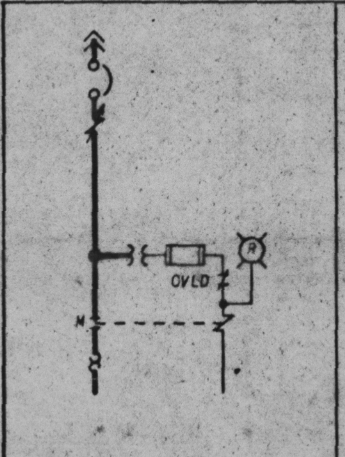
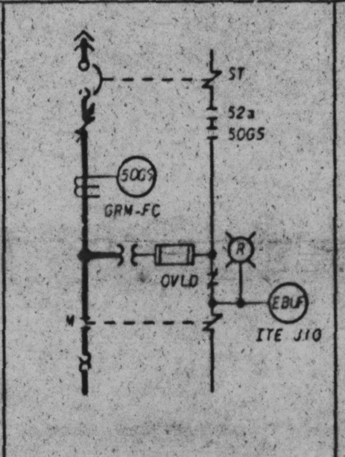
COMPT NO	LOAD	UNID	DETAIL	LOAD SIZE	SCHEMATIC DWG REFERENCE
A1	MAIN BREAKER	2ED-52NA-34F	SEE KEY DIAG		
B1	EL 673 TB UNIT HTR FAN	OVU-EMOT-038	D	0.5HP	5GW0740-VU-12
B2	EL 604 AIR HANDLING UNIT	OVT-EMOT-068	D	20HP	5GW0740-VT-07
B3	COND TUBE CLEANING RECIRCULATION PUMP 2A	2RC-EMOT-007	D	15HP	5GW2640-RC-02
B4	SPARE	2ED	K		
B5	SPARE	2ED	D		
C1	EL 649 WALL SUPPLY FAN	OVT-EMOT-030	D	3HP	5GW0740-VT-13
C2	EL 649 WALL SUPPLY FAN	OVT-EMOT-032	D	3HP	5GW0740-VT-13
C3	EL 629 WALL SUPPLY FAN	OVT-EMOT-037	D	3HP	5GW0740-VT-13
C4	EL 673 WALL SUPPLY FAN	OVT-EMOT-029	D	3HP	5GW0740-VT-13
C5	EL 629 AIR HANDLING UNIT	OVT-EMOT-064	G	40HP	5GW0740-VT-17
D1	3 HTR DRAIN PUMP 2A AUX LUBE OIL PUMP	2CD-EMOT-913	D	1HP	5GW2640-CD-02
D2	6 HTR DRAIN PUMP 2A AUX LUBE OIL PUMP	2CE-EMOT-916	D	0.5HP	5GW2740-CE-04
D3	HTR 2A1 FW OUTLET MOV	2CF-IFCV-037	K	13.2HP	5GW2640-CF-03
D4	HTR 2A2 FW INLET MOV	2CF-IFCV-021	K	13.2HP	5GW2640-CF-03
D5	MFPT TURNING GEAR 2A	2CP-EMOT-907	D	1.5HP	5GW2640-CF-21
D6	MFPT OIL PUMP 2A1	2CP-EMOT-917	D	25HP	5GW2640-CF-19
E1	HTR 2A3 CNDS OUTLET MOV	2CM-IFCV-059	K	3.94HP	5GW2740-CM-23
E2	HTR 2A4 CNDS INLET MOV	2CM-IFCV-051	K	3.94HP	5GW2740-CM-23
E3	MAIN FEED PUMP 2A CNDS INLET MOV	2CM-IFCV-038	K	5.2HP	5GW2740-CM-27
E4	SPARE	2ED	H		
E5	HTR 2A5 CNDS OUTLET MOV	2CM-IFCV-077	K	3.94HP	5GW2740-CM-19
E6	HTR 2A6 CNDS INLET MOV	2CM-IFCV-070	K	3.94HP	5GW2740-CM-19
F1	HTR 2A2 EXTRACTION STEAM INLET MOV	2SE-IFCV-038	K	10.5HP	5GW2640-SE-07
F2	MAIN FEED PUMP 2A FW OUTLET MOV	2CF-IFCV-015	H	13.2HP	5GW2640-CF-02
F3	MSS TO RHR A 2A2 COILS INLET STOP VALVE	2SM-IFCV-126	K	1.6HP	5GW2640-SM-07
F4	EXTRACTION STEAM TO REHEATER 2-1A2 MOV	2SE-IFCV-063	K	1HP	5GW2640-SE-05
F5	HTR 2A4 EXTRACTION STEAM INLET MOV	2SE-IFCV-093	K	2.6HP	5GW2640-SE-09
F6	HTR 2A3 EXTRACTION STEAM INLET MOV	2SE-IFCV-077	K	2.6HP	5GW2640-SE-08
G1	MCC LOSS OF VOLTAGE RLY		SEE KEY DIAG		
G2	120V-1P-CKT BKR COMPT		SEE KEY DIAG		
G4	FUSE COMPT		SEE KEY DIAG		
G5	MCC CONTROL TRANSFORMER AND DISCONNECT SWITCH		SEE KEY DIAG		
H1	COND TUBE CLEANING RECIRCULATION PUMP 2B	2RC-EMOT-008	D	15HP	5GW2640-RC-02
H2	COND TUBE CLEANING RECIRCULATION PUMP 2C	2RC-EMOT-009	D	15HP	5GW2640-RC-02
H3	MFPT LUBE OIL TANK 2A HTR	2CP-EHTR-012	P	9KW	5GW2640-CF-24
H4	RAW COOLING WATER PUMP 2A2	2KW-EMOT-002	F	100HP	5GW2740-KW-03
H6	FUTURE - 6 INCH	2ED			
J1	COND TUBE CLEANING RECIRCULATION PUMP 2D	2RC-EMOT-010	D	15HP	5GW2640-RC-02

