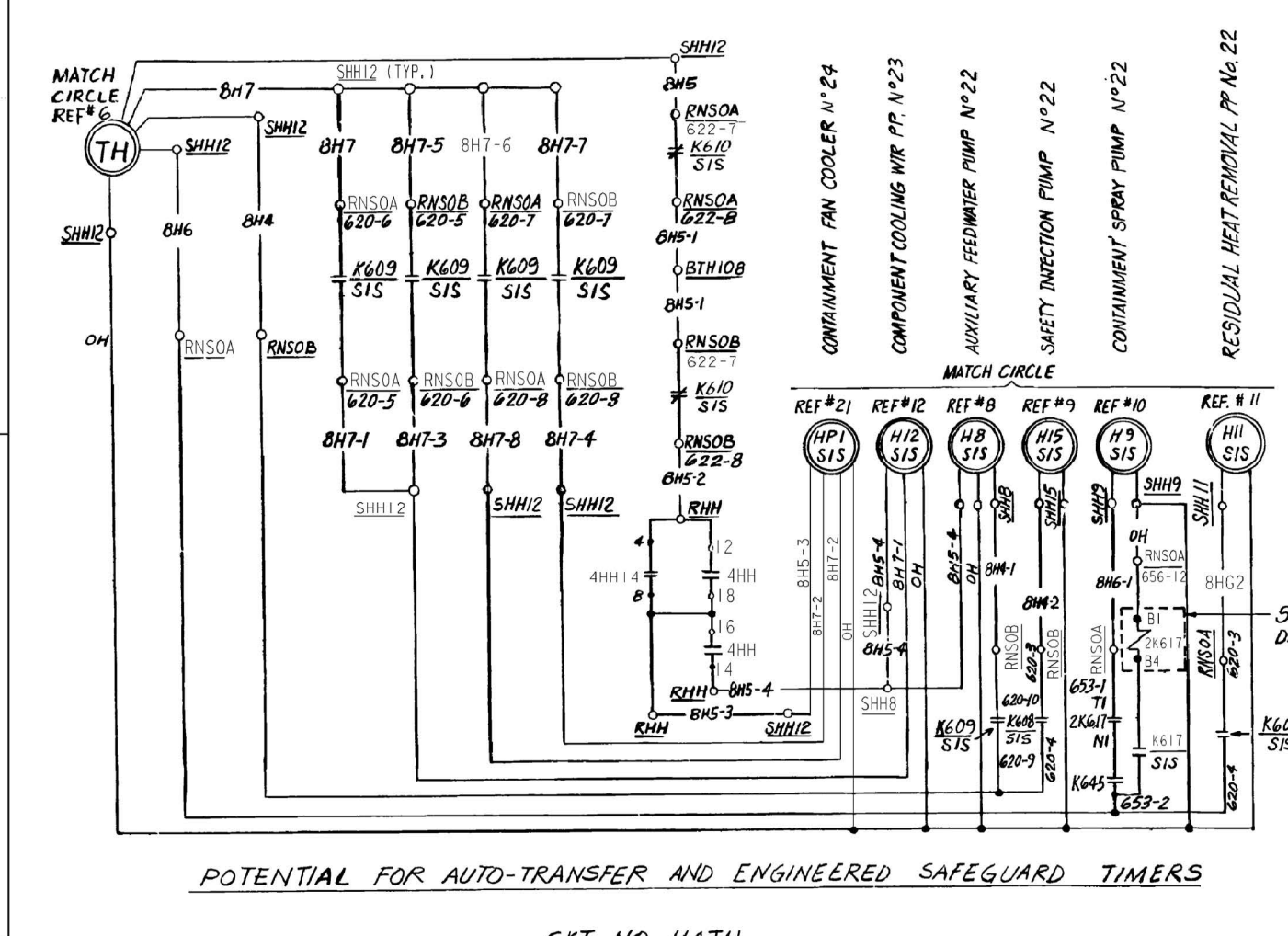


TABLE OF DEVICES

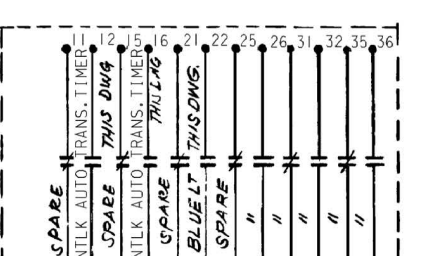
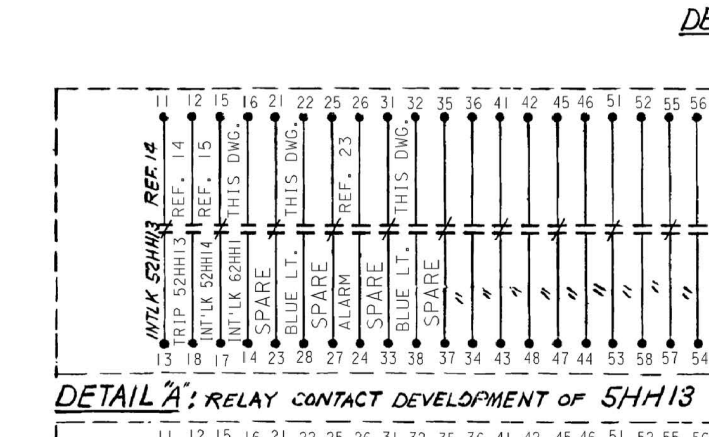
DEVICE NO.	FUNCTION	RATING	MFR TYPE	CAT. NO. OR REF. NO.	REMARKS		
3HH1	DEIEEL AUTO TRANSFER INTERLOCKING RELAY	125VDC	ELECTRICAL SWITCH	7825DD	ELECTRIC RESET		
4HH7	CLOSE RELAY	W	56	1342925			
4HH4	START-UP AUTO TRANSFER CLOSE RELAY	W	56	1342925			
5HH3	TRIP RELAY	W	56	1342925	ELECTRIC RESET		
27HDC	DC CONTROL BUS UNDERVOLTAGE RELAY	W	56	1342925			
27HHB1	4 KV BUS H AUTO TRANSFER U/V RELAY	W	56	1342925	1-3 & RESIDUAL VOLTAGE DELAY		
27HHB2	START DIESEL U/V RELAY	W	56	1342925	2 & 6		
27HHB2	U/V AUX. RELAY	125VDC	W	56	1342925	2 & 6	
27HHT1	U/V TRIP RELAY (1ST LEVEL)						
27HHT2	U/V TRIP RELAY (2ND LEVEL)						
27HHT1	FDR U/V RELAY (START-UP TRANSF.)				INSTANTANEOUS		
27HHT2	START DIESEL U/V AUX. RELAY	125VDC	W	56	1342925		
27HHB3, B4	U/V TRIP RELAY (2ND LEVEL)				REF. 32		
27XHH1	4 KV BUS H U/V TRIP AUX. RELAY	125VDC			ELECTRIC RESET		
29HHB2	27HHB2 FLUR. CUTOOUT SWITCH				ABB 33		
4HH4X	START-UP AUTO TRANSFER CLOSE AUX. REL.	125VDC	W	56	1342925		
27Y G 2	GENERATOR UNDERVOLTAGE AUX. RELAY				17		
51XHH13	1 KV BUS H FDR Q/C. AUX. RELAY (U/V TRANSF.)				15		
