

125VDC CONTROL SCHEMATIC  
FCV95-AUX. FWP TURB II STEAM SUPPLY HEADER M.O.V. CKT. NO. 230D

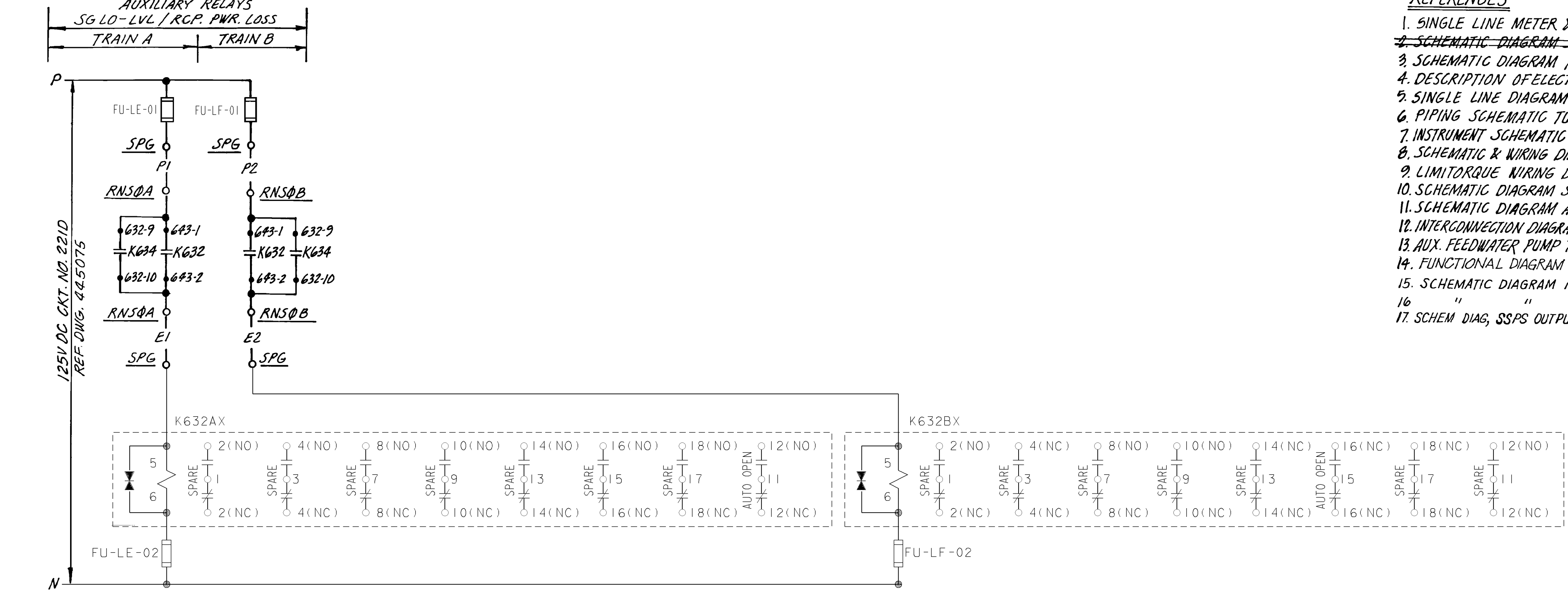
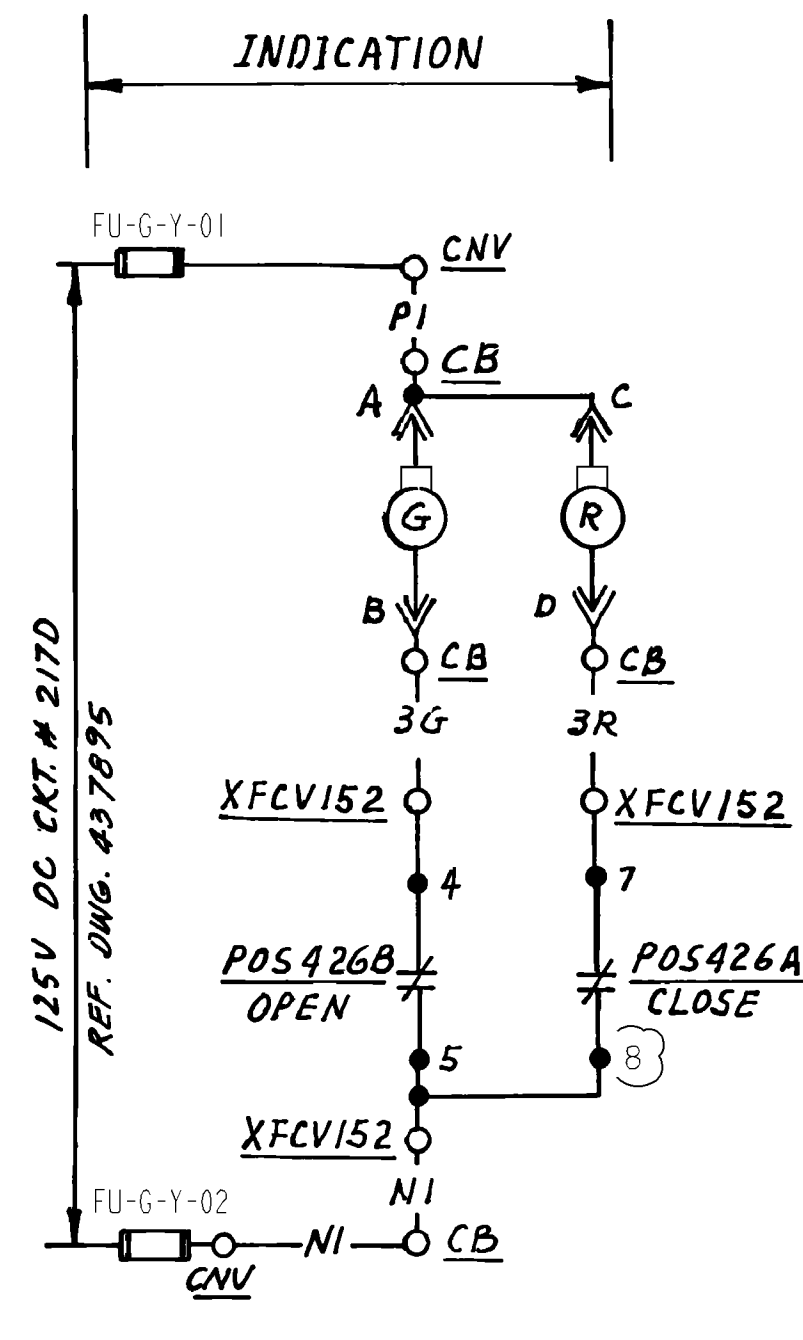
