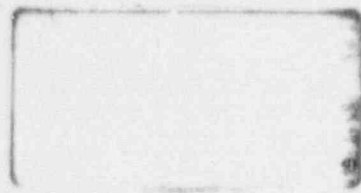


05-97-90



From: Skip Kitchens 3/2/90

To: Paul Dietz

Here is info on our critical safety function status trees on our SPDS (on ERF computer).

We at Wogtle developed our own setpoints & logic for MODES 1-6 operation. [MODE 0 is the same as WOG EOP4 - Rx Trip or SI auto initiates MODE 0 trees].

Call me at ext 3140 if you have ~~any~~ questions.

Skip Kitchens



### 7.3.3 SECOND LEVEL DISPLAYS

There are seven second level displays in the ERF computer system. Six, one per Critical Safety Function, show the current path of each CSF status tree, and one Radiation Overview display which summarizes all radiation inputs into the ERF computer. All update at 2.5 second intervals.

It is important to note that the keys which access these displays are located on the SPDS (annunciator) keyboard and have the same spacial arrangement as do the CSF and Radiation status lights. See 7.1.11 for keyboard arrangement.

#### 7.3.3.1 CRITICAL SAFETY FUNCTION STATUS TREE DISPLAYS

The CSFST displays show each CSF's entire logic tree in white when selected. The current path is highlighted in the color corresponding to that of the endpoint reached by the decisions within the tree. See 7.3 for CSF color convention. All endpoints which result in a CSF not satisfied, also refer to the appropriate GPC emergency operating procedure (EOP) by number if the plant is in mode 0 (post trip emergency).

In the event a decision cannot be made due to bad or questionable data which prevents the tree from reaching an endpoint, the path up to that decision will be highlighted in magenta. This also turns the affected status light magenta.

The other CSF status lights and the Radiation status light are also shown with each tree so that they may be monitored while viewing a particular CSFST. Whenever a CSF changes to a non-satisfied state, the corresponding status light will blink for thirty (30) seconds and the audible alarm sound in the control room.

Additionally, if the primary source of PERMS radiation data to the ERF computer fails over to the secondary source, a "SLOW" message will appear just above the Radiation status light to indicate that the radiation data is being updated at 30 second intervals instead of the normal 5 second intervals. If both sources of radiation data fail, then a "FAIL" message will appear above the Radiation status light.

In general the computer is as conservative as possible when monitoring the CSFSTs. If redundant inputs are available for a needed parameter then they are validated (see validation of redundant sensor algorithm in section 5.5). No decisions are ever made with bad, questionable or out of range data.

The program which calculates the state of each CSFST and other data needed by the SPDS displays is known as the "SPDS SCAN" program. Program specifics can be found in appendix C2 and flow charts for the CSFST logic in appendix C1.

The following pages contain video copies of the CSF status trees used by the ERF computer. There is one tree per mode per CSF, for a total of forty-two (42) unique CSFSTs.

1911-1912

1911-1912

COVER RANGE  
00 TO  
1911-1

COVER RANGE  
00 TO  
1911-1

INTERMEDIATE RANGE STARTUP RATE  
00 TO  
1911-1

INTERMEDIATE RANGE STARTUP RATE  
POSITIVE

INTERMEDIATE RANGE STARTUP RATE  
00 TO  
1911-1

INTERMEDIATE RANGE STARTUP RATE  
00 TO  
1911-1

INTERMEDIATE RANGE STARTUP RATE  
00 TO  
1911-1

SOURCE RANGE  
NOT ENERGIZED

SOURCE RANGE  
NOT ENERGIZED

INTERMEDIATE RANGE STARTUP RATE  
00 TO  
1911-1

INTERMEDIATE RANGE STARTUP RATE  
00 TO  
1911-1

INTERMEDIATE RANGE STARTUP RATE  
00 TO  
1911-1

INTERMEDIATE RANGE SUR  
ZERO OR NEGATIVE

INTERMEDIATE RANGE SUR  
ZERO OR NEGATIVE

SOURCE RANGE SUR  
00 TO  
1911-1

SOURCE RANGE SUR  
00 TO  
1911-1

SOURCE RANGE SUR  
00 TO  
1911-1

SOURCE RANGE  
ENERGIZED

SOURCE RANGE  
ENERGIZED

SOURCE RANGE SUR  
00 TO  
1911-1

SOURCE RANGE SUR  
00 TO  
1911-1

SOURCE RANGE SUR  
00 TO  
1911-1

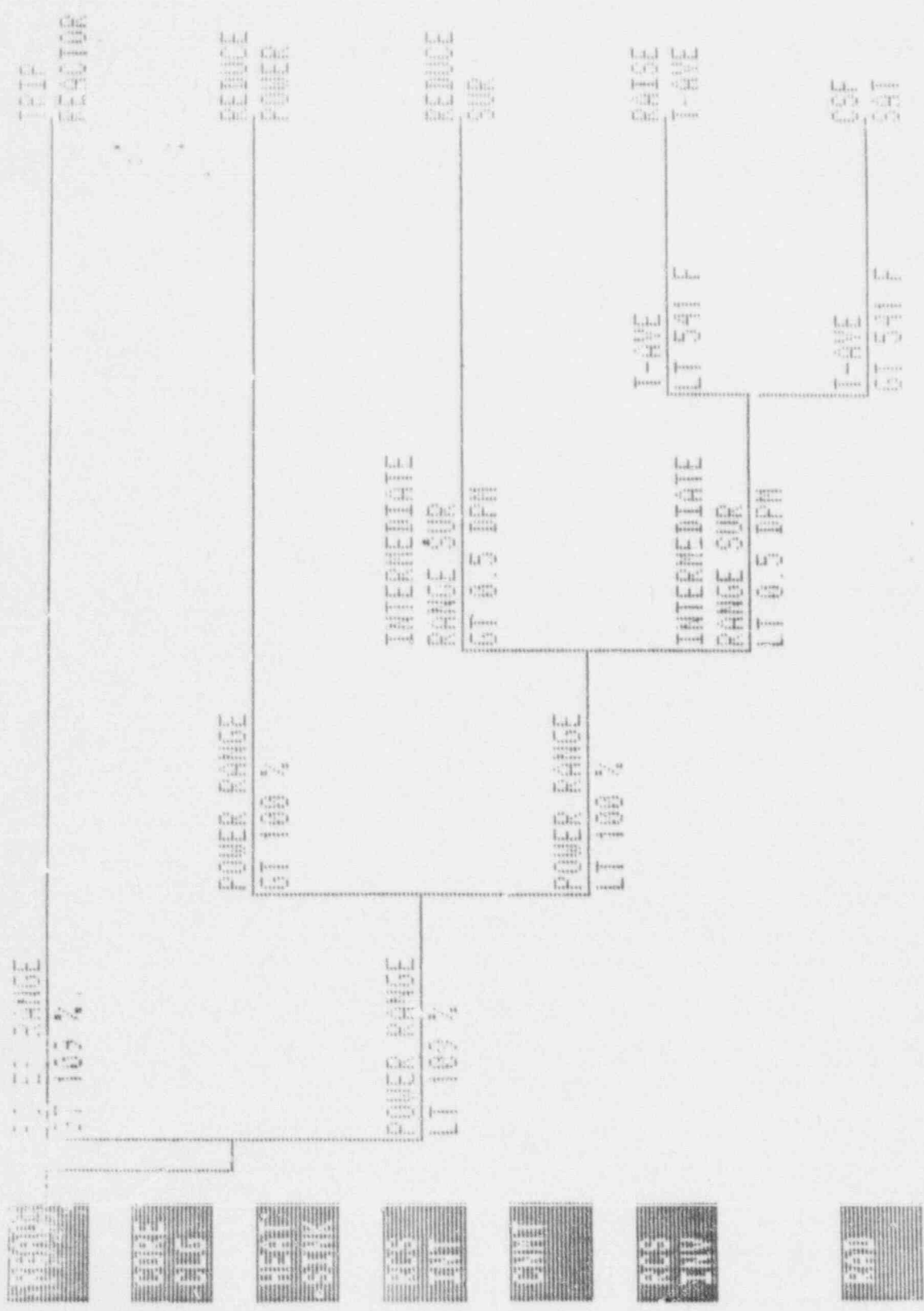
SOURCE RANGE SUR  
ZERO OR NEGATIVE

SOURCE RANGE SUR  
ZERO OR NEGATIVE

SOURCE RANGE SUR  
ZERO OR NEGATIVE

111  
112  
113  
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115  
116  
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195  
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197  
198  
199  
200

RECORD



11 13 13 13 13 13 13 13

50 TO  
NONE

50 TO  
NONE

50 TO  
NONE

50 TO  
NONE

50 TO  
NONE

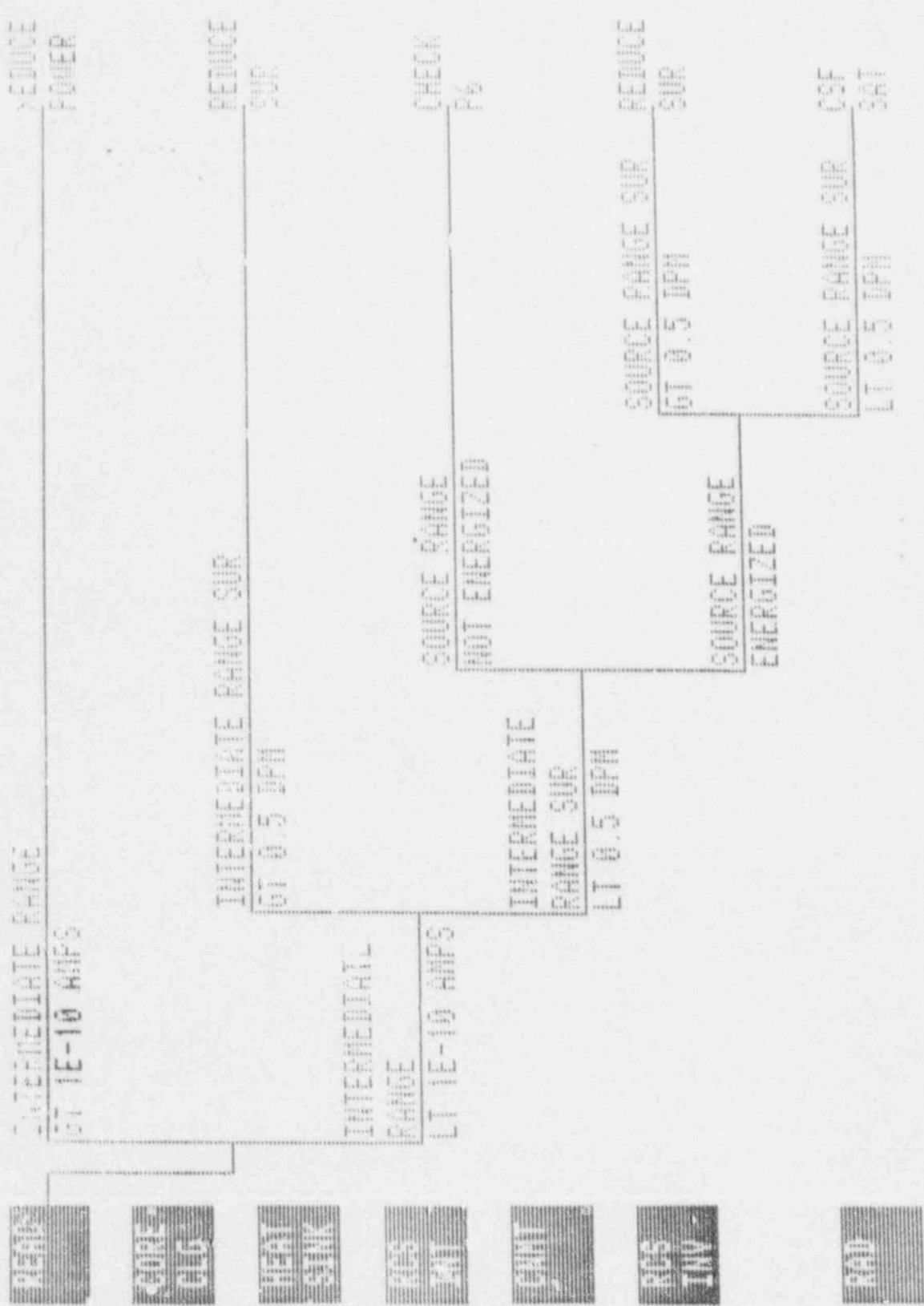
50 TO  
NONE

50 TO  
NONE

50 TO  
NONE



3-11-11  
11:11:11

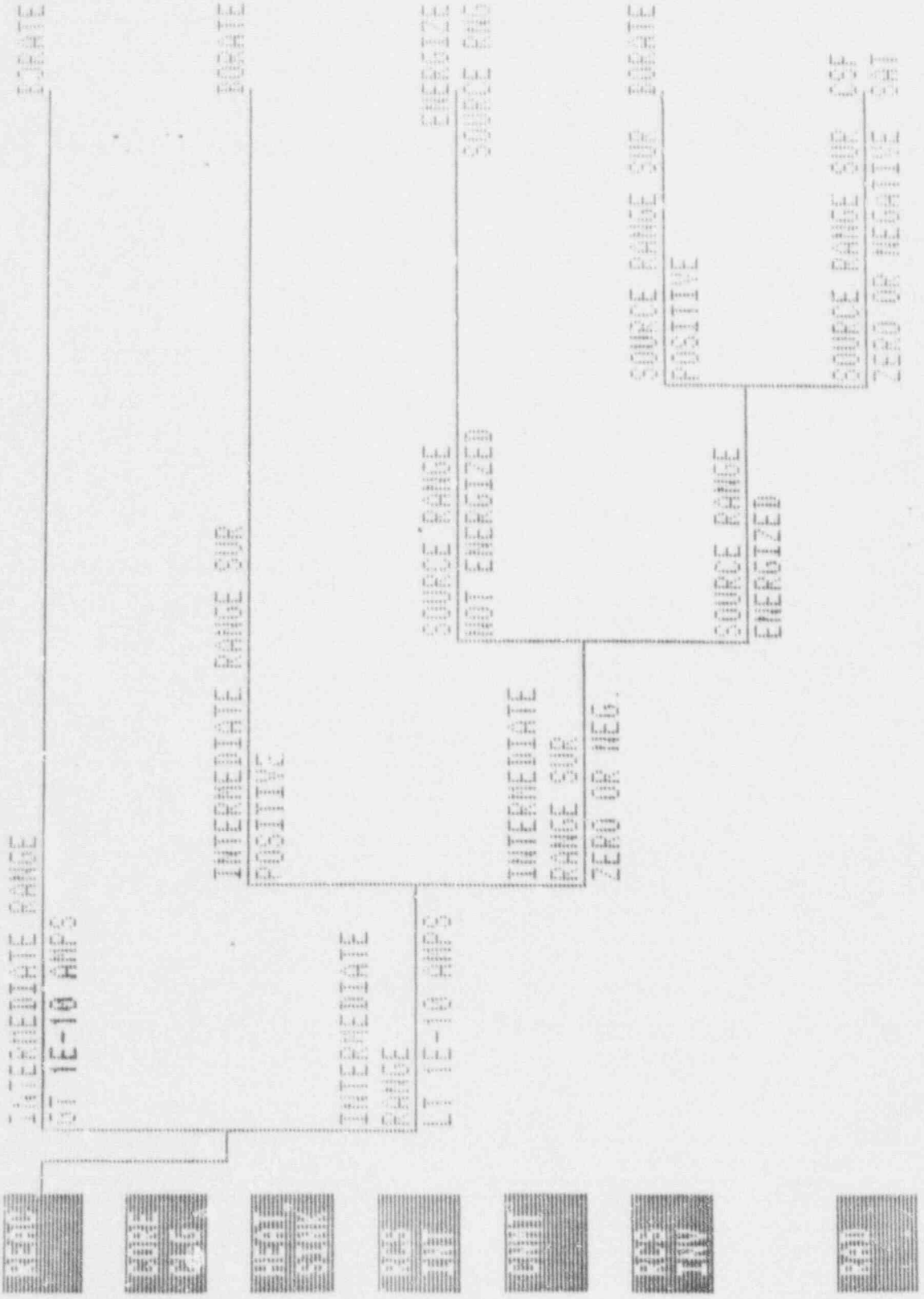






S-19-29-10-29-21-2111-10

REACTIVITY



REACTIVITY

REACTIVITY

INTERMEDIATE RANGE  
OF 12-10 AHS

SOURCE



INTERMEDIATE RANGE SOURCE  
POSITIVE

INTERMEDIATE RANGE

OF 12-10 AHS

INTERMEDIATE RANGE SOURCE  
ZERO OR NEG.

SOURCE RANGE  
NOT ENERGIZED

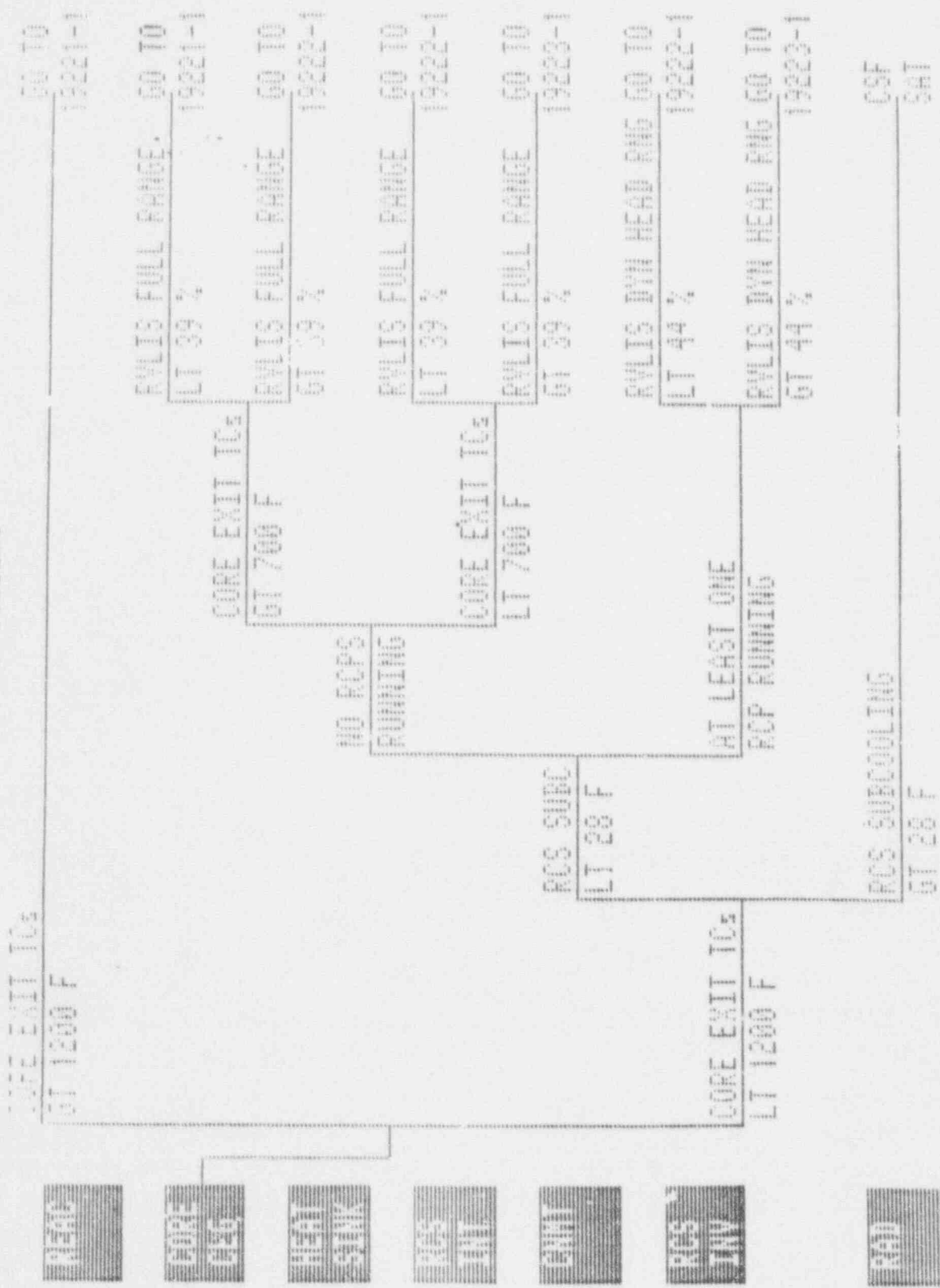
CHECK  
TO S.A.S.

