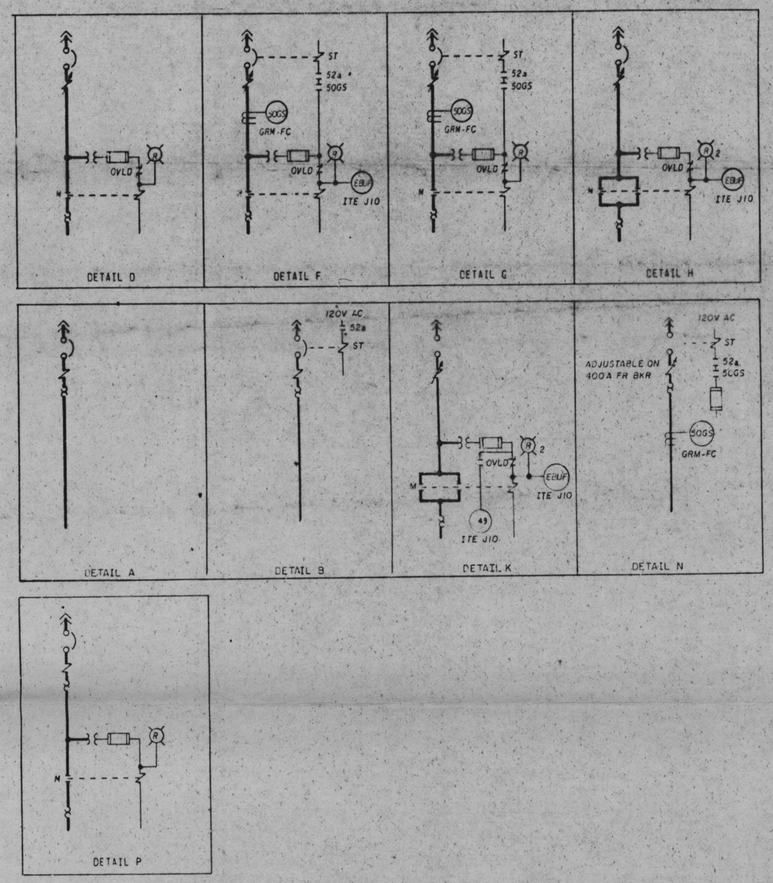
COMPT NO	LOAD	UNID	DETAIL	LOAD SIZE	SCHEMATIC DWG REFERENCE
A1	MAIN BREAKER	2EC-52NA-37F	SEE KEY DIAG		
B1	EL 673 TB UNIT HTR FAN	0VU-EMOT-042	D	0.5 HP	5GW0740-VU-12
B2L	SPARE	2EC	A		
B2R	SPARE	2EC	A		
B3L	COND CLEAN SYS CONT PNL 1B	2MC-EECB-140	A	50 KVA	5GW2640-RC-01
B3R	GEN BRK SW 2LG PMP 2B TDR	2KN-EMOT-038B	A	12.5 HP	5GW2640-TC-54
B4	EL 649 WALL SUPPLY FAN	0VT-EMOT-035	D	3 HP	5GW0740-VT-14
B5	EL 649 WALL SUPPLY FAN	0VT-EMOT-033	D	3 HP	5GW0740-VT-14
B6	COND TUBE CLEAN RECIRCULATION PUMP 2G	2RC-EMOT-013	D	15 HP	5GW2640-RC-02
C1	MFPT TURNING GEAR 2B	2CP-EMOT-909	D	1.5 HP	5GW2640-CF-32
C2	MFPT 2B VAPOR EXTRACTOR	2CP-EMOT-011	D	0.33HP	5GW2640-CF-31
C3	#3 HTR DRAIN PUMP 2B AUX LUBE OIL PUMP	2CD-EMOT-914	D	1 HP	5GW2640-CD-03
C4	MFPT OIL PUMP 2B1	2CP-EMOT-920	D	25 HP	5GW2640-CF-30
C5	EL 629 WALL SUPPLY FAN	0V1-EMOT-040	D	3 HP	5GW0740-VT-14
C6	EL 675 WALL SUPPLY FAN	0VT-EMOT-026	D	3 HP	5GW0740-VT-14
D1	#6 HTR DRAIN PUMP 2B AUX LUBE OIL PUMP	2CE-EMOT-915	D	0.5 HP	5GW2740-CE-05
D2	EL 673 TB UNIT HTR FAN	0VU-EMOT-047	D	0.5 HP	5GW0740-VU-12
D3	COND TUBE CLEANING RECIRCULATION PUMP 2E	2RC-EMOT-011	D	15 HP	5GW2640-RC-02
D4	HTR #6 DRAIN TANK PUMP CNDS MKUP ISOLATION MOV 2B	2CM-IFCV-066	K	1 HP	5GW2740-CM-21
D5	MAIN FEED PUMP 2B CNDS INLET MOV	2CM-IFCV-030	K	5.2 HP	5GW2740-CM-26
D6	MAIN FEED PUMP 2B FW OUTLET MOV	2CF-IFCV-014	H	13.2 HP	5GW2640-CF-02
E1	MCC LOSS OF VOLTAGE RLY		SEE KEY DIAG		
E2	120V-1P-CKT BKR COMPT		SEE KEY DIAG		
E4	FUSE COMPT		SEE KEY DIAG		
E5	MCC CONTROL TRANSFORMER AND DISCONNECT SWITCH		SEE KEY DIAG		
F1	EL 673 TB UNIT HTR FAN	0VU-EMOT-050	D	0.5 HP	5GW0740-VU-13
F2	EL 673 TB UNIT HTR FAN	0VU-EMOT-039	D	1 HP	5GW0740-VU-12
F3	MFPT LUBE OIL TANK 2B HTR	2CP-EHTR-013	P	9 KW	5GW2640-CF-35
F4	HTR 2B1 FW OUTLET MOV	2CF-IFCV-036	K	13.2 HP	5GW2640-CF-04
F5	HTR 2B4 CNDS INLET MOV	2CM-IFCV-050	K	3.94 HP	5GW2740-CM-24
F6	SPARE	2ED	K		
G1	HTR 2B4 EXTRACTION STEAM INLET MOV	2SE-IFCV-097	K	2.6 HP	5GW2640-SE-09
G2	HTR 2B2 FW INLET MOV	2CF-IFCV-020	K	13.2 HP	5GW2640-CF-04
G3	HTR 2B5 CNDS OUTLET MOV	2CM-IFCV-062	K	3.94 HP	5GW2740-CM-20
G4	HTR 2B2 EXTRACTION STEAM INLET MOV	2SE-IFCV-055	K	10.5 HP	5GW2640-SE-07
G5	SPARE	2ED	K		
G6	COND TUBE CLEANING RECIRCULATION PUMP 2H	2RC-EMOT-014	D	15 HP	5GW2640-RC-02
H1	HTR 2B3 CNDS OUTLET MOV	2CM-IFCV-042	K	3.94 HP	5GW2740-CM-24
H2	HTR 2B6 CNDS INLET MOV	2CM-IFCV-069	K	3.94 HP	5GW2740-CM-20
H3	HTR 2B3 EXTRACTION STEAM INLET MOV	2SE-IFCV-083	K	2.6 HP	5GW2640-SE-08
H4	SPARE	2ED	K		
H5	EL 629 AIR HANDLING UNIT	0VT-EMOT-063	G	40 HP	5GW0740-VT-17
J1	MS/RH A FRONT BUNDLES LAY-BY STEAM ISLN VALVE	2SM-IFCV-588	H	0.13 HP	5GW2640-SM-37

