

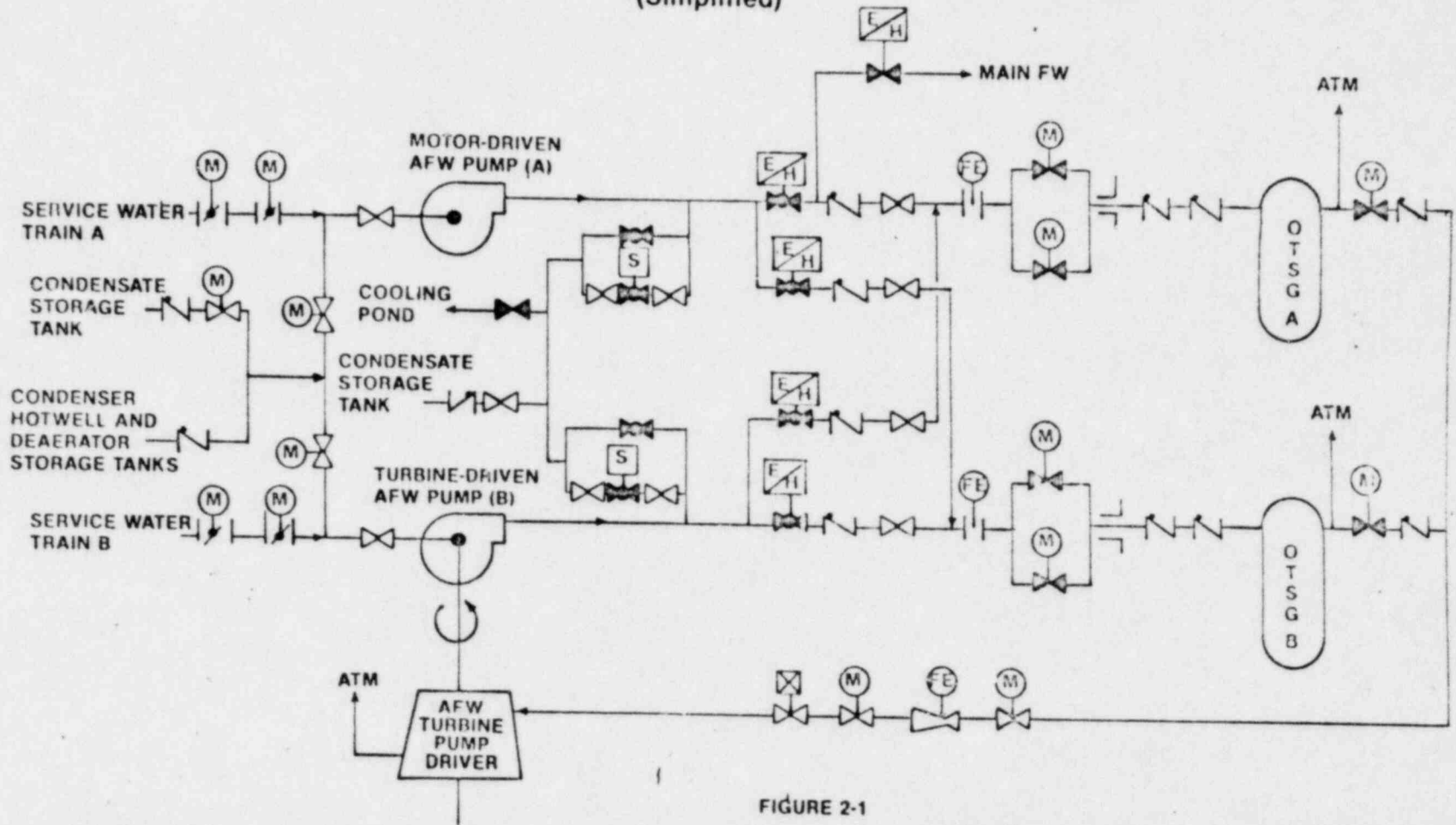
ENCLOSURE 3

Selected Viewgraph Slides Viewed
During Meeting Presentations

April 30, 1981

106110020

AUXILIARY FEEDWATER SYSTEM (Simplified)