SOURCE RANGE SOURCE RANGE  
POSITIVE

SOURCE RANGE  
ENERGIZED

SOURCE RANGE SOURCE SOURCE  
ZERO OR NEGATIVE OR

CORE COOLING



00000000000000000000

CORE COOLING

CORE EXIT TCs LT 1200 F	REFLECTOR
----------------------------	-----------



EOS SUBCOOLING LT 20 F	INVESTIGATE PRESSURE
---------------------------	-------------------------

EOS SUBCOOLING LT 20 F	EOS SUBCOOLING LT 20 F
---------------------------	---------------------------

3/17/88 13:02 24 CORE 3

# CORE COOLING



01 1 30 10 00 0 0000

CORE COLLINE

CORE EXITS  
DT T-AVE+40 F  
INVESTIGATIVE  
FLOW



INVESTIGATIVE  
PRESSURE

RES SUBCOLLINE  
LT 50 F

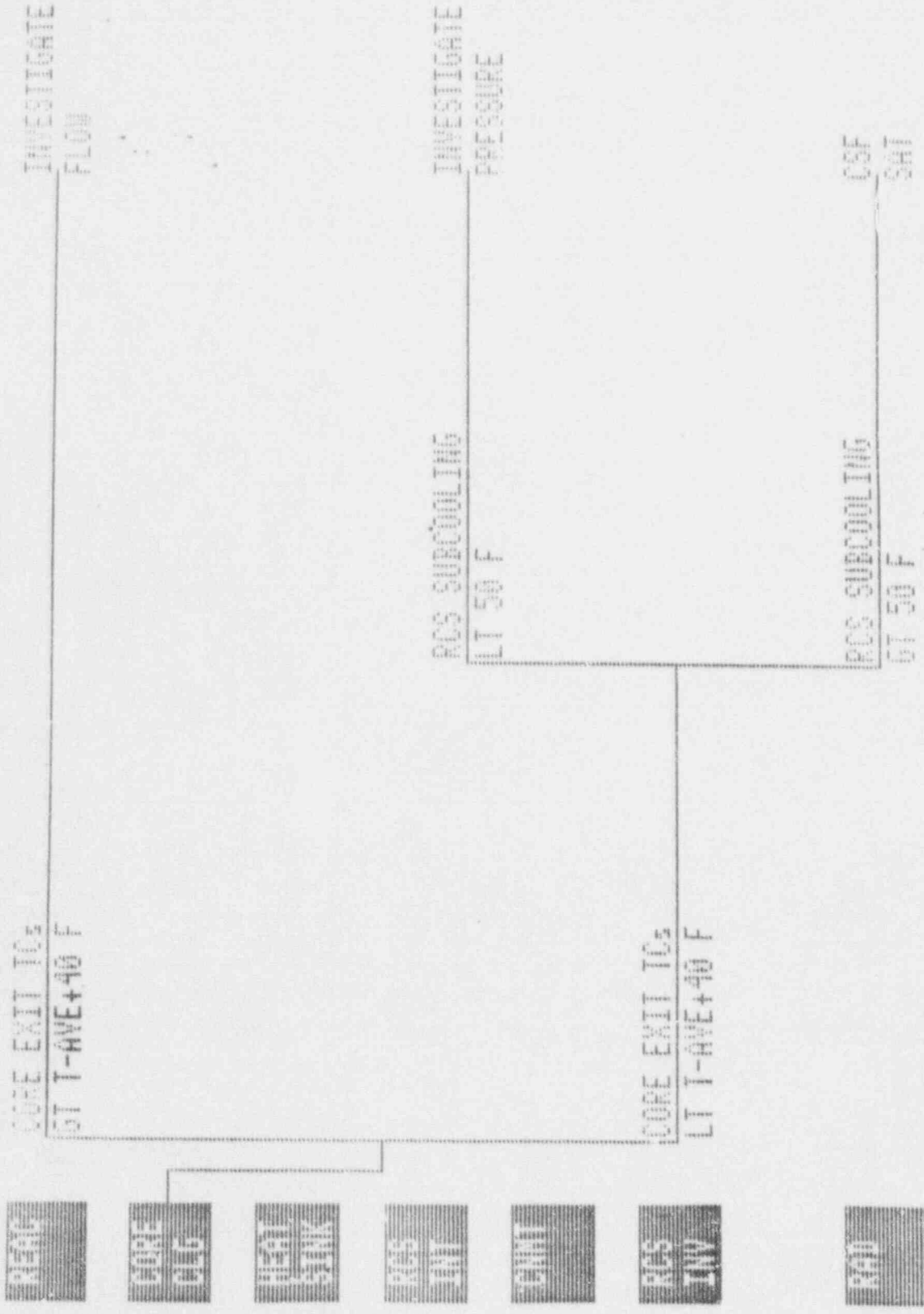
CORE EXITS  
LT T-AVE+40 F

COL  
50 F

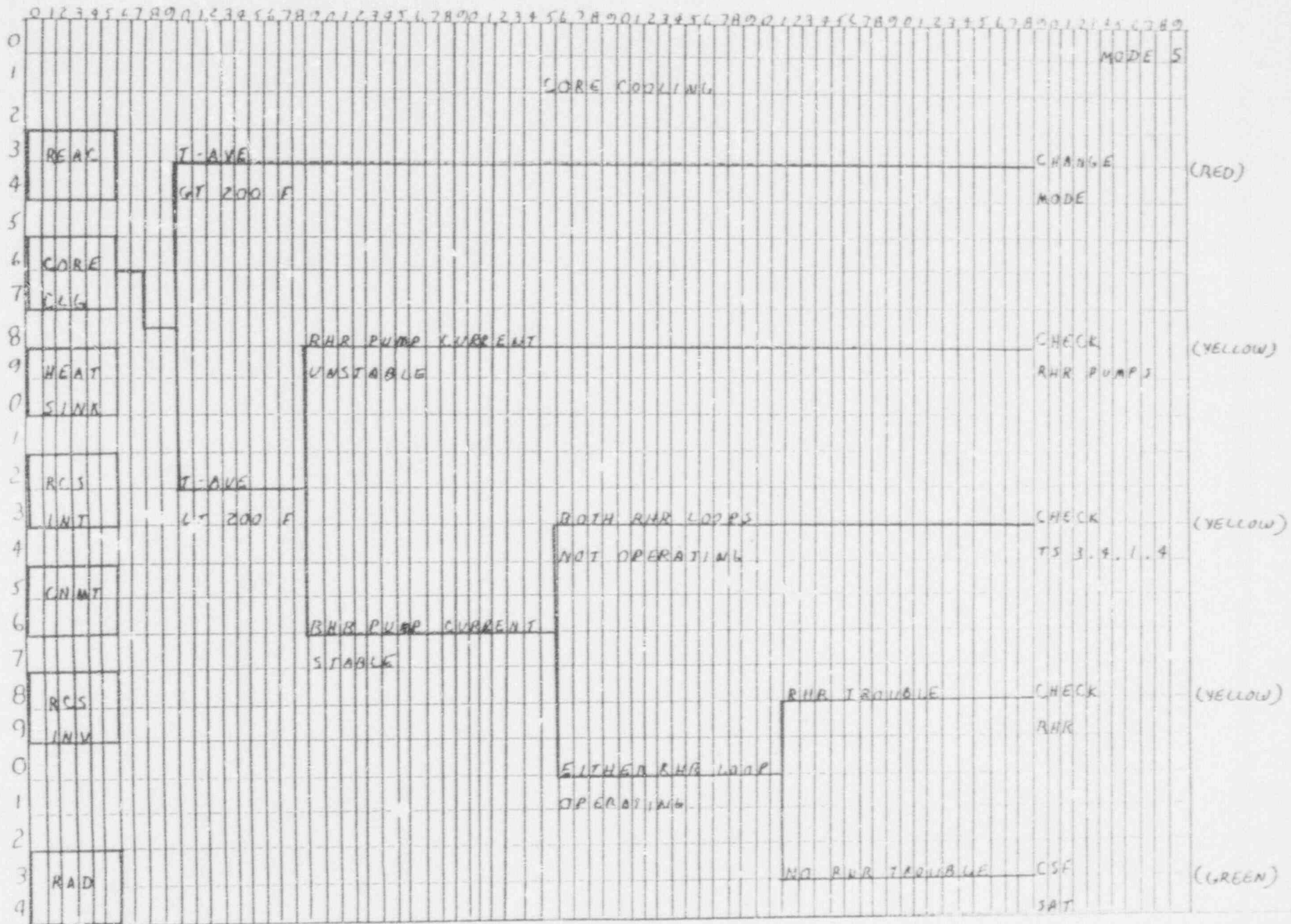
RES SUBCOLLINE  
LT 50 F

31713 06 13 07 43 CORE 4

CORE COOLING



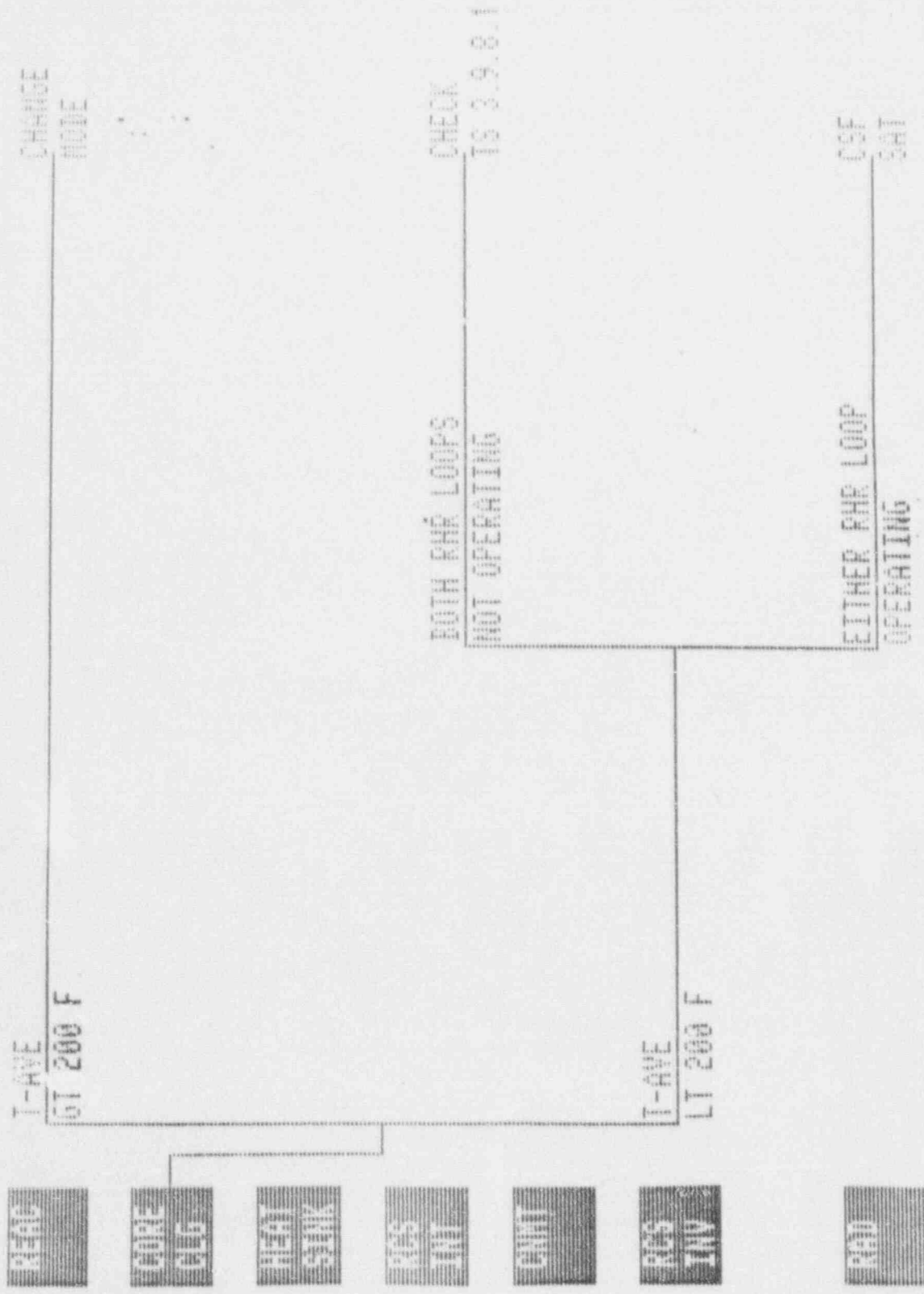
REVISED MODE 5 CSFST'a - implemented on Unit 1 in Feb 1980.

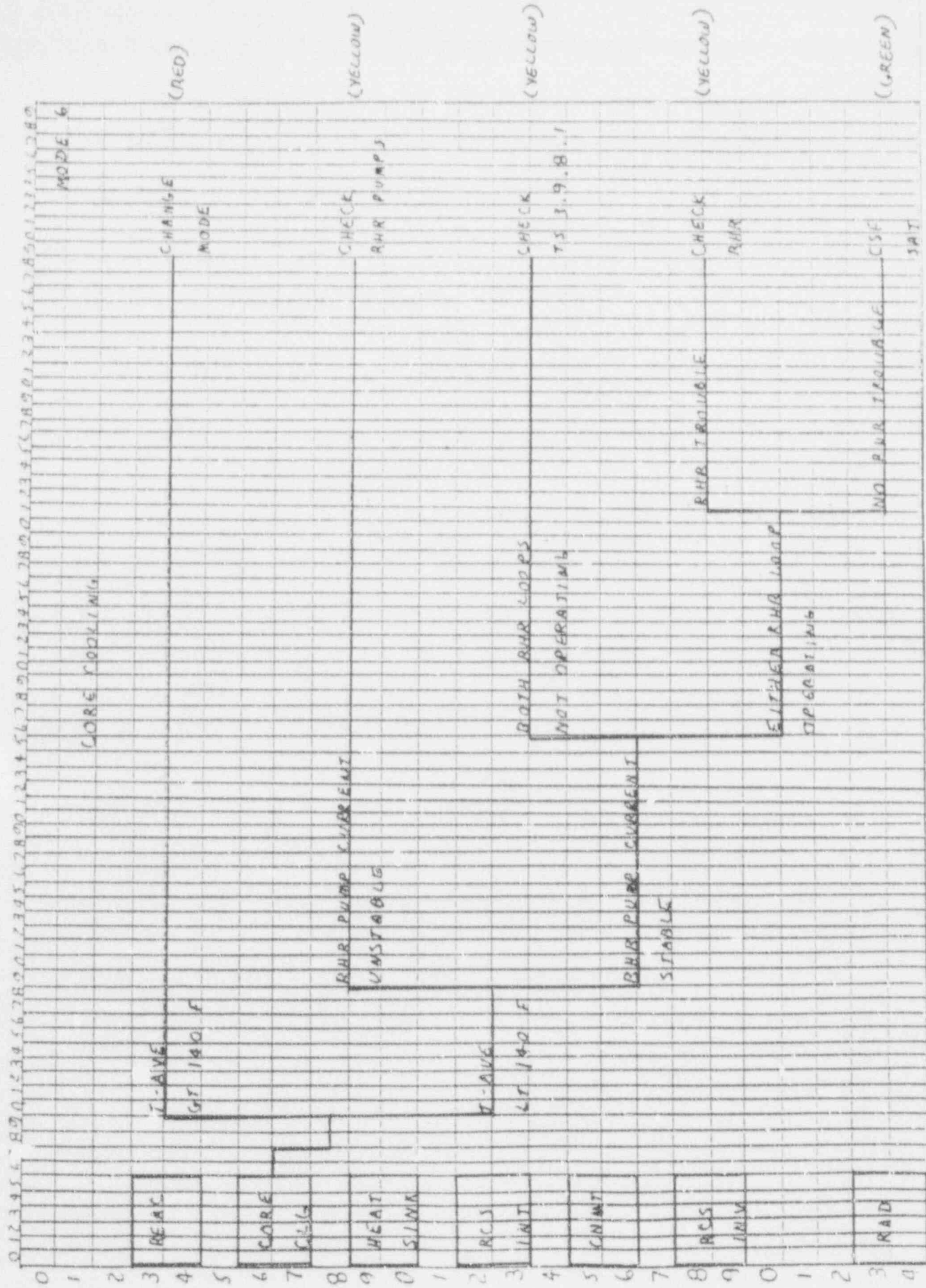




01 16/66 13 09 23 WIDE 5

COFE COOLING





01/16/06 10:11:12 AM E 6

00000000

CHASE  
NOLE

CHASE  
NOLE

CHASE  
NOLE

CHASE  
NOLE

CHASE  
NOLE

CHASE  
NOLE

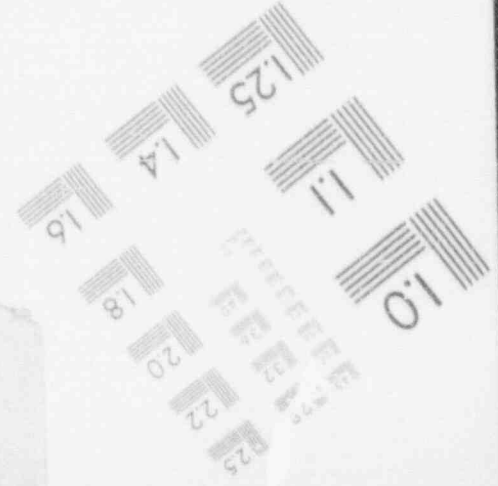
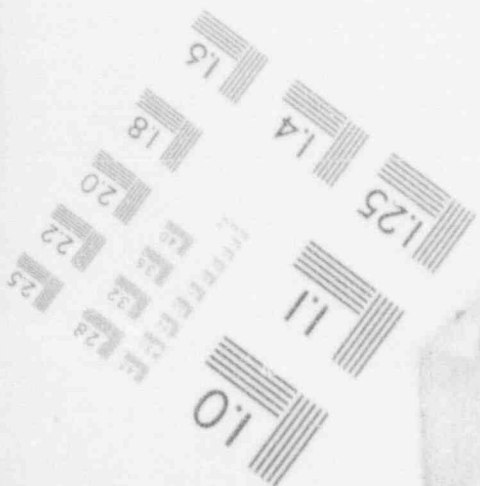
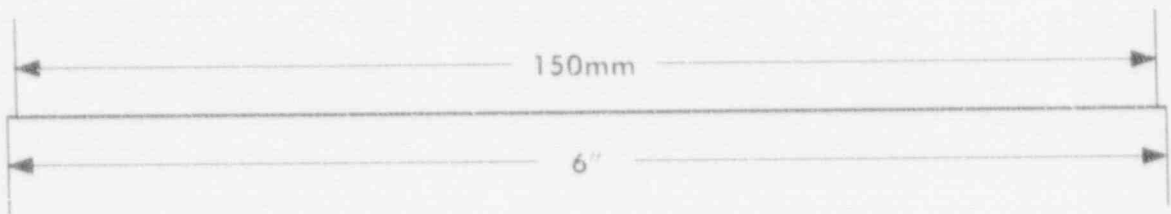
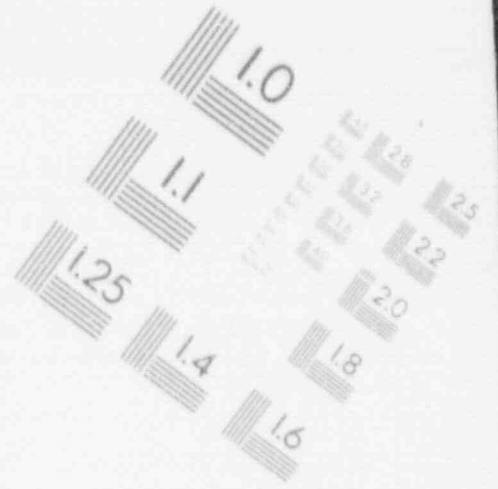
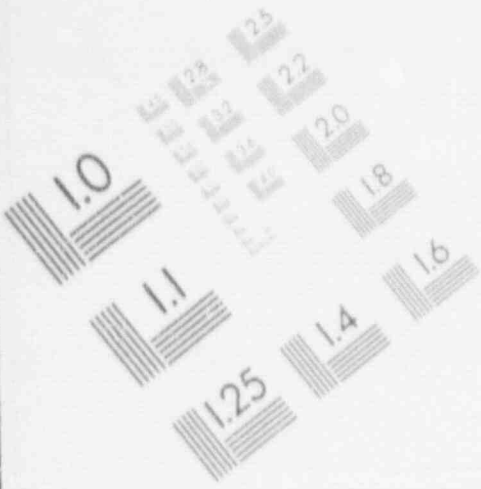
CHASE  
NOLE

CHASE  
NOLE



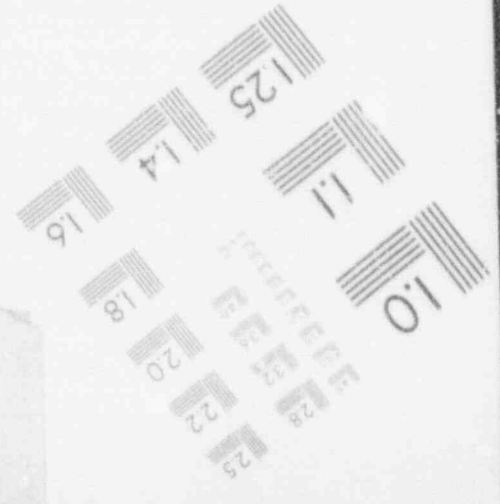
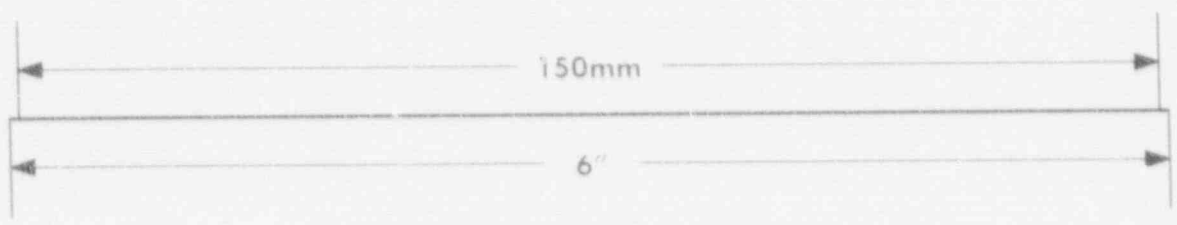
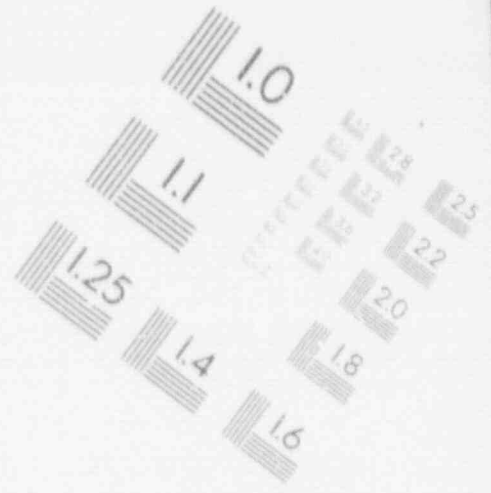
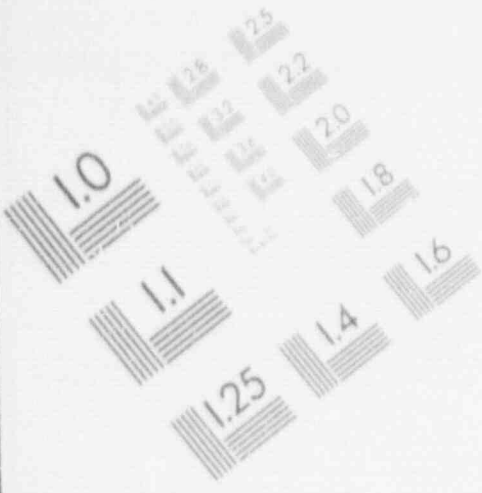
# 1

