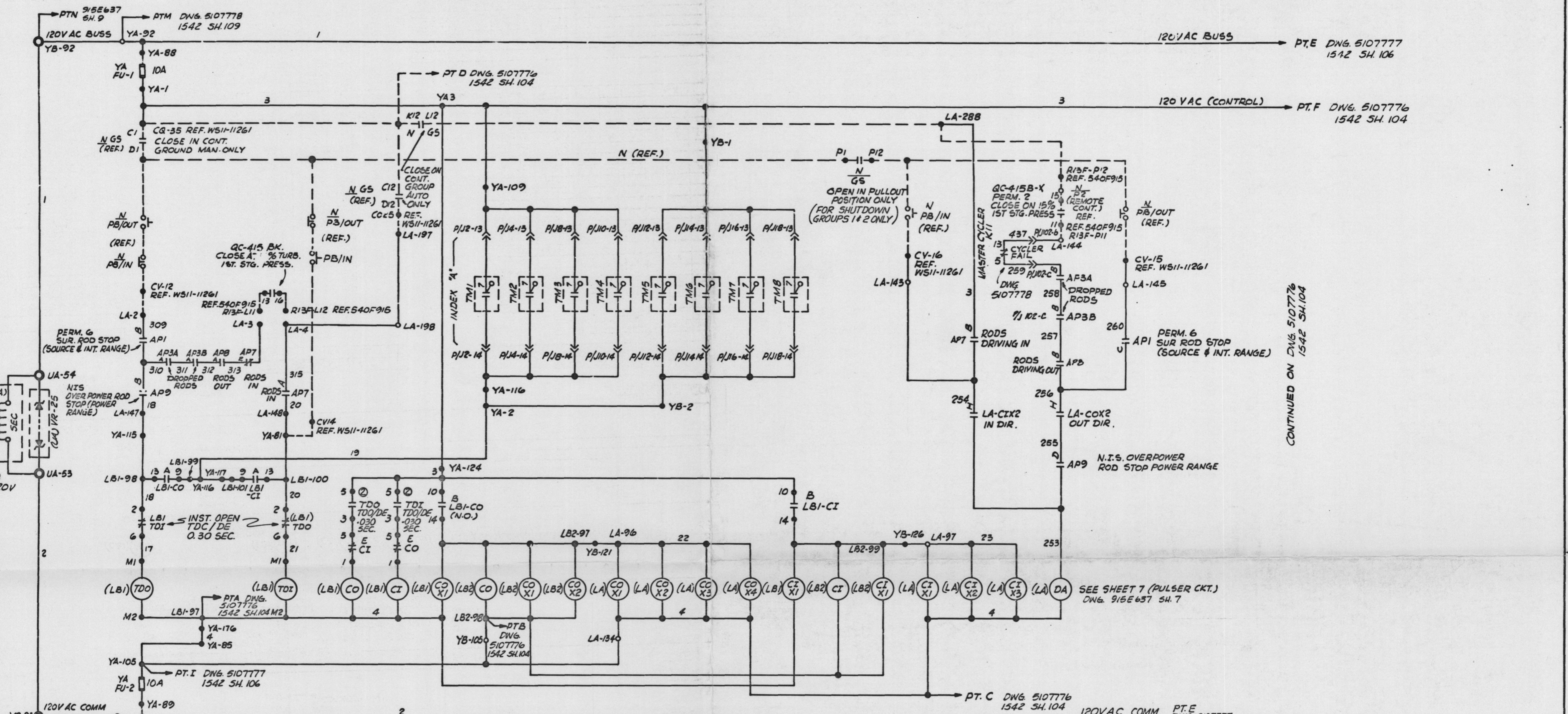
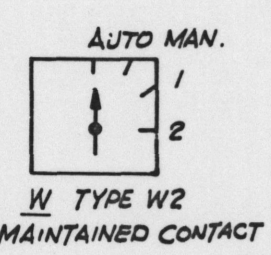


480V AC POWER IN  
MCC 1 BKR. 8-1181 (NORMAL)  
MCC 2 BKR. 8-1258 (ALTERNATE)