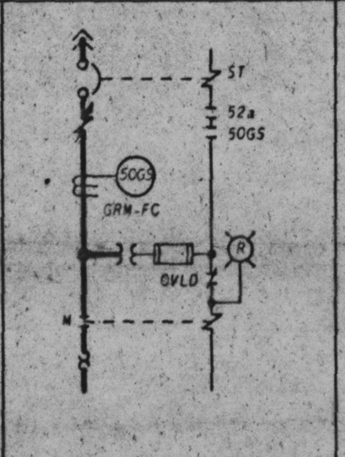
COMPT NO.	LOAD	UNID	DETAIL	LOAD SIZE	SCHEMATIC DWG REFERENCE
J2	FUTURE - 12 INCH	2ED			
J3	EL 673 TB UNIT HTR FAN	OVU-EMOT-044	D	0.5HP	5GW0740-VU-12
J4	EL 673 TB UNIT HTR FAN	OVU-EMOT-048	D	0.5HP	5GW0740-VU-12
J5	EL 673 TB UNIT HTR FAN	OVU-EMOT-043	D	1HP	5GW0740-VU-12
J6	FUTURE - 12 INCH	2ED			
K1	FUTURE - 12	2ED			
K2	HTR #6 DRAIN TANK PUMP CNDS MKUP ISLN MOV 2A	2CM-IFCV-073	K	1HP	5GW2740-CM-21
K3	MFPT 2A VAPOR EXTRACTOR	2CP-EMOT-010	D	0.33HP	5GW2640-CF-20
K4	FUTURE - 12 INCH	2ED			
K5L	COND CLEAN SYS CONT PNL 2A	2RC-EECB-139	A	5CKVA	5GW2640-RC-01
K5R	GEN INITIAL EXC PKG	2TE-ECAB-EG01	A	28KVA	5GW2640-TE-01
K6L	6 TON COND TUBING HOIST	2MM-EMOT-059	A	7.5HP	5GW2740-MM-02
K6R	GEN BRK SW CLG PMP 2A FDR	2XN-EMOT-088A	A	12.5HP	5GW2640-TC-54
L1	SEC L BUS GND RLY	2ED-50GS-34B	SEE KEY DIAG		
L3L	TB 480V RCPT A,B,C	2ED-ERCP-019	B		5GW2740-ED-30
L3R	480V RCPT A,B	2ED-ERCP-020	B		5GW2740-ED-30
L4	HTR 2A1 EXTRACTION STEAM INLET ISOLATION MOV	2SE-IFCV-018	K	19.9HP	5GW2640-SE-06
L6	FUTURE - 6 INCH	2ED			
M1	SPARE	2ED	K		
M2	SPARE	2ED	K		
M3L	GEN BRK SW CPRSR CONT PNL	2XN-EMCP-3	A	16.6KVA	5GW2640-TC-55
M3R	FUTURE - HALF COMPT	2ED			
M4	UNIT 2 MAIN GEN BUS COOLING FAN 1	2XP-EMOT-1	G	40HP	5GW2640-TC-56
M6	MFPT 2A TURBINE DRAIN VALVE MOV	2TD-IFCV-171	H	0.13HP	5GW2640-CF-38
N1	MFPT 2A LP STOP VALVE DRAIN MOV	2TD-IFCV-179	H	0.13HP	5GW2640-CF-37
N2	MFPT 2A HP STOP VALVE DRAIN MOV	2TD-IFCV-178	H	0.2HP	5GW2640-CF-36
N3	MFPT 2A HP STOP VALVE DRAIN MOV	2TD-IFCV-177	H	0.2HP	5GW2640-CF-36
N4	MFPT 2A LP STOP VALVE DRAIN MOV	2TD-IFCV-180	H	0.13HP	5GW2640-CF-37
N5	FUTURE - 24 INCH	2ED			



