

# FENOC

FirstEnergy Nuclear Operating Company

Beaver Valley Power Station  
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April 26, 2000  
L-00-052

U. S. Nuclear Regulatory Commission, Region I  
Mr. Michael C. Modes  
Emergency Preparedness and Safeguards Branch, Chief  
475 Allendale Road  
King of Prussia, Pennsylvania 19046

**Subject: Beaver Valley Power Station, Unit No. 1 and No. 2  
BV-1 Docket No. 50-334, License No. DPR-66  
BV-2 Docket No. 50-412, License No. NPF-73  
Emergency Preparedness Plan**

Dear Sir:

In support of the schedule for review of the Beaver Valley Power Station's Emergency Preparedness Evaluated Exercise to be conducted June 27, 2000, FirstEnergy Nuclear Operating Company (FENOC) is providing the attached Exercise Package.

To allow sufficient time for FENOC to incorporate comments, we request that any comments on the Exercise Package be provided to us by May 26, 2000.

Questions for the Exercise and its preparation should be directed to Hal Szklinski (412) 393-5772. Your cooperation on this matter is greatly appreciated.

Very truly yours,

  
Lew W. Myers

Attachment

IE35

**Beaver Valley Power Station, Unit No. 1 and No. 2  
Emergency Preparedness Plan  
L-00-052  
Page 2**

**c: U.S. Nuclear Regulatory Commission, Region I  
Mr. Dave Silk  
Emergency Preparedness Section  
475 Allendale Road  
King of Prussia, Pennsylvania 19046**

**Mr. D. M. Kern, Senior Resident Inspector  
U.S. Nuclear Regulatory Commission  
Beaver Valley Power Station  
Shippingport, PA 15077**

**U.S. Nuclear Regulatory Commission (w/o attachment)  
Care of Document Control Desk  
Washington, D.C. 20555**

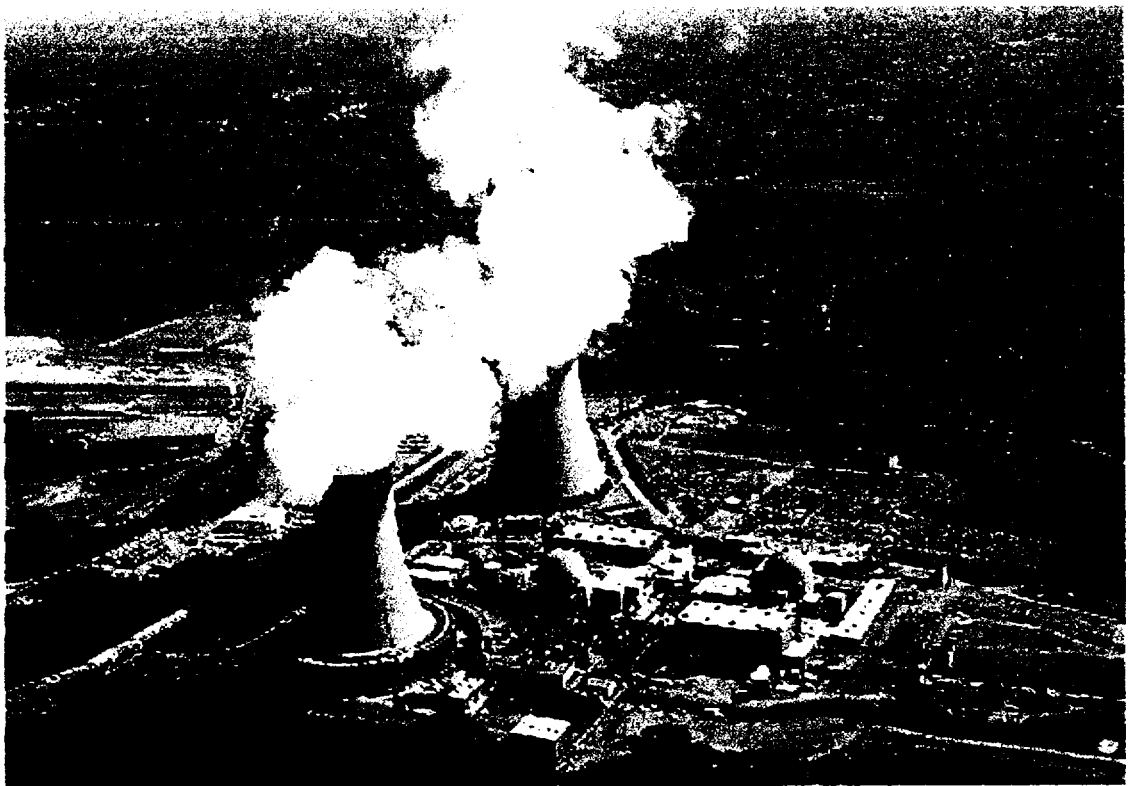
**Ms. Mary E. O'Reilly (w/o attachment)  
FirstEnergy Legal Department**

# BEAVER VALLEY POWER STATION

## **FENOC**

FirstEnergy Nuclear Operating Company

### **2000 EMERGENCY PREPAREDNESS EXERCISE**



# Beaver Valley Power Station

## 2000 Evaluated Exercise

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# Beaver Valley Power Station

## 2000 Evaluated Exercise

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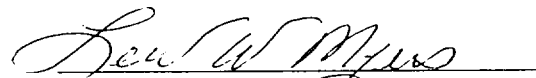
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## **BEAVER VALLEY POWER STATION**

### **2000 EVALUATED EXERCISE**

#### **FOREWORD**

This Exercise package has been developed to provide the basis for the conduct of a simulated radiological accident at the Beaver Valley Power Station Unit No. 2 facility located in Shippingport, Beaver County, Pennsylvania. The purpose of the Exercise is to demonstrate and evaluate the capabilities and effectiveness of the Emergency Preparedness Program for Beaver Valley Power Station. This package is to be utilized by the Exercise Controllers and Evaluators of the Federal, State and Local agencies, as well as those of the Utility. The information contained within provides guidelines for initiating, controlling and evaluating the activities of the participants in the Exercise.

  
Lew W. Myers  
Sr. V.P. Nuclear

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**Beaver Valley Power Station**

**2000 Evaluated Exercise**

**INTRODUCTION:**

In order to achieve a sequence of events that will test participating groups, the 2000 Emergency Preparedness Exercise must contain some unlikely plant problems. These problems will involve simulated equipment failures and events. The content of this package is confidential and is to assist Controllers/Evaluators in the conduct and evaluation of the Exercise.

EXERCISE PARTICIPANTS WILL NOT HAVE PRIOR KNOWLEDGE OF THE NATURE OF THE SIMULATED EVENTS OF THIS EXERCISE. THE EXERCISE IS DESIGNED TO PROVIDE ADDITIONAL TRAINING IN ORDER THAT PERSONNEL CAN DEMONSTRATE THEIR ABILITY TO HANDLE AN EMERGENCY ACCORDING TO CURRENT PLANS AND PROCEDURES.

<b>SCHEDULE OF EVENTS</b>
---------------------------

**6/26/00**

<b><u>TIME</u></b>	<b><u>EVENT</u></b>
1300	Pre-Exercise Briefing for TSC and EOF personnel – Simulator Building Classroom 3/4

**6/27/00**

<b><u>TIME</u></b>	<b><u>EVENT</u></b>
1600	Participant "Turnover" briefings

<u>Facility</u>	<u>Briefing Location</u>
<b>Control Room: (1515 Hrs.)</b>	ERF Bldg. - TSC Area
<b>OSC:</b>	SOSB-5 - Conference Room
<b>ROC:</b>	ROC
<b>Chemistry:</b>	U2 Cold Lab
<b>CAS:</b>	CAS
<b>JPIC</b>	JPIC

1615	Evaluated Exercise begins
2200	Evaluated Exercise ends
2215	Emergency Facility Critiques begin
2245	Emergency Facility Critiques end

**6/28/00**

<b><u>TIME</u></b>	<b><u>EVENT</u></b>
0900-1400	Controller meeting Simulator Building, Classroom 3 / 4

**6/29/00**

<b><u>TIME</u></b>	<b><u>EVENT</u></b>
0900	BVPS Evaluated Exercise Critique for management and participants
1000	NRC Evaluated Exercise Critique



## Beaver Valley Power Station

### SCOPE AND OBJECTIVES

#### SCOPE:

The 2000 Evaluated Exercise, scheduled to be conducted **June 27, 2000**, will simulate accident events culminating in a radiological accident at Beaver Valley Power Station (BVPS) **Unit #2**, located in Shippingport, Pennsylvania, Beaver County. The Exercise will involve events that test the effectiveness of the Station's Emergency Preparedness Program including the activation and utilization of emergency response facilities. This Exercise will include mobilization by State and local emergency personnel and resources in Pennsylvania, Ohio and West Virginia.

#### OBJECTIVES:

The Objectives are provided in the following GROUPS:

<u>GROUP</u>	<u>TITLE</u>
A	OPERATIONS
B	OFFSITE AGENCY COMMUNICATIONS
C	HEALTH PHYSICS
D	OPERATIONS SUPPORT CENTER
E	ENVIRONMENTAL ASSESSMENT AND DOSE PROTECTION
F	CHEMISTRY
G	SECURITY
H	TECHNICAL SUPPORT CENTER
I	EMERGENCY OPERATIONS FACILITY
J	EMERGENCY PUBLIC INFORMATION
K	MISCELLANEOUS

## **Beaver Valley Power Station**

### **SCOPE AND OBJECTIVES**

#### **LEGEND:**

CR/CRDC	Control Room (Control Room Drill Center) located at the Emergency Response Facility (ERF)
OSC	Operations Support Center
ROC	Radiological Operations Center
Security	Security Activities
TSC	Technical Support Center
EOF	Emergency Operations Facility
ERF	Emergency Response Facility [Contains the Technical Support Center (TSC) and Emergency Response Facility (ERF)]
JPIC	Joint Public Information Center

**Beaver Valley Power Station**

**2000 Evaluated Exercise**

**Scope & Objectives**

Beaver Valley Power Station

**2000 Evaluated Exercise**

**SCOPE:**

The 2000 Evaluated Exercise, scheduled to be conducted June 27, 2000 will simulate accident events at Beaver Valley Power Station (BVPS) **Unit #2**, located in Beaver County, Shippingport, Pennsylvania. The Exercise will involve events that test the effectiveness of the Station's Emergency Preparedness Program including the activation and utilization of emergency response facilities. The Exercise will include full-participation by State and local emergency personnel and resources in Pennsylvania, Ohio and West Virginia.

## ONSITE OBJECTIVES

In order to establish the scope and boundaries of the scenario, a definitive set of objectives were developed. These objectives are not only used to ascertain the required input to the Drill/Exercise sequence of events, but also to establish evaluation critique areas to be graded by the Drill/Exercise controllers and observers during actual conduct of the Drill/Exercise. The following objectives are to be used for this purpose.

### **NOTE:**

1. An objective listed with an asterisk (\*) to the left, indicates that the objective was used as a specific scenario development objective.
2. An objective in *italics* indicates an area for improvement identified from the previous Exercise/Drill.
3. An objective with a pound symbol (#) to the left indicates the objective is also an EPP NRC performance Indicator.
4. If Objective performed unsatisfactory, provide reason.

<b>A.</b>	<b><u>Operations Objectives</u></b>	<b><u>SAT</u></b>	<b><u>UNSAT</u></b>	<b><u>N/A</u></b>
*	1. Demonstrate the Control Room personnel's ability to recognize operational symptoms and parameters indicative of degrading plant conditions.  <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
*	2. Demonstrate the Control Room personnel's ability to respond to emergency situations using appropriate Abnormal Operating Procedures (AOPs) and Emergency Operating Procedures (EOPs).  <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A.	<u>Operations Objectives (Continued)</u>	<u>SAT</u>	<u>UNSAT</u>	<u>N/A</u>
* #	3. Demonstrate the ability to initially identify and classify emergency conditions using the Emergency Action Levels (EALs) in EPP/I-1, "Recognition and Classification of Emergency Conditions".  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
*	4. <i>Demonstrate the Control Room personnel's ability to properly notify Emergency Response Organization personnel via Beepers using the Beaver Valley Emergency Response System (BVERS), or alternate methods, per EPP/IP 1.1.</i>  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	5. Demonstrate the Control Room personnel's ability to use the Plant Page Party, phone, etc., to begin activation of the necessary Emergency Response Facilities per EPP/I-2, 3, 4, 5, and EPP/IP 1.1, as applicable.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	6. Demonstrate efficient and effective 24-hour communications capability to notify offsite and onsite personnel which includes the use of phone systems, audible alarms, public address systems, and/or visual alarms.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A.	<u>Operations Objectives (Continued)</u>	<u>SAT</u>	<u>UNSAT</u>	<u>N/A</u>
	7. Demonstrate effective communication and informational flow from the Control Room personnel to the Technical Support Center (TSC) by the Nuclear Shift Supervisor (NSS) and Control Room Operations Coordinator.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<hr/>				
<hr/>				
<hr/>				
	8. Demonstrate effective communication and informational flow from Control Room personnel to other Emergency Response Facilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<hr/>				
<hr/>				
<hr/>				
	9. Demonstrate the Control Room personnel's capability to assemble and dispatch personnel in response to in-plant problems prior to activation of other emergency facilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<hr/>				
<hr/>				
<hr/>				
*	10. Demonstrate a turnover briefing between the NSS/ED and the On-Call Emergency Director via EPP/IP 1.3, "Emergency Director-Emergency Recovery Manager Turnover/Briefing Checklist" and EPP/IP 1.4, "Technical Support Center Activation, Operation and Deactivation".	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<hr/>				
<hr/>				
<hr/>				
*	11. Demonstrate the capability to shift authorities and responsibilities from the on-shift emergency organization to the Alert (TSC) emergency organization upon activation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<hr/>				
<hr/>				

<b>A.</b>	<b><u>Operations Objectives (Continued)</u></b>	<b><u>SAT</u></b>	<b><u>UNSAT</u></b>	<b><u>N/A</u></b>
<b>*</b>	12. Demonstrate the ability to notify and mobilize staff and activate emergency facilities in a timely manner.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**(Note:** Joint Public Information Center (JPIC) and Corporate Emergency Response Organization (ERO) personnel will be prestaged. Notification and activation of the JPIC and Corporate Communications organizations are not an objective for this Drill/Exercise.)

13.	Demonstrate adequate and effective information flow between BVPS Emergency Response Facilities (ERFs) and proper utilization of emergency response equipment.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.	Demonstrate the ability to establish and maintain solid accident management command and control authority and maintain continuity of authority in all BVPS emergency facilities.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.	Demonstrate at all BVPS ERFs the ability to maintain accurate record keeping and logging of data, information, message transmittals and status boards.  _____ _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>Signature:</b> _____	_____ Name	_____ Date
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B.	<u>Offsite Agency Communications</u>	<u>SAT</u>	<u>UNSAT</u>	<u>N/A</u>
* #	1. <i>For Control Room personnel, demonstrate the ability to perform timely and accurate emergency classification notifications to appropriate State and County agencies per EPP/IP 1.1 Notifications.</i>  <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* #	2. <i>For TSC personnel, demonstrate the ability to perform timely and accurate <u>Site Area Emergency</u> classification notifications to appropriate State and County agencies per EPP/IP 1.1 Notifications.</i>  <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* #	3. <i>For TSC personnel, demonstrate the ability to perform timely and accurate <u>General Emergency</u> classification notifications, including a Protective Action Recommendation, to appropriate State and County agencies per EPP/IP 1.1 Notifications and EPP/IP 4.1 "Offsite Protective Actions".</i>  <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	4. Demonstrate the ability to notify the NRC within one (1) hour of initially declaring an emergency per EPP/IP 1.1 Notifications.  <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>B.</b>	<b><u>Offsite Agency Communications (Continued)</u></b>	<b><u>SAT</u></b>	<b><u>UNSAT</u></b>	<b><u>N/A</u></b>
5.	<b>For TSC personnel</b> , demonstrate the ability to perform timely and accurate emergency classification notifications to other offsite agencies/organizations per EPP/IP 1.1 Notifications, as necessary. <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	<b>For TSC personnel</b> , demonstrate the ability to Periodically update appropriate Federal, State, County, and other appropriate offsite agencies/organizations per EPP/IP 1.1 Notifications (i.e.: Follow-up Notifications). <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Demonstrate adequate and effective information flow between BVPS Emergency Response Facilities (ERFs) and proper utilization of emergency response equipment. <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	Demonstrate at all BVPS ERFs the ability to maintain accurate record keeping and logging of data, information and message transmittals. <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>Signature:</b>	<div style="border-bottom: 1px solid black; height: 1.2em; margin-bottom: 2px;"></div> Name	<div style="border-bottom: 1px solid black; height: 1.2em; margin-bottom: 2px;"></div> Date
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C.	<u>Health Physics Objectives</u>	<u>SAT</u>	<u>UNSAT</u>	<u>N/A</u>
*	1. Demonstrate initial facility activation and staffing per EPP/IP 1.5 "Emergency Support Centers (ROC & OSC) Activation, Operation and Deactivation" using the designated ERO Team.  <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2. Demonstrate the capability to mobilize appropriate in-plant radiological monitoring.  <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	3. Demonstrate the capability to mobilize appropriate offsite radiological monitoring.  <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	4. Demonstrate the ability to determine ongoing in-plant radiological activities prior to Radiological Operations Center (ROC) activation and include this information in radiological assessments.  <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	5. Demonstrate the ability to determine habitability of the Control Room, Operations Support Center (OSC), Radiological Operations Center (ROC), TSC, and the Emergency Operations Facility (EOF) during emergency conditions.  <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
*	6. Demonstrate the ability to respond to, and analyze, simulated airborne and liquid samples, and direct radiation measurements in the environment, as appropriate (No silver zeolite cartridges will be used, however, Controllers shall verify their availability).  <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

C.	<u><b>Health Physics Objectives (Continued)</b></u>	<u><b>SAT</b></u>	<u><b>UNSAT</b></u>	<u><b>N/A</b></u>
7.	Demonstrate the ability to provide adequate radiation protection services while maintaining personnel exposures As Low As Reasonably Achievable (ALARA) through the utilization of appropriate procedures.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	Demonstrate the ability to determine the necessity of appropriate protective measures for BVPS personnel, as necessary, using EPP/IP 5.3 Emergency Exposure Criteria and Control (i.e.: KI, etc.).  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Demonstrate adequate and effective information flow between BVPS Emergency Response Facilities (ERFs) and proper utilization of emergency response equipment.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	Demonstrate the ability to establish and maintain solid accident management command and control authority and maintain continuity of authority in all BVPS emergency facilities.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.	Demonstrate at all BVPS ERFs the ability to maintain accurate record keeping and logging of data, information, message transmittals and status boards.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>Signature:</b> _____	Name	Date
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D.	<u>Operation Support Center Objectives</u>	<u>SAT</u>	<u>UNSAT</u>	<u>N/A</u>
*	1. Demonstrate initial facility activation and staffing per EPP/IP 1.5 "Emergency Support Centers (ROC & OSC) Activation, Operation and Deactivation" using the designated ERO Team.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2. Demonstrate the ability to assemble, coordinate and dispatch in-plant Damage Control/Repair Teams as prioritized by the TSC.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	3. Demonstrate the ability to coordinate Damage Control/Repair Teams with the ROC for Health Physics support.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
*	4. Demonstrate the ability to determine ongoing in-plant maintenance activities prior to OSC activation and include this information in maintenance assessments.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	5. Demonstrate adequate and effective information flow between BVPS Emergency Response Facilities (ERFs) and proper utilization of emergency response equipment.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

D.	<u>Operation Support Center Objectives (Continued)</u>	<u>SAT</u>	<u>UNSAT</u>	<u>N/A</u>
6.	Demonstrate the ability to establish and maintain solid accident management command and control authority and maintain continuity of authority in all BVPS emergency facilities.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Demonstrate at all BVPS ERFs the ability to maintain accurate record keeping and logging of data, information, message transmittals and status boards.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>Signature:</b>	_____ Name	_____ Date
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E.	<u>Environmental Assessment and Dose Projection Objectives</u>	<u>SAT</u>	<u>UNSAT</u>	<u>N/A</u>
	1. Demonstrate initial area activation and staffing per EPP/IP 2.6 "Environmental Assessment and Dose Projection Controlling Procedure" using the designated ERO Team. <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
*	2. Demonstrate the ability to assemble offsite radiological monitoring teams. <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
*	3. Demonstrate the ability to coordinate and direct offsite radiological monitoring in relation to plume monitoring and/or wind direction. <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	4. Demonstrate the ability to coordinate analysis of simulated airborne or liquid samples, and direct radiation measurements in the environment, as appropriate (No silver zeolite cartridges will be used, however, Controllers shall verify their availability). <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
*	5. Demonstrate the ability to perform timely and accurate offsite dose projections concerning potential airborne radiological releases using FSAR, isotopic, or monitor information, as necessary, using the new MIDAS system and the EPP/IP 2 series procedures. <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

E.	<u>Environmental Assessment and Dose Projection Objectives (Continue)</u>	<u>SAT</u>	<u>UNSAT</u>	<u>N/A</u>
*	6. Demonstrate the ability to provide appropriate dose assessment information to the Emergency Director (via the Rad. Controls Coord direct line), or the Emergency Recovery Manager, as appropriate.  <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	7. Demonstrate the ability to interact with offsite agency personnel (if available) in resolving questions associated with dose projections.  <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	8. Demonstrate the ability to determine the necessity of appropriate protective measures for offsite field monitoring team personnel, as necessary (i.e.: KI, etc.).  <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
*	9. Demonstrate the ability to provide continuous meteorological information to the ERO via available meteorological data.  <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	10. Demonstrate adequate and effective information flow between BVPS Emergency Response Facilities (ERFs) and proper utilization of emergency response equipment.  <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



**E. Environmental Assessment and Dose Projection Objectives (Continue)**

	<u>SAT</u>	<u>UNSAT</u>	<u>N/A</u>
11. Demonstrate the ability to establish and maintain solid accident management command and control authority and maintain continuity of authority in all BVPS emergency facilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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12. Demonstrate at all BVPS ERFs the ability to maintain accurate record keeping and logging of data, information, message transmittals and status boards in a timely manner.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Signature:**

\_\_\_\_\_  
Name

\_\_\_\_\_  
Date

<b>F.</b>	<b><u>Chemistry Objectives</u></b>	<b><u>SAT</u></b>	<b><u>UNSAT</u></b>	<b><u>N/A</u></b>
1.	Demonstrate the ability to assist with factoring chemistry information into the overall assessment process. <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Demonstrate the ability to obtain chemistry samples upon request. <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Demonstrate adequate and effective information flow between in-plant chemistry personnel and TSC chemistry personnel. <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>Signature:</b> _____ <div style="display: inline-block; width: 300px; text-align: center; margin-top: 5px;">             Name         </div> <div style="display: inline-block; width: 150px; text-align: center; margin-top: 5px;">             Date         </div>
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G.	<u>Security Objectives</u>	<u>SAT</u>	<u>UNSAT</u>	<u>N/A</u>
*	1. Demonstrate maintenance of site security operations throughout the drill/exercise, and the ability to establish and control site security access control points. <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
*	2. Demonstrate, upon notification, the ability to initially setup and provide appropriate security access control for the ERF Building per EPP/IP 1.4 "Technical Support Center Activation, Operation and Deactivation" (locking of the ERF building and initiation of the emergency ventilation system shall be simulated, unless otherwise stated). <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	3. Demonstrate the ability to perform personnel Assembly/Accountability per EPP/IP 3.2 Accountability for the BVPS site. (This shall be simulated and will be discussed at the pre-exercise briefing.) <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
*	4. Demonstrate the ability to notify Near-Site Buildings of a declared emergency. <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	5. Demonstrate the ability to 1) confirm Control Room activation of the ERO beepers, or, 2) initiate Security's activation of the ERO beepers, per EPP/IP 1.1 "Notifications". <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

G.	<u>Security Objectives (Continued)</u>	<u>SAT</u>	<u>UNSAT</u>	<u>N/A</u>
6.	Demonstrate adequate and effective information flow between BVPS Emergency Response Facilities (ERFs) and proper utilization of emergency response equipment.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Demonstrate the ability to establish and maintain solid accident management command and control authority and maintain continuity of authority for onsite emergency facilities.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	Demonstrate the ability to establish and maintain solid accident management command and control authority and maintain continuity of authority for the JPIC.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Demonstrate at all BVPS ERFs the ability to maintain accurate record keeping and logging of data, information, message transmittals and status boards.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>Signature:</b> _____ <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <span>_____ Name _____</span> <span>_____ Date _____</span> </div>
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<b>H.</b>	<b><u>Technical Support Center Objectives</u></b>	<b><u>SAT</u></b>	<b><u>UNSAT</u></b>	<b><u>N/A</u></b>
<b>*</b>	1.. Demonstrate a turnover briefing between the NSS/ED and the On-Call Emergency Director via EPP/IP 1.3, "Emergency Director-Emergency Recovery Manager Turnover/Briefing Checklist" and EPP/IP 1.4, "Technical Support Center Activation, Operation and Deactivation". <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>*</b>	2. Demonstrate initial facility activation and staffing per EPP/IP 1.4 "Technical Support Center Activation, Operation and Deactivation" using the designated ERO Team. <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>* #</b>	3. Demonstrate understanding and use of EALs and the ability to recognize and classify emergency conditions using EPP/I-1 "Recognition and Classification of Emergency Conditions". SAE- GE- <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	4. Demonstrate the ability of appropriate TSC staff to prioritize Damage Control/Repair Team activities. <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	5. Demonstrate the ability to communicate Damage Control/Repair Team priorities to the OSC and ROC. <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

H.	<u>Technical Support Center Objectives (Continued)</u>	<u>SAT</u>	<u>UNSAT</u>	<u>N/A</u>
6.	Demonstrate the Emergency Directors ability to maintain command and control of the TSC throughout the Drill/Exercise utilizing the Command Table format.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Demonstrate the Emergency Directors ability to prioritize TSC actions, inform Coordinators and the remainder of the TSC Staff (i.e.: discussions, briefings, etc.).  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	Demonstrate adequate and effective information flow between BVPS Emergency Response Facilities (ERFs) and proper utilization of emergency response equipment.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Demonstrate the ability to establish and maintain solid accident management command and control authority and maintain continuity of authority in all BVPS emergency facilities.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	Demonstrate at all BVPS ERFs the ability to maintain accurate record keeping and logging of data, information, message transmittals and status boards.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>Signature:</b> _____ <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <span>_____</span> <span>_____</span> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <span>Name</span> <span>Date</span> </div>
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I.	<b><u>Emergency Operations Facility Objectives</u></b>	<b><u>SAT</u></b>	<b><u>UNSAT</u></b>	<b><u>N/A</u></b>
*	1. Demonstrate initial facility activation and staffing per EPP/IP 1.6 "Emergency Operation Facility Activation, Operation and Deactivation" using the designated ERO Team.  <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2. Demonstrate a turnover briefing between the TSC Emergency Director and Emergency Recovery Manager via EPP/IP 1.3, "Emergency Director-Emergency Recovery Manager Turnover/Briefing Checklist".  <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
*	3. Demonstrate an understanding of EALs and those conditions that would necessitate escalation to a higher emergency classification per EPP/I-1 "Recognition and Classification".  <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	4. Demonstrate the ability to develop an initial Protective Action Recommendation to provide to the Offsite Agencies, per EPP/IP 4.1 "Offsite Protective Actions".  <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	5. Demonstrate the ability to determine an upgraded Protective Action Recommendation, if necessary to provide to the Offsite Agencies, per EPP/IP 4.1 "Offsite Protective Actions".  <hr/> <hr/> <hr/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I.	<u>Emergency</u>	<u>Operations</u>	<u>Facility</u>	<u>Objectives</u>	<u>SAT</u>	<u>UNSAT</u>	<u>N/A</u>
	<u>(Continued)</u>						
6.	Demonstrate the ability to provide 24 hour staffing in all emergency facilities for a multi-day event via scheduling paperwork.				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Demonstrate the ability to interact and coordinate with offsite agencies (if available) present in the EOF during emergency conditions.				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	Demonstrate the Emergency Recovery Managers ability to maintain command and control of the EOF throughout the Drill/Exercise utilizing the Command Table format.				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Demonstrate the Emergency Recovery Managers ability to prioritize EOF actions, inform Coordinators, EOF Staff and Offsite agency personnel, if available.				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	Demonstrate adequate and effective information flow between BVPS Emergency Response Facilities (ERFs) and proper utilization of emergency response equipment.				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



I.	<u>Emergency Operations Facility Objectives</u> <u>(Continued)</u>	<u>SAT</u>	<u>UNSAT</u>	<u>N/A</u>
11.	Demonstrate the ability to establish and maintain solid accident management command and control authority and maintain continuity of authority in all BVPS emergency facilities.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.	Demonstrate at all BVPS ERFs the ability to maintain accurate record keeping and logging of data, information, message transmittals and status boards.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>Signature:</b> _____ <div style="display: flex; justify-content: space-around; width: 100%;"> <span>Name</span> <span>Date</span> </div>
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J.	<b><u>Emergency Public Information Objectives</u></b>	<b><u>SAT</u></b>	<b><u>UNSAT</u></b>	<b><u>N/A</u></b>
1.	Demonstrate the activation and staffing of the various public information ERFs per EPP/IP 9.1, 9.3, 9.4, and 9.5 as appropriate. (NOTE: Activation timing will not be evaluated due to personnel pre-staging, however, initial facility setup and personnel staffing will be evaluated.)  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	At the JPIC, demonstrate coordination of news briefings with government emergency response spokespersons, if available, per EPP/IP 9.4.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	At the EOF, demonstrate the timely and accurate development of news announcements for release of information to the public per EPP/IP 9.3.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	Demonstrate the timely approval process of news announcements per EPP/IP 9.3.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Demonstrate the distribution of verbal information via news briefings per EPP/IP 9.4.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Demonstrate the timely and accurate information flow between the JPIC and the EOF using the headset circuits or phones.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

J.	<b><u>Emergency Public Information Objectives</u></b> <b><u>(Continued)</u></b>			<b><u>SAT</u></b>	<b><u>UNSAT</u></b>	<b><u>N/A</u></b>
7.	Demonstrate the distribution of hard copy information via news announcements per EPP/IP 9.3.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	Demonstrate the control and follow-up of misinformation originating from the news media, public, etc. (Rumor Control) per EPP/IP 9.4.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Test the capabilities of the utility to respond to telephone inquiries from the media, electric utility industry, and the general public.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	Demonstrate the involvement of senior company management in the approval of public information.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.	Demonstrate adequate and effective information flow between BVPS Emergency Response Facilities (ERFs) and proper utilization of emergency response equipment.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.	Demonstrate the ability to establish and maintain solid accident management command and control authority and maintain continuity of authority in all BVPS emergency facilities.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

J.	<u>Emergency Public Information Objectives</u> <u>(Continued)</u>	<u>SAT</u>	<u>UNSAT</u>	<u>N/A</u>
13.	Demonstrate at all BVPS ERFs the ability to maintain accurate record keeping and logging of data, information, message transmittals and status boards.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<hr/>			
	<hr/>			
	<hr/>			

<b>Signature:</b> _____ <div style="display: flex; justify-content: space-around; width: 100%;"> <span>Name</span> <span>Date</span> </div>
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<b>K.</b>	<b><u>Miscellaneous</u></b>	<b><u>SAT</u></b>	<b><u>UNSAT</u></b>	<b><u>N/A</u></b>
*	1. Demonstrate an effective Exercise/Drill critique program to include comment sheets, participating personnel, controllers, evaluators and observers.  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
*	2. <i>Deficiencies identified in past Exercises/Drills or inspections have been addressed and corrected, and corrective actions will be demonstrated, if applicable.</i>  _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>Signature:</b>	_____ Name	_____ Date
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## Beaver Valley Power Station

### CONTROLLER/EVALUATOR LOCATIONS

Due to the timing and location of events, all Controller/Evaluator locations have been tentatively broken down in the following manner. Depending on the actual response actions of the participants and the amount of "free play" allowed by the Controllers, some of these positions may alter during the conduct of the Drill. Due to availability, some of these positions may change over the course of the three scheduled Mini Drills.

**a. Control Room Drill Center (CRDC)**

<b>Lead Controller</b>	-	<b>Carlos Contreras</b>
Operations Management	-	Dave Held
Plant Operations	-	Dan Schwer
Plant Operations	-	Jim Kinest
Plant Operations	-	Tim Bean
Plant Operations	-	George Christophe
Roving	-	Brad Silk
Roving	-	Steve Beidenbach
Roving	-	Will Guntum
Roving	-	Lenny Kabana
Communications	-	Tracy Shook

**b. In-Plant Radcon**

ROC Management	-	Jim Freund
DRMS Panel	-	Tom Sidora
Roving	-	Ken Kimmerle
Roving	-	Russ Pucci
Roving	-	John Swinker
Roving	-	Al Bevan
Roving	-	Mark Duranko
Rad monitoring Teams	-	Jim Belfiore
Rad monitoring Teams	-	

**c. Chemistry**

Plant Chemistry	-	Rob Harris
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**d. Security**

Management	-	Nick DiPietro
	-	Larry Miklavic

**Beaver Valley Power Station**

**CONTROLLER/EVALUATOR LOCATIONS**

**e.     Maintenance**

OSC Management	-	Rob Felix
	-	Kevin Rogers
	-	Ken Nekos
	-	Tom Saska
	-	George Zaritski
Standby Alarm Person	-	John Kowalski

**f.     ERF**

Lead Controller	-	Hal Szklinski
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**g.     Technical Support Center**

Management	-	Brian Tuite
Engineering	-	Mark Majeski
Computer Operations	-	Clyde Hampton
Chemistry	-	Frank Schweitzer
Security	-	Dave Kline

**h.     Emergency Operations Facility**

Management	-	Larry Freeland
Nuclear Communications	-	Bob Zamule

**i.     Environmental Assessment & Dose Projections (EA&DP)**

Management	-	Tony Lonnett
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**j.     Nuclear Communications (EOF/JPIC/Corporate)**

Management	-	Joe Sasala
	-	Randy Rossomme
	-	Ron Fedin
	-	Curtis Hill
	-	Chuck Hawley
Security	-	Rich Dibler

## **DRILL/EXERCISE PRECAUTIONS AND LIMITATIONS**

This section provides information for all Drill/Exercise Controllers, Observers and participants related to the rules and guidelines to be followed throughout the conduct of this Drill/Exercise. Prior to initiation of the Drill/Exercise, a pre-briefing will be held to review the entire Drill/Exercise process with all the Controllers and Observers identified in the Introduction Section of this package.

- A. Should, at any time during the course of the conduct of this Drill/Exercise, an actual emergency situation arise, all activities and communications related to the Drill/Exercise will be suspended. It will be the responsibility of a Controller or Observer that becomes aware of an actual emergency to suspend Drill/Exercise response in his/her immediate area and to inform the Lead Controllers of the situation. Upon notification of an actual emergency, the Lead Controllers will notify all other Controllers/Observers to suspend all Drill/Exercise activities.
- B. Should, at any time during the conduct of this Drill/Exercise, a Controller or Observer witness a Drill/Exercise participant undertake any action which would, in the opinion of the Controller/Observer, place either an individual or component in an unsafe condition, the Controller/Observer is responsible for intervening in the individual's actions and terminating the unsafe activity immediately. Upon termination of the activity, the Controller/Observer is responsible for contacting the Lead Controllers and informing them of the situation. The Lead Controllers will make a determination at that point whether to continue, place a temporary hold on, or terminate the Drill/Exercise.
- C. No pressurization of fire hoses, discharging of fire extinguishers, or initiation of any fire suppression systems will be required for the Scenario.
- D. Manipulation of any plant operating systems, valves, breakers or controls in response to this Drill/Exercise are only to be simulated. There is to be no alteration of any plant operating equipment, systems or circuits during the response to this Drill/Exercise unless directed by a Controller.
- E. All repair activities associated with the scenario will be simulated with extreme caution emphasized around operating equipment.



## **DRILL/EXERCISE PRECAUTIONS AND LIMITATIONS**

- F. All telephone communications, radio transmissions and public address announcements related to the Drill/Exercise must begin and end with the statement, "This is a Drill/Exercise." Should a Controller or Observer witness an Drill/Exercise participant not observing this practice, it is the Controllers/Observers responsibility to remind the individual of the need to follow this procedure.
- G. Limited participation in the areas of notifications, dissemination of information, decision-making and protective action recommendations are planned by the States and Counties. Controllers will provide communications personnel with a list of actual and simulated calls.
- H. Any motor vehicle response to this Drill/Exercise, whether it be ambulance, fire fighting equipment, police/security vehicles or field monitoring teams, should observe all normal motor vehicle operating laws including posted speed limits, stop lights/signs, one way streets, etc.
- I. Should any onsite security actions be required in response to this Drill/Exercise, Drill/Exercise participants are to cooperate as directed, and security representatives are to be prudent and tolerant in their actions.
- J. **DRILLSMANSHIP:** Drill/Exercise participants are to inject as much realism into the Drill/Exercise as is consistent with its safe performance; however, caution must be used to prevent overreaction. Information to be obtained from Controllers should; (1) be that which you would normally be able to see, hear, touch, taste or smell in reality (the "5 senses" or (2) clarification of drill simulations.
- K. Care must be taken to assure that any non-participating individuals who may observe Drill/Exercise activities or overhear Drill/Exercise communications are not misled into believing that an actual emergency exists. Any Controller or Observer who is aware of an individual or group of individuals in the immediate vicinity who may have become alarmed or confused about the situation, should approach that individual or group and explain the nature of the Drill/Exercise and its intent.
- L. Meteorological, plant and radiological data will be supplied by Controllers. Real-time data will be used only at the direction of a Controller.

## DRILL/EXERCISE PRECAUTIONS AND LIMITATIONS

- M. If you disagree with data provided by a Controller, discuss this quietly and if time permits, he/she may contact the Lead Controller but theirs is the final word.
- N. Drill/Exercises often involve high radiation and airborne problems. Treat them as if they are real and act accordingly. Do not be confused by the fact that Controller/Observers are exempt from acting as if high levels exist. **No one is exempt from normal station radiological practices.**
- O. Use your logs, status boards, etc. as much as possible to document your Drill/Exercise related actions. Remember: **"Put it in writing"**. All such documents are considered to be QA Drill/Exercise records and at the end of the Drill/Exercise should be put in the envelopes provided in various emergency centers.
- P. If you feel the Drill/Exercise has revealed deficiencies in emergency plans, procedures, training or equipment, bring this to the attention of a Controller or write it down and give it to a Controller/Observer. Do not trust that you will remember the problem later.
- Q. Remember: Speak out loud and identify your key actions and decisions and do not assume that a simulated or unobserved action worked. This seems artificial but it is essential to the conduct and evaluation of the Drill/Exercise.
- R. Plant operational parameters will be preprogrammed into the In-Plant Computer (IPC) System or Safety Parameter Display System (SPDS), as appropriate. Real-time data will not be used in the Drill/Exercise, unless specified by Controllers.
- S. Since operational and radiological data follows a predetermined course to accomplish objectives for the Drill/Exercise, players should not limit their attempts at problem solving to the situations posed to them. Alternative solutions are encouraged and should be brought to the attention of the Controller in their respective areas. Controllers will note alternatives, but may have to direct a course of action to stay within the scenario.

**BEAVER VALLEY POWER STATION**  
**2000 Evaluated Exercise**  
**Written Summary**

Beaver Valley Power Station Unit 2 has been at 100% power for 365 days and is near the end of core life. Unit 1 is in Mode 5 for a Forced Outage in "B" Train priority and is expected to return to service in 7 days. System Operations has requested Unit 2 stay at full power due to high demand on the grid.

Unit 2 is in normal electrical arrangement, with the 4 kV buses being supplied from the Unit Station Service Transformers. The 21B Charging Pump is in service, 21A is in standby and 21C is out of service. The 2-2 Emergency Diesel Generator is out of service due to a fuel oil leak.

The 2000 Evaluated Exercise begins at 1615 hours. At 1630, Unit 2 experiences a loss of the AE emergency 4kV bus due to an overcurrent on the E7 breaker. All plant equipment powered from the AE bus is lost. By 1645, an ALERT should be declared based on EAL 3.1 due to the 2-2 D/G being OOS and the AE bus de-energized. The ERO will be activated and offsite notifications begun. The TSC, OSC and ROC should be activated at this time and the EOF and JPIC in standby.

Indications of a LOCA are received in the Control Room at 1738 (400 gpm, at 1744 the leak increases to 9000 gpm) prompting a manual Reactor Trip and manual Safety Injection at 1741. (This meets ALERT criteria under EAL 1.2.3 [Potential Loss]). Containment Isolation Phase "B" occurs at 1750 at which time 2SWS-MOV103B fails to open. All other equipment required to start at the CIB signal functions as required. Containment pressure continues to increase. 2RSS-P21D starts as required 10 minutes later (1800) but 2RSS-P21B does not start as required. By 1815, a SITE AREA EMERGENCY should be declared based on EAL's 1.2.3 (LOSS) and 1.3.2 (POTENTIAL). (Site Assembly and Accountability will be simulated except for required paperwork.) The EOF and JPIC should begin activation at this time if not previously activated.

2SIS-P21B no flow indicated at 1812 (RCS <180<sup>#</sup>). Reactor Vessel Level Indication (RVLIS) begins to decrease and Core Exit Thermocouples (CETC) temperatures begin to increase. RVLIS = 23% and CETC are >729°F with Adverse Containment at 1900 prompting entry into Core Cooling Red Path. By 1915, a GENERAL EMERGENCY should be declared based on EAL's 1.1.1 (LOSS), 1.2.3 (LOSS) and 1.3.2 (POTENTIAL) with a Protective Action Recommendation (PAR) of 360 degree 0 to 5 mile evacuation and shelter the remainder of the 10-mile EPZ.

Transfer to Recirc at 1927 provides flow from 2RSS-P21D to the RCS. This provides cooling to the core and increased RCS inventory.

An offsite release via the Unit 2 containment equipment hatch through SLCRS begins at 1945. This results in an upgraded PAR of 360 degree 0 – 10-mile evacuation recommendation.

The AE bus returns to service at 2030 hrs.

The release ends at 2045. The exercise terminates at 2130.

## **Beaver Valley Power Station**

### **INITIAL CONDITIONS**

- Beaver Valley Power Station Unit # 2 has been in Mode 1 (100% power) for 365 days and is near the end of core life.
- Beaver Valley Power Station Unit #1 is in Mode 5 with "B" Train Priority due to a forced outage and is scheduled to return to service in 7 days.
- System Operations is reporting low system availability and has requested that Unit 2 stay at full power due to high demand on the grid.
- Refueling Group moved coupons in the Spent Fuel Pool as part of the Boraflex Sampling Program and were completed by 1200 hours today.
- 2CHS-P22A (Boric Acid Transfer Pump) is in service.
- 2CHS-P21B (Charging Pump) is in service.
- 2CHS-P21A (Charging Pump) is in standby.
- 2CHS-P21C is out-of-service due to a motor bearing replacement. It will not return for 2 days due to a parts issue.
- D/G 2-2 is out-of-service due to a fuel leak. It is expected to return to service in 36 hours.

## Beaver Valley Power Station

### EVENT TIMELINE

Real Time	Drill Time	EVENT	CIS
1500	-0075	Operations briefing at the Control Room Drill Center (CRDC) – ERF Building Ombudsman Office).	01
1530	-0045	BVPS Unit #2 is simulated to be in Operational Mode 1 at 100% Reactor Power for the past 365 days and is at the end of core life.	02 03
<p><b><u>NOTE:</u></b> The actual operating shift personnel will not be participating in the exercise due to normal plant operations and safety concerns. Additional Operations personnel located at the ERF Control Room Drill Center (CRDC) will be present to perform the activities necessary to respond to the simulated plant conditions and will be briefed on the Initial Conditions at this time.</p> <p>Participants will also be made available in the areas of Security, Health Physics, Maintenance and Chemistry due to station security and safety operations.</p> <p>Initial Conditions are given to Exercise participants.</p>			
1614	-0001	The Beaver Valley Power Station Unit #2 Evaluated Exercise begins. Announcements are made to onsite personnel. (NOTE: Page Party System Line ____ will be dedicated for Exercise use.)	04
1615	0000	Beaver Valley Power Station Evaluated Exercise begins.	
1618	0003	The Fuel handling Building Sump alarm is received in the Control Room. This is due to the suction flange of 2FNC-P21A (Fuel Pool Cooling Pump) leaking. (Upon investigation by Operations personnel, Fuel Handling Bldg. temp and humidity will be observed to be significantly higher than normal. The Air Handling Unit will be tripped off and 2CDS-TCV110 (chilled water temp control valve) will be failed closed. This results in no ventilation in the Fuel Handling Bldg.	05 06
1630	0015	A loss of the AE 4kV Emergency Bus occurs due to an overcurrent condition on the E7 4kV tie breaker. All equipment powered by the “AE” Bus is now de-energized.	07 08
1632	0017	Control Room Operators enter AOP 2.36.2.	

Real Time	Drill Time	EVENT	CIS
1645	0030	<p><b>An <u>ALERT</u> should be declared based on EPP/I-1, EAL 3.1 "AC power to emergency buses reduced to a single source of power such that any additional failures will result in the de-energization of both buses".</b></p> <p><b><u>NOTE:</u></b> Notifications are commenced to plant personnel, the offsite agencies, and the NRC per EPP/I-3 (ALERT). Operations personnel should activate the beepers at this time. The onsite Emergency Response Organization should begin activation of the Technical Support Center (TSC), Radiological Operations Center (ROC), and Operations Support Center (OSC). Personnel for the Emergency Operations Facility (EOF) are placed in stand-by status. (<i>JPIC personnel may be pre-staged.</i>)</p> <p><b><u>NOTE:</u></b> <i>Any discussion for shutting the plant down can and should be entertained. Participant may be given credit for their initiative; however, a plant shutdown MUST be delayed until after 1745 hrs.</i></p>	
1650	0035	Operations notifies Maintenance personnel to determine the cause of the overcurrent condition.	
1700	0045	<p><b>An <u>ALERT</u> should be declared by now. The Controller should use the contingency card provided if this action has not been completed, however, if discussions are underway which the Controller feels will lead to the declaration of the emergency classification, this CIS may be held for any additional time period.</b></p> <p>Containment pressure is normal at – 4.77 PSIG.</p>	09X
1738	0123	Indications of a LOCA (400 gpm) in Containment are received in the Control Room. Containment radiation monitors begin to increase along with Containment pressure.	10
1741	0126	Manual Reactor trip and manual Safety Injection are performed. ALERT criteria under EAL 1.2.3 (Potential Loss) are reached.	11X
1742	0127	Control Room Operators enter procedure E-0. High Rad Monitor Alarm received in Control Room.	12
1744	0129	The LOCA increases to 9000 gpm.	

Real Time	Drill Time	EVENT	CIS
1745	0130	<p>Subcooling is lost due to the LOCA. Radiation monitor alarms are received in the Control Room.</p> <p>Due to the loss of the "AE" Bus, only 1 of 2 Containment high range radiation monitors are functioning and now on-scale reading 1 R/hr and increasing.</p> <p>The TSC, ROC and OSC should be activated by this time. The EOF and JPIC should be staffed and ready to activate, if needed.</p> <p>The Criteria is reached to tripping the Reactor Coolant Pumps in the Control Room.</p>	13
1746	0131	<p>The Reactor Coolant Pumps are tripped from the Control Room.</p> <p>Containment is now at atmospheric pressure (0 PSIG) and increasing.</p>	
1747	0132	Steam Line Isolation occurs and Adverse Containment is reached.	14
1748	0133	<p>Radiation monitor alarms are received in the Control Room.</p> <p>Containment pressure is 4 PSIG and increasing.</p>	15
1750	0135	Containment Isolation Phase "B" (CIB) occurs. 2SWS-MOV103B does not open (this valve allows cooling water to the Containment Spray Pumps, and so Containment Spray water will not be cooled for optimum effectiveness for reducing Containment pressure).	16 17
1751	0136	<p>Maintenance should be contacted to investigate 2SWS-MOV103B not opening.</p> <p>Containment pressure is 8 PSIG and increasing.</p>	
1754	0139	The Safety Injection Accumulators begin to inject. Core Exit Thermocouples (CETC) are 528 degrees F and decreasing.	18
1758	0143	Operations personnel transition to procedure E-1.	

Real Time	Drill Time	EVENT	CIS
1800	0145	<p>Containment pressure is 12 PSIG and increasing.</p> <p>Containment Spray Recirc Pump 2RSS-P21D starts, however, 2RSS-P21B does not start when required. Since one train of Containment Sprays is unavailable due to the loss of the "AE" Bus, and 2RSS-P21B does not start, this results in less than one full train of Containment Sprays unavailable. Radiation levels in Safeguards increase due to initiation of the Recirc Spray System.</p> <p>Reactor Vessel Level Indication System (RVLIS) indicates 70% and decreasing due to the LOCA.</p>	19 20
1812	0157	<p>Containment pressure is 15.22 PSIG.</p> <p><b><u>A SITE AREA EMERGENCY</u> should be declared based on EPP/I-1 EAL's 1.2.3 and 1.3.2.</b></p> <p><b><i>1.2.3 RCS Leak rate – Loss of Subcooling [LOSS].</i></b></p> <p><b><i>1.3.2 Containment Pressure/Hydrogen concentration – Containment pressure &gt; 8 PSIG and less than one full train of spray [POTENTIAL].</i></b></p> <p>Per EPP/I-4 (SITE AREA EMERGENCY), an onsite assembly for station personnel is requested. <i>(This will be simulated).</i></p> <p>Per EPP/IP 3.2, accountability is commenced. <i>(This will be simulated, however, paperwork shall be completed.)</i></p> <p>Non-emergency personnel begin to report to their appropriate assembly areas. <i>(This will be simulated).</i></p> <p>The Emergency Operations Facility (EOF) begins to activate per EPP/IP 1.6, if not already activated. TSC personnel begin offsite notifications. Also, Nuclear Communications begins activation of the Joint Public Information Center (JPIC), if not already done.</p> <p>CETC are 404 degrees F and decreasing.</p> <p>RVLIS indicates 55% and decreasing.</p>	
1815	0200	<b><u>NOTE:</u></b> <i>At the declaration of a Site Area Emergency, Site Assembly and Accountability will be simulated.</i>	
1818	0203	Containment pressure is 14.75 PSIG and slowly decreasing due to the one Containment Spray being available.	



Real Time	Drill Time	EVENT	CIS
1830	0215	A <u>SITE AREA EMERGENCY</u> should be declared by now. The Controller should use the contingency card provided if this action has not been completed, however, if discussions are underway which the Controller feels will lead to the declaration of the emergency classification, this CIS may be held for any additional time period.	21X
1831	0216	2SIS-P21A (LHSI) indicates running but no flow.	22 23
1838	0223	Enter FR.P.1  Containment radiation levels are 17 R/hr and increasing.	
1842	0227	Core Exit Thermocouples (CETC) indicate 163 degrees F.	
1848	0233	Reactor Vessel Level (RVLIS) indicates 39% and decreasing. Operations personnel enter FR-C.2 – Orange Path for core cooling.  Due to the lack of cooling water and low water level in the reactor, CETC are now 202 degrees F and increasing.  Field Monitoring Teams are assembled, if not done earlier.	24
1900	0245	RVLIS indicates 23% and CETC's indicates >729 degrees F. Operations enter FR.C.1 – Red Path for core cooling.  Containment pressure is 11.39 PSIG and slowly decreasing. Containment radiation levels are 50 R/hr and increasing.	25
1915	0300	A <u>GENERAL EMERGENCY</u> should be declared based on EPP/I-1 EAL's 1.1.1, 1.2.3 and 1.3.2.  <u>1.1.1</u> Critical Safety Function Status – Core Cooling CSF Red Path. (LOSS)  <u>1.2.3</u> RCS Leak rate – RCS leak results in loss of RCS subcooling. [LOSS].  <u>1.3.2</u> Containment Pressure/Hydrogen Concentration – Containment pressure >8 PSIG with less than one full train of containment spray [POTENTIAL].  <u>NOTE:</u> Other EAL's may also apply.	

Real Time	Drill Time	EVENT	CIS
1915	0300	<p><b>Also at this time, based on EPP/IP 4.1 “<u>Recommendation of Offsite Protective Actions</u>” <u>operational and meteorological conditions</u>, an offsite Protective Action Recommendation (PAR) of “Evacuate 360 degrees 0 – 5 miles and shelter the remainder of the 10-mile EPZ”, is provided to offsite agencies in the EOF and via the Gold Executive Conference (GEC) call. TSC offsite notifications are also conducted.</b></p> <p>CETC indicate 975 degrees F and increasing.</p> <p>Containment radiation levels are 172 R/hr and increasing.</p> <p>Containment pressure is 10.19 PSIG and slowly decreasing.</p> <p>The EOF should be fully activated (unless activated earlier).</p>	
1924	0309	<p>CETC indicate 1014 degrees F and increasing.</p> <p>Containment radiation levels are 400 R/hr and increasing.</p>	
1927	0312	<p>CETC indicate 975 degrees F and increasing.</p> <p>Containment radiation levels are 500 R/hr and increasing.</p> <p>Containment pressure is 9.23 PSIG and slowly decreasing.</p> <p>The Control Room initiates transfer to Cold Leg Recirc with Recirc Spray Pump 2RSS-P21D supplying water to the RCS.</p>	
1930	0315	<p>A <u>GENERAL EMERGENCY</u> should be declared by now. The Controller should use the contingency card provided if this action has not been completed, however, if discussions are underway which the Controller feels will lead to the declaration of the emergency classification, this CIS may be held for any additional time period.</p> <p>Containment radiation levels are 576 R/hr and increasing.</p> <p>RVLIS indicates 37% and increasing.</p>	26X
1942	0327	<p>Containment radiation levels are 1000 R/hr and RVLIS indicates 85%.</p> <p>Containment pressure is 8.03 PSIG and slowly decreasing.</p>	

Real Time	Drill Time	EVENT	CIS
1945	0330	<p>An <b>offsite release</b> begins via the Unit 2 Containment Equipment Hatch, which is ventilated by the Supplemental Leak Collection and Release System (SLCRS). This is a monitored and filtered ventilation path.</p> <p>Containment pressure and radiation levels begin to decrease. The SLCRS effluent radiation monitors increase indicating a release to the environment has begun.</p>	27
1950	0335	<p>Dose projections indicate approximately 20 Rem TEDE and 5 Rem CDE at the Site Boundary, and 1.1 Rem TEDE and 0.028 Rem CDE at 5 miles.</p> <p><b>NOTE:</b> With 1 of 2 SLCRS fans unavailable due to the loss of the "AE" Bus, a reduced flowrate should be used for the dose projection calculations. The default flowrate may be used for conservatism, however, this decision must be identified.</p>	
2000	0345	<p><b>Based on EPP/IP 4.1 "Recommendation of Offsite Protective Actions" dose projections, an upgraded Offsite Protective Action Recommendation (PAR) of "Evacuate 360 degrees 0 – 10 miles", is provided to offsite agencies in the EOF and via the Gold Executive Conference (GEC) call. TSC offsite notifications are also conducted.</b></p>	
2015	0400	<p>An UPGRADED PAR should be declared by now. The Controller should use the contingency card provided if this action has not been completed, however, if discussions are underway which the Controller feels will lead to the declaration of the emergency classification, this CIS may be held for an additional time period.</p> <p>The front of the plume reached the Ohio/West Virginia border. With a weather front passing through the area, the plume transit speed slows.</p>	28X
2045	0430	<p>Containment is at atmospheric pressure (0 PSIG) and the release from Containment ends. SLCRS effluent monitors begin to decrease.</p> <p>Per Maintenance, the "AE" Bus is available to be returned to service. Operations personnel begin preparations to return the Bus to service.</p>	29
2054	0439	<p>The effluent radiation monitors return to background readings.</p>	

Real Time	Drill Time	EVENT	CIS
2100	0445	The weather front passes through the area and weather conditions improve. Wind speeds begin to increase and the plume begins to disperse.  Termination and Recovery discussions may begin.	
2125	0510	The plume has dissipated. Environmental readings have returned to background levels.	
2130	0515	The Beaver Valley Power Station 2000 Evaluated Exercise terminates.	30
	*	Facilitation critiques with the Lead Facility participants shall occur in each Emergency Facility upon termination of the Exercise.	
	**	All Controllers/Observers/Evaluators shall complete their Critique Sheets and prepare a listing of identified items (Strengths/Areas For Improvement). They shall assure all records generated for the Exercise for their respective areas are gathered (including rosters) and present these records and comments to the Lead Exercise Controller at the scheduled Controller Critique.	

TIME	1500
CIS No.	01

<b>Beaver Valley Power Station 2000 Evaluated Exercise Cue Information Sheet</b>
------------------------------------------------------------------------------------------

**Message For:** Control Room Drill Center (CRDC)

**Message:** Attached are the Initial Conditions for the Unit #2, 2000 Evaluated Exercise and the appropriate turnover logs.

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

Provide appropriate information at turnover.

TIME	1530
CIS No.	02

<b>Beaver Valley Power Station 2000 Evaluated Exercise Cue Information Sheet</b>
------------------------------------------------------------------------------------------

**Message For:** HP, Maint., Security & Chemistry

**Message:** Attached are the Initial Conditions for the Unit #2 2000 Evaluated Exercise and the appropriate turnover logs.

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

Provide appropriate information at turnover.

TIME	1530
CIS No.	03

<b>Beaver Valley Power Station 2000 Evaluated Exercise Cue Information Sheet</b>
------------------------------------------------------------------------------------------

**Message For:** Maintenance Crew

**Message:** D/G 2-2 OOS due to fuel oil leak. To be returned to service in 36 hours (waiting for parts).

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

D/G 2-2 OOS due to fuel oil leak. To be returned to service in 36 hours (waiting for parts).

TIME	1614
CIS No.	04

<b>Beaver Valley Power Station 2000 Evaluated Exercise Cue Information Sheet</b>
------------------------------------------------------------------------------------------

**Message For:** Control Room Drill Center (CRDC)

**Message:** Please merge the Page Party System and announce the following:  
"This is a drill. The BVPS 2000 Evaluated Exercise has begun. Page  
Party line 5 is reserved for drill-related conversations. This is a  
drill". Repeat one additional time.

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

This message should be read over the Station Page Party System with the Unit  
1 and 2 merge switch engaged. The Page Party should not be un-merged when  
the message is completed.

**\*\*\* Contact System Operations and advise them of use of the  
Stand-by Alarm for the Exercise. \*\*\***



TIME	1618
CIS No.	05

<b>Beaver Valley Power Station 2000 Evaluated Exercise Cue Information Sheet</b>
------------------------------------------------------------------------------------------

**Message For:** Control Room Drill Center (CRDC)

**Message:** Fuel Handling Building Sum alarm is received in the Control Room.

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

This is due to the suction flange of 2FNC-P21A (Fuel Pool Cooling Pump) leaking. (Upon investigation by Operations personnel, Fuel Handling Building temp and humidity will be observed to be significantly higher than normal. The Air Handling Unit will be tripped off and 2CDS-TCV110 (chilled water temp control valve) will be failed closed. This results in no ventilation in the Fuel Handling Building.

TIME	1618
CIS No.	06

<b>Beaver Valley Power Station 2000 Evaluated Exercise Cue Information Sheet</b>
------------------------------------------------------------------------------------------

**Message For:** Operations/Maintenance Personnel Sent to FHB

**Message:** The Controller has information.

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

This is due to the suction flange of 2FNC-P21A (Fuel Pool Cooling Pump) leaking. (Upon investigation by Operations personnel, Fuel Handling Bldg. temp and humidity will be observed to be significantly higher than normal. The Air Handling Unit will be tripped off and 2CDS-TCV110 (chilled water temp control valve) will be failed closed. This results in no ventilation in the Fuel Handling Bldg. **The ventilation returns to service when the TCV is repaired. The 2FNC-P21A leak may be repaired at any time.**

TIME	1630
CIS No.	07

<b>Beaver Valley Power Station 2000 Evaluated Exercise Cue Information Sheet</b>
------------------------------------------------------------------------------------------

**Message For:** Control Room Drill Center

The following annunciators are received:

**Message:** A1-1C, 4F, 1H, 4H  
A2-2F, 5G, 4H  
A4-2G  
A6-1A  
A7-1A  
A8-2A, 2B, 2C, 4G, 4A, 6B, 6D, 6E, 9A (YELLOW)  
A10-1A, 3C, 5F, 1D, 1G, 2D, 5C  
A11-5C, 6G, 6D

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

Provide Information on the annunciators and also that any equipment powered from the AE bus is now de-energized.

TIME	1630
CIS No.	08

<b>Beaver Valley Power Station 2000 Evaluated Exercise Cue Information Sheet</b>
------------------------------------------------------------------------------------------

**Message For:** Maintenance Crew Evaluating "AE" Bus

**Message:** "AE" Bus overcurrent trip E7.

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

Relay setpoint –will need relay crew called-out. Bus OOS for entire scenario, however, must seem like it will become available.

- Relay crew arrives 1730 hours
- Check all relays (2 hours)
- Check E7 breaker (3 hours)

No problems identified.

**Return to service 2045 hours.**

TIME	1700
CIS No.	09X

<b>Beaver Valley Power Station 2000 Evaluated Exercise Cue Information Sheet</b>
------------------------------------------------------------------------------------------

**Message For:** NSS

**Message:** An ALERT should be declared based on EAL 3.1 "AC power to emergency buses reduced to a single source of power such that any additional failure will result in the de-energization of both buses".

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

An ALERT should be declared by now. The Controller should use the contingency card provided if this action has not been completed. However, if discussions are under way which the Controller feels will lead to the declaration of the emergency classification, this CIS may be held for an additional time period.

TIME	1738
CIS No.	10

**Beaver Valley Power Station  
2000 Evaluated Exercise  
Cue Information Sheet**

**Message For:** Control Room Drill Center

The following annunciators are received:

**Message:** A2-3E – Charging Flow Path Trouble (YELLOW)  
A4-2D – Pressurizer Pressure Low

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

ARP for A2-3E should be entered. Indications are of high charging flow and of a LOCA.

TIME	1741
CIS No.	11X

<b>Beaver Valley Power Station 2000 Evaluated Exercise Cue Information Sheet</b>
------------------------------------------------------------------------------------------

**Message For:** Control Room Drill Center

**Message:** A manual Reactor Trip and manual Safety Injection are to be performed.

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

Use this contingency card only if the above actions are not imminent.

TIME	1742
CIS No.	12

<b>Beaver Valley Power Station 2000 Evaluated Exercise Cue Information Sheet</b>
------------------------------------------------------------------------------------------

**Message For:** Control Room Drill Center

**Message:** Radiation Monitor High Alarm is received in the Control Room.

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

Due to LOCA in Containment.



TIME	1745
CIS No.	13

<b>Beaver Valley Power Station 2000 Evaluated Exercise Cue Information Sheet</b>
------------------------------------------------------------------------------------------

**Message For:** Control Room Drill Center Controllers

**Message:** N/A

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

Reactor Coolant Pump Trip criteria has been reached.

TIME	1747
CIS No.	14

<b>Beaver Valley Power Station 2000 Evaluated Exercise Cue Information Sheet</b>
------------------------------------------------------------------------------------------

**Message For:** Control Room Drill Center Controllers

**Message:** N/A

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

Adverse Containment parameters have been reached.

**TIME**            1748  
**CIS No.**        15

**Beaver Valley Power Station  
2000 Evaluated Exercise  
Cue Information Sheet**

**Message For:**    Control Room Drill Center Controllers

**Message:**        Radiation Monitor Alert Alarm is received in the Control Room.

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

Due to LOCA in Containment.

TIME	1750
CIS No.	16

<b>Beaver Valley Power Station 2000 Evaluated Exercise Cue Information Sheet</b>
------------------------------------------------------------------------------------------

**Message For:** Control Room Drill Center

**Message:** Containment Isolation Phase B has occurred. The Controller has additional information for you.

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

After appropriate board walkdown, inform the RO/PO that 2SWS-MOV103B does not indicate open.

TIME	1750
CIS No.	17

<b>Beaver Valley Power Station 2000 Evaluated Exercise Cue Information Sheet</b>
------------------------------------------------------------------------------------------

**Message For:** Maintenance Crew for 2SWS-MOV103A

**Message:** Controller has information.

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

Electricians-dispatched to check – MCC breaker, Bridge & Megger MOV motor (will find nothing wrong). Also sent to check MOV locally, when try to manually open valve it will be bound.

**MOV shall be returned to service at 1925 hours.** Mechanics in valve pit able to open if lube stem, etc.

TIME	1754
CIS No.	18

<b>Beaver Valley Power Station 2000 Evaluated Exercise Cue Information Sheet</b>
------------------------------------------------------------------------------------------

**Message For:** Control Room Drill Center

**Message:** The Safety Injection Accumulators begin to inject.

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

Provide information at this time.

TIME	1800
CIS No.	19

<b>Beaver Valley Power Station 2000 Evaluated Exercise Cue Information Sheet</b>
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**Message For:** Control Room Drill Center

**Message:** 2RSS-P21D starts, 2RSS-P21B does not start.

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

Indicator for Site Area Emergency

TIME	1800
CIS No.	20

**Beaver Valley Power Station  
2000 Evaluated Exercise  
Cue Information Sheet**

**Message For:** Maintenance Crew at 2RSS-P21B

**Message:** Controller has information.

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

When electricians check breaker, no problems found. Upon bridge & megger of motor, it is found to be grounded. **Does not return to service.**



TIME	1830
CIS No.	21X

<p><b>Beaver Valley Power Station</b> <b>2000 Evaluated Exercise</b> <b>Cue Information Sheet</b></p>
---------------------------------------------------------------------------------------------------------------

**Message For:** TSC Emergency Director

**Message:** A SITE AREA EMERGENCY should be declared now based on EAL's 1.2.3 RCS Leak Rate – Loss of Subcooling (LOSS) and 1.3.2 Containment Pressure/Hydrogen Concentration – Containment pressure >8 PSIG and less than one full train of spray (POTENTIAL).

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

A SITE AREA EMERGENCY should be declared by now. The Controller should use the contingency card provided if this action has not been completed. However, if discussions are under way which the Controller feels will lead to the declaration of the emergency classification, this CIS may be held for an additional time period.

TIME	1831
CIS No.	22

<b>Beaver Valley Power Station 2000 Evaluated Exercise Cue Information Sheet</b>
------------------------------------------------------------------------------------------

**Message For:** Control Room Drill Center

**Message:** 2SIS-P21B indicates running but no flow.

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

Pump coupling broken.

TIME	1831
CIS No.	23

<b>Beaver Valley Power Station 2000 Evaluated Exercise Cue Information Sheet</b>
------------------------------------------------------------------------------------------

**Message For:** Maintenance Crew for 2SIS-P21B

**Message:** Controller has information.

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

Pump coupling broken. **Does not return to service.**

TIME	1845
CIS No.	24

<b>Beaver Valley Power Station 2000 Evaluated Exercise Cue Information Sheet</b>
------------------------------------------------------------------------------------------

**Message For:** Control Room Drill Center Controller

**Message:** N/A

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

RVLIS = 39%

TIME	1900
CIS No.	25

**Beaver Valley Power Station  
2000 Evaluated Exercise  
Cue Information Sheet**

**Message For:** Control Room Drill Center Controller

**Message:** N/A

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

RVLIS = 23%, CETC's >729F, Adverse Containment and FRC-1 Red Path.

TIME	1930
CIS No.	26X

<b>Beaver Valley Power Station 2000 Evaluated Exercise Cue Information Sheet</b>
------------------------------------------------------------------------------------------

**Message For:** TSC Emergency Director

**Message:** A GENERAL EMERGENCY should be declared now based on EAL's 1.1.1 Critical Safety Function Status – Core Cooling CSF Red Path (LOSS). 1.2.3 RCS Leak Rate – RCS leak results in Loss of RCS subcooling (LOSS). 1.3.2 Containment Pressure/Hydrogen Concentration – containment pressure >8PSIG with less than one full train of containment spray (POTENTIAL). With a Protective Action Recommendation of evacuate 0 – 5 miles 360 degrees and shelter the remainder of the 10 mile EPZ.

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

A GENERAL EMERGENCY should be declared by now. The Controller should use the contingency card provided if this action has not been completed. However, if discussions are underway which the Controller feels will lead to the declaration of the emergency classification, this CIS may be held for an additional time period.

TIME	1945
CIS No.	27

<b>Beaver Valley Power Station 2000 Evaluated Exercise Cue Information Sheet</b>
------------------------------------------------------------------------------------------

**Message For:** Control Room Drill Center

**Message:** Radiation Monitor High and Alert Alarm is received in the Control Room.

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

Radioactive release via the Equipment hatch through SLCRS to the environment begins.

TIME	2015
CIS No.	28X

<b>Beaver Valley Power Station 2000 Evaluated Exercise Cue Information Sheet</b>
------------------------------------------------------------------------------------------

**Message For:** TSC Emergency Director

**Message:** An upgraded PAR should be declared now based on dose projection results of evacuate 0-10 miles, 360 degrees.

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

An upgraded PAR should be declared by now. The Controller should use the contingency card provided if this action has not been completed. However, if discussions are underway which the Controller feels will lead to the declaration of the emergency classification, this CIS may be held for an additional time period.



TIME	2045
CIS No.	29

<b>Beaver Valley Power Station 2000 Evaluated Exercise Cue Information Sheet</b>
------------------------------------------------------------------------------------------

**Message For:** Maintenance Crew at "AE" Bus

**Message:** You have completed repairs and the bus can now be returned to service.

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

The Bus must be returned at 2045 hours. This information should be provided to the TSC and Control Room via the participants..

TIME	2130
CIS No.	30

<b>Beaver Valley Power Station 2000 Evaluated Exercise Cue Information Sheet</b>
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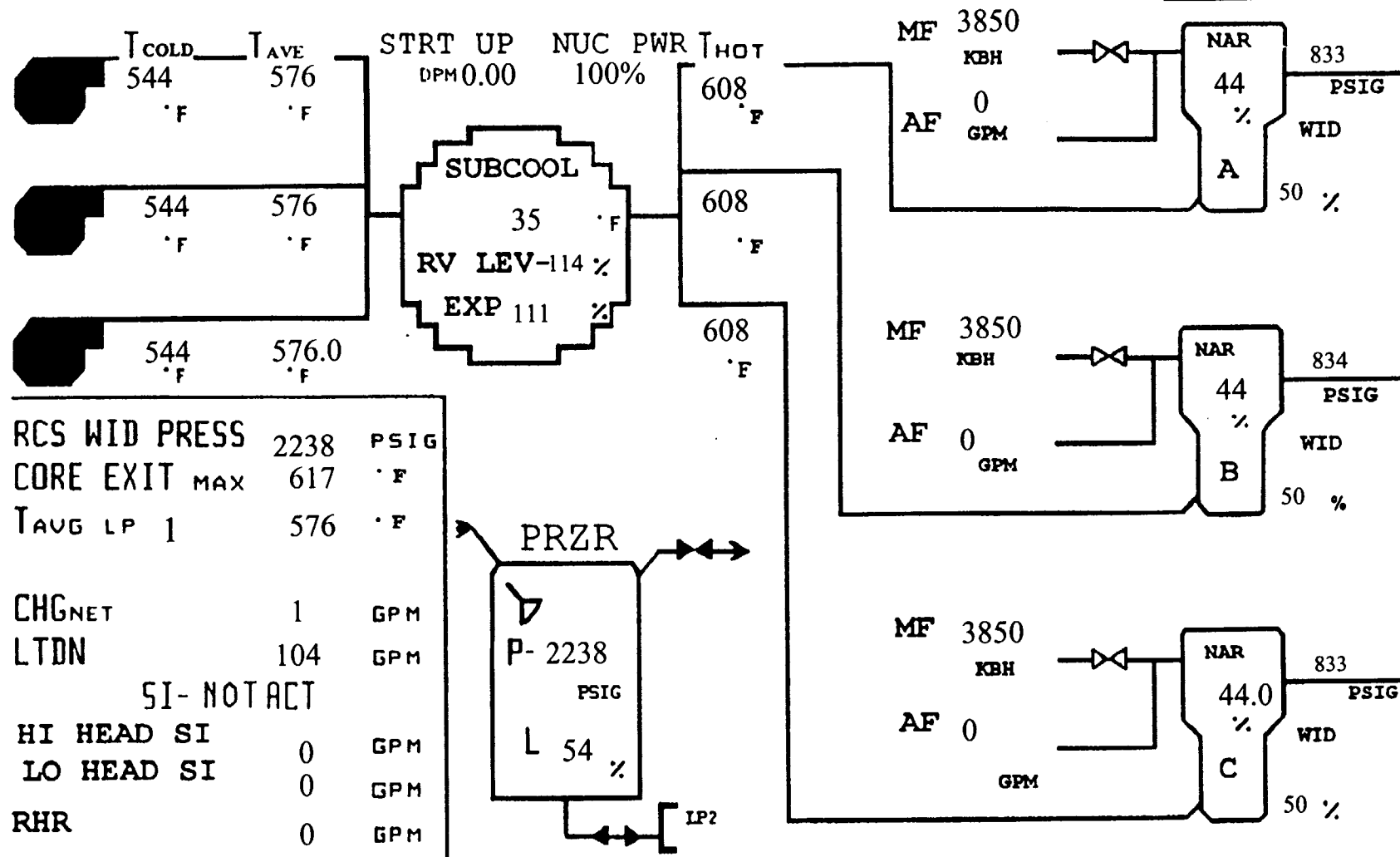
**Message For: ALL CONTROLLERS**

**Message:** The Exercise will terminate per the LEAD Exercise Controllers instructions. Obtain all rosters, records, etc., and have participants return the emergency facilities to pre-exercise conditions. Begin Facility Critiques after a short break..

