01	none
*	RM-G18	mR/hr	6.0E-01	none
	RM-G19	mR/hr	1.0E+00	none
	RM-G20	mR/hr	3.0E-01	none
	RM-G21	mR/hr	9.3E+05	high alarm
	RM-G22	R/hr	9.3E+00	none
	RM-G23	R/hr	7.0E+00	none
	RM-G24	mR/hr	1.0E-01	none
	RM-G25	mR/hr	2.5E-01	none
	RM-G26	CPM	1.0E+02	none
	RM-G27	CPM	6.8E+02	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

APPENDIX E 1994 ANNUAL EXERCISE

RADIATION MONITORING SYSTEM DATA / ATMOSPHERIC MONITORS

Scenario Time in Minutes 150

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RMA-1 Part	CPM	1.0E+02	none
	RMA-1 Iodine	CPM	8.0E+01	none
	RMA-1 Gas	CPM	5.0E+01	none
	RMA-2 Part	CPM	1.0E+06	offscale high
	RMA-2 Iodine	CPM	1.0E+06	offscale high
	RMA-2 Gas	CPM	3.2E+05	high alarm
	RMA-4 Part	CPM	2.0E+02	none
	RMA-4 Iodine	CPM	2.0E+02	none
	RMA-4 Gas	CPM	3.0E+01	none
	RMA-5 Gas	CPM	2.3E+05	high alarm
	RMA-5 HIGH Gas	CPM	8.1E+01	none
	RMA-6 Part	CPM	3.0E+02	none
	RMA-6 Iodine	CPM	5.0E+01	none
	RMA-6 Gas	CPM	3.0E+01	none
	RMA-7 Gas	CPM	1.5E+02	none
	RMA-8 Part	CPM	3.0E+01	none
	RMA-8 Iodine	CPM	2.0E+02	none
	RMA-8 Gas	CPM	6.0E+01	none
	RMA-8 HIGH Gas	CPM	1.0E-01	none
	RMA-9 Part	CPM	1.0E+06	offscale high
	RMA-9 Iodine	CPM	1.0E+06	offscale high
	RMA-9 Gas	CPM	3.2E+05	alert alarm
	RMA-9 HIGH Gas	CPM	1.0E-01	none
*	RMA-12 Part	CPM	1.5E+02	none
*	RMA-12 Iodine	CPM	2.0E+01	none
*	RMA-12 Gas	CPM	5.0E+01	none
	RMA-15 Gas	CPM	2.2E+05	high alarm

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

APPENDIX E 1994 ANNUAL EXERCISE

RADIATION MONITORING SYSTEM DATA / LIQUID MONITORS

Scenario Time in Minutes 150

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
*	RM-L1 Low	CPM	4.8E+04	none
*	RM-L1 High	CPM	9.4E+02	none
	RM-L2	CPM	1.5E+02	none
	RM-L3	CPM	1.5E+02	none
	RM-L4	CPM	1.0E+02	none
	RM-L5	CPM	5.0E+02	none
	RM-L6	CPM	5.0E+02	none
	RM-L7	CPM	1.5E+02	none
	RM-L9	CPM	1.8E+04	none
*	RM-L10	CPS	8.0E+00	none
*	RM-L11	CPM	6.0E+01	none
	RM-L12	CPM	6.0E+01	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

APPENDIX E 1994 ANNUAL EXERCISE

RADIATION MONITORING SYSTEM DATA / AREA GAMMA MONITORS

Scenario Time in Minutes 165

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RM-G1	mR/hr	1.0E-01	none
*	RM-G2	mR/hr	1.0E-01	none
*	RM-G3	mR/hr	5.0E-01	none
	RM-G4	mR/hr	1.0E-01	none
	RM-G5	mR/hr	5.3E+00	none
	RM-G6	mR/hr	5.3E+03	high alarm
	RM-G7	mR/hr	9.5E+03	none
	RM-G8	mR/hr	1.1E+02	alert alarm
	RM-G9	mR/hr	1.0E+00	none
	RM-G10	mR/hr	1.0E-01	none
	RM-G11	mR/hr	3.0E-01	none
	RM-G12	mR/hr	1.0E-01	none
	RM-G13	mR/hr	1.0E-01	none
	RM-G14	mR/hr	1.0E-01	none
	RM-G15	mR/hr	1.0E-01	none
*	RM-G16	mR/hr	1.0E-01	none
*	RM-G17	mR/hr	1.0E-01	none
*	RM-G18	mR/hr	6.0E-01	none
	RM-G19	mR/hr	1.0E+00	none
	RM-G20	mR/hr	3.0E-01	none
	RM-G21	mR/hr	1.0E+06	offscale high
	RM-G22	R/hr	1.1E+01	none
	RM-G23	R/hr	7.9E+00	none
	RM-G24	mR/hr	1.0E-01	none
	RM-G25	mR/hr	1.3E-01	none
	RM-G26	CPM	1.0E+02	none
	RM-G27	CPM	6.2E+02	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

APPENDIX E 1994 ANNUAL EXERCISE

RADIATION MONITORING SYSTEM DATA / ATMOSPHERIC MONITORS

Scenario Time in Minutes 165

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RMA-1 Part	CPM	1.0E+02	none
	RMA-1 Iodine	CPM	8.0E+01	none
	RMA-1 Gas	CPM	5.0E+01	none
	RMA-2 Part	CPM	1.0E+06	offscale high
	RMA-2 Iodine	CPM	1.0E+06	offscale high
	RMA-2 Gas	CPM	3.7E+05	high alarm
	RMA-4 Part	CPM	2.0E+02	none
	RMA-4 Iodine	CPM	2.0E+02	none
	RMA-4 Gas	CPM	3.0E+01	none
	RMA-5 Gas	CPM	1.2E+05	alert alarm
	RMA-5 HIGH Gas	CPM	4.1E+01	none
	RMA-6 Part	CPM	3.0E+02	none
	RMA-6 Iodine	CPM	5.0E+01	none
	RMA-6 Gas	CPM	3.0E+01	none
	RMA-7 Gas	CPM	1.5E+02	none
	RMA-8 Part	CPM	3.0E+01	none
	RMA-8 Iodine	CPM	2.0E+02	none
	RMA-8 Gas	CPM	6.0E+01	none
	RMA-8 HIGH Gas	CPM	1.0E-01	none
	RMA-9 Part	CPM	1.0E+06	offscale high
	RMA-9 Iodine	CPM	1.0E+06	offscale high
	RMA-9 Gas	CPM	3.7E+05	alert alarm
	RMA-9 HIGH Gas	CPM	1.0E-01	none
*	RMA-12 Part	CPM	1.5E+02	none
*	RMA-12 Iodine	CPM	2.0E+01	none
*	RMA-12 Gas	CPM	5.0E+01	none
	RMA-15 Gas	CPM	1.1E+05	alert alarm

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

APPENDIX E 1994 ANNUAL EXERCISE

RADIATION MONITORING SYSTEM DATA / LIQUID MONITORS

Scenario Time in Minutes 165

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
*	RM-L1 Low	CPM	4.7E+04	none
*	RM-L1 High	CPM	9.3E+02	none
	RM-L2	CPM	1.5E+02	none
	RM-L3	CPM	1.5E+02	none
	RM-L4	CPM	1.0E+02	none
	RM-L5	CPM	5.0E+02	none
	RM-L6	CPM	5.0E+02	none
	RM-L7	CPM	1.5E+02	none
	RM-L9	CPM	1.8E+04	none
*	RM-L10	CPS	8.0E+00	none
*	RM-L11	CPM	6.0E+01	none
	RM-L12	CPM	6.0E+01	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / AREA GAMMA MONITORS

Scenario Time in Minutes 180

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RM-G1	mR/hr	1.0E-01	none
*	RM-G2	mR/hr	1.0E-01	none
*	RM-G3	mR/hr	5.0E-01	none
	RM-G4	mR/hr	1.0E-01	none
	RM-G5	mR/hr	5.9E+00	none
	RM-G6	mR/hr	5.9E+03	high alarm
	RM-G7	mR/hr	1.1E+04	none
	RM-G8	mR/hr	1.2E+02	alert alarm
	RM-G9	mR/hr	1.0E+00	none
	RM-G10	mR/hr	1.0E-01	none
	RM-G11	mR/hr	3.0E-01	none
	RM-G12	mR/hr	1.0E-01	none
	RM-G13	mR/hr	1.0E-01	none
	RM-G14	mR/hr	1.0E-01	none
	RM-G15	mR/hr	1.0E-01	none
*	RM-G16	mR/hr	1.0E-01	none
*	RM-G17	mR/hr	1.0E-01	none
*	RM-G18	mR/hr	6.0E-01	none
	RM-G19	mR/hr	1.0E+00	none
	RM-G20	mR/hr	3.0E-01	none
	RM-G21	mR/hr	1.0E+06	offscale high
	RM-G22	R/hr	1.2E+01	none
	RM-G23	R/hr	8.8E+00	none
	RM-G24	mR/hr	1.0E-01	none
	RM-G25	mR/hr	1.0E-01	none
	RM-G26	CPM	1.0E+02	none
	RM-G27	CPM	5.8E+02	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

APPENDIX E 1994 ANNUAL EXERCISE

RADIATION MONITORING SYSTEM DATA / ATMOSPHERIC MONITORS

Scenario Time in Minutes 180

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RMA-1 Part	CPM	1.0E+02	none
	RMA-1 Iodine	CPM	8.0E+01	none
	RMA-1 Gas	CPM	5.0E+01	none
	RMA-2 Part	CPM	1.0E+06	offscale high
	RMA-2 Iodine	CPM	1.0E+06	offscale high
	RMA-2 Gas	CPM	4.2E+05	high alarm
	RMA-4 Part	CPM	2.0E+02	none
	RMA-4 Iodine	CPM	2.0E+02	none
	RMA-4 Gas	CPM	3.0E+01	none
	RMA-5 Gas	CPM	6.1E+04	none
	RMA-5 HIGH Gas	CPM	2.2E+01	none
	RMA-6 Part	CPM	3.0E+02	none
	RMA-6 Iodine	CPM	5.0E+01	none
	RMA-6 Gas	CPM	3.0E+01	none
	RMA-7 Gas	CPM	1.5E+02	none
	RMA-8 Part	CPM	3.0E+01	none
	RMA-8 Iodine	CPM	2.0E+02	none
	RMA-8 Gas	CPM	6.0E+01	none
	RMA-8 HIGH Gas	CPM	1.0E-01	none
	RMA-9 Part	CPM	1.0E+06	offscale high
	RMA-9 Iodine	CPM	1.0E+06	offscale high
	RMA-9 Gas	CPM	4.2E+05	alert alarm
	RMA-9 HIGH Gas	CPM	1.0E-01	none
*	RMA-12 Part	CPM	1.5E+02	none
*	RMA-12 Iodine	CPM	2.0E+01	none
*	RMA-12 Gas	CPM	5.0E+01	none
	RMA-15 Gas	CPM	6.0E+04	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

APPENDIX E 1994 ANNUAL EXERCISE

RADIATION MONITORING SYSTEM DATA / LIQUID MONITORS

Scenario Time in Minutes 180

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
*	RM-L1 Low	CPM	4.7E+04	none
*	RM-L1 High	CPM	9.2E+02	none
	RM-L2	CPM	1.5E+02	none
	RM-L3	CPM	1.5E+02	none
	RM-L4	CPM	1.0E+02	none
	RM-L5	CPM	5.0E+02	none
	RM-L6	CPM	5.0E+02	none
	RM-L7	CPM	1.5E+02	none
	RM-L9	CPM	1.8E+04	none
*	RM-L10	CPS	8.0E+00	none
*	RM-L11	CPM	6.0E+01	none
	RM-L12	CPM	6.0E+01	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / AREA GAMMA MONITORS

Scenario Time in Minutes 195

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RM-G1	mR/hr	1.0E-01	none
*	RM-G2	mR/hr	1.0E-01	none
*	RM-G3	mR/hr	5.0E-01	none
	RM-G4	mR/hr	1.0E-01	none
	RM-G5	mR/hr	6.5E+00	none
	RM-G6	mR/hr	6.5E+03	high alarm
	RM-G7	mR/hr	1.2E+04	none
	RM-G8	mR/hr	1.3E+02	alert alarm
	RM-G9	mR/hr	1.0E+00	none
	RM-G10	mR/hr	1.0E-01	none
	RM-G11	mR/hr	3.0E-01	none
	RM-G12	mR/hr	1.0E-01	none
	RM-G13	mR/hr	1.0E-01	none
	RM-G14	mR/hr	1.0E-01	none
	RM-G15	mR/hr	1.0E-01	none
*	RM-G16	mR/hr	1.0E-01	none
*	RM-G17	mR/hr	1.0E-01	none
*	RM-G18	mR/hr	6.0E-01	none
	RM-G19	mR/hr	1.0E+00	none
	RM-G20	mR/hr	3.0E-01	none
	RM-G21	mR/hr	1.0E+06	offscale high
	RM-G22	R/hr	1.3E+01	none
	RM-G23	R/hr	9.7E+00	none
	RM-G24	mR/hr	1.0E-01	none
	RM-G25	mR/hr	1.0E-01	none
	RM-G26	CPM	1.0E+02	none
	RM-G27	CPM	5.4E+02	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / ATMOSPHERIC MONITORS

Scenario Time in Minutes 195

	RMS CHANNEL	UNITS	READING	ALARM CONDITION
	RMA-1 Part	CPM	1.0E+02	none
	RMA-1 Iodine	CPM	8.0E+01	none
	RMA-1 Gas	CPM	5.0E+01	none
	RMA-2 Part	CPM	1.0E+06	offscale high
	RMA-2 Iodine	CPM	1.0E+06	offscale high
	RMA-2 Gas	CPM	4.7E+05	high alarm
	RMA-4 Part	CPM	2.0E+02	none
	RMA-4 Iodine	CPM	2.0E+02	none
	RMA-4 Gas	CPM	3.0E+01	none
	RMA-5 Gas	CPM	3.4E+04	none
	RMA-5 HIGH Gas	CPM	1.2E+01	none
	RMA-6 Part	CPM	3.0E+02	none
	RMA-6 Iodine	CPM	5.0E+01	none
	RMA-6 Gas	CPM	3.0E+01	none
	RMA-7 Gas	CPM	1.5E+02	none
	RMA-8 Part	CPM	3.0E+01	none
	RMA-8 Iodine	CPM	2.0E+02	none
	RMA-8 Gas	CPM	6.0E+01	none
	RMA-8 HIGH Gas	CPM	1.0E-01	none
	RMA-9 Part	CPM	1.0E+06	offscale high
	RMA-9 Iodine	CPM	1.0E+06	offscale high
	RMA-9 Gas	CPM	4.7E+05	alert alarm
	RMA-9 HIGH Gas	CPM	1.0E-01	none
*	RMA-12 Part	CPM	1.5E+02	none
*	RMA-12 Iodine	CPM	2.0E+01	none
*	RMA-12 Gas	CPM	5.0E+01	none
	RMA-15 Gas	CPM	3.4E+04	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

APPENDIX E 1994 ANNUAL EXERCISE

RADIATION MONITORING SYSTEM DATA / LIQUID MONITORS

Scenario Time in Minutes 195

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
*	RM-L1 Low	CPM	4.6E+04	none
*	RM-L1 High	CPM	9.1E+02	none
	RM-L2	CPM	1.5E+02	none
	RM-L3	CPM	1.5E+02	none
	RM-L4	CPM	1.0E+02	none
	RM-L5	CPM	5.0E+02	none
	RM-L6	CPM	5.0E+02	none
	RM-L7	CPM	1.5E+02	none
	RM-L9	CPM	1.8E+04	none
*	RM-L10	CPS	8.0E+00	none
*	RM-L11	CPM	6.0E+01	none
	RM-L12	CPM	6.0E+01	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / AREA GAMMA MONITORS

Scenario Time in Minutes 210

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RM-G1	mR/hr	1.0E-01	none
*	RM-G2	mR/hr	1.0E-01	none
*	RM-G3	mR/hr	5.0E-01	none
	RM-G4	mR/hr	1.0E-01	none
	RM-G5	mR/hr	7.0E+00	none
	RM-G6	mR/hr	7.0E+03	high alarm
	RM-G7	mR/hr	1.3E+04	none
	RM-G8	mR/hr	1.4E+02	alert alarm
	RM-G9	mR/hr	1.0E+00	none
	RM-G10	mR/hr	1.0E-01	none
	RM-G11	mR/hr	3.0E-01	none
	RM-G12	mR/hr	1.0E-01	none
	RM-G13	mR/hr	1.0E-01	none
	RM-G14	mR/hr	1.0E-01	none
	RM-G15	mR/hr	1.0E-01	none
*	RM-G16	mR/hr	1.0E-01	none
*	RM-G17	mR/hr	1.0E-01	none
*	RM-G18	mR/hr	6.0E-01	none
	RM-G19	mR/hr	1.0E+00	none
	RM-G20	mR/hr	3.0E-01	none
	RM-G21	mR/hr	1.0E+06	offscale high
	RM-G22	R/hr	1.4E+01	none
	RM-G23	R/hr	1.1E+01	none
	RM-G24	mR/hr	1.0E-01	none
	RM-G25	mR/hr	1.0E-01	none
	RM-G26	CPM	1.0E+02	none
	RM-G27	CPM	5.1E+02	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / ATMOSPHERIC MONITORS