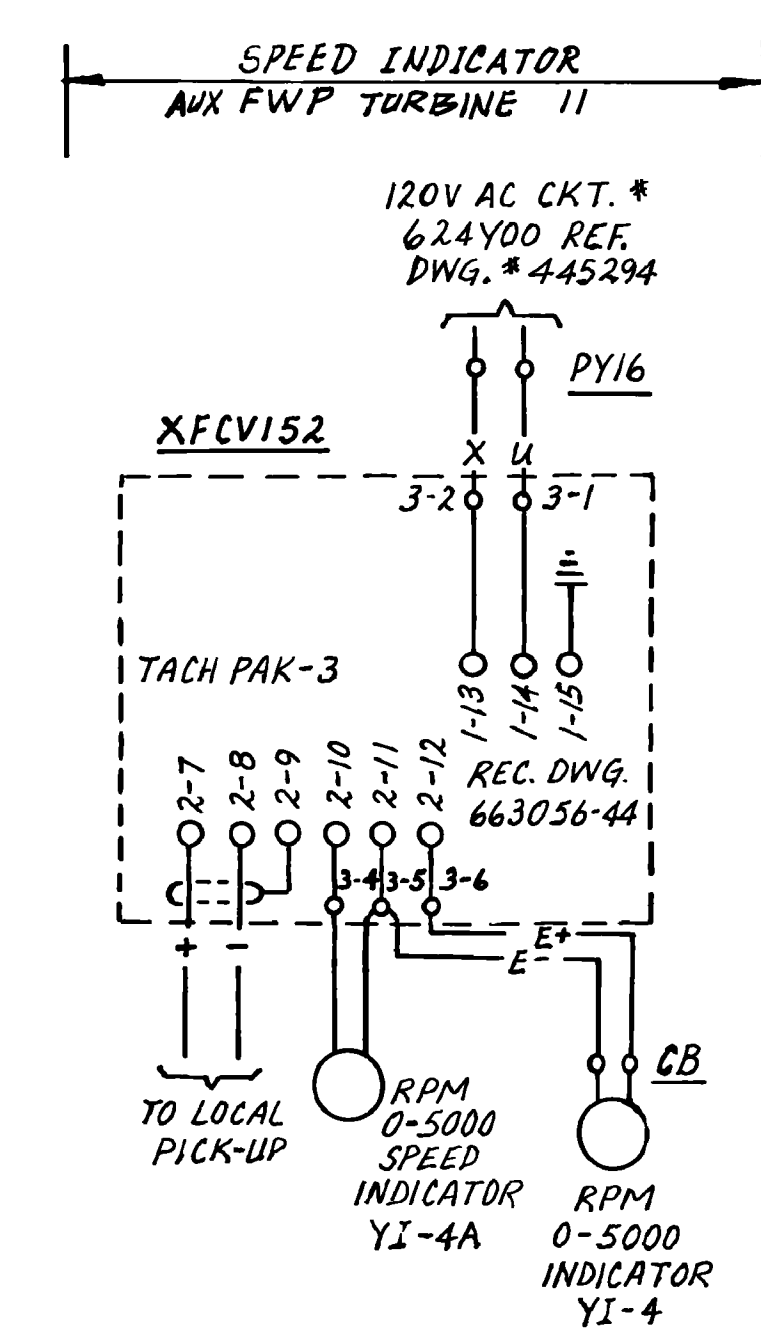
ALARM CIRCUIT NO.	COMPUTER CKT. NO.
OVERCURRENT	TRANS OF CONT
UNDERVOLTAGE	AUX FWP RUNNING POS. 441
A1441IDG	AY50660G
	AV24060G
	CY28440G

