

Attachment to WM 92-0119

WOLF CREEK NUCLEAR OPERATING CORPORATION

WOLF CREEK GENERATION STATION

DOCKET NO. 50-482

EMERGENCY PREPAREDNESS

1992 FIELD EXERCISE

SCENARIO

Prepared by:

M. A. Schreiber

XA-921023
9207060048 920829
OF WEEK 03000482
F

TABLE OF CONTENTS

INTRODUCTION	1.0
OBJECTIVES AND GUIDELINES	
OBJECTIVES	2.0
GUIDELINES	
SCENARIO AND TIMELINE	
SCENARIO	3.0
TIMELINE	
CONTROLLER MESSAGES	
ASSIGNMENTS	4.0
MESSAGES	
PLANT DATA	
PLANT PARAMETERS	5.0
PLANT GRAPHS	
CORE DAMAGE ASSESSMENT	
METEOROLOGICAL DATA	6.0
ONSITE RADIOLOGICAL DATA	
PROCESS RADIOCHEMISTRY	7.0
PROCESS MONITORS	
AREA RADIATION MONITORS	
OFFSITE RADIOLOGICAL DATA	8.0
CONTROLLER ASSIGNMENTS AND INSTRUCTIONS	
ASSIGNMENTS	9.0
INSTRUCTIONS	
EVALUATOR ASSIGNMENTS AND INSTRUCTIONS	
EVALUATOR ASSIGNMENTS	10.0
EVALUATOR INSTRUCTIONS	
EVALUATION CHECKLISTS	
EVALUATION SUMMARY	

SECTION 1.0

INTRODUCTION

To assure that adequate measures are available to protect the health and safety of the general public in the Coffey County area in the event of an incident at the Wolf Creek Generating Station (WCGS), it is necessary to conduct an annual emergency preparedness exercise which requires the full participation of the Emergency Response Organization, which includes Site, Home Office and General Office personnel, and State and County emergency response capabilities. Federal agencies will evaluate and critique the annual exercise to assure proper response in the event of an actual emergency at WCGS.

Exercise participants do not have prior knowledge of the accident scenario or of the time or date of the Exercise. The exercise should demonstrate that those individuals and agencies who are assigned responsibilities in a radiological emergency are adequately trained to perform according to current plans and procedures. Furthermore, this exercise will provide training for emergency response personnel, and identify any potential problem areas in the overall emergency response system.

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

Section 2.0 Objectives and Guidelines

This section defines the exercise objectives and sets forth guidelines for the conduct of the exercise to meet those objectives.

Section 3.0 Scenario and Timeline

This section describes the postulated sequence of events occurring at WCGS which requires the Emergency Response Organization to respond.

Section 4.0 Controller Messages

This section contains copies of the exercise messages utilized to control the development of the exercise scenario.

Section 5.0 Plant Data

This section contains time-related information concerning the postulated plant conditions, which corresponds to the development of the exercise scenario and reflects simulator responses. To assure that adequate operational data is available in the event of a simulator failure, graphs of time-related plant parameter information have been included in this section.

Section 6.0 Meteorological Data

This section contains information and data concerning the postulated meteorological conditions in the Coffey County area which will be utilized in the development of the exercise scenario.

Section 7.0 Onsite Radiological Data

This section contains time-related information concerning radiological conditions at the various onsite monitoring locations. Also included in this section is information concerning primary and secondary systems radiochemistry, containment atmosphere radiochemistry, and in-plant radiation levels.

Section 8.0 Offsite Radiological Data

This section contains time-related information concerning radiological conditions at the various offsite monitoring locations.

Section 9.0 Controllers' Instructions

This section provides general instructions to the exercise controllers in the conduct of the exercise.

Section 10.0 Evaluators' Instructions

This section provides general instructions and criteria for evaluating the responses of the exercise participants and the progress of the exercise. Evaluator's Log Sheets are also provided in this section.

Copies of this manual will be provided to exercise controllers, evaluators, and selected observers prior to the exercise. Following the exercise, copies of this manual may be distributed to key exercise participants.

SECTION 2.0

OBJECTIVES AND GUIDELINES

<u>Subsections</u>	<u>Page</u>
OBJECTIVES	2.1
LIST OF ABBREVIATIONS	2.2
LICENSEE	2.4
STATE	2.6
LOCAL	2.13
GUIDELINES	2.20
CORRECTIVE ACTIONS	2.22

OBJECTIVES

Specific objectives to be achieved during the Exercise originate from discussions among the Wolf Creek Nuclear Operating Corporation (WCNOC), State of Kansas, Coffey County, Nuclear Regulatory Commission - Region IV (NRC), and the Federal Emergency Management Agency - Region VII (FEMA).

The listing of objectives is divided into three groups: WCNOC, State, and local. The WCNOC objectives were obtained from NRC Inspection Procedure 82302. Group I objectives are to be demonstrated during each annual Exercise. Group II objectives are to be demonstrated at least once during a 5 year period. Like the State and local objectives, WCNOC objectives are segregated by the facility or group which will demonstrate the objective.

Each objective for each WCNOC, State and local facility/team will be designated with a "na", "--" or a "D". Certain parts of some objectives have been enclosed in brackets. This is to indicate it is a two part objective. If both parts of the objective are to be demonstrated, a single "D" will appear in the facility/team column. Likewise, if both parts are not applicable (na) or not to be demonstrated (--) at this exercise, then only a single "na" or "--" will be present in the facility/team column. However, if only the bracketed part of the objective is to be demonstrated (D) and the part outside the brackets is not applicable (na), then in the facility/team column a "D" would appear in brackets and a "na" would appear without brackets.

A list of abbreviations used in assigning responsibilities for objectives follows.

LIST OF ABBREVIATIONS

Amb	Ambulance Service
CEOC	Coffey County Emergency Operations Center
CR	Control Room
CRBD	Coffey County Road and Bridge Department
D	Active to be Demonstrated
DA&FT COORD	Dose Assessment and Field Team Coordination
EOF	Emergency Operations Facility
EOFS	Emergency Operations Facility, State Dose Assessment Group
Hosp	Hospital
IC	Information Clearinghouse
JRMT	Joint Radiological Monitoring Team
KCPL GO	Kansas City Power and Light General Office
MED	Medical
MI	Media Inquiry
MM	Media Monitoring
MRC	Media Release Center
na	Objective Not Applicable to Facility/Function
OMT	Offsite Monitoring Team
OSC	Operations Support Center
PASS/ERDC	Post-Accident Sampling System/Emergency Repair-Damage Control Team
PC	Public Concern
Rad Lab	Radiation Laboratory, Kansas Department of Health and Environment
RCC	Reception and Care Center
School	Coffey County Schools
SEC	Security (WCNOC)

SEOC	State Emergency Operations Center
SFSA	State Forward Staging Area
TBD	To Be Determined
TSC	Technical Support Center
--	Objective Not to be Demonstrated

1992 OBJECTIVES

WCNOC

Group I OBJECTIVES (every year)	CR	SEC	TSC	PASS/ ERDC	OSC	OMT/ JRMT	EOF	IC/ MRC	MI	PC	MM	KCP G.O.	MED
1. Accident detection and assessment	D	na	D	na	D	na	D	na	na	na	na	na	na
2. Emergency classification	D	na	D	na	na	na	--	na	na	na	na	na	na
3. Notification of onsite and offsite emergency responders	D	na	D	na	na	na	D	na	na	na	na	na	na
4. Communications	D	D	D	D	D	D	D	--	--	--	--	--	--
5. Radiological exposure control	D	na	D	D	D	D	D	na	na	na	na	na	--
6. Protective action recommendations	D	na	D	na	na	na	D	na	na	na	na	na	na
7. Staff augmentation	D	na	na	na	na	na	na	--	--	--	--	--	na
8. Shift staffing	D	na	D	na	D	na	D	na	na	na	na	na	na
Group II OBJECTIVES (once every five years)													
1. Off-hours staffing (6 p.m. to 4 a.m.)	D	na	D	na	D	na	D	--	na	na	na	na	na
2. Activation of emergency news center (Joint Information Center)	na	na	na	na	na	na	na	--	na	na	na	na	na
3. Use of fire control teams	--	na	--	-	--	na	na	na	na	na	na	na	na
4. Use of first aid and/or rescue teams	--	--	--	--	--	na	na	na	na	na	na	na	--
5. Use of medical support personnel	--	--	--	na	na	na	na	na	na	na	na	na	--
6. Use of licensee's headquarters support personnel	na	na	na	na	na	na	--	na	na	na	na	na	na

1992 OBJECTIVES

WCNOC

Group II OBJECTIVES (once every five years)	CR	SEC	TSC	PASS/ ERDC	OSC	OMT/ JRMT	EOF	IC/ MRC	MI	PC	MM	KCPL G.O.	MED
7. Use of security personnel to provide prompt access for emergency equipment and support	--	--	na	na	na	na	na	na	na	na	na	na	na
8. Use of backup communications	--	na	--	na	na	na	--	na	na	na	na	na	na
9. Rumor Control	na	na	na	na	na	na	na	--	--	--	--	--	na
10. Use of emergency power (where not a part of plant safety systems, e.g. TSC)	na	na	--	na	na	na	--	na	na	na	na	na	na
11. Evacuation of Emergency Response Facilities (ERFs) and relocation to backup ERFs where applicable	--	na	--	na	--	na	--	na	na	na	na	na	na
12. Ingestion pathway exercise	na	na	na	na	na	na	na	--	na	na	na	na	na
13. Field monitoring, including soil, vegetation and water sampling	na	na	na	na	--	--	--	na	na	na	na	na	na
14. Capability for determining the magnitude and impact of the particular components of a release	--	na	--	na	na	na	--	na	na	na	na	na	na
15. Capability for post-accident coolant sampling and analysis	na	na	--	--	--	na	na	na	na	na	na	na	na
16. Use of potassium iodide	--	na	--	--	--	--	--	na	na	na	na	na	na
17. Assembly and accountability	D	D	D	na	D	na	D	na	na	na	na	na	na
18. Recovery and reentry	--	na	--	--	--	na	--	na	na	na	na	na	na

1992 OBJECTIVES

STATE

OBJECTIVES	SEOC	EOFS		JRMT	SPSA	IC	MRC	RAD L&E
		EOF	DA&FT COORD					
MOBILIZATION OF EMERGENCY PERSONNEL								
1. Demonstrate the capability to alert and fully mobilize personnel for both emergency facilities and field operations. Demonstrate the capability to activate and staff emergency facilities for emergency operations.	--	--	--	--	--	--	--	na
FACILITIES - EQUIPMENT, DISPLAYS, AND WORK ENVIRONMENT								
2. Demonstrate the adequacy of facilities, equipment, displays, and other materials to support emergency operations.	--	--	--	na	na	--	--	na
DIRECTION AND CONTROL								
3. Demonstrate the capability to direct and control emergency operations.	--	--	--	na	--	--	--	na
COMMUNICATIONS								
4. Demonstrate the ability to communicate with all appropriate emergency personnel at facilities and in the field.	--	--	--	--	--	--	--	na
EMERGENCY WORKER EXPOSURE CONTROL								
5. Demonstrate the capability to continuously monitor and control radiation exposure to emergency workers.	na	--	--	--	--	na	na	--

1992 OBJECTIVES

STATE

OBJECTIVES	SEOC	EOFS		JRMT	SFSA	IC	MRC	RAD LAB
		EOF	DA&FT COORD					
FIELD RADIOLOGICAL MONITORING - AMBIENT RADIATION MONITORING								
6. Demonstrate the appropriate use of equipment and procedures for determining field radiation measurements.	na	na	na	--	na	na	na	na
PLUME DOSE PROJECTION								
7. Demonstrate the capability to develop dose projections and protective action recommendations regarding evacuation and sheltering.	na	na	--	na	na	na	na	na
FIELD RADIOLOGICAL MONITORING - AIRBORNE RADIOIODINE AND PARTICULATE ACTIVITY MONITORING								
8. Demonstrate the appropriate use of equipment and procedures for the measurement of airborne radioiodine concentrations as low as 10^{-7} (.0000001) microcuries per cubic centimeter in the presence of noble gases and obtain samples of particulate activity in the airborne plume.	na	na	na	--	na	na	na	na
PLUME PROTECTIVE ACTION DECISION MAKING								
9. Demonstrate the capability to make timely and appropriate protective action decisions (PAD).	--	na	--	na	na	na	na	na
ALERT AND NOTIFICATION								
10. Demonstrate the capability to promptly alert and notify the public within the 10-mile plume pathway emergency planning zone (EPZ) and disseminate instructional messages to the public on the basis of decisions by appropriate State or local officials.	--	na	na	na	na	na	na	na

1992 OBJECTIVES

STATE

OBJECTIVES	SEOC	EOPS		JRMT	SFSA	IC	MRC	RAD LAB
		EOF	DA&PT COORD					
PUBLIC INSTRUCTIONS AND EMERGENCY INFORMATION								
11. Demonstrate the capability to coordinate the formulation and dissemination of accurate information and instructions to the public.	--	na	na	na	na	na	na	na
EMERGENCY INFORMATION - MEDIA								
12. Demonstrate the capability to coordinate the development and dissemination of clear, accurate, and timely information to the news media.	na	na	na	na	na	na	--	na
EMERGENCY INFORMATION - RUMOR CONTROL								
13. Demonstrate the capability to establish and operate rumor control in a coordinated and timely manner.	na	na	na	na	na	--	na	na
IMPLEMENTATION OF PROTECTIVE ACTIONS - USE OF KI FOR EMERGENCY WORKERS, INSTITUTIONALIZED INDIVIDUALS, AND THE GENERAL PUBLIC								
14. Demonstrate the capability and resources to implement potassium iodide (KI) protective actions for emergency workers, institutionalized individuals, and, if the State plan specifies, the general public.*	na	--	--	--	--	na	na	na
IMPLEMENTATION OF PROTECTIVE ACTIONS - SPECIAL POPULATIONS								
15. Demonstrate the capability and resources necessary to implement appropriate protective actions for special populations.	na	na	na	na	na	na	na	na

*The State of Kansas does not recommend the use of KI for the general public (State Plan Section 1.3.1 Tab J)

1992 OBJECTIVES

STATE

OBJECTIVES	SEOC	EOPS		JRMT	SFSA	IC	MRC	RAD LAB
		EOP	DA&PT COORD					
IMPLEMENTATION OF PROTECTIVE ACTIONS - SCHOOLS								
16. Demonstrate the capability and resources necessary to implement protective actions for school children within the plume pathway emergency planning zone (EPZ).	na	na	na	na	na	na	na	na
TRAFFIC AND ACCESS CONTROL								
17. Demonstrate the organizational capability and resources necessary to control evacuation traffic flow and to control access to evacuated and sheltered areas.	--	na	na	na	--	na	na	na
RECEPTION CENTER - MONITORING, DECONTAMINATION, AND REGISTRATION								
18. Demonstrate the adequacy of procedures, facilities, equipment, and personnel for the radiological monitoring, decontamination, and registration of evacuees.	na	na	na	na	na	na	na	na
CONGREGATE CARE								
19. Demonstrate the adequacy of facilities, equipment, supplies, personnel, and procedures for congregate care of evacuees.	na	na	na	na	na	na	na	na
MEDICAL SERVICES - TRANSPORTATION								
20. Demonstrate the adequacy of vehicles, equipment, procedures and personnel for transporting contaminated, injured or exposed individuals.	na	na	na	na	na	na	na	na

1992 OBJECTIVES

STATE

OBJECTIVES	SEOC	EOFS		JRMT	SFSA	IC	MRC	RAD LAB
		EOF	DA&FT COORD					
MEDICAL SERVICES - FACILITIES								
21. Demonstrate the adequacy of the equipment, procedures, supplies, and personnel of medical facilities responsible for treatment of contaminated, injured, or exposed individuals.	na	na	na	na	na	na	na	na
EMERGENCY WORKERS, EQUIPMENT, AND VEHICLES - MONITORING AND DECONTAMINATION								
22. Demonstrate the adequacy of procedures for the monitoring and decontamination of emergency workers, equipment, and vehicles.	na	na	na	na	na	na	na	na
SUPPLEMENTARY ASSISTANCE (FEDERAL/OTHER)								
23. Demonstrate the capability to identify the need for external assistance and to request such assistance from Federal or other support organizations.	--	na	na	na	na	na	na	na
POST-EMERGENCY SAMPLING								
24. Demonstrate the use of equipment and procedures for the collection and transportation of samples from areas that received deposition from the airborne plume.	na	na	na	--	na	na	na	na
LABORATORY OPERATIONS								
25. Demonstrate laboratory operations and procedures for measuring and analyzing samples.	na	na	na	na	na	na	na	--

1992 OBJECTIVES

STATE

OBJECTIVES	SEOC	EOFS		JRMT	SFSA	IC	MRC	RAD LAB
		EOF	DA&PT COORD					
INGESTION EXPOSURE PATHWAY - DOSE PROJECTION AND PROTECTIVE ACTION DECISION MAKING								
26. Demonstrate the capability to [project dose to the public] for the ingestion exposure pathway and to recommend protective actions.	[na] --	na	[--] --	na	na	na	na	na
INGESTION EXPOSURE PATHWAY - PROTECTIVE ACTION IMPLEMENTATION								
27. Demonstrate the capability to implement protective actions for the ingestion exposure pathway.	--	na	na	na	na	na	na	na
RECOVERY, REENTRY AND RETURN - DECISION MAKING								
28. Demonstrate the capability to develop decisions on relocation, re-entry, and return.	--	na	--	na	na	na	na	na
RELOCATION, RE-ENTRY, AND RETURN - IMPLEMENTATION								
29. Demonstrate the capability to implement appropriate measures for relocation, re-entry, and return.	--	na	na	na	--	na	na	na
CONTINUOUS, 24-HOUR STAFFING								
30. Demonstrate the capability to maintain staffing on a continuous, 24-hour basis through an actual shift change.	--	--	--	--	--	--	na	--
OFFSITE SUPPORT FOR THE EVACUATION OF ONSITE PERSONNEL								
31. Demonstrate the capability to provide offsite support for the evacuation of onsite personnel.	na	na	na	na	na	na	na	na

1992 OBJECTIVES

STATE

OBJECTIVES	SEOC	EOFS		JRMT	SFSA	IC	MRC	RAD LAB
		EOF	DA&FT COORD					
UNANNOUNCED EXERCISE OR DRILL								
32. Demonstrate the capability to carry out emergency response functions in an unannounced exercise or drill.	D	D	D	D	na	D	D	na
OFF-HOURS EXERCISE OR DRILL								
33. Demonstrate the capability to carry out emergency response functions during an off-hours exercise or drill.	D	D	D	D	na	D	D	na

1992 OBJECTIVES

LOCAL

OBJECTIVES	CEOC	JRMT	IC	MRC	CRBD	School	Amb	Hosp	Reception & Care Centers				
									Lyon	Franklin	Anderson	Allen	
MOBILIZATION OF EMERGENCY PERSONNEL													
1. Demonstrate the capability to alert and fully mobilize personnel for both emergency facilities and field operations. Demonstrate the capability to activate and staff emergency facilities for emergency operations.	--	--	--	--	--	na	na	na	--	--	--	--	
FACILITIES - EQUIPMENT, DISPLAYS, AND WORK ENVIRONMENT													
2. Demonstrate the adequacy of facilities, equipment, displays, and other materials to support emergency operations.	--	na	--	--	--	na	na	na	na	na	na	na	
DIRECTION AND CONTROL													
3. Demonstrate the capability to direct and control emergency operations.	--	na	--	--	--	na	na	na	--	--	--	--	
COMMUNICATIONS													
4. Demonstrate the ability to communicate with all appropriate emergency personnel at facilities and in the field.	--	--	--	--	--	--	--	na	--	--	--	--	
EMERGENCY WORKER EXPOSURE CONTROL													
5. Demonstrate the capability to continuously monitor and control radiation exposure to emergency workers.	--	--	na	na	--	--	--	--	--	--	--	--	

1992 OBJECTIVES

LOCAL

OBJECTIVES	CEOC	JHMT	IC	MRC	CRBD	School	Amb	Hosp	Reception & Care Centers				
									Lyon	Franklin	Anderson	Allen	
FIELD RADIOLOGICAL MONITORING - AMBIENT RADIATION MONITORING													
6. Demonstrate the appropriate use of equipment and procedures for determining field radiation measurements.	na	--	na	na	na	na	na	na	na	na	na	na	na
PLUME DOSE PROJECTION													
7. Demonstrate the capability to develop dose projections and protective action recommendations regarding evacuation and sheltering.	na	na	na	na	na	na	na	na	na	na	na	na	na
FIELD RADIOLOGICAL MONITORING - AIRBORNE RADIOIODINE AND PARTICULATE ACTIVITY MONITORING													
8. Demonstrate the appropriate use of equipment and procedures for the measurement of airborne radioiodine concentrations as low as 10 E-7 (.0000001) microcuries per cubic centimeter in the presence of noble gases and obtain samples of particulate activity in the airborne plume.	na	--	na	na	na	na	na	na	na	na	na	na	na
PLUME PROTECTIVE ACTION DECISION MAKING													
9. Demonstrate the capability to make timely and appropriate protective action decisions (PAD).	na	na	na	na	na	na	na	na	na	na	na	na	na
ALERT AND NOTIFICATION													
10. Demonstrate the capability to promptly alert and notify the public within the 10-mile plume pathway emergency planning zone (EPZ) and disseminate instructional messages to the public on the basis of decisions by appropriate State or local officials.	--	na	na	na	na	na	na	na	na	na	na	na	na

1992 OBJECTIVES

LOCAL

OBJECTIVES	CEOC	JRMT	IC	MRC	CRBD	School	Amb	Hosp	Reception & Care Centers				
									Lyon	Franklin	L. Jerson	Allen	
PUBLIC INSTRUCTIONS AND EMERGENCY INFORMATION													
11. Demonstrate the capability to coordinate the formulation and dissemination of accurate information and instructions to the public.	--	na	na	na	na	na	na	na	na	na	na	na	na
EMERGENCY INFORMATION - MEDIA													
12. Demonstrate the capability to coordinate the development and dissemination of clear, accurate, and timely information to the news media.	na	na	na	--	na	na	na	na	na	na	na	na	na
EMERGENCY INFORMATION - RUMOR CONTROL													
13. Demonstrate the capability to establish and operate rumor control in a coordinated and timely manner.	na	na	--	na	na	na	na	na	na	na	na	na	na
IMPLEMENTATION OF PROTECTIVE ACTIONS - USE OF KI FOR EMERGENCY WORKERS, INSTITUTIONALIZED INDIVIDUALS, AND THE GENERAL PUBLIC													
14. Demonstrate the capability and resources to implement potassium iodide (KI) protective actions for emergency workers, institutionalized individuals, and, if the State plan specifies, the general public.*	--	--	na	na	--	--	--	na	na	na	na	na	na
IMPLEMENTATION OF PROTECTIVE ACTIONS - SPECIAL POPULATIONS													
15. Demonstrate the capability and resources necessary to implement appropriate protective actions for special populations.	--	na	na	na	--	na	na	na	na	na	na	na	na

*The State of Kansas does not recommend the use of KI for the general public (State Plan Section 1.3.1 Tab J)

1992 OBJECTIVES

LOCAL

OBJECTIVES	CEOC	JRMT	IC	MRC	CRBD	School	Amb	Hosp	Reception & Care Centers				
									Lyon	Franklin	Anderson	Allen	
IMPLEMENTATION OF PROTECTIVE ACTIONS - SCHOOLS													
16. Demonstrate the capability and resources necessary to implement protective actions for school children within the plume pathway emergency planning zone (EPZ).	--	na	na	na	na	--	na	na	na	na	na	na	na
TRAFFIC AND ACCESS CONTROL													
17. Demonstrate the organizational capability and resources necessary to control evacuation traffic flow and to control access to evacuated and sheltered areas.	--	na	na	na	--	na	na	na	na	na	na	na	na
RECEPTION CENTER - MONITORING, DECONTAMINATION, AND REGISTRATION													
18. Demonstrate the adequacy of procedures, facilities, equipment, and personnel for the radiological monitoring, decontamination, and registration of evacuees.	na	na	na	na	na	na	na	na	--	--	--	--	--
CONGREGATE CARE													
19. Demonstrate the adequacy of facilities, equipment, supplies, personnel, and procedures for congregate care of evacuees.	na	na	na	na	na	na	na	na	--	--	--	--	--
MEDICAL SERVICES - TRANSPORTATION													
20. Demonstrate the adequacy of vehicles, equipment, procedures and personnel for transporting contaminated, injured or exposed individuals.	na	na	na	na	na	na	--	na	na	na	na	na	na

1992 OBJECTIVES

LOCAL

OBJECTIVES	CEOC	JRMT	IC	MRC	CRBD	School	Amb	Hosp	Reception & Care Centers				
									Lyon	Franklin	Anderson	Allen	
MEDICAL SERVICES - FACILITIES													
21. Demonstrate the adequacy of the equipment, procedures, supplies, and personnel of medical facilities responsible for treatment of contaminated, injured, or exposed individuals.	na	na	na	na	na	na	na	--	na	na	na	na	na
EMERGENCY WORKERS, EQUIPMENT, AND VEHICLES - MONITORING AND DECONTAMINATION													
22. Demonstrate the adequacy of procedures for the monitoring and decontamination of emergency workers, equipment, and vehicles.	na	na	na	na	--	na	na	na	--	--	--	--	--
SUPPLEMENTARY ASSISTANCE (FEDERAL/OTHER)													
23. Demonstrate the capability to identify the need for external assistance and to request such assistance from Federal or other support organizations.	na	na	na	na	na	na	na	na	na	na	na	na	na
POST-EMERGENCY SAMPLING													
24. Demonstrate the use of equipment and procedures for the collection and transportation of samples from areas that received deposition from the airborne plume.	na	na	na	na	na	na	na	na	na	na	na	na	na
LABORATORY OPERATIONS													
25. Demonstrate laboratory operations and procedures for measuring and analyzing samples.	na	na	na	na	na	na	na	na	na	na	na	na	na

1992 OBJECTIVES

LOCAL

OBJECTIVES	CEOC	JRMT	IC	MRC	CRBD	School	Amb	Hosp	Reception & Care Centers			
									Lyon	Franklin	Anderson	Allen
INGESTION EXPOSURE PATHWAY - DOSE PROJECTION AND PROTECTIVE ACTION DECISION MAKING												
26. Demonstrate the capability [to project dose to the public] for the ingestion exposure pathway and to recommend protective actions.	[na] --	na	na	na	na	na	na	na	na	na	na	na
INGESTION EXPOSURE PATHWAY - PROTECTIVE ACTION IMPLEMENTATION												
27. Demonstrate the capability to implement protective actions for the ingestion exposure pathway.	na	na	na	na	na	na	na	na	na	na	na	na
RECOVERY, REENTRY AND RETURN - DECISION MAKING												
28. Demonstrate the capability to develop decisions on relocation, re-entry, and return.	na	na	na	na	na	na	na	na	na	na	na	na
RELOCATION, RE-ENTRY, AND RETURN - IMPLEMENTATION												
29. Demonstrate the capability to implement appropriate measures for relocation, re-entry, and return.	--	na	na	na	na	na	na	na	na	na	na	na
CONTINUOUS, 24-HOUR STAFFING												
30. Demonstrate the capability to maintain staffing on a continuous, 24-hour basis through an actual shift change.	--	--	--	--	--	na	na	na	--	--	--	--
OFFSITE SUPPORT FOR THE EVACUATION OF ONSITE PERSONNEL												
31. Demonstrate the capability to provide offsite support for the evacuation of onsite personnel.	na	na	na	na	na	na	na	na	na	na	na	na

1992 OBJECTIVES

LOCAL

OBJECTIVES	CEOC	JRMT	IC	MRC	CRBD	School	Amb	Hosp	Reception & Care Centers				
									Lyon	Franklin	Anderson	Allen	
UNANNOUNCED EXERCISE OR DRILL													
32. Demonstrate the capability to carry out emergency response functions in an unannounced exercise or drill.	D	D	D	D	na	na	na	na	na	na	na	na	na
OFF-HOURS EXERCISE OR DRILL													
33. Demonstrate the capability to carry out emergency response functions during an off-hours exercise or drill.	D	D	D	D	na	na	na	na	na	na	na	na	na

GUIDELINES

These guidelines define the participants' extent of play in demonstrating the previously listed objectives.

- A. The Exercise will be conducted the week of August 30, 1992.
- B. Participants will not have prior knowledge of the scenario, date, or time of the Exercise. However, they will receive a briefing on the guidelines for the Exercise.
- C. There will be pre-staging of licensee participants in the Wolf Creek Generating Station (WCGS) Simulator. A crew of operators, a Health Physics technician, and a Chemistry technician will be scheduled each evening during the week of August 30, to avoid having the date known in advance. Station operators will also be pre-staged in the computer room next to the actual Control Room on site.
- D. The following emergency response facilities/functions will be activated during the Exercise.
 - 1. Licensee - Wolf Creek Nuclear Operating Corp.
 - a. Control Room (CR)
 - b. Technical Support Center (TSC)
 - c. Operations Support Center (OSC)
 - d. Emergency Repair/Damage Control (ERDC) Teams
 - e. Onsite Survey Teams (OSTs), if necessary
 - f. Security
 - g. Offsite Monitoring Teams (OMTs)
 - h. Emergency Operations Facility (EOF)
 - 2. State - Kansas

 - a. Emergency Operations Center (SEOC) Key Personnel
 - 3. Local

 - a. Coffey County Emergency Operations Center (CEOC) Key Personnel
- E. Extent of participation for State and local groups:

The State and local EOCs themselves will not be activated. Only a few key players from each group will go to their respective EOC, where they will demonstrate their call down procedures. Agencies notified by phone will only give their estimated time of arrival, but will not actually be required to come to their EOC.
- F. Notifications should be made to both the State and local groups initially and until the key personnel declare that they are deactivating. The notifications to the local group (Coffey County Sheriff's dispatchers) may continue throughout the Exercise, unless the dispatcher requests that the notifications stop. The State should not be notified at all after deactivation.

GUIDELINES

- G. The CR will be simulated from the plant simulator. A full shift complement of operators will staff the simulator.
- H. All communications involving the CR will be duplicated in the simulator, except for the Emergency Notification System (ENS) dedicated line and the State/County radios. A commercial telephone will be used in the simulator for the ENS.
- I. Fire protection panels (KC008) are not duplicated on the plant simulator and will be simulated.
- J. Operational and meteorological initial conditions will be established prior to the start of the exercise and will be distributed to those players who would, under actual conditions, be aware of this information.
- K. Participation by onsite personnel directly involved with emergency response shall be carried out to the fullest extent possible without affecting plant operations or plant safety.
- L. The phrase, "This is a drill", will begin and end all radio and telephone transmissions performed in response to scenario events.

CORRECTIVE ACTIONS FOR NRC WEAKNESSES PREVIOUSLY IDENTIFIED

- 1) Weakness 482/9029-01: licensee did not augment the Control Room staff when the BOP operator was called away to act as fire brigade leader. This will be addressed by Message Number 004.
- 2) Inspector Followup Item 482/9029-02: inadequate logkeeping in the Control Room. This will be addressed by the demonstration of Objective I(4). This item was a Followup Item from 1990.
- 3) Weakness 482/9119-01: manual transmission and tracking of critical plant data for the TSC was identified as an exercise weakness. This will be addressed by Message Number 009.
- 4) Weakness 482/9119-02: TSC management applied a nonconservative and unanticipatory approach to important technical assessments performed by TSC staff. This will be addressed by the demonstration of Objective I(1).
- 5) Weakness 482/9119-03: failure of the licensee to establish and maintain habitability in the emergency response facilities. This will be addressed by the demonstration of Objective I(5).
- 6) Weakness 482/9119-04: poor coordination and control of field monitoring teams. This will be addressed by the demonstration of Objective I(1) and the use of a wind direction and a stability class change which will force the Dose Assessment Coordinator (TSC) and/or the Radiological Assessment Supervisor (EOF) to redirect the field teams in order to evaluate any possible offsite release.

SECTION 3.0

SCENARIO AND TIMELINE

<u>Subsections</u>	<u>Page</u>
SCENARIO	
Initial Conditions	3.2
Narrative Summary	3.4
TIMELINE	
Summary	3.6
Chart	3.8

SCENARIO

A summary of the scenario events is provided in the following subsection.

Operational events will be conducted as written. Other events may vary from those written according to the actions of the players.

INITIAL CONDITIONS

(Page 1 of 2)

Operations

The plant has been operating at 100% full power for the last 10 days on the sixth cycle of a beginning of life (BOL) core. The WCGS electrical power system is in a very high demand situation. Plant operation is normal; however, Coffey County is under a tornado watch until midnight.

Maintenance work in progress is as follows:

1. Diesel generator NEO1 has been tagged out for scheduled maintenance.
2. PZR PORV Block Valve (BB HV-8000B) is closed in accordance with Technical Specification 3.4.4 due to seat leakage on BB PCV-456A.
3. "B" Cmt Spray Pump (PEN01B) has been out-of-service for the last six hours for routine motor preventive maintenance. Technical Specification 3.6.2 (72 hour) has been entered. Restoration expected within the next eight hours.
4. Positive Displacement Charging Pump (PBG04) is out-of-service due to excessive leakage. Restoration not expected for the next three days.
5. "A" Emergency Exhaust Fan (CGG02A) has been out-of-service for the last 23 hours to replace the charcoal in the "A" Emergency Filter Adsorber Unit. The charcoal has been removed. New charcoal installation has been scheduled to start in about one hour.
6. The PZR/RCS Liquid Sample Outer Cmt Isolation Valve (SJ HV-127) is out-of-service for replacement of its solenoid actuator. The valve is closed with power removed in accordance with Technical Specification 3.6.3.
7. "A" Chilled Water Cooler (SGB01A) is out-of-service for tube inspection.

Meteorological

It is an overcast and humid day with winds out of the west-northwest at 10 mph. A tornado watch is in effect. The ambient temperature is 70°F. Last night, 0.10" of precipitation was recorded.

INITIAL CONDITIONS

(Page 2 of 2)

Radiochemistry

Following is the latest isotopic analysis performed on the reactor coolant system (RCS). The analysis was performed at 0730 the day of the Exercise.

<u>Nuclide</u>	<u>Activity (uCi/cc)</u>
Kr-85m	4.4E-02
Kr-87	4.3E-02
Kr-88	8.6E-02
Xe-133m	2.6E-02
Xe-133	1.3E+00
Xe-135m	7.7E-02
Xe-135	2.4E-01
Xe-138	5.7E-02

Total Noble Gas = 1.87E+00

I-131	1.4E-02
I-132	7.1E-02
I-133	4.5E-02
I-134	8.3E-02
I-135	6.1E-02

Total Iodines = 2.74E-01

Cs-134	1.6E-03
Cs-137	8.4E-04
Cs-138	1.2E-01

Total
Particulate = 1.22E-01

Gross Total
Activity = 2.27E+00

RCS I-131 EQUIV. IS 3.50E-02

SCENARIO

NARRATIVE SUMMARY

The plant has been operating at 100% full power for the last 10 days on the sixth cycle of a beginning of life (BOL) core. The WCGS electrical power system is in a very high demand situation. Plant operation is normal; however, Coffey County is under a tornado watch until midnight.

Several maintenance projects are in progress. They involve the following pieces of equipment:

- 1) NEO1
- 2) PZR PORV Block Valve (BB HV-8000B)
- 3) "B" Ctmt Spray Pump (PEN01B)
- 4) PDF (PBG04)
- 5) "A" Emergency Exhaust Fan (CGG02A)
- 6) PZR/RCS Liquid Sample Outer Ctmt Isolation Valve (SJ HV-127)
- 7) "A" Chilled Water Cooler (SGB01A)

See the Initial Conditions for more detail.

At 1600, the Control Room night shift crew relieves the shift crew. Plant operations are normal, despite the tornado watch. At approximately 10 minutes after the beginning of the Exercise, a 350 gpm LOCA occurs. The exact location of the LOCA is unidentified. Ten minutes after the LOCA, the reactor trips and safety injection occurs.

The Shift Supervisor should declare an **ALERT** based on the loss of the reactor coolant system boundary. Offsite notifications are made by the Shift Clerk per EPP 01-3.1. Site personnel are notified of the situation through the activation of the plant emergency alarm and the reading of the message found in EPP 01-2.2. Because the emergency occurred during off-hours, callout of TSC/OSC and some EOF personnel begins. Accountability of personnel inside the Protected Area Boundary (PAB) also occurs at this time.

Approximately 60 minutes after the Alert has been declared, the TSC is activated. Personnel have also begun to staff the OSC and the EOF. The County and State will declare their EOCs activated, and then discontinue their participation.

At one hour and forty minutes into the Exercise, two lightning strikes will occur almost simultaneously. One will damage the main feeder bus between transformers 4 and 5 in the switchyard; however, no fire will result. The other lightning strike will drop the line to the startup transformer outside the switchyard. A loss of offsite power results from the damage done by the lightning.

Emergency diesel generator NE02 has been running since 10 minutes after the Exercise began for routine testing. The lightning strike takes away the running Essential Service Water (ESW) pump resulting in loss of cooling water to the B-train emergency diesel generator heat exchangers. The generator jacket water system (engine coolant) overheats, and NE02 stops running. A loss of offsite power results, with the following ramifications for the facilities inside the protected area:

- 1) TWO WAY FM RADIO
 - AT MET TOWER - BATTERY BACKUP - DWG E-OMCS16
 - AT CONTROL BLDG - BATTERY BACKUP - DWG E-OMCS14
 - AT SECURITY - DIESEL GENERATOR - HE-CQXXX
- 2) MICROWAVE
 - AT MET TOWER - BATTERY BACKUP - KG&E CONTROLLED
 - AT CBX (ADMIN BLDG) - BATTERY BACKUP - DWG E-0082
- 3) FIBER OPTICS
 - AT ADMIN BLDG/EOF - BATTERY BACKUP - DWG E-0082 AND 8025-J-00-FQ-01
 - AT ADMIN BLDG/BURLINGTON - BATTERY BACKUP - DWG E-0082
- 4) COPPER TELEPHONE CABLE
 - ADMIN BLDG (NRC ENS) - BATTERY BACKUP - DWG E-0082
- 5) ONSITE TELEPHONES
 - 8000 SERIES NUMBERS - NO BACKUP - OFF
 - 4000 SERIES NUMBERS - BATTERY BACKUP - DWG E-0082
- 6) GAITRONICS AND MAINTENANCE JACKS
 - OFF UNTIL DIESEL GENERATOR (NE02) RESTARTS - DWGS E-11005,
E-03QF01, E-03PN01, E-048-0042B
- 7) POWER TO THE TSC
 - PER DWG'S A-KAT-14 A-KAT-15, THERE IS POWER TO ALL RECEPTACLES WHEN
EMERGENCY DIESEL GENERATOR IS RUNNING

The turbine-driven auxiliary feedwater pump is also inoperable due to tripping on overspeed. A **SITE AREA EMERGENCY** should be declared based on the loss of offsite power and loss of all onsite AC power (more than momentary).

An Exclusion Area evacuation should be simulated. Offsite notifications should be completed. Callout of remaining EOF personnel begins. Protective action recommendations (PARs) should include evacuating John Redmond Reservoir (JRR).

A team is dispatched to repair diesel generator NE02. The generator is repaired and power is restored approximately 2 1/2 hours into the emergency.

The EOF is activated and assumes command and control of the emergency, approximately 90 minutes after the declaration of the Site Area Emergency.

At about five hours after the initial LOCA, conditions are stabilized. The 1992 Exercise will terminate at this point.

TIMELINE

SUMMARY*

<u>TIME</u>	<u>PLANT EVENT SUMMARY</u>
H+00:00	Exercise begins. Initial conditions given to the Control Room (Simulator) crew.
H+00:10	350 gpm LOCA occurs.
H+00:20	Manual reactor trip; safety injection initiated. Enter EMG E-0.
H+00:23	Transition to EMG E-1.
H+00:24	Transition to EMG ES-03.
H+00:25	<ul style="list-style-type: none">- ALERT should be declared.- Callout of TSC, OSC, and some EOF personnel.- Walkdowns and accountability begin.
H+00:27	Reenter EMG E-1 due to pressure decreasing.
H+00:32	Commence RCS depressurization to refill pressurizer.
H+00:40	Stop RCS depressurization at 18% pressurizer level.
H+01:40	<ul style="list-style-type: none">- Lost offsite power due to simultaneous lightning strikes.- Diesel generator NE02 started; NB02 energized.
H+01:42	Turbine-driven auxiliary feedwater pump not running.
H+01:45	Diesel generator NE02 fails. Enter EMG C-0.
H+01:50	SITE AREA EMERGENCY should be declared. Exclusion area evacuation (simulated) should begin. JRR evacuation PAR should be given.
H+01:53	SG depressurization begins per EMG C-0.
H+02:45	NE02 repaired and re-energized. Stop SG depressurization. Power restored.