Scenario Time in Minutes 210

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RMA-1 Part	CPM	1.0E+02	none
	RMA-1 Iodine	CPM	8.0E+01	none
	RMA-1 Gas	CPM	5.0E+01	none
	RMA-2 Part	CPM	1.0E+06	offscale high
	RMA-2 Iodine	CPM	1.0E+06	offscale high
	RMA-2 Gas	CPM	5.2E+05	high alarm
	RMA-4 Part	CPM	2.0E+02	none
	RMA-4 Iodine	CPM	2.0E+02	none
	RMA-4 Gas	CPM	3.0E+01	none
	RMA-5 Gas	CPM	2.1E+04	none
	RMA-5 HIGH Gas	CPM	7.5E+00	none
	RMA-6 Part	CPM	3.0E+02	none
	RMA-6 Iodine	CPM	5.0E+01	none
	RMA-6 Gas	CPM	3.0E+01	none
	RMA-7 Gas	CPM	1.5E+02	none
	RMA-8 Part	CPM	3.0E+01	none
	RMA-8 Iodine	CPM	2.0E+02	none
	RMA-8 Gas	CPM	6.0E+01	none
	RMA-8 HIGH Gas	CPM	1.0E-01	none
	RMA-9 Part	CPM	1.0E+06	offscale high
	RMA-9 Iodine	CPM	1.0E+06	offscale high
	RMA-9 Gas	CPM	5.3E+05	alert alarm
	RMA-9 HIGH Gas	CPM	1.0E-01	none
*	RMA-12 Part	CPM	1.5E+02	none
*	RMA-12 Iodine	CPM	2.0E+01	none
*	RMA-12 Gas	CPM	5.0E+01	none
	RMA-15 Gas	CPM	2.0E+04	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

APPENDIX E 1994 ANNUAL EXERCISE

RADIATION MONITORING SYSTEM DATA / LIQUID MONITORS

Scenario Time in Minutes 210

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
*	RM-L1 Low	CPM	4.6E+04	none
*	RM-L1 High	CPM	9.0E+02	none
	RM-L2	CPM	1.5E+02	none
	RM-L3	CPM	1.5E+02	none
	RM-L4	CPM	1.0E+02	none
	RM-L5	CPM	5.0E+02	none
	RM-L6	CPM	5.0E+02	none
	RM-L7	CPM	1.5E+02	none
	RM-L9	CPM	1.8E+04	none
*	RM-L10	CPS	8.0E+00	none
*	RM-L11	CPM	6.0E+01	none
	RM-L12	CPM	6.0E+01	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / AREA GAMMA MONITORS

Scenario Time in Minutes 225

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RM-G1	mR/hr	1.0E-01	none
*	RM-G2	mR/hr	1.0E-01	none
*	RM-G3	mR/hr	5.0E-01	none
	RM-G4	mR/hr	1.0E-01	none
	RM-G5	mR/hr	7.6E+00	none
	RM-G6	mR/hr	7.6E+03	high alarm
	RM-G7	mR/hr	1.4E+04	none
	RM-G8	mR/hr	1.5E+02	alert alarm
	RM-G9	mR/hr	1.0E+00	none
	RM-G10	mR/hr	1.0E-01	none
	RM-G11	mR/hr	3.0E-01	none
	RM-G12	mR/hr	1.0E-01	none
	RM-G13	mR/hr	1.0E-01	none
	RM-G14	mR/hr	1.0E-01	none
	RM-G15	mR/hr	1.0E-01	none
*	RM-G16	mR/hr	1.0E-01	none
*	RM-G17	mR/hr	1.0E-01	none
*	RM-G18	mR/hr	6.0E-01	none
	RM-G19	mR/hr	1.0E+00	none
	RM-G20	mR/hr	3.0E-01	none
	RM-G21	mR/hr	1.0E+06	offscale high
	RM-G22	R/hr	1.5E+01	none
	RM-G23	R/hr	1.1E+01	none
	RM-G24	mR/hr	1.0E-01	none
	RM-G25	mR/hr	1.0E-01	none
	RM-G26	CPM	1.0E+02	none
	RM-G27	CPM	4.9E+02	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / ATMOSPHERIC MONITORS

Scenario Time in Minutes 225

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RMA-1 Part	CPM	1.0E+02	none
	RMA-1 Iodine	CPM	8.0E+01	none
	RMA-1 Gas	CPM	5.0E+01	none
	RMA-2 Part	CPM	1.0E+06	offscale high
	RMA-2 Iodine	CPM	1.0E+06	offscale high
	RMA-2 Gas	CPM	5.7E+05	high alarm
	RMA-4 Part	CPM	2.0E+02	none
	RMA-4 Iodine	CPM	2.0E+02	none
	RMA-4 Gas	CPM	3.0E+01	none
	RMA-5 Gas	CPM	1.4E+04	none
	RMA-5 HIGH Gas	CPM	5.1E+00	none
	RMA-6 Part	CPM	3.0E+02	none
	RMA-6 Iodine	CPM	5.0E+01	none
	RMA-6 Gas	CPM	3.0E+01	none
	RMA-7 Gas	CPM	1.5E+02	none
	RMA-8 Part	CPM	3.0E+01	none
	RMA-8 Iodine	CPM	2.0E+02	none
	RMA-8 Gas	CPM	6.0E+01	none
	RMA-8 HIGH Gas	CPM	1.0E-01	none
	RMA-9 Part	CPM	1.0E+06	offscale high
	RMA-9 Iodine	CPM	1.0E+06	offscale high
	RMA-9 Gas	CPM	5.8E+05	alert alarm
	RMA-9 HIGH Gas	CPM	1.0E-01	none
*	RMA-12 Part	CPM	1.5E+02	none
*	RMA-12 Iodine	CPM	2.0E+01	none
*	RMA-12 Gas	CPM	5.0E+01	none
	RMA-15 Gas	CPM	1.4E+04	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

APPENDIX E 1994 ANNUAL EXERCISE

RADIATION MONITORING SYSTEM DATA / LIQUID MONITORS

Scenario Time in Minutes 225

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
*	RM-L1 Low	CPM	4.6E+04	none
*	RM-L1 High	CPM	9.0E+02	none
	RM-L2	CPM	1.5E+02	none
	RM-L3	CPM	1.5E+02	none
	RM-L4	CPM	1.0E+02	none
	RM-L5	CPM	5.0E+02	none
	RM-L6	CPM	5.0E+02	none
	RM-L7	CPM	1.5E+02	none
	RM-L9	CPM	1.8E+04	none
*	RM-L10	CPS	8.0E+00	none
*	RM-L11	CPM	6.0E+01	none
	RM-L12	CPM	6.0E+01	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / AREA GAMMA MONITORS

Scenario Time in Minutes 240

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RM-G1	mR/hr	1.0E-01	none
*	RM-G2	mR/hr	1.0E-01	none
*	RM-G3	mR/hr	5.0E-01	none
	RM-G4	mR/hr	1.0E-01	none
	RM-G5	mR/hr	8.2E+00	none
	RM-G6	mR/hr	8.2E+03	high alarm
	RM-G7	mR/hr	1.5E+04	none
	RM-G8	mR/hr	1.6E+02	alert alarm
	RM-G9	mR/hr	1.0E+00	none
	RM-G10	mR/hr	1.0E-01	none
	RM-G11	mR/hr	3.0E-01	none
	RM-G12	mR/hr	1.0E-01	none
	RM-G13	mR/hr	1.0E-01	none
	RM-G14	mR/hr	1.0E-01	none
	RM-G15	mR/hr	1.0E-01	none
*	RM-G16	mR/hr	1.0E-01	none
*	RM-G17	mR/hr	1.0E-01	none
*	RM-G18	mR/hr	6.0E-01	none
	RM-G19	mR/hr	1.0E+00	none
	RM-G20	mR/hr	3.0E-01	none
	RM-G21	mR/hr	1.0E+06	offscale high
	RM-G22	R/hr	1.6E+01	none
	RM-G23	R/hr	1.2E+01	none
	RM-G24	mR/hr	1.0E-01	none
	RM-G25	mR/hr	1.0E-01	none
	RM-G26	CPM	1.0E+02	none
	RM-G27	CPM	4.6E+02	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / ATMOSPHERIC MONITORS

Scenario Time in Minutes 240

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
	RMA-1 Part	CPM	1.0E+02	none
	RMA-1 Iodine	CPM	8.0E+01	none
	RMA-1 Gas	CPM	5.0E+01	none
	RMA-2 Part	CPM	1.0E+06	offscale high
	RMA-2 Iodine	CPM	1.0E+06	offscale high
	RMA-2 Gas	CPM	6.2E+05	high alarm
	RMA-4 Part	CPM	2.0E+02	none
	RMA-4 Iodine	CPM	2.0E+02	none
	RMA-4 Gas	CPM	3.0E+01	none
	RMA-5 Gas	CPM	1.1E+04	none
	RMA-5 HIGH Gas	CPM	3.9E+00	none
	RMA-6 Part	CPM	3.0E+02	none
	RMA-6 Iodine	CPM	5.0E+01	none
	RMA-6 Gas	CPM	3.0E+01	none
	RMA-7 Gas	CPM	1.5E+02	none
	RMA-8 Part	CPM	3.0E+01	none
	RMA-8 Iodine	CPM	2.0E+02	none
	RMA-8 Gas	CPM	6.0E+01	none
	RMA-8 HIGH Gas	CPM	1.0E-01	none
	RMA-9 Part	CPM	1.0E+06	offscale high
	RMA-9 Iodine	CPM	1.0E+06	offscale high
	RMA-9 Gas	CPM	6.3E+05	alert alarm
	RMA-9 HIGH Gas	CPM	1.0E-01	none
*	RMA-12 Part	CPM	1.5E+02	none
*	RMA-12 Iodine	CPM	2.0E+01	none
*	RMA-12 Gas	CPM	5.0E+01	none
	RMA-15 Gas	CPM	1.1E+04	none

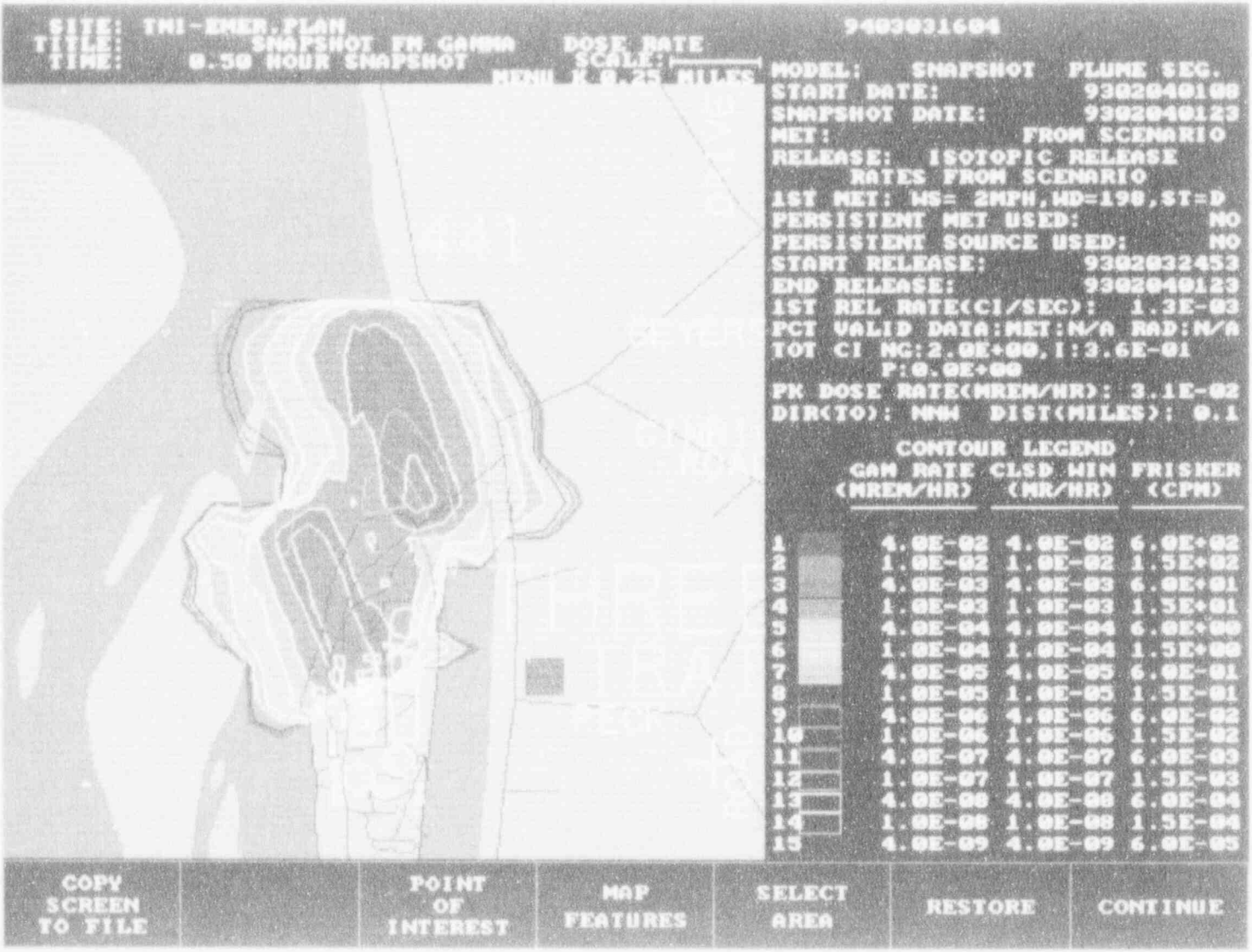
* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings

RADIATION MONITORING SYSTEM DATA / LIQUID MONITORS

Scenario Time in Minutes 240

RMS	CHANNEL	UNITS	READING	ALARM CONDITION
*	RM-L1 Low	CPM	4.6E+04	none
*	RM-L1 High	CPM	8.9E+02	none
	RM-L2	CPM	1.5E+02	none
	RM-L3	CPM	1.5E+02	none
	RM-L4	CPM	1.0E+02	none
	RM-L5	CPM	5.0E+02	none
	RM-L6	CPM	5.0E+02	none
	RM-L7	CPM	1.5E+02	none
	RM-L9	CPM	1.8E+04	none
*	RM-L10	CPS	8.0E+00	none
*	RM-L11	CPM	6.0E+01	none
	RM-L12	CPM	6.0E+01	none

* This monitor reading is a function of anticipated operator action during the course of the drill; contact the data controller for instructions and proper readings


SITE: TMI-EMER.PLAN
TITLE: SNAPSHOT FM GAMMA DOSE RATE
TIME: 0.50 HOUR SNAPSHOT
SCALE:
MINOR TK 0.25 MILES
9403031604
MODEL: SNAPSHOT PLUME SEG.
START DATE: 9302040100
SNAPSHOT DATE: 9302040123
MET: FROM SCENARIO
RELEASE: ISOTOPIC RELEASE
RATES FROM SCENARIO
1ST MET: WS= 2MPH,WD=190,ST=D
PERSISTENT MET USED: NO
PERSISTENT SOURCE USED: NO
START RELEASE: 9302032453
END RELEASE: 9302040123
1ST REL RATE(CI/SEC): 1.3E-03
PCT VALID DATA:MET:N/A RAD:N/A
TOT CI NG:2.0E+00,I:3.6E-01
P:0.0E+00
PK DOSE RATE(MREM/HR): 3.1E-02
DIR(TO): NNW DIST(MILES): 0.1
CONTOUR LEGEND
GAM RATE (MREM/HR)
CLSD WIN (MR/HR)
FRISKER (CPM)
1 4.0E-02 4.0E-02 6.0E+02
2 1.0E-02 1.0E-02 1.5E+02
3 4.0E-03 4.0E-03 6.0E+01
4 1.0E-03 1.0E-03 1.5E+01
5 4.0E-04 4.0E-04 6.0E+00
6 1.0E-04 1.0E-04 1.5E+00
7 4.0E-05 4.0E-05 6.0E-01
8 1.0E-05 1.0E-05 1.5E-01
9 4.0E-06 4.0E-06 6.0E-02
10 1.0E-06 1.0E-06 1.5E-02
11 4.0E-07 4.0E-07 6.0E-03
12 1.0E-07 1.0E-07 1.5E-03
13 4.0E-08 4.0E-08 6.0E-04
14 1.0E-08 1.0E-08 1.5E-04
15 4.0E-09 4.0E-09 6.0E-05
COPY SCREEN TO FILE
POINT OF INTEREST
MAP FEATURES
SELECT AREA
RESTORE
CONTINUE

APPENDIX F

NOTE: THIS IS A PLAYER REACTIVE DRILL RUN IN 'REAL TIME' FROM THE PLANT REFERENCE SIMULATOR AND NO BACK UP DATA WILL BE USED. THE SIMULATOR WILL BE RESET, IF REQUIRED TO CONTINUE/COMPLETE THE DRILL. CONFIRMATORY DATA WILL BE COLLECTED AND FILED AFTER THE DRILL.