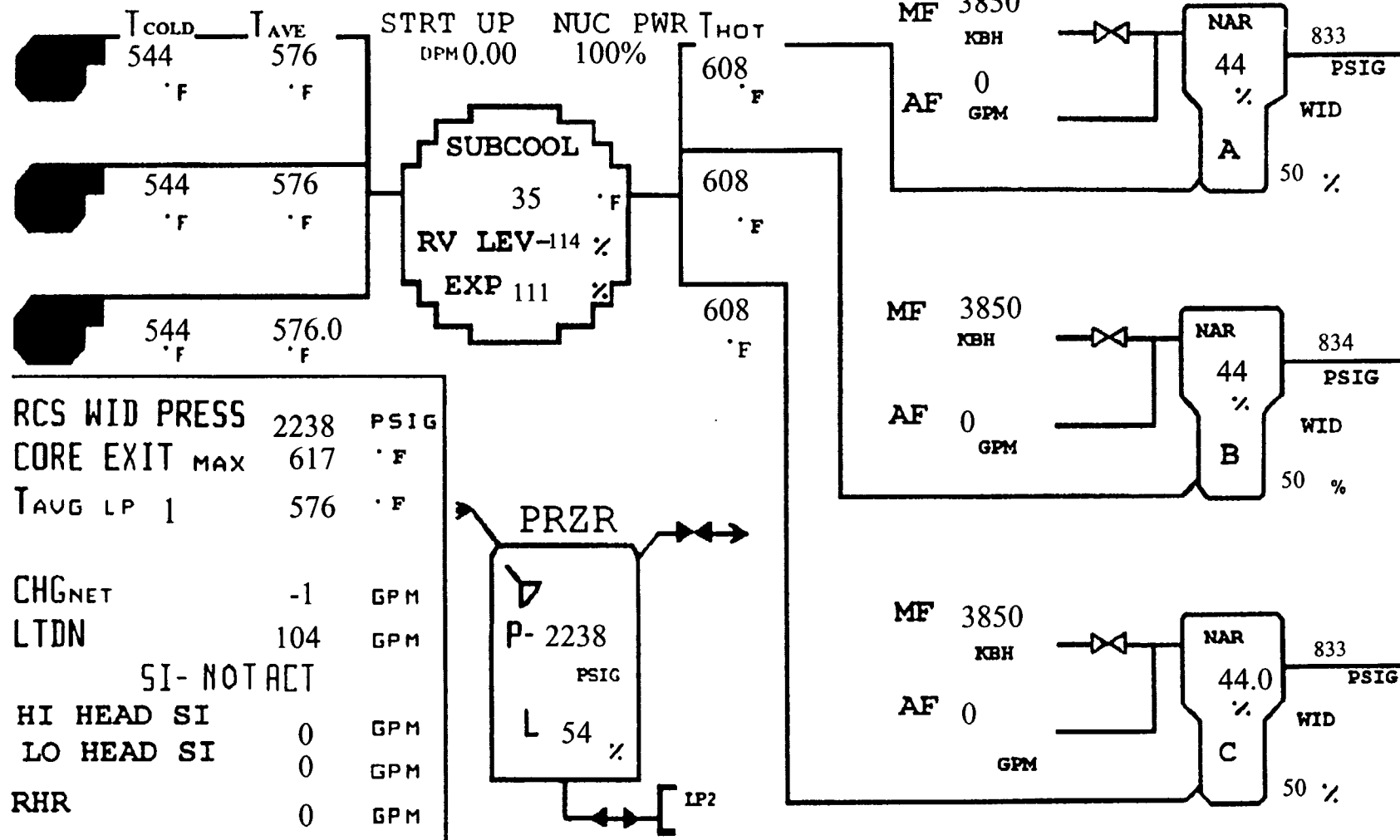
**FOR CONTROLLER USE ONLY**

**Controller Notes:**

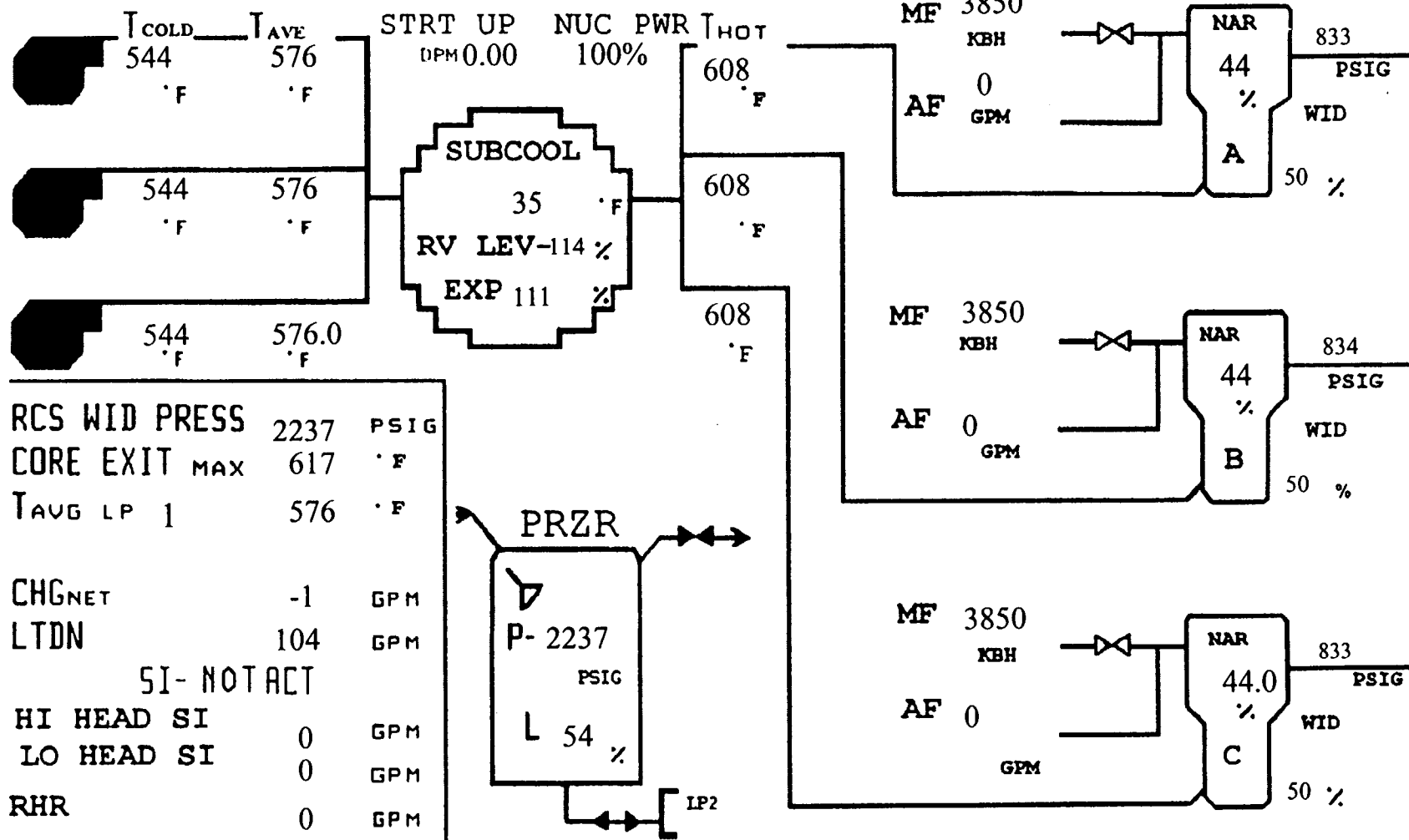
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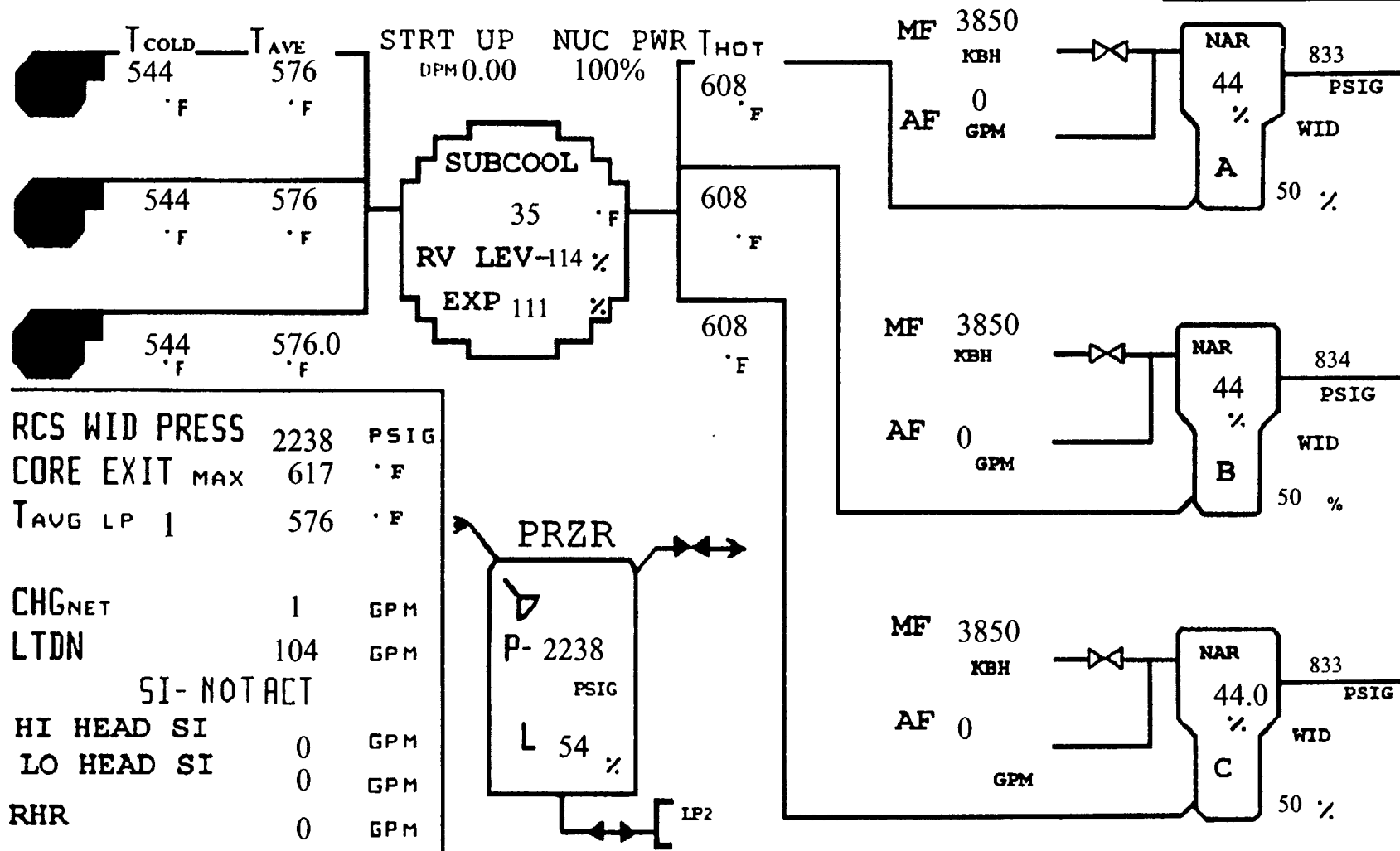
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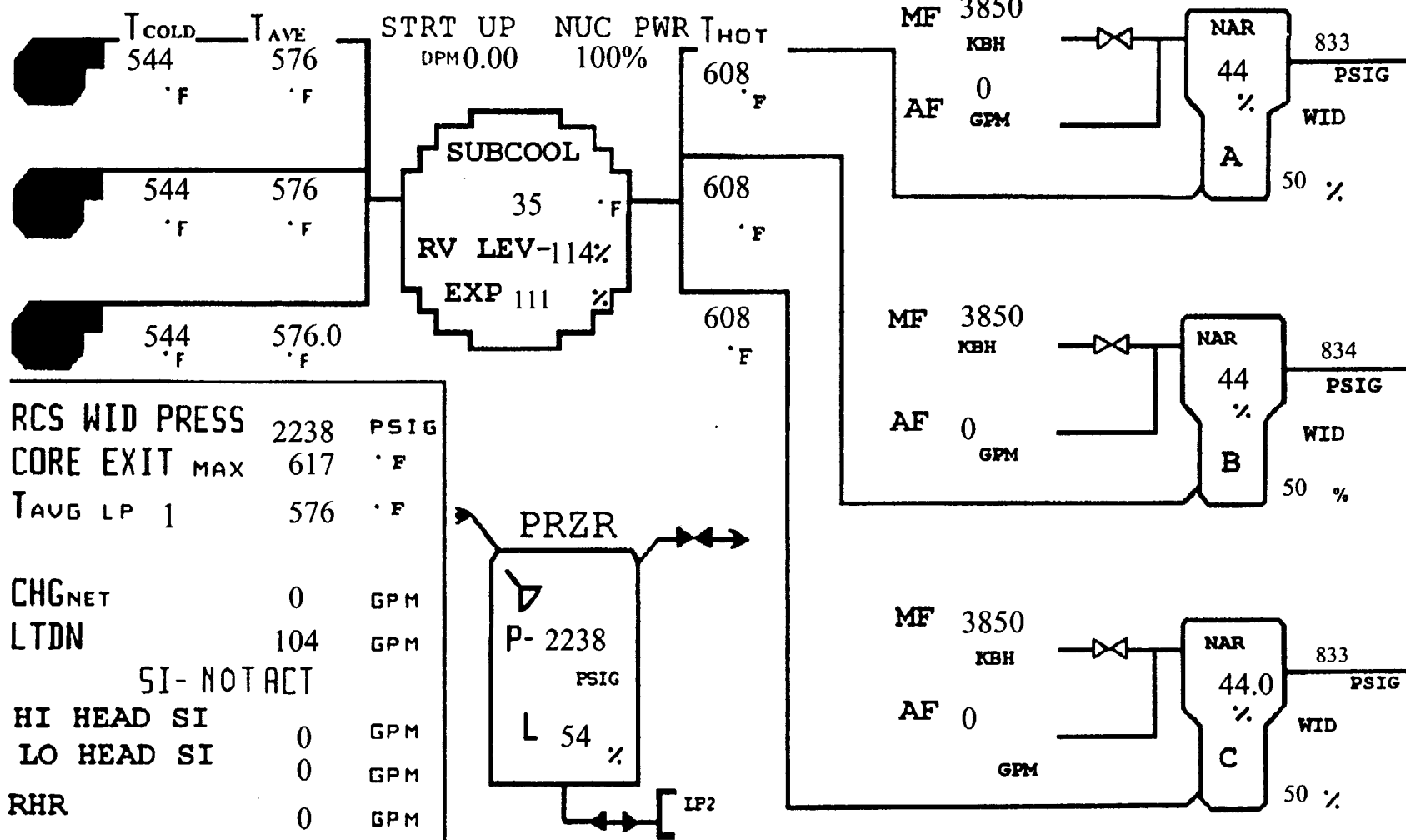
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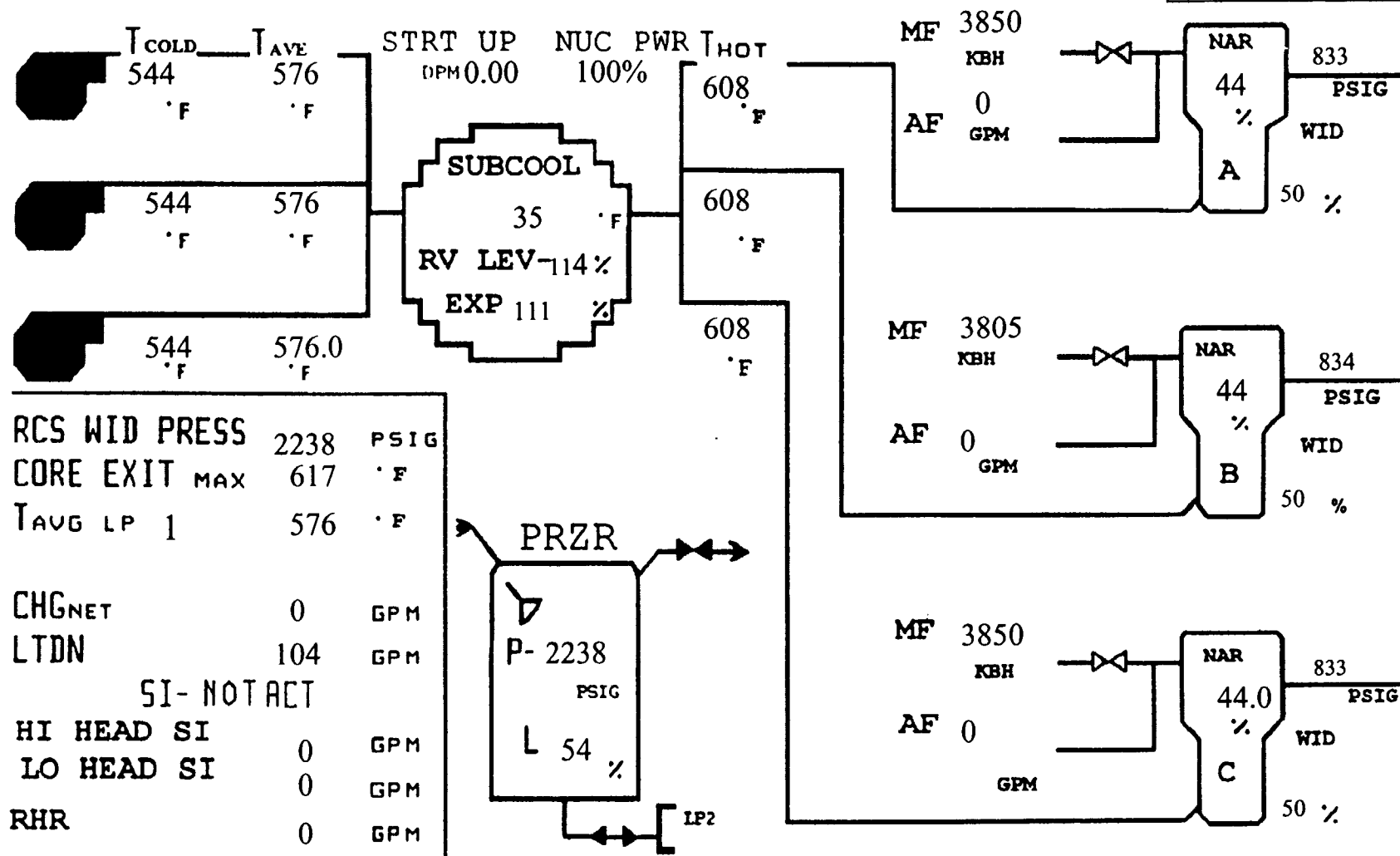
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**Time:1639**

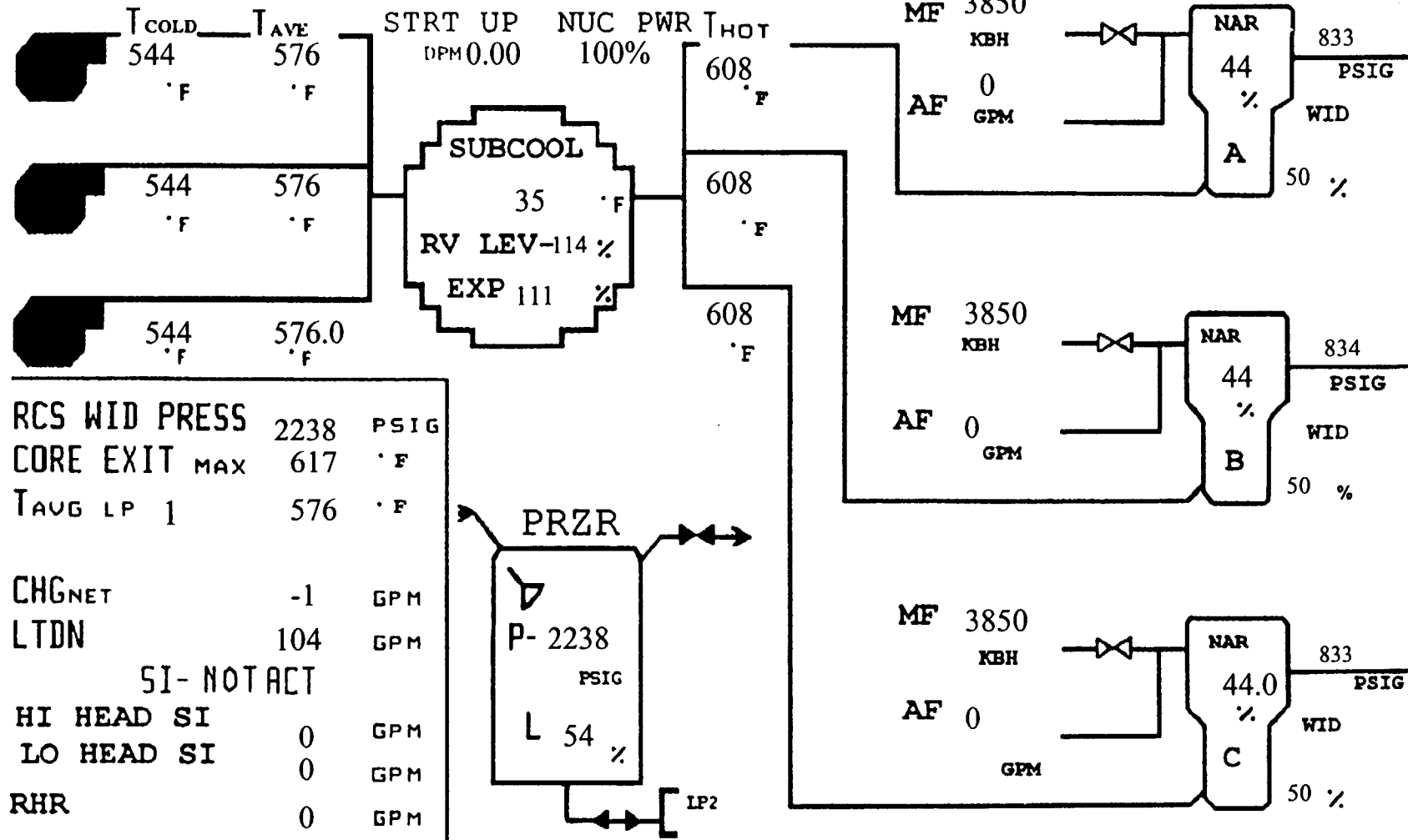


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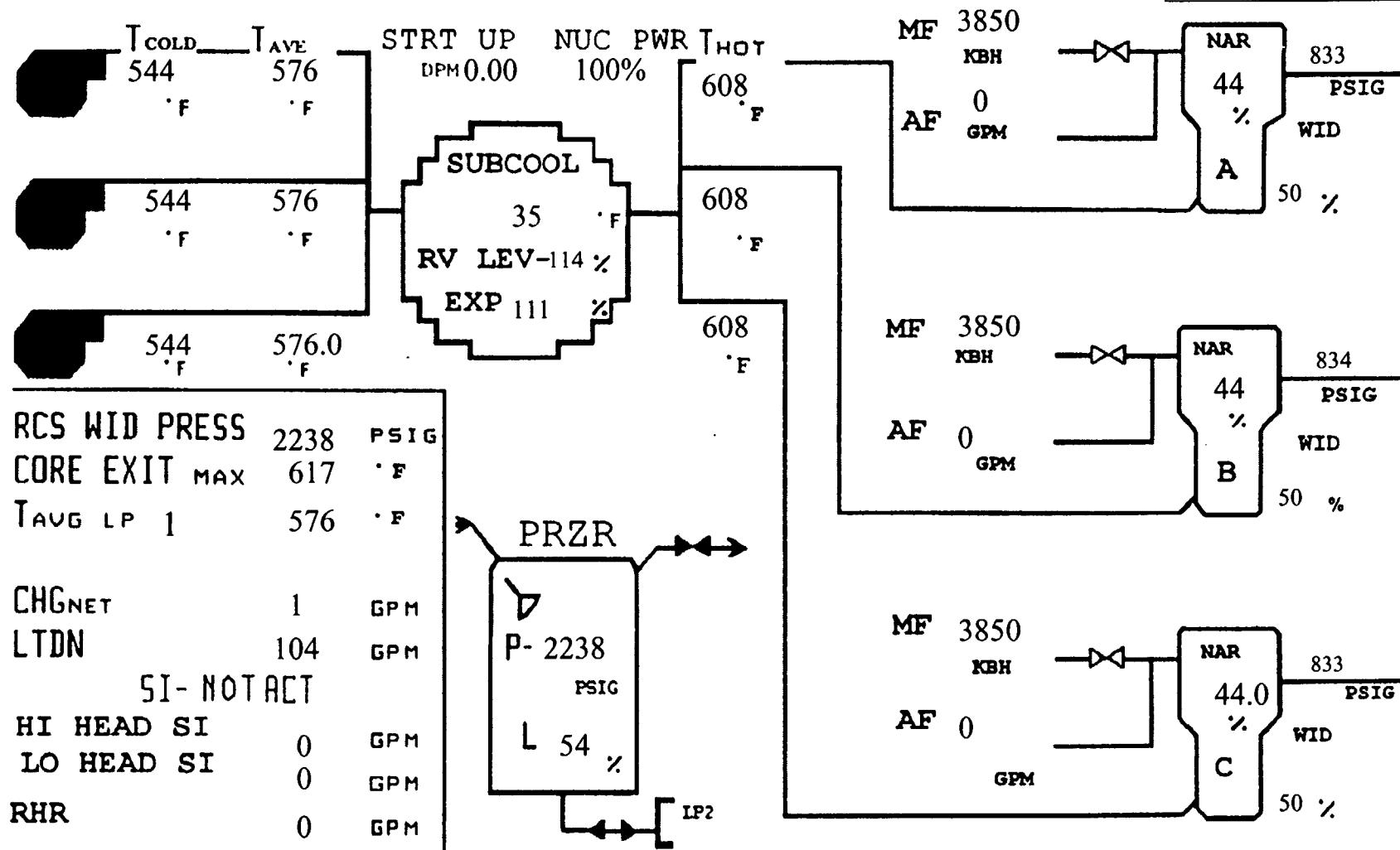




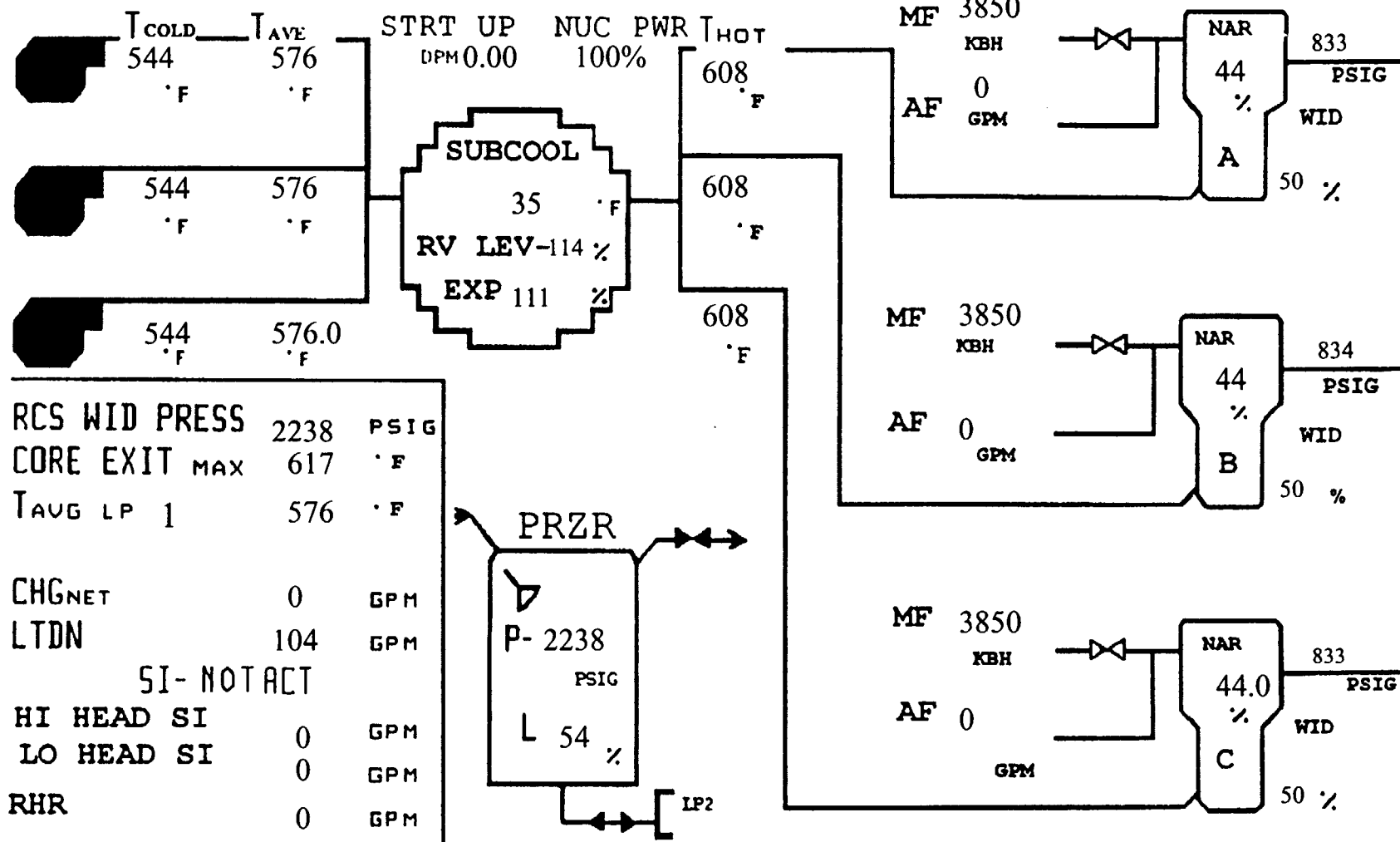
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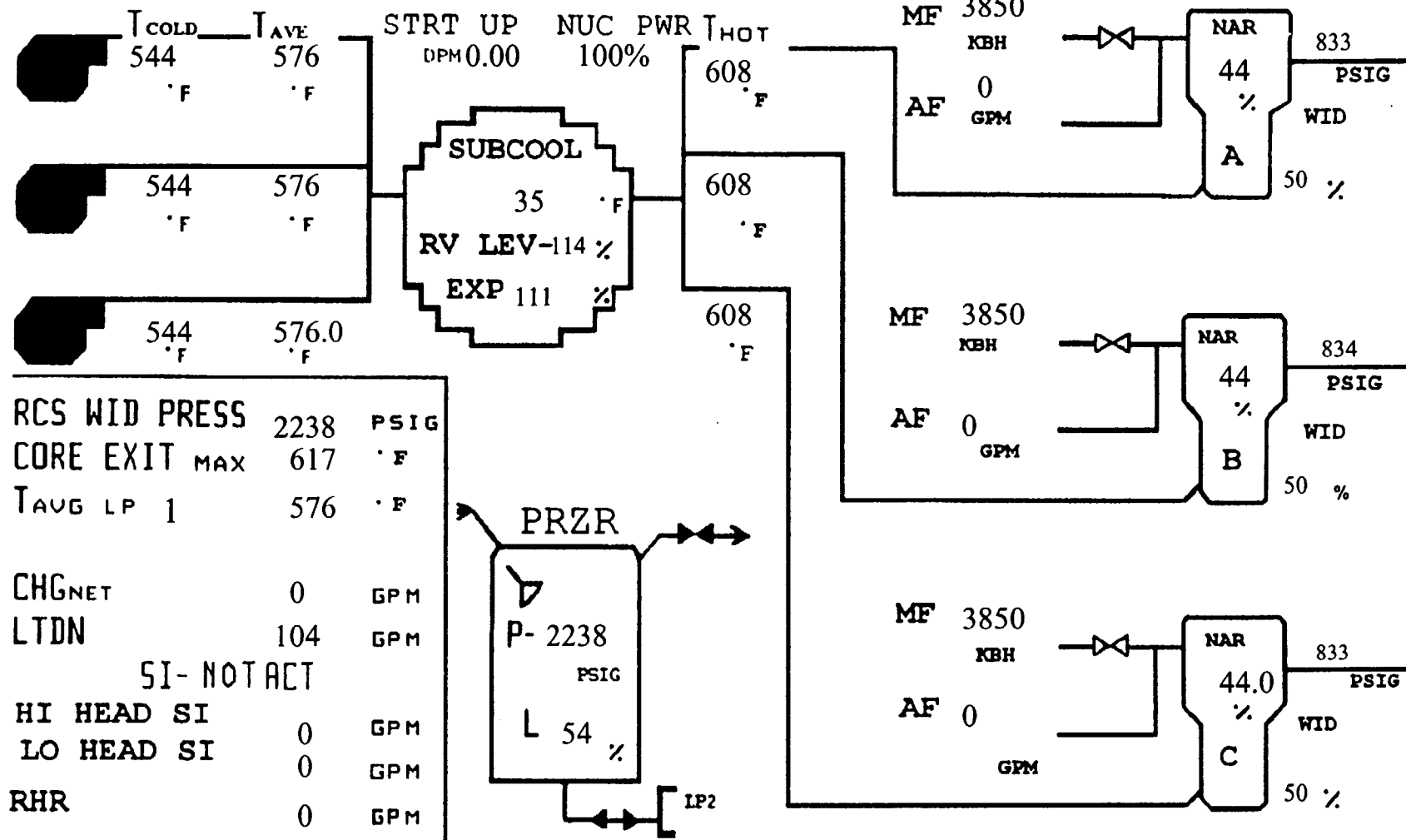
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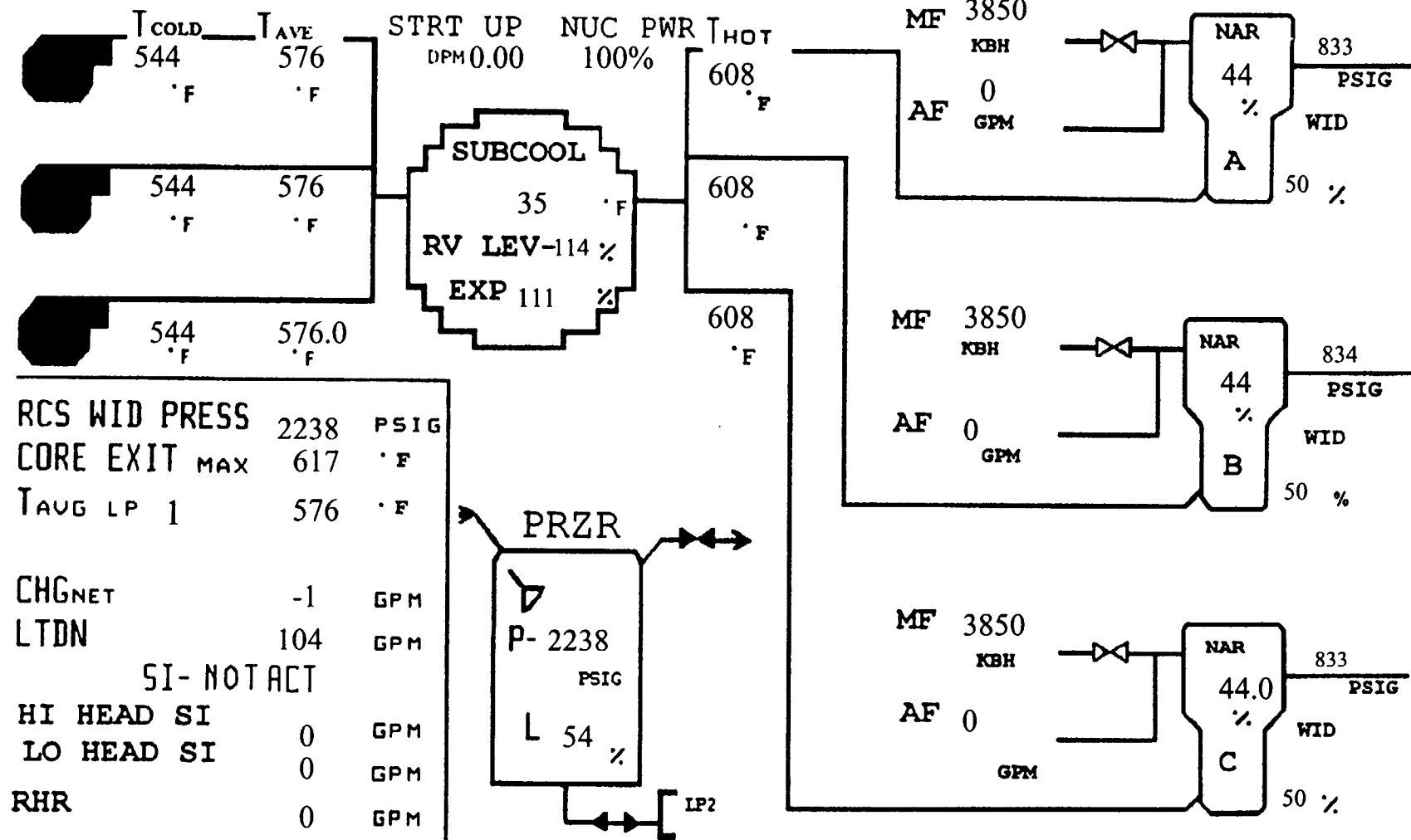
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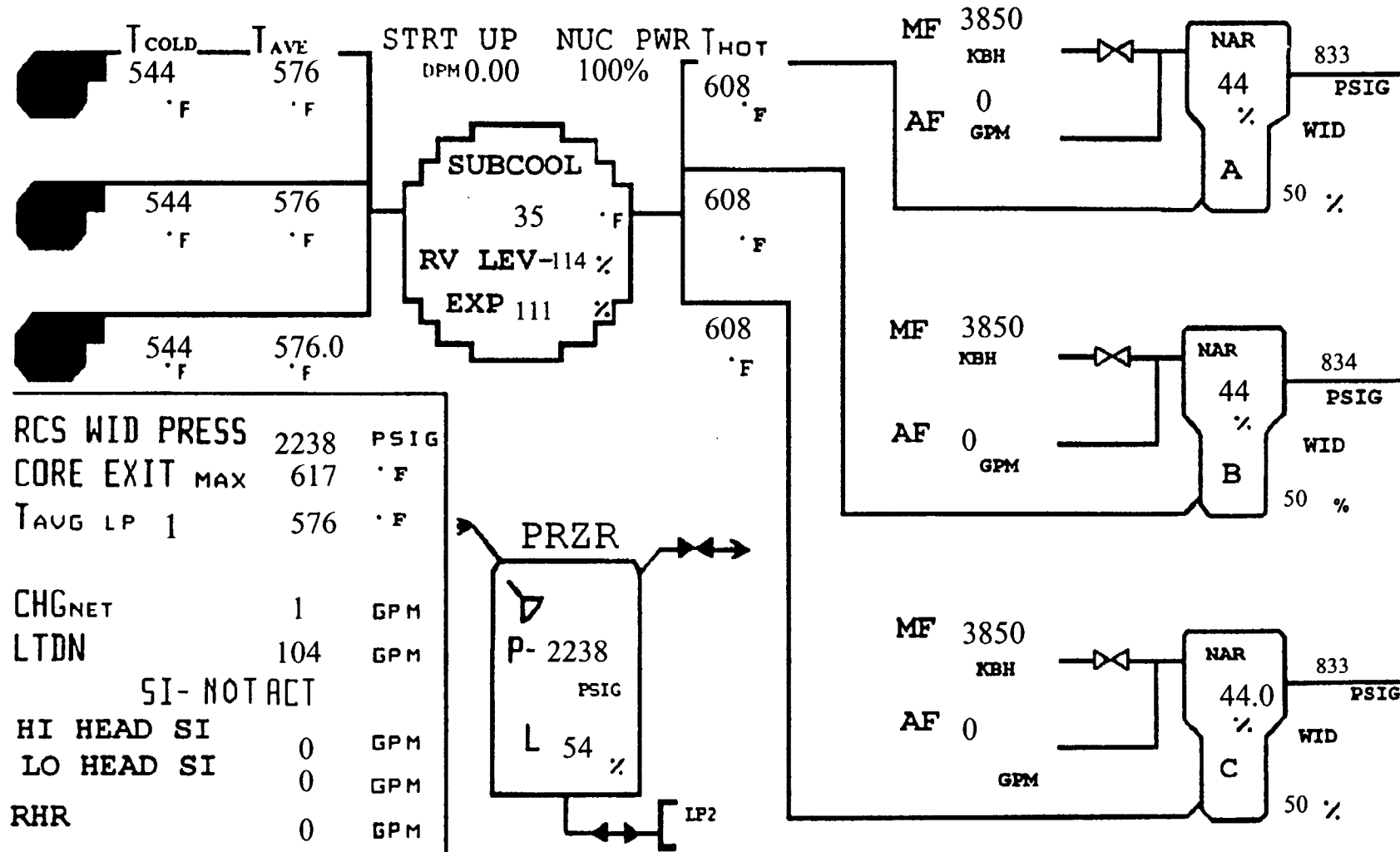
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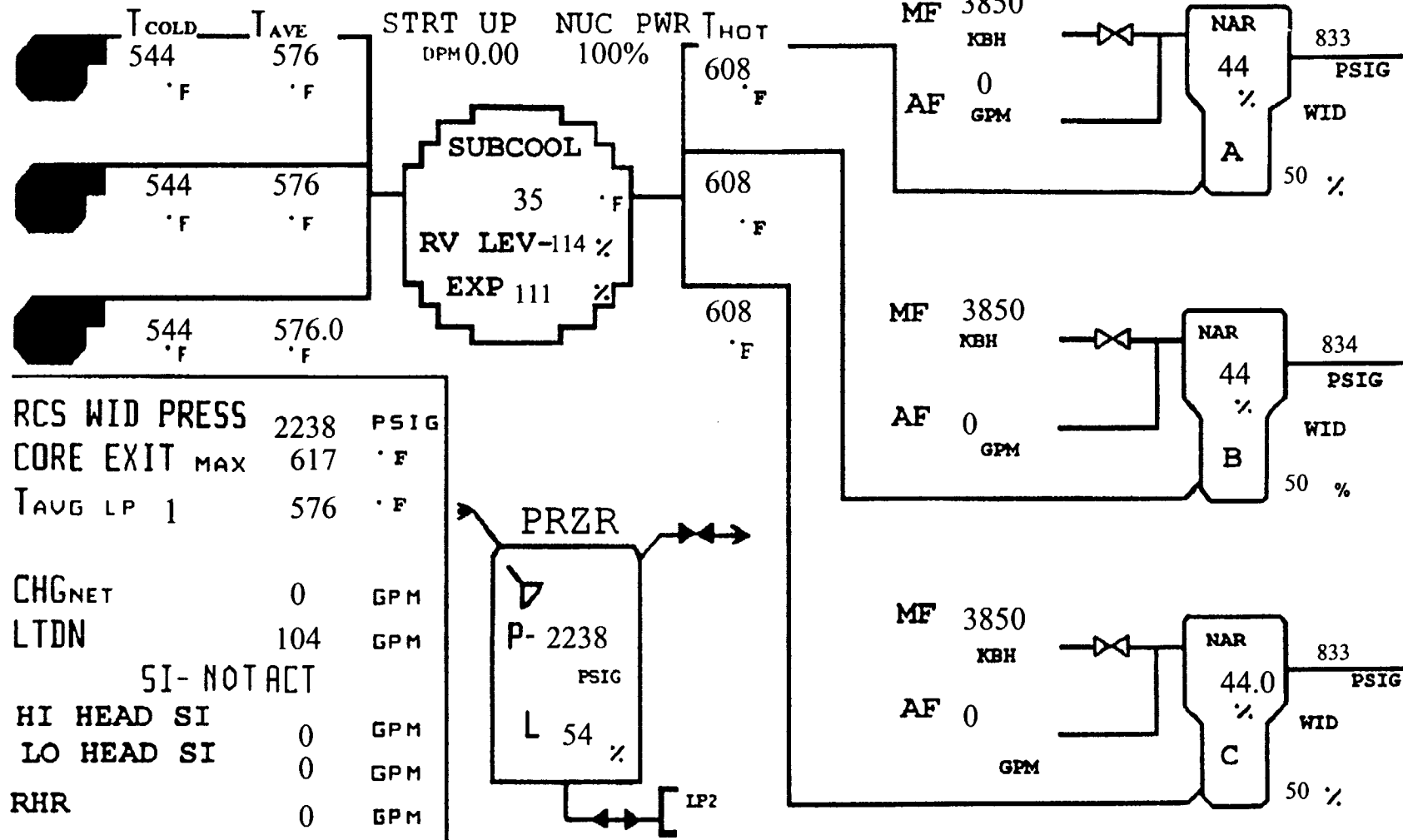
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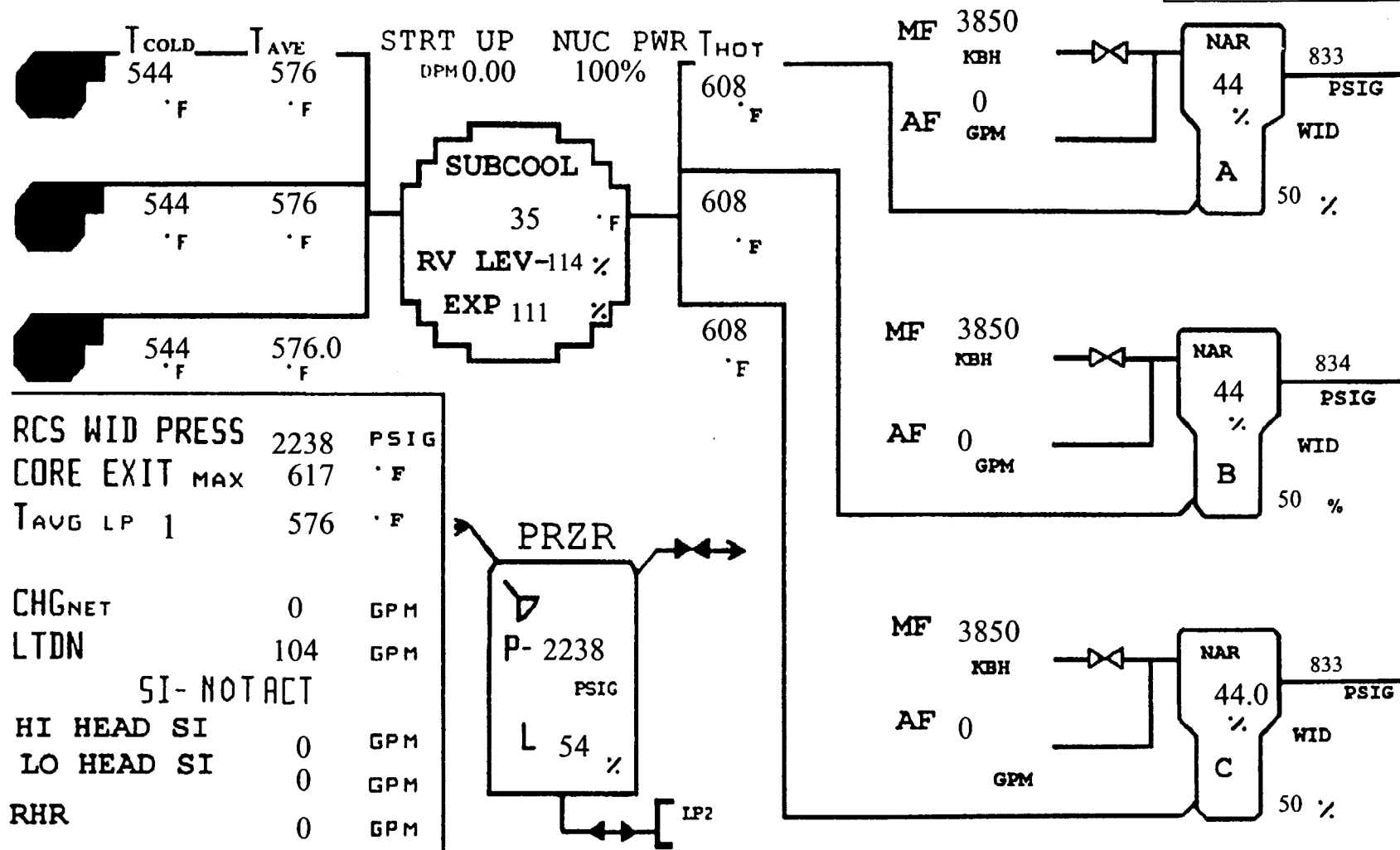
**Time:1700**



**Time:1703**

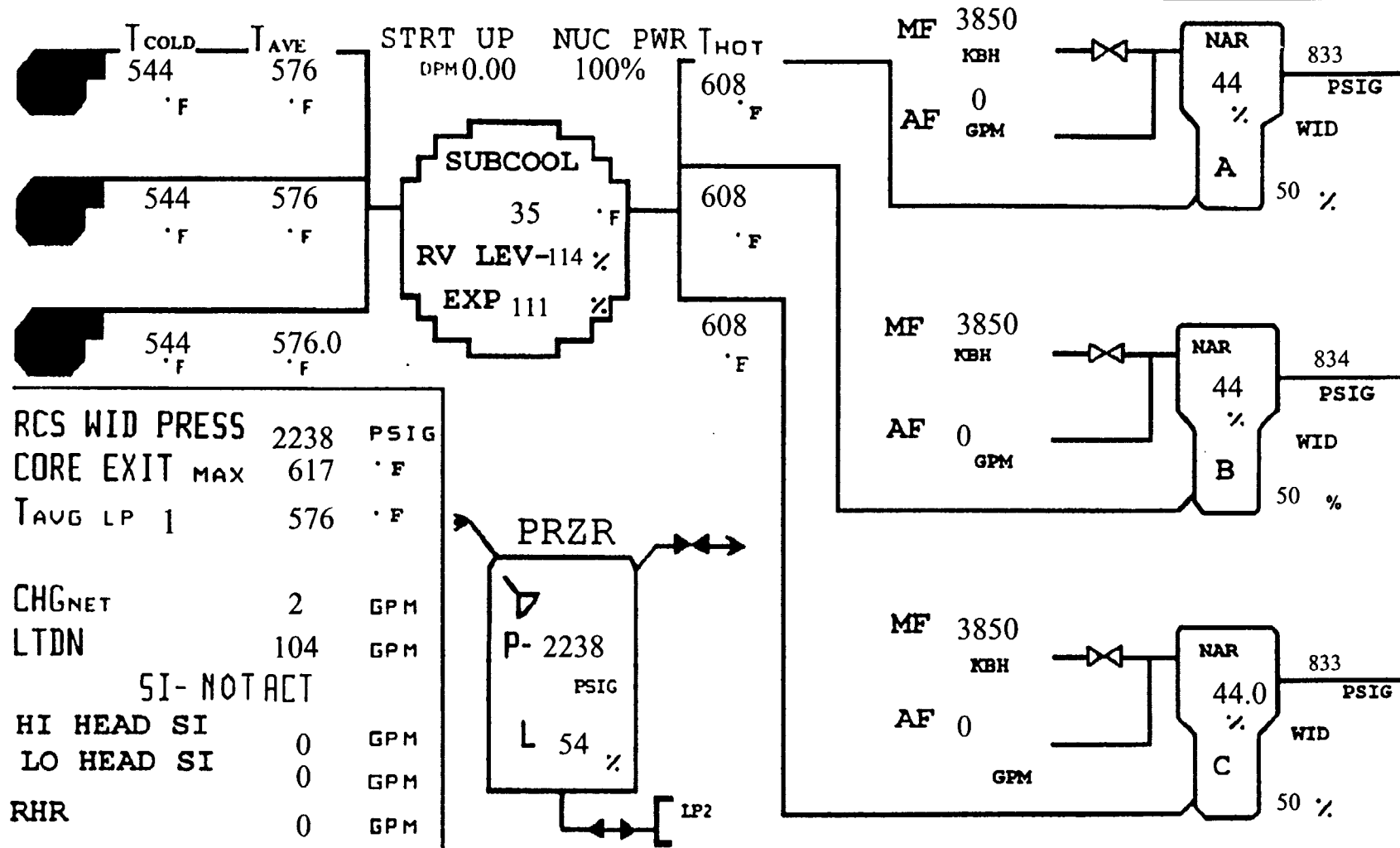


**Time:1706**

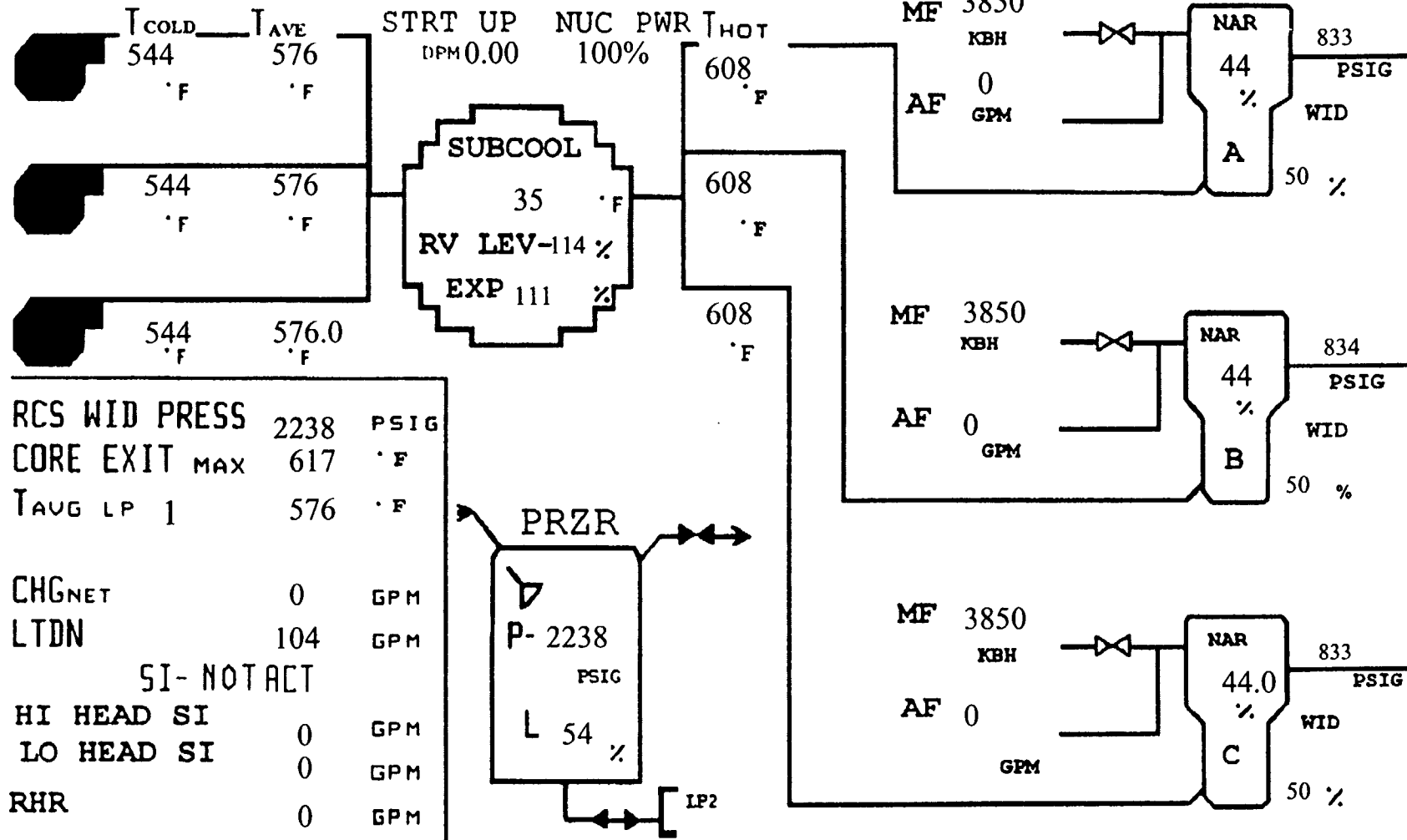




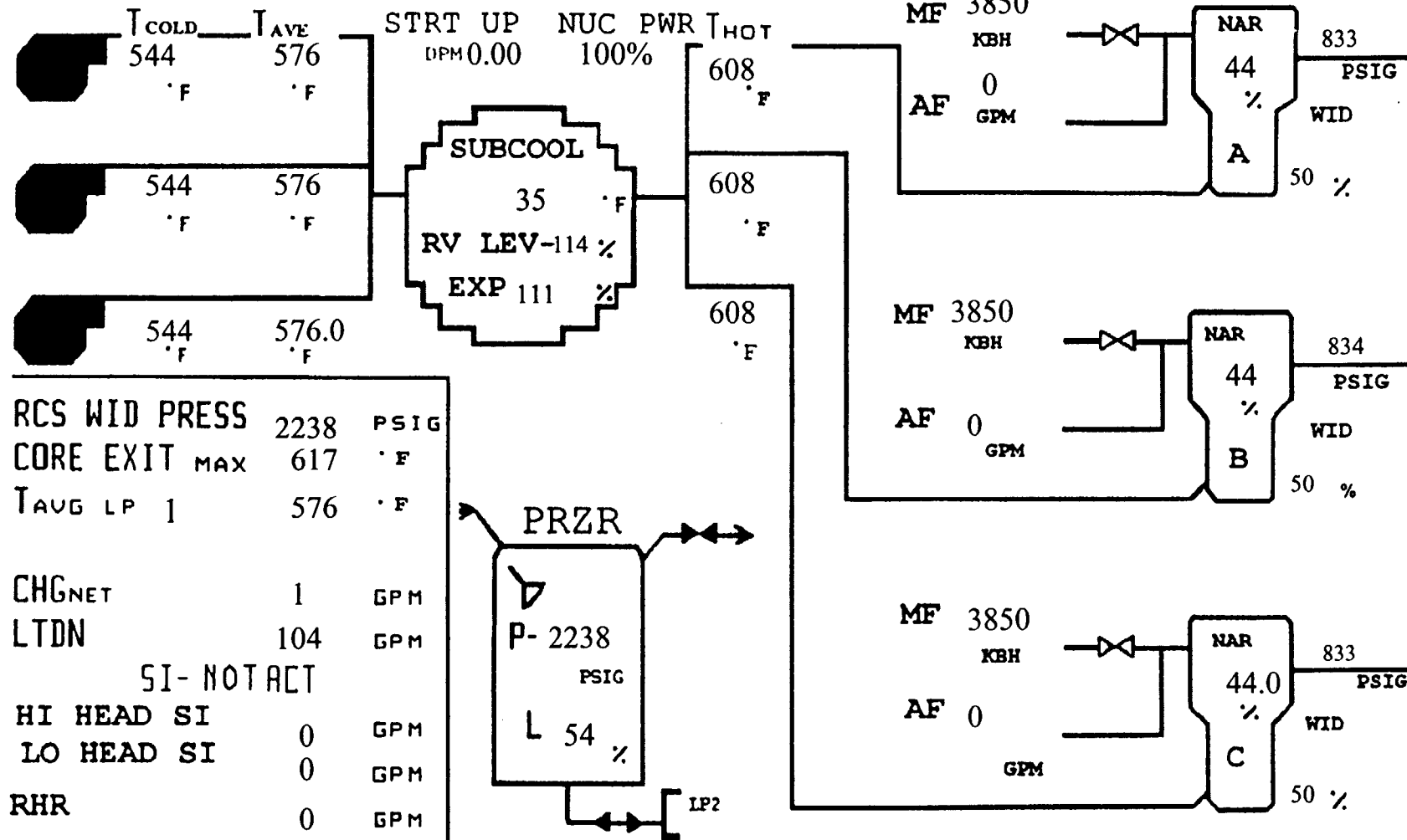
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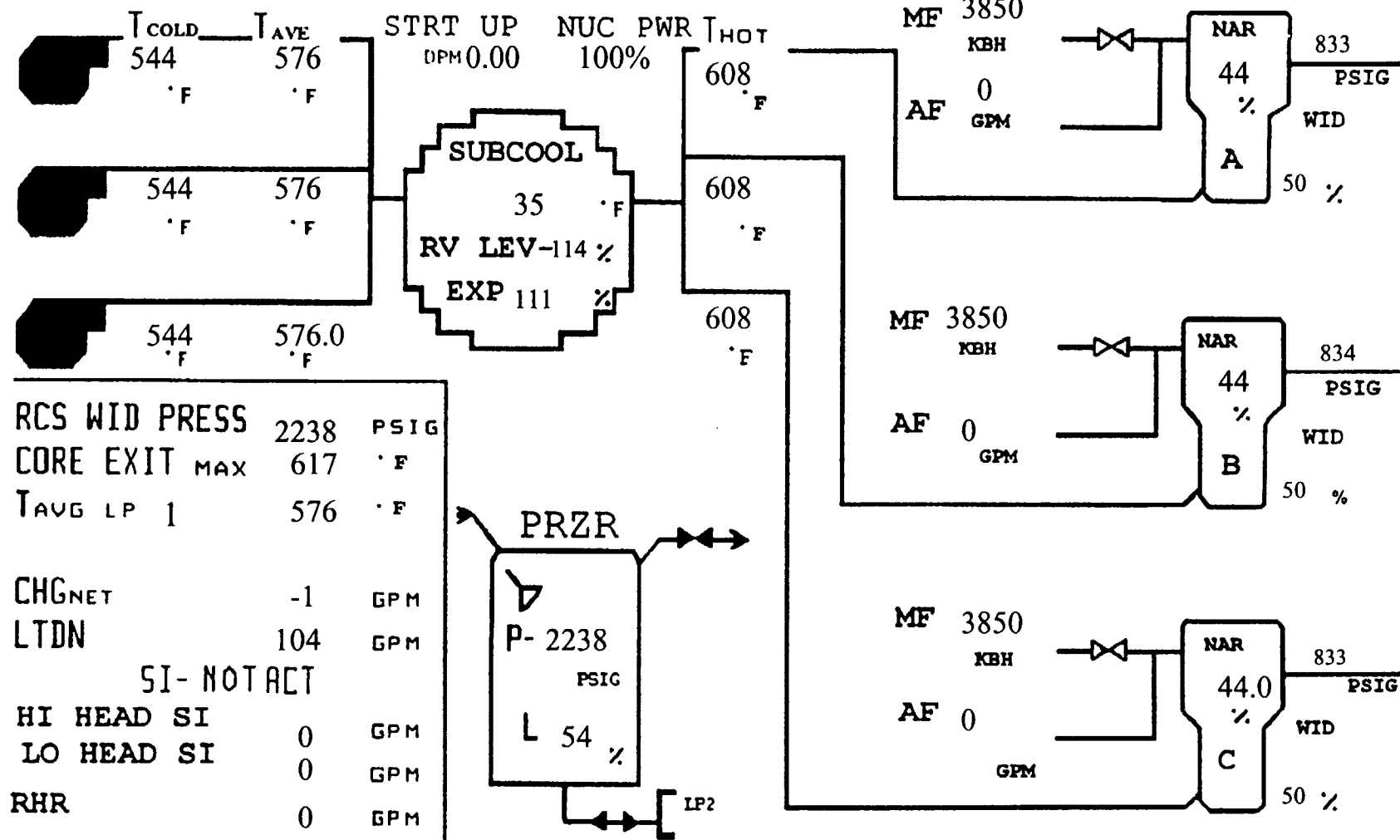
Time:1712



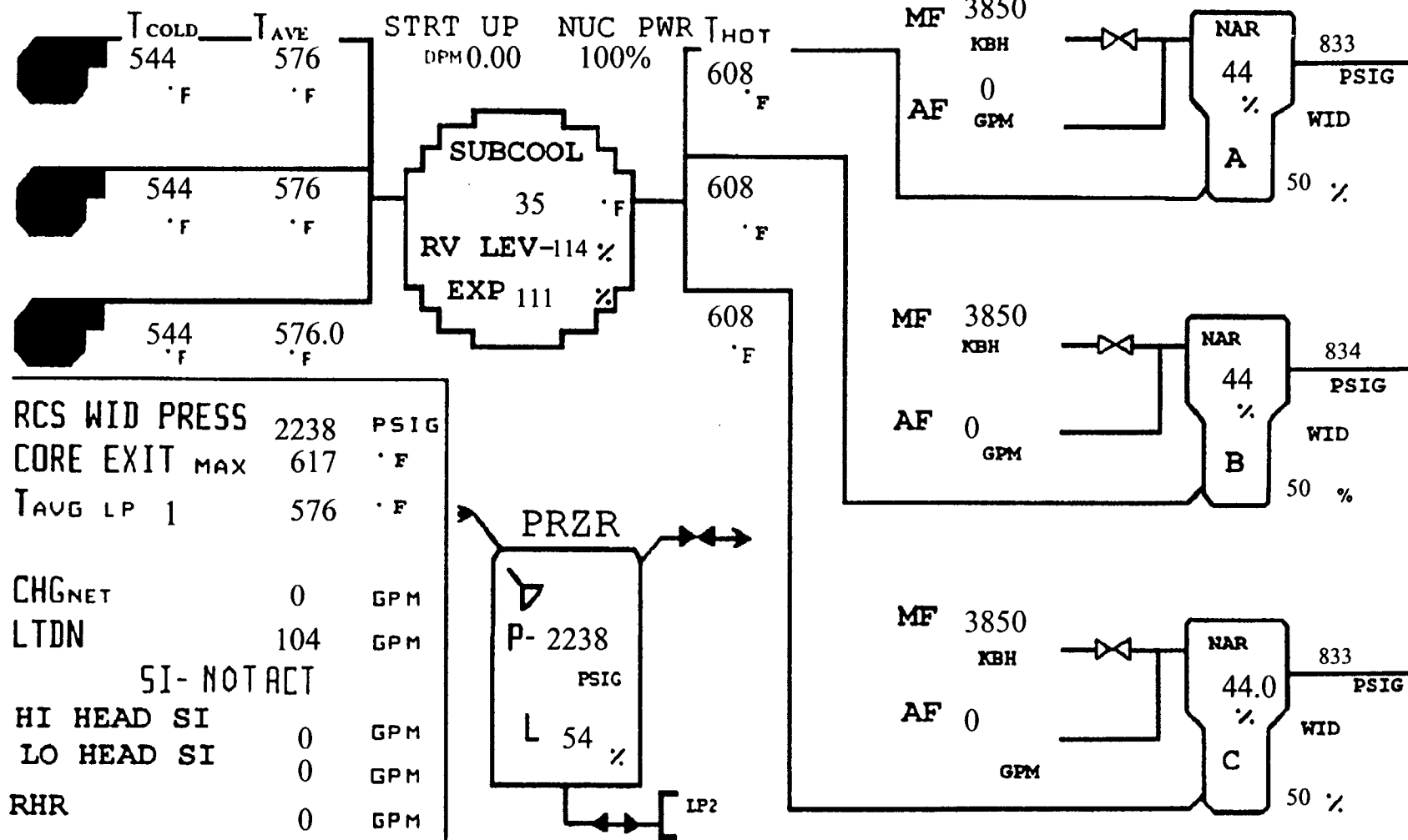
**Time:1715**



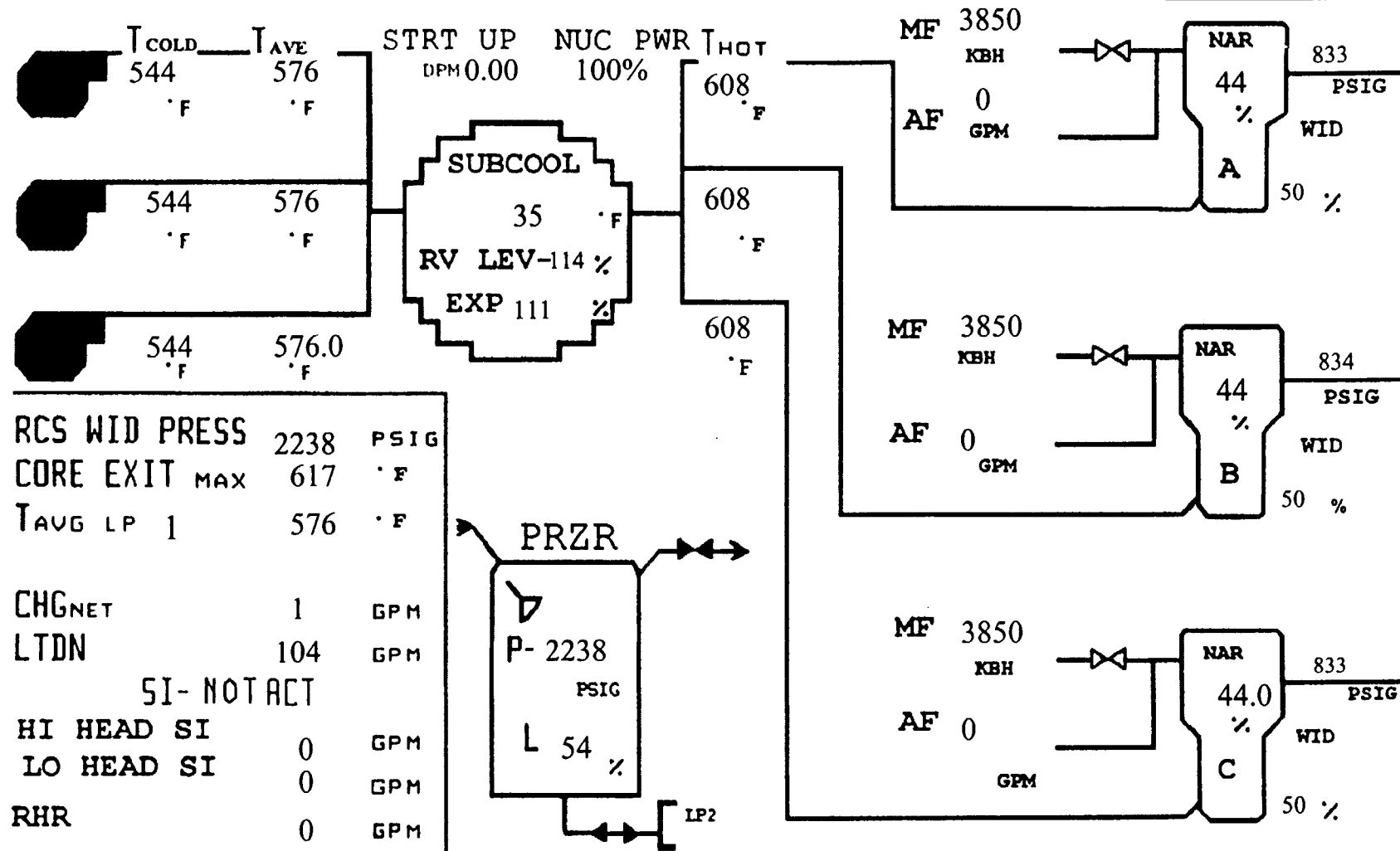
Time:1718



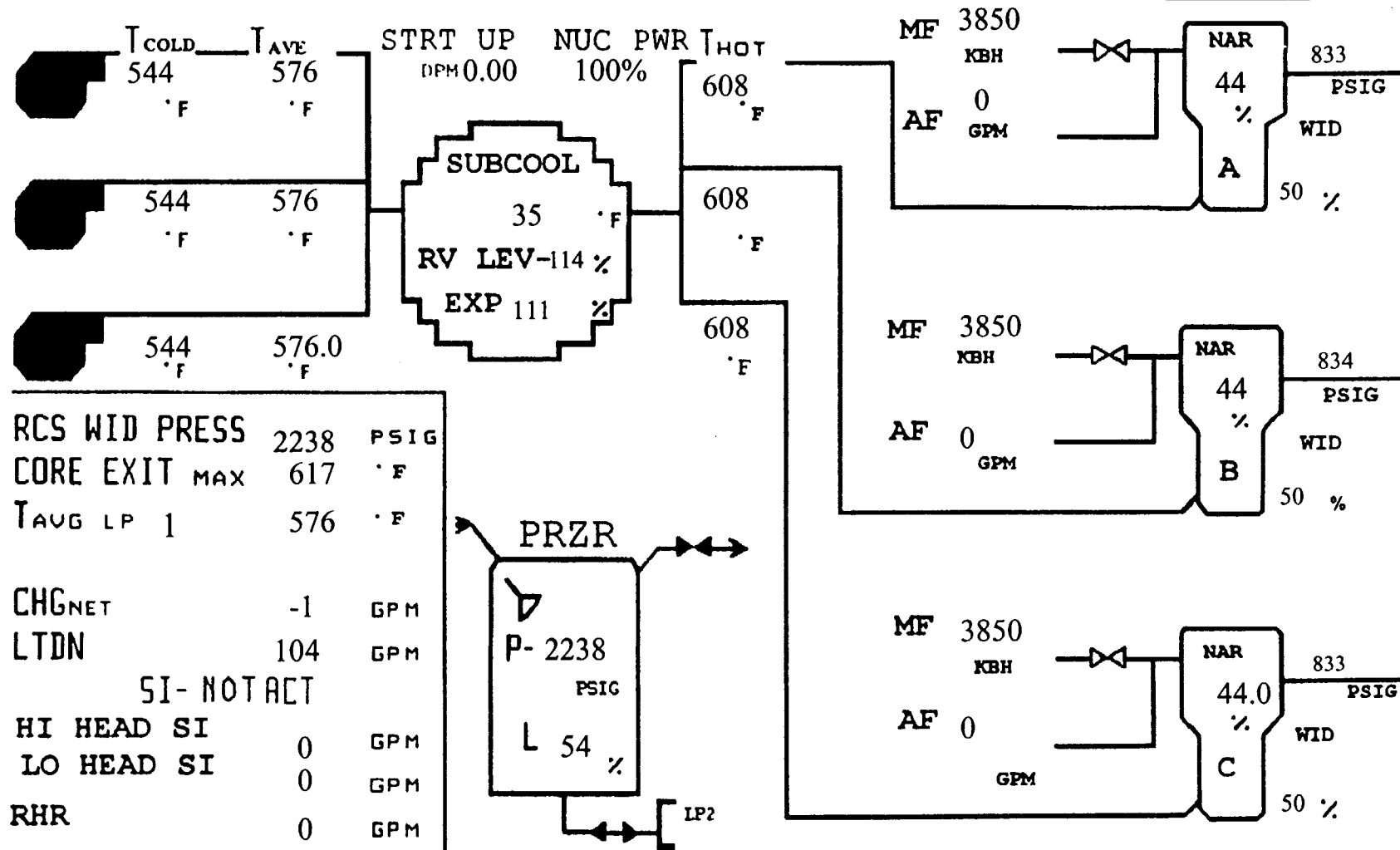
Time:1721



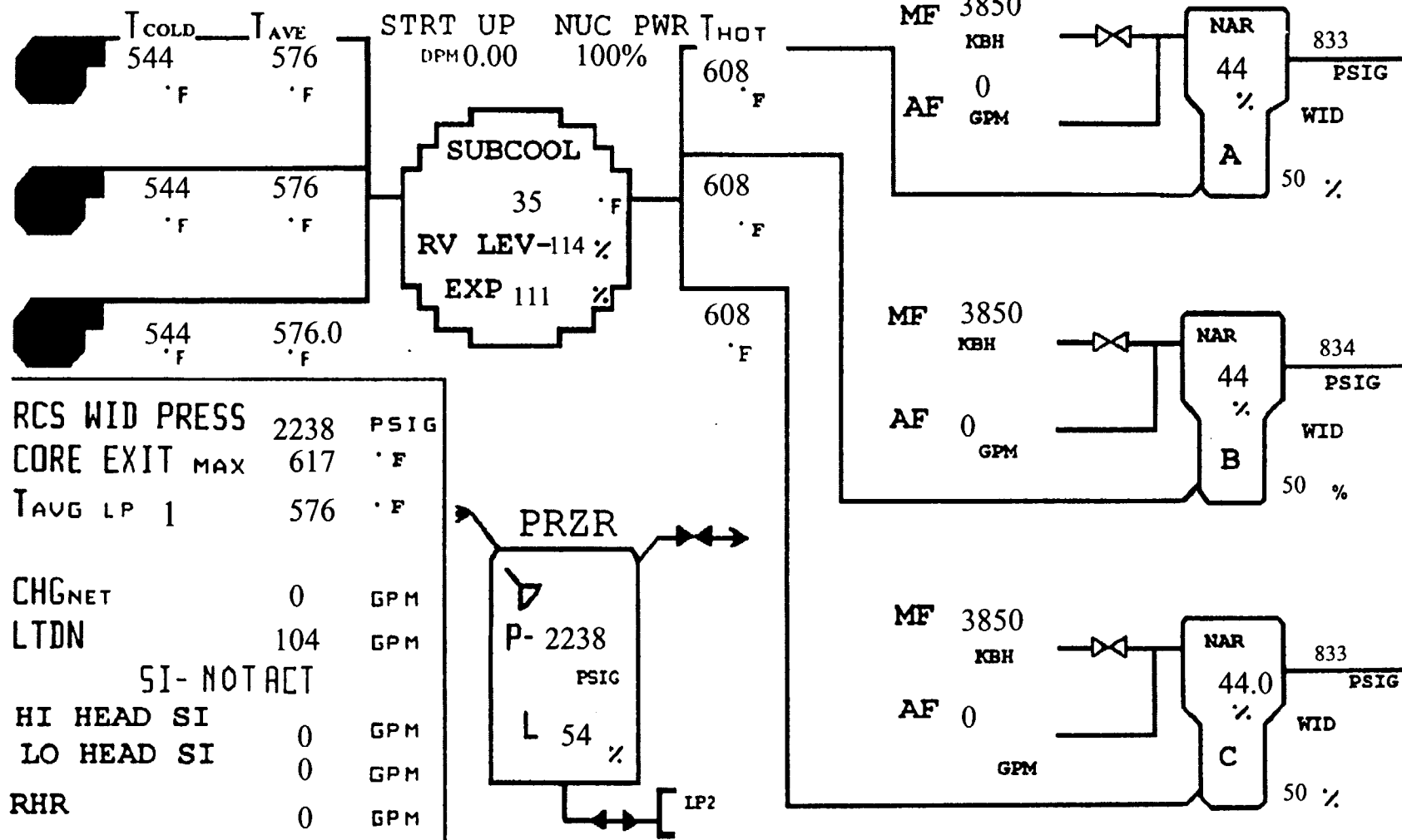
Time:1724



Time:1727

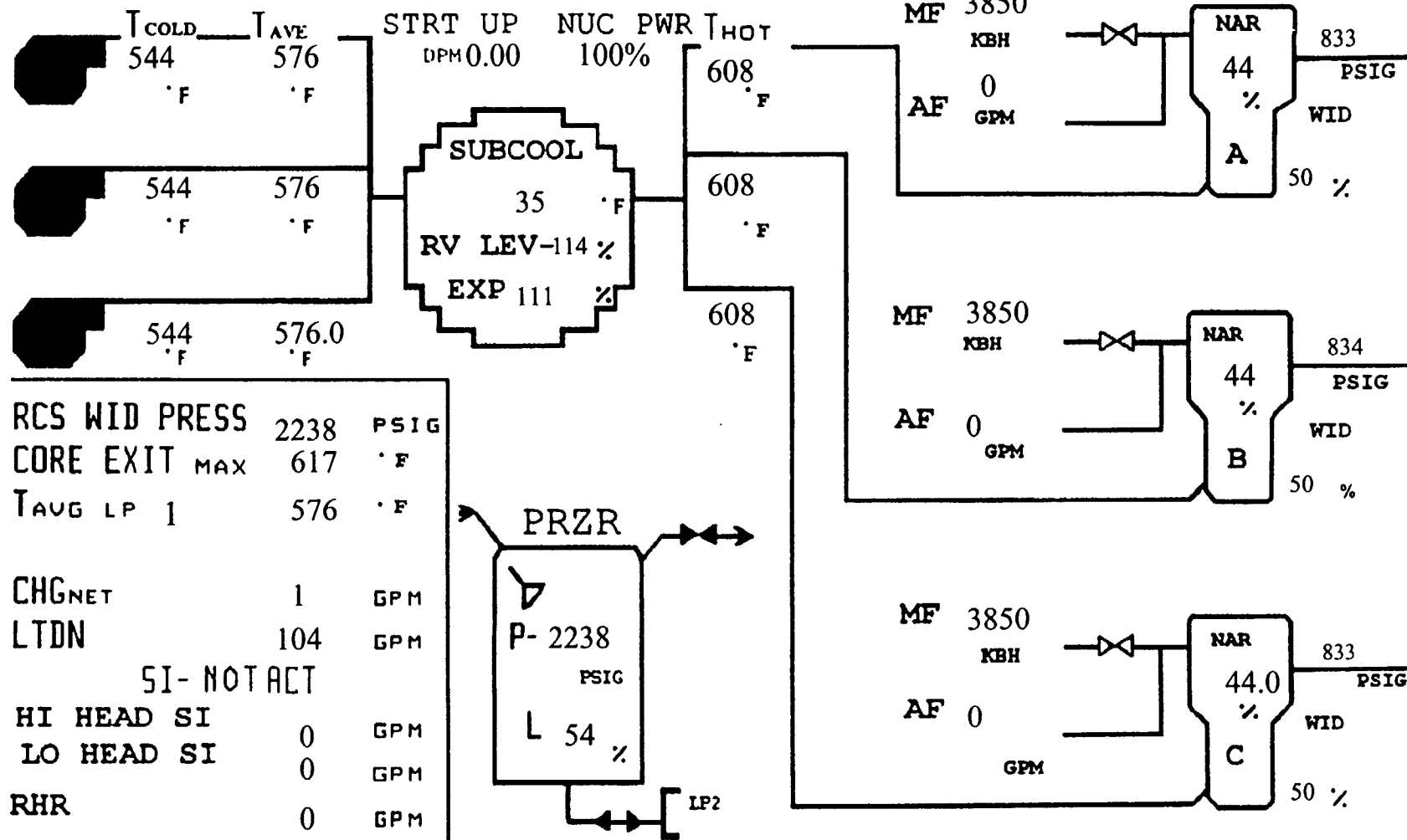


**Time:1730**

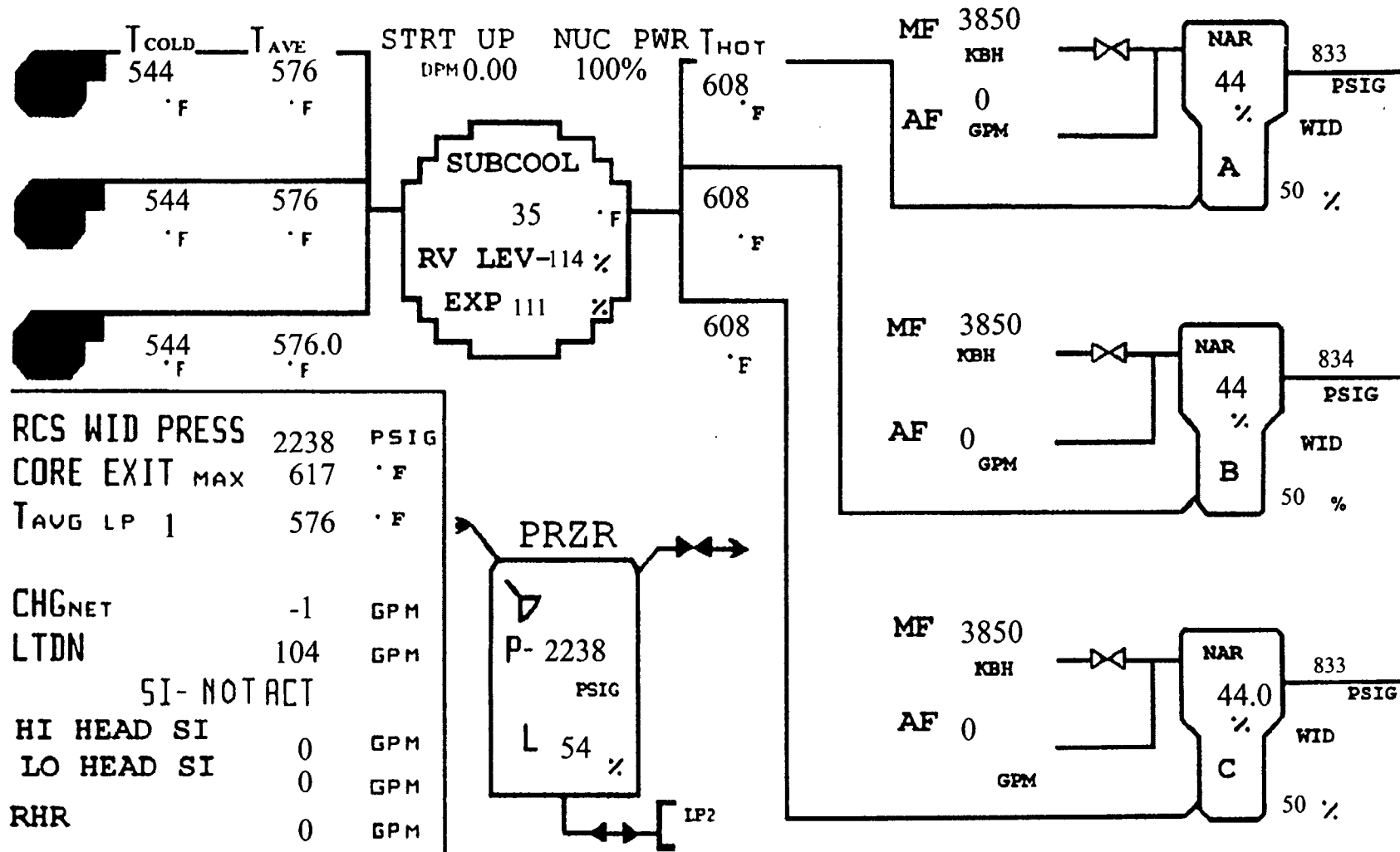




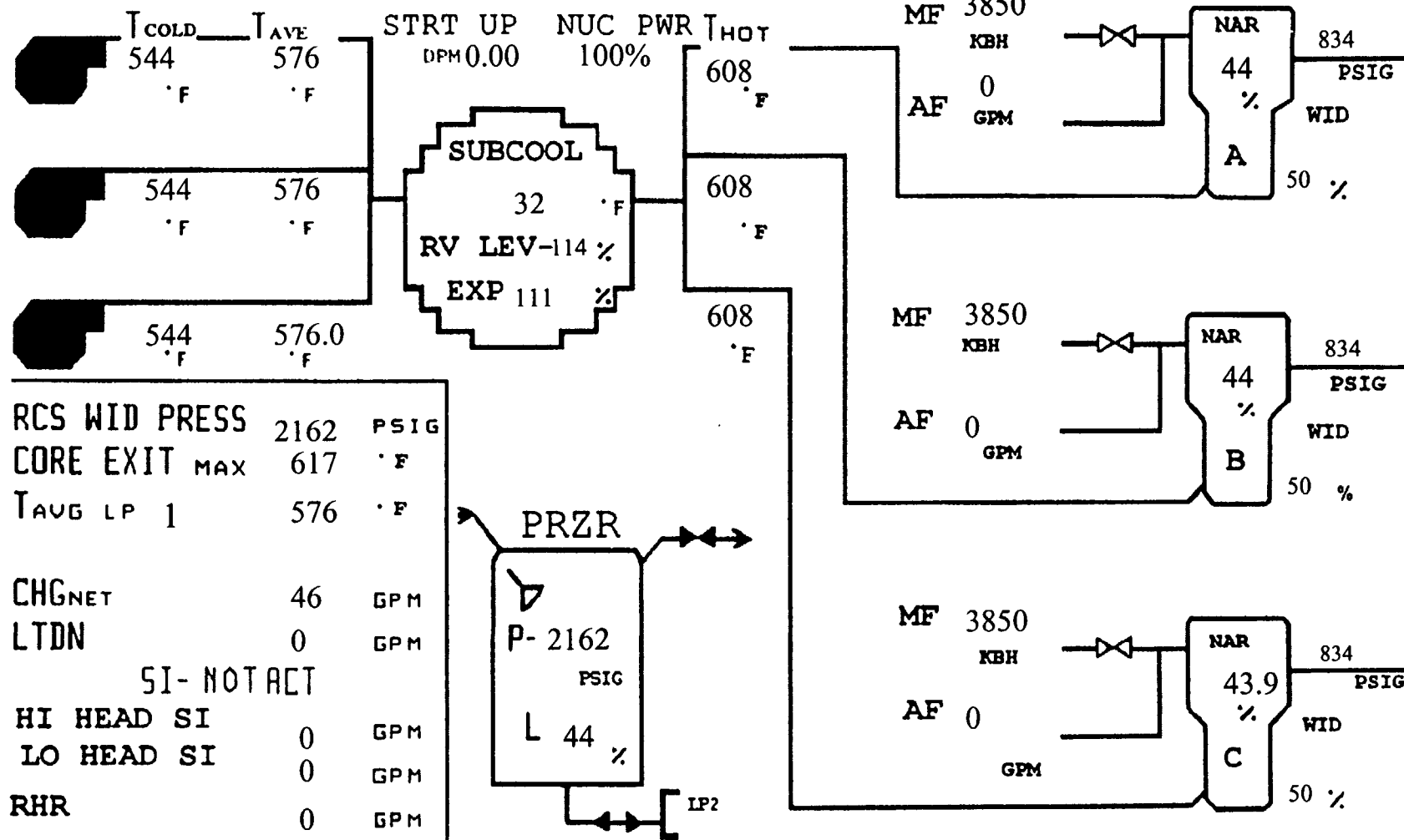
Time:1733



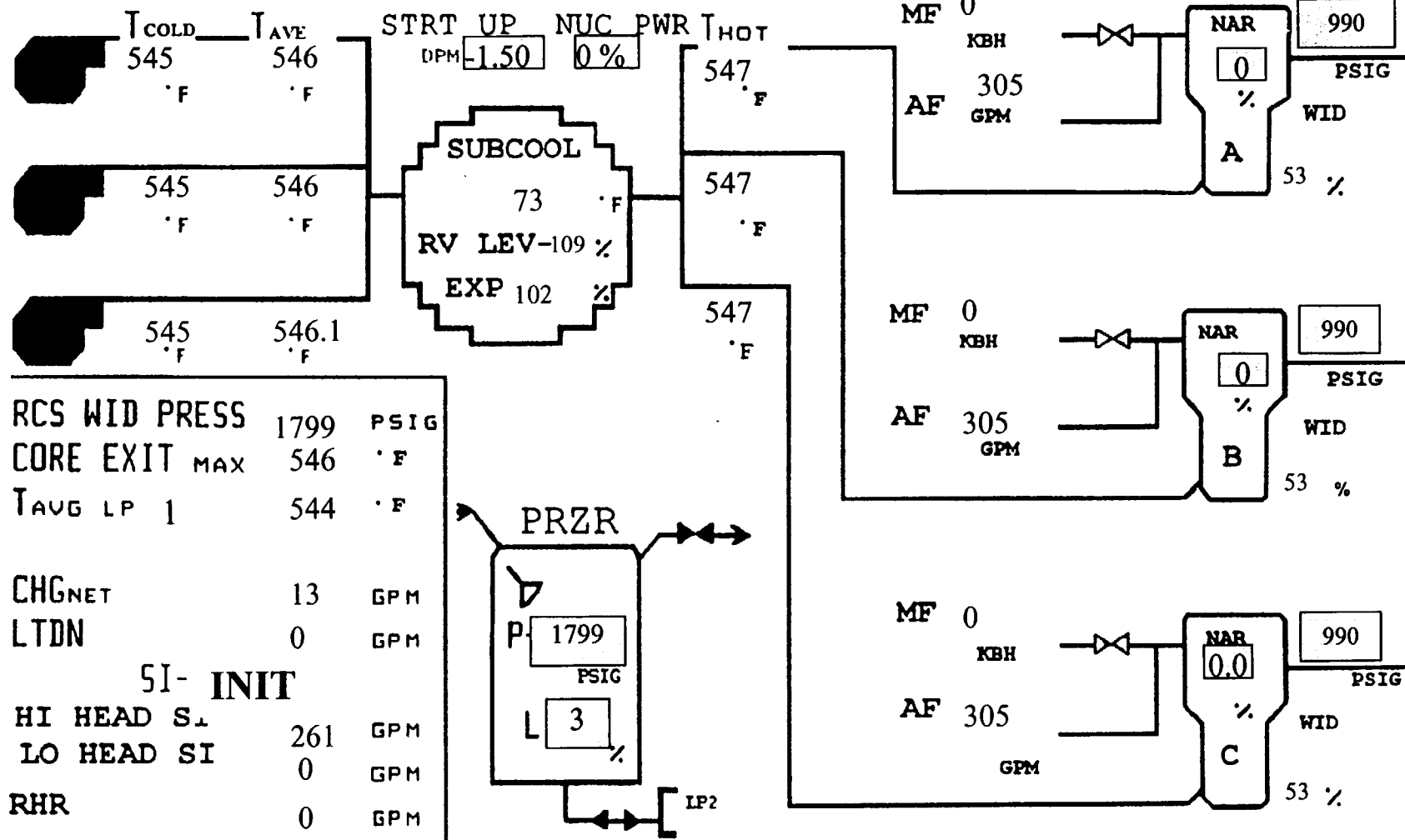
Time:1736



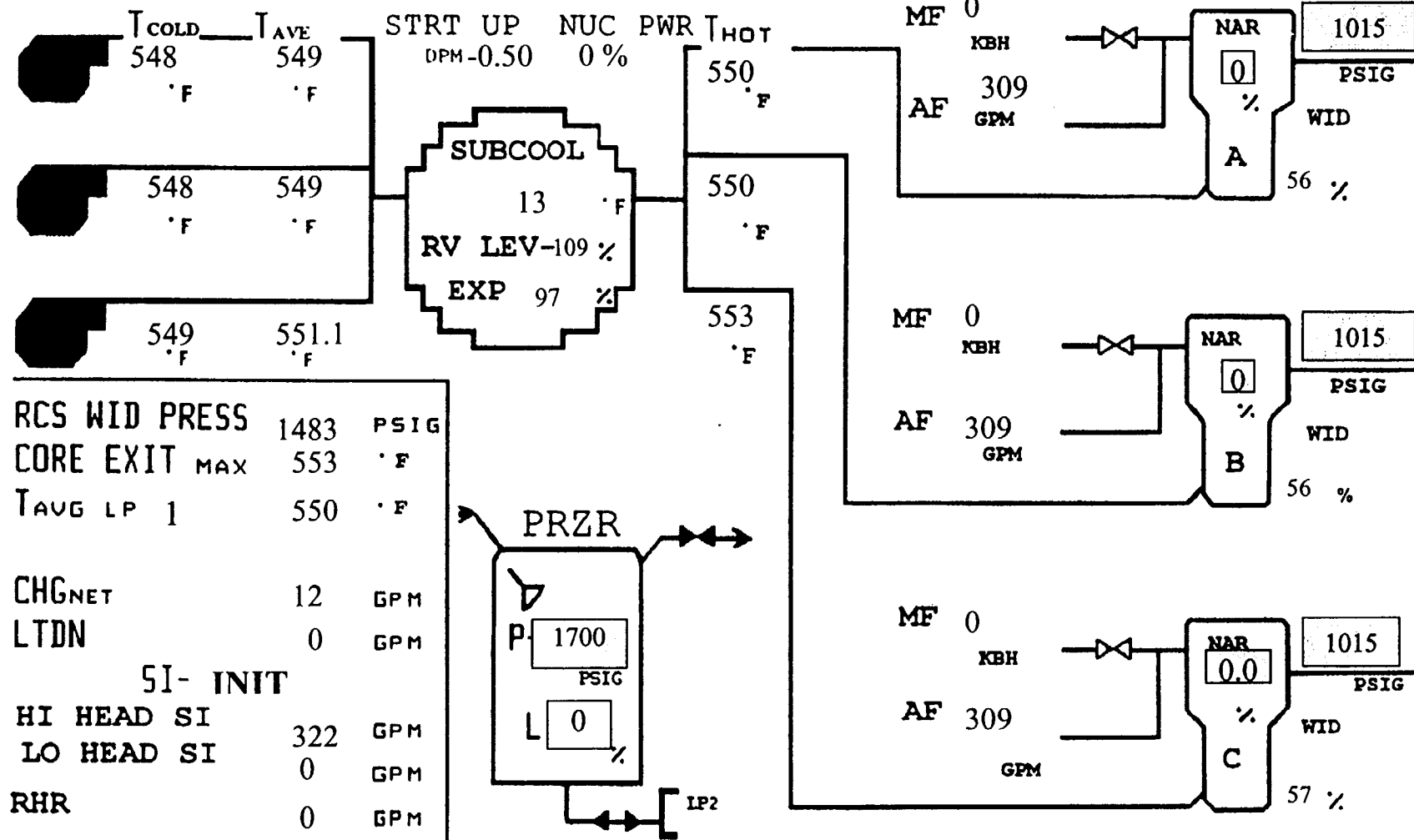
Time:1739



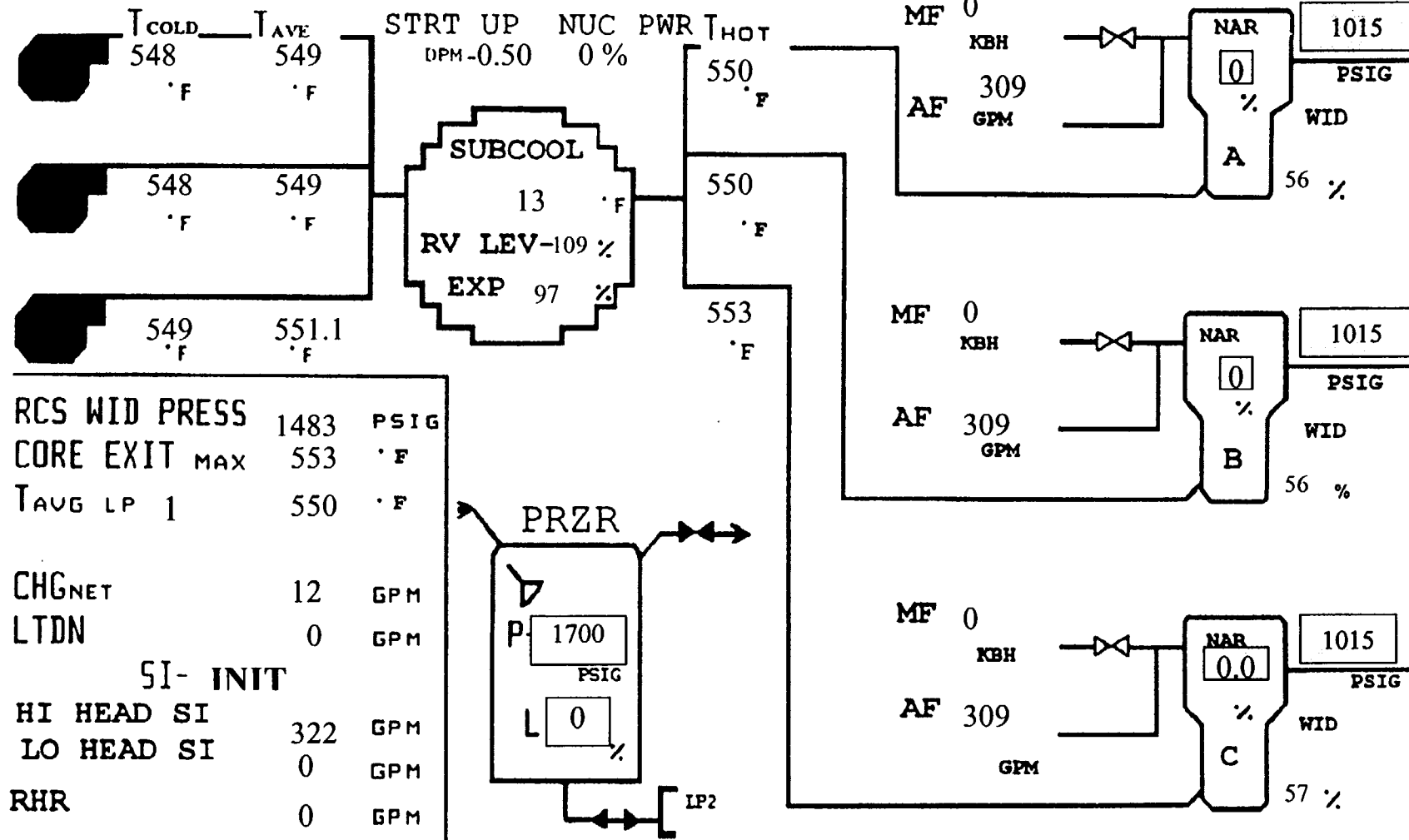
Time:1742



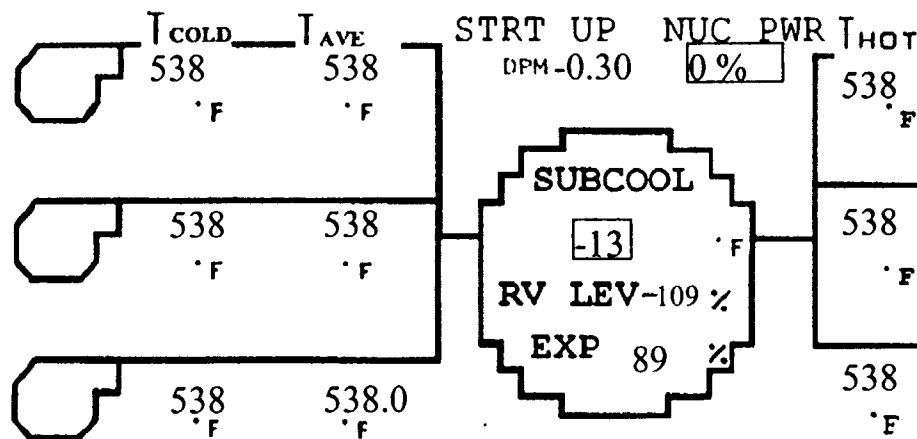
Time:1745



Time:1745

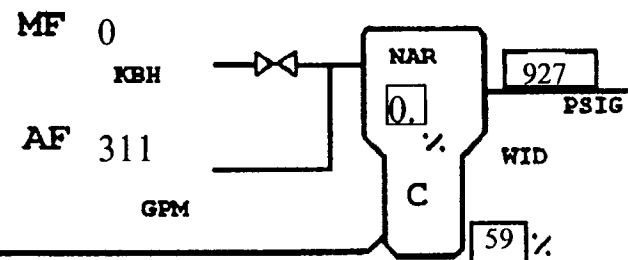
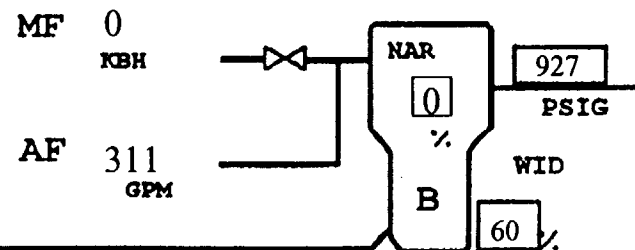
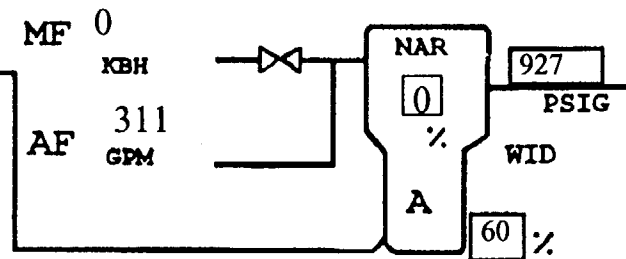
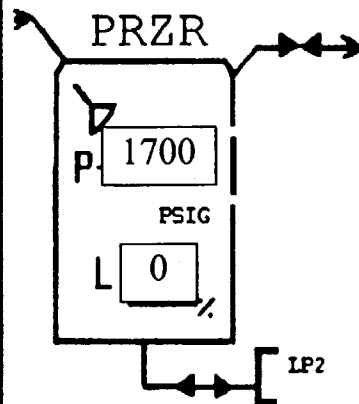