DEVICE NO.	FUNCTION	RATING	MFR.	TYPE	CAT/DWG.	REMARKS
72-1230	CIRCUIT BREAKER 125V DC				REF. DWG. 1	
42-1230	MOTOR STARTER REVERSIBLE SIZE 1	125VDC	ABB		REF. DWG. 8	S/C 95-8173
43X-1230	CONTROL TRANSFER RELAY	125VDC	ELECTRO SERIES SYN. COMP. 24 LOR		7803F	HAND RESET
49-1230	MOTOR OVERLOAD RELAY	125VDC	ABB		REF. DWG. 6	S/C 95-5778
49X-1230	MOTOR OVERLOAD AUX. RELAY	125VDC	P&B		REF. DWG. 8	S/C 93-0653
K632	RCP BUS UNDER VOLTAGE AUX. RLY.				(1/2 7)	
K634	STM GEN. LO-LO LVL. AUX. RLY.				(1/2 7)	
K632AX	SG LO-LO LVL/RCP POWER LOSS AUX. RELAY	125VDC	POTTER BRUMFIELD	MDR	MDR 5076-1	LOCATED IN AUX. RELAY PNL. MCC "1G"
POS 441	POSITION SWITCH				REF. DWG. 9	
CIAX2-G	CNT. ISOL. PHA. AUX. RLY. MOTOR OC BYPASS				REF. DWG. 10	CLOSES ON PHASE A ISOL. 4 SYS. ACTIVATION
27-1230	UNDERVOLTAGE RELAY	125VDC	G.E.		REF. DWG. 8	
POS426A, B	POSITION SWITCH				REF. DWG. 13	
FCV152	FLOW CONTROL VALVE				REF. DWG. 13	
K10BA	AMSAC SYS. CAB. A		W.E.		6008434	
K10BB	AMSAC SYS. CAB. B		W.E.		6008434	

LOCATION CODE  
LD30 - LOC. STARTER FCV95 AUX. FWP TURB II  
SPG - 480V MOTOR CONTROL CENTER BUS SECTION "1G"  
CB - CONTROL BOARD 1V83 STEAM & TURBINE  
H01 - HOT SHUTDOWN REMOTE CONTROL PANEL 1  
MD30 - FCV95 AUX. FWP TURBINE II  
RNS0B - RACK NUCLEAR SAFEGUARD OUTPUT TRAIN B  
FCV152 - INSTRUMENT NO. FCV152 LOCAL MOUNTED

NOTES  
1. SWITCH OPENS ON MECHANICAL TORQUE DURING OPENING CYCLE (18)  
2. SWITCH OPENS ON MECHANICAL TORQUE DURING CLOSING CYCLE (17)  
3. FIELD TO INSTALL JUMPER FOR TORQUE SEATING.

