

STOP, THINK, ACT AND REVIEW

TABLE

TRIP INPUTS
1 HIGH POWER LEVEL
2 HIGH RATE OF CHANGE OF POWER
3 LOW FLOW REACTOR COOLANT
4 LOW WATER LEVEL STEAM GENERATORS
5 LOW PRESSURE STEAM GENERATORS
6 HIGH PRESSURE PRESSURIZER
7 THERMAL HANGOVER PRESSURE
8 LOSS OF LOAD
9 HIGH JAMTANT PRESSURE
10 JAMM POWER DISTRIBUTION

REACTOR PROTECTIVE SYSTEM FUNCTIONAL DIAGRAM

CALVERT CLIFFS NUCLEAR POWER PLANT  
ENGINEERING SERVICES DEPARTMENT  
CALVERT CLIFFS UNIT 1 & 2  
REV. 12/28-0012

# 7-2A REACTOR PROTECTIVE SYSTEM - INTERFACE LOGIC DIAGRAM

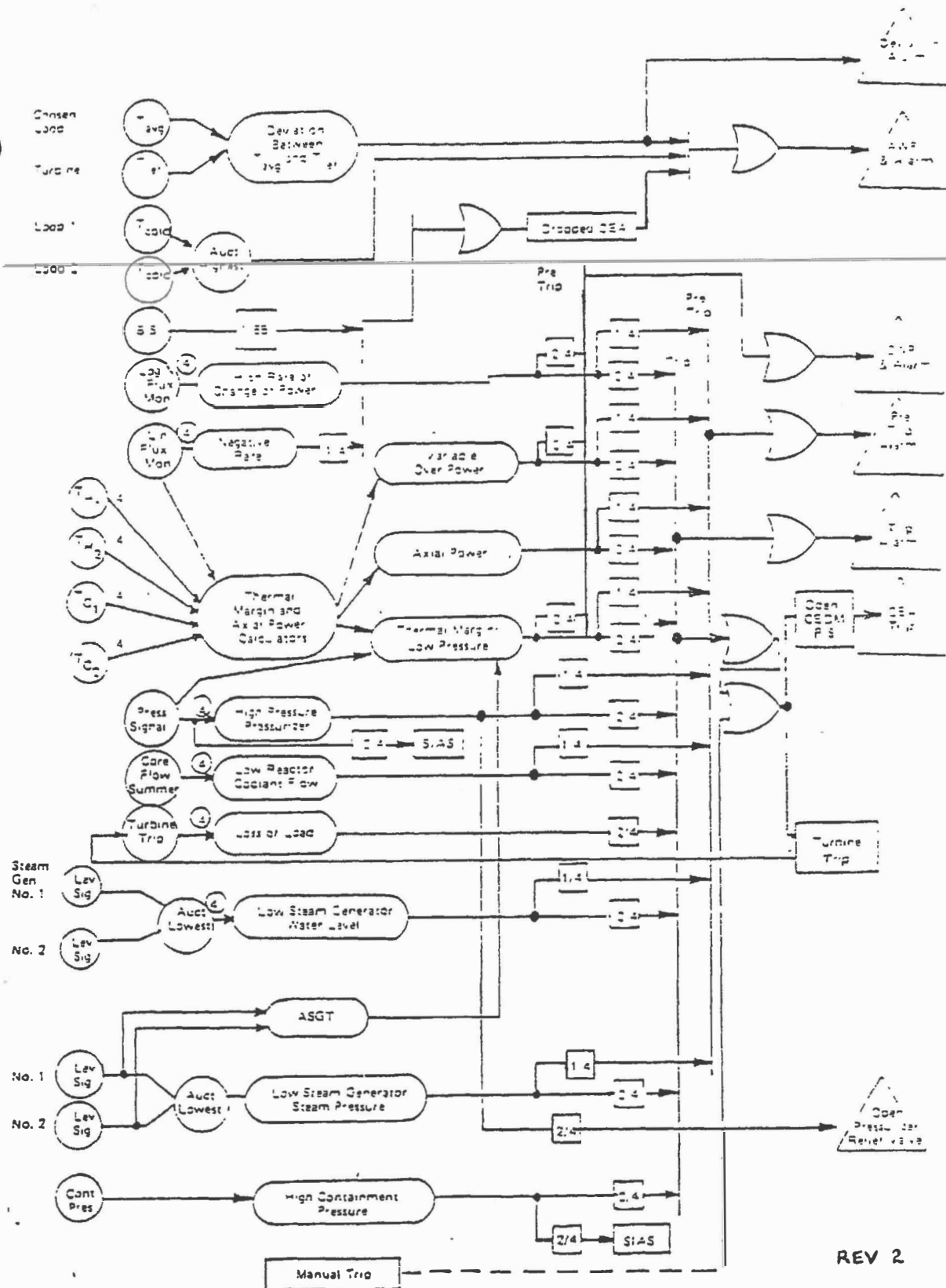
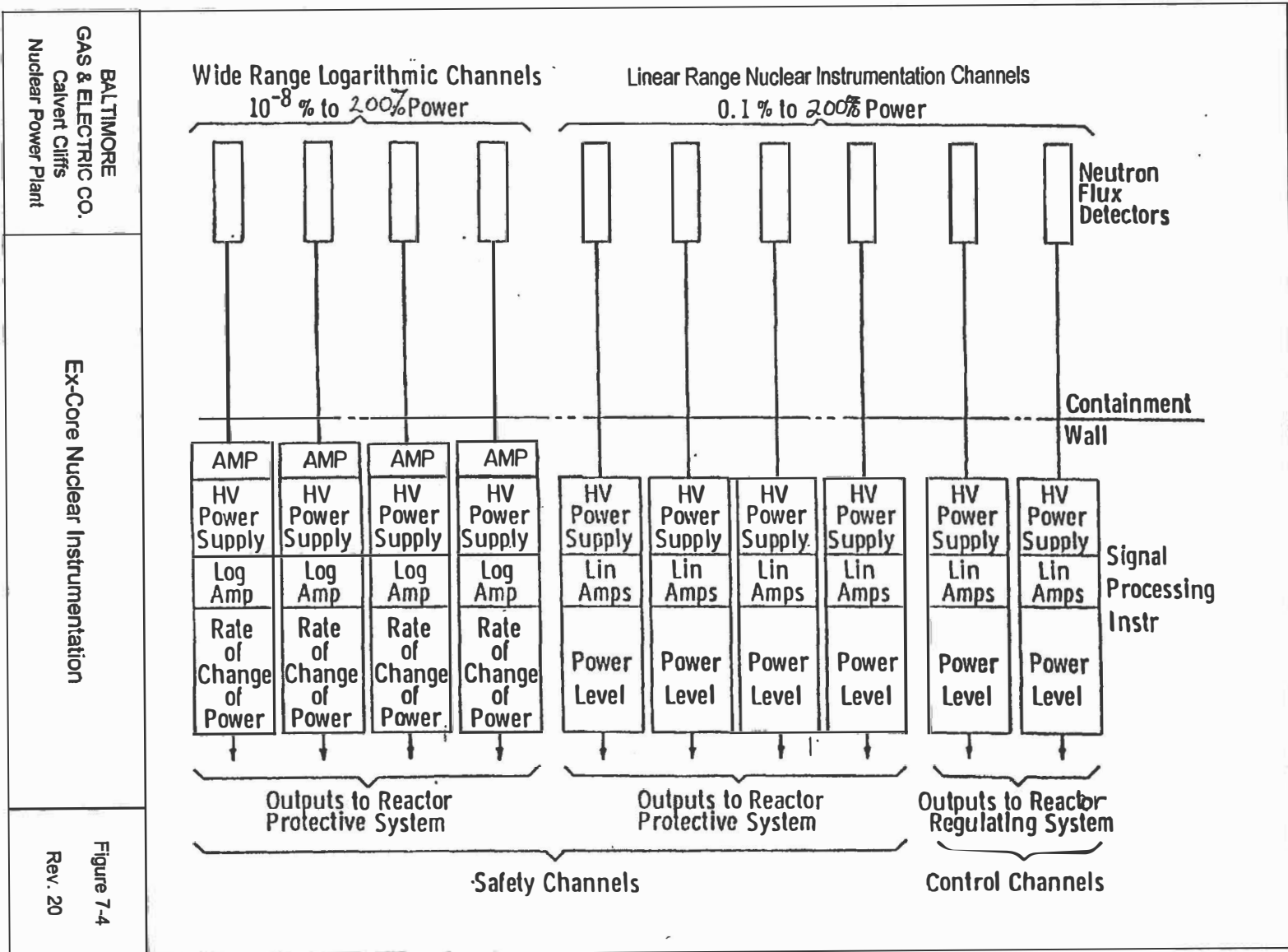


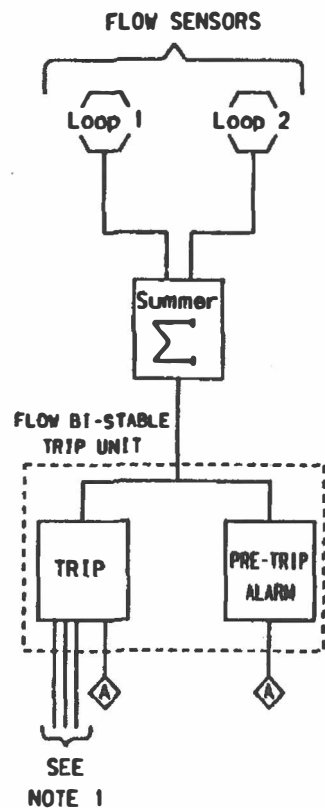
Figure 7-2A REACTOR PROTECTIVE SYSTEM INTERFACE LOGIC DIAGRAM

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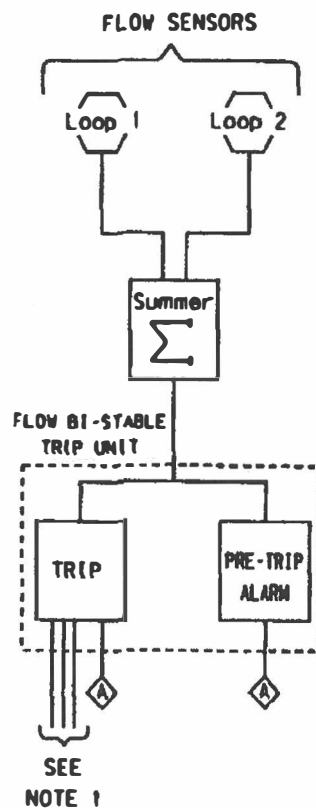