51XHH14	1 KV BUS H FDR Q/C. AUX. RELAY (U/V TRANSF.)				(2 & 6)		
52HH7	CTI BKR (DIESEL GENERATOR)				(2 & 6)		
52HH12	(COMP. COOLING WTR.) (AUX. TRANSFER)				12		
52HH13	(AUX. TRANSFER)				(2 & 6)		
52HH14	(U/V TRANSF.) (U/V TRANSF.)				(2 & 6)		
59HH6	Q/V RELAY (ST-UP TRANSFORMER)				INSTANTANEOUS		
59HH6	(DIESEL GENERATOR)				2 & 6		
62HH1	START-UP AUTO TRANSFER TIMER BUS H	125VDC	W	D-5	293801A13	0.1 TO 4 SEC.	
62HH2	DIESEL AUTO TRANSFER TIMER BUS H	125VDC	AGASTAT	ETR	ETR1403B	0.55-15 SEC.	
62XHHB	4 KV BUS H DIFF. AUX. RELAY					17, 18	
62YXH	25 KV MOTOR OP. DISC. AUX. SW.					CONTACT IS CLOSED WHEN DISC. SWITCH IS OPEN	
552Y2	500 KV P.C.B. AUX. RELAY					CONTACT IS CLOSED WHEN DISC. SWITCH IS OPEN	
K608/SIS	SAFETY INJECTION AUX. RELAY					30	
K609/SIS						30	
K610/SIS						30	
K611/SIS						30	
K645	SPRAY ACTUATION AUX. RELAY					30	
CCW1	K609/SIS TRAIN A AUX. RELAY	125V DC	G.E.	HGA	108ANUS4		
CCF1	TRAIN B						
CCF2							
62HH3A	START DIESEL TIME DELAY BUS H	125VDC	AGASTAT	ETR	ETR1410A	TIMER SET @ 10 SEC.	
62HH3B	XFR TO DSL				ETR	ETR1410A	TIMER SET @ 20 SEC.
A2K617	K611/SIS TRAIN A AUX. TIMING RELAY	120VAC	AGASTAT	ETR	ETR1411B-006	CONTACT CLOS. @ 26 SEC.	