## IMAGE EVALUATION TEST TARGET (MT-3)



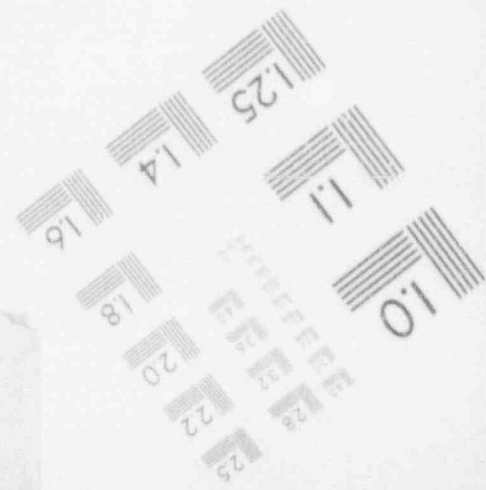
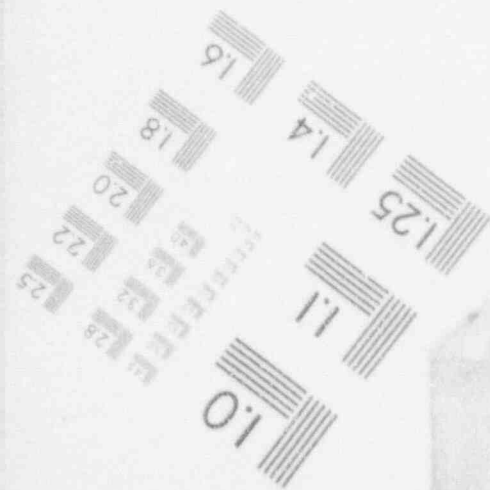
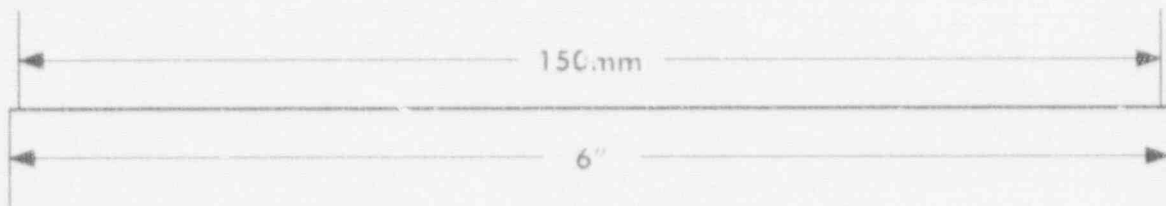
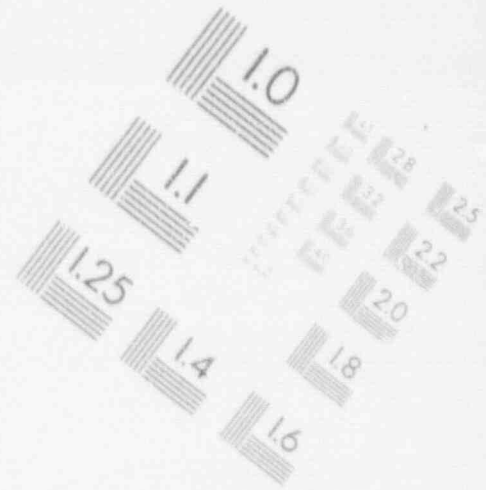
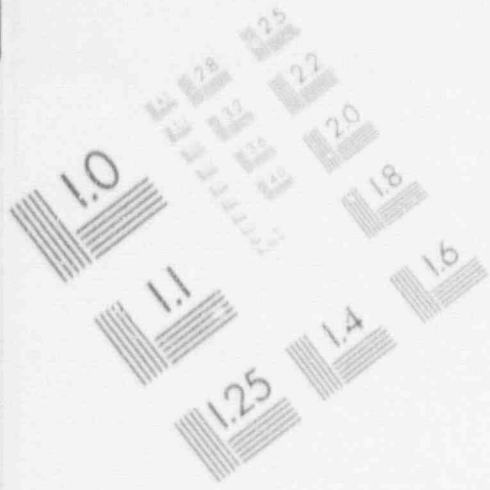
# 1