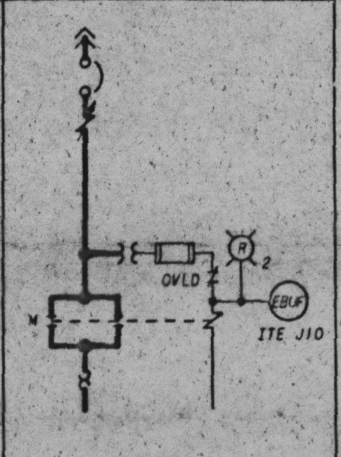
DETAIL B



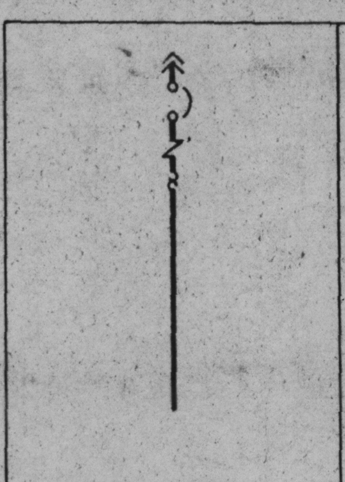
DETAIL F



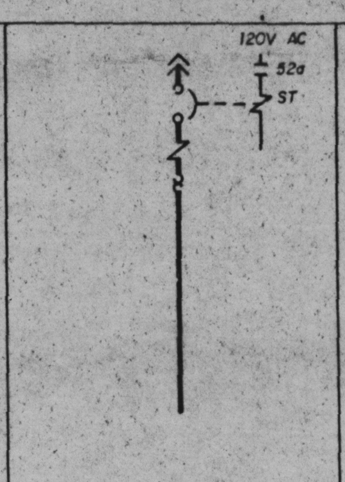
DETAIL G



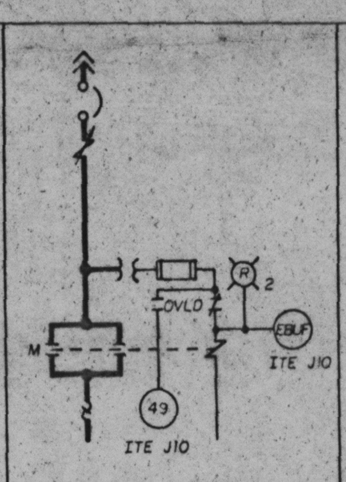
DETAIL H



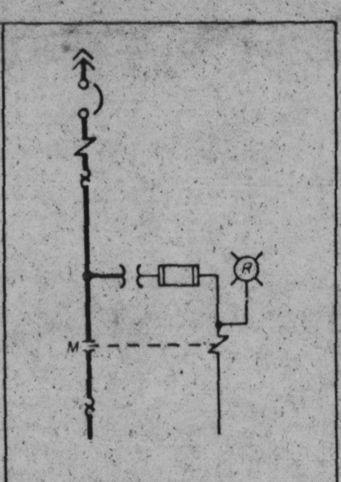
DETAIL A



DETAIL B



DETAIL K



DETAIL P

NOTES

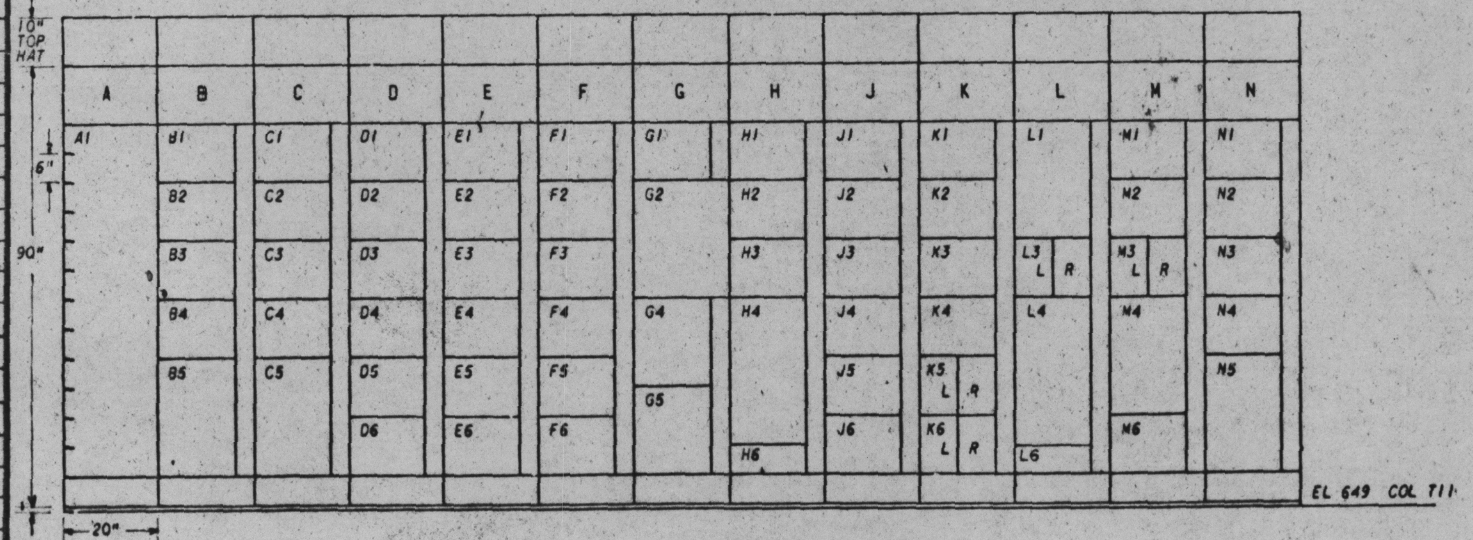
1. 480V MOTOR CONTROL CENTER PROVIDED ON TVA CONTRACT NO 76K5-86242 BY GOULD/ITE.
2. ALL MOLDED CASE 480V CIRCUIT BREAKERS ARE 3Φ, 600V WITH AN INTERRUPTING RATING OF NOT LESS THAN 25,000 RMS SYMMETRICAL AMPS AT 480V. CIRCUIT BREAKERS SHOWN WITH SHUNT TRIP COILS HAVE A TRIP COIL CAPABLE OF OPERATING AT 55 PERCENT RATED VOLTAGE. ALL 100A FRAME 480V CIRCUIT BREAKERS ARE ITE "HE" SERIES AND THE 400A FRAME 480V CIRCUIT BREAKERS ARE ITE "JL" SERIES.
3. ALL MOLDED CASE 120V CIRCUIT BREAKERS ARE 1Φ, 100A FRAME, THERMAL MAGNETIC WITH 15A TRIP, ITE "BQ" SERIES.
4. ALL 5A AND 10A FUSES ARE GOULD/SHAWMUT, AMP-TRAP, FORM 600, MIDGET TYPE 2.