* Times are only approximations based on previous simulator runs.

H+02:49	Transition to EMG CS-02.
H+02:50	Transition to EMG E-1
H+03:07	Increase auxiliary feedwater flow to max. Commence depressurizing SG "C" to \leq RCS pressure.
H+03:20	EOF activated.
H+05:00	Exercise terminated.

TIMELINE

		(H+00:00)	<	Exercise begins. Initial conditions provided to key players.
350 gpm LOCA	>	(H+00:10)		
		(H+00:20)	<	- Reactor trip - Safety injection
ALERT should be declared based on loss of PCS barrier. Walkdowns and accountability begin.	>	(H+00:25)	<	Callout of ERO personnel begins. (TSC, OSC, some EOF)
		(H+01:25)	<	TSC/OSC activated.
Two lightning strikes	>	(H+01:40)		
- Main feeder bus between transformers 4 & 5 in switchyard damaged				
- Line dropped to startup transformer outside switchyard				
- Loss of offsite power				
		(H+01:45)	<	Diesel generator NE02 fails, causing station blackout
SITE AREA EMERGENCY should be declared based on loss of RCS barrier and station blackout.	>	(H+01:50)	<	Callout of remaining ERO personnel begins
		(H+02:45)	<	Diesel generator NE02 repaired; power restored
EOF activated.	>	(H+03:20)		
		(H+05:00)	<	Exercise termination

SECTION 4.0

CONTROLLER MESSAGES

<u>Subsections</u>	<u>Page</u>
ASSIGNMENTS	4.1
MESSAGES	4.2
SCENARIO	4.0-SC-01
MINI-SCENARIOS	4.0-MINI-01

ASSIGNMENTS

SCENARIO

<u>Message #</u>	<u>Time</u>	<u>For</u>	<u>From</u>	<u>Location</u>	<u>Assignment</u>
001	H+00:00	SS	CR Lead Controller	CR	_____
002c	H+00:10	SS	CR Lead Controller	CR	_____
003c	H+00:25	SS	CR Lead Controller	CR	_____
004	H+00:45	SS	CR Lead Controller	CR	_____
005c	H+01:40	SS	CR Lead Controller	CR	_____
006c	H+01:42	SS	CR Lead Controller	CR	_____
007c	H+01:43	SS	CR Lead Controller	CR	_____
008c	H+01:45	SS	CR Lead Controller	CR	_____
009c	H+01:50	DED	TSC Lead Controller	CR	_____
010	H+01:55	All Players	CR/TSC/EOF Lead Controllers	CR/TSC EOF	_____
011	H+02:00	Operator	Controller	CR	_____
012c	H+02:30	SS	CR Lead Controller	CR	_____
013	H+02:55	All Players	CR/TSC/EOF Lead Controllers	CR/TSC EOF	_____
014	H+05:00	All Players	Facility Controllers	--	_____

MINI-SCENARIOS

1	H+00:45	--	111 Reactor Operator	_____
2	H+01:40	--	Damaged Main Feeder Between Transformers	_____
3	H+01:41	--	Dropped Line to Startup Transformer	_____
4	H+01:42	--	Auxiliary Feedwater Pump Loss	_____
5	H+01:45	--	NE02 Loss	_____
6	H+01:55	--	NPIS Computer Failure	_____
7	H+00:00	--	NE01 Out-of-Service Maintenance	_____

MESSAGES

A complete listing of messages included in this scenario is provided in the following subsection. Information necessary in making and tracking message assignments is provided for each message.

The list is categorized by message type, recipient or facility, and finally by message number. A space for assigning controllers responsible for the message is included.

The scenario messages are provided to instigate actions at various facilities. More detail for particular maintenance activities is provided in the mini-scenarios.

THIS IS A DRILL

DO NOT initiate actions affecting normal plant operations.

TO: Shift Supervisor
FROM: CR Lead Controller
LOCATION: Control Room
TIME: (H-00:10)
MESSAGE: Initial Conditions are as follows:

Operationally

See attached forms.

Radiochemically

Total activity = $2.27\text{E}+00$ uCi/cc.

Meteorologically

It is an overcast and humid day with winds out of the west-northwest at 10 mph. A tornado watch is in effect. The ambient temperature is 70°F. Last night, 0.10" of precipitation was recorded.

Additional information such as work orders in progress will also be provided at this time.

THIS IS A DRILL

THIS IS A DRILL

DO NOT initiate actions affecting normal plant operations.

TO: Shift Supervisor
FROM: CR Lead Controller
LOCATION: Control Room
TIME: (H+00:10)
MESSAGE: A 350 gallon per minute LOCA occurs. The reactor and turbine trip.

NOTE: This message is only provided if the simulator fails.

THIS IS A DRILL

THIS IS A DRILL

DO NOT initiate actions affecting normal plant operations.

TO: Shift Supervisor

FROM: CR Lead Controller

LOCATION: Control Room

TIME: (H+00:25)

MESSAGE: An alert should have been declared based on the loss of one
fission product barrier (RCS breach).

NOTE: DO NOT pass this message without the consent of the Drill
Lead Controller.

THIS IS A DRILL

THIS IS A DRILL

DO NOT initiate actions affecting normal plant operations.

TO: Shift Supervisor

FROM: CR Lead Controller

LOCATION: Control Room

TIME: (H+00:45)

MESSAGE: The Reactor Operator has complained of having a bad case of the flu. He has left his post and has gone to the CR bathroom to vomit. He says he is no longer capable of manning his station and requests to be relieved.

NOTE: Direct the person filling the Reactor Operator position to leave the simulator and return to his normal work duties -- not related to the E-Plan Exercise. The Shift Supervisor should call out a replacement within 2 hours per Technical Specification 6.2.2, Table 6.2-1. See mini-scenario #1.

THIS IS A DRILL

THIS IS A DRILL

DO NOT initiate actions affecting normal plant operations.

TO: Shift Supervisor

FROM: CR Lead Controller

LOCATION: Control Room

TIME: (H+01:40)

MESSAGE: Two lightning strikes occur almost simultaneously. A loss of offsite power occurs and diesel generator NEO2 is used to supply backup power.

NOTE: This message is only provided if the simulator fails. See mini-scenarios #2 and #3.

THIS IS A DRILL

THIS IS A DRILL

DO NOT initiate actions affecting normal plant operations.

TO: Shift Supervisor
FROM: CR Lead Controller
LOCATION: Control Room
TIME: (H+01:42)
MESSAGE: The turbine-driven auxiliary feedwater pump is not running.

NOTE: This message is only provided if the simulator fails. See
mini-scenario #5.

THIS IS A DRILL

THIS IS A DRILL

DO NOT initiate actions affecting normal plant operations.

TO: Shift Supervisor

FROM: CR Lead Controller

LOCATION: Control Room

TIME: (H+01:03)

MESSAGE: A "DG 2 Trouble" alarm is received.

(The Control Room should send an operator to the Engine
Annunciator Panel in the Diesel room.)

NOTE: This message to be provided only if the simulator fails.

THIS IS A DRILL

THIS IS A DRILL

DO NOT initiate actions affecting normal plant operations.

TO: Shift Supervisor

FROM: CR Lead Controller

LOCATION: Control Room

TIME: (H+01:45)

MESSAGE: Diesel generator NEO2 is no longer running. Bus NEO2 is no longer energized.

NOTE: This message to be provided only if the simulator fails.

THIS IS A DRILL

THIS IS A DRI ,

DO NOT initiate actions affecting normal plant operations.

TO: DED
FROM: TSC Lead Controller
LOCATION: TSC
TIME: (H+01:50)
MESSAGE: A Site Area Emergency should be declared based on a loss of all
offsite power and a loss of onsite AC power (more than
momentary).

NOTE: Do not pass this message until instructed by the Lead
Controller.

THIS IS A DRILL

THIS IS A DRILL

DO NOT initiate actions affecting normal plant operations.

TO: All players in CR, TSC, EOF
FROM: CR/TSC/EOF Lead Controller
LOCATION: CR/TSC/EOF
TIME: (H+01:55)
MESSAGE: Due to unknown circumstances that are not pertinent to the emergency, the NPIS computer screens have gone blank. You no longer have the capability to receive data from NPIS. This situation will continue until further notice from the Exercise controllers.

- NOTE: 1) This message is intended to have facility players practice the manual transmission and tracking of data to close out an NRC weakness.
- 2) Certain screens must be left operable in the Simulator. The data provided by these screens is accessible in the Control Room through means other than NPIS; but the Simulator can not access this data except through NPIS. The applicable screens are:
- Area radiation monitors
 - Core exit thermocouples
- 3) See mini-scenario #6.

THIS IS A DRILL

THIS IS A DRILL

DO NOT initiate actions affecting normal plant operations.

TO: Operator dispatched to check Diesel Room annunciator panel
FROM: Controller from Computer Room
LOCATION: Diesel Room
TIME: "H+02:00 after dispatch when annunciator panel in Diesel Room is reached.
MESSAGE: The alarm "JW Temp High" is indicated on the annunciator panel.

NOTE: The operator should relay this message to the Control Room, who should ask for an ERDC team to investigate. See Mini-scenario #4.

THIS IS A DRILL

THIS IS A DRILL

DO NOT initiate actions affecting normal plant operations.

TO: Shift Supervisor
FROM: CR Lead Controller
LOCATION: CR
TIME: (H+02:45)
MESSAGE: Diesel generator NE02 has been repaired and power restored.

NOTE: This message is only provided if the ERDC teams do not relay the above information to the Control Room after affecting repairs.

THIS IS A DRILL

THIS IS A DRILL

DO NOT initiate actions affecting normal plant operations.

TO: All Players in CR, TSC, EOF
FROM: CR/TSC/EOF Lead Controllers
LOCATION: CR/TSC/EOF
TIME: (H+02:55)
MESSAGE: NPIS is now operable and usable.

THIS IS A DRILL

THIS IS A DRILL

DO NOT initiate actions affecting normal plant operations.

TO: All Facilities

FROM: Facility Lead Controllers

TIME: (H+05:00)

MESSAGE: The Exercise activities have been terminated. Collect all logs, notes, etc. and give them to the Facility Lead Evaluator.

THIS IS A DRILL

MESSAGES

MINI-SCENARIOS

The following mini-scenarios provide instructions and supplementary information for controllers in the Control Room and with the Emergency Repair and Damage Control (ERDC) Teams.

The information provided in these mini-scenarios assumes that players will take certain actions in response to the Exercise scenario. Controllers must be cognizant of the actions of the players to which they are assigned. The information provided in this section does not preclude the possibility that controllers will be required to provide additional information to the players based on player actions.

Control Room Mini Scenario #1

Time: H+00:45

THE REACTOR OPERATOR BECOMES ILL AND MUST BE REPLACED.

Task:

The Shift Supervisor should arrange to have the sick operator replaced in order to maintain needed crew complement.

Completion:

The task is complete when the ill Reactor Operator is replaced. The task may be completed at any time, but the sick operator must be relieved within two hours in order to satisfy the requirement of Technical Specification Section 6.2.2, Table 6.2-1.

Maintenance Mini Scenario #2

Time: H+01:40

DAMAGED TRANSFORMERS IN SWITCHYARD

Tasks:

During a thunderstorm, lightning strikes the bus between the #4 and #5 transformers on the east side of the switchyard. The damage caused by the lightning strike causes the bus between the transformers to contact the ground potential support holding the bus. The ground contact causes the #4 and #5 transformers to be disabled.

Controller actions:

If a team is dispatched to investigate the damage, View "B" (long-range view), and View "C" (short-range view) are to be shown to the players. These diagrams are in a separate controller's packet.

Expected player actions:

- 1) Using a hack saw, it would be possible with effort to isolate and separate the two transformers' bus connections and re-energize the #4 transformer via the Athens or the REC outside lines. (The after hours nighttime schedule for the Field Exercise may create delays and result in this action not being taken.)
- 2) Evaluate the grounded bus as too extensive and contact KG&E line crews for support.

Completion:

This task could be completed in one hour after discovery of condition. It may be completed anytime during the Exercise.

Caution: All E-Plan drill actions involving work in the switchyard should be simulated from outside the switchyard proper.

Maintenance Mini Scenario #3

Time: H+01:41

DROPPED LINE OUTSIDE SWITCHYARD

Tasks:

During a thunderstorm, lightning strikes the line tower just outside the switchyard. The strike damages the tower such that the phase (two lines) on the east side of the tower drop. The contact with earth causes a short disabling the power feed to XMR01 startup transformer.

Controller actions:

If a team is dispatched to investigate the damage, View "A" is to be shown to the players depicting the line drop. The diagram is in a separate controller's packet.

Expected player actions:

Report the line drop. Very little to be done other than call a line crew from KG&E.

Completion:

This task will require 5 hours to complete, and may be completed anytime during the Exercise.

Caution: All E-Plan drill actions involving the switchyard should be simulated and can be evaluated from outside the switchyard proper.

Maintenance Mini Scenario #4

Time: H+01:42

TURBINE DRIVEN AUXILIARY FEEDWATER PUMP LOSS

Tasks:

The turbine driven auxiliary feedwater pump will have tripped due to overspeed. The Emergency Connecting Rod is sheared at the point of smallest diameter at the end of the threads (see diagram in separate controller's packet). The mechanical overspeed trip will have to be manually reset.

The Emergency Connecting Rod is not available in the Warehouse, so the rod will either have to be welded for repair or expected from another source.

NOTE: The following I&C work may be in parallel with Maintenance workers repairing/replacing the Emergency Connecting Rod. If Turbine startup is attempted before the EG-M repair, the turbine will continue to trip on overspeed.

I&C may be called to troubleshoot the Woodward governor control system. This is a difficult system to troubleshoot and would possibly involve several hours of reference material research and actual testing in the plant. For the purposes of this Exercise scenario, the EG-M amplifier board output will prove to be unstable and therefore, this amplifier board should be replaced. The failed amplifier board may be found by following the setup and calibration section (section 6) of M021-00086. Section 6 will then give the instructions for calibrating the EG-M.

Completion:

This task will take approximately 12 hours and so will not be completed in time to return the turbine driven auxiliary feedwater pump to service during the Exercise.

Maintenance Mini Scenario #5

Time: H+01:45

EMERGENCY DIESEL GENERATOR (EDG) NEO2

Tasks:

NEO2 has been running since H+00:10. At H+01:40, the lightning strike takes away the running ESW pump, resulting in loss of cooling water flow to the B-train EDG Heat Exchangers. This causes the jacket water system (engine coolant) to overheat. The diesel engine (KKJ01B) shuts down on High Jacket Water (JW) Temperature trip, resulting in NEO2 output breaker opening on under-frequency.

The Control Room received "DG 2 Trouble" alarm when the engine shuts down. When the operators see the engine annunciator panel in the Diesel Room, they will see the alarm "JW Temp High."

This alarm should key the Control Room to dispatch Mechanical Maintenance (MMA) to investigate.

Expected Player Actions:

The repair team assessment should determine that at least two jacket water temperature switches (KJ TSH 0159 A, B, C, D) have closed satisfying 2 of 4 trip logic. This information should be given to the TSC Engineering Team.

NOTE: The 2 of 4 logic may not be switches A & B. Any other combination will cause the trip.

The team should arrive at the conclusion that the thermostatic elements ("power pills") in KJTCV0160 (jacket water thermostatic control valve) should be replaced. The correct parts and replacement procedure should be identified.

Completion:

This task will require about 1 hour to complete; NEO2 should be given back to the plant by H+02:45.

Maintenance Mini-Scenario #6

Time: H+01:55

ACTIVITIES ASSOCIATED WITH NPIS COMPUTER FAILURE

Tasks:

The plant computer system has stopped updating. Computer screens will lock-up on the last display and the upper right hand corner will have a flashing message ("Time not Updating").

Repair team investigation should find the top LAN-Bridge in computer room cabinet RJ148 has failed. Inspection of the LAN-Bridge will show that all LEDs on back of the unit are extinguished and also the white circuit breaker button is "out." The circuit breaker will not reset and the only possible repair is either complete LAN-Bridge replacement or module repair/replacement within the unit.

Completion:

This task would take several hours to complete; however, NPIS will be returned as operable by H+02:55. The reason for losing NPIS is to demonstrate a 1991 Exercise weakness for manual updating and tracking of critical plant parameters. Message #13 has been inserted in the controller messages to ensure the return of NPIS. The ERDC team performing this task should follow through all needed repair steps and simulate reporting repairs back to the Control Room.

Maintenance Mini Scenario #7

Time: Duration of Exercise

NE01 REPAIRS

Tasks:

NE01 has been tagged out (inoperable) for a scheduled maintenance outage. At H+00:00, Mechanical Maintenance (MMA) is finishing cleaning of the Lube Oil Strainer. The status of the machine is:

Clearance is still in effect with:

- a) Jacket Water System (engine coolant) drained
- b) Starting air isolation valves shut
- c) Starting air reservoirs depressurized
- d) Barring device engaged
- e) NE01 output breaker tagged in "open" position
- f) Lube oil and jacket water cooled down.

Completion:

In this state, restoration of NE01 would require approximately:

- a) 2-3 hours to refill the Jacket Water System, lift the clearance and perform valve line-ups.
- b) 30-45 minutes to re-charge the starting air reservoirs
- c) 4 hours to heat up the jacket water and lube oil systems

SECTION 5.0

PLANT DATA

<u>Subsections</u>	<u>Page</u>
PLANT PARAMETERS	5.1
PLANT GRAPHS	5.18
CORE DAMAGE ASSESSMENT	5.41

PLANT PARAMETERS

Time-related plant parameters are provided in the following subsection. The data includes parameters for primary and secondary systems that may or may not have an impact on this scenario. The following subsection, "Plant Graphs" depicts the same data in graph form.

These parameters may be used as a source of data for control room (CR) operators by the CR Lead Controller, in case of simulator failure.

PLANT PARAMETERS

Relative Time (H+00:00-00:10)	Plant Values	Loop 1 or A Values	Loop 2 or B Values	Loop 3 or C Values	Loop 4 or D Values
<u>PRIMARY SYSTEM</u>					
Reactor Power (%)	100	-	-	-	-
Reactor Vessel Level (%) - Natural Circulation	112	-	-	-	-
Reactor Coolant System (RCS) Pressure (psig)	2294	-	-	-	-
Pressurizer Level (%)	61	-	-	-	-
Reactor Coolant System Temp. (°F)					
T _C (wide-range)	-	559	559	559	559
T _H (wide-range)	-	618	618	618	618
T _{AVG} (narrow-range)	-	589	589	589	589
Core Exit Thermocouple Temp. (°F)	600	-	-	-	-
Reactor Coolant Loop Flows (%)	-	100	100	100	100
Boron Concentration (ppm)	1140	-	-	-	-
<u>SECONDARY SYSTEMS</u>					
Main Steam Flow Rate (x10 ⁶ lbm/hr)	-	3786	3786	3786	3786
Steam Generator (WR) Levels (%)	-	66	66	66	66
Steam Generator Pressures (psig)	-	990	990	990	990
<u>CONTAINMENT BUILDING</u>					
Pressure (psig)	0	-	-	-	-
Temperature (°F)	80	-	-	-	-
Humidity (%)	33	-	-	-	-
Hydrogen Concentration (% vol)	0	-	-	-	-
Recirculation Sump Level (in)	0	-	-	-	-
<u>TANKS</u>					
Accumulator Levels (%)	-	59	59	59	59
Accumulator Pressures (psig)	-	645	645	645	645
Refueling Water Storage Tank Level (%)	97	-	-	-	-

PLANT PARAMETERS

Relative Time (H+00:10)	Plant Values	Loop 1 or A Values	Loop 2 or B Values	Loop 3 or C Values	Loop 4 or D Values
<u>PRIMARY SYSTEM</u>					
Reactor Power (%)	100	-	-	-	-
Reactor Vessel Level (%) - Natural Circulation	112	-	-	-	-
Reactor Coolant System (RCS) Pressure (psig)	2290	-	-	-	-
Pressurizer Level (%)	60	-	-	-	-
Reactor Coolant System Temp. (°F)					
T _C (wide-range)	-	559	559	559	559
T _H (wide-range)	-	618	618	618	618
T _{AVG} (narrow-range)	-	589	589	589	589
Core Exit Thermocouple Temp. (°F)	600	-	-	-	-
Reactor Coolant Loop Flows (%)	-	100	100	100	100
Boron Concentration (ppm)	1140	-	-	-	-
<u>SECONDARY SYSTEMS</u>					
Main Steam Flow Rate (x10 ⁶ lbm/hr)	-	3786	3786	3786	3786
Steam Generator (WR) Levels (%)	-	66	66	66	66
Steam Generator Pressures (psig)	-	990	990	990	990
<u>CONTAINMENT BUILDING</u>					
Pressure (psig)	0	-	-	-	-
Temperature (°F)	80	-	-	-	-
Humidity (%)	33	-	-	-	-
Hydrogen Concentration (% vol)	0	-	-	-	-
Recirculation Sump Level (in)	0	-	-	-	-
<u>TANKS</u>					
Accumulator Levels (%)	-	59	59	59	59
Accumulator Pressures (psig)	-	645	645	645	645
Refueling Water Storage Tank Level (%)	97	-	-	-	-

PLANT PARAMETERS

Relative Time (H+00:20)	Plant Values	Loop 1 or A Values	Loop 2 or B Values	Loop 3 or C Values	Loop 4 or D Values
<u>PRIMARY SYSTEM</u>					
Reactor Power (%)	0.1	-	-	-	-
Reactor Vessel Level (%) - Natural Circulation	100	-	-	-	-
Reactor Coolant System (RCS) Pressure (psig)	2010	-	-	-	-
Pressurizer Level (%)	11	-	-	-	-
Reactor Coolant System Temp. (°F)					
T _C (wide-range)	-	557	557	557	557
T _H (wide-range)	-	618	618	560	560
T _{AVG} (narrow-range)	-	588	588	559	559
Core Exit Thermocouple Temp. (°F)	560	-	-	-	-
Reactor Coolant Loop Flows (%)	-	100	100	100	100
Boron Concentration (ppm)	1140	-	-	-	-
<u>SECONDARY SYSTEMS</u>					
Main Steam Flow Rate (x10 ⁶ lbm/hr)	-	107	110	109	137
Steam Generator (WR) Levels (%)	-	44	44	44	44
Steam Generator Pressures (psig)	-	1095	1095	1095	1095
<u>CONTAINMENT BUILDING</u>					
Pressure (psig)	1.3	-	-	-	-
Temperature (°F)	95	-	-	-	-
Humidity (%)	98	-	-	-	-
Hydrogen Concentration (% vol)	0	-	-	-	-
Recirculation Sump Level (in)	0	-	-	-	-
<u>TANKS</u>					
Accumulator Levels (%)	-	59	59	59	59
Accumulator Pressures (psig)	-	645	645	645	645
Refueling Water Storage Tank Level (%)	97	-	-	-	-

PLANT PARAMETERS

Relative Time (H+00:30)	Plant Values	Loop 1 or A Values	Loop 2 or B Values	Loop 3 or C Values	Loop 4 or D Values
<u>PRIMARY SYSTEM</u>					
Reactor Power (%)	0	-	-	-	-
Reactor Vessel Level (%) - Natural Circulation	100	-	-	-	-
Reactor Coolant System (RCS) Pressure (psig)	1974	-	-	-	-
Pressurizer Level (%)	10	-	-	-	-
Reactor Coolant System Temp. (°F)					
T _C (wide-range)	-	557	557	557	557
T _H (wide-range)	-	558	558	558	558
T _{AVG} (narrow-range)	-	558	558	558	558
Core Exit Thermocouple Temp. (°F)	558	-	-	-	-
Reactor Coolant Loop Flows (%)	-	100	100	100	100
Boron Concentration (ppm)	1214	-	-	-	-
<u>SECONDARY SYSTEMS</u>					
Main Steam Flow Rate ($\times 10^6$ lbm/hr)	-	91	91	84	80
Steam Generator (WR) Levels (%)	-	50	50	50	50
Steam Generator Pressures (psig)	-	1089	1089	1089	1089
<u>CONTAINMENT BUILDING</u>					
Pressure (psig)	1.6	-	-	-	-
Temperature (°F)	98	-	-	-	-
Humidity (%)	98	-	-	-	-
Hydrogen Concentration (% vol)	0	-	-	-	-
Recirculation Sump Level (in)	0	-	-	-	-
<u>TANKS</u>					
Accumulator Levels (%)	-	59	59	59	59
Accumulator Pressures (psig)	-	645	645	645	645
Refueling Water Storage Tank Level (%)	96	-	-	-	-

PLANT PARAMETERS

Relative Time (H+00:45)	Plant Values	Loop 1 or A Values	Loop 2 or B Values	Loop 3 or C Values	Loop 4 or D Values
<u>PRIMARY SYSTEM</u>					
Reactor Power (%)	0	-	-	-	-
Reactor Vessel Level (%) - Natural Circulation	99	-	-	-	-
Reactor Coolant System (RCS) Pressure (psig)	1365	-	-	-	-
Pressurizer Level (%)	0	-	-	-	-
Reactor Coolant System Temp. (°F)					
T _C (wide-range)	-	540	540	540	540
T _H (wide-range)	-	541	541	541	541
T _{AVG} (narrow-range)	-	541	541	541	541
Core Exit Thermocouple Temp. (°F)	541	-	-	-	-
Reactor Coolant Loop Flows (%)	-	100	100	100	100
Boron Concentration (ppm)	1257	-	-	-	-
<u>SECONDARY SYSTEMS</u>					
Main Steam Flow Rate ($\times 10^6$ lbm/hr)	-	34	26	0	33
Steam Generator (WR) Levels (%)	-	61	61	61	61
Steam Generator Pressures (psig)	-	959	959	959	959
<u>CONTAINMENT BUILDING</u>					
Pressure (psig)	1.7	-	-	-	-
Temperature (°F)	99	-	-	-	-
Humidity (%)	98	-	-	-	-
Hydrogen Concentration (% vol)	0	-	-	-	-
Recirculation Sump Level (in)	0	-	-	-	-
<u>TANKS</u>					
Accumulator Levels (%)	-	59	59	59	59
Accumulator Pressures (psig)	-	645	645	645	645
Refueling Water Storage Tank Level (%)	95	-	-	-	-

PLANT PARAMETERS

Relative Time (H+01:00)	Plant Values	Loop 1 or A Values	Loop 2 or B Values	Loop 3 or C Values	Loop 4 or D Values
<u>PRIMARY SYSTEM</u>					
Reactor Power (%)	0	-	-	-	-
Reactor Vessel Level (%) - Natural Circulation	34	-	-	-	-
Reactor Coolant System (RCS) Pressure (psig)	1444	-	-	-	-
Pressurizer Level (%)	51	-	-	-	-
Reactor Coolant System Temp. (°F)					
T _C (wide-range)	-	505	505	505	510
T _H (wide-range)	-	507	507	507	514
T _{AVG} (narrow-range)	-	530	530	530	530
Core Exit Thermocouple Temp. (°F)	514	-	-	-	-
Reactor Coolant Loop Flows (%)	-	0	0	0	100
Boron Concentration (ppm)	1424	-	-	-	-
<u>SECONDARY SYSTEMS</u>					
Main Steam Flow Rate (x10 ⁶ lbm/hr)	-	0	0	44	0
Steam Generator (WR) Levels (%)	-	69	68	68	63
Steam Generator Pressures (psig)	-	734	734	734	734
<u>CONTAINMENT BUILDING</u>					
Pressure (psig)	1.4	-	-	-	-
Temperature (°F)	95	-	-	-	-
Humidity (%)	98	-	-	-	-
Hydrogen Concentration (% vol)	0	-	-	-	-
Recirculation Sump Level (in)	0	-	-	-	-
<u>TANKS</u>					
Accumulator Levels (%)	-	59	59	59	59
Accumulator Pressures (psig)	-	645	645	645	645
Refueling Water Storage Tank Level (%)	93	-	-	-	-

PLANT PARAMETERS

Relative Time (H+01:15)	Plant Values	Loop 1 or A Values	Loop 2 or B Values	Loop 3 or C Values	Loop 4 or D Values
<u>PRIMARY SYSTEM</u>					
Reactor Power (I)	0	-	-	-	-
Reactor Vessel Level (I) - Natural Circulation	34	-	-	-	-
Reactor Coolant System (RCS) Pressure (psig)	1589	-	-	-	-
Pressurizer Level (I)	64	-	-	-	-
Reactor Coolant System Temp. (°F)					
T _C (wide-range)	-	507	507	507	511
T _H (wide-range)	-	508	508	508	514
T _{AVG} (narrow-range)	-	530	530	530	530
Core Exit Thermocouple Temp. (°F)	515	-	-	-	-
Reactor Coolant Loop Flows (I)	-	0	0	0	100
Boron Concentration (ppm)	1579	-	-	-	-
<u>SECONDARY SYSTEMS</u>					
Main Steam Flow Rate (x10 ⁶ lbm/hr)	-	0	0	40	0
Steam Generator (WR) Levels (I)	-	70	70	70	64
Steam Generator Pressures (psig)	-	737	737	737	737
<u>CONTAINMENT BUILDING</u>					
Pressure (psig)	1.4	-	-	-	-
Temperature (°F)	95	-	-	-	-
Humidity (I)	98	-	-	-	-
Hydrogen Concentration (I vol)	0	-	-	-	-
Recirculation Sump Level (in)	0	-	-	-	-
<u>TANKS</u>					
Accumulator Levels (I)	-	59	59	59	59
Accumulator Pressures (psig)	-	645	645	645	645
Refueling Water Storage Tank Level(I)	91	-	-	-	-

PLANT PARAMETERS

Relative Time (H+01:30)	Plant Values	Loop 1 or A Values	Loop 2 or B Values	Loop 3 or C Values	Loop 4 or D Values
<u>PRIMARY SYSTEM</u>					
Reactor Power (I)	0	-	-	-	-
Reactor Vessel Level (I) - Natural Circulation	34	-	-	-	-
Reactor Coolant System (RCS) Pressure (psig)	1556	-	-	-	-
Pressurizer Level (I)	64	-	-	-	-
Reactor Coolant System Temp. (°F)					
T _C (wide-range)	-	503	503	503	507
T _H (wide-range)	-	502	502	503	510
T _{AVG} (narrow-range)	-	530	530	530	530
Core Exit Thermocouple Temp. (°F)	511	-	-	-	-
Reactor Coolant Loop Flows (I)	-	0	0	0	100
Boron Concentration (ppm)	1597	-	-	-	-
<u>SECONDARY SYSTEMS</u>					
Main Steam Flow Rate (x10 ⁶ lbm/hr)	-	0	0	34	0
Steam Generator (WR) Levels (I)	-	70	69	70	63
Steam Generator Pressures (psig)	-	713	713	713	713
<u>CONTAINMENT BUILDING</u>					
Pressure (psig)	1.4	-	-	-	-
Temperature (°F)	95	-	-	-	-
Humidity (I)	98	-	-	-	-
Hydrogen Concentration (I vol)	0	-	-	-	-
Recirculation Sump Level (in)	0	-	-	-	-
<u>TANKS</u>					
Accumulator Levels (I)	-	59	59	59	59
Accumulator Pressures (psig)	-	645	645	645	645
Refueling Water Storage Tank Level(I)	90	-	-	-	-

PLANT PARAMETERS

Relative Time (H+01:45)	Plant Values	Loop 1 or A Values	Loop 2 or B Values	Loop 3 or C Values	Loop 4 or D Values
<u>PRIMARY SYSTEM</u>					
Reactor Power (I)	0	-	-	-	-
Reactor Vessel Level (I) - Natural Circulation	32	-	-	-	-
Reactor Coolant System (RCS) Pressure (psig)	1484	-	-	-	-
Pressurizer Level (I)	64	-	-	-	-
Reactor Coolant System Temp. (°F)					
T _C (wide-range)	-	505	505	505	506
T _H (wide-range)	-	522	522	522	522
T _{AVG} (narrow-range)	-	530	530	530	530
Core Exit Thermocouple Temp. (°F)	517	-	-	-	-
Reactor Coolant Loop Flows (I)	-	0	0	0	0
Boron Concentration (ppm)	1614	-	-	-	-
<u>SECONDARY SYSTEMS</u>					
Main Steam Flow Rate (x10 ⁶ lbm/hr)	-	0	0	32	0
Steam Generator (WR) Levels (I)	-	69	68	69	67
Steam Generator Pressures (psig)	-	737	737	737	737
<u>CONTAINMENT BUILDING</u>					
Pressure (psig)	2.2	-	-	-	-
Temperature (°F)	113	-	-	-	-
Humidity (I)	**	-	-	-	-
Hydrogen Concentration (I vol)	0	-	-	-	-
Recirculation Sump Level (in)	0	-	-	-	-
<u>TANKS</u>					
Accumulator Levels (I)	-	59	59	59	59
Accumulator Pressures (psig)	-	645	645	645	645
Refueling Water Storage Tank Level (I)	89	-	-	-	-

** Station blackout - gauge automatically goes to zero

PLANT PARAMETERS

Relative Time (H+02:00)	Plant Values	Loop 1 or A Values	Loop 2 or B Values	Loop 3 or C Values	Loop 4 or D Values
<u>PRIMARY SYSTEM</u>					
Reactor Power (%)	0	-	-	-	-
Reactor Vessel Level (%) - Natural Circulation	31	-	-	-	-
Reactor Coolant System (RCS) Pressure (psig)	1068	-	-	-	-
Pressurizer Level (%)	30	-	-	-	-
Reactor Coolant System Temp. (°F)					
T _C (wide-range)	-	522	522	522	527
T _H (wide-range)	-	557	557	558	558
T _{AVG} (narrow-range)		530	530	530	530
Core Exit Thermocouple Temp. (°F)	547	-	-	-	-
Reactor Coolant Loop Flows (%)	-	0	0	0	0
Boron Concentration (ppm)	1614	-	-	-	-
<u>SECONDARY SYSTEMS</u>					
Main Steam Flow Rate (x10 ⁶ lbm/hr)	-	436	151	434	432
Steam Generator (WR) Levels (%)	-	67	67	67	65
Steam Generator Pressures (psig)	-	857	863	864	887
<u>CONTAINMENT BUILDING</u>					
Pressure (psig)	3.5	-	-	-	-
Temperature (°F)	124	-	-	-	-
Humidity (%)	**	-	-	-	-
Hydrogen Concentration (% vol)	0	-	-	-	-
Recirculation Sump Level (in)	0	-	-	-	-
<u>TANKS</u>					
Accumulator Levels (%)	-	59	59	59	59
Accumulator Pressures (psig)	-	645	645	645	645
Refueling Water Storage Tank Level (%)	89	-	-	-	-

** Station blackout - gauge automatically goes to zero

PLANT PARAMETERS

Relative Time (H+02:15)	Plant Values	Loop 1 or A Values	Loop 2 or B Values	Loop 3 or C Values	Loop 4 or D Values
<u>PRIMARY SYSTEM</u>					
Reactor Power (%)	0	-	-	-	-
Reactor Vessel Level (%) - Natural Circulation	30	-	-	-	-
Reactor Coolant System (RCS) Pressure (psig)	711	-	-	-	-
Pressurizer Level (%)	0	-	-	-	-
Reactor Coolant System Temp. (°F)					
T _C (wide-range)	-	411	411	502	408
T _H (wide-range)	-	476	476	507	476
T _{AVG} (narrow-range)	-	530	530	530	530
Core Exit Thermocouple Temp. (°F)	462	-	-	-	-
Reactor Coolant Loop Flows (%)	-	0	0	0	0
Boron Concentration (ppm)	1614	-	-	-	-
<u>SECONDARY SYSTEMS</u>					
Main Steam Flow Rate (x10 ⁶ lbm/hr)	-	31	71	188	31
Steam Generator (WR) Levels (%)	-	48	48	64	46
Steam Generator Pressures (psig)	-	398	396	907	388
<u>CONTAINMENT BUILDING</u>					
Pressure (psig)	4	-	-	-	-
Temperature (°F)	128	-	-	-	-
Humidity (%)	**	-	-	-	-
Hydrogen Concentration (% vol)	0	-	-	-	-
Recirculation Sump Level (in)	0	-	-	-	-
<u>TANKS</u>					
Accumulator Levels (%)	-	59	59	59	59
Accumulator Pressures (psig)	-	645	645	645	645
Refueling Water Storage Tank Level (%)	80	-	-	-	-

** Station blackout - gauge automatically goes to zero

PLANT PARAMETERS

Relative Time (H+02:30)	Plant Values	Loop 1 or A Values	Loop 2 or B Values	Loop 3 or C Values	Loop 4 or D Values
<u>PRIMARY SYSTEM</u>					
Reactor Power (%)	0	-	-	-	-
Reactor Vessel Level (%) - Natural Circulation	25	-	-	-	-
Reactor Coolant System (RCS) Pressure (psig)	307	-	-	-	-
Pressurizer Level (%)	0	-	-	-	-
Reactor Coolant System Temp. (°F)					
T _C (wide-range)	-	318	318	424	319
T _H (wide-range)	-	380	380	424	358
T _{AVG} (narrow-range)	-	530	530	530	530
Core Exit Thermocouple Temp. (°F)	354	-	-	-	-
Reactor Coolant Loop Flows (%)	-	0	0	0	0
Boron Concentration (ppm)	1614	-	-	-	-
<u>SECONDARY SYSTEMS</u>					
Main Steam Flow Rate (x10 ⁶ lbm/hr)	-	21	21	0	65
Steam Generator (WR) Levels (%)	-	13	14	63	12
Steam Generator Pressures (psig)	-	67	68	901	65
<u>CONTAINMENT BUILDING</u>					
Pressure (psig)	3.8	-	-	-	-
Temperature (°F)	128	-	-	-	-
Humidity (%)	**	-	-	-	-
Hydrogen Concentration (%) vol)	0	-	-	-	-
Recirculation Sump Level (in)	0	-	-	-	-
<u>TANKS</u>					
Accumulator Levels (%)	-	59	59	59	59
Accumulator Pressures (psig)	-	645	645	645	645
Refueling Water Storage Tank Level (%)	89	-	-	-	-

** Station blackout - gauge automatically goes to zero

PLANT PARAMETERS

Relative Time (H+02:45)	Plant Values	Loop 1 or A Values	Loop 2 or B Values	Loop 3 or C Values	Loop 4 or D Values
<u>PRIMARY SYSTEM</u>					
Reactor Power (%)	0	-	-	-	-
Reactor Vessel Level (%) - Natural Circulation	24	-	-	-	-
Reactor Coolant System (RCS) Pressure (psig)	131	-	-	-	-
Pressurizer Level (%)	0	-	-	-	-
Reactor Coolant System Temp (°F)					
T _C (wide-range)	-	296	296	152	277
T _H (wide-range)	-	335	335	349	335
T _{AVG} (narrow-range)	-	530	530	530	530
Core Exit Thermocouple Temp. (°F)	322	-	-	-	-
Reactor Coolant Loop Flows (%)	-	0	0	0	0
Boron Concentration (ppm)	1664	-	-	-	-
<u>SECONDARY SYSTEMS</u>					
Main Steam Flow Rate (x10 ⁶ lbm/hr)	-	31	31	20	65
Steam Generator (WR) Levels (%)	-	5	6	64	4
Steam Generator Pressures (psig)	-	90	90	894	93
<u>CONTAINMENT BUILDING</u>					
Pressure (psig)	3.4	-	-	-	-
Temperature (°F)	127	-	-	-	-
Humidity (%)	**	-	-	-	-
Hydrogen Concentration (% vol)	0	-	-	-	-
Recirculation Sump Level (in)	0	-	-	-	-
<u>TANKS</u>					
Accumulator Levels (%)	-	59	59	59	59
Accumulator Pressures (psig)	-	645	645	645	645
Refueling Water Storage Tank Level (%)	88	-	-	-	-