REFERENCES	DWG. NO.
1. SINGLE LINE METER & RELAY DIAGRAM 125V DC SYSTEM	4-45075
2. SCHEMATIC DIAGRAM STEAM GENERATOR BLOWDOWN SOLENOID VALVES	437605
3. SCHEMATIC DIAGRAM MAIN ANNUNCIATOR SH. 14	501134
4. DESCRIPTION OF ELECT. SCHEMATIC DIAG. SYMBOLS & CIRCUIT DESIGNATIONS	090003
5. SINGLE LINE DIAGRAM MAIN CONTROL BO. 1V81 & 1V82 FUEL PANEL	437895
6. PIPING SCHEMATIC TURBINE STEAM SUPPLY SYSTEM	102004
7. INSTRUMENT SCHEMATIC FLOW INSTRUMENT SYSTEMS	102032
8. SCHEMATIC & WIRING DIAGRAM FULL VOLTAGE REVERSING DG STARTER	REG. 063945-76
9. LIMIT TORQUE WIRING DIAGRAM	REG. 063317-162
10. SCHEMATIC DIAGRAM SAFETY INJECTION SYSTEM MOTOR OPERATOR VALVES	437606
11. SCHEMATIC DIAGRAM AUXILIARY FEEDWATER PUMP TURBINE CONTROL SH #1	437884
12. INTERCONNECTION DIAGRAM SAUD STATE PROTECTION SYSTEM OUTPUT TRAIN A & B	450832
13. AUX. FEEDWATER PUMP TURB. STEAM INLET VALVE POS. SW. TYPE 6S2 WIRING DIAG.	REG. 063056-44
14. FUNCTIONAL DIAGRAM FEEDWATER CONTROL & ISOLATION	495853
15. SCHEMATIC DIAGRAM MAIN ANNUNCIATOR, SH. 22	437700
16. " " " " SH. 25	502115
17. SCHEM. DIAG. SSPS OUTPUT RELAYS, TRAIN A, TRAIN B	DWGS 501869, 503088



CONTACTS	VALVE POSITION	REMARKS
2-1-1 NC1	OPEN	SPARE
61-1-3 NO1	INTER	SPARE
5-1-4 NC2	CLOSE	GREEN LT
62-1-6 NO2	CLOSE	SPARE
8-1-7 (NC1)	CLOSE	RED LT.
61-1-9 NO1	CLOSE	SPARE
11-1-10 NC2	CLOSE	SPARE
62-1-12 NO2	CLOSE	ALARM-REF. 3

FCV152 POSITION SWITCH CONTACT DEVELOPMENT  
REFERENCE #13

CONTACTS	POSITION	REMARKS
A	CLOSE/NEUTRAL	THIS DWG.
B	CLOSE/NEUTRAL	SPARE
C	CLOSE/NEUTRAL	THIS DWG.
D	CLOSE/NEUTRAL	SPARE

CONTROL SWITCH CS  
USED AT LOCATION CB, H01  
SPRING RETURN TO NEUTRAL  
OPERATOR OT2VG

CONTACTS	POSITION	REMARKS
A	CLOSE LOCAL	THIS DWG.
B	CLOSE LOCAL	SPARE
C	CLOSE LOCAL	THIS DWG.
D	CLOSE LOCAL	SPARE

TRANSFER SWITCH 43R-1230  
USED AT LOCATION H01  
NO SPRING RETURN

CONTACTS	VALVE POSITION	FUNCTION
1	FULL OPEN	SPARE
2	FULL OPEN	COMPUTER
3	FULL OPEN	GREEN LIGHT
4	FULL OPEN	OPEN LIMIT
5	FULL OPEN	OPEN TS18 BYPASS INTRK
6	FULL OPEN	SPARE
7	FULL OPEN	SPARE
8	FULL OPEN	CLOSE LIMIT
9	FULL OPEN	SPARE
10	FULL OPEN	SPARE
11	FULL OPEN	SPARE
12	FULL OPEN	SPARE
13	FULL OPEN	RED LIGHT
14	FULL OPEN	CLOSE TS17 BYPASS INTRK

FCV95 VALVE POSITION SWITCH CONTACT DEVELOPMENT  
POS441 ACTUAL CONTACT SETTINGS ARE IN PMS

NUCLEAR SAFETY RELATED

KEY DWG. SECTION 6

DATE 01-05-2015	REVISION DESCRIPTION REVISED PER DFT-7*2907	UNIT 1	DWG SCALE:
D.D. MHRU		ELECTRICAL	BILL OF MATL:
R.E. Fx2		AUXILIARY FEEDWATER PUMPS	SUPDS:
I.V. FAZI		TURBINE CONTROL	SUPDS BY:
P.E. N/A		DRAWING SHEET PAGE REV 1 0 14	

PACIFIC GAS AND ELECTRIC COMPANY  
SAN FRANCISCO, CALIFORNIA

RASTER: 07/12/2015 2:41:22.dgn  
 USER: MHRU  
 CADD: 01-05-2015