5. ALL CONTROL TRANSFORMERS ARE 1Φ, 480-120V WITH GROUNDED SECONDARY. THE SECONDARY OF THE 150 VA TRANSFORMER IS FUSED WITH A 1.5A DUAL-ELEMENT TIME-DELAY, BUSSMAN TYPE FNQ FUSE. THE SECONDARY OF THE 350 VA TRANSFORMER IS FUSED WITH A 3.5A DUAL-ELEMENT TIME-DELAY GOULD/SHAWMUT TYPE TRM FUSE.
6. GROUND FAULT PROTECTION (50GS), ITE TYPE GRM-FC, PICKS UP AT APPROXIMATELY 10 AMPS PRIMARY CURRENT WITH NO INTENTIONAL TIME DELAY.
7. THE PRIMARY OF THE 5KVA CONTROL POWER TRANSFORMER IS FUSED WITH A 15A TIME DELAY, BUSSMANN TYPE JHC-15 FUSE.
8. THE MOTOR CONTROL CENTER ARRANGEMENT IS CONTROLLED BY THE FRONT VIEW LOCATED ON THIS DRAWING. COMPARTMENT CONFIGURATION CONTROL DRAWINGS ARE REFERENCED IN THE MOTOR CONTROL CENTER COMPUTERIZED CIRCUIT SCHEDULE. THE MOTOR CONTROL CENTER COMPUTERIZED CIRCUIT SCHEDULE DOCUMENTS DEVICE RATINGS AND ADJUSTABLE CIRCUIT BREAKER SETTINGS.
9. THIS MCC IS NON-CLASS 1E.
10. ALL AGASTAT RELAYS ARE OF THE 7000 SERIES.