## IMAGE EVALUATION TEST TARGET (MT-3)



# 1

## IMAGE EVALUATION TEST TARGET (MT-3)



19235-1

HEAT SINK

TOTAL AVAILABLE FW FLOW TO SGs

LT 550 GPM

GO TO 19231-1

NR LEVEL IN ALL SGs  
LT 27 %

PRESSURE IN ANY SG  
GT 1235 PSIG

GO TO 19232-1

TOTAL AVAILABLE FW FLOW TO SGs GT 150 GPM

NR LEVEL IN ANY SG  
GT 78 %

GO TO 19233-1

NR LEVEL IN ANY SG  
GT 27 %

PRESSURE IN ALL SGs  
LT 1235 PG

PRESSURE IN ANY SG  
GT 1185 PSIG

GO TO 19234-1

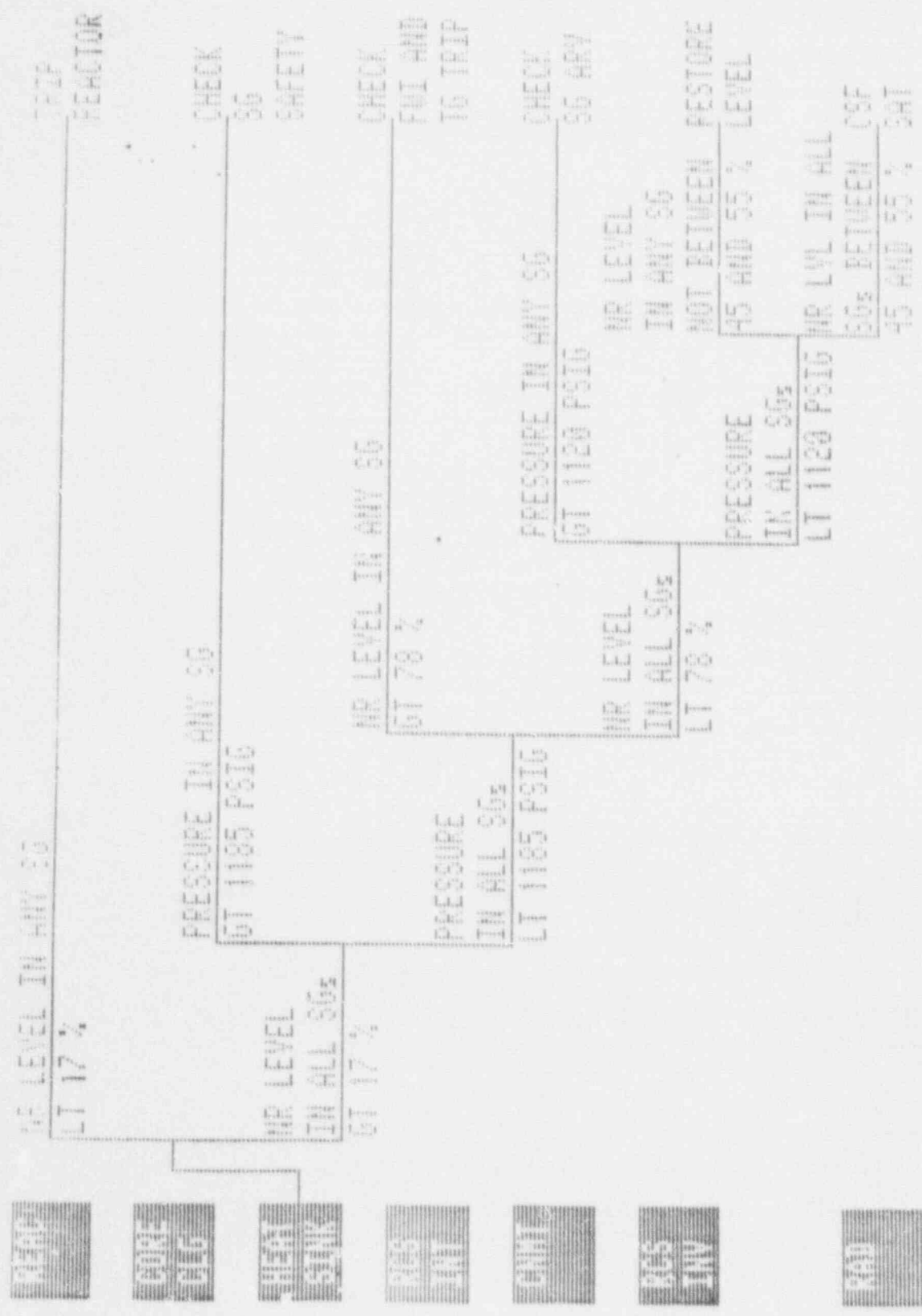
NR LEVEL IN ALL SGs  
LT 78 %

NR LEVEL IN ANY SG  
GO TO 19235-1

PRESSURE IN ALL SGs  
LT 1185 PG

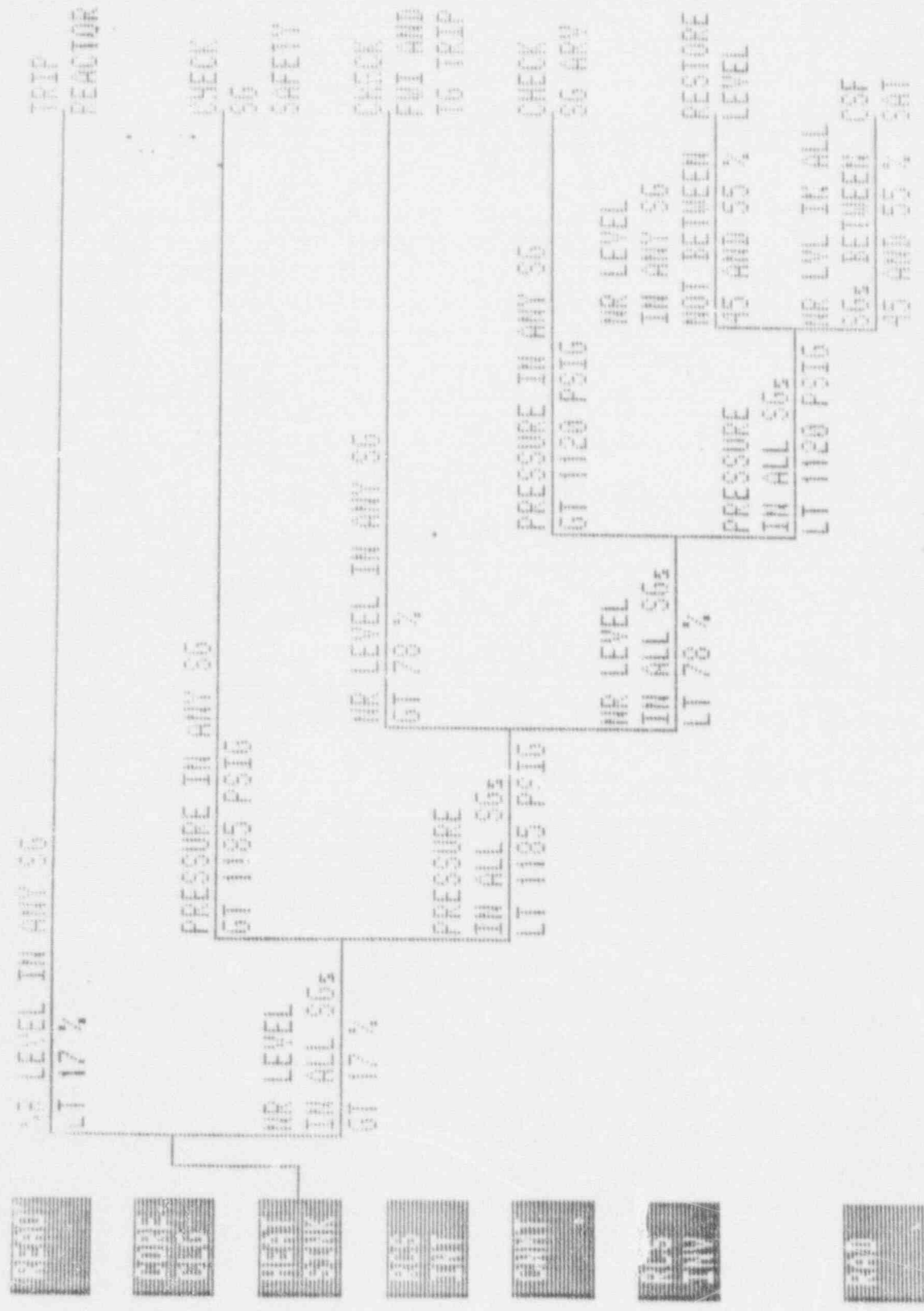
NR LEVEL IN ALL SGs CSF  
GT 27 % SAT



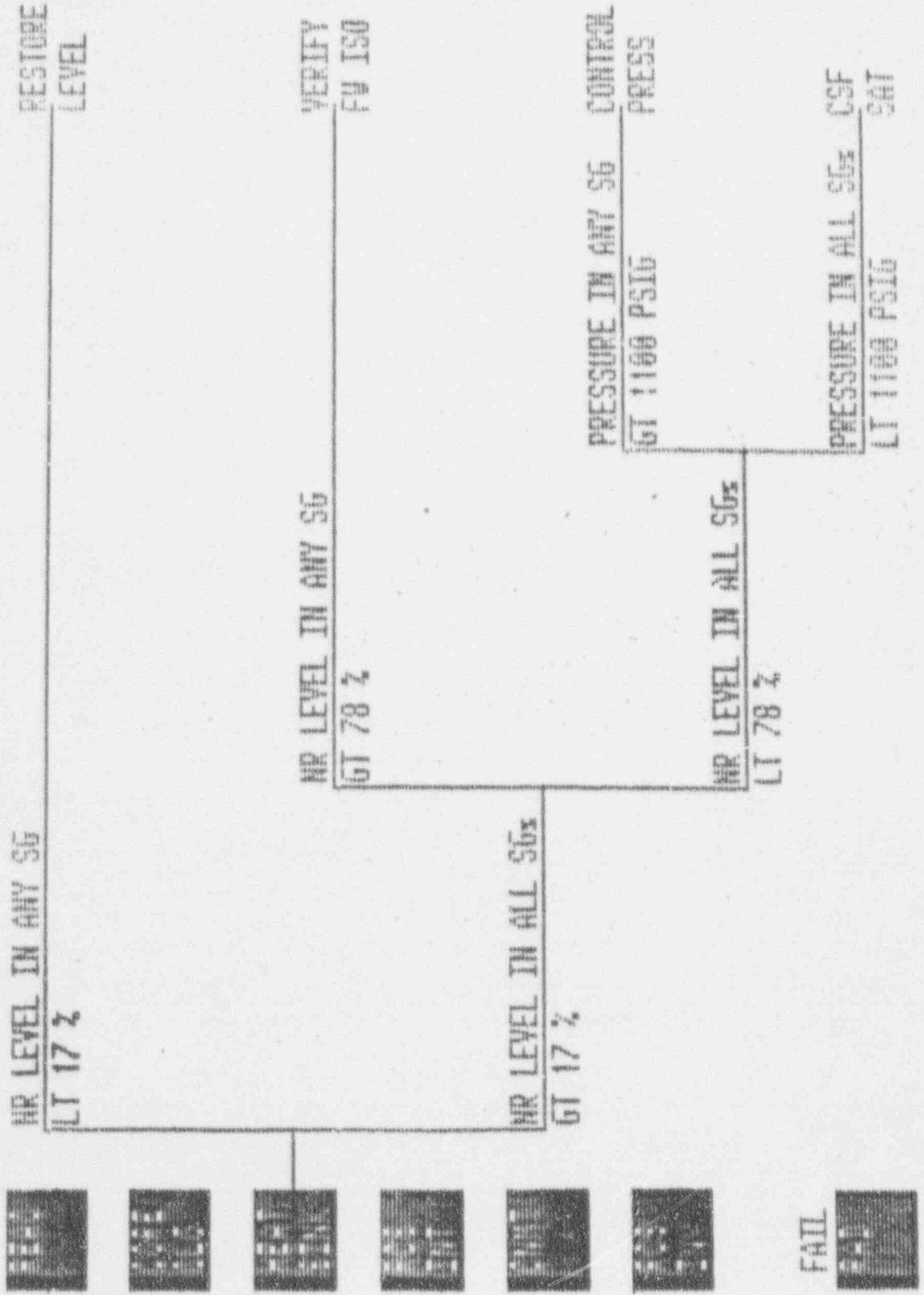




TEST LOG

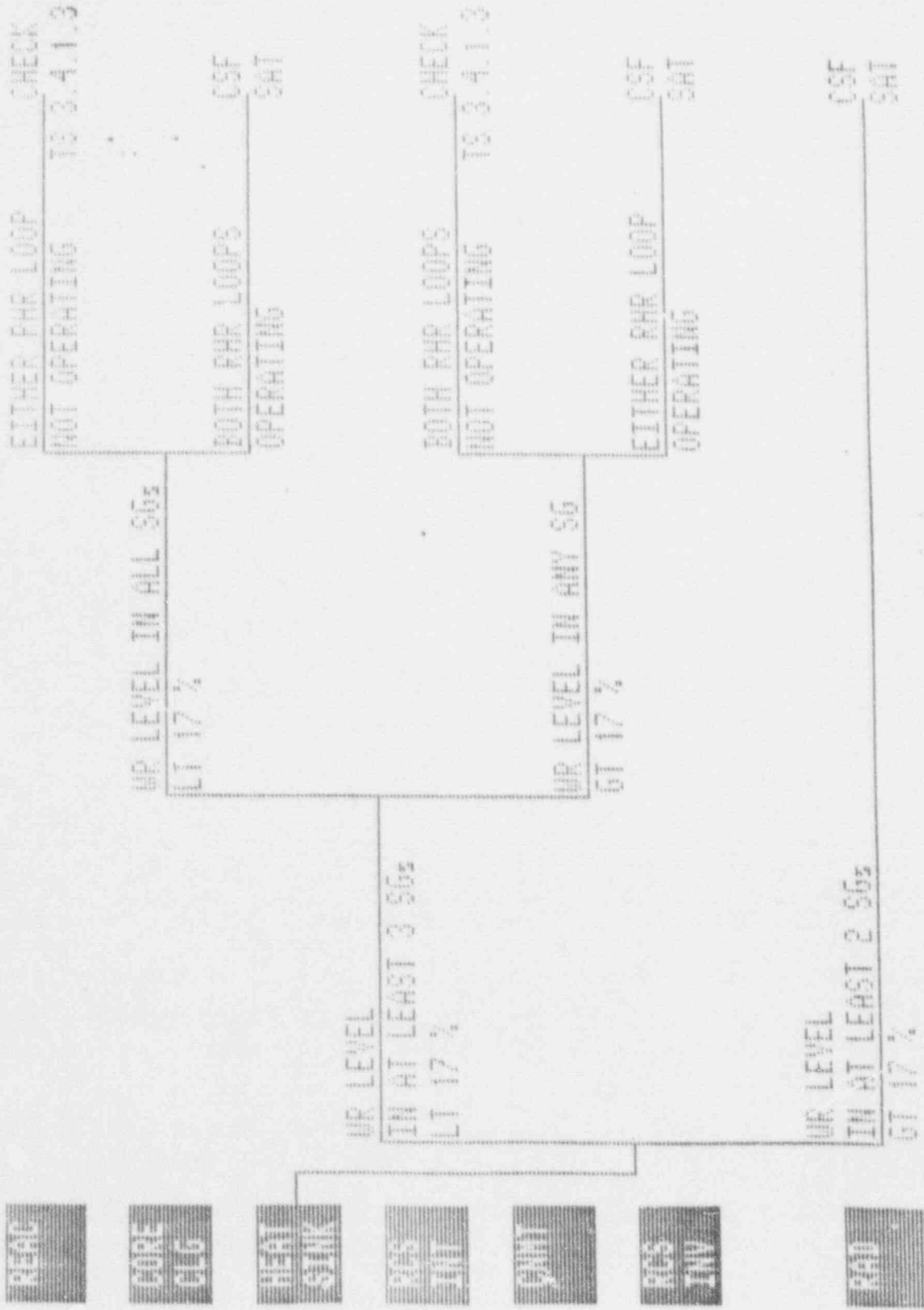


LOSP FOXNET PORT A 12/89/87 07:54:27 NODE 3  
HEAT SINK



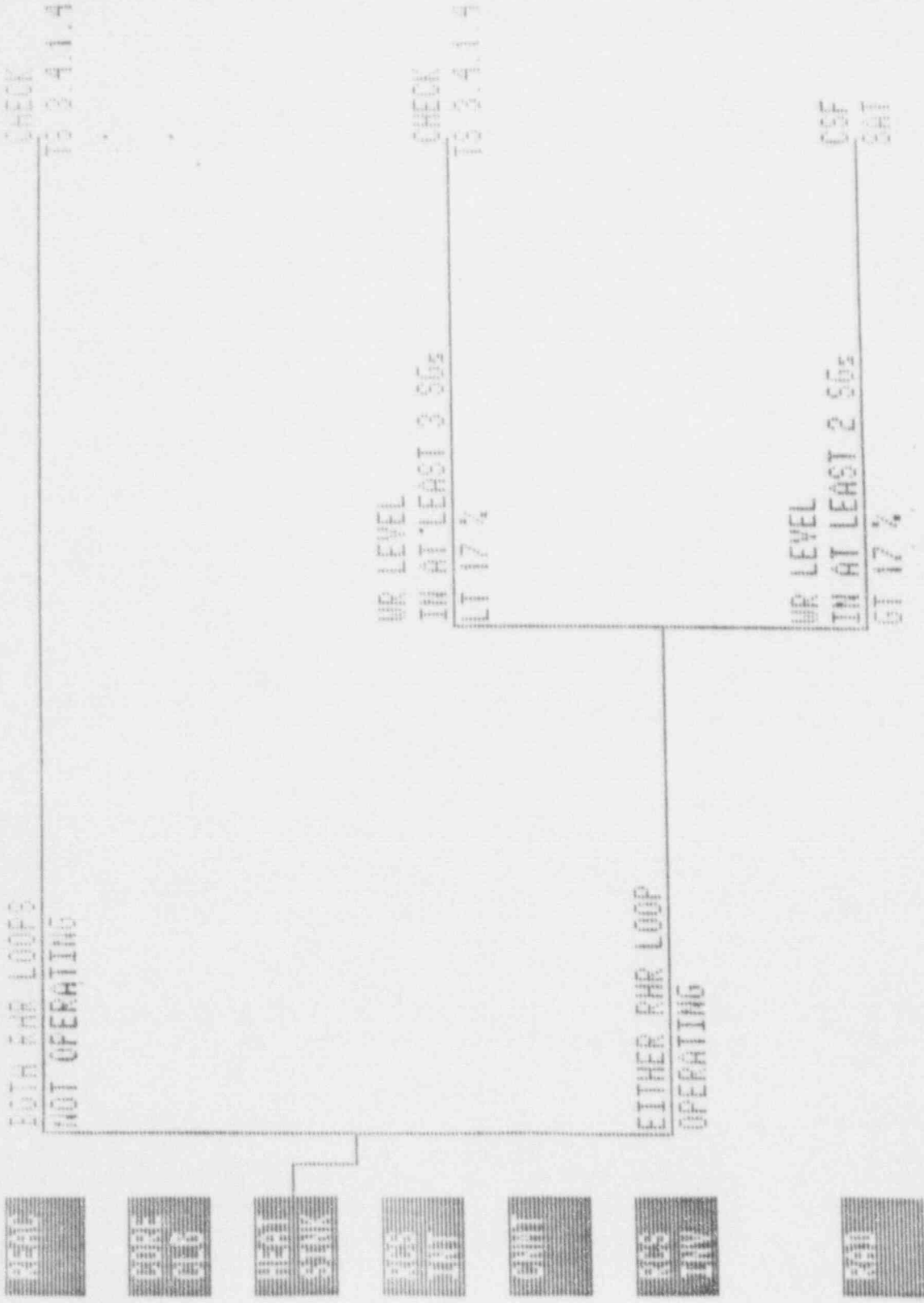
211656 13 07 59 MODE 4

HEAT SINK



07 10 24 13 06 41 101E 5

HEAT SIM



0000

0000

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0000

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0000