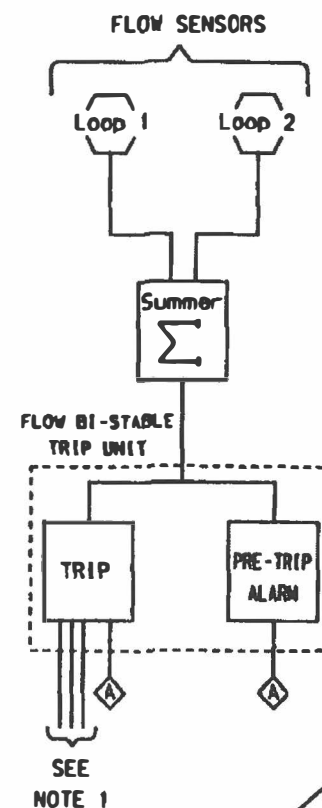
MEASUREMENT CHANNEL A



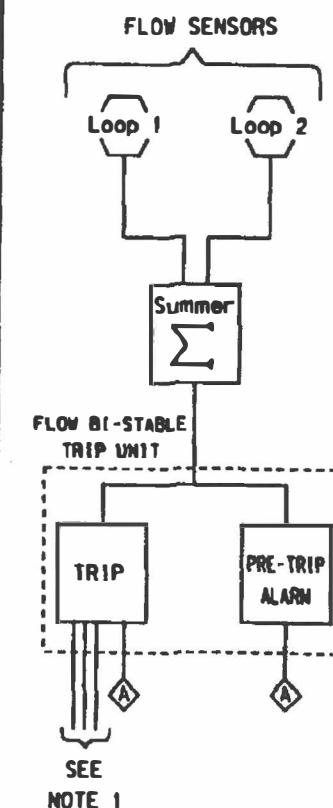
MEASUREMENT CHANNEL B



MEASUREMENT CHANNEL C



MEASUREMENT CHANNEL D



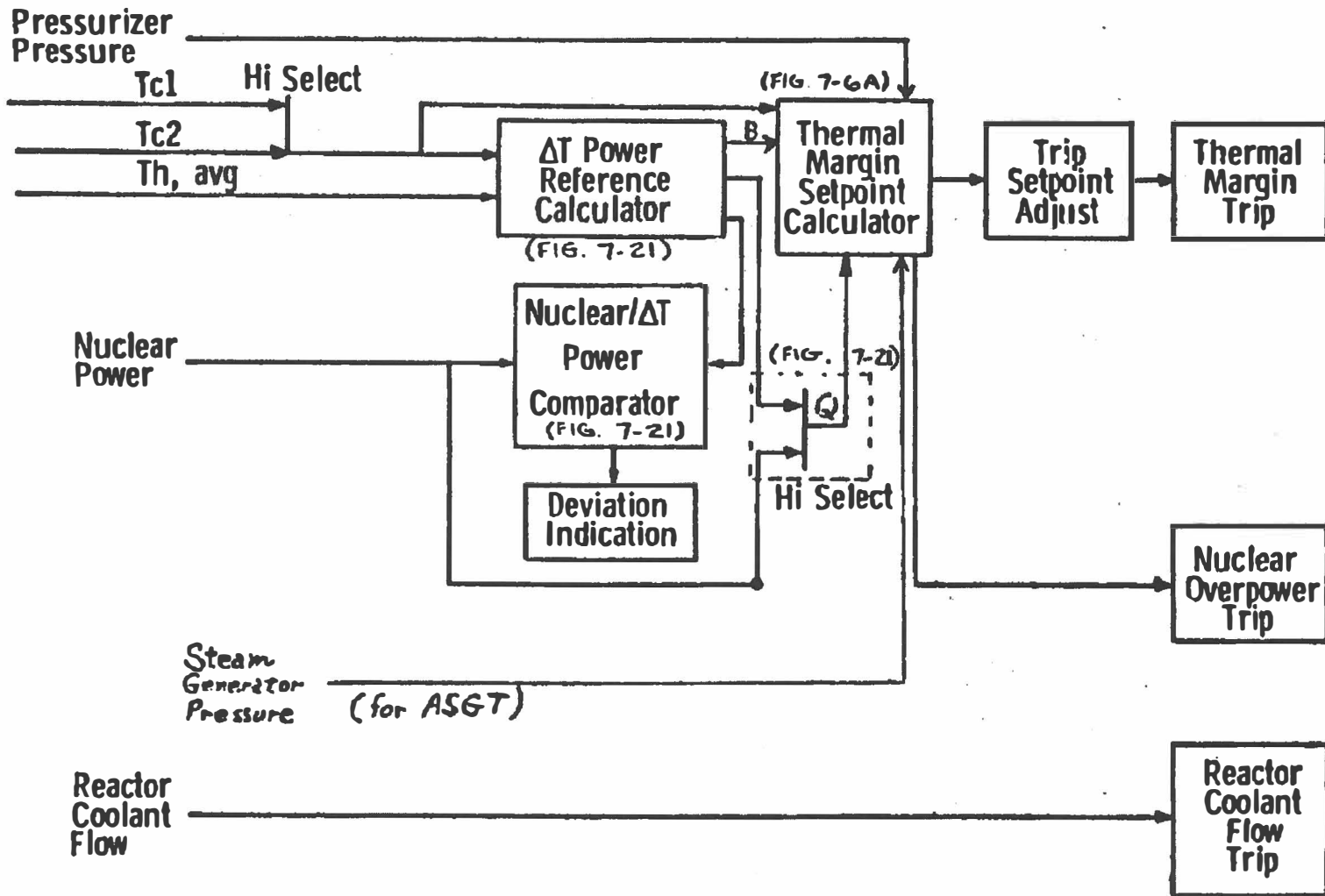
MECHANICAL  
BARRIER

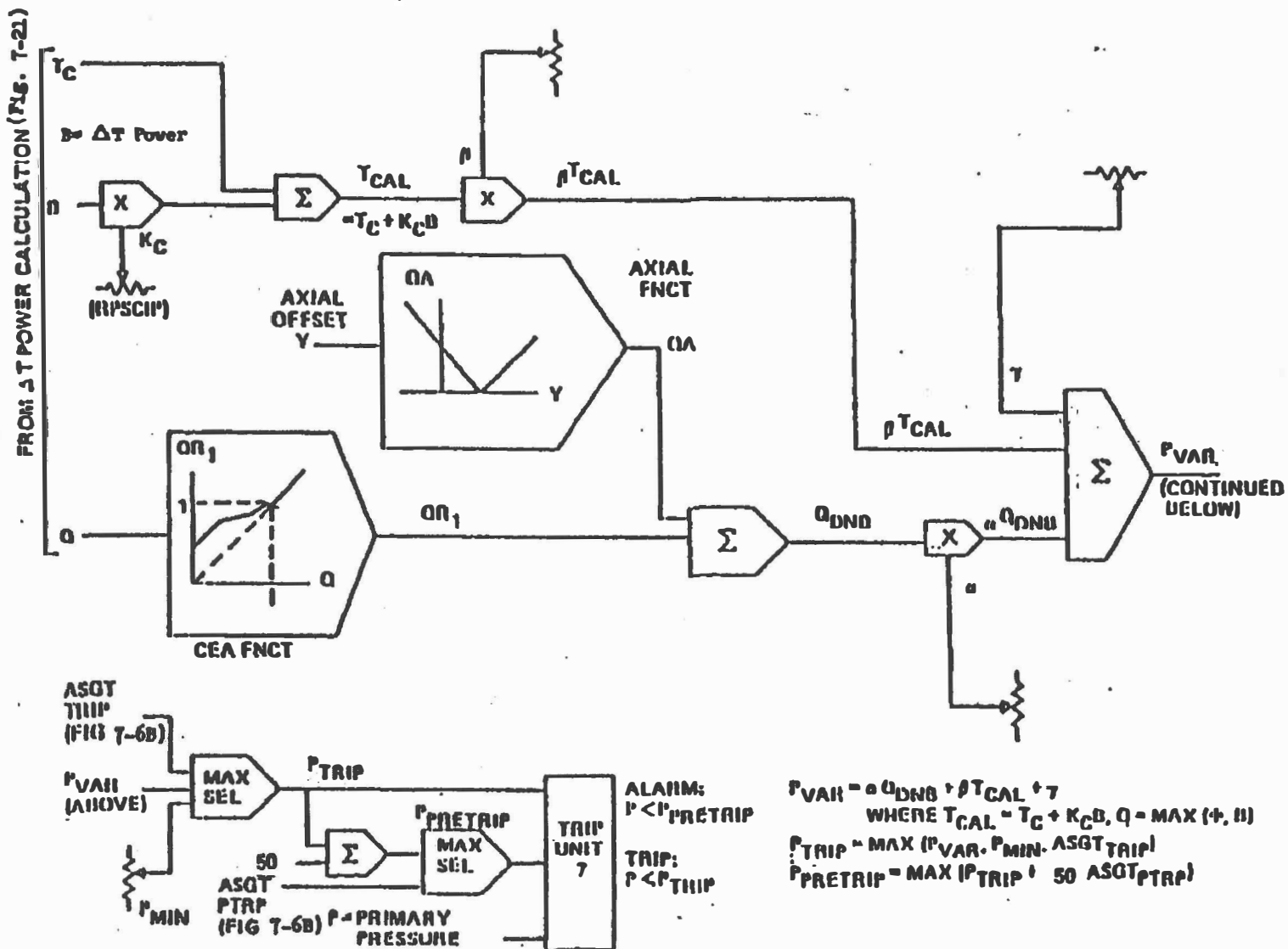
Note 1: To 2 out of 4 Logic Matrices  
Reactor Protective System  
Functional Diagram