COMPT NO.	LOAD	UNID	DETAIL	LOAD SIZE	SCHEMATIC DWG REFERENCE
J2	MS/RH A REAR BUNDLES LAY-BY STEAM ISLN VALVE	2SM-IFCV-587	H	0.13 HP	5GW2640-SM-38
J3	COND TUBE CLEANING RECIRCULATION PUMP 2F	2RC-EMOT-012	D	15 HP	5GW2640-RC-02
J4	RAW COOLING WATER PUMP 2B2	2KW-EMOT-004	F	100 HP	5GW2740-KW-03
J6	FUTURE-6 INCH	2ED			
K1	SEC K BUS GRD RLY	2ED-50GS-378	SEE KEY DIAG		
K3L	TB 480V RCPT A,B,C,D	2ED-ERCP-021	B		5GW2740-ED-31
K3R	FUTURE-HALF COMPT	2ED			
K4	HTR 2B1 EXTRACTION STEAM ISOLATION MOV	2SE-IFCV-034	K	19.9 HP	5GW2640-SE-06
K6	FUTURE - 6 INCH				
L1	FUTURE - 24 INCH	2ED			
L3	MFPT 2B TURBINE DRAIN VALVE MOV	2TD-IFCV-181	H	0.13 HP	5GW2640-CF-38
L4	UNIT 2 ISOLATED PHASE BUS HTR CONTROL PANEL	2XP-EMCP-1	N	160 KW	5GW2640-TC-56
L6	FUTURE - 12 INCH	2ED			
M1	MFPT 2B HP STOP VALVE DRAIN MOV	2TD-IFCV-188	H	0.2 HP	5GW2640-CF-39
M2	MFPT 2B HP STOP VALVE DRAIN MOV	2TD-IFCV-187	H	0.2 HP	5GW2640-CF-39
M3	MFPT 2B LP STOP VALVE DRAIN MOV	2TD-IFCV-190	H	0.13 HP	5GW2640-CF-40
M4	MFPT 2B LP STOP VALVE DRAIN MOV	2TD-IFCV-189	H	0.13 HP	5GW2640-CF-40
M5	UNIT 2 MAIN GEN BUS COOLING FAN 2	2XP-EMOT-2	G	40 HP	5GW2640-TC-56