1000

01 14 86 13.11 25 NOIE 6

HEAT SINK

2.77 FRR LOOPS  
NOT OPERATING

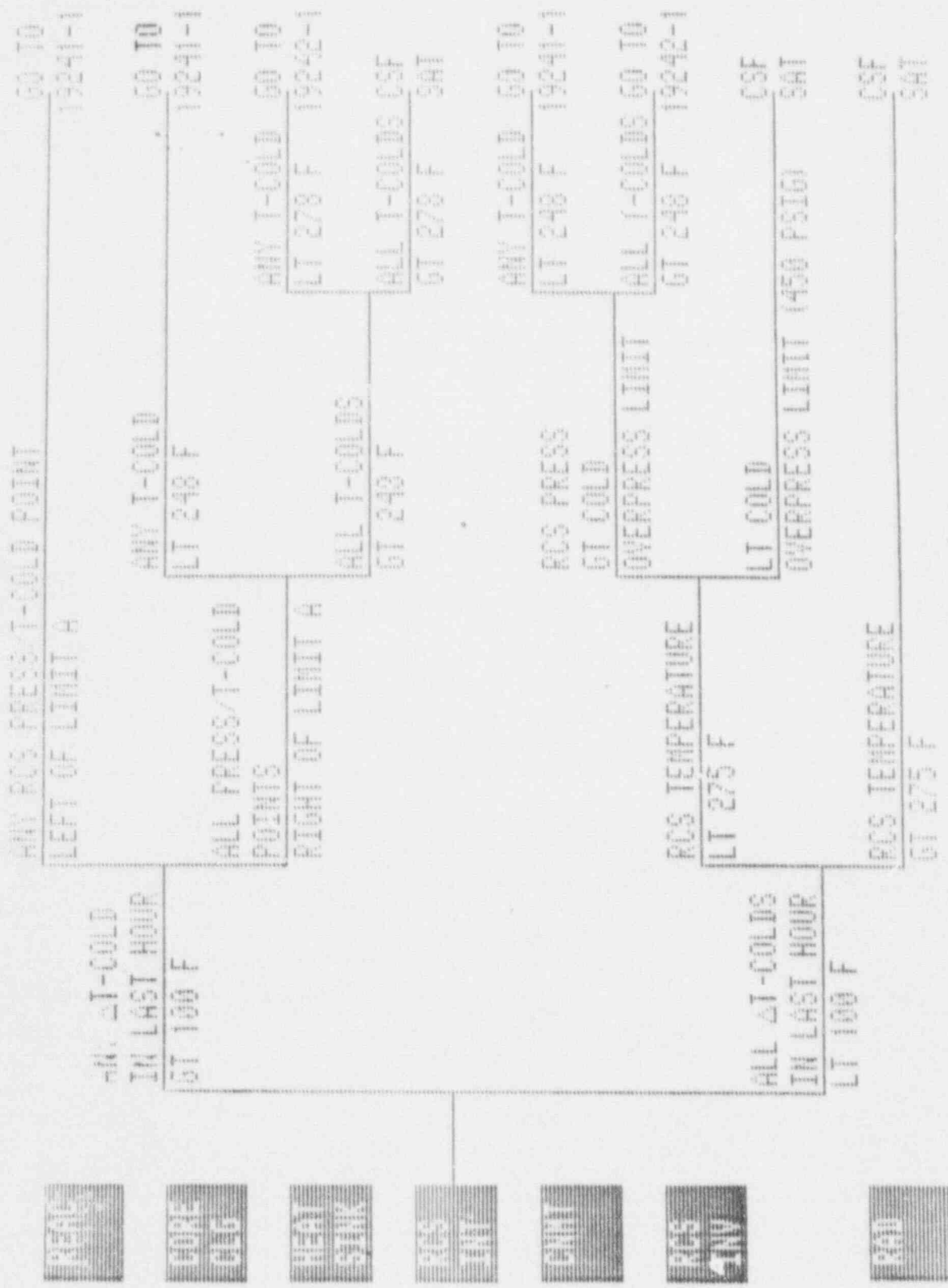
CHECK  
TS 3.9.8.1



EITHER FRR LOOP  
OPERATING

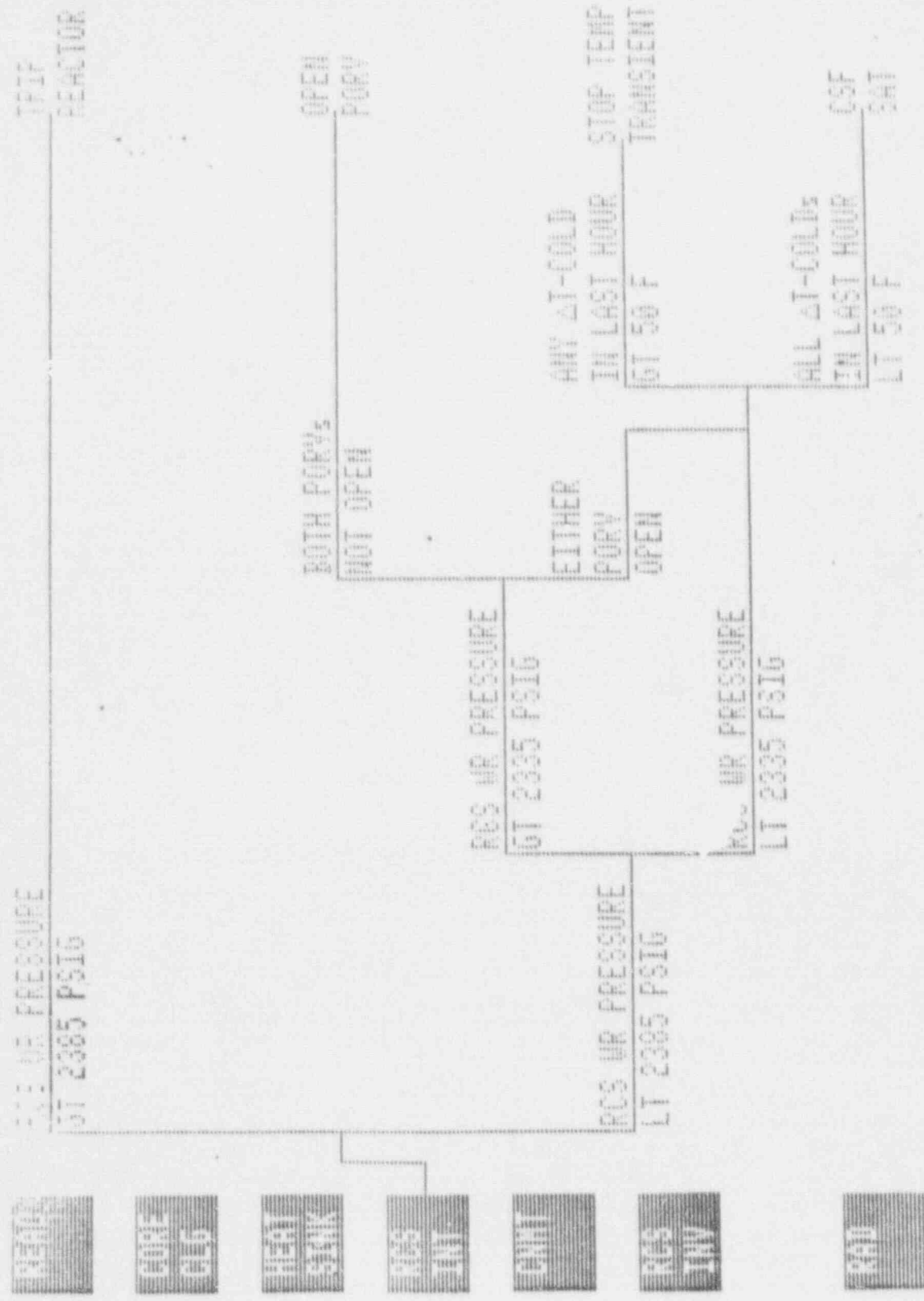
COF  
CH

EGG INTEGRITY



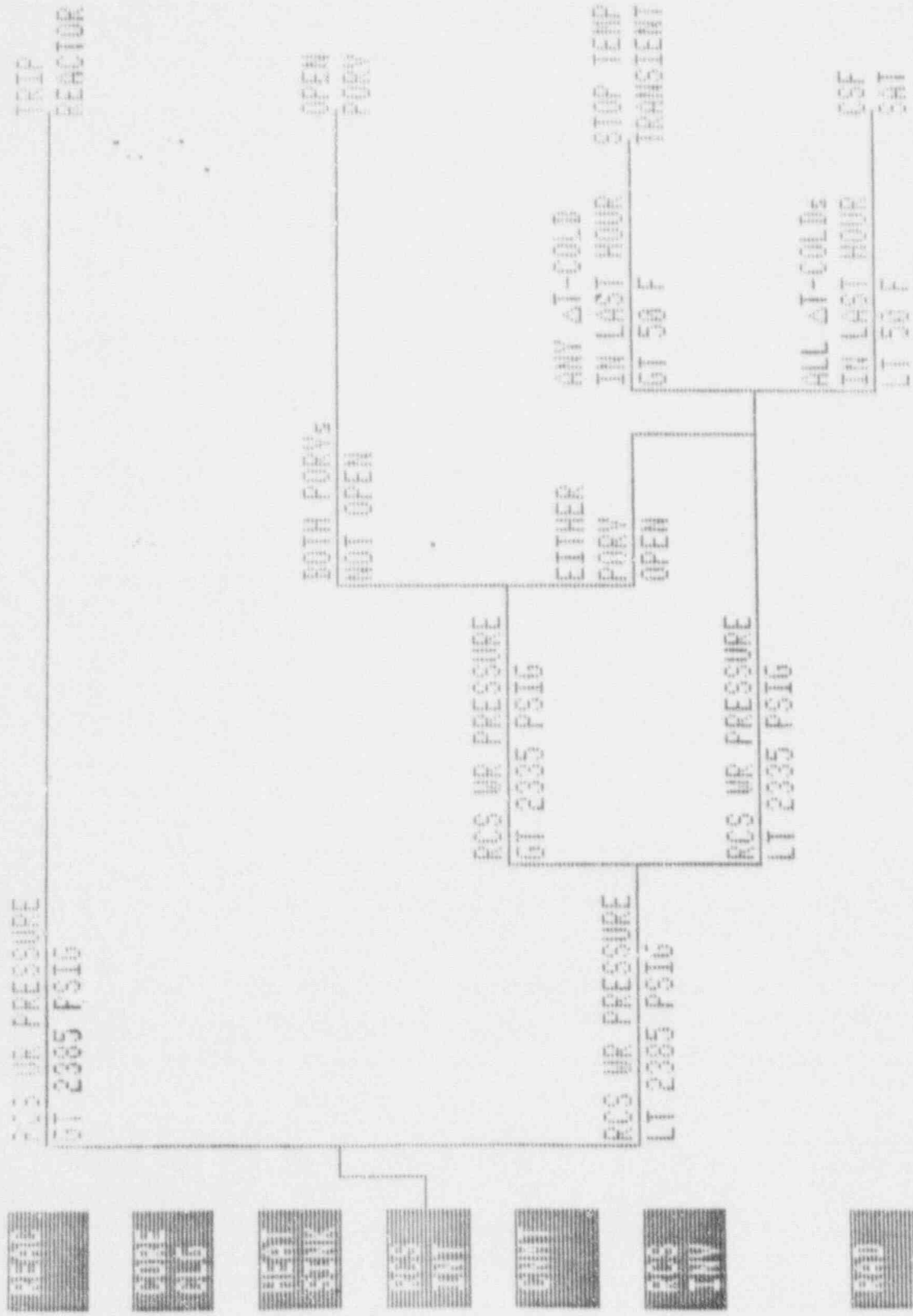
TRIP REACTOR

TRIP REACTOR



3/14/80 10:04:37 AM E

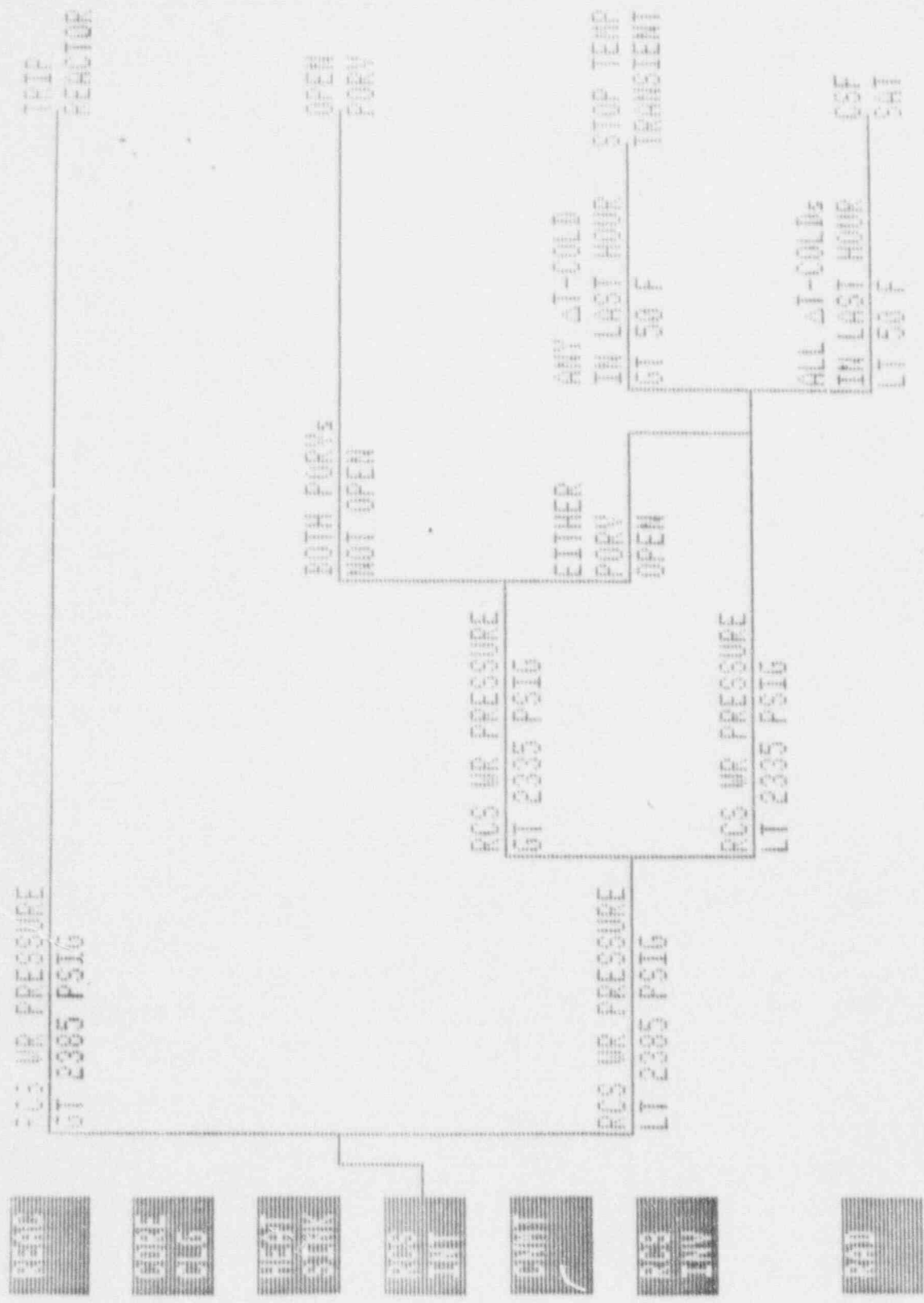
FOR INTERVIEW





TRIP REACTOR

SECURITY



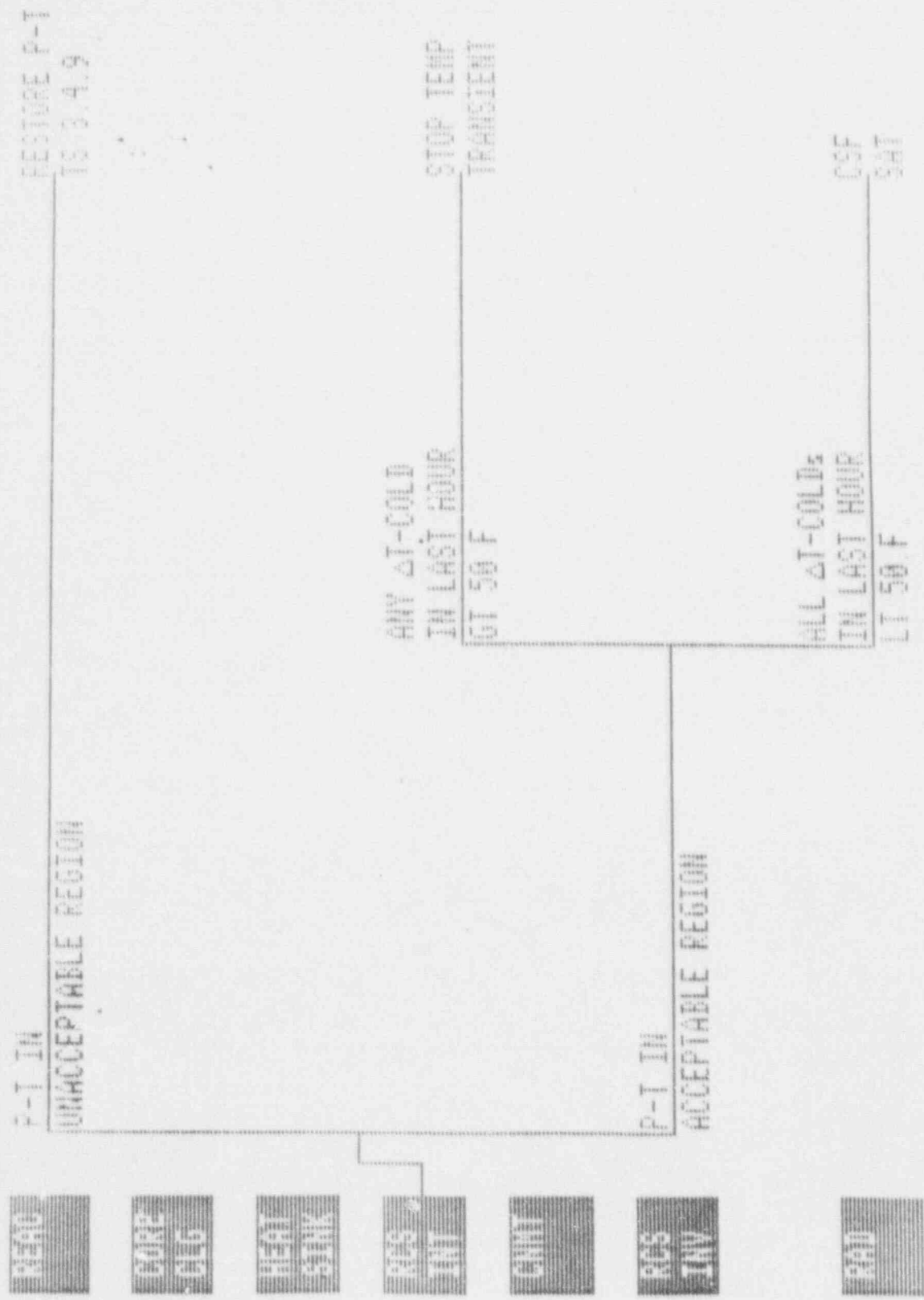
8/16/86 13.03 12 TUBE 4

ECG INTERPRET



01/14/86 13:13 03101E 5

RCS INTEGRITY



0000

0000

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0000

0000

RDS  
TAV

0000

FIGURE P-1  
18.3.4.9

CSF  
SAT

21 16/86 13.11 13.100E 6

RCS INTEGRITY

P-T IN UNACCEPTABLE REGION  
RESTORE P-T  
TS 3.4.9

P-T IN UNACCEPTABLE REGION

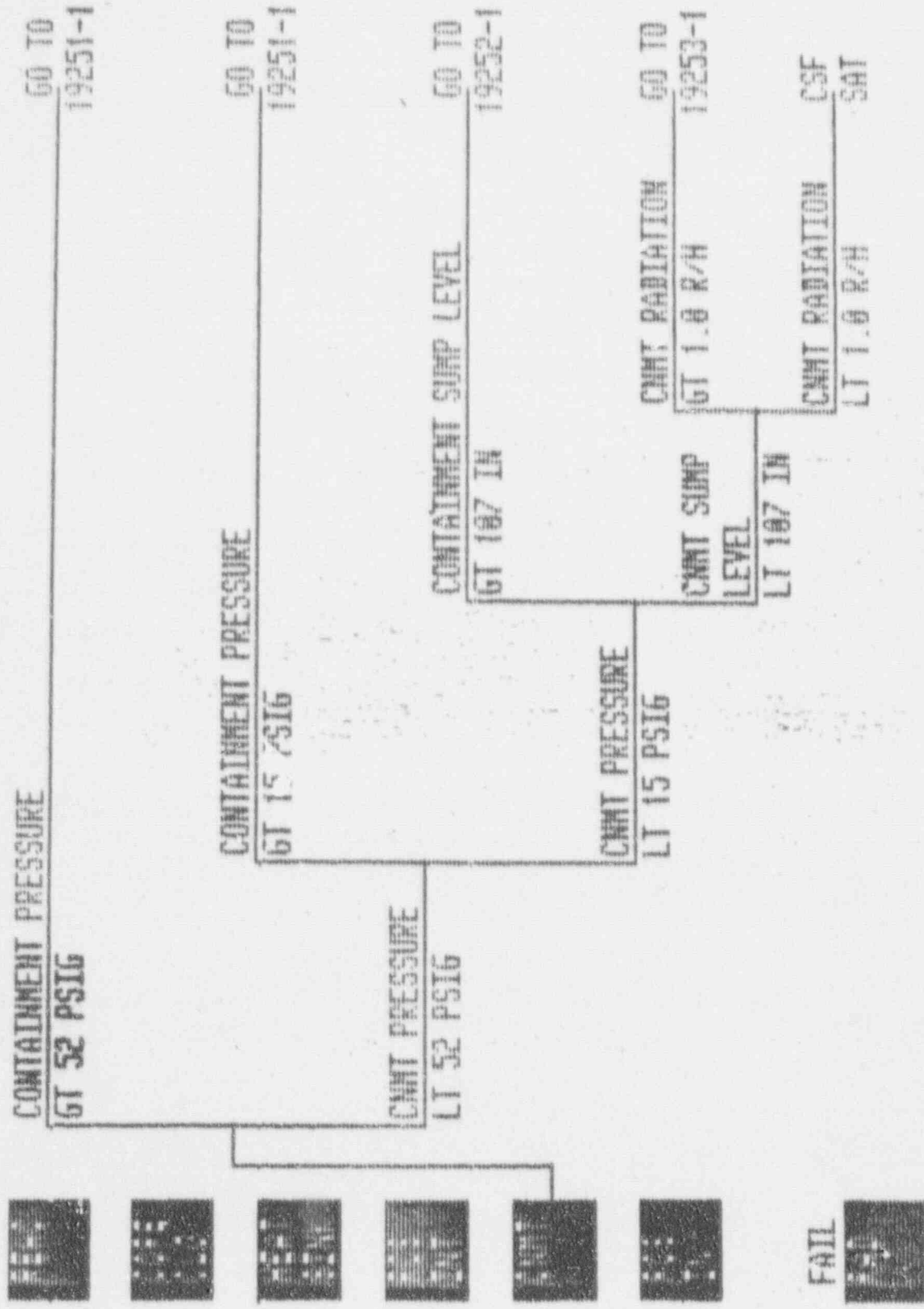


ANY ΔT-COLD  
IN LAST HOUR  
GT 50 F  
STOP TEMP  
TRANSIENT

P-T IN ACCEPTABLE REGION

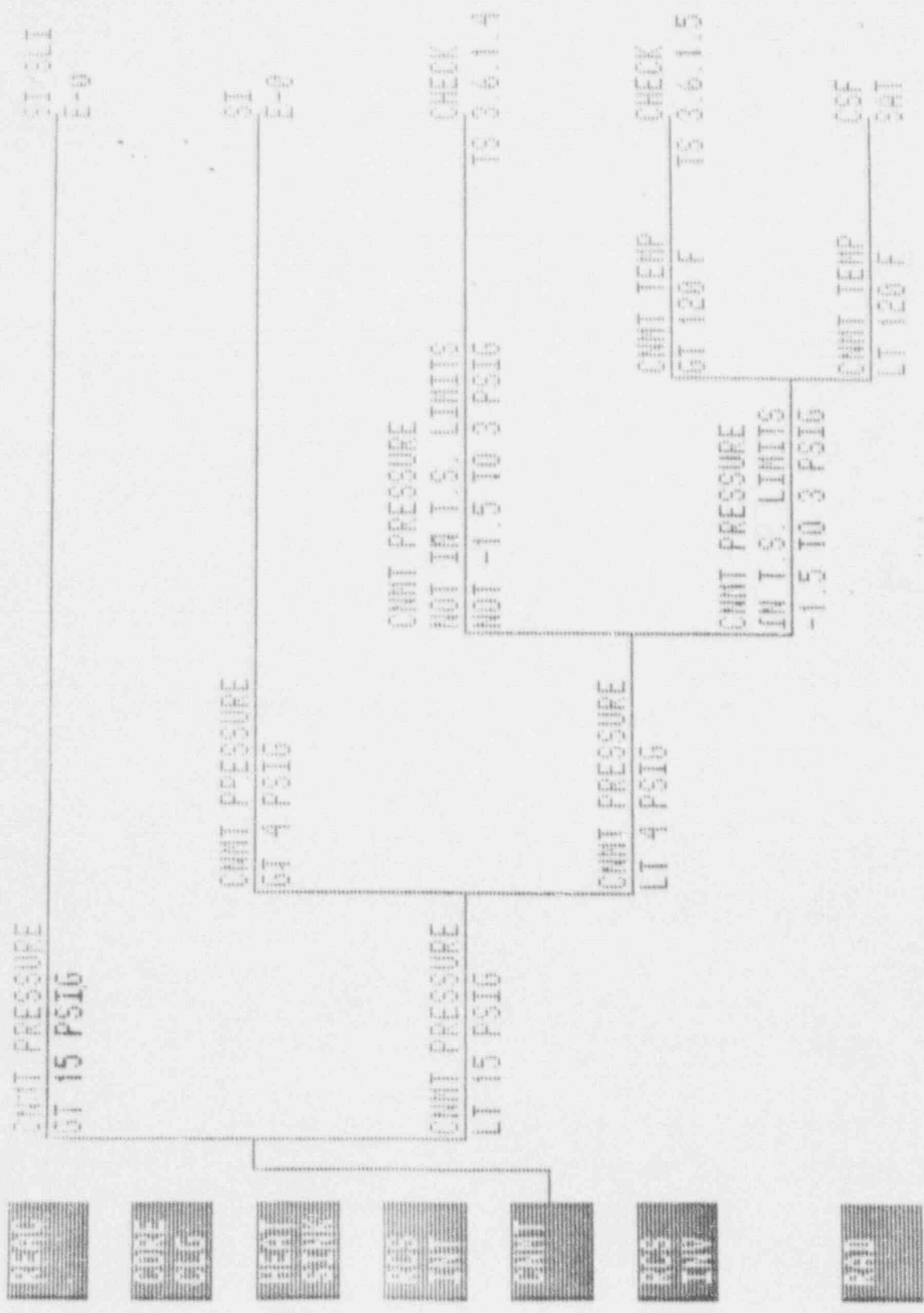
ALL ΔT-COLDS  
IN LAST HOUR  
LT 50 F  
CSF  
5<sub>0</sub>