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# THERMAL MARGIN/LOW PRESSURE TRIP CHANNEL - BLOCK DIAGRAM

Figure 7-6  
Rev. 31





IF  $|\Delta\text{PSG}| > \text{ASGT}_{\text{TRIP SET}}$ ,  $\text{ASGT}_{\text{TRIP}} = 2500 \text{ PSI}$ . ELSE  $\text{ASGT}_{\text{TRIP}} = 0 \text{ PSI}$   
 IF  $|\Delta\text{PSG}| > \text{ASGT}_{\text{PRETRIP}}$ ,  $\text{ASGT}_{\text{PTRP}} = 2500 \text{ PSI}$ . ELSE  $\text{ASGT}_{\text{PRETRIP}} = 0 \text{ PSI}$

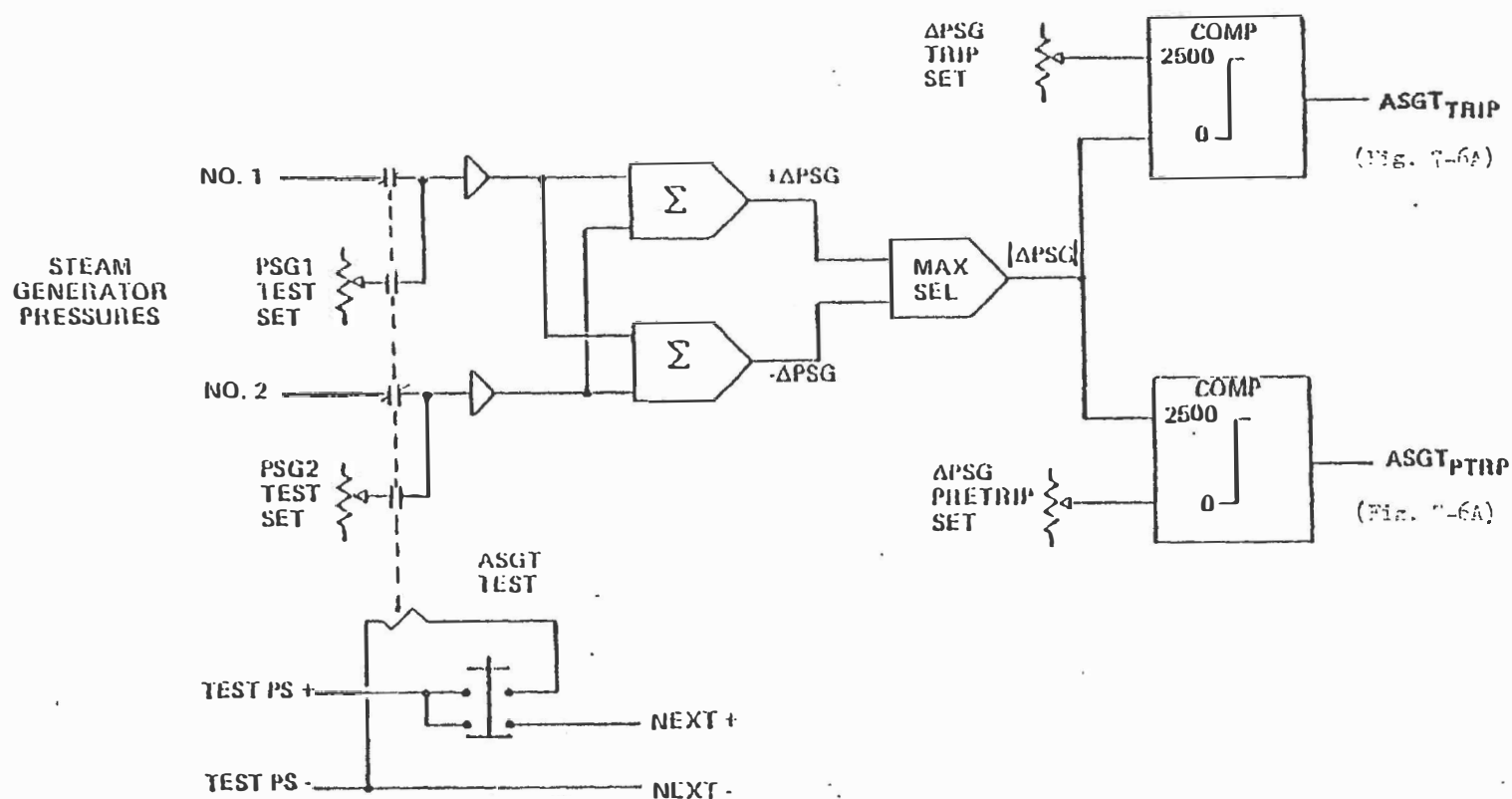
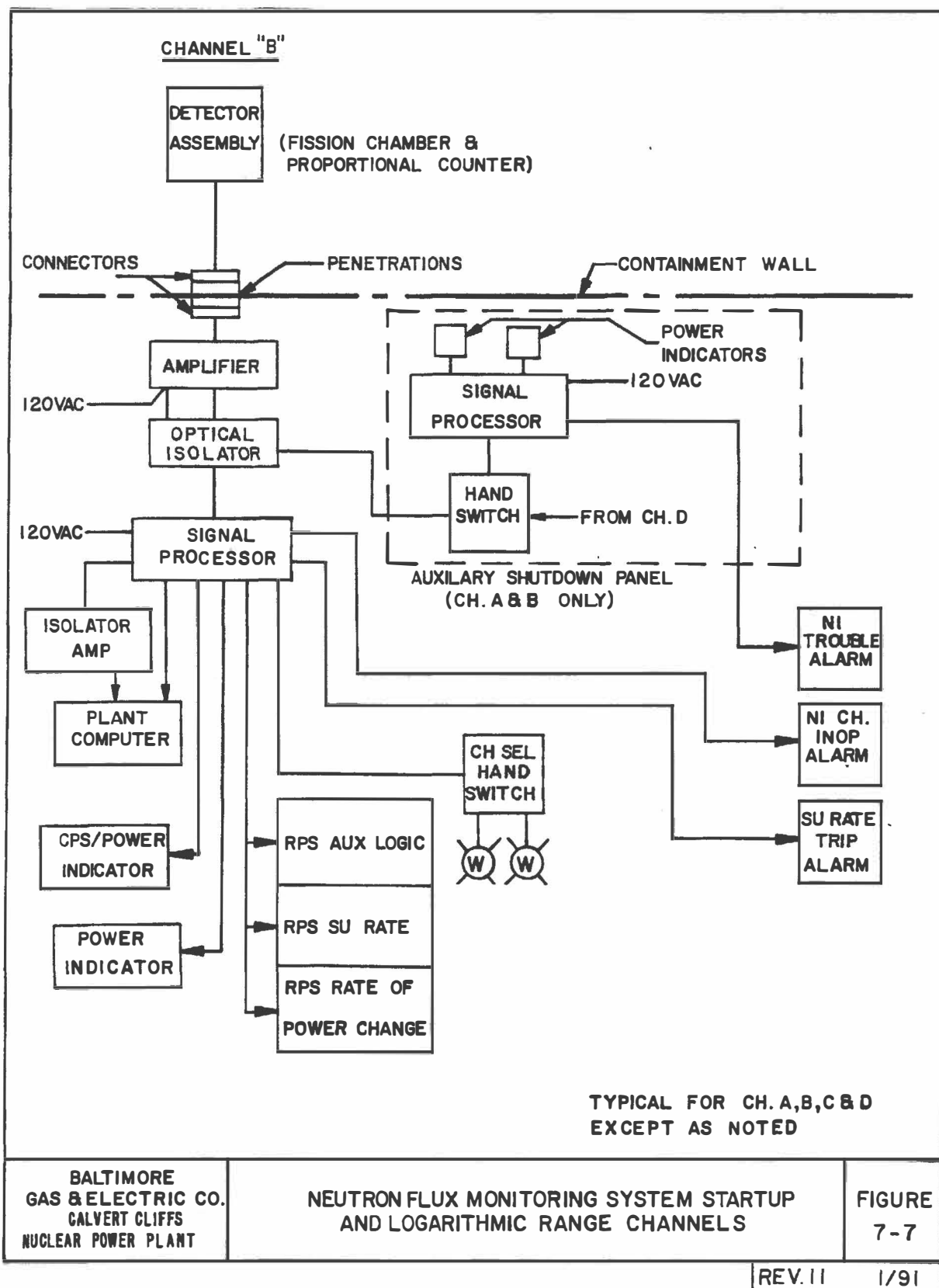
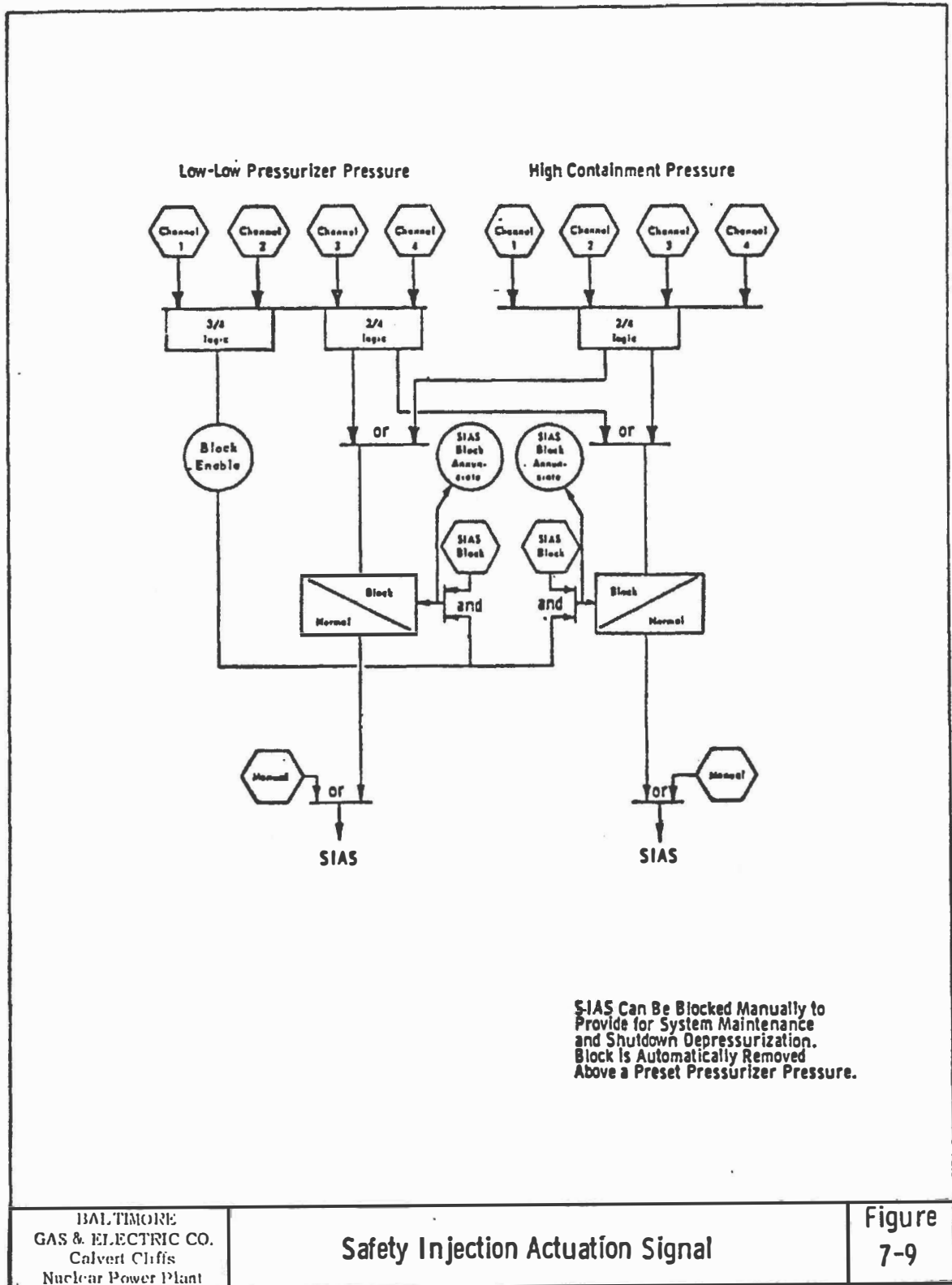
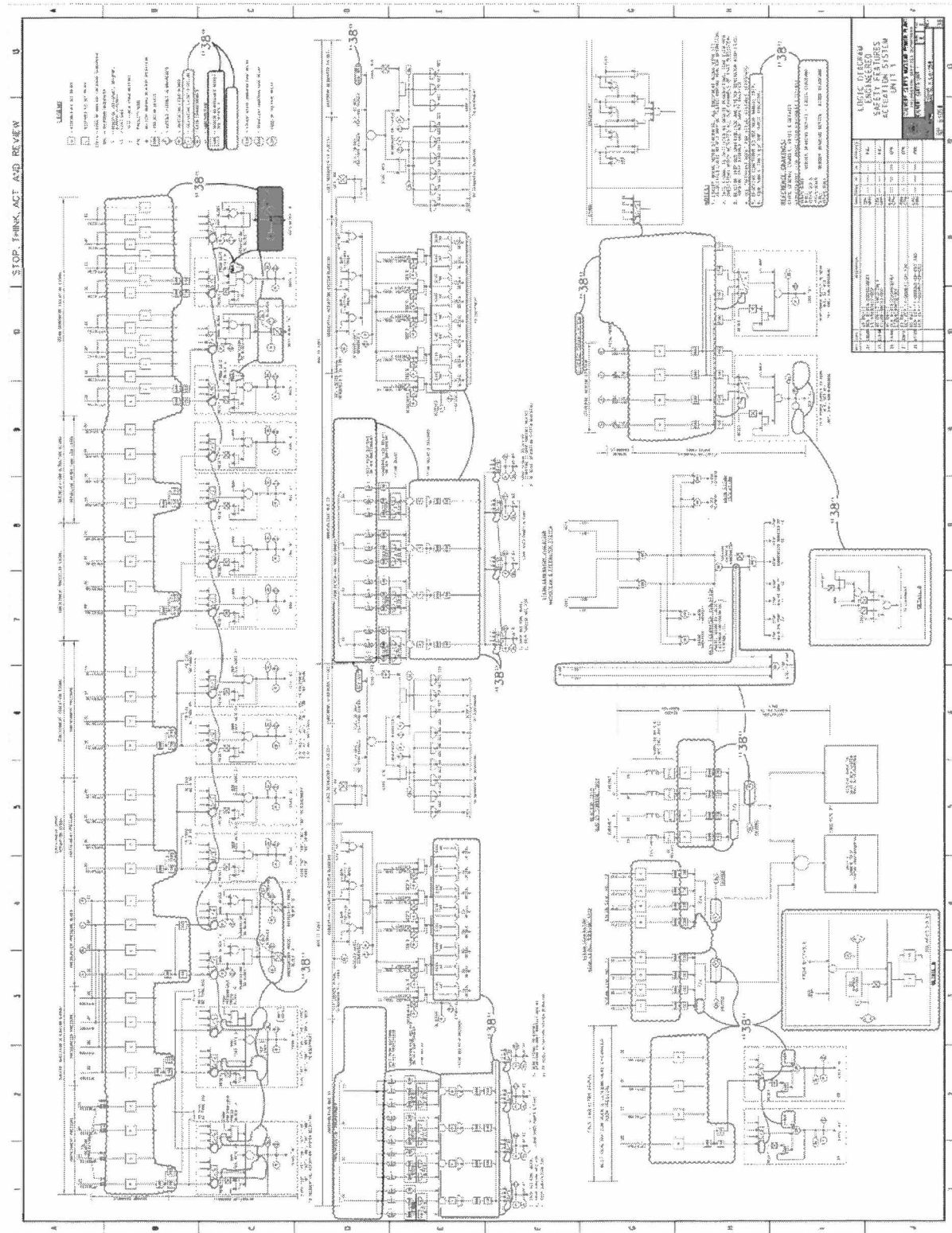