REFERENCED DRAWINGS AND DOCUMENTS

PLANT AC AUXILIARY POWER SYSTEM SINGLE LINE	2GW0720-RP-01
SINGLE LINE DIAGRAM 480V SWITCHGEAR 2XA1	2TW2726-ED-1
480V NORMAL AC AUXILIARY POWER DISTRIBUTION SYSTEM SCHEMATIC	5GW2740-ED-30
480V MCC COMPARTMENT TYPICALS	5GW0747-RP
480V MCC 2A2 COMPUTERIZED CIRCUIT SCHEDULE	5TC2764-ED

SYMBOLS

-MAGNETIC TRIP ONLY CIRCUIT BREAKER (ADJUSTABLE)



FRONT VIEW

PRC APERTURE CARD

Docket # 50-438
Control # 8304050536
Date 3-25-83 of Document:
REGULATORY DOCKET FILE

COMPANION DWG:
5TW2734-ED-03
5TW2734-ED-02 HAS BEEN VOIDED

INSPECTED AND APPROVED FOR ISSUE

REV NO	ECN NO	DATE	DSGN	DRWN	CHKD	SUPV	ENGR	INSP	SUBM	RECM	APPD
4	S1	7-3-72		DWS		WRT					
ADDED LOAD SIZE AND SCHEMATIC DWG REF COLUMN TO TABLES, REVISED NOTES 7 & 8 AND MOVED KEY DIAGRAM TO SHEET 3.											
3	S1	3-3-1									
DELETE LOADS FROM COMPT B4 AND M1. ADDED LOAD TO COMPT L4											
2	S1	12-14-77		RAF				—		JLS	
RECORD DWG REV FOR THE MCC COMPUTERIZED CKT SCH HISTORICAL DATA BASE R4.											
1	S1	2-25-76	LDG		RGL	WRT	CTG		CTG	JLS	
INCORPORATED UNID SYS, GEN REV PER ECN S1-VARIOUS.											

DSGN T.W. PFEILER/R.G. LARGE
DRWN R.Q. ROBERTS
CHKD T.E. SNYDER
SUPV W.L. ALDREDGE
INSP
ENGINEER C.T. Garner

SCALE: NTS EXCEPT AS NOTED

TURBINE BUILDING
UNIT 2

SINGLE LINE
480V MCC 2A2
2ED-EMCC-34

BELLEFONTE NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN
N

SUBMITTED C.T. Garner
RECOMMENDED
APPROVED R.M. Hodges

KNOXVILLE 12-6-74 88 E 5TW2734-ED-1 R4

RECORD DRAWING AS CONSTRUCTED