LOSP FURNET PORT A 12/00/87 07:59:37 MODE 0  
CONTAINMENT

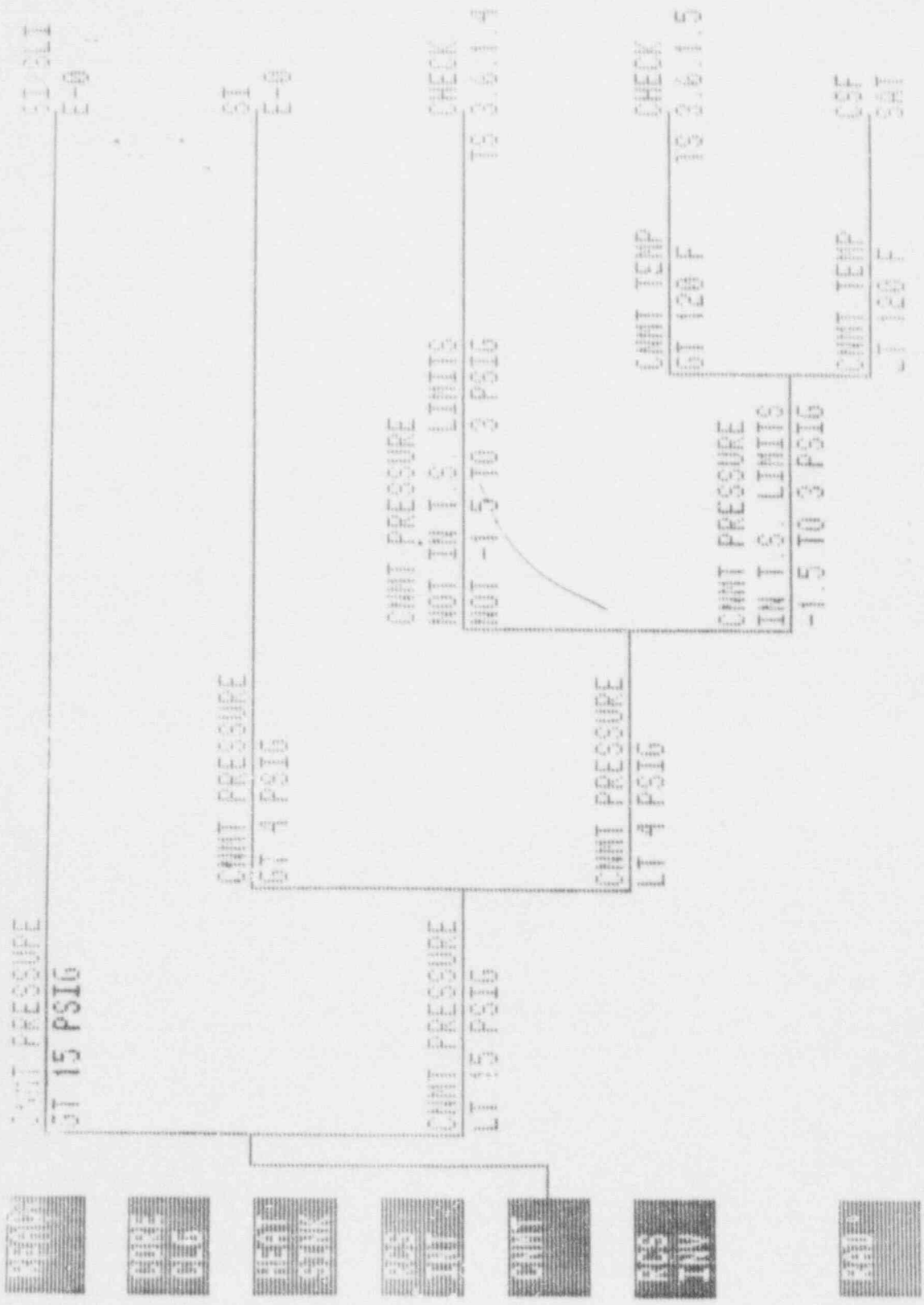


2024 11 10 11:11:11

CONTROL

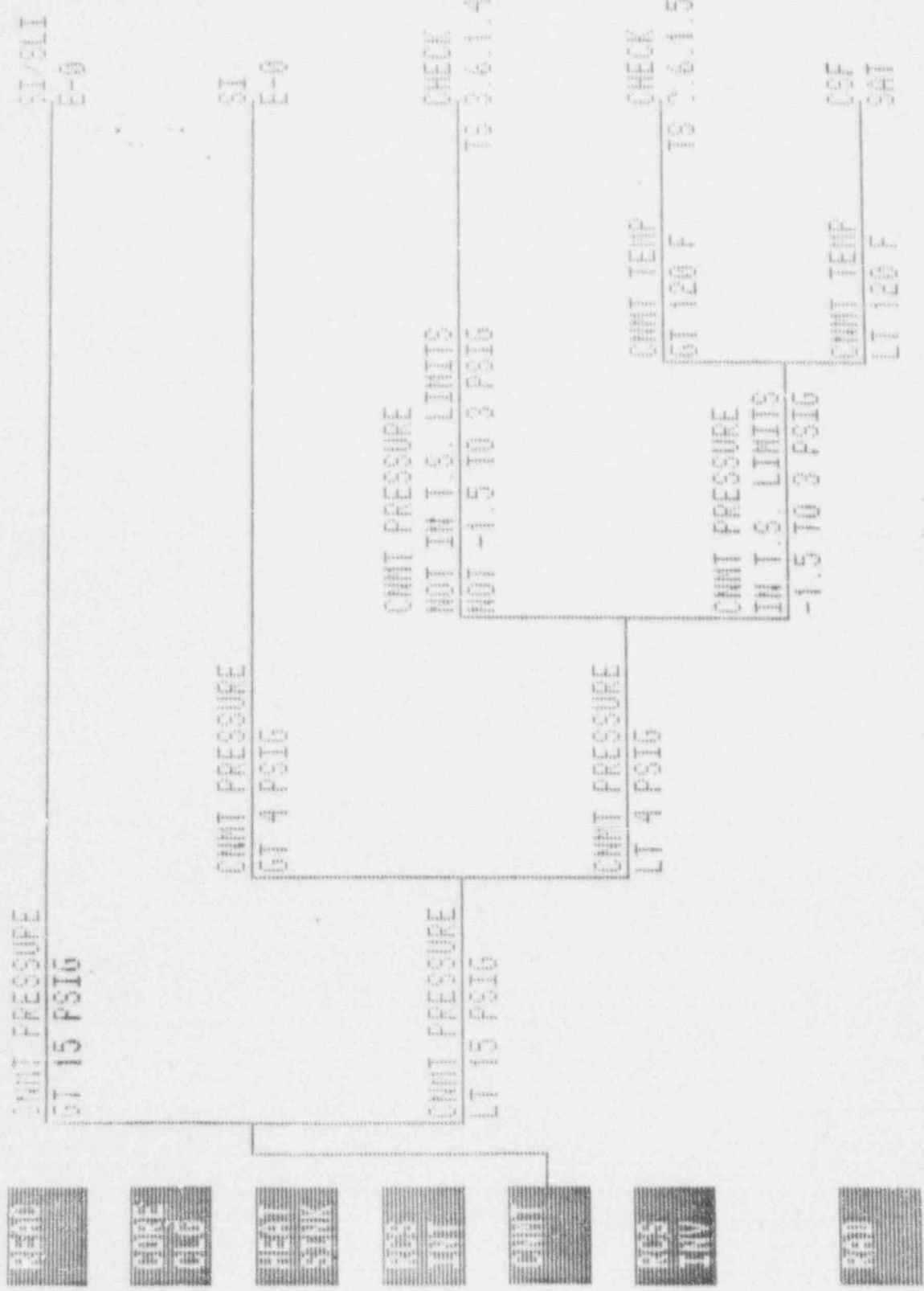


REVISIONS  
REVISION  
REVISION



19 66 10 06 3 CODE 3

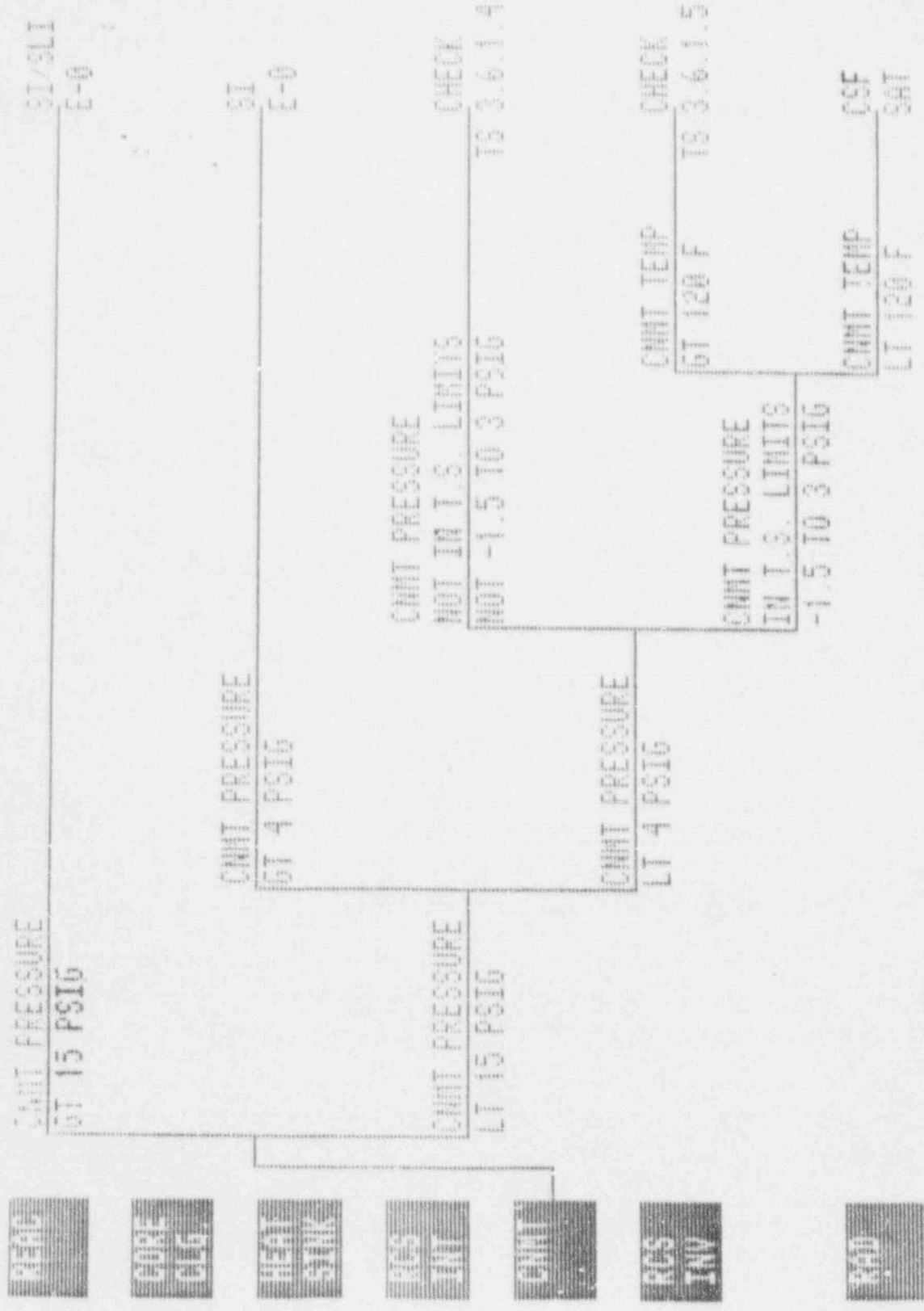
CONTAINMENT





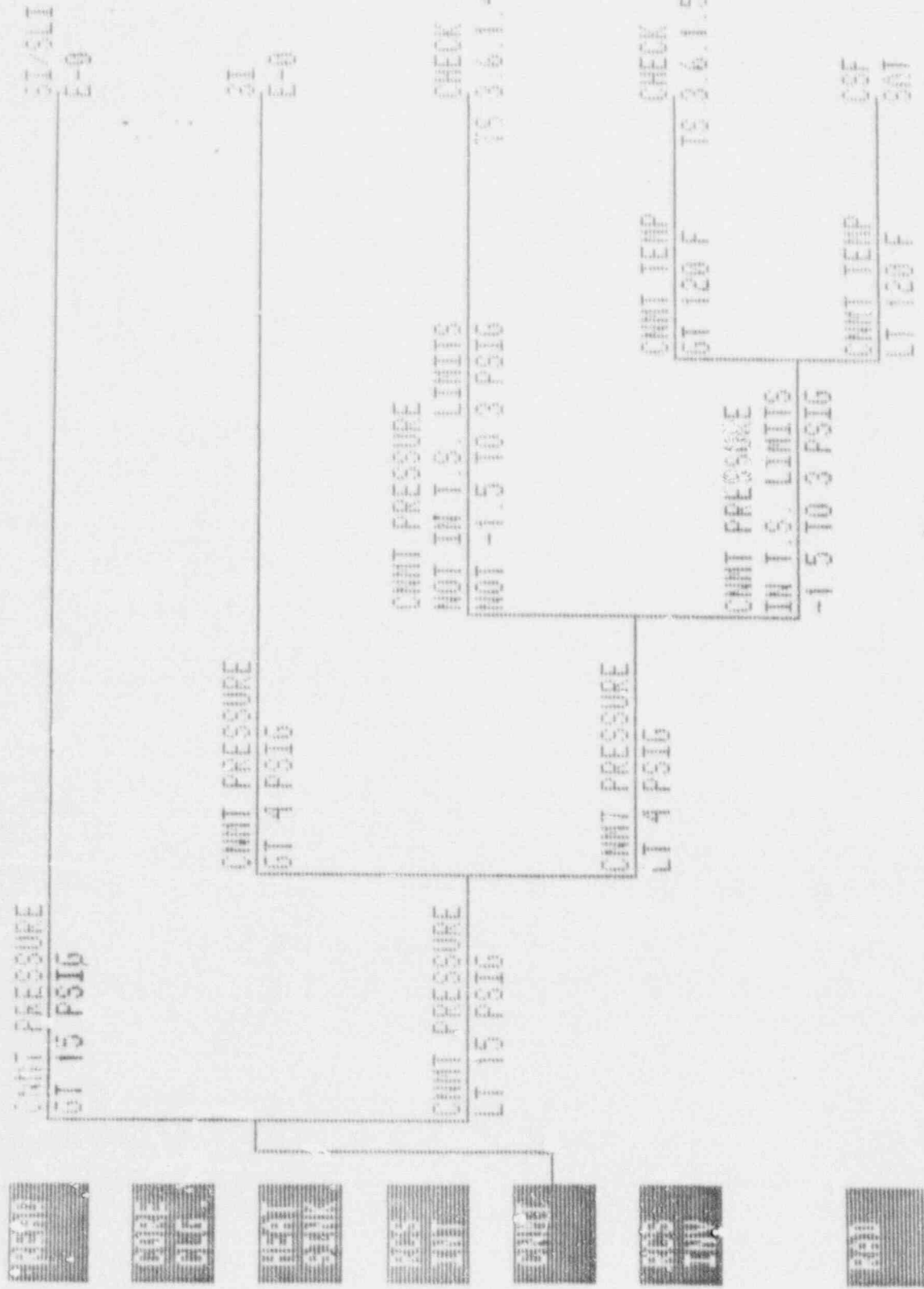
SI 16 24 13 05 LT NOTE 4

CONTAINMENT



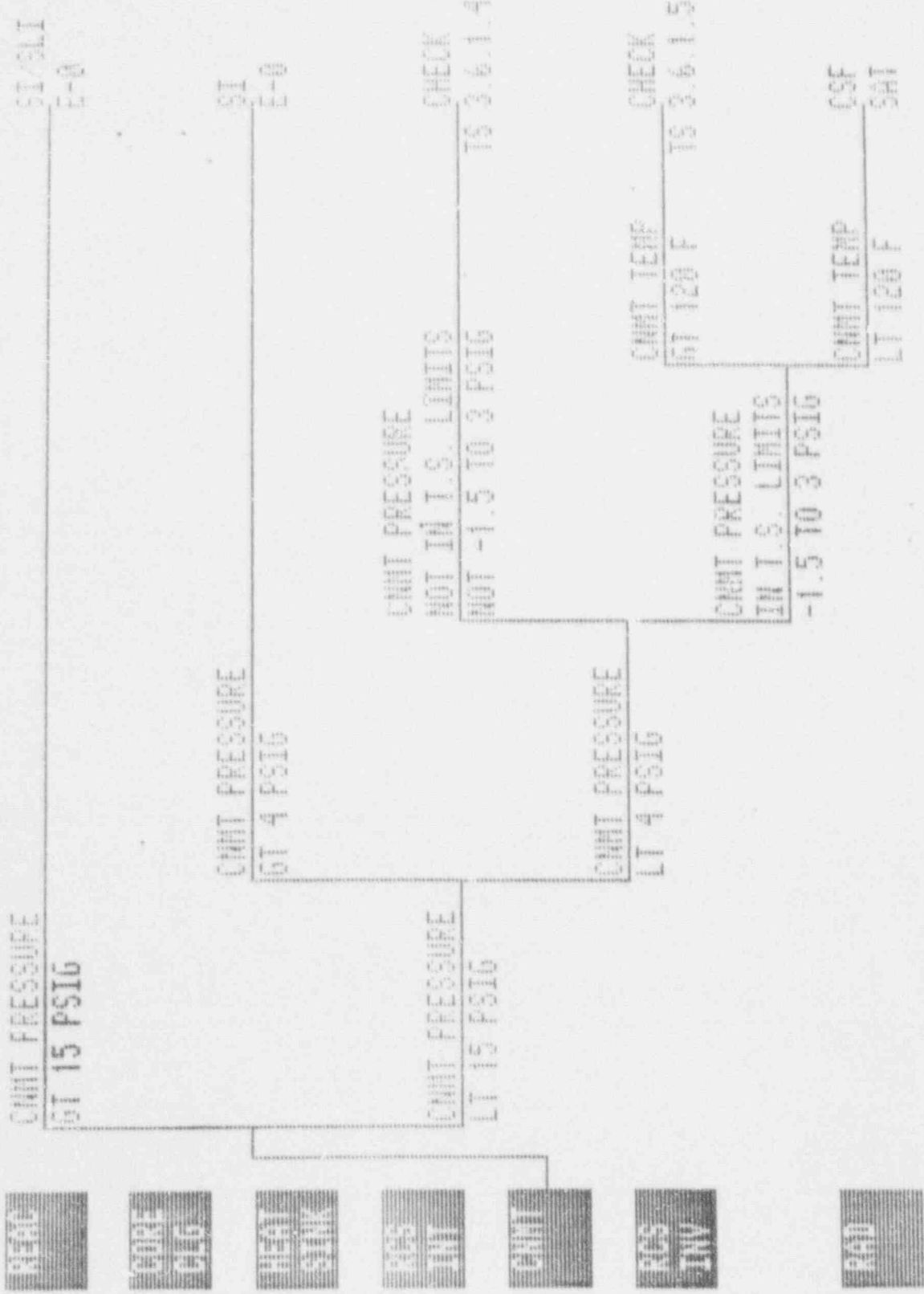
21/14/88 13.10 20 JUNE 5

CONTAINMENT



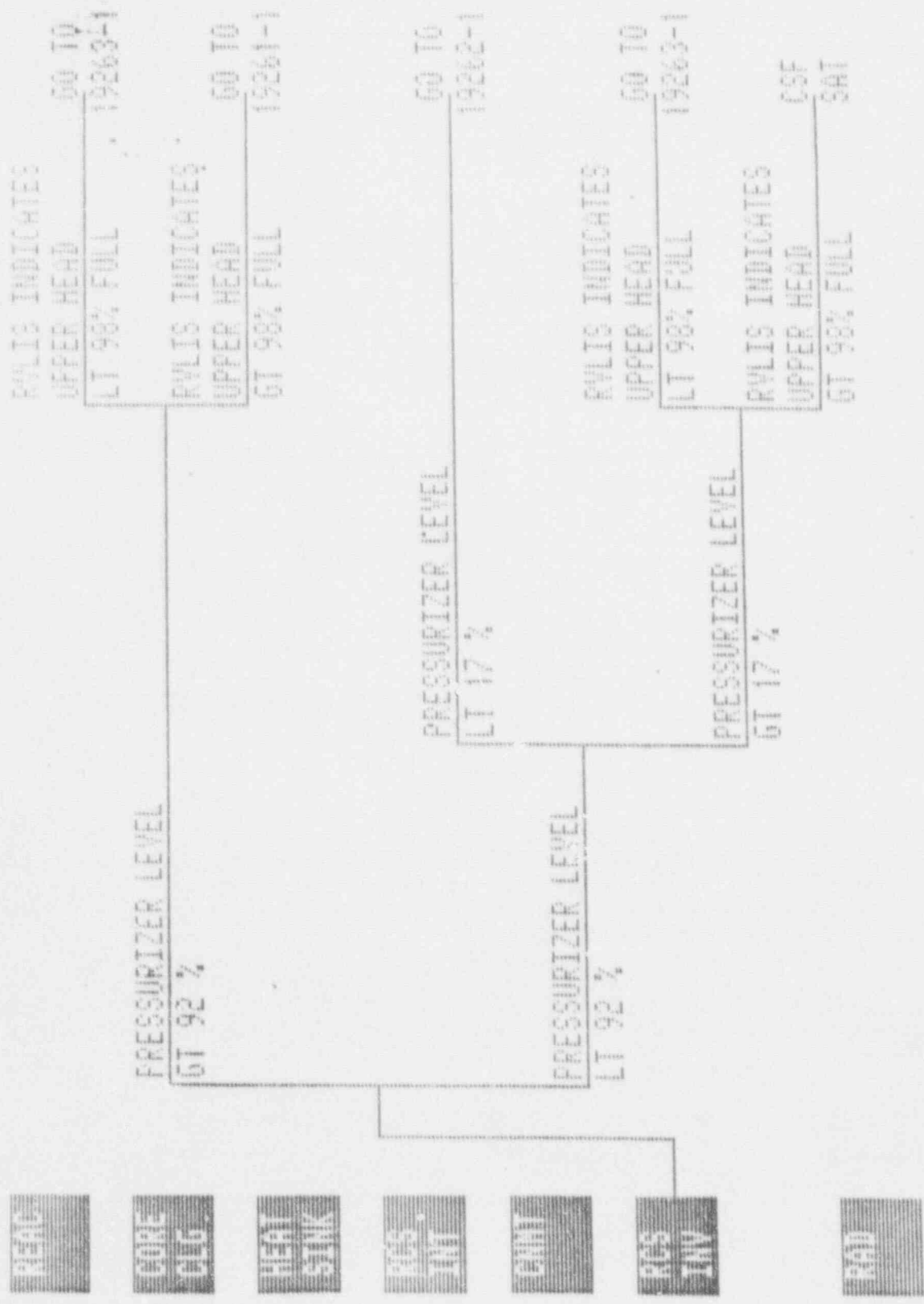
01/16/86 13 11 55 T01E 6

CONTAINMENT



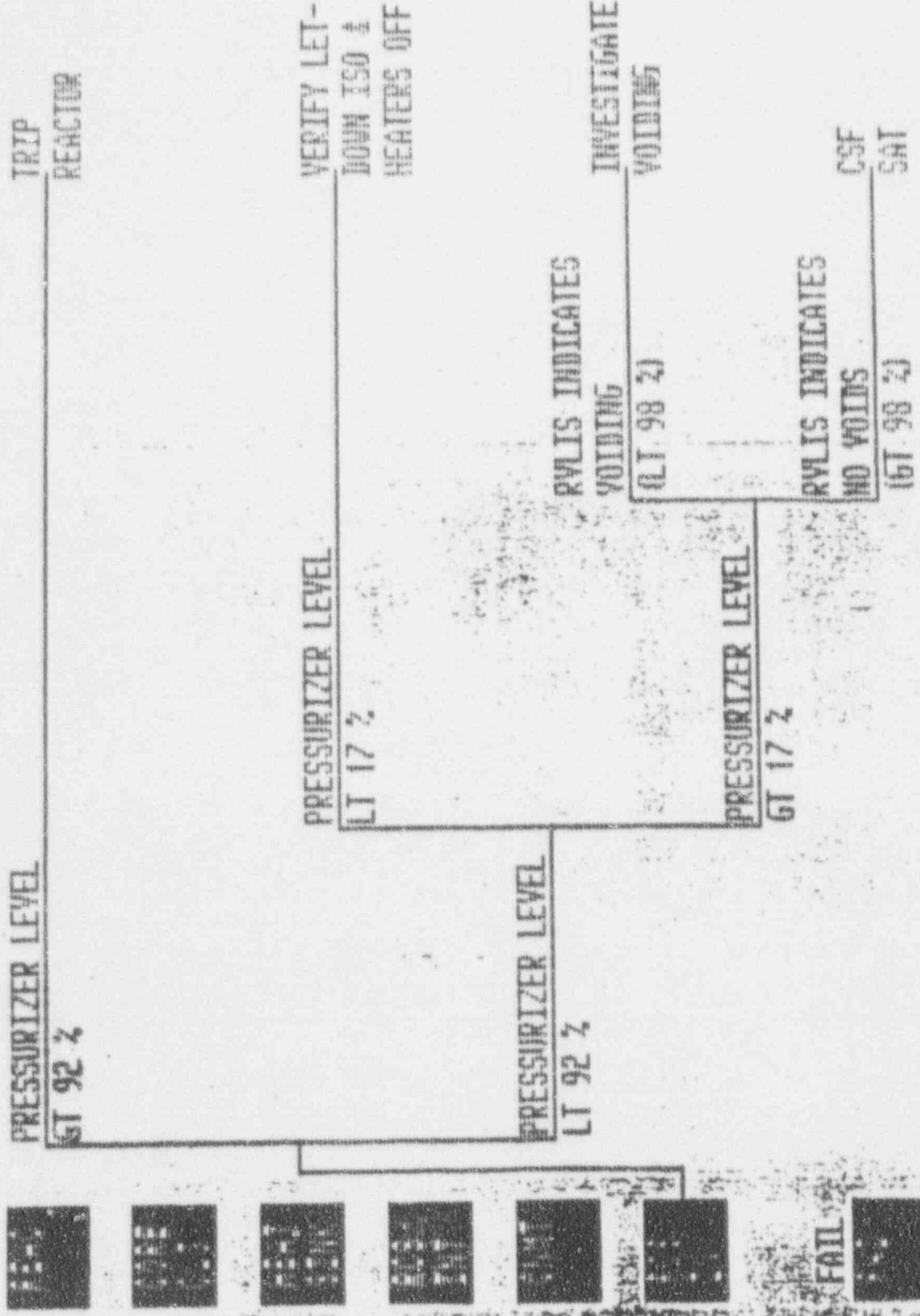
27 10 30 12 57 19263-1

REACTIVITY



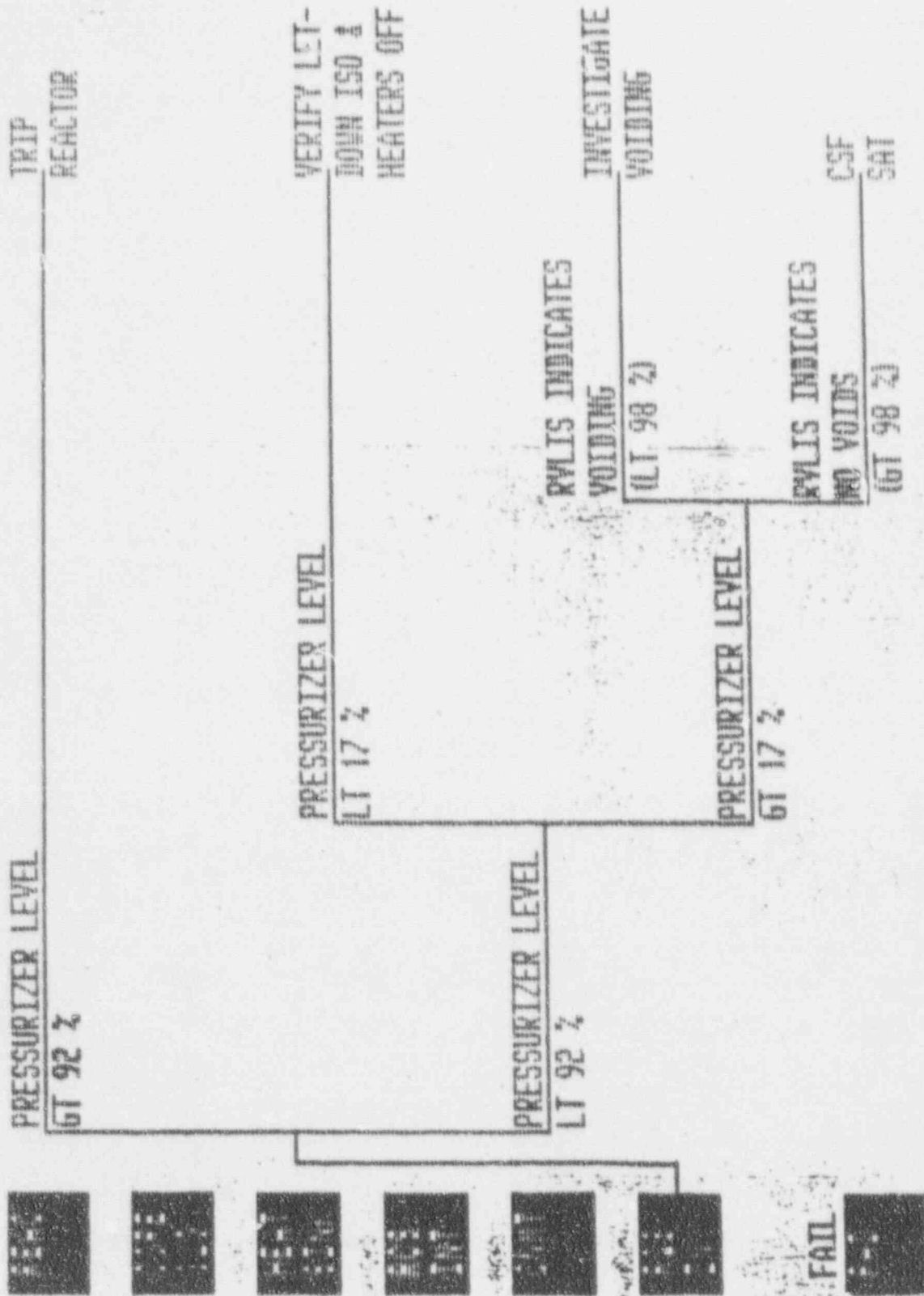
06/12/78 07:42:04 MODE 1

RCS INVENTORY



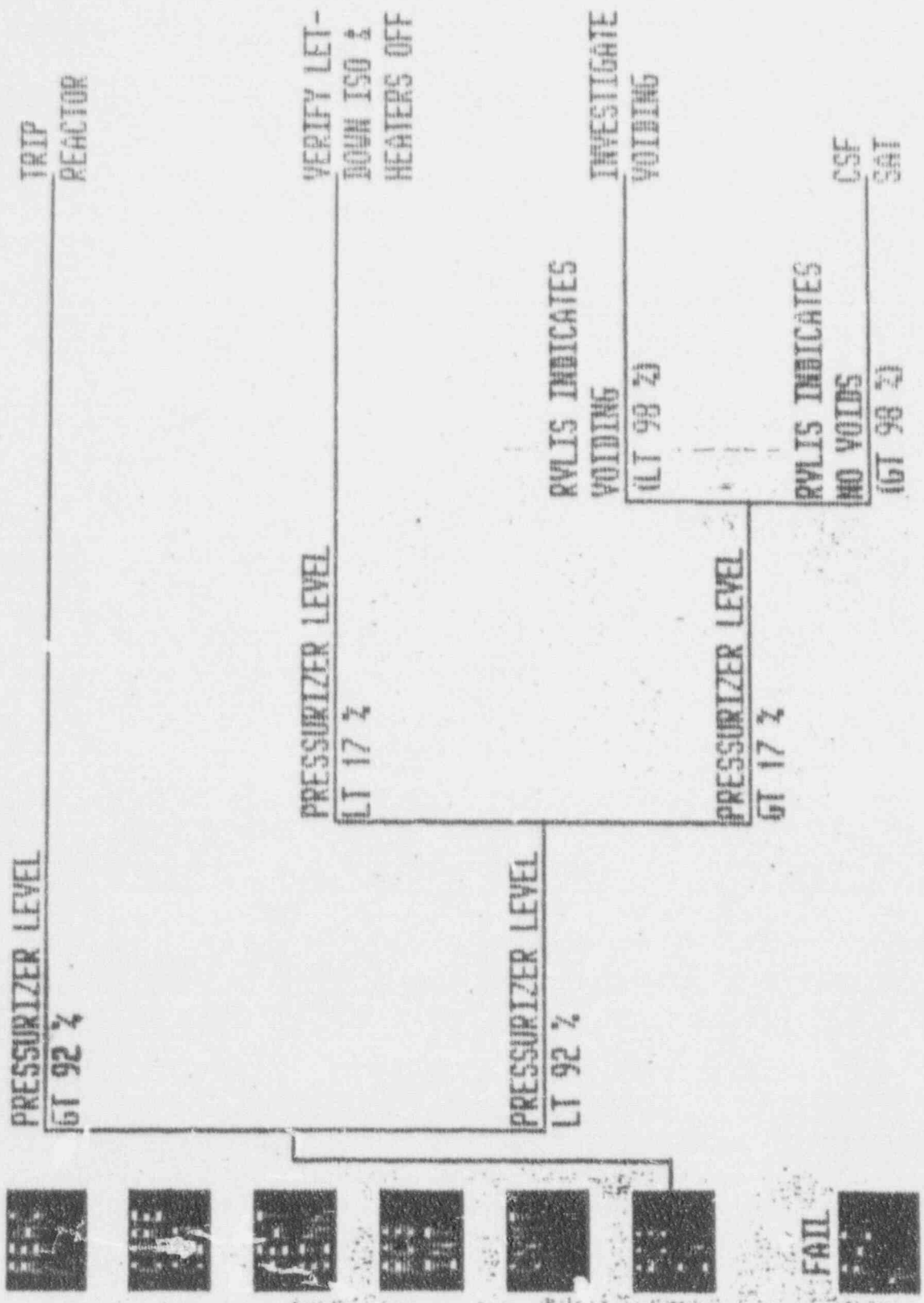
06/12/78 07:42:46 MODE 2

RCS INVENTORY



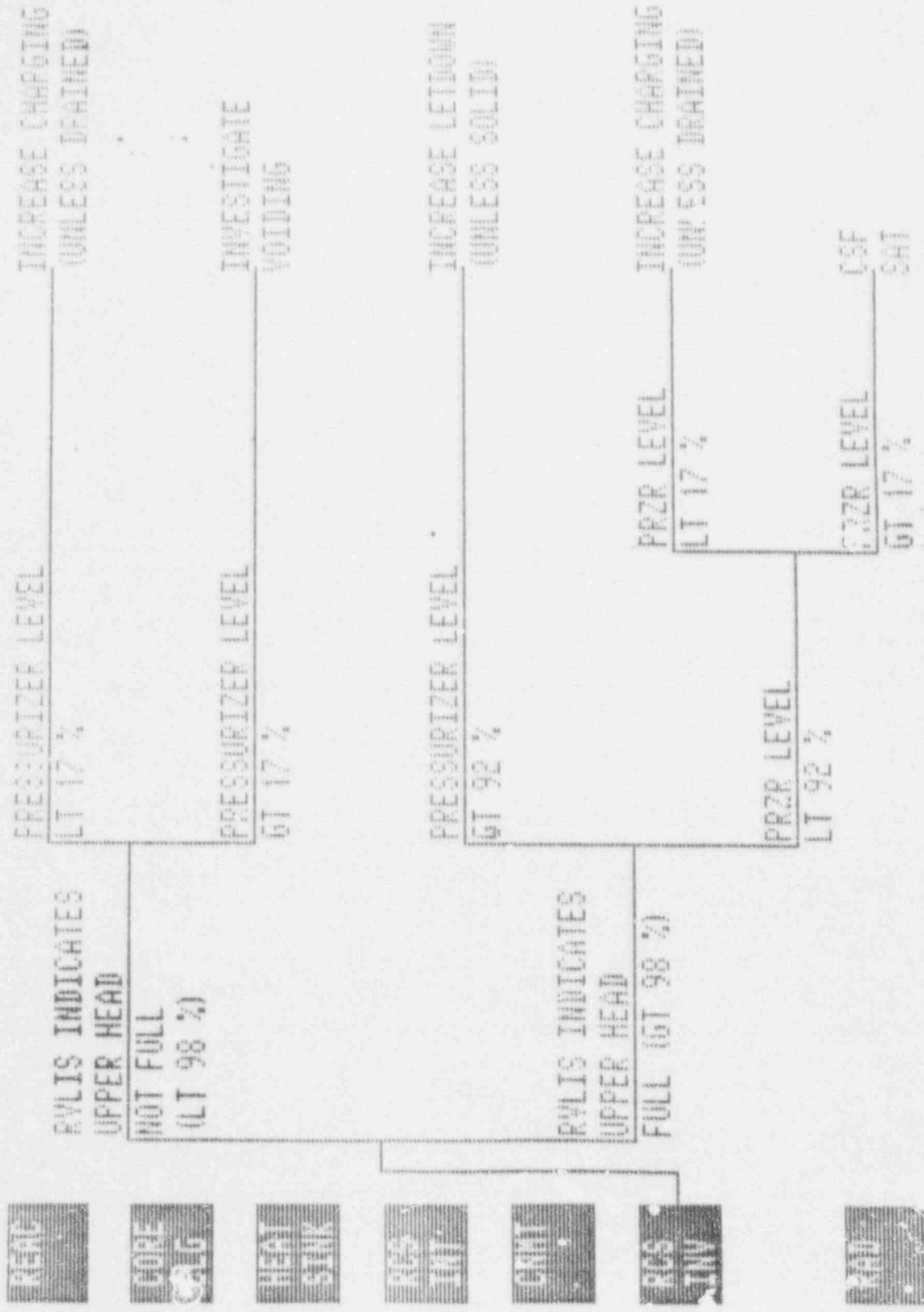
6/12/78 07:43:20 MODE 3

RCS INVENTORY



01-14-86 13:08 41 NODE A

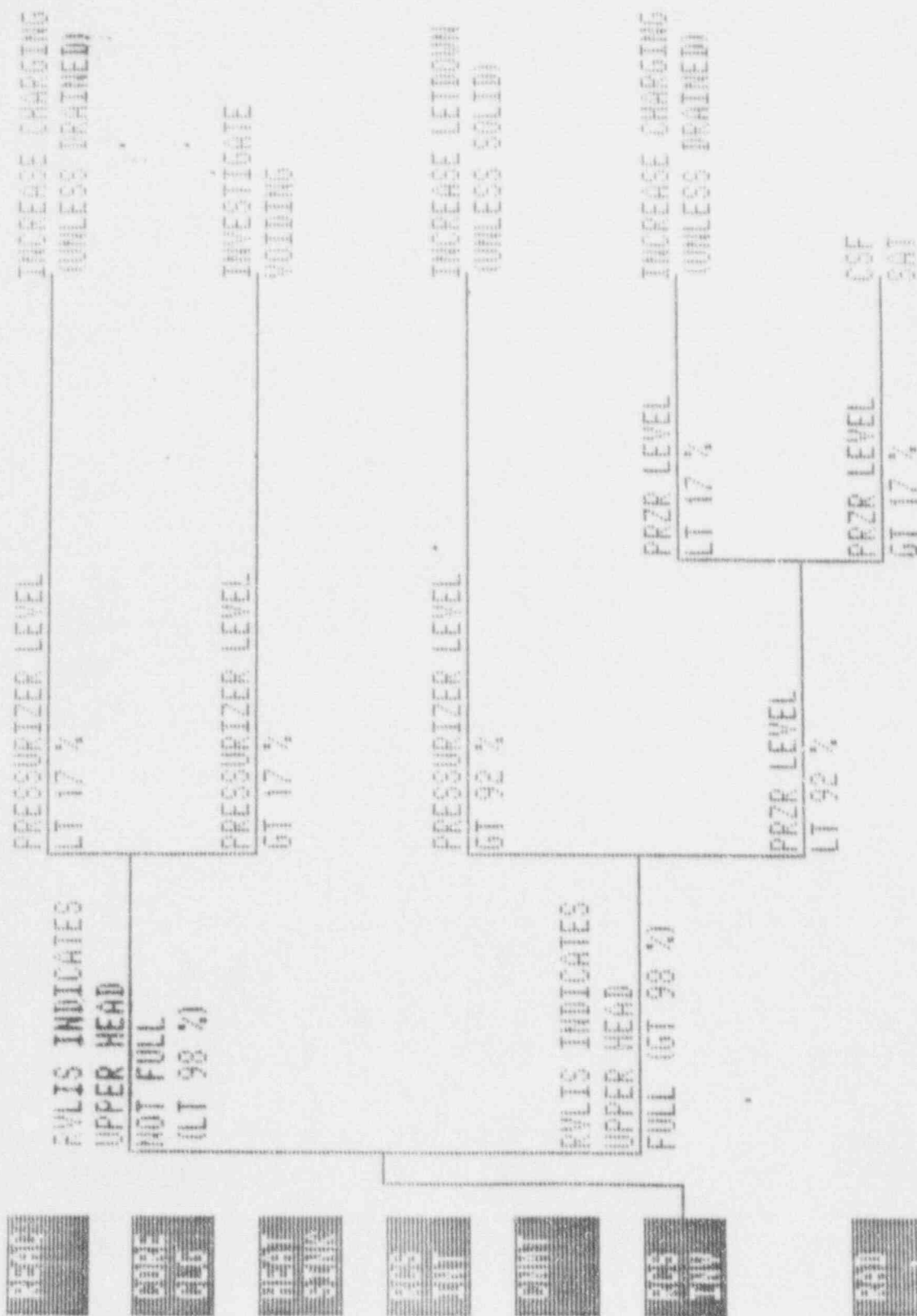
FILE INVENTORY





01 16 86 13 16 33 CODE 5

RCS INVENTORY



01/16/06 10:12:00 NOE 4

ECB INVENTORY

INCREASE  
LEVEL

EVIS FULL RANGE LEVEL

LT 46 3/4



EVIS FULL RANGE LEVEL

GT 46 3/4

CSF  
CHT

### 7.3.3.2 RADIATION OVERVIEW DISPLAY

The Radiation Overview display is the primary display for monitoring radiation inputs from the Plant Effluent Radiation Monitoring System (PERMS) computer. The display is accessible by pushing the "RAD" key on the SPDS keyboard and updates at 2.5 second intervals.

The display is an overview of the plant complex showing the relative location of the radiation sensors by originating device number. Each originating device number conveys the current status of the sensor by color where:

GREEN = Normal  
YELLOW = Alert Alarm  
RED = High Alarm  
MAGENTA = Inactive, Equipment Trouble,  
Test, or Overrange.

Note: the Point ID Summary display for each PERMS input shows the status of inputs shown in magenta

This color code is consistent with PERMS CRT displays and other ERF computer displays.

The user may obtain more detailed information about any individual input by placing the cursor under any originating device number on the CRT and pressing either the "Cursor Point I.D. Summary" or the "Trend Cursor Input" keys.

To aid the operator in locating and assessing any high radiation level problems, all PERMS inputs shown on the Radiation Overview are assigned to one, and only one, of the following groups:

CONTAINMENT  
STEAM GENERATORS  
GASEOUS  
LIQUID  
AREA

Therefore all inputs from the PERMS computer to the ERF computer, except flow monitors, are assigned to one of the above radiation groups.

---

1 Radiation inputs scanned at 5 second intervals due slow transmission rate from the PERMS computer. If the primary PERMS computer (communications console) has failed and the radiation data is coming from the backup computer (mini computer), the data is scanned in 30 second intervals and "SLOW" will appear above the "RAD" status light on all SPDS displays and on the radiation group displays. IF both PERMS computers have failed the message "FAIL" will appear. See section 7.3.3.2.1 for logic and interface information.

The status lights across the bottom of the Radiation Overview display represent these groups and show the color of the "worst" input in each group. The worst input in each group is determined by auctioneering each input's status against the others in that group where:

Alarm (red) is higher than Alert Alarm (yellow)  
Alert Alarm (yellow) is higher than Bad (magenta)  
Bad (magenta) is higher than Normal (green)

These five radiation status lights are summarized by the "RAD" status light in the lower left corner of the display using the same auctioneering logic described previously and is shown on all Top and Second level displays along with the CSF status lights. The other five radiation status lights are also shown on the Top Level Digital display. Therefore it is possible to monitor all radiation inputs while using any of the Top or Second level displays.

When any radiation status light changes to an abnormal (non-green) state it will blink for 30 seconds and the audible alarm in the control room will be sounded.

The inputs in each radiation group are also displayed in a group display format accessible by pushing the desired "Rad Inputs" key on the SPDS keyboard. These keys have the same spacial arrangement as the radiation status lights. Additional third level displays for interagating radiological parameters, are CRT trends of preselected inputs which are assigned to the keys directly underneath each "Rad Inputs" key. See 7.1.11 for keyboard arrangement.

### 7.3.3.2.1 PERMS STATUS LOGIC and INTERFACE

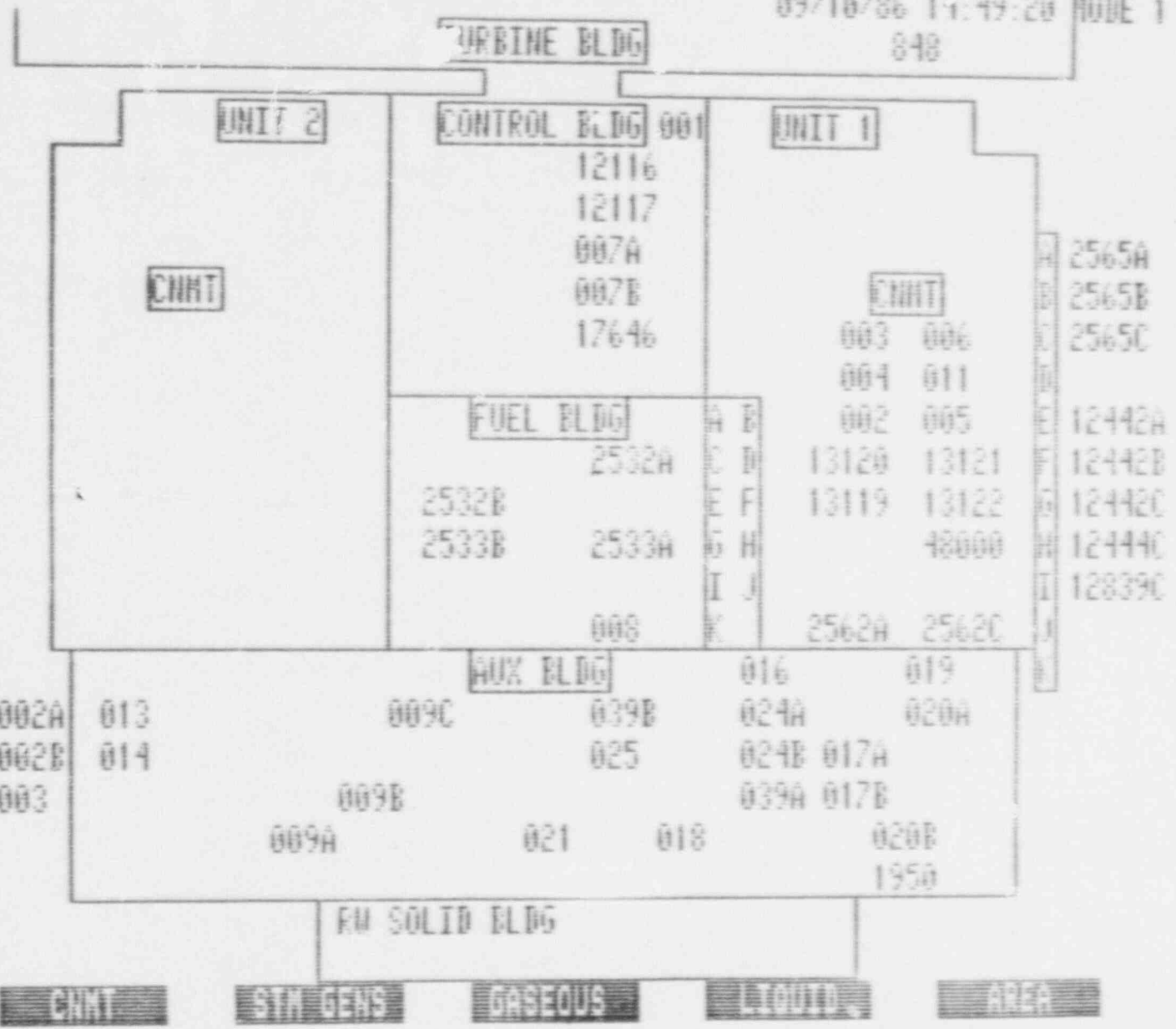
PERMS radiation inputs are normally scanned at 5 second intervals from the communications console. If the primary PERMS computer (com. con.) has failed the radiation data will come from the backup computer (mini computer), with a scan rate of 30 seconds and "SLOW" will appear above the "RAD" status light on all SPDS displays and on the radiation group displays. IF both PERMS computers have failed, the data concentrator retry counter is zero, or the data concentrator scan program (CPR 135) is blocked the message "FAIL" will appear.

The following conditions are checked in the order listed to determine which message to display with the PERMS data:

Condition	Message
1. Data concentrator scan (CPR 135) blocked	FAIL
2. DC retry counter = 0 (loc 15507)	FAIL
3. PERMS not updated with data concentrator scan (Bit 27 of PERMS status word (loc 22630) = RESET)	same as last time
4. Com. Console and mini computer failure (Bits 0,1, and 27 of PERMS status word = SET)	FAIL
5. Mini computer is primary (Bits 2 and 27 of PERMS status word = SET)	SLOW
6. Com. Console is primary (normal) (Bit 2 RESET and BIT 27 SET in PERMS status word)	none (blank)

09/18/86 14:49:20 MODE 1  
848

- REAC
- CORE CLG
- HEAT SINK
- RCS INT
- CNMT
- RCS INV
- RAD



50002A 013  
50002B 014  
50003

EM SOLID BLDG

- CNMT
- SYM GENS
- GASEOUS
- LIQUID
- AREA

### 7.3.2.2 TOP LEVEL DIGITAL DISPLAY

The Top Level Digital Display is an alpha-numeric display of the top level parameters listed in the table in section 7.3.2, along with the Critical Safety Function status lights, and the Radiation Status lights. See video copy of display.

The display is accessible by pressing the "Top Level Digital" key on the SPDS (annunciator) keyboard and updates every 2.5 seconds.

The six CSF status lights down the left side of the screen show the color representing the termination point of each CSFST. Upon any CSF change of state to a non-satisfied condition, that CSF status light will blink for 30 seconds.

The five status lights across the bottom of the screen show the state of each radiation group of inputs. See 7.3.3.2 for radiation status light logic. The "RAD" status light in the lower left corner shows in the "worst" color of the individual radiation status lights.

Additionally, if the primary source of PERMs radiation data to the ERF computer fails over to the secondary source, a "SLOW" message will appear just above the Radiation status light to indicate that the radiation data is being updated at 30 second intervals instead of the normal 5 second intervals. If both sources of radiation data fail, then a "FAIL" message will appear above the Radiation status light.

For consistency, the top level parameters are grouped in a similar fashion and enhanced by the same color code (sec. 7.2) as the Top Level Deviation Bar Chart display. But the Top Level Digital display provides the quantitative information lacking in the Deviation Bar Chart by showing all analog and calculated values to one decimal place.