I-II

FIGURE 2-1

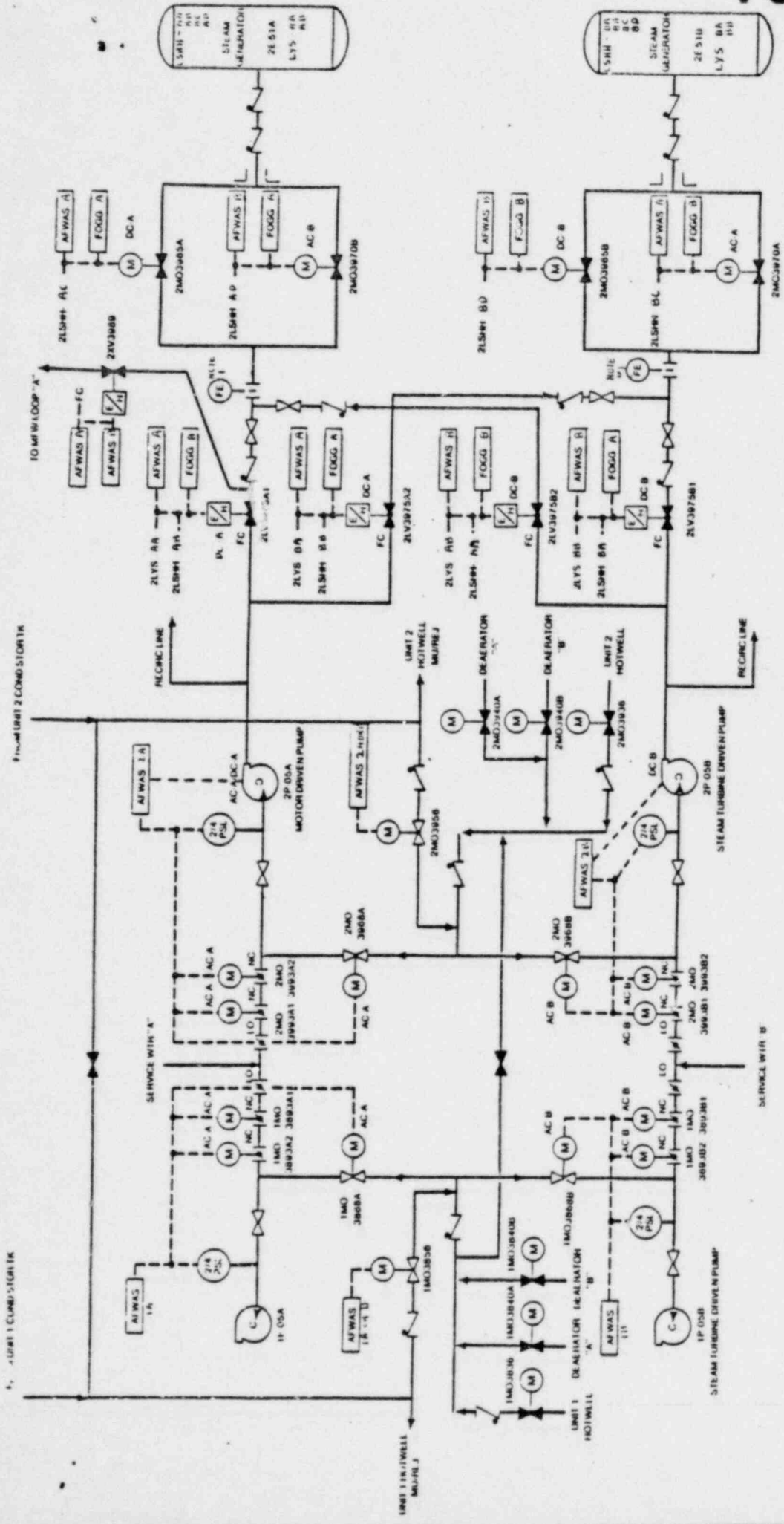


FIGURE 2

SIMPLIFIED DIAGRAM
 MIDLAND PLANT UNITS 1 AND 2
 AUXILIARY FEEDWATER SYSTEM