FIG. 7-6P Asymmetric Steam Generator Trip (ASGT) - Functional Diagram





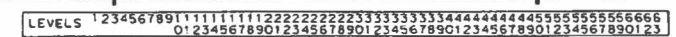
**FIGURE 07-10 LOGIC DIAGRAM ENGINEERED SAFETY FEATURES ACTUATION SYSTEM UNIT 1 SHEET 1**

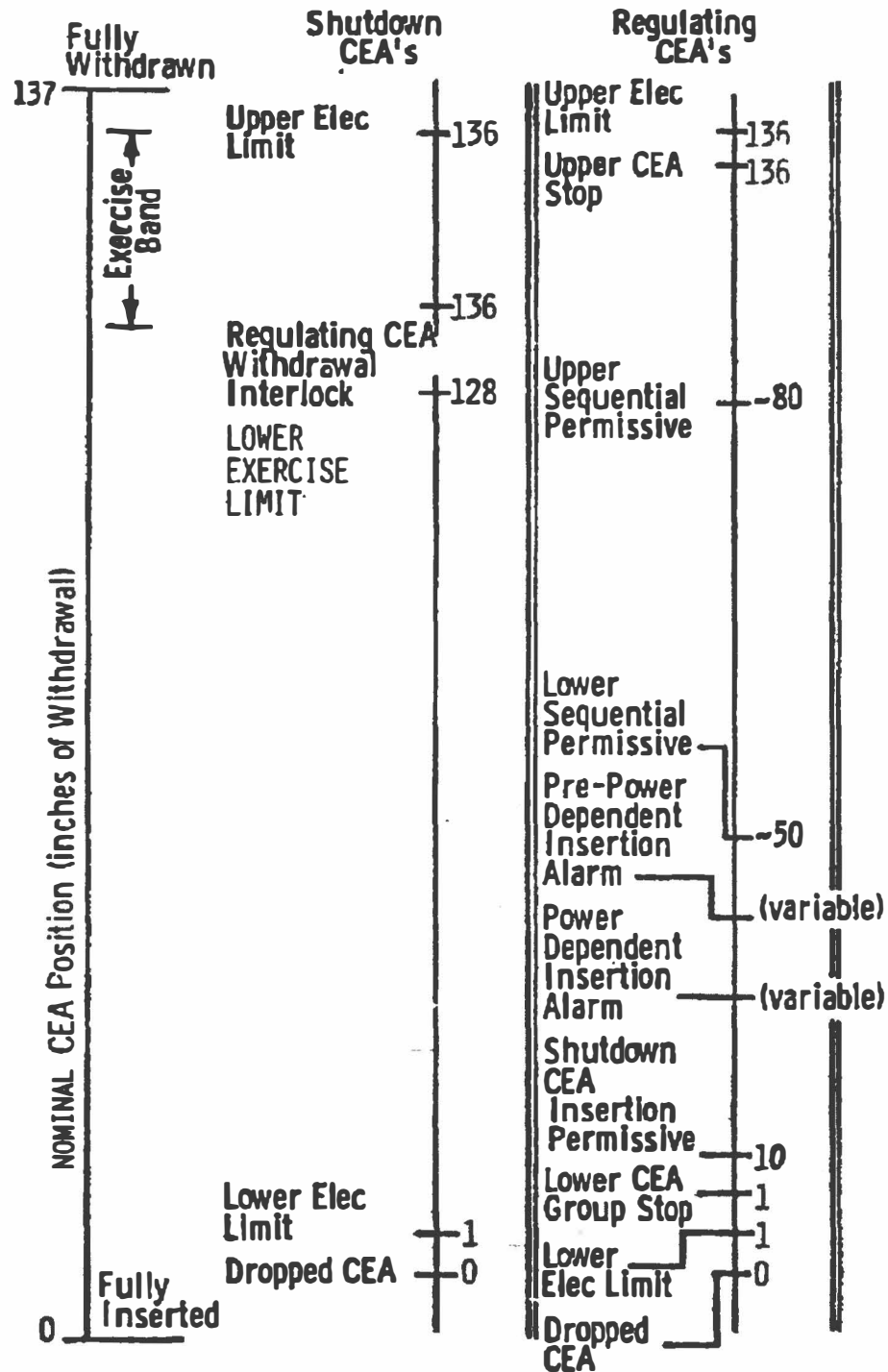




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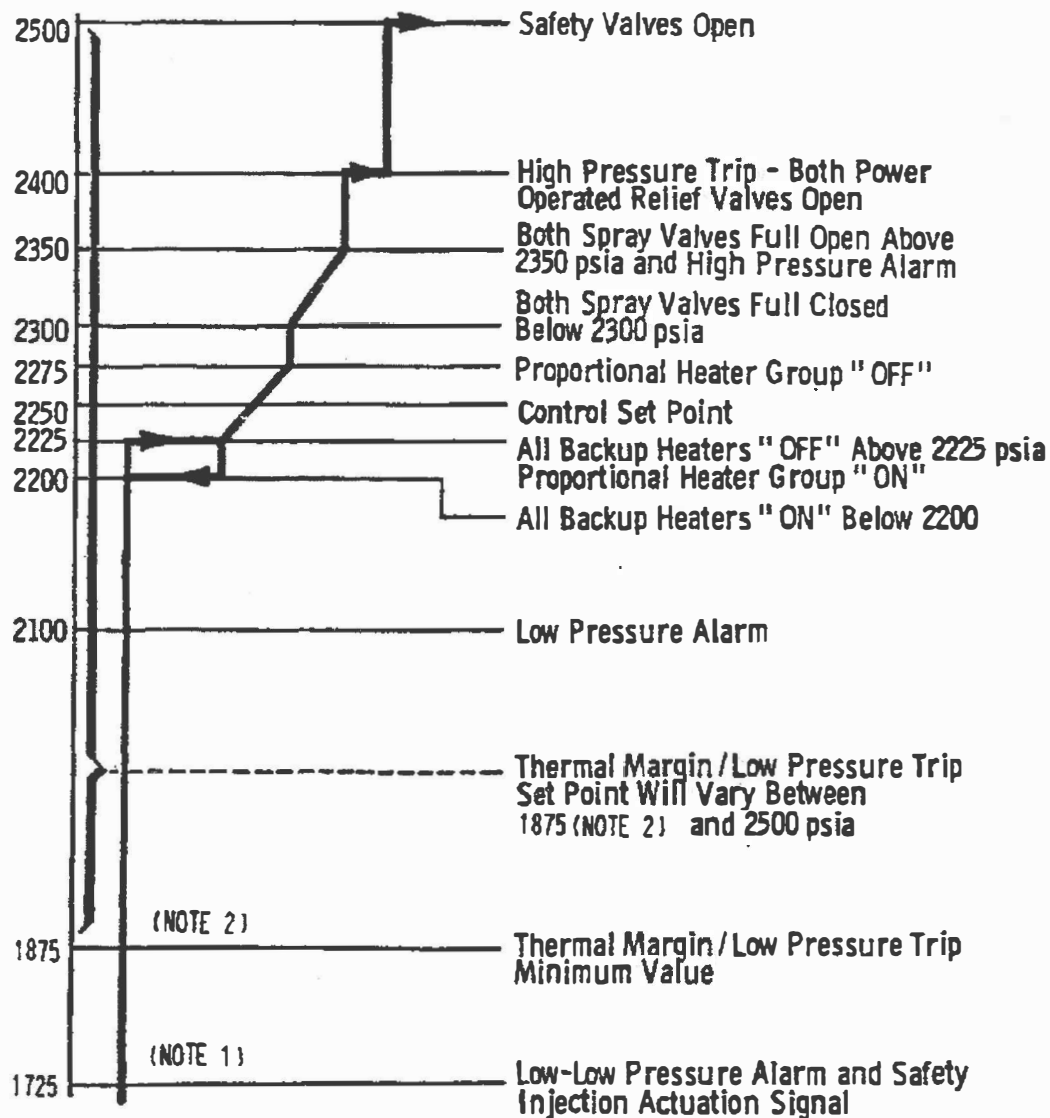
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Calvert Cliffs  
Nuclear Power Plant

# CEA POSITION SETPOINTS

REV.  
26

Figure  
7-12

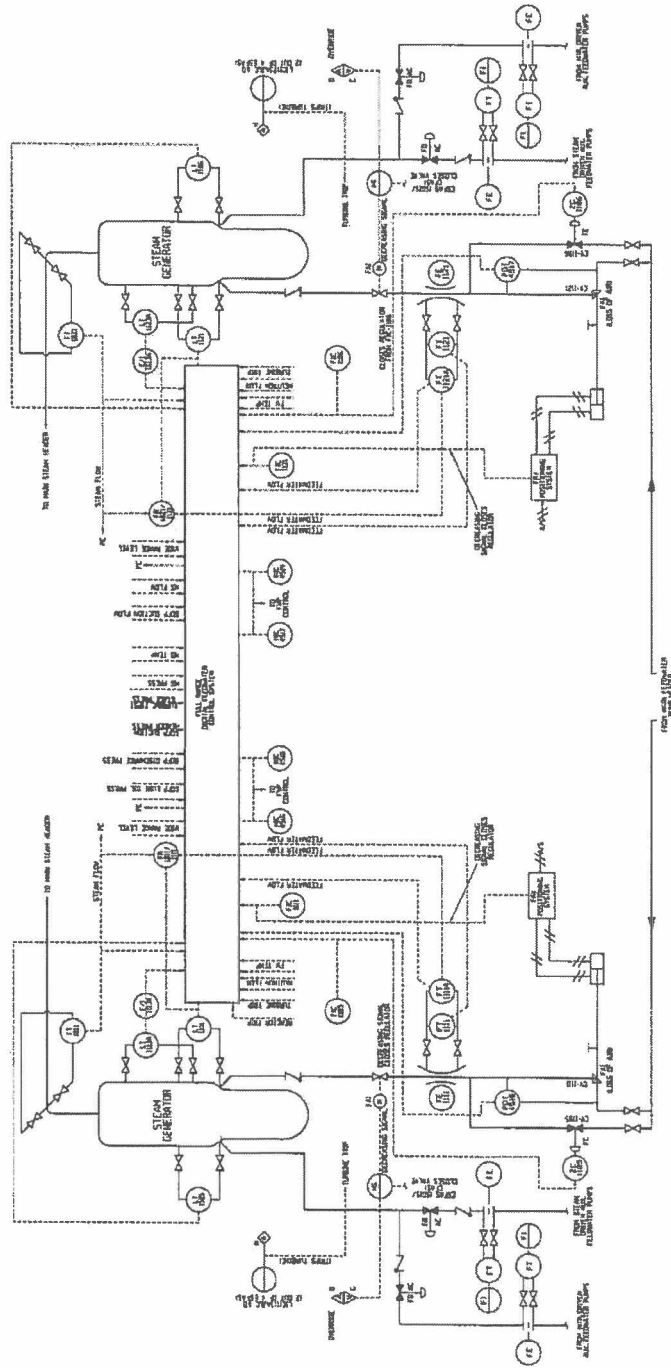
C. PRAGER



NOTE 1: Technical Specification 3.3-4, Table 3.3.4-1

NOTE 2: UFSAR Table 7-1

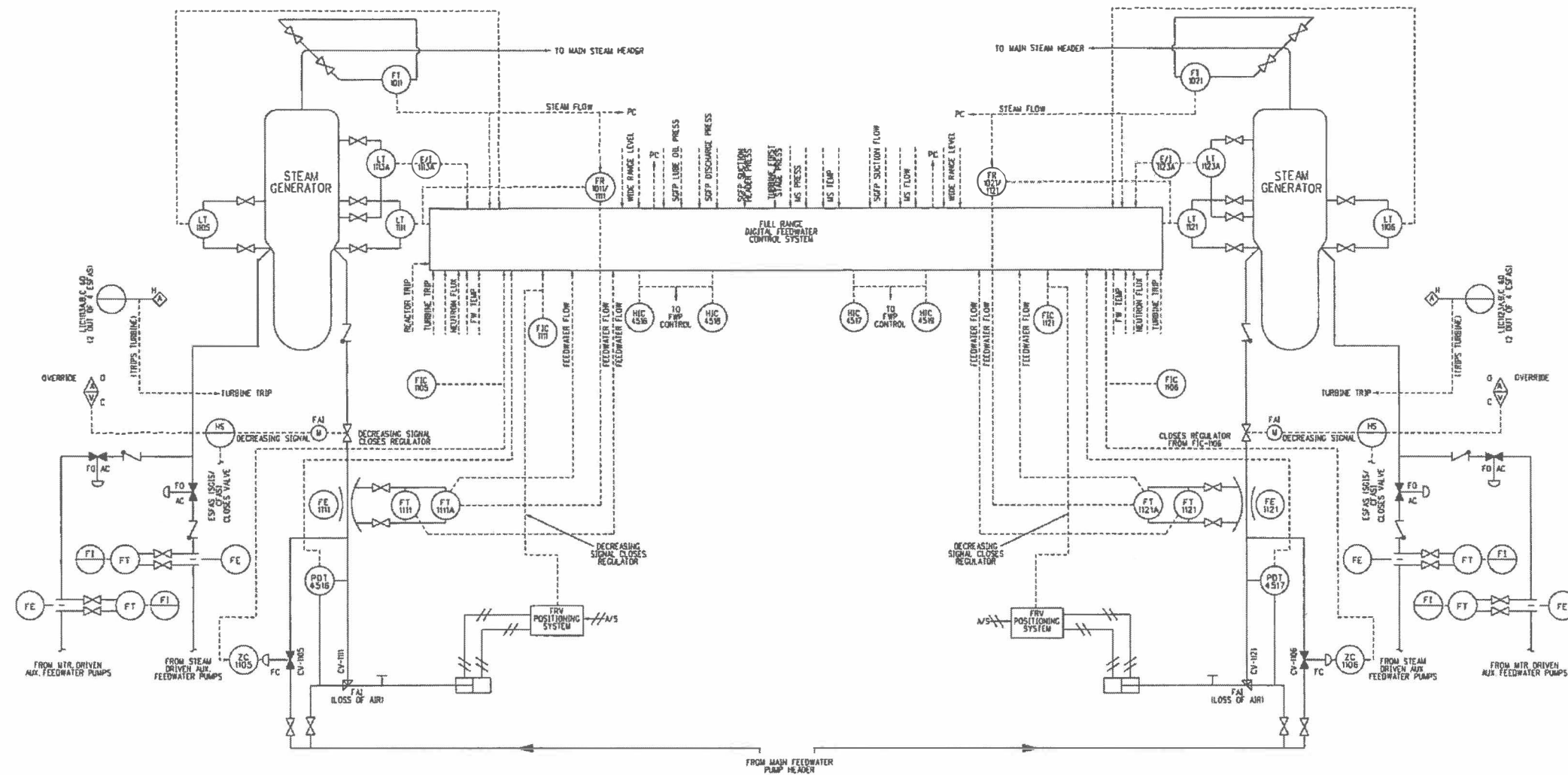
FIGURE 7-14A FEED WATER CONTROL SYSTEM - BLOCK DIAGRAM, UNIT 1