ALARM CIRCUIT TABLE

DEVICE	4 KV BUS SECT. H UNDERVOLTAGE	4 KV BUS SECT. H AUTOMATIC TRANSFER	4 KV BUS H BUS OR ST-UP FOR U/V	DC CONTROL UNDERVOLTAGE
CRT. NO.	27XHH1	5HH3	27XHH2	27HDC, 27HHB2 & 27HHT1
	AV4203DH	AY4212DH	AV4204DH	AV4206DH

DETAIL "E" RELAY CONTACT DEVELOPMENT OF 5HH1 (SEE NOTE 2)



- ### NOTES
- TEST RELAY CONTACT OPEN DURING TEST
 - CONTACTS ARE SHOWN IN TRIPPING POSITION
 - CONTACTS PERMIT TRIPPING OF THE UNIT AUX. TRANSF. BKR. ON 2ND LEVEL U/V WHEN THE DSL GEN. AND THE UNIT AUX. TRANSF. ARE PARALLELED
 - CONTACT C1-C2 MAY ALLOW VOLTAGE READING ACROSS AN INTERNAL HIGH IMPEDANCE TRIP CIRCUIT MONITOR (TCM) WHERE NO VOLTAGE IS EXPECTED DURING POST MAINTENANCE TESTING. THE TCM FUNCTION IS NOT USED WITH AUTO TRANSFER SCHEME TO START D/G NOR WILL IT AFFECT ITS FUNCTION. (REF: 663332-220 PAGES 12-11, 6-17)

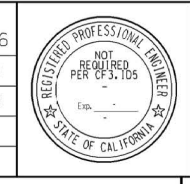
- ### EQUIPMENT LOCATION
- BTH108 TERMINAL BOX H108
 - RHH ENG. SAFEGUARD RELAY BOARD BUS H
 - CHH CONTROL BOARD ENG. SAFEGUARD BUS H
 - CG CONTROL BOARD MAIN GENERATOR
 - RGE GENERATOR RELAY BOARD
 - SSVLS 500KV 4KV BUS V. CIRCUIT 5
 - RNSOA RACK NUCLEAR SAFEGUARD OUTPUT A
 - MGDSH 25KV MOT. OPERATED DISC. AUX. SWITCH H