Due to space limitations on the CRT, the ERF Point ID number is not displayed with each parameter. The user may easily access the "Point ID Summary" display, "Calculated Value" display, or "CRT Trend" display for any top level parameter by placing the cursor underneath any value (state for digital inputs) and pressing the corresponding key on the lower standard function keyboard.

LOSP FOMNET PORT A 12/09/87 67:27:06 MODE 0

POWER.....	0.0 %	MAX EXIT TEMP.....	650.0 DEG F
STARTUP RATE.....	BAD DPH	CNMT ISOLATED.....	BAD
COOLDOWN RATE 1 MIN.....	0.0 DEG/HR	CNMT PRESSURE.....	0.5 PSIG
RCS SUBCOOLING.....	15.5 DEG F	CNMT HYDROGEN.....	0.0 %
RCS WR PRESSURE.....	0.0 PSIG	CNMT WATER LEVEL.....	0.0 IN
PRZR LEVEL.....	0.0 %	CST 1 LEVEL.....	0.0 %
RVLIS FULL RANGE.....	0.0 %	CST 2 LEVEL.....	0.0 %
RVLIS UPPER RANGE.....	BAD %	RWST LEVEL.....	0.0 %

	LOOP 1	LOOP 2	LOOP 3	LOOP 4
RCP STATUS	BAD	BAD	BAD	BAD
T-HOT (F)	0.0	0.0	0.0	0.0
T-COLD (F)	0.0	0.0	0.0	0.0
SG PRESS (PSIG)	0.0	0.0	0.0	0.0
SG NR LEVEL (Z)	54.2	54.2	50.0	54.2
SG WR LEVEL (Z)	0.0	0.0	0.0	0.0
AFV FLOW (GPM)	0.0	0.0	0.0	0.0
MS RAD (UCI/CC)	0.00E+00	0.00E+00	0.00E+00	0.00E+00

FAIL



ATTACHMENT 3

05-98-90

DATE: 2-14-89

FROM: Manager Operations

TO: Licensee

You A.L. Blalock have successfully completed the Accelerated Requalification Training Program outlined in letter dated 7-29-88 and, are reinstated to active license status.

Respectfully,

*W F Kitchens*  
Manager Operations

cc: Plant Training & Emergency Preparedness Manager  
Licensee Department Head  
Licensee Department Supervisor  
Licensee Training File

\* Original Record lost, A.L. Blalock successfully completed Accelerated Requalification Training on 8-23-88 and was able to be reinstated to active license status on that date.

## ATTACHMENT 2

DATE: 7-29-88

FROM: Manager Operations

TO: A.L. Blalock  
(Licensee)

You have not met the minimum requirements of the Licensed Operator Requalification Training Program pursuant to VEGP Administrative Procedure 00715-C and will be placed on inactive license status and removed from licensed activities effective 7-27-88.  
(date)

This is due to the following reason(s):

- a. Failure of Operating Test ( Simulator ; Walkthrough )
- b. Failure of Annual Written Exam
- c.

You are to report to the Operations Supervisor, Requalification in the VEGP Training Center on 8-8-88.  
(date)  
to be enrolled in the Accelerated Requalification Training Program outlined in Attachment 1 to this letter. You will be notified of successful completion of the outlined remedial training and subsequent date of return to active license status.

A copy of this letter and the attached remedial training program will be maintained in your training file.

Respectfully,

*W.F. Kitchens*

Manager Operations

cc: Plant Training & Emergency Preparedness Manager  
Department Head  
Department Immediate Supervisor  
Licensee's Individual Training File

## PLANT VOGTLE TRAINING

## REMEDIAL TRAINING ACTION FORM

NAME Blalock, A.L. DATE 7/29/88  
 COURSE TITLE L.O. Regual Annual Operating Test.  
 COURSE ID # RQ-015 CLASS # 88-03 END DATE OF COURSE 7/29/88

## COURSE REQUIREMENT NOT COMPLETED

Failed both parts (simulator and plant walkthrough) of the Annual Operating Test.

## REMEDIAL ACTION NEEDED FOR COURSE CREDIT

In Accordance with Section 4.3.2 of Admin Procedure 06715-C:

1. Review failed portions of the Operating Test with H. Butterworth.
2. Attend Accelerated Regual Training Program to include as a minimum
  - a. One additional simulator practice session
  - b. Guided Self Study Program (Systems Review)
3. Successfully complete another Annual Operating Test similar in content and scope to the original examination.

INSTRUCTOR [Signature] 7/29/88 APPROVED Robert E. Dorman 7/29/88  
 SIGNATURE/DATE TRAINING SUPV/DATE

RETAIN THIS FORM IN SUSPENSE FILE UNTIL COMPLETE.

CORRECTIVE ACTION COMPLETE AS FOLLOWS:

INSTRUCTOR

DATE

PLANT MISTLE TRAINING  
REMEDIAL TRAINING ACTION FORM

Blalock, A C DATE 8/3/88

L. O. Regal (Annual Written Exam)

COURSE ID: RQ-005 CLASS: 88-03 END DATE OF COURSE 7/29/88

COURSE REQUIREMENT NOT COMPLETED

Average of Part A (RQ-005-88-03.1) and Part B (RQ-005-88-03.2) exams less than 80% (72% and 80.0% respectively.)

REMEDIAL ACTION NEEDED FOR COURSE CREDIT

In accordance with Admin. Procedure 00715-C, Sections 4.2.4.1.2 and 4.3

1. Removal from Licensed Duties.
2. Review the Simulator Static Exam, RQ-005-88-03.1, with a Regal Instructor.
3. Review the objectives for the failed exam.
4. Retake the simulator Static Exam, Part A, and pass with a minimum score of 74%.

INSTRUCTOR R O Byrd 8/3/88  
SIGNATURE/DATE

APPROVED Robert E. Royma 8/4/88  
TRAINING SUPV. DATE

RETAIN THIS FORM IN SUSPENSE FILE UNTIL COMPLETE.

CORRECTIVE ACTION COMPLETE AS FOLLOWS:

INSTRUCTOR

PLANT VOGTLE TRAINING  
REMEDIAL TRAINING ACTION FORM

NAME Blalock, A.L. DATE 7/29/88

COURSE TITLE L.O. Regual Annual Operating Test.

COURSE ID RO-015 CLASS 88-03 END DATE OF COURSE 7/29/88

COURSE REQUIREMENT NOT COMPLETED

Failed both parts (simulator and plant walkthrough) of the Annual Operating Test.

REMEDIAL ACTION NEEDED FOR COURSE CREDIT

- In Accordance with Section 4.32 of Admin Procedure 00715-C:
1. Review failed portions of the Operating Test with H. Butterworth.
  2. Attend accelerated Regual Training Program to include as a minimum:
    - a. One additional simulator practice session
    - b. Guided Self Study Program (Systems Review)
  3. Successfully complete another Annual Operating Test similar in content and scope to the original examination.

INSTRUCTOR [Signature] 7/29/88

SIGNATURE/DATE

APPROVED Robert E. Dorman 7/29/88

TRAINING SUPV/DATE

RETAIN THIS FORM IN SUSPENSE FILE UNTIL COMPLETE.

CORRECTIVE ACTION COMPLETE AS FOLLOWS:

Reviewed failed exam RG

Attended Guided Self Study at Tracy Centre - RG

Satisfactorily completed a simulator practice session RG

Successfully completed another Annual Operty Test RG

[Signature]  
INSTRUCTOR DATE

PLANT WIGGLE TRAINING  
REMEDIAL TRAINING ACTION FORM

Blalock, A.C. DATE 8/3/88

L.O. Royal (Annual Written Exam)

COURSE ID: RQ-005 CLASS 88-03 END DATE OF COURSE 7/29/88

COURSE REQUIREMENT NOT COMPLETED

Average of Part A (RQ-005-88-03.1) and Part A (RQ-005-88-03.2) exams less than 80% (72% and 80.0% respectively.)

REMEDIAL ACTION NEEDED FOR COURSE CREDIT

In accordance with Admin. Procedure 00715-C, Sections 4.2.4.1.2 and 4.3

\*1. Removal from Licensed Duties

2. Review the Simulator Static Exam, RQ-005-88-03.1, with a Royal Instructor

3. Review the objections for the failed exam.

4. Retake the simulator Static Exam, Part A, and pass with a minimum score of 74%.

INSTRUCTOR R. Blalock 8/3/88  
SIGNATURE/DATE

APPROVED Robert E. Norman 8/4/88  
TRAINING SUPERVISOR

RETAIN THIS FORM IN SUSPENSE FILE UNTIL COMPLETE.

CORRECTIVE ACTION COMPLETE AS FOLLOWS:

Removal of failed exam. NOX

Removal of objections for failed exam NOX

Successfully passed a simulator static exam, RQ-005-88-03.1 on 8-18-88 with a score of 77.3% NOX

\* previously removed from licensed duties for failure of annual operating test

R. Blalock 8-23-88  
INSTRUCTOR

## ATTACHMENT 3

DATE: 9/2/88

FROM: Manager Operations

TO: Licensee

You F. REDKANZ have successfully completed the Accelerated Requalification Training Program outlined in letter 0715 attachment 2 and, are reinstated to active license status.