FOR A23, DETAILS SEE

UNIT 1 CLUTCH MECHANICAL POWER PLANT  
 UPPER TOWER 7-14A  
 FEEDWATER CONTROL SYSTEM  
 SEE DRAWING 4/4

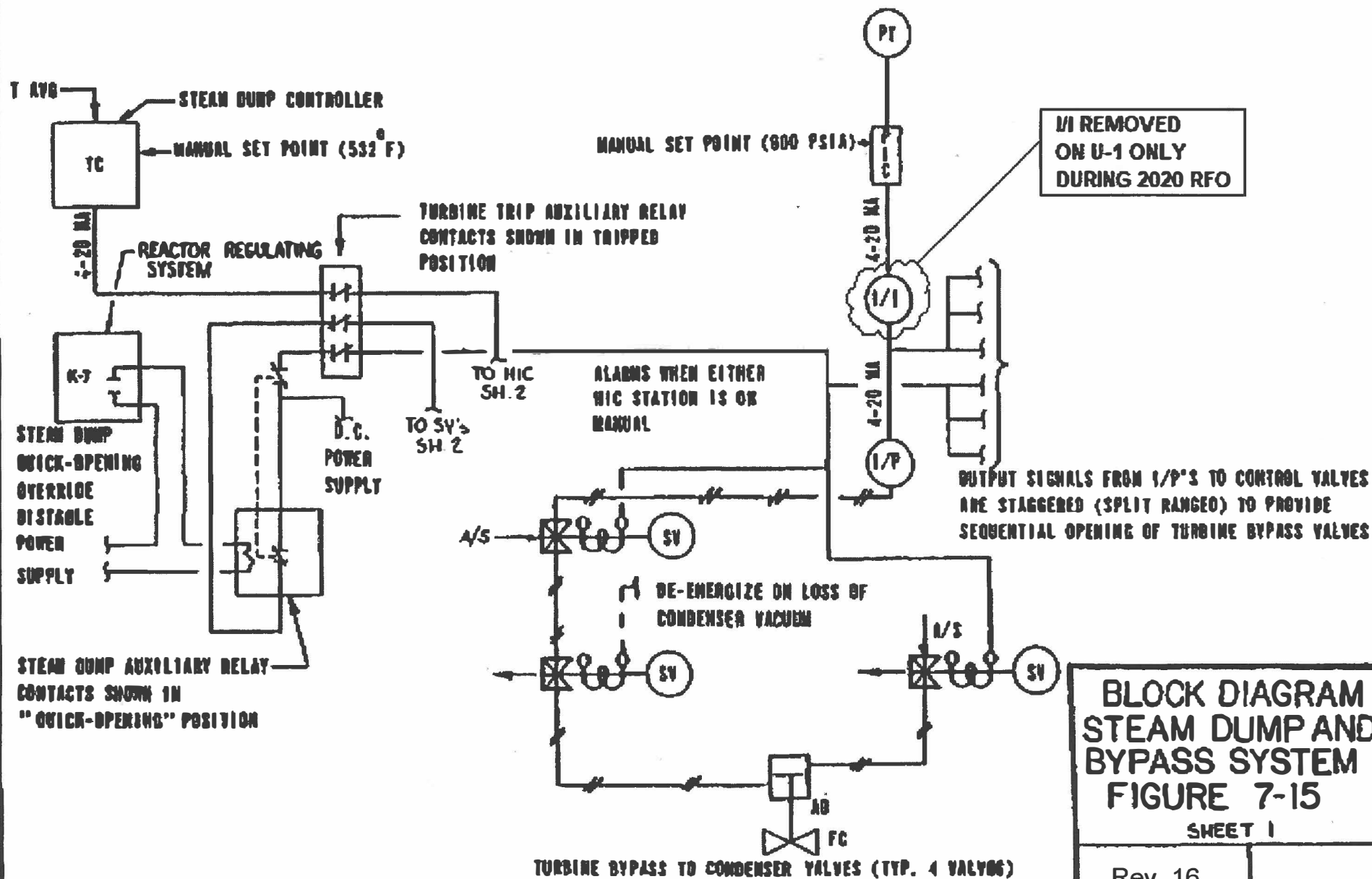
FIGURE 7-14B FEED WATER CONTROL SYSTEM- BLOCK DIAGRAM, UNIT 2

FOR AFW DETAILS, SEE  
625B3 (OM-800)

CALVERT CLIFFS NUCLEAR POWER PLANT
UFSAR FIGURE 7-14B
FEEDWATER CONTROL SYSTEM
BLOCK DIAGRAM
UNIT 2
BGE DRAWING N/A

REVISION 38

REVISION 48



**BLOCK DIAGRAM  
 STEAM DUMP AND  
 BYPASS SYSTEM  
 FIGURE 7-15**

**SHEET 1**

Rev. 16

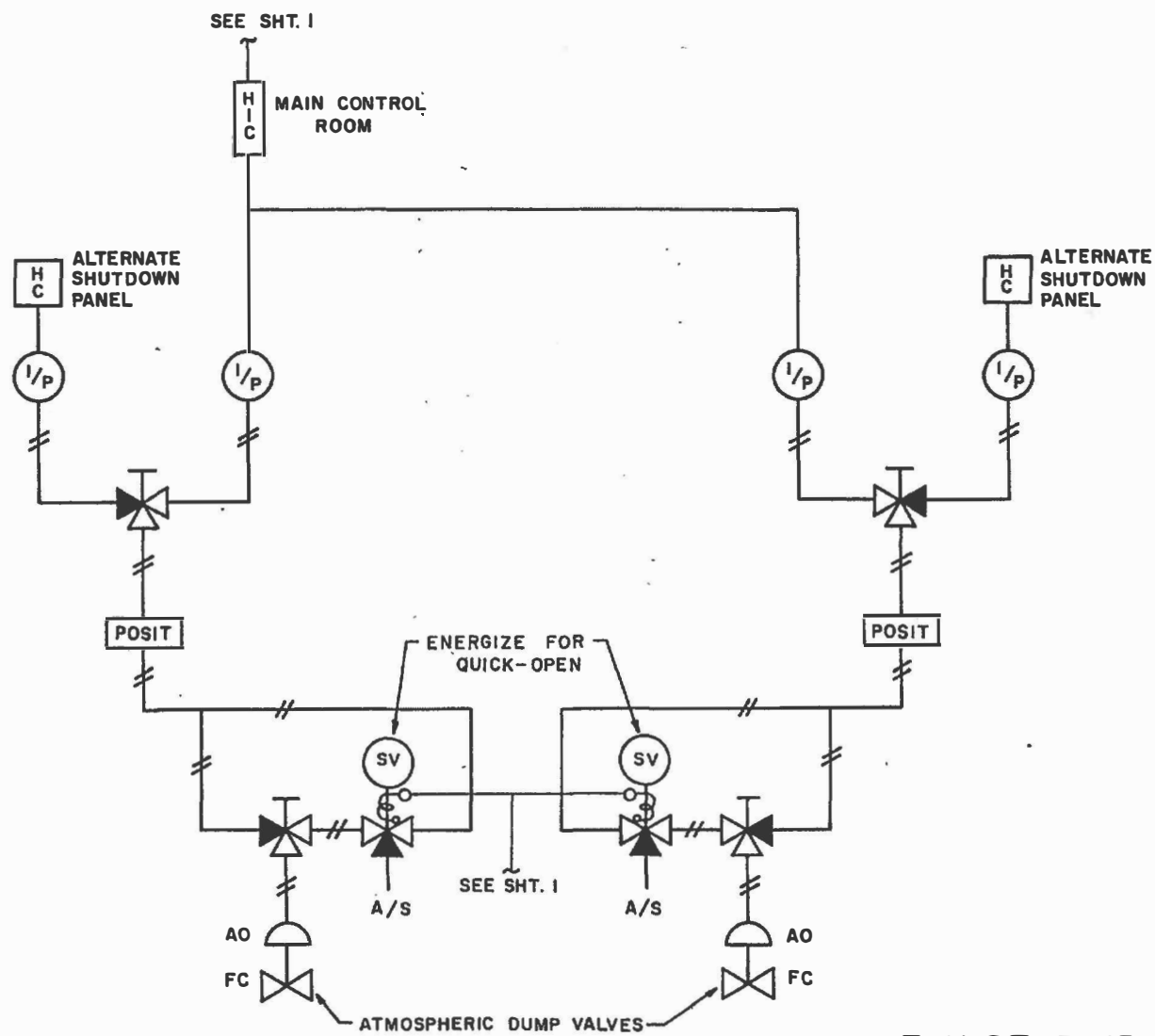


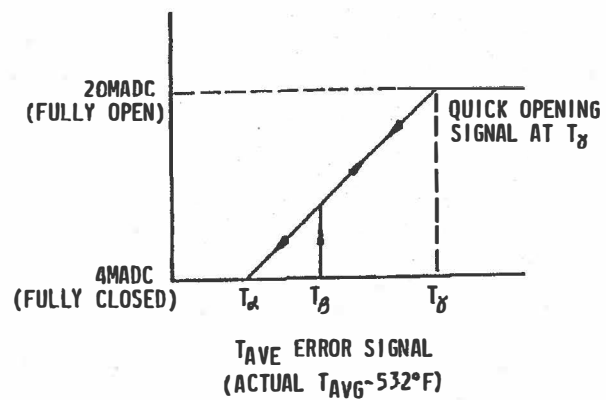
FIGURE 7-15 SHT.2  
REV. 3



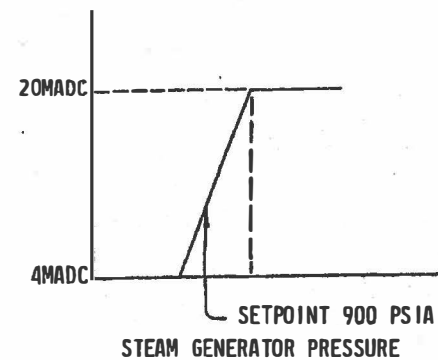
DUMP VALVE POSITION SIGNAL

NOTE:

1. QUICK OPENING BOOSTER AIR SOLENOID VALVES ENERGIZED BY OVERRIDE BISTABLE WHEN OUTPUT SIGNAL > 19.80MA, DE-ENERGIZED WHEN OUTPUT SIGNAL < 19.64MA



STEAM DUMP CONTROLLER  
PROGRAM  
(ADV)



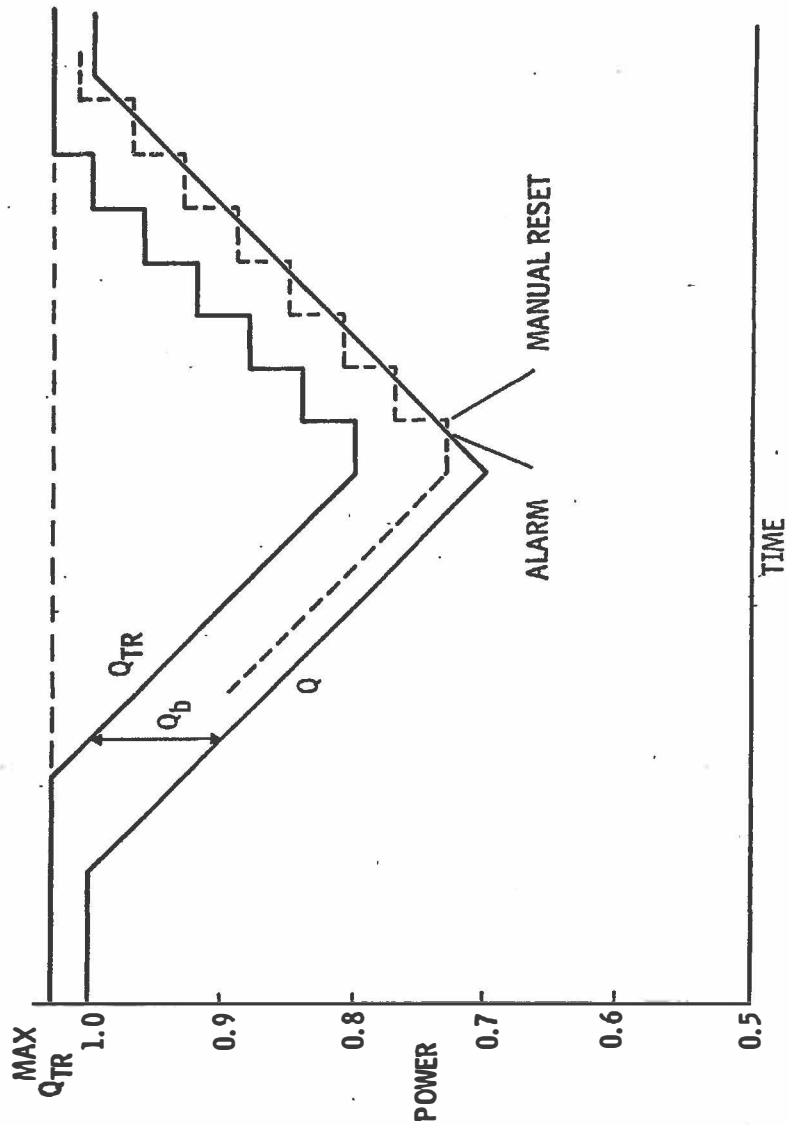
PRESSURE CONTROLLER  
PROGRAM  
(TBV)







# 7-20 VARIABLE HIGH POWER TRIP OPERATION



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## VARIABLE HIGH POWER TRIP OPERATION

Rev. 9/25/73

Figure  
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# $\Delta T$ POWER CALCULATION

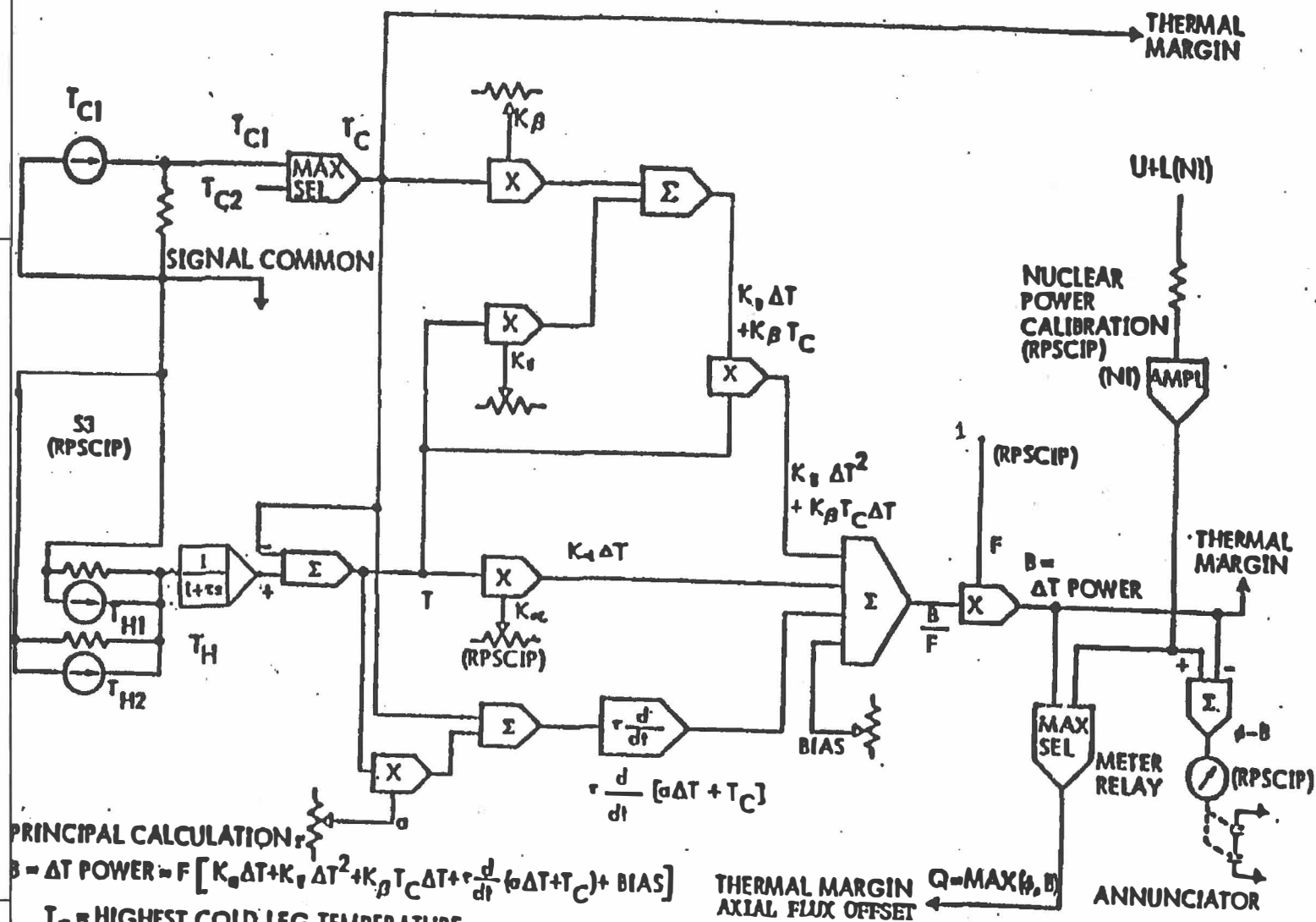


Figure 7-21  
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$T_C$  = HIGHEST COLD LEG TEMPERATURE  
 $T_H$  = AVERAGE OR ACTIVE LOOP HOT LEG TEMPERATURE  
 $\Delta T = T_H - T_C$

FIGURE 7-22 LOGIC DIAGRAM – ENGINEERED SAFETY FEATURES ACTUATION SYSTEM UNIT 2 (SHEET 1)