 PRELIMINARY REVISED DESIGN

PRELIMINARY

AUXILIARY FEEDWATER SUCTION CONFIGURATION

I-III

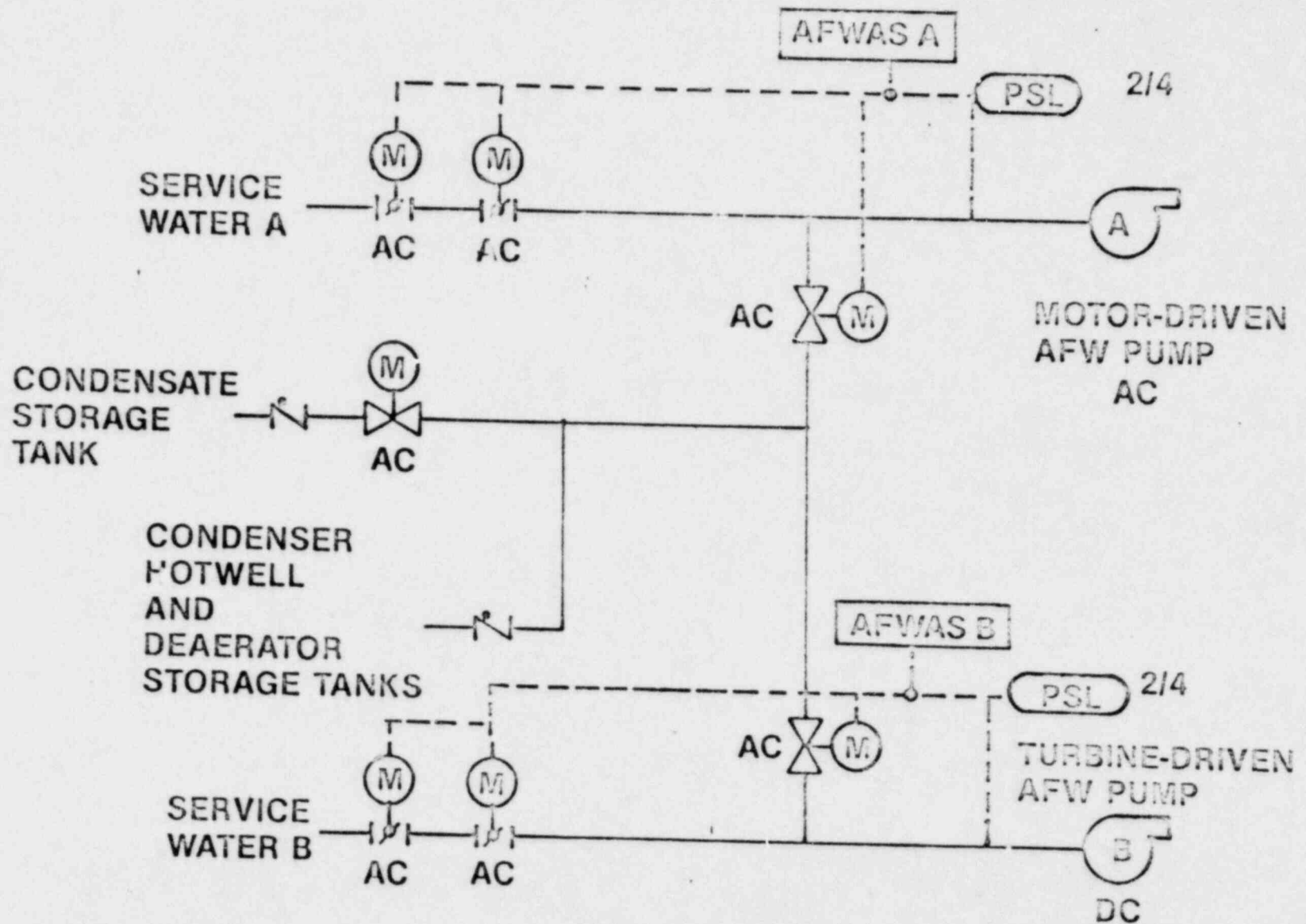