** Station blackout - gauge automatically goes to zero

PLANT PARAMETERS

Relative Time (H+03:00)	Plant Values	Loop 1 or A Values	Loop 2 or B Values	Loop 3 or C Values	Loop 4 or D Values
<u>PRIMARY SYSTEM</u>					
Reactor Power (%)	0	-	-	-	-
Reactor Vessel Level (%) - Natural Circulation	31	-	-	-	-
Reactor Coolant System (RCS) Pressure (psig)	388	-	-	-	-
Pressurizer Level (%)	100	-	-	-	-
Reactor Coolant System Temp. (°F)					
T _C (wide-range)	-	317	317	320	314
T _H (wide-range)	-	330	330	330	330
T _{AVG} (narrow-range)	-	530	530	530	530
Core Exit Thermocouple Temp. (°F)	323	-	-	-	-
Reactor Coolant Loop Flows (%)	-	0	0	0	0
Boron Concentration (ppm)	1863	-	-	-	-
<u>SECONDARY SYSTEMS</u>					
Main Steam Flow Rate (x10 ⁶ lbm/hr)	-	30	30	20	50
Steam Generator (WR) Levels (%)	-	11	6	64	11
Steam Generator Pressures (psig)	-	74	92	887	71
<u>CONTAINMENT BUILDING</u>					
Pressure (psig)	2.6	-	-	-	-
Temperature (°F)	120	-	-	-	-
Humidity (%)	**	-	-	-	-
Hydrogen Concentration (% vol)	0	-	-	-	-
Recirculation Sump Level (in)	0	-	-	-	-
<u>TANKS</u>					
Accumulator Levels (%)	-	59	59	59	59
Accumulator Pressures (psig)	-	645	645	645	645
Refueling Water Storage Tank Level (%)	83	-	-	-	-

** Station blackout - gauge automatically goes to zero

PLANT PARAMETERS

Relative Time (H+03:15)	Plant Values	Loop 1 or A Values	Loop 2 or B Values	Loop 3 or C Values	Loop 4 or D Values
<u>PRIMARY SYSTEM</u>					
Reactor Power (%)	0	-	-	-	-
Reactor Vessel Level (%) - Natural Circulation	32	-	-	-	-
Reactor Coolant System (RCS) Pressure (psig)	317	-	-	-	-
Pressurizer Level (%)	100	-	-	-	-
Reactor Coolant System Temp. (°F)					
T _C (wide-range)	-	351	351	314	344
T _H (wide-range)	-	352	352	352	352
T _{AVG} (narrow-range)	-	530	530	530	530
Core Exit Thermocouple Temp. (°F)	344	-	-	-	-
Reactor Coolant Loop Flows (%)	-	0	0	0	0
Boron Concentration (ppm)	1863	-	-	-	-
<u>SECONDARY SYSTEMS</u>					
Main Steam Flow Rate (x10 ⁶ lbm/hr)	-	35	35	25	55
Steam Generator (WR) Levels (%)	-	30	6	43	30
Steam Generator Pressures (psig)	-	118	124	89	116
<u>CONTAINMENT BUILDING</u>					
Pressure (psig)	2.3	-	-	-	-
Temperature (°F)	117	-	-	-	-
Humidity (%)	**	-	-	-	-
Hydrogen Concentration (% vol)	0	-	-	-	-
Recirculation Sump Level (in)	0	-	-	-	-
<u>TANKS</u>					
Accumulator Levels (%)	-	59	59	59	59
Accumulator Pressures (psig)	-	645	645	645	645
Refueling Water Storage Tank Level (%)	83	-	-	-	-

** Station blackout - gauge automatically goes to zero

PLANT PARAMETERS

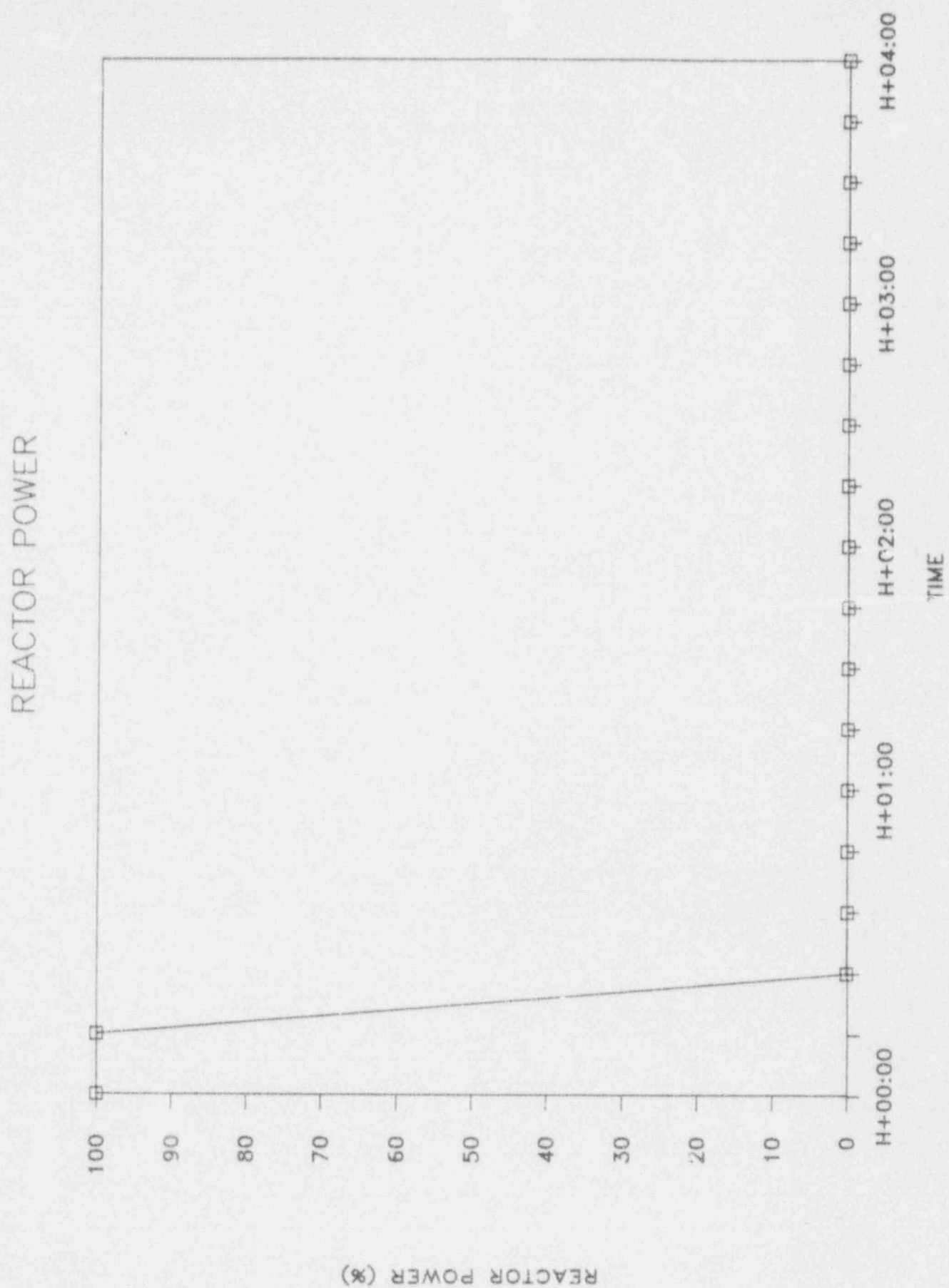
Relative Time (H+03:30+)	Plant Values	Loop 1 or A Values	Loop 2 or B Values	Loop 3 or C Values	Loop 4 or D Values
<u>PRIMARY SYSTEM</u>					
Reactor Power (%)	0	-	-	-	-
Reactor Vessel Level (%) - Natural Circulation	31	-	-	-	-
Reactor Coolant System (RCS) Pressure (psig)	241	-	-	-	-
Pressurizer Level (%)	80	-	-	-	-
Reactor Coolant System Temp. (°F)					
T _C (wide-range)	-	369	369	365	333
T _H (wide-range)	-	371	371	372	371
T _{AVG} (narrow-range)	-	530	530	530	530
Core Exit Thermocouple Temp. (°F)	363	-	-	-	-
Reactor Coolant Loop Flows (%)	-	0	0	0	0
Boron Concentration (ppm)	1863	-	-	-	-
<u>SECONDARY SYSTEMS</u>					
Main Steam Flow Rate ($\times 10^6$ lbm/hr)	-	35	35	25	55
Steam Generator (WR) Levels (%)	-	46	6	44	46
Steam Generator Pressures (psig)	-	118	159	161	117
<u>CONTAINMENT BUILDING</u>					
Pressure (psig)	2.0	-	-	-	-
Temperature (°F)	115	-	-	-	-
Humidity (%)	**	-	-	-	-
Hydrogen Concentration (% vol)	0	-	-	-	-
Recirculation Sump Level (in)	0	-	-	-	-
<u>TANKS</u>					
Accumulator Levels (%)	-	59	59	59	59
Accumulator Pressures (psig)	-	645	645	645	645
Refueling Water Storage Tank Level (%)	83	-	-	-	-

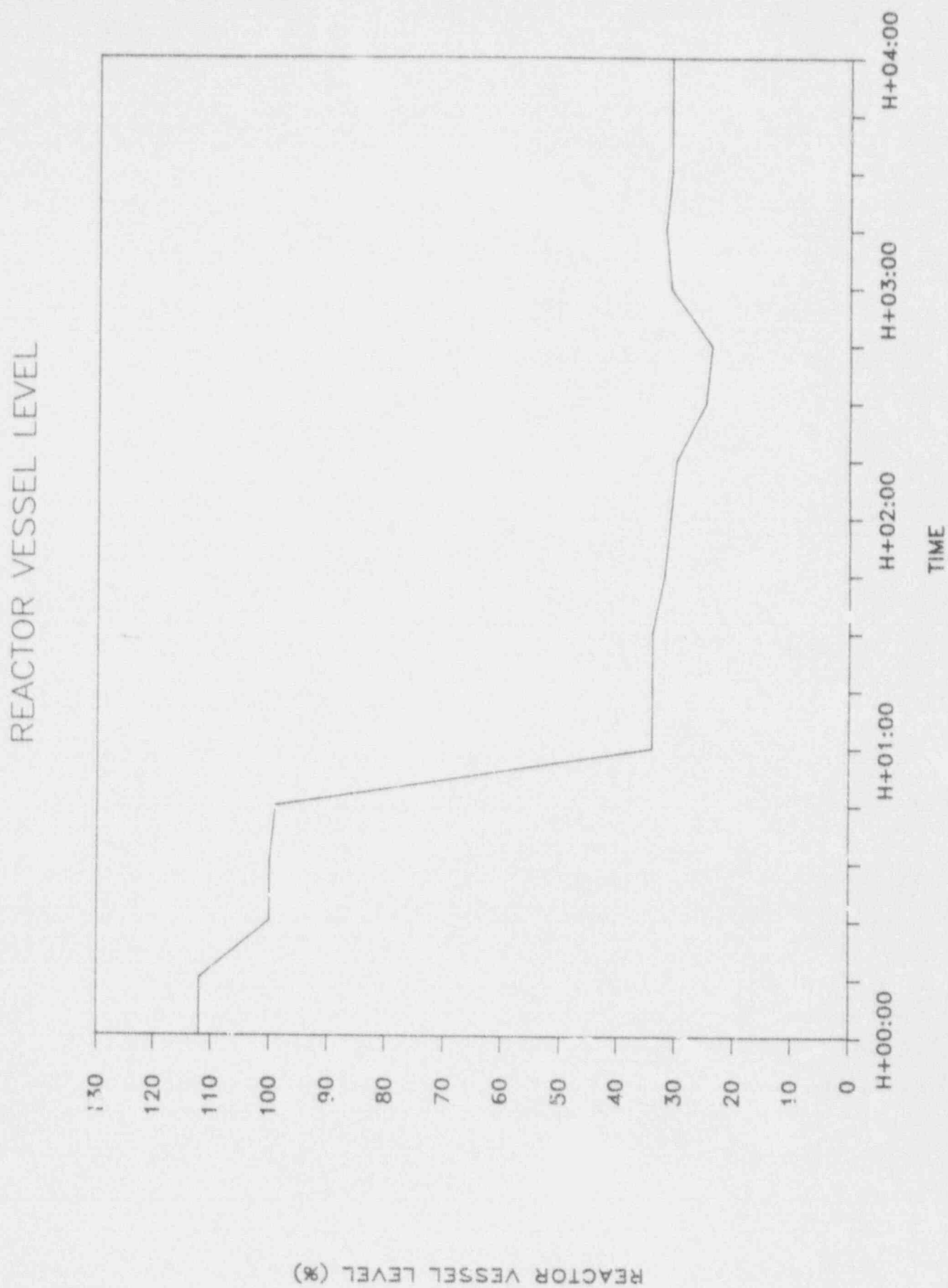
** Station blackout - gauge automatically goes to zero

PLANT GRAPHS

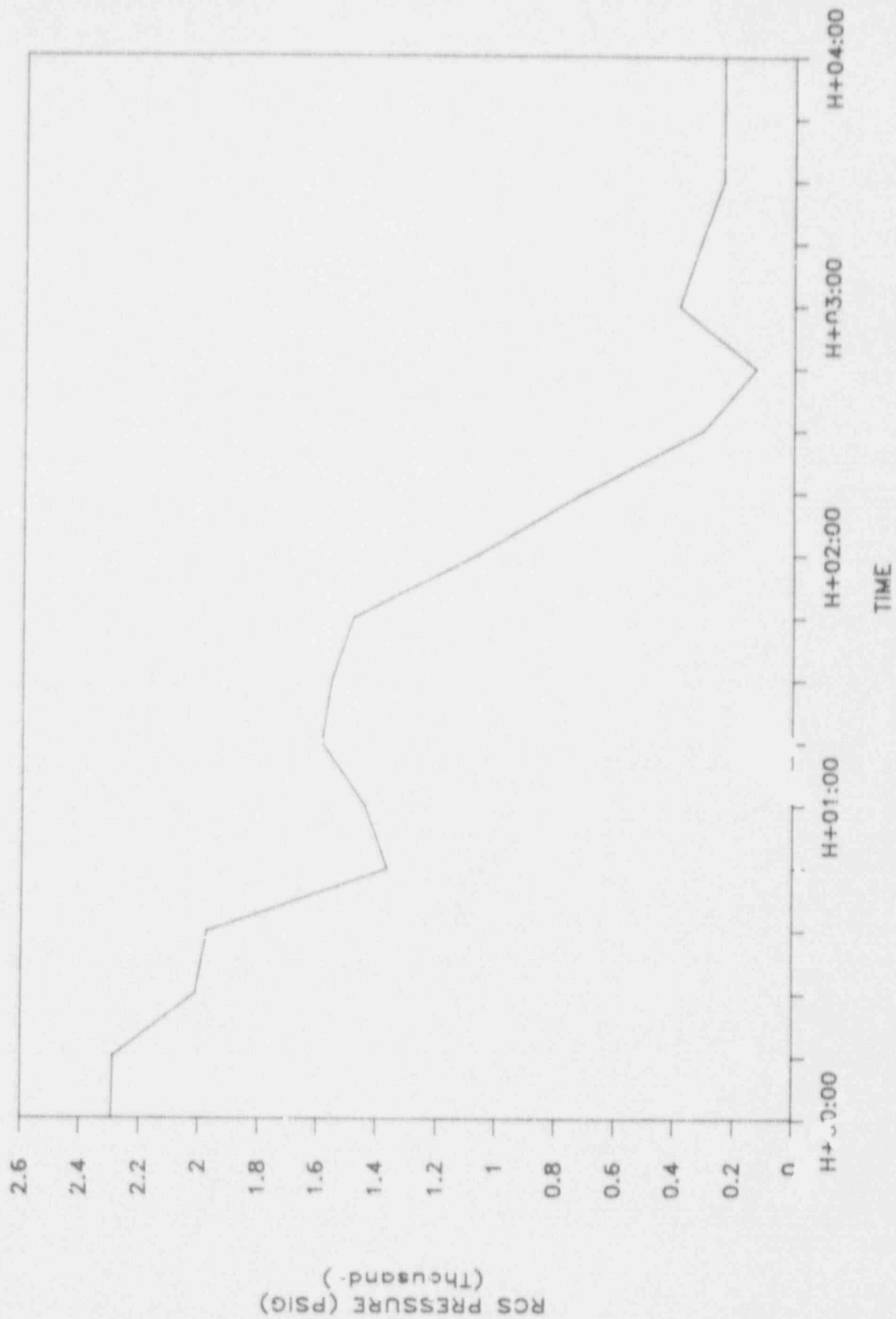
time-related plant parameters are provided in the following subsection. The data is depicted in graphic form versus time. The previous subsection, "Plant Parameters", depicts the same data in tabular form.

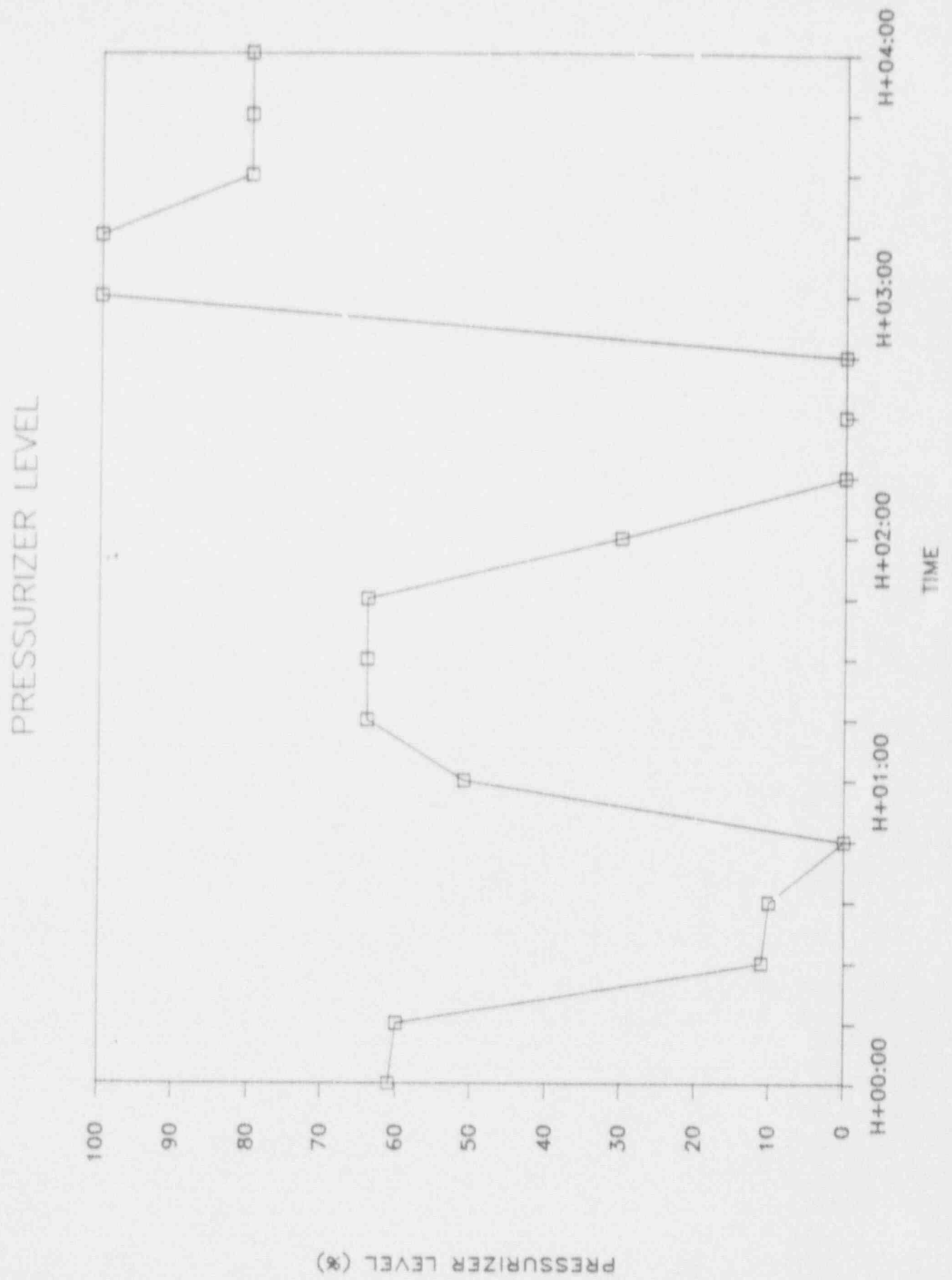
These graphs may be used as a source of data for Control Room (CR) operators, by the CR Lead Controller, in case of simulator failure.