The supporting DATA in the Appendices was developed from a verification run of the Plant Reference Simulator and assumed meteorological conditions. This verification data was reviewed and compiled by Emergency Preparedness, Licensed Operator Training and Radiological Engineering personnel.

This DATA is provided ONLY for your review.

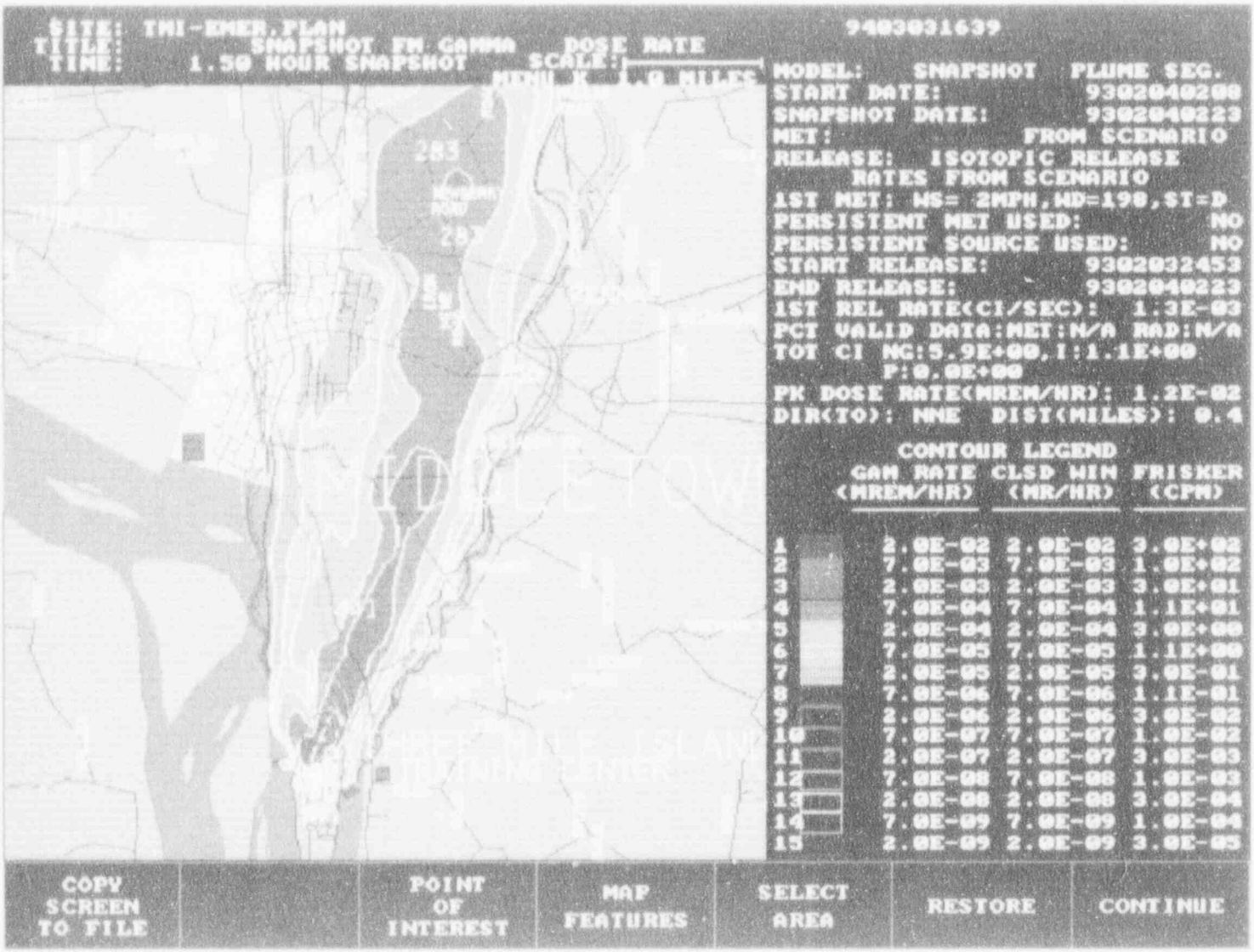
Actual drill data will be collected during the PLAYER REACTIVE exercise. The actual drill data will vary depending on the response of the players and prevailing weather (actual) conditions the day of the drill.

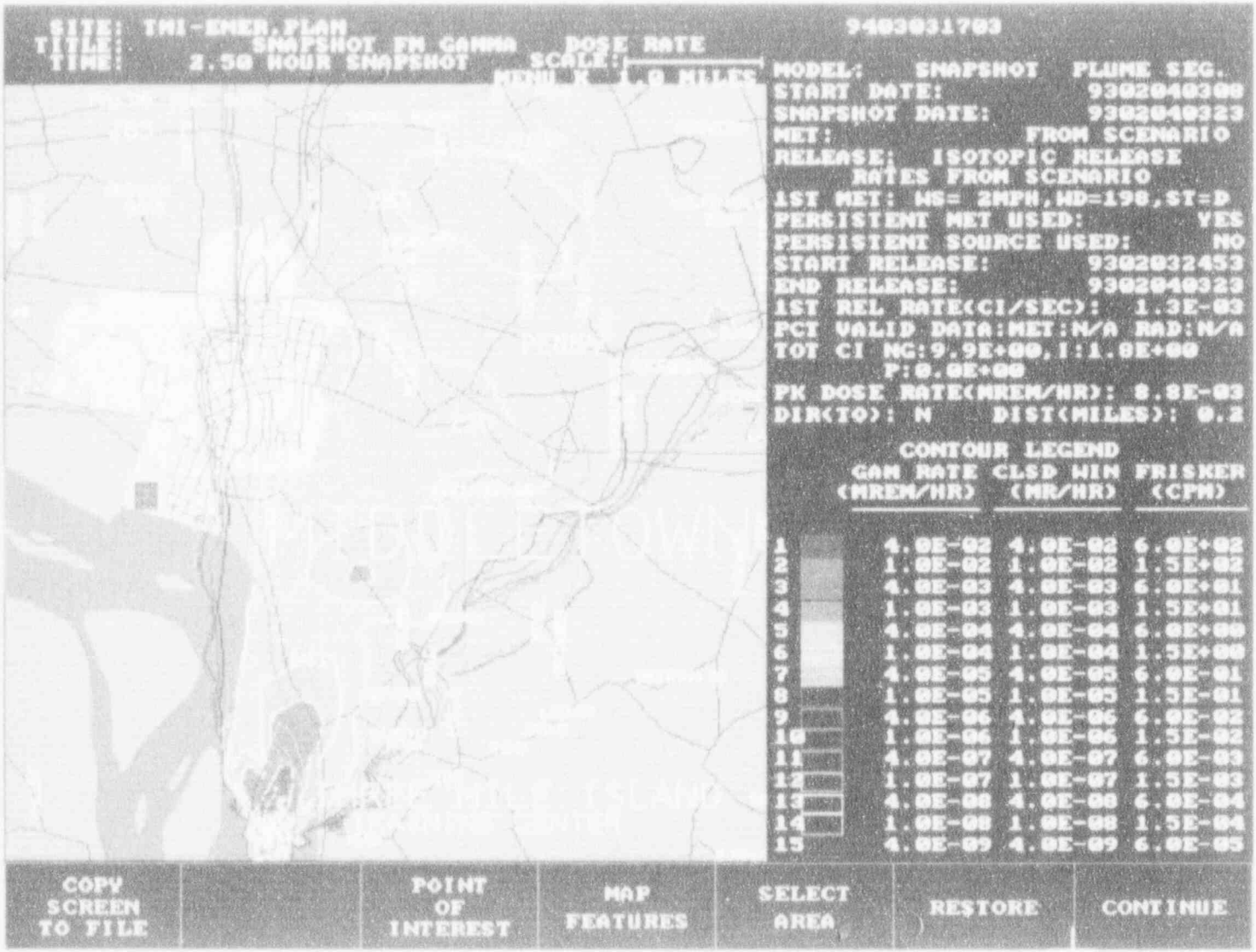
GPU NUCLEAR CORPORATION
MIDDLETOWN, PA

1994 ANNUAL EXERCISE
Appendix F

FIELD MONITORING
AND REUTER STOKES DATA

Revision 1
03/03/94


SITE: TMI-EMER.PLAN
TITLE: SNAPSHOT FM GAMMA DOSE RATE
TIME: 1.50 HOUR SNAPSHOT SCALE:
9403031639
MODEL: SNAPSHOT PLUME SEG.
START DATE: 9302040200
SNAPSHOT DATE: 9302040223
MET: FROM SCENARIO
RELEASE: ISOTOPIC RELEASE
RATES FROM SCENARIO
1ST MET: WS= 2MPH,WD=198,ST=D
PERSISTENT MET USED: NO
PERSISTENT SOURCE USED: NO
START RELEASE: 9302032453
END RELEASE: 9302040223
1ST REL RATE(CI/SEC): 1.3E-03
PCT VALID DATA:MET:N/A RAD:N/A
TOT CI NG:5.9E+00,I:1.1E+00
P:0.0E+00
PK DOSE RATE(MREM/HR): 1.2E-02
DIR(TO): NNE DIST(MILES): 0.4
CONTOUR LEGEND
GAM RATE (MREM/HR) CLSD WIN (MR/HR) FRISKER (CPM)
1 2.0E-02 2.0E-02 3.0E+02
2 7.0E-03 7.0E-03 1.0E+02
3 2.0E-03 2.0E-03 3.0E+01
4 7.0E-04 7.0E-04 1.1E+01
5 2.0E-04 2.0E-04 3.0E+00
6 7.0E-05 7.0E-05 1.1E+00
7 2.0E-05 2.0E-05 3.0E-01
8 7.0E-06 7.0E-06 1.1E-01
9 2.0E-06 2.0E-06 3.0E-02
10 7.0E-07 7.0E-07 1.0E-02
11 2.0E-07 2.0E-07 3.0E-03
12 7.0E-08 7.0E-08 1.0E-03
13 2.0E-08 2.0E-08 3.0E-04
14 7.0E-09 7.0E-09 1.0E-04
15 2.0E-09 2.0E-09 3.0E-05
COPY SCREEN TO FILE
POINT OF INTEREST
MAP FEATURES
SELECT AREA
RESTORE
CONTINUE


SITE: TMI-EMER.PLAN
TITLE: SNAPSHOT FM GAMMA DOSE RATE
TIME: 2.50 HOUR SNAPSHOT
SCALE:
9403031703
MODEL: SNAPSHOT PLUME SEG.
START DATE: 9302040300
SNAPSHOT DATE: 9302040323
MET: FROM SCENARIO
RELEASE: ISOTOPIC RELEASE RATES FROM SCENARIO
1ST MET: WS= 2MPH,WD=198,ST=D
PERSISTENT MET USED: YES
PERSISTENT SOURCE USED: NO
START RELEASE: 9302032453
END RELEASE: 9302040323
1ST REL RATE(CI/SEC): 1.3E-03
PCT VALID DATA:MET:N/A RAD:N/A
TOT CI NG:9.9E+00,I:1.8E+00 P:0.0E+00
PK DOSE RATE(MREM/HR): 8.8E-03
DIR(TO): N DIST(MILES): 0.2
CONTOUR LEGEND
GAM RATE (MREM/HR) CLSD WIN (MR/HR) FRISKER (CPM)
1 4.0E-02 4.0E-02 6.0E+02
2 1.0E-02 1.0E-02 1.5E+02
3 4.0E-03 4.0E-03 6.0E+01
4 1.0E-03 1.0E-03 1.5E+01
5 4.0E-04 4.0E-04 6.0E+00
6 1.0E-04 1.0E-04 1.5E+00
7 4.0E-05 4.0E-05 6.0E-01
8 1.0E-05 1.0E-05 1.5E-01
9 4.0E-06 4.0E-06 6.0E-02
10 1.0E-06 1.0E-06 1.5E-02
11 4.0E-07 4.0E-07 6.0E-03
12 1.0E-07 1.0E-07 1.5E-03
13 4.0E-08 4.0E-08 6.0E-04
14 1.0E-08 1.0E-08 1.5E-04
15 4.0E-09 4.0E-09 6.0E-05
COPY SCREEN TO FILE
POINT OF INTEREST
MAP FEATURES
SELECT AREA
RESTORE
CONTINUE

1994 ANNUAL EXERCISE DRILL TIME = 15 MINUTES

REMOTE DATA 05-19-94 07:30:00 R/S OPERATING SYSTEM VERSION 90.00

NUMBER	NAME	SECTOR	CURRENT VALUE	STATUS	VOLTS	BATTERY
1	MIDDLETOWN	N	0.0074	0000	0314	14.16
2	NORTH GATE TMI	NN	0.0054	0000	0314	14.16
3	MIDDLETOWN SUB	NE	0.0052	0000	0314	14.16
4	ALWINE FARM	EN	0.0087	0000	0314	14.16
5	VISITORS CTR	E	0.0071	0000	0314	14.16
6	500 KV SUB	ES	0.0083	0000	0314	14.16
7	BECKER FARM	SE	0.0064	0000	0314	14.16
8	FALMOUTH SUB	SS	0.0069	0000	0314	14.16
9	CLY SUBSTATION	S	0.0053	0000	0314	14.16
10	TMI WAREHOUSE	SS	0.0069	0000	0314	14.16
11	TMI MOCT	SW	0.0066	0000	0314	14.16
12	GOLDSBORO	WS	0.0068	0000	0314	14.16
13	TMI INTAKES	W	0.0071	0000	0314	14.16
14	FAIRVIEW TWP	WN	0.0081	0000	0314	14.16
15	HBG AIRPORT	NW	0.0085	0000	0314	14.16
16	CRAWFORD STATION	NN	0.0097	0000	0314	14.16

PRESS THE NUMBER KEY FOR SELECTION

1 - MAKE REPORTS 2 - EDIT SETUP 3 - FORCE CALLS 4 - EDIT RECORDS

5 - EXPORT DATA 6 - CLEAR ALARM/ERRORS 7-BACKUP DATA 8 - DOS SHELL

ERROR: NONE TIMESET: N CALL INT: .25 CLEAR REMOTE: Y # OF STATIONS: 15

1994 ANNUAL EXERCISE DRILL TIME = 30 MINUTES

REMOTE DATA 05-19-94 07:45:00 R/S OPERATING SYSTEM VERSION 90.00

NUMBER	NAME	SECTOR	CURRENT VALUE	STATUS	VOLTS	BATTERY
1	MIDDLETOWN	N	0.0087	0000	0314	14.16
2	NORTH GATE TMI	NN	0.0061	0000	0314	14.16
3	MIDDLETOWN SUB	NE	0.0051	0000	0314	14.16
4	ALWINE FARM	EN	0.0094	0000	0314	14.16
5	VISITORS CTR	E	0.0070	0000	0314	14.16
6	500 KV SUB	ES	0.0083	0000	0314	14.16
7	BECKER FARM	SE	0.0065	0000	0314	14.16
8	FALMOUTH SUB	SS	0.0074	0000	0314	14.16
9	CLY SUBSTATION	S	0.0061	0000	0314	14.16
10	TMI WAREHOUSE	SS	0.0067	0000	0314	14.16
11	TMI MDCT	SW	0.0077	0000	0314	14.16
12	GOLDSBORO	WS	0.0057	0000	0314	14.16
13	TMI INTAKES	W	0.0071	0000	0314	14.16
14	FAIRVIEW TWP	WN	0.0078	0000	0314	14.16
15	HBG AIRPORT	NW	0.0081	0000	0314	14.16
16	CRAWFORD STATION	NN	0.0097	0000	0314	14.16