FIGURE 3-1

AUXILIARY FEEDWATER DISCHARGE CONFIGURATION

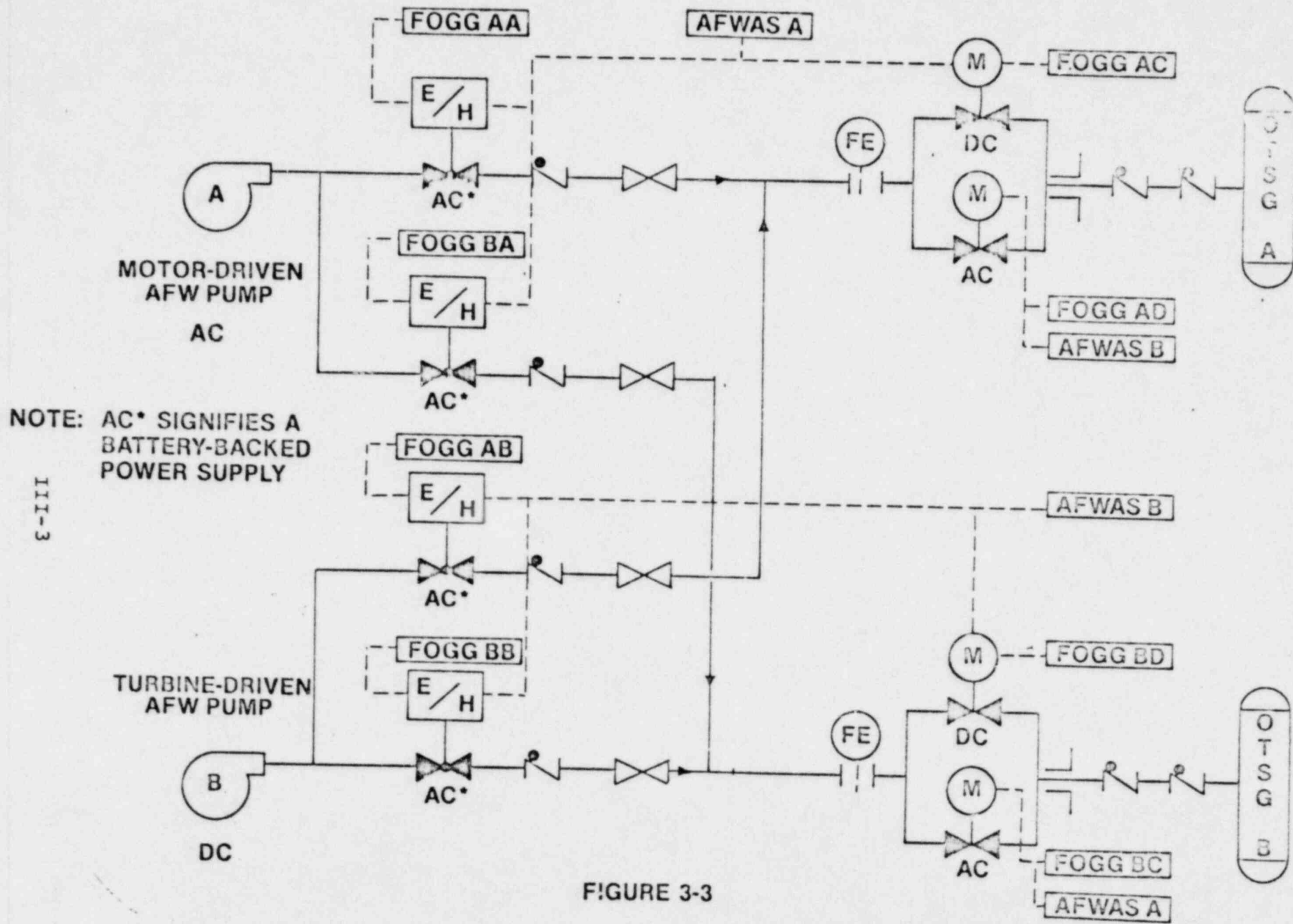


FIGURE 3-3

III-3