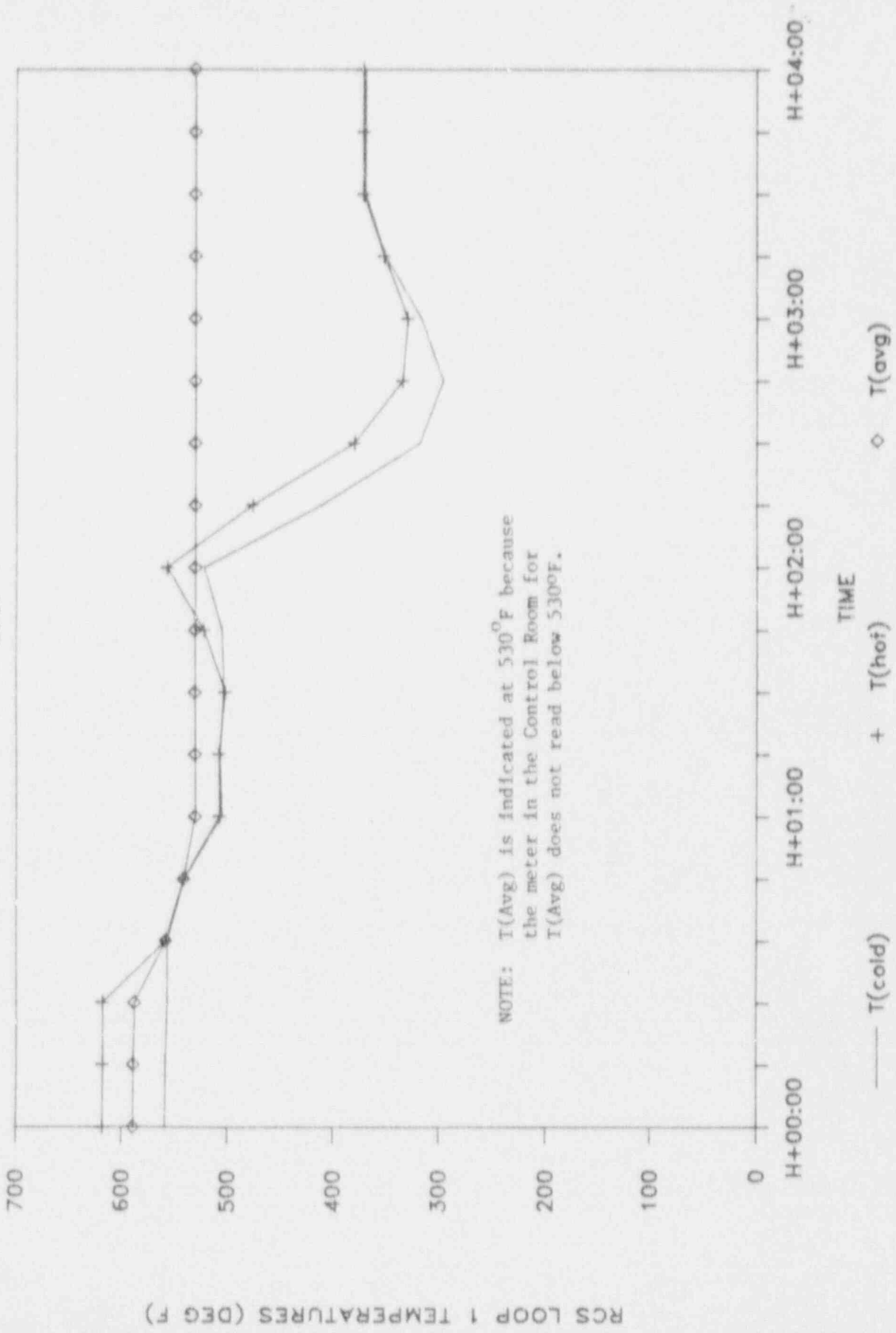
RCS PRESSURE





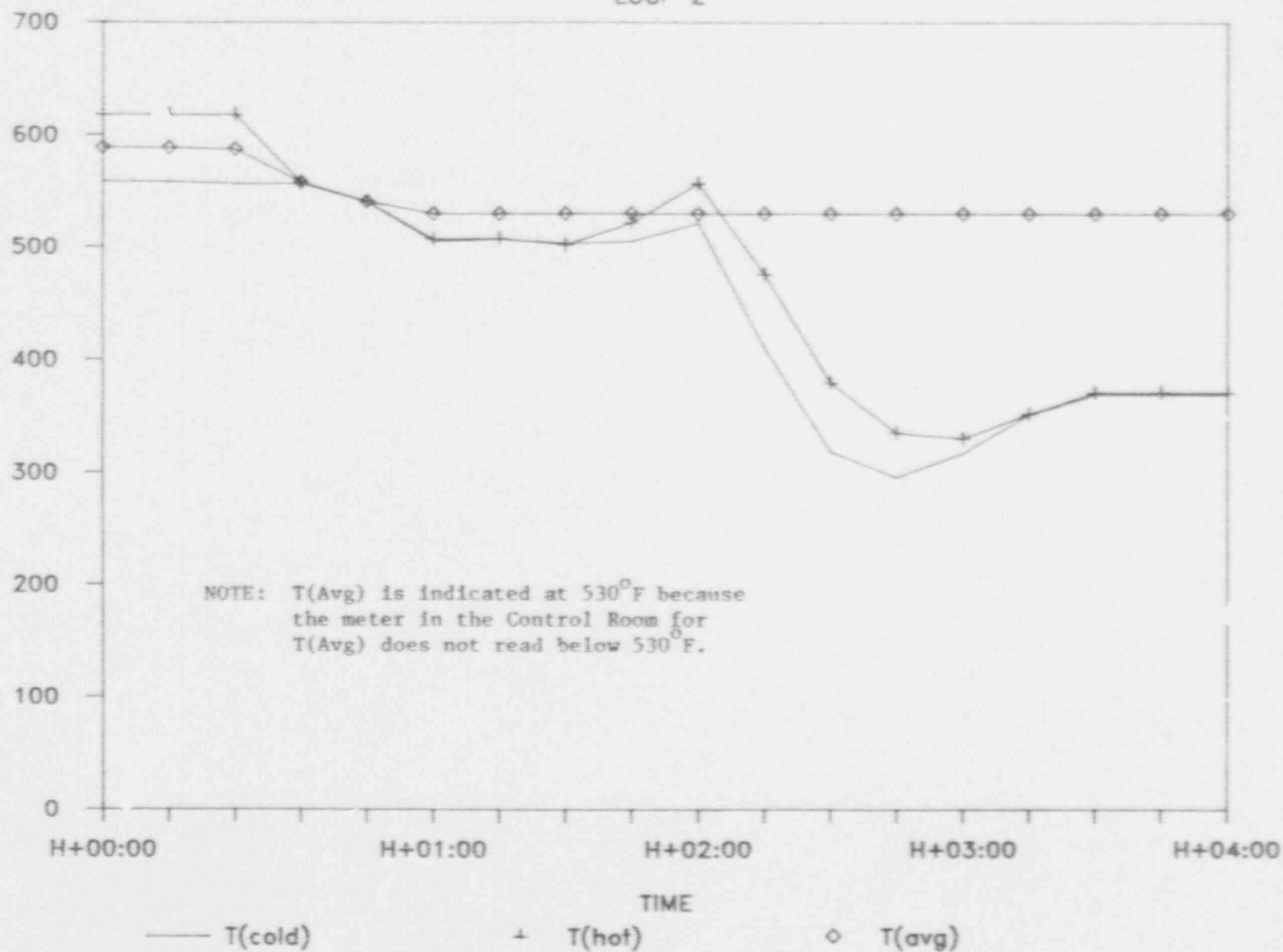
REACTOR COOLANT SYSTEM TEMPERATURE

LOOP 1



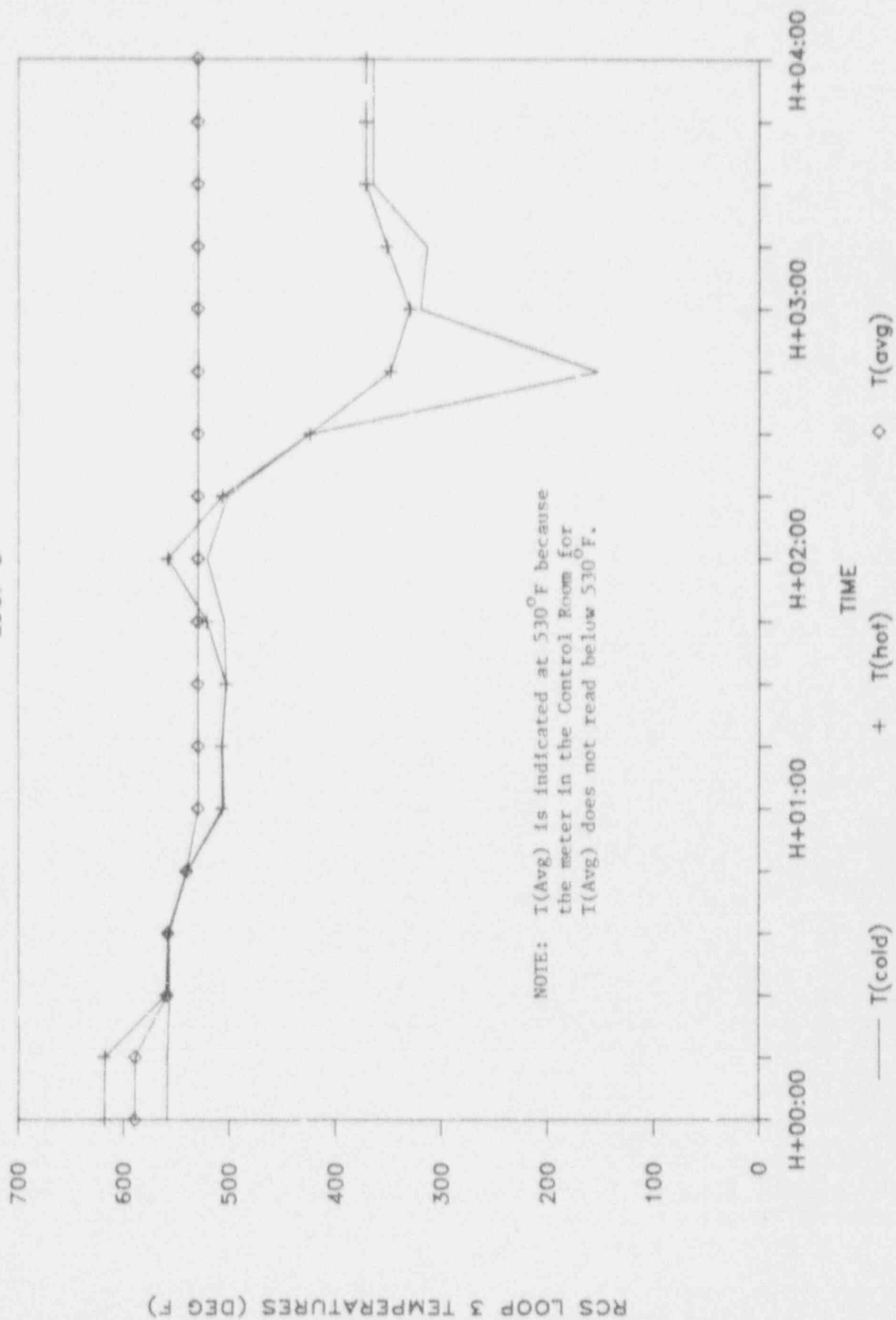
REACTOR COOLANT SYSTEM TEMPERATURE

LOOP 2



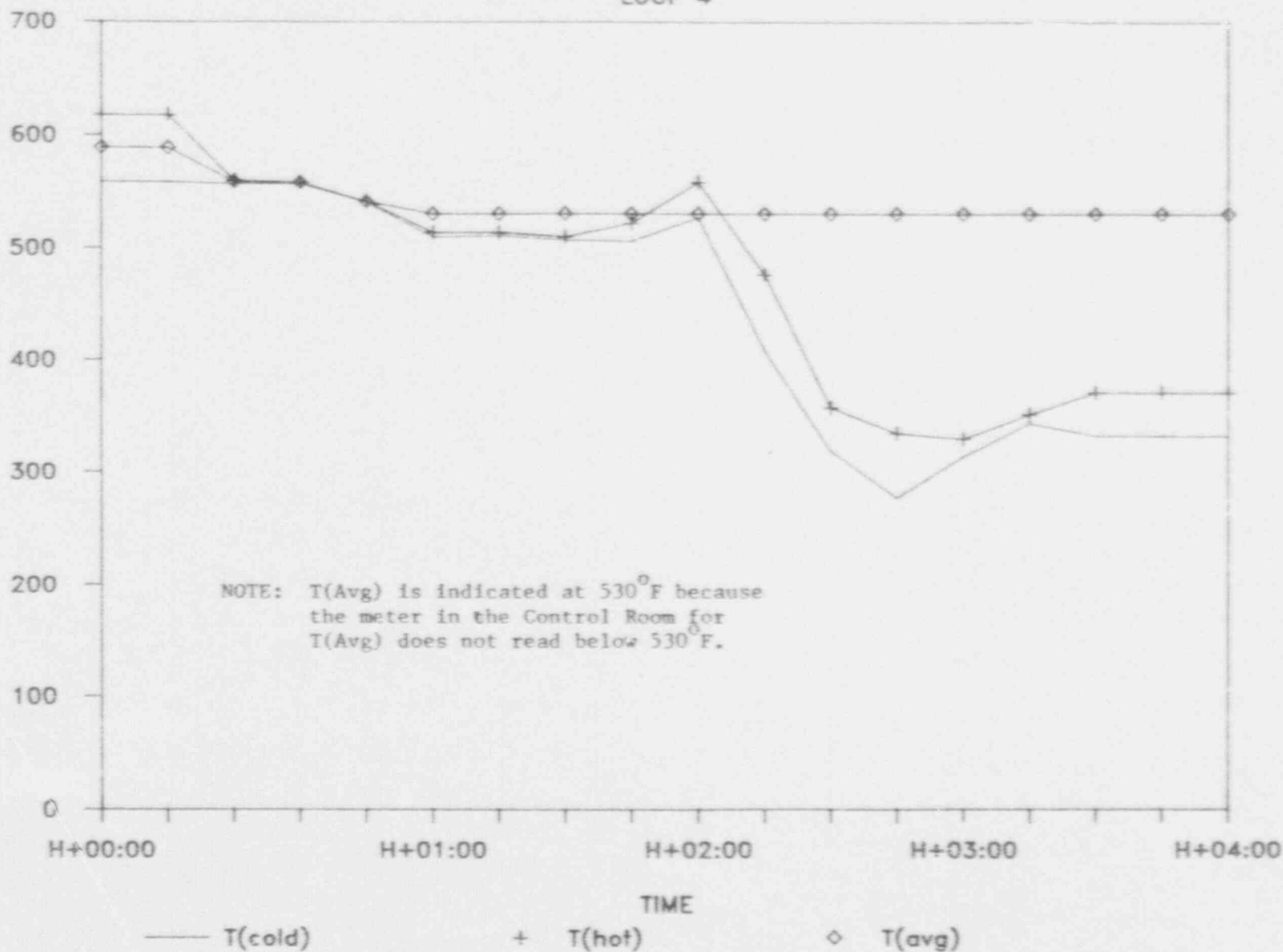
REACTOR COOLANT SYSTEM TEMPERATURE

LOOP 3

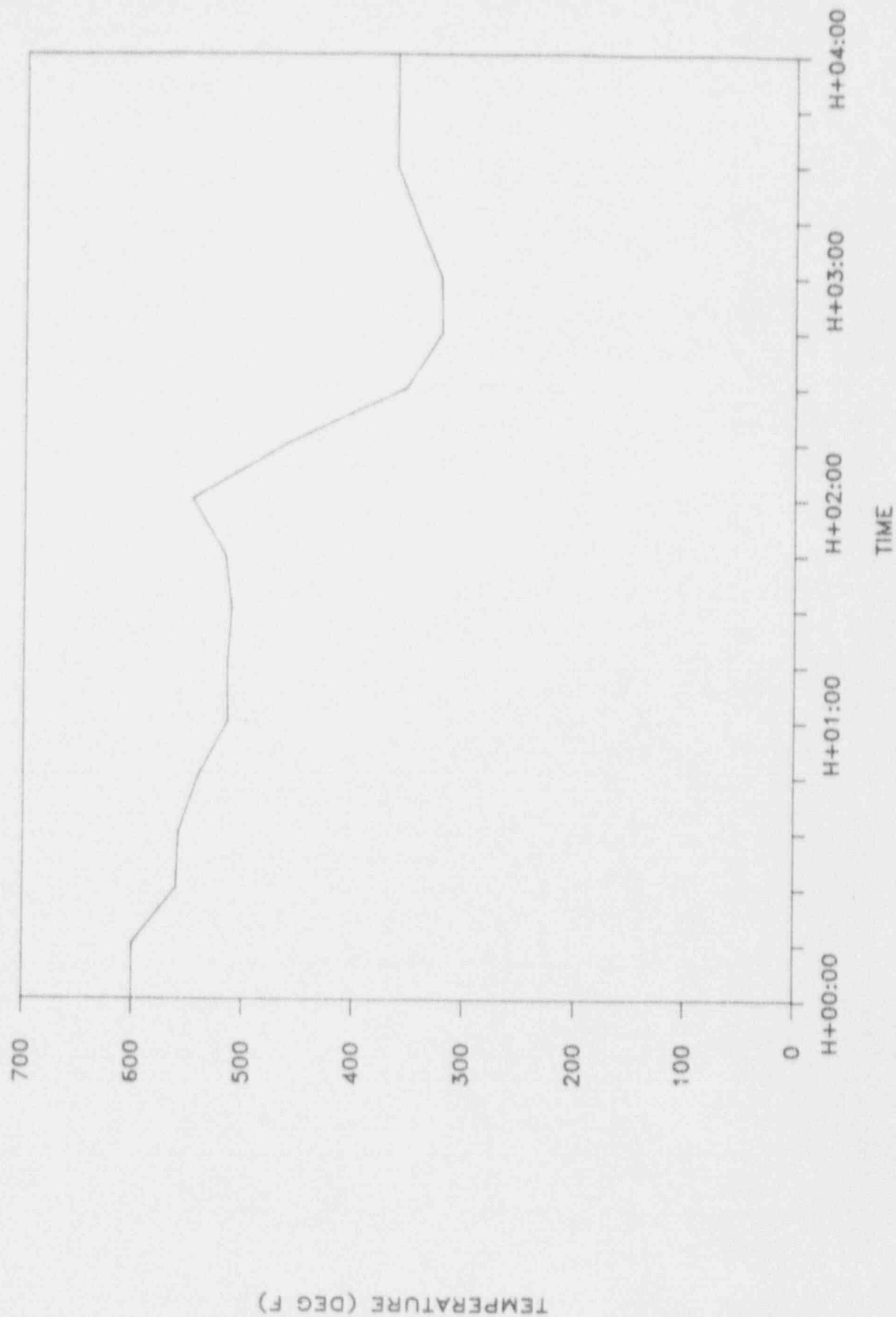


REACTOR COOLANT SYSTEM TEMPERATURE

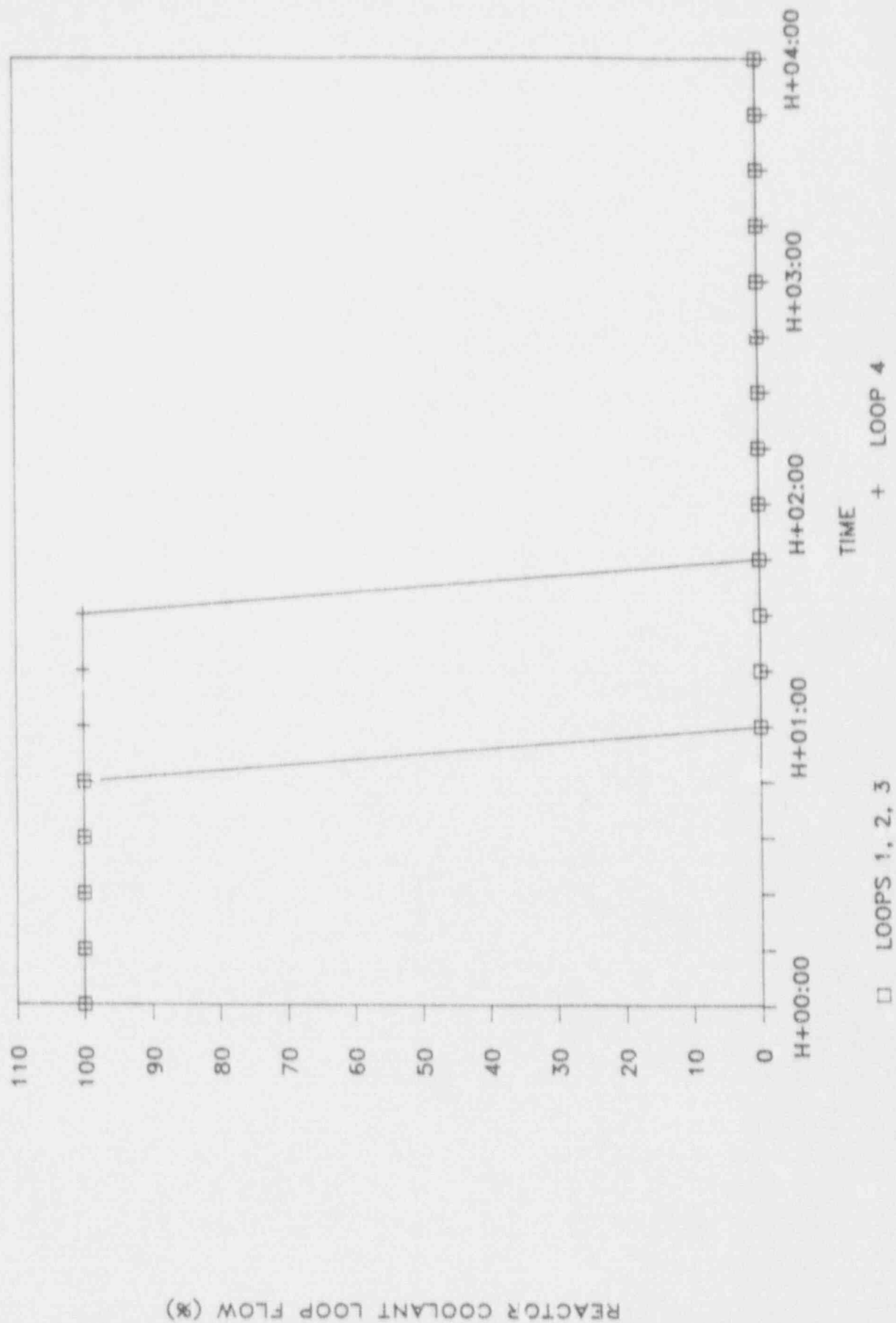
LOOP 4

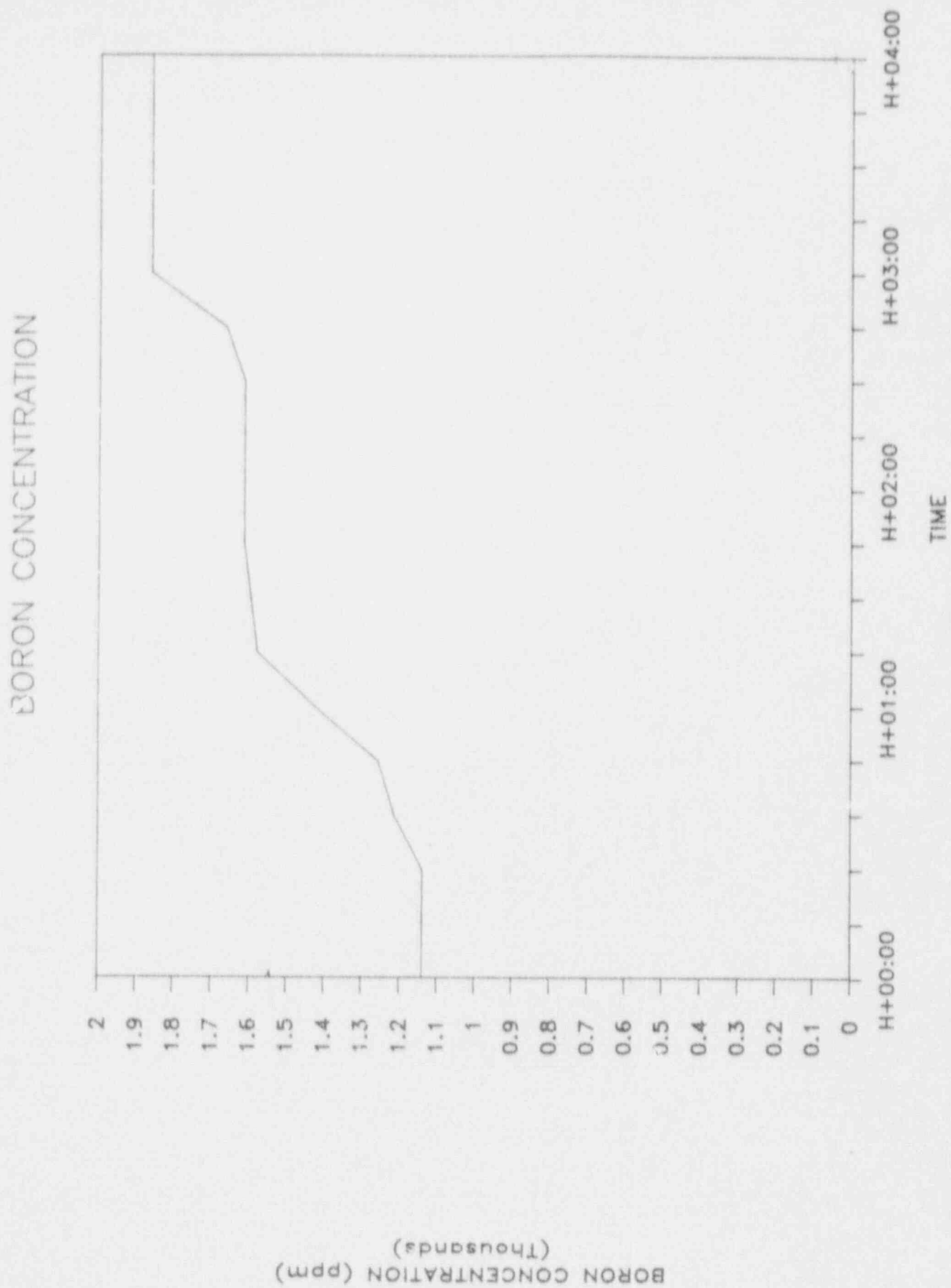


CORE EXIT THERMOCOUPLE TEMPERATURE

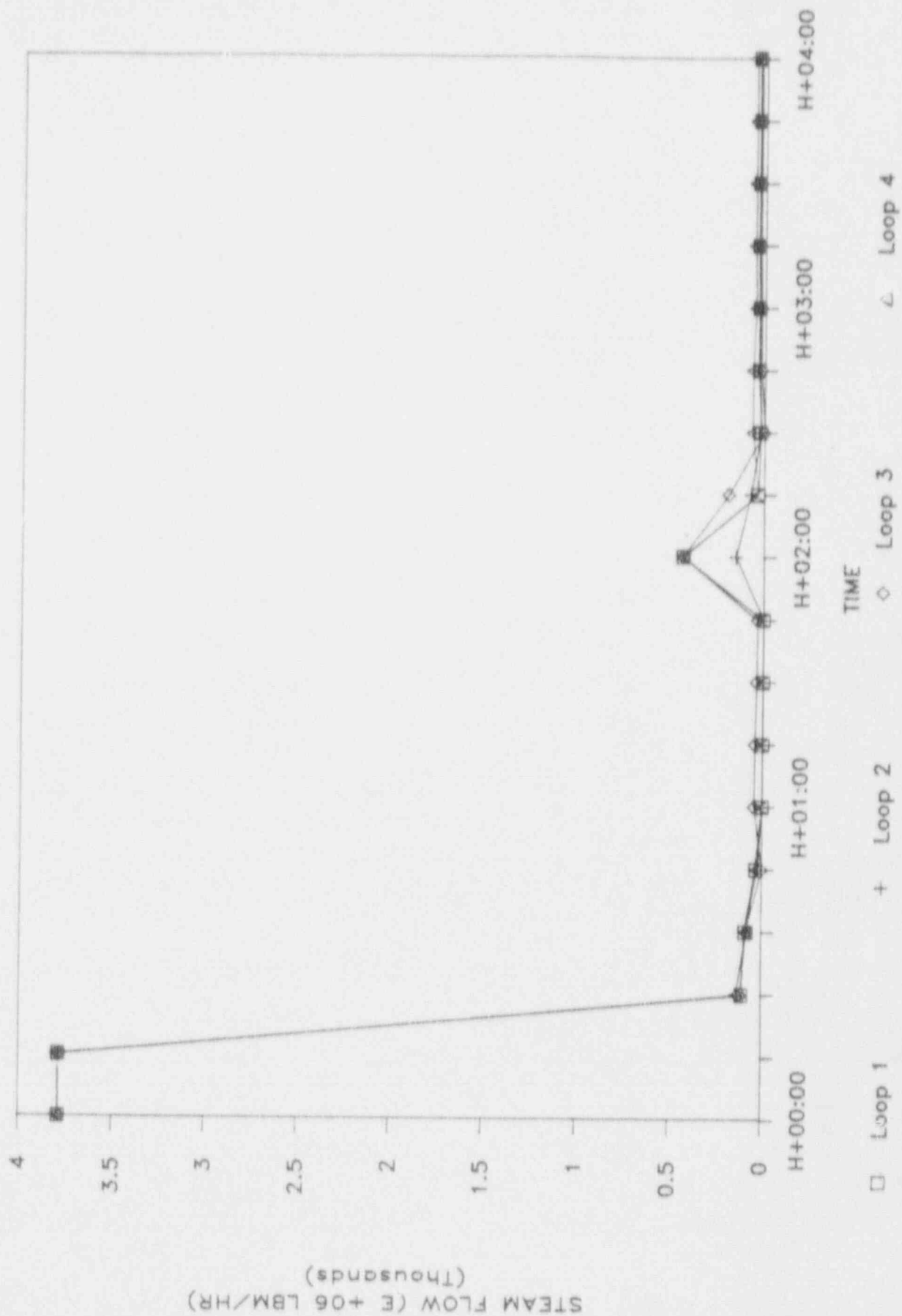


REACTOR COOLANT LOOP FLOWS

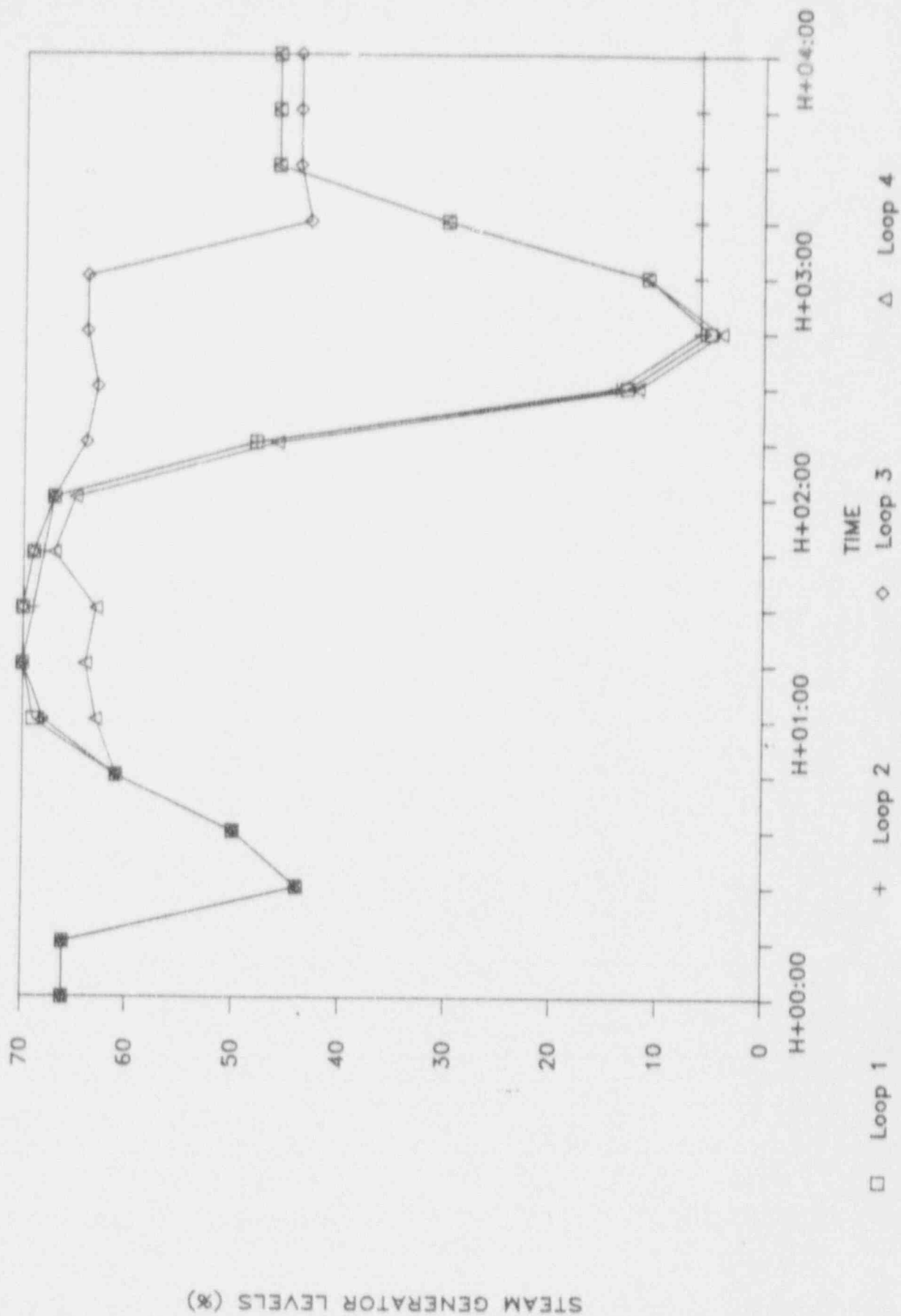




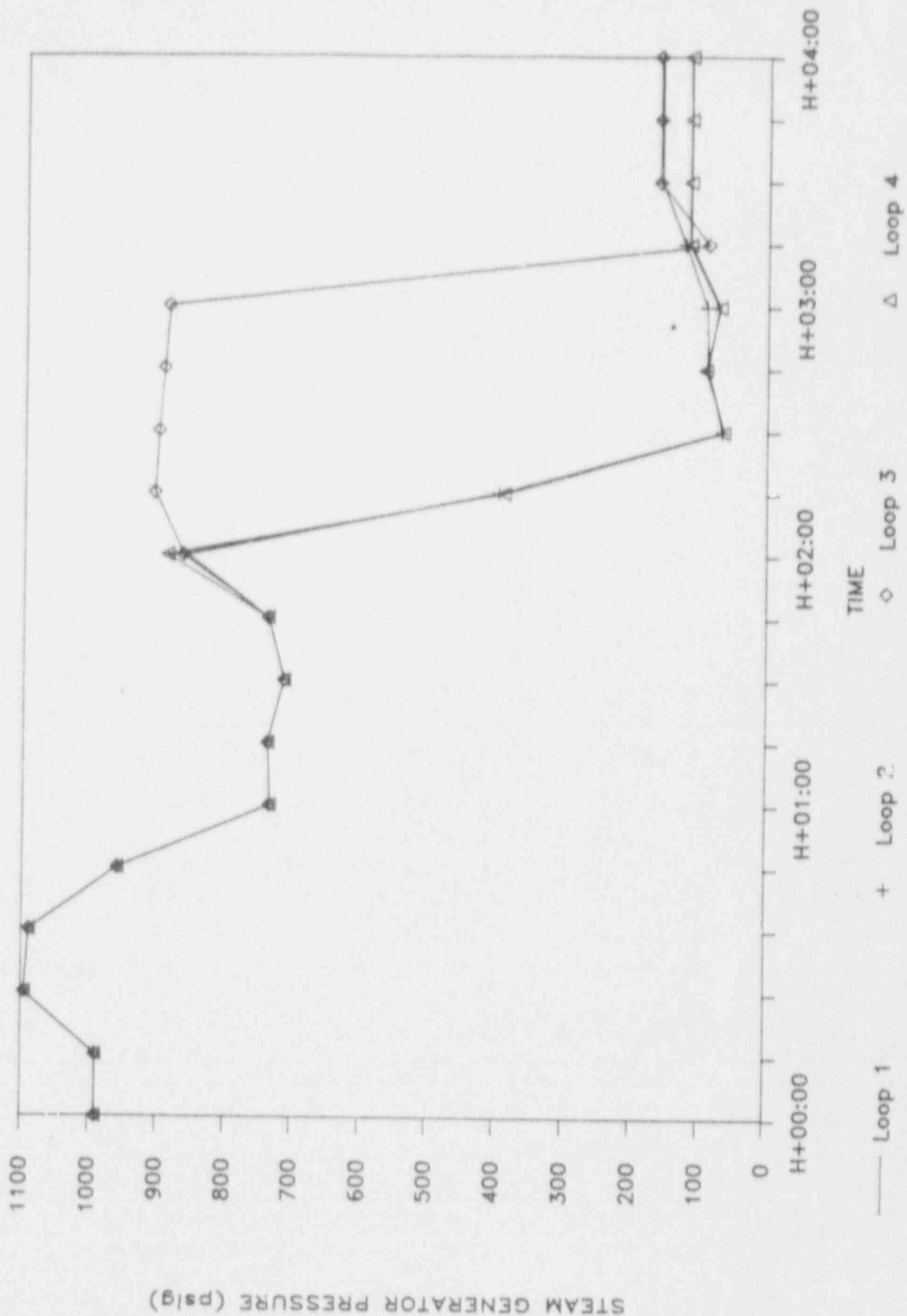
MAIN STEAM FLOW RATE



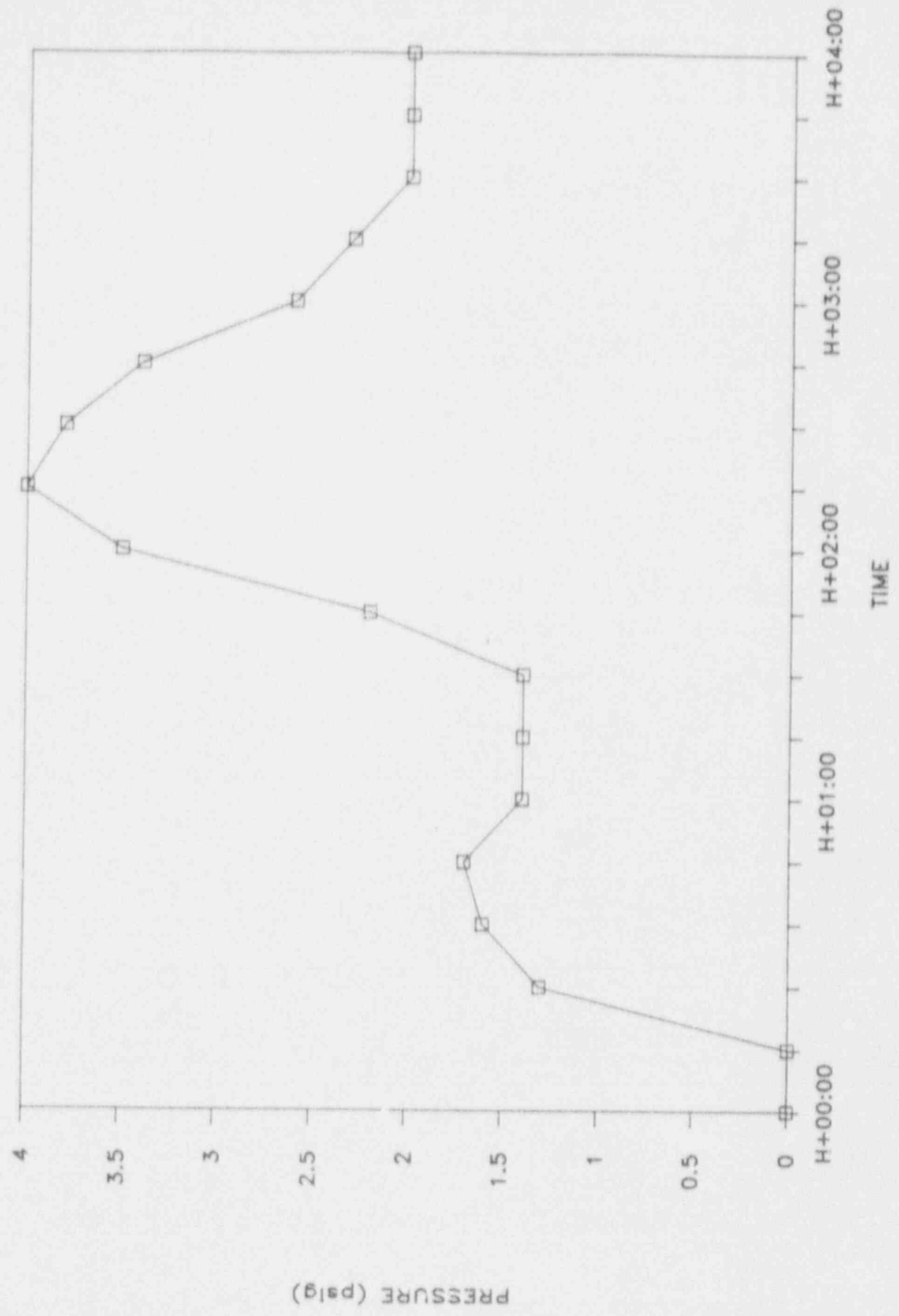
STEAM GENERATOR LEVELS



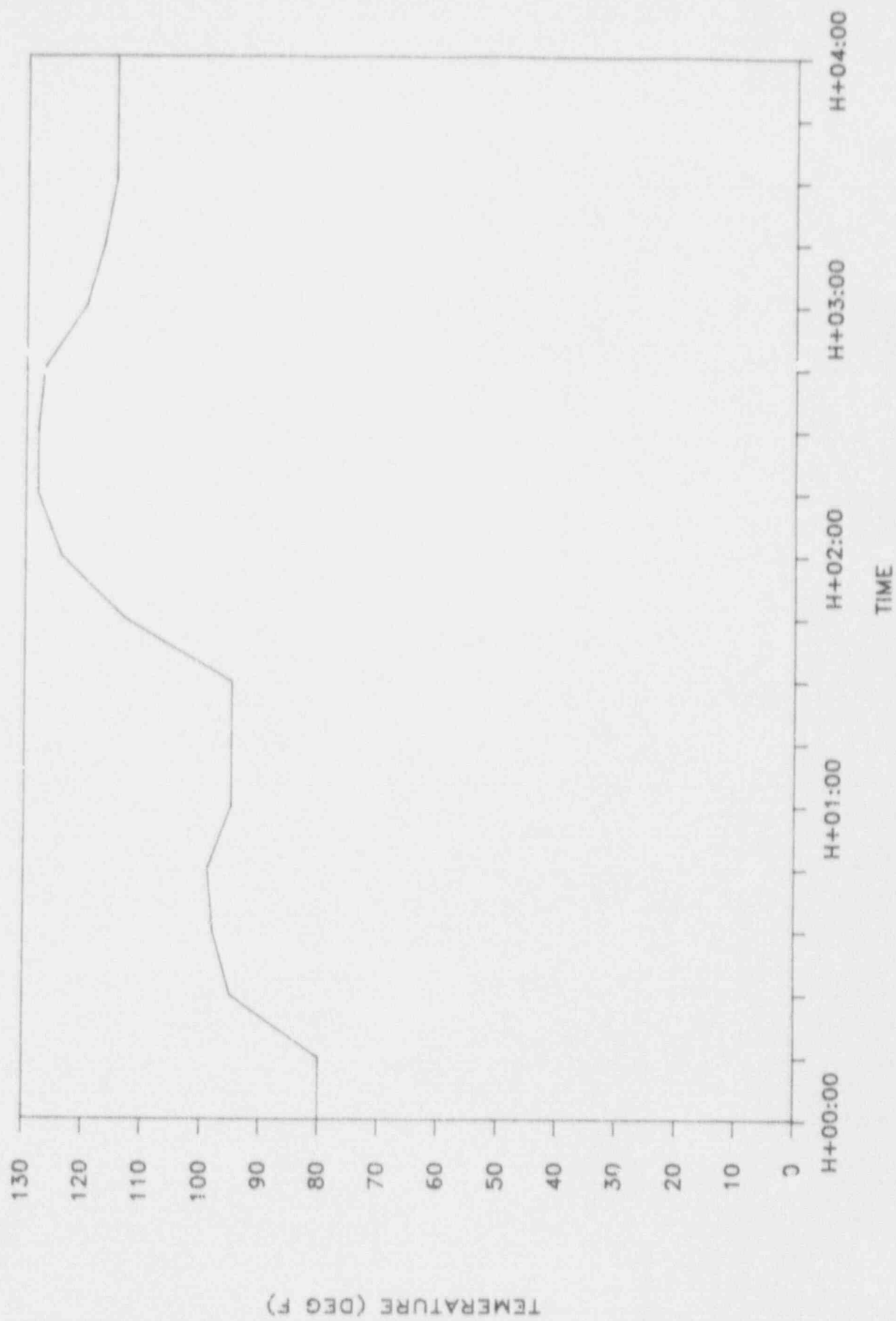
STEAM GENERATOR PRESSURES



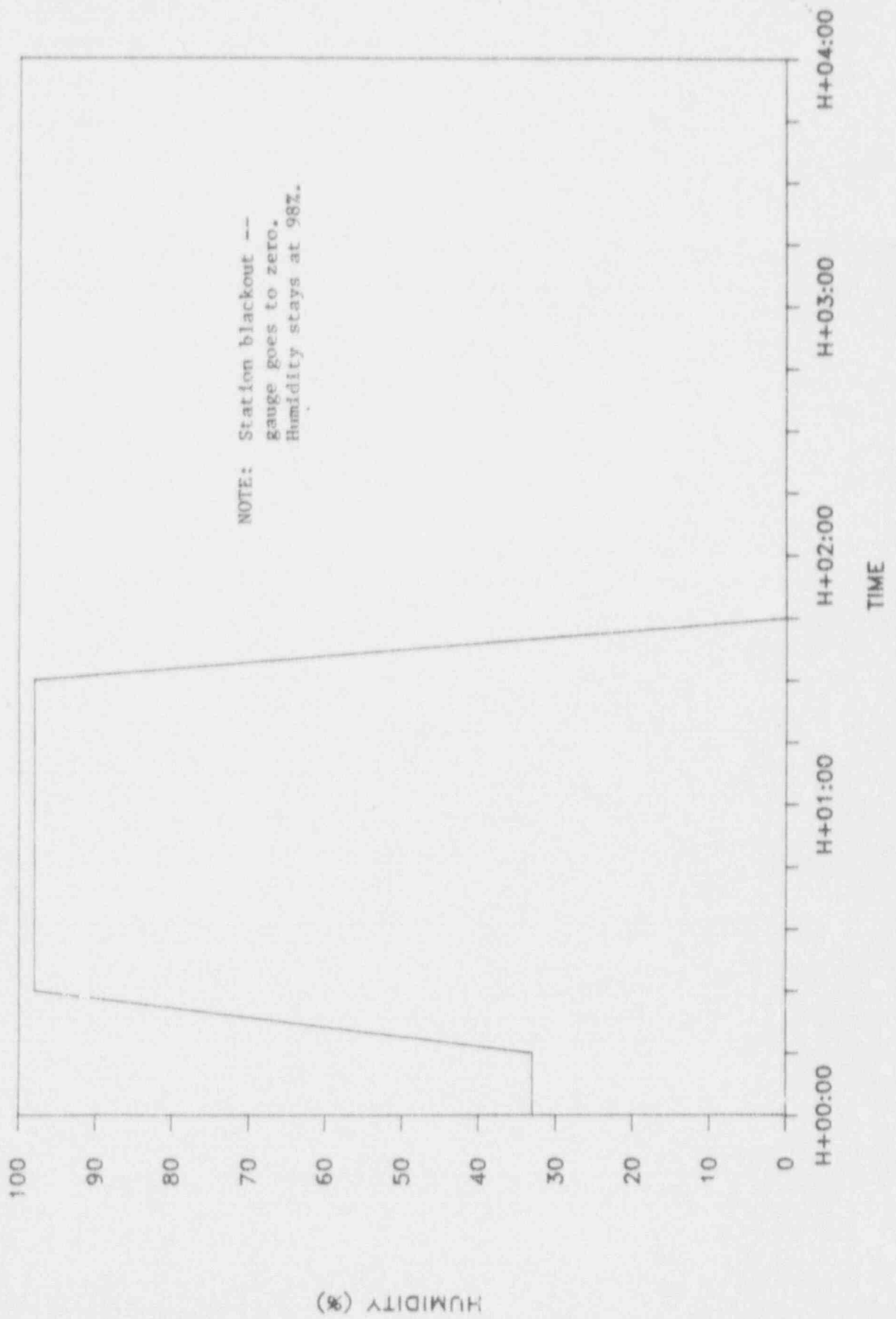
CONTAINMENT BUILDING PRESSURE



CONTAINMENT BUILDING TEMPERATURE

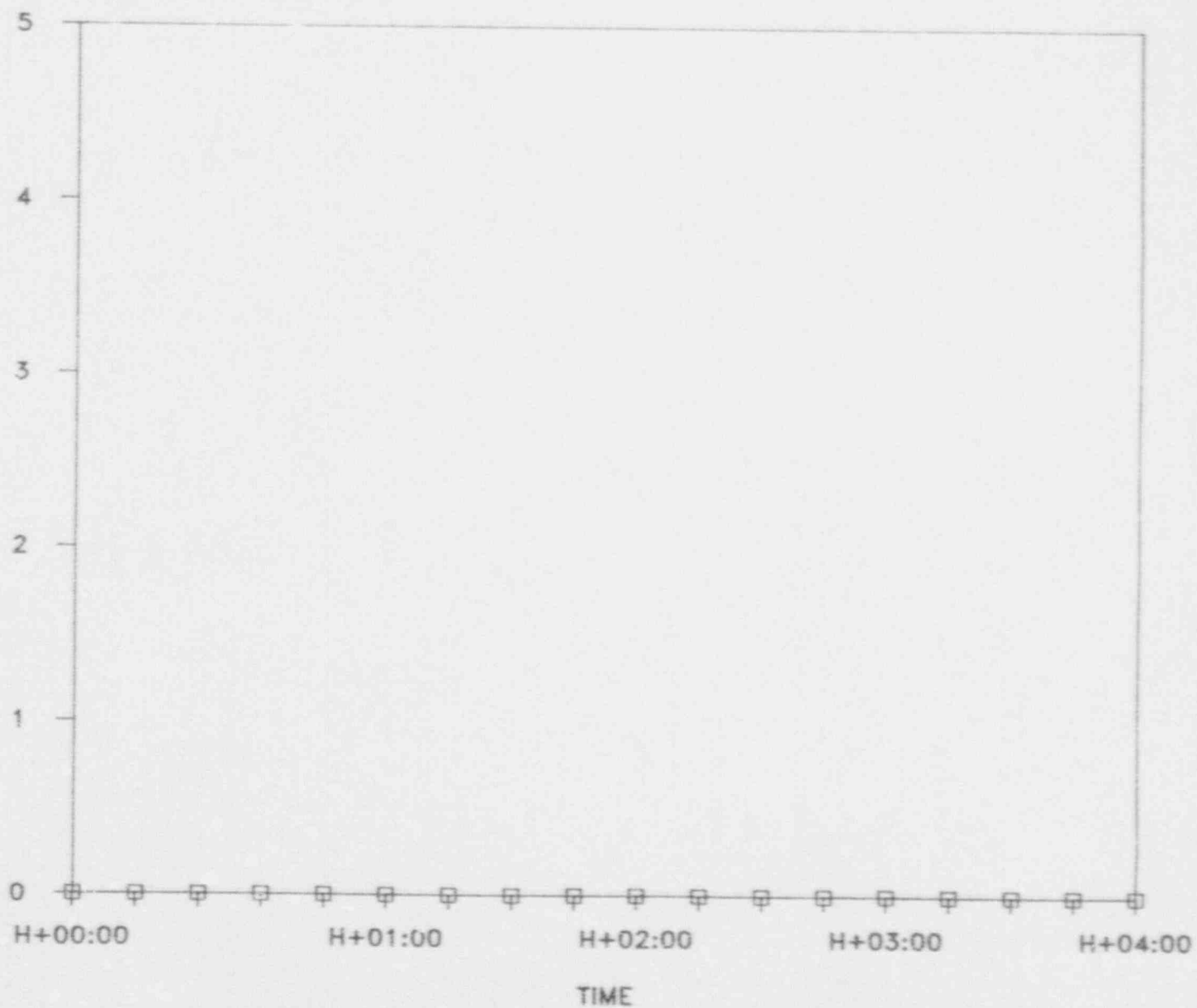


CONTAINMENT BUILDING HUMIDITY

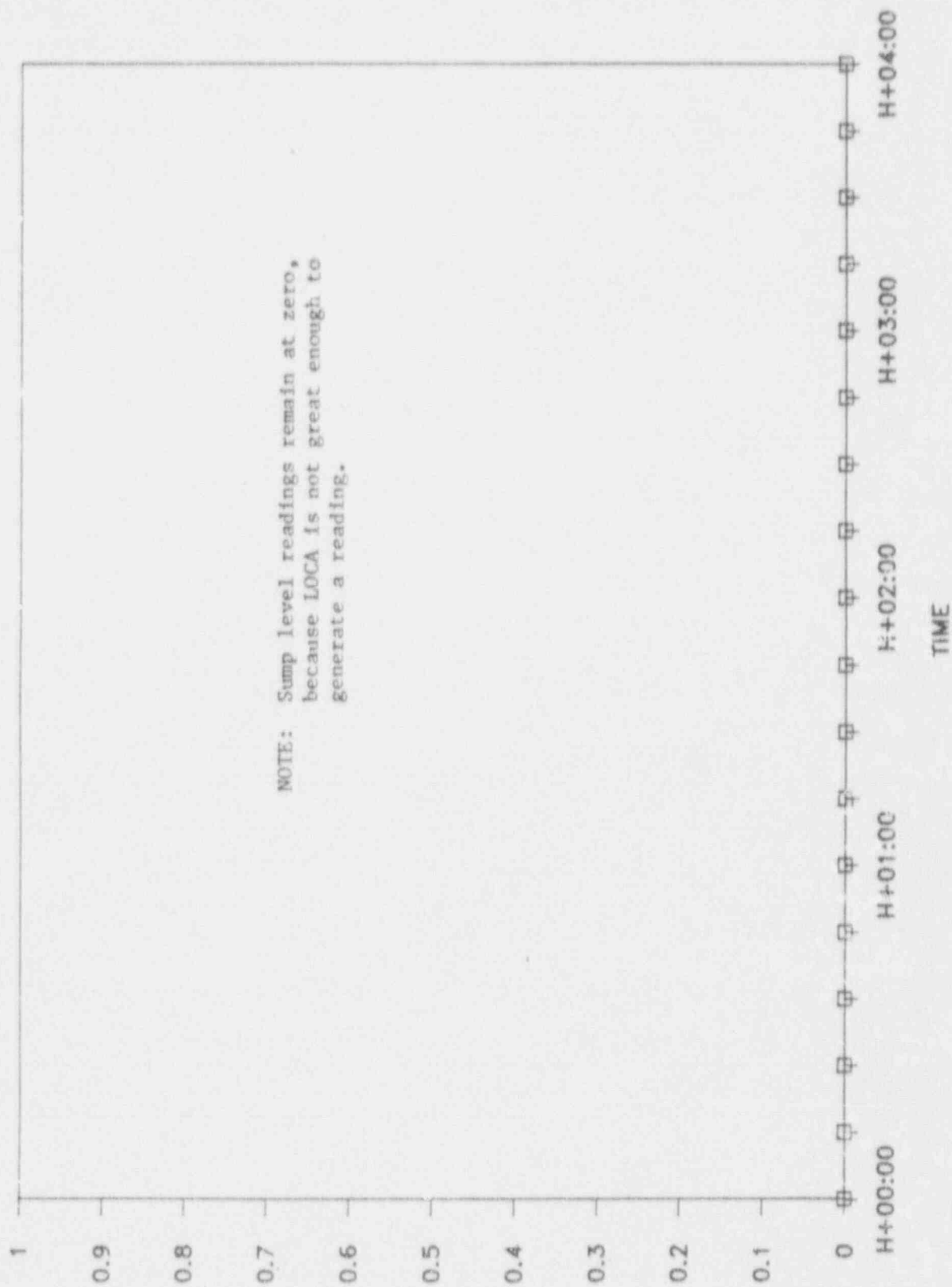


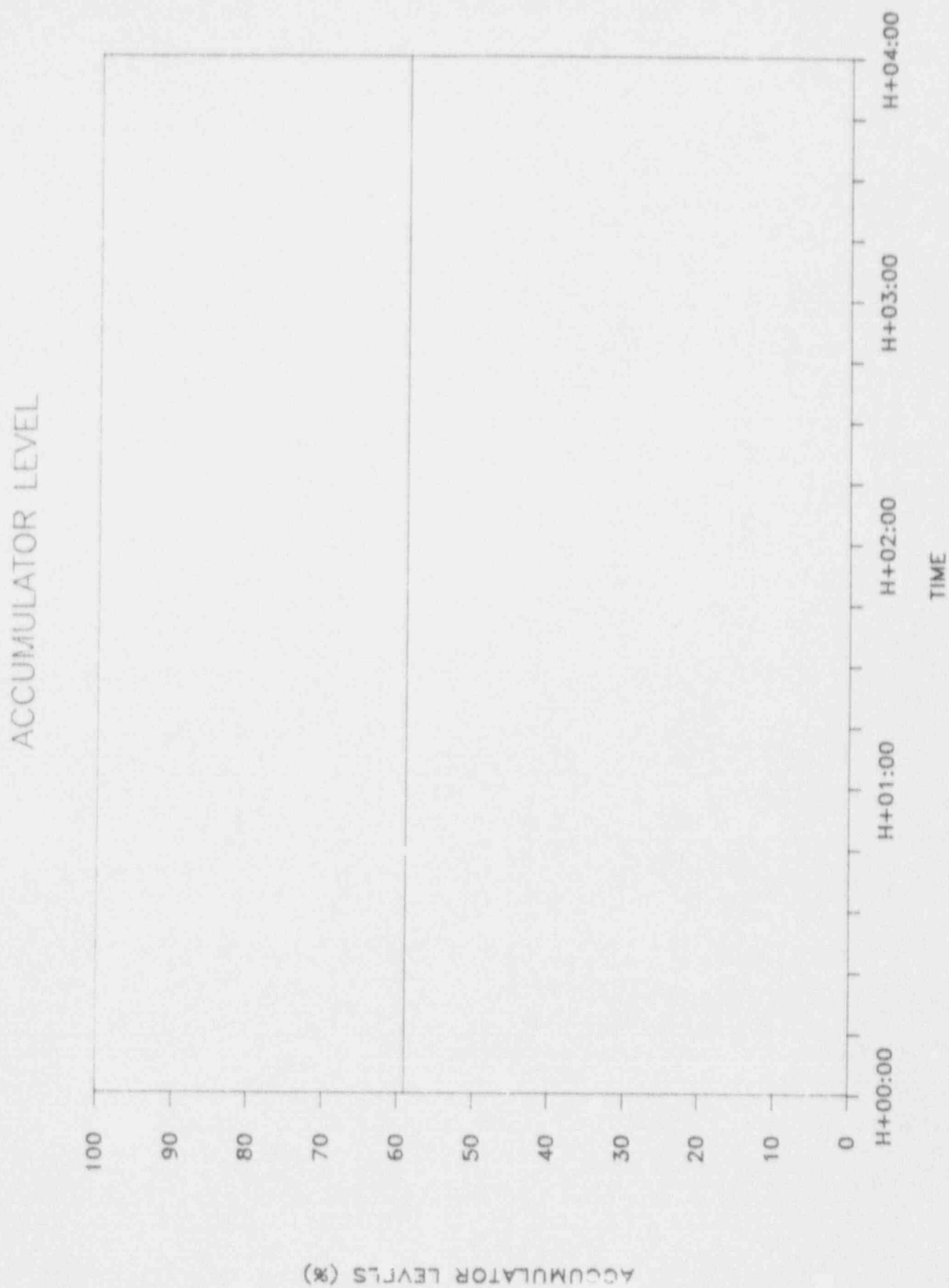
CONCENTRATION (%)