COMMAND CONTROL CIRCUITRY I

RELAY	FUNCTION
CO	CONTROL RODS OUT
CI	CONTROL RODS IN
DA	PULSER INITIATION



SPARE RELAY CONTACTS			
CABINET	RELAY	N.O.	N.C.
LB1	CO	0	0
LB1	CI	0	0
LB1	COX1	1	0
LB2	CO	2	0
LB2	COX1	2	0
LB2	COX2	4	2
LA	COX1	0	0
LA	COX2	0	0
LA	COX3	2	3
LA	COX4		-3PDT-
LB1	CIX1	1	0
LB2	CI	2	0
LB2	CIX1	2	0
LA	CIX2	0	0
LA	CIX3	0	3
LA	DA		3PDT

GROUP SELECTOR (GS) SWITCH DEVELOPMENT					
CONTACT	CONT. GR.	POSITION			
		SHUT DOWN GROUP	NOT USED		
	AUTO MAN.	1	2	3	4
A11-B11		X	X		
A12-B12		X	X		
A1-B1				X	X
O6-O7			X	X	X
A5-B5		X	X	X	X
C12-D12	X				
C1-D1	X				
E11-F11	X	X	X	X	X
E5-F5	X	X	X	X	X
G6-H6	X				
I11-J11	X	X	X	X	X
K12-L12	X				
C7-D7	X				
I5-J5	X	X	X	X	X
M7-N7	X	X	X	X	X
K6-L6	X				
O12-O1		X	X	X	X
P12-P1	X	X	X	X	X

USED ELSEWHERE  
SPARE  
SPARE

RELAY:  
TDO - TIME DELAY RELAY TO ENERGIZE CO RELAY  
TDI - TIME DELAY RELAY TO ENERGIZE CI RELAY  
BOTH T.D. RELAYS ARE TIME DELAY WHEN DE-ENERG'D  
② - TIMING CONTACTS (NO) FROM TDO & TDI RELAY TO ENERGIZE CO & CI RELAYS, TO BE USED AS "OFF DELAY" AND EACH TIMER SET AT 0.3 SECONDS (PER W)

NOTES: RELAYS TDO & TDI TO BE LOCATED IN LB CABINET.  
RELAYS CO & CI TO BE LOCATED IN LB CABINET.

SLAVE CYCLER CAM DEVELOPMENT				HOME = 340°	
CAM NO.	SHT.	START	STOP	TYPE	NOTE
1	(NO) MOVEABLE "IN"	1825°	161°	1-2	N5
2	(SI) STATIONARY "IN"	1011°	229°	3-4	N6
3	(LI) LIFT "IN"	1011°	116°	5-6	N8
4	(NO) MOVEABLE "OUT"	1011°	1575°	7-8	N5
5	(SO) STATIONARY "OUT"	1011°	75°	9-10	N5
6	(LO) LIFT "OUT"	1011°	180°	11-12	N7
7	INDEX "A"	2	3	13-14	N1
8	INDEX "B"	16	16	15-16	N1
9	INDEX "C"	12	12	18-19	N1
10	LRA BANK OVERLAP CNTR (N.O.)	6	70°	20-21	N4
11	COC CARRYOVER CAM	3	10°	22-23	N9
12	MCR L MSTR CYC. FAULT DET.	8	35°	24-25	N8

1542 SH. 103  
SONGS I  
SAFETY RELATED

BECHTEL NO 3246-W-J4-81-4  
THIS DNG. MADE FROM WESTINGHOUSE DNG. E-915E637 SH.2

Reference Drawings	No.	Revisions	Date	Approved	O.K.	O.K.	CL'D	Made	J.O.No.	Scale	N/A/E
510777B	PROGRAMMING CIRCUITRY III										
510777	INDICATION CIRCUITRY II										
510776	PERMISSIVE CIRCUITRY I										

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Docket # 50-206  
Control # 7908130253  
Date 7/10/09 of Document:  
REGULATORY DOCKET FILE

RETURN TO REACTOR DOCKET FILES