AUXILIARY FEEDWATER PUMP TURBINE DRIVER

III-2

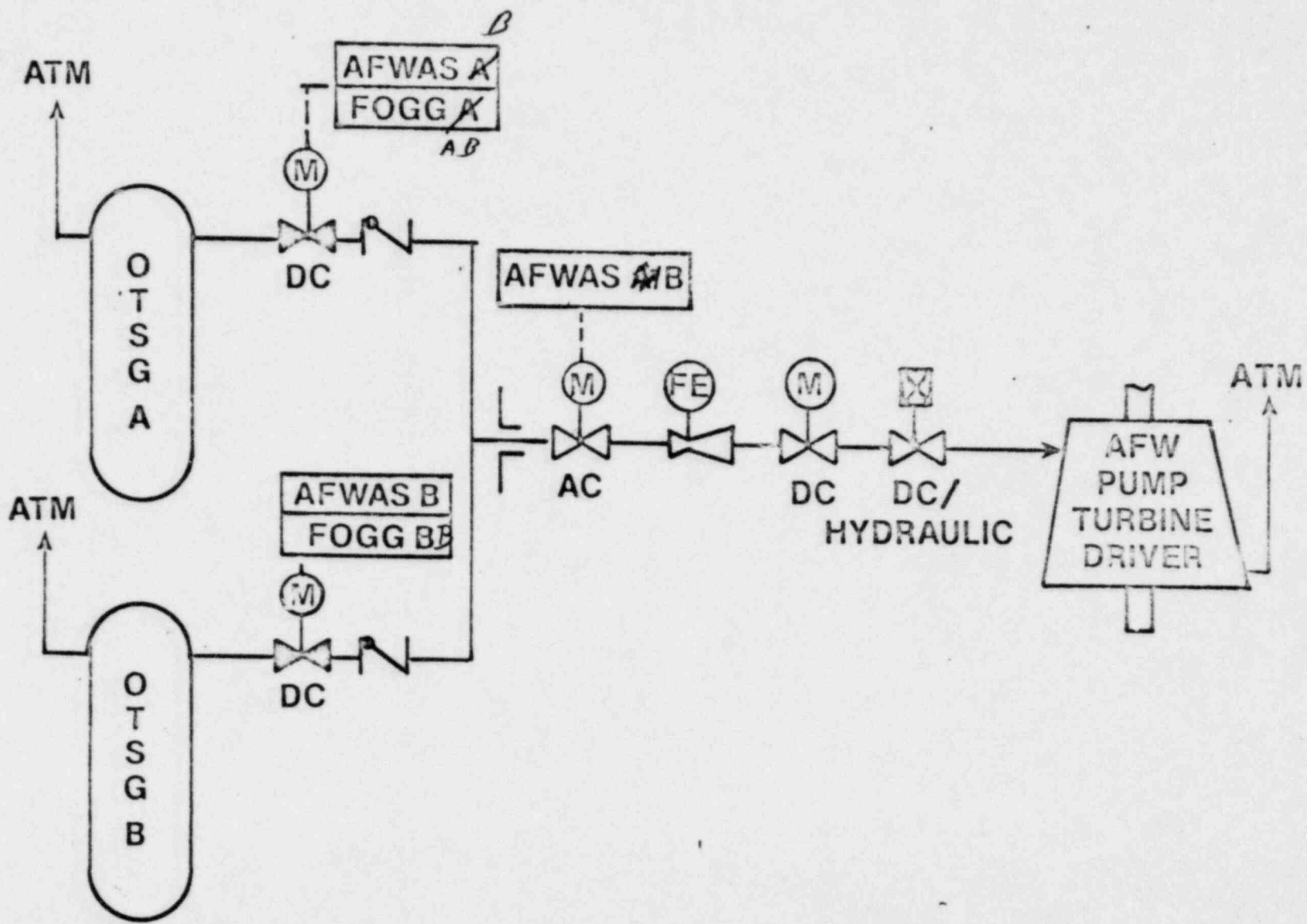
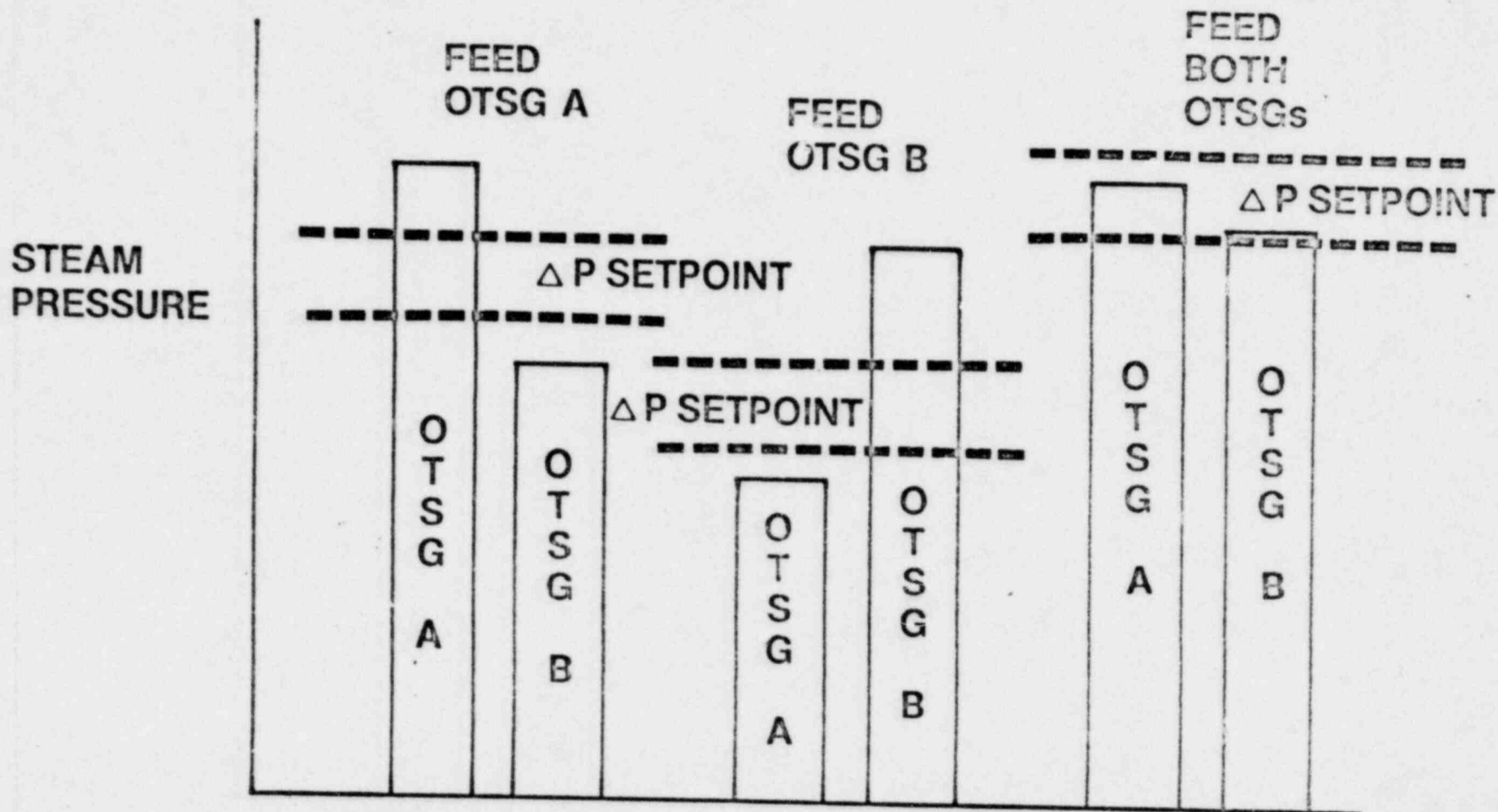