Respectfully,

*W F Kitchens*

Manager Operations

cc: Plant Training & Emergency Preparedness Manager  
Licensee Department Head  
Licensee Department Supervisor  
Licensee Training File

## ATTACHMENT 2

DATE: 8-26-88

FROM: Manager Operations

TO: Fred Redwan  
(Licensee)

You have not met the minimum requirements of the Licensed Operator Requalification Training Program pursuant to VEGP Administrative Procedure 00715-C and will be placed on inactive license status and removed from licensed activities effective

8-26-88

(date)

This is due to the following reason(s):

- a. Failure of Licensed Operator Regual Exam (Annual Simulator)
- b.
- c.

You are to report to the Operations Supervisor, Requalification in the VEGP Training Center on Aug 29, 1988

(date)

to be enrolled in the Accelerated Requalification Training Program outlined in Attachment 1 to this letter. You will be notified of successful completion of the outlined remedial training and subsequent date of return to active license status.

A copy of this letter and the attached remedial training program will be maintained in your training file.

Respectfully,

*Heussak*  
for  
Manager Operations

cc: Plant Training & Emergency Preparedness Manager  
Department Head  
Department Immediate Supervisor  
Licensee's Individual Training File



PLANT VOGTLE TRAINING

REMEDIAL TRAINING ACTION FORM

NAME Fred Redwest DATE 8-25-88

COURSE TITLE Annual Operating Exam

COURSE ID # RG-015 CLASS # 88-07 END DATE OF COURSE 8-25-88

COURSE REQUIREMENT NOT COMPLETED

*Unsatisfactory performance during the simulator phase of the exam.*

REMEDIAL ACTION NEEDED FOR COURSE CREDIT

- ① Review exam deficiencies noted w/ an instructor
- ② Complete a practice simulator exam session.
- ③ Satisfactorily complete another simulator exam of the same difficulty as the failed scenario, but different in content.
- ④ Removal from licensed duties

INSTRUCTOR Atlas 8/25/88  
SIGNATURE/DATE

APPROVED Robert E. Dorman 8/25/88  
TRAINING SUPV/DATE

RETAIN THIS FORM IN SUSPENSE FILE UNTIL COMPLETE.

CORRECTIVE ACTION COMPLETE AS FOLLOWS:

INSTRUCTOR \_\_\_\_\_ DATE \_\_\_\_\_

FIGURE 8

PLANT VOGTLE TRAINING

REMEDIAL TRAINING ACTION FORM

NAME Fred Redware DATE 8-25-88

COURSE TITLE Annual Operating Exam

COURSE ID # RG-015 CLASS # 88-07 END DATE OF COURSE 8-25-88

COURSE REQUIREMENT NOT COMPLETED

*Unsatisfactory performance during the simulator phase of the exam.*

REMEDIAL ACTION NEEDED FOR COURSE CREDIT

- ① Review exam deficiencies noted w/ an instructor
- ② Complete a practice simulator exam session.
- ③ Satisfactorily complete another simulator exam of the same difficulty as the failed scenario, but different in content.
- ④ Removal from licensed duties

INSTRUCTOR Alan 8/25/88  
SIGNATURE/DATE

APPROVED Robert E. ... 8/25/88  
TRAINING SUPV/DATE

RETAIN THIS FORM IN SUSPENSE FILE UNTIL COMPLETE.

CORRECTIVE ACTION COMPLETE AS FOLLOWS:

- ① completed SAT
- ② completed SAT
- ③ completed SAT
- ④ Recommend restoration to license duties

Robert E. ...  
INSTRUCTOR DATE 8/25/88

FIGURE 8

## ATTACHMENT 3

DATE: 9/2/88

FROM: Manager Operations

TO: Licensee

You W. HENNESSY have successfully completed the Accelerated Requalification Training Program outlined in letter 0715 attachment 2 and, are reinstated to active license status.

Respectfully,

*W F Kitchens*

Manager Operations

cc: Plant Training & Emergency Preparedness Manager  
Licensee Department Head  
Licensee Department Supervisor  
Licensee Training File

## ATTACHMENT 2

DATE: 8-26-88

FROM: Manager Operations

TO: Bill Hennessy  
(Licensee)

You have not met the minimum requirements of the Licensed Operator P qualification Training Program pursuant to VEGP Administrative Procedure 00715-C and will be placed on inactive license status and removed from licensed activities effective Aug 26-1988.  
(date)

This is due to the following reason(s):

- a. Failure of Licensed Operator Regual Exam (Annual Simulator)
- b.
- c.

You are to report to the Operations Supervisor, Requalification in the VEGP Training Center on Aug 29, 1988.  
(date)  
to be enrolled in the Accelerated Requalification Training Program outlined in Attachment 1 to this letter. You will be notified of successful completion of the outlined remedial training and subsequent date of return to active license status.

A copy of this letter and the attached remedial training program will be maintained in your training file.

Respectfully,

*Hennessy*  
Manager Operations

cc: Plant Training & Emergency Preparedness Manager  
Department Head  
Department Immediate Supervisor  
Licensee's Individual Training File

## PLANT VOGTLE TRAINING

## REMEDIAL TRAINING ACTION FORM

NAME William Heaney DATE 8-25-88  
 COURSE TITLE Annual Operating Exam  
 COURSE ID # LQ-15 CLASS # 88-07 END DATE OF COURSE 8-25-88  
 COURSE REQUIREMENT NOT COMPLETED

*Unsatisfactory performance during the simulator phase of the exam.*

## REMEDIAL ACTION NEEDED FOR COURSE CREDIT

- ① Review identified deficiencies w/ an instructor.
- ② Complete a practice simulator exam scenario.
- ③ Satisfactorily complete a other simulator exam of the same difficulty as the failed scenario, but different in content.
- ④ Removal from licensed duties

INSTRUCTOR Atkins 8-25-88  
 SIGNATURE/DATE

APPROVED Robert S. Brown 8/25/88  
 TRAINING SUPV/DATE

RETAIN THIS FORM IN SUSPENSE FILE UNTIL COMPLETE.

CORRECTIVE ACTION COMPLETE AS FOLLOWS:

INSTRUCTOR

DATE

PLANT VOGTLE TRAINING  
REMEDIAL TRAINING ACTION FORM

NAME William Heasley DATE 8-25-88  
 COURSE TITLE Annual Operating Exam  
 COURSE ID # LO-15 CLASS # 88-07 END DATE OF COURSE 8-25-88  
 COURSE REQUIREMENT NOT COMPLETED

*Unsatisfactory performance during the simulator phase of the exam.*

REMEDIAL ACTION NEEDED FOR COURSE CREDIT

- ① Review identified deficiencies w/ an instructor.
- ② Complete a practice simulator exam scenario.
- ③ Satisfactorily complete another simulator exam of the same difficulty as the failed scenario, but different in content.
- ④ Removal from license duties

INSTRUCTOR J. Heasley 8-25-88 APPROVED Robert S. Brown 9/2/88  
 SIGNATURE/DATE TRAINING SUPV/DATE

RETAIN THIS FORM IN SUSPENSE FILE UNTIL COMPLETE.

CORRECTIVE ACTION COMPLETE AS FOLLOWS:

- ① completed SAT
- ② completed SAT
- ③ completed SAT
- ④ recommend restriction to license duties

J. Heasley  
INSTRUCTOR

9/2/88  
DATE

FIGURE 8

ATTACHMENT 2

DATE: 7/20/89

FROM: Manager Operations  
TO: J.D. Williams  
(Licensee)

You have not met the minimum requirements of the Licensed Operator Requalification Training Program pursuant to VEGP Administrative Procedure 00715-C and will be placed on inactive license status and removed from licensed activities effective 7/19/89.  
(date)

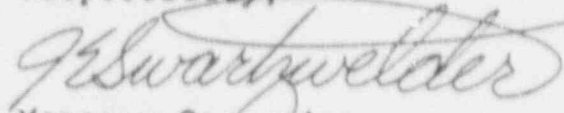
This is due to the following reason(s):

- a. FAILURE OF LICENSED OPERATOR ANNUAL OPERATING E
- b.
- c.

You are to report to the Operations Supervisor, Requalification in the VEGP Training Center on 7/21/89.  
(date)  
to be enrolled in the Accelerated Requalification Training Program outlined in Attachment 1 to this letter. You will be notified of successful completion of the outlined remedial training and subsequent date of return to active license status.

A copy of this letter and the attached remedial training program will be maintained in your training file.

Respectfully,

  
Manager Operations

cc: Plant Training & Emergency Preparedness Manager  
Department Head  
Department Immediate Supervisor  
Licensee's Individual Training File

EJK

PROCEEDING

REVISION

PAGE NO

VEGP

00715-C

4

21 of 23

ATTACHMENT 3

DATE: 7-23-89

FROM: Manager Operations

TO: Licensee

You J.D Williams have successfully completed the Accelerated Requalification Training Program discussed in my letter dated 7-20-89 and, are reinstated to current license status.

Respectfully,

*H. Buttenworth* for

Manager Operations

cc: Plant Training & Emergency Preparedness Manager  
Licensee Department Head  
Licensee Department Supervisor  
Licensee Training File



VEGP

00715-C

4

21 of 23

## ATTACHMENT 3

DATE: 7-23-89

FROM: Manager Operations

TO: Licensee

You W.P. Stephens have successfully completed the Accelerated Requalification Training Program discussed in my letter dated 7-20-89 and, are reinstated to current license status.

Respectfully,

*W. Buttimore* For  
Manager Operations

cc: Plant Training & Emergency Preparedness Manager  
Licensee Department Head  
Licensee Department Supervisor  
Licensee Training File

ATTACHMENT 2

DATE: 7/20/89

FROM: Manager Operations

TO: W. P. STEPHENS  
(Licensee)

You have not met the minimum requirements of the Licensed Operator Requalification Training Program pursuant to VEGP Administrative Procedure 00715-C and will be placed on inactive license status and removed from licensed activities effective 7/19/89.  
(date)

This is due to the following reason(s):

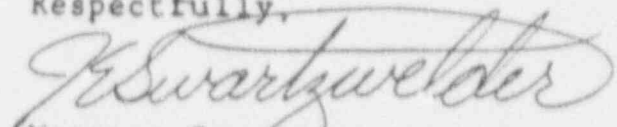
- a. FAILURE OF LICENSED OPERATOR ANNUAL OPERATING EXAM
- b.
- c.

You are to report to the Operations Supervisor, Requalification in the VEGP Training Center on 7/21/89  
(date)

to be enrolled in the Accelerated Requalification Training Program outlined in Attachment 1 to this letter. You will be notified of successful completion of the outlined remedial training and subsequent date of return to active license status.

A copy of this letter and the attached remedial training program will be maintained in your training file.

Respectfully,

  
Manager Operations

cc: Plant Training & Emergency Preparedness Manager  
Department Head  
Department Immediate Supervisor  
Licensee's Individual Training File

## ATTACHMENT 3

DATE: 7.23.89

FROM: Manager Operations

TO: Licensee

You w.m. watkins have successfully completed the Accelerated Requalification Training Program discussed in my letter dated 7.20.89 and, are reinstated to current license status.

Respectfully,

*H. Butterworth* for  
Manager Operations

cc: Plant Training & Emergency Preparedness Manager  
Licensee Department Head  
Licensee Department Supervisor  
Licensee Training File

## ATTACHMENT 2

DATE: 7/20/89

FROM: Manager Operations

TO: W. M. WATKINS  
(Licensee)

You have not met the minimum requirements of the Licensed Operator Requalification Training Program pursuant to VEGP Administrative Procedure 00715-C and will be placed on inactive license status and removed from licensed activities effective 7/19/89.  
(date)

This is due to the following reason(s):

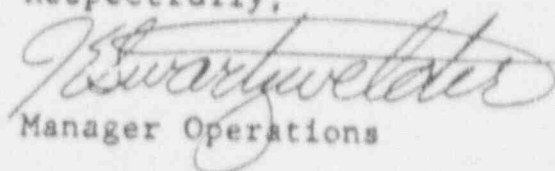
- a. FAILURE OF LICENSED OPERATOR ANNUAL OPERATING EXAM
- b.
- c.

You are to report to the Operations Supervisor, Requalification in the VEGP Training Center on 7/21/89  
(date)

to be enrolled in the Accelerated Requalification Training Program outlined in Attachment 1 to this letter. You will be notified of successful completion of the outlined remedial training and subsequent date of return to active license status.

A copy of this letter and the attached remedial training program will be maintained in your training file.

Respectfully,

  
Manager Operations

cc: Plant Training & Emergency Preparedness Manager  
Department Head  
Department Immediate Supervisor  
Licensee's Individual Training File

DATE: 7-18-89

FROM: Manager Operations

TO: David Haile  
(Licensee)

You have not met the minimum requirements of the Licensed Operator Requalification Training Program pursuant to VEGP Administrative Procedure 00715-C and will be placed on inactive license status and removed from licensed activities effective

7-18-89

(date)

This is due to the following reason(s):

- a. Failure of Annual Operating Exam
- b.
- c.

You are to report to the Operations Supervisor, Requalification in the VEGP Training Center on

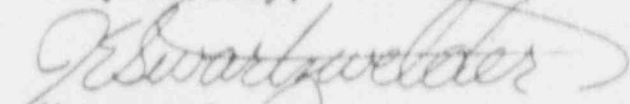
TBD

(date)

to be enrolled in the Accelerated Requalification Training Program outlined in Attachment 1 to this letter. You will be notified of successful completion of the outlined remedial training and subsequent date of return to active license status.

A copy of this letter and the attached remedial training program will be maintained in your training file.

Respectfully,



Manager Operations

cc: Plant Training & Emergency Preparedness Manager LRH  
 Department Head WLB  
 Department Immediate Supervisor OCS  
 Licensee's Individual Training File

VEGP

00715-C

4

21 of 23

## ATTACHMENT 3

DATE: 7-23-89

FROM: Manager Operations

TO: Licensee

You D.C. Haile have successfully completed the Accelerated Requalification Training Program discussed in my letter dated 7-20-89 and, are reinstated to current license status.

Respectfully,

*H. Butterword* For  
Manager Operations

cc: Plant Training & Emergency Preparedness Manager  
Licensee Department Head  
Licensee Department Supervisor  
Licensee Training File

ATTACHMENT 2

DATE: 7/20/89

FROM: Manager Operations  
TO: JW COVINGTON  
(Licensee)

You have not met the minimum requirements of the Licensed Operator Requalification Training Program pursuant to VEGP Administrative Procedure 00715-C and will be placed on inactive license status and removed from licensed activities effective 7/19/89  
(date)

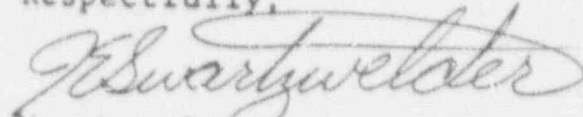
This is due to the following reason(s):

- a. FAILURE OF LICENSED OPERATOR ANNUAL OPERATING EXA
- b.
- c.

You are to report to the Operations Supervisor, Requalification in the VEGP Training Center on 7/21/89  
(date) to be enrolled in the Accelerated Requalification Training Program outlined in Attachment 1 to this letter. You will be notified of successful completion of the outlined remedial training and subsequent date of return to active license status.

A copy of this letter and the attached remedial training program will be maintained in your training file.

Respectfully,

  
Manager Operations

cc: Plant Training & Emergency Preparedness Manager  
Department Head  
Department Immediate Supervisor  
Licensee's Individual Training File

## ATTACHMENT 3

DATE: 10-21-88

FROM: Manager Operations

TO: Licensee

You Ron LeGrand have successfully completed the Accelerated Requalification Training Program outlined in letter dated 8-8-88 and, are reinstated to active license status.

Respectfully,

*W F Kitchens*

Manager Operations

cc: Plant Training & Emergency Preparedness Manager  
Licensee Department Head  
Licensee Department Supervisor  
Licensee Training File

\* actual date of successful completion 9-8-88



## ATTACHMENT 2

DATE: 7-29-88

FROM: Manager Operations

TO: R.L. LeGrand  
(Licensee)

You have not met the minimum requirements of the Licensed Operator Requalification Training Program pursuant to VEGP Administrative Procedure 00715-C and will be placed on inactive license status and removed from licensed activities effective ~~7-29-88~~ 7-28-88 (date)

This is due to the following reason(s):

- a. Failure of Operating Test (Simulator and walkthrough)
- b.
- c.

You are to report to the Operations Supervisor, Requalification in the VEGP Training Center on 8-8-88 (date) to be enrolled in the Accelerated Requalification Training Program outlined in Attachment 1 to this letter. You will be notified of successful completion of the outlined remedial training and subsequent date of return to active license status.

A copy of this letter and the attached remedial training program will be maintained in your training file.

Respectfully,

*W.F. Kitchens*  
Manager Operations

cc: Plant Training & Emergency Preparedness Manager  
Department Head  
Department Immediate Supervisor  
Licensee's Individual Training File

PLANT VOGTLE TRAINING  
REMEDIAL TRAINING ACTION FORM

NAME LaGrand, RL. DATE 7/29/88  
 COURSE TITLE LV. Regual Annual Operating Test.  
 COURSE ID # RQ-05 CLASS # 88-23 END DATE OF COURSE 7/29/88

COURSE REQUIREMENT NOT COMPLETED

Failed both parts (simulator and plant walkthrough) of the Annual Operating Test.

REMEDIAL ACTION NEEDED FOR COURSE CREDIT

In accordance with Admin. Procedure 00715-c, section 4.3.2:

1. Review failed Operating Test with P. Zubin (Evaluator)
2. Attend accelerated Regual Training Program to include as a minimum:
  - a. One additional simulator practice session.
  - b. Guided Self Study Program (Systems Review)
3. Successfully complete another Annual Operating Test similar in scope and content to the original examination.

INSTRUCTOR [Signature] 7/29/88 APPROVED [Signature] 7/29/88  
 SIGNATURE/DATE TRAINING SUPERV/DATE

RETAIN THIS FORM IN SUSPENSE FILE UNTIL COMPLETE.

CORRECTIVE ACTION COMPLETE AS FOLLOWS:

INSTRUCTOR

DATE

## PLANT VOGTLE TRAINING

## REMEDIAL TRAINING ACTION FORM

NAME Le Grand, R.L.DATE 7/29/88COURSE TITLE LD Regual Annual Operating Test.COURSE ID RQ-05 CLASS 88-03 END DATE OF COURSE 7/29/88

## COURSE REQUIREMENT NOT COMPLETED

Failed both parts (simulator and plant walkthrough) of the Annual Operating Test.

## REMEDIAL ACTION NEEDED FOR COURSE CREDIT

In accordance with Admin. Procedure 00715-C, section 4.3.2:

1. Review failed Operating Test with P. Rubin (Evaluator)
2. Attend accelerated Regual Training Program to include as a minimum:
  - a. One additional simulator practice session.
  - b. Guided Self Study Program (Systems Review)
3. Successfully complete another Annual Operating Test similar in scope and content to the original examination

INSTRUCTOR R. Rubin

SIGNATURE/DATE

7/29/88APPROVED Robert S. Brown

TRAINING SUPV/DATE

7/29/88

RETAIN THIS FORM IN SUSPENSE FILE UNTIL COMPLETE.

## CORRECTIVE ACTION COMPLETE AS FOLLOWS:

1. a. Attended simulator practice session.
- b. Guided Self Study.
3. Completed simulator exam (8/19/88) and walk-thru exam (8/18/88) with satisfactory results.
1. Reviewed test with P. Rubin on 9/6/88. Also did his study program (P. Rubin)

R. Rubin

INSTRUCTOR

9-8-88

DATE

## ATTACHMENT 3

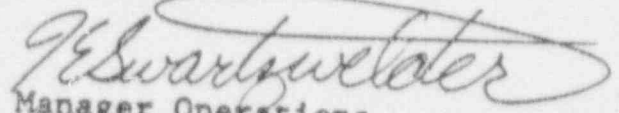
DATE: 8/14/89

FROM: Manager Operations

TO: Licensee

You G.J. DURRANCE have successfully completed the Accelerated Requalification Training Program discussed in my letter dated 7/31/89 and, are reinstated to current license status.

Respectfully,

  
Manager Operations

cc: Plant Training & Emergency Preparedness Manager  
Licensee Department Head  
Licensee Department Supervisor  
Licensee Training File

## ATTACHMENT 2

DATE: 7/11/89

FROM: Manager Operations

TO: GRFC DURANCE  
(Licensee)

You have not met the minimum requirements of the Licensed Operator Requalification Training Program pursuant to VEGP Administrative Procedure 00715-C and will be placed on inactive license status and removed from licensed activities effective 7/11/89 (date).

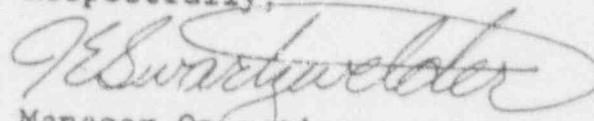
This is due to the following reason(s):

- a. FAILURE OF ANNUAL WRITTEN REQUALIFICATION EXAM
- b.
- c.

You are to report to the Operations Supervisor, Requalification in the VEGP Training Center on 8-1-89 (date) to be enrolled in the Accelerated Requalification Training Program outlined in Attachment 1 to this letter. You will be notified of successful completion of the outlined remedial training and subsequent date of return to active license status.

A copy of this letter and the attached remedial training program will be maintained in your training file.

Respectfully,

  
Manager Operations

cc: Plant Training & Emergency Preparedness Manager  
Department Head  
Department Immediate Supervisor  
Licensee's Individual Training File

Remedial Training Action Form  
PLANT VOGTLE TRAINING

Name: GREG DURZENCE Date: 7/28/89

Course Title: ANNUAL WRITTEN EXAM

Course ID No.: SR-896 Class No.: 03 End Date of Course: 7/28/89

Course Requirement Not Completed:

Failed the ANNUAL WRITTEN EXAM WITH ONE SECTION LESS THAN 70% AND OVERALL LESS THAN 80% ON THE TWO-PART EXAM

Remedial Action Needed For Course Credit:

- ① Review both exams with an instructor SR-896 03.A ; SR-896
- ② Perform directed self study under guidance of instructor
- ③ Retake both parts of THE ANNUAL WRITTEN EXAM AND PASS EACH SECTION WITH A MINIMUM SCORE OF 70% AND AN OVERALL AVERAGE SCORE OF 80%.

Instructor Charles S. [Signature] 8/1/89 Approved Robert S. [Signature] 8/1/89  
Signature/Date Training Supv./Date

Retain This Form in Suspense File Until Complete.

Corrective Action Complete as Follows:

\_\_\_\_\_  
Instructor Date