Time:1748

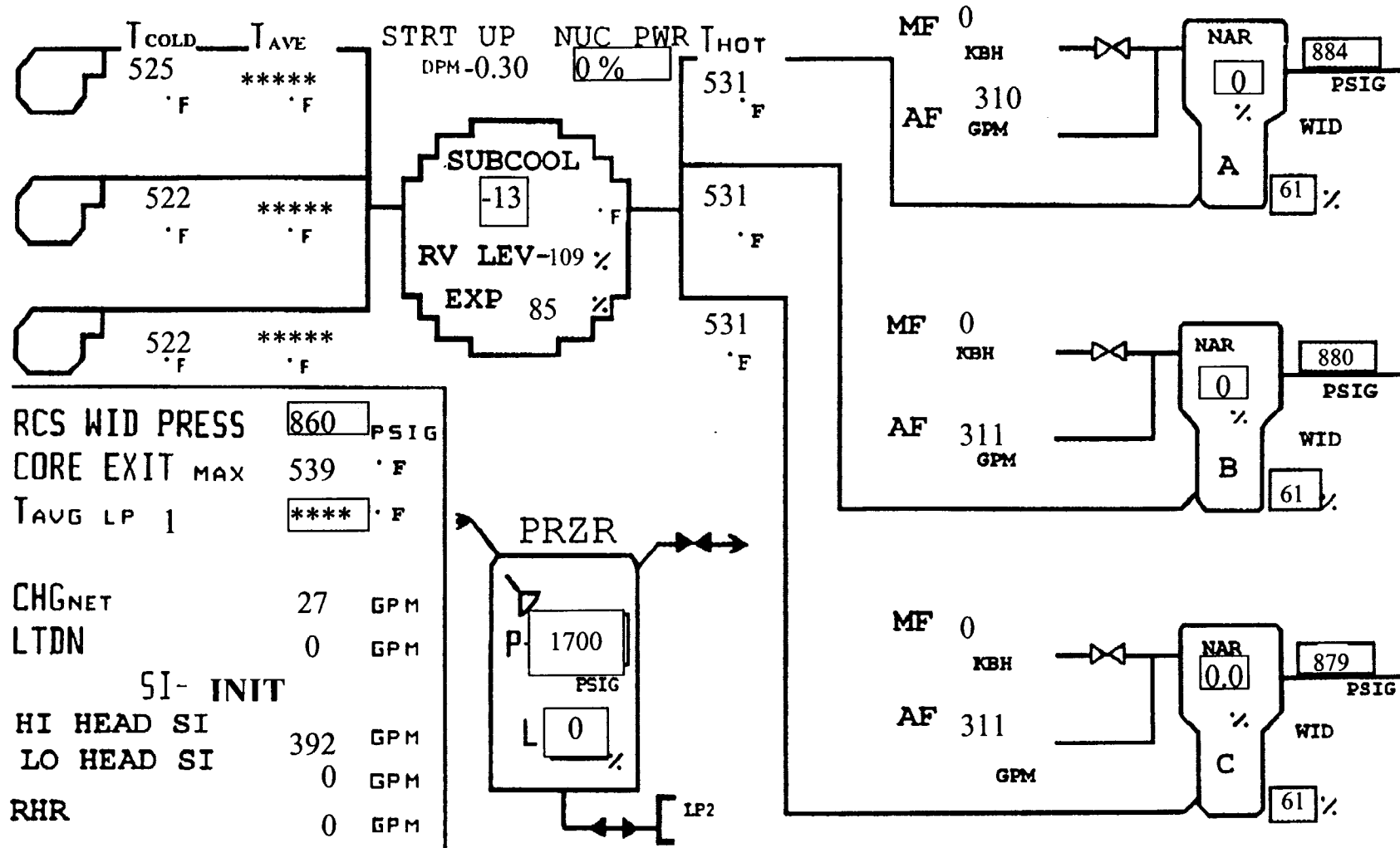


RCS WID PRESS 917 PSIG  
 CORE EXIT MAX 548 °F  
 TAVG LP 1 538 °F

CHGNET 24 GPM  
 LTDN 0 GPM  
 SI- INIT  
 HI HEAD SI 386 GPM  
 LO HEAD SI 0 GPM  
 RHR 0 GPM

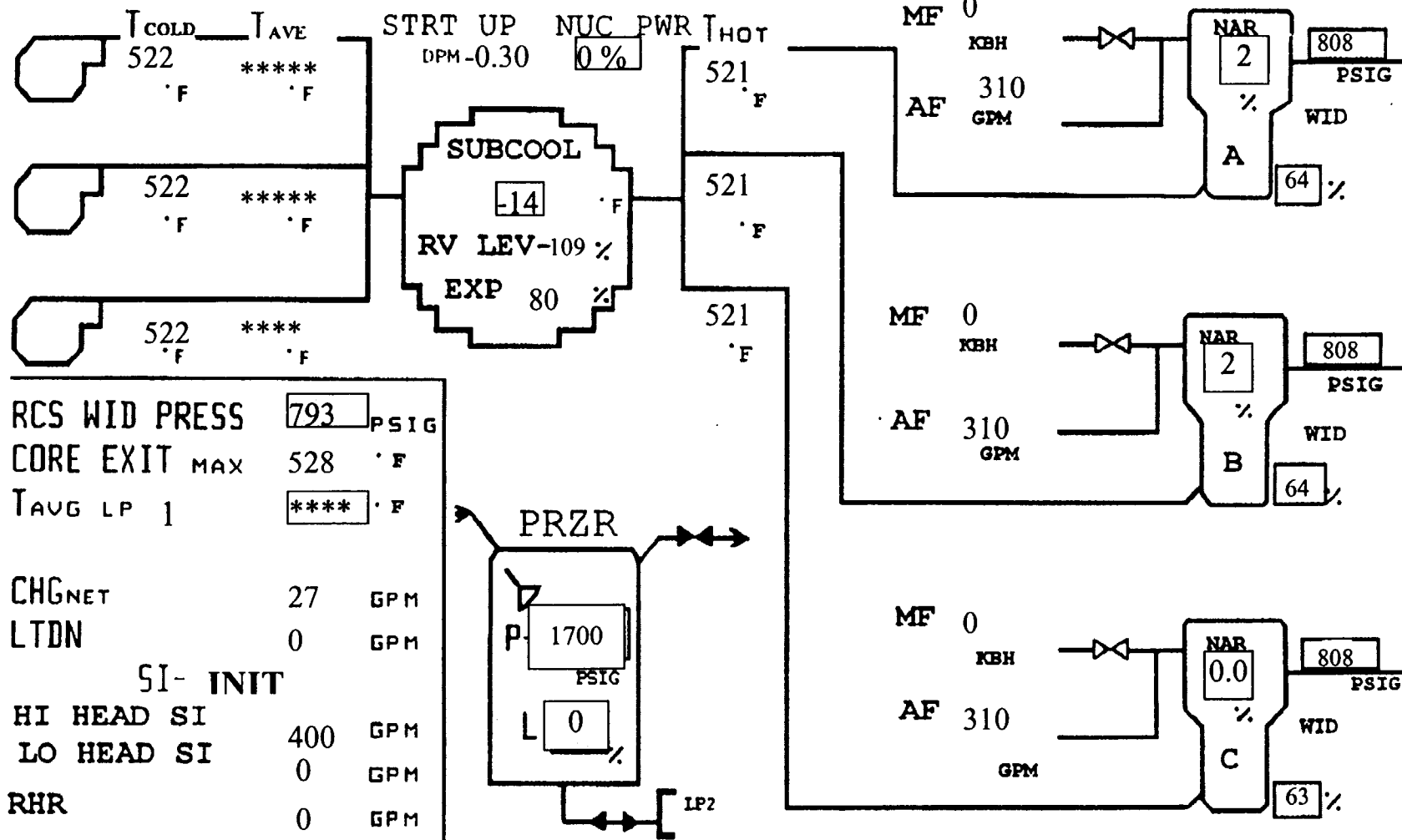


Time:1751

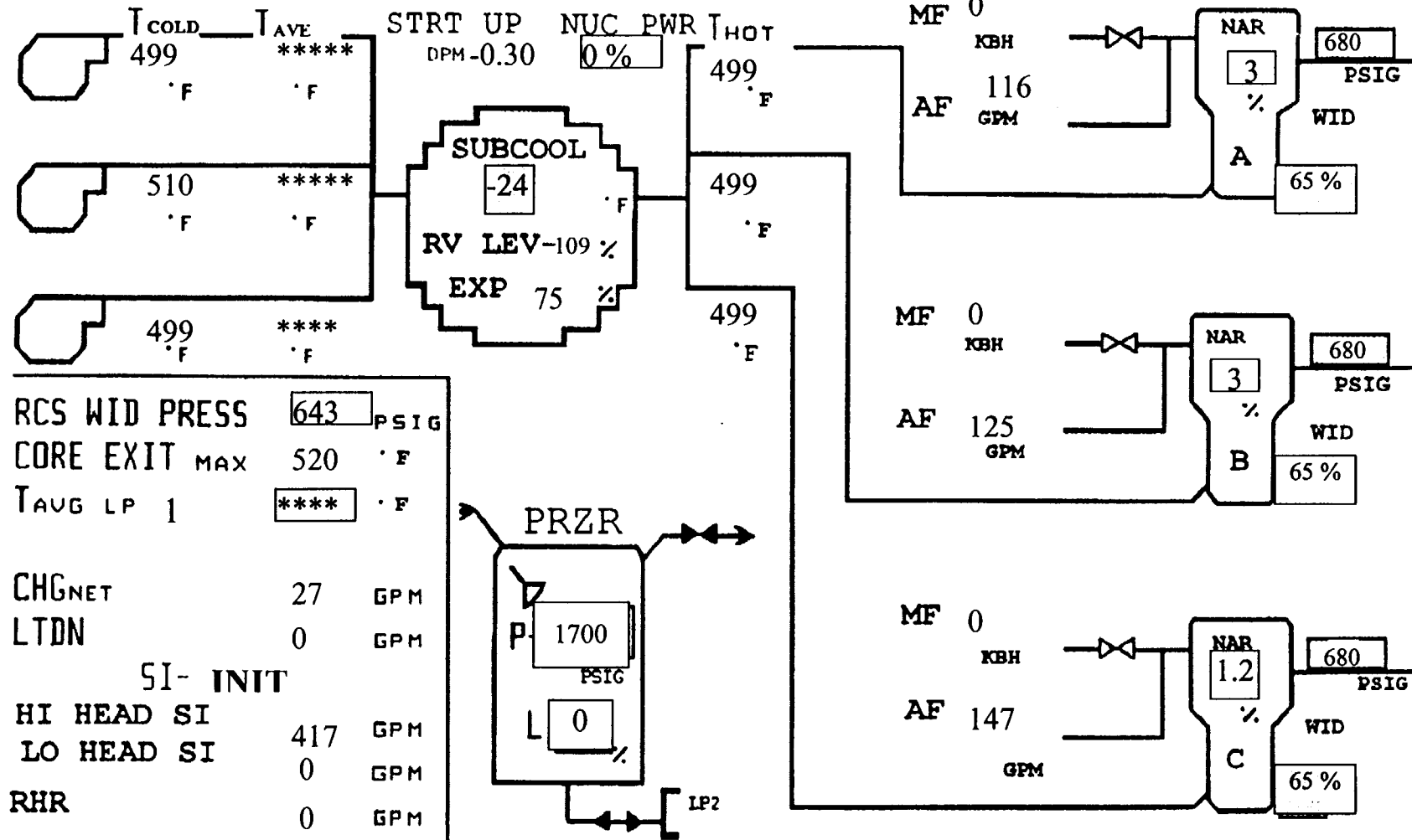




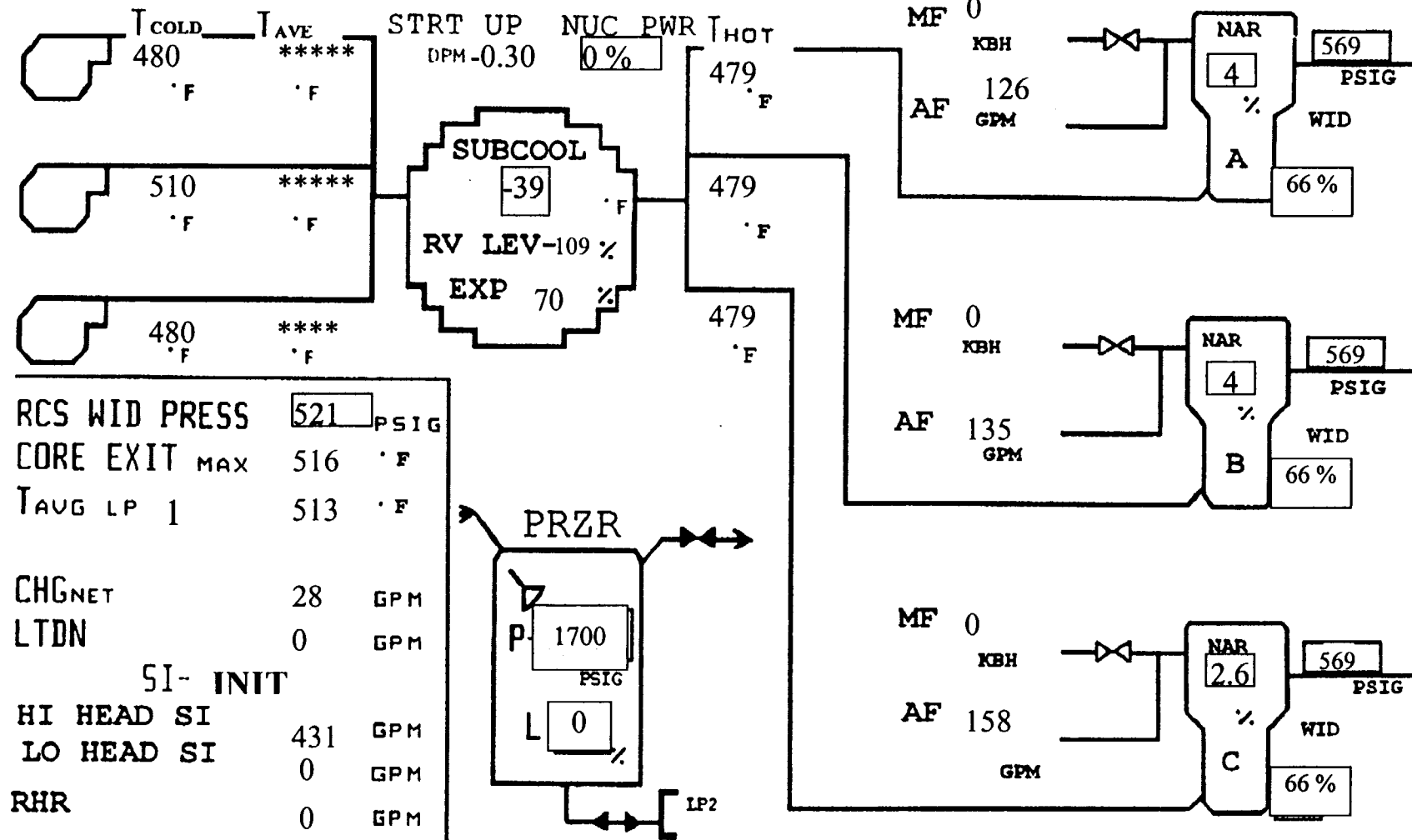
**Time:1754**



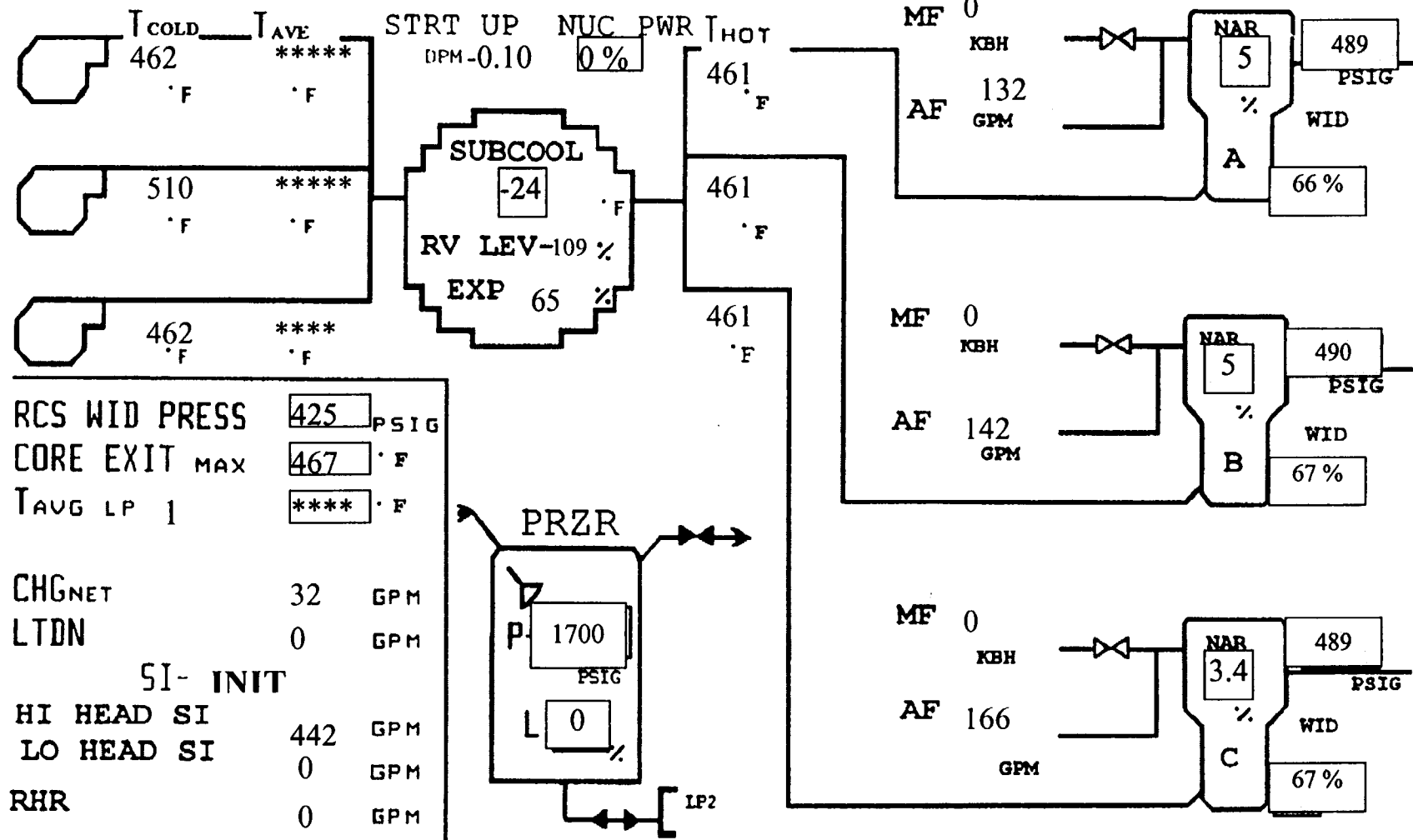
Time:1757



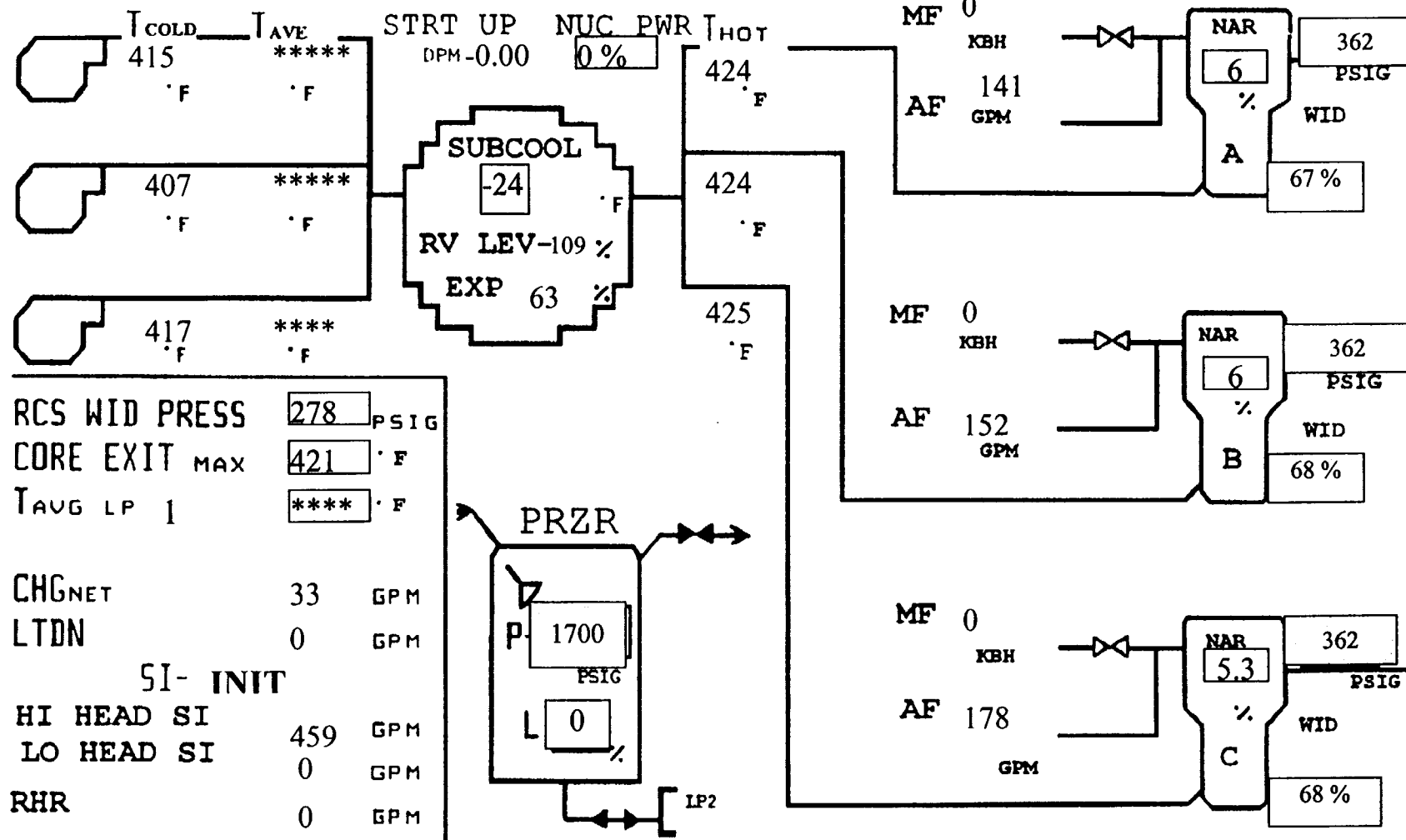
Time:1800



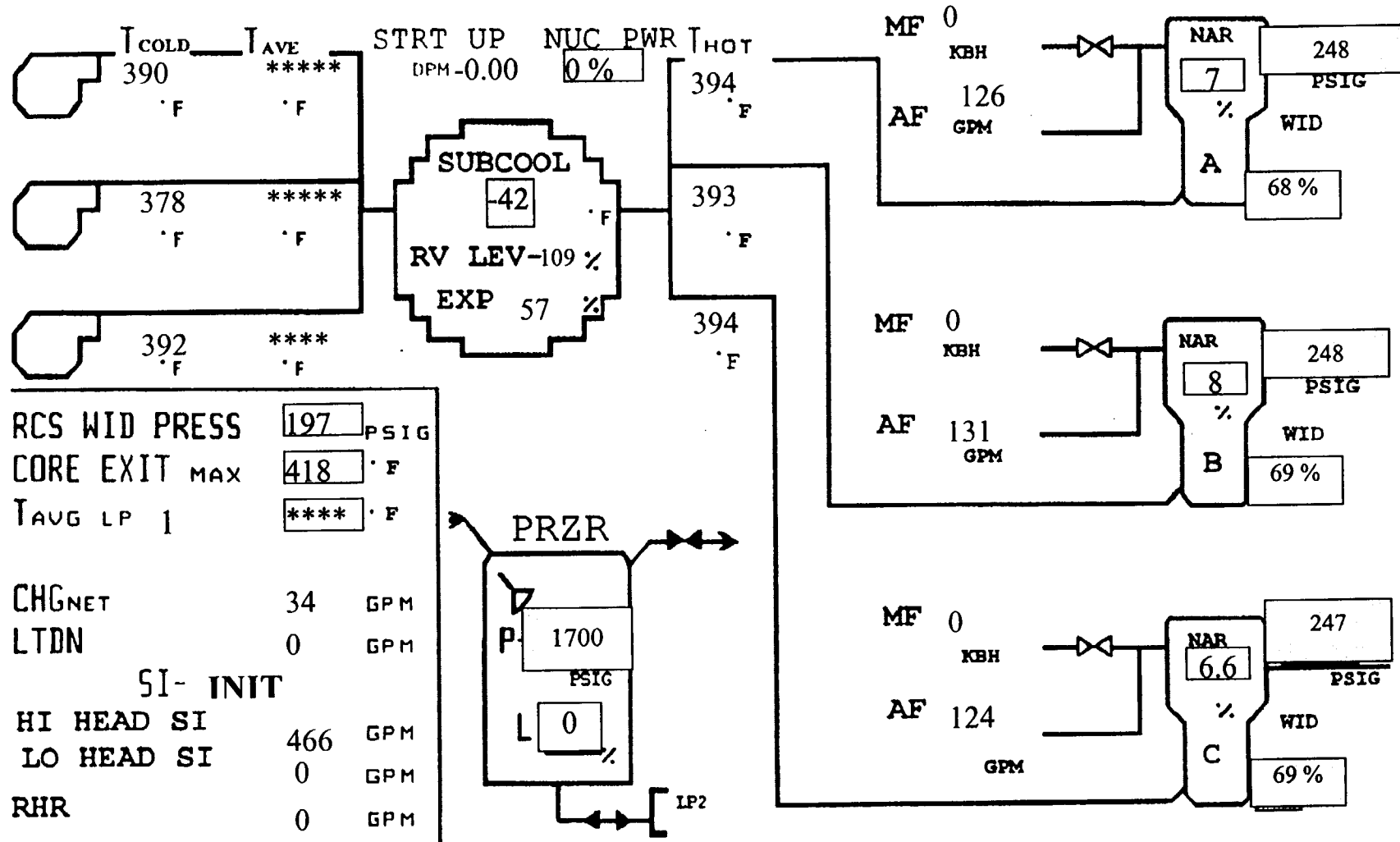
Time:1803



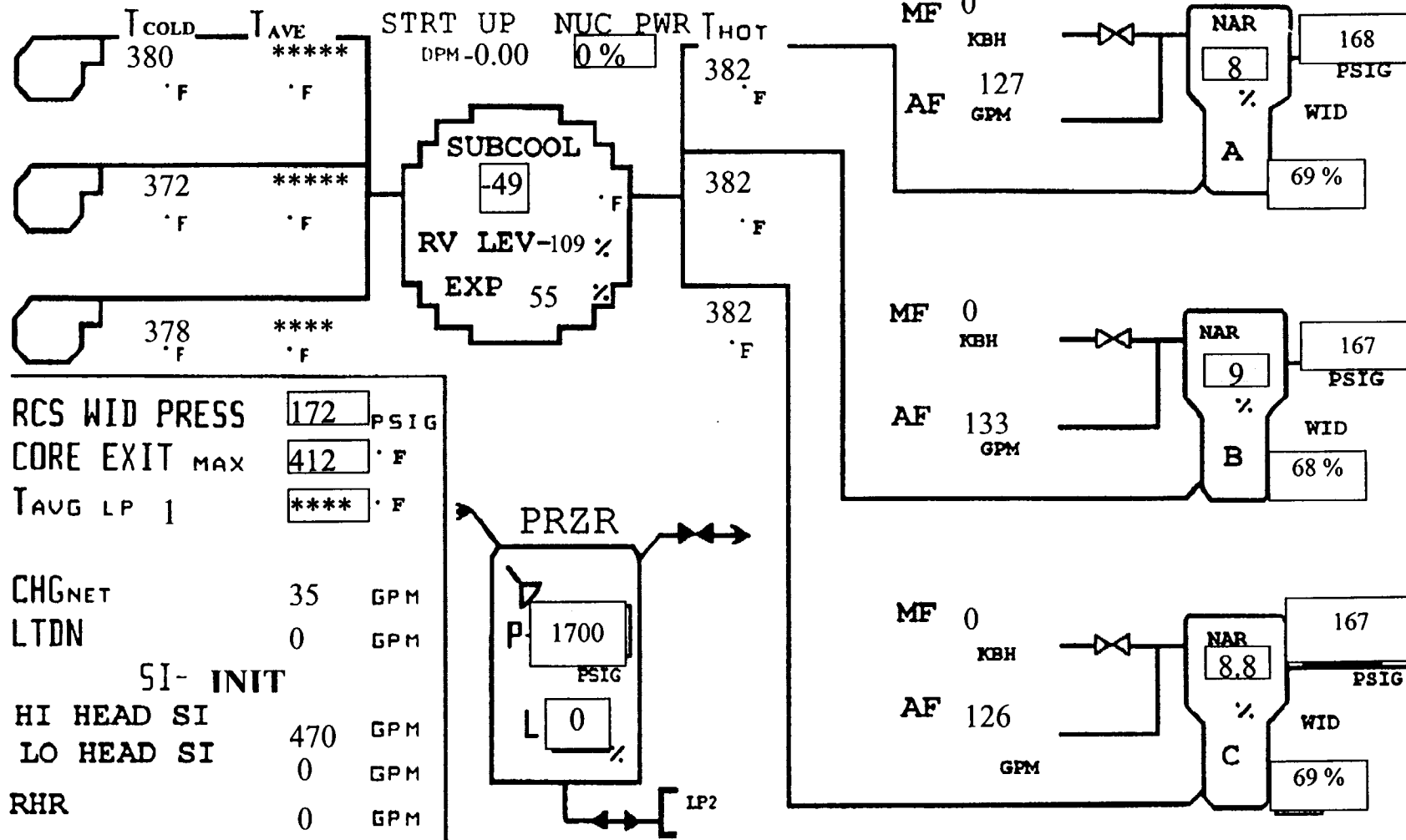
**Time:1806**



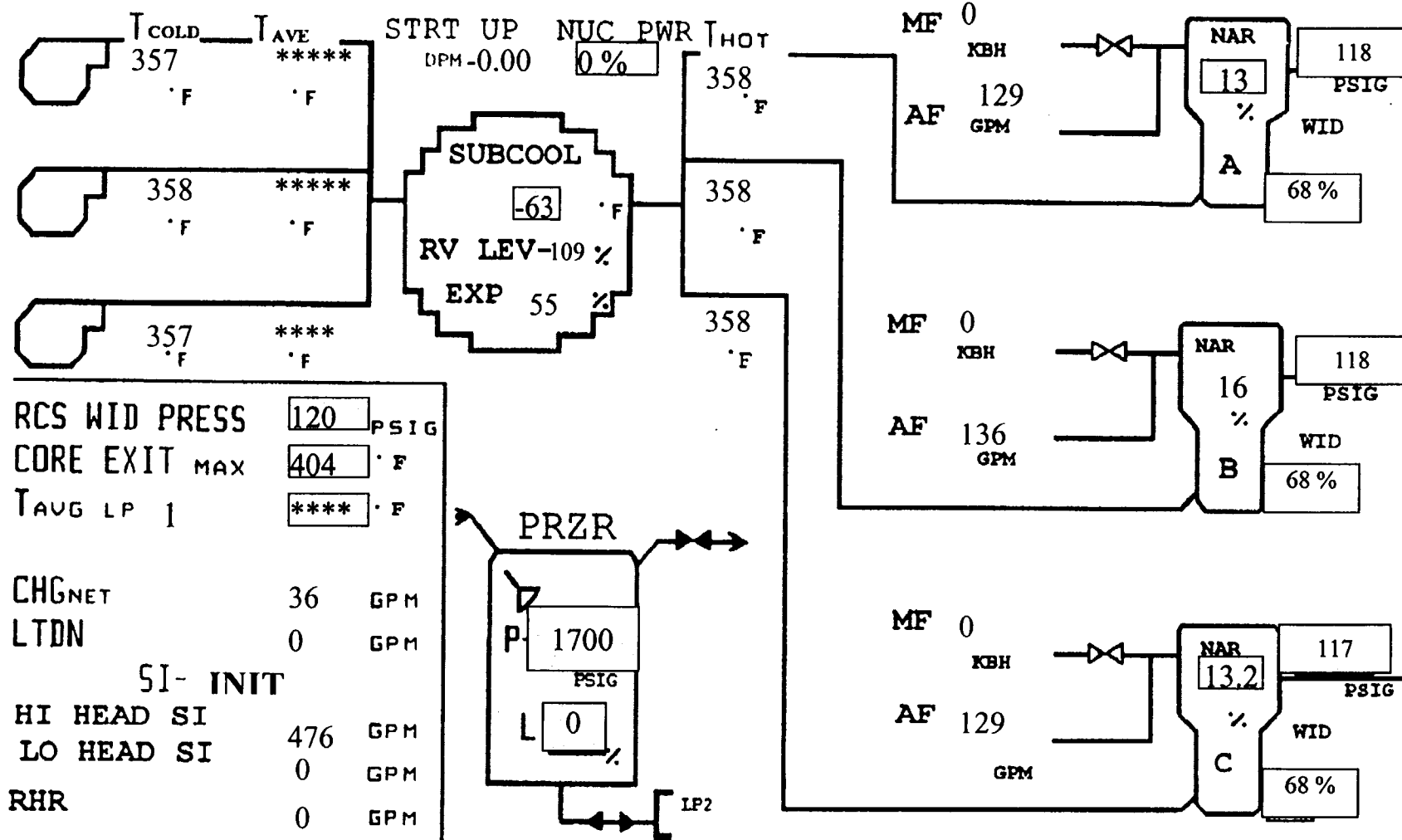
**Time:1809**



Time:1812

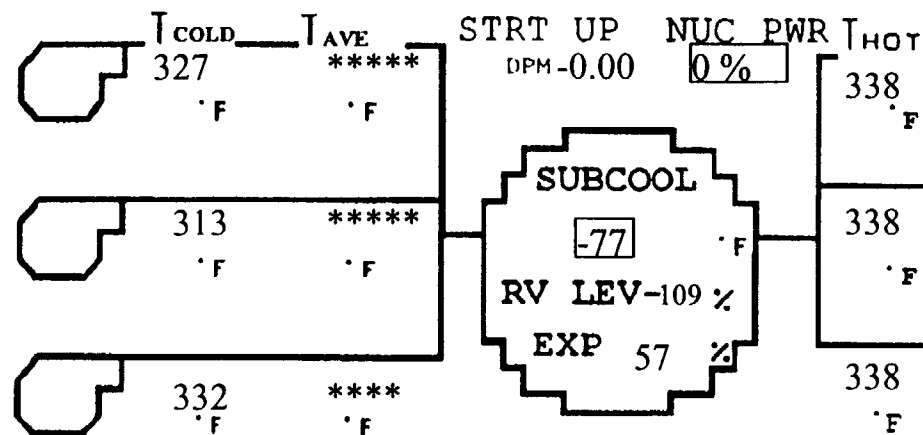


Time:1815



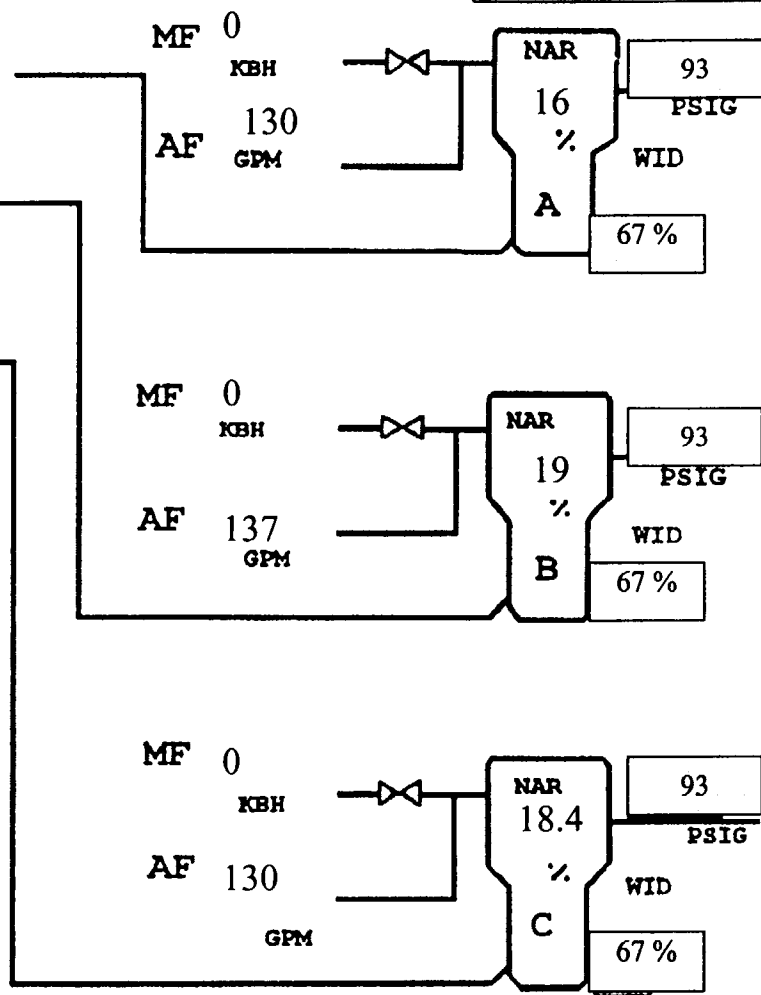
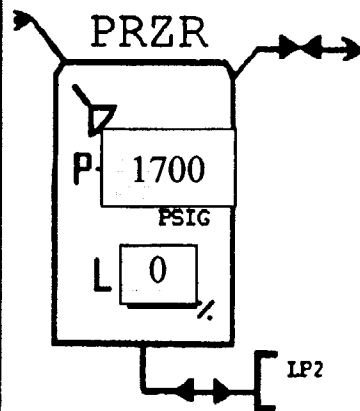


Time:1818

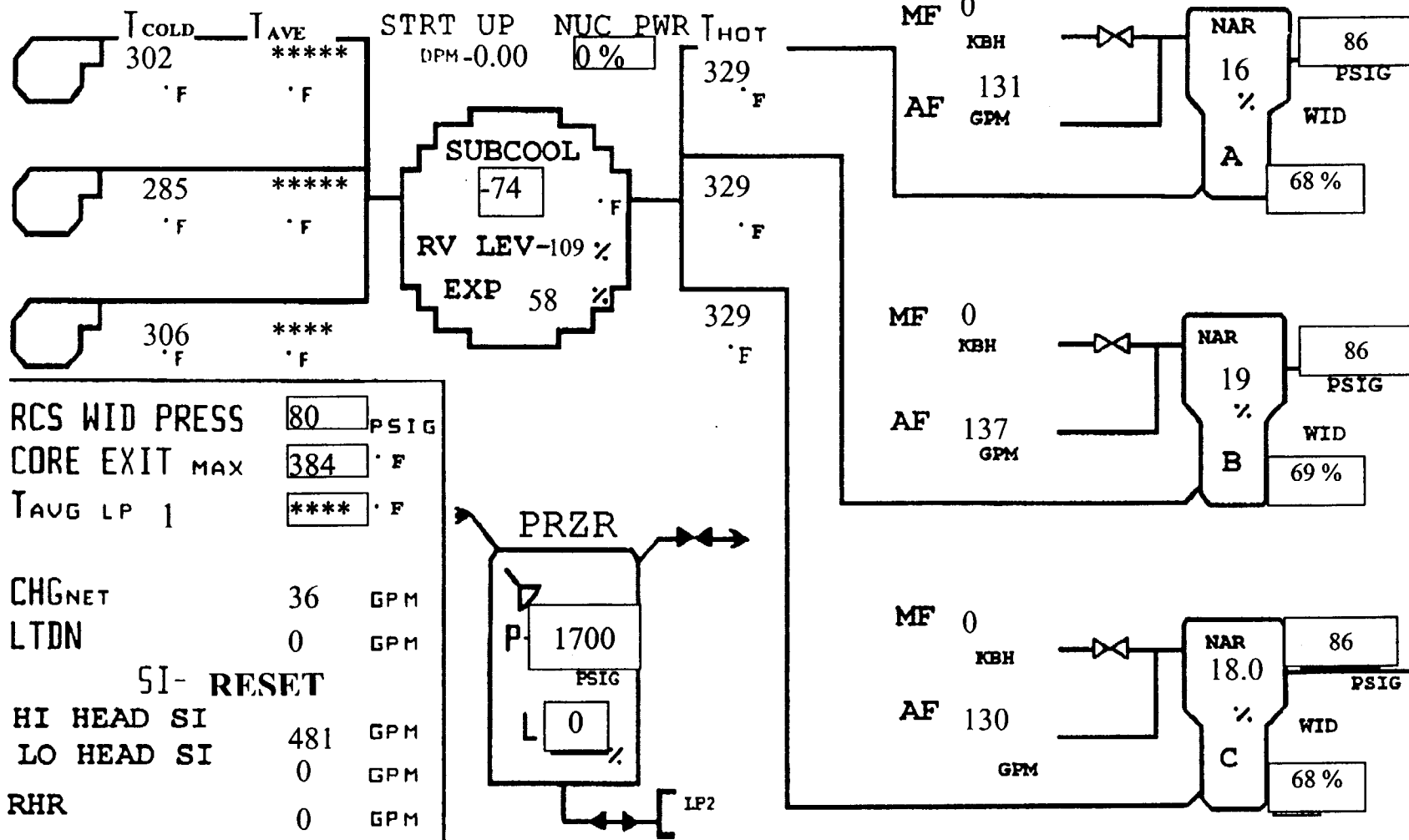


RCS WID PRESS 80 PSIG  
 CORE EXIT MAX 397 °F  
 T<sub>AUG LP 1</sub> \*\*\*\*\* °F

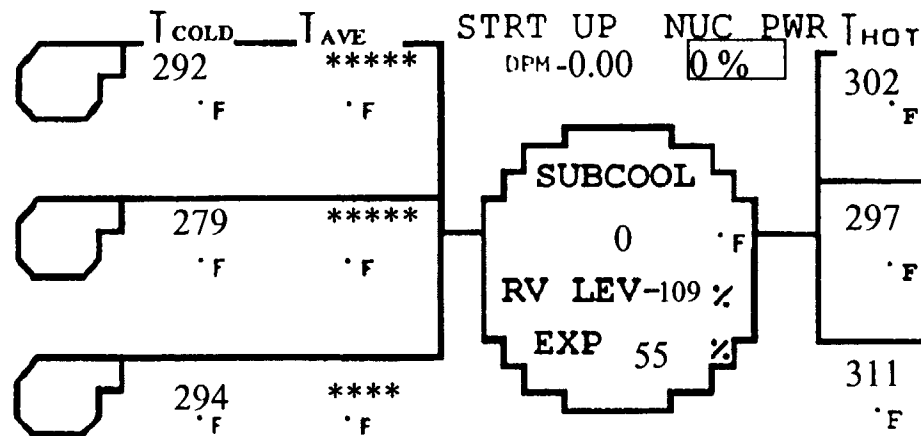
CHG<sub>NET</sub> 35 GPM  
 LTDN 0 GPM  
 SI- RESET  
 HI HEAD SI 480 GPM  
 LO HEAD SI 0 GPM  
 RHR 0 GPM



**Time:1821**

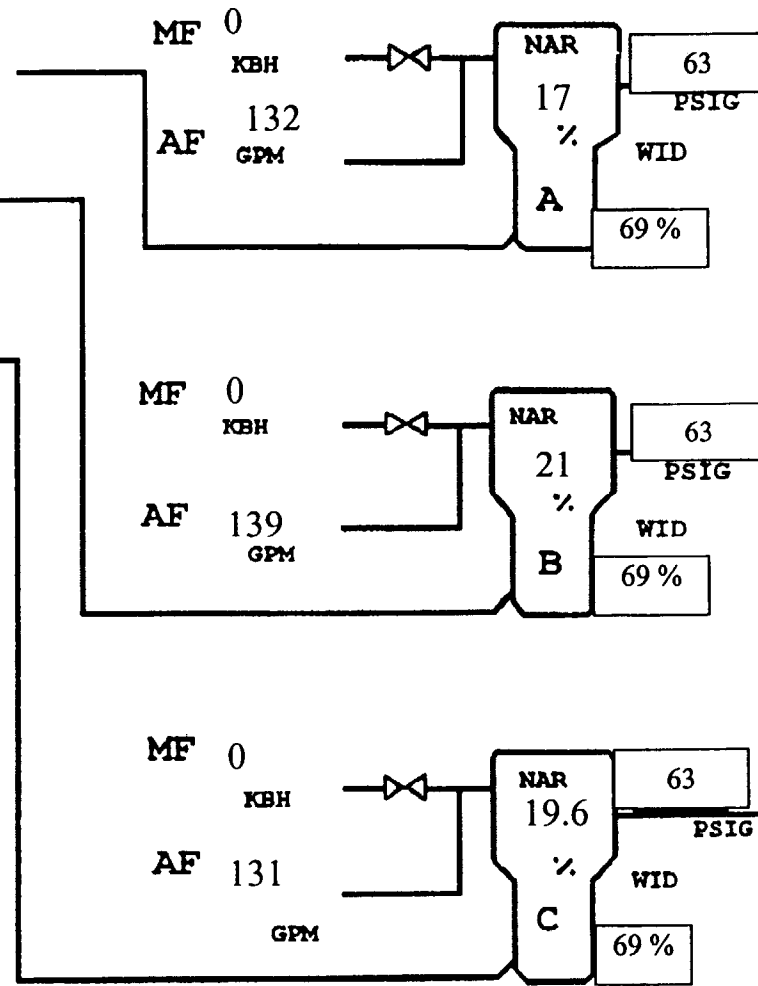
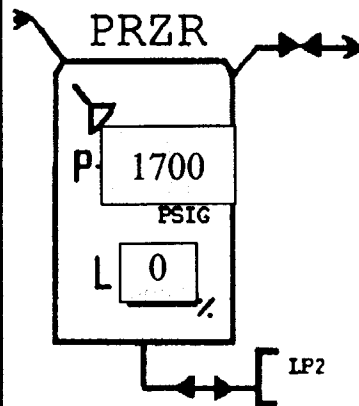


Time:1824

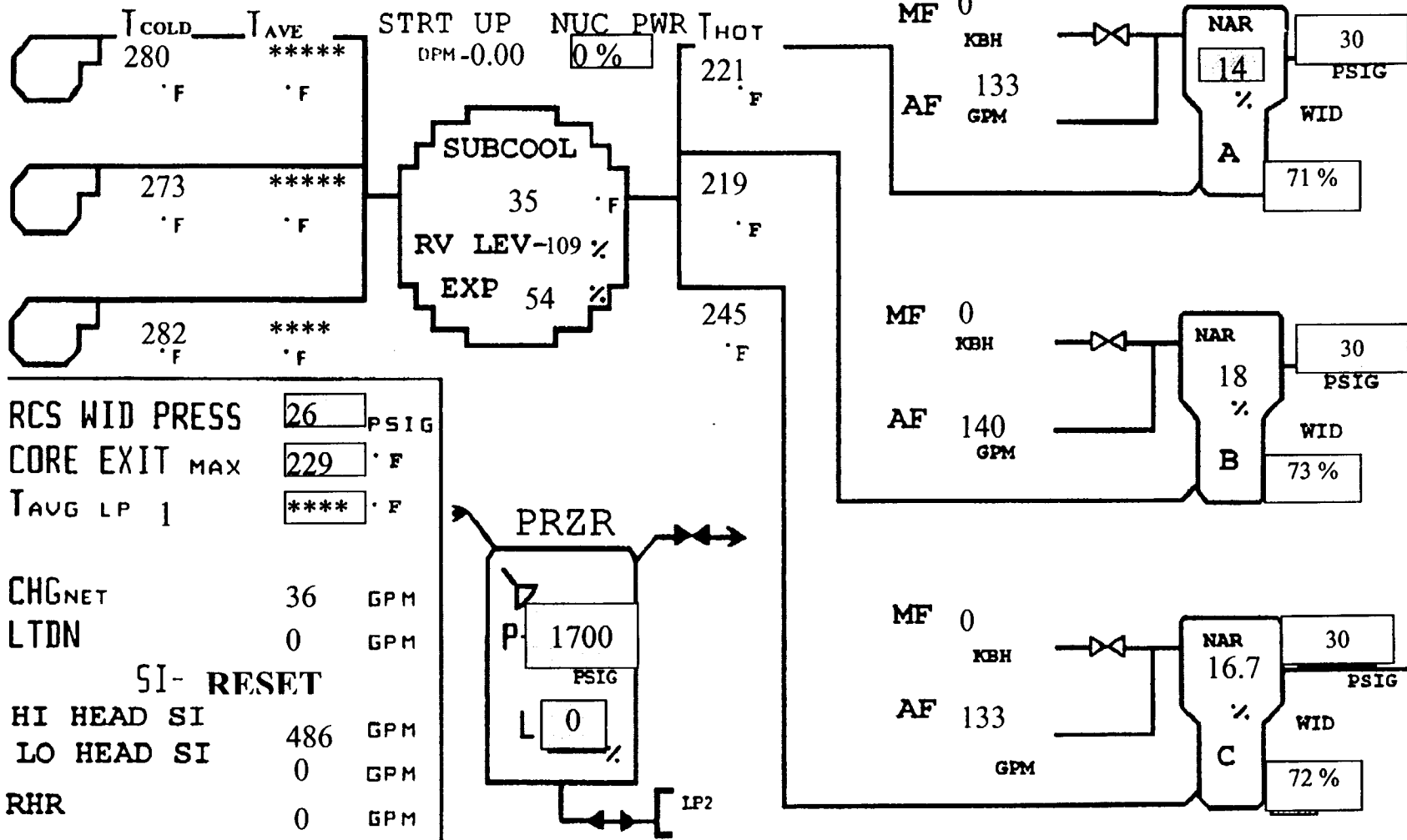


RCS WID PRESS 58 PSIG  
 CORE EXIT MAX 299 °F  
 T<sub>AUG LP 1</sub> \*\*\*\*\* °F

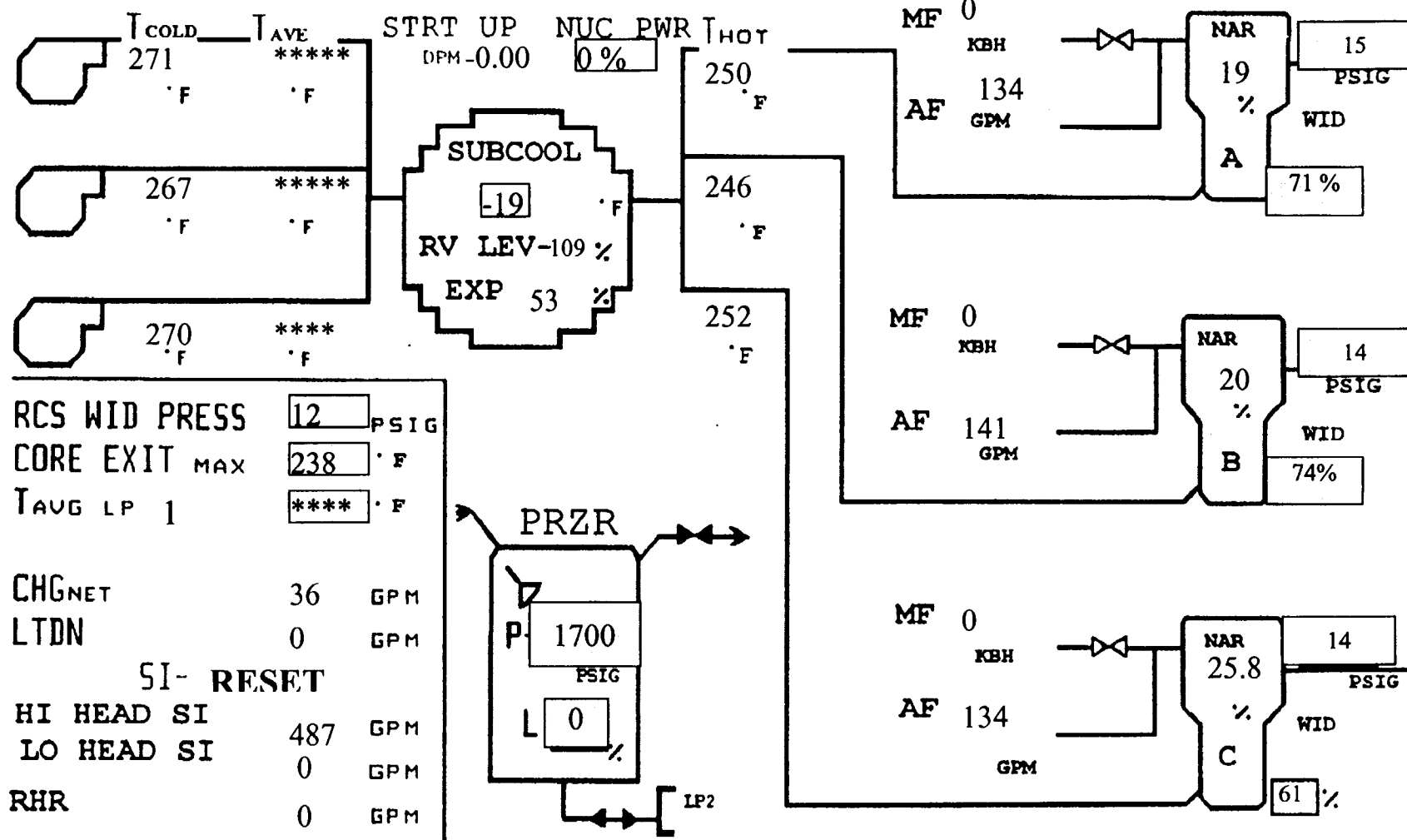
CHG<sub>NET</sub> 36 GPM  
 LTDN 0 GPM  
 SI- RESET  
 HI HEAD SI 483 GPM  
 LO HEAD SI 0 GPM  
 RHR 0 GPM