NOTES

1. 480V MOTOR CONTROL CENTER PROVIDED ON TVA CONTRACT NO 76K5-36242 BY GOULD/ITE
2. ALL MOLDED CASE 480V CIRCUIT BREAKERS ARE 3P, 600V WITH AN INTERRUPTING RATING OF NOT LESS THAN 25,000 RMS SYMMETRICAL AMPS AT 480V. CIRCUIT BREAKERS SHOWN WITH SHUNT TRIP COILS HAVE 1 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 1P, 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 1Ø, 480-120V WITH GROUNDED SECONDARY. THE SECONDARY OF THE 130 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 5 KVA CONTROL POWER TRANSFORMER IS FUSED WITH A 15A TIME DELAY, BUSSMANN TYPE MHC-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.

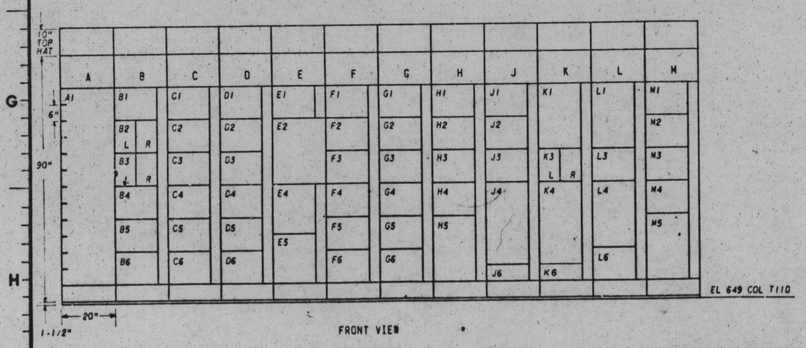
REFERENCED DRAWINGS AND DOCUMENTS

PLANT AC AUXILIARY POWER SYSTEM SINGLE LINE--------2GW0720-RP-01
SINGLE LINE DIAGRAM 480V SWITCHGEAR 2XB1----------2TW2727-ED-1
480V NORMAL AC AUXILIARY POWER DISTRIBUTION SYSTEM SCHEMATIC----------5GW2740-ED-31
480V MCC COMPARTMENT TYPICALS----------5GW0747-RP
480V MCC 2B2 COMPUTERIZED CIRCUIT SCHEDULE---------STC2765-ED

SYMBOLS:

-MAGNETIC TRIP ONLY CIRCUIT BREAKER (ADJUSTABLE)

PRC APERTURE CARD



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

COMPANION DRAWING:
5TW2735-ED-03
5TW2735-ED-02 HAS BEEN VOIDED

INSPECTED AND APPROVED FOR ISSUE

4	S1	7-3-82	WSH		ADDED LOAD SIZE AND SCHEMATIC DWG REF COL TO TABLES, REVISED NOTES 7 & 8 AND KEY DIAGRAM TO SHEET 3.
3	S1	11-3-81	WSH		DELETED LOAD FROM COMPT F6, ADDED LOADS TO COMPT J1,J2 AND K4.
2	S1	2-4-77	WSH		RECORD DWG REV FOR THE MCC COMPUTERIZED CKT SCH HISTORICAL DATA BASE PR
1	S1	2-25-76	WBH		INCORPORATED UNID SYS.GEN REV PER ECN S1-VARIOUS.

REV NO	ECN NO	DATE	DSGN	DRWN	CHK	SUPV	ENGR	INSP	SUBM	RECD	APPD

DSGN B.J. NORTON
DRWN J.W. BRIGGS
CHKD T.D. CRUSER
SUPV W.L. ALDRIDGE
INSP
ENGINEER C.T. Barner

SCALE: NTS — EXCEPT AS NOTED

TURBINE BUILDING
UNIT 2

SINGLE LINE
480V MCC 2B2
2ED-EMCC-37

BELLEFONTE NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

N

SUBMITTED	RECOMMENDED	APPROVED
C.T. Barner		
KNOXVILLE 12-6-76	88 E	5TW2735-ED-1 R4

RECORD DRAWINGS AS CONSTRUCTED