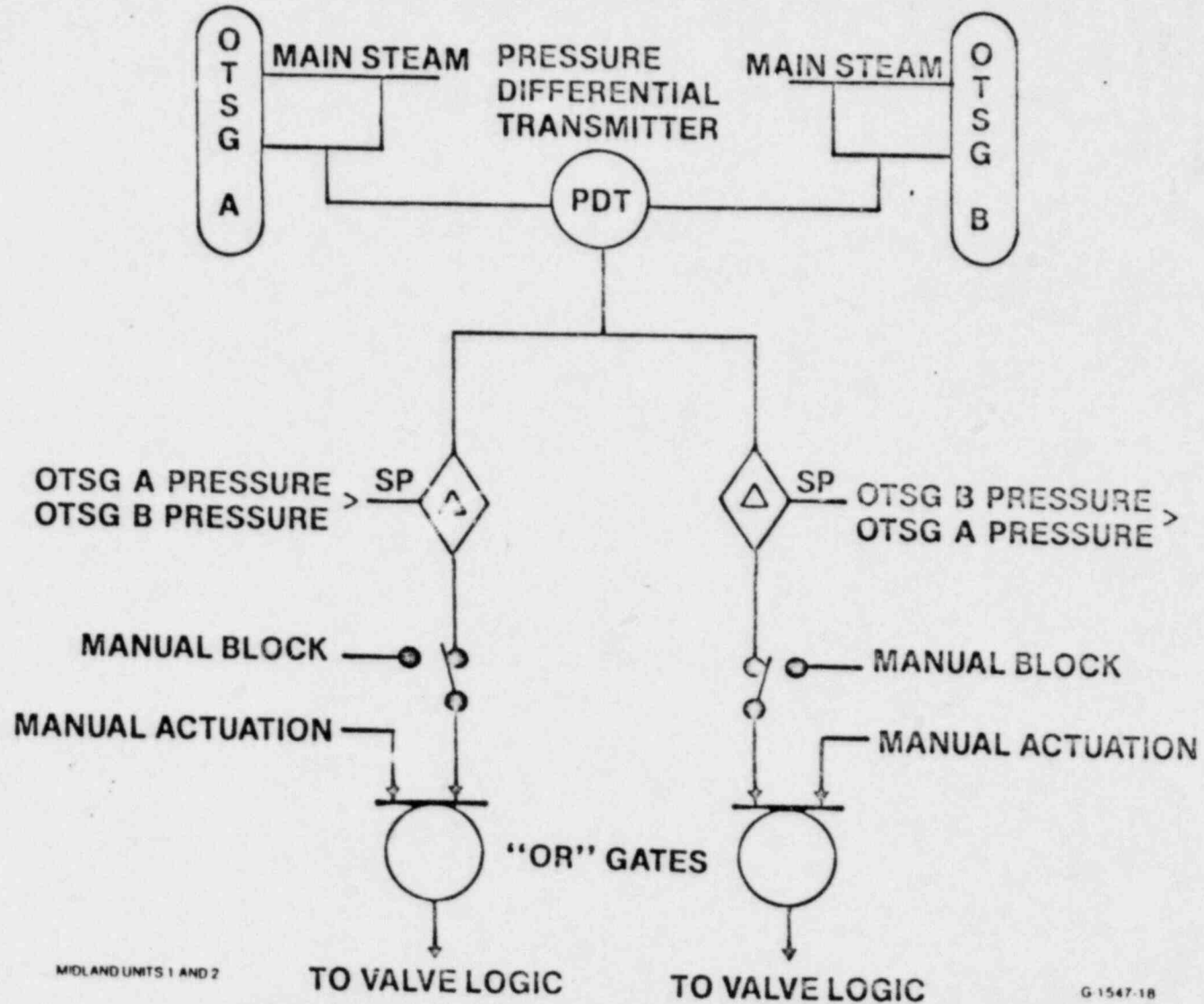
FIGURE 3-2

AUXILIARY FEEDWATER FOGG LOGIC



IV-12

AUXILIARY FEEDWATER



IV-13

MIDLAND UNITS 1 AND 2

G 1547-18

**FEED-ONLY-GOOD GENERATOR LOGIC
CHANNEL A