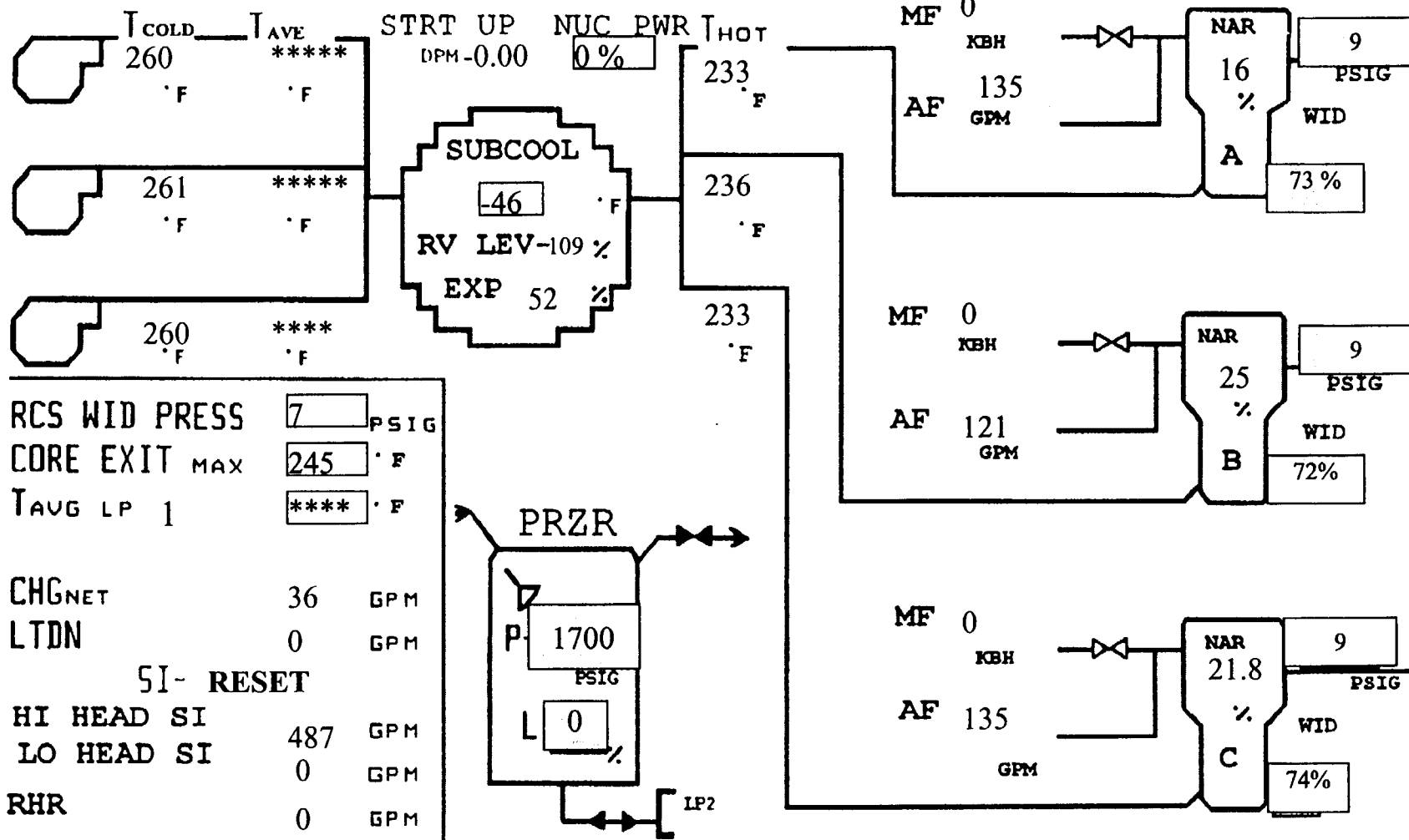
Time:1827



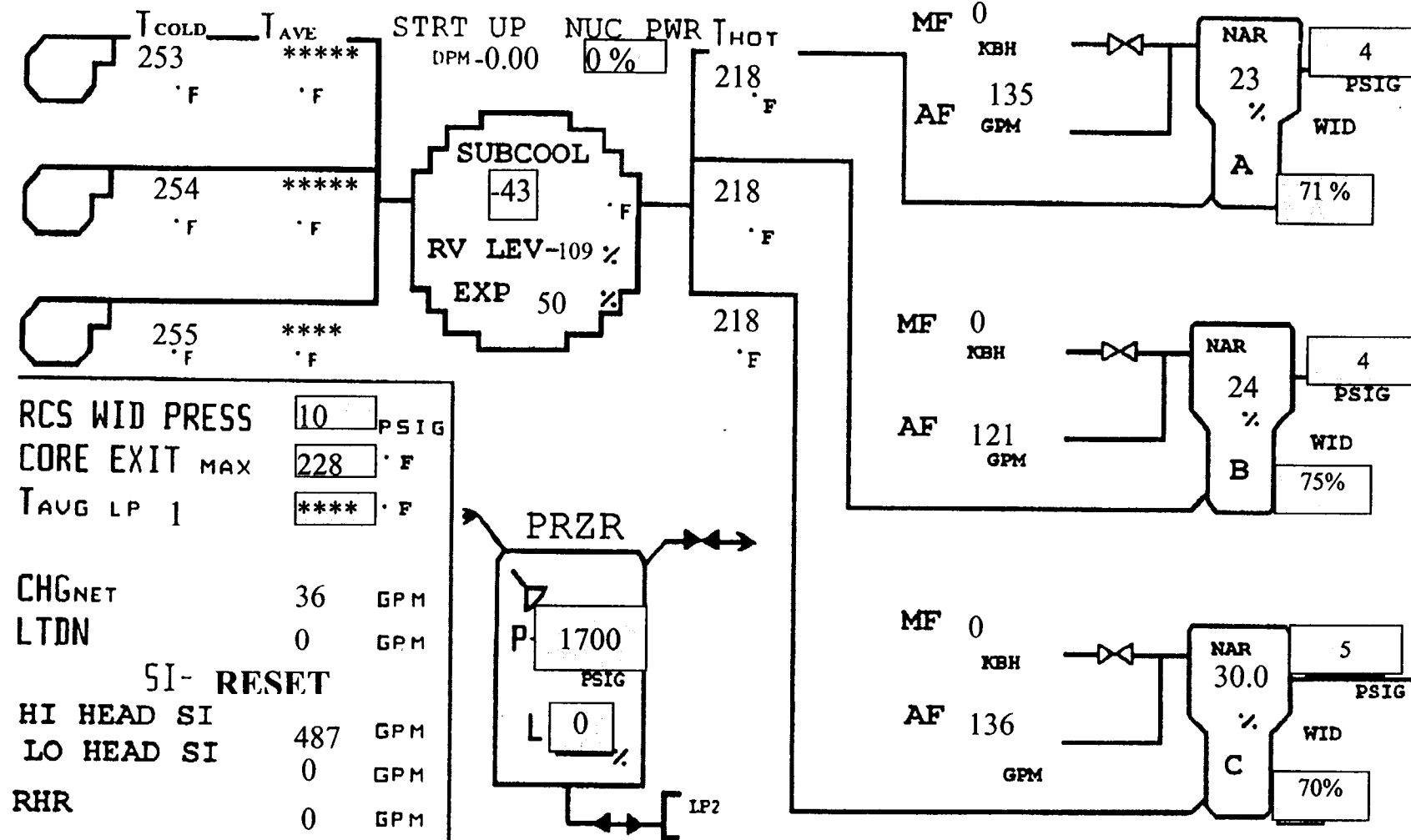
Time:1830



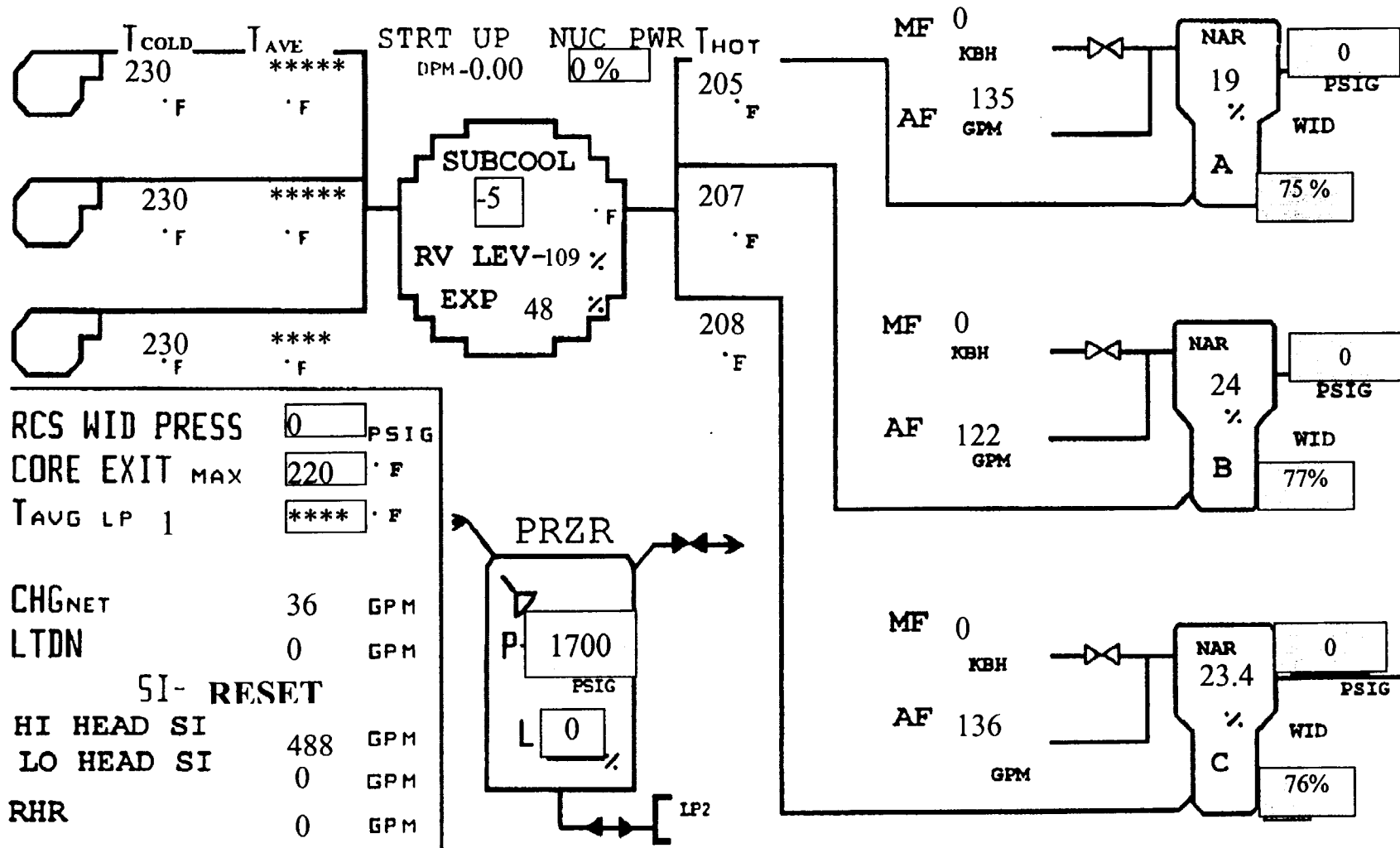
**Time:1833**



Time:1836

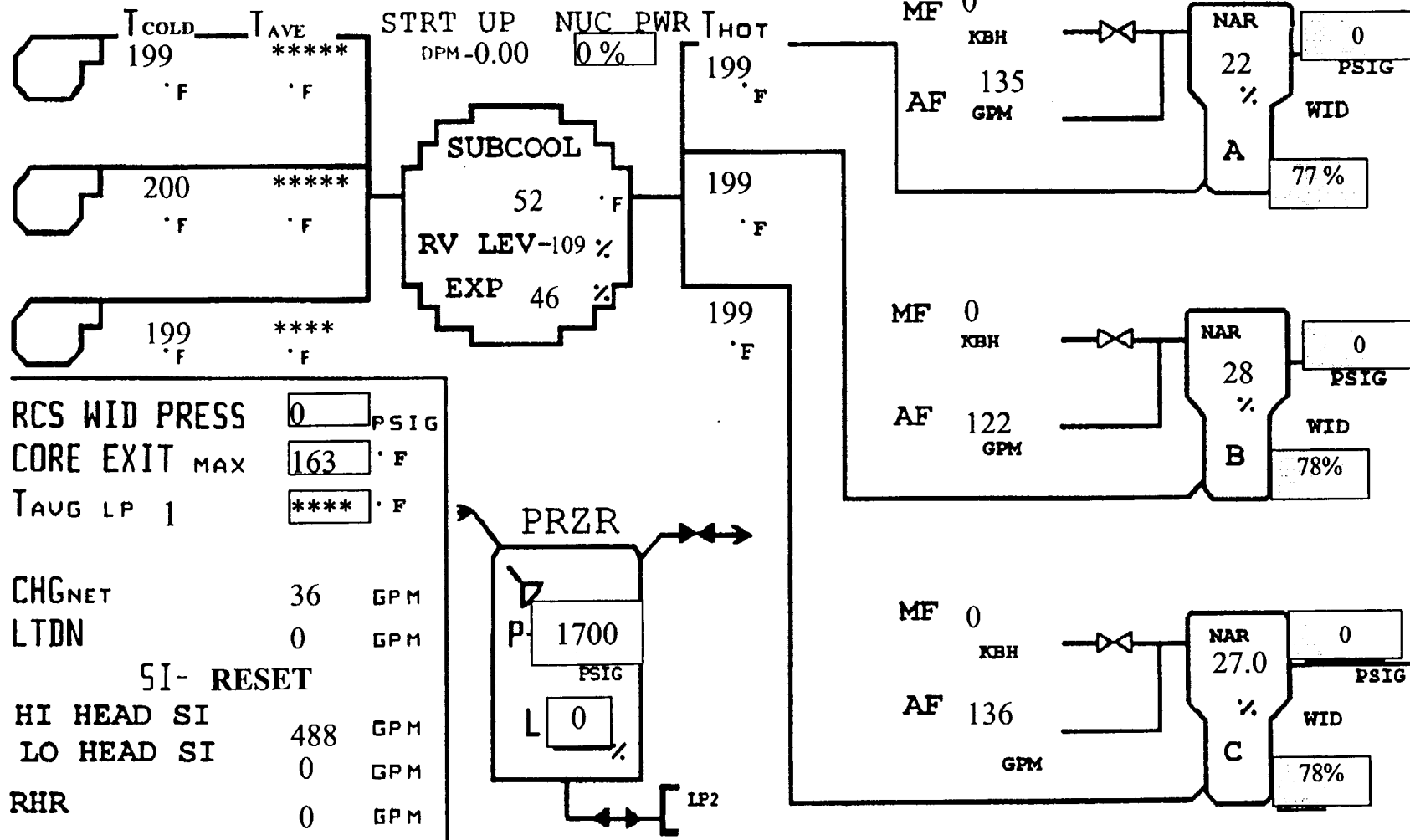


Time:1839

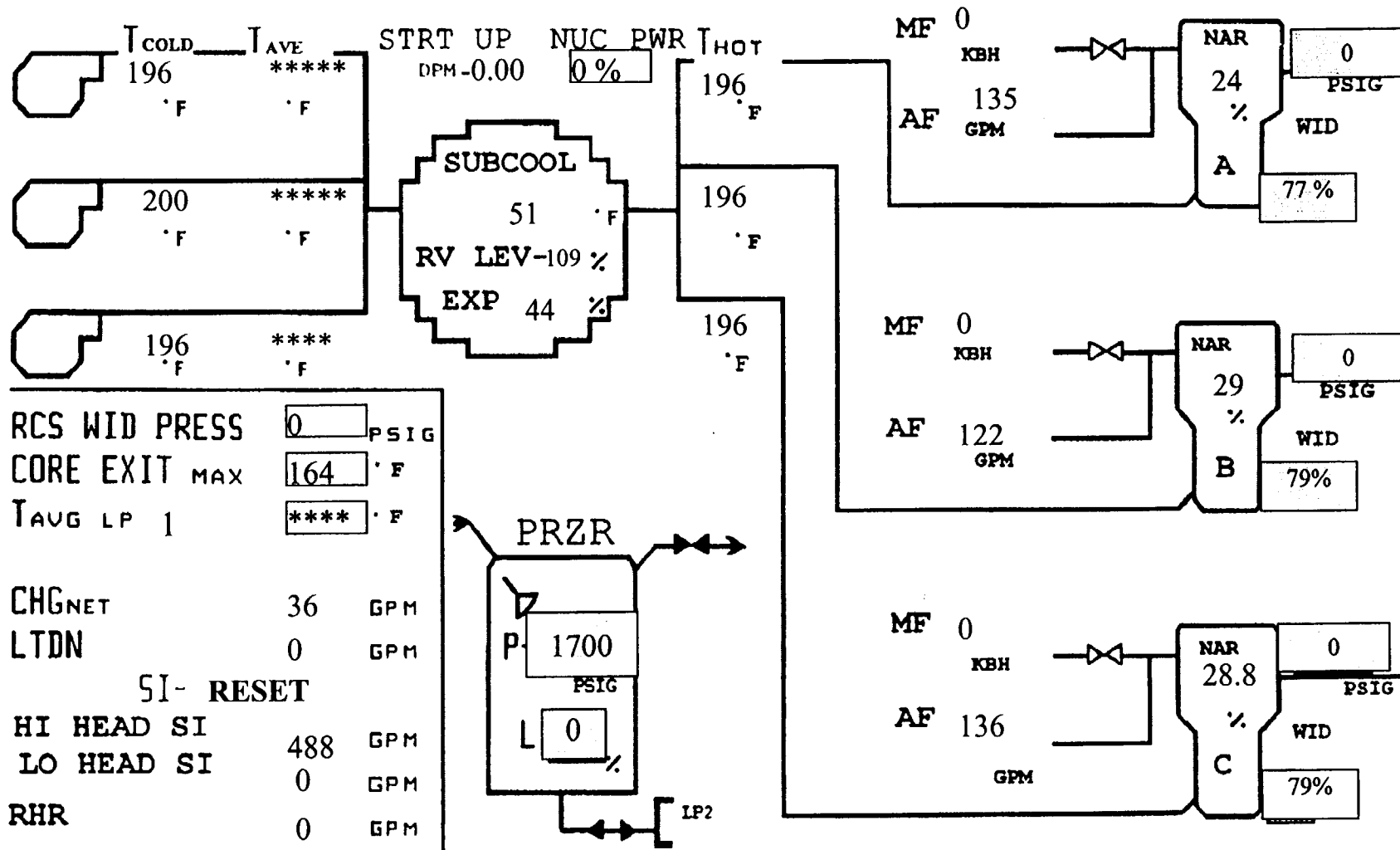




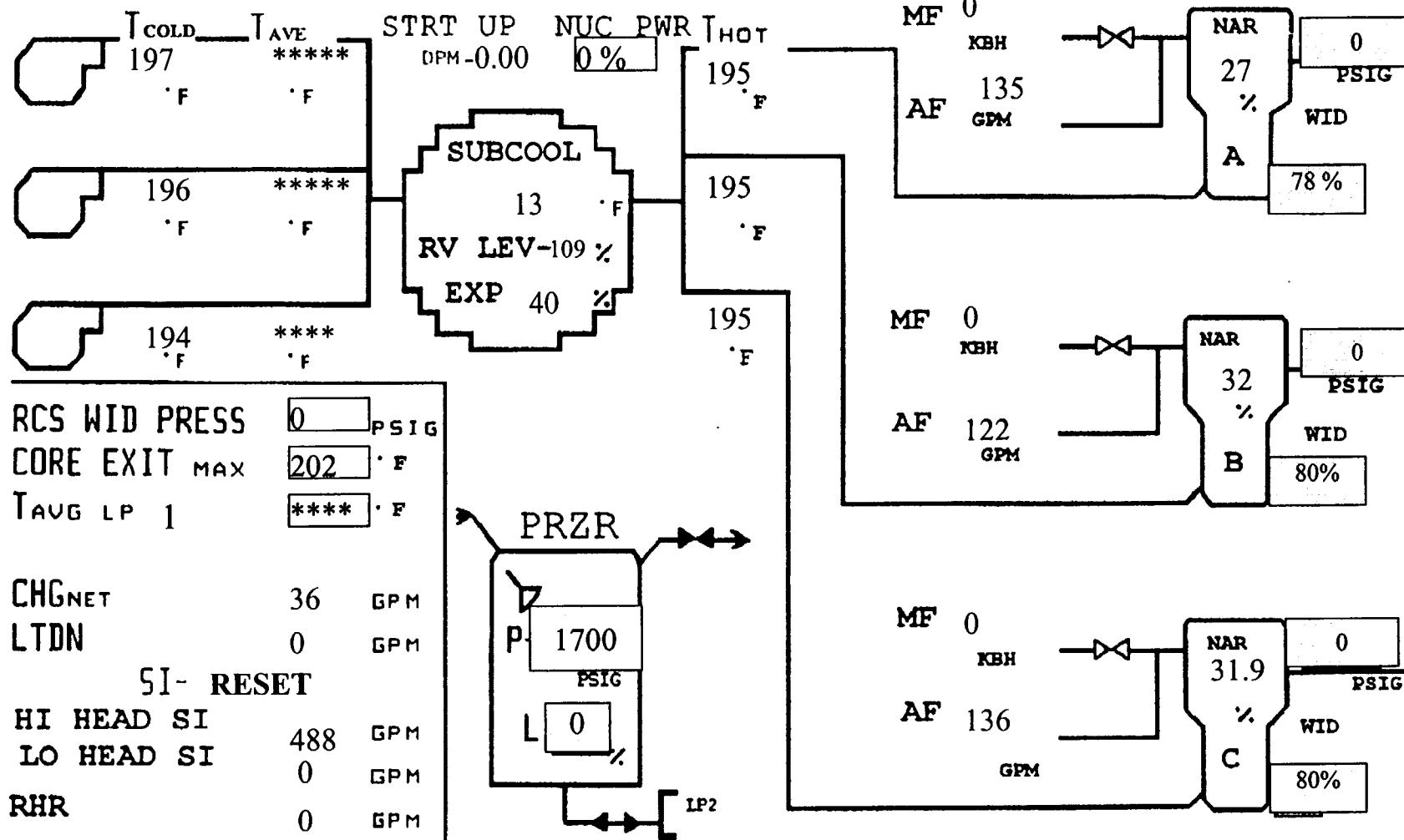
Time:1842



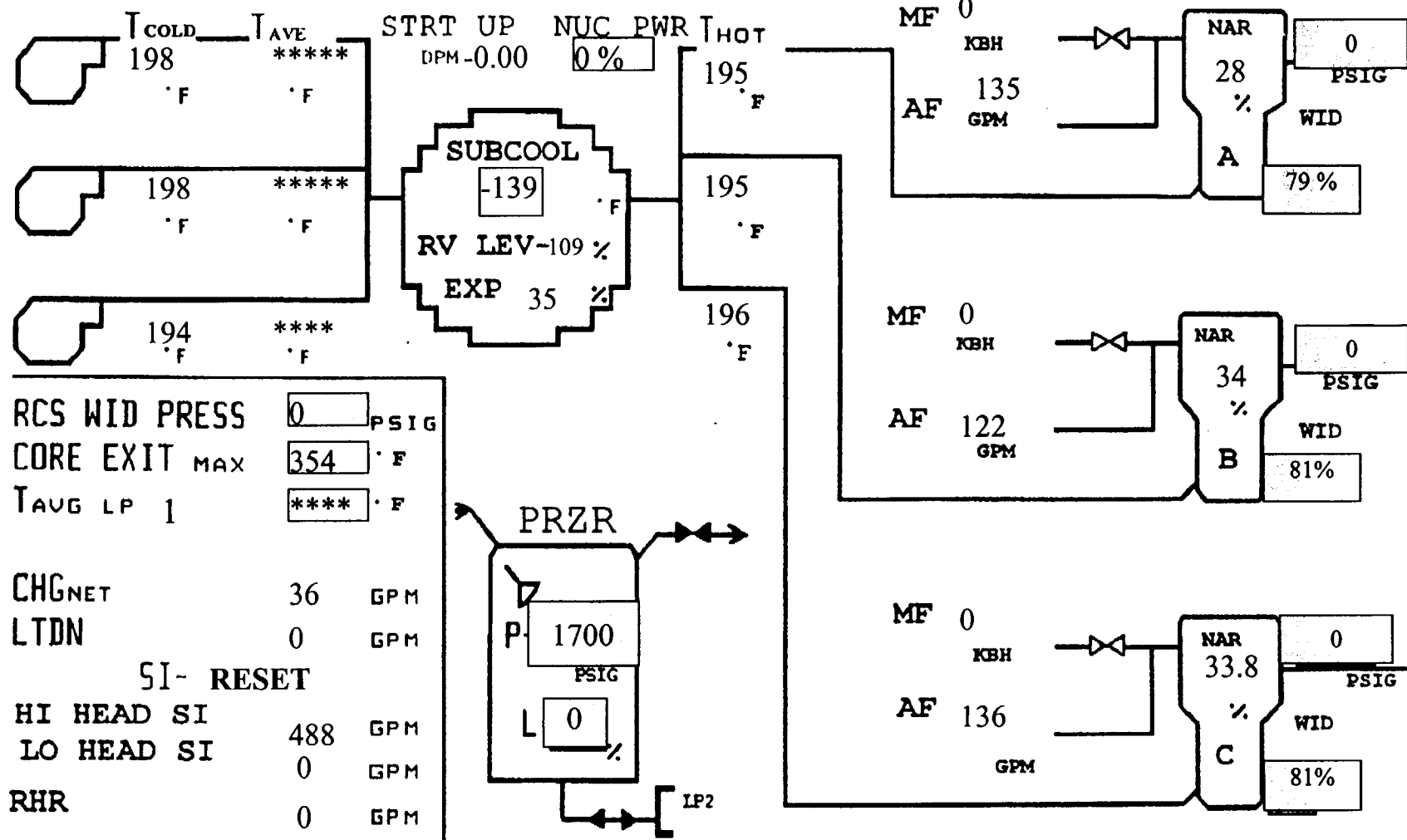
**Time:1845**



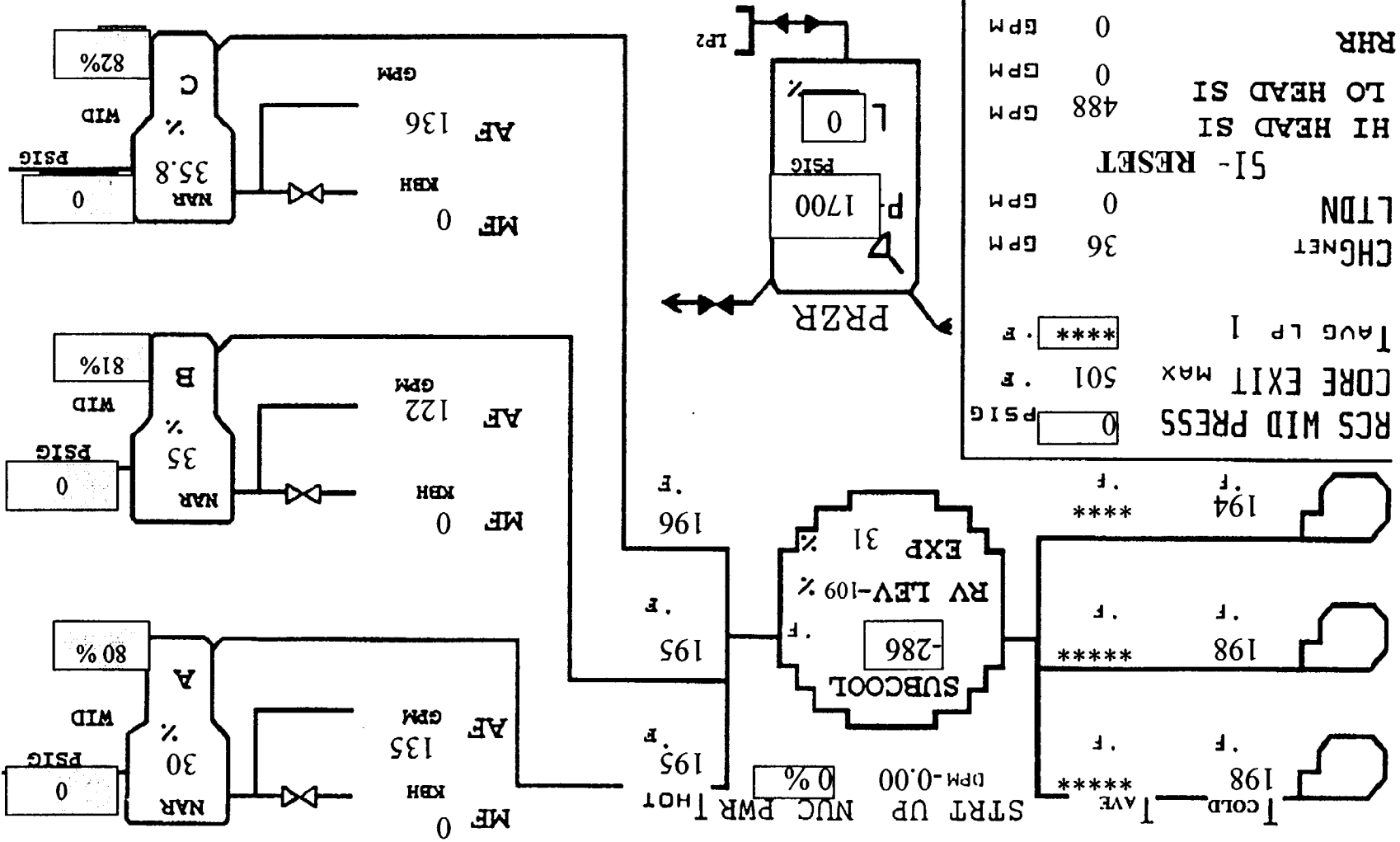
Time:1848



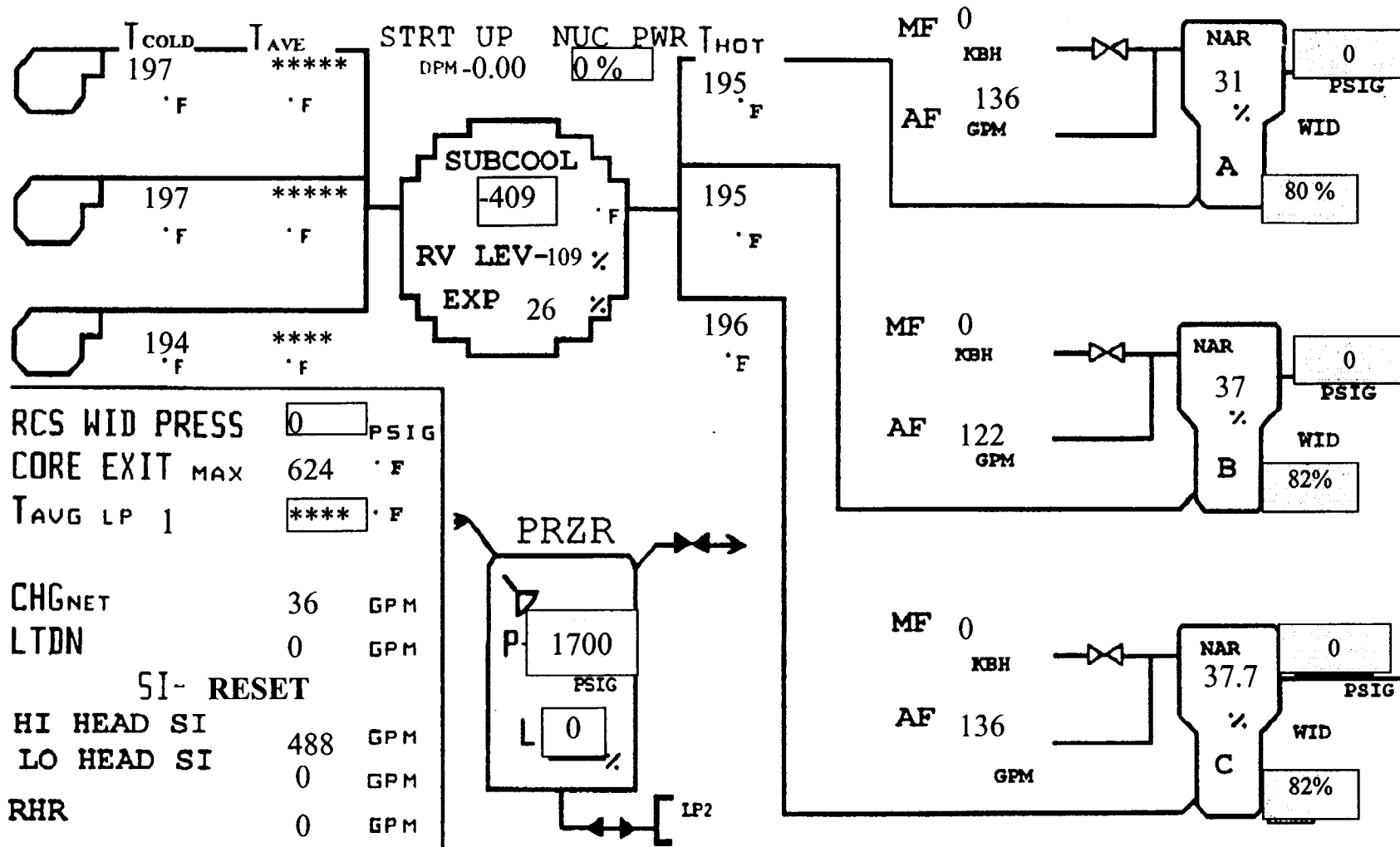
**Time:1851**



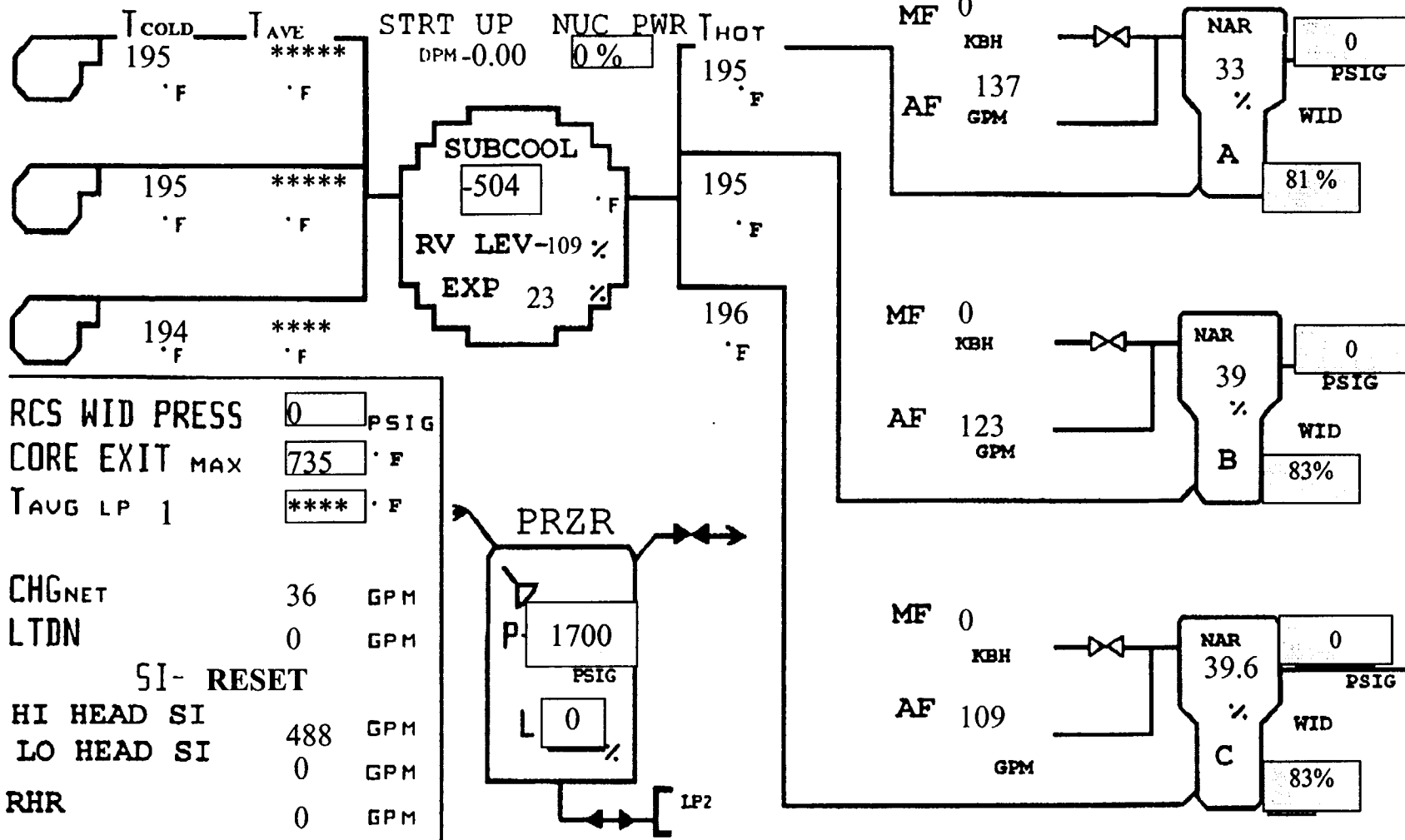
Time:1854



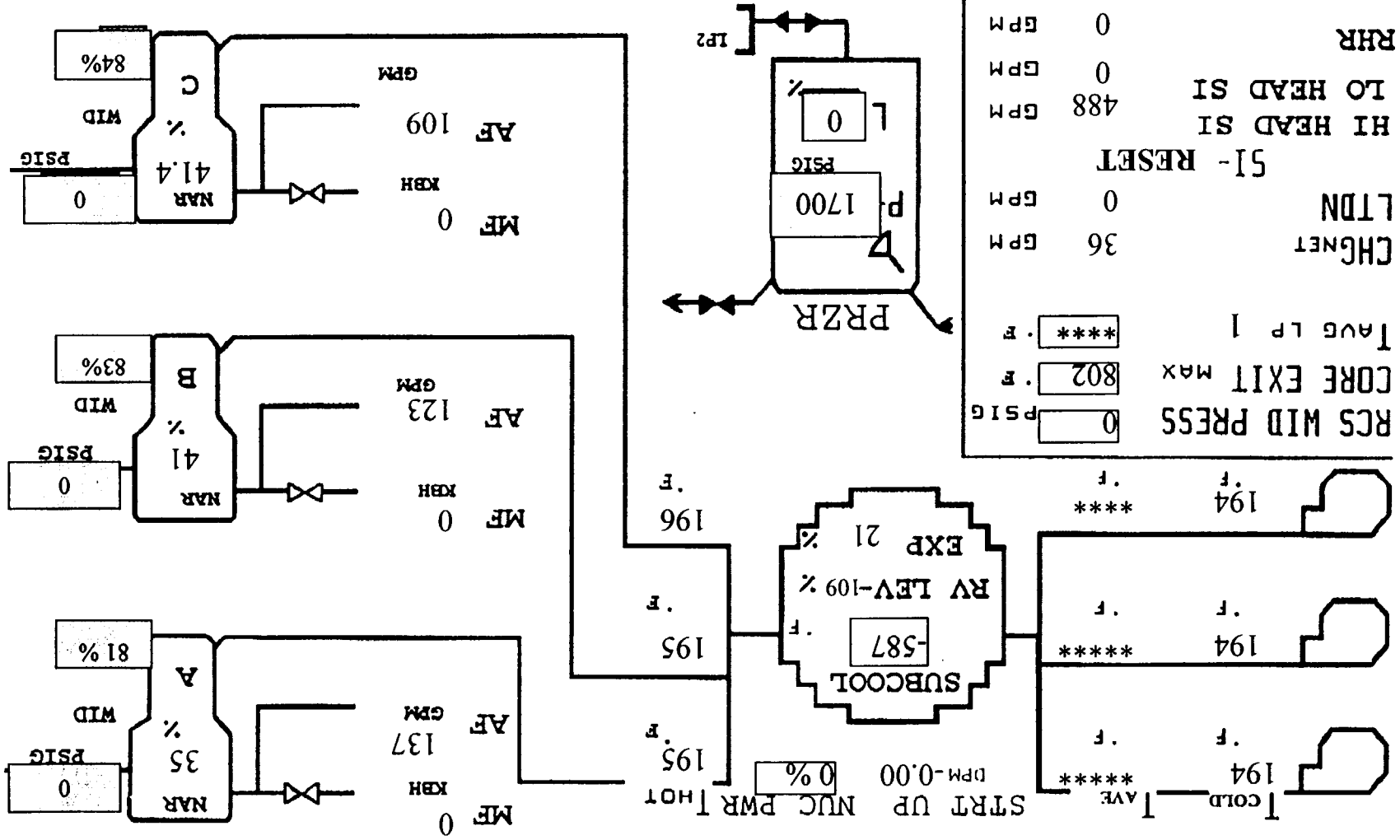
Time:1857



**Time:1900**

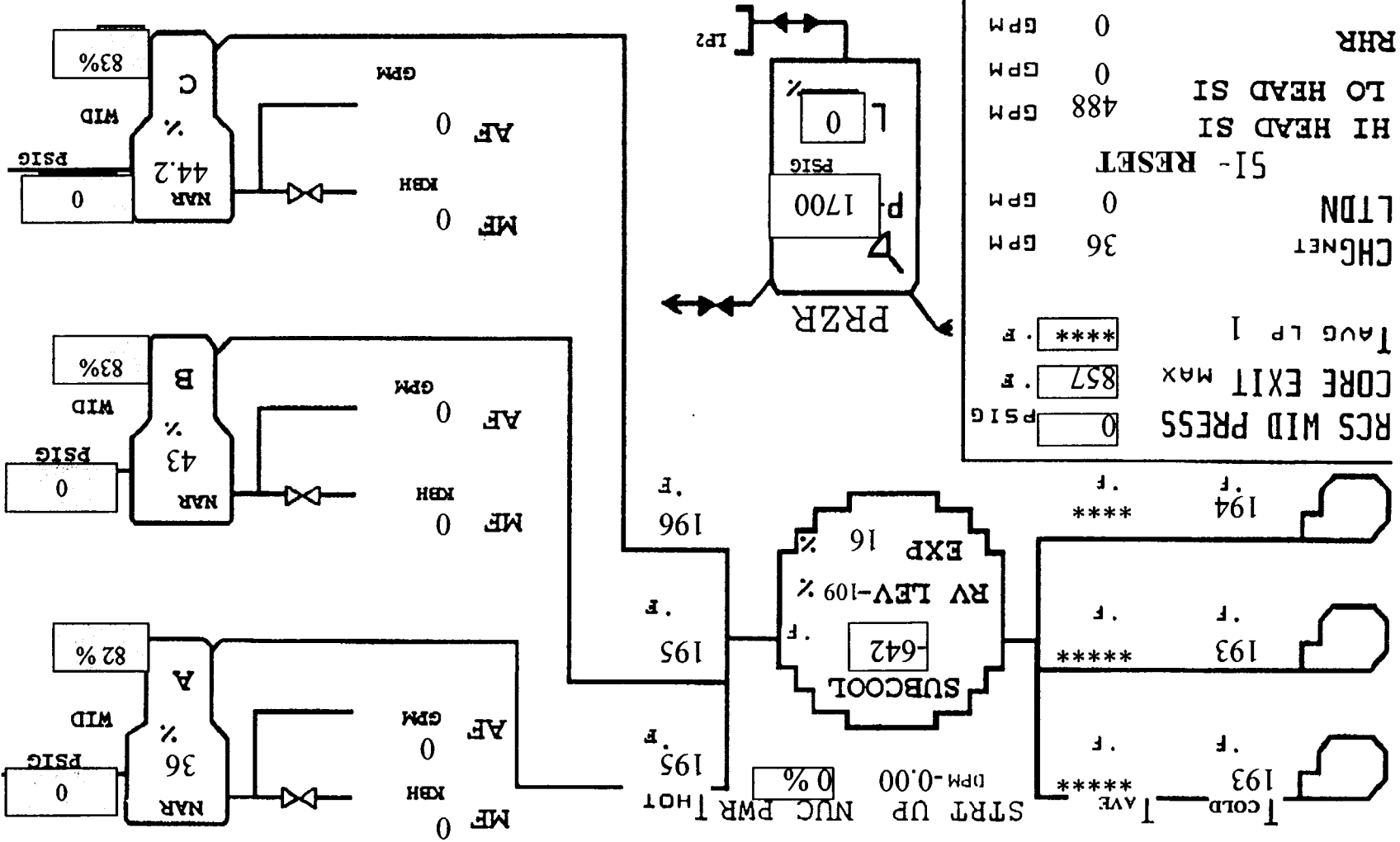


Time:1903

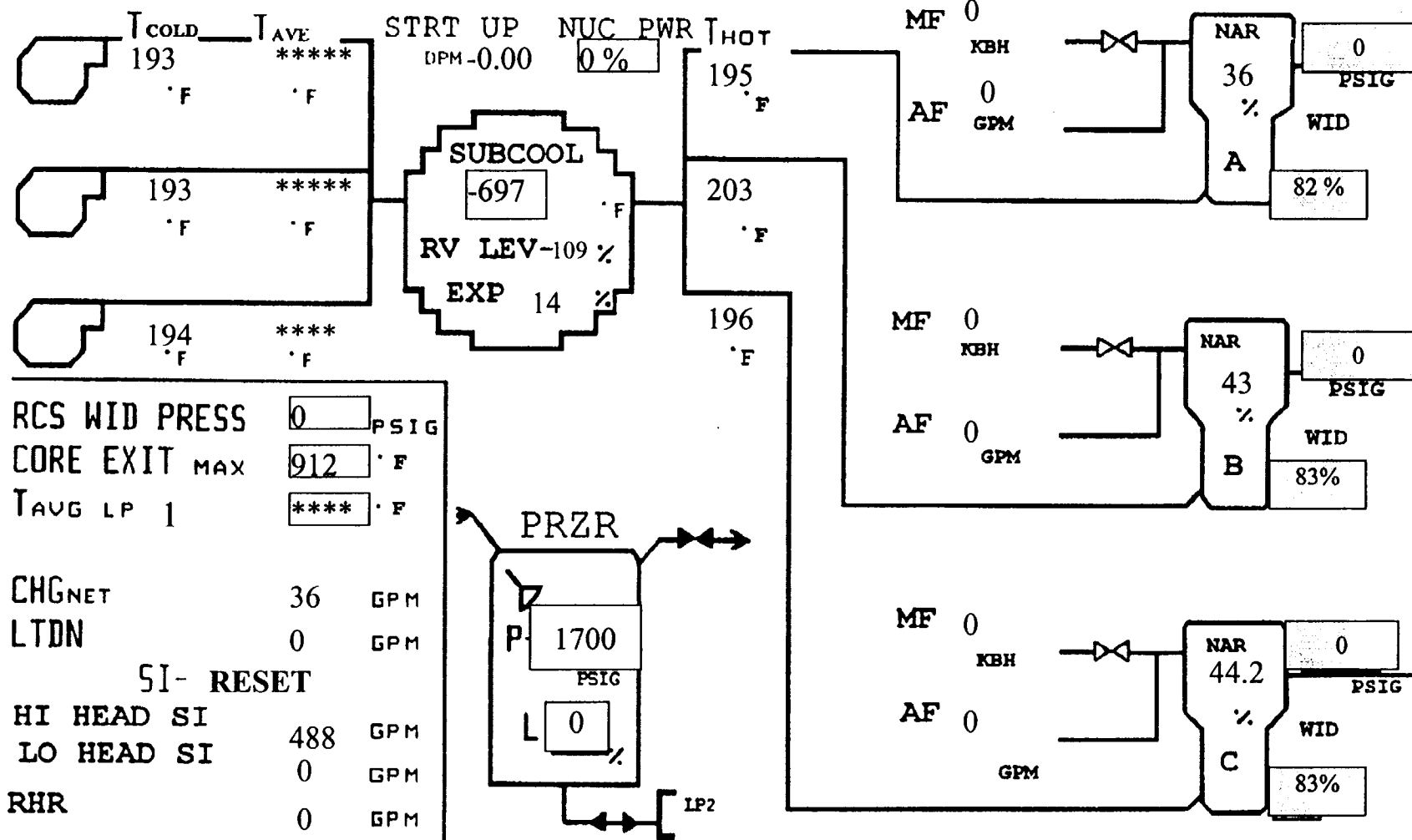




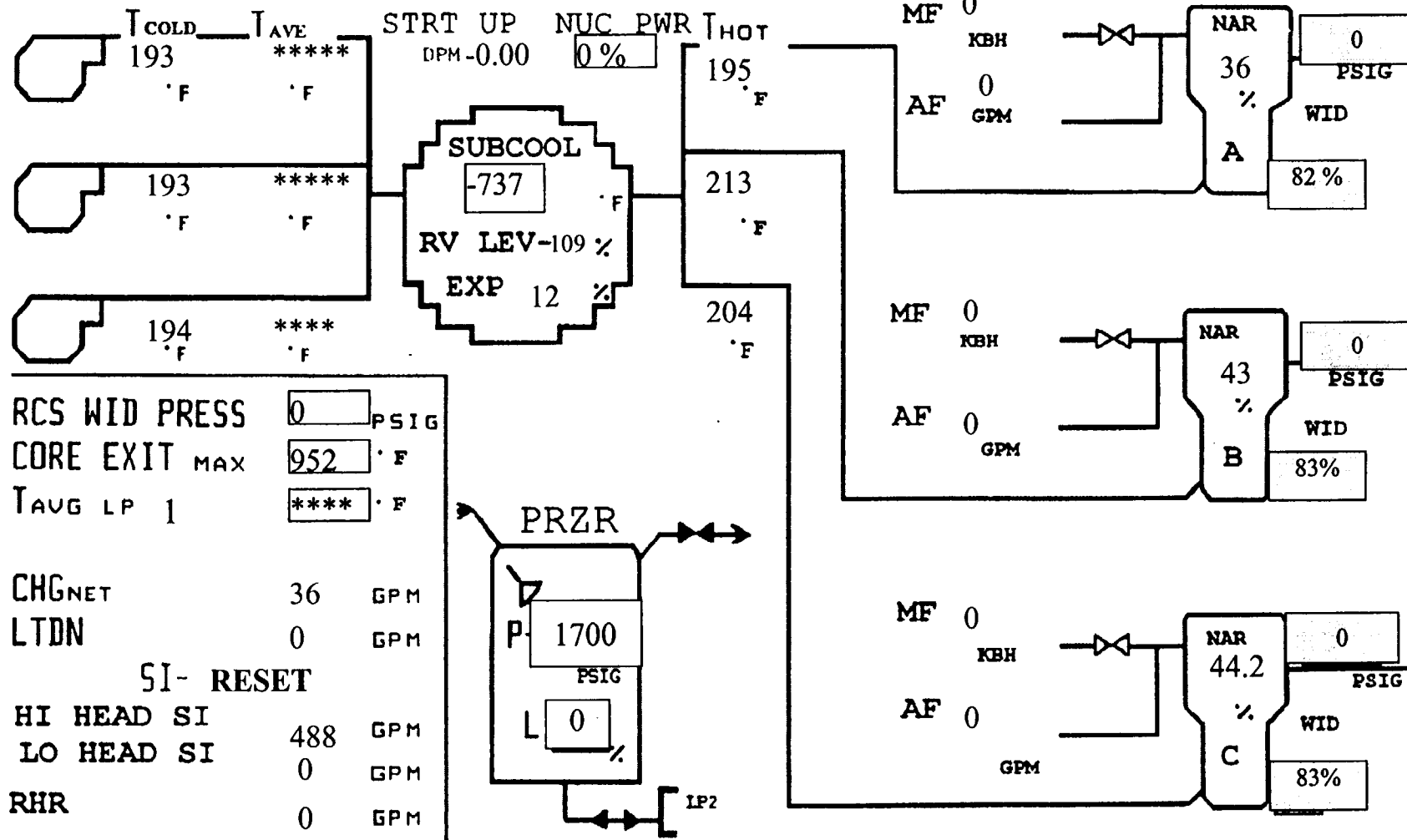
Time:1906



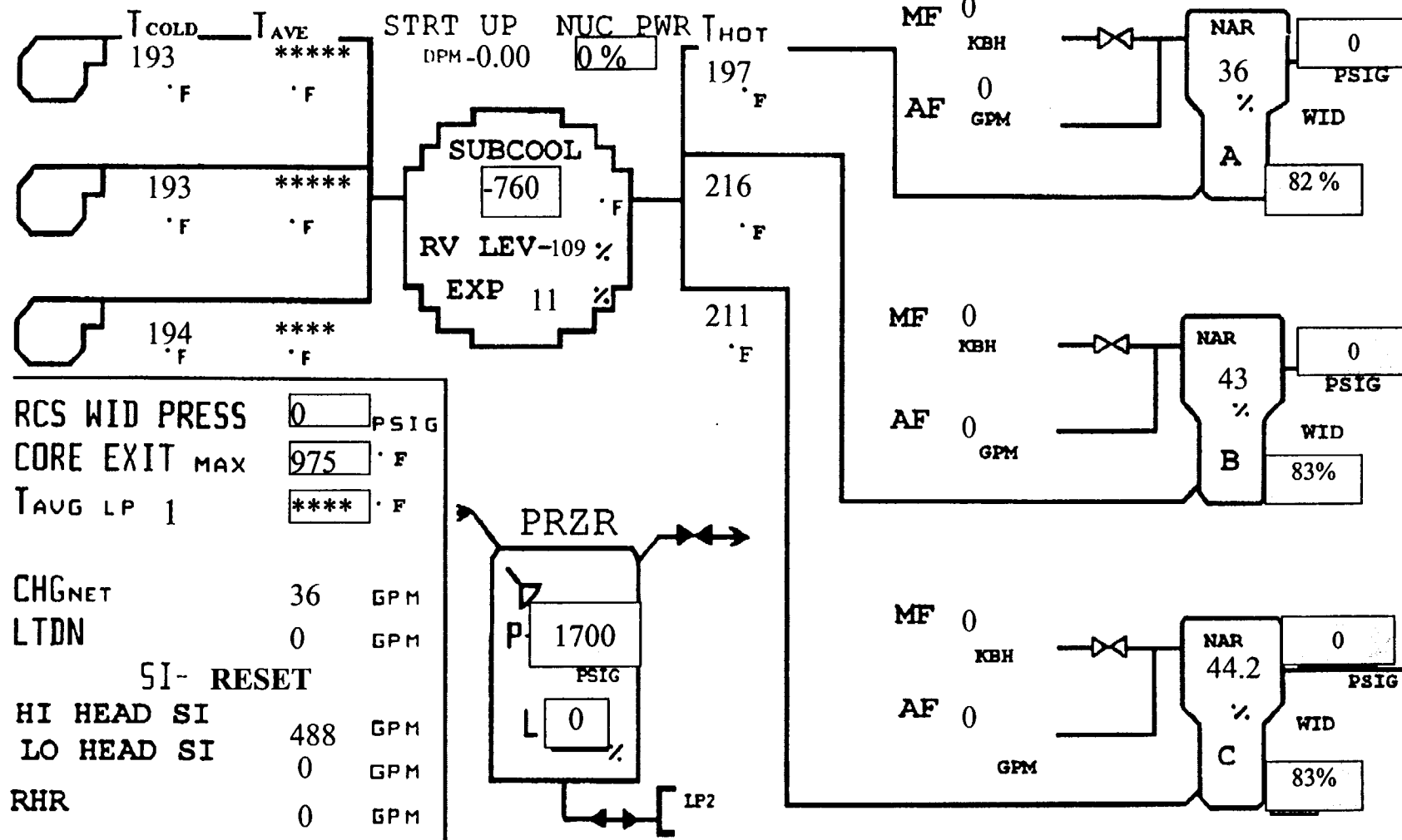
**Time:1909**



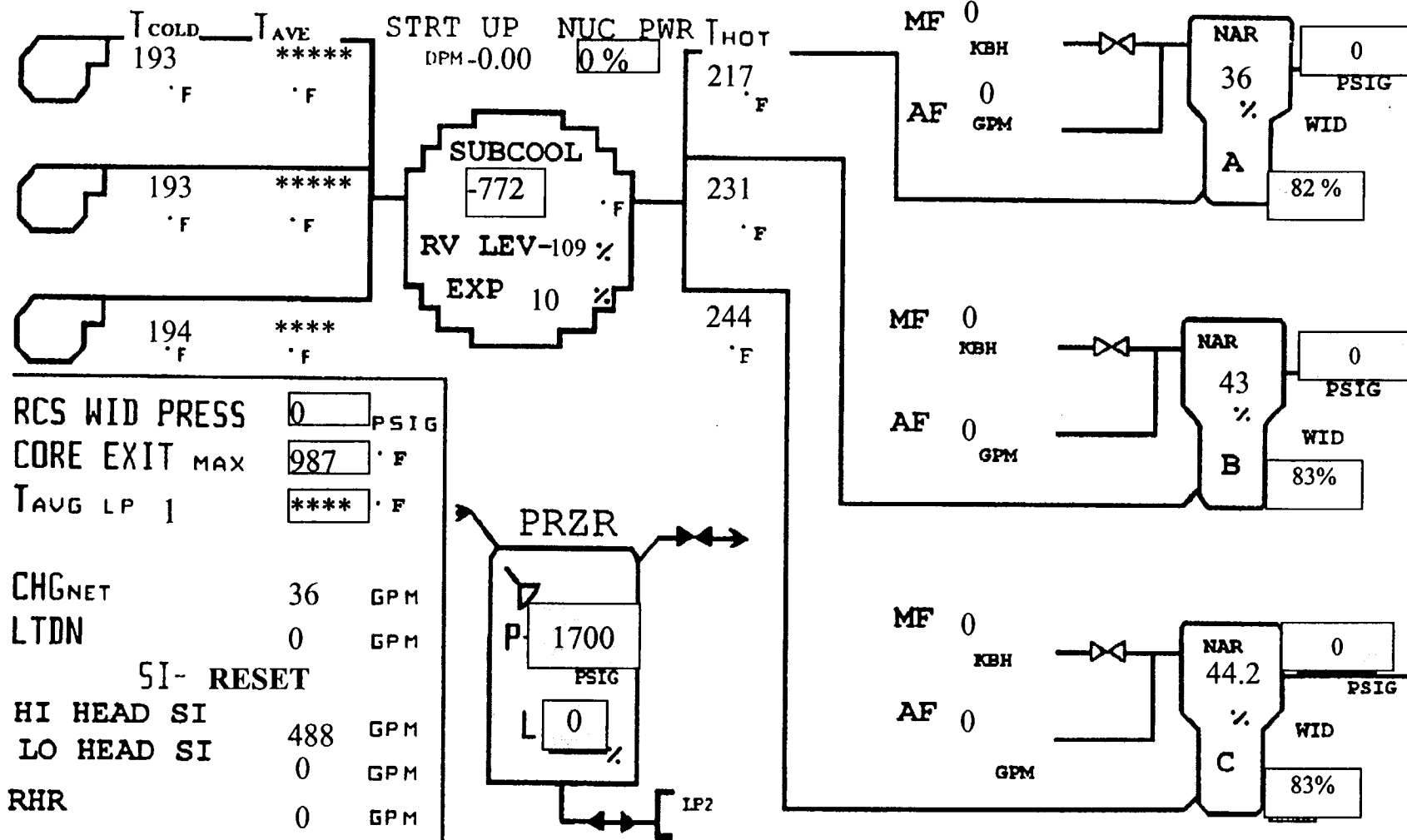
Time:1912



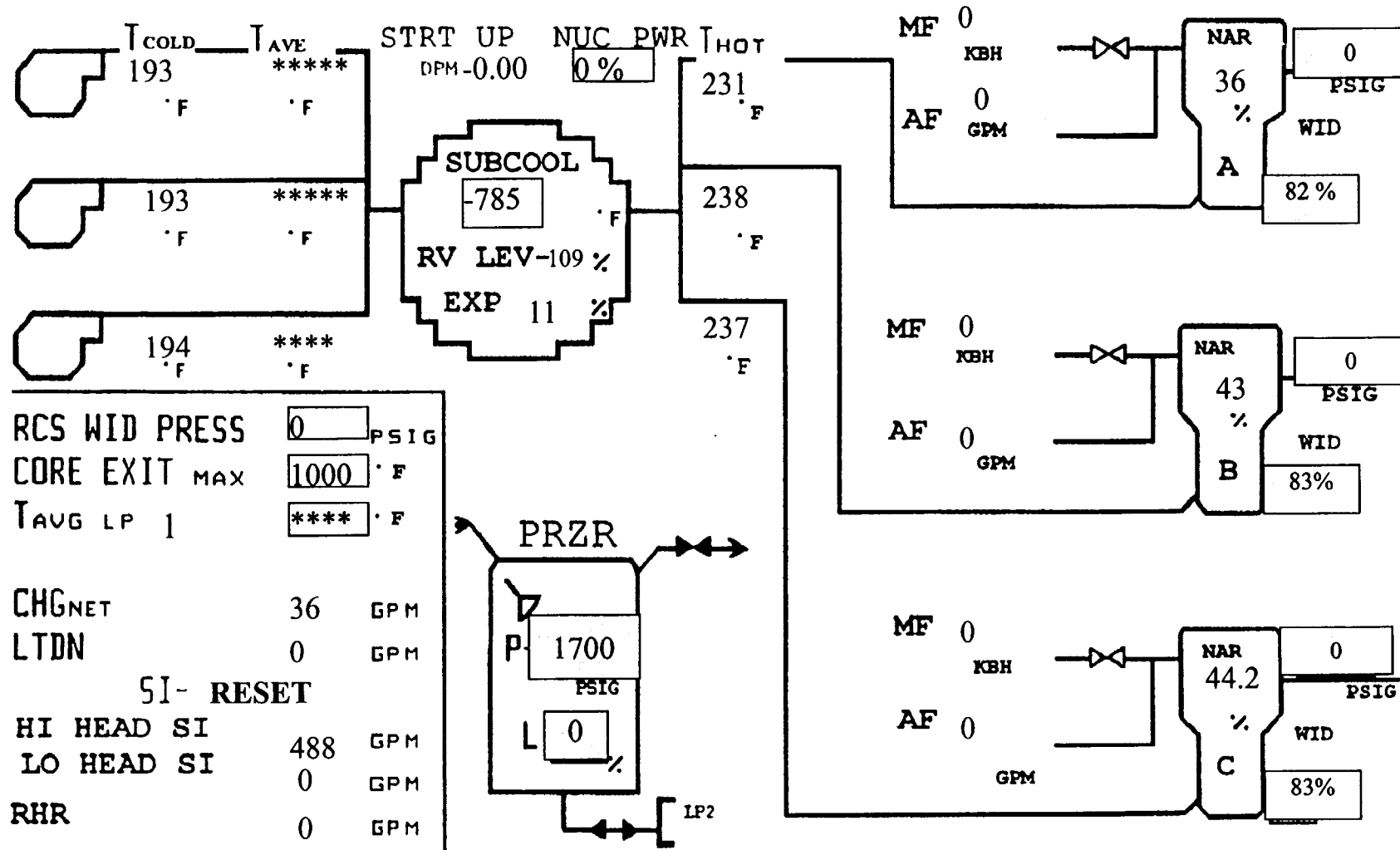
Time:1915



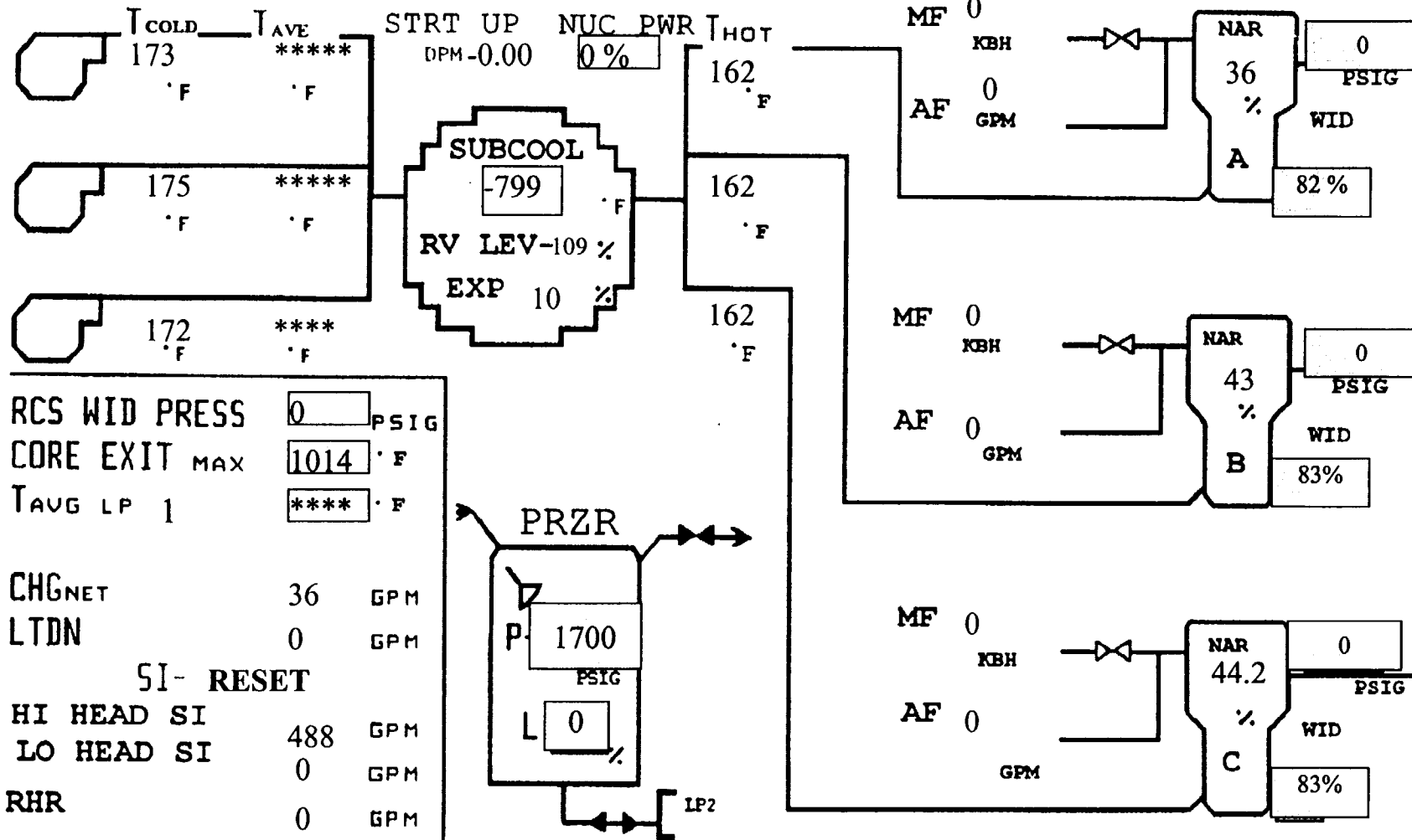
Time:1918



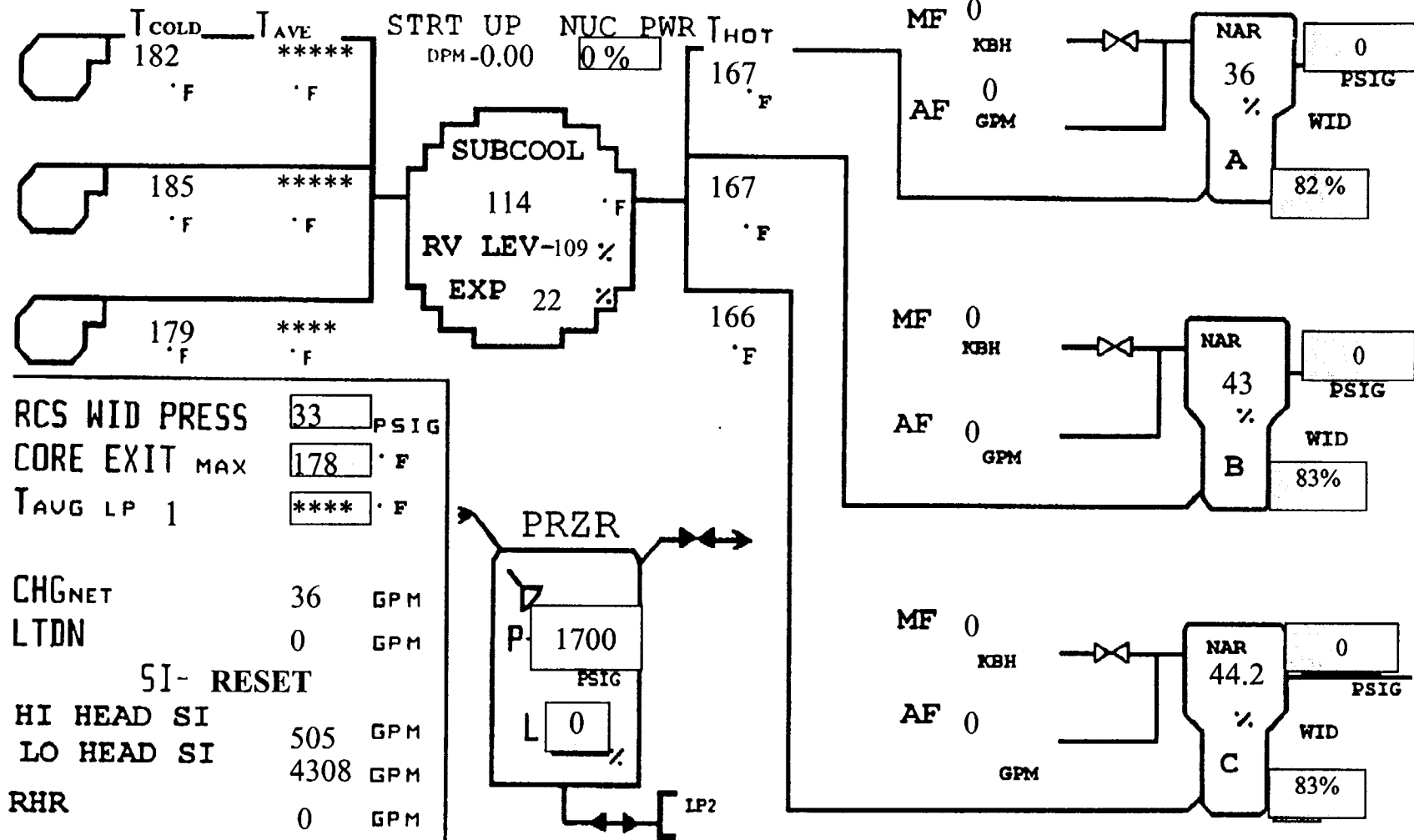
Time:1921



Time:1924

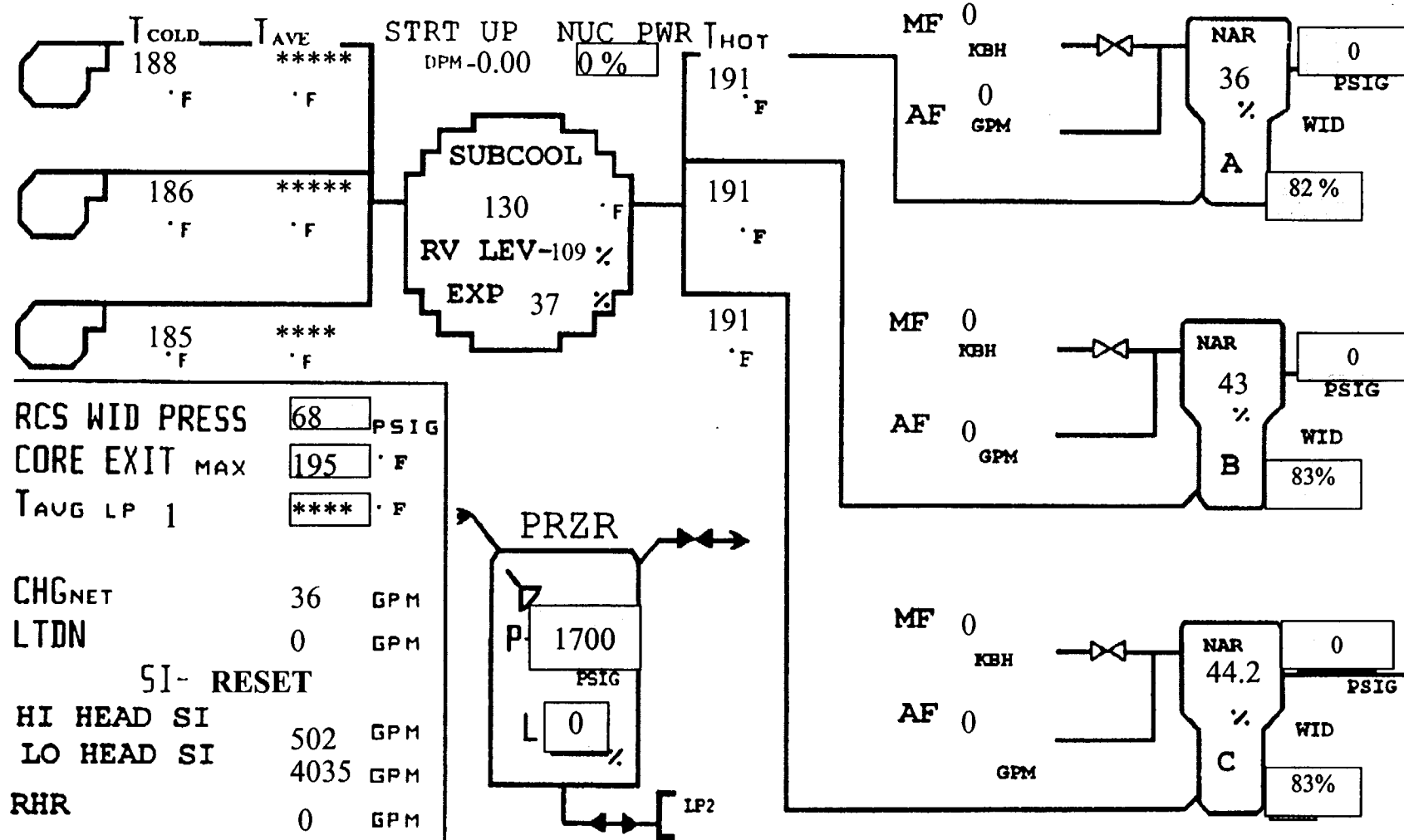


Time:1927

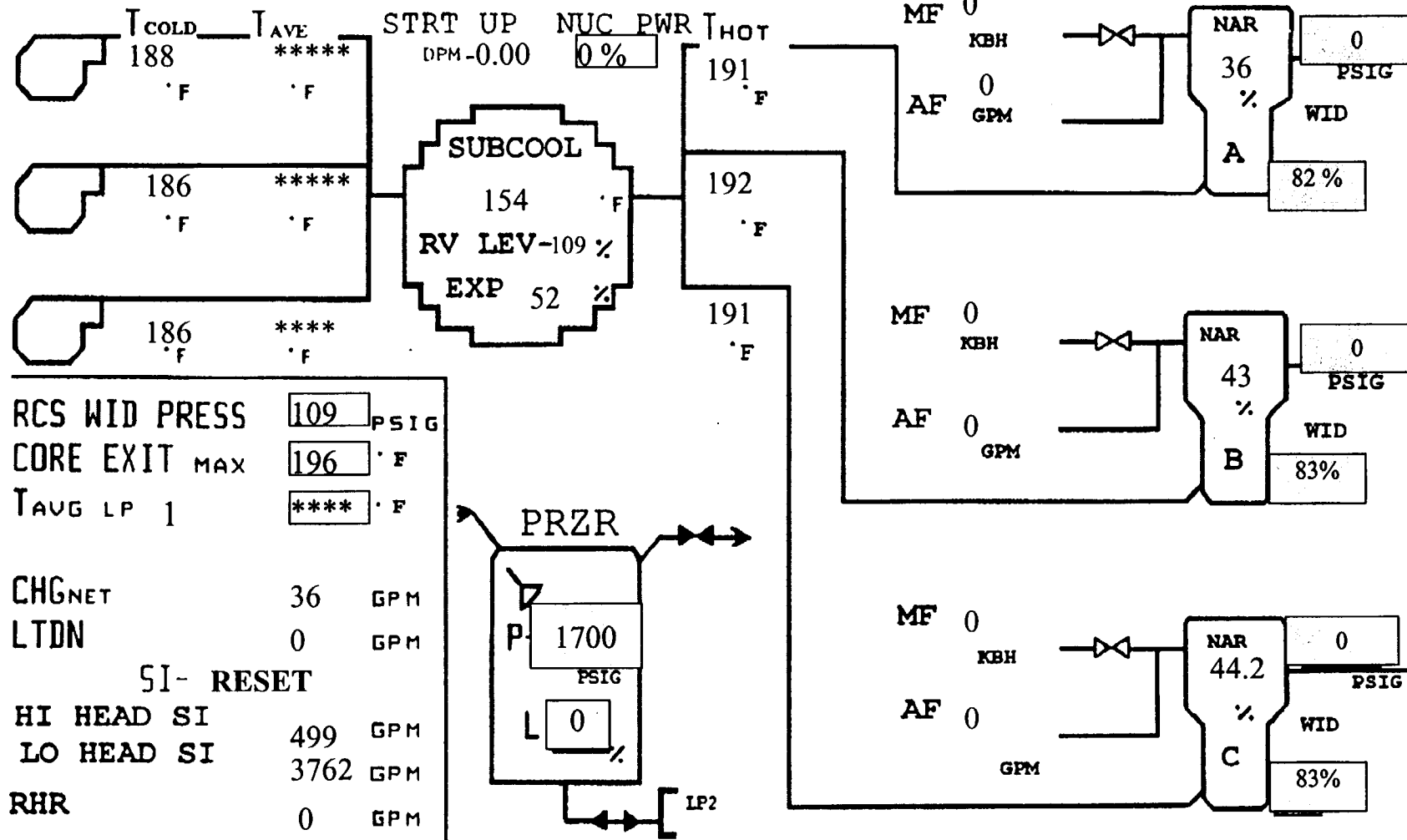




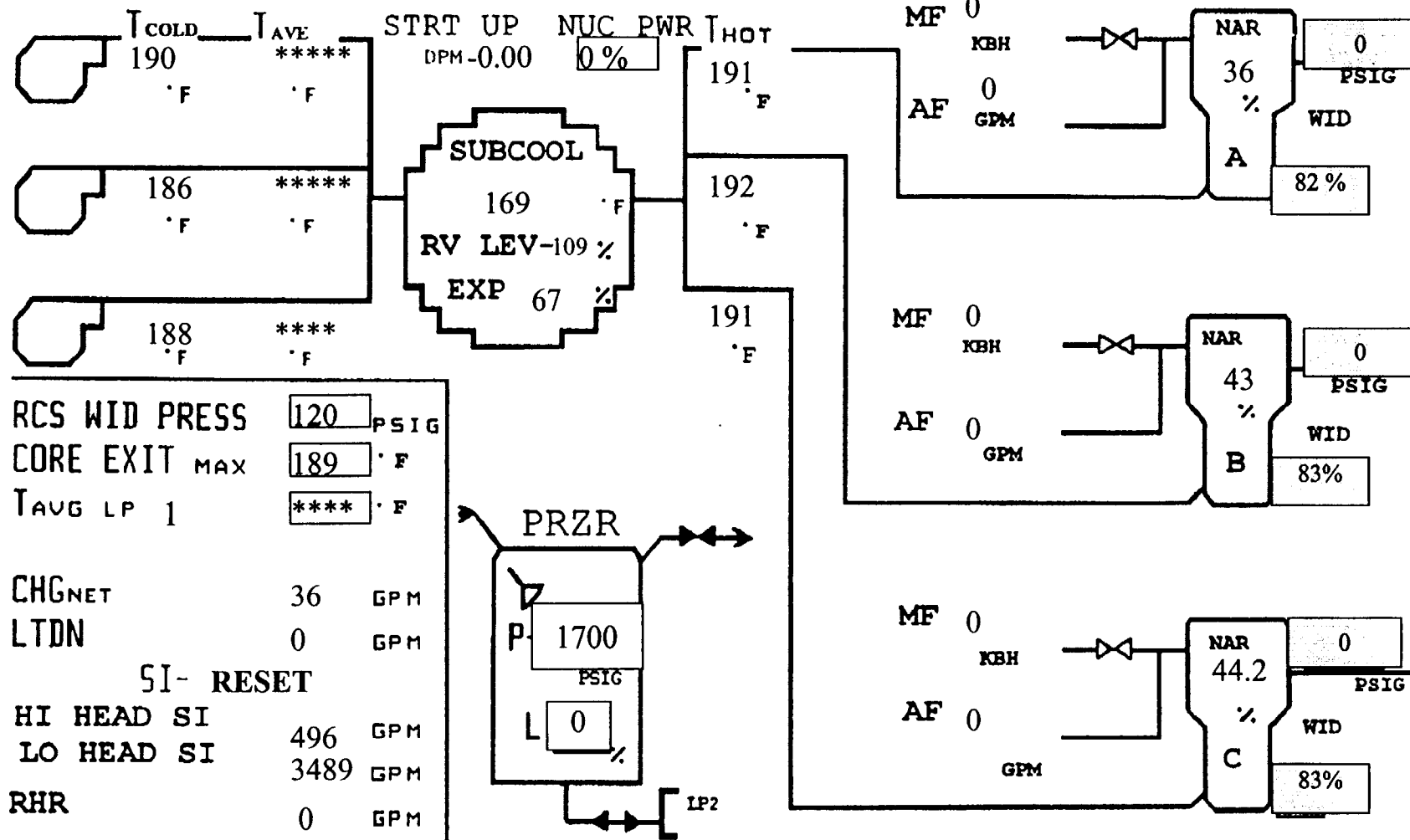
**Time:1930**



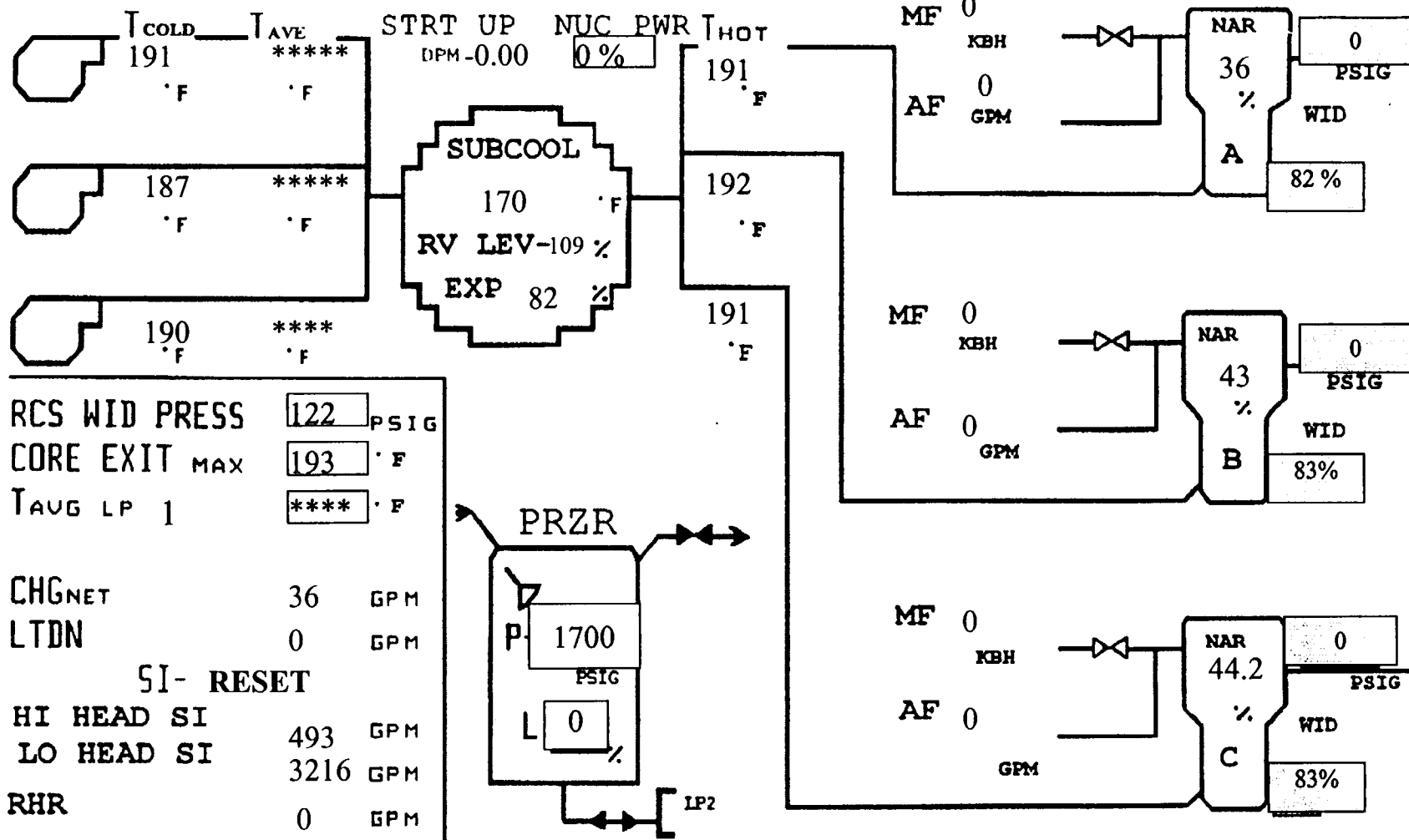
**Time:1933**



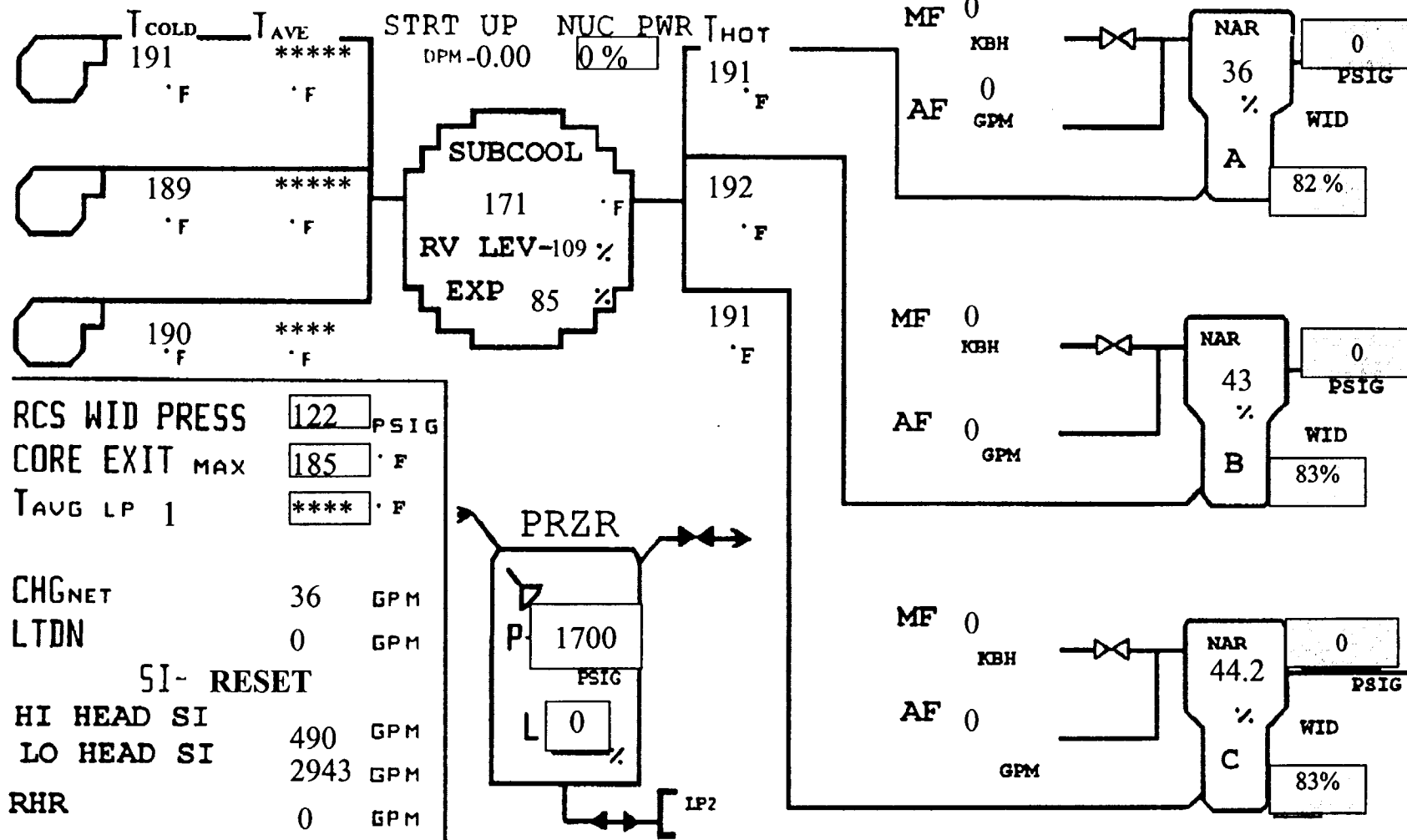
Time:1936

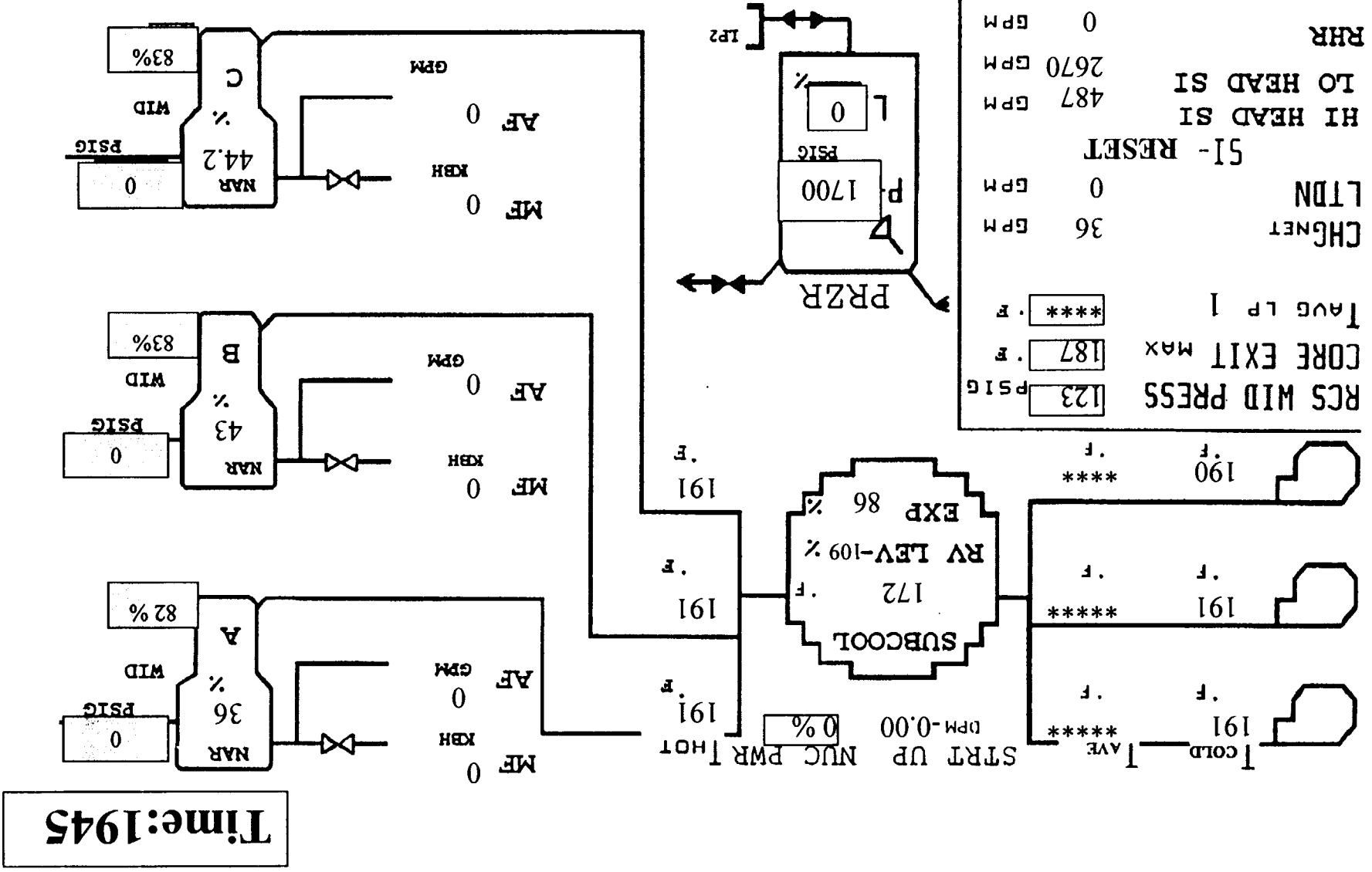


**Time:1939**

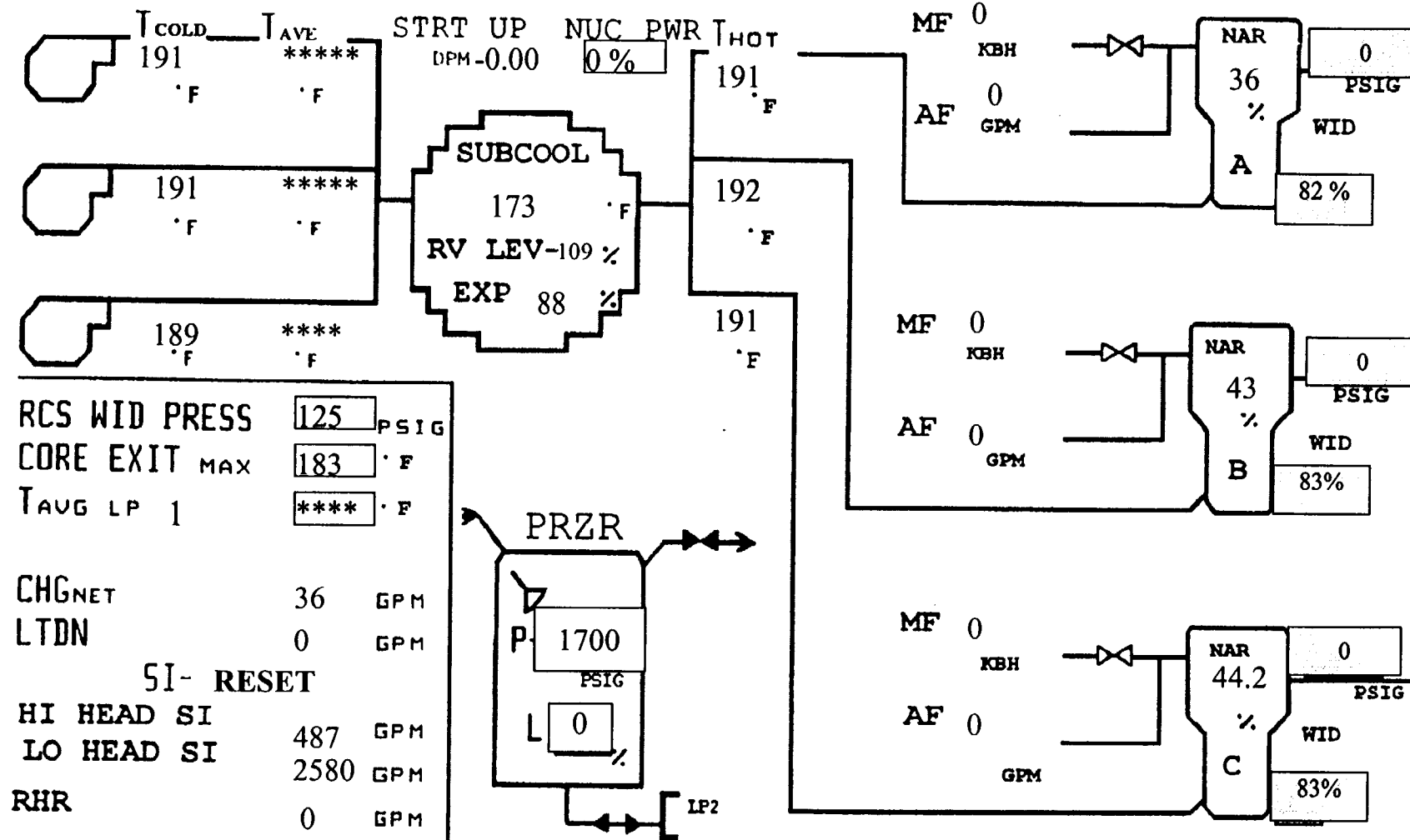


Time:1942

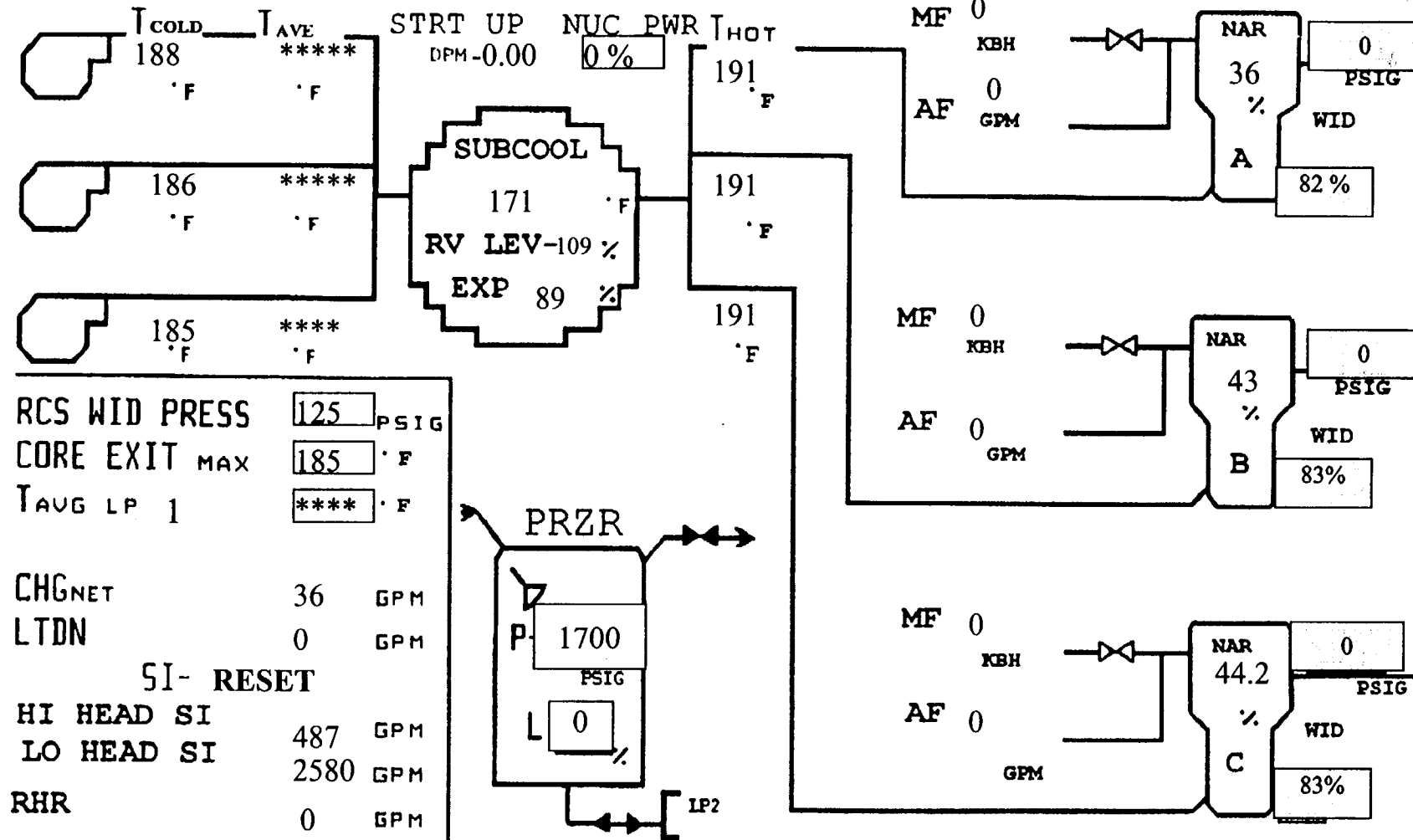




Time:1948

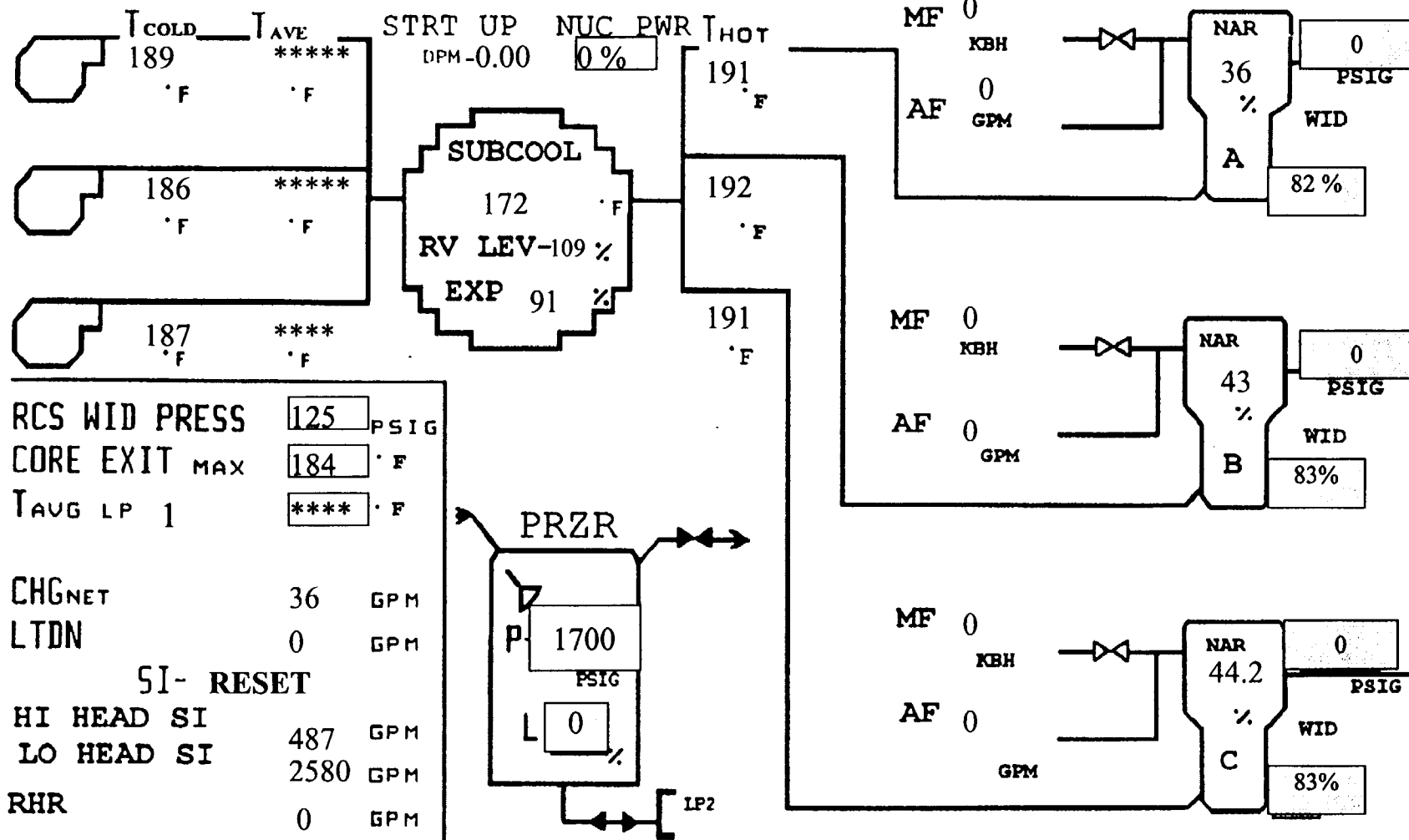


Time:1951

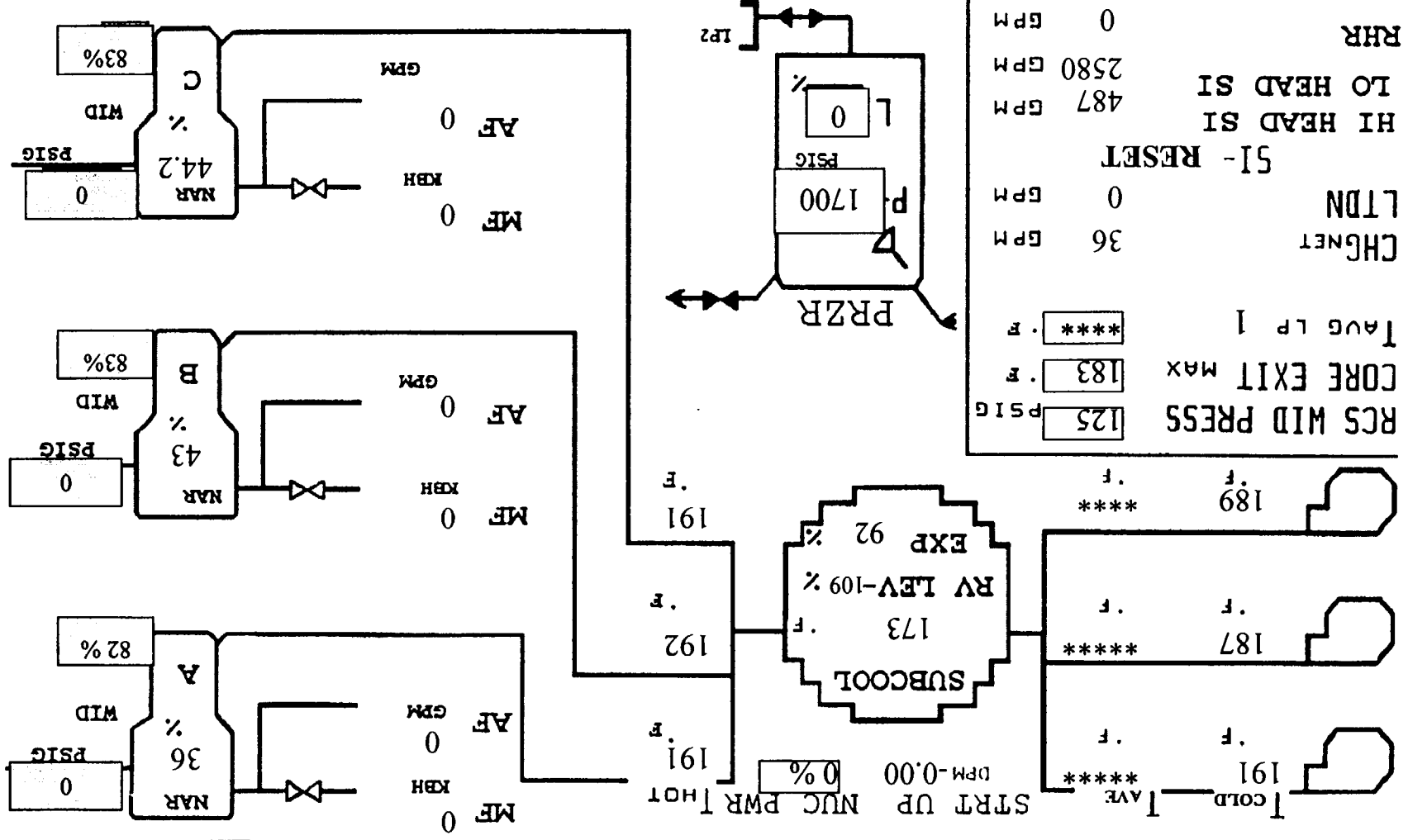




Time:1954

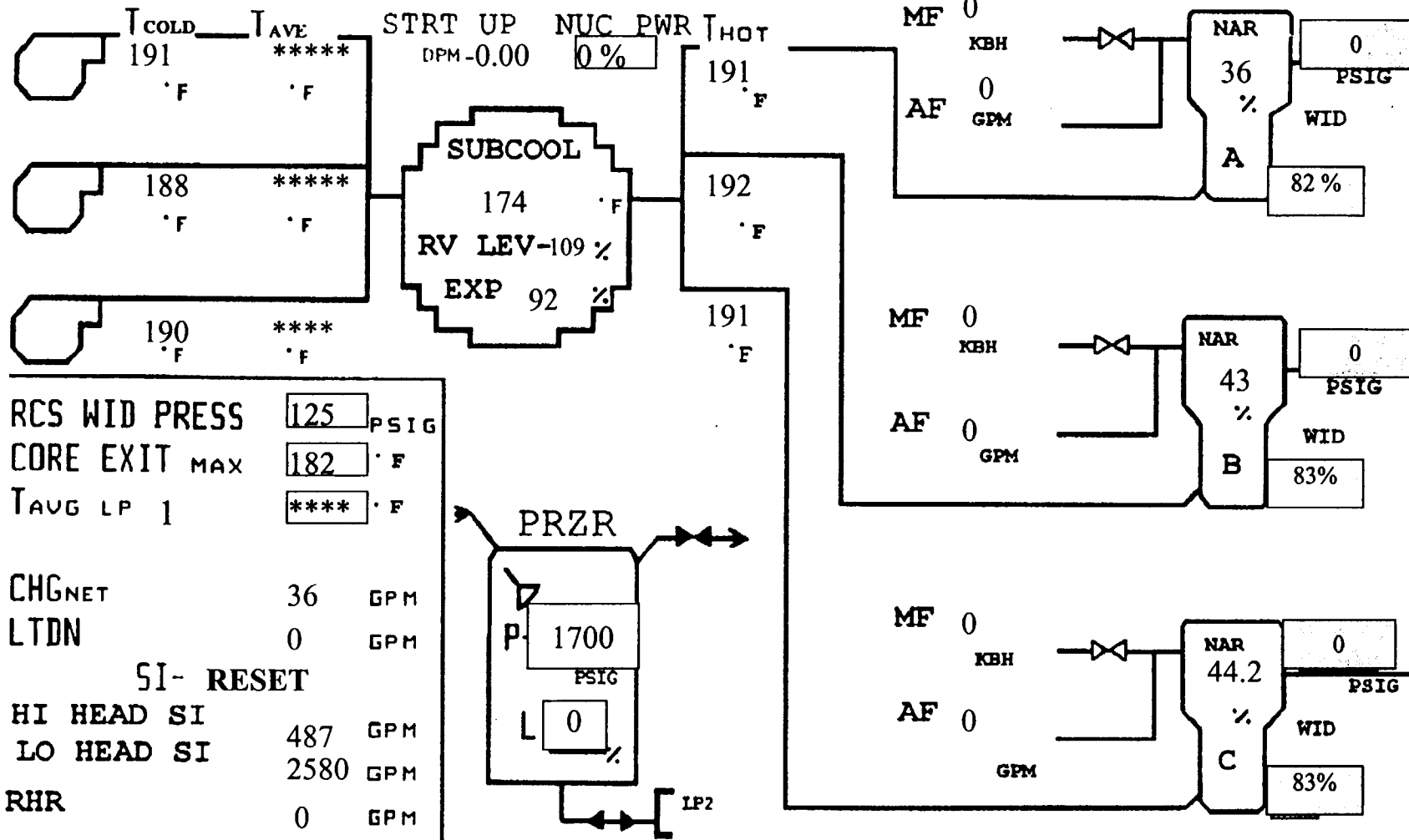


Time:1957

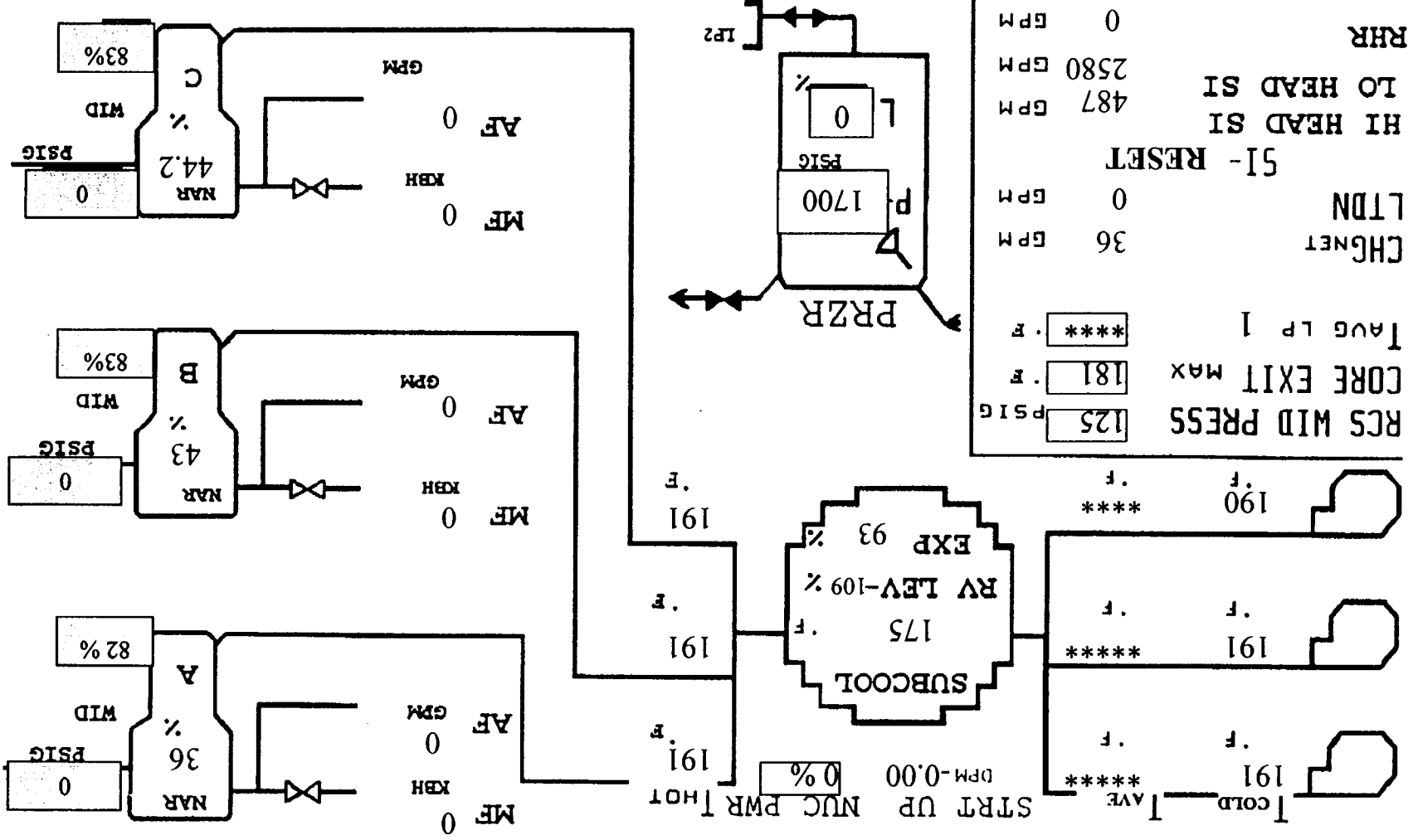


RCS MID PRESS 125 PSIG  
CORE EXIT MAX 183  
Tavg LP 1 \*\*\*\*  
CHGNET 36 GPM  
LTDN 0 GPM  
51- RESET  
HI HEAD SI 487 GPM  
TO HEAD SI 2580 GPM  
RHR 0 GPM