PRESS THE NUMBER KEY FOR SELECTION

1 - MAKE REPORTS 2 - EDIT SETUP 3 - FORCE CALLS 4 - EDIT RECORDS

5 - EXPORT DATA 6 - CLEAR ALARM/ERRORS 7-BACKUP DATA 8 - DOS SHELL

ERROR: NONE TIMESET: N CALL INT: .25 CLEAR REMOTE: Y # OF STATIONS: 15

1994 ANNUAL EXERCISE DRILL TIME = 45 MINUTES

REMOTE DATA 05-19-94 08:00:00 R/S OPERATING SYSTEM VERSION 90.00

NUMBER	NAME	SECTOR	CURRENT VALUE	STATUS	VOLTS	BATTERY
1	MIDDLETOWN	N	0.0075	0000	0314	14.16
2	NORTH GATE TMI	NN	0.0200	0000	0314	14.16
3	MIDDLETOWN SUB	NE	0.0057	0000	0314	14.16
4	ALWINE FARM	EN	0.0090	0000	0314	14.16
5	VISITORS CTR	E	0.0062	0000	0314	14.16
6	500 KV SUB	ES	0.0073	0000	0314	14.16
7	BECKER FARM	SE	0.0073	0000	0314	14.16
8	FALMOUTH SUB	SS	0.0073	0000	0314	14.16
9	CLY SUBSTATION	S	0.0056	0000	0314	14.16
10	TMI WAREHOUSE	SS	0.0072	0000	0314	14.16
11	TMI MDCT	SW	0.0078	0000	0314	14.16
12	GOLDSBORO	WS	0.0057	0000	0314	14.16
13	TMI INTAKES	W	0.0077	0000	0314	14.16
14	FAIRVIEW TWP	WN	0.0072	0000	0314	14.16
15	HBG AIRPORT	NW	0.0082	0000	0314	14.16
16	CRAWFORD STATION	NN	0.0099	0000	0314	14.16

PRESS THE NUMBER KEY FOR SELECTION

1 - MAKE REPORTS 2 - EDIT SETUP 3 - FORCE CALLS 4 - EDIT RECORDS

5 - EXPORT DATA 6 - CLEAR ALARM/ERRORS 7-BACKUP DATA 8 - DOS SHELL

ERROR: NONE TIMESET: N CALL INT: .25 CLEAR REMOTE: Y # OF STATIONS: 15

1994 ANNUAL EXERCISE DRILL TIME = 60 MINUTES

REMOTE DATA 05-19-94 08:15:00 R/S OPERATING SYSTEM VERSION 90.00

NUMBER	NAME	SECTOR	CURRENT VALUE	STATUS	VOLTS	BATTERY
1	MIDDLETOWN	N	0.0089	0000	0314	14.16
2	NORTH GATE TMI	NN	0.0100	0000	0314	14.16
3	MIDDLETOWN SUB	NE	0.0053	0000	0314	14.16
4	ALWINE FARM	EN	0.0098	0000	0314	14.16
5	VISITORS CTR	E	0.0069	0000	0314	14.16
6	500 KV SUB	ES	0.0071	0000	0314	14.16
7	BECKER FARM	SE	0.0076	0000	0314	14.16
8	FALMOUTH SUB	SS	0.0070	0000	0314	14.16
9	CLY SUBSTATION	S	0.0060	0000	0314	14.16
10	TMI WAREHOUSE	SS	0.0065	0000	0314	14.16
11	TMI MDCT	SW	0.0075	0000	0314	14.16
12	GOLDSBORO	WS	0.0061	0000	0314	14.16
13	TMI INTAKES	W	0.0070	0000	0314	14.16
14	FAIRVIEW TWP	WN	0.0070	0000	0314	14.16
15	HBG AIRPORT	NW	0.0078	0000	0314	14.16
16	CRAWFORD STATION	NN	0.0099	0000	0314	14.16

PRESS THE NUMBER KEY FOR SELECTION

1 - MAKE REPORTS 2 - EDIT SETUP 3 - FORCE CALLS 4 - EDIT RECORDS

5 - EXPORT DATA 6 - CLEAR ALARM/ERRORS 7-BACKUP DATA 8 - DOS SHELL

ERROR: NONE TIMESET: N CALL INT: .25 CLEAR REMOTE: Y # OF STATIONS: 15

1994 ANNUAL EXERCISE DRILL TIME = 75 MINUTES

REMOTE DATA 05-19-94 08:30:00 R/S OPERATING SYSTEM VERSION 90.00

NUMBER	NAME	SECTOR	CURRENT VALUE	STATUS	VOLTS	BATTERY
1	MIDDLETOWN	N	0.0087	0000	0314	14.16
2	NORTH GATE TMI	NN	0.0200	0000	0314	14.16
3	MIDDLETOWN SUB	NE	0.0060	0000	0314	14.16
4	ALWINE FARM	EN	0.0190	0000	0314	14.16
5	VISITORS CTR	E	0.0073	0000	0314	14.16
6	500 KV SUB	ES	0.0075	0000	0314	14.16
7	BECKER FARM	SE	0.0074	0000	0314	14.16
8	FALMOUTH SUB	SS	0.0071	0000	0314	14.16
9	CLY SUBSTATION	S	0.0060	0000	0314	14.16
10	TMI WAREHOUSE	SS	0.0070	0000	0314	14.16
11	TMI MDCT	SW	0.0068	0000	0314	14.16
12	GOLDSBORO	WS	0.0065	0000	0314	14.16
13	TMI INTAKES	W	0.0072	0000	0314	14.16
14	FAIRVIEW TWP	WN	0.0080	0000	0314	14.16
15	HBG AIRPORT	NW	0.0074	0000	0314	14.16
16	CRAWFORD STATION	NN	0.0092	0000	0314	14.16

PRESS THE NUMBER KEY FOR SELECTION

1 - MAKE REPORTS 2 - EDIT SETUP 3 - FORCE CALLS 4 - EDIT RECORDS

5 - EXPORT DATA 6 - CLEAR ALARM/ERRORS 7-BACKUP DATA 8 - DOS SHELL

ERROR: NONE TIMESET: N CALL INT: .25 CLEAR REMOTE: Y # OF STATIONS: 15

1994 ANNUAL EXERCISE DRILL TIME = 90 MINUTES

REMOTE DATA 05-19-94 08:45:00 R/S OPERATING SYSTEM VERSION 90.00

NUMBER	NAME	SECTOR	CURRENT VALUE	STATUS	VOLTS	BATTERY
1	MIDDLETOWN	N	0.0078	0000	0314	14.16
2	NORTH GATE TMI	NN	0.0100	0000	0314	14.16
3	MIDDLETOWN SUB	NE	0.0055	0000	0314	14.16
4	ALWINE FARM	EN	0.0099	0000	0314	14.16
5	VISITORS CTR	E	0.0067	0000	0314	14.16
6	500 KV SUB	ES	0.0073	0000	0314	14.16
7	BECKER FARM	SE	0.0070	0000	0314	14.16
8	FALMOUTH SUB	SS	0.0076	0000	0314	14.16
9	CLY SUBSTATION	S	0.0055	0000	0314	14.16
10	TMI WAREHOUSE	SS	0.0062	0000	0314	14.16
11	TMI MDCT	SW	0.0078	0000	0314	14.16
12	GOLDSBORO	WS	0.0063	0000	0314	14.16
13	TMI INTAKES	W	0.0072	0000	0314	14.16
14	FAIRVIEW TWP	WN	0.0080	0000	0314	14.16
15	HBG AIRPORT	NW	0.0076	0000	0314	14.16
16	CRAWFORD STATION	NN	0.0091	0000	0314	14.16

PRESS THE NUMBER KEY FOR SELECTION

1 - MAKE REPORTS 2 - EDIT SETUP 3 - FORCE CALLS 4 - EDIT RECORDS

5 - EXPORT DATA 6 - CLEAR ALARM/ERRORS 7-BACKUP DATA 8 - DOS SHELL

ERROR: NONE TIMESET: W CALL INT: .25 CLEAR REMOTE: Y # OF STATIONS: 15

1994 ANNUAL EXERCISE DRILL TIME = 105 MINUTES

REMOTE DATA 05-19-94 09:00:00 R/S OPERATING SYSTEM VERSION 90.00

NUMBER	NAME	SECTOR	CURRENT VALUE	STATUS	VOLTS	BATTERY
1	MIDDLETOWN	N	0.0077	0000	0314	14.16
2	NORTH GATE TMI	NN	0.0200	0000	0314	14.16
3	MIDDLETOWN SUB	NE	0.0055	0000	0314	14.16
4	ALWINE FARM	EN	0.0087	0000	0314	14.16
5	VISITORS CTR	E	0.0070	0000	0314	14.16
6	500 KV SUB	ES	0.0081	0000	0314	14.16
7	BECKER FARM	SE	0.0068	0000	0314	14.16
8	FALMOUTH SUB	SS	0.0082	0000	0314	14.16
9	CLY SUBSTATION	S	0.0062	0000	0314	14.16
10	TMI WAREHOUSE	SS	0.0069	0000	0314	14.16
11	TMI MDCT	SW	0.0072	0000	0314	14.16
12	GOLDSBORO	WS	0.0065	0000	0314	14.16
13	TMI INTAKES	W	0.0075	0000	0314	14.16
14	FAIRVIEW TWP	WN	0.0073	0000	0314	14.16
15	HBG AIRPORT	NW	0.0089	0000	0314	14.16
16	CRAWFORD STATION	NN	0.0090	0000	0314	14.16

PRESS THE NUMBER KEY FOR SELECTION

1 - MAKE REPORTS 2 - EDIT SETUP 3 - FORCE CALLS 4 - EDIT RECORDS

5 - EXPORT DATA 6 - CLEAR ALARM/ERRORS 7-BACKUP DATA 8 - DOS SHELL

ERROR: NONE TIMESET: N CALL INT: .25 CLEAR REMOTE: Y # OF STATIONS: 15

1994 ANNUAL EXERCISE DRILL TIME = 120 MINUTES

REMOTE DATA 05-19-94 09:15:00 R/S OPERATING SYSTEM VERSION 90.00

NUMBER	NAME	SECTOR	CURRENT VALUE	STATUS	VOLTS	BATTERY
1	MIDDLETOWN	N	0.0081	0000	0314	14.16
2	NORTH GATE TMI	NN	0.0100	0000	0314	14.16
3	MIDDLETOWN SUB	NE	0.0055	0000	0314	14.16
4	ALWINE FARM	EN	0.0092	0000	0314	14.16
5	VISITORS CTR	E	0.0068	0000	0314	14.16
6	500 KV SUB	ES	0.0077	0000	0314	14.16
7	BECKER FARM	SE	0.0065	0000	0314	14.16
8	FALMOUTH SUB	SS	0.0073	0000	0314	14.16
9	CLY SUBSTATION	S	0.0062	0000	0314	14.16
10	TMI WAREHOUSE	SS	0.0062	0000	0314	14.16
11	TMI MDCT	SW	0.0072	0000	0314	14.16
12	GOLDSBORO	WS	0.0059	0000	0314	14.16
13	TMI INTAKES	W	0.0064	0000	0314	14.16
14	FAIRVIEW TWP	WN	0.0077	0000	0314	14.16
15	HBG AIRPORT	NW	0.0081	0000	0314	14.16
16	CRAWFORD STATION	NN	0.0100	0000	0314	14.16

PRESS THE NUMBER KEY FOR SELECTION

1 - MAKE REPORTS 2 - EDIT SETUP 3 - FORCE CALLS 4 - EDIT RECORDS

5 - EXPORT DATA 6 - CLEAR ALARM/ERRORS 7-BACKUP DATA 8 - DOS SHELL

ERROR: NONE TIMESET: N CALL INT: .25 CLEAR REMOTE: Y # OF STATIONS: 15

1994 ANNUAL EXERCISE DRILL TIME = 135 MINUTES

REMOTE DATA 05-19-94 09:30:00 R/S OPERATING SYSTEM VERSION 90.00

NUMBER	NAME	SECTOR	CURRENT VALUE	STATUS	VOLTS	BATTERY
1	MIDDLETOWN	N	0.0081	0000	0314	14.16
2	NORTH GATE TMI	NN	0.0200	0000	0314	14.16
3	MIDDLETOWN SUB	NE	0.0058	0000	0314	14.16
4	ALWINE FARM	EN	0.0095	0000	0314	14.16
5	VISITORS CTR	E	0.0072	0000	0314	14.16
6	500 KV SUB	ES	0.0083	0000	0314	14.16
7	BECKER FARM	SE	0.0064	0000	0314	14.16
8	FALMOUTH SUB	SS	0.0069	0000	0314	14.16
9	CLY SUBSTATION	S	0.0062	0000	0314	14.16
10	TMI WAREHOUSE	SS	0.0072	0000	0314	14.16
11	TMI MDCT	SW	0.0069	0000	0314	14.16
12	GOLDSBORO	WS	0.0064	0000	0314	14.16
13	TMI INTAKES	W	0.0065	0000	0314	14.16
14	FAIRVIEW TWP	WN	0.0080	0000	0314	14.16
15	HBG AIRPORT	NW	0.0080	0000	0314	14.16
16	CRAWFORD STATION	NN	0.0098	0000	0314	14.16

PRESS THE NUMBER KEY FOR SELECTION

1 - MAKE REPORTS 2 - EDIT SETUP 3 - FORCE CALLS 4 - EDIT RECORDS

5 - EXPORT DATA 6 - CLEAR ALARM/ERRORS 7-BACKUP DATA 8 - DOS SHELL

ERROR: NONE TIMESET: N CALL INT: .25 CLEAR REMOTE: Y # OF STATIONS: 15

1994 ANNUAL EXERCISE DRILL TIME = 150 MINUTES

REMOTE DATA 05-19-94 09:45:00 R/S OPERATING SYSTEM VERSION 90.00

NUMBER	NAME	SECTOR	CURRENT VALUE	STATUS	VOLTS	BATTERY
1	MIDDLETOWN	N	0.0088	0000	0314	14.16
2	NORTH GATE TMI	NN	0.0100	0000	0314	14.16
3	MIDDLETOWN SUB	NE	0.0055	0000	0314	14.16
4	ALWINE FARM	EN	0.0093	0000	0314	14.16
5	VISITORS CTR	E	0.0061	0000	0314	14.16
6	500 KV SUB	ES	0.0078	0000	0314	14.16
7	BECKER FARM	SE	0.0068	0000	0314	14.16
8	FALMOUTH SUB	SS	0.0074	0000	0314	14.16
9	CLY SUBSTATION	S	0.0061	0000	0314	14.16
10	TMI WAREHOUSE	SS	0.0068	0000	0314	14.16
11	TMI MDCT	SW	0.0065	0000	0314	14.16
12	GOLDSBORO	WS	0.0068	0000	0314	14.16
13	TMI INTAKES	W	0.0067	0000	0314	14.16
14	FAIRVIEW TWP	WN	0.0083	0000	0314	14.16
15	HBG AIRPORT	NW	0.0083	0000	0314	14.16
16	CRAWFORD STATION	NN	0.0087	0000	0314	14.16

PRESS THE NUMBER KEY FOR SELECTION

1 - MAKE REPORTS 2 - EDIT SETUP 3 - FORCE CALLS 4 - EDIT RECORDS

5 - EXPORT DATA 6 - CLEAR ALARM/ERRORS 7-BACKUP DATA 8 - DOS SHELL

ERROR: NONE TIMESET: N CALL INT: .25 CLEAR REMOTE: Y # OF STATIONS: 15

1994 ANNUAL EXERCISE DRILL TIME = 165 MINUTES

REMOTE DATA 05-19-94 10:00:00 R/S OPERATING SYSTEM VERSION 90.00

NUMBER	NAME	SECTOR	CURRENT VALUE	STATUS	VOLTS	BATTERY
1	MIDDLETOWN	N	0.0075	0000	0314	14.16
2	NORTH GATE TMI	NN	0.0091	0000	0314	14.16
3	MIDDLETOWN SUB	NE	0.0060	0000	0314	14.16
4	ALWINE FARM	EN	0.0099	0000	0314	14.16
5	VISITORS CTR	E	0.0060	0000	0314	14.16
6	500 KV SUB	ES	0.0074	0000	0314	14.16
7	BECKER FARM	SE	0.0073	0000	0314	14.16
8	FALMOUTH SUB	SS	0.0074	0000	0314	14.16
9	CLY SUBSTATION	S	0.0053	0000	0314	14.16
10	TMI WAREHOUSE	SS	0.0069	0000	0314	14.16
11	TMI MDCT	SW	0.0069	0000	0314	14.16
12	GOLDSBORO	WS	0.0068	0000	0314	14.16
13	TMI INTAKES	W	0.0076	0000	0314	14.16
14	FAIRVIEW TWP	WN	0.0081	0000	0314	14.16
15	HBG AIRPORT	NW	0.0083	0000	0314	14.16
16	CRAWFORD STATION	NN	0.0095	0000	0314	14.16