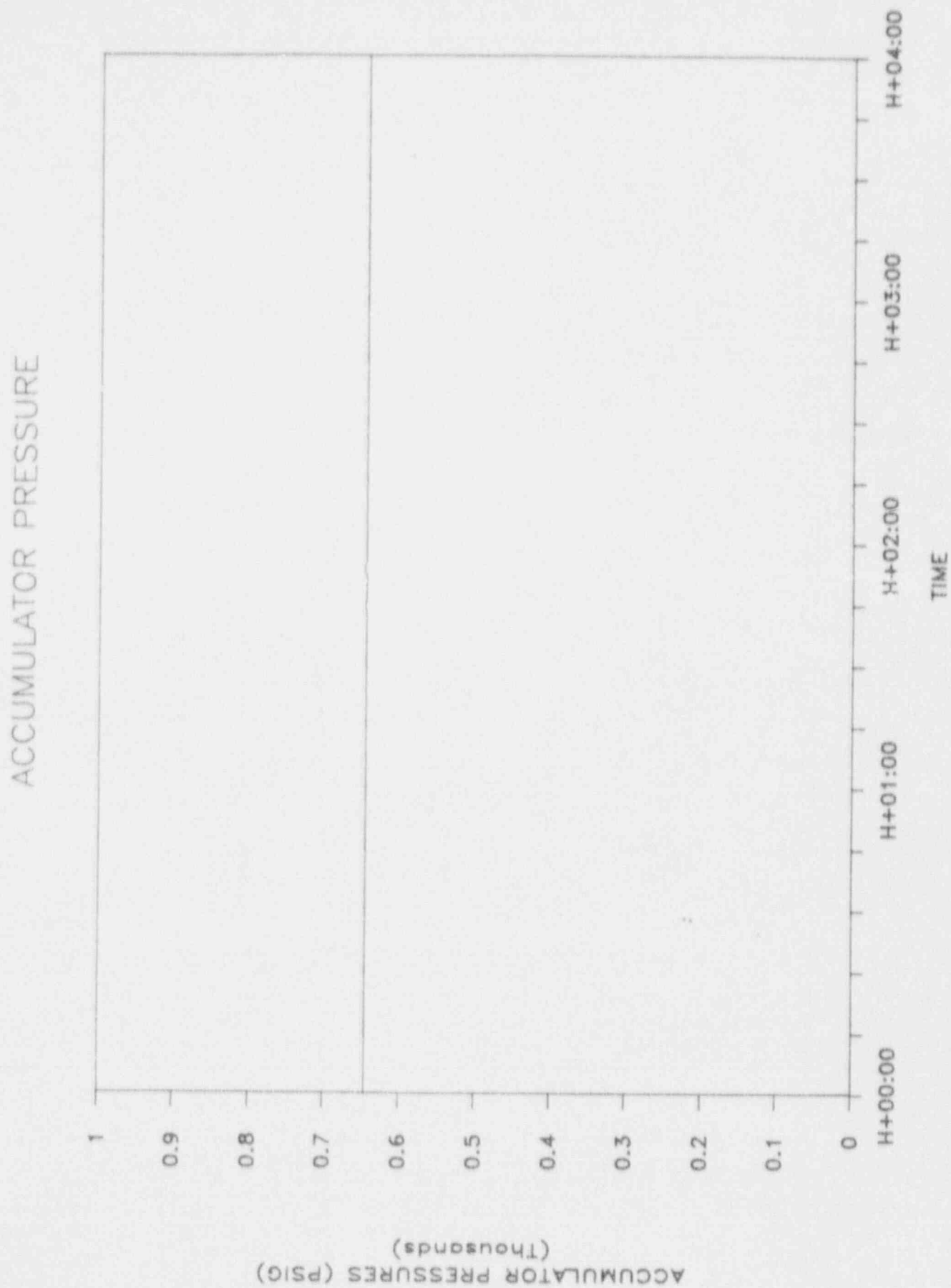
CONTAINMENT HYDROGEN CONCENTRATION



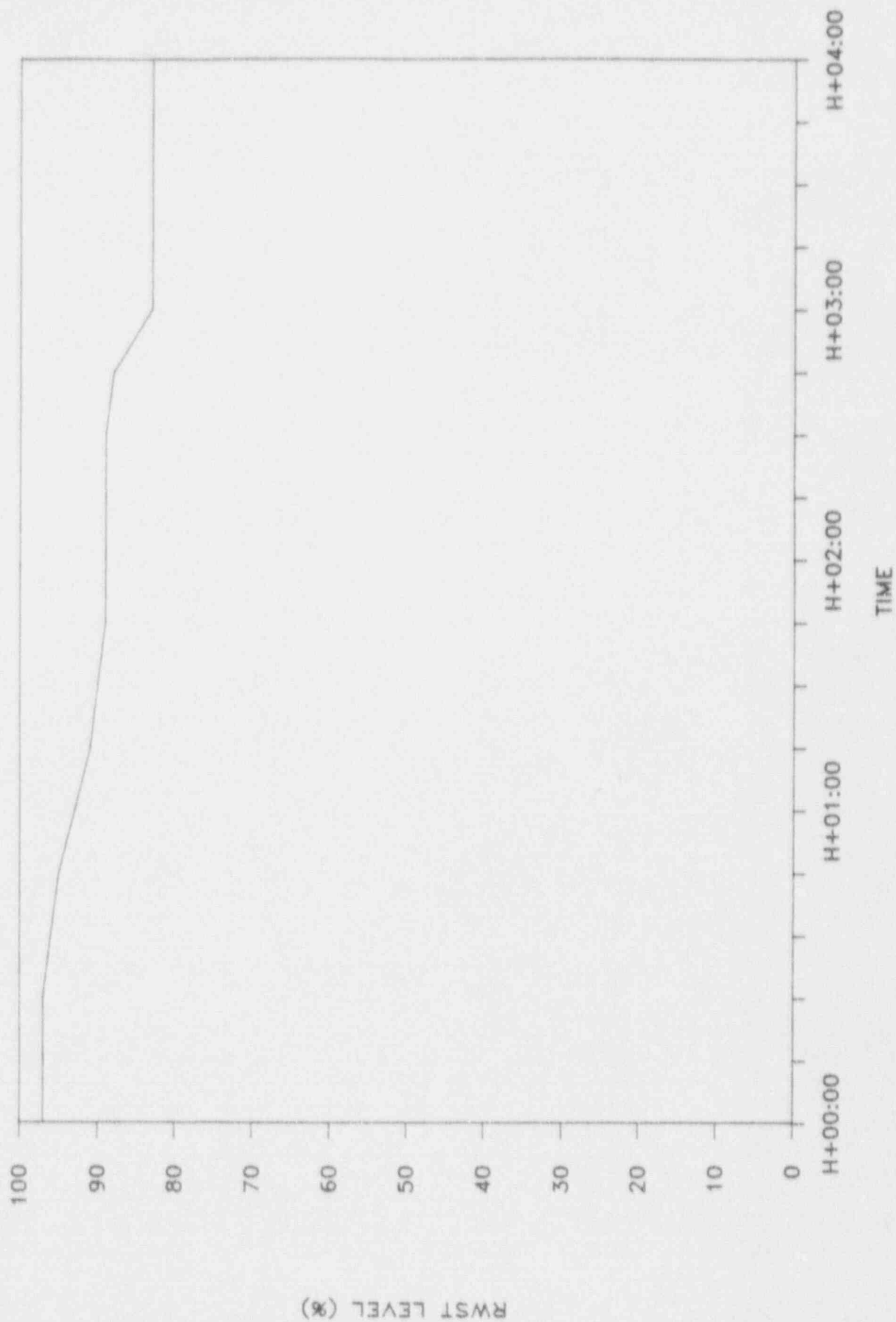
SUMP LEVEL







REFUELING WATER STORAGE TANK LEVEL



CORE DAMAGE ASSESSMENT

A precalculated core inventory necessary in assessing core damage is included in the following subsection.

The core inventory is a summation of curies present in the total mass of fuel pellets at the time of damage to the core. The inventory can be considered to be a corrected fuel pellet inventory for accident assessment purposes. Various assumptions utilized are listed on the following pages.

CORE DAMAGE ASSESSMENT

CORE INVENTORY

<u>Nuclide</u>	<u>Corrected Fuel Pellet Inventory (Ci)</u>
KR-83M	1.48E+07
KR-85M	4.62E+07
KR-85	1.46E+06
KR-87	8.32E+07
KR-88	1.14E+08
XE-133M	4.93E+06
XE-133	2.00E+08
XE-135M	5.55E+07
XE-135	1.91E+08
XE-138	1.70E+08
I-131	8.94E+07
I-132	1.36E+08
I-133	2.00E+08
I-134	2.34E+08
I-135	1.82E+08
RB-88	1.07E+08
CE-144	6.80E+07
TE-132	2.30E+08
CS-134	3.70E+07
CS-137	1.80E+07
CS-138	7.01E+07
LA-140	2.93E+08
LA-142	3.00E+07
BA-140	2.70E+08

CORE DAMAGE ASSESSMENT

- Assumptions:
1. Clad gap activities can be assumed to be 10.0% of fuel pellet activity for all isotopes except KR-85 which is 30% of core activity.
 2. Radioactive decay, time after shutdown, is a factor for accident assessment.
 3. Reactor coolant system volume is static at 10600 cu ft, $3.00E+08$ cc.

Results: Core damage should be assessed at less than .01% clad damage and no fuel overtemperatures.

SECTION 6.0

METEOROLOGICAL DATA

METEOROLOGICAL DATA

(NPIS Met. Data Read Out)

Time

Relative (HRS:MIN)	(H+00:00)	(H+00:15)	(H+00:30)	(H+00:45)
Wind Speed (mi/hr)				
10m	9.2	9.9	10.3	9.3
35m	9.6	10.2	10.5	9.9
60m	11.0	10.5	10.9	10.0
Wind Direction (Deg) (from)				
10m	304	298	304	297
35m	310	305	307	300
60m	311	312	309	305
Wind Direction Var. (Deg)				
10m	16.9	16.8	15.9	15.8
60m	14.3	14.2	13.7	13.6
Vert. Temp. Diff. (Deg F)				
10-35m	-0.8	-0.8	-0.8	-0.8
10-60m	-1.0	-1.0	-1.0	-1.0
10-85m	-1.1	-1.1	-1.1	-1.1
Dew Point (Deg F)				
10m	68	70	70	70
Ref. Temp. (Deg F)				
10m	70	70	70	72
Precipitation (Inches)	0.1	0.1	0.1	0.2
Stability Class	D	D	D	D

METEOROLOGICAL DATA

(NPIS Met. Data Read Out)

Time

Relative (HRS:MIN)	(H+01:00)	(H+01:15)	(H+01:30)	(H+01:45)
Wind Speed (mi/hr)				
10m	11.2	10.5	9.7	10.1
35m	11.3	11.1	10.1	10.5
60m	12.0	11.3	10.4	10.5
Wind Direction (Deg) (from)				
10m	300	304	301	295
35m	302	309	311	305
60m	306	312	311	306
Wind Direction Var. (Deg)				
10m	15.8	16.2	16.3	16.1
60m	13.5	14.0	13.9	14.1
Vert. Temp. Diff. (Deg F)				
10-35m	-0.8	-0.8	-0.8	-0.8
10-60m	-1.0	-1.0	-1.0	-1.0
10-85m	-1.1	-1.1	-1.1	-1.1
Dew Point (Deg F)				
10m	70	70	72	72
Ref. Temp. (Deg F)				
10m	72	72	72	72
Precipitation (Inches)	0.2	0.2	0.2	0.2
Stability Class	D	D	D	D

METEOROLOGICAL DATA

(NP15 Met. Data Read Out)

Time

Relative (HR' MIN)	(H+02:00)	(H+02:15)	(H+02:30)	(H+02:45)
Wind Speed (mi/hr)				
10m	10.8	9.5	8.7	9.1
35m	10.9	10.1	9.1	9.5
60m	11.8	10.3	9.4	9.5
Wind Direction (Deg) (from)				
10m	310	314	316	305
35m	320	327	329	323
60m	350	356	358	350
Wind Direction Var. (Deg)				
10m	15.9	16.0	15.7	15.8
60m	13.7	13.8	14.0	13.3
Vert. Temp. Diff. (Deg F)				
10-35m	+0.20	+0.20	+0.20	+0.20
10-60m	+0.75	+0.75	+0.75	+0.75
10-85m	+1.00	+1.00	+1.00	+1.00
Dew Point (Deg F)				
10m	72	72	72	72
Ref. Temp. (Deg F)				
10m	72	73	72	73
Precipitation (Inches)	0.2	0.2	0.2	0.3
Stability Class	D	D	D	D

METEOROLOGICAL DATA

(NPIS Met. Data Read Out)

Time

Relative (HRS:MIN)	(H+03:00)	(H+03:15)	(H+03:30)	(H+03:45)
Wind Speed (mi/hr)				
10m	6.0	6.2	6.6	6.5
35m	6.4	6.7	6.9	6.5
60m	6.5	7.1	7.3	7.2
Wind Direction (Deg) (from)				
10m	355	351	353	345
35m	357	353	358	355
60m	1	1	0	0
Wind Direction Var. (Deg)				
10m	15.9	16.0	15.7	15.8
60m	13.7	13.8	14.0	13.3
Vert. Temp. Diff. (Deg F)				
10-35m	+0.20	+0.20	+0.20	+0.20
10-60m	+0.75	+0.75	+0.75	+0.75
10-85m	+1.00	+1.00	+1.00	+1.00
Dew Point (Deg F)				
10m	72	73	73	73
Ref. Temp. (Deg F)				
10m	73	73	75	75
Precipitation (Inches)	0.3	0.3	0.3	0.3
Stability Class	F	F	F	F

METEOROLOGICAL DATA

(NPIS Met. Data Read Out)

Time

Relative (HRS:MIN)	(H+04:00)	(H+04:15)	(H+04:30)	(H+04:45+)
Wind Speed (mi/hr)				
10m	7.0	7.5	7.7	7.6
35	7.1	7.7	7.7	7.8
60m	7.4	8.4	8.4	8.0
Wind Direction (Deg) (from)				
10m	353	345	5	2
35m	358	355	8	3
60m	0	0	10	5
Wind Direction Var. (Deg)				
10m	15.2	15.5	15.5	15.3
60m	13.2	13.7	13.1	13.0
Vert. Temp. Diff. (Deg F)				
10-35m	+0.20	+0.20	+0.20	+0.20
10-60m	+0.75	+0.75	+0.75	+0.75
10-85m	+1.00	+1.00	+1.00	+1.00
Dew Point (Deg F)				
10m	75	73	75	73
Ref. Temp. (Deg F)				
10m	75	75	75	75
Precipitation (Inches)	0.3	0.3	0.3	0.3
Stability Class	F	F	F	F

SECTION 7.0

ON-SITE RADIOLOGICAL PARAMETERS

<u>Subsections</u>	<u>Page</u>
PROCESS RADIOCHEMISTRY	7.1
PROCESS MONITORING	
AIRBORNE	7.4
LIQUID	7.13
AREA RADIATION MONITORS	7.16
INPLANT SURVEYS	7.27

PROCESS RADIOCHEMISTRY

Time-related process radiochemistry is provided in the following subsection. Concentration data is provided by isotope in units of $\mu\text{Ci/cc}$ for the reactor coolant system (RCS). Containment and plant unit vent concentrations to be used throughout the Exercise are also included.

Isotopic concentrations are determined using the radiation monitoring system as a reference.

Time frames at the top of the page are based on the time at which the sample is collected, not when it was analyzed.

A time delay of one hour should be allowed from the time a post-accident sampling system (PASS) sample is collected to when the sample is analyzed and results are obtained.

PROCESS RADIOCHEMISTRYRCS Concentration (uCi/cc)

<u>Time (Relative):</u>	<u>H+00:00</u>	<u>H+00:30</u>	<u>H+01:00</u>	<u>H+01:30</u>	<u>H+02:00</u>	<u>H+02:30</u>	<u>H+03:00</u>	<u>H+03:30+</u>
<u>Nuclide</u>								
Kr-85m	1.0E-01	9.3E-02	7.3E-02	--	--	4.8E-02	3.2E-02	1.9E-02
Kr-87	6.4E-02	3.5E-02	--	--	--	--	--	--
Kr-88	1.8E-01	1.7E-01	5.1E-02	6.3E-02	5.1E-02	--	--	--
Xe-133	2.7E+00	3.9E+00	2.0E+00	2.5E+00	3.4E+00	4.3E+00	3.7E+00	3.6E+00
Xe-133m	6.0E-02	5.8E-02	--	--	--	--	--	--
Xe-135	5.9E-01	9.4E-01	4.6E-01	6.1E-01	8.6E-01	1.1E+00	8.6E-01	7.7E-01
Xe-135m	1.3E-01	5.8E-01	--	--	--	--	--	--
Xe-138	--	--	--	--	--	--	--	--
<u>Total Noble Gas</u>	3.82E+00	5.78E+00	2.58E+00	3.17E+00	4.11E+00	5.45E+00	4.59E+00	4.39E+00
<u>Iodine</u>								
I-131	8.6E-02	2.3E+00	3.8E+00	5.1E+00	5.1E+00	4.0E+00	3.4E+00	2.7E+00
I-132	1.1E-01	1.3E+00	1.6E+00	1.5E+00	1.3E+00	8.6E-01	7.4E-01	6.2E-01
I-133	1.2E-01	2.1E+00	3.2E+00	4.0E+00	3.9E+00	2.9E+00	2.2E+00	1.7E+00
I-134	9.8E-02	1.9E-01	1.1E-01	3.2E-02	--	--	--	--
I-135	8.6E-02	1.1E+00	1.6E+00	1.6E+00	1.4E+00	8.8E-01	5.9E-01	3.9E-01
<u>Total Iodine</u>	5.00E-01	6.99E+00	1.03E+01	1.22E+01	1.17E+01	8.64E+00	6.93E+00	5.41E+00
DEI	1.29E-01	3.04E+00	4.92E+00	6.39E+00	6.35E+00	4.89E+00	4.09E+00	3.25E+00
<u>Particulate</u>								
Cs-134	9.3E-03	4.2E-01	6.9E-01	1.1E+00	1.5E+00	1.3E+00	1.1E+00	9.5E-01
Cs-136	2.1E-03	7.7E-02	1.2E-01	1.8E-01	2.4E-01	2.2E-01	1.9E-01	1.6E-01
Cs-137	6.0E-03	2.5E-01	4.0E-01	6.2E-01	8.5E-01	7.3E-01	6.3E-01	5.6E-01
Cs-138	8.6E-02	8.6E-02	2.3E-02	--	--	--	--	--
<u>Total Particulate</u>	1.03E-01	8.33E-01	1.23E+00	1.90E+00	2.59E+00	2.25E+00	1.92E+00	1.67E+00
<u>Gross Total Activity</u>	4.42E+00	1.36E+01	1.41E+01	1.73E+01	1.86E+01	1.63E+01	1.34E+01	1.15E+01

PROCESS RADIOCHEMISTRYContainment Atmosphere Concentration (uCi/cc)

Time (Relative):	<u>H+00:00</u>	<u>H+00:30</u>	<u>H+01:00</u>	<u>H+01:30</u>	<u>H+02:00</u>	<u>H+02:30</u>	<u>H+03:00</u>	<u>H+03:30+</u>
<u>Nuclide</u>								
Kr-85m	1.61E-05	3.03E-05	3.50E-05	--	--	--	--	--
Kr-87	1.03E-05	1.11E-05	--	--	--	--	--	--
Kr-88	2.90E-05	5.48E-05	2.52E-05	--	--	--	--	--
Xe-133	4.42E-04	1.13E-03	1.30E-03	2.53E-03	4.38E-03	8.40E-03	7.19E-03	7.01E-03
Xe-133m	9.69E-06	1.90E-05	1.96E-05	--	--	--	--	--
Xe-135	9.47E-05	3.00E-04	3.00E-04	6.11E-04	1.15E-03	2.12E-03	1.74E-03	1.47E-03
Xe-135m	2.00E-05	1.92E-04	--	--	--	--	--	--
Xe-138	--	--	--	--	--	--	--	--
<u>Total Noble Gas</u>	6.22E-04	1.74E-03	1.68E-03	3.14E-03	5.53E-03	1.05E-02	8.93E-03	8.48E-03
I-131	3.90E-11	3.70E-10	7.00E-10	9.99E-10	2.00E-09	4.00E-09	2.96E-09	2.92E-09
I-132	--	3.59E-10	1.80E-09	8.89E-10	1.80E-09	1.67E-09	1.52E-09	1.38E-09
I-133	8.51E-11	7.96E-10	1.49E-09	2.13E-09	4.27E-09	4.27E-09	3.14E-09	3.01E-09
I-134	--	2.95E-10	1.31E-09	--	--	--	--	--
I-135	7.18E-11	6.48E-10	1.19E-09	1.70E-09	3.41E-09	3.33E-09	2.16E-09	1.05E-09
<u>Total Iodine</u>	1.96E-10	2.47E-09	6.49E-09	5.72E-09	1.15E-08	1.33E-08	9.78E-08	8.36E-09
<u>Particulate (no particulate less than detectable)</u>								
Cs-134	--	<	<	<	<	<	<	<
Cs-136	--	<	<	<	<	<	<	<
Cs-137	--	<	<	<	<	<	<	<
Cs-138	--	<	<	<	<	<	<	<
Co-58	--	<	<	<	<	<	<	<
Co-60	--	<	:	<	<	<	<	<
<u>Total Particulate</u>	--	<	<	<	<	<	<	<
<u>Gross Total Activity</u>	6.22E-04	1.74E-03	1.68E-03	3.14E-03	5.53E-03	1.05E-02	8.93E-03	8.48E-03

PROCESS MONITORS

AIRBORNE

Time-related inplant airborne process monitoring data is provided in the following subsection. Concentration data is provided in the units as indicated. The process monitors are identified by identification numbers as well as its common name.

Some of the listed process monitors have three channels to monitor particulates, iodines or noble gases. For the process monitor data it is assumed that the particulate and noble gas channels determine gross activities whereas the iodine channel determines the activity of Iodine 131 and not gross iodine.

PROCESS MONITORS

AIRBORNE

Time	Relative		(H+00:00)
GTRE 21A/B	Unit Vent Eff.	P (uCi/cc) I G	2.0E-13 7.1E-13 9.0E-07
GHRE 10A/B	Radwaste Building Eff.	P (uCi/cc) I G	1.0E-12 1.0E-11 2.0E-06
ABRE 114	MSRV Monitor S/G A	(mR/hr)	4.0E-01
ABRE 113	S/G B	(mR/hr)	4.0E-01
ABRE 112	S/G C	(mR/hr)	4.0E-01
ABRE 111	S/G D	(mR/hr)	4.0E-01
FCRE 385	Aux. Feed Pump Turbine	(mR/hr)	4.0E-01
GLRE 60	Aux. Bldg. Vent Ex.	P (uCi/cc)	2.0E-10
GKRE 41	Access Control Vent	P (uCi/cc)	3.0E-11
GGRE 27	Fuel Bldg. Vent Ex.	P (uCi/cc) I G	3.2E-10 1.4E-11 2.1E-07
GGRE 28		P (uCi/cc) I G	3.1E-10 1.3E-11 2.0E-07
GERE 92	Condenser Air Discharge	G (uCi/cc)	2.0E-06
GTRE 22	Containment Purge Ex.	P (uCi/cc) I G	1.0E-12 1.0E-12 1.0E-07
GTRE 33		P (uCi/cc) I G	1.0E-12 1.0E-12 1.0E-07
GHRE 22	Radwaste Bldg. Vent	P (uCi/cc)	1.0E-11
GHRE 23	Gas Decay Tank Vent Ex.	G (uCi/cc)	2.2E-06
GKRE 04	Control Room Supply	P (uCi/cc) I G	3.0E-12 2.0E-11 4.0E-06
GKPE 05		P (uCi/cc) I G	3.0E-12 2.0E-12 4.0E-06
GTRE 31	Containment Atmosphere	P (uCi/cc) I G	2.6E-11 2.0E-10 8.2E-04
GTRE 32		P (uCi/cc) I G	2.6E-11 2.0E-10 8.2E-04
GTRE 59	Ctmt. High Range Rad.	(R/hr)	<1.0E+00
GTRE 60		(R/hr)	<1.0E+00

PROCESS MONITORS

AIRBORNE

Time Relative			(H+00:15)	(H+00:30)
GTRE 21A/B	Unit Vent Eff.	P (uCi/cc) I G	2.0E-13 7.1E-13 9.0E-07	2.0E-13 7.1E-13 9.0E-07
GHRE 10A/B	Radwaste Building Eff.	P (uCi/cc) I G	1.0E-12 1.0E-11 2.0E-06	1.0E-12 1.0E-11 2.0E-06
ABRE 114	MSRV Monitor S/G A	(mR/hr)	4.0E-01	4.0E-01
ABRE 113	S/G B	(mR/hr)	4.0E-01	4.0E-01
ABRE 112	S/G C	(mR/hr)	4.0E-01	4.0E-01
ABRE 111	S/G D	(mR/hr)	4.0E-01	4.0E-01
FCRE 385	Aux. Feed Pump Turbine	(mR/hr)	4.0E-01	4.0E-01
GLRE 60	Aux. Bldg. Vent Ex.	P (uCi/cc)	2.0E-10	2.0E-10
GKRE 41	Access Control Vent	P (uCi/cc)	3.0E-11	3.0E-11
GGRE 27	Fuel Bldg. Vent Ex.	P (uCi/cc) I G	3.2E-10 1.4E-11 2.1E-07	3.2E-10 1.4E-11 2.1E-07
GGRE 28		P (uCi/cc) I G	3.1E-10 1.3E-11 2.0E-07	3.1E-10 1.3E-11 2.0E-07
GERE 92	Condenser Air Discharge	G (uCi/cc)	2.0E-06	2.0E-06
GTRE 22	Containment Purge Ex.	P (uCi/cc) I G	1.0E-12 1.0E-12 1.0E-07	1.0E-12 1.0E-12 1.0E-07
GTRE 33		P (uCi/cc) I G	1.0E-12 1.0E-12 1.0E-07	1.0E-12 1.0E-12 1.0E-07
GHRE 22	Radwaste Bldg. Vent	P (uCi/cc)	1.0E-11	1.0E-11
GHRE 23	Gas Decay Tank Vent Ex.	G (uCi/cc)	2.2E-06	2.2E-06
GKRE 04	Control Room Supply	P (uCi/cc) I G	3.0E-12 2.0E-11 4.0E-06	3.0E-12 2.0E-11 4.0E-06
GKPE 05		P (uCi/cc) I G	3.0E-12 2.0E-12 4.0E-06	3.0E-12 2.0E-12 4.0E-06
GTRE 31	Containment Atmosphere	P (uCi/cc) I G	2.6E-11 2.0E-09 9.0E-04	2.6E-11 2.0E-09 1.7E-03
GTRE 32		P (uCi/cc) I G	2.6E-11 2.0E-09 9.0E-04	2.6E-11 2.0E-09 1.7E-03
GTRE 59	Ctmt. High Range Rad.	(R/hr)	<1.0E+00	<1.0E+00
GTRE 60		(R/hr)	<1.0E+00	<1.0E+00

PROCESS MONITORS

AIRBORNE

Time Relative			(H+00:45)	(H+01:00)
GTRE 21A/B	Unit Vent Eff.	P (uCi/cc) I G	2.0E-13 7.1E-13 9.0E-07	2.0E-13 7.1E-13 9.0E-07
GHRE 10A/B	Radwaste Building Eff.	P (uCi/cc) I G	1.0E-12 1.0E-11 2.0E-06	1.0E-12 1.0E-11 2.0E-06
ABRE 114	MSRV Monitor S/G A	(mR/hr)	4.0E-01	4.0E-01
ADRE 113	S/G B	(mR/hr)	4.0E-01	4.0E-01
ABRE 112	S/G C	(mR/hr)	4.0E-01	4.0E-01
ABRE 111	S/G D	(mR/hr)	4.0E-01	4.0E-01
FCRE 385	Aux. Feed Pump Turbine	(mR/hr)	4.0E-01	4.0E-01
GLRE 60	Aux. Bldg. Vent Ex.	P (uCi/cc)	2.0E-10	2.0E-10
GKRE 41	Access Control Vent	P (uCi/cc)	3.0E-11	3.0E-11
GGRE 27	Fuel Bldg. Vent Ex.	P (uCi/cc) I G	3.2E-10 1.4E-11 2.1E-07	3.2E-10 1.4E-11 2.1E-07
GGRE 28		P (uCi/cc) I G	3.1E-10 1.3E-11 2.0E-07	3.1E-10 1.3E-11 2.0E-07
GERE 92	Condenser Air Discharge	G (uCi/cc)	2.0E-06	2.0E-06
GTRE 22	Containment Purge Ex.	P (uCi/cc) I G	1.0E-12 1.0E-12 1.0E-07	1.0E-12 1.0E-12 1.0E-07
GTRE 33		P (uCi/cc) I G	1.0E-12 1.0E-12 1.0E-07	1.0E-12 1.0E-12 1.0E-07
GHRE 22	Radwaste Bldg. Vent	P (uCi/cc)	1.0E-11	1.0E-11
GHRE 23	Gas Decay Tank Vent Ex.	G (uCi/cc)	2.2E-06	2.2E-06
GKRE 04	Control Room Supply	P (uCi/cc) I G	3.0E-12 2.0E-11 4.0E-06	3.0E-12 2.0E-11 4.0E-06
GKPE 05		P (uCi/cc) I G	3.0E-12 2.0E-12 4.0E-06	3.0E-12 2.0E-12 4.0E-06
GTRE 31	Containment Atmosphere	P (uCi/cc) I G	2.6E-10 6.0E-09 1.7E-03	2.6E-10 6.0E-09 1.7E-03
GTRE 32		P (uCi/cc) I G	2.6E-10 6.0E-09 1.7E-03	2.6E-10 6.0E-09 1.7E-03
GTRE 59	Ctmt. High Range Rad.	(R/hr)	<1.0E+00	<1.0E+00
GTRE 60		(R/hr)	<1.0E+00	<1.0E+00

PROCESS MONITORS

AIRBORNE

Time	Relative		(H+01:15)	(H+01:30)
GTRE 21A/B	Unit Vent Eff.	P (uCi/cc) I G	2.0E-13 7.1E-13 9.0E-07	-- -- 9.0E-07
GHRE 10A/B	Radwaste Building Eff.	P (uCi/cc) I G	1.0E-12 1.0E-11 2.0E-06	-- -- 2.0E-06
ABRE 114	MSRV Monitor S/G A	(mR/hr)	4.0E-01	4.0E-01
ABRE 113	S/G B	(mR/hr)	4.0E-01	4.0E-01
ABRE 112	S/G C	(mR/hr)	4.0E-01	4.0E-01
ABRE 111	S/G D	(mR/hr)	4.0E-01	4.0E-01
PCRE 385	Aux. Feed Pump Turbine	(mR/hr)	4.0E-01	4.0E-01
GLRE 60	Aux. Bldg. Vent Ex.	P (uCi/cc)	2.0E-10	--
GKRE 41	Access Control Vent	P (uCi/cc)	3.0E-11	--
GGRE 27	Fuel Bldg. Vent Ex.	P (uCi/cc) I G	3.2E-10 1.4E-11 2.1E-07	3.2E-10 1.4E-11 2.1E-07
GGRE 28		P (uCi/cc) I G	3.1E-10 1.3E-11 2.0E-07	3.1E-10 1.3E-11 2.0E-07
GERE 92	Condenser Air Discharge	G (uCi/cc)	2.0E-06	--
GTRE 22	Containment Purge Ex.	P (uCi/cc) I G	1.0E-12 1.0E-12 1.0E-07	1.0E-12 1.0E-12 1.0E-07
GTRE 33		P (uCi/cc) I G	1.0E-12 1.0E-12 1.0E-07	1.0E-12 1.0E-12 1.0E-07
GHRE 22	Radwaste Bldg. Vent	P (uCi/cc)	1.0E-11	--
GHRE 23	Gas Decay Tank Vent Ex.	G (uCi/cc)	2.2E-06	--
GKRE 04	Control Room Supply	P (uCi/cc) I G	3.0E-12 2.0E-11 4.0E-06	3.0E-12 2.0E-11 4.0E-06
GKPE 05		P (uCi/cc) I G	3.0E-12 2.0E-12 4.0E-06	3.0E-12 2.0E-12 4.0E-06
GTRE 31	Containment Atmosphere	P (uCi/cc) I G	2.6E-10 6.0E-09 3.2E-03	2.6E-10 6.0E-09 3.2E-03
GTRE 32		P (uCi/cc) I G	2.6E-10 6.0E-09 3.2E-03	2.6E-10 6.0E-09 3.2E-03
GTRE 59	Ctmt. High Range Rad.	(R/hr)	<1.0E+00	<1.0E+00
GTRE 60		(R/hr)	<1.0E+00	<1.0E+00

PROCESS MONITORS

AIRBORNE

Time Relative			(H+01:45)	(H+02:00)
GTRE 21A/B	Unit Vent Eff.	P (uCi/cc) I G	-- -- 9.0E-07	-- -- 9.0E-07
GHRE 10A/B	Radwaste Building Eff.	P (uCi/cc) I G	-- -- 2.0E-06	-- -- 2.0E-06
ABRE 114	MSRV Monitor S/G A	(mR/hr)	4.0E-01	4.0E-01
ABRE 113	S/G B	(mR/hr)	4.0E-01	4.0E-01
ABRE 112	S/G C	(mR/hr)	4.0E-01	4.0E-01
ABRE 111	S/G D	(mR/hr)	4.0E-01	4.0E-01
FCRE 385	Aux. Feed Pump Turbine	(mR/hr)	4.0E-01	4.0E-01
GLRE 60	Aux. Bldg. Vent Ex.	P (uCi/cc)	--	--
GKRE 41	Access Control Vent	P (uCi/cc)	--	--
GGRE 27	Fuel Bldg. Vent Ex.	P (uCi/cc) I G	3.2E-10 1.4E-11 2.1E-07	3.2E-10 1.4E-11 2.1E-07
CGRE 28		P (uCi/cc) I G	3.1E-10 1.3E-11 2.0E-07	3.1E-10 1.3E-11 2.0E-07
GERE 92	Condenser Air Discharge	G (uCi/cc)	--	--
GTRE 22	Containment Purge Ex.	P (uCi/cc) I G	1.0E-12 1.0E-12 1.0E-07	1.0E-12 1.0E-12 1.0E-07
GTRE 33		P (uCi/cc) I G	1.0E-12 1.0E-12 1.0E-07	1.0E-12 1.0E-12 1.0E-07
GHRE 22	Radwaste Bldg. Vent	P (uCi/cc)	--	--
GHRE 23	Gas Decay Tank Vent Ex.	G (uCi/cc)	--	--
GKRE 04	Control Room Supply	P (uCi/cc) I G	3.0E-12 2.0E-11 4.0E-06	3.0E-12 2.0E-11 4.0E-06
GKPE 05		P (uCi/cc) I G	3.0E-12 2.0E-12 4.0E-06	3.0E-12 2.0E-12 4.0E-06
GTRE 31	Containment Atmosphere	P (uCi/cc) I G	2.6E-10 8.0E-09 4.2E-03	2.6E-10 1.0E-08 5.2E-03
GTRE 32		P (uCi/cc) I G	2.6E-10 8.0E-09 4.2E-03	2.6E-10 1.0E-08 5.2E-03
GTRE 59	Ctmt. High Range Rad.	(R/hr)	< 1.0E+00	3.0E+00
GTRE 60		(R/hr)	< 1.0E+00	3.0E+00

PROCESS MONITORS

AIRBORNE

Time		Relative		(H+02:15)	(H+02:30)
GTRE 21A/B	Unit Vent Eff.	P (uCi/cc)	--	--	
		I	--	--	
		G	9.0E-07	9.0E-07	
GHRE 10A/B	Radwaste Building Eff.	P (uCi/cc)	--	--	
		I	--	--	
		G	2.0E-06	2.0E-06	
ABRE 114	MSRV Monitor S/G A	(mR/hr)	4.0E-01	5.0E+0	
ABRE 113	S/G B	(mR/hr)	4.0E-01	5.0E+0	
ABRE 112	S/G C	(mR/hr)	4.0E-01	5.0E+0	
ABRE 111	S/G D	(mR/hr)	4.0E-01	5.0E+0	
FCRE 385	Aux. Feed Pump Turbine	(mR/hr)	4.0E-01	4.0E-01	
GLRE 60	Aux. Bldg. Vent Ex.	P (uCi/cc)	--	--	
GKRE 41	Access Control Vent	P (uCi/cc)	--	--	
GGRE 27	Fuel Bldg. Vent Ex.	P (uCi/cc)	3.2E-10	3.2E-10	
		I	1.4E-11	1.4E-11	
		G	2.1E-07	2.1E-07	
GGRE 28		P (uCi/cc)	3.1E-10	3.1E-10	
		I	1.3E-11	1.3E-11	
		G	2.0E-07	2.0E-07	
GERE 92	Condenser Air Discharge	G (uCi/cc)	--	--	
GTRE 22	Containment Purge Ex.	P (uCi/cc)	1.0E-12	1.0E-12	
		I	1.0E-12	1.0E-12	
		G	1.0E-07	1.0E-07	
GTRE 33		P (uCi/cc)	1.0E-12	1.0E-12	
		I	1.0E-12	1.0E-12	
		G	1.0E-07	1.0E-07	
GHRE 22	Radwaste Bldg. Vent	P (uCi/cc)	--	--	
GHRE 23	Gas Decay Tank Vent Ex.	G (uCi/cc)	--	--	
GKRE 04	Control Room Supply	P (uCi/cc)	3.0E-12	3.0E-12	
		I	2.0E-11	2.0E-11	
		G	4.0E-06	4.0E-06	
GKPE 05		P (uCi/cc)	3.0E-12	3.0E-12	
		I	2.0E-12	2.0E-12	
		G	4.0E-06	4.0E-06	
GTRE 31	Containment Atmosphere	P (uCi/cc)	2.6E-10	2.6E-10	
		I	2.0E-08	2.5E-08	
		G	1.2E-02	1.0E-02	
GTRE 32		P (uCi/cc)	2.6E-10	2.6E-10	
		I	2.0E-08	2.5E-08	
		G	1.2E-02	1.0E-02	
GTRE 59	Ctmt. High Range Rad.	(R/hr)	3.0E+00	5.0E+00	
GTRE 60		(R/hr)	3.0E+00	5.0E+00	

PROCESS MONITORS

AIRBORNE

Time Relative			(H+02:45)	(H+03:00)
GTRE 21A/B	Unit Vent Eff.	P (uCi/cc) I G	-- -- 9.0E-07	-- -- 9.0E-07
GHRE 10A/B	Radwaste Building Eff.	P (uCi/cc) I G	-- -- 2.0E-06	-- -- 2.0E-06
ABRE 114	MSRV Monitor S/G A	(mR/hr)	6.0E+0	1.2E+01
ABRE 113	S/G B	(mR/hr)	6.0E+0	1.2E+01
ABRE 112	S/G C	(mR/hr)	6.0E+0	1.2E+01
ABRE 111	S/G D	(mR/hr)	6.0E+0	1.2E+01
FCRE 385	Aux. Feed Pump Turbine	(mR/hr)	4.0E-01	4.0E-01
GLRE 60	Aux. Bldg. Vent Ex.	P (uCi/cc)	--	--
GKRE 41	Access Control Vent	P (uCi/cc)	--	--
GGRE 27	Fuel Bldg. Vent Ex.	P (uCi/cc) I G	3.2E-10 1.4E-11 2.1E-07	3.2E-10 1.4E-11 2.1E-07
GCRE 28		P (uCi/cc) I G	3.1E-10 1.3E-11 2.0E-07	3.1E-10 1.3E-11 2.0E-07
GERE 92	Condenser Air Discharge	G (uCi/cc)	--	--
GTRE 22	Containment Purge Ex.	P (uCi/cc) I G	1.0E-12 1.0E-12 1.0E-07	1.0E-12 1.0E-12 1.0E-07
GTRE 33		P (uCi/cc) I G	1.0E-12 1.0E-12 1.0E-07	1.0E-12 1.0E-12 1.0E-07
GHRE 22	Radwaste Bldg. Vent	P (uCi/cc)	--	--
GHRE 23	Gas Decay Tank Vent Ex.	G (uCi/cc)	--	--
GKRE 04	Control Room Supply	P (uCi/cc) I G	3.0E-12 2.0E-11 4.0E-06	3.0E-12 2.0E-11 4.0E-06
GKPE 05		P (uCi/cc) I G	3.0E-12 2.0E-12 4.0E-06	3.0E-12 2.0E-12 4.0E-06
GTRE 31	Containment Atmosphere	P (uCi/cc) I G	2.6E-10 1.3E-08 9.6E-03	2.6E-10 1.3E-08 8.8E-03
GTRE 32		P (uCi/cc) I G	2.6E-10 1.3E-08 9.6E-03	2.6E-10 1.3E-08 8.8E-03
GTRE 59	Ctmt. High Range Rad.	(R/hr)	5.0E+00	5.0E+00
GTRE 60		(R/hr)	5.0E+00	5.0E+00

PROCESS MONITORS

AIRBORNE

Time		Relative		(H+03:15)	(H+03:30+)
GTRE 21A/B	Unit Vent Eff.	P (uCi/cc)	--	--	--
		I	--	--	--
		G	9.0E-07	9.0E-07	9.0E-07
GHRE 10A/B	Radwaste Building Eff.	P (uCi/cc)	--	--	--
		I	--	--	--
		G	2.0E-06	2.0E-06	2.0E-06
ABRE 114	MSRV Monitor S/G A	(mR/hr)	1.4E+01	1.3E+01	1.3E+01
ABRE 113	S/G B	(mR/hr)	1.4E+01	1.3E+01	1.3E+01
ABRE 112	S/G C	(mR/hr)	1.4E+01	1.3E+01	1.3E+01
ABRE 111	S/G D	(mR/hr)	1.4E+01	1.3E+01	1.3E+01
FCRE 385	Aux. Feed Pump Turbine	(mR/hr)	4.0E-01	4.0E-01	4.0E-01
GLRE 60	Aux. Bld. Vent Ex.	P (uCi/cc)	--	--	--
GKRE 41	Access Control Vent	P (uCi/cc)	--	--	--
GGRE 27	Fuel Bldg. Vent Ex.	P (uCi/cc)	3.2E-10	3.2E-10	3.2E-10
		I	1.4E-11	1.4E-11	1.4E-11
		G	2.1E-07	2.1E-07	2.1E-07
GGRE 28		P (uCi/cc)	3.1E-10	3.1E-10	3.1E-10
		I	1.3E-11	1.3E-11	1.3E-11
		G	2.0E-07	2.0E-07	2.0E-07
GERE 92	Condenser Air Discharge	G (uCi/cc)	--	--	--
GTRE 22	Containment Purge Ex.	P (uCi/cc)	1.0E-12	1.0E-12	1.0E-12
		I	1.0E-12	1.0E-12	1.0E-12
		G	1.0E-07	1.0E-07	1.0E-07
GTRE 33		P (uCi/cc)	1.0E-12	1.0E-12	1.0E-12
		I	1.0E-12	1.0E-12	1.0E-12
		G	1.0E-07	1.0E-07	1.0E-07
GHRE 22	Radwaste Bldg. Vent	P (uCi/cc)	--	--	--
GHRE 23	Gas Decay Tank Vent Ex.	G (uCi/cc)	--	--	--
GKRE 04	Control Room Supply	P (uCi/cc)	3.0E-12	3.0E-12	3.0E-12
		I	2.0E-11	2.0E-11	2.0E-11
		G	4.0E-06	4.0E-06	4.0E-06
GKPE 05		P (uCi/cc)	3.0E-12	3.0E-12	3.0E-12
		I	2.0E-12	2.0E-12	2.0E-12
		G	4.0E-06	4.0E-06	4.0E-06
GTRE 31	Containment Atmosphere	P (uCi/cc)	2.6E-10	2.6E-10	2.6E-10
		I	1.3E-08	1.3E-08	1.3E-08
		G	8.3E-03	7.6E+03	7.6E+03
GTRE 32		P (uCi/cc)	2.6E-10	2.6E-10	2.6E-10
		I	1.3E-08	1.3E-08	1.3E-08
		G	8.3E-03	7.6E+03	7.6E+03
GTRE 59	Ctmt. High Range Rad.	(R/hr)	3.0E+00	3.0E+00	3.0E+00
GTRE 60		(R/hr)	3.0E+00	3.0E+00	3.0E+00

PROCESS MONITORS

LIQUID

Time-related implant liquid process monitoring data is provided in the following subsection. Concentration data is provided in the units as indicated. The process monitors are identified by identification numbers as well as its common name.