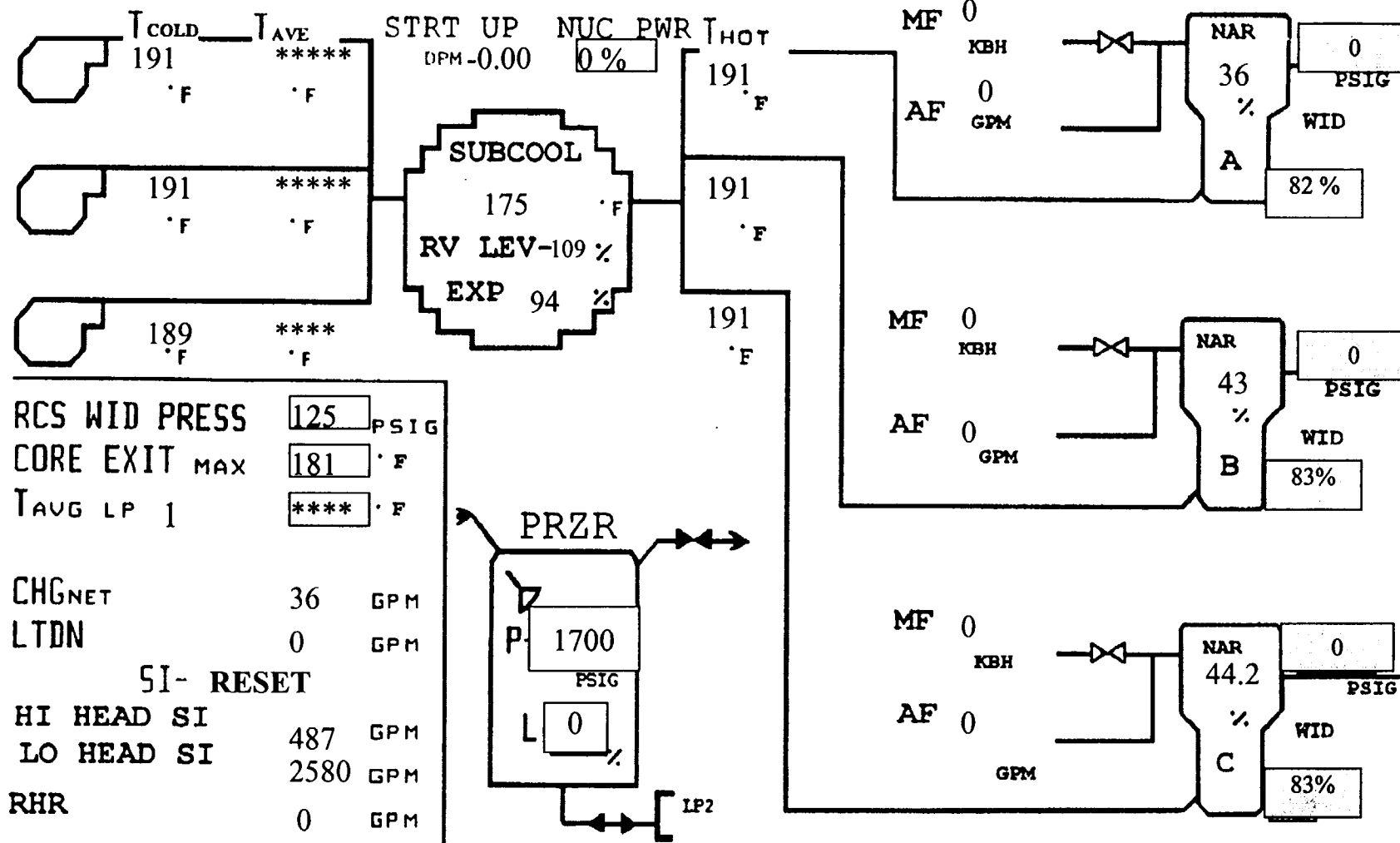
**Time:2000**



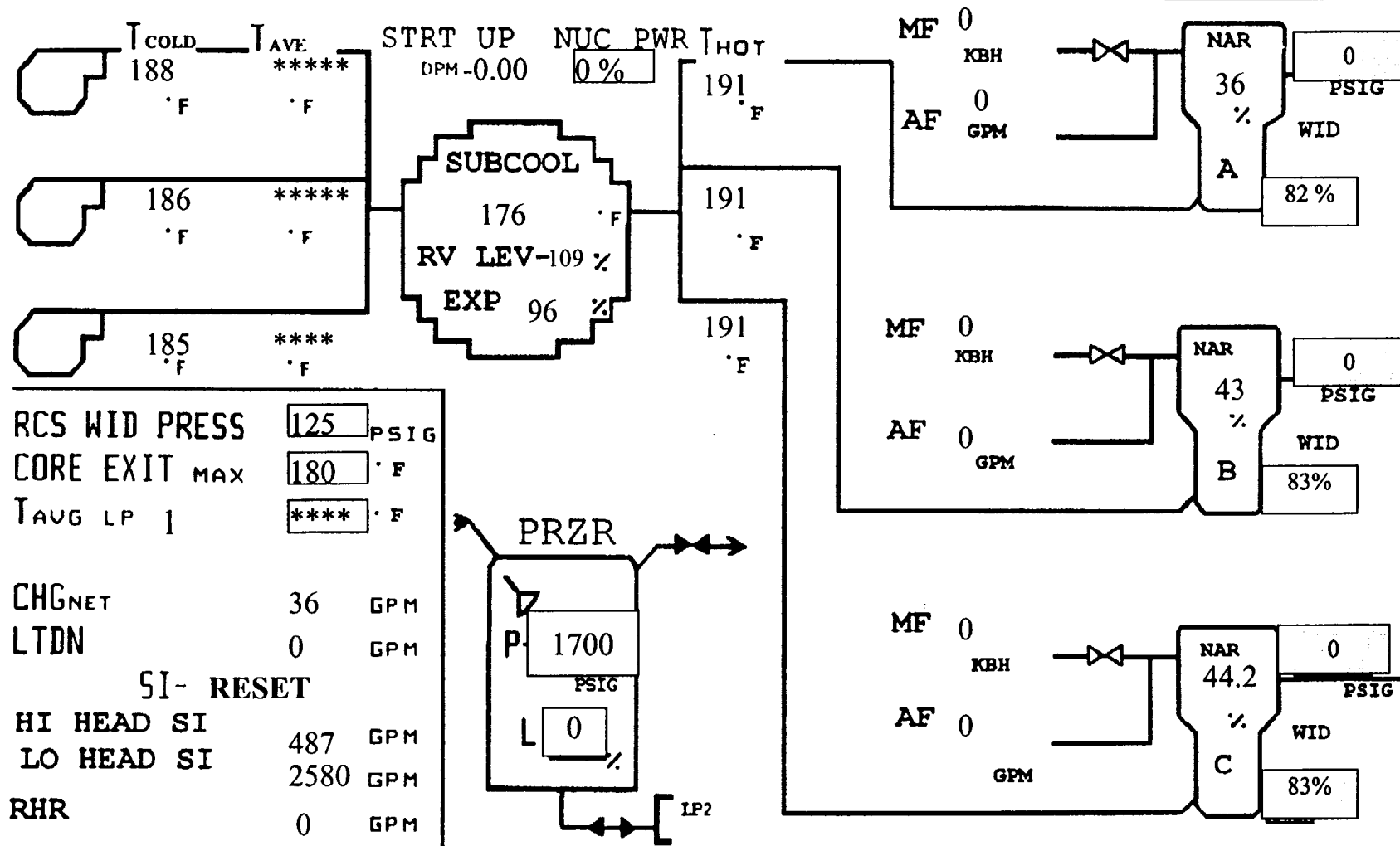
Time:2003



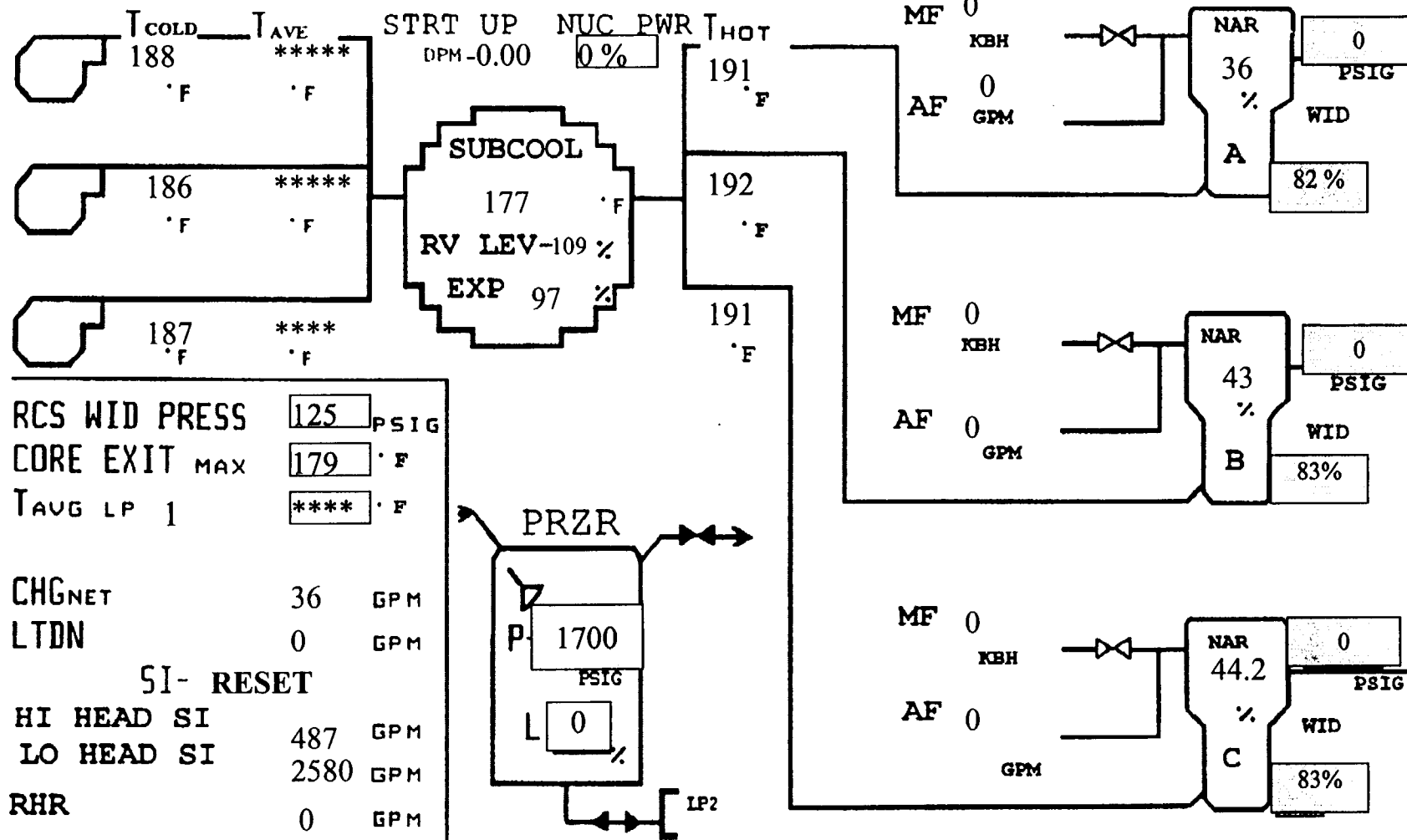
Time:2006



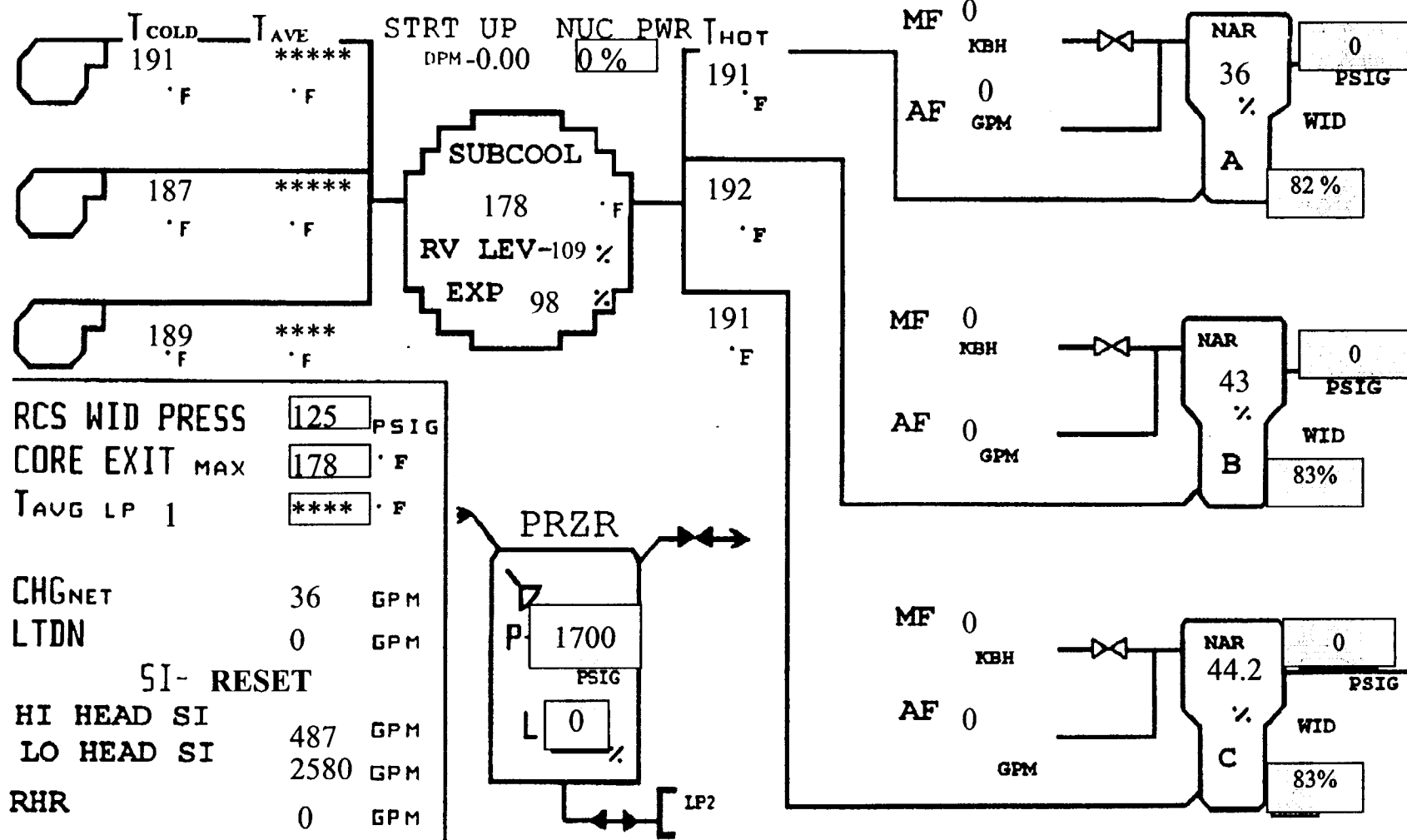
Time:2009



Time:2012

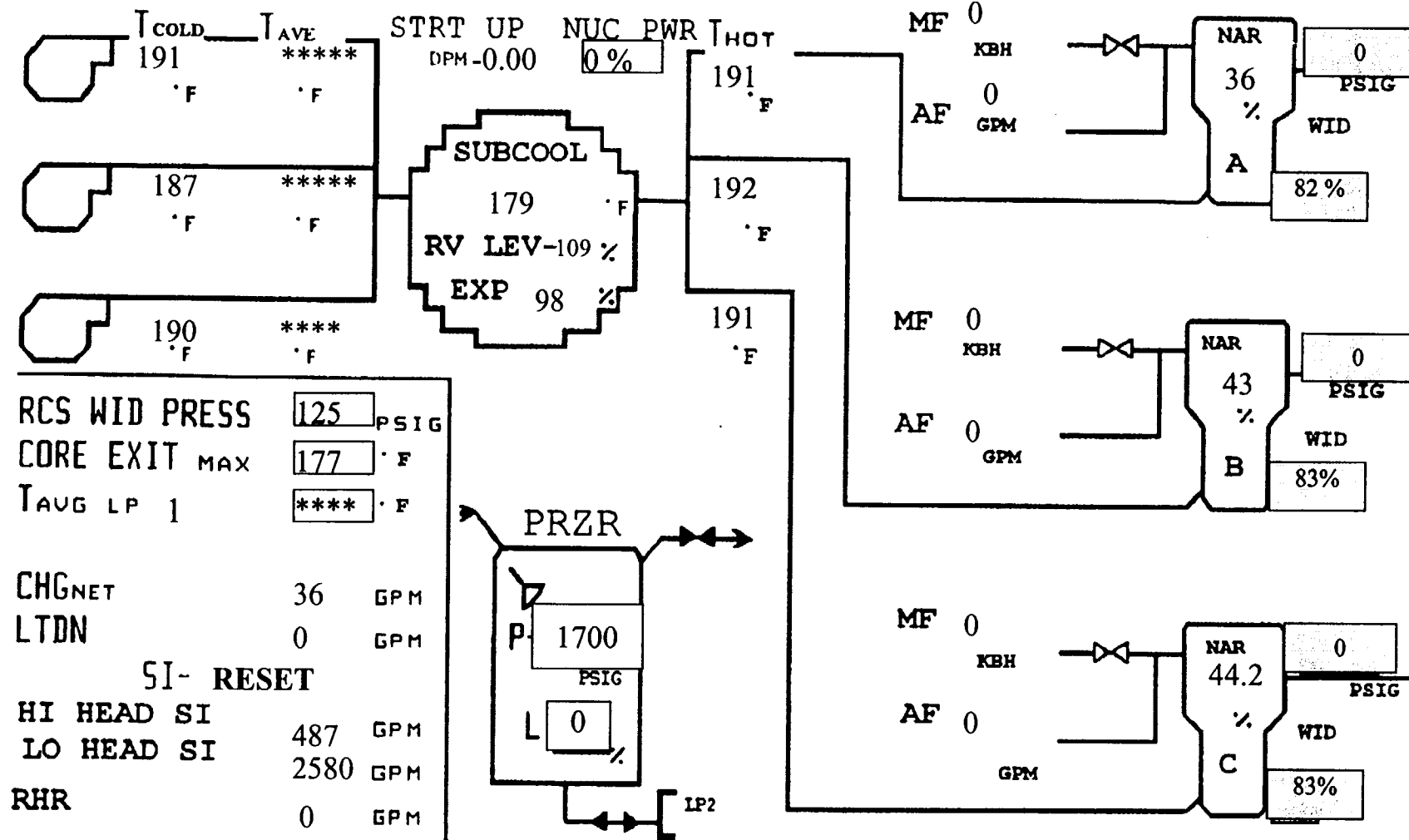


Time:2015

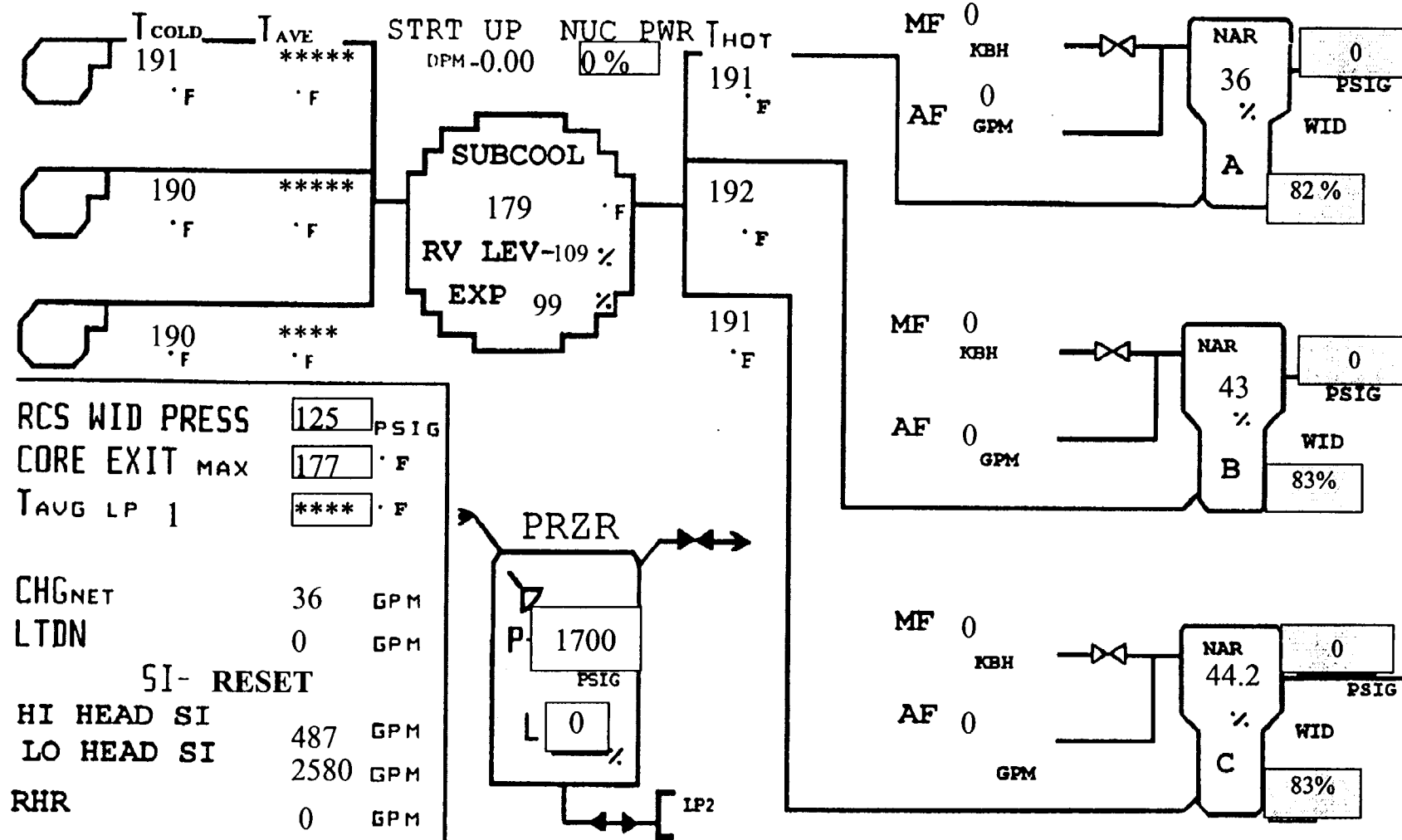




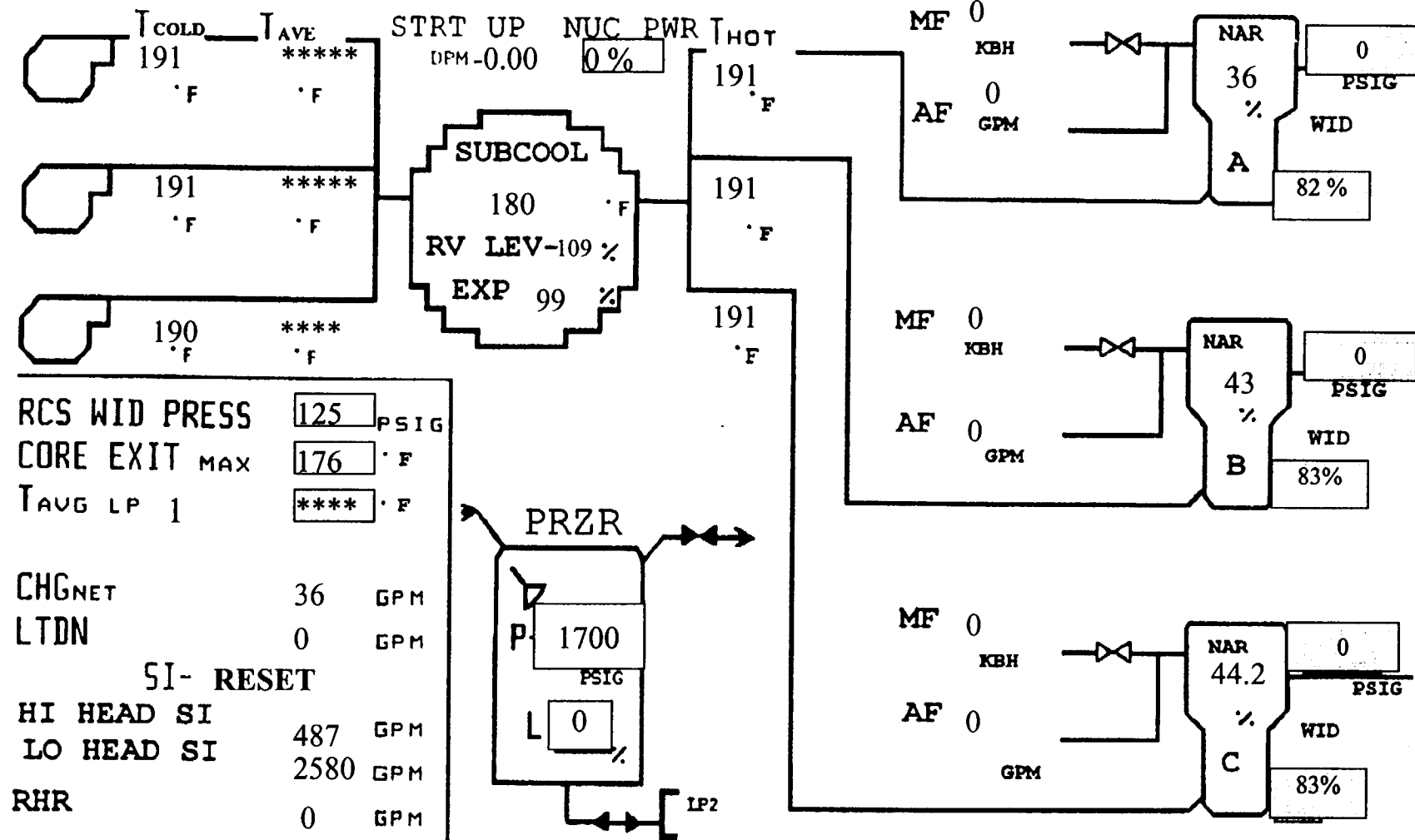
**Time:2018**



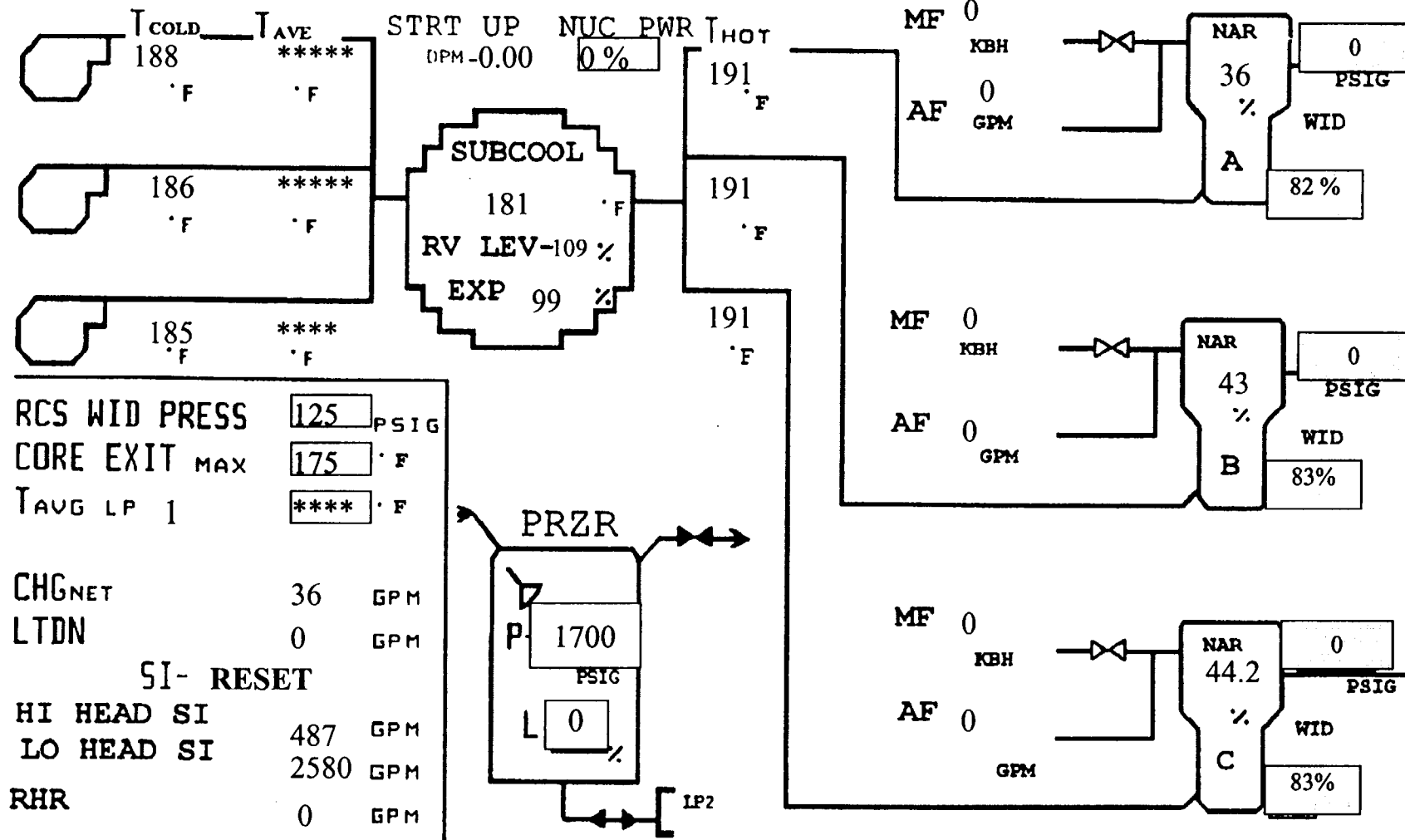
Time:2021



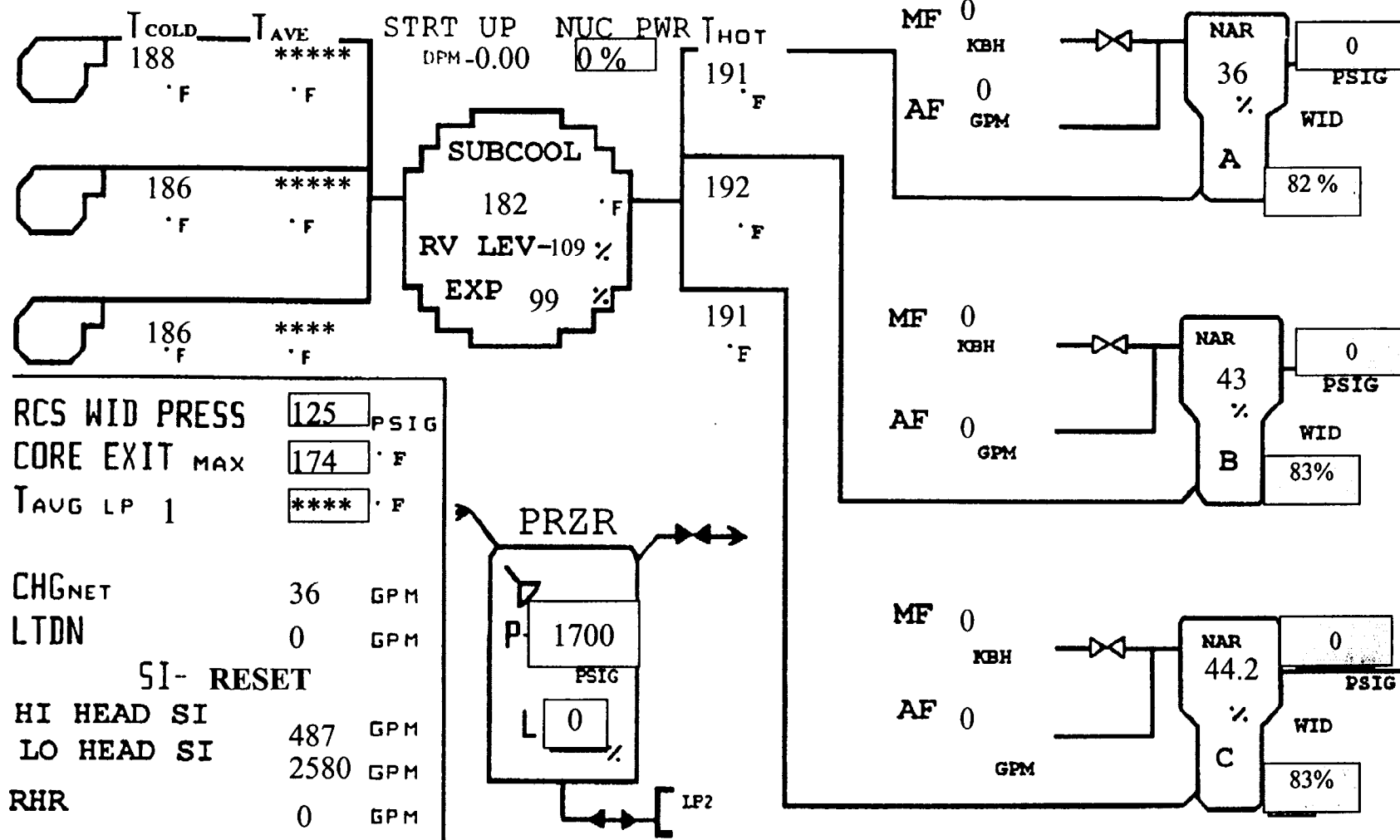
Time:2024



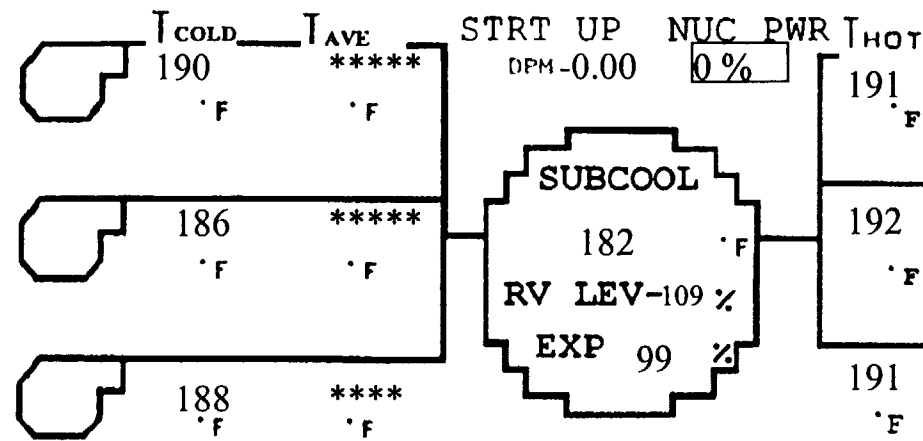
Time:2027



Time:2030

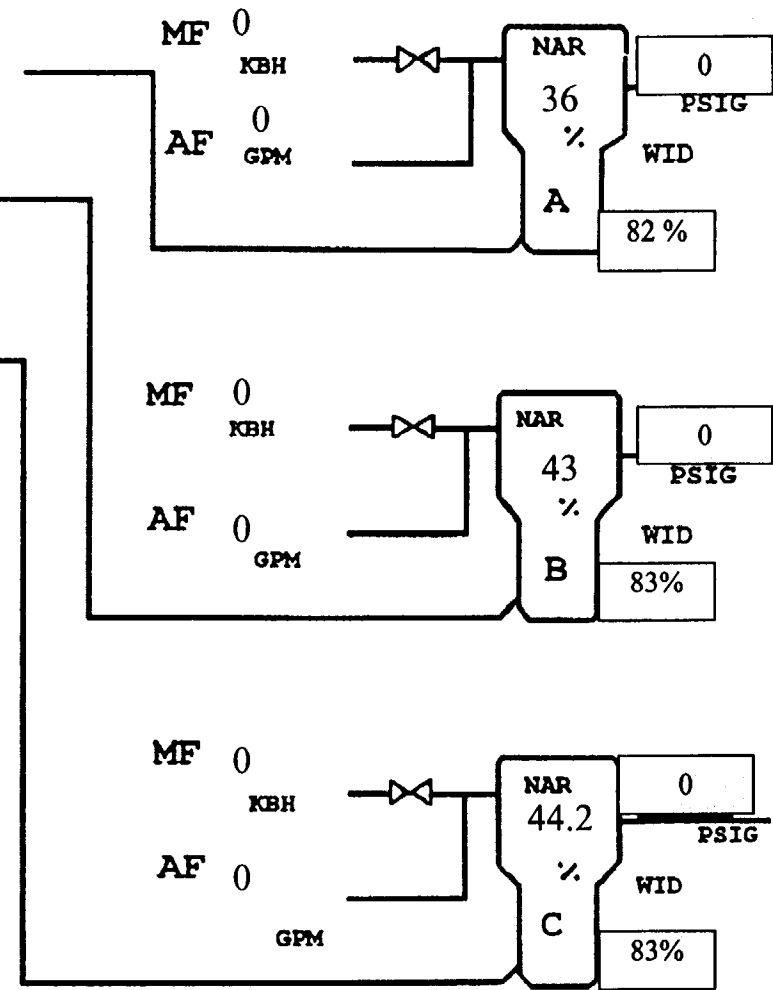
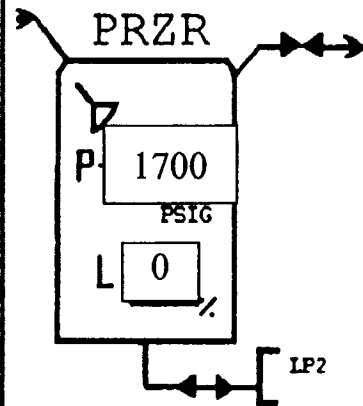


Time:2033

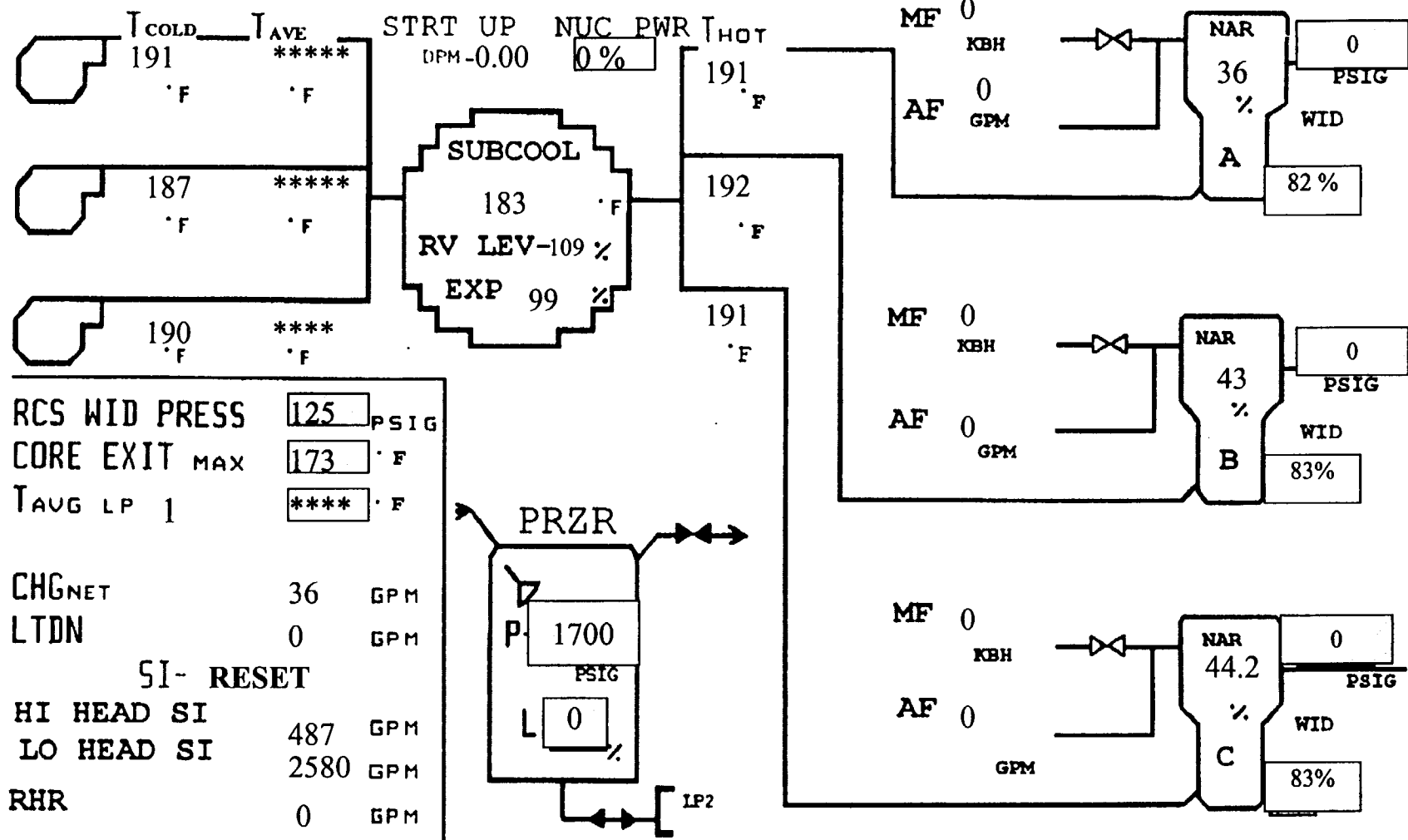


RCS WID PRESS 125 PSIG  
 CORE EXIT MAX 174 °F  
 T<sub>AVG</sub> LP 1 \*\*\*\*\* °F

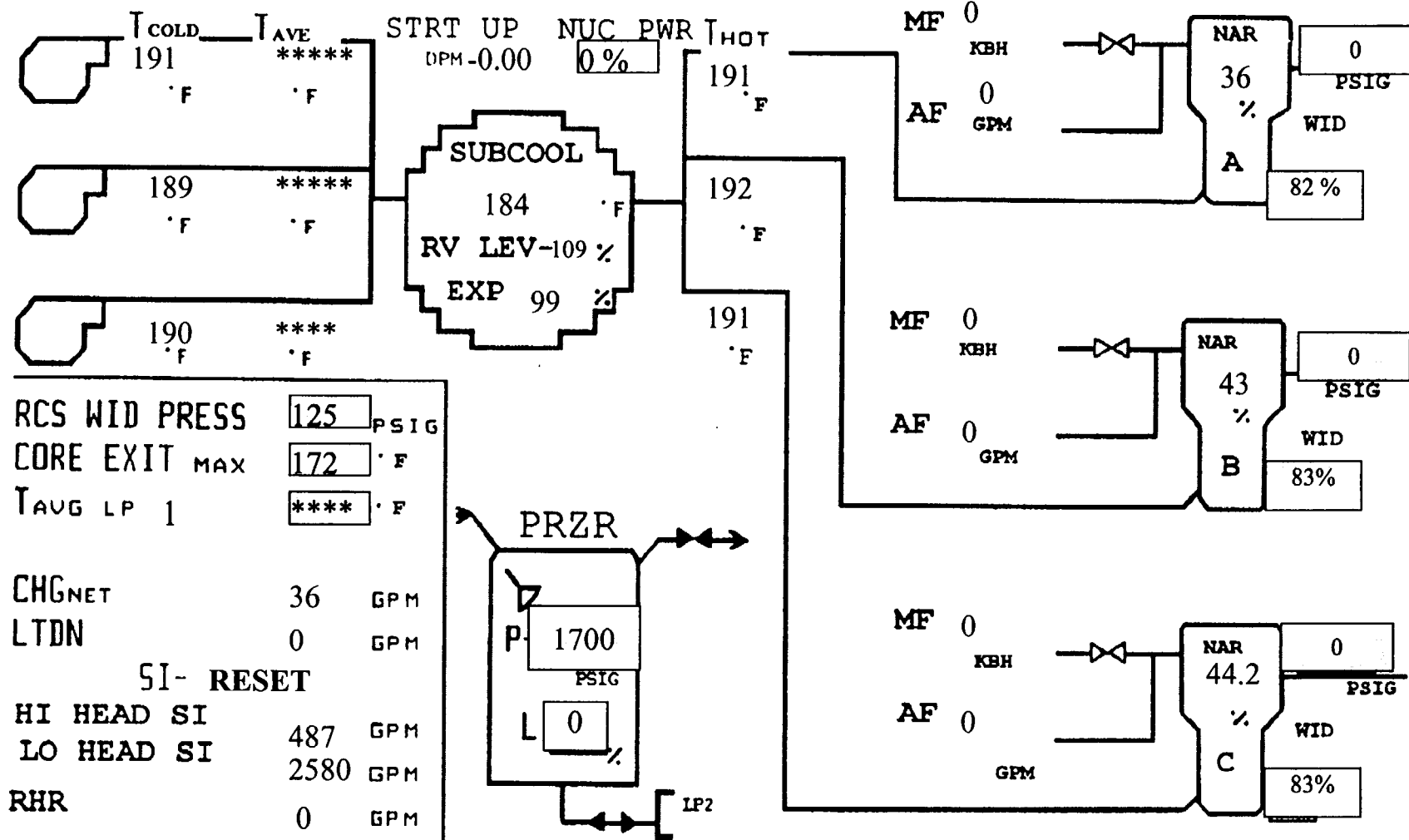
CHG<sub>NET</sub> 36 GPM  
 LTDN 0 GPM  
 SI- RESET  
 HI HEAD SI 487 GPM  
 LO HEAD SI 2580 GPM  
 RHR 0 GPM



Time:2036

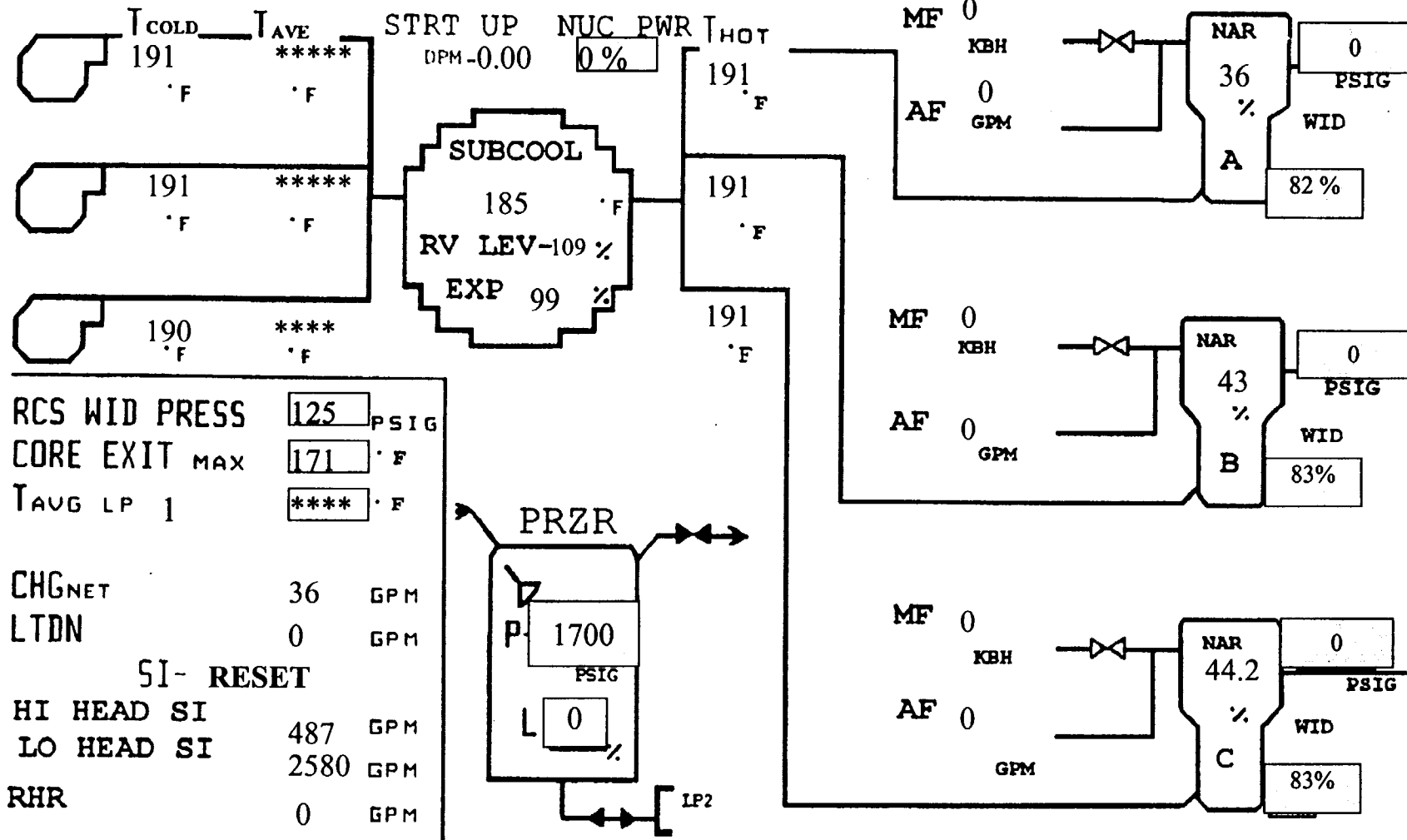


Time:2039

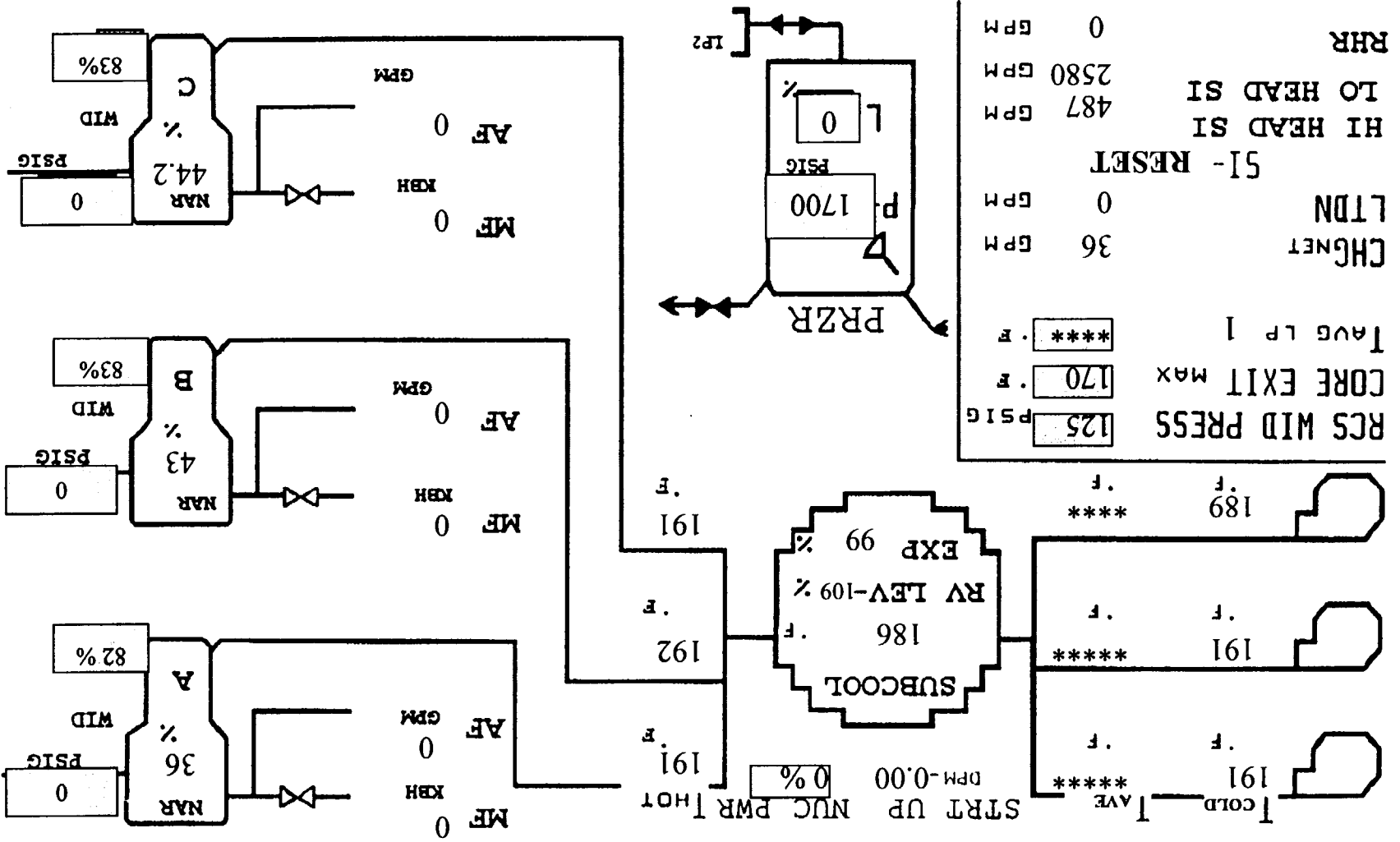




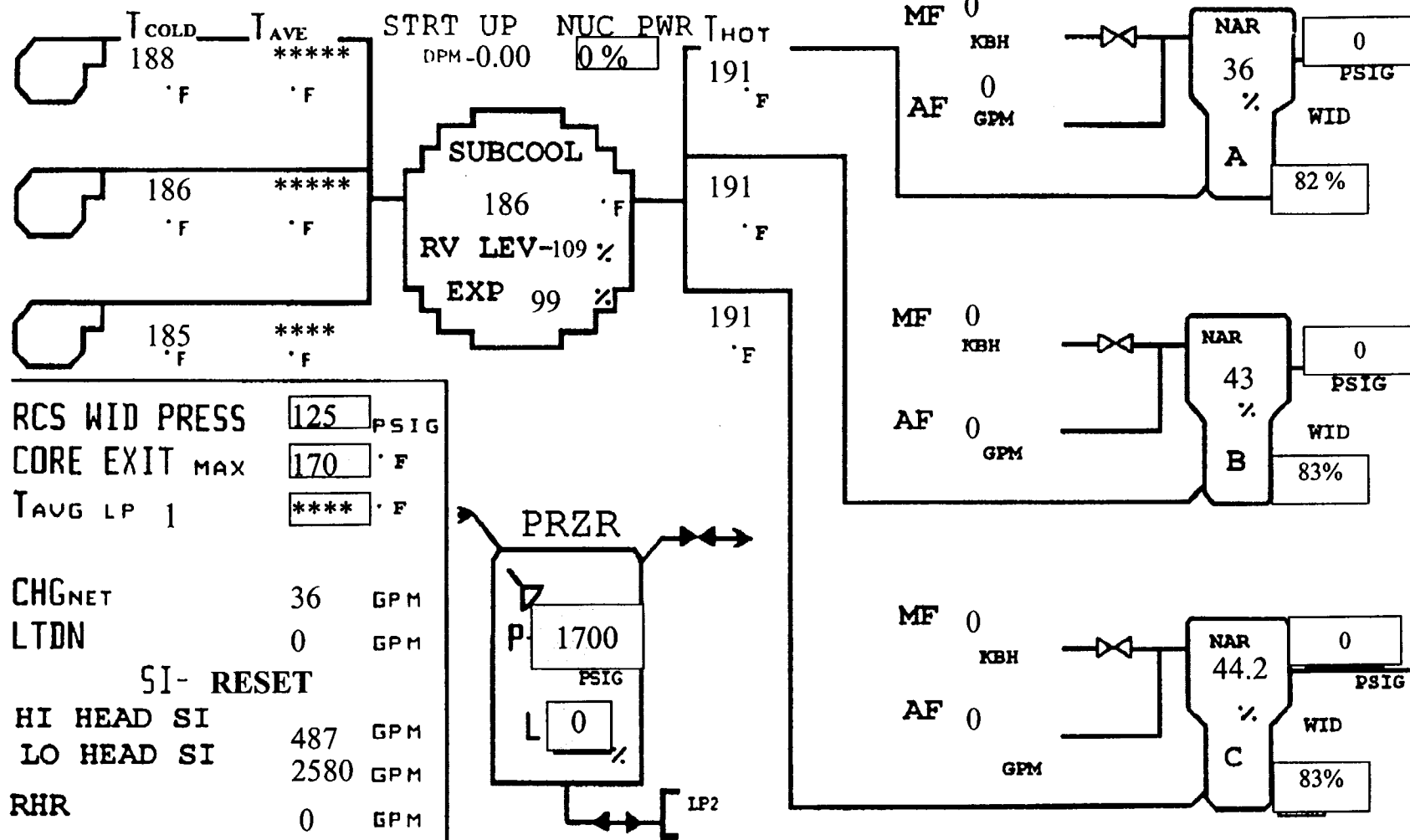
**Time:2042**



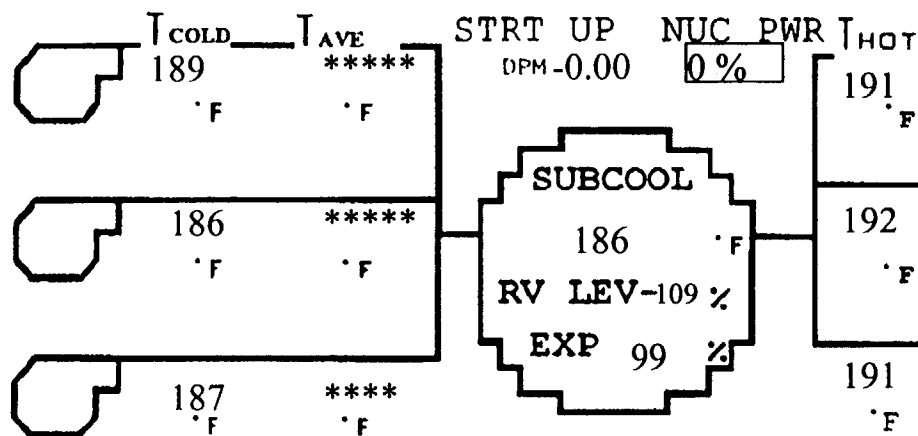
Time:2045



Time:2048



Time:2051

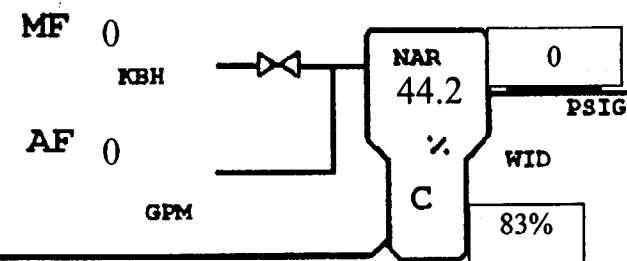
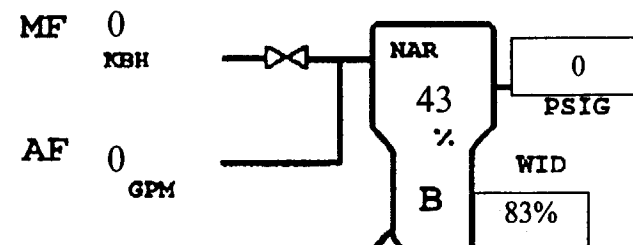
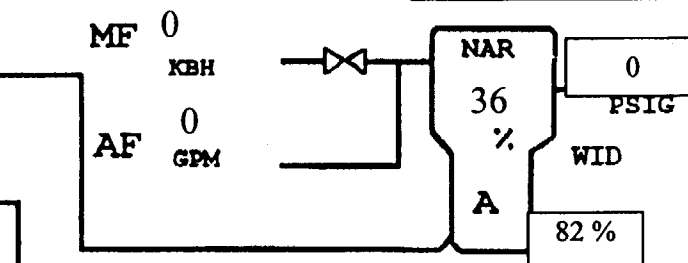
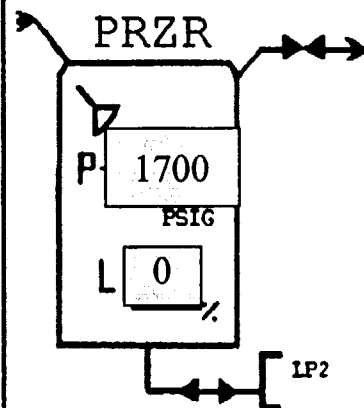


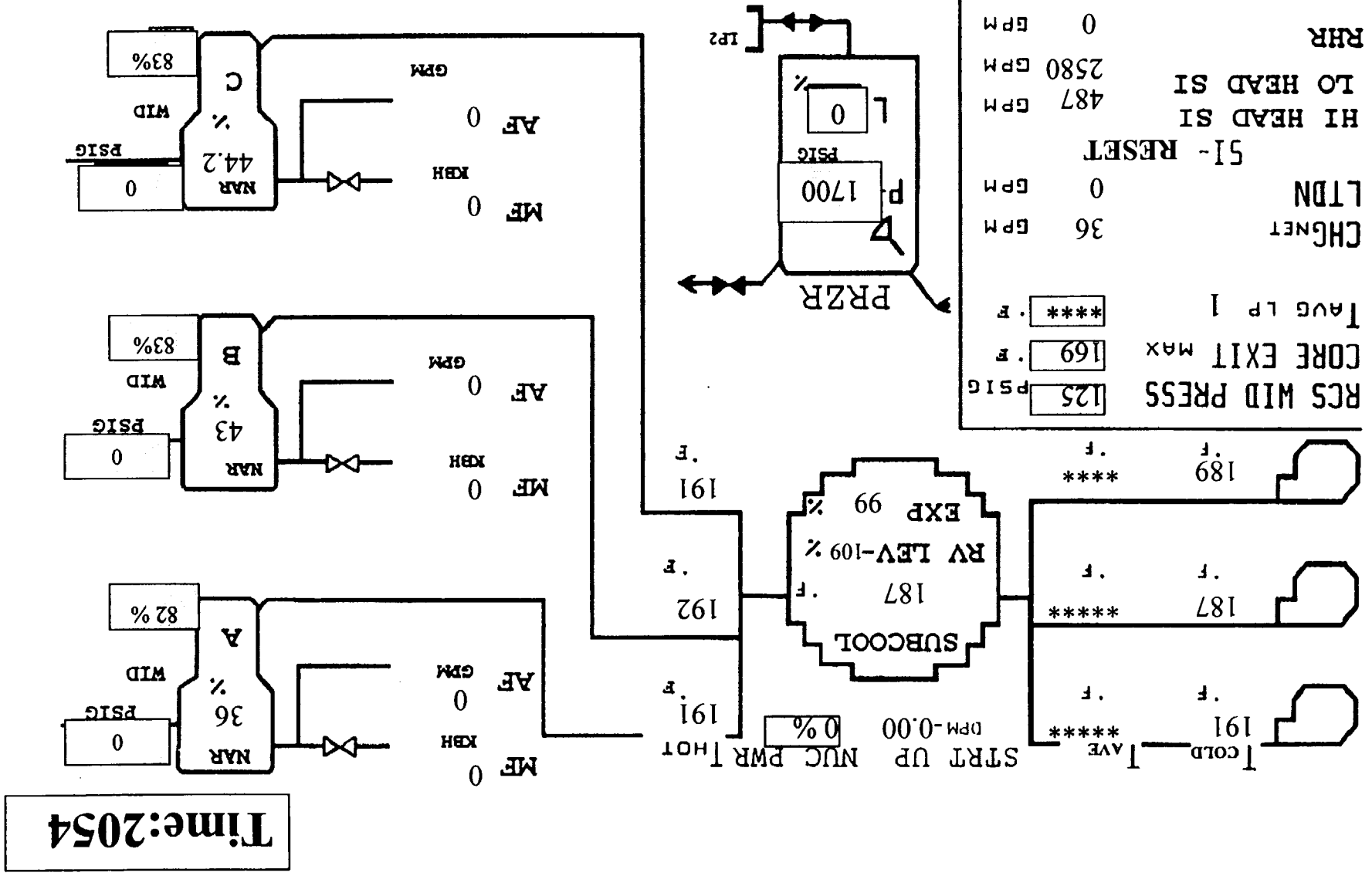
RCS WID PRESS 125 PSIG  
 CORE EXIT MAX 170 °F  
 T<sub>AUG LP 1</sub> \*\*\*\*\* °F

CHG<sub>NET</sub> 36 GPM  
 LTDN 0 GPM

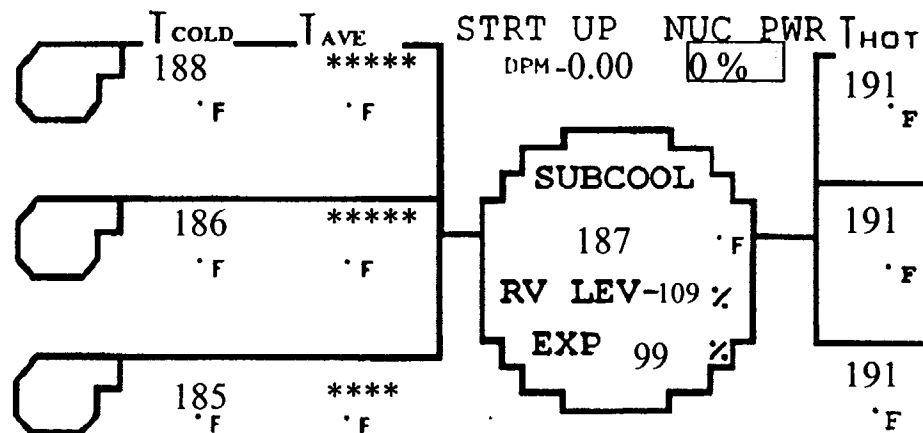
SI- RESET

HI HEAD SI 487 GPM  
 LO HEAD SI 2580 GPM  
 RHR 0 GPM



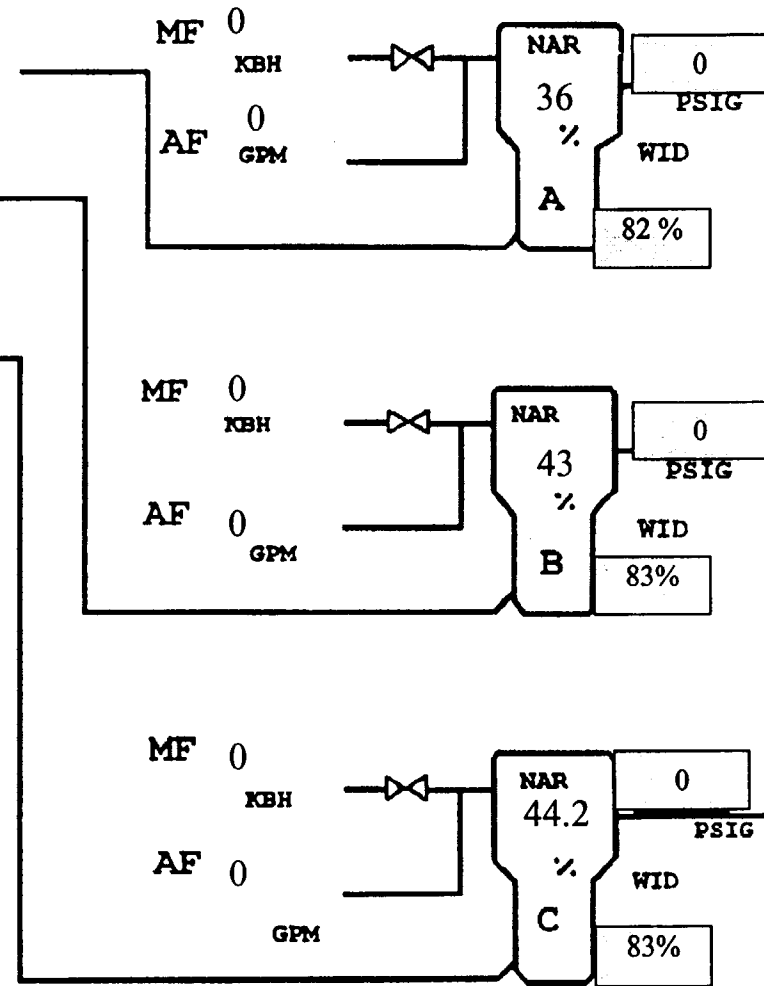
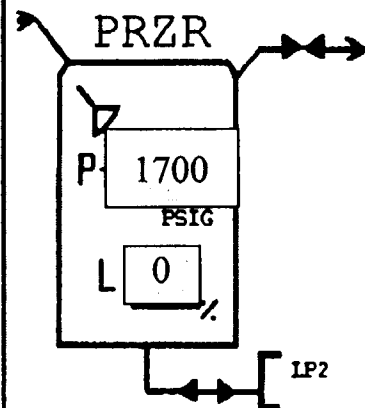


**Time:2057**

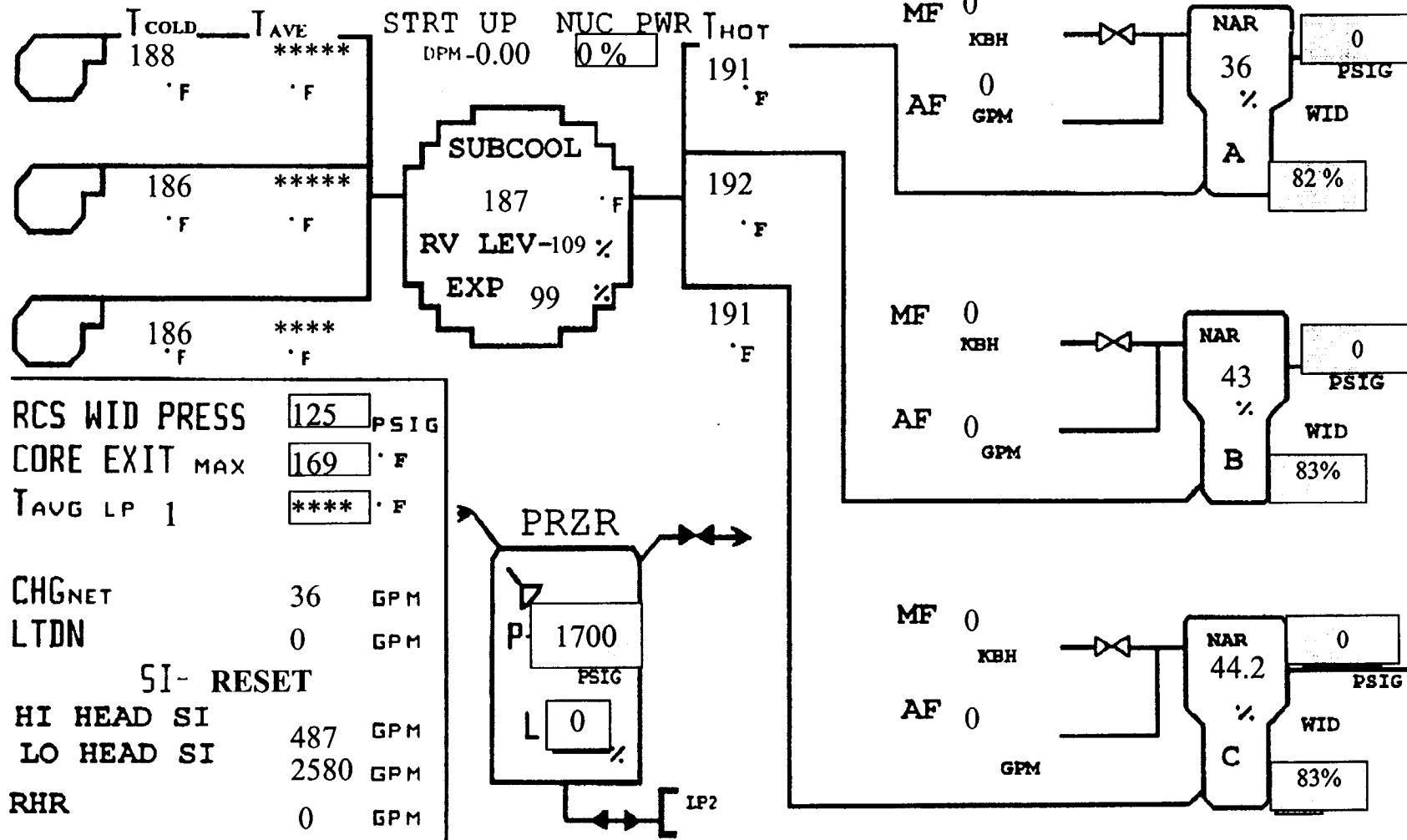


RCS WID PRESS 125 PSIG  
 CORE EXIT MAX 169 °F  
 T<sub>AUG LP 1</sub> \*\*\*\*\* °F

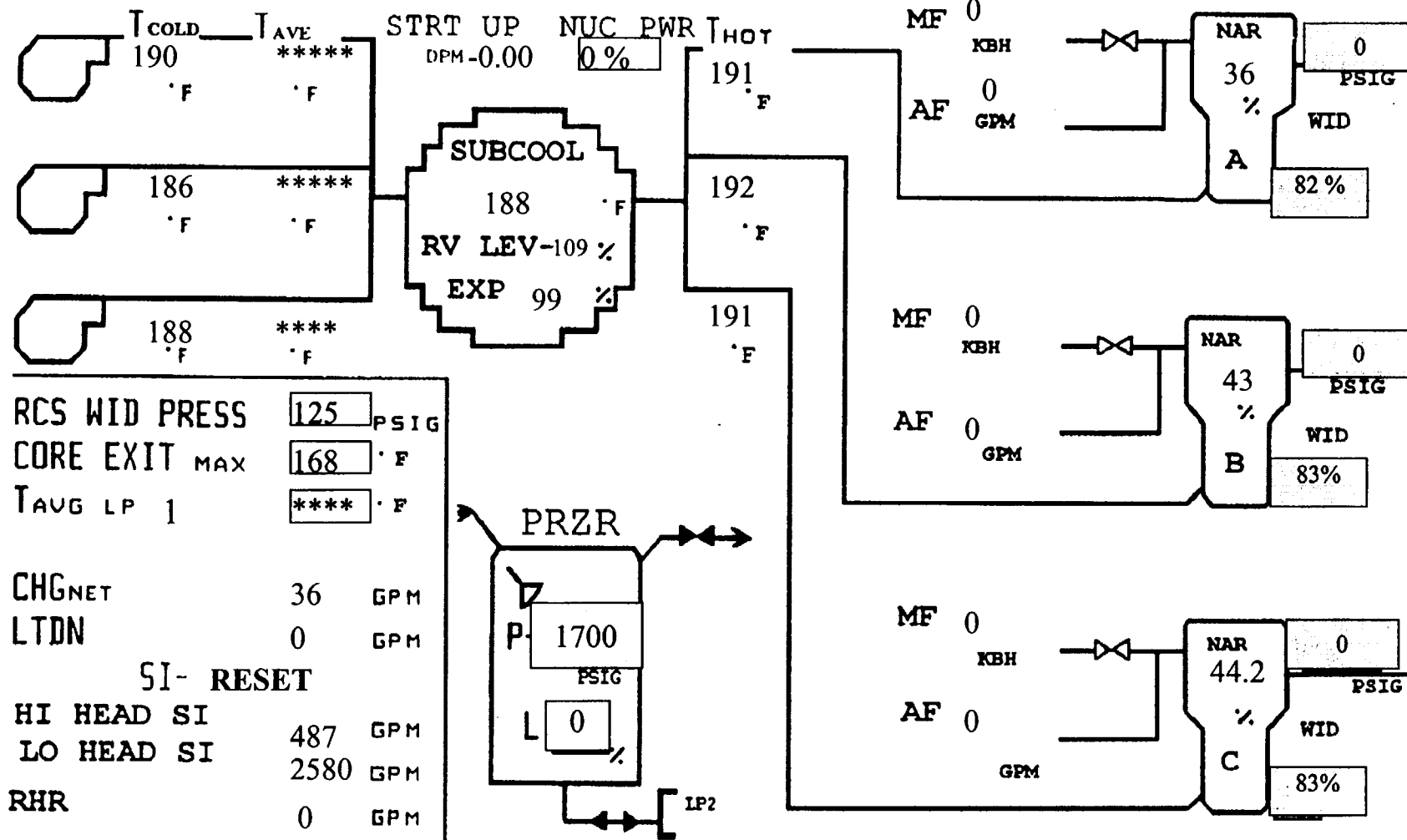
CHGNET 36 GPM  
 LTDN 0 GPM  
 SI- RESET  
 HI HEAD SI 487 GPM  
 LO HEAD SI 2580 GPM  
 RHR 0 GPM



Time:2100

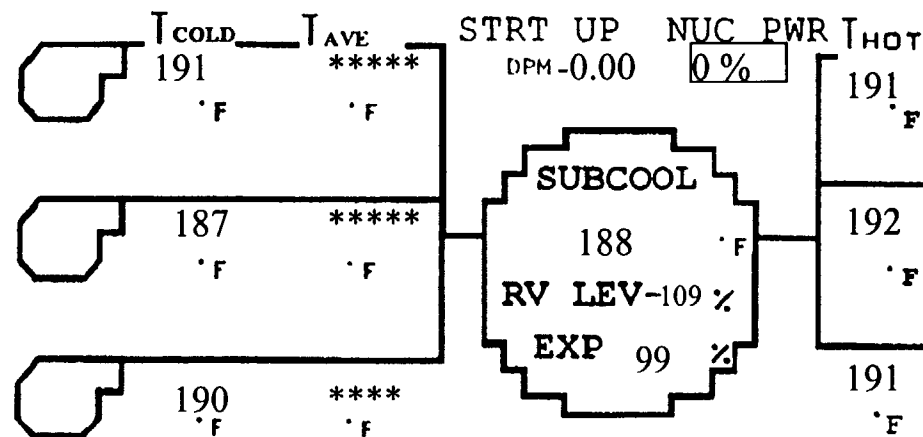


Time:2103



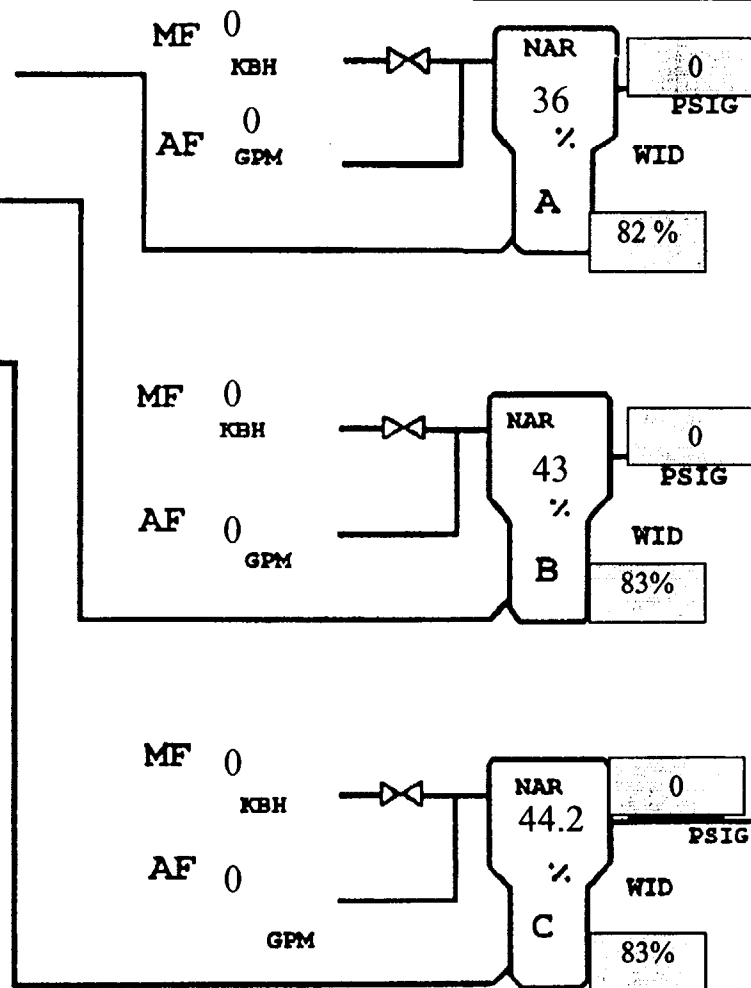
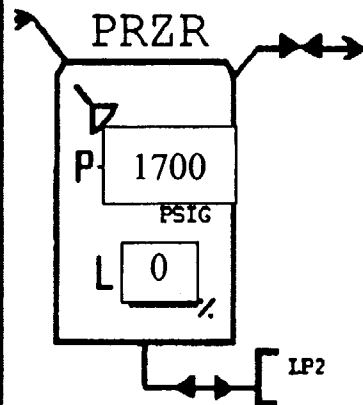