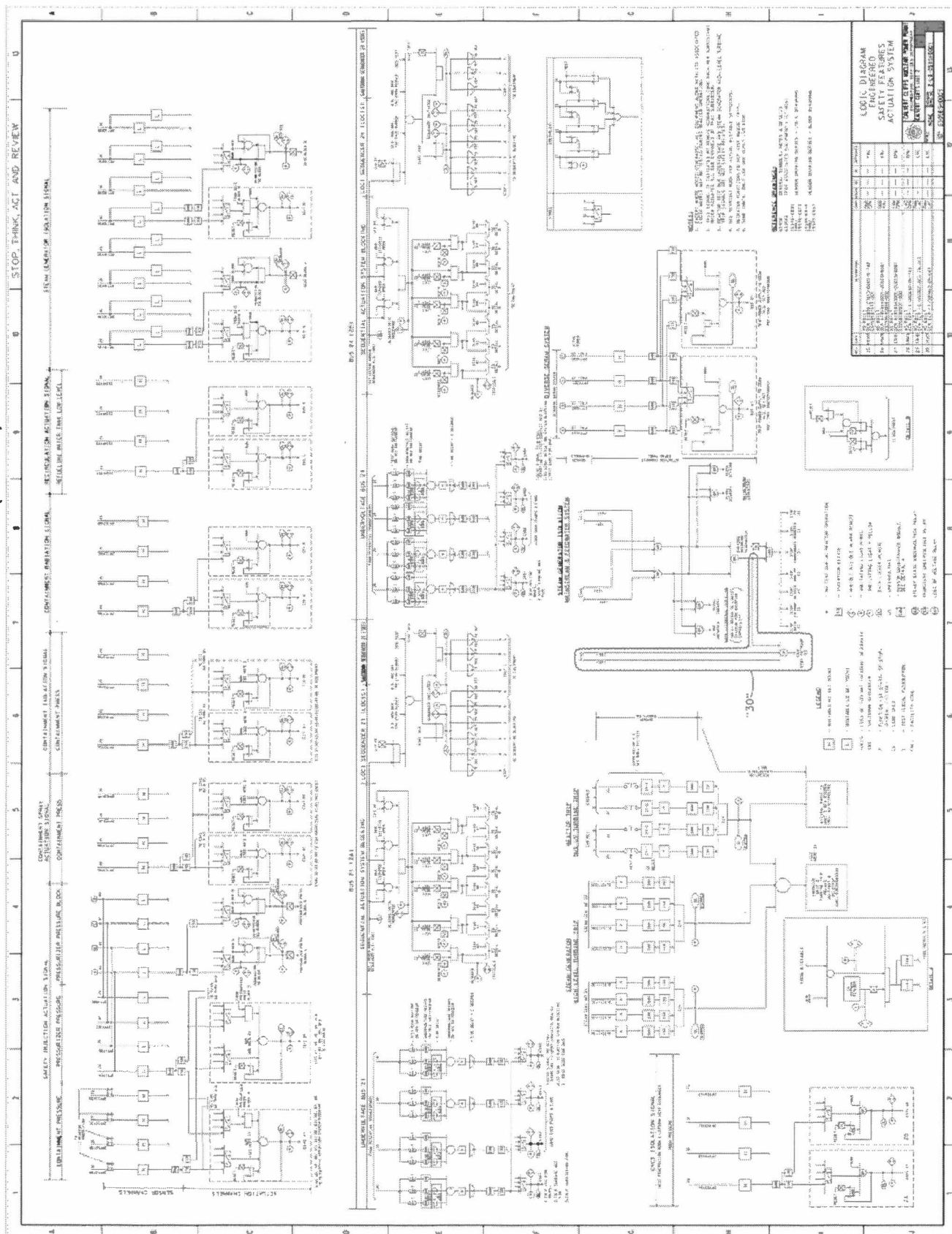
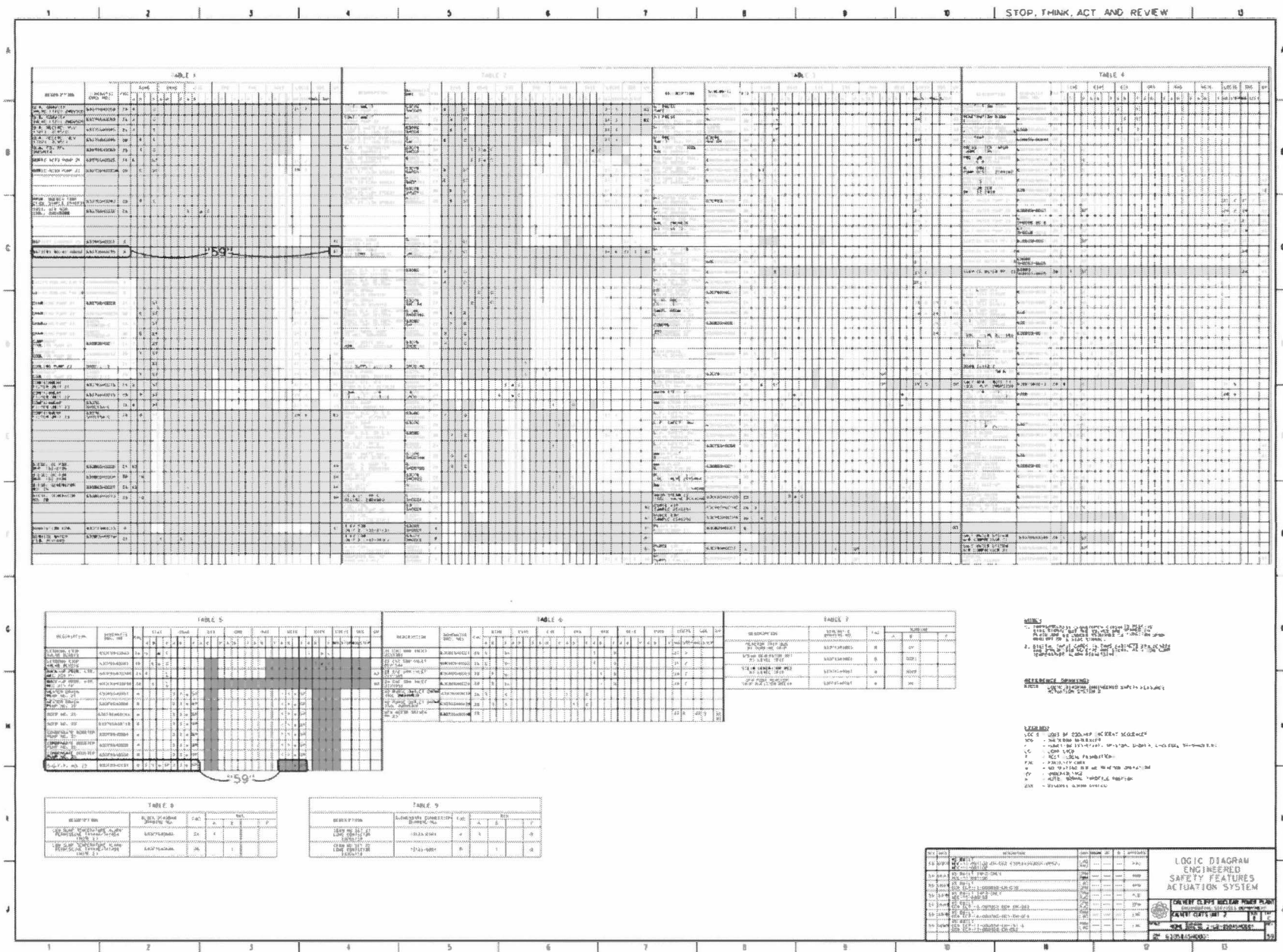
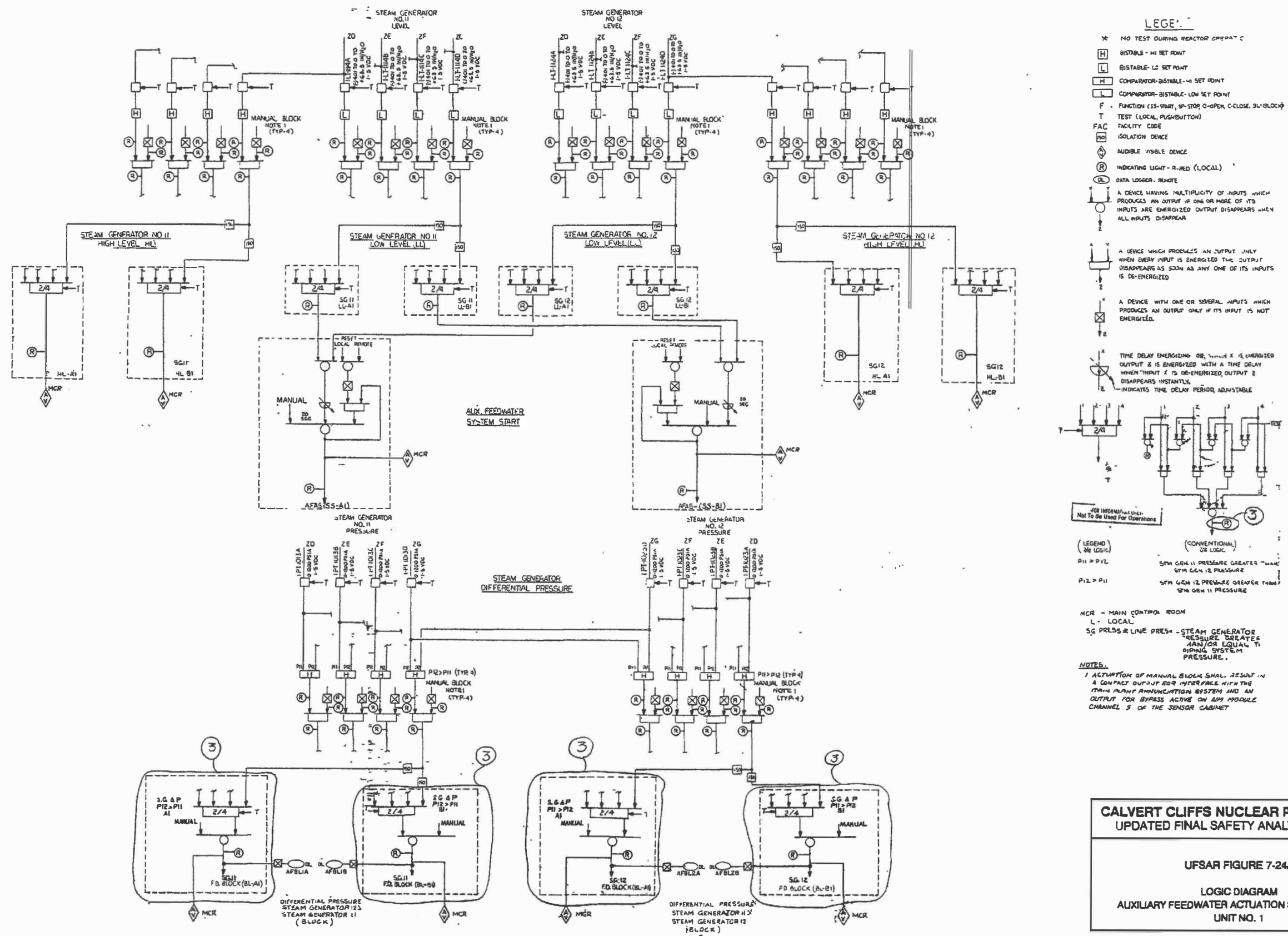


FIGURE 7-22 LOGIC DIAGRAM – ENGINEERED SAFETY FEATURES ACTUATION SYSTEM UNIT 2 (SHEET 2)







## STOP, THINK, ACT AND REVIEW





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