PROCESS MONITORS

LIQUID

Time	Relative		(H+00:00)	(H+00:15)
LERE 59	Turbine Bldg. Drain	(uCi/cc)	6.00E-07	6.00E-07
HFRE 45	Sec. Liquid Waste Discharge	(uCi/cc)	5.50E-09	5.50E-09
FBRE 50	Aux. Steam Cond. Recovery Tank	(uCi/cc)	4.00E-07	4.00E-07
AERE 4A	Service Water Return	(uCi/cc)	4.00E-08	4.00E-08
AERE 4B		(uCi/cc)	4.00E-08	4.00E-08
EFRE 35	Essential Service Water	(uCi/cc)	5.00E-07	5.00E-08
EFRE 36		(uCi/cc)	5.00E-07	5.00E-08
EGRE 09	CCW Train A	(uCi/cc)	4.50E-07	4.50E-07
EGRE 10	CCW Train B	(uCi/cc)	4.50E-07	4.50E-07
SJRE 02	S/F Liquid	(uCi/cc)	3.00E-07	3.00E-07
BMRE 25	S/G Blowdown Process	(uCi/cc)	3.50E-07	3.50E-07
BMRE 52	S/F Blowdown Discharge	(uCi/cc)	3.50E-07	3.50E-07
SJRE 01	CVCS Letdown	(uCi/cc)	2.30E+00	4.40E+00
HERE 16	Boron Recycle Distillate	(uCi/cc)	5.00E-07	5.00E-07
HBRE 18	Liquid Waste Discharge	(uCi/cc)	3.00E-05	3.00E-05

Time	Relative		(H+00:30)	(H+00:45)
LERE 59	Turbine Bldg. Drain	(uCi/cc)	6.00E-07	6.00E-07
HFRE 45	Sec. Liquid Waste Discharge	(uCi/cc)	5.50E-09	5.50E-09
FBRE 50	Aux. Steam Cond. Recovery Tank	(uCi/cc)	4.00E-07	4.00E-07
AERE 4A	Service Water Return	(uCi/cc)	4.00E-08	4.00E-08
AERE 4B		(uCi/cc)	4.00E-08	4.00E-08
EFRE 35	Essential Service Water	(uCi/cc)	5.00E-07	5.00E-07
EFRE 36		(uCi/cc)	5.00E-07	5.00E-07
EGRE 09	CCW Train A	(uCi/cc)	4.50E-07	4.50E-07
EGRE 10	CCW Train B	(uCi/cc)	4.50E-07	4.50E-07
SJRE 02	S/F Liquid	(uCi/cc)	3.00E-07	3.00E-07
BMRE 25	S/G Blowdown Process	(uCi/cc)	3.50E-07	3.50E-07
BMRE 52	S/F Blowdown Discharge	(uCi/cc)	3.50E-07	3.50E-07
SJRE 01	CVCS Letdown	(uCi/cc)	1.40E+01	1.40E+01
HERE 16	Boron Recycle Distillate	(uCi/cc)	5.00E-07	5.00E-07
HBRE 18	Liquid Waste Discharge	(uCi/cc)	3.00E-05	3.00E-05

PROCESS MONITORSLIQUID

Time		Relative		(H+01:00)	(H+01:15+)
LERE 59	Turbine Bldg. Drain	(uCi/cc)	6.00E-07	6.00E-07	
HFRE 45	Sec. Liquid Waste Discharge	(uCi/cc)	5.50E-09	5.50E-09	
FBRE 50	Aux. Steam Cond. Recovery Tank	(uCi/cc)	4.00E-07	4.00E-07	
AERE 4A	Service Water Return	(uCi/cc)	4.00E-08	4.00E-08	
AERE 4B		(uCi/cc)	4.00E-08	4.00E-08	
EFRE 35	Essential Service Water	(uCi/cc)	5.00E-07	5.00E-08	
EFRE 36		(uCi/cc)	5.00E-07	5.00E-08	
EGRE 09	CCW Train A	(uCi/cc)	4.50E-07	4.50E-07	
EGRE 10	CCW Train B	(uCi/cc)	4.50E-07	4.50E-07	
SJRE 02	S/F Liquid	(uCi/cc)	3.00E-07	3.00E-07	
BMRE 25	S/G Blowdown Process	(uCi/cc)	3.50E-07	3.50E-07	
BMRE 52	S/F Blowdown Discharge	(uCi/cc)	3.50E-07	3.50E-07	
SJRE 01	CVCS Letdown	(uCi/cc)	1.40E+01	1.70E+01	
HERE 16	Boron Recycle Distillate	(uCi/cc)	5.00E-07	5.00E-07	
HBRE 18	Liquid Waste Discharge	(uCi/cc)	3.00E-05	3.00E-05	

AREA RADIATION MONITORS

Time-related inplant area radiation monitoring data is provided in the following subsection. Radiation data is provided in the units as indicated. The area radiation monitors are identified by identification numbers as well as its common name.

Radiation levels indicated with a < or > sign indicate the monitor is reading offscale low or offscale high respectively.

The location of area radiation monitors within the auxiliary and fuel buildings are designated on the inplant radiation maps.

AREA RADIATION MONITORS

Time	Relative		(H+00:00)	(H+00:15)
SDRE01	Radwaste Bldg. Corridor, Basement (West)	(mR/hr)	0.2	0.2
SDRE02	Radwaste Bldg. Corridor, Basement (Central)	(mR/hr)	0.2	0.2
SDRE03	Radwaste Bldg. Corridor, Basement (East)	(mR/hr)	0.2	0.2
SDRE04	Radwaste Bldg. Corridor, 2000' ele. (West)	(mR/hr)	0.2	0.2
SDRE05	Radwaste Bldg. Corridor, 2000' ele. (Central)	(mR/hr)	0.2	0.2
SDRE06	Solid Radwaste Area, 2000' ele.	(mR/hr)	0.2	0.2
SDRE07	Radwaste Bldg. Truck Space, 2000' ele.	(mR/hr)	0.2	0.2
SDRE08	Radwaste Bldg. Sample Laboratory	(mR/hr)	0.2	0.2
SDRE09	Radwaste Bldg. Valve Rm. Corridor, (East) 2047' ele.	(mR/hr)	0.2	0.2
SDRE10	Radwaste Bldg. Valve Rm. Corridor, (West) 2047' ele.	(mR/hr)	0.2	0.2
SDRE11	Radwaste Bldg. HVAC Filter Unit	(mR/hr)	0.2	0.2
SDRE12	Aux. Bldg. Corridor, Basement (1974' ele. SE)	(mR/hr)	25.0	25.0
SDRE13	Aux. Bldg. Corridor, Basement (1974' ele. NE)	(mR/hr)	25.0	25.0
SDRE14	Aux. Bldg. Corridor, Basement (1974' ele. N)	(mR/hr)	25.0	25.0
SDRE15	Aux. Bldg. Corridor, Basement (1974' ele. W)	(mR/hr)	25.0	25.0
SDRE16	Aux. Bldg. Corridor, Basement (1974' ele. SW)	(mR/hr)	25.0	25.0
SDRE17	Nonradioactive Pipe Tunnel & Personnel Access (1974' ele.)	(mR/hr)	0.5	0.5
SDRE18	Aux. Bldg. Ground Floor Corridor (2000' ele. N)	(mR/hr)	25.0	25.0
SDRE19	Aux. Bldg. Ground Floor Corridor (2000' ele. SE)	(mR/hr)	25.0	25.0
SDRE20	Aux. Bldg. Valve Rm. Corridor (2000' ele. S)	(mR/hr)	25.0	25.0
SDRE21	Aux. Bldg. Valve Rm. Corridor (2000' ele. S)	(mR/hr)	25.0	25.0
SDRE22	Aux. Bldg. Ground Floor (2000' ele. SW)	(mR/hr)	25.0	25.0
SDRE23	Aux. Bldg. Ground Floor (2000' ele. W)	(mR/hr)	25.0	25.0
SDRE24	Aux. Bldg. Sampling Room (2000' ele. Central)	(mR/hr)	50.0	50.0
SDRE25	Aux. Bldg. Vent Filter	(mR/hr)	5.0	5.0
SDRE26	RHR Heat Exchanger Outside (2026' ele.)	(mR/hr)	25.0	25.0
SDRE27	Cont. Purge Exhaust Filter Unit (2047' ele.)	(mR/hr)	5.0	5.0
SDRE28	Cont. Personnel Hatch (2047' ele.)	(mR/hr)	50.0	50.0
SDRE29	Hot Machine Shop	(mR/hr)	0.2	0.2
SDRE30	Hot Instrument Shop	(mR/hr)	0.2	0.2
SDRE31	Control Bldg. Hot Lab	(mR/hr)	0.2	0.2
SDRE32	Control Bldg. Corridor	(mR/hr)	0.2	0.2
SDRE33	Control Room (2047' ele.)	(mR/hr)	0.2	0.2
SDRE34	Cask Handling Area (2000' ele.)	(mR/hr)	0.5	0.5
SDRE35	New Fuel Storage (2026' ele. W)	(mR/hr)	0.5	0.5
SDRE36	New Fuel Storage Corridor (2026' ele.)	(mR/hr)	0.5	0.5
SDRE37	Spent Fuel Pool Area	(mR/hr)	0.5	0.5
SDRE38	Spent Fuel Pool Area	(mR/hr)	0.5	0.5
SDRE39	Seal Table Area (2026' ele. N)	(mR/hr)	200.0	200.0
SDRE40	Personnel Access Hatch Area Inside (2047' ele. SW)	(mR/hr)	400.0	400.0
SDRE41	Containment Bldg. (2047.6' ele. NW)	(mR/hr)	40.0	40.0
SDRE42	Containment Bldg. (2047.6' ele. E)	(mR/hr)	40.0	40.0
SDRE43	Technical Support Center	(mR/hr)	0.2	0.2
SDRE44	Emergency Operations Facility	(mR/hr)	0.2	0.2
SDRE47	PASS Sampling Room (2000' ele. Aux. Bldg.)	(mR/hr)	50.0	50.0

AREA RADIATION MONITORS

Time	Relative		(H+00:30)	(H+00:45)
SDRE01	Radwaste Bldg. Corridor, Basement (West)	(mR/hr)	0.2	0.2
SDRE02	Radwaste Bldg. Corridor, Basement (Central)	(mR/hr)	0.2	0.2
SDRE03	Radwaste Bldg. Corridor, Basement (East)	(mR/hr)	0.2	0.2
SDRE04	Radwaste Bldg. Corridor, 2000' ele. (West)	(mR/hr)	0.2	0.2
SDRE05	Radwaste Bldg. Corridor, 2000' ele. (Central)	(mR/hr)	0.2	0.2
SDRE06	Solid Radwaste Area, 2000' ele.	(mR/hr)	0.2	0.2
SDRE07	Radwaste Bldg. Truck Space, 2000' ele.	(mR/hr)	0.2	0.2
SDRE08	Radwaste Bldg. Sample Laboratory	(mR/hr)	0.2	0.2
SDRE09	Radwaste Bldg. Valve Rm. Corridor, (East) 2047' ele.	(mR/hr)	0.2	0.2
SDRE10	Radwaste Bldg. Valve Rm. Corridor, (West) 2047' ele.	(mR/hr)	0.2	0.2
SDRE11	Radwaste Bldg. HVAC Filter Unit	(mR/hr)	0.2	0.2
SDRE12	Aux. Bldg. Corridor, Basement (1974' ele. SE)	(mR/hr)	25.0	25.0
SDRE13	Aux. Bldg. Corridor, Basement (1974' ele. NE)	(mR/hr)	25.0	25.0
SDRE14	Aux. Bldg. Corridor, Basement (1974' ele. N)	(mR/hr)	25.0	25.0
SDRE15	Aux. Bldg. Corridor, Basement (1974' ele. W)	(mR/hr)	25.0	25.0
SDRE16	Aux. Bldg. Corridor, Basement (1974' ele. SW)	(mR/hr)	25.0	25.0
SDRE17	Nonradioactive Pipe Tunnel & Personnel Access (1974' ele.)	(mR/hr)	0.5	0.5
SDRE18	Aux. Bldg. Ground Floor Corridor (2000' ele. N)	(mR/hr)	25.0	25.0
SDRE19	Aux. Bldg. Ground Floor Corridor (2000' ele. SE)	(mR/hr)	25.0	25.0
SDRE20	Aux. Bldg. Valve Rm. Corridor (2000' ele. S)	(mR/hr)	25.0	25.0
SDRE21	Aux. Bldg. Valve Rm. Corridor (2000' ele. S)	(mR/hr)	25.0	25.0
SDRE22	Aux. Bldg. Ground Floor (2000' ele. SW)	(mR/hr)	25.0	25.0
SDRE23	Aux. Bldg. Ground Floor (2000' ele. W)	(mR/hr)	25.0	25.0
SDRE24	Aux. Bldg. Sampling Room (2000' ele. Central)	(mR/hr)	50.0	50.0
SDRE25	Aux. Bldg. Vent Filter	(mR/hr)	5.0	5.0
SDRE26	RHR Heat Exchanger Outside (2026' ele.)	(mR/hr)	25.0	25.0
SDRE27	Cont. Purge Exhaust Filter Unit (2047' ele.)	(mR/hr)	5.0	5.0
SDRE28	Cont. Personnel Hatch (2047' ele.)	(mR/hr)	50.0	50.0
SDRE29	Hot Machine Shop	(mR/hr)	0.2	0.2
SDRE30	Hot Instrument Shop	(mR/hr)	0.2	0.2
SDRE31	Control Bldg. Hot Lab	(mR/hr)	0.2	0.2
SDRE32	Control Bldg. Corridor	(mR/hr)	0.2	0.2
SDRE33	Control Room (2047' ele.)	(mR/hr)	0.2	0.2
SDRE34	Cask Handling Area (2000' ele.)	(mR/hr)	0.5	0.5
SDRE35	New Fuel Storage (2026' ele. W)	(mR/hr)	0.5	0.5
SDRE36	New Fuel Storage Corridor (2026' ele.)	(mR/hr)	0.5	0.5
SDRE37	Spent Fuel Pool Area	(mR/hr)	0.5	0.5
SDRE38	Spent Fuel Pool Area	(mR/hr)	0.5	0.5
SDRE39	Seal Table Area (2026' ele. N)	(mR/hr)	200.0	200.0
SDRE40	Personnel Access Hatch Area Inside (2047' ele. SW)	(mR/hr)	400.0	400.0
SDRE41	Containment Bldg. (2047.6' ele. NW)	(mR/hr)	40.0	40.0
SDRE42	Containment Bldg. (2047.6' ele. E)	(mR/hr)	40.0	40.0
SDRE43	Technical Support Center	(mR/hr)	0.2	0.2
SDRE44	Emergency Operations Facility	(mR/hr)	0.2	0.2
SDRE47	PASS Sampling Room (2000' ele. Aux. Bldg.)	(mR/hr)	50.0	50.0

AREA RADIATION MONITORS

Time	Relative		(H+01:00)	(H+01:15)
SDRE01	Radwaste Bldg. Corridor, Basement (West)	(mR/hr)	0.2	0.2
SDRE02	Radwaste Bldg. Corridor, Basement (Central)	(mR/hr)	0.2	0.2
SDRE03	Radwaste Bldg. Corridor, Basement (East)	(mR/hr)	0.2	0.2
SDRE04	Radwaste Bldg. Corridor, 2000' ele. (West)	(mR/hr)	0.2	0.2
SDRE05	Radwaste Bldg. Corridor, 2000' ele. (Central)	(mR/hr)	0.2	0.2
SDRE06	Solid Radwaste Area, 2000' ele.	(mR/hr)	0.2	0.2
SDRE07	Radwaste Bldg. Truck Space, 2000' ele.	(mR/hr)	0.2	0.2
SDRE08	Radwaste Bldg. Sample Laboratory	(mR/hr)	0.2	0.2
SDRE09	Radwaste Bldg. Valve Rm. Corridor, (East) 2047' ele.	(mR/hr)	0.2	0.2
SDRE10	Radwaste Bldg. Valve Rm. Corridor, (West) 2047' ele.	(mR/hr)	0.2	0.2
SDRE11	Radwaste Bldg. HVAC Filter Unit	(mR/hr)	0.2	0.2
SDRE12	Aux. Bldg. Corridor, Basement (1974' ele. SE)	(mR/hr)	25.0	25.0
SDRE13	Aux. Bldg. Corridor, Basement (1974' ele. NE)	(mR/hr)	25.0	25.0
SDRE14	Aux. Bldg. Corridor, Basement (1974' ele. N)	(mR/hr)	25.0	25.0
SDRE15	Aux. Bldg. Corridor, Basement (1974' ele. W)	(mR/hr)	25.0	25.0
SDRE16	Aux. Bldg. Corridor, Basement (1974' ele. SW)	(mR/hr)	25.0	25.0
SDRE17	N. Radioactive Pipe Tunnel & Personnel Access (1974' ele.)	(mR/hr)	0.5	0.5
SDRE18	Aux. Bldg. Ground Floor Corridor (2000' ele. N)	(mR/hr)	25.0	25.0
SDRE19	Aux. Bldg. Ground Floor Corridor (2000' ele. SE)	(mR/hr)	25.0	25.0
SDRE20	Aux. Bldg. Valve Rm. Corridor (2000' ele. S)	(mR/hr)	25.0	25.0
SDRE21	Aux. Bldg. Valve Rm. Corridor (2000' ele. S)	(mR/hr)	25.0	25.0
SDRE22	Aux. Bldg. Ground Floor (2000' ele. SW)	(mR/hr)	25.0	25.0
SDRE23	Aux. Bldg. Ground Floor (2000' ele. W)	(mR/hr)	25.0	25.0
SDRE24	Aux. Bldg. Sampling Room (2000' ele. Central)	(mR/hr)	50.0	50.0
SDRE25	Aux. Bldg. Vent Filter	(mR/hr)	5.0	5.0
SDRE26	RHR Heat Exchanger Outside (2026' ele.)	(mR/hr)	25.0	25.0
SDRE27	Cont. Purge Exhaust Filter Unit (2047' ele.)	(mR/hr)	5.0	5.0
SDRE28	Cont. Personnel Hatch (2047' ele.)	(mR/hr)	50.0	50.0
SDRE29	Hot Machine Shop	(mR/hr)	0.2	0.2
SDRE30	Hot Instrument Shop	(mR/hr)	0.2	0.2
SDRE31	Control Bldg. Hot Lab	(mR/hr)	0.2	0.2
SDRE32	Control Bldg. Corridor	(mR/hr)	0.2	0.2
SDRE33	Control Room (2047' ele.)	(mR/hr)	0.2	0.2
SDRE34	Cask Handling Area (2000' ele.)	(mR/hr)	0.5	0.5
SDRE35	New Fuel Storage (2026' ele. W)	(mR/hr)	0.5	0.5
SDRE36	New Fuel Storage Corridor (2026' ele.)	(mR/hr)	0.5	0.5
SDRE37	Spent Fuel Pool Area	(mR/hr)	0.5	0.5
SDRE38	Spent Fuel Pool Area	(mR/hr)	0.5	0.5
SDRE39	Seal Table Area (2026' ele. N)	(mR/hr)	200.0	200.0
SDRE40	Personnel Access Hatch Area Inside (2047' ele. SW)	(mR/hr)	400.0	400.0
SDRE41	Containment Bldg. (2047.6' ele. NW)	(mR/hr)	40.0	40.0
SDRE42	Containment Bldg. (2047.6' ele. E)	(mR/hr)	40.0	40.0
SDRE43	Technical Support Center	(mR/hr)	0.2	0.2
SDRE44	Emergency Operations Facility	(mR/hr)	0.2	0.2
SDRE47	PASS Sampling Room (2000' ele. Aux. Bldg.)	(mR/hr)	50.0	50.0

AREA RADIATION MONITORS

Time	Relative		(H+01:30)	(H+01:45)
SDRE01	Radwaste Bldg. Corridor, Basement (West)	(mR/hr)	0.2	0.2
SDRE02	Radwaste Bldg. Corridor, Basement (Central)	(mR/hr)	0.2	0.2
SDRE03	Radwaste Bldg. Corridor, Basement (East)	(mR/hr)	0.2	0.2
SDRE04	Radwaste Bldg. Corridor, 2000' ele. (West)	(mR/hr)	0.2	0.2
SDRE05	Radwaste Bldg. Corridor, 2000' ele. (Central)	(mR/hr)	0.2	0.2
SDRE06	Solid Radwaste Area, 2000' ele.	(mR/hr)	0.2	0.2
SDRE07	Radwaste Bldg. Truck Space, 2000' ele.	(mR/hr)	0.2	0.2
SDRE08	Radwaste Bldg. Sample Laboratory	(mR/hr)	0.2	0.2
SDRE09	Radwaste Bldg. Valve Rm. Corridor, (East) 2047' ele.	(mR/hr)	0.2	0.2
SDRE10	Radwaste Bldg. Valve Rm. Corridor, (West) 2047' ele.	(mR/hr)	0.2	0.2
SDRE11	Radwaste Bldg. HVAC Filter Unit	(mR/hr)	0.2	0.2
SDRE12	Aux. Bldg. Corridor, Basement (1974' ele. SE)	(mR/hr)	25.0	25.0
SDRE13	Aux. Bldg. Corridor, Basement (1974' ele. NE)	(mR/hr)	25.0	25.0
SDRE14	Aux. Bldg. Corridor, Basement (1974' ele. N)	(mR/hr)	25.0	25.0
SDRE15	Aux. Bldg. Corridor, Basement (1974' ele. W)	(mR/hr)	25.0	25.0
SDRE16	Aux. Bldg. Corridor, Basement (1974' ele. SW)	(mR/hr)	25.0	25.0
SDRE17	Nonradioactive Pipe Tunnel & Personnel Access (1974' ele.)	(mR/hr)	0.5	0.5
SDRE18	Aux. Bldg. Ground Floor Corridor (2000' ele. N)	(mR/hr)	25.0	25.0
SDRE19	Aux. Bldg. Ground Floor Corridor (2000' ele. SE)	(mR/hr)	25.0	25.0
SDRE20	Aux. Bldg. Valve Rm. Corridor (2000' ele. S)	(mR/hr)	25.0	25.0
SDRE21	Aux. Bldg. Valve Rm. Corridor (2000' ele. S)	(mR/hr)	25.0	25.0
SDRE22	Aux. Bldg. Ground Floor (2000' ele. SW)	(mR/hr)	25.0	25.0
SDRE23	Aux. Bldg. Ground Floor (2000' ele. W)	(mR/hr)	25.0	25.0
SDRE24	Aux. Bldg. Sampling Room (2000' ele. Central)	(mR/hr)	100.0	100.0
SDRE25	Aux. Bldg. Vent Filter	(mR/hr)	5.0	5.0
SDRE26	RHR Heat Exchanger Outside (2026' ele.)	(mR/hr)	25.0	25.0
SDRE27	Cont. Purge Exhaust Filter Unit (2047' ele.)	(mR/hr)	20.0	20.0
SDRE28	Cont. Personnel Hatch (2047' ele.)	(mR/hr)	50.0	50.0
SDRE29	Hot Machine Shop	(mR/hr)	0.2	0.2
SDRE30	Hot Instrument Shop	(mR/hr)	0.2	0.2
SDRE31	Control Bldg. Hot Lab	(mR/hr)	0.2	0.2
SDRE32	Control Bldg. Corridor	(mR/hr)	0.2	0.2
SDRE33	Control Room (2047' ele.)	(mR/hr)	0.2	0.2
SDRE34	Cask Handling Area (2000' ele.)	(mR/hr)	0.5	0.5
SDRE35	New Fuel Storage (2026' ele. W)	(mR/hr)	0.5	0.5
SDRE36	New Fuel Storage Corridor (2026' ele.)	(mR/hr)	0.5	0.5
SDRE37	Spent Fuel Pool Area	(mR/hr)	0.5	0.5
SDRE38	Spent Fuel Pool Area	(mR/hr)	0.5	0.5
SDRE39	Seal Table Area (2026' ele. N)	(mR/hr)	200.0	200.0
SDRE40	Personnel Access Hatch Area Inside (2047' ele. SW)	(mR/hr)	400.0	400.0
SDRE41	Containment Bldg. (2047.6' ele. NW)	(mR/hr)	60.0	60.0
SDRE/2	Containment Bldg. (2047.6' ele. E)	(mR/hr)	60.0	60.0
SDRE43	Technical Support Center	(mR/hr)	0.2	0.2
SDRE44	Emergency Operations Facility	(mR/hr)	0.2	0.2
SDRE47	PASS Sampling Room (2000' ele. Aux. Bldg.)	(mR/hr)	100.0	100.0

AREA RADIATION MONITORS

Time	Relative		(H+02:00)	(H+02:15)
SDRE01	Radwaste Bldg. Corridor, Basement (West)	(mR/hr)	0.2	0.2
SDRE02	Radwaste Bldg. Corridor, Basement (Central)	(mR/hr)	0.2	0.2
SDRE03	Radwaste Bldg. Corridor, Basement (East)	(mR/hr)	0.2	0.2
SDRE04	Radwaste Bldg. Corridor, 2000' ele. (West)	(mR/hr)	0.2	0.2
SDRE05	Radwaste Bldg. Corridor, 2000' ele. (Central)	(mR/hr)	0.2	0.2
SDRE06	Solid Radwaste Area, 2000' ele.	(mR/hr)	0.2	0.2
SDRE07	Radwaste Bldg. Truck Space, 2000' ele.	(mR/hr)	0.2	0.2
SDRE08	Radwaste Bldg. Sample Laboratory	(mR/hr)	0.2	0.2
SDRE09	Radwaste Bldg. Valve Rm. Corridor, (East) 2047' ele.	(mR/hr)	0.2	0.2
SDRE10	Radwaste Bldg. Valve Rm. Corridor, (West) 2047' ele.	(mR/hr)	0.2	0.2
SDRE11	Radwaste Bldg. HVAC Filter Unit	(mR/hr)	0.2	0.2
SDRE12	Aux. Bldg. Corridor, Basement (1974' ele. SE)	(mR/hr)	25.0	25.0
SDRE13	Aux. Bldg. Corridor, Basement (1974' ele. NE)	(mR/hr)	25.0	25.0
SDRE14	Aux. Bldg. Corridor, Basement (1974' ele. N)	(mR/hr)	25.0	25.0
SDRE15	Aux. Bldg. Corridor, Basement (1974' ele. W)	(mR/hr)	25.0	25.0
SDRE16	Aux. Bldg. Corridor, Basement (1974' ele. SW)	(mR/hr)	25.0	25.0
SDRE17	Nonradioactive Pipe Tunnel & Personnel Access (1974' ele.)	(mR/hr)	0.5	0.5
SDRE18	Aux. Bldg. Ground Floor Corridor (2000' ele. N)	(mR/hr)	25.0	25.0
SDRE19	Aux. Bldg. Ground Floor Corridor (2000' ele. SE)	(mR/hr)	25.0	25.0
SDRE20	Aux. Bldg. Valve Rm. Corridor (2000' ele. S)	(mR/hr)	25.0	25.0
SDRE21	Aux. Bldg. Valve Rm. Corridor (2000' ele. S)	(mR/hr)	25.0	25.0
SDRE22	Aux. Bldg. Ground Floor (2000' ele. SW)	(mR/hr)	25.0	25.0
SDRE23	Aux. Bldg. Ground Floor (2000' ele. W)	(mR/hr)	25.0	25.0
SDRE24	Aux. Bldg. Sampling Room (2000' ele. Central)	(mR/hr)	100.0	100.0
SDRE25	Aux. Bldg. Vent Filter	(mR/hr)	5.0	5.0
SDRE26	RHR Heat Exchanger Outside (2026' ele.)	(mR/hr)	25.0	25.0
SDRE27	Cont. Purge Exhaust Filter Unit (2047' ele.)	(mR/hr)	20.0	20.0
SDRE28	Cont. Personnel Hatch (2047' ele.)	(mR/hr)	50.0	50.0
SDRE29	Hot Machine Shop	(mR/hr)	0.2	0.2
SDRE30	Hot Instrument Shop	(mR/hr)	0.2	0.2
SDRE31	Control Bldg. Hot Lab	(mR/hr)	0.2	0.2
SDRE32	Control Bldg. Corridor	(mR/hr)	0.2	0.2
SDRE33	Control Room (2047' ele.)	(mR/hr)	0.2	0.2
SDRE34	Cask Handling Area (2000' ele.)	(mR/hr)	0.5	0.5
SDRE35	New Fuel Storage (2026' ele. W)	(mR/hr)	0.5	0.5
SDRE36	New Fuel Storage Corridor (2026' ele.)	(mR/hr)	0.5	0.5
SDRE37	Spent Fuel Pool Area	(mR/hr)	0.5	0.5
SDRE38	Spent Fuel Pool Area	(mR/hr)	0.5	0.5
SDRE39	Seal Table Area (2026' ele. N)	(mR/hr)	200.0	200.0
SDRE40	Personnel Access Hatch Area Inside (2047' ele. SW)	(mR/hr)	400.0	400.0
SDRE41	Containment Bldg. (2047.6' ele. NW)	(mR/hr)	100.0	100.0
SDRE42	Containment Bldg. (2047.6' ele. E)	(mR/hr)	100.0	100.0
SDRE43	Technical Support Center	(mR/hr)	0.2	0.2
SDRE44	Emergency Operations Facility	(mR/hr)	0.2	0.2
SDRE47	PASS Sampling Room (2000' ele. Aux. Bldg.)	(mR/hr)	100.0	100.0

AREA RADIATION MONITORS

Time	Relative		(H+02:30)	(H+02:45)
SDRE01	Radwaste Bldg. Corridor, Basement (West)	(mR/hr)	0.2	0.2
SDRE02	Radwaste Bldg. Corridor, Basement (Central)	(mR/hr)	0.2	0.2
SDRE03	Radwaste Bldg. Corridor, Basement (East)	(mR/hr)	0.2	0.2
SDRE04	Radwaste Bldg. Corridor, 2000' ele. (West)	(mR/hr)	0.2	0.2
SDRE05	Radwaste Bldg. Corridor, 2000' ele. (Central)	(mR/hr)	0.2	0.2
SDRE06	Solid Radwaste Area, 2000' ele.	(mR/hr)	0.2	0.2
SDRE07	Radwaste Bldg. Truck Space, 2000' ele.	(mR/hr)	0.2	0.2
SDRE08	Radwaste Bldg. Sample Laboratory	(mR/hr)	0.2	0.2
SDRE09	Radwaste Bldg. Valve Rm. Corridor, (East) 2047' ele.	(mR/hr)	0.2	0.2
SDRE10	Radwaste Bldg. Valve Rm. Corridor, (West) 2047' ele.	(mR/hr)	0.2	0.2
SDRE11	Radwaste Bldg. HVAC Filter Unit	(mR/hr)	0.2	0.2
SDRE12	Aux. Bldg. Corridor, Basement (1974' ele. SE)	(mR/hr)	60.0	90.0
SDRE13	Aux. Bldg. Corridor, Basement (1974' ele. NE)	(mR/hr)	55.0	85.0
SDRE14	Aux. Bldg. Corridor, Basement (1974' ele. N)	(mR/hr)	40.0	50.0
SDRE15	Aux. Bldg. Corridor, Basement (1974' ele. W)	(mR/hr)	30.0	35.0
SDRE16	Aux. Bldg. Corridor, Basement (1974' ele. SW)	(mR/hr)	30.0	33.0
SDRE17	Nonradioactive Pipe Tunnel & Personnel Access (1974' ele.)	(mR/hr)	35.0	45.0
SDRE18	Aux. Bldg. Ground Floor Corridor (2000' ele. N)	(mR/hr)	40.0	50.0
SDRE19	Aux. Bldg. Ground Floor Corridor (2000' ele. SE)	(mR/hr)	37.0	45.0
SDRE20	Aux. Bldg. Valve Rm. Corridor (2000' ele. S)	(mR/hr)	30.0	33.0
SDRE21	Aux. Bldg. Valve Rm. Corridor (2000' ele. S)	(mR/hr)	30.0	33.0
SDRE22	Aux. Bldg. Ground Floor (2000' ele. SW)	(mR/hr)	28.0	29.0
SDRE23	Aux. Bldg. Ground Floor (2000' ele. W)	(mR/hr)	28.0	29.0
SDRE24	Aux. Bldg. Sampling Room (2000' ele. Central)	(mR/hr)	200.0	250.0
SDRE25	Aux. Bldg. Vent Filter	(mR/hr)	35.0	60.0
SDRE26	RHR Heat Exchanger Outside (2026' ele.)	(mR/hr)	58.0	85.0
SDRE27	Cont. Purge Exhaust Filter Unit (2047' ele.)	(mR/hr)	44.0	63.0
SDRE28	Cont. Personnel Hatch (2047' ele.)	(mR/hr)	80.0	100.0
SDRE29	Hot Machine Shop	(mR/hr)	0.2	0.2
SDRE30	Hot Instrument Shop	(mR/hr)	0.2	0.2
SDRE31	Control Bldg. Hot Lab	(mR/hr)	0.2	0.2
SDRE32	Control Bldg. Corridor	(mR/hr)	0.2	0.2
SDRE33	Control Room (2047' ele.)	(mR/hr)	0.2	0.2
SDRE34	Cask Handling Area (2000' ele.)	(mR/hr)	0.5	0.5
SDRE35	New Fuel Storage (2026' ele. W)	(mR/hr)	0.5	0.5
SDRE36	New Fuel Storage Corridor (2026' ele.)	(mR/hr)	0.5	0.5
SDRE37	Spent Fuel Pool Area	(mR/hr)	0.5	0.5
SDRE38	Spent Fuel Pool Area	(mR/hr)	0.5	0.5
SDRE39	Seal Table Area (2026' ele. N)	(mR/hr)	>10000.0	>10000.0
SDRE40	Personnel Access Hatch Area Inside (2047' ele. SW)	(mR/hr)	>10000.0	>10000.0
SDRE41	Containment Bldg. (2047.6' ele. NW)	(mR/hr)	>10000.0	>10000.0
SDRE42	Containment Bldg. (2047.6' ele. E)	(mR/hr)	>10000.0	>10000.0
SDRE43	Technical Support Center	(mR/hr)	0.2	0.2
SDRE44	Emergency Operations Facility	(mR/hr)	0.2	0.2
SDRE47	PASS Sampling Room (2000' ele. Aux. Bldg.)	(mR/hr)	200.0	250.0