Time:2106

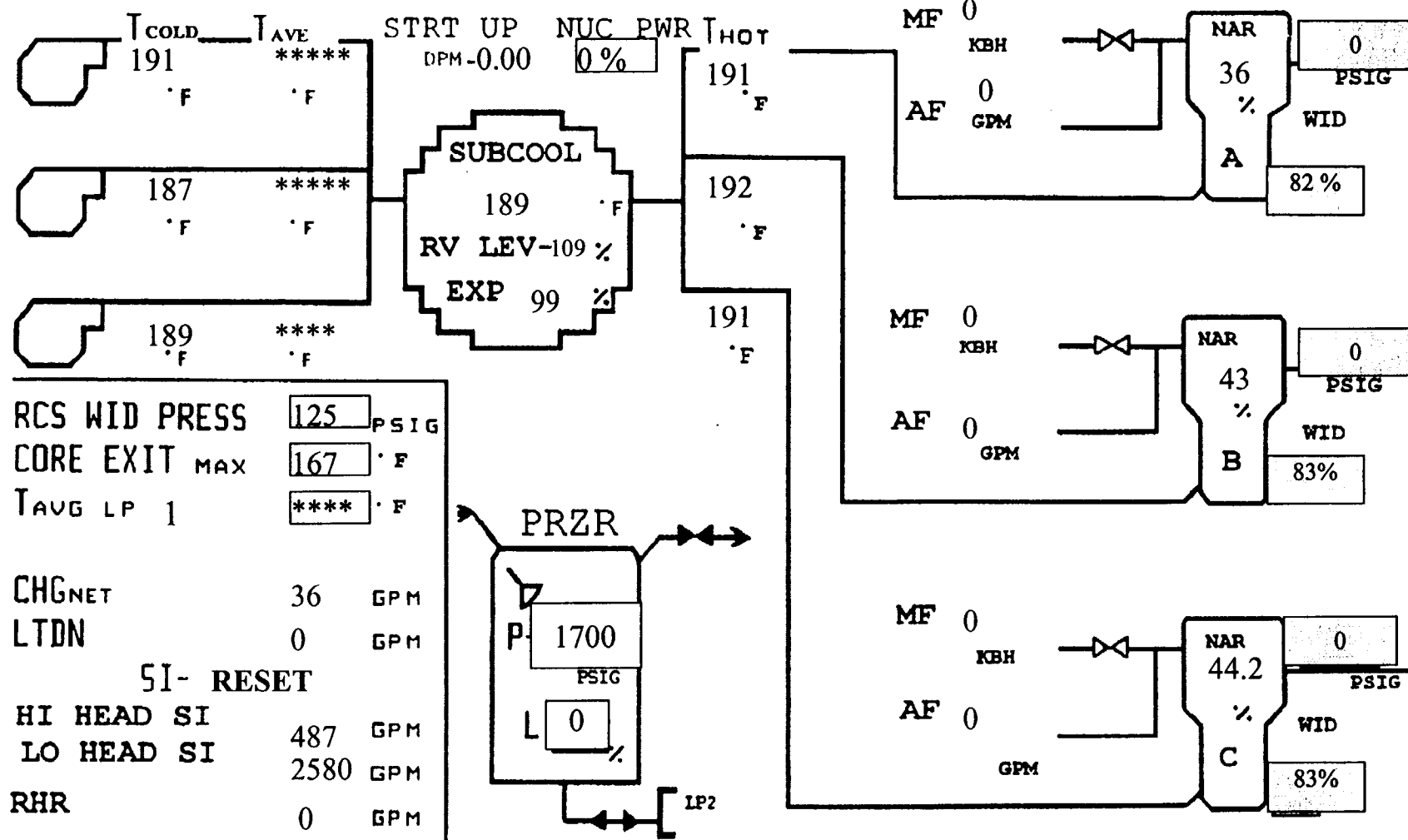


RCS WID PRESS 125 PSIG  
 CORE EXIT MAX 168 °F  
 T<sub>AUG LP 1</sub> \*\*\*\*\* °F

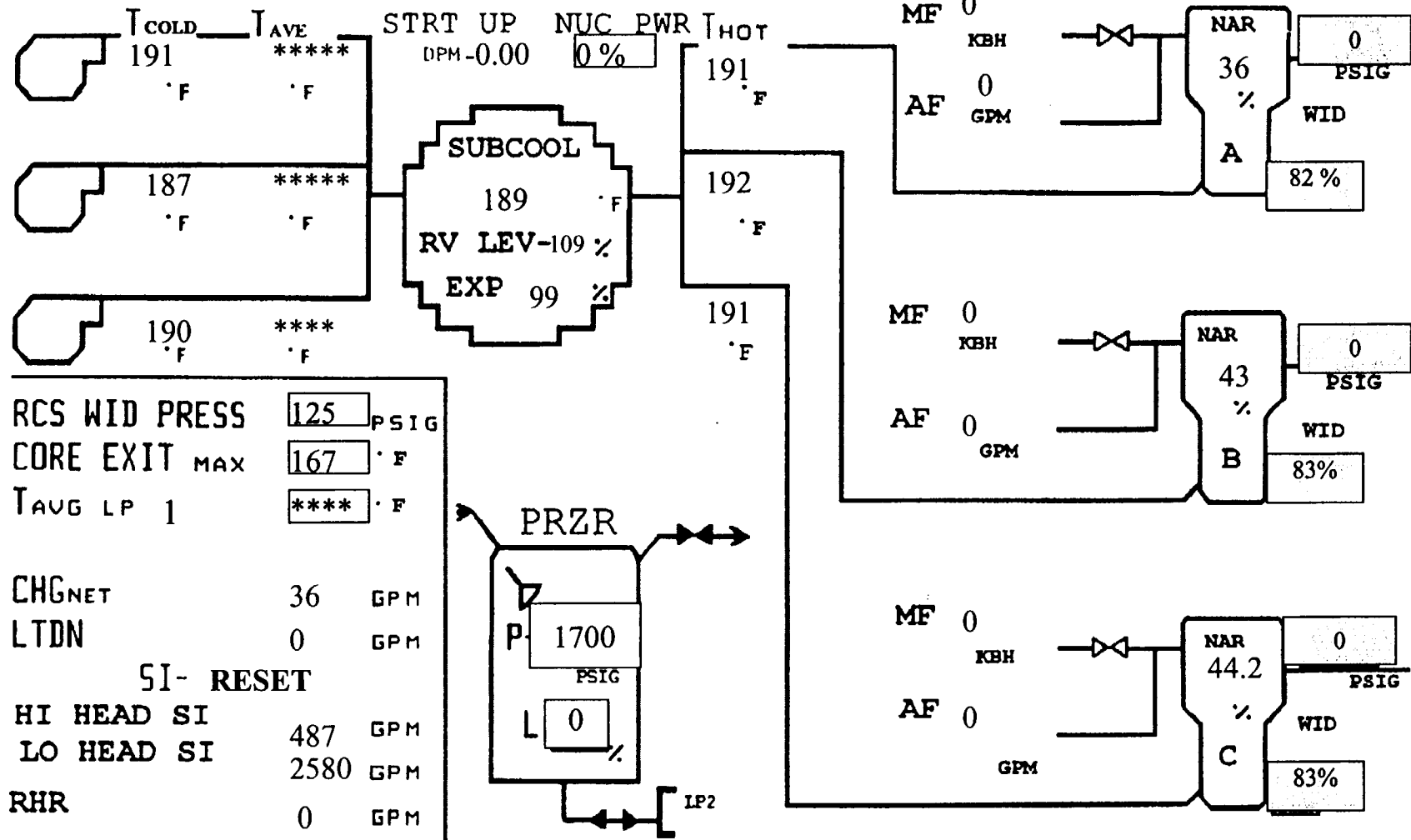
CHGNET 36 GPM  
 LTDN 0 GPM  
 SI- RESET  
 HI HEAD SI 487 GPM  
 LO HEAD SI 2580 GPM  
 RHR 0 GPM



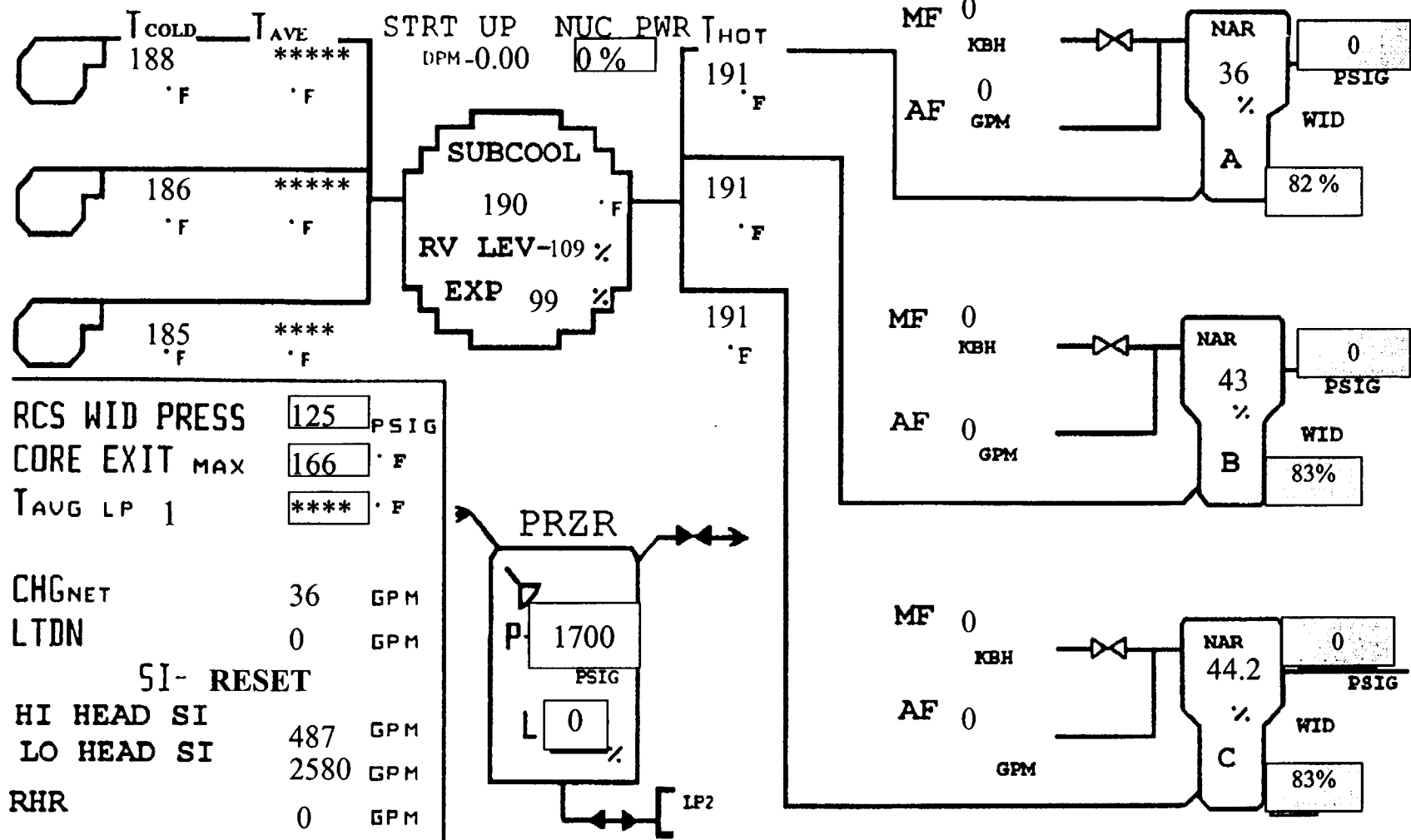
Time:2109



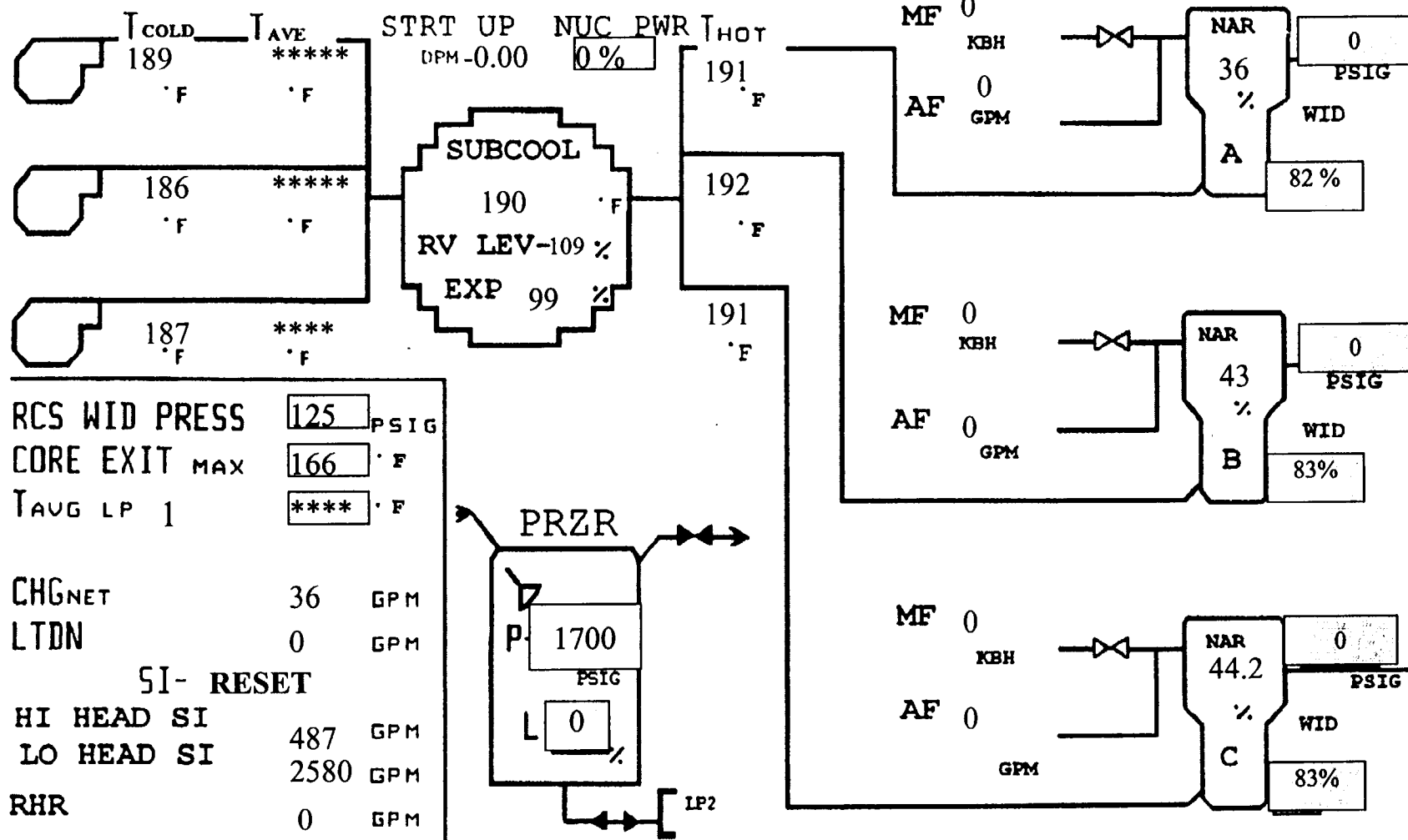
Time:2112

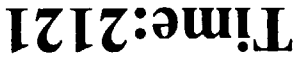


Time:2115

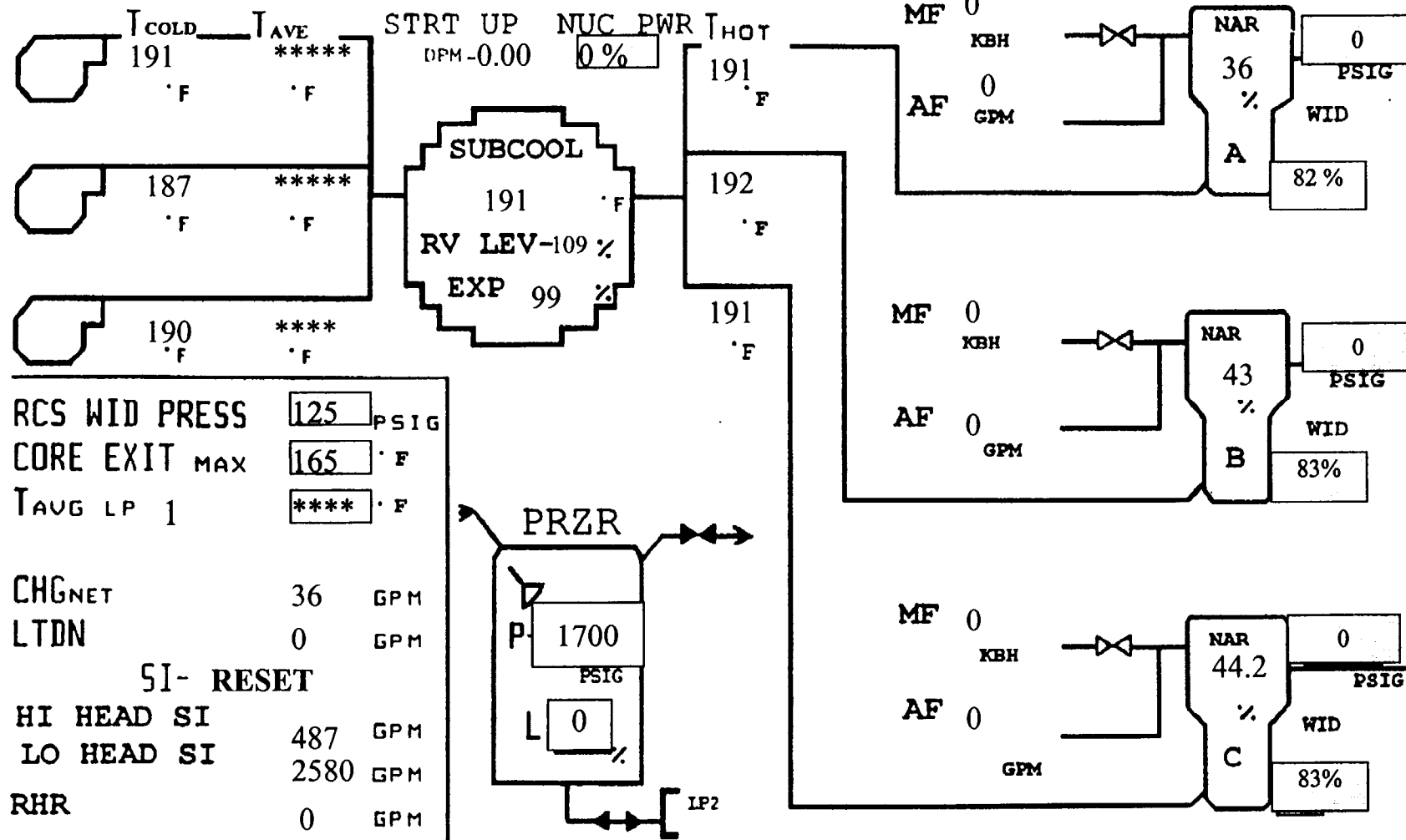


Time:2118

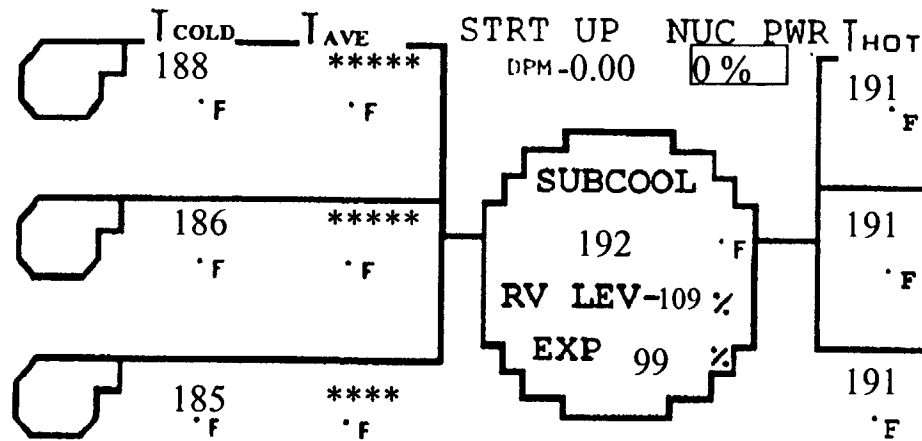




Time:2124

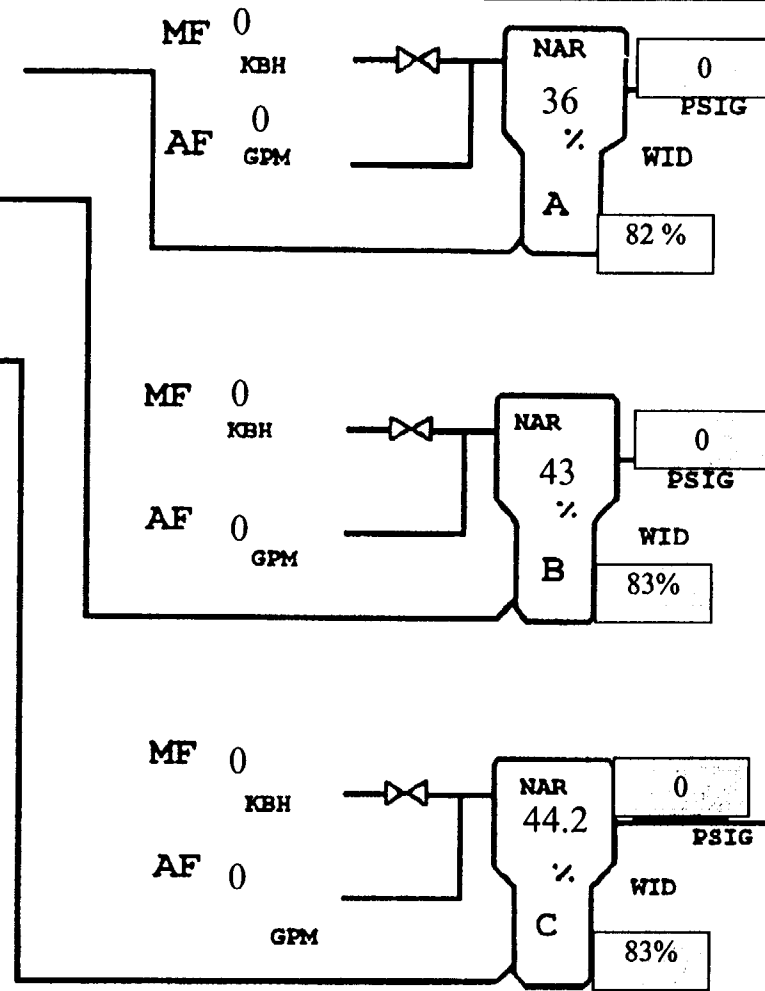
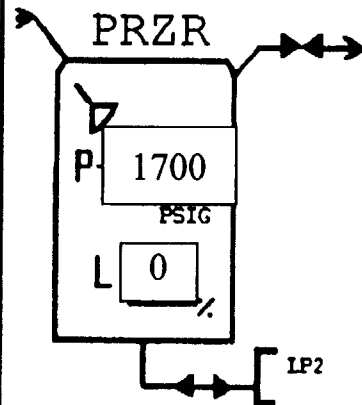


Time:2127



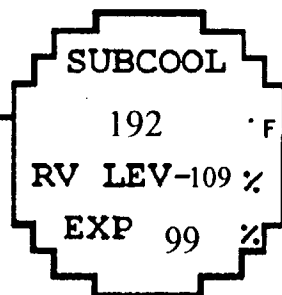
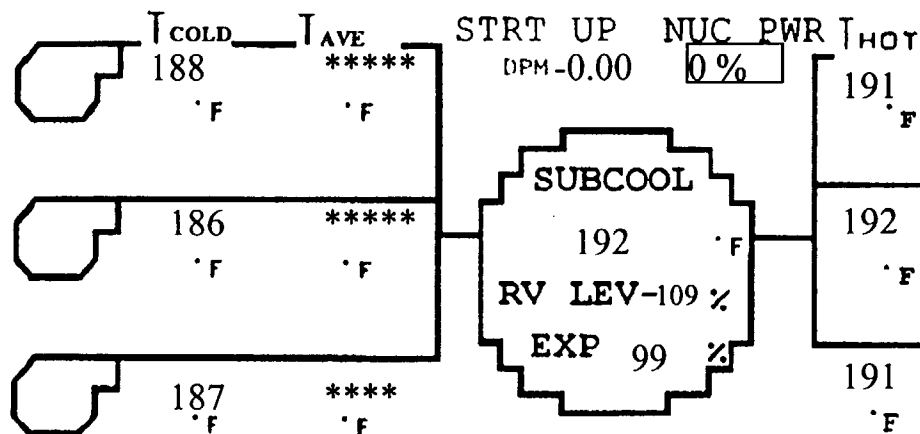
RCS WID PRESS 125 PSIG  
 CORE EXIT MAX 164 °F  
 T<sub>AVG</sub> LP 1 \*\*\*\*\* °F

CHG<sub>NET</sub> 36 GPM  
 LTDN 0 GPM  
 SI- RESET  
 HI HEAD SI 487 GPM  
 LO HEAD SI 2580 GPM  
 RHR 0 GPM



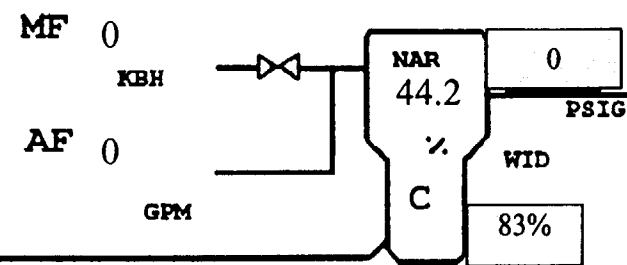
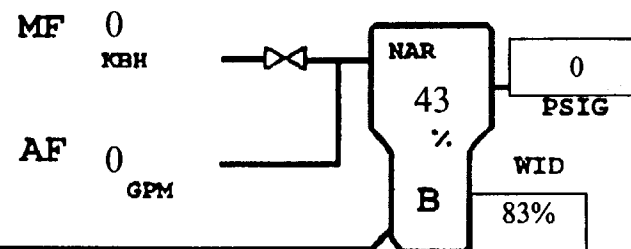
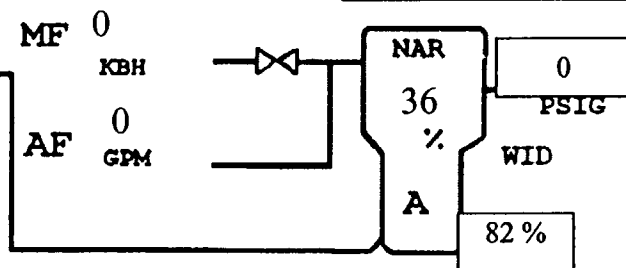
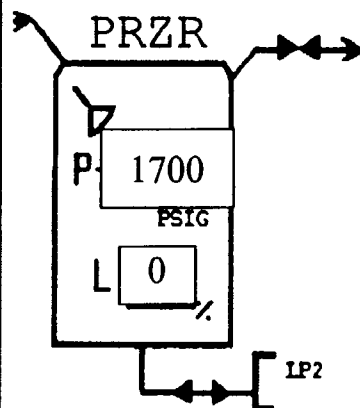


Time:2130



RCS WID PRESS 125 PSIG  
 CORE EXIT MAX 164 °F  
 T<sub>AVG</sub> LP 1 \*\*\*\*\* °F

CHG<sub>NET</sub> 36 GPM  
 LTDN 0 GPM  
 SI- RESET  
 HI HEAD SI 487 GPM  
 LO HEAD SI 2580 GPM  
 RHR 0 GPM



## BVPS UNIT NO. 2 DIGITAL RADIATION MONITORING SYSTEM (DRMS)

MONITORING		FUNCTION	MONITOR LOCATION
1.	2ARC-RQ1100	AIR EJECTOR DISCHARGE	(GAS) 752-6 TURB. BLDG.
2.	2CCP-RQ1100	COMPONENT COOLING WATER	(LIQUID) 718-6 AUX. BLDG.
3.	2CHS-RQ1100	REACTOR COOLANT LETDOWN HIGH/LOW	(LIQUID) 718-6 AUX. BLDG.
4.	2CNA-RQ1100	AUXILIARY STEAM CONDENSATE	(LIQUID) 718-6 AUX. BLDG.
5.	2CNA-RQ1101	EVAPORATION REBOILER CONDENSATE	(LIQUID) 722-6 WASTE HANDLING
6.	2GWS-RQ1102	GASEOUS WASTE SURGE TK TRANSFER LINE	(GAS) 735-6 AUX. BLDG.
7.	2GWS-RQ1102	AIR EJECTOR DELAY BED EXHAUST	(GAS) 755-6 AUX. BLDG.
8.	2GWS-RQ1103	AERATED VENT TRANSFER LINE	(GAS) 735-6 AUX. BLDG.
9.	2GWS-RQ1104	WASTE GAS STORAGE TANK	(GAS) 735-6 DECON BLDG.
10.	2HVL-RQ1112	CONDENSATE POLISHING VENT STACK	(GAS & PARTICULATE) 794-6 COND. POL.
11.	2HVR* RQ104A	CONTAINMENT PURGE	(GAS) 782-CNMT.
12.	2HVR* RQ104B	CONTAINMENT PURGE	(GAS) 782-CNMT.
13.	2HVS-RQ1101	VENTILATION VENT	(GAS & PARTICULATE) 773-6 AUX. BLDG.
14.	2HVS* RQ 109A	ELEVATED RELEASE (PARTICULATE)	(PARTICULATE) 773-6 AUX. BLDG.
15.	2HVS* RQ 109B	ELEVATED RELEASE (LOW RANGE)	(GAS) 773-6 AUX. BLDG.
16.	2HVS* RQ 109C	ELEVATED RELEASE (MID RANGE)	(GAS) 773-6 AUX. BLDG.
17.	2HVS* RQ 109D	ELEVATED RELEASE (HIGH RANGE)	(GAS) 773-6 AUX. BLDG.
18.	2MSS* RQ1101A	MAIN STEAM LINE	(STEAM) 745-6 SERVICE BLDG.
19.	2MSS* RQ1101B	MAIN STEAM LINE	(STEAM) 745-6 SERVICE BLDG.
20.	2MSS* RQ1101C	MAIN STEAM LINE	(STEAM) 745-6 SERVICE BLDG.
21.	2RMC* RQ201	CONTROL ROOM AREA	CONTROL BLDG.
22.	2RMC* RQ202	CONTROL ROOM AREA	CONTROL BLDG.
23.	2RMC-RQ1301	CONTROL ROOM AIRBORNE	(GAS & PARTICULATE) CONTROL BLDG.
24.	2RMF-RQ201	NEW FUEL STORAGE AREA	755-4 FUEL BLDG.
25.	2RMF-RQ202	FUEL PIT BRIDGE	FUEL BLDG.
26.	2RMF-RQ1301	FUEL BUILDING VENTILATION	(GAS & PARTICULATE) 766-4 FUEL BLDG.
27.	2RMJ-RQ201	WASTE HANDLING - 722 AREA	722-6 WASTE HANDLING
28.	2RMJ-RQ202	WASTE HANDLING - 755 AREA	WASTE HANDLING
29.	2RMJ-RL202	WASTE HANDLING - 755 AREA	WASTE HANDLING
30.	2RMJ-RQ203	WASTE HANDLING - 735 AREA	WASTE BLDG.
31.	2RMJ-RL203	WASTE HANDLING - 735 AREA	WASTE HANDLING
32.	2RMJ-RQ204	WASTE HANDLING - 735 AREA	WASTE HANDLING
33.	2RMJ-RQ1301	WASTE HANDLING BUILDING	(GAS & PARTICULATE) 733-6 AUX. BLDG.
34.	2RML-RQ201	CONDENSATE POLISHING - 722 AREA	722-6 COND. POL.
35.	2RML-RQ202	CONDENSATE POLISHING - 735 AREA	735-5 COND. POL.
36.	2RML-RQ203	CONDENSATE POLISHING - 752 AREA	752-6 COND. POL.
37.	2RML-RQ204	CONDENSATE POLISHING - 744 AREA	744-6 COND. POL.
38.	2RML-RQ205	CONDENSATE POLISHING - 735 AREA	735-6 COND. POL.
39.	2RML-RQ206	CONDENSATE POLISHING - 735 AREA	735-6 COND. POL.
40.	2RML-RQ1301	CONDENSATE POLISHING BLDG. AIRBORNE	(GAS & PARTICULATE) 794-6 COND. POL.
41.	2RMP-RQ201	AUXILIARY BUILDING - 710 AREA	718-6 AUX. BLDG.
42.	2RMP-RQ202	AUXILIARY BUILDING - 710 AREA	718-6 AUX. BLDG.

## BVPS UNIT NO. 2 DIGITAL RADIATION MONITORING SYSTEM (DRMS) (Cont.)

MONITORING		FUNCTION	MONITOR LOCATION
43.	2RMP-RQ203	AUXILIARY BUILDING - 710 AREA	718-6 AUX. BLDG
44.	2RMP-RQ204	AUXILIARY BUILDING - 735 AREA	735-6 AUX. BLDG.
45.	2RMP-RQ205	AUXILIARY BUILDING - 735 AREA	735-6 AUX. BLDG.
46.	2RMP-RQ206	AUXILIARY BUILDING - 735 AREA	755-6 AUX. BLDG.
47.	2RMP-RQ207	AUXILIARY BUILDING - 755 AREA	755-6 AUX. BLDG.
48.	2RMP-RQ208	AUXILIARY BUILDING - 755 AREA	755-6 AUX. BLDG.
49.	2RMP-RQ209	AUXILIARY BUILDING - 773 AREA	733-6 AUX. BLDG.
50.	2RMP-RQ210	AUX. BLDG. SAMPLE ROOM AREA	718-6 AUX. BLDG.
51.	2RMP-RI210	AUX. BLDG. SAMPLE ROOM AREA	718-6 AUX. BLDG.
52.	2RMP-RQ1300	AUXILIARY BUILDING 718A	(GAS & PARTICULATE) 735-6 AUX. BLDG.
53.	2RMP-RQ1302	AUXILIARY BUILDING 718B	(GAS & PARTICULATE) 735-6 AUX. BLDG.
54.	2RMP-RQ1304	AUXILIARY BUILDING 718C	(GAS & PARTICULATE) 735-6 AUX. BLDG.
55.	2RMP-RQ1306	AUXILIARY BUILDING 735A	(GAS & PARTICULATE) 735-6 AUX. BLDG.
56.	2RMP-RQ1308	AUXILIARY BUILDING 735B	(GAS & PARTICULATE) 735-6 AUX. BLDG.
57.	2RMP-RQ1310	AUXILIARY BUILDING 755A	(GAS & PARTICULATE) 755-6 AUX. BLDG.
58.	2RMP-RQ1312	AUXILIARY BUILDING 755B	(GAS & PARTICULATE) 755-6 AUX. BLDG.
59.	2RMQ-RQ201	DECONTAMINATION AREA	749-6 DECON. BLDG
60.	2RMQ-RQ1301	DECONTAMINATION BUILDING	(GAS & PARTICULATE) 766-4 FUEL BLDG.
61.	2RMQ-RQ1303	WASTE GAS STORAGE VAULT	(GAS & PARTICULATE) 735-6 DECON. BLDG.
62.	2RMR-RQ201	REACTOR CONTAINMENT LOW RANGE	767' CONTAINMENT
63.	2RMR-RI201	REACTOR CONTAINMENT LOW RANGE	767' CONTAINMENT
64.	2RMR-RQ202A	OUTSIDE PERSONNEL HATCH AREA	767' CABLE VAULT & ROD CONT.
65.	2RMR-RQ202B	OUTSIDE PERSONNEL HATCH AREA	767' CABLE VAULT & ROD CONT.
66.	2RMR-RL202	OUTSIDE PERSONNEL HATCH AREA	767' CABLE VAULT & ROD CONT.
67.	2RMR-RQ203	MANIPULATOR CRANE	CONTAINMENT
68.	2RMR-RL203	MANIPULATOR CRANE	CONTAINMENT
69.	2RMC-RQ202A	U2 CONTROL ROOM	CONTROL ROOM
70.	2RMC-RQ202B	U2 CONTROL ROOM	CONTROL ROOM
71.	2RMR-RQ204	INCORE INSTRUMENTATION AREA	743-4 CONTAINMENT
72.	2RMR-RI204	INCORE INSTRUMENTATION AREA	743-4 CONTAINMENT
73.	2RMR-RQ205A	SAFEGUARDS RECOMBINER AREA	742-0 SAFEGUARDS
74.	2RMR-RQ205B	SAFEGUARDS RECOMBINER AREA	742-0 SAFEGUARDS
75.	2RMR-RQ206	INCONTAINMENT HIGH RANGE	CONTAINMENT
76.	2RMR-RL206	INCONTAINMENT HIGH RANGE	CONTAINMENT
77.	2RMR-RI207	INCONTAINMENT HIGH RANGE	CONTAINMENT
78.	2RMR-RL207	INCONTAINMENT HIGH RANGE	CONTAINMENT

## BVPS UNIT NO. 2 DIGITAL RADIATION MONITORING SYSTEM (DRMS) (Cont.)

MONITORING		FUNCTION		MONITOR LOCATION
79.	2RMR-RQ1301	LEAK COLLECTION VENTILATION	(GAS & PARTICULATE)	773-6 AUX. BLDG.
80.	2RMR-RQ1303	CONTAINMENT AIRBORNE	(GAS & PARTICULATE)	738-10 CABLE VAULT & ROD CONT.
81.	2RMS-RQ221	SPARE		
82.	2RMS-RQ222	SPARE		
83.	2RMS-RQ223	PRIMARY ACCESS FACILITY AREA		
84.	2RMS-RQ224	SPARE		
85.	2SGC-RQ1100	LIQUID WASTE PROCESS EFFLUENT	(LIQUID)	718-6 AUX. BLDG.
86.	2SSR-RQ1100	STEAM GENERATOR BLOWDOWN	(LIQUID)	718-6 AUX. BLDG.
87.	2SWS*RQ1100A	RECIRC. SPRAY Hx SW	(LIQUID)	759-0 DIESEL GEN.
88.	2SWS*RQ1100B	RECIRC. SPRAY Hx SW	(LIQUID)	759-0 DIESEL GEN.
89.	2SWS*RQ1100C	RECIRC. SPRAY Hx SW	(LIQUID)	759-0 DIESEL GEN.
90.	2SWS*RQ1100D	RECIRC. SPRAY Hx SW	(LIQUID)	759-0 DIESEL GEN.
91.	2SWS*RQ1101	COMPONENT COOLING SW	(LIQUID)	710-6 AUX. BLDG.
92.	2SWS-RQ1102	COMPONENT COOLING Hx SW	(LIQUID)	710-6 AUX. BLDG.

**2000 EVALUATED EXERCISE – DRMS DATA**  
(MONITORS UNAFFECTED BY EXERCISE EVENTS)

<u>MARK NO.</u> <u>AREA MONITOR</u>	<u>DRMS ID.</u>	<u>READING</u>	<u>UNITS</u>	<u>MARK NO.</u> <u>AIRBORNE</u>	<u>DRMS ID.</u>	<u>READING</u>	<u>UNITS</u>
*2RMC-RQ201	1AX069	3.33E-02	mR/hr.	2RMC-RQ301A	1PA070	1.95E-10	uCi/cc
2RMC-RQ202	1AX072	6.00E-02	mR/hr.	2RMC-RQ301B	2GB070	3.44E-6	uCi/cc
<b><u>EFFLUENT MONITOR</u></b>				2RMF-RQ301A	1PA032	2.90E-10	uCi/cc
2HVL-RQ112A	1PA013	8.30E-11	uCi/cc	2RMF-RQ301B	2GB032	4.21E-06	uCi/cc
2HVL-RQ112B	2GB013	3.34E-05	uCi/cc	2RMJ-RQ301A	1PA041	2.90E-10	uCi/cc
2HVS-RQ101A	1PA039	4.50E-10	uCi/cc	2RMJ-RQ301B	2GB041	1.38E-6	uCi/cc
2HVS-RQ101B	2GB039	1.90E-06	uCi/cc	2RML-RQ301A	1PA014	5.71E-10	uCi/cc
*2MSS-RQ101AA	1SA005	9.37E-03	uCi/cc	2RML-RQ301B	2GB014	2.2E-6	uCi/cc
*2MSS-RQ101AB	2EA005		uCi/sec	2RMP-RQ300A	1PA054	2.49E-10	uCi/cc
*2MSS-RQ101BA	3SB005	5.83E-03	uCi/cc	2RMP-RQ300B	2GB054	1.57E-06	uCi/cc
*2MSS-RQ101BB	4EB005		uCi/sec	2RMP-RQ302A	1PA052	2.09E-10	uCi/cc
*2MSS-RQ101CA	5SC005	5.02E-03	uCi/cc	2RMP-RQ302B	2GB052	1.53E-06	uCi/cc
*2MSS-RQ101CB	6EC005		uCi/sec	2RMP-RQ304A	1PA056	2.45E-10	uCi/cc
2RMQ-RQ301A	1PA033	6.66E-10	uCi/cc	2RMP-RQ304B	2GB056	1.54E-06	uCi/cc
2RMQ-RQ301B	2GB033	2.24E-06	uCi/cc	2RMP-RQ306A	1PA053	2.47E-10	uCi/cc
2RMQ-RQ303A	1PA037	2.71E-10	uCi/cc	2RMP-RQ306B	2GB053	1.58E-06	uCi/cc
2RMQ-RQ303B	2GB037	2.74E-06	uCi/cc	2RMP-RQ308A	1PA055	2.57E-10	uCi/cc
<b><u>PROCESS LIQ.</u></b>				2RMP-RQ308B	2GB055	1.19E-06	uCi/cc
2CNA-RQ100	1LX063	5.70E-07	uCi/ml	2RMP-RQ310A	1PA046	2.81E-10	uCi/cc
2CNA-RQ101	1LX012	2.54E-07	uCi/ml	2RMP-RQ310B	2GB046	1.56E-06	uCi/cc
2SSR-RQ100	1LX062	3.38E-06	uCi/ml	2RMP-RQ312A	1PA048	3.05E-10	uCi/cc
2SWS-RQ101	1LX068	7.21E-07	uCi/ml	2RMP-RQ312B	2GB048	1.60E-06	uCi/cc
*2SWS-RQ100A	1LA001	6.73E-5	uCi/ml	<b><u>PROCESS GAS</u></b>			
2SWS-RQ100B	1LB002	1.78E-4	uCi/ml	2ARC-RQ100	1GX007	5.09E-07	uCi/cc
*2SWS-RQ100C	1LC003	1.55E-4	uCi/ml	2GWS-RQ101	1GX058	3.47E-02	uCi/cc
2SWS-RQ100D	1LD004	1.61E-4	uCi/ml	2GWS-RQ102A	1GX047	7.72E-07	uCi/cc
				2GWS-RQ103	1GX057	1.06E-06	uCi/cc
				2GWS-RQ104A	1GX036	2.39E+00	uCi/cc

THESE READINGS ARE VALID 1600 hrs. to 2200 hrs.

\* Will lose monitor during AE Bus failure.

2000 Evaluated Exercise - DRMS Data

	TIME >	1615	1618	1621	1624	1627	1630	1633	1636	1639	1642
Area Monitors	Channel	Drill Starts					Loss of AE Bus				
RMR-RQ201(mR/hr)	1AX026	8.00E-01	8.00E-01	8.00E-01	8.00E-01	8.00E-01	8.00E-01	8.00E-01	8.00E-01	8.00E-01	8.00E-01
RMR-RQ202A(mR/hr)	1AA020	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01
RMR-RQ202B(mR/hr)	2AB020	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01
RMR-RQ203(mR/hr)	1AX025	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS
RMR-RQ204(mR/hr)	1AX027	5.00E+00	5.00E+00	5.00E+00	5.00E+00	5.00E+00	5.00E+00	5.00E+00	5.00E+00	5.00E+00	5.00E+00
RMR-RQ205A(mR/hr)	1AX022	3.48E-01	3.48E-01	3.48E-01	3.48E-01	3.48E-01	3.48E-01	3.48E-01	3.48E-01	3.48E-01	3.48E-01
RMR-RQ205B(mR/hr)	1AX023	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01
RMR-RQ206(R/hr)	1AX029	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01
RMR-RQ207(R/hr)	1AX030	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01
RMF-RQ201(mR/hr)	1AX034	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01
RMF-RQ202(mR/hr)	1AX031	1.76E-01	1.76E-01	1.76E-01	1.76E-01	1.76E-01	1.76E-01	1.76E-01	1.76E-01	1.76E-01	1.76E-01
RMJ-RQ201(mR/hr)	1AX011	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00
RMJ-RQ202(mR/hr)	1AX009	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01
RMJ-RQ203(mR/hr)	1AX008	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01
RMJ-RQ204(mR/hr)	1AX010	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01
RML-RQ201(mR/hr)	1AX019	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01
RML-RQ202(mR/hr)	1AX017	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03
RML-RQ203(mR/hr)	1AX016	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01
RML-RQ204(mR/hr)	1AX015	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01
RML-RQ205(mR/hr)	1AX018	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01
RML-RQ206(mR/hr)	1AX073	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02
RMP-RQ201(mR/hr)	1AX066	1.85E-01	1.85E-01	1.85E-01	1.85E-01	1.85E-01	1.85E-01	1.85E-01	1.85E-01	1.85E-01	1.85E-01
RMP-RQ202(mR/hr)	1AX061	3.14E-01	3.14E-01	3.14E-01	3.14E-01	3.14E-01	3.14E-01	3.14E-01	3.14E-01	3.14E-01	3.14E-01
RMP-RQ203(mR/hr)	1AX060	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01
RMP-RQ204(mR/hr)	1AX050	1.17E-01	1.17E-01	1.17E-01	1.17E-01	1.17E-01	1.17E-01	1.17E-01	1.17E-01	1.17E-01	1.17E-01
RMP-RQ205(mR/hr)	1AX049	1.10E-01	1.10E-01	1.10E-01	1.10E-01	1.10E-01	1.10E-01	1.10E-01	1.10E-01	1.10E-01	1.10E-01
RMP-RQ206(mR/hr)	1AX044	1.13E-01	1.13E-01	1.13E-01	1.13E-01	1.13E-01	1.13E-01	1.13E-01	1.13E-01	1.13E-01	1.13E-01
RMP-RQ207(mR/hr)	1AX043	1.16E-01	1.16E-01	1.16E-01	1.16E-01	1.16E-01	1.16E-01	1.16E-01	1.16E-01	1.16E-01	1.16E-01
RMP-RQ208(mR/hr)	1AX045	1.40E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01
RMP-RQ209(mR/hr)	1AX038	1.05E-01	1.05E-01	1.05E-01	1.05E-01	1.05E-01	1.05E-01	1.05E-01	1.05E-01	1.05E-01	1.05E-01
RMP-RQ210(mR/hr)	1AX059	2.00E-01	2.00E-01	2.00E-01	2.00E-01	2.00E-01	2.00E-01	2.00E-01	2.00E-01	2.00E-01	2.00E-01
RMQ-RQ201(mR/hr)	1AX035	1.03E-01	1.03E-01	1.03E-01	1.03E-01	1.03E-01	1.03E-01	1.03E-01	1.03E-01	1.03E-01	1.03E-01
RMS-RQ223(mR/hr)	1AX071	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01
<b>Effluent Monitors</b>											
HVS-RQ109(uCi/sec)	5EE040	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01
HVS-RQ109A(uCi/cc)	1PA040	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10
HVS-RQ109B(uCi/cc)	2GB040	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07
HVS-RQ109C(uCi/cc)	3GC040	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04
HVS-RQ109D(uCi/cc)	4GD040	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02
<b>Airborne Monitors</b>											
HVR-RQ104A(uCi/cc)	1GX024	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.45E-04
HVR-RQ104B(uCi/cc)	1GX028	6.56E-05	6.56E-05	6.56E-05	6.56E-05	6.56E-05	6.56E-05	6.56E-05	6.56E-05	6.56E-05	6.56E-05
RMR-RQ301A(uCi/cc)	1PA042	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10
RMR-RQ301B(uCi/cc)	2GB042	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06
RMR-RQ303A(uCi/cc)	1PA021	1.04E-09	1.04E-09	1.04E-09	1.04E-09	1.04E-09	1.04E-09	1.04E-09	1.04E-09	1.04E-09	1.04E-09
RMR-RQ303B(uCi/cc)	2GB021	2.00E-06	2.00E-06	2.00E-06	2.00E-06	2.00E-06	2.00E-06	2.00E-06	2.00E-06	2.00E-06	2.00E-06
<b>Process Liq Monitors</b>											
CHS-RQ101A(uCi/cc)	1LA051	2.49E+00	2.49E+00	2.49E+00	2.49E+00	2.49E+00	2.49E+00	2.49E+00	2.49E+00	2.49E+00	2.49E+00
CHS-RQ101B(uCi/cc)	2LB051	3.00E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00
Designates Alert Alarm	High Alarm										
No Data AE BUS Failure											

## 2000 Evaluated Exercise - DRMS Data

	TIME >	1645	1648	1651	1654	1657	1700	1703	1706	1709	1712
<b>Area Monitors</b>	<b>Channel</b>										
RMR-RQ201(mR/hr)	1AX026	8.00E-01	8.00E-01	8.00E-01	8.00E-01	8.00E-01	8.00E-01	8.00E-01	8.00E-01	8.00E-01	8.00E-01
RMR-RQ202A(mR/hr)	1AA020	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01
RMR-RQ202B(mR/hr)	2AB020	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01
RMR-RQ203(mR/hr)	1AX025	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS
RMR-RQ204(mR/hr)	1AX027	5.00E+00	5.00E+00	5.00E+00	5.00E+00	5.00E+00	5.00E+00	5.00E+00	5.00E+00	5.00E+00	5.00E+00
RMR-RQ205A(mR/hr)	1AX022	3.48E-01	3.48E-01	3.48E-01	3.48E-01	3.48E-01	3.48E-01	3.48E-01	3.48E-01	3.48E-01	3.48E-01
RMR-RQ205B(mR/hr)	1AX023	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01
RMR-RQ206(R/hr)	1AX029	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01
RMR-RQ207(R/hr)	1AX030	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01
RMF-RQ201(mR/hr)	1AX034	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01
RMF-RQ202(mR/hr)	1AX031	1.76E-01	1.76E-01	1.76E-01	1.76E-01	1.76E-01	1.76E-01	1.76E-01	1.76E-01	1.76E-01	1.76E-01
RMJ-RQ201(mR/hr)	1AX011	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00
RMJ-RQ202(mR/hr)	1AX009	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01
RMJ-RQ203(mR/hr)	1AX008	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01
RMJ-RQ204(mR/hr)	1AX010	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01
RML-RQ201(mR/hr)	1AX019	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01
RML-RQ202(mR/hr)	1AX017	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03
RML-RQ203(mR/hr)	1AX016	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01
RML-RQ204(mR/hr)	1AX015	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01
RML-RQ205(mR/hr)	1AX018	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01
RML-RQ206(mR/hr)	1AX073	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02
RMP-RQ201(mR/hr)	1AX066	1.85E-01	1.85E-01	1.85E-01	1.85E-01	1.85E-01	1.85E-01	1.85E-01	1.85E-01	1.85E-01	1.85E-01
RMP-RQ202(mR/hr)	1AX061	3.14E-01	3.14E-01	3.14E-01	3.14E-01	3.14E-01	3.14E-01	3.14E-01	3.14E-01	3.14E-01	3.14E-01
RMP-RQ203(mR/hr)	1AX060	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01
RMP-RQ204(mR/hr)	1AX050	1.17E-01	1.17E-01	1.17E-01	1.17E-01	1.17E-01	1.17E-01	1.17E-01	1.17E-01	1.17E-01	1.17E-01
RMP-RQ205(mR/hr)	1AX049	1.10E-01	1.10E-01	1.10E-01	1.10E-01	1.10E-01	1.10E-01	1.10E-01	1.10E-01	1.10E-01	1.10E-01
RMP-RQ206(mR/hr)	1AX044	1.13E-01	1.13E-01	1.13E-01	1.13E-01	1.13E-01	1.13E-01	1.13E-01	1.13E-01	1.13E-01	1.13E-01
RMP-RQ207(mR/hr)	1AX043	1.16E-01	1.16E-01	1.16E-01	1.16E-01	1.16E-01	1.16E-01	1.16E-01	1.16E-01	1.16E-01	1.16E-01
RMP-RQ208(mR/hr)	1AX045	1.40E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01
RMP-RQ209(mR/hr)	1AX038	1.05E-01	1.05E-01	1.05E-01	1.05E-01	1.05E-01	1.05E-01	1.05E-01	1.05E-01	1.05E-01	1.05E-01
RMP-RQ210(mR/hr)	1AX059	2.00E-01	2.00E-01	2.00E-01	2.00E-01	2.00E-01	2.00E-01	2.00E-01	2.00E-01	2.00E-01	2.00E-01
RMQ-RQ201(mR/hr)	1AX035	1.03E-01	1.03E-01	1.03E-01	1.03E-01	1.03E-01	1.03E-01	1.03E-01	1.03E-01	1.03E-01	1.03E-01
RMS-RQ223(mR/hr)	1AX071	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01
<b>Effluent Monitors</b>											
HVS-RQ109(uCi/sec)	5EE040	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01
HVS-RQ109A(uCi/cc)	1PA040	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10
HVS-RQ109B(uCi/cc)	2GB040	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07
HVS-RQ109C(uCi/cc)	3GC040	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04
HVS-RQ109D(uCi/cc)	4GD040	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02
<b>Airborne Monitors</b>											
HVR-RQ104A(uCi/cc)	1GX024	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.45E-04
HVR-RQ104B(uCi/cc)	1GX028	6.56E-05	6.56E-05	6.56E-05	6.56E-05	6.56E-05	6.56E-05	6.56E-05	6.56E-05	6.56E-05	6.56E-05
RMR-RQ301A(uCi/cc)	1PA042	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10
RMR-RQ301B(uCi/cc)	2GB042	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06
RMR-RQ303A(uCi/cc)	1PA021	1.04E-09	1.04E-09	1.04E-09	1.04E-09	1.04E-09	1.04E-09	1.04E-09	1.04E-09	1.04E-09	1.04E-09
RMR-RQ303B(uCi/cc)	2GB021	2.00E-06	2.00E-06	2.00E-06	2.00E-06	2.00E-06	2.00E-06	2.00E-06	2.00E-06	2.00E-06	2.00E-06
<b>Process Liq Monitors</b>											
CHS-RQ101A(uCi/cc)	1LA051	2.49E+00	2.49E+00	2.49E+00	2.49E+00	2.49E+00	2.49E+00	2.49E+00	2.49E+00	2.49E+00	2.49E+00
CHS-RQ101B(uCi/cc)	2LB051	3.00E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00
Designates Alert Alarm	High Alarm										
No Data - AE BUS Failure											

2000 Evaluated Exercise - DRMS Data

TIME>		1715	1718	1721	1724	1727	1730	1733	1736	1739	1742
Area Monitors		400 GPM LOCA									
Channel											
RMR-RQ201(mR/hr)	1AX026	8.00E-01	8.00E-01	8.00E-01	8.00E-01	8.00E-01	8.00E-01	8.00E-01	8.00E-01	7.20E+00	2.16E+01
RMR-RQ202A(mR/hr)	1AA020	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.98E-01
RMR-RQ202B(mR/hr)	2AB020	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.80E-01	1.82E-01
RMR-RQ203(mR/hr)	1AX025	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS
RMR-RQ204(mR/hr)	1AX027	5.00E+00	5.00E+00	5.00E+00	5.00E+00	5.00E+00	5.00E+00	5.00E+00	5.00E+00	5.00E+00	2.66E+01
RMR-RQ205A(mR/hr)	1AX022	3.48E-01	3.48E-01	3.48E-01	3.48E-01	3.48E-01	3.48E-01	3.48E-01	3.48E-01	3.48E-01	3.48E-01
RMR-RQ205B(mR/hr)	1AX023	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01
RMR-RQ206(R/hr)	1AX029	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01
RMR-RQ207(R/hr)	1AX030	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01	8.70E-01
RMF-RQ201(mR/hr)	1AX034	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01
RMF-RQ202(mR/hr)	1AX031	1.76E-01	1.76E-01	1.76E-01	1.76E-01	1.76E-01	1.76E-01	1.76E-01	1.76E-01	1.76E-01	1.76E-01
RMJ-RQ201(mR/hr)	1AX011	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00
RMJ-RQ202(mR/hr)	1AX009	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01
RMJ-RQ203(mR/hr)	1AX008	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01
RMJ-RQ204(mR/hr)	1AX010	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01
RML-RQ201(mR/hr)	1AX019	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01
RML-RQ202(mR/hr)	1AX017	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03
RML-RQ203(mR/hr)	1AX016	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01
RML-RQ204(mR/hr)	1AX015	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01
RML-RQ205(mR/hr)	1AX018	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01
RML-RQ206(mR/hr)	1AX073	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02
RMP-RQ201(mR/hr)	1AX066	1.85E-01	1.85E-01	1.85E-01	1.85E-01	1.85E-01	1.85E-01	1.85E-01	1.85E-01	1.85E-01	1.85E-01
RMP-RQ202(mR/hr)	1AX061	3.14E-01	3.14E-01	3.14E-01	3.14E-01	3.14E-01	3.14E-01	3.14E-01	3.14E-01	3.14E-01	3.14E-01
RMP-RQ203(mR/hr)	1AX060	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01
RMP-RQ204(mR/hr)	1AX050	1.17E-01	1.17E-01	1.17E-01	1.17E-01	1.17E-01	1.17E-01	1.17E-01	1.17E-01	1.17E-01	1.17E-01
RMP-RQ205(mR/hr)	1AX049	1.10E-01	1.10E-01	1.10E-01	1.10E-01	1.10E-01	1.10E-01	1.10E-01	1.10E-01	1.10E-01	1.10E-01
RMP-RQ206(mR/hr)	1AX044	1.13E-01	1.13E-01	1.13E-01	1.13E-01	1.13E-01	1.13E-01	1.13E-01	1.13E-01	1.13E-01	1.13E-01
RMP-RQ207(mR/hr)	1AX043	1.16E-01	1.16E-01	1.16E-01	1.16E-01	1.16E-01	1.16E-01	1.16E-01	1.16E-01	1.16E-01	1.16E-01
RMP-RQ208(mR/hr)	1AX045	1.40E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01
RMP-RQ209(mR/hr)	1AX038	1.05E-01	1.05E-01	1.05E-01	1.05E-01	1.05E-01	1.05E-01	1.05E-01	1.05E-01	1.05E-01	1.05E-01
RMP-RQ210(mR/hr)	1AX059	2.00E-01	2.00E-01	2.00E-01	2.00E-01	2.00E-01	2.00E-01	2.00E-01	2.00E-01	2.00E-01	2.00E-01
RMQ-RQ201(mR/hr)	1AX035	1.03E-01	1.03E-01	1.03E-01	1.03E-01	1.03E-01	1.03E-01	1.03E-01	1.03E-01	1.03E-01	1.89E+00
RMS-RQ223(mR/hr)	1AX071	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01
Effluent Monitors											
HVS-RQ109(uCi/sec)	5EE040	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01
HVS-RQ109A(uCi/cc)	1PA040	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10
HVS-RQ109B(uCi/cc)	2GB040	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07
HVS-RQ109C(uCi/cc)	3GC040	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04
HVS-RQ109D(uCi/cc)	4GD040	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02
Airborne Monitors											
HVR-RQ104A(uCi/cc)	1GX024	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.11E-01	3.92E-03
HVR-RQ104B(uCi/cc)	1GX028	6.56E-05	6.56E-05	6.56E-05	6.56E-05	6.56E-05	6.56E-05	6.56E-05	1.97E-04	5.90E-04	1.77E-03
RMR-RQ301A(uCi/cc)	1PA042	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10
RMR-RQ301B(uCi/cc)	2GB042	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06
RMR-RQ303A(uCi/cc)	1PA021	1.04E-09	1.04E-09	1.04E-09	1.04E-09	1.04E-09	1.04E-09	1.04E-09	1.04E-09	1.04E-09	1.04E-09
RMR-RQ303B(uCi/cc)	2GB021	2.00E-06	2.00E-06	2.00E-06	2.00E-06	2.00E-06	2.00E-06	2.00E-06	2.00E-06	2.00E-06	2.00E-06
Process Liq Monitors											
CHS-RQ101A(uCi/cc)	1LA051	2.49E+00	2.49E+00	2.49E+00	2.49E+00	2.49E+00	2.49E+00	2.49E+00	2.49E+00	2.49E+00	2.49E+00
CHS-RQ101B(uCi/cc)	2LB051	3.00E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00
Designates Alert Alarm		High Alarm									
No Data - AT BUS Failure											



## 2000 Evaluated Exercise - DRMS Data

Area Monitors	TIME>	1745	1748	1751	1754	1757	1800	1803	1806	1809	1812
Channel	9000 GPM LOCA	CIB	RS Starts								
RMR-RQ201(mR/hr)	1AX026	6.48E+01	1.24E+02	1.25E+03	1.7E+03	1.72E+03	2.01E+03	2.35E+03	2.75E+03	3.24E+03	3.76E+03
RMR-RQ202A(mR/hr)	1AA020	2.18E-01	2.40E-01	4.46E+00	5.18E+00	6.02E+00	7.00E+00	8.15E+00	9.50E+00	1.11E+01	1.29E+01
RMR-RQ202B(mR/hr)	2AB020	1.84E-01	1.85E-01	4.02E+01	4.09E+01	4.18E+01	4.28E+01	4.39E+01	4.53E+01	4.68E+01	4.87E+01
RMR-RQ203(mR/hr)	1AX025	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS
RMR-RQ204(mR/hr)	1AX027	6.98E+01	1.22E+02	1.26E+03	1.7E+03	1.72E+03	2.01E+03	2.35E+03	2.75E+03	3.24E+03	3.76E+03
RMR-RQ205A(mR/hr)	1AX022	3.48E-01	3.48E-01	3.48E-01	3.48E-01	3.48E-01	3.48E-01	5.36E+00	6.27E+00	7.33E+00	8.58E+00
RMR-RQ205B(mR/hr)	1AX023	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01	2.32E+00	2.72E+00	3.18E+00	3.72E+00
RMR-RQ206(R/hr)	1AX029	1.02E+00	1.19E+00	1.39E+00	1.63E+00	1.91E+00	2.23E+00	2.61E+00	3.05E+00	3.57E+00	4.18E+00
RMR-RQ207(R/hr)	1AX030	1.02E+00	1.19E+00	1.39E+00	1.63E+00	1.91E+00	2.23E+00	2.61E+00	3.05E+00	3.57E+00	4.18E+00
RMF-RQ201(mR/hr)	1AX034	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01
RMF-RQ202(mR/hr)	1AX031	1.76E-01	1.76E-01	2.12E+00	2.48E+00	2.90E+00	3.39E+00	3.97E+00	4.64E+00	5.43E+00	6.36E+00
RMJ-RQ201(mR/hr)	1AX011	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00
RMJ-RQ202(mR/hr)	1AX009	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01
RMJ-RQ203(mR/hr)	1AX008	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01
RMJ-RQ204(mR/hr)	1AX010	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01
RML-RQ201(mR/hr)	1AX019	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01
RML-RQ202(mR/hr)	1AX017	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03
RML-RQ203(mR/hr)	1AX016	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01
RML-RQ204(mR/hr)	1AX015	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01
RML-RQ205(mR/hr)	1AX018	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01
RML-RQ206(mR/hr)	1AX073	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02
RMP-RQ201(mR/hr)	1AX066	1.85E-01	1.85E-01	1.85E-01	2.27E-01	2.65E-01	3.10E-01	3.63E-01	4.25E-01	4.97E-01	5.81E-01
RMP-RQ202(mR/hr)	1AX061	3.14E-01	3.14E-01	3.14E-01	6.52E-01	7.63E-01	8.93E-01	1.04E+00	1.22E+00	1.43E+00	1.67E+00
RMP-RQ203(mR/hr)	1AX060	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	2.01E-01	2.35E-01	2.75E-01	3.22E-01	3.76E-01
RMP-RQ204(mR/hr)	1AX050	1.17E-01	1.17E-01	1.88E-01	2.20E-01	2.58E-01	3.01E-01	3.52E-01	4.12E-01	4.83E-01	5.65E-01
RMP-RQ205(mR/hr)	1AX049	1.10E-01	1.10E-01	1.10E-01	1.10E-01	1.34E-01	1.56E-01	1.83E-01	2.14E-01	2.50E-01	2.93E-01
RMP-RQ206(mR/hr)	1AX044	1.13E-01	1.13E-01	1.13E-01	1.79E-01	2.10E-01	2.45E-01	2.87E-01	3.36E-01	3.93E-01	4.60E-01
RMP-RQ207(mR/hr)	1AX043	1.16E-01	1.16E-01	1.16E-01	1.16E-01	1.43E-01	1.67E-01	1.96E-01	2.29E-01	2.68E-01	3.14E-01
RMP-RQ208(mR/hr)	1AX045	1.40E-01	1.40E-01	2.02E-01	2.36E-01	2.77E-01	3.24E-01	3.79E-01	4.43E-01	5.18E-01	6.06E-01
RMP-RQ209(mR/hr)	1AX038	1.05E-01	1.05E-01	4.46E-01	5.18E-01	6.02E-01	7.00E-01	8.15E-01	9.50E-01	1.11E+00	1.29E+00
RMP-RQ210(mR/hr)	1AX059	2.00E-01	2.00E-01	2.00E-01	2.00E-01	2.00E-01	1.12E-01	1.31E-01	1.53E-01	1.79E-01	2.09E-01
RMQ-RQ201(mR/hr)	1AX035	2.21E+00	2.58E+00	3.02E+00	3.54E+00	4.14E+00	4.84E+00	5.67E+00	6.63E+00	7.76E+00	9.07E+00
RMS-RQ223(mR/hr)	1AX071	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01
<b>Effluent Monitors</b>											
HVS-RQ109(uCi/sec)	5EE040	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01
HVS-RQ109A(uCi/cc)	1PA040	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10
HVS-RQ109B(uCi/cc)	2GB040	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07
HVS-RQ109C(uCi/cc)	3GC040	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04
HVS-RQ109D(uCi/cc)	4GD040	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02
<b>Airborne Monitors</b>											
HVR-RQ104A(uCi/cc)	1GX024	1.12E-02	1.12E-02	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01
HVR-RQ104B(uCi/cc)	1GX028	5.31E-03	1.59E-02	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01
RMR-RQ301A(uCi/cc)	1PA042	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10
RMR-RQ301B(uCi/cc)	2GB042	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06
RMR-RQ303A(uCi/cc)	1PA021	1.04E-09	1.0348E-09	1.0296E-09	1.0245E-09	1.0194E-09	1.0143E-09	1.0092E-09	1.0041E-09	9.9912E-10	9.9413E-10
RMR-RQ303B(uCi/cc)	2GB021	2.00E-03	8.75E-03	9.9702E-03	8.8657E-03	8.8213E-03	8.7772E-03	8.7331E-03	8.6897E-03	8.6474E-03	8.6061E-03
<b>Process Liq Monitors</b>											
CHS-RQ101A(uCi/cc)	1LA051	2.49E+00	2.37E+00	2.25E+00	2.13E+00	2.03E+00	1.93E+00	1.83E+00	1.74E+00	1.65E+00	1.57E+00
CHS-RQ101B(uCi/cc)	2LB051	3.00E+00	2.85E+00	2.71E+00	2.57E+00	2.44E+00	2.32E+00	2.21E+00	2.10E+00	1.99E+00	1.89E+00
Designates Alert Alarm	High Alarm										
No Data - AE BUS Failure											

## 2000 Evaluated Exercise - DRMS Data

TIME>		1815	1818	1821	1824	1827	1830	1833	1836	1839	1842
<b>Area Monitors</b>											
RMR-RQ201(mR/hr)	1AX026	1.51E+01	1.76E+01	2.05E+01	2.40E+01	2.80E+01	3.27E+01	3.83E+01	4.47E+01	5.23E+01	6.12E+01
RMR-RQ202A(mR/hr)	1AA020	5.08E+01	5.33E+01	5.63E+01	5.97E+01	6.38E+01	6.85E+01	7.40E+01	8.05E+01	8.81E+01	9.69E+01
RMR-RQ202B(mR/hr)	2AB020	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS
RMR-RQ203(mR/hr)	1AX025	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS
RMR-RQ204(mR/hr)	1AX027	1.17E+01	1.37E+01	1.61E+01	1.88E+01	2.20E+01	2.57E+01	3.01E+01	3.52E+01	4.12E+01	4.82E+01
RMR-RQ205A(mR/hr)	1AX022	5.09E+00	5.95E+00	6.97E+00	8.15E+00	9.54E+00	1.12E+01	1.31E+01	1.53E+01	1.79E+01	2.09E+01
RMR-RQ205B(mR/hr)	1AX023	4.89E+00	5.72E+00	6.70E+00	7.84E+00	9.17E+00	1.07E+01	1.26E+01	1.47E+01	1.72E+01	2.01E+01
RMR-RQ206(R/hr)	1AX029	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01
RMR-RQ207(R/hr)	1AX030	7.44E+00	8.70E+00	1.02E+01	1.19E+01	1.39E+01	1.63E+01	1.91E+01	2.23E+01	2.61E+01	3.06E+01
RMF-RQ201(mR/hr)	1AX034	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00
RMF-RQ202(mR/hr)	1AX031	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01
RMJ-RQ201(mR/hr)	1AX011	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01
RMJ-RQ202(mR/hr)	1AX009	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01
RMJ-RQ203(mR/hr)	1AX008	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01
RMJ-RQ204(mR/hr)	1AX010	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01
RML-RQ201(mR/hr)	1AX019	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03
RML-RQ202(mR/hr)	1AX017	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01
RML-RQ203(mR/hr)	1AX016	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01
RML-RQ204(mR/hr)	1AX015	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01
RML-RQ205(mR/hr)	1AX018	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02
RML-RQ206(mR/hr)	1AX073	6.80E-01	7.96E-01	9.31E-01	1.09E+00	1.27E+00	1.49E+00	1.74E+00	2.04E+00	2.39E+00	2.79E+00
RMP-RQ201(mR/hr)	1AX066	1.96E+00	2.29E+00	2.68E+00	3.13E+00	3.67E+00	4.29E+00	5.02E+00	5.87E+00	6.87E+00	8.04E+00
RMP-RQ202(mR/hr)	1AX061	4.40E-01	5.15E-01	6.03E-01	7.05E-01	8.25E-01	9.65E-01	1.13E+00	1.32E+00	1.55E+00	1.81E+00
RMP-RQ203(mR/hr)	1AX060	6.61E-01	7.73E-01	9.04E-01	1.06E+00	1.24E+00	1.45E+00	1.69E+00	1.98E+00	2.32E+00	2.71E+00
RMP-RQ204(mR/hr)	1AX050	3.43E-01	4.01E-01	4.69E-01	5.49E-01	6.42E-01	7.51E-01	8.79E-01	1.03E+00	1.20E+00	1.41E+00
RMP-RQ205(mR/hr)	1AX049	5.38E-01	6.30E-01	7.37E-01	8.62E-01	1.01E+00	1.18E+00	1.38E+00	1.62E+00	1.89E+00	2.21E+00
RMP-RQ206(mR/hr)	1AX044	3.67E-01	4.29E-01	5.02E-01	5.88E-01	6.88E-01	8.05E-01	9.41E-01	1.10E+00	1.29E+00	1.51E+00
RMP-RQ207(mR/hr)	1AX043	7.09E-01	8.30E-01	9.71E-01	1.14E+00	1.33E+00	1.56E+00	1.82E+00	2.13E+00	2.49E+00	2.91E+00
RMP-RQ208(mR/hr)	1AX045	1.51E+00	1.76E+00	2.05E+00	2.40E+00	2.80E+00	3.27E+00	3.83E+00	4.47E+00	5.23E+00	6.12E+00
RMP-RQ209(mR/hr)	1AX038	2.45E-01	2.86E-01	3.35E-01	3.92E-01	4.58E-01	5.36E-01	6.28E-01	7.34E-01	8.59E-01	1.01E+00
RMP-RQ210(mR/hr)	1AX059	1.06E+01	1.24E+01	1.45E+01	1.70E+01	1.99E+01	2.33E+01	2.72E+01	3.19E+01	3.73E+01	4.36E+01
RMQ-RQ201(mR/hr)	1AX035	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01
RMS-RQ223(mR/hr)	1AX071	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01
<b>Effluent Monitors</b>											
HVS-RQ109(uCi/sec)	5EE040	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10
HVS-RQ109A(uCi/cc)	1PA040	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07
HVS-RQ109B(uCi/cc)	2GB040	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04
HVS-RQ109C(uCi/cc)	3GC040	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02
HVS-RQ109D(uCi/cc)	4GD040	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01
<b>Airborne Monitors</b>											
HVR-RQ104A(uCi/cc)	1GX024	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10
HVR-RQ104B(uCi/cc)	1GX028	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06
RMR-RQ301A(uCi/cc)	1PA042	9.8915E-10	9.8421E-10	9.7929E-10	9.7439E-10	9.6952E-10	9.6467E-10	9.5985E-10	9.5505E-10	9.5027E-10	9.4552E-10
RMR-RQ301B(uCi/cc)	2GB042	3.51E-06	3.51E-06	3.51E-06	3.51E-06	3.51E-06	3.51E-06	3.51E-06	3.51E-06	3.51E-06	3.51E-06
RMR-RQ303A(uCi/cc)	1PA021	3.51E-06	3.51E-06	3.51E-06	3.51E-06	3.51E-06	3.51E-06	3.51E-06	3.51E-06	3.51E-06	3.51E-06
RMR-RQ303B(uCi/cc)	2GB021	3.51E-06	3.51E-06	3.51E-06	3.51E-06	3.51E-06	3.51E-06	3.51E-06	3.51E-06	3.51E-06	3.51E-06
<b>Process Liq Monitors</b>											
CHS-RQ101A(uCi/cc)	1LA051	1.49E+00	1.42E+00	1.35E+00	1.28E+00	1.21E+00	1.15E+00	1.10E+00	1.04E+00	9.89E-01	9.40E-01
CHS-RQ101B(uCi/cc)	2LB051	1.80E+00	1.71E+00	1.62E+00	1.54E+00	1.46E+00	1.39E+00	1.32E+00	1.25E+00	1.19E+00	1.13E+00
Designates Alert Alarm	High Alarm										
No Data - AT BUS Failure											

## 2000 Evaluated Exercise - DRMS Data

TIME >		1845	1848	1851	1854	1857	1900	1903	1906	1909	1912
<b>Area Monitors</b>											
RMR-RQ201(mR/hr)	1AX026	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01
RMR-RQ202A(mR/hr)	1AA020	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01
RMR-RQ202B(mR/hr)	2AB020	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01
RMR-RQ203(mR/hr)	1AX025	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS
RMR-RQ204(mR/hr)	1AX027	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01
RMR-RQ205A(mR/hr)	1AX022	5.64E+01	6.60E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01	7.15E+01
RMR-RQ205B(mR/hr)	1AX023	2.45E+01	2.86E+01	3.35E+01	3.92E+01	4.58E+01	5.36E+01	6.27E+01	7.15E+01	7.15E+01	7.15E+01
RMR-RQ206(R/hr)	1AX029	2.35E+01	2.75E+01	3.22E+01	3.77E+01	4.41E+01	5.16E+01	6.03E+01	7.84E+01	1.02E+02	1.33E+02
RMR-RQ207(R/hr)	1AX030	2.35E+01	2.75E+01	3.22E+01	3.77E+01	4.41E+01	5.16E+01	6.03E+01	7.84E+01	1.02E+02	1.33E+02
RMF-RQ201(mR/hr)	1AX034	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01	2.02E-01
RMF-RQ202(mR/hr)	1AX031	3.57E+01	4.18E+01	4.89E+01	5.73E+01	6.70E+01	7.84E+01	9.03E+01	1.02E+02	1.18E+02	1.33E+02
RMJ-RQ201(mR/hr)	1AX011	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00
RMJ-RQ202(mR/hr)	1AX009	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01
RMJ-RQ203(mR/hr)	1AX008	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01
RMJ-RQ204(mR/hr)	1AX010	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.84E-01
RML-RQ201(mR/hr)	1AX019	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01	1.08E-01
RML-RQ202(mR/hr)	1AX017	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	1.08E+00
RML-RQ203(mR/hr)	1AX016	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01
RML-RQ204(mR/hr)	1AX015	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.18E-01
RML-RQ205(mR/hr)	1AX018	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01
RML-RQ206(mR/hr)	1AX073	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02	9.65E-02
RMP-RQ201(mR/hr)	1AX066	3.27E+00	3.82E+00	4.48E+00	5.24E+00	6.13E+00	7.17E+00	8.39E+00	1.09E+01	1.42E+01	1.84E+01
RMP-RQ202(mR/hr)	1AX061	9.41E+00	1.10E+01	1.29E+01	1.51E+01	1.76E+01	2.06E+01	2.41E+01	3.14E+01	4.08E+01	5.30E+01
RMP-RQ203(mR/hr)	1AX060	2.12E+00	2.48E+00	2.90E+00	3.39E+00	3.97E+00	4.64E+00	5.43E+00	7.06E+00	9.18E+00	1.19E+01
RMP-RQ204(mR/hr)	1AX050	3.18E+00	3.71E+00	4.35E+00	5.09E+00	5.95E+00	6.96E+00	8.14E+00	1.06E+01	1.38E+01	1.79E+01
RMP-RQ205(mR/hr)	1AX049	1.65E+00	1.93E+00	2.25E+00	2.64E+00	3.09E+00	3.61E+00	4.22E+00	5.49E+00	7.14E+00	9.28E+00
RMP-RQ206(mR/hr)	1AX044	2.59E+00	3.03E+00	3.54E+00	4.14E+00	4.85E+00	5.67E+00	6.64E+00	8.63E+00	1.12E+01	1.46E+01
RMP-RQ207(mR/hr)	1AX043	1.76E+00	2.06E+00	2.41E+00	2.83E+00	3.31E+00	3.87E+00	4.52E+00	5.88E+00	7.65E+00	9.94E+00
RMP-RQ208(mR/hr)	1AX045	3.41E+00	3.99E+00	4.67E+00	5.46E+00	6.39E+00	7.48E+00	8.75E+00	1.14E+01	1.48E+01	1.92E+01
RMP-RQ209(mR/hr)	1AX038	7.15E+00	8.36E+00	9.78E+00	1.14E+01	1.34E+01	1.56E+01	1.83E+01	2.38E+01	3.09E+01	4.02E+01
RMP-RQ210(mR/hr)	1AX059	1.18E+00	1.38E+00	1.61E+00	1.88E+00	2.20E+00	2.58E+00	3.02E+00	3.92E+00	5.10E+00	6.63E+00
RMQ-RQ201(mR/hr)	1AX035	5.10E+01	5.97E+01	6.99E+01	8.17E+01	9.56E+01	1.12E+02	1.36E+02	1.69E+02	2.18E+02	2.83E+02
RMS-RQ223(mR/hr)	1AX071	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01
<b>Effluent Monitors</b>											
HVS-RQ109(uCi/sec)	5EE040	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01
HVS-RQ109A(uCi/cc)	1PA040	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10
HVS-RQ109B(uCi/cc)	2GB040	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07
HVS-RQ109C(uCi/cc)	3GC040	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04
HVS-RQ109D(uCi/cc)	4GD040	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02
<b>Airborne Monitors</b>											
HVR-RQ104A(uCi/cc)	1GX024	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01
HVR-RQ104B(uCi/cc)	1GX028	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01
RMR-RQ301A(uCi/cc)	1PA042	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10
RMR-RQ301B(uCi/cc)	2GB042	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06
RMR-RQ303A(uCi/cc)	1PA021	9.4079E-10	9.3609E-10	9.3141E-10	9.2675E-10	9.2212E-10	9.1751E-10	9.1292E-10	9.0836E-10	9.0382E-10	8.993E-10
RMR-RQ303B(uCi/cc)	2GB021	9.1415E-06	9.1008E-06	9.0603E-06	9.020E-06	8.9799E-06	8.94E-06	8.9003E-06	8.8608E-06	8.8213E-06	8.7824E-06
<b>Process Liq Monitors</b>											
CHS-RQ101A(uCi/cc)	1LA051	8.93E-01	8.48E-01	8.06E-01	7.65E-01	7.27E-01	1.93E+00	1.83E+00	1.74E+00	1.65E+00	1.57E+00
CHS-RQ101B(uCi/cc)	2LB051	1.08E+00	1.02E+00	9.71E-01	9.22E-01	8.76E-01	2.32E+00	2.21E+00	2.10E+00	1.99E+00	1.89E+00
Designates Alert Alarm		High Alarm									
No Data - AE BUS Failure											

## 2000 Evaluated Exercise - DRMS Data

TIME >		1915	1918	1921	1924	1927	1930	1933	1936	1939	1942
Channel											
<b>Area Monitors</b>											
RMR-RQ201(mR/hr)	1AX026	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
RMR-RQ202A(mR/hr)	1AA020	2.22E+00	2.22E+00	2.22E+00	1.65E+00	1.49E+00	1.55E+00	2.04E+00	2.39E+00	2.79E+00	2.67E+00
RMR-RQ202B(mR/hr)	2AB020	2.43E+00	2.43E+00	2.43E+00	1.18E+00	1.51E+00	1.78E+00	2.08E+00	2.92E+00	2.85E+00	2.91E+00
RMR-RQ203(mR/hr)	1AX025	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS
RMR-RQ204(mR/hr)	1AX027	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
RMR-RQ205A(mR/hr)	1AX022	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
RMR-RQ205B(mR/hr)	1AX023	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
RMR-RQ206(R/hr)	1AX029	1.72E+02	2.24E+02	2.91E+02	3.79E+02	4.92E+02	5.76E+02	6.74E+02	7.88E+02	9.22E+02	1.08E+03
RMR-RQ207(R/hr)	1AX030	1.72E+02	2.24E+02	2.91E+02	3.79E+02	4.92E+02	5.76E+02	6.74E+02	7.88E+02	9.22E+02	1.08E+03
RMF-RQ201(mR/hr)	1AX034	8.62E-01	1.12E+00	1.46E+00	1.89E+00	2.46E+00	2.88E+00	3.37E+00	3.94E+00	4.61E+00	5.39E+00
RMF-RQ202(mR/hr)	1AX031	5.67E+00	4.01E+00	1.41E+00	5.75E+00	7.48E+00	8.75E+00	1.02E+00	1.20E+00	1.40E+00	1.61E+00
RMJ-RQ201(mR/hr)	1AX011	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.38E+00	1.62E+00	1.89E+00	2.21E+00	2.59E+00
RMJ-RQ202(mR/hr)	1AX009	2.07E+00	2.69E+00	3.49E+00	4.54E+00	5.91E+00	6.91E+00	8.08E+00	9.46E+00	1.11E+01	1.29E+01
RMJ-RQ203(mR/hr)	1AX008	1.72E+00	2.24E+00	2.91E+00	3.79E+00	4.92E+00	5.76E+00	6.74E+00	7.88E+00	9.22E+00	1.08E+01
RMJ-RQ204(mR/hr)	1AX010	1.90E+00	2.46E+00	3.20E+00	4.16E+00	5.41E+00	6.33E+00	7.41E+00	8.67E+00	1.01E+01	1.19E+01
RML-RQ201(mR/hr)	1AX019	5.00E-01	6.50E-01	8.44E-01	1.10E+00	1.43E+00	1.67E+00	1.95E+00	2.29E+00	2.67E+00	3.13E+00
RML-RQ202(mR/hr)	1AX017	1.40E+00	1.82E+00	2.37E+00	3.08E+00	4.01E+00	4.69E+00	5.48E+00	6.42E+00	7.51E+00	8.78E+00
RML-RQ203(mR/hr)	1AX016	1.50E+00	1.95E+00	2.54E+00	3.30E+00	4.29E+00	5.02E+00	5.87E+00	6.87E+00	8.04E+00	9.41E+00
RML-RQ204(mR/hr)	1AX015	1.69E+00	2.19E+00	2.85E+00	3.70E+00	4.81E+00	5.63E+00	6.59E+00	7.71E+00	9.02E+00	1.06E+01
RML-RQ205(mR/hr)	1AX018	1.90E+00	2.46E+00	3.20E+00	4.16E+00	5.41E+00	6.33E+00	7.41E+00	8.67E+00	1.01E+01	1.19E+01
RML-RQ206(mR/hr)	1AX073	9.65E-02	2.46E-01	3.20E-01	4.16E-01	5.41E-01	6.33E-01	7.41E-01	8.67E-01	1.01E+00	1.19E+00
RMP-RQ201(mR/hr)	1AX066	2.40E+01	3.11E+01	4.05E+01	5.26E+01	6.84E+01	8.00E+01	9.56E+01	1.10E+02	1.28E+02	1.50E+02
RMP-RQ202(mR/hr)	1AX061	6.89E+01	4.20E+01	1.66E+02	1.51E+02	1.97E+02	2.30E+02	2.69E+02	3.15E+02	3.69E+02	4.32E+02
RMP-RQ203(mR/hr)	1AX060	1.55E+01	2.02E+01	2.62E+01	3.41E+01	4.43E+01	5.18E+01	6.06E+01	7.09E+01	8.30E+01	9.70E+01
RMP-RQ204(mR/hr)	1AX050	2.33E+01	3.02E+01	3.93E+01	5.11E+01	6.64E+01	7.77E+01	9.02E+01	1.05E+02	1.24E+02	1.46E+02
RMP-RQ205(mR/hr)	1AX049	1.21E+01	1.57E+01	2.04E+01	2.65E+01	3.44E+01	4.03E+01	4.72E+01	5.52E+01	6.46E+01	7.55E+01
RMP-RQ206(mR/hr)	1AX044	1.90E+01	2.46E+01	3.20E+01	4.16E+01	5.41E+01	6.33E+01	7.41E+01	8.67E+01	1.01E+02	1.19E+02
RMP-RQ207(mR/hr)	1AX043	1.29E+01	1.68E+01	2.18E+01	2.84E+01	3.69E+01	4.32E+01	5.05E+01	5.91E+01	6.92E+01	8.09E+01
RMP-RQ208(mR/hr)	1AX045	2.50E+01	3.25E+01	4.22E+01	5.49E+01	7.14E+01	8.55E+01	9.77E+01	1.11E+02	1.29E+02	1.56E+02
RMP-RQ209(mR/hr)	1AX038	5.22E+01	6.79E+01	8.93E+01	1.15E+02	1.49E+02	1.75E+02	2.04E+02	2.39E+02	2.79E+02	3.27E+02
RMP-RQ210(mR/hr)	1AX059	8.62E+00	1.12E+01	1.46E+01	1.89E+01	2.46E+01	2.88E+01	3.37E+01	3.94E+01	4.61E+01	5.39E+01
RMQ-RQ201(mR/hr)	1AX035	5.74E-01	2.40E+00	3.20E+00	4.16E+00	5.41E+00	6.33E+00	7.41E+00	8.67E+00	1.01E+01	1.19E+01
RMS-RQ223(mR/hr)	1AX071	8.62E-01	1.12E+00	1.46E+00	1.89E+00	2.46E+00	2.88E+00	3.37E+00	3.94E+00	4.61E+00	5.39E+00
<b>Effluent Monitors</b>											
HVS-RQ109(uCi/sec)	5EE040	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01
HVS-RQ109A(uCi/cc)	1PA040	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10
HVS-RQ109B(uCi/cc)	2GB040	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07
HVS-RQ109C(uCi/cc)	3GC040	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04
HVS-RQ109D(uCi/cc)	4GD040	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02
<b>Airborne Monitors</b>											
HVR-RQ104A(uCi/cc)	1GX024	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01
HVR-RQ104B(uCi/cc)	1GX028	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01
RMR-RQ301A(uCi/cc)	1PA042	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10
RMR-RQ301B(uCi/cc)	2GB042	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06
RMR-RQ303A(uCi/cc)	1PA021	8.948E-10	8.9033E-10	8.8587E-10	8.8144E-10	8.7704E-10	8.7265E-10	8.6829E-10	8.6395E-10	8.5963E-10	8.5533E-10
RMR-RQ303B(uCi/cc)	2GB021	7.735E-06	7.7027E-06	7.6662E-06	7.6279E-06	7.5897E-06	7.551E-06	7.512E-06	7.4735E-06	7.435E-06	7.3912E-06
<b>Process Liq Monitors</b>											
CHS-RQ101A(uCi/cc)	1LA051	1.49E+00	1.42E+00	1.35E+00	1.28E+00	1.21E+00	1.15E+00	1.10E+00	1.04E+00	9.89E-01	9.40E-01
CHS-RQ101B(uCi/cc)	2LB051	1.80E+00	1.71E+00	1.62E+00	1.54E+00	1.46E+00	1.39E+00	1.32E+00	1.25E+00	1.19E+00	1.13E+00
Designates Alert Alarm	High Alarm										
No Data - AE BUS Failure											