PRESS THE NUMBER KEY FOR SELECTION

1 - MAKE REPORTS 2 - EDIT SETUP 3 - FORCE CALLS 4 - EDIT RECORDS

5 - EXPORT DATA 6 - CLEAR ALARM/ERRORS 7-BACKUP DATA 8 - DOS SHELL

ERROR: NONE TIMESET: N CALL INT: .25 CLEAR REMOTE: Y # OF STATIONS: 15

1994 ANNUAL EXERCISE DRILL TIME = 180 MINUTES

REMOTE DATA 05-19-94 10:15:00 R/S OPERATING SYSTEM VERSION 90.00

NUMBER	NAME	SECTOR	CURRENT VALUE	STATUS	VOLTS	BATTERY
1	MIDDLETOWN	N	0.0081	0000	0314	14.16
2	NORTH GATE TMI	NN	0.0200	0000	0314	14.16
3	MIDDLETOWN SUB	NE	0.0053	0000	0314	14.16
4	ALWINE FARM	EN	0.0093	0000	0314	14.16
5	VISITORS CTR	E	0.0073	0000	0314	14.16
6	500 KV SUB	ES	0.0072	0000	0314	14.16
7	BECKER FARM	SE	0.0070	0000	0314	14.16
8	FALMOUTH SUB	SS	0.0079	0000	0314	14.16
9	CLY SUBSTATION	S	0.0060	0000	0314	14.16
10	TMI WAREHOUSE	SS	0.0061	0000	0314	14.16
11	TMI MDCT	SW	0.0073	0000	0314	14.16
12	GOLDSBORO	WS	0.0061	0000	0314	14.16
13	TMI INTAKES	W	0.0076	0000	0314	14.16
14	FAIRVIEW TWP	WN	0.0083	0000	0314	14.16
15	HBG AIRPORT	NW	0.0079	0000	0314	14.16
16	CRAWFORD STATION	NN	0.0100	0000	0314	14.16

PRESS THE NUMBER KEY FOR SELECTION

1 - MAKE REPORTS 2 - EDIT SETUP 3 - FORCE CALLS 4 - EDIT RECORDS

5 - EXPORT DATA 6 - CLEAR ALARM/ERRORS 7-BACKUP DATA 8 - DOS SHELL

ERROR: NONE TIMESET: N CALL INT: .25 CLEAR REMOTE: Y # OF STATIONS: 15

1994 ANNUAL EXERCISE DRILL TIME = 195 MINUTES

REMOTE DATA 05-19-94 10:30:00 R/S OPERATING SYSTEM VERSION 90.00

NUMBER	NAME	SECTOR	CURRENT VALUE	STATUS	VOLTS	BATTERY
1	MIDDLETOWN	N	0.0088	0000	0314	14.16
2	NORTH GATE TMI	NN	0.0100	0000	0314	14.16
3	MIDDLETOWN SUB	NE	0.0052	0000	0314	14.16
4	ALWINE FARM	EN	0.0098	0000	0314	14.16
5	VISITORS CTR	E	0.0069	0000	0314	14.16
6	500 KV SUB	ES	0.0075	0000	0314	14.16
7	BECKER FARM	SE	0.0068	0000	0314	14.16
8	FALMOUTH SUB	SS	0.0069	0000	0314	14.16
9	CLY SUBSTATION	S	0.0057	0000	0314	14.16
10	TMI WAREHOUSE	SS	0.0066	0000	0314	14.16
11	TMI MDCT	SW	0.0078	0000	0314	14.16
12	GOLDSBORO	WS	0.0067	0000	0314	14.16
13	TMI INTAKES	W	0.0075	0000	0314	14.16
14	FAIRVIEW TWP	WN	0.0070	0000	0314	14.16
15	HBG AIRPORT	NW	0.0084	0000	0314	14.16
16	CRAWFORD STATION	NN	0.0089	0000	0314	14.16

PRESS THE NUMBER KEY FOR SELECTION

1 - MAKE REPORTS 2 - EDIT SETUP 3 - FORCE CALLS 4 - EDIT RECORDS

5 - EXPORT DATA 6 - CLEAR ALARM/ERRORS 7-BACKUP DATA 8 - DOS SHELL

ERROR: NONE TIMESET: N CALL INT: .25 CLEAR REMOTE: Y # OF STATIONS: 15

1994 ANNUAL EXERCISE DRILL TIME = 210 MINUTES

REMOTE DATA 05-19-94 10:45:00 R/S OPERATING SYSTEM VERSION 90.00

NUMBER	NAME	SECTOR	CURRENT VALUE	STATUS	VOLTS	BATTERY
1	MIDDLETOWN	N	0.0086	0000	0314	14.16
2	NORTH GATE TMI	NN	0.0102	0000	0314	14.16
3	MIDDLETOWN SUB	NE	0.0055	0000	0314	14.16
4	ALWINE FARM	EN	0.0090	0000	0314	14.16
5	VISITORS CTR	E	0.0062	0000	0314	14.16
6	500 KV SUB	ES	0.0074	0000	0314	14.16
7	BECKER FARM	SE	0.0067	0000	0314	14.16
8	FALMOUTH SUB	SS	0.0076	0000	0314	14.16
9	CLY SUBSTATION	S	0.0052	0000	0314	14.16
10	TMI WAREHOUSE	SS	0.0061	0000	0314	14.16
11	TMI MDCT	SW	0.0069	0000	0314	14.16
12	GOLDSBORO	WS	0.0061	0000	0314	14.16
13	TMI INTAKES	W	0.0072	0000	0314	14.16
14	FAIRVIEW TWP	WN	0.0071	0000	0314	14.16
15	HBG AIRPORT	NW	0.0083	0000	0314	14.16
16	CRAWFORD STATION	NN	0.0101	0000	0314	14.16

PRESS THE NUMBER KEY FOR SELECTION

1 - MAKE REPORTS 2 - EDIT SETUP 3 - FORCE CALLS 4 - EDIT RECORDS

5 - EXPORT DATA 6 - CLEAR ALARM/ERRORS 7-BACKUP DATA 8 - DOS SHELL

ERROR: NONE TIMESET: N CALL INT: .25 CLEAR REMOTE: Y # OF STATIONS: 15

1994 ANNUAL EXERCISE DRILL TIME = 225 MINUTES

REMOTE DATA 05-19-94 11:00:00 R/S OPERATING SYSTEM VERSION 90.00

NUMBER	NAME	SECTOR	CURRENT VALUE	STATUS	VOLTS	BATTERY
1	MIDDLETOWN	N	0.0084	0000	0314	14.16
2	NORTH GATE TMI	NN	0.0110	0000	0314	14.16
3	MIDDLETOWN SUB	NE	0.0056	0000	0314	14.16
4	ALWINE FARM	EN	0.0091	0000	0314	14.16
5	VISITORS CTR	E	0.0064	0000	0314	14.16
6	500 KV SUB	ES	0.0081	0000	0314	14.16
7	BECKER FARM	SE	0.0071	0000	0314	14.16
8	PALMOUTH SUB	SS	0.0074	0000	0314	14.16
9	CLY SUBSTATION	S	0.0061	0000	0314	14.16
10	TMI WAREHOUSE	SS	0.0064	0000	0314	14.16
11	TMI MDCT	SW	0.0077	0000	0314	14.16
12	GOLDSBORO	WS	0.0058	0000	0314	14.16
13	TMI INTAKES	W	0.0067	0000	0314	14.16
14	FAIRVIEW TWP	WN	0.0077	0000	0314	14.16
15	HBG AIRPORT	NW	0.0086	0000	0314	14.16
16	CRAWFORD STATION	NN	0.0086	0000	0314	14.16

PRESS THE NUMBER KEY FOR SELECTION

1 - MAKE REPORTS 2 - EDIT SETUP 3 - FORCE CALLS 4 - EDIT RECORDS

5 - EXPORT DATA 6 - CLEAR ALARM/ERRORS 7-BACKUP DATA 8 - DOS SHELL

ERROR: NONE TIMESET: N CALL INT: .25 CLEAR REMOTE: Y # OF STATIONS: 15

1994 ANNUAL EXERCISE DRILL TIME = 240 MINUTES

REMOTE DATA 05-19-94 11:15:00 R/S OPERATING SYSTEM VERSION 90.00

NUMBER	NAME	SECTOR	CURRENT VALUE	STATUS	VOLTS	BATTERY
1	MIDDLETOWN	W	0.0082	0000	0314	14.16
2	NORTH GATE TMI	NN	0.0104	0000	0314	14.16
3	MIDDLETOWN SUB	NE	0.0062	0000	0314	14.16
4	ALWINE FARM	EN	0.0091	0000	0314	14.16
5	VISITORS CTR	E	0.0072	0000	0314	14.16
6	500 KV SUB	ES	0.0072	0000	0314	14.16
7	BECKER FARM	SE	0.0077	0000	0314	14.16
8	FALMOUTH SUB	SS	0.0071	0000	0314	14.16
9	CLY SUBSTATION	S	0.0062	0000	0314	14.16
10	TMI WAREHOUSE	SS	0.0070	0000	0314	14.16
11	TMI MDCT	SW	0.0073	0000	0314	14.16
12	GOLDSBORO	WS	0.0064	0000	0314	14.16
13	TMI INTAKES	W	0.0065	0000	0314	14.16
14	FAIRVIEW TWP	WN	0.0084	0000	0314	14.16
15	HBG AIRPORT	NW	0.0086	0000	0314	14.16
16	CRAWFORD STATION	NN	0.0085	0000	0314	14.16

PRESS THE NUMBER KEY FOR SELECTION

1 - MAKE REPORTS 2 - EDIT SETUP 3 - FORCE CALLS 4 - EDIT RECORDS

5 - EXPORT DATA 6 - CLEAR ALARM/ERRORS 7-BACKUP DATA 8 - DOS SHELL

ERROR: NONE TIMESET: N CALL INT: .25 CLEAR REMOTE: Y # OF STATIONS: 15

1994 ANNUAL EXERCISE Drill Time= 15 minutes

THREE MILE ISLAND REUTER STOKES MONITORING REPORT
ENDING 05-19-94 07:30:00

	STATION	SECTOR	AVERAGE mR/HR	MINIMUM mR/HR	MAXIMUM mR/HR	HOURS	TOTAL mR/HR
1	MIDDLETOWN	N	0.0074	0.0074	0.0074	1.00	0.0018
2	NORTH GATE TMI	NN	0.0054	0.0054	0.0054	1.00	0.0013
3	MIDDLETOWN SUB	NE	0.0052	0.0052	0.0052	1.00	0.0013
4	ALWINE FARM	EN	0.0087	0.0087	0.0087	1.00	0.0022
5	VISITORS CTR	E	0.0071	0.0071	0.0071	1.00	0.0018
6	500 KV SUB	ES	0.0083	0.0083	0.0083	1.00	0.0021
7	BECKER FARM	SE	0.0064	0.0064	0.0064	1.00	0.0016
8	FALMOUTH SUB	SS	0.0069	0.0069	0.0069	1.00	0.0017
9	CLY SUBSTATION	S	0.0053	0.0053	0.0053	1.00	0.0013
10	TMI WAREHOUSE	SS	0.0069	0.0069	0.0069	1.00	0.0017
11	TMI MDCT	SW	0.0066	0.0066	0.0066	1.00	0.0017
12	GOLDSBORO	WS	0.0068	0.0068	0.0068	1.00	0.0017
13	TMI INTAKES	W	0.0071	0.0071	0.0071	1.00	0.0018
14	FAIRVIEW TWP	WN	0.0081	0.0081	0.0081	1.00	0.0020
15	HBG AIRPORT	NW	0.0085	0.0085	0.0085	1.00	0.0021
16	CRAWFORD STATION	NN	0.0097	0.0097	0.0097	1.00	0.0024

1994 ANNUAL EXERCISE Drill Time= 30 minutes

THREE MILE ISLAND REUTER STOKES MONITORING REPORT
ENDING 05-19-94 07:45:00

	STATION	SECTOR	AVERAGE mR/HR	MINIMUM mR/HR	MAXIMUM mR/HR	HOURS	TOTAL mR/HR
1	MIDDLETOWN	N	0.0087	0.0087	0.0087	1.00	0.0022
2	NORTH GATE TMI	NN	0.0061	0.0061	0.0061	1.00	0.0015
3	MIDDLETOWN SUB	NE	0.0051	0.0051	0.0051	1.00	0.0013
4	ALWINE FARM	EN	0.0094	0.0094	0.0094	1.00	0.0023
5	VISITORS CTR	E	0.0070	0.0070	0.0070	1.00	0.0017
6	500 KV SUB	ES	0.0083	0.0083	0.0083	1.00	0.0021
7	BECKER FARM	SE	0.0065	0.0065	0.0065	1.00	0.0016
8	FALMOUTH SUB	SS	0.0074	0.0074	0.0074	1.00	0.0019
9	CLY SUBSTATION	S	0.0061	0.0061	0.0061	1.00	0.0015
10	TMI WAREHOUSE	SS	0.0067	0.0067	0.0067	1.00	0.0017
11	TMI MDCT	SW	0.0077	0.0077	0.0077	1.00	0.0019
12	GOLDSBORO	WS	0.0057	0.0057	0.0057	1.00	0.0014
13	TMI INTAKES	W	0.0071	0.0071	0.0071	1.00	0.0018
14	FAIRVIEW TWP	WN	0.0078	0.0078	0.0078	1.00	0.0020
15	HBG AIRPORT	NW	0.0081	0.0081	0.0081	1.00	0.0020
16	CRAWFORD STATION	NN	0.0097	0.0097	0.0097	1.00	0.0024

1994 ANNUAL EXERCISE Drill Time= 45 minutes

THREE MILE ISLAND REUTER STOKES MONITORING REPORT
ENDING 05-19-94 08:00:00

STATION		SECTOR	AVERAGE mR/HR	MINIMUM mR/HR	MAXIMUM mR/HR	HOURS	TOTAL mR/HR
1	MIDDLETOWN	W	0.0075	0.0075	0.0075	1.00	0.0019
2	NORTH GATE TMI	NN	0.0200	0.0200	0.0200	1.00	0.0050
3	MIDDLETOWN SUB	NE	0.0057	0.0057	0.0057	1.00	0.0014
4	ALWINE FARM	EN	0.0090	0.0090	0.0090	1.00	0.0022
5	VISITORS CTR	E	0.0062	0.0062	0.0062	1.00	0.0016
6	500 KV SUB	ES	0.0073	0.0073	0.0073	1.00	0.0018
7	BECKER FARM	SE	0.0073	0.0073	0.0073	1.00	0.0018
8	FALMOUTH SUB	SS	0.0073	0.0073	0.0073	1.00	0.0018
9	CLY SUBSTATION	S	0.0056	0.0056	0.0056	1.00	0.0014
10	TMI WAREHOUSE	SS	0.0072	0.0072	0.0072	1.00	0.0018
11	TMI MDCT	SW	0.0078	0.0078	0.0078	1.00	0.0020
12	GOLDSBORO	WS	0.0057	0.0057	0.0057	1.00	0.0014
13	TMI INTAKES	W	0.0077	0.0077	0.0077	1.00	0.0019
14	FAIRVIEW TWP	WN	0.0072	0.0072	0.0072	1.00	0.0018
15	HBG AIRPORT	NW	0.0082	0.0082	0.0082	1.00	0.0020
16	CRAWFORD STATION	NN	0.0099	0.0099	0.0099	1.00	0.0025

1994 ANNUAL EXERCISE Drill Time= 60 minutes

THREE MILE ISLAND REUTER STOKES MONITORING REPORT
ENDING 05-19-94 08:15:00

	STATION	SECTOR	AVERAGE mR/HR	MINIMUM mR/HR	MAXIMUM mR/HR	HOURS	TOTAL mR/HR
1	MIDDLETOWN	N	0.0089	0.0089	0.0089	1.00	0.0022
2	NORTH GATE TMI	NN	0.0100	0.0100	0.0100	1.00	0.0025
3	MIDDLETOWN SUB	NE	0.0053	0.0053	0.0053	1.00	0.0013
4	ALWINE FARM	EN	0.0098	0.0098	0.0098	1.00	0.0024
5	VISITORS CTR	E	0.0069	0.0069	0.0069	1.00	0.0017
6	500 KV SUB	ES	0.0071	0.0071	0.0071	1.00	0.0018
7	BECKER FARM	SE	0.0076	0.0076	0.0076	1.00	0.0019
8	FALMOUTH SUB	SS	0.0070	0.0070	0.0070	1.00	0.0017
9	CLY SUBSTATION	S	0.0060	0.0060	0.0060	1.00	0.0015
10	TMI WAREHOUSE	SS	0.0065	0.0065	0.0065	1.00	0.0016
11	TMI MDCT	SW	0.0075	0.0075	0.0075	1.00	0.0019
12	GOLDSBORO	WS	0.0061	0.0061	0.0061	1.00	0.0015
13	TMI INTAKES	W	0.0070	0.0070	0.0070	1.00	0.0017
14	FAIRVIEW TWP	WN	0.0070	0.0070	0.0070	1.00	0.0018
15	HBG AIRPORT	NW	0.0078	0.0078	0.0078	1.00	0.0019
16	CRAWFORD STATION	NN	0.0099	0.0099	0.0099	1.00	0.0025