- ### REFERENCES
- DESCRIPTION OF ELEC. SCHEMATIC DIAG. SYMBOLS & CIRCUIT DESIGNATIONS DWG NO 050003
 - SINGLE LINE METER & RELAY DIAG. 4160 V SYSTEM (BUS SECT. G & H) 441230
 - SCHEMATIC DIAG. 4KV SYSTEM AUTOMATIC TRANSFER (BUS SECT. D & E) 441351
 - SINGLE LINE METER & RELAY DIAG. 4KV SYSTEM (BUS SECT. F) 441352
 - (BUS SECT. G) 441353
 - (BUS SECT. H) 441354
 - AUX. TRANSFER TIME DELAY BUS H & ASSOCIATED CIRCUIT BREAKERS SH 2 441287
 - 25 KV ISOPHASE BUS MOTOR OPERATED DISC. SW. 441302
 - CONTAINMENT FAN COOLERS 441315
 - SAFETY INJECTION PUMPS 441307
 - CONTAINMENT SPRAY PUMPS 441309
 - RESIDUAL HEAT REMOVAL PUMPS 441311
 - COMPONENT COOLING WATER PUMPS 441312
 - 4160 V BUS DIFFERENTIAL SH 2 441343
 - AUX. TRANSFORMER NO 22 & ASSOCIATED CIRCUIT BREAKERS SH 2 441349
 - DIESEL GENERATORS & ASSOCIATED CIRCUIT BREAKERS SH 2 441345
 - GENERATOR CONTROL SHEET NO 1 441245
 - 4KV DIESEL GENERATORS CONTROL SH #1 441246
 - 25 KV ISOPHASE BUS MOTOR OPERATED DISC. SW. 441357
 - CONTAINMENT FAN COOLERS 441358
 - LOGIC DIAGRAM 4160 V BUS SECTION "H" AUTOMATIC TRANSFER 500786, 87
 - SCHEMATIC DIAG. MAIN ANNUNCIATOR SH 16.17 441240
 - SINGLE LINE METER & RELAY DIAG. 125V DC SYSTEM 441247
 - SCHEMATIC DIAG. GEN. CONTROL SHEET NO 3 441313
 - LIST OF EQUIPMENT LOCATION CODES 663231
 - SOLID STATE PROTECTION SYSTEM MFR'S DWG 663195
 - FUNCTIONAL DIAGRAM MFR DWGS 503089, 093
 - SCHEM. DIAG. 555PS OUTPUT RELAYS, TRAIN A, TRAIN B DWG. NO. 502092
 - SCHEMATIC DIAG. CONTROL SHEET NO 1 441308
 - SCHEMATIC DIAG. CNT. SPR. MOV 050011
 - WIRING DIAGRAM - 4KV SWITCHGEAR BUS "H" 441594

RASTER: 441354.dgn
 CWD User: ZNS Date: 09-26-2016

DATE: 09-26-2016
 D. D. ZNS
 R. E. FxC2
 J. V. N/A
 P. E. N/A

KEY DWG. SECTION 2



REVISION DESCRIPTION
 REVISED PER DFT-73715

UNIT 2

ELECTRICAL
 SCHEMATIC DIAGRAM
 4160 V BUS SECTION "H"
 AUTOMATIC TRANSFER

DIABLO CANYON POWER PLANT
 PACIFIC GAS AND ELECTRIC COMPANY
 SAN FRANCISCO, CALIFORNIA

DWG SCALE:	SHEET	PAGE	REV
BILL OF MATL:	441354	1	0 33
SUPSD BY:			
DATE:			

NUCLEAR SAFETY RELATED

P.G. & E. SYSTEM
 PHASE SEQUENCE
 A-C-B