## 2000 Evaluated Exercise - DRMS Data

TIME >		1945	1948	1951	1954	1957	2000	2003	2006	2009	2012
Channel		Release Starts									
<b>Area Monitors</b>											
RMR-RQ201(mR/hr)	1AX026	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05
RMR-RQ202A(mR/hr)	1AA020	2.43E+00	3.20E+03	3.17E+04	3.1E+02	3.11E+03	3.08E+03	4.05E+03	1.02E+04	2.22E+04	2.26E+03
RMR-RQ202B(mR/hr)	2AB020	2.7E+03	3.24E+03	3.21E+04	3.18E+02	3.15E+03	3.1E+03	3.08E+03	3.05E+03	2.92E+03	2.29E+03
RMR-RQ203(mR/hr)	1AX025	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS
RMR-RQ204(mR/hr)	1AX027	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05
RMR-RQ205A(mR/hr)	1AX022	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05
RMR-RQ205B(mR/hr)	1AX023	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05
RMR-RQ206(R/hr)	1AX029	1.07E+03	1.06E+03	1.05E+03	1.04E+03	1.03E+03	1.02E+03	1.01E+03	9.96E+02	9.86E+02	9.76E+02
RMR-RQ207(R/hr)	1AX030	1.07E+03	1.06E+03	1.05E+03	1.04E+03	1.03E+03	1.02E+03	1.01E+03	9.96E+02	9.86E+02	9.76E+02
RMF-RQ201(mR/hr)	1AX034	5.34E+00	5.29E+00	5.23E+00	5.18E+00	5.13E+00	5.08E+00	5.03E+00	4.98E+00	4.93E+00	4.88E+00
RMF-RQ202(mR/hr)	1AX031	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05
RMJ-RQ201(mR/hr)	1AX011	2.56E+00	2.54E+00	2.51E+00	2.49E+00	2.46E+00	2.44E+00	2.41E+00	2.39E+00	2.37E+00	2.34E+00
RMJ-RQ202(mR/hr)	1AX009	1.28E+01	1.27E+01	1.26E+01	1.24E+01	1.23E+01	1.22E+01	1.21E+01	1.19E+01	1.18E+01	1.17E+01
RMJ-RQ203(mR/hr)	1AX008	1.07E+01	1.06E+01	1.05E+01	1.04E+01	1.03E+01	1.02E+01	1.01E+01	9.96E+00	9.86E+00	9.76E+00
RMJ-RQ204(mR/hr)	1AX010	1.18E+01	1.16E+01	1.15E+01	1.14E+01	1.13E+01	1.12E+01	1.11E+01	1.10E+01	1.08E+01	1.07E+01
RML-RQ201(mR/hr)	1AX019	3.10E+00	3.07E+00	3.04E+00	3.01E+00	2.98E+00	2.95E+00	2.92E+00	2.89E+00	2.86E+00	2.83E+00
RML-RQ202(mR/hr)	1AX017	8.70E+00	8.61E+00	8.52E+00	8.44E+00	8.35E+00	8.27E+00	8.19E+00	8.10E+00	8.02E+00	7.94E+00
RML-RQ203(mR/hr)	1AX016	9.31E+00	9.22E+00	9.13E+00	9.04E+00	8.95E+00	8.86E+00	8.77E+00	8.68E+00	8.60E+00	8.51E+00
RML-RQ204(mR/hr)	1AX015	1.04E+01	1.03E+01	1.02E+01	1.01E+01	1.00E+01	9.93E+00	9.84E+00	9.74E+00	9.64E+00	9.54E+00
RML-RQ205(mR/hr)	1AX018	1.18E+01	1.16E+01	1.15E+01	1.14E+01	1.13E+01	1.12E+01	1.11E+01	1.10E+01	1.08E+01	1.07E+01
RML-RQ206(mR/hr)	1AX073	1.18E+00	1.16E+00	1.15E+00	1.14E+00	1.13E+00	1.12E+00	1.11E+00	1.10E+00	1.08E+00	1.07E+00
RMP-RQ201(mR/hr)	1AX066	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05
RMP-RQ202(mR/hr)	1AX061	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05
RMP-RQ203(mR/hr)	1AX060	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05
RMP-RQ204(mR/hr)	1AX050	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05
RMP-RQ205(mR/hr)	1AX049	7.48E+01	7.40E+01	7.33E+01	7.26E+01	7.18E+01	7.11E+01	7.04E+01	6.97E+01	6.90E+01	6.83E+01
RMP-RQ206(mR/hr)	1AX044	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05
RMP-RQ207(mR/hr)	1AX043	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05
RMP-RQ208(mR/hr)	1AX045	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05
RMP-RQ209(mR/hr)	1AX038	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05
RMP-RQ210(mR/hr)	1AX059	5.34E+01	5.29E+01	5.23E+01	5.18E+01	5.13E+01	5.08E+01	5.03E+01	4.98E+01	4.93E+01	4.88E+01
RMQ-RQ201(mR/hr)	1AX035	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05
RMS-RQ223(mR/hr)	1AX071	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05
<b>Effluent Monitors</b>											
HVS-RQ109(uCi/sec)	5EE040	1.00E+09	1.20E+09	1.20E+09	1.20E+09	1.20E+09	1.20E+09	1.20E+09	1.20E+09	1.20E+09	1.20E+09
HVS-RQ109A(uCi/cc)	1PA040	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10
HVS-RQ109B(uCi/cc)	2GB040	2.50E-01	2.50E-01	2.50E-01	2.50E-01	2.50E-01	2.50E-01	2.50E-01	2.50E-01	2.50E-01	2.50E-01
HVS-RQ109C(uCi/cc)	3GC040	1.30E+02	1.30E+02	1.30E+02	1.30E+02	1.30E+02	1.30E+02	1.30E+02	1.30E+02	1.30E+02	1.30E+02
HVS-RQ109D(uCi/cc)	4GD040	1.30E+02	1.30E+02	1.30E+02	1.30E+02	1.30E+02	1.30E+02	1.30E+02	1.30E+02	1.30E+02	1.30E+02
<b>Airborne Monitors</b>											
HVR-RQ104A(uCi/cc)	1GX024	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01
HVR-RQ104B(uCi/cc)	1GX028	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01
RMR-RQ301A(uCi/cc)	1PA042	5.00E-08	5.00E-08	5.00E-08	5.00E-08	5.00E-08	5.00E-08	5.00E-08	5.00E-08	5.00E-08	5.00E-08
RMR-RQ301B(uCi/cc)	2GB042	3.70E-01	3.70E-01	3.70E-01	3.70E-01	3.70E-01	3.70E-01	3.70E-01	3.70E-01	3.70E-01	3.70E-01
RMR-RQ303A(uCi/cc)	1PA021	8.5105E-10	8.468E-10	8.4256E-10	8.3835E-10	8.3416E-10	8.2999E-10	8.2584E-10	8.2171E-10	8.176E-10	8.1351E-10
RMR-RQ303B(uCi/cc)	2GB021	1.649E-06	1.628E-06	1.607E-06	1.586E-06	1.565E-06	1.544E-06	1.523E-06	1.502E-06	1.481E-06	1.46E-06
<b>Process Liq Monitors</b>											
CHS-RQ101A(uCi/cc)	1LA051	8.93E-01	8.48E-01	8.06E-01	7.65E-01	7.27E-01	6.91E-01	6.56E-01	6.23E-01	5.92E-01	5.63E-01
CHS-RQ101B(uCi/cc)	2LB051	1.08E+00	1.02E+00	9.71E-01	9.22E-01	8.76E-01	8.32E-01	7.91E-01	7.51E-01	7.13E-01	6.78E-01
Designates Alert Alarm		High Alarm									
No Data - AE BUS Failure											

## 2000 Evaluated Exercise - DRMS Data

	TIME >	2015	2018	2021	2024	2027	2030	2033	2036	2039	2042
<b>Area Monitors</b>											
RMR-RQ201(mR/hr)	1AX026	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05
RMR-RQ202A(mR/hr)	1AA020	2.21E+03	2.20E+03	2.17E+03	2.15E+03	2.11E+03	2.17E+03	2.76E+03	2.73E+03	2.70E+03	2.77E+03
RMR-RQ202B(mR/hr)	2AB020	2.25E+03	2.23E+03	2.21E+03	2.18E+03	2.13E+03	2.12E+03	2.79E+03	2.76E+03	2.74E+03	2.79E+03
RMR-RQ203(mR/hr)	1AX025	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS
RMR-RQ204(mR/hr)	1AX027	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05
RMR-RQ205A(mR/hr)	1AX022	1.00E+05	1.00E+05	1.00E+05	2.45E+03	2.23E+03	2.20E+03	2.48E+03	2.45E+03	2.44E+03	2.44E+03
RMR-RQ205B(mR/hr)	1AX023	1.00E+05	1.00E+05	1.00E+05	2.45E+03	2.23E+03	2.20E+03	2.48E+03	2.45E+03	2.44E+03	2.44E+03
RMR-RQ206(R/hr)	1AX029	9.66E+02	9.56E+02	9.47E+02	9.37E+02	9.28E+02	9.19E+02	9.10E+02	9.00E+02	8.91E+02	8.83E+02
RMR-RQ207(R/hr)	1AX030	9.66E+02	9.56E+02	9.47E+02	9.37E+02	9.28E+02	9.19E+02	9.10E+02	9.00E+02	8.91E+02	8.83E+02
RMF-RQ201(mR/hr)	1AX034	4.83E+00	4.78E+00	4.73E+00	4.69E+00	4.64E+00	4.59E+00	4.55E+00	4.50E+00	4.46E+00	4.41E+00
RMF-RQ202(mR/hr)	1AX031	1.17E+00	1.15E+00	1.14E+00	1.12E+00	1.11E+00	1.10E+00	1.09E+00	1.08E+00	1.07E+00	1.06E+00
RMJ-RQ201(mR/hr)	1AX011	2.32E+00	2.30E+00	2.27E+00	2.25E+00	2.23E+00	2.20E+00	2.18E+00	2.16E+00	2.14E+00	2.12E+00
RMJ-RQ202(mR/hr)	1AX009	1.16E+01	1.15E+01	1.14E+01	1.12E+01	1.11E+01	1.10E+01	1.09E+01	1.08E+01	1.07E+01	1.06E+01
RMJ-RQ203(mR/hr)	1AX008	9.66E+00	9.56E+00	9.47E+00	9.37E+00	9.28E+00	9.19E+00	9.10E+00	9.00E+00	8.91E+00	8.83E+00
RMJ-RQ204(mR/hr)	1AX010	1.06E+01	1.05E+01	1.04E+01	1.03E+01	1.02E+01	1.01E+01	1.00E+01	9.90E+00	9.81E+00	9.71E+00
RML-RQ201(mR/hr)	1AX019	2.80E+00	2.77E+00	2.75E+00	2.72E+00	2.69E+00	2.66E+00	2.64E+00	2.61E+00	2.59E+00	2.56E+00
RML-RQ202(mR/hr)	1AX017	7.86E+00	7.79E+00	7.71E+00	7.63E+00	7.55E+00	7.48E+00	7.40E+00	7.33E+00	7.26E+00	7.18E+00
RML-RQ203(mR/hr)	1AX016	8.42E+00	8.34E+00	8.26E+00	8.17E+00	8.09E+00	8.01E+00	7.93E+00	7.85E+00	7.77E+00	7.70E+00
RML-RQ204(mR/hr)	1AX015	9.45E+00	9.35E+00	9.26E+00	9.17E+00	9.08E+00	8.98E+00	8.90E+00	8.81E+00	8.72E+00	8.63E+00
RML-RQ205(mR/hr)	1AX018	1.06E+01	1.05E+01	1.04E+01	1.03E+01	1.02E+01	1.01E+01	1.00E+01	9.90E+00	9.81E+00	9.71E+00
RML-RQ206(mR/hr)	1AX073	1.06E+00	1.05E+00	1.04E+00	1.03E+00	1.02E+00	1.01E+00	1.00E+00	9.90E-01	9.81E-01	9.71E-01
RMP-RQ201(mR/hr)	1AX066	1.59E+02	1.58E+02	1.57E+02	1.56E+02	1.55E+02	1.54E+02	1.53E+02	1.52E+02	1.51E+02	1.50E+02
RMP-RQ202(mR/hr)	1AX061	1.59E+02	1.58E+02	1.57E+02	1.56E+02	1.55E+02	1.54E+02	1.53E+02	1.52E+02	1.51E+02	1.50E+02
RMP-RQ203(mR/hr)	1AX060	1.59E+02	1.58E+02	1.57E+02	1.56E+02	1.55E+02	1.54E+02	1.53E+02	1.52E+02	1.51E+02	1.50E+02
RMP-RQ204(mR/hr)	1AX050	1.59E+02	1.58E+02	1.57E+02	1.56E+02	1.55E+02	1.54E+02	1.53E+02	1.52E+02	1.51E+02	1.50E+02
RMP-RQ205(mR/hr)	1AX049	6.76E+01	6.69E+01	6.63E+01	6.56E+01	6.50E+01	6.43E+01	6.37E+01	6.30E+01	6.24E+01	6.18E+01
RMP-RQ206(mR/hr)	1AX044	1.06E+02	1.05E+02	1.04E+02	1.03E+02	1.02E+02	1.01E+02	1.00E+02	9.90E+01	9.81E+01	9.71E+01
RMP-RQ207(mR/hr)	1AX043	7.25E+01	7.17E+01	7.10E+01	7.03E+01	6.96E+01	6.89E+01	6.82E+01	6.75E+01	6.69E+01	6.62E+01
RMP-RQ208(mR/hr)	1AX045	1.59E+02	1.58E+02	1.57E+02	1.56E+02	1.55E+02	1.54E+02	1.53E+02	1.52E+02	1.51E+02	1.50E+02
RMP-RQ209(mR/hr)	1AX038	1.59E+02	1.58E+02	1.57E+02	1.56E+02	1.55E+02	1.54E+02	1.53E+02	1.52E+02	1.51E+02	1.50E+02
RMP-RQ210(mR/hr)	1AX059	4.83E+01	4.78E+01	4.73E+01	4.69E+01	4.64E+01	4.59E+01	4.55E+01	4.50E+01	4.46E+01	4.41E+01
RMQ-RQ201(mR/hr)	1AX035	1.59E+02	1.58E+02	1.57E+02	1.56E+02	1.55E+02	1.54E+02	1.53E+02	1.52E+02	1.51E+02	1.50E+02
RMS-RQ223(mR/hr)	1AX071	1.59E+02	1.58E+02	1.57E+02	1.56E+02	1.55E+02	1.54E+02	1.53E+02	1.52E+02	1.51E+02	1.50E+02
<b>Effluent Monitors</b>											
HVS-RQ109(uCi/sec)	5EE040	1.20E+02	1.20E+02	1.20E+02	1.20E+02	1.20E+02	1.20E+02	1.20E+02	1.20E+02	1.20E+02	1.20E+02
HVS-RQ109A(uCi/cc)	1PA040	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10
HVS-RQ109B(uCi/cc)	2GB040	2.50E-01	2.50E-01	2.50E-01	2.50E-01	2.50E-01	2.50E-01	2.50E-01	2.50E-01	2.50E-01	2.50E-01
HVS-RQ109C(uCi/cc)	3GC040	1.30E+02	1.30E+02	1.30E+02	1.30E+02	1.30E+02	1.30E+02	1.30E+02	1.30E+02	1.30E+02	1.30E+02
HVS-RQ109D(uCi/cc)	4GD040	1.30E+02	1.30E+02	1.30E+02	1.30E+02	1.30E+02	1.30E+02	1.30E+02	1.30E+02	1.30E+02	1.30E+02
<b>Airborne Monitors</b>											
HVR-RQ104A(uCi/cc)	1GX024	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01
HVR-RQ104B(uCi/cc)	1GX028	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01
RMR-RQ301A(uCi/cc)	1PA042	5.00E-08	5.00E-08	5.00E-08	5.00E-08	5.00E-08	5.00E-08	5.00E-08	5.00E-08	5.00E-08	5.00E-08
RMR-RQ301B(uCi/cc)	2GB042	3.70E-01	3.70E-01	3.70E-01	3.70E-01	3.70E-01	3.70E-01	3.70E-01	3.70E-01	3.70E-01	3.70E-01
RMR-RQ303A(uCi/cc)	1PA021	8.0945E-10	8.054E-10	8.0137E-10	7.9736E-10	7.9338E-10	7.8941E-10	7.8546E-10	7.8154E-10	7.7763E-10	7.7374E-10
RMR-RQ303B(uCi/cc)	2GB021	3.00E-01	3.00E-01	3.00E-01	3.00E-01	3.00E-01	3.00E-01	3.00E-01	3.00E-01	3.00E-01	3.00E-01
<b>Process Liq Monitors</b>											
CHS-RQ101A(uCi/cc)	1LA051	5.34E-01	5.08E-01	4.82E-01	4.58E-01	4.35E-01	4.14E-01	3.93E-01	3.73E-01	3.55E-01	3.37E-01
CHS-RQ101B(uCi/cc)	2LB051	6.44E-01	6.12E-01	5.81E-01	5.52E-01	5.24E-01	4.98E-01	4.73E-01	4.50E-01	4.27E-01	4.06E-01
Designates Alert Alarm		High Alarm									
No Data - AT BUS Failure											

## 2000 Evaluated Exercise - DRMS Data

Area Monitors	Channel	TIME> Release Stops	2045	2048	2051	2054	2057	2100	2103	2106	2109	2112
			2045	2048	2051	2054	2057	2100	2103	2106	2109	2112
RMR-RQ201(mR/hr)	1AX026		1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05
RMR-RQ202A(mR/hr)	1AA020		2.51E+03	2.52E+03	2.50E+03	2.57E+03	2.54E+03	2.57E+03	2.49E+03	2.57E+03	2.52E+03	2.52E+03
RMR-RQ202B(mR/hr)	2AB020		2.50E+03	2.50E+03	2.50E+03	2.50E+03	2.58E+03	2.55E+03	2.53E+03	2.50E+03	2.51E+03	2.55E+03
RMR-RQ203(mR/hr)	1AX025	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS
RMR-RQ204(mR/hr)	1AX027		1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05
RMR-RQ205A(mR/hr)	1AX022		2.48E+03	2.08E+03	2.00E+03	2.03E+03	2.01E+03	1.99E+03	1.90E+03	1.99E+03	1.99E+03	1.99E+03
RMR-RQ205B(mR/hr)	1AX023		1.00E+05	2.00E+02	2.21E+02	3.82E+02	3.73E+02	3.51E+02	1.19E+02	1.17E+02	1.00E+02	1.05E+02
RMR-RQ206(R/hr)	1AX029		8.74E+02	8.65E+02	8.56E+02	8.48E+02	8.39E+02	8.31E+02	8.23E+02	8.14E+02	8.06E+02	7.98E+02
RMR-RQ207(R/hr)	1AX030		8.74E+02	8.65E+02	8.56E+02	8.48E+02	8.39E+02	8.31E+02	8.23E+02	8.14E+02	8.06E+02	7.98E+02
RMF-RQ201(mR/hr)	1AX034		4.37E+00	4.32E+00	4.28E+00	4.24E+00	4.20E+00	4.15E+00	4.11E+00	4.07E+00	4.03E+00	3.99E+00
RMF-RQ202(mR/hr)	1AX031		1.10E+01	1.08E+01	1.00E+01	1.29E+01	1.28E+01	1.26E+01	1.25E+01	1.24E+01	1.23E+01	1.20E+01
RMJ-RQ201(mR/hr)	1AX011		2.10E+00	2.08E+00	2.06E+00	2.03E+00	2.01E+00	1.99E+00	1.97E+00	1.95E+00	1.93E+00	1.92E+00
RMJ-RQ202(mR/hr)	1AX009		1.05E+01	1.04E+01	1.03E+01	1.02E+01	1.01E+01	9.97E+00	9.87E+00	9.77E+00	9.67E+00	9.58E+00
RMJ-RQ203(mR/hr)	1AX008		8.74E+00	8.65E+00	8.56E+00	8.48E+00	8.39E+00	8.31E+00	8.23E+00	8.14E+00	8.06E+00	7.98E+00
RMJ-RQ204(mR/hr)	1AX010		9.61E+00	9.51E+00	9.42E+00	9.33E+00	9.23E+00	9.14E+00	9.05E+00	8.96E+00	8.87E+00	8.78E+00
RML-RQ201(mR/hr)	1AX019		2.53E+00	2.51E+00	2.48E+00	2.46E+00	2.43E+00	2.41E+00	2.39E+00	2.36E+00	2.34E+00	2.31E+00
RML-RQ202(mR/hr)	1AX017		7.11E+00	7.04E+00	6.97E+00	6.90E+00	6.83E+00	6.76E+00	6.70E+00	6.63E+00	6.56E+00	6.50E+00
RML-RQ203(mR/hr)	1AX016		7.62E+00	7.54E+00	7.47E+00	7.39E+00	7.32E+00	7.25E+00	7.17E+00	7.10E+00	7.03E+00	6.96E+00
RML-RQ204(mR/hr)	1AX015		8.54E+00	8.46E+00	8.37E+00	8.29E+00	8.21E+00	8.13E+00	8.04E+00	7.96E+00	7.88E+00	7.81E+00
RML-RQ205(mR/hr)	1AX018		9.61E+00	9.51E+00	9.42E+00	9.33E+00	9.23E+00	9.14E+00	9.05E+00	8.96E+00	8.87E+00	8.78E+00
RML-RQ206(mR/hr)	1AX073		9.61E-01	9.51E-01	9.42E-01	9.33E-01	9.23E-01	9.14E-01	9.05E-01	8.96E-01	8.87E-01	8.78E-01
RMP-RQ201(mR/hr)	1AX066		1.00E+02	1.20E+02	1.12E+02	1.18E+02	1.17E+02	1.15E+02	1.14E+02	1.13E+02	1.12E+02	1.10E+02
RMP-RQ202(mR/hr)	1AX061		3.30E+02	3.36E+02	3.33E+02	3.59E+02	3.56E+02	3.54E+02	3.29E+02	3.23E+02	3.24E+02	3.19E+02
RMP-RQ203(mR/hr)	1AX060		1.85E+01	7.73E+01	7.77E+01	2.63E+01	7.55E+01	7.48E+01	7.40E+01	7.33E+01	7.26E+01	7.18E+01
RMP-RQ204(mR/hr)	1AX050		1.14E+02	1.17E+02	1.16E+02	1.14E+02	1.13E+02	1.12E+02	1.10E+02	1.10E+02	1.09E+02	1.08E+02
RMP-RQ205(mR/hr)	1AX049		6.12E+01	6.05E+01	5.99E+01	5.93E+01	5.87E+01	5.82E+01	5.76E+01	5.70E+01	5.64E+01	5.59E+01
RMP-RQ206(mR/hr)	1AX044		2.50E+01	2.51E+01	2.52E+01	2.53E+01	2.53E+01	2.54E+01	2.05E+01	3.20E+01	3.84E+01	3.78E+01
RMP-RQ207(mR/hr)	1AX043		6.55E+01	6.49E+01	6.42E+01	6.36E+01	6.29E+01	6.23E+01	6.17E+01	6.11E+01	6.05E+01	5.99E+01
RMP-RQ208(mR/hr)	1AX045		1.00E+02	1.35E+02	1.24E+02	1.28E+02	1.24E+02	1.20E+02	1.19E+02	1.18E+02	1.17E+02	1.16E+02
RMP-RQ209(mR/hr)	1AX038		1.00E+02	2.02E+02	2.50E+02	2.57E+02	2.51E+02	2.52E+02	2.49E+02	2.47E+02	2.46E+02	2.42E+02
RMP-RQ210(mR/hr)	1AX059		4.37E+01	4.32E+01	4.28E+01	4.24E+01	4.20E+01	4.15E+01	4.11E+01	4.07E+01	4.03E+01	3.99E+01
RMQ-RQ201(mR/hr)	1AX035		1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05
RMS-RQ223(mR/hr)	1AX071		1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
<b>Effluent Monitors</b>												
HVS-RQ109(uCi/sec)	5EE040		1.20E+09	1.20E+09	1.20E+09	1.20E+09	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01
HVS-RQ109A(uCi/cc)	1PA040		3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10
HVS-RQ109B(uCi/cc)	2GB040		2.50E-01	2.50E-01	2.50E-01	2.50E-01	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07
HVS-RQ109C(uCi/cc)	3GC040		1.30E+02	1.30E+01	1.30E-01	1.30E-03	1.30E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04
HVS-RQ109D(uCi/cc)	4GD040		1.30E+02	1.30E+01	1.30E-01	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02
<b>Airborne Monitors</b>												
HVR-RQ104A(uCi/cc)	1GX024		2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01
HVR-RQ104B(uCi/cc)	1GX028		2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01
RMR-RQ301A(uCi/cc)	1PA042		5.00E-08	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10
RMR-RQ301B(uCi/cc)	2GB042		3.70E-01	3.70E-05	3.70E-05	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06
RMR-RQ303A(uCi/cc)	1PA021		7.6987E-10	7.6602E-10	7.6219E-10	7.5838E-10	7.5459E-10	7.5082E-10	7.4706E-10	7.4333E-10	7.3961E-10	7.3591E-10
RMR-RQ303B(uCi/cc)	2GB021		3.5923E-06	3.5923E-06	3.5923E-06	3.5923E-06	3.5923E-06	3.5923E-06	3.5923E-06	3.5923E-06	3.5923E-06	3.5923E-06
<b>Process Liq Monitors</b>												
CHS-RQ101A(uCi/cc)	1LA051		3.20E-01	3.04E-01	2.89E-01	2.74E-01	2.61E-01	2.48E-01	2.35E-01	2.23E-01	2.12E-01	2.02E-01
CHS-RQ101B(uCi/cc)	2LB051		3.86E-01	3.66E-01	3.48E-01	3.31E-01	3.14E-01	2.98E-01	2.83E-01	2.69E-01	2.56E-01	2.43E-01
Designates Alert Alarm			High Alarm									
No Data - AE BUS Failure												



## 2000 Evaluated Exercise - DRMS Data

TIME >		2115	2118	2121	2124	2127	2130
Channel		End					
<b>Area Monitors</b>							
RMR-RQ201(mR/hr)	1AX026	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05
RMR-RQ202A(mR/hr)	1AA020	2.39E+03	2.37E+03	2.35E+03	2.32E+03	2.30E+03	2.28E+03
RMR-RQ202B(mR/hr)	2AB020	2.38E+03	2.41E+03	2.38E+03	2.36E+03	2.34E+03	2.31E+03
RMR-RQ203(mR/hr)	1AX025	OOS	OOS	OOS	OOS	OOS	OOS
RMR-RQ204(mR/hr)	1AX027	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05	1.00E+05
RMR-RQ205A(mR/hr)	1AX022	1.25E+04	1.24E+04	1.22E+04	1.21E+04	1.20E+04	1.19E+04
RMR-RQ205B(mR/hr)	1AX023	1.14E+04	1.13E+04	1.12E+04	1.11E+04	1.09E+04	1.08E+04
RMR-RQ206(R/hr)	1AX029	7.90E+02	7.82E+02	7.74E+02	7.67E+02	7.59E+02	7.51E+02
RMR-RQ207(R/hr)	1AX030	7.90E+02	7.82E+02	7.74E+02	7.67E+02	7.59E+02	7.51E+02
RMF-RQ201(mR/hr)	1AX034	3.95E+00	3.91E+00	3.87E+00	3.83E+00	3.80E+00	3.76E+00
RMF-RQ202(mR/hr)	1AX031	1.20E+03	1.19E+03	1.18E+03	1.17E+03	1.15E+03	1.1E+03
RMJ-RQ201(mR/hr)	1AX011	1.90E+00	1.88E+00	1.86E+00	1.84E+00	1.82E+00	1.80E+00
RMJ-RQ202(mR/hr)	1AX009	9.48E+00	9.39E+00	9.29E+00	9.20E+00	9.11E+00	9.02E+00
RMJ-RQ203(mR/hr)	1AX008	7.90E+00	7.82E+00	7.74E+00	7.67E+00	7.59E+00	7.51E+00
RMJ-RQ204(mR/hr)	1AX010	8.69E+00	8.60E+00	8.52E+00	8.43E+00	8.35E+00	8.27E+00
RML-RQ201(mR/hr)	1AX019	2.29E+00	2.27E+00	2.25E+00	2.22E+00	2.20E+00	2.18E+00
RML-RQ202(mR/hr)	1AX017	6.43E+00	6.37E+00	6.30E+00	6.24E+00	6.18E+00	6.12E+00
RML-RQ203(mR/hr)	1AX016	6.89E+00	6.82E+00	6.75E+00	6.69E+00	6.62E+00	6.55E+00
RML-RQ204(mR/hr)	1AX015	7.73E+00	7.65E+00	7.57E+00	7.50E+00	7.42E+00	7.35E+00
RML-RQ205(mR/hr)	1AX018	8.69E+00	8.60E+00	8.52E+00	8.43E+00	8.35E+00	8.27E+00
RML-RQ206(mR/hr)	1AX073	8.69E-01	8.60E-01	8.52E-01	8.43E-01	8.35E-01	8.27E-01
RMP-RQ201(mR/hr)	1AX066	1.00E+02	1.09E+02	1.08E+02	1.07E+02	1.06E+02	1.04E+02
RMP-RQ202(mR/hr)	1AX061	3.16E+02	3.13E+02	3.10E+02	3.07E+02	3.04E+02	3.01E+02
RMP-RQ203(mR/hr)	1AX060	7.11E+01	7.04E+01	6.97E+01	6.90E+01	6.83E+01	6.76E+01
RMP-RQ204(mR/hr)	1AX050	1.07E+02	1.06E+02	1.05E+02	1.04E+02	1.02E+02	1.01E+02
RMP-RQ205(mR/hr)	1AX049	5.53E+01	5.48E+01	5.42E+01	5.37E+01	5.31E+01	5.26E+01
RMP-RQ206(mR/hr)	1AX044	3.07E+01	3.00E+01	3.02E+01	3.03E+01	3.05E+01	3.07E+01
RMP-RQ207(mR/hr)	1AX043	5.93E+01	5.87E+01	5.81E+01	5.75E+01	5.69E+01	5.64E+01
RMP-RQ208(mR/hr)	1AX045	1.15E+02	1.13E+02	1.12E+02	1.11E+02	1.10E+02	1.09E+02
RMP-RQ209(mR/hr)	1AX038	4.39E+02	4.39E+02	4.35E+02	4.32E+02	4.30E+02	4.28E+02
RMP-RQ210(mR/hr)	1AX059	3.95E+01	3.91E+01	3.87E+01	3.83E+01	3.80E+01	3.76E+01
RMQ-RQ201(mR/hr)	1AX035	1.71E+03	1.70E+03	1.68E+03	1.66E+03	1.65E+03	1.64E+03
RMS-RQ223(mR/hr)	1AX071	3.25E+00	3.24E+00	3.23E+00	3.23E+00	3.20E+00	3.19E+00
<b>Effluent Monitors</b>							
HVS-RQ109(uCl/sec)	5EE040	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01	2.29E+01
HVS-RQ109A(uCl/cc)	1PA040	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10	3.10E-10
HVS-RQ109B(uCl/cc)	2GB040	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07	8.31E-07
HVS-RQ109C(uCl/cc)	3GC040	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04
HVS-RQ109D(uCl/cc)	4GD040	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02	5.56E-02
<b>Airborne Monitors</b>							
HVR-RQ104A(uCl/cc)	1GX024	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01
HVR-RQ104B(uCl/cc)	1GX028	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01	2.56E-01
RMR-RQ301A(uCl/cc)	1PA042	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10	2.29E-10
RMR-RQ301B(uCl/cc)	2GB042	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06	2.11E-06
RMR-RQ303A(uCl/cc)	1PA021	7.3223E-10	7.2857E-10	7.2493E-10	7.213E-10	7.177E-10	7.1411E-10
RMR-RQ303B(uCl/cc)	2GB021	6.3366E-06	6.3049E-06	6.2734E-06	6.2421E-06	6.2108E-06	6.1798E-06
<b>Process Liq Monitors</b>							
CHS-RQ101A(uCl/cc)	1LA051	1.92E-01	1.82E-01	1.73E-01	1.64E-01	1.56E-01	1.48E-01
CHS-RQ101B(uCl/cc)	2LB051	2.31E-01	2.19E-01	2.08E-01	1.98E-01	1.88E-01	1.79E-01
Designates Alert Alarm		High Alarm					
No Data AE BTIS Failure							



## Dose Rates In Unit-2 Health Check Area in mR/hr

Time	RMR-206 R/hr	Hallway General Area	Office General Area
1745	1.02	0.08	0.02
1800	2.23	0.19	0.04
1815	4.89	0.41	0.08
1830	10.7	0.89	0.18
1845	23.5	1.96	0.39
1900	51.6	4.30	0.86
1915	172	14.33	2.87
1930	576	47.98	9.60
1945	1070	89.13	17.83
2000	1020	84.97	16.99
2015	966	80.47	16.09
2030	919	76.55	15.31
2045	874	72.80	14.56
2100	831	69.22	13.84
2115	790	65.81	13.16
2130	751	62.56	12.51
Note: PCMs and friskers in the area will alarm at 1800 hrs and will be rendered inoperable for the balance of the exercise			

## Dose Rates From Containment Shine At Grade Elevation (mR/hr)

		Distance in Feet From RBC Wall														
		5	25	50	75	100	150	200	300	400	500	700	900	1200	1600	2500
Time	RMR-206 R/hr	All readings listed below are in (mR/hr)														
1745	1.02	1.632	1.591	2.213	2.601	2.978	3.397	5.406	2.04	1.387	0.949	0.808	0.405	0.108	0.024	0.005
1800	2.23	3.568	3.479	4.839	5.687	6.512	7.426	11.82	4.46	3.033	2.074	1.766	0.885	0.236	0.052	0.01
1815	4.89	7.824	7.628	10.61	12.47	14.28	16.28	25.92	9.78	6.65	4.548	3.873	1.941	0.518	0.113	0.023
1830	10.7	17.12	16.69	23.22	27.29	31.24	35.63	56.71	21.4	14.55	9.951	8.474	4.248	1.134	0.248	0.05
1845	23.5	37.6	36.66	51	59.93	68.62	78.26	124.6	47	31.96	21.86	18.61	9.33	2.491	0.545	0.109
1900	51.6	82.56	80.5	112	131.6	150.7	171.8	273.5	103.2	70.18	47.99	40.87	20.49	5.47	1.197	0.239
1915	172	275.2	268.3	373.2	438.6	502.2	572.8	911.6	344	233.9	160	136.2	68.28	18.23	3.99	0.797
1930	576	921.6	898.6	1250	1469	1682	1918	3053	1152	783.4	535.7	456.2	228.7	61.06	13.36	2.669
1945	1070	1712	1669	2322	2729	3124	3563	5671	2140	1455	995.1	847.4	424.8	113.4	24.82	4.957
2000	1020	1632	1591	2213	2601	2978	3397	5406	2040	1387	948.6	807.8	404.9	108.1	23.66	4.726
2015	966	1546	1507	2096	2463	2821	3217	5120	1932	1314	898.4	765.1	383.5	102.4	22.41	4.475
2030	919	1470	1434	1994	2343	2683	3060	4871	1838	1250	854.7	727.8	364.8	97.41	21.32	4.258
2045	874	1398	1363	1897	2229	2552	2910	4632	1748	1189	812.8	692.2	347	92.64	20.28	4.049
2100	831	1330	1296	1803	2119	2427	2767	4404	1662	1130	772.8	658.2	329.9	88.09	19.28	3.85
2115	790	1264	1232	1714	2015	2307	2631	4187	1580	1074	734.7	625.7	313.6	83.74	18.33	3.66
2130	751	1202	1172	1630	1915	2193	2501	3980	1502	1021	698.4	594.8	298.1	79.61	17.42	3.479

Note 1: The following map has a scale of 100' per grid block, therefore point V10 is about 100' from containment.

Note 2: The diagonal of a grid block is about 141'.

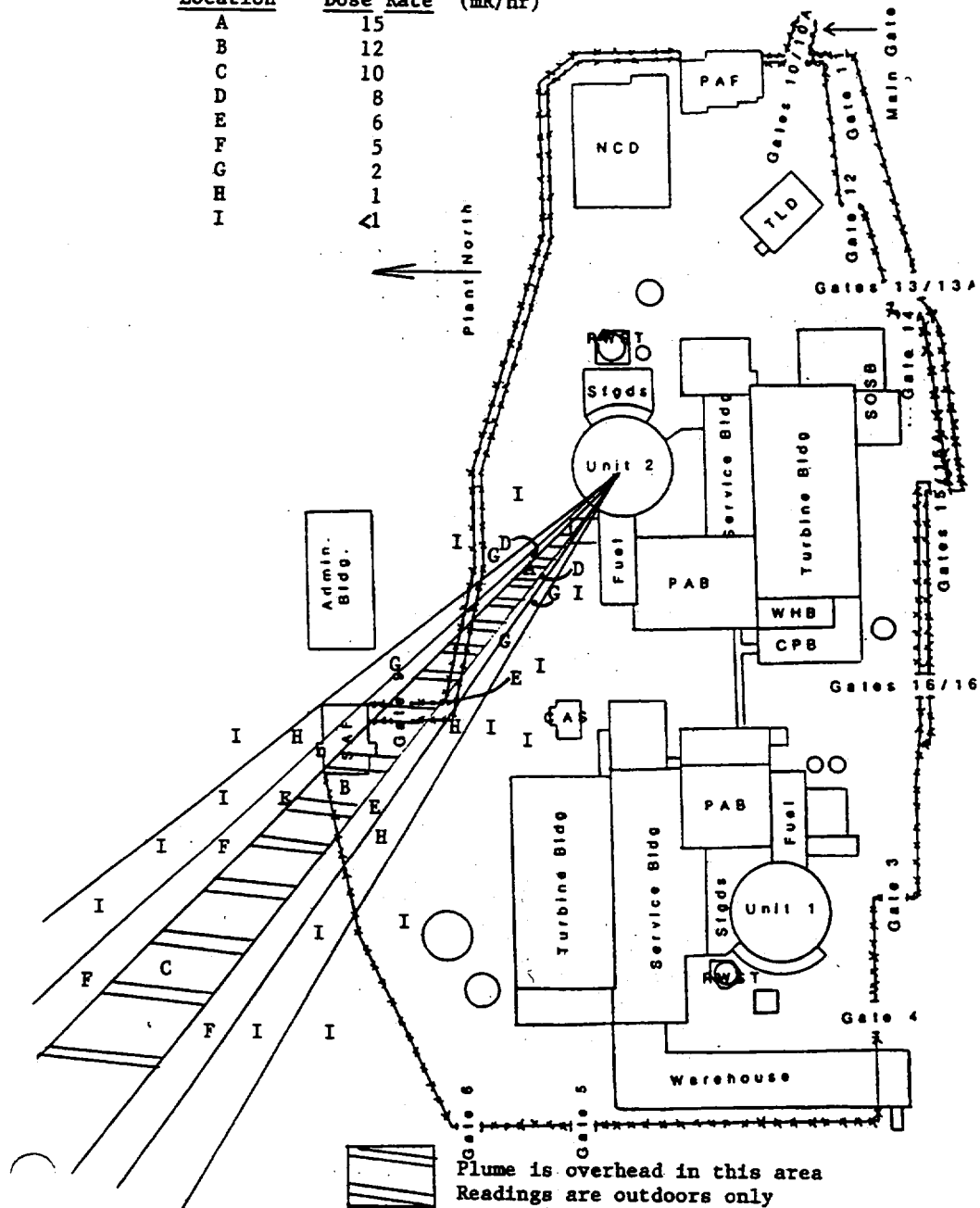
Note 3: Dose rates are to be used when in line of site with the containment, controllers will have to estimate scatter and shielding when near or in the shadow of other structures.



# NORTH YARD PLUME DOSE RATES (ground level)

1945 to 2045 hours

Location	Dose Rate (mR/hr)
A	15
B	12
C	10
D	8
E	6
F	5
G	2
H	1
I	<1



NOTE: These values may be over shadowed by higher-level RBC "SHINE" levels except when behind the shielding of land or other structures blocking RBC "SHINE".

## **POST DBA LOCA TASKS (per FSAR)**

<b><u>TASK</u></b>	<b><u>LOCATION</u></b>
1) Operate Post Accident H2 Anal.	730' Service Bldg.
2) Obtain PASS Samples	735' PAB & 774 Cond. Polishing Bldg.
3) Operate H2 Recombiner	737' Safeguards
4) Operate Safe Shutdown Valves	741' Safeguards
A) Service Water Sys.	
B) Recirc. Spray Sys.	
C) H2 Control Sys.	
D) SI Sys.	
E) Quench Spray Sys.	
5) RHR Suction Valve Transfer	738' Cable Vault
6) Obtain and Analyze WRGM samples	773' PAB

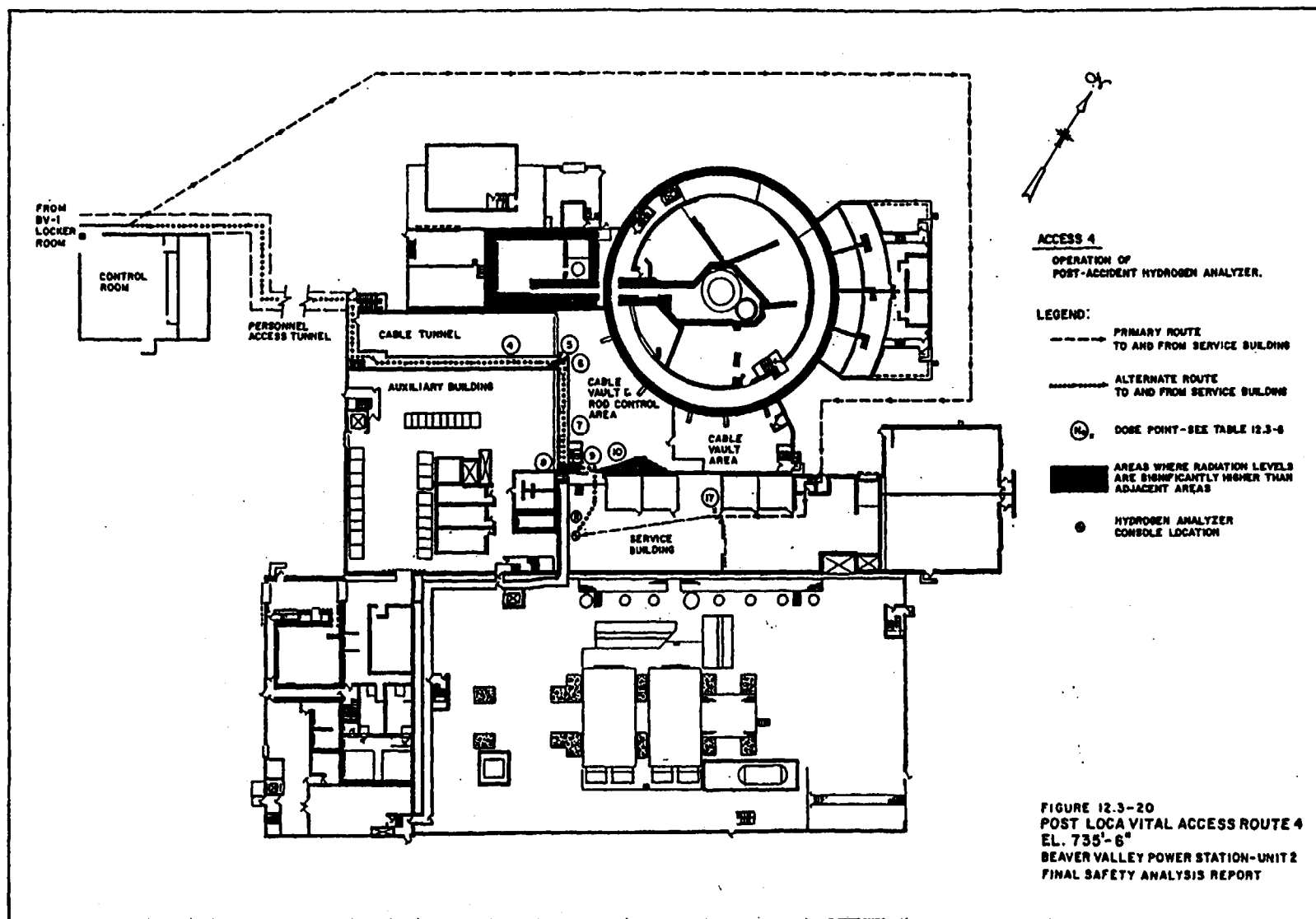
Use the following maps and numbered locations for obtaining dose rates if and when these tasks are attempted. The table can be used for time and location post DBA

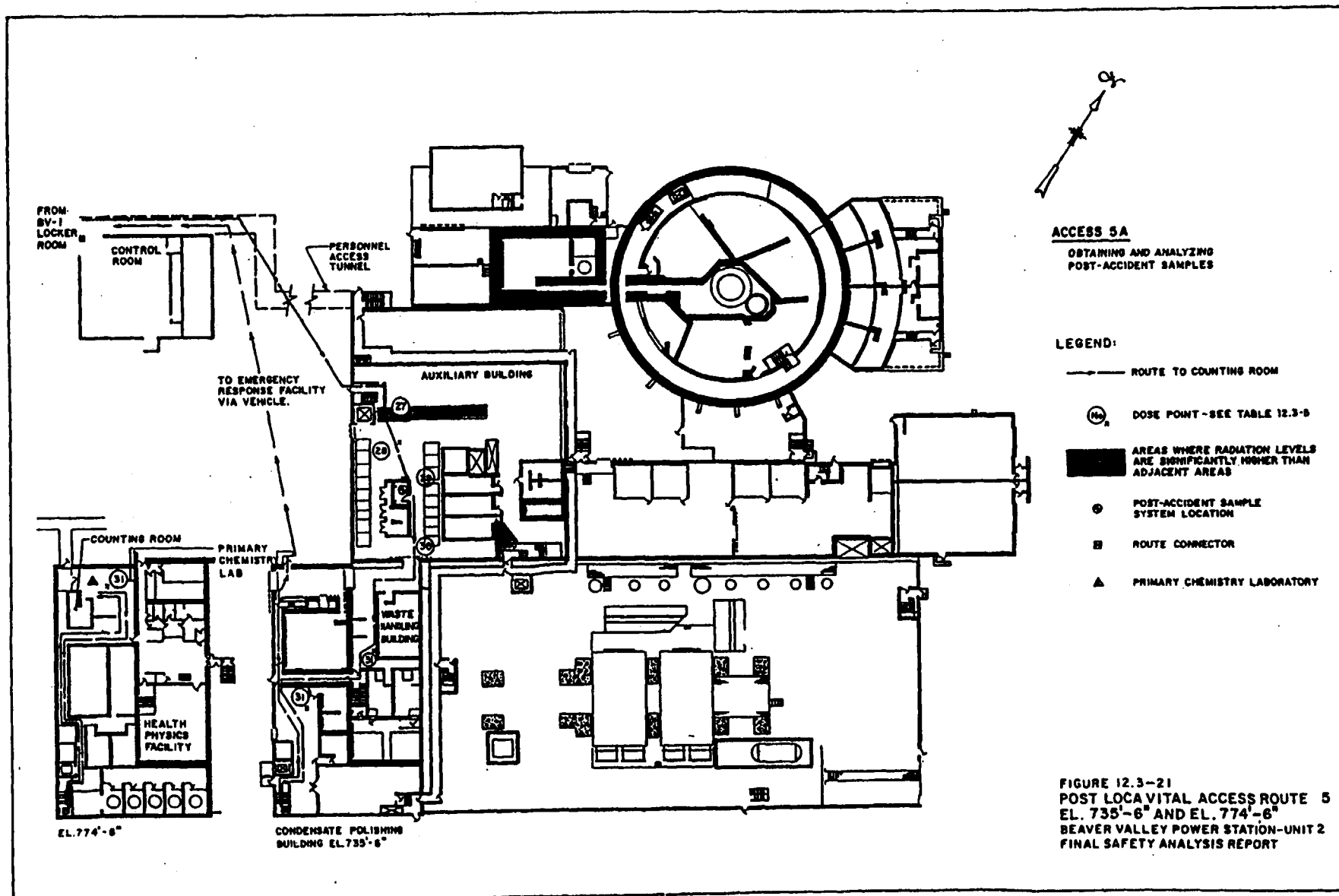
## Dose Rates On FSAR Point Maps in R/hr

		Point Numbers																
Time	RMR-206 R/hr	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1745	1.02	3.03E-05	3.01E-04	7.71E-04	2.58E-03	7.01E-02	5.46E-03	1.73E-04	1.57E-03	1.16E-02	1.66E-03	2.40E-04	3.63E-02	2.89E-02	5.09E-02	6.12E-02	1.30E-02	2.38E-04
1800	2.23	6.63E-05	6.58E-04	1.69E-03	5.63E-03	1.53E-01	1.19E-02	3.79E-04	3.43E-03	2.53E-02	3.62E-03	5.24E-04	7.94E-02	6.33E-02	1.11E-01	1.34E-01	2.84E-02	5.21E-04
1815	4.89	1.45E-04	1.44E-03	3.70E-03	1.23E-02	3.36E-01	2.62E-02	8.31E-04	7.52E-03	5.55E-02	7.95E-03	1.15E-03	1.74E-01	1.39E-01	2.44E-01	2.93E-01	6.23E-02	1.14E-03
1830	10.7	3.18E-04	3.16E-03	8.09E-03	2.70E-02	7.36E-01	5.72E-02	1.82E-03	1.65E-02	1.21E-01	1.74E-02	2.51E-03	3.81E-01	3.04E-01	5.34E-01	6.42E-01	1.36E-01	2.50E-03
1845	23.5	6.99E-04	6.93E-03	1.78E-02	5.93E-02	1.62E+00	1.26E-01	4.00E-03	3.61E-02	2.67E-01	3.82E-02	5.52E-03	8.37E-01	6.67E-01	1.17E+00	1.41E+00	3.00E-01	5.49E-03
1900	51.6	1.54E-03	1.52E-02	3.90E-02	1.30E-01	3.55E+00	2.76E-01	8.77E-03	7.93E-02	5.86E-01	8.39E-02	1.21E-02	1.84E+00	1.46E+00	2.57E+00	3.10E+00	6.58E-01	1.21E-02
1915	172	5.12E-03	5.07E-02	1.30E-01	4.34E-01	1.18E+01	9.20E-01	2.92E-02	2.64E-01	1.95E+00	2.80E-01	4.04E-02	6.13E+00	4.88E+00	8.58E+00	1.03E+01	2.19E+00	4.02E-02
1930	576	1.71E-02	1.70E-01	4.36E-01	1.45E+00	3.98E+01	3.08E+00	9.79E-02	8.86E-01	6.54E+00	9.36E-01	1.35E-01	2.05E+01	1.63E+01	2.87E+01	3.46E+01	7.34E+00	1.35E-01
1945	1070	3.18E-02	3.16E-01	8.09E-01	2.70E+00	7.36E+01	5.72E+00	1.82E-01	1.65E+00	1.21E+01	1.74E+00	2.51E-01	3.81E+01	3.04E+01	5.34E+01	6.42E+01	1.36E+01	2.50E-01
2000	1020	3.03E-02	3.01E-01	7.71E-01	2.58E+00	7.01E+01	5.46E+00	1.73E-01	1.57E+00	1.16E+01	1.66E+00	2.40E-01	3.63E+01	2.89E+01	5.09E+01	6.12E+01	1.30E+01	2.38E-01
2015	966	2.87E-02	2.85E-01	7.31E-01	2.44E+00	6.64E+01	5.17E+00	1.64E-01	1.49E+00	1.10E+01	1.57E+00	2.27E-01	3.44E+01	2.74E+01	4.82E+01	5.80E+01	1.23E+01	2.26E-01
2030	919	2.73E-02	2.71E-01	6.95E-01	2.32E+00	6.32E+01	4.92E+00	1.56E-01	1.41E+00	1.04E+01	1.49E+00	2.16E-01	3.27E+01	2.61E+01	4.58E+01	5.51E+01	1.17E+01	2.15E-01
2045	874	2.60E-02	2.58E-01	6.61E-01	2.21E+00	6.01E+01	4.68E+00	1.49E-01	1.34E+00	9.92E+00	1.42E+00	2.05E-01	3.11E+01	2.48E+01	4.36E+01	5.24E+01	1.11E+01	2.04E-01
2100	831	2.47E-02	2.45E-01	6.28E-01	2.10E+00	5.71E+01	4.45E+00	1.41E-01	1.28E+00	9.43E+00	1.35E+00	1.95E-01	2.96E+01	2.38E+01	4.14E+01	4.99E+01	1.06E+01	1.94E-01
2115	790	2.35E-02	2.33E-01	5.97E-01	1.99E+00	5.43E+01	4.23E+00	1.34E-01	1.21E+00	8.97E+00	1.28E+00	1.86E-01	2.81E+01	2.24E+01	3.94E+01	4.74E+01	1.01E+01	1.85E-01
2130	751	2.23E-02	2.22E-01	5.68E-01	1.90E+00	5.18E+01	4.02E+00	1.28E-01	1.15E+00	8.52E+00	1.22E+00	1.76E-01	2.68E+01	2.13E+01	3.75E+01	4.51E+01	9.58E+00	1.76E-01

Time	RMR-206 R/hr	Point Numbers															
		18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
1745	1.02	3.63E-02	1.66E-01	1.49E-01	1.45E-01	3.63E-02	5.21E-02	7.01E-01	6.50E-01	2.49E-05	7.93E-04	4.46E-05	*	4.46E-05	3.14E-06	3.47E-03	2.56E-03
1800	2.23	7.94E-02	3.62E-01	3.26E-01	3.18E-01	7.94E-02	1.14E-01	1.53E+00	1.42E+00	5.44E-05	1.73E-03	9.76E-05	*	9.76E-05	6.86E-06	7.58E-03	5.60E-03
1815	4.89	1.74E-01	7.95E-01	7.15E-01	6.97E-01	1.74E-01	2.50E-01	3.36E+00	3.12E+00	1.19E-04	3.80E-03	2.14E-04	*	2.14E-04	1.50E-05	1.66E-02	1.23E-02
1830	10.7	3.81E-01	1.74E+00	1.56E+00	1.52E+00	3.81E-01	5.47E-01	7.36E+00	6.82E+00	2.61E-04	8.32E-03	4.68E-04	*	4.68E-04	3.29E-05	3.64E-02	2.89E-02
1845	23.5	8.37E-01	3.82E+00	3.44E+00	3.35E+00	8.37E-01	1.20E+00	1.62E+01	1.50E+01	5.73E-04	1.83E-02	1.03E-03	*	1.03E-03	7.23E-05	7.99E-02	5.90E-02
1900	51.6	1.84E+00	8.39E+00	7.55E+00	7.35E+00	1.84E+00	2.64E+00	3.55E+01	3.29E+01	1.26E-03	4.01E-02	2.26E-03	*	2.26E-03	1.59E-04	1.75E-01	1.30E-01
1915	172	6.13E+00	2.80E+01	2.52E+01	2.45E+01	6.13E+00	8.79E+00	1.18E+02	1.10E+02	4.19E-03	1.34E-01	7.53E-03	*	7.53E-03	5.29E-04	5.85E-01	4.32E-01
1930	576	2.05E+01	9.36E+01	8.42E+01	8.21E+01	2.05E+01	2.94E+01	3.96E+02	3.67E+02	1.40E-02	4.48E-01	2.52E-02	*	2.52E-02	1.77E-03	1.96E+00	1.45E+00
1945	1070	3.81E+01	1.74E+02	1.56E+02	1.52E+02	3.81E+01	5.47E+01	7.36E+02	6.82E+02	2.61E-02	8.32E-01	4.68E-02	*	4.68E-02	3.29E-03	3.64E+00	2.69E+00
2000	1020	3.63E+01	1.66E+02	1.49E+02	1.45E+02	3.63E+01	5.21E+01	7.01E+02	6.50E+02	2.49E-02	7.93E-01	4.46E-02	*	4.46E-02	3.14E-03	3.47E+00	2.56E+00
2015	966	3.44E+01	1.57E+02	1.41E+02	1.38E+02	3.44E+01	4.94E+01	6.64E+02	6.16E+02	2.35E-02	7.51E-01	4.23E-02	*	4.23E-02	2.97E-03	3.28E+00	2.43E+00
2030	919	3.27E+01	1.49E+02	1.34E+02	1.31E+02	3.27E+01	4.70E+01	6.32E+02	5.86E+02	2.24E-02	7.15E-01	4.02E-02	*	4.02E-02	2.83E-03	3.12E+00	2.31E+00
2045	874	3.11E+01	1.42E+02	1.28E+02	1.25E+02	3.11E+01	4.47E+01	6.01E+02	5.57E+02	2.13E-02	6.80E-01	3.82E-02	*	3.82E-02	2.69E-03	2.97E+00	2.20E+00
2100	831	2.96E+01	1.35E+02	1.22E+02	1.18E+02	2.96E+01	4.25E+01	5.71E+02	5.30E+02	2.03E-02	6.46E-01	3.64E-02	*	3.64E-02	2.56E-03	2.83E+00	2.09E+00
2115	790	2.81E+01	1.28E+02	1.16E+02	1.13E+02	2.81E+01	4.04E+01	5.43E+02	5.04E+02	1.93E-02	6.14E-01	3.46E-02	*	3.46E-02	2.43E-03	2.69E+00	1.98E+00
2130	751	2.68E+01	1.22E+02	1.10E+02	1.07E+02	2.68E+01	3.84E+01	5.16E+02	4.79E+02	1.83E-02	5.84E-01	3.29E-02	*	3.29E-02	2.31E-03	2.55E+00	1.89E+00

Note: \* The PASS panel is designed to have a worst case dose rate of < 1 R/hr.







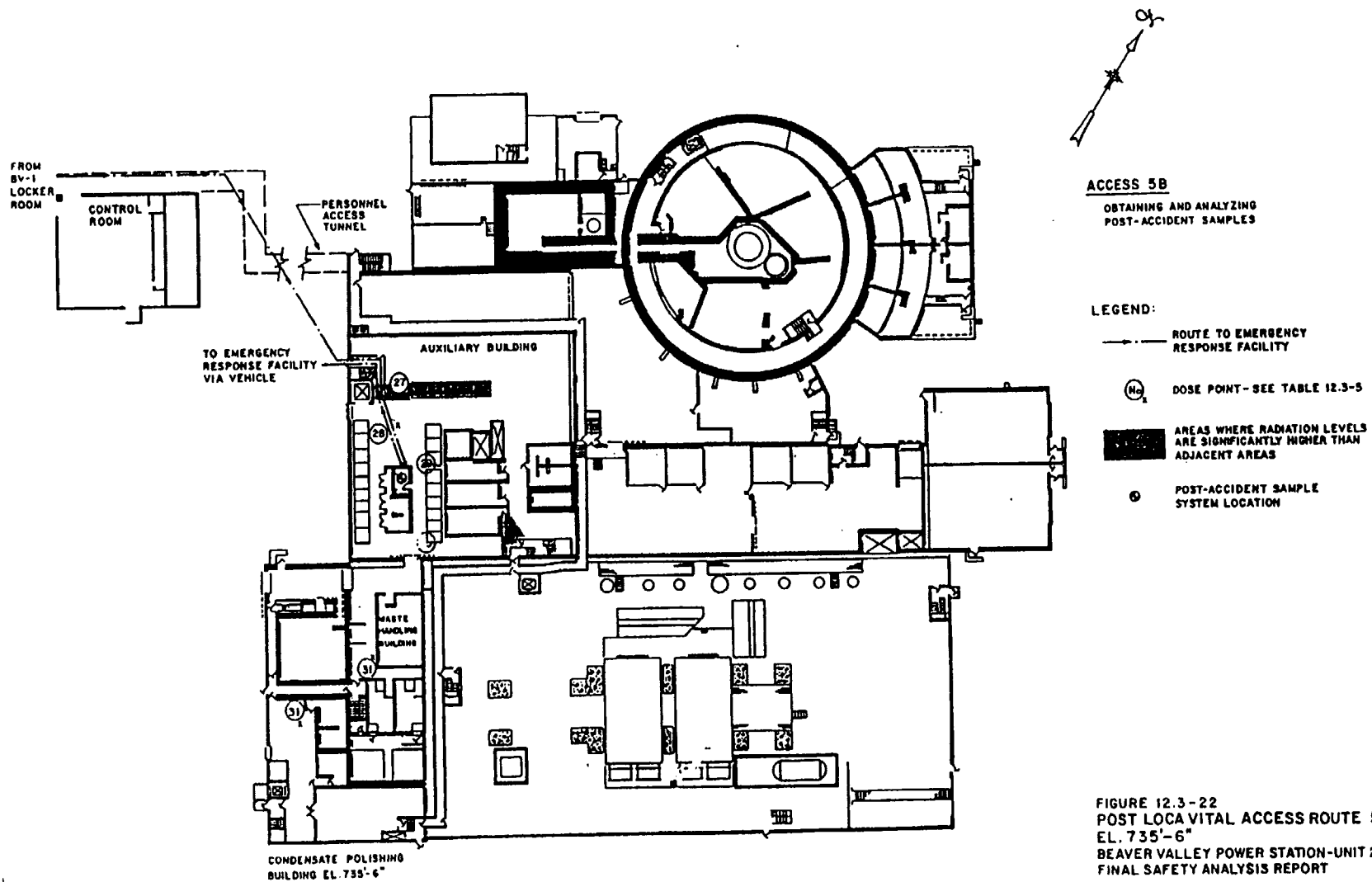
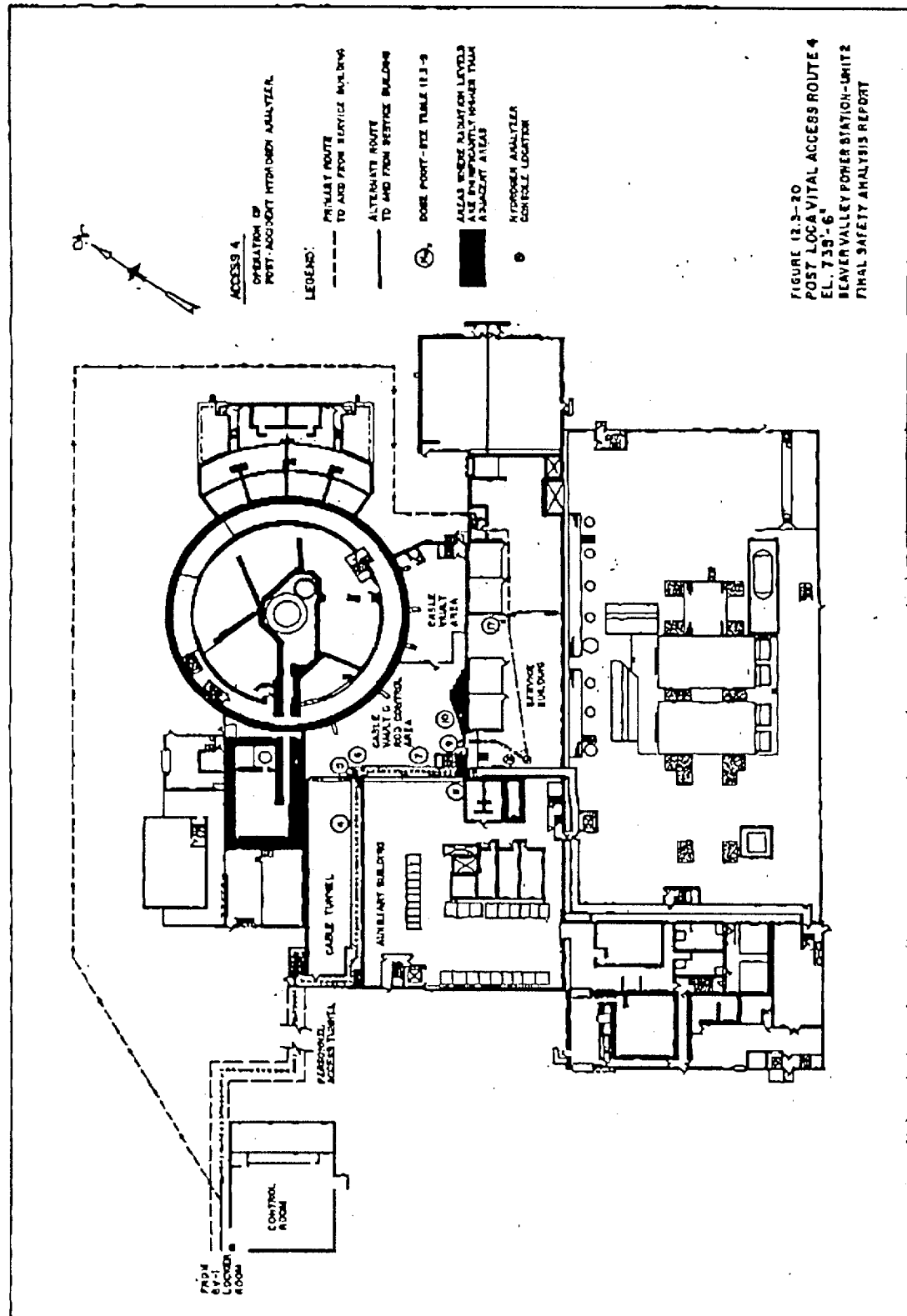
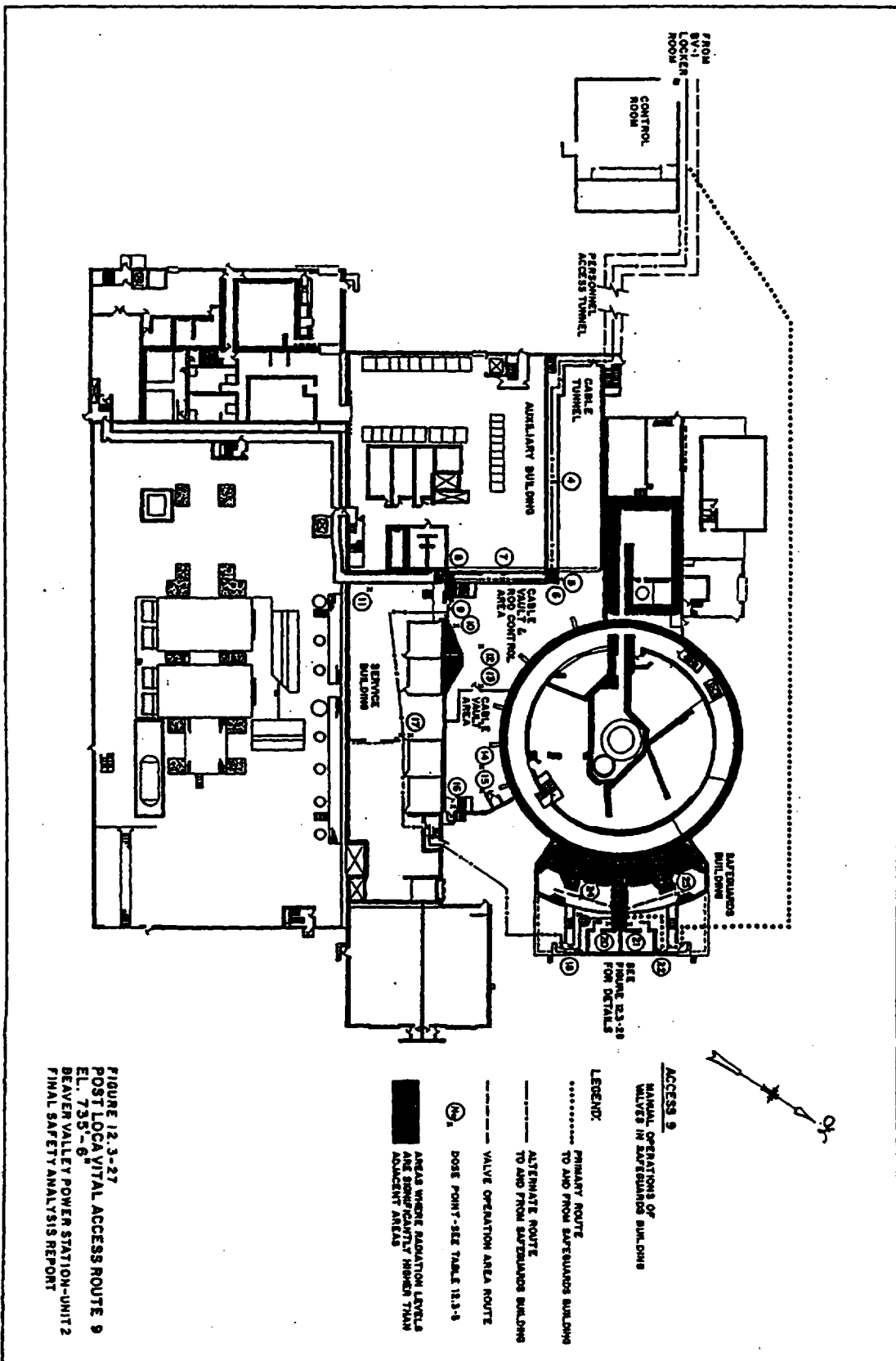
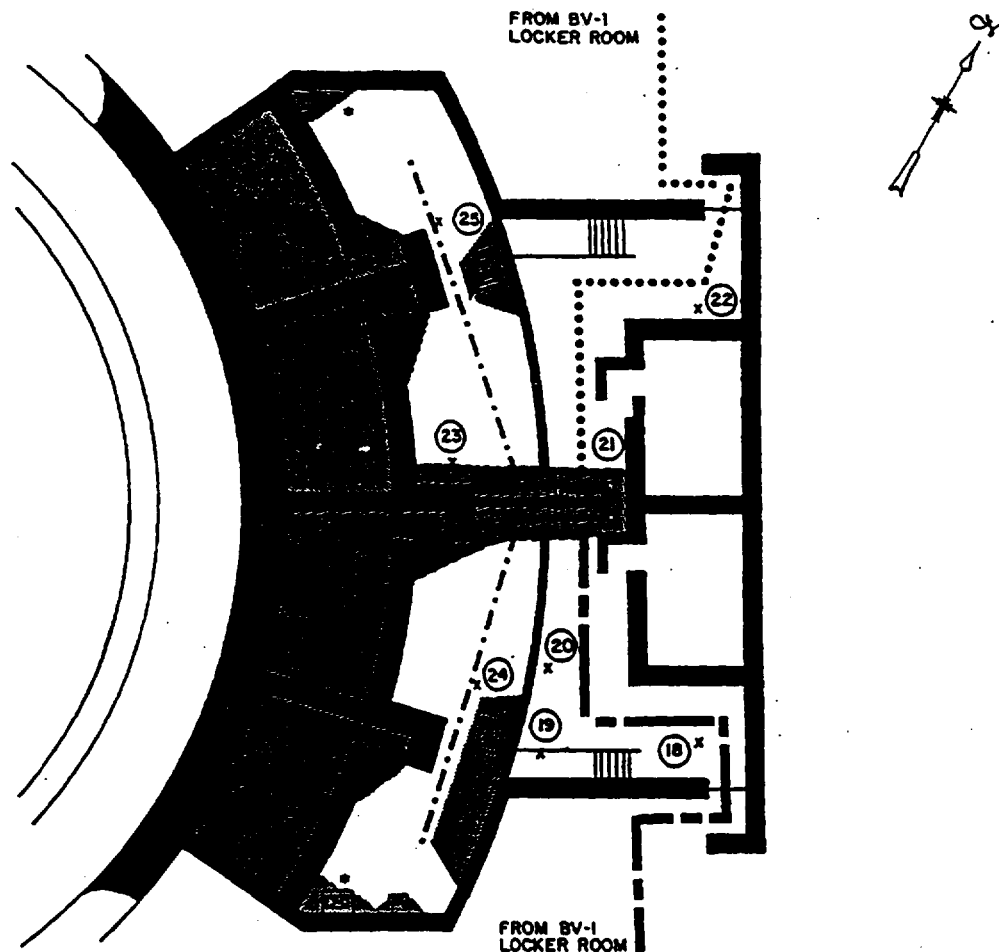


FIGURE 12.3-22  
POST LOCA VITAL ACCESS ROUTE 5B  
EL. 735'-6"  
BEAVER VALLEY POWER STATION-UNIT 2  
FINAL SAFETY ANALYSIS REPORT







#### ACCESS 9

MANUAL OPERATIONS OF VALVES IN  
SAFEGUARDS BUILDING

#### LEGEND:

- — — — — PRIMARY ROUTE  
TO AND FROM SAFEGUARDS BUILDING
- ..... ALTERNATE ROUTE  
TO AND FROM SAFEGUARDS BUILDING
- - - - - VALVE OPERATION AREA ROUTE

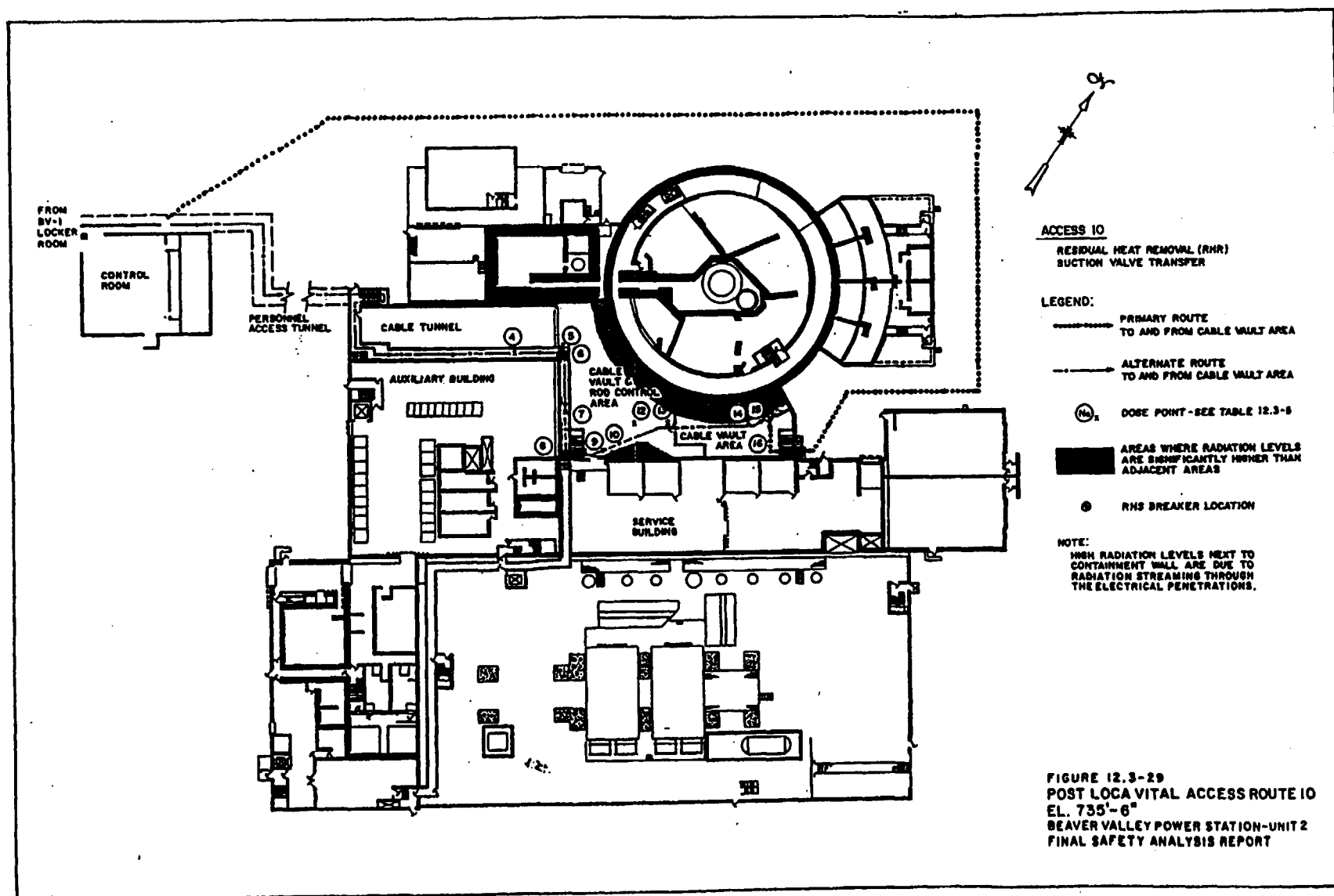
(No) x DOSE POINT - SEE TABLE 12.3-5

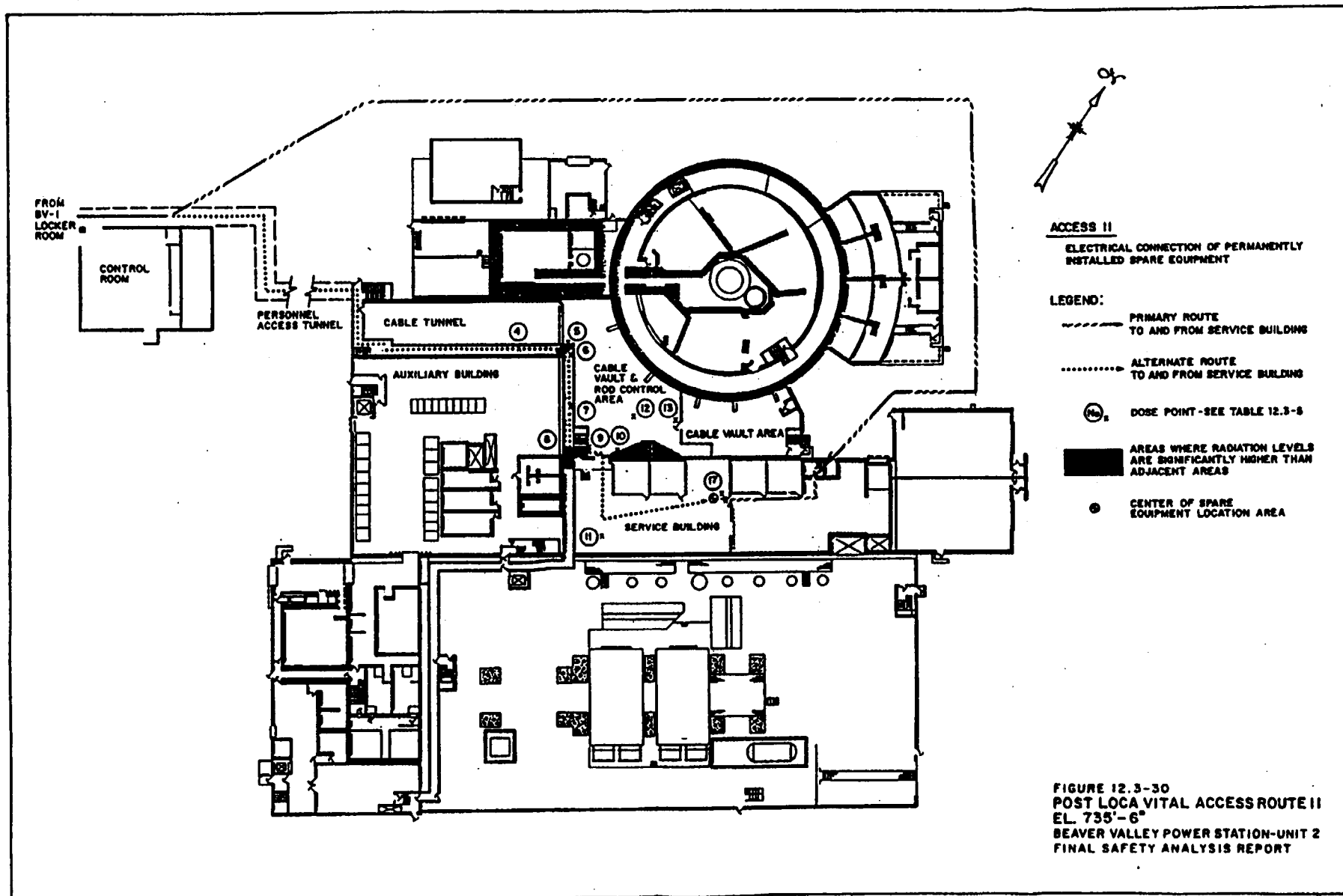
■ AREAS WHERE RADIATION LEVELS  
ARE SIGNIFICANTLY HIGHER THAN  
ADJACENT AREAS

#### \* NOTE:

HIGH RADIATION LEVEL IS DUE TO  
STREAMING THROUGH VENTILATION  
PENETRATION IN RSS CUBICLE WALL.  
HIGH LEVELS OCCUR AT ELEVATIONS  
GREATER THAN 5 FT. ABOVE THE FLOOR.

FIGURE 12.3-28  
POST LOCA VITAL ACCESS ROUTE 9  
DETAIL OF ACCESS 9  
EL. 735'-6"  
BEAVER VALLEY POWER STATION-UNIT 2  
FINAL SAFETY ANALYSIS REPORT





## RADIOCHEMISTRY DATA

(Activities are in uCi/g)

<u>ISOTOPE</u>	<u>"NORMAL"</u> <u>OPERATING</u> <u>ACTIVITY</u>	<u>"POST TRIP"</u> <u>ACTIVITY</u>
I-131	1.872 E-4	1.582 E-3
I-132	5.227 E-3	1.046 E-2
I-133	2.547 E-3	9.124 E-3
I-134	9.252 E-3	1.820 E-2
I-135	4.930 E-3	1.27 E-2
Ar-41	1.179 E-1	4.909 E-1
Kr-85M	1.503 E-3	6.213 E-3
Kr-87	3.212 E-3	2.332 E-2
Kr-88	3.938 E-3	3.261 E-2
Xe-133	2.794 E-3	5.851 E-3
Xe-133M	5.309 E-4	6.540 E-4
Xe-135	7.906 E-3	6.936 E-2
Xe-135M	1.226 E-2	1.481 E-1
Be-7	1.690 E-4	5.848 E-4
F-18	7.985 E-2	1.165 E-1
Na-24	1.242 E-3	1.061 E-2
Cr-51	2.476 E-3	3.281 E-2
Mn-54	3.361 E-4	1.192 E-2
Co-58	2.303 E-3	1.828 E-2
Fe-59	1.829 E-4	1.028 E-3
Co-60	2.770 E-4	3.722 E-3
Rb-88	1.044 E-2	2.035 E-2
Zr-95	1.221 E-3	1.307 E-2
Nb-95	1.628 E-3	1.702 E-2
Mo-99	1.506 E-4	4.522 E-4
Tc-99m	1.506 E-4	4.522 E-4
Cs-137	4.033 E-6	4.564 E-6
Cs-138	1.255 E-2	2.268 E-2

## **Dose Projections**

The Atmospheric Radioactive Effluent Release Assessment System (ARERAS) is the computer hardware by which airborne release dose projections are primarily done at BVPS Units #1 & 2, with hand calculations being the backup method. ARERAS runs the Meteorological Information and Dose Assessment System (MIDAS) software, which calculates the dose projection results.

MIDAS has access to real-time site meteorology, real-time gaseous effluent radiation monitor data, and accident assessment files to determine projected doses from any release point at either BVPS Unit #1 or #2. MIDAS calculates an "Adjusted Wind Speed" based on a calculated release height. The wind speed given at the 35', 150' or 500' Meteorological Tower elevations is NOT used in developing MIDAS dose projection results. The Adjusted Wind Speed is used in MIDAS dose assessment calculations, which includes specific release point heights.