1994 ANNUAL EXERCISE Drill Time= 75 minutes

THREE MILE ISLAND REUTER STOKES MONITORING REPORT
ENDING 05-19-94 08:30:00

STATION		SECTOR	AVERAGE mR/HR	MINIMUM mR/HR	MAXIMUM mR/HR	HOURS	TOTAL mR/HR
1	MIDDLETOWN	N	0.0087	0.0087	0.0087	1.00	0.0022
2	NORTH GATE TMI	NN	0.0200	0.0200	0.0200	1.00	0.0050
3	MIDDLETOWN SUB	NE	0.0060	0.0060	0.0060	1.00	0.0015
4	ALWINE FARM	EN	0.0100	0.0100	0.0100	1.00	0.0025
5	VISITORS CTR	E	0.0073	0.0073	0.0073	1.00	0.0018
6	500 KV SUB	ES	0.0075	0.0075	0.0075	1.00	0.0019
7	BECKER FARM	SE	0.0074	0.0074	0.0074	1.00	0.0018
8	FALMOUTH SUB	SS	0.0071	0.0071	0.0071	1.00	0.0018
9	CLY SUBSTATION	S	0.0060	0.0060	0.0060	1.00	0.0015
10	TMI WAREHOUSE	SS	0.0070	0.0070	0.0070	1.00	0.0017
11	TMI MDCT	SW	0.0068	0.0068	0.0068	1.00	0.0017
12	GOLDSBORO	WS	0.0065	0.0065	0.0065	1.00	0.0016
13	TMI INTAKES	W	0.0072	0.0072	0.0072	1.00	0.0018
14	FAIRVIEW TWP	WN	0.0080	0.0080	0.0080	1.00	0.0020
15	HBG AIRPORT	NW	0.0074	0.0074	0.0074	1.00	0.0018
16	CRAWFORD STATION	NN	0.0092	0.0092	0.0092	1.00	0.0023

1994 ANNUAL EXERCISE Drill Time= 90 minutes

THREE MILE ISLAND REUTER STOKES MONITORING REPORT
ENDING 05-19-94 08:45:00

	STATION	SECTOR	AVERAGE mR/HR	MINIMUM mR/HR	MAXIMUM mR/HR	HOURS	TOTAL mR/HR
1	MIDDLETOWN	N	0.0078	0.0078	0.0078	1.00	0.0019
2	NORTH GATE TMI	NW	0.0100	0.0100	0.0100	1.00	0.0025
3	MIDDLETOWN SUB	NE	0.0055	0.0055	0.0055	1.00	0.0014
4	ALWINE FARM	EN	0.0099	0.0099	0.0099	1.00	0.0025
5	VISITORS CTR	E	0.0067	0.0067	0.0067	1.00	0.0017
6	500 KV SUB	ES	0.0073	0.0073	0.0073	1.00	0.0018
7	BECKER FARM	SE	0.0070	0.0070	0.0070	1.00	0.0017
8	FALMOUTH SUB	SS	0.0076	0.0076	0.0076	1.00	0.0019
9	CLY SUBSTATION	S	0.0055	0.0055	0.0055	1.00	0.0014
10	TMI WAREHOUSE	SS	0.0062	0.0062	0.0062	1.00	0.0015
11	TMI MDCT	SW	0.0078	0.0078	0.0078	1.00	0.0020
12	GOLDSBORO	WS	0.0063	0.0063	0.0063	1.00	0.0016
13	TMI INTAKES	W	0.0072	0.0072	0.0072	1.00	0.0018
14	FAIRVIEW TWP	WN	0.0080	0.0080	0.0080	1.00	0.0020
15	HBG AIRPORT	NW	0.0076	0.0076	0.0076	1.00	0.0019
16	CRAWFORD STATION	NN	0.0091	0.0091	0.0091	1.00	0.0023

1994 ANNUAL EXERCISE Drill Time= 105 minutes

THREE MILE ISLAND REUTER STOKES MONITORING REPORT
ENDING 05-19-94 09:00:00

	STATION	SECTOR	AVERAGE mR/HR	MINIMUM mR/HR	MAXIMUM mR/HR	HOURS	TOTAL mR/HR
1	MIDDLETOWN	N	0.0077	0.0077	0.0077	1.00	0.0019
2	NORTH GATE TMI	NW	0.0200	0.0200	0.0200	1.00	0.0050
3	MIDDLETOWN SUB	NE	0.0055	0.0055	0.0055	1.00	0.0014
4	ALWINE FARM	EN	0.0087	0.0087	0.0087	1.00	0.0022
5	VISITORS CTR	E	0.0070	0.0070	0.0070	1.00	0.0017
6	500 KV SUB	ES	0.0081	0.0081	0.0081	1.00	0.0020
7	BECKER FARM	SE	0.0068	0.0068	0.0068	1.00	0.0017
8	FALMOUTH SUB	SS	0.0082	0.0082	0.0082	1.00	0.0021
9	CLY SUBSTATION	S	0.0062	0.0062	0.0062	1.00	0.0015
10	TMI WAREHOUSE	SS	0.0069	0.0069	0.0069	1.00	0.0017
11	TMI MDCT	SW	0.0072	0.0072	0.0072	1.00	0.0018
12	GOLDSBORO	WS	0.0065	0.0065	0.0065	1.00	0.0016
13	TMI INTAKES	W	0.0075	0.0075	0.0075	1.00	0.0019
14	FAIRVIEW TWP	WN	0.0073	0.0073	0.0073	1.00	0.0018
15	HBG AIRPORT	NW	0.0089	0.0089	0.0089	1.00	0.0022
16	CRAWFORD STATION	NN	0.0090	0.0090	0.0090	1.00	0.0022

1994 ANNUAL EXERCISE Drill Time= 120 minutes

THREE MILE ISLAND REUTER STOKES MONITORING REPORT
ENDING 05-19-94 09:15:00

	STATION	SECTOR	AVERAGE mR/HR	MINIMUM mR/HR	MAXIMUM mR/HR	HOURS	TOTAL mR/HR
1	MIDDLETOWN	N	0.0081	0.0081	0.0081	1.00	0.0020
2	NORTH GATE TMI	NN	0.0100	0.0100	0.0100	1.00	0.0025
3	MIDDLETOWN SUB	NE	0.0055	0.0055	0.0055	1.00	0.0014
4	ALWINE FARM	EN	0.0092	0.0092	0.0092	1.00	0.0023
5	VISITORS CTR	E	0.0068	0.0068	0.0068	1.00	0.0017
6	500 KV SUB	ES	0.0077	0.0077	0.0077	1.00	0.0019
7	BECKER FARM	SE	0.0065	0.0065	0.0065	1.00	0.0016
8	FALMOUTH SUB	SS	0.0073	0.0073	0.0073	1.00	0.0018
9	CLY SUBSTATION	S	0.0062	0.0062	0.0062	1.00	0.0016
10	TMI WAREHOUSE	SS	0.0062	0.0062	0.0062	1.00	0.0015
11	TMI MDCT	SW	0.0072	0.0072	0.0072	1.00	0.0018
12	GOLDSBORO	WS	0.0059	0.0059	0.0059	1.00	0.0015
13	TMI INTAKES	W	0.0064	0.0064	0.0064	1.00	0.0016
14	FAIRVIEW TWP	WN	0.0077	0.0077	0.0077	1.00	0.0019
15	HBG AIRPORT	NW	0.0081	0.0081	0.0081	1.00	0.0020
16	CRAWFORD STATION	NN	0.0100	0.0100	0.0100	1.00	0.0025

1994 ANNUAL EXERCISE Drill Time= 135 minutes

THREE MILE ISLAND REUTER STOKES MONITORING REPORT
ENDING 05-19-94 09:30:00

	STATION	SECTOR	AVERAGE mR/HR	MINIMUM mR/HR	MAXIMUM mR/HR	HOURS	TOTAL mR/HR
1	MIDDLETOWN	N	0.0081	0.0081	0.0081	1.00	0.0020
2	NORTH GATE TMI	NN	0.0200	0.0200	0.0200	1.00	0.0050
3	MIDDLETOWN SUB	NE	0.0058	0.0058	0.0058	1.00	0.0014
4	ALWINE FARM	EN	0.0095	0.0095	0.0095	1.00	0.0024
5	VISITORS CTR	E	0.0072	0.0072	0.0072	1.00	0.0018
6	500 KV SUB	ES	0.0083	0.0083	0.0083	1.00	0.0021
7	BECKER FARM	SE	0.0064	0.0064	0.0064	1.00	0.0016
8	FALMOUTH SUB	SS	0.0069	0.0069	0.0069	1.00	0.0017
9	CLY SUBSTATION	S	0.0062	0.0062	0.0062	1.00	0.0016
10	TMI WAREHOUSE	SS	0.0072	0.0072	0.0072	1.00	0.0018
11	TMI MDCT	SW	0.0069	0.0069	0.0069	1.00	0.0017
12	GOLDSBORO	WS	0.0064	0.0064	0.0064	1.00	0.0016
13	TMI INTAKES	W	0.0065	0.0065	0.0065	1.00	0.0016
14	FAIRVIEW TWP	WN	0.0080	0.0080	0.0080	1.00	0.0020
15	HBG AIRPORT	NW	0.0080	0.0080	0.0080	1.00	0.0020
16	CRAWFORD STATION	NN	0.0098	0.0098	0.0098	1.00	0.0025

1994 ANNUAL EXERCISE Drill Time= 150 minutes

THREE MILE ISLAND REUTER STOKES MONITORING REPORT
ENDING 05-19-94 09:45:00

	STATION	SECTOR	AVERAGE mR/HR	MINIMUM mR/HR	MAXIMUM mR/HR	HOURS	TOTAL mR/HR
1	MIDDLETOWN	N	0.0088	0.0088	0.0088	1.00	0.0022
2	NORTH GATE TMI	NN	0.0100	0.0100	0.0100	1.00	0.0025
3	MIDDLETOWN SUB	NE	0.0055	0.0055	0.0055	1.00	0.0014
4	ALWINE FARM	EN	0.0093	0.0093	0.0093	1.00	0.0023
5	VISITORS CTR	E	0.0061	0.0061	0.0061	1.00	0.0015
6	500 KV SUB	ES	0.0078	0.0078	0.0078	1.00	0.0019
7	BECKER FARM	SE	0.0068	0.0068	0.0068	1.00	0.0017
8	FALMOUTH SUB	SS	0.0074	0.0074	0.0074	1.00	0.0019
9	CLY SUBSTATION	S	0.0061	0.0061	0.0061	1.00	0.0015
10	TMI WAREHOUSE	SS	0.0068	0.0068	0.0068	1.00	0.0017
11	TMI MDCT	SW	0.0065	0.0065	0.0065	1.00	0.0016
12	GOLDSBORO	WS	0.0068	0.0068	0.0068	1.00	0.0017
13	TMI INTAKES	W	0.0067	0.0067	0.0067	1.00	0.0017
14	FAIRVIEW TWP	WN	0.0083	0.0083	0.0083	1.00	0.0021
15	HBG AIRPORT	NW	0.0083	0.0083	0.0083	1.00	0.0021
16	CRAWFORD STATION	NN	0.0087	0.0087	0.0087	1.00	0.0022

1994 ANNUAL EXERCISE Drill Time= 165 minutes

THREE MILE ISLAND REUTER STOKES MONITORING REPORT
ENDING 05-19-94 10:00:00

	STATION	SECTOR	AVERAGE mR/HR	MINIMUM mR/HR	MAXIMUM mR/HR	HOURS	TOTAL mR/HR
1	MIDDLETOWN	N	0.0075	0.0075	0.0075	1.00	0.0019
2	NORTH GATE TMI	NN	0.0091	0.0091	0.0091	1.00	0.0023
3	MIDDLETOWN SUB	NE	0.0060	0.0060	0.0060	1.00	0.0015
4	ALWINE FARM	EN	0.0099	0.0099	0.0099	1.00	0.0025
5	VISITORS CTR	E	0.0060	0.0060	0.0060	1.00	0.0015
6	500 KV SUB	ES	0.0074	0.0074	0.0074	1.00	0.0018
7	BECKER FARM	SE	0.0073	0.0073	0.0073	1.00	0.0018
8	FALMOUTH SUB	SS	0.0074	0.0074	0.0074	1.00	0.0018
9	CLY SUBSTATION	S	0.0053	0.0053	0.0053	1.00	0.0013
10	TMI WAREHOUSE	SS	0.0069	0.0069	0.0069	1.00	0.0017
11	TMI MDCT	SW	0.0069	0.0069	0.0069	1.00	0.0017
12	GOLDSBORO	WS	0.0068	0.0068	0.0068	1.00	0.0017
13	TMI INTAKES	W	0.0076	0.0076	0.0076	1.00	0.0019
14	FAIRVIEW TWP	WN	0.0081	0.0081	0.0081	1.00	0.0020
15	HBG AIRPORT	NW	0.0083	0.0083	0.0083	1.00	0.0021
16	CRAWFORD STATION	NN	0.0095	0.0095	0.0095	1.00	0.0024

1994 ANNUAL EXERCISE Drill Time= 180 minutes

THREE MILE ISLAND REUTER STOKES MONITORING REPORT
ENDING 05-19-94 10:15:00

	STATION	SECTOR	AVERAGE mR/HR	MINIMUM mR/HR	MAXIMUM mR/HR	HOURS	TOTAL mR/HR
1	MIDDLETOWN	N	0.0081	0.0081	0.0081	1.00	0.0020
2	NORTH GATE TMI	NN	0.0200	0.0200	0.0200	1.00	0.0050
3	MIDDLETOWN SUB	NE	0.0053	0.0053	0.0053	1.00	0.0013
4	ALWINE FARM	EN	0.0093	0.0093	0.0093	1.00	0.0023
5	VISITORS CTR	E	0.0073	0.0073	0.0073	1.00	0.0018
6	500 KV SUB	ES	0.0072	0.0072	0.0072	1.00	0.0018
7	BECKER FARM	SE	0.0070	0.0070	0.0070	1.00	0.0018
8	FALMOUTH SUB	SS	0.0079	0.0079	0.0079	1.00	0.0020
9	CLY SUBSTATION	S	0.0060	0.0060	0.0060	1.00	0.0015
10	TMI WAREHOUSE	SS	0.0061	0.0061	0.0061	1.00	0.0015
11	TMI MDCT	SW	0.0073	0.0073	0.0073	1.00	0.0018
12	GOLDSBORO	WS	0.0061	0.0061	0.0061	1.00	0.0015
13	TMI INTAKES	W	0.0076	0.0076	0.0076	1.00	0.0019
14	FAIRVIEW TWP	WN	0.0083	0.0083	0.0083	1.00	0.0021
15	HBG AIRPORT	NW	0.0079	0.0079	0.0079	1.00	0.0020
16	CRAWFORD STATION	NN	0.0100	0.0100	0.0100	1.00	0.0025

1994 ANNUAL EXERCISE Drill Time= 195 minutes

THREE MILE ISLAND REUTER STOKES MONITORING REPORT
ENDING 05-19-94 10:30:00

	STATION	SECTOR	AVERAGE mR/HR	MINIMUM mR/HR	MAXIMUM mR/HR	HOURS	TOTAL mR/HR
1	MIDDLETOWN	N	0.0088	0.0088	0.0088	1.00	0.0022
2	NORTH GATE TMI	NN	0.0100	0.0100	0.0100	1.00	0.0025
3	MIDDLETOWN SUB	NE	0.0052	0.0052	0.0052	1.00	0.0013
4	ALWINE FARM	EN	0.0098	0.0098	0.0098	1.00	0.0025
5	VISITORS CTR	E	0.0069	0.0069	0.0069	1.00	0.0017
6	500 KV SUB	ES	0.0075	0.0075	0.0075	1.00	0.0019
7	BECKER FARM	SE	0.0068	0.0068	0.0068	1.00	0.0017
8	FALMOUTH SUB	SS	0.0069	0.0069	0.0069	1.00	0.0017
9	CLY SUBSTATION	S	0.0057	0.0057	0.0057	1.00	0.0014
10	TMI WAREHOUSE	SS	0.0066	0.0066	0.0066	1.00	0.0016
11	TMI MDCT	SW	0.0078	0.0078	0.0078	1.00	0.0020
12	GOLDSBORO	WS	0.0067	0.0067	0.0067	1.00	0.0017
13	TMI INTAKES	W	0.0075	0.0075	0.0075	1.00	0.0019
14	FAIRVIEW TWP	WN	0.0070	0.0070	0.0070	1.00	0.0017
15	HBG AIRPORT	NW	0.0084	0.0084	0.0084	1.00	0.0021
16	CRAWFORD STATION	NN	0.0089	0.0089	0.0089	1.00	0.0022