AREA RADIATION MONITORS

Time	Relative		(H+03:00)	(H+03:15)
SDRE01	Radwaste Bldg. Corridor, Basement (West)	(mR/hr)	0.2	0.2
SDRE02	Radwaste Bldg. Corridor, Basement (Central)	(mR/hr)	0.2	0.2
SDRE03	Radwaste Bldg. Corridor, Basement (East)	(mR/hr)	0.2	0.2
SDRE04	Radwaste Bldg. Corridor, 2000' ele. (West)	(mR/hr)	0.2	0.2
SDRE05	Radwaste Bldg. Corridor, 2000' ele. (Central)	(mR/hr)	0.2	0.2
SDRE06	Solid Radwaste Area, 2000' ele.	(mR/hr)	0.2	0.2
SDRE07	Radwaste Bldg. Truck Space, 2000' ele.	(mR/hr)	0.2	0.2
SDRE08	Radwaste Bldg. Sample Laboratory	(mR/hr)	0.2	0.2
SDRE09	Radwaste Bldg. Valve Rm. Corridor, (East) 2047' ele.	(mR/hr)	0.2	0.2
SDRE10	Radwaste Bldg. Valve Rm. Corridor, (West) 2047' ele.	(mR/hr)	0.2	0.2
SDRE11	Radwaste Bldg. HVAC Filter Unit	(mR/hr)	0.2	0.2
SDRE12	Aux. Bldg. Corridor, Basement (1974' ele. SE)	(mR/hr)	340.0	410.0
SDRE13	Aux. Bldg. Corridor, Basement (1974' ele. NE)	(mR/hr)	335.0	405.0
SDRE14	Aux. Bldg. Corridor, Basement (1974' ele. N)	(mR/hr)	150.0	180.0
SDRE15	Aux. Bldg. Corridor, Basement (1974' ele. W)	(mR/hr)	72.0	98.0
SDRE16	Aux. Bldg. Corridor, Basement (1974' ele. SW)	(mR/hr)	70.0	93.0
SDRE17	Nonradioactive Pipe Tunnel & Personnel Access (1974' ele.)	(mR/hr)	110.0	130.0
SDRE18	Aux. Bldg. Ground Floor Corridor (2000' ele. N)	(mR/hr)	150.0	180.0
SDRE19	Aux. Bldg. Ground Floor Corridor (2000' ele. SE)	(mR/hr)	140.0	170.0
SDRE20	Aux. Bldg. Valve Rm. Corridor (2000' ele. S)	(mR/hr)	70.0	95.0
SDRE21	Aux. Bldg. Valve Rm. Corridor (2000' ele. S)	(mR/hr)	70.0	93.0
SDRE22	Aux. Bldg. Ground Floor (2000' ele. SW)	(mR/hr)	60.0	75.0
SDRE23	Aux. Bldg. Ground Floor (2000' ele. W)	(mR/hr)	60.0	75.0
SDRE24	Aux. Bldg. Sampling Room (2000' ele. Central)	(mR/hr)	325.0	350.0
SDRE25	Aux. Bldg. Vent Filter	(mR/hr)	260.0	310.0
SDRE26	RHR Heat Exchanger Outside (2026' ele.)	(mR/hr)	310.0	370.0
SDRE27	Cont. Purge Exhaust Filter Unit (2047' ele.)	(mR/hr)	225.0	270.0
SDRE28	Cont. Personnel Hatch (2047' ele.)	(mR/hr)	448.0	520.0
SDRE29	Hot Machine Shop	(mR/hr)	0.2	0.2
SDRE30	Hot Instrument Shop	(mR/hr)	0.2	0.2
SDRE31	Control Bldg. Hot Lab	(mR/hr)	0.2	0.2
SDRE32	Control Bldg. Corridor	(mR/hr)	0.2	0.2
SDRE33	Control Room (2047' ele.)	(mR/hr)	0.2	0.2
SDRE34	Cask Handling Area (2000' ele.)	(mR/hr)	0.5	0.5
SDRE35	New Fuel Storage (2026' ele. W)	(mR/hr)	0.5	0.5
SDRE36	New Fuel Storage Corridor (2026' ele.)	(mR/hr)	0.5	0.5
SDRE37	Spent Fuel Pool Area	(mR/hr)	0.5	0.5
SDRE38	Spent Fuel Pool Area	(mR/hr)	0.5	0.5
SDRE39	Seal Table Area (2026' ele. N)	(mR/hr)	>10000.0	>10000.0
SDRE40	Personnel Access Hatch Area Inside (2047' ele. SW)	(mR/hr)	>10000.0	>10000.0
SDRE41	Containment Bldg. (2047.6' ele. NW)	(mR/hr)	>10000.0	>10000.0
SDRE42	Containment Bldg. (2047.6' ele. E)	(mR/hr)	>10000.0	>10000.0
SDRE43	Technical Support Center	(mR/hr)	0.2	0.2
SDRE44	Emergency Operations Facility	(mR/hr)	0.2	0.2
SDRE47	PASS Sampling Room (2000' ele. Aux. Bldg.)	(mR/hr)	325.0	325.0

AREA RADIATION MONITORS

Time	Relative		(H+03:45)	(H+04:00)
SDRE01	Radwaste Bldg. Corridor, Basement (West)	(mR/hr)	0.2	0.2
SDRE02	Radwaste Bldg. Corridor, Basement (Central)	(mR/hr)	0.2	0.2
SDRE03	Radwaste Bldg. Corridor, Basement (East)	(mR/hr)	0.2	0.2
SDRE04	Radwaste Bldg. Corridor, 2000' ele. (West)	(mR/hr)	0.2	0.2
SDRE05	Radwaste Bldg. Corridor, 2000' ele. (Central)	(mR/hr)	0.2	0.2
SDRE06	Solid Radwaste Area, 2000' ele.	(mR/hr)	0.2	0.2
SDRE07	Radwaste Bldg. Truck Space, 2000' ele.	(mR/hr)	0.2	0.2
SDRE08	Radwaste Bldg. Sample Laboratory	(mR/hr)	0.2	0.2
SDRE09	Radwaste Bldg. Valve Rm. Corridor, (East) 2047' ele.	(mR/hr)	0.2	0.2
SDRE10	Radwaste Bldg. Valve Rm. Corridor, (West) 2047' ele.	(mR/hr)	0.2	0.2
SDRE11	Radwaste Bldg. HVAC Filter Unit	(mR/hr)	0.2	0.2
SDRE12	Aux. Bldg. Corridor, Basement (1974' ele. SE)	(mR/hr)	525.0	365.0
SDRE13	Aux. Bldg. Corridor, Basement (1974' ele. NE)	(mR/hr)	527.0	360.0
SDRE14	Aux. Bldg. Corridor, Basement (1974' ele. N)	(mR/hr)	75.0	160.0
SDRE15	Aux. Bldg. Corridor, Basement (1974' ele. W)	(mR/hr)	75.0	70.0
SDRE16	Aux. Bldg. Corridor, Basement (1974' ele. SW)	(mR/hr)	71.0	65.0
SDRE17	Nonradioactive Pipe Tunnel & Personnel Access (1974' ele.)	(mR/hr)	180.0	110.0
SDRE18	Aux. Bldg. Ground Floor Corridor (2000' ele. N)	(mR/hr)	225.0	160.0
SDRE19	Aux. Bldg. Ground Floor Corridor (2000' ele. SE)	(mR/hr)	210.0	150.0
SDRE20	Aux. Bldg. Valve Rm. Corridor (2000' ele. S)	(mR/hr)	71.0	65.0
SDRE21	Aux. Bldg. Valve Rm. Corridor (2000' ele. S)	(mR/hr)	70.0	64.0
SDRE22	Aux. Bldg. Ground Floor (2000' ele. SW)	(mR/hr)	65.0	54.0
SDRE23	Aux. Bldg. Ground Floor (2000' ele. W)	(mR/hr)	65.0	54.0
SDRE24	Aux. Bldg. Sampling Room (2000' ele. Central)	(mR/hr)	400.0	335.0
SDRE25	Aux. Bldg. Vent Filter	(mR/hr)	405.0	280.0
SDRE26	RHR Heat Exchanger Outside (2026' ele.)	(mR/hr)	475.0	330.0
SDRE27	Cont. Purge Exhaust Filter Unit (2047' ele.)	(mR/hr)	345.0	240.0
SDRE28	Cont. Personnel Hatch (2047' ele.)	(mR/hr)	650.0	475.0
SDRE29	Hot Machine Shop	(mR/hr)	0.2	0.2
SDRE30	Hot Instrument Shop	(mR/hr)	0.2	0.2
SDRE31	Control Bldg. Hot Lab	(mR/hr)	0.2	0.2
SDRE32	Control Bldg. Corridor	(mR/hr)	0.2	0.2
SDRE33	Control Room (2047' ele.)	(mR/hr)	0.2	0.2
SDRE34	Cask Handling Area (2000' ele.)	(mR/hr)	0.5	0.5
SDRE35	New Fuel Storage (2026' ele. W)	(mR/hr)	0.5	0.5
SDRE36	New Fuel Storage Corridor (2026' ele.)	(mR/hr)	0.5	0.5
SDRE37	Spent Fuel Pool Area	(mR/hr)	0.5	0.5
SDRE38	Spent Fuel Pool Area	(mR/hr)	0.5	0.5
SDRE39	Seal Table Area (2026' ele. N)	(mR/hr)	>10000.0	>10000.0
SDRE40	Personnel Access Hatch Area Inside (2047' ele. SW)	(mR/hr)	>10000.0	>10000.0
SDRE41	Containment Bldg. (2047.6' ele. NW)	(mR/hr)	>10000.0	>10000.0
SDRE42	Containment Bldg. (2047.6' ele. E)	(mR/hr)	>10000.0	>10000.0
SDRE43	Technical Support Center	(mR/hr)	0.2	0.2
SDRE44	Emergency Operations Facility	(mR/hr)	0.2	0.2
SDRE47	PASS Sampling Room (2000' ele. Aux. Bldg.)	(mR/hr)	400.0	335.0

AREA RADIATION MONITORS

Time	Relative		(H+04:15)	(H+04:30)
SDRE01	Radwaste Bldg. Corridor, Basement (West)	(mR/hr)	0.2	0.2
SDRE02	Radwaste Bldg. Corridor, Basement (Central)	(mR/hr)	0.2	0.2
SDRE03	Radwaste Bldg. Corridor, Basement (East)	(mR/hr)	0.2	0.2
SDRE04	Radwaste Bldg. Corridor, 2000' ele. (West)	(mR/hr)	0.2	0.2
SDRE05	Radwaste Bldg. Corridor, 2000' ele. (Central)	(mR/hr)	0.2	0.2
SDRE06	Solid Radwaste Area, 2000' ele.	(mR/hr)	0.2	0.2
SDRE07	Radwaste Bldg. Truck Space, 2000' ele.	(mR/hr)	0.2	0.2
SDRE08	Radwaste Bldg. Sample Laboratory	(mR/hr)	0.2	0.2
SDRE09	Radwaste Bldg. Valve Rm. Corridor, (East) 2047' ele.	(mR/hr)	0.2	0.2
SDRE10	Radwaste Bldg. Valve Rm. Corridor, (West) 2047' ele.	(mR/hr)	0.2	0.2
SDRE11	Radwaste Bldg. HVAC Filter Unit	(mR/hr)	0.2	0.2
SDRE12	Aux. Bldg. Corridor, Basement (1974' ele. SE)	(mR/hr)	330.0	310.0
SDRE13	Aux. Bldg. Corridor, Basement (1974' ele. NE)	(mR/hr)	325.0	305.0
SDRE14	Aux. Bldg. Corridor, Basement (1974' ele. N)	(mR/hr)	150.0	140.0
SDRE15	Aux. Bldg. Corridor, Basement (1974' ele. W)	(mR/hr)	68.0	65.0
SDRE16	Aux. Bldg. Corridor, Basement (1974' ele. SW)	(mR/hr)	64.0	61.0
SDRE17	Nonradioactive Pipe Tunnel & Personnel Access (1974' ele.)	(mR/hr)	95.0	85.0
SDRE18	Aux. Bldg. Ground Floor Corridor (2000' ele. N)	(mR/hr)	150.0	140.0
SDRE19	Aux. Bldg. Ground Floor Corridor (2000' ele. SE)	(mR/hr)	140.0	130.0
SDRE20	Aux. Bldg. Valve Rm. Corridor (2000' ele. S)	(mR/hr)	64.0	61.0
SDRE21	Aux. Bldg. Valve Rm. Corridor (2000' ele. S)	(mR/hr)	63.0	60.0
SDRE22	Aux. Bldg. Ground Floor (2000' ele. SW)	(mR/hr)	53.0	52.0
SDRE23	Aux. Bldg. Ground Floor (2000' ele. W)	(mR/hr)	53.0	52.0
SDRE24	Aux. Bldg. Sampling Room (2000' ele. Central)	(mR/hr)	320.0	315.0
SDRE25	Aux. Bldg. Vent Filter	(mR/hr)	250.0	230.0
SDRE26	RHR Heat Exchanger Outside (2026' ele.)	(mR/hr)	300.0	280.0
SDRE27	Cont. Purge Exhaust Filter Unit (2047' ele.)	(mR/hr)	220.0	205.0
SDRE28	Cont. Personnel Hatch (2047' ele.)	(mR/hr)	440.0	415.0
SDRE29	Hot Machine Shop	(mR/hr)	0.2	0.2
SDRE30	Hot Instrument Shop	(mR/hr)	0.2	0.2
SDRE31	Control Bldg. Hot Lab	(mR/hr)	0.2	0.2
SDRE32	Control Bldg. Corridor	(mR/hr)	0.2	0.2
SDRE33	Control Room (2047' ele.)	(mR/hr)	0.2	0.2
SDRE34	Cask Handling Area (2000' ele.)	(mR/hr)	0.5	0.5
SDRE35	New Fuel Storage (2026' ele. W)	(mR/hr)	0.5	0.5
SDRE36	New Fuel Storage Corridor (2026' ele.)	(mR/hr)	0.5	0.5
SDRE37	Spent Fuel Pool Area	(mR/hr)	0.5	0.5
SDRE38	Spent Fuel Pool Area	(mR/hr)	0.5	0.5
SDRE39	Seal Table Area (2026' ele. N)	(mR/hr)	>10000.0	>10000.0
SDRE40	Personnel Access Hatch Area Inside (2047' ele. SW)	(mR/hr)	>10000.0	>10000.0
SDRE41	Containment Bldg. (2047.6' ele. NW)	(mR/hr)	>10000.0	>10000.0
SDRE42	Containment Bldg. (2047.6' ele. E)	(mR/hr)	>10000.0	>10000.0
SDRE43	Technical Support Center	(mR/hr)	0.2	0.2
SDRE44	Emergency Operations Facility	(mR/hr)	0.2	0.2
SDRE47	PASS Sampling Room (2000' ele. Aux. Bldg.)	(mR/hr)	320.0	315.0

AREA RADIATION MONITORS

Time	Relative		(H+04:45)	(H+05:00+)
SDRE01	Radwaste Bldg. Corridor, Basement (West)	(mR/hr)	0.2	0.2
SDRE02	Radwaste Bldg. Corridor, Basement (Central)	(mR/hr)	0.2	0.2
SDRE03	Radwaste Bldg. Corridor, Basement (East)	(mR/hr)	0.2	0.2
SDRE04	Radwaste Bldg. Corridor, 2000' ele. (West)	(mR/hr)	0.2	0.2
SDRE05	Radwaste Bldg. Corridor, 2000' ele. (Central)	(mR/hr)	0.2	0.2
SDRE06	Solid Radwaste Area, 2000' ele.	(mR/hr)	0.2	0.2
SDRE07	Radwaste Bldg. Truck Space, 2000' ele.	(mR/hr)	0.2	0.2
SDRE08	Radwaste Bldg. Sample Laboratory	(mR/hr)	0.2	0.2
SDRE09	Radwaste Bldg. Valve Rm. Corridor, (East) 2047' ele.	(mR/hr)	0.2	0.2
SDRE10	Radwaste Bldg. Valve Rm. Corridor, (West) 2047' ele.	(mR/hr)	0.2	0.2
SDRE11	Radwaste Bldg. HVAC Filter Unit	(mR/hr)	0.2	0.2
SDRE12	Aux. Bldg. Corridor, Basement (1974' ele. SE)	(mR/hr)	295.0	288.0
SDRE13	Aux. Bldg. Corridor, Basement (1974' ele. NE)	(mR/hr)	290.0	283.0
SDRE14	Aux. Bldg. Corridor, Basement (1974' ele. N)	(mR/hr)	130.0	125.0
SDRE15	Aux. Bldg. Corridor, Basement (1974' ele. W)	(mR/hr)	63.0	60.0
SDRE16	Aux. Bldg. Corridor, Basement (1974' ele. SW)	(mR/hr)	59.0	56.0
SDRE17	Nonradioactive Pipe Tunnel & Personnel Access (1974' ele.)	(mR/hr)	80.0	75.0
SDRE18	Aux. Bldg. Ground Floor Corridor (2000' ele. N)	(mR/hr)	130.0	125.0
SDRE19	Aux. Bldg. Ground Floor Corridor (2000' ele. SE)	(mR/hr)	122.0	119.0
SDRE20	Aux. Bldg. Valve Rm. Corridor (2000' ele. S)	(mR/hr)	59.0	56.0
SDRE21	Aux. Bldg. Valve Rm. Corridor (2000' ele. S)	(mR/hr)	57.0	54.0
SDRE22	Aux. Bldg. Ground Floor (2000' ele. SW)	(mR/hr)	48.0	47.0
SDRE23	Aux. Bldg. Ground Floor (2000' ele. W)	(mR/hr)	48.0	47.0
SDRE24	Aux. Bldg. Sampling Room (2000' ele. Central)	(mR/hr)	310.0	305.0
SDRE25	Aux. Bldg. Vent Filter	(mR/hr)	220.0	215.0
SDRE26	RHR Heat Exchanger Outside (2026' ele.)	(mR/hr)	270.0	265.0
SDRE27	Cont. Purge Exhaust Filter Unit (2047' ele.)	(mR/hr)	195.0	190.0
SDRE28	Cont. Personnel Hatch (2047' ele.)	(mR/hr)	400.0	390.0
SDRE29	Hot Machine Shop	(mR/hr)	0.2	0.2
SDRE30	Hot Instrument Shop	(mR/hr)	0.2	0.2
SDRE31	Control Bldg. Hot Lab	(mR/hr)	0.2	0.2
SDRE32	Control Bldg. Corridor	(mR/hr)	0.2	0.2
SDRE33	Control Room (2047' ele.)	(mR/hr)	0.2	0.2
SDRE34	Cask Handling Area (2000' ele.)	(mR/hr)	0.5	0.5
SDRE35	New Fuel Storage (2026' ele. W)	(mR/hr)	0.5	0.5
SDRE36	New Fuel Storage Corridor (2026' ele.)	(mR/hr)	0.5	0.5
SDRE37	Spent Fuel Pool Area	(mR/hr)	0.5	0.5
SDRE38	Spent Fuel Pool Area	(mR/hr)	0.5	0.5
SDRE39	Seal Table Area (2026' ele. N)	(mR/hr)	>10000.0	>10000.0
SDRE40	Personnel Access Hatch Area Inside (2047' ele. SW)	(mR/hr)	>10000.0	>10000.0
SDRE41	Containment Bldg. (2047.6' ele. NW)	(mR/hr)	>10000.0	>10000.0
SDRE42	Containment Bldg. (2047.6' ele. E)	(mR/hr)	>10000.0	>10000.0
SDRE43	Technical Support Center	(mR/hr)	0.2	0.2
SDRE44	Emergency Operations Facility	(mR/hr)	0.2	0.2
SDRE47	PASS Sampling Room (2000' ele. Aux. Bldg.)	(mR/hr)	310.0	305.0

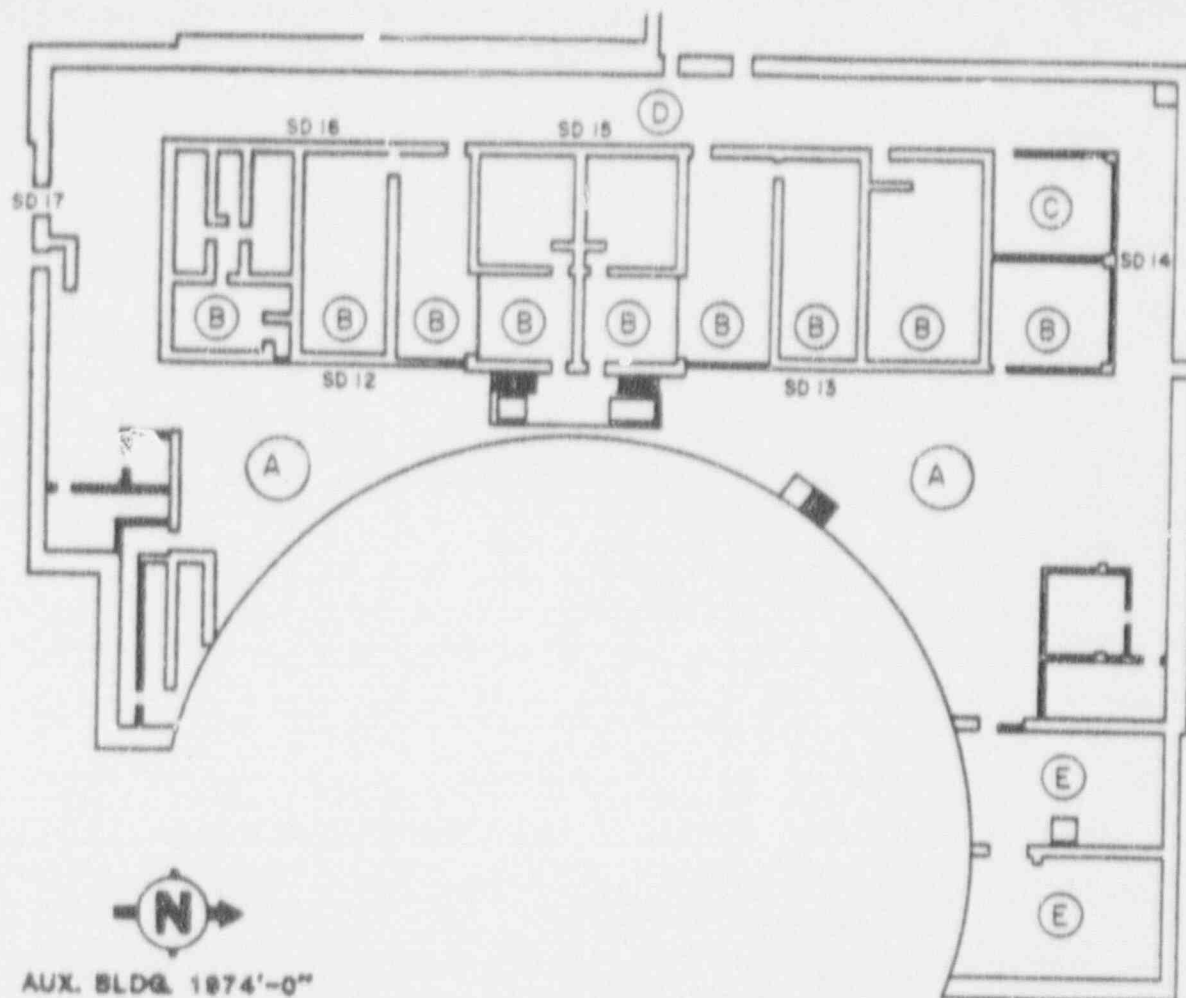
INPLANT SURVEYS

RADIATION

Inplant survey map data is provided in the following subsection. Data is provided for each floor level of the auxiliary, fuel and diesel generator buildings. Radiation data is provided in the units as indicated. The data is designated by a letter and corresponds to the circled letter zones on the map.

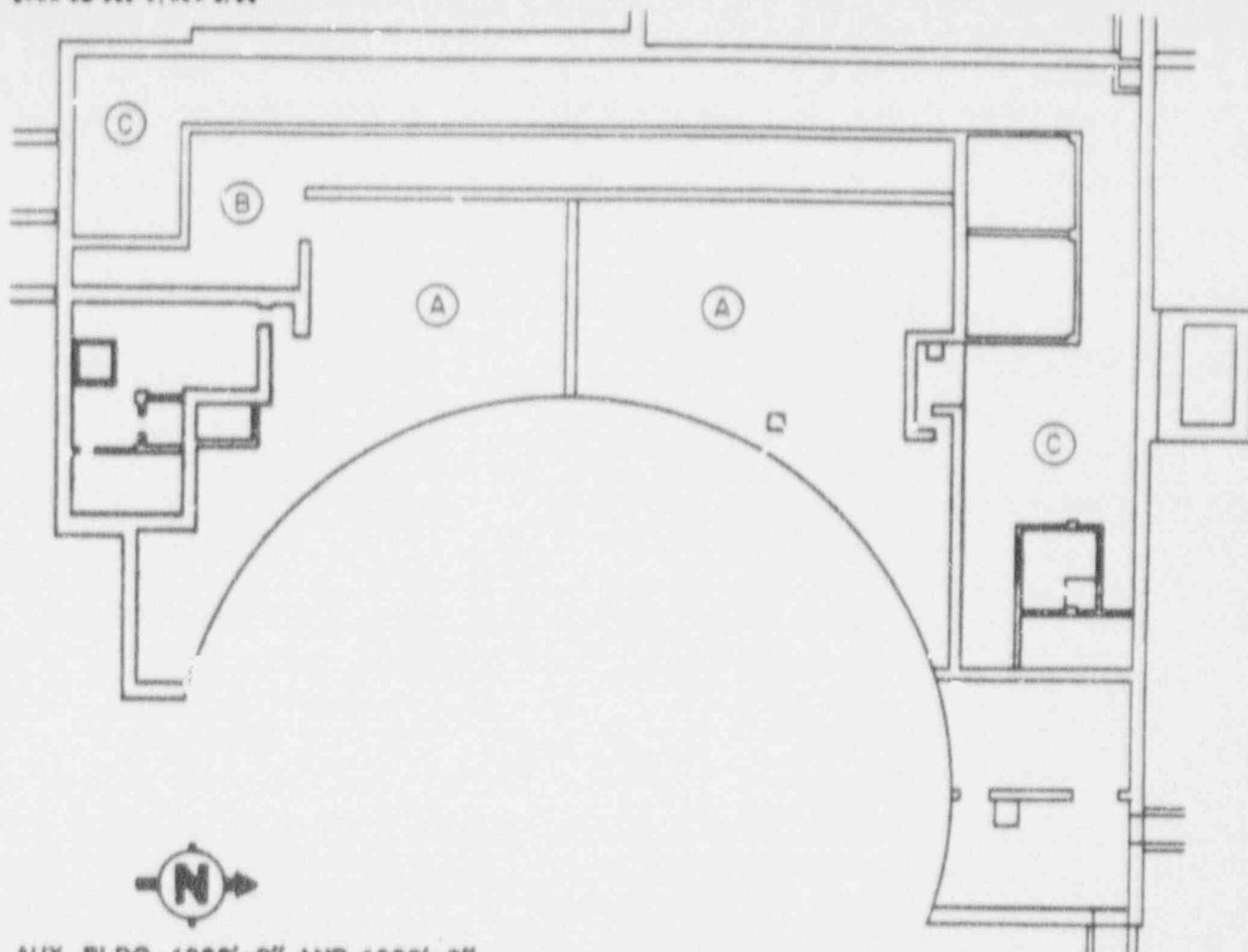
Radiation levels indicated with a < sign indicate areas where readings will generally be below the lower level of detectability for instruments used in determining radiation levels.

Area radiation monitors are designated on the maps as the monitor number preceded by a "SD". The data for these monitors is provided in the area radiation monitoring data.



(RADIATION LEVELS INDICATED ARE IN R/HR)

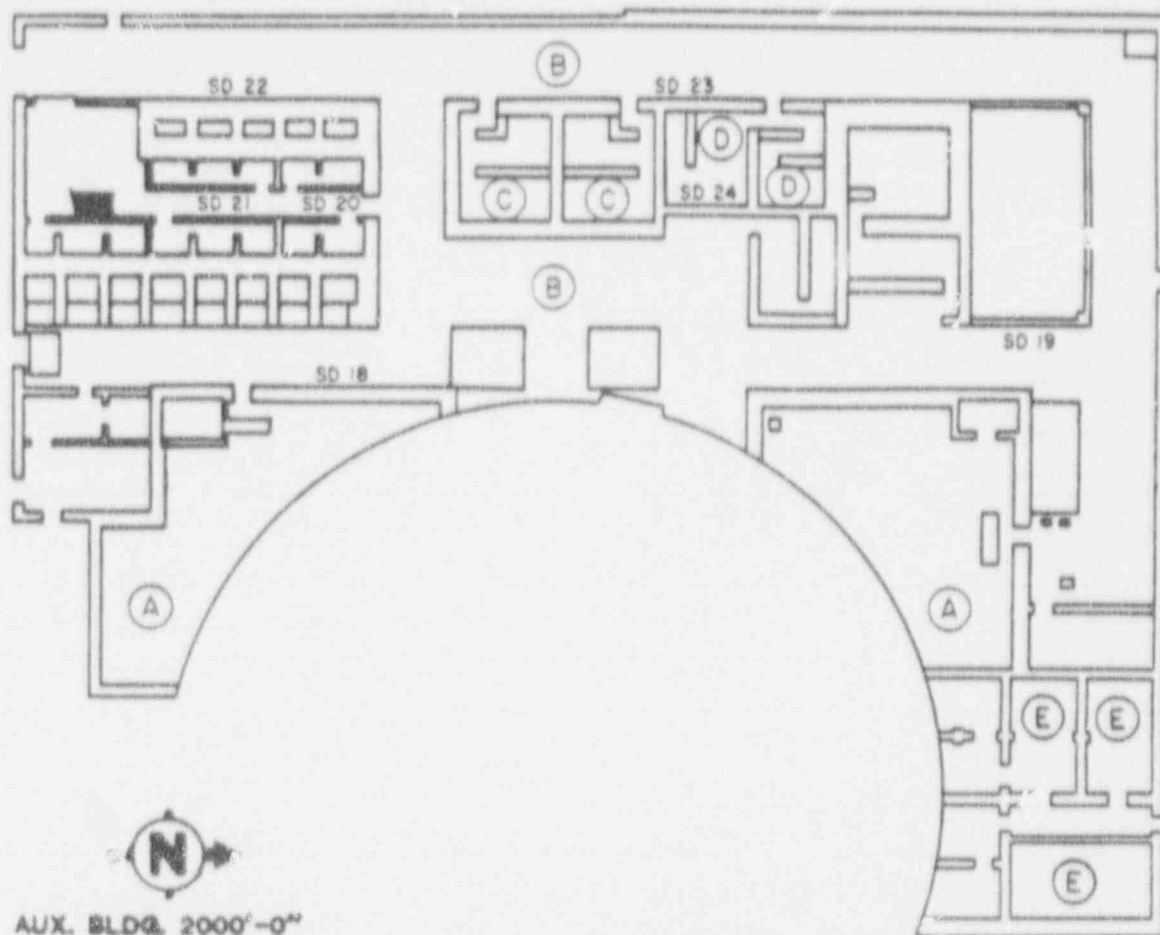
Time:	<u>H+00:00 - 02:15</u>	<u>H+02:30+</u>
(A) Corridor Area	0.025	0.700
(B) Pump Room Areas	0.050	0.250
(C) Boric Acid Tank Areas	<0.002	0.050
(D) Corridor Area	0.025	0.080
(E) Aux FW Pump Area	<0.002	0.220



AUX. BLDG. 1988'-0" AND 1989'-6"

(RADIATION LEVELS INDICATED ARE IN R/HR)

Time:	<u>H+00:00 - 02:15</u>	<u>H+02:30+</u>
(A) RHR Encapsulation Areas	1.0	1.700
(B) Corridor Area	0.050	0.250
(C) Corridor Area	0.050	0.150



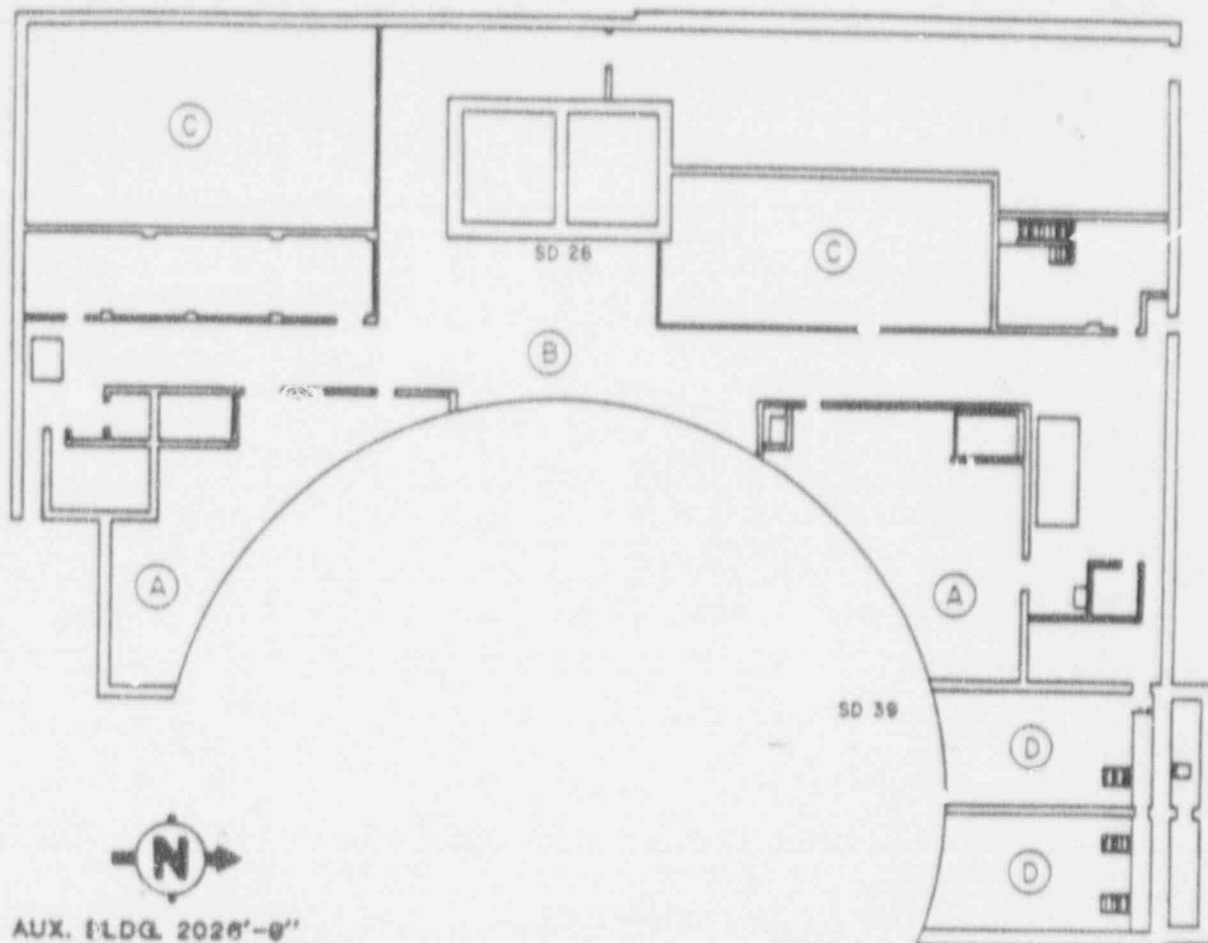
(RADIATION LEVELS INDICATED ARE IN R/HR)

Time:

H+00:00 - 02:15

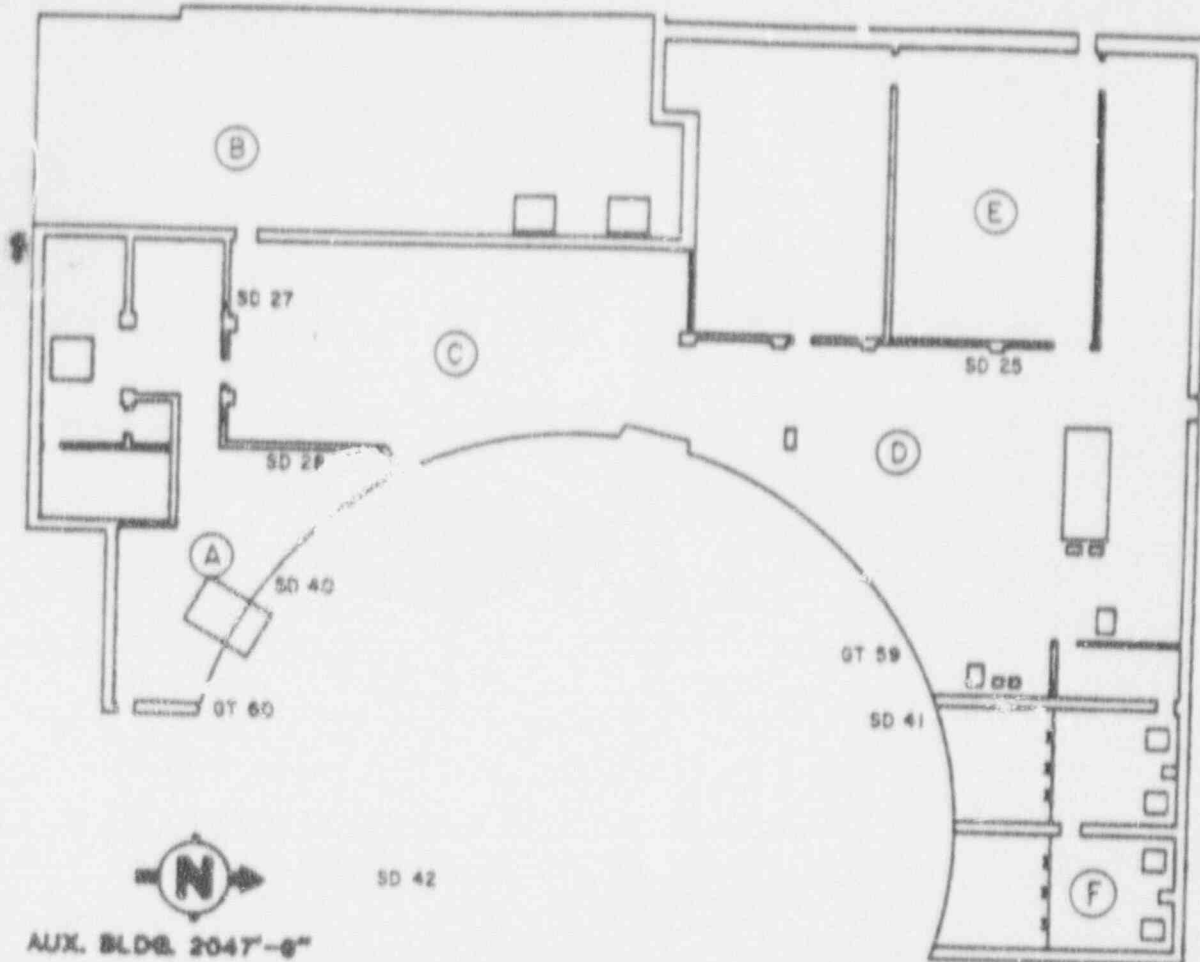
H+02:30+

(A) Pipe Penetration Areas	0.300	0.800
(B) Corridor Area	0.025	0.200
(C) RHR Heat Exchange Areas	0.200	0.300
(D) Sampling/PASS Areas	0.200	0.300
(E) Feedwater Pump Room	<0.002	0.075



(RADIATION LEVELS INDICATED ARE IN R/HR)

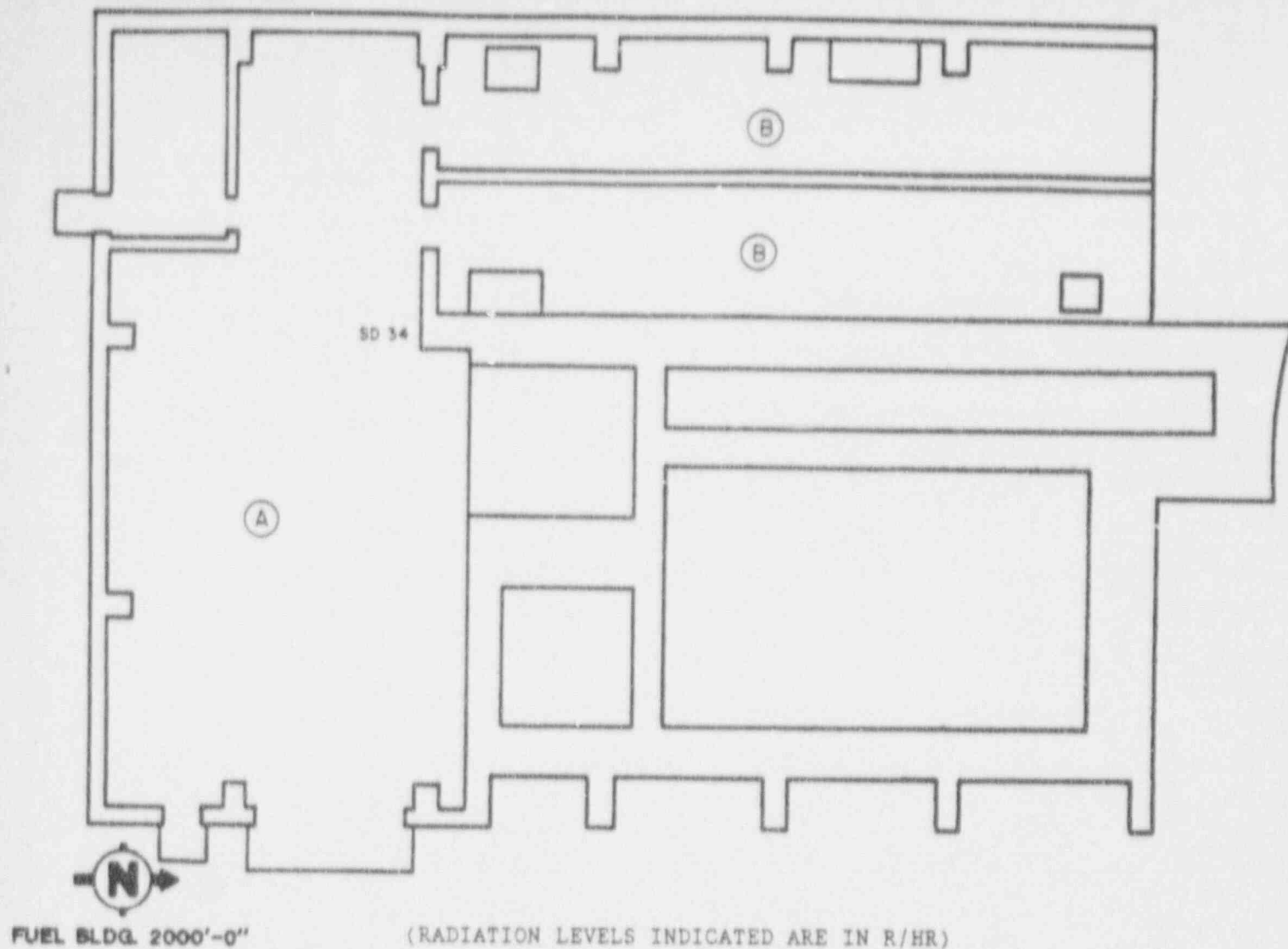
Time:	<u>H+00:00 - 02:15</u>	<u>H+02:30+</u>
(A) Elect. Penetration Areas	0.100	0.500
(B) Corridor Area	0.020	0.500
(C) CCW Pump Areas	0.010	0.280
(D) Main FW Pump Areas	0.010	0.410