(typical for Channels B, C, and D)**

FIGURE 4-7

AUXILIARY FEEDWATER TYPICAL STEAM GENERATOR

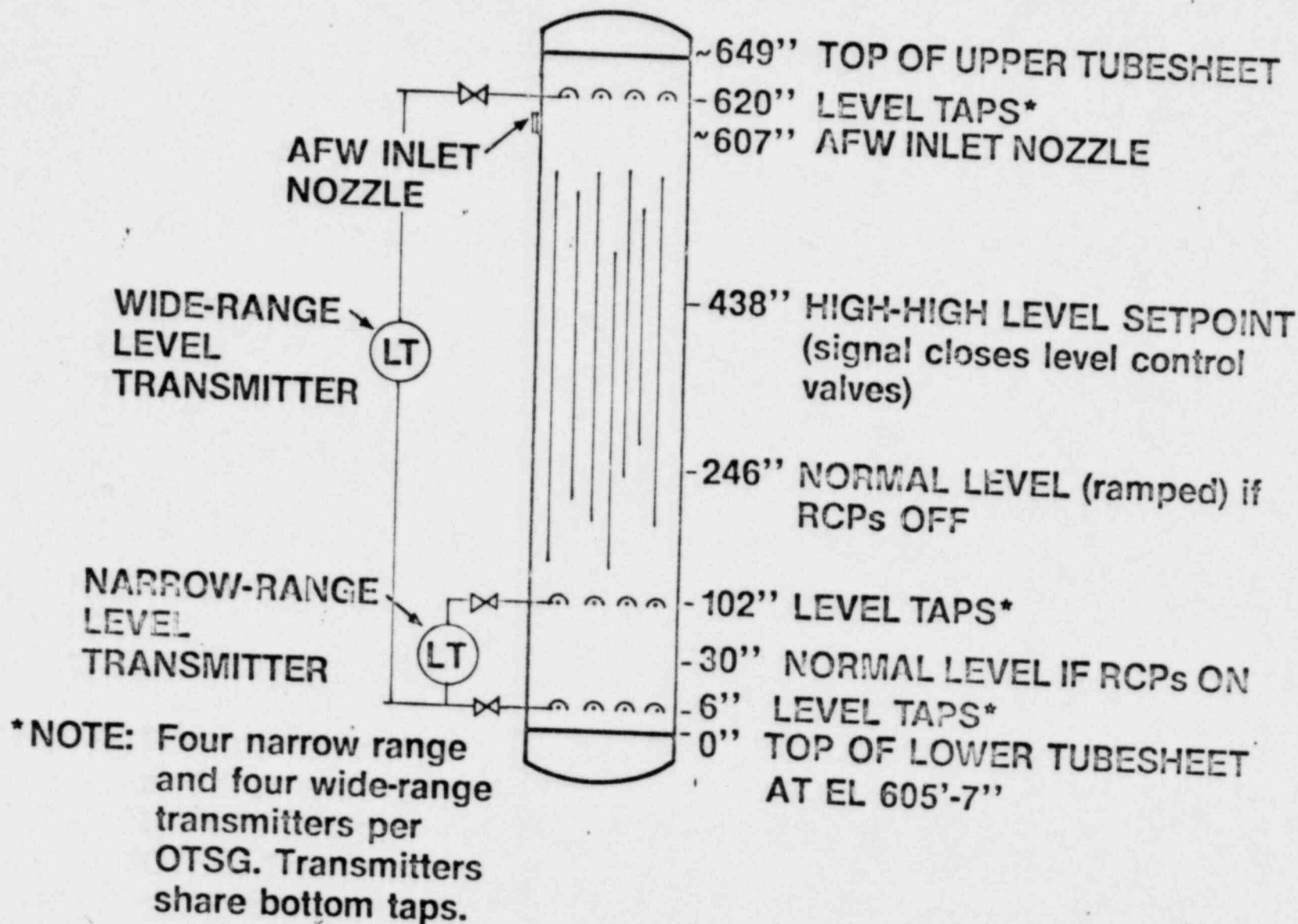
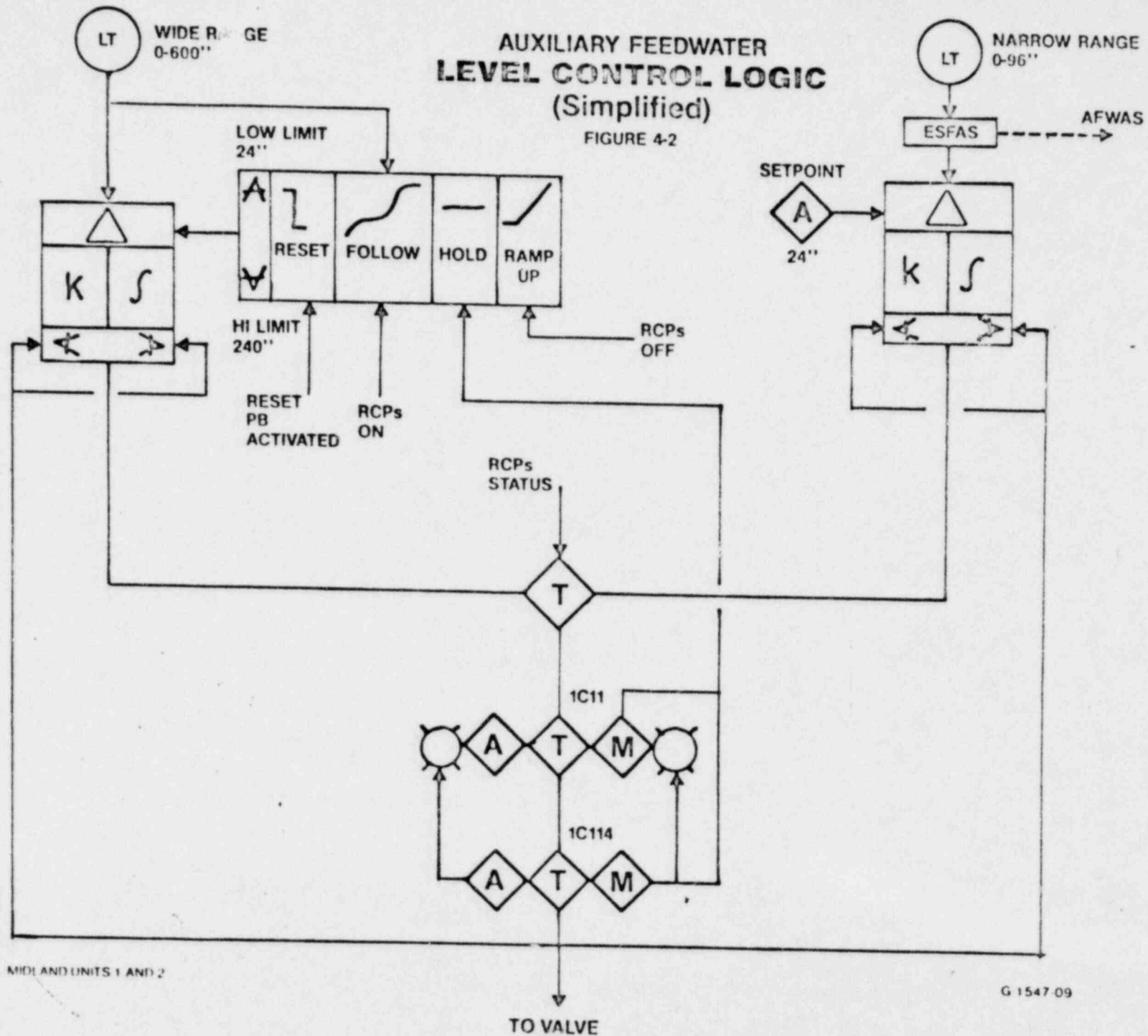