1994 ANNUAL EXERCISE Drill Time= 210 minutes

THREE MILE ISLAND REUTER STOKES MONITORING REPORT
ENDING 05-19-94 10:45:00

	STATION	SECTOR	AVERAGE mR/HR	MINIMUM mR/HR	MAXIMUM mR/HR	HOURS	TOTAL mR/HR
1	MIDDLETOWN	N	0.0086	0.0086	0.0086	1.00	0.0022
2	NORTH GATE TMI	NN	0.0102	0.0102	0.0102	1.00	0.0025
3	MIDDLETOWN SUB	NE	0.0055	0.0055	0.0055	1.00	0.0014
4	ALWINE FARM	EN	0.0090	0.0090	0.0090	1.00	0.0022
5	VISITORS CTR	E	0.0062	0.0062	0.0062	1.00	0.0016
6	500 KV SUB	ES	0.0074	0.0074	0.0074	1.00	0.0018
7	BECKER FARM	SE	0.0067	0.0067	0.0067	1.00	0.0017
8	FALMOUTH SUB	SS	0.0076	0.0076	0.0076	1.00	0.0019
9	CLY SUBSTATION	S	0.0052	0.0052	0.0052	1.00	0.0013
10	TMI WAREHOUSE	SS	0.0061	0.0061	0.0061	1.00	0.0015
11	TMI MDCT	SW	0.0069	0.0069	0.0069	1.00	0.0017
12	GOLDSBORO	WS	0.0061	0.0061	0.0061	1.00	0.0015
13	TMI INTAKES	W	0.0072	0.0072	0.0072	1.00	0.0018
14	FAIRVIEW TWP	WN	0.0071	0.0071	0.0071	1.00	0.0018
15	HBG AIRPORT	NW	0.0083	0.0083	0.0083	1.00	0.0021
16	CRAWFORD STATION	NN	0.0101	0.0101	0.0101	1.00	0.0025

1994 ANNUAL EXERCISE Drill Time= 225 minutes

THREE MILE ISLAND REUTER STOKES MONITORING REPORT
ENDING 05-19-94 11:00:00

	STATION	SECTOR	AVERAGE mR/HR	MINIMUM mR/HR	MAXIMUM mR/HR	HOURS	TOTAL mR/HR
1	MIDDLETOWN	N	0.0084	0.0084	0.0084	1.00	0.0021
2	NORTH GATE TMI	NN	0.0110	0.0110	0.0110	1.00	0.0027
3	MIDDLETOWN SUB	NE	0.0056	0.0056	0.0056	1.00	0.0014
4	ALWINE FARM	EN	0.0091	0.0091	0.0091	1.00	0.0023
5	VISITORS CTR	E	0.0064	0.0064	0.0064	1.00	0.0016
6	500 KV SUB	ES	0.0081	0.0081	0.0081	1.00	0.0020
7	BECKER FARM	SE	0.0071	0.0071	0.0071	1.00	0.0018
8	FALMOUTH SUB	SS	0.0074	0.0074	0.0074	1.00	0.0018
9	CLY SUBSTATION	S	0.0061	0.0061	0.0061	1.00	0.0015
10	TMI WAREHOUSE	SS	0.0064	0.0064	0.0064	1.00	0.0016
11	TMI MDCT	SW	0.0077	0.0077	0.0077	1.00	0.0019
12	GOLDSBORO	WS	0.0058	0.0058	0.0058	1.00	0.0015
13	TMI INTAKES	W	0.0067	0.0067	0.0067	1.00	0.0017
14	FAIRVIEW TWP	WN	0.0077	0.0077	0.0077	1.00	0.0019
15	HBG AIRPORT	NW	0.0086	0.0086	0.0086	1.00	0.0022
16	CRAWFORD STATION	NN	0.0086	0.0086	0.0086	1.00	0.0021

1994 ANNUAL EXERCISE Drill Time= 240 minutes

THREE MILE ISLAND REUTER STOKES MONITORING REPORT
ENDING 05-19-94 11:15:00

	STATION	SECTOR	AVERAGE mR/HR	MINIMUM mR/HR	MAXIMUM mR/HR	HOURS	TOTAL mR/HR
1	MIDDLETOWN	W	0.0082	0.0082	0.0082	1.00	0.0021
2	NORTH GATE TMI	NW	0.0104	0.0104	0.0104	1.00	0.0026
3	MIDDLETOWN SUB	NE	0.0062	0.0062	0.0062	1.00	0.0015
4	ALWINE FARM	EN	0.0091	0.0091	0.0091	1.00	0.0023
5	VISITORS CTR	E	0.0072	0.0072	0.0072	1.00	0.0018
6	500 KV SUB	ES	0.0072	0.0072	0.0072	1.00	0.0018
7	BECKER FARM	SE	0.0077	0.0077	0.0077	1.00	0.0019
8	FALMOUTH SUB	SS	0.0071	0.0071	0.0071	1.00	0.0018
9	CLY SUBSTATION	S	0.0062	0.0062	0.0062	1.00	0.0015
10	TMI WAREHOUSE	SS	0.0070	0.0070	0.0070	1.00	0.0017
11	TMI MDCT	SW	0.0073	0.0073	0.0073	1.00	0.0018
12	GOLDSBORO	WS	0.0064	0.0064	0.0064	1.00	0.0016
13	TMI INTAKES	W	0.0065	0.0065	0.0065	1.00	0.0016
14	FAIRVIEW TWP	WN	0.0084	0.0084	0.0084	1.00	0.0021
15	HBG AIRPORT	NW	0.0086	0.0086	0.0086	1.00	0.0021
16	CRAWFORD STATION	NN	0.0085	0.0085	0.0085	1.00	0.0021

APPENDIX G
RUMOR CONTROL
INQUIRIES

This appendix provides additional guidance and information to the Controller/Observer responding to this event. The responding organizations are expected to be the Communications, Public Affairs and Rumor Control organizations.

Upon declaration of an Alert, personnel will begin to staff the GPUNC Joint Information Center at Suite 500, 6345 Flank Drive, Harrisburg, PA in accordance with the Emergency Public Information Plan (8200-IMP-1720.01). News releases will be distributed from the Joint Information Center.

At strategic times throughout the course of the exercise, telephone calls simulating calls from concerned GPUNC personnel, local citizens, media and industry-related organizations (e.g., INPO) will be made to various locations on-site and to the TMI emergency response facilities.

Additionally, throughout the course of the exercise, telephone calls simulating calls from the general public, media, industry-related organizations and plant personnel will be made to the Rumor Control organization at the Joint Information Center.

Controller/Observer Information:

These inquiries are intended to exercise the response and interface of the GPUNC Communications Department at TMI, including public and media relations, information gathering and press releases, facility activation, rumor control, and press briefings.

The observer/controller and associated personnel, e.g., telephone callers, will be provided sufficient data to support these activities. Observer/Controllers are expected to perform the following:

- Evaluate the GPUNC emergency response organization in regards to channeling of telephone inquiries to the appropriate organizations.

- Evaluate communication personnel in regard to compliance with the Public Information Emergency Plan.

- Upon termination of the exercise, conduct a critique with participants identifying strengths and weaknesses of their performance.

- Upon termination of the exercise, gather copies of press releases and attendance forms and other material, as appropriate, and submit it to the TMI Emergency Preparedness Department.

PUBLIC INFORMATION INQUIRIES TO EMERGENCY RESPONSE FACILITIES

*** PREFACE AND END ALL MESSAGES WITH
"THIS IS A DRILL! THIS IS A DRILL!"

1. CR (948-2069, 2070, 2071) (NOTE: Control Room numbers are direct.)
*(A + 30)
I heard there is a problem at the plant and my husband works the daylight maintenance at Unit 1. He's late getting home from work. Is he OK?

Response:_____

2. N/A CR (948-2069, 2070, 2071) (NOTE: Control Room numbers are direct.)
*(UE + 30)
I heard on the radio that there's smoke coming from the TMI-1 Reactor. What's going on there?

Response:_____

3. Security, TMI-1 (948-8040)
*(SAE + 30)
My husband is a member of the site safety department. Has everyone been accounted for? How can I find out?

Response:_____

4. N/A Security, TMI-1 (948-8040)
*(SAE + 30)
Where are my kids? I heard the schools are being evacuated. Should I go to pick them up?

Response:_____

5. EOF (657-0471)
* (SAE + 30)
I'm Randy David, News Director, for WABSZ TV in New York. I have a camera crew and reporter enroute to the Emergency Center in Harrisburg to film your activities for the 11 o'clock news. Please make arrangements for them.

Response:_____

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6. Switchboard (948-8000)
*(A + 30)
I know there's an emergency at the plant. My husband was at Fox's Market in Middletown earlier today. Can I let him into the house? Should I make him shower immediately? Is the food okay to eat?

Response:_____
_____
_____

7. CR (948-2069, 2070, 2071) (NOTE: Control Room numbers are direct.)
N/A *(SAE + 30)
I have a dairy farm near Elizabethtown, and I just heard that TMI is releasing radioactivity into the air. What should I do with my cows? Should I hose down my corn?

Response:_____
_____
_____

8. Communications (948-8197, 8198, 8199)
* (SAE + 30)
I heard there was an accident at the plant. My mother feels very dizzy, she must have gotten some radiation. What can I give her?

Response:_____
_____
_____

9. Communications (948-8740, 8829, 8197)
*(SAE + 30)
I live about one mile from TMI. My husband just called to tell me to get out of the house then hung up. What's going on? Where should I go?

Response:_____
_____
_____

10. EOF (948-8967)
*(SAE + 90)
Hello, I live in Maytown and spotted men in yellow suits with Geiger counters in my yard. What are they doing there? Am I safe?

Response:_____
_____
_____

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11. EOF (948-8967)
*(SAE + 90)
Hello, I live down river from TMI and the air smells funny and my car won't start. What should I do? Am I in danger?

Response:_____
_____
_____

12. Communications (948-8197, 8829, 8198, 8199)
N/A * (EXPLOSION + 30)
Hello, I heard on the radio that the plant has exploded and people are evacuating. Where should I go?

Response:_____
_____
_____

13. CR (948-2069, 2070, 2071) (NOTE: Control Room numbers are direct.)
*(SAE + 30)
Hello, I own a gas station/mini-mart on Route 441 and I'm going to evacuate the area. Where should I send the bill for my loss of business?

Response:_____
_____
_____

14. EOF (948-8903)
*(SAE + 90)
Hello, this is Alan Nelson from NUMARC. I can't get through on any of the other lines. How bad is the accident? Should we send assistance?

Response:_____
_____
_____

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GPUNC Public Information and Rumor Control (540-4909)

1. My husband is a Security Guard on duty at TMI. I've tried the 948-8000 number and Security direct dial numbers. All lines are busy. How can I reach him?
*(SAE + 90)

Response:_____
_____
_____

2. I work at Fox's Market in Middletown, but live in Hershey. Will I contaminate my family if I go home?
*(SAE + 90)

Response:_____
_____
_____

3. I was enjoying supper at Kuppy's Diner in Middletown when I heard about TMI's problems. Should I go to the Med Center to be checked for radiation poisoning? How can I bill this to GPU?
*(SAE + 90)

Response:_____
_____
_____

4. This is the Pedigree Pet Resort Kennel. I've got all these expensive registered dogs here. If they contract radiation poisoning, their owners will probably sue. What can GPU do to help?
* (SAE + 90)

Response:_____
_____
_____

5. Listen, my husband has been looking for our brochure for twenty minutes. We live in Fontana. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response:_____
_____
_____

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GPUNC Public Information and Rumor Control (540-4909)

6. I live in Sagerville. I was attempting to evacuate but I fell down my stairs inside my house and I think my leg is broken. I need help. (Rumor Control should advise the caller to dail 911.)
* (SAE + 90)

Response: _____

7. I'm from Rowenna and I'm in Colonial Park. Can I get home or is it too radiated over there?
* (SAE + 90)

Response: _____

8. I'm 96 years old and my wife is dead. Please send someone to help me. I live at 910 Spring Street here in Middletown.
* (SAE + 90)

Response: _____

9. Hey, what time did the emergency at the plant start? Do I have time to pick up my kids at their grandparents? How fast do I have to drive? (Wait for response.) Why can't you answer my question? I'm just gonna waste time calling all those groups and they're still gonna give me the run-a-round. What do I do?
*(SAE + 90)

Response: _____

10. I'm holding an aerobic class and my whole class is scared stiff. Where do I tell them to go? Can some of them pick up their kids at school?
*(SAE + 90)

Response: _____

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GPUNC Public Information and Rumor Control (540-4909)

11. My kid's away at college and she has my car. There's no neighbors in sight and my wife's about to have a baby here in the house. Is my baby going to die because of the meltdown? I'm so confused. What'll I do?
*(SAE + 90)

Response:_____
_____
_____

12. N/A I'm the Hershey High School principal, and I'm calling from a pay phone. All our telephones and emergency communications systems are out of service. Would you call the state and relay our problems? I have no numbers with me?
*(SAE + 90)

Response:_____
_____
_____

13. Hello, I live in New Cumberland and there are men with Geiger counters in my yard. What are they doing there? Am I safe?
* (SAE + 90)

Response:_____
_____
_____

14. Hello, I live downwind of TMI. Am I in danger? I have a heart condition and can't drive? What should I do?
*(SAE + 90)

Response:_____
_____
_____

15. Hello, I own a greenhouse on Route 441 and I'm going to evacuate the area. Where should I send the bill for my loss of business?
*(SAE + 90)

Response:_____
_____
_____

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GPUNC Public Information and Rumor Control (540-4909)

16. Hello, this is Tom Tipton from EEI. I can't get through on any of the other lines. How bad is the accident?
* (SAE + 90)

Response: _____

17. Hello, this is Harry Graham from the American Nuclear Insurance. How bad is the accident? We've got two people on the way to the plant. Please make arrangements for them?
* (SAE + 90)

Response: _____

18. My husband was at work in Middletown earlier today. Can I let him into the house? Should I make him shower immediately?
* (SAE + 90)

Response: _____

19. If I have to evacuate, what will happen to my belongings and my home? I'm afraid of being burglarized.
*(SAE + 90)

Response: _____

20. Hello, I'm at a phone booth because I don't have a phone at home. Please tell me what is happening there.
* (SAE + 90)

Response: _____

21. Hello, my television is broke and I don't have a radio. Could you tell me what is happening? How will I know if I should leave town or not?
* (SAE + 90)

Response: _____

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GPUNC Public Information and Rumor Control (540-4909)

22. I heard about the accident. I'm afraid and I can't leave my home because I'm in a wheelchair. How do I get help?
*(SAE + 90)

Response:_____
_____
_____

23. Hello. How long will it take for the radiation to leave the area? If I can't go outside, how long will I have to stay in my home?
* (SAE + 90)

Response:_____
_____
_____

24. Hello, my name is Barbara Rowe. I'm calling from WNYS (Nosey). Could you tell me what type of information people are calling for and where you are referring them?
* (SAE + 90)

Response:_____
_____
_____

25. Hello, I've heard about the accident. Is there any radiation coming from the plant? What will it do to me if I go outside?
* (SAE + 90)

Response:_____
_____
_____

26. I'm calling from Millersburg. My daughter and her family live in Middletown. They are on vacation. Is it safe to come into Middletown to get some of their belongings?
* (SAE + 90)

Response:_____
_____
_____

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GPUNC Public Information and Rumor Control (540-4909)

27. This is the Gas Company. We have a report of an odor of gas near TMI. Is it safe to send a crew to investigate this report?
* (SAE + 90)

Response: _____

28. This is Amtrak calling from Harrisburg. Should we cancel our Middletown stops for the time being?
* (SAE + 90)

Response: _____

29. I have a flight scheduled out of Harrisburg International Airport in about an hour. Is it safe to fly out? Will the plane circle over TMI?
* (SAE + 90)

Response: _____

30. N/A This is the Apple Basket Boutique. I have an outdoor tea and fashion show scheduled for today. Two hundred guests have responded that they will attend. Is it safe to "go on with the show"?