For this Exercise, a Loss of Coolant Accident (LOCA) occurs with a radiological release occurring from the Containment Equipment Hatch (this is a monitored release path). Calculations are based on some fuel damage occurring and a release of "gap" activity to the environment.

- 1) **Since the "DF" bus was lost, only one of two ventilation fans are operable and a flowrate of 41,000 CFM was used for the following calculations:**
  - Using effluent monitor HVS-RQ109D (high range), WS: 10 MPH (Adjusted Wind Speed: 21 MPH) and FG stability results in a release rate of 130 Ci/sec, with doses of 20 R TEDE and 5 R CDE at the EAB, and 1.1 R TEDE and 0.028 R CDE at 5 miles. (This will result in an upgraded PAR).
- 2) **If the default flowrate is used (57,000 CFM), the results of the calculation's are as follows:**
  - Using effluent monitor HVS-RQ109D (high range), WS: 10 MPH (Adjusted Wind Speed: 21 MPH) and FG stability results in a release rate of 177 Ci/sec, with doses of 28 R TEDE and 6.9 R CDE at the EAB, and 1.6 R TEDE and 0.039 R CDE at 5 miles. (This would also result in an upgraded PAR).

Use of either flowrate is acceptable, based on Controller observation that a determination of which flowrate to use was made by the participants. Either flowrate provides the dose projection results necessary to drive an upgraded PAR, and provide appropriate field data for Offsite Agencies.

The MIDAS "Class A Model" or Hand Calculations may be used during the Exercise for a quick accident assessment (the MIDAS program provides for radioactive decay and building wake effects, while the Hand Calculations do not).



## METEOROLOGICAL DATA

TIME	150' WIND DIRECTION	500' WIND DIRECTION	35' WIND SPEED (MPH)	DELTA T 150'-35' (S.C.)	35' AMBIENT TEMP. (°F)
1600	15	42	5	-0.9 (C)	87 Cldy
1615	18	44	5	-0.9 (C)	87 Cldy
1630	20	54	4	-0.9 (C)	87 Cldy
1645	25	60	4	-0.4 (D)	87 Cldy
1700	30	65	5	-0.4 (D)	86 Cldy
1715	40	70	5	-0.4 (D)	86 Cldy
1730	50	77	6	-0.4 (D)	86 Cldy
1745	70	85	6	0.4 (E)	86 Cldy
1800	73	92	6	0.4 (E)	85 Cldy
1815	75	100	7	0.4 (E)	85 Cldy
1830	72	107	7	0.4 (E)	84 Cldy
1845	72	125	8	1.2 (FG)	84 Cldy
1900	70	130	8	1.2 (FG)	84 Cldy
1915	73	130	8	1.2 (FG)	83 Cldy
1930	75	130	10	1.2 (FG)	83 Cldy
1945	75	130	10	1.2 (FG)	83 Cldy
2000	75	130	10	1.2 (FG)	82 Cldy
2015	75	130	10	0.5 (E)	81 Cldy
2030	70	127	2	-0.4 (D)	80 Cldy
2045	70	120	2	-0.4 (D)	79 Ptly Cldy
2100	65	115	7	-0.4 (D)	79 Ptly Cldy
2115	60	100	11	-0.4 (D)	78 Clearing
2130	55	95	15	-0.4 (D)	77 Clearing

### FORECAST:

1530-2200hrs: Hot and humid, mild winds from the north with temperatures in the 80's. Cloudy sky's throughout the evening. Clearing with moderate winds from the east are expected as high pressure moves through the area late evening.

After 2200hrs: Cool with temperatures in the upper 60's. Winds from the northwest with scattered showers are expected near midnight. Clearing skies are expected by morning.



: BU UNIT: NC EOL AND DOSE SUMMARY PRINT  
 : DRILL- THESE EVENTS DID NOT OCCUR-DRILL\*  
 IDENT TYPE: LBCA W/ GAP ACTIVITY  
 : INITIAL ENTRY OF NET  
 : MANUAL ENTRY OF VENT AND FLOW MONITOR DATA\*

\*\*\*\*\*  
 REJECTION FOR 1.0 HOUR RELEASE:  
 : OFFSITE TEDE (MREM) 2.0E+04

EMERGENCY ACTION LEVEL: \*\*\* GENERAL EMERGENCY \*\*\*

>>> PROTECTIVE ACTION REQUIRED -- <<<  
 >>> 2-10 MILE DOWNWIND PAR SECTORS: not avail. <<<

: EPA REPORTABLE QUANTITY EXCEEDED FRACTION = 4.9E+05 \*\*\*  
 \*\*\*\*\*

: DRILL- THESE EVENTS DID NOT OCCUR-DRILL\* 29-MAR-2008 16:28

OFFSITE 1/RELEASE HOUR	4-DAY GND DEP EDE	PLUME EDE	PLUME CEDE	TEDE	CHILD THYROID COE	B-S SKIN OE
BOUNDARY	3.6E+01	2.0E+04	6.3E+01	2.0E+04	5.0E+03	4.4E+04
1 MILE RADIUS	1.0E+00	5.0E+03	1.0E+01	5.0E+03	5.0E+02	2.0E+03
1 MILE RADIUS	2.1E+00	1.1E+03	3.0E+00	1.1E+03	2.0E+02	6.0E+02
1 MILE RADIUS	3.0E+01	4.0E+02	1.0E+00	4.0E+02	1.0E+02	3.0E+02
RATE AT PEAK	3.0E+01	2.0E+04	6.3E+01	2.0E+04	5.0E+03	4.4E+04
1 TO PEAK (FT)	2.0E+03	2.0E+03	2.0E+03	2.0E+03	2.0E+03	2.0E+03

: TO-TEDE RATIO: 1.0E+00  
 : CASE POINTS ACTIVE: SLCRS

: ILTS ARE DOSE (MREM) PER HOUR OF RELEASE.  
 : : IS SUM OF GND EDE, PLUME EDE AND PLUME CEDE.  
 : : AND DEPOSITION DOSE ASSUMES ACTIVITY DEPOSITED AT  
 : : EXPOSURE INTEGRATED OVER FOUR DAYS

UNIT: U2

BEAVER VALLEY POWER STATION  
Follow-up Notification -- Gaseous ReleaseEPP/IP-1.1 ATT 3  
Equivalent

MEMO: #DRILL- THESE EVENTS DID NOT OCCUR-DRILL#

[1] Time Prepared: 29-MAR-2008 16:30  
 [2] Type of Accident: LOCA U/ GAP ACTIVITY  
 [3] Time of RX Trip or Accident Start: 29-MAR-2008 16:26  
 [4] Release Started: (u) (n) [5] Time: 29-MAR-2008 16:26 (actual) (proj.)  
 [6] Release Stopped: (u) (n) [7] Duration: 1.00 (actual) (proj.)  
 [8] Potential For Additional Release: (Y) (N)

[9] Projected Release Based on: LOCA U/ GAP ACTIVITY

[10] Noble Gas: 1.27E+09 uCi/sec XE133 4.59E+08 uCi/sec  
 KR88 2.12E+08  
 KR89 1.31E+08  
 [11] Iodine: 1.81E+05 uCi/sec XE133 1.30E+08 (10 Maximum  
 [12] Total: 1.27E+09 uCi/sec XE135 1.14E+08 isotopes)  
 KR85M 8.82E+07  
 [13] I/MG Ratio: 7.95E-05 XE135M 4.22E+07  
 XE137 3.70E+07  
 I-131 2.71E+04  
 I-133 7.40E+04

[14] Max Monitor: HVS#189H

[15] Reading: 1.30E+02 uCi/cc [16] Flow: 4.10E+04 cfm

[17] 35ft Wind Speed: 10.0 150ft Wind Speed: N/A 500ft Wind Speed: N/A  
 [18] Delta-1: 1.28 [19] Stability: F [20] 150ft Direction: 70  
 [21] 500ft Direction: N/A [22] Precip: (N) [23] Source: MANUAL NET DATA

Dist	Sectors (a)	Int. TEDE (b)	Projected Child Thyroid (c)	Protective Action Recommendation (d)
[24] EAB	ALL SECTORS	2.02E+04	MREM	4.95E+02 MREM
[25] 5 mi	not avail.	3.04E+03	MREM	9.54E+02 MREM
[26] 5 mi	not avail.	1.12E+03	MREM	2.81E+02 MREM
[27] 10 mi	not avail.	4.66E+02	MREM	1.16E+02 MREM
[28] EDE-TD-TEDE Ratio:		9.97E-01		

[29] Actual Field Monitoring Results

Time (a)	Point (b)	WB MREM/HR (c)	Thy MREM/HR (d)
-------------	--------------	-------------------	--------------------

MEMO: DRILL - THESE EVENTS DID NOT OCCUR-DRILL\*

29-MAR-2000 16:28

\*\*\* DOSE PROJECTIONS \*\*\*

TIME = 29-MAR-2000 16:28

TIME(hrs) = + 1.0 + 2.0 + 4.0 + 8.0  
DISTANCE (1726) (1826) (2026) (2426)

TIME TO  
REACH PAG\*

SITE BDRY Plume Overhead 16:27 to 17:27

TEDE (MREM)	1.9E+04	2.8E+04	2.8E+04	2.8E+04	16:27
THY CDE (MREM)	4.7E+03	5.8E+03	5.8E+03	5.8E+03	NOT REACHED
SKIN DE (MREM)	4.1E+04	4.4E+04	4.4E+04	4.4E+04	NOT REACHED
4-DAY GND DEPOSITION EDE (MREM)					
ONE YEAR WEATHERED GND DEPOSITION (MREM)				6.7E+01	

2 MILES Plume Overhead 16:32 to 17:32

TEDE (MREM)	3.6E+03	3.8E+03	3.8E+03	3.8E+03	16:32
THY CDE (MREM)	9.1E+02	9.5E+02	9.5E+02	9.5E+02	NOT REACHED
SKIN DE (MREM)	7.6E+03	8.8E+03	8.8E+03	8.8E+03	NOT REACHED
4-DAY GND DEPOSITION EDE (MREM)					
ONE YEAR WEATHERED GND DEPOSITION (MREM)				1.3E+01	

5 MILES Plume Overhead 16:42 to 17:42

TEDE (MREM)	7.8E+02	1.1E+03	1.1E+03	1.1E+03	16:42
THY CDE (MREM)	2.8E+02	2.8E+02	2.8E+02	2.8E+02	NOT REACHED
SKIN DE (MREM)	1.9E+03	2.3E+03	2.3E+03	2.3E+03	NOT REACHED
4-DAY GND DEPOSITION EDE (MREM)					
ONE YEAR WEATHERED GND DEPOSITION (MREM)				3.8E+00	

10 MILES Plume Overhead 16:56 to 17:56

TEDE (MREM)	2.1E+02	4.7E+02	4.7E+02	4.7E+02	NOT REACHED
THY CDE (MREM)	6.2E+01	1.2E+02	1.2E+02	1.2E+02	NOT REACHED
SKIN DE (MREM)	4.2E+02	8.4E+02	8.4E+02	8.4E+02	NOT REACHED
4-DAY GND DEPOSITION EDE (MREM)					
ONE YEAR WEATHERED GND DEPOSITION (MREM)				1.6E+00	

\*PAG - TEDE=1000 MREM, THY CDE=5000 MREM, SKIN DE=50000 MREM  
\*\* - NOT CALCULATED AT THIS DISTANCE

SITE: BEAVER VALLEY UNIT: TWO MENU: 0 DATE: 03/29/88 16:38  
 INPUT DATA SUMMARY FOR 03/29/88 16:38

MONITOR ID	RPT	CURRENT READING	UNITS	CONV FACTOR	CURR READ (UCI/CC)	FLOW	CURR READ (UCI/SEC)
HUS*109H	2	1.38E+02	UCI/CC	0.00E+00	6.58E+01	4.18E+04	1.27E+09

ISOTOPE	(UCI/SEC)	REL PT 1	REL PT 2	REL PT 3	REL PT 4
I131	0.00E+00	0.00E+00	2.71E+04	0.00E+00	0.00E+00
I133	0.00E+00	0.00E+00	7.48E+04	0.00E+00	0.00E+00
XE133	0.00E+00	0.00E+00	4.59E+08	0.00E+00	0.00E+00
KR88	0.00E+00	0.00E+00	2.12E+08	0.00E+00	0.00E+00
XE138	0.00E+00	0.00E+00	1.38E+08	0.00E+00	0.00E+00
KR87	0.00E+00	0.00E+00	1.31E+08	0.00E+00	0.00E+00
KR89	0.00E+00	0.00E+00	2.43E+07	0.00E+00	0.00E+00
XE135	0.00E+00	0.00E+00	1.14E+08	0.00E+00	0.00E+00
XE135M	0.00E+00	0.00E+00	4.22E+07	0.00E+00	0.00E+00
KR85M	0.00E+00	0.00E+00	8.82E+07	0.00E+00	0.00E+00
XE137	0.00E+00	0.00E+00	3.78E+07	0.00E+00	0.00E+00
TOTAL NOBLE	0.00E+00	0.00E+00	1.27E+09	0.00E+00	0.00E+00
TOTAL PARTICULATE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TOTAL IODINE	0.00E+00	0.00E+00	1.01E+06	0.00E+00	0.00E+00

	RP 1	SC	RP 2	SC	RP 3	SC	RP 4	SC
ADJ. GRND. SPEED (MPH)	0.0	2	21.0	0M	0.0	2	0.0	2
GRND. DIRECTION (DEG.)	0	2	70	0M	0	2	0	2
GRND. STABILITY CLASS-(Z)		2	F	0M		2		2
GRND. TEMP (DEG. F)	0.0	2	38.0	0M	0.0	2	0.0	2
ADJ. ELEV. SPEED (MPH)	0.0	2	0.0	2	0.0	2	0.0	2
ELEV. DIRECTION (DEG.)	0	2	0	2	0	2	0	2
ELEV. STABILITY CLASS-(Z)		2		2		2		2
ELEV. TEMP (DEG. F)	0.0	2	0.0	2	0.0	2	0.0	2
RAIN (INCHES)	0.00	2	0.00	0M	0.00	2	0.00	2
PLUME FRACTION AT GROUND	0.00		1.00		0.00		0.00	
FINAL PLUME HEIGHT (M)	0.0		10.0		0.0		0.0	

SC-STATUS:0=GOOD,1=??,2=BAD. DATA SOURCE:P=1ST,S=2ND,T=3RD,H=MANL,D=DEF,L=LAST

16:09:31

## Beaver Valley Unit 2 Centerline Table

03-29-2000

 $1.3\text{E}+2 \text{ uCi/cc} \times 4.1\text{E}+4 \text{ CFM} \times 2.4\text{E}-4 = 1.3\text{E}+3 \text{ Ci/sec}$ 

Released NG (Ci/sec) =	1.3E+3	Iodine	2.5E-1
Monitor used	109-D	Windspeed	9.39 m/sec 21 MPH
Projected Exposure Time	1	Stability Class	FG
Accident Type	GAP LOCA	Affected Sectors	M+L&N
Wind Direction (to)	250	(from)	70
Present Time	1609	Release Start Time	1545
Release in Progress (hrs)	0.40	Release Duration hr	1

Release	DCF: Rem / (uCi/cc)*h
Nuclide(Ci/s)	Fraction External Inhaled Deposit Thyroid TEDE EW Ratio
Weighted DCF = 4.0E+2	4.0E+2
Weighted DCF = 9.6E+2	6.5E+3 5.3E+3 3.4E+5 1.3E+41.0E+0

I / NG		Dose Rate (Rem/hour) / Dose (Rem)										
Dis. Mile	X/Q sec/m <sup>2</sup> uCi/cc	Conc	Comb.	Thy.	Plume Shine	Inhale	Ground Shine	Width 10%	1%	Deposit uCi/m <sup>2</sup>	Arr. Time	Dep. Time
0.4	6.8E-5	1.7E-5	3.5E+1	5.7E+0	3.5E+1	1.1E-1	9.0E-2	0.1	0.1	6.0E+0	1546	1646
		8.6E-2	3.5E+1	5.7E+0	3.5E+1	1.1E-1	9.0E-2	TEDE	CT		Emer.	
1.0	2.5E-5	6.1E-6	1.3E+1	2.1E+0	1.3E+1	4.0E-2	3.3E-2	0.2	0.2	2.2E+0	1547	1647
		3.1E-2	1.3E+1	2.1E+0	1.3E+1	4.0E-2	3.3E-2	TEDE			Emer.	
2.0	1.0E-5	2.5E-6	5.3E+0	8.6E-1	5.3E+0	1.6E-2	1.4E-2	0.3	0.4	9.1E-1	1550	1650
		1.3E-2	5.3E+0	8.6E-1	5.3E+0	1.6E-2	1.4E-2	TEDE			Prev.	
5.0	3.2E-6	7.9E-7	1.6E+0	2.7E-1	1.6E+0	5.1E-3	4.2E-3	0.7	0.9	2.8E-1	1559	1659
		4.1E-3	1.6E+0	2.7E-1	1.6E+0	5.1E-3	4.2E-3	TEDE			Prev.	
10.0	1.4E-6	3.3E-7	7.0E-1	1.1E-1	6.9E-1	2.2E-3	1.8E-3	1.2	1.7	1.2E-1	1613	1713
		1.7E-3	7.0E-1	1.1E-1	6.9E-1	2.2E-3	1.8E-3					

Return to Input Screen

Print Form

SITE: BU UNIT: U2 EAL AND DOSE SUMMARY PRINT  
MEMO: \*DRILL- THESE EVENTS DID NOT OCCUR-DRILL\*  
ACCIDENT TYPE: LDCA W/ GAP ACTIVITY  
'MANUAL ENTRY OF NET'  
'USE MANUAL ENTRY OF VENT AND FLOW MONITOR DATA'

\*\*\*\*\*  
\* PROJECTION FOR 1.0 HOUR RELEASE: \*  
\* PEAK OFFSITE TEDE (MREM) 2.8E+04 \*  
\* PEAK OFFSITE CHILD THYROID CDE (MREM) 6.9E+03 \*  
\* EMERGENCY ACTION LEVEL: \*\*\* GENERAL EMERGENCY \*\*\*  
\* >>> PROTECTIVE ACTION REQUIRED -- <<<  
\* >>> 0-2 MILES ALL SECTORS <<<  
\* >>> 2-10 MILE DOWNWIND PAR SECTORS: not avail. <<<  
\* \*\*\* EPA REPORTABLE QUANTITY EXCEEDED FRACTION = 5.9E+05 \*\*\*  
\*\*\*\*\*

MEMO: \*DRILL- THESE EVENTS DID NOT OCCUR-DRILL\*

29-MAR-2000 16:21

DOSE OFFSITE MREM/RELEASE HOUR	4-DAY GND DEP EDE	PLUME EDE	PLUME CEDE	TEDE	CHILD THYROID CDE	B-G SKIN DE
SITE BOUNDARY	5.8E+01	2.8E+04	8.7E+01	2.8E+04	6.9E+03	6.1E+04
2 MILE RADIUS	9.7E+00	5.3E+03	1.7E+01	5.3E+03	1.3E+03	1.1E+04
5 MILE RADIUS	2.9E+00	1.5E+03	5.0E+00	1.6E+03	3.9E+02	3.2E+03
10 MILE RADIUS	1.2E+00	6.4E+02	2.1E+00	6.5E+02	1.6E+02	1.3E+03
DOSE RATE AT PEAK	5.8E+01	2.8E+04	8.7E+01	2.8E+04	6.9E+03	6.1E+04
DIST TO PEAK (FT)	2.8E+03	2.8E+03	2.8E+03	2.8E+03	2.8E+03	2.8E+03

EDE-TO-TEDE RATIO: 1.0E+00  
RELEASE POINTS ACTIVE: SLCRS

I-REPORT THESE--I

RESULTS ARE DOSE (MREM) PER HOUR OF RELEASE.  
TEDE IS SUM OF GND EDE, PLUME EDE, AND PLUME CEDE.  
GROUND DEPOSITION DOSE ASSUMES ACTIVITY DEPOSITED AT  
T=0, EXPOSURE INTEGRATED OVER FOUR DAYS



UNIT: U2

BEAVER VALLEY POWER STATION  
Follow-up Notification -- Gaseous ReleaseEPP/IP-1.1 ATT 3  
Equivalent

MEMO: \*DRILL- THESE EVENTS DID NOT OCCUR-DRILL\*

[1] Time Prepared: 29-MAR-2000 16:23  
 [2] Type of Accident: LOCA W/ GAP ACTIVITY  
 [3] Time of RX Trip or Accident Start: 29-MAR-2000 16:18  
 [4] Release Started: (y) (n) [5] Time: 29-MAR-2000 16:18 (actual) (proj.)  
 [6] Release Stopped: (y) (n) [7] Duration: 1.00 (actual) (proj.)  
 [8] Potential For Additional Release: (Y) (N)

[9] Projected Release Based on: LOCA W/ GAP ACTIVITY

[10] Noble Gas:  $1.77\text{E}+09$  uCi/sec  
 [11] Iodine:  $1.41\text{E}+05$  uCi/sec  
 [12] Total:  $1.77\text{E}+09$  uCi/sec  
 [13] I/Ng Ratio:  $7.95\text{E}-05$

XE133  $6.39\text{E}+08$  uCi/sec  
 KR88  $2.95\text{E}+08$   
 KR87  $1.82\text{E}+08$   
 XE138  $1.80\text{E}+08$  (10 Maximum  
 Isotopes)  
 XE135  $1.58\text{E}+08$   
 KR85M  $1.11\text{E}+08$   
 XE135M  $5.87\text{E}+07$   
 XE137  $5.15\text{E}+07$   
 I-131  $3.77\text{E}+04$   
 I-133  $1.03\text{E}+05$

[14] Max Monitor: HUS109H

[15] Reading:  $1.30\text{E}+02$  uCi/cc [16] Flow:  $5.70\text{E}+04$  cfm

[17] 35ft Wind Speed: 10.0 150ft Wind Speed: N/A 500ft Wind Speed: N/A  
 [18] Delta-T: 1.20 [19] Stability: F [20] 150ft Direction: 70  
 [21] 500ft Direction: N/A [22] Precip: (N) [23] Source: MANUAL MET DATA

Dist	Sectors (a)	Int. TEDE (b)	Projected Child Thyroid (c)	Protective Action Recommendation (d)
[24] EAB	ALL SECTORS	$2.82\text{E}+04$ MREM	$6.88\text{E}+03$ MREM	MREM
[25] 2 mi	not avail.	$5.34\text{E}+03$ MREM	$1.33\text{E}+03$ MREM	MREM
[26] 5 mi	not avail.	$1.56\text{E}+03$ MREM	$3.91\text{E}+02$ MREM	MREM
[27] 10 mi	not avail.	$6.48\text{E}+02$ MREM	$1.62\text{E}+02$ MREM	MREM
[28] EDE-TD-TEDE Ratio:		$9.97\text{E}-01$		

[29] Actual Field Monitoring Results

Time Point WB MREM/HR Thy MREM/HR  
 (a) (b) (c) (d)

MEMO: \*DRILL- THESE EVENTS DID NOT OCCUR-DRILL\*

29-MAR-2000 16:21

\*\*\* DDSE PROJECTIONS \*\*\*

TIME(hrs) = + 1.0 + 2.0 + 4.0 + 8.0  
 DISTANCE (1718) (1818) (2018) (2418)

TIME TO  
 REACH PAG\*

SITE BDRY Plume Overhead 16:19 to 17:19

	(MREM)	2.3E+04	2.8E+04	2.8E+04	2.8E+04	
TEDE	(MREM)	2.3E+04	2.8E+04	2.8E+04	2.8E+04	16:19
THY CDE	(MREM)	5.7E+03	6.9E+03	6.9E+03	6.9E+03	16:40
SKIN DE	(MREM)	5.0E+04	6.1E+04	6.1E+04	6.1E+04	17:15
4-DAY GND DEPOSITION EDE	(MREM)				5.0E+01	
ONE YEAR WEATHERED GND DEPOSITION	(MREM)				9.3E+01	

2 MILES Plume Overhead 16:24 to 17:24

	(MREM)	3.1E+03	5.3E+03	5.3E+03	5.3E+03	
TEDE	(MREM)	3.1E+03	5.3E+03	5.3E+03	5.3E+03	16:24
THY CDE	(MREM)	7.7E+02	1.3E+03	1.3E+03	1.3E+03	NOT REACHED
SKIN DE	(MREM)	6.5E+03	1.1E+04	1.1E+04	1.1E+04	NOT REACHED
4-DAY GND DEPOSITION EDE	(MREM)				9.7E+00	
ONE YEAR WEATHERED GND DEPOSITION	(MREM)				1.8E+01	

5 MILES Plume Overhead 16:34 to 17:34

	(MREM)	9.1E+02	1.6E+03	1.6E+03	1.6E+03	
TEDE	(MREM)	9.1E+02	1.6E+03	1.6E+03	1.6E+03	17:27
THY CDE	(MREM)	2.3E+02	3.9E+02	3.9E+02	3.9E+02	NOT REACHED
SKIN DE	(MREM)	1.9E+03	3.2E+03	3.2E+03	3.2E+03	NOT REACHED
4-DAY GND DEPOSITION EDE	(MREM)				2.9E+00	
ONE YEAR WEATHERED GND DEPOSITION	(MREM)				5.3E+00	

10 MILES Plume Overhead 16:47 to 17:47

	(MREM)	2.2E+02	6.5E+02	6.5E+02	6.5E+02	
TEDE	(MREM)	2.2E+02	6.5E+02	6.5E+02	6.5E+02	NOT REACHED
THY CDE	(MREM)	5.4E+01	1.6E+02	1.6E+02	1.6E+02	NOT REACHED
SKIN DE	(MREM)	4.4E+02	1.3E+03	1.3E+03	1.3E+03	NOT REACHED
4-DAY GND DEPOSITION EDE	(MREM)				1.2E+00	

SITE: BEAVER VALLEY UNIT: TWO MENU: D DATE: 03/29/00 16:24  
 INPUT DATA SUMMARY FOR 03/29/00 16:15

MONITOR ID	RPT	CURRENT READING	UNITS	CONU FACTOR	CURR READ (UCI/CC)	FLOW	CURR READ (UCI/SEC)
HUS#109H	2	1.30E+02	UCI/CC	0.00E+00	6.58E+01	5.70E+04	1.77E+09

ISOTOPE	(UCI/SEC)	REL PT 1	REL PT 2	REL PT 3	REL PT 4
I131	0.00E+00	3.77E+04	0.00E+00	0.00E+00	
I133	0.00E+00	1.03E+05	0.00E+00	0.00E+00	
XE133	0.00E+00	6.39E+08	0.00E+00	0.00E+00	
KR88	0.00E+00	2.95E+08	0.00E+00	0.00E+00	
XE138	0.00E+00	1.30E+08	0.00E+00	0.00E+00	
KR87	0.00E+00	1.82E+08	0.00E+00	0.00E+00	
KR89	0.00E+00	3.38E+07	0.00E+00	0.00E+00	
XE135	0.00E+00	1.58E+08	0.00E+00	0.00E+00	
XE135M	0.00E+00	5.87E+07	0.00E+00	0.00E+00	
KR85M	0.00E+00	1.11E+08	0.00E+00	0.00E+00	
XE137	0.00E+00	5.15E+07	0.00E+00	0.00E+00	
TOTAL NOBLE	0.00E+00	1.77E+09	0.00E+00	0.00E+00	
TOTAL PARTICULATE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
TOTAL IODINE	0.00E+00	1.41E+05	0.00E+00	0.00E+00	

	RP 1	SC	RP 2	SC	RP 3	SC	RP 4	SC
ADJ. GRND. SPEED (MPH)	0.0	2	21.0	0M	0.0	2	0.0	2
GRND. DIRECTION (DEG.)	0	2	70	0M	0	2	0	2
GRND. STABILITY CLASS-(Z)		2	F	0M		2		2
GRND. TEMP (DEG. F)	0.0	2	30.0	0M	0.0	2	0.0	2
ADJ. ELEV. SPEED (MPH)	0.0	2	0.0	2	0.0	2	0.0	2
ELEV. DIRECTION (DEG.)	0	2	0	2	0	2	0	2
ELEV. STABILITY CLASS-(Z)		2		2		2		2
ELEV. TEMP (DEG. F)	0.0	2	0.0	2	0.0	2	0.0	2
RAIN (INCHES)	0.00	2	0.00	0M	0.00	2	0.00	2
PLUME FRACTION AT GROUND	0.00		1.00		0.00		0.00	
FINAL PLUME HEIGHT (M)	0.0		10.0		0.0		0.0	

SC=STATUS:0=GOOD,1=??,2=BAD. DATA SOURCE:P=1ST,S=2ND,T=3RD,M=MANL,D=DEF,L=LAST

16:12:58

## Beaver Valley Unit 2 Centerline Table

03-29-2000

$$1.3\text{E}+2 \text{ uCi/cc} \times 5.7\text{E}+4 \text{ CFM} \times 2.4\text{E}-4 = 1.8\text{E}+3 \text{ Ci/sec}$$

Released NG (Ci/sec) = 1.8E+3 Iodine 3.4E-1  
 Monitor used 109-D Windspeed 9.39 m/sec 21 MPH  
 Projected Exposure Time 1 Stability Class FG  
 Accident Type GAP LOCA Affected Sectors M+L&N  
 Wind Direction (to) 250 (from) 70  
 Present Time 1612 Release Start Time 1545  
 Release in Progress (hrs) 0.45 Release Duration hr 1

Release DCFs Rem / (uCi/cc)\*h  
 Nuclide(Ci/s) Fraction External Inhaled Deposit Thyroid TEDE EW Ratio  
 Weighted DCF = 4.0E+2 4.0E+2  
 Weighted DCF = 9.6E+2 6.5E+3 5.3E+3 3.4E+5 1.3E+4 1.0E+0

Return to Input Screen

Print Form

		I / NG Dose Rate (Rem/hour) / Dose (Rem)											
Dis.	X/Q	Conc	Comb.	Thy.	Plume	Inhale	Ground	Width	Deposit	Arr.	Dep.		
Mile	sec/m <sup>2</sup> uCi/cc				Shine		Shine	10% 1%	uCi/m <sup>2</sup>	Time	Time		
0.4	6.8E-5	2.3E-5	4.9E+1	7.9E+0	4.8E+1	1.5E-1	1.2E-1	0.1 0.1	8.4E+0	1546	1646		
		1.2E-1	4.9E+1	7.9E+0	4.8E+1	1.5E-1	1.2E-1	TEDE	CT			Emer.	
1.0	2.5E-5	8.5E-6	1.8E+1	2.9E+0	1.8E+1	5.5E-2	4.6E-2	0.2 0.2	3.1E+0	1547	1647		
		4.4E-2	1.8E+1	2.9E+0	1.8E+1	5.5E-2	4.6E-2	TEDE			Emer.		
2.0	1.0E-5	3.5E-6	7.3E+0	1.2E+0	7.3E+0	2.3E-2	1.9E-2	0.3 0.4	1.3E+0	1550	1650		
		1.8E-2	7.3E+0	1.2E+0	7.3E+0	2.3E-2	1.9E-2	TEDE			Prev.		
5.0	3.2E-6	1.1E-6	2.3E+0	3.7E-1	2.3E+0	7.1E-3	5.9E-3	0.7 0.9	4.0E-1	1559	1659		
		5.6E-3	2.3E+0	3.7E-1	2.3E+0	7.1E-3	5.9E-3	TEDE			Prev.		
10.0	1.4E-6	4.6E-7	9.7E-1	1.6E-1	9.6E-1	3.0E-3	2.5E-3	1.2 1.7	1.7E-1	1613	1713		
		2.4E-3	9.7E-1	1.6E-1	9.6E-1	3.0E-3	2.5E-3			Prev.			

## BVPS FIELD MONITORING DATA-2000

### Air Sample Data For Silver Zeolite (All readings in NET CPM)

TIME	Distance (miles)																
	EAB*	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	8.0	9.0	10.0
1945	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1948	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1951	-	17,110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1957	-	17,110	12,290	9,180	-	-	-	-	-	-	-	-	-	-	-	-	-
2003	-	17,110	12,290	9,180	7,310	5,590	-	-	-	-	-	-	-	-	-	-	-
2009	-	17,110	12,290	9,180	7,310	5,590	4,670	4,050	-	-	-	-	-	-	-	-	-
+	2015	-	17,110	12,290	9,180	7,310	5,590	4,670	4,050	3,580	3,270	-	-	-	-	-	-
	2022	-	17,110	12,290	9,180	7,310	5,590	4,670	4,050	3,580	3,270	-	-	-	-	-	-
	2030	-	17,110	12,290	9,180	7,310	5,590	4,670	4,050	3,580	3,270	2,500	-	-	-	-	-
	2038	-	17,110	12,290	9,180	7,310	5,590	4,670	4,050	3,580	3,270	2,500	-	-	-	-	-
*	2045	-	9,330	6,000	3,110	2,500	1,900	4,670	4,050	3,580	3,270	2,500	1,900	-	-	-	-
	2100	-	-	-	-	2,500	1,900	4,670	4,050	3,580	3,270	2,500	1,500	1250	-	-	-
	2105	-	-	-	-	1,200	600	1,510	1,250	1,030	3,270	250	180	1000	500	-	-
	2110	-	-	-	-	-	-	50	250	300	1,600	100	80	180	180	-	-
	2115	-	-	-	-	-	-	-	-	150	800	50	50	60	100	180	-
	2121	-	-	-	-	-	-	-	-	-	-	-	40	50	40	-	-
	2125	- PLUME DISSIPATED AFTER THIS TIME -															

#### CONTROLLER NOTES:

- Background for all air samples = 20 CPM.
- \*\* Plume overhead, all air samples taken read background, 20 CPM (Plume reaches ground level 1 mile from Site).
- + Winds stall to 2 mph.
- \* Winds increase.
- 10 FT3 air samples Ag (Ze) using a RM-14/E-140 with HP-210 probe or equivalent.
- All air samples must be evaluated outside the Plume Boundary to obtain the above readings (*refer to Plume Maps*).
- Any air samples evaluated within the Plume Boundary will indicate offscale High due to plume shine (*refer to Plume Maps*).

## BVPS FIELD MONITORING DATA-2000

### Closed Window Dose Rate (R/hr)

		Distance (miles)																
TIME	EAB **	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	8.0	9.0	10.0	
+	1945	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	1948	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	1951	0.1	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	1957	0.1	11	8	6	-	-	-	-	-	-	-	-	-	-	-	-	
	2003	0.1	11	8	6	4.8	3.7	-	-	-	-	-	-	-	-	-	-	
	2009	0.1	11	8	6	4.8	3.7	3.1	2.5	-	-	-	-	-	-	-	-	
	2015	0.1	11	8	6	4.8	3.7	3.1	2.5	2.1	1.8	-	-	-	-	-	-	
	2022	0.1	11	8	6	4.8	3.7	3.1	2.5	2.1	1.8	-	-	-	-	-	-	
	2030	0.1	11	8	6	4.8	3.7	3.1	2.5	2.1	1.8	1.5	-	-	-	-	-	
	2038	0.1	11	8	6	4.8	3.7	3.1	2.5	2.1	1.8	1.5	-	-	-	-	-	
*	2045	0.1	11	8	6	4.8	3.7	3.1	2.5	2.1	1.8	1.5	1.2	-	-	-	-	
	2100	0.02	-	-	-	4.8	3.7	3.1	2.5	2.1	1.8	1.5	0.9	0.8	-	-	-	
	2105	-	-	-	-	0.5	0.2	1	0.8	2.1	1.8	1.5	0.1	0.6	0.3	-	-	
	2110	-	-	-	-	-	-	0.02	0.1	1	0.3	0.3	0.07	0.01	0.1	-	-	
	2115	-	-	-	-	-	-	-	-	0.5	0.08	0.002	0.001	0.005	0.02	0.1	-	
	2121	-	-	-	-	-	-	-	-	-	-	-	-	0.001	0.007	0.003	0.01	
	2125	- PLUME DISSIPATED AFTER THIS TIME -																

#### CONTROLLER NOTES:

- \*\* Readings due to shine from overhead Plume.  
(The Plume reaches ground level 1 mile from the Site).
- + Winds stall to 2 mph.
- \* Winds increase.
- Open window is 2 X closed.
- Readings continue through next time period.

## FIELD MONITORING DATA-2000

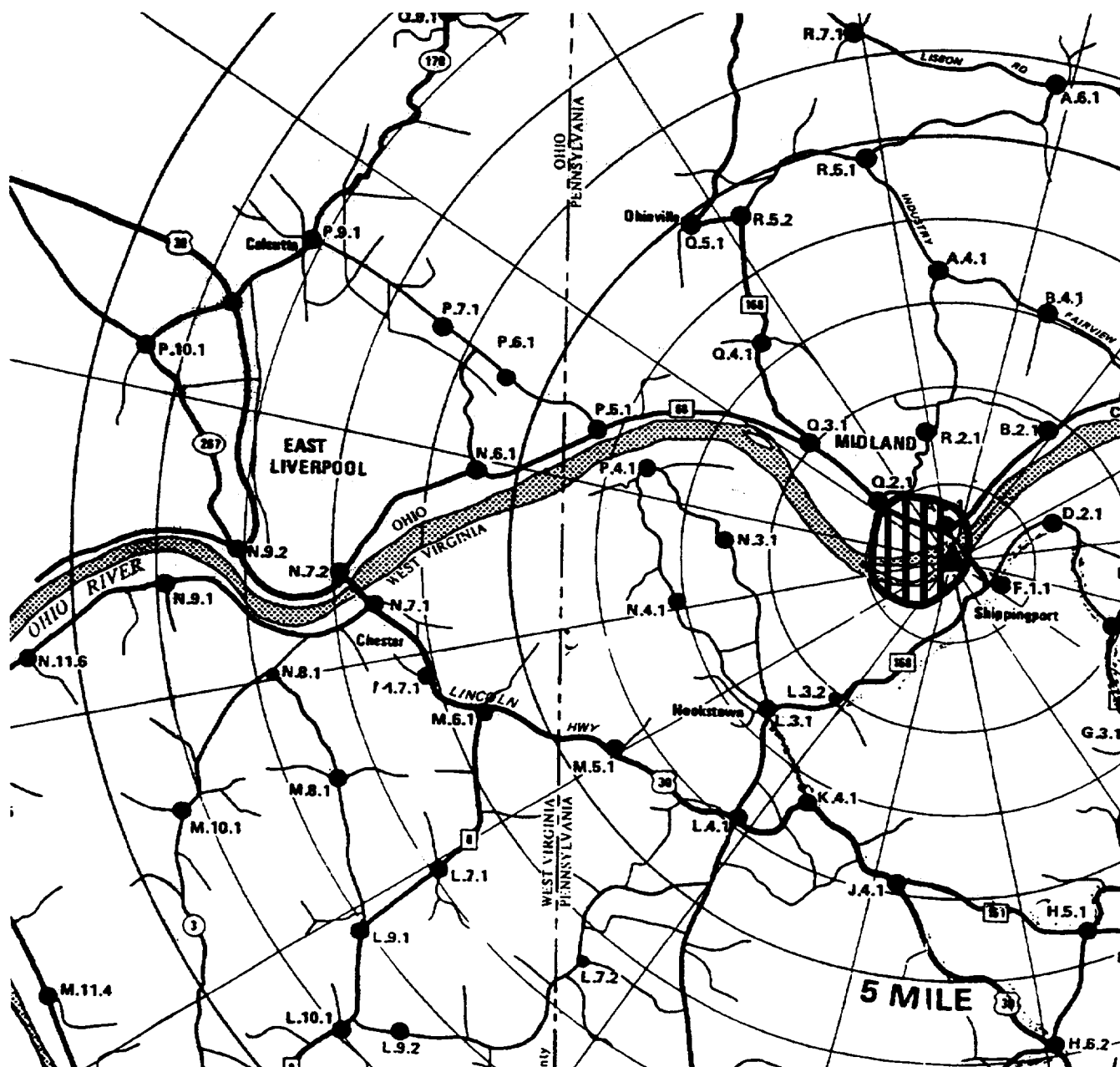
### Air Sample Data Concentration in uCi/cc

		Distance (miles)															
TIME	EAB**	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	8.0	9.0	
+	1945	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	1948	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	1951	-	1.1E-6	-	-	-	-	-	-	-	-	-	-	-	-	-	
	1957	-	1.1E-6	7.9E-7	5.9E-7	-	-	-	-	-	-	-	-	-	-	-	
	2003	-	1.1E-6	7.9E-7	5.9E-7	4.7E-7	3.6E-7	-	-	-	-	-	-	-	-	-	
	2009	-	1.1E-6	7.9E-7	5.9E-7	4.7E-7	3.6E-7	3.0E-7	2.6E-7	-	-	-	-	-	-	-	
	2015	-	1.1E-6	7.9E-7	5.9E-7	4.7E-7	3.6E-7	3.0E-7	2.6E-7	2.3E-7	2.1E-7	-	-	-	-	-	
	2022	-	1.1E-6	7.9E-7	5.9E-7	4.7E-7	3.6E-7	3.0E-7	2.6E-7	2.3E-7	2.1E-7	-	-	-	-	-	
	2030	-	1.1E-6	7.9E-7	5.9E-7	4.7E-7	3.6E-7	3.0E-7	2.6E-7	2.3E-7	2.1E-7	1.6E-7	-	-	-	-	
	2038	-	1.1E-6	7.9E-7	5.9E-7	4.7E-7	3.6E-7	3.0E-7	2.6E-7	2.3E-7	2.1E-7	1.6E-7	-	-	-	-	
*	2045	-	6.0E-7	3.9E-7	2.0E-7	1.6E-7	1.2E-7	3.0E-7	2.6E-7	2.3E-7	2.1E-7	1.6E-7	1.2E-7	-	-	-	
	2100	-	-	-	-	1.6E-7	1.2E-7	3.0E-7	2.6E-7	2.3E-7	2.1E-7	1.6E-7	9.6E-8	8.0E-8	-	-	
	2105	-	-	-	-	8.0E-8	1.0E-7	9.7E-8	8.0E-8	6.6E-8	1.4E-8	1.1E-8	1.1E-8	6.0E-8	3.0E-8	-	
	2110	-	-	-	-	-	-	3.0E-9	1.6E-8	1.8E-8	9.6E-8	6.0E-9	1.1E-8	1.0E-8	1.0E-8	-	
	2115	-	-	-	-	-	-	-	-	9.0E-9	4.8E-8	3.0E-9	3.0E-9	5.0E-9	6.0E-9	1.1E-8	
	2121	-	-	-	-	-	-	-	-	-	-	-	-	2.0E-9	3.0E-9	2.0E-9	
	2125	- PLUME DISSIPATED AFTER THIS TIME -															

#### CONTROLLER NOTES:

- \*\* Plume overhead, all air samples taken read background (Plume reaches ground level 1 mile from Site).
- Background readings.
- + Winds stall to 2 mph.
- \* Winds increase.
- The above information is provided to also allow the State Agencies to calculate air sample CPM readings on their specific air sample monitoring instrumentation, if necessary.

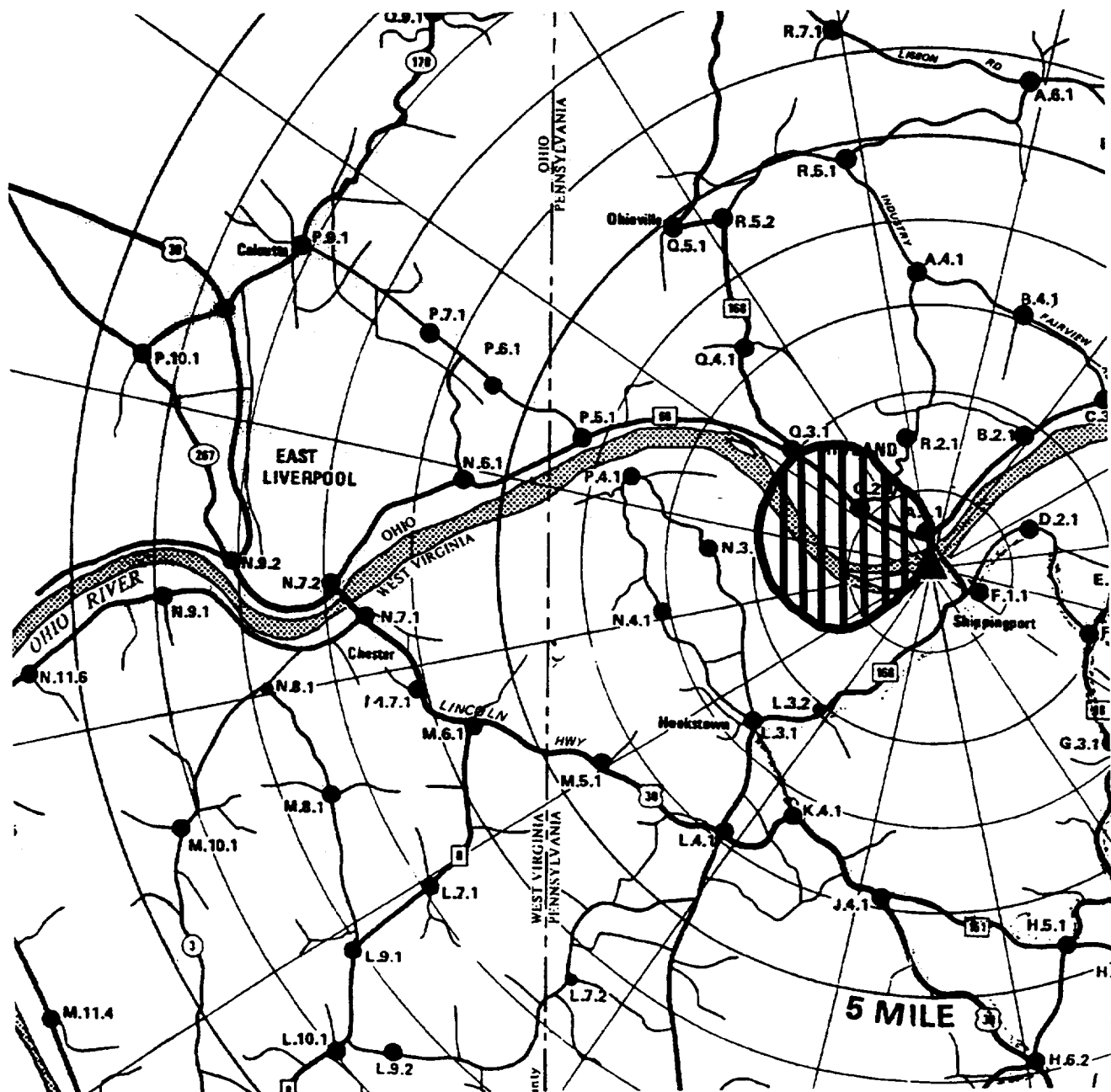
# PLUME LOCATION AT 1951 HRS.





## PLUME LOCATION AT 1957 HRS

**(2 mile)**

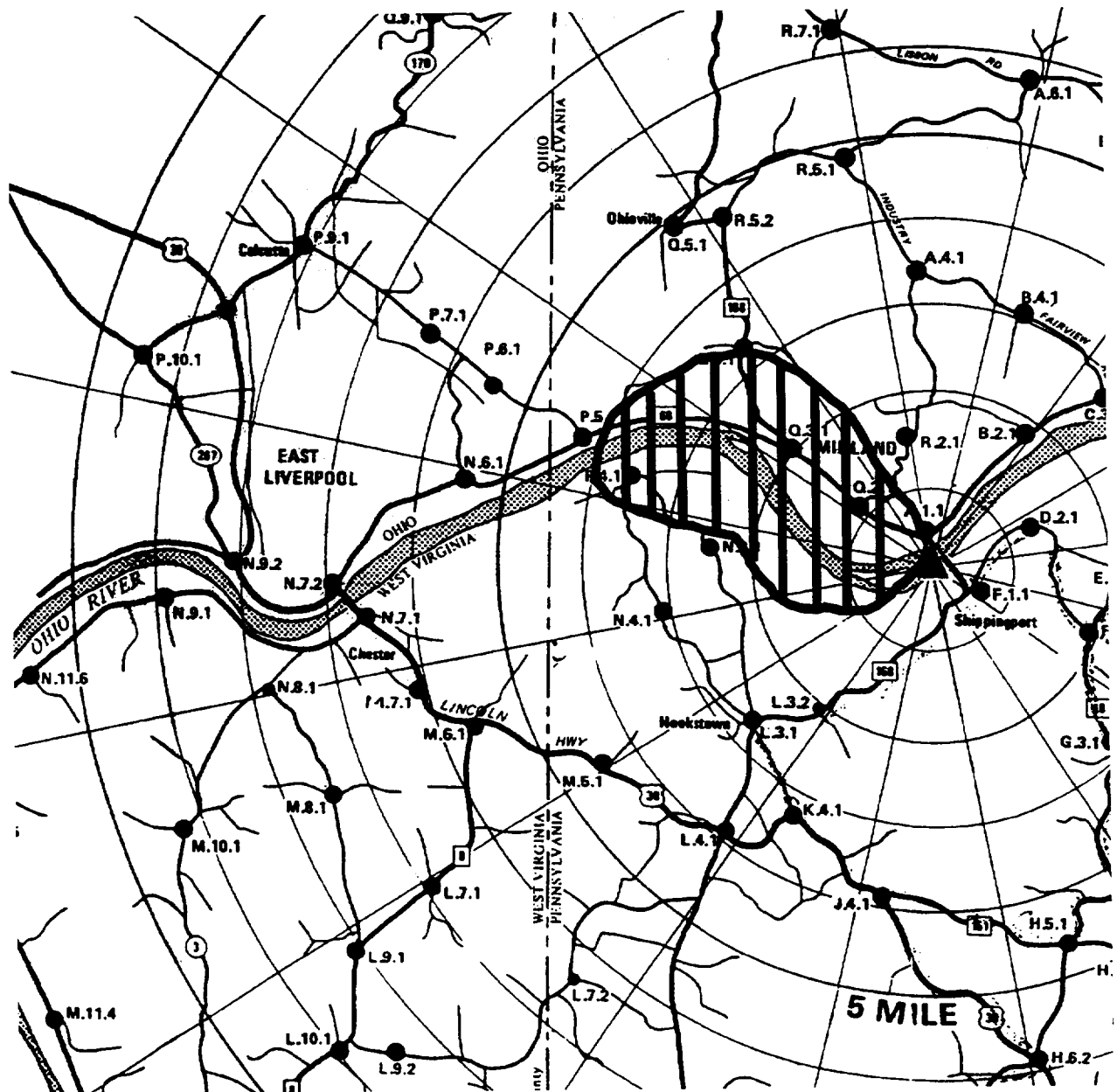


**(3 mile)**



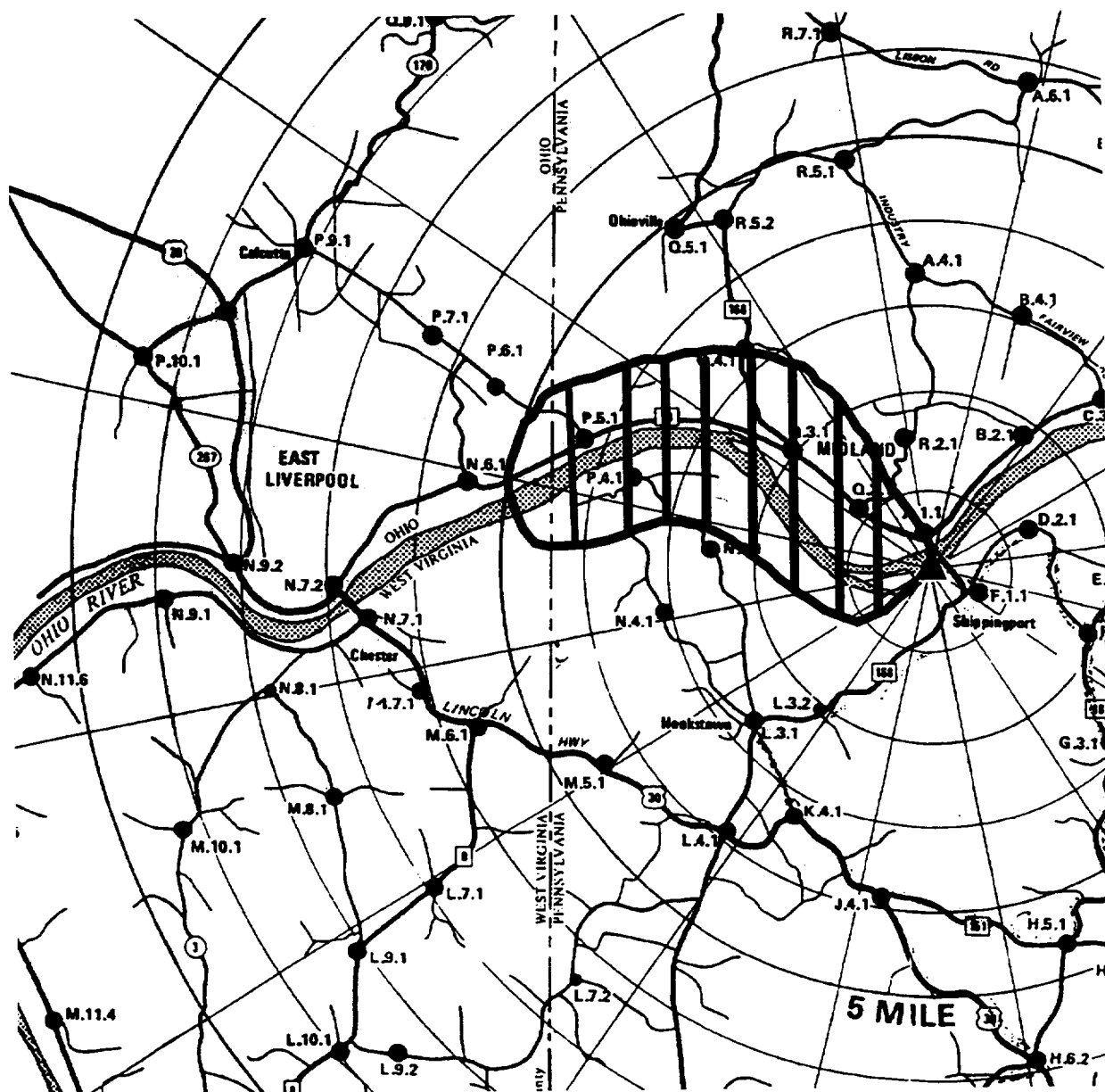
# PLUME LOCATION At 2009 HRS.

## (4 mile)



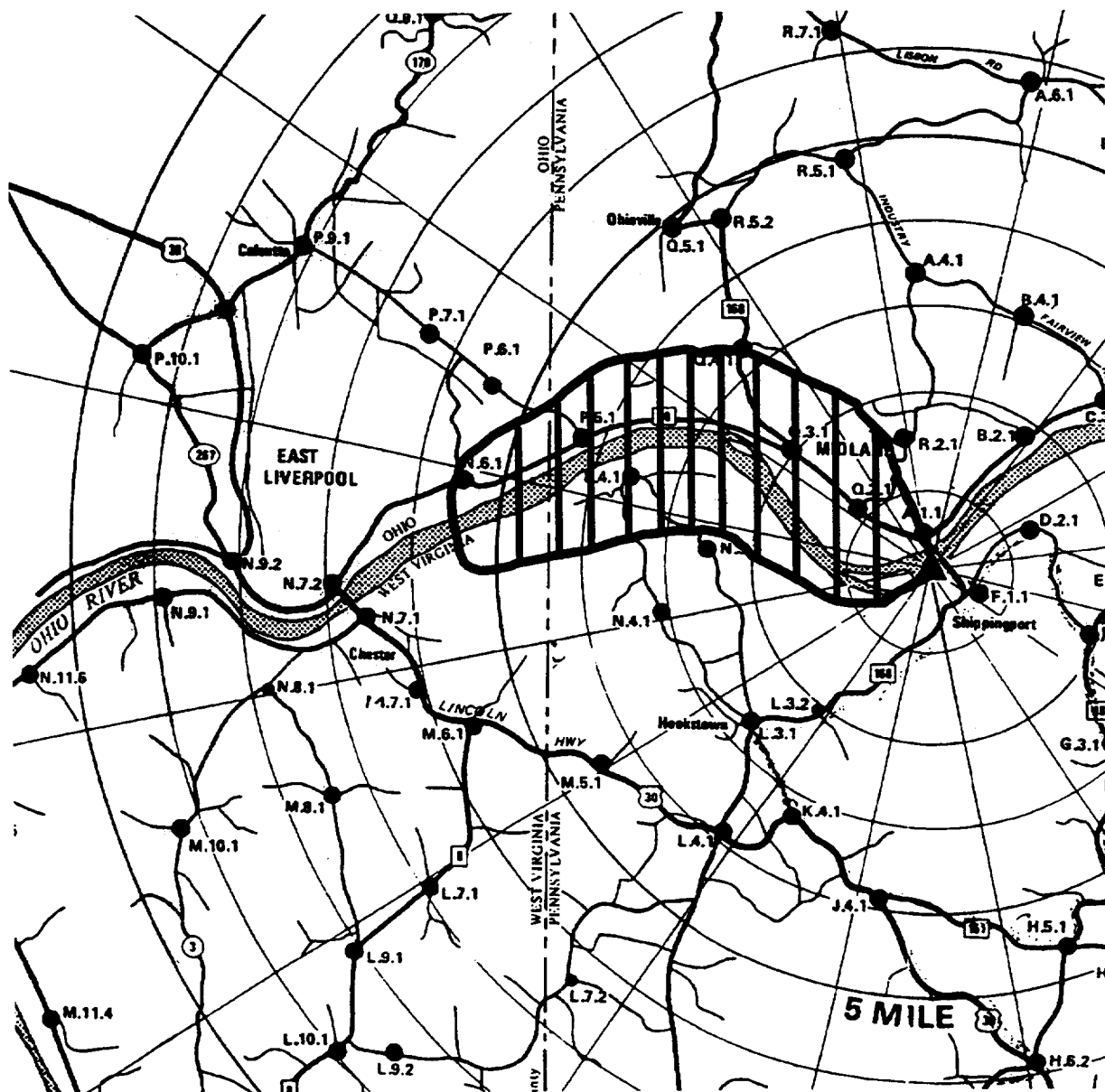
# **PLUME LOCATION AT 2015 HRS.**

## **(5mile)**



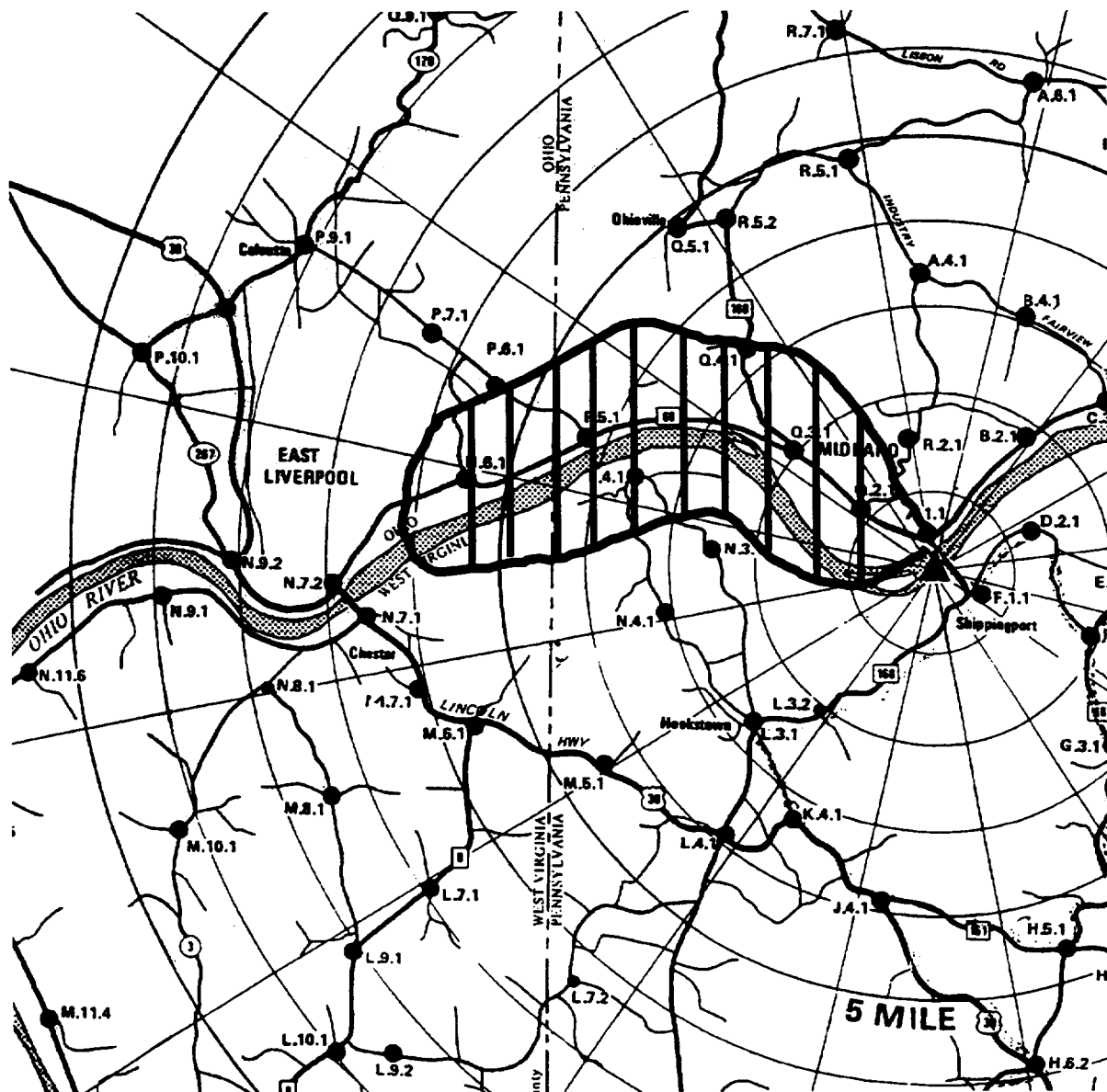
## PLUME LOCATION AT 2030 HRS.

**(5.5mile)**

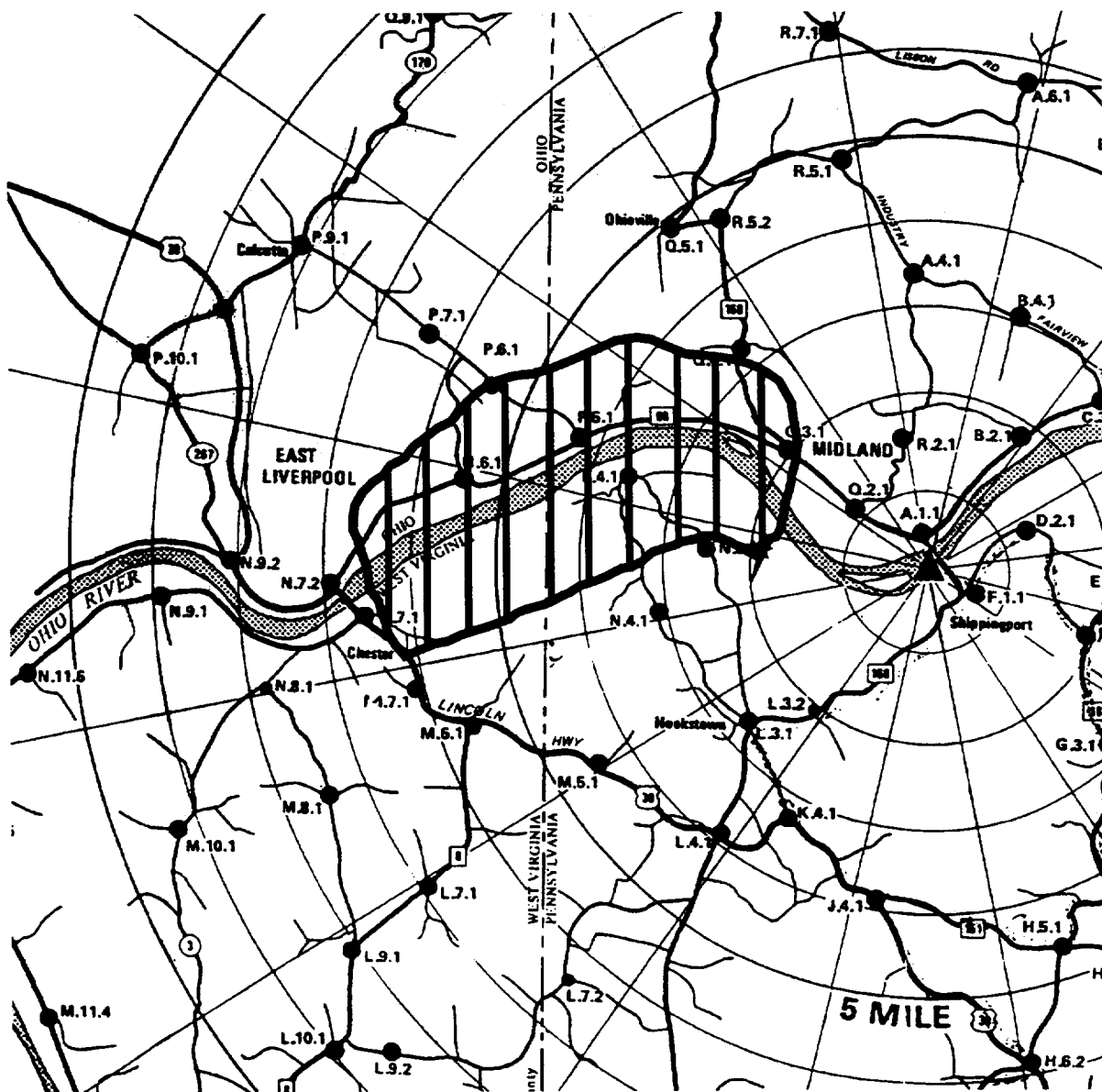


# **PLUME LOCATION AT 2045 HRS.**

## **(6mile)**

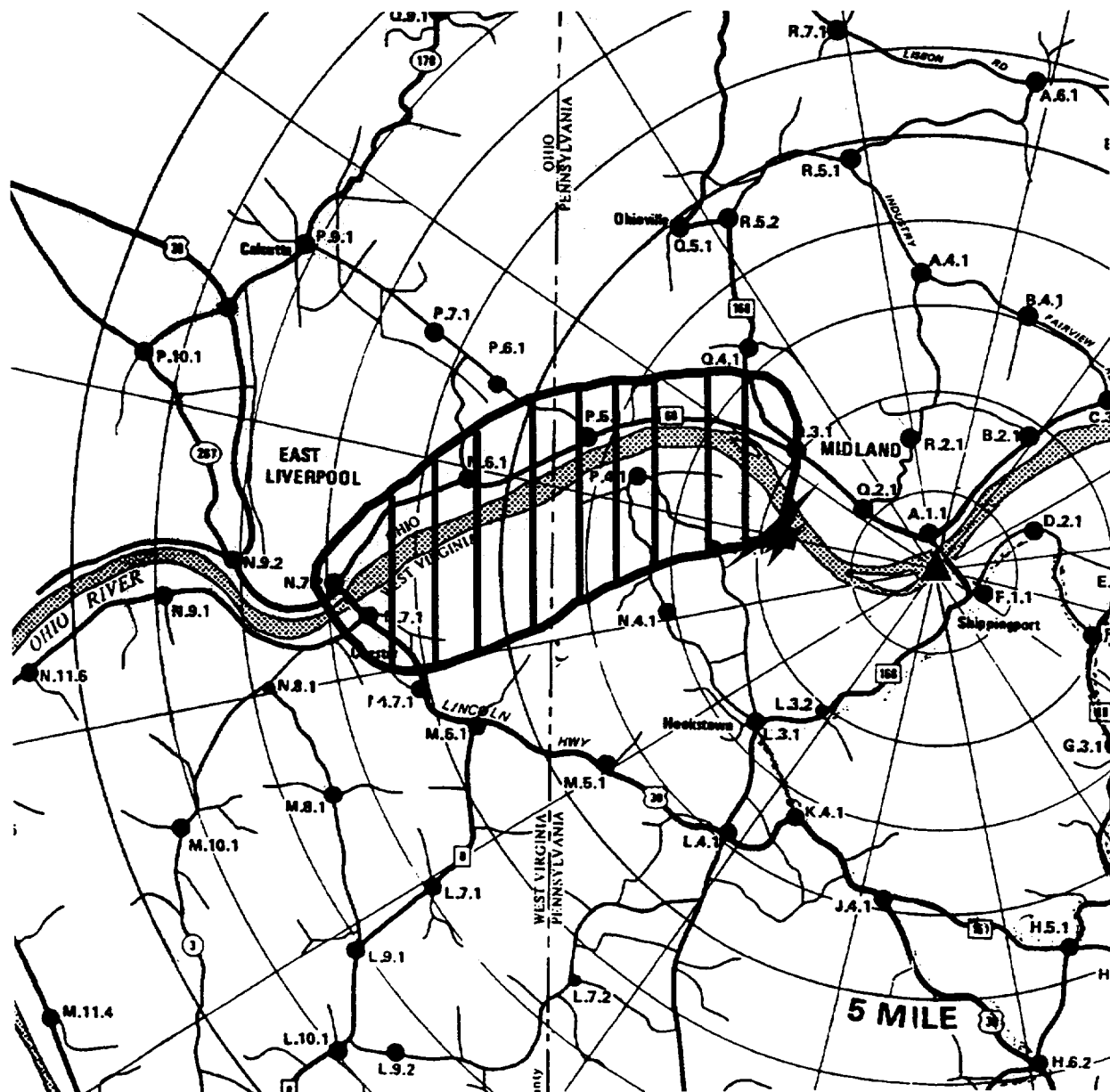


**(6.5 mile)**



# PLUME LOCATION AT 2105 HRS.

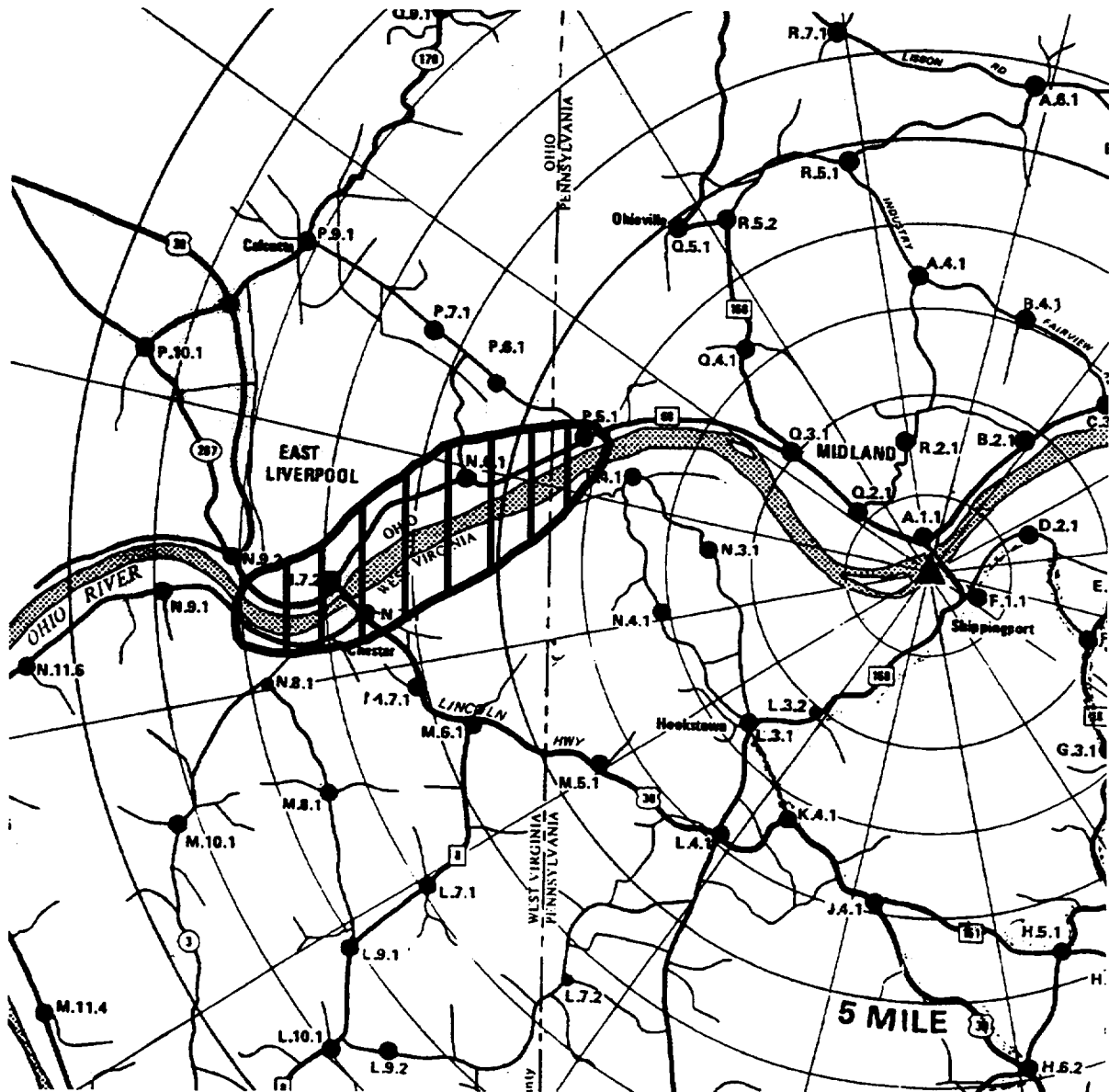
## (7 mile)





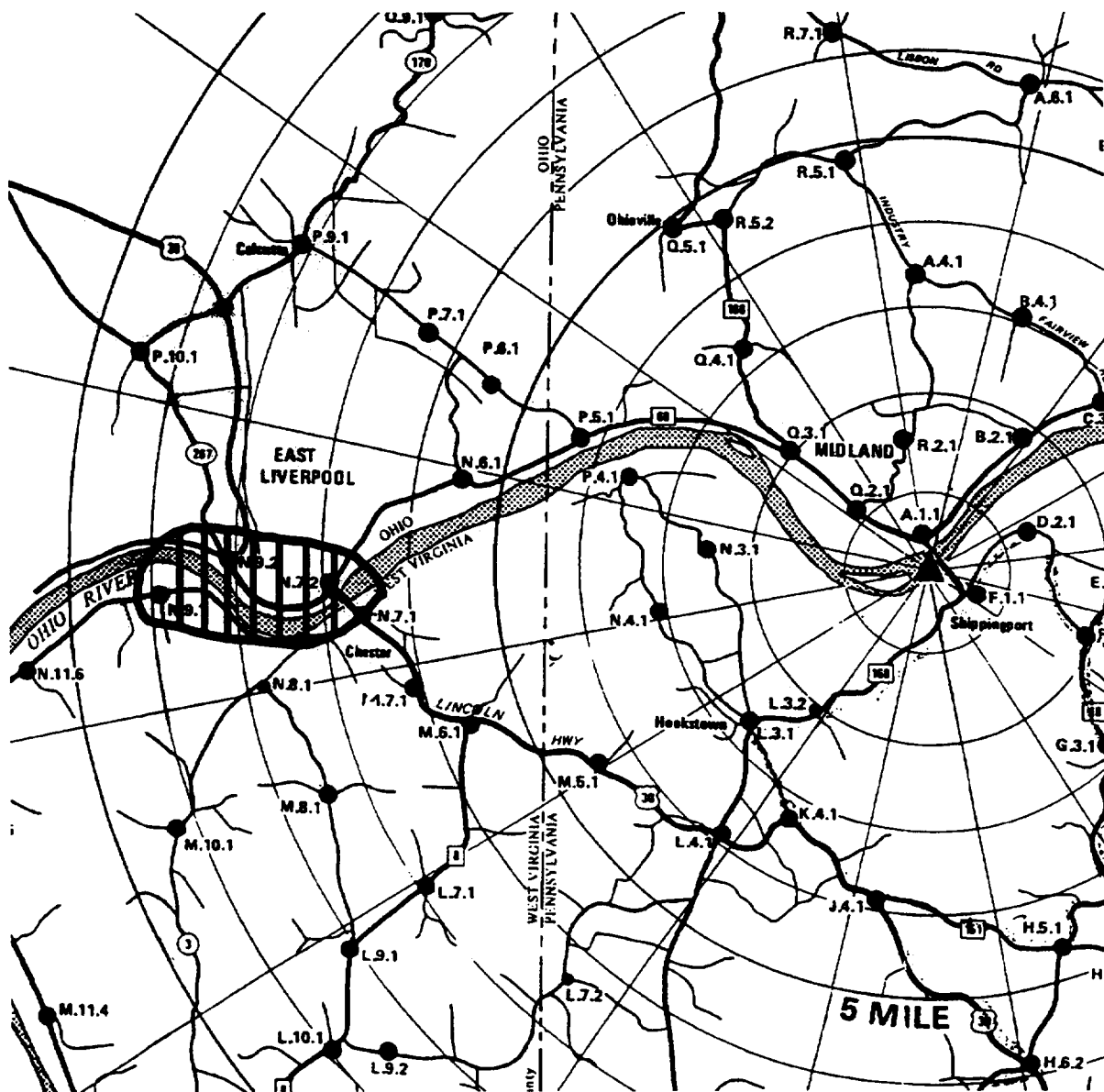
# PLUME LOCATION AT 2115 HRS.

(8mi)

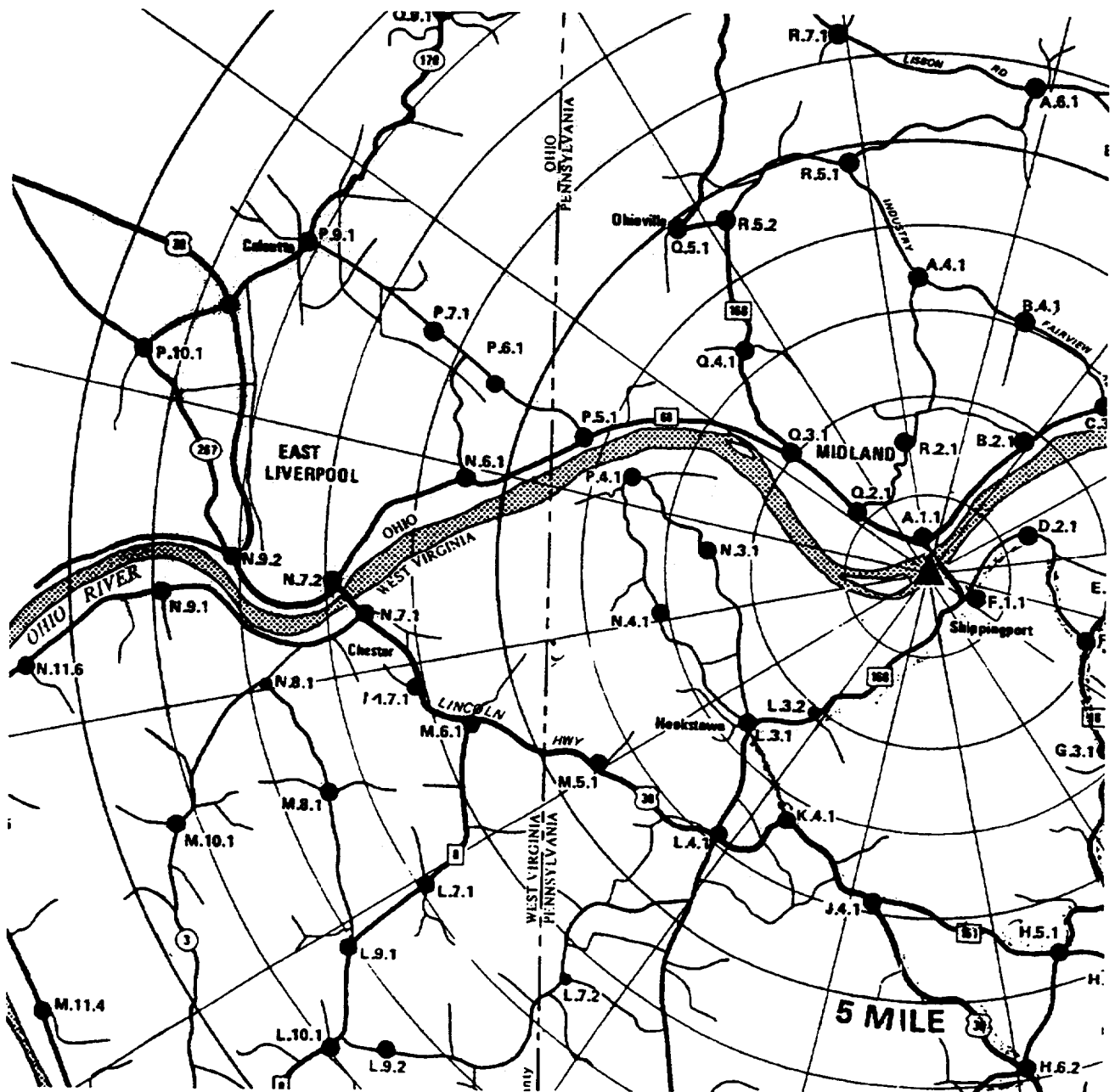


# PLUME LOCATION AT 2121 HRS.

## (9 mile)



# PLUME LOCATION AT 2126 HRS.



## **NUCLEAR COMMUNICATIONS INFORMATION**

The following are examples of the questions that will be used to simulate media and public phone calls to the Nuclear Communications organization during the Evaluated Exercise.

Controllers will be used to provide this function.

<p style="text-align: center;"><b>NUCLEAR COMMUNICATIONS</b> <b>2000 EPP DRILL QUESTIONS</b></p>
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The following is a listing of typical questions, which are to be asked via telephones from simulated media/public requests to various JPIC personnel.

- This is the Wall Street Journal. Would you please send us your press releases?
- This is KUTV-TV in Pittsburgh – Could we talk to someone at the plant about what's happening today? I can have our film crew there in 20 minutes.
- This is James Van Smith from Channel 12. How serious is your accident? What is FirstEnergy doing about it?
- This is Channel 43. We heard there are problems again at your plant. Can we speak to the Plant Manager?
- This is Don Johnson from the Post-Gazette. What does it mean when you declare an Alert at the nuclear power plant?
- Bill Leaf here, from CCN News. What caused you to declare an emergency at Beaver Valley today? How does this relate to the man who was injured?
- My name is Judith Coine. Was an ambulance sent to the site? My husband works there and I fear he may be hurt. I can't get him on the phone. What should I do?
- Hi, my name is Karen Stande. Someone said the emergency reactor shutdown systems all failed. Is that true? I live only 2 miles from there.
- This is Mike Padak from WWZT-TV. I'd like an update on the emergency at the power plant. What do we tell our listeners?
- This is the Columbus News. When will be your next press conference? Where is it being held?
- This is the Plant Manger from the Davis-Besse Nuclear Power Plant. We're trying to find Lew Myers. Can you find out where he is for us?
- This is Dick Charles from DLC Substations. I have men working in the switchyard down at Beaver Valley. Should I recall these men? Who is in charge of letting me know what I should be doing in regards to the nuclear accident?

<p style="text-align: center;"><b>NUCLEAR COMMUNICATIONS</b> <b>2000 EPP DRILL QUESTIONS</b></p>
------------------------------------------------------------------------------------------------------

- This is Bill Barnes of the Youngsville Times. Our staff is headed to your JPIC. They're not familiar with the Pittsburgh region. Can you give us directions to the JPIC and to the power plant site?
- This is Julie Wahl from the Brownstown Tribune Review. How bad is this leak at the atomic power plants? We'll be sending a camera team out to the scene. May we fly over the area?
- I live in Shippingport. If the sirens sound, does that mean I should leave?
- This is George Papas, Plant Manager for the Bruce Mansfield power stations. Should we shut down our plants? Should we evacuate our employees? Who will notify me if we need to and how?
- Melissa Glad. Do you have the emergency number for Beaver County?
- This is Diane Roome. I teach in the Ambridge Schools. A student complained that he had a rash on his right hand today. Could that be due to radiation from your nuclear plant?
- This is Lisa Roberts from the News Dispatch. What is the plant's current status? Is this accident similar to Russia's? How much radiation has been released?
- This is the Beaver Gazette. We have some reports from some farmers that they have been told not to milk their cows. Are the cows going to die? I heard on the radio that I'm supposed to find my emergency calendar. I can't find mine. What should I do?
- This is Loraine Reese. I live in East Liverpool. Can I safely drink my water, with the radioactivity in it?
- My name is Chris Vain from the Delivery Press. I want to talk about this radiation cloud. What does it look like? How can you tell it apart from the regular clouds? How far can this cloud travel? How far from the plant did monitoring teams detect any radiation? What was it?
- I was planning to go out tomorrow and do some fishing on the Ohio River. How long will it be before it's safe for me to go fishing? I heard that there's radiation coming out of the nuke plant.
- This is Stu Loose from the Farmers Journal. How could a radiation leak affect livestock and crops?

<p><b>NUCLEAR COMMUNICATIONS</b> <b>2000 EPP DRILL QUESTIONS</b></p>
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- Hello, this is Robert Rank from ARCO Chemical. Hey, do you guys need any help? Is there any support we can provide?
- This is CCN. Do you have satellite link up capabilities at your news conference place?
- This is Senator Santorum's office. How can we speak with the person in charge there?
- Hi, Karen Long from the Penn Power's Customer Service. We are getting tons of calls. Should we tell the public to go to the JPIC if they need information?

## **ACKNOWLEDGMENTS**

The **2000 EVALUATED EXERCISE** Scenario was prepared by the following Scenario Development Committee members and Controllers:

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K. Rodgers	Maintenance
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