FIGURE 4-1

IV-4



SUMMARY OF RESULTS
CONDITIONAL UNAVAILABILITIES OF THE MIDLAND AFWS

Contributors to Unavailability	Loss of Main Feedwater		Loss of Main Feedwater Due to Loss of Offsite Power		Loss of Main Feedwater and Loss of All AC Power	
	Double Crossover (Plant Specific Data)	Double Crossover (NRC Data)	Double Crossover (Plant Specific Data)	Double Crossover (NRC Data)	Double Crossover (Plant Specific Data)	Double Crossover (NRC Data)
Random failures	7.0 E-5 (1.1 E-8)	3.5 E-5	6.6 E-4 (8.4 E-6)	2.5 E-4	1.7 E-2 (5.3 E-4)	6.4 E-3
Test and maintenance and random system failures	1.2 E-4 (3.9 E-8)	6.9 E-5	3.4 E-4 (6.5 E-7)	2.8 E-4	5.9 E-3 (1.9 E-4)	5.9 E-3
Human error (test--failure to close full flow test valve)	6.3 E-6 (1.1 E-10)	3.7 E-6	1.8 E-5 (2.0 E-9)	1.5 E-5	3.1 E-4 (5.3 E-7)	3.1 E-4
Common cause (full flow test valve open after test)	8.4 E-6 (5.9 E-10)	8.4 E-6	8.4 E-6 (5.9 E-10)	8.4 E-6	8.4 E-6 (5.9 E-10)	8.4 E-6
Other	€	€	€	€	€	€
System Total						
Mean	2.0 E-4		1.0 E-3		2.3 E-2	
Variance	4.7 E-8		6.0 E-6		6.7 E-4	
5th	3.4 E-5		4.1 E-5		3.5 E-3	
95th	5.8 E-4		3.8 E-3		6.8 E-2	
Median	1.4 E-4	1.2 E-4	4.0 E-4	5.5 E-4	1.6 E-2	1.3 E-2

POOR ORIGINAL

RESULTS OF EVENT TREE ANALYSIS

	SYSTEM STATE	RELATIVE FREQUENCY FOLLOWING DEMAND
1.	IMMEDIATE FAILURE	4×10^{-5}
2.	INITIAL COOLING, LONG-TERM FAILURE	1×10^{-5}
3.	SUCCESSFUL OPERATION BUT OVERCOOLING IN AT LEAST ONE SG	2×10^{-4}
4.	INITIAL OVERCOOLING AND LONG-TERM FAILURE	2×10^{-9}