Response: _____

31. I am a Mom with the Middletown Area Girls Softball League. I have one thousand boxes of popcorn sitting on my patio. Are they safe to eat?
* (SAE + 90)

Response: _____

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GPUNC Public Information and Rumor Control (540-4909)

32. I'm a shift worker for Building Services on the 11 to 7 shift. Should I report to work tonight?
* (SAE + 90)

Response: _____

33. Hello. We run an egg farm. Will we still be able to sell our eggs after this is over? What is the chickens are affected? We could lose our business!
* (SAE + 90)

Response: _____

34. Hello, I've just heard what happened on the news. How bad are things?
* (SAE + 90)

Response: _____

35. Hello, is my baby in any danger? I heard on the radio what has happened. I work in Harrisburg and I am also five months pregnant.
* (SAE + 90)

Response: _____

36. Will there be any type of radiation releases coming from the plant? If so, will the public be notified before the releases take place?
* (SAE + 90)

Response: _____

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GPUNC Public Information and Rumor Control (540-4909)

37. How long will it be before everything is back to normal there? Are there any chances of it getting worse?
* (SAE + 90)

Response: _____

38. I heard on my radio that something happened there. Is it true? If so, what happened?
* (SAE + 90)

Response: _____

39. Hi, this is Jane Butler from WLIX Radio. Is there any chance that we could interview the Emergency Director? We felt the public should know what is happening by hearing it from a direct source.
* (SAE + 90)

Response: _____

40. Who do I contact if I start feeling sick? I live in Cly.
* (SAE + 90)

Response: _____

41. Hello, our family is planning to use our cabin on the river tonight. I don't have a radio at my cabin. How do I find out if the situation gets worse?
* (SAE + 90)

Response: _____

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GPUNC Public Information and Rumor Control (540-4909)

42. My father used to work at the Island. He said that a lot of times the situation is worse than what GPU Nuclear tells the public. Is this true?
* (SAE + 90)

Response: _____

43. Are we in danger of getting radiation or contaminated? Will this affect my skin cancer? Who do I talk to about trying to avoid this?
* (SAE + 90)

Response: _____

44. This is Bill Hix of WXTB and you're on the air live. What's going on down at Three Mile Island?

Response: _____

45. Hello, I live in Berks County. Is there any danger to our farmland at this time?
* (SAE + 90)

Response: _____

46. Hello, I am calling from NO NUKES! Who is responsible for this accident? What are you telling the public?
* (SAE + 90)

Response: _____

47. What channel on my television will give me the best coverage as to what is happening there? (I live in _____ and have cable TV, or I have a satellite dish).
* (SAE + 90)

Response: _____

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GPUNC Public Information and Rumor Control (540-4909)

48. When things like this happen, doesn't it go on for days? When will we know if everything is okay?
* (SAE + 90)

Response:_____

49. Hello. I'm from Middletown. My wife just had a baby. She is still in the hospital. Should we bring the baby home with all of this going on?
* (SAE + 90)

Response:_____

50. You're killing my baby! (Whatever response) You're killing my baby! (Whatever response) You're killing my baby! .. (R.C. should try to calm the caller.)
* (SAE + 90)

Response:_____

51. Can I let my dog outside to go to the bathroom? (no pause) Will he get sick if I do?
* (SAE + 90)

Response:_____

52. I understand if we have to evacuate we can't take our pets with us to the evacuation center. Is that true?
* (SAE + 90)

Response:_____

53. N/A (Hysterically) My kids are at school. How can we ever get together if we have to evacuate?
* (SAE + 90)

Response:_____

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GPUNC Public Information and Rumor Control (540-4909)

54. We live over here on 230 and have been hearing a whole bunch of emergency vehicles running around. What's going on? (No pause) Should we evacuate?
* (SAE + 90)

Response: _____

55. N/A I was working outside and I felt a burning sensation on my face. Are you releasing radiation?
* (SAE + 90)

Response: _____

56. I smell something strange in the air. Are you releasing radioactivity?
* (SAE + 90)

Response: _____

57. I have a metallic taste in my mouth. Has there been a radiation release?
* (SAE + 90)

Response: _____

58. If that thing blows (explodes), who's going to pay for replacing our house?
* (SAE + 90)

Response: _____

59. If TMI blows up, will we ever be able to move back?
* (SAE + 90)

Response: _____

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GPUNC Public Information and Rumor Control (540-4909)

60. This is Representative Kaddlehopper. I understand there has been a release of radiation and my constituents are calling to ask if they should leave or take shelter. How serious is it - and what should I tell them?
* (SAE + 90)

Response: _____

61. I'm with Senator Hornblower and we want to talk to your president now! (There is no way to tell if the caller is legitimate. R.C. should ask for a telephone number to have someone get back to the Senator)
* (SAE + 90)

Response: _____

62. This is Mayor Snodgrass. We get our water from the river and I want to know what you're dumping into it.
* (SAE + 90)

Response: _____

63. N/A I'm chairman of Green Township and I can see smoke over your way. Is that coming from the plant and is it radioactive?
* (SAE + 90)

Response: _____

64. This is Township Commissioner Jones. I understand you are venting to the atmosphere. Why aren't we receiving instructions for protective action? (No Pause) I'm here at our EOC and we haven't heard a word about that.
* (SAE + 90)

Response: _____

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PUBLIC INFORMATION INQUIRIES TO EMERGENCY RESPONSE FACILITIES

*** PREFACE AND END ALL MESSAGES WITH
"THIS IS A DRILL! THIS IS A DRILL!"

GPUNC Public Information and Rumor Control (540-4909)

65. This is Township Commissioner Albert E. Right. I understand you are venting to the atmosphere. Why aren't we receiving instructions for protective action? (No Pause) I'm here at our EOC and we haven't heard a word about that.
* (SAE + 90)

Response:_____
_____
_____

66. I am calling for Congressman Phil A. Buster. He wants to know if the steam generator problem you're having is related to the plugging you did in the past.
* (SAE + 90)

Response:_____
_____
_____

67. I can hear your plant public address and it sounds like you're telling your workers to evacuate. (Re: mustering) (No pause) Why aren't we being told too?
* (SAE + 90)

Response:_____
_____
_____

68. My power is out. Have your people blown the system?
* (SAE + 90)

Response:_____
_____
_____

69. I've misplaced our emergency brochure. We live in Mount Royal. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response:_____
_____
_____

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GPUNC Public Information and Rumor Control (540-4909)

70. I've misplaced our emergency brochure. We live in Penryn. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response:_____

71. I've misplaced our emergency brochure. We live in Weiglestown. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response:_____

72. I've misplaced our emergency brochure. We live in Kralltown. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response:_____

73. Listen, my husband has been looking for our brochure for twenty minutes. We live in Valley Green Estates. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response:_____

74. I've misplaced our emergency brochure. We live in Quentin. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response:_____

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GPUNC Public Information and Rumor Control (540-4909)

75. I've misplaced our emergency brochure. We live in Waltonville. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response:_____

76. I've misplaced our emergency brochure. We live in East Petersburg. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response:_____

77. I've misplaced our emergency brochure. We live in Pine Manor. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response:_____

78. Listen, my husband has been looking for our brochure for twenty minutes. We live in Ironville. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response:_____

79. I've misplaced our emergency brochure. We live in Hoernerstown. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response:_____

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GPUNC Public Information and Rumor Control (540-4909)

80. I've misplaced our emergency brochure. We live in Milton Grove. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response:_____

81. I've misplaced our emergency brochure. We live in Starview. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response:_____

82. I've misplaced our emergency brochure. We live in Sand Hill. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response:_____

83. Listen, my husband has been looking for our brochure for twenty minutes. We live in Ono. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response:_____

84. I've misplaced our emergency brochure. We live in Hanoverdale. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response:_____

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GPUNC Public Information and Rumor Control (540-4909)

85. I've misplaced our emergency brochure. We live in Seven Valleys. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response:_____

86. I've misplaced our emergency brochure. We live in Falmouth. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response:_____

87. I've misplaced our emergency brochure. We live in Washington Boro. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response:_____

88. Listen, my husband has been looking for our brochure for twenty minutes. We live in Piketown. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response:_____

89. I've misplaced our emergency brochure. We live in Clay. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response:_____

90. I've misplaced our emergency brochure. We live in Brownstown. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response:_____

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GPUNC Public Information and Rumor Control (540-4909)

91. I've misplaced our emergency brochure. We live in Lawn. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response: _____

92. I've misplaced our emergency brochure. We live in Saginaw. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response: _____

93. Listen, my husband has been looking for our brochure for twenty minutes. We live in Thomasville. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response: _____

94. I've misplaced our emergency brochure. We live in Sporting Hill. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response: _____

95. I've misplaced our emergency brochure. We live in Pillow. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response: _____

96. I've misplaced our emergency brochure. We live in Yorkana. Which area is that? Does this mean we should evacuate?
* (SAE + 90)

Response: _____

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GPUNC Public Information and Rumor Control (540-4909)

97. I'm Jane Cain, News Director for WXTR TV in York. I have a camera crew and reporter enroute to the Emergency Center in Harrisburg, to film your activities for our next news broadcast. Please make arrangements for them.
* (SAE + 90)

esponse:_____

98. N/A I heard the schools are being evacuated. Where are my kids? Should I go to pick them up?
* (SAE + 90)

Response:_____

99. (N/A) My name is Patricia Tibbs. I am calling from WSCP. There has been a rumor that an employee has been hurt. Could you verify that?
* (SAE + 90)

Response:_____

100. (N/A) Is it true that someone was hurt? Who was it? My husband is working that shift!
* (SAE + 90)

Response:_____

101. I'm calling from Denver. How far away from here do I have to go to be safe? What is going on at the plant?

EXPECTED ACTION: The current situation is as follows (read latest news release). Please keep in mind that all protective actions for the public involve only a ten mile radius around the plant. Persons in other locations would not have to move or relocate under any circumstances.
*(SAE + (90)

Response:_____

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GPUNC Public Information and Rumor Control (540-4909)

102. I'm a Science Teacher from the Harrisburg Academy, and I want to come to the plant to observe what's going on. Which gate can I use to get into the plant? Should I come to the Joint Information Center?

EXPECTED ACTION: I'm sorry but during an emergency, any unauthorized person is prohibited from entering the facility. The Joint Information Center is provided for members of the Media. The Emergency Broadcast System (EBS) can give you additional information.
* (SAE + 90)

Response:_____
_____
_____

103. Listen to me! My kids are at home with a baby sitter. We live about a mile from TMI. I've tried to call but I can't get through on the phone. The police won't let me past Route 83. Please help me. I'm worried sick. Can you send someone over to check on them?

Response:_____
_____
_____

104. I have a farm and if I have to leave, who's going to look after my livestock?
*(SAE + 90)

Response:_____
_____
_____

105. N/A Can I sell my produce from my roadside stand? Is it contaminated? I'm only four miles below TMI on Route 441.
* (SAE + 90)

Response:_____
_____
_____

106. N/A I raise vegetables for the market. How can I tell if they are radioactive?
* (SAE + 90)

Response:_____
_____
_____

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GPUNC Public Information and Rumor Control (540-4909)

107. I hear you are releasing radioactivity to the atmosphere.
N/A Should I get my cows inside? I'm only five miles from TMI.
* (SAE + 90)

Response:_____

108. This is the Old Lace Antique Auction Company. A New York antique dealer purchased a grandfather clock dating back to the 1700's from us for $10,000.00. This dealer now wants to cancel the deal because he chinks the clock may be contaminated. Who's going to talk to this dealer?

Response:_____

109. This is Polly Petal's Exotic Blooms. One hundred of our rarest orchids just wilted. What are you going to do about it?
* (SAE + 90)

Response:_____

110. My child went with his baseball team to Philadelphia to see the Phillies. They are expected back this evening. How can I pick him up if they don't allow the buses to come back into the area? How can I find out about this?
* (SAE + 90)

Response:_____

111. Hello, my name is Katie. I'm eight years old. I'm by myself. I live with my Daddy in Middletown. I heard on the TV there is some trouble at TMI. I'm scared! What should I do?
* (SAE + 90)

Response:_____

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GPUNC Public Information and Rumor Control (540-4909)

112. This is the Foreman of the Weston Construction Company. I've got two truck loads of cement which will harden in a couple of hours and my guys went home 'cause they thought there was some trouble at TMI. They just walked off the job! Who's gonna pour this cement? Who's gonna pay for it?
N/A
* (SAE + 90)

Response: _____

113. A friend of mine who lives near the Island called and said she heard fire alarms going off? What's the story?
* (SAE + 30)

Response: _____

114. On television, a representative of the No Nukes Associate was interviewed and said there was a big water leak at TMI. Where's this water going:
* (SAE + 30)

Response: _____

115. I am the Cub Master for Cub Scout Pack 642. My cub scouts pine wood
derby car race is scheduled for tonight. The lads will be disappointed if it is canceled. Will this problem at TMI be cleared up shortly or should I cancel the race?
* (SAE + 30)

Response: _____

116. This is Mrs. Adams. My brownie troop has a Victorian afternoon tea scheduled with a local nursing home. Should we cancel? What's going on?
N/A
* (SAE + 30)

Response: _____

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GPUNC Public Information and Rumor Control (540-4909)

117. Hello, I'm disabled and cannot get out of bed without help. My wife went shopping. What do I do if I have to evacuate?
* (SAE + 30)

Response:_____

118. Hello, this is Polly's Parrot Shop. I have a number of rare birds. How can I decontaminate their feathers if something happens at TMI?
* (SAE + 30)

Response:_____

119. N/A Hello, this is the Snow Flake Ski Lodge. Thanks. We have a limited season at best. The snow hasn't been good. Now there is an incident at TMI. How can I assure skiers it is perfectly safe to ski?
* (SAE + 30)

Response:_____

120. Hello, this is Mr. Chop. My lambs won fist prize at the Farm Show held in Harrisburg. I got a big contract with this meat packer. Now he wants to cancel because of the incident at TMI. Are you guys going to pay my losses?
* (SAE + 30)

Response:_____

121. What's going on down there? Is this a cover up for terrorists taking over the plant. Are you telling the truth or is this another "1979 - keep the truth from the public" maneuver?

Response:_____

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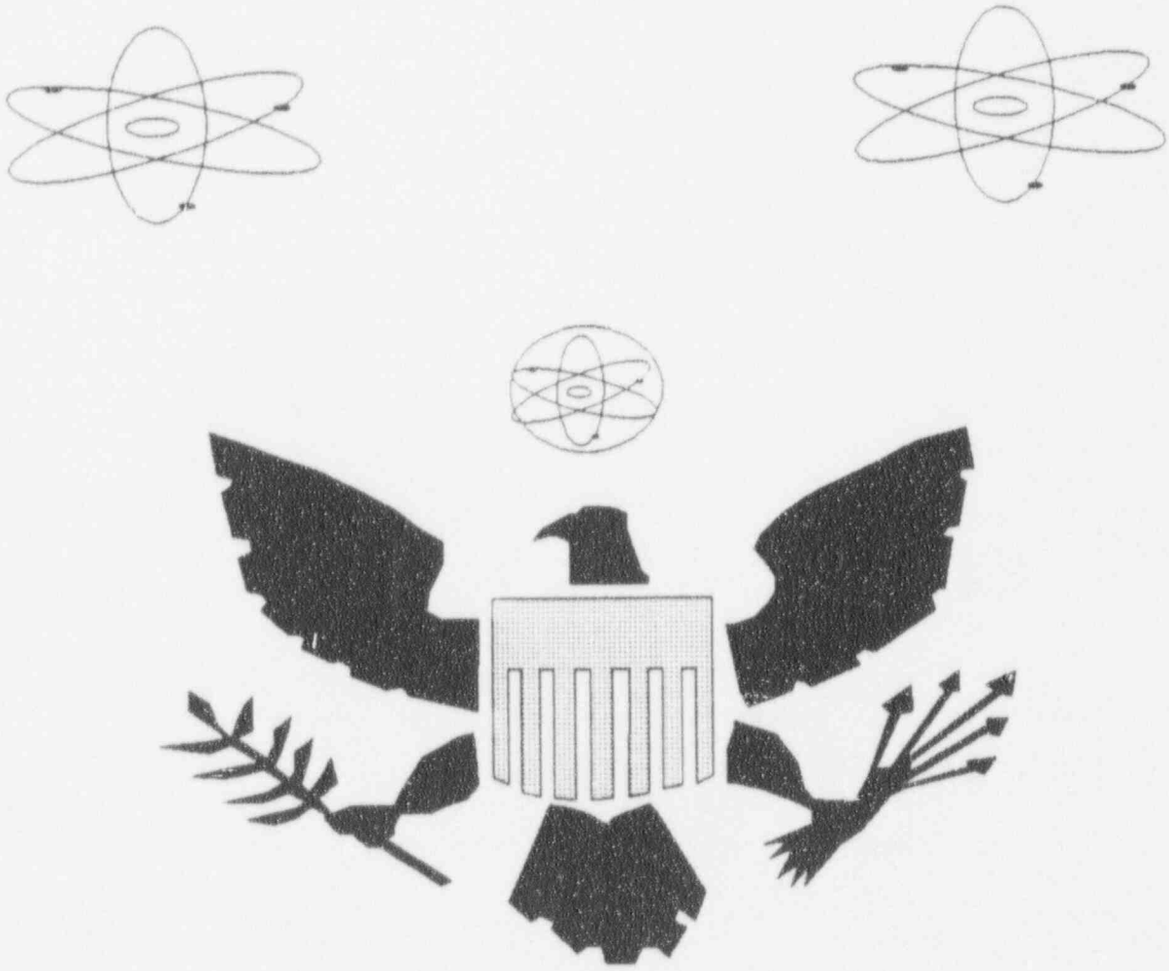
INTENTIONALLY



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