COMPT NO	LOAD	UNID	DETAIL	LOAD SIZE	SCHEMATIC DWG REFERENCE
A1	MAIN BREAKER	2EI-52NA-70F-B	SEE KEY DIAG		
B1	SPARE	2EI	H		
B3	CFT 2B ISOLATION OUTLET MOV (CF-HV18)	2NL-IFCV-073-B	J	2.64HP	5GW0640-NL-08
C1	SPARE	2EI	J		
C2	SPARE	2EI	J		
C4	FUEL HANDLING AREA EXH FAN	2VB-EMOT-010-B	E	75HP	5GW2740-VB-07
C6	FUTURE - 6 INCH	2EI			
D1	RCP P241 LUBE OIL PUMP B	2NC-EMOT-030-B	Q	25HP	5GW2740-NC-06
D3	FUTURE - 12 INCH	2EI			
D4	SPARE	2EI	H		
E1	[illegible]	2EY-ELS-004	C	42.5KVA	5GW2747-EN-01
E2	RCP P281 LUBE OIL PUMP B	2NC-EMOT-034-B	Q	25HP	5GW2740-NC-08
E5	ZONE 2B EL 649 ESSENTIAL ELEC EQPT ROOM AHU	2VA-EMOT-137-B	E	20HP	5GW2740-VA-15
E6	FUTURE - 12 INCH	2EI			
E11	HVAC VENT MAIN MON FDR	2L9-ILPM-002-B	A	3.4KVA	5GW0640-1R-02
E12	STA VENT NO 2 MAIN MON FDR	2L9-ILPM-012-B	A	3.4KVA	5GW0640-1R-02
F2	SPARE	2EI	Q		
F3	STEAM GEN 2B MAIN FW ISOLATION VALVE	2CF-IFCV-081-B	E	2HP	5GW2640-CF-09
F4	RCP P282 LUBE OIL PUMP B	2NC-EMOT-036-B	Q	25HP	5GW2740-NC-11
G1	MCC LOSS OF VOLTAGE RLY		SEE KEY DIAG		
G2	120V-1P-2KT BKR COMPT		SEE KEY DIAG		
G4	FUSE COMPT		SEE KEY DIAG		
G5	MCC CONTROL TRANSFORMER AND DISCONNECT SWITCH		SEE KEY DIAG		
H1L	FUEL HANDLING AREA EH HTR	2VB-EHTR-029-B	A	24KW	5GW2740-VB-08
H1R	[illegible] CLEANUP EH HTR	2VX-EHTR-006-B	A	24KW	5GW2740-VX-07
H2L	HVAC VENT AUX FAN MON FDR	2L9-ILPM-027-B	A	3.4KVA	5GW0640-1R-02
H2R	FUTURE - HALF COMPT	2EI			
H3	CRD FAN	2VX-EMOT-001-B	E	3HP	5GW2740-VX-02
H4	CRD COOLING PUMP 2B B	2KD-EMOT-002-B	E	25HP	5GW2740-KD-02
H5	FUTURE - 12 INCH	2EI			
H6	FUTURE - 12 INCH	2EI			
J1	ZONE 2B EL 629 AREA AHU	2VA-EMOT-137-B	E	3HP	5GW2740-VA-18

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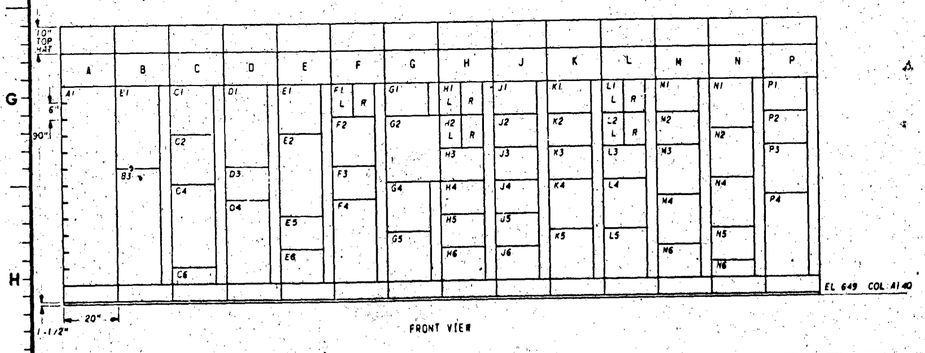