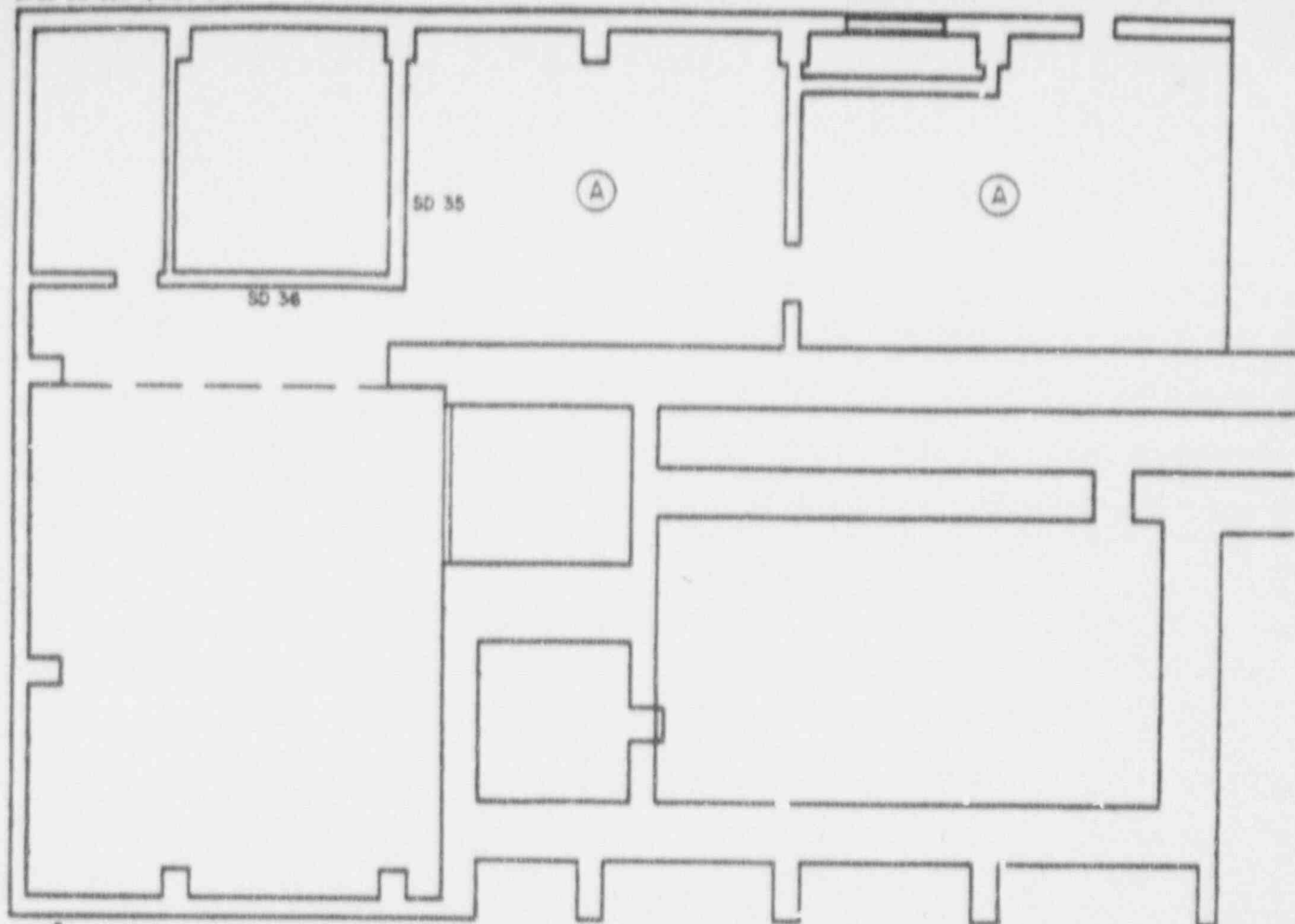
AUX. BLDG. 2047-6

(RADIATION LEVELS INDICATED ARE IN R/HR)

Time:	<u>H+00:00 - 02:15</u>	<u>H+02:30+</u>
(A) Personnel Hatch Area	0.050	0.700
(B) Aux Bldg Roof Area	<0.002	0.100
(C) Ctmt Purge Exhaust Area	0.005	0.375
(D) Ctmt Purge Supply Area	0.005	0.380
(E) CR Filtration Area	<0.002	0.100
(F) MSIV Area	0.020	0.150



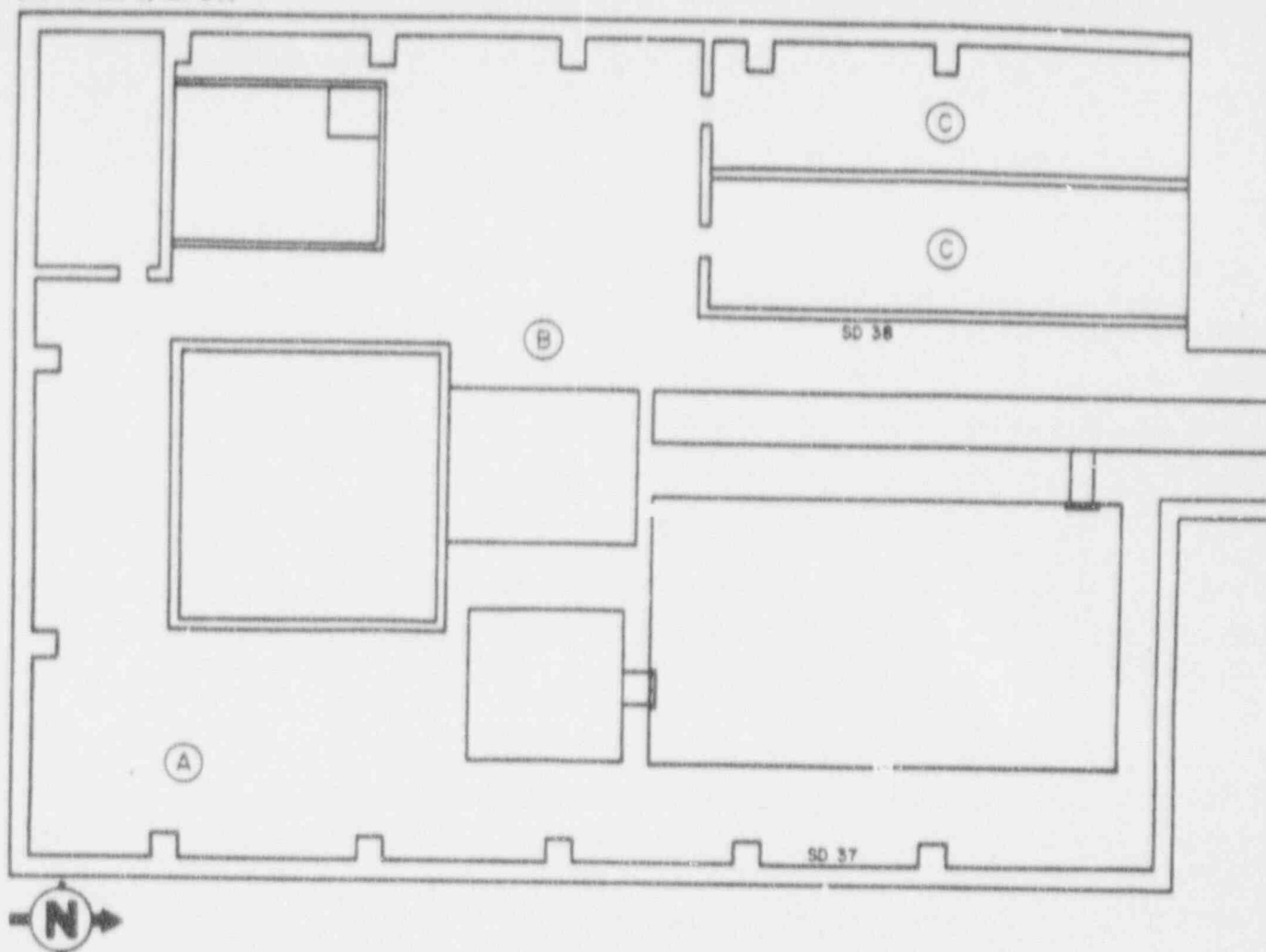
All levels of the Fuel Building show radiation levels to be <0.002 R/hr throughout the duration of the exercise.



FUEL BLDG. 2026'-0"

(RADIATION LEVELS INDICATED ARE IN R/HR)

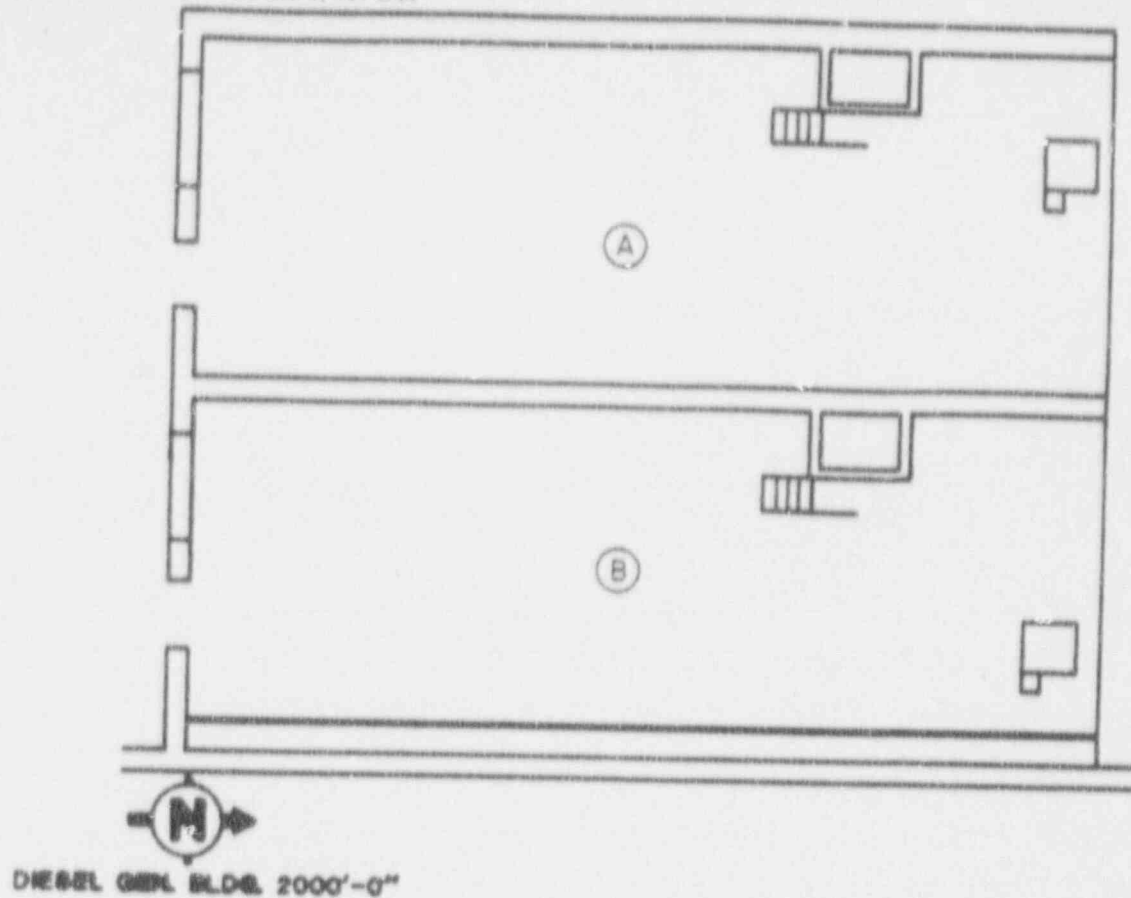
All levels of the Fuel Building show radiation levels to be <0.002 R/hr throughout the duration of the exercise.



FUEL BLDG. 2047'-6"

(RADIATION LEVELS INDICATED ARE IN R/HR)

All levels of the Fuel Building show radiation levels to be <0.002 R/hr throughout the duration of the exercise.



(RADIATION LEVELS INDICATED ARE IN R/HR)

Time:	(ALL TIMES)
(A) General Floor Area	<0.002
(B) General Floor Area	<0.002

SECTION 8.0

OFFSITE RADIOLOGICAL PARAMETERS

OFFSITE RADIOLOGICAL PARAMETERS

A map of the area surrounding WCGS is included in the field team kits. Field teams may be directed to the predesignated monitoring locations indicated on the map or to other locations, however, no offsite radioactive plume will be observed since there is no release of radioactive materials from the plant.

SECTION 9.0

CONTROLLER ASSIGNMENTS AND INSTRUCTIONS

<u>Subsections</u>	<u>Page</u>
ASSIGNMENTS	9.1
INSTRUCTIONS	9.2

CONTROLLER ASSIGNMENTS

<u>ASSIGNMENT</u>	<u>NAME</u>
Lead Controllers	<u>Mark Schreiber</u> <u>Ken Craighead</u> <u>Lisa Herhold</u>
CR Lead Controller	<u>Glenn Reeves</u>
CR Operations	<u>Paul Sudnak (UE)</u>
CR Communications/HP/Chemistry	<u>Randy Skiles</u>
CR Plant Teams (3 - dispatched from computer room)	<u>Duane Smith</u> <u>Barry Brooks</u> <u>Art Mah</u>
TSC Lead Controller/Communications	<u>Larry Stevens</u>
TSC Dose Assessment	<u>Ralph Logsdon</u>
TSC Engineering	<u>Ken Gross (UE)</u>
TSC Rad. Team	<u>Skip Holman</u>
OSC Lead Controller	<u>Lee Nobles</u>
OSC Health Physics	<u>Carolyn Cricqui</u>
OSC Onsite Teams (4)	<u>Royce McMahon</u> <u>Alex Hawley</u> <u>Bud Freeman</u> <u>Pete DeBlonk</u>
PASS Team	<u>Bruce Reischmann</u>
OSC Offsite Monitoring Teams (2)	<u>Jeff Walton</u> <u>Sue Burkdoll</u>
Security Accountability Controller	<u>Pete Lutze</u>
EOF Lead Controller/Communications	<u>Britt McKinney</u>
EOF Engineering	<u>Dan Dullum</u>
EOF Dose Assessment	<u>Bill Ketchum</u>
EOF Rad Team	<u>Craig Swartzendruber</u>
Public Information Controller	<u>Mona Grimsley</u>
County EOC	<u>Brian Winzenried</u>
State EOC	<u>Sheila Teal</u>
The Control Room Simulator and NPIS computer will be operated by Dale Moses, Dave Fehr, and Glenn Reeves.	

CONTROLLER INSTRUCTIONS

Controller instructions define the types of interactions and conduct expected from controllers. The instructions included in the following subsection must be adhered to since controllers will at times have a direct input into the development of scenario activities and subsequently the success of the Exercise.

CONTROLLER INSTRUCTIONS

- A. Controllers shall pre-position themselves in the appropriate emergency response facility no later than 30 minutes prior to the commencement of Exercise activities.
- B. Controllers must comply with instructions from the Exercise Lead Controller.
- C. Prior to the commencement of Exercise activities, controllers shall test telecommunications to ensure operable communication links to the Exercise Lead Controller.
- D. Prior to the commencement of Exercise activities, controllers shall synchronize their watches through the Exercise Lead Controller to ensure the coordinated dispatch of time-related messages and data.
- E. Controller messages, specifically scenario, onsite, offsite and public information messages, must be approved by the facility Lead Controller prior to issuance.
- F. Special messages and messages designated as contingency must be approved by the Exercise Lead Controller prior to issuance.
- G. Information regarding scenario events or data must only be provided upon request from the appropriate players.
- H. Information regarding scenario events or data must not be provided prior to the times noted on the message or data sheets.
- I. Controllers will ensure that players do not use radios in Area 5 of the plant.
- J. Exercise objectives are considered confidential information and are not to be provided to Wolf Creek participants.

SECTION 10.0

EVALUATOR ASSIGNMENTS AND INSTRUCTIONS

<u>Subsections</u>	<u>Page</u>
Evaluator Assignments	10.1
Evaluator Instructions	10.2
Evaluation Checklists	10.4
Evaluation Summary	10.5
Control Room	10.6
Security	10.8
Technical Support Center	10.9
PASS/Onsite Survey/ERDC Team	10.13
Operations Support Center	10.14
Offsite Monitoring Team/ Joint Radiological Monitoring Team	10.16
Emergency Operations Facility	10.18
County EOC	10.21
State EOC	10.22
Evaluation Log Sheets	

EVALUATOR ASSIGNMENTS

<u>ASSIGNMENT</u>	<u>NAME</u>
Lead Evaluator	<u>Mark Schreiber</u>
CR Evaluator	<u>Jeff Pappan</u>
CR Plant Teams (dispatched from computer room)	<u>Rich Meister</u>
TSC Lead Evaluator	<u>Ed Peterson</u>
TSC Dose Assessment	<u>Ray Ryan</u>
TSC Engineering	<u>Ken Frederickson</u>
TSC Communications	<u>Mindy Sadowski</u>
TSC Rad. Team	<u>Ray Ryan</u>
OSC Lead Evaluator	<u>Colton Holman</u>
OSC Health Physics	<u>Greg McClelland</u>
OSC Onsite Teams (4)	<u>Dave Donohoe</u>
	<u>Roger Guard</u>
	<u>Cliff Blow</u>
	<u>Rich Gerdes</u>
PASS Team	<u>Bruce Reischmann</u>
OSC Offsite Monitoring Teams (2)	<u>Jeff Walton</u>
	<u>Sue Burkdoll</u>
Security Accountability Evaluator	<u>Montie McKinney</u>
EOF Lead Evaluator	<u>Terry Damashek</u>
EOF Engineering	<u>Terry Garrett</u>
EOF Dose Assessment	<u>Chris Reekie</u>
EOF Rad Team	<u>Chris Reekie</u>
EOF Communications	<u>Jeanne Dagenette</u>
Public Information	<u>Mona Grimsley</u>
County EOC	<u>Brian Winzenried</u>
State EOC	<u>Sheila Teal</u>

EVALUATOR INSTRUCTIONS

Evaluator instructions defining the types of interactions and conduct expected from evaluators are included in the following subsection.

All instructions included in the following subsection must be adhered to since evaluators may at times have a direct input into the success of the Exercise.

EVALUATOR INSTRUCTIONS

- A. Evaluators shall re-position themselves in the appropriate emergency response facility no later than 30 minutes prior to the commencement of Exercise activities.
- B. Evaluators must comply with instructions from the Exercise Lead Evaluator.
- C. Prior to the commencement of Exercise activities, evaluators shall synchronize their watches through the Exercise Lead Evaluator to ensure a coordinated accounting of Exercise events and player activities.
- D. Interactions with the players must be held to a minimum by all evaluators.
- E. All evaluators shall take detailed notes of player activities utilizing the blank evaluation log sheets. Each evaluator should carefully note the arrival and departure times for players, the times at which major activities or milestones occur, and any problem areas encountered.
- F. Evaluation checklists for the applicable functional area should be completed by each evaluator. The completed checklists will be used to determine if the assigned objectives were satisfactorily demonstrated.
- G. Toward the end of Exercise activities, each facility Lead Evaluator shall distribute the attendance sheet and collect player comments. Player comment forms are included in the facility Lead Evaluators' packets.
- H. All facility Lead Evaluators shall turn in their evaluation logs and checklists to the Exercise Lead Evaluator at the controller/evaluator critique after the Exercise. The date for this critique will be _____.
- I. All facility Lead Evaluators shall submit a formal critique to be completed following the termination of Exercise activities. The format of the critique will be as follows:
 - 1.) Summary of Events and Overall Evaluation
 - 2.) Timeline of Activities
 - 3.) List of Observations, Improvement Items and Deficiencies
- J. The facility Lead Evaluators shall ensure that players' paperwork, logs, notification forms, etc. produced in the course of Exercise activities are turned into the Exercise Lead Evaluator during the controller/evaluator critique.

EVALUATION CHECKLISTS

Evaluation checklists are included in the following subsection.

Checklists are categorized by facility or response function and then into specific objectives to be demonstrated by that facility or response function. The objectives provided in the checklists correspond to the objectives to be demonstrated as identified in the matrices in Section 2.0.

The Evaluation Summary (following the Evaluation Checklists) should list the most significant positive or negative items noted by the evaluator during the Exercise. The following definitions apply to the headings on the EVALUATION SUMMARY:

Deficiency: A significant failure or inadequacy. 1' indicates that the level of emergency preparedness does not provide reasonable assurances that adequate protective measures can and will be taken in the event of a radiological emergency. These are addressed through KGP-1210, "Performance Improvement Request."

Weakness: A failure or inadequacy in any WCMOC-related emergency planning procedure, program, implementation, or documentation. It indicates that the level of preparedness could have precluded effective implementation of the emergency plan in the event of an actual emergency. These are addressed through KGP-1210.

Observation: An opportunity to enhance the Emergency Planning Program that, if not implemented, would not reduce the effectiveness of the Emergency Planning Program. These items are below the threshold of KGP-1210 and are tracked through the E-Plan Action Item Tracking System.

Good Practice: An item identified during drills and exercises which should be continued to enhance the implementation of the Emergency Planning Program.

EVALUATION CHECKLISTS

EVALUATION SUMMARY

Evaluator: _____

Assignment: _____

(Use additional pages as required)

DEFICIENCIES: _____

WEAKNESSES: _____

IMPROVEMENT
ITEMS: _____

GOOD
PRACTICES: _____

EVALUATION CHECKLISTS

Evaluator: _____
Assignment: _____

Control Room

<u>Objective</u>	<u>Yes</u>	<u>No</u>	<u>N/O</u>	<u>N/A</u>
I.1. Accident detection and assessment				
a. Did the Shift Supervisor properly evaluate the emergency?	___	___	___	___
I.2. Emergency classification				
a. Was an Alert declared promptly?	___	___	___	___
I.3. Notification of onsite and offsite emergency responders				
a. Did the CR Communicator complete the Immediate Notification form (Form EP 01-3.1-1) and call the appropriate personnel within applicable time limits (15 min. for State and County; ASAP and within 1 hour for NRC);				
- for the Alert?	___	___	___	___
b. Did CR personnel promptly sound the emergency alarm and announce via GAI-tronics Form EP 01-1.0-1 for the Alert?	___	___	___	___
c. Were followup notifications made to the State and County every 30 minutes after the Immediate Notification?*	___	___	___	___
I.4. Communications				
a. Were phones and GAI-tronics operable for making notifications or transmitting information?	___	___	___	___
b. Were radios operable if phones were inoperable?	___	___	___	___

* After the initial Alert notification, further notifications will be made only as long as the State and County remain activated or are willing to receive the notifications.

EVALUATION CHECKLISTS

Control Room

<u>Objective</u>	<u>Yes</u>	<u>No</u>	<u>N/O</u>	<u>N/A</u>
I.5. Radiological exposure control				
a. Was CR habitability established?	---	---	---	---
b. Did the Shift Supervisor authorize overexposure or recommend the use of KI to any WCNOG emergency worker?	---	---	---	---
c. Was this authorization/recommendation based on criteria in EPPs 01-9.1 and 01-9.3?	---	---	---	---
I.6. Protective action recommendations				
a. Did the Shift Supervisor include any protective action recommendation on the Immediate Notification Forms for the Alert?	---	---	---	---
b. If a) is "yes", were the recommendations based on the criteria in EPP 01-10.1?	---	---	---	---
I.7. Staff augmentation				
a. Did the Shift Supervisor augment the CR staff when the BOP operator left the area?	---	---	---	---
I.8. Shift staffing AND				
II.1. Off-hours staffing				
a. Was a complete Control Room shift complement available during the drill?	---	---	---	---
II.17. Assembly and accountability				
a. Was a complete Control Room shift complement initially accounted for and periodically checked during the drill?	---	---	---	---

EVALUATION CHECKLISTS

Evaluator: _____
Assignment: _____

Security

<u>Objective</u>	<u>Yes</u>	<u>No</u>	<u>N/O</u>	<u>N/A</u>
I.1 Communications				
a. Were radio communications accurate and clear?	---	---	---	---
II.17. Assembly and Accountability				
a. Was there an orderly evacuation of all non-essential personnel?	---	---	---	---
b. Did Security personnel control site access in accordance with Security procedures?	---	---	---	---
c. Were all onsite personnel accounted for within 30 minutes post-classification of an Alert?	---	---	---	---
NOTE: This excludes personnel on the exempt list.				
d. Did Security initiate steps to locate unaccounted-for individuals?	---	---	---	---

EVALUATION CHECKLISTS

Evaluator: _____

Assignment: _____

Technical Support Center

<u>Objective</u>	<u>Yes</u>	<u>No</u>	<u>N/O</u>	<u>N/A</u>
I.1. Accident detection and assessment				
a. When the TSC was activated was the DED aware of all significant events prior to that time?	___	___	___	___
b. Did the REC promptly request that two Offsite Monitoring Teams be dispatched?	___	___	___	___
c. Did the DED convene regular managers' meetings and then update the balance of the TSC staff on the event status?	___	___	___	___
d. Did the TSC personnel actively support the Control Room's efforts to identify the cause of the incident and mitigate it?	___	___	___	___
e. Did the TSC Engineering Team work with the EOF Engineering Team to determine short and long range solutions to the incident?	___	___	___	___
f. Were ERDC Teams requested for dispatch to problem areas promptly?	___	___	___	___
g. Were the status boards maintained regularly and accurately?	___	___	___	___
h. Was plant data effectively manually transmitted and tracked after the NPIS screens went blank (simulated)?	___	___	___	___
I.2. Emergency classification				
a. Was the Site Area Emergency promptly declared by the DED?	___	___	___	___

EVALUATION CHECKLISTS

Technical Support Center

<u>Objective</u>	<u>Yes</u>	<u>No</u>	<u>N/O</u>	<u>N/A</u>
1.3. Notification of onsite and offsite emergency responders				
a. Did the TSC Communicator complete the Immediate Notification Form (Form EP 0)-3.1-1) and call the appropriate personnel within applicable time constraints (15 min. - State, County; ASAP and within one hour - NRC)?*	---	---	---	---
NOTE: NRC communications may be performed by the ENS Communicator.				
b. Did the CR sound the Plant Emergency Alarm and announce, via GAI-tronics, Form EP 2.2-3:				
- for a Site Area Emergency?	---	---	---	---
c. Were followup notifications made to the State and County every 30 minutes after the Immediate Notification?*	---	---	---	---
d. Were the State, County and NRC notified of TSC activation?*	---	---	---	---
1.4. Communications				
a. Were the following types of communication operable during the drill:				
- Phone	---	---	---	---
- Radios	---	---	---	---
- GAI-tronics	---	---	---	---
1.5. Radiological exposure control				
a. Did the DED authorize overexposure or recommend the use of KI to any WCNOG emergency worker?	---	---	---	---

* Notifications will be made only if the State and County are activated or willing to receive the notifications.

EVALUATION CHECKLISTS

Technical Support Center

<u>Objective</u>	<u>Yes</u>	<u>No</u>	<u>N/O</u>	<u>N/A</u>
b. Was this authorization/recommendation based on criteria in EPPs 01-9.1 and 01-9.37	---	---	---	---
c. Was TSC habitability established and verified at least every hour?	---	---	---	---
I.6. Protective action recommendations				
a. Did the DED include any protective action recommendations on the Immediate Notification Forms for the SAE?	---	---	---	---
b. If a. is "yes", were these recommendations based on discussions with the RLE and OEC?	---	---	---	---
c. Were PARs posted correctly on the status boards and the notification form?	---	---	---	---
d. Were the PARs followed up by the DED with the County/State as to the status of their implementation?*	---	---	---	---
e. Were Offsite Monitoring Teams aware of the PARs?	---	---	---	---
I.8. Shift staffing AND				
II.6. Off-hours staffing				
a. Was the TSC activated within 60 minutes after the Alert was classified?	---	---	---	---
b. Was a complete TSC shift complement available during the drill?	---	---	---	---

* dependent on County and State extent of play.

EVALUATION CHECKLISTS

Technical Support Center

<u>Objective</u>	<u>Yes</u>	<u>SA</u>	<u>N/O</u>	<u>N/A</u>
II.17. Assembly and accountability				
a. Was a complete TSC shift complement initially accounted for and periodically checked during the drill?	—	—	—	—

EVALUATION CHECKLISTS

Evaluator: _____
Assignment: _____

PASS/Onsite Survey/ERDC Team

<u>Objective</u>	<u>Yes</u>	<u>No</u>	<u>N/O</u>	<u>N/A</u>
I.4. Communication				
a. Were the radios in the emergency cabinet operable?	---	---	---	---
I.5. Radiological exposure control				
a. Was respiratory protection required for the Team's assignment?	---	---	---	---
b. If a. is "yes", was the proper equipment available and used?	---	---	---	---
c. Were Team members supplied with correct range dosimetry and TLDs?	---	---	---	---
d. If samples were obtained, were they handled in a way to minimize exposure?	---	---	---	---

EVALUATION CHECKLISTS

Evaluator: _____
Assignment: _____

Operations Support Center

<u>Objective</u>	<u>Yes</u>	<u>No</u>	<u>N/O</u>	<u>N/A</u>
I.1. Accident detection and assessment				
a. Were Onsite Survey Teams/ERDC Teams briefed on:				
- radiation/contamination levels	___	___	___	___
- route to and from work area	___	___	___	___
- Dosimetry, PC, respirator requirements	___	___	___	___
- allowable doses or stay time	___	___	___	___
- air monitoring and radiological control requirements	___	___	___	___
- their team identification	___	___	___	___
I.4. Communications				
a. Were the Teams in radio or GAI-tronics contact with the TSC or OSC at all times?	___	___	___	___
b. Were all the radios in the OSC emergency cabinet operable?	___	___	___	___
c. Were phone communications available between the OSC Supervisor's office and the TSC?	___	___	___	___
I.5. Radiological exposure control				
a. Was OSC habitability established then verified every hour?	___	___	___	___
b. Were the Team members issued adequate dosimetry for the radiological conditions they might encounter?	___	___	___	___
c. Was KI recommended to be taken by any Team member?	___	___	___	___
d. If c. is "yes", was KI readily available?	___	___	___	___

EVALUATION CHECKLISTS

Operations Support Center

<u>Objective</u>	<u>Yes</u>	<u>No</u>	<u>N/O</u>	<u>N/A</u>
I.8. Shift staffing AND				
II.1. Off-hours staffing				
a. Was the OSC activated within 60 minutes post-classification of the Alert?	---	---	---	---
b. Were all OSC ERO positions staffed?	---	---	---	---
II.17. Assembly and accountability				
a. Was a complete OSC shift complement initially accounted for and periodically checked during the drill?	---	---	---	---

EVALUATION CHECKLISTS

Evaluator: _____
Assignment: _____

Offsite Monitoring Teams

<u>Objective</u>	<u>Yes</u>	<u>No</u>	<u>N/O</u>	<u>N/A</u>
I.4. Communications				
a. Were the radios in the emergency cabinet operable?	---	---	---	---
I.5. Radiological exposure control				
a. Was respiratory protection required for the Team's assignment?	---	---	---	---
b. If a. is "yes", was the proper equipment available and used?	---	---	---	---
c. Were Team members supplied with correct range dosimetry and TLDs?	---	---	---	---
d. Were Team members briefed on:				
- magnitude and composition of any actual or potential radiological releases	---	---	---	---
- source of leak	---	---	---	---
- expected duration of release	---	---	---	---
- projected or measured offsite dose rates	---	---	---	---
- current and projected meteorological conditions	---	---	---	---
- location to join Offsite Monitoring Team, if applicable	---	---	---	---
e. Did Team members keep their exposure ALARA by moving to low background areas for counting of samples?	---	---	---	---
f. Was dosimetry checked periodically?	---	---	---	---

EVALUATION CHECKLISTS

Offsite Monitoring Teams

<u>Objective</u>	<u>Yes</u>	<u>No</u>	<u>N/O</u>	<u>N/A</u>
g. Were survey instruments used properly?	---	---	---	---
h. Were personnel, equipment and vehicle checked for contamination?	---	---	---	---
i. Was decontamination performed properly?	---	---	---	---
j. Was dosimetry checked and the readings recorded when the Team returned to the EOF?	---	---	---	---

EVALUATION CHECKLISTS

Evaluator: _____
Assignment: _____

Emergency Operations Facility

<u>Objective</u>	<u>Yes</u>	<u>No</u>	<u>N/O</u>	<u>N/A</u>
I.1. Accident detection and assessment				
a. When the EOF was activated, was the DEM aware of all significant events prior to that time?	---	---	---	---
b. Did the DEM convene regular managers' meetings and then update the balance of the EOF staff on the event status?	---	---	---	---
c. Were EOF personnel actively engaged with TSC personnel to mitigate the incident?	---	---	---	---
d. Did the EOF Engineering Team work with the TSC Engineering Team to determine short, mid- and long range solutions to the incident?	---	---	---	---
I.3. Notification of onsite and offsite emergency responders				
a. Were followup notifications made to the State and County every 30 minutes?*	---	---	---	---
I.4. Communications				
a. Were the following communication lines operable:				
- ERO phones	---	---	---	---
- ENS phone	---	---	---	---
- HPN phone	---	---	---	---
- Telecopier	---	---	---	---

* Notifications will be made only as long as the State and County remain activated or are willing to receive the notifications.

EVALUATION CHECKLISTS

Emergency Operations Facility

<u>Objective</u>	<u>Yes</u>	<u>No</u>	<u>N/O</u>	<u>N/A</u>
I.5. Radiological exposure control				
a. Did the DEM authorize over-exposure for any WCNOG emergency worker?	---	---	---	---
b. Was this authorization based on criteria in EPPs 01-9.1 and 01-9.3?	---	---	---	---
c. Was EOF habitability established and verified at least every hour?	---	---	---	---
d. Was dosimetry positioned throughout the EOF?	---	---	---	---
e. Was dosimetry checked periodically?	---	---	---	---
I.6. Protective action recommendations				
a. Did the DEM include new protective action recommendations on the Immediate Notification Form?	---	---	---	---
b. If a. is "yes", were these recommendations based on:				
- dose calculations,	---	---	---	---
- discussions with the RAM and TRM, or	---	---	---	---
- automatic PARs in EPP 01-10.1	---	---	---	---
c. Were PARs posted correctly on the status boards and the notification form?				
d. Were PARs discussed with the State RAM and/or the SDEP representative?**	---	---	---	---
e. Were changes in PARs transmitted to the State and County within 15 minutes of being made?*	---	---	---	---

* Notifications will be made only as long as the State and County remain activated or are willing to accept notifications.

** State officials may elect not to play and therefore may not be present.

EVALUATION CHECKLISTS

Emergency Operations Facility

<u>Objective</u>	<u>Yes</u>	<u>No</u>	<u>N/O</u>	<u>N/A</u>
f. Was implementation of the PARs followed up by the DEM as to the status of their implementation?	---	---	---	---
g. Were JRMTs aware of the current PARs?	---	---	---	---
I.8. Shift staffing AND				
II.1 Off-hours staffing				
a. Was the EOF activated within 90 minutes after the Site Area Emergency classification?	---	---	---	---
b. Was a complete EOF shift complement available during the drill?	---	---	---	---
II 17. Assembly and accountability				
a. Was a complete EOF shift complement initially accounted for and periodically checked during the drill?	---	---	---	---

EVALUATION CHECKLISTS

Coffey County EOC

<u>Objective</u>	<u>Yes</u>	<u>No</u>	<u>N/O</u>	<u>N/A</u>
32. Demonstrate the capability to carry out emergency response functions in an unannounced exercise or drill.				
33. Demonstrate the capability to carry out emergency response functions during an off-hours exercise or drill.				
a. Did the dispatcher use an Immediate Notification Form when the initial call came from Wolf Creek?	---	---	---	---
b. Did the dispatcher begin his/her call list as soon as possible after receiving the Immediate Notification?	---	---	---	---
c. Did the dispatcher document reaching each individual on the call list and noting the ETA?	---	---	---	---
d. Did key players come in to the EOC in a timely fashion?				
Emergency Preparedness Coordinator (EPC)	---	---	---	---
Radiological Officer (RO)	---	---	---	---
Commissioner	---	---	---	---
e. Did key players initiate their call lists as soon as possible after coming in to the EOC?				
EPC	---	---	---	---
RO	---	---	---	---
Commissioner	---	---	---	---
f. Did each key player document reaching each individual on the call list and noting the ETA?				
EPC	---	---	---	---
RO	---	---	---	---
Commissioner	---	---	---	---
g. Did the FPC contact the State and WCNOG?	---	---	---	---

EVALUATION CHECKLISTS

State EOC

<u>Objective</u>	<u>Yes</u>	<u>No</u>	<u>N/O</u>	<u>N/A</u>
32. Demonstrate the capability to carry out emergency response functions in an unannounced exercise or drill.				
33. Demonstrate the capability to carry out emergency response functions during an off-hours exercise or drill.	---	---	---	---
a. Did the Duty Officer document when the initial call came from Wolf Creek?	---	---	---	---
b. Did key players come in to the EOC in a timely fashion?				
Duty Officer and/or his designee State Radiological Assessment Manager (SRAM)	---	---	---	---
c. Did key players initiate their call lists as soon as possible after coming in to the EOC?				
Duty Officer SRAM	---	---	---	---
d. Did each key player document reaching each individual on the call list and noting the ETA?				
Duty Officer SRAM	---	---	---	---
e. Did the Duty Officer contact the County and WCNOG?	---	---	---	---

WOLF CREEK NUCLEAR OPERATING CORPORATION

EVALUATION LOG SHEET

Evaluator:

Date: _____

Assignment:

Page:

[illegible]

EVALUATION LOG SHEET

Date: _____

Page: _____

[illegible]

WOLF CREEK NUCLEAR OPERATING CORPORATION

EVALUATION LOG SHEET

Evaluator:

Date: _____

Assignment:

Page:

[illegible]

WOLF CREEK NUCLEAR OPERATING CORPORATION

EVALUATION LOG SHEET

Evaluator: _____

Date: _____

Assignment:

Page: _____

[illegible]

EVALUATION LOG SHEET

Date: _____

Page:

[illegible]

WOLF CREEK NUCLEAR OPERATING CORPORATION

EVALUATION LOG SHEET

Evaluator: _____

Date: _____

Assignment: _____

Page: _____

[illegible]

WOLF CREEK NUCLEAR OPERATING CORPORATION

EVALUATION LOG SHEET

Evaluator:

Date: _____

Assignment:

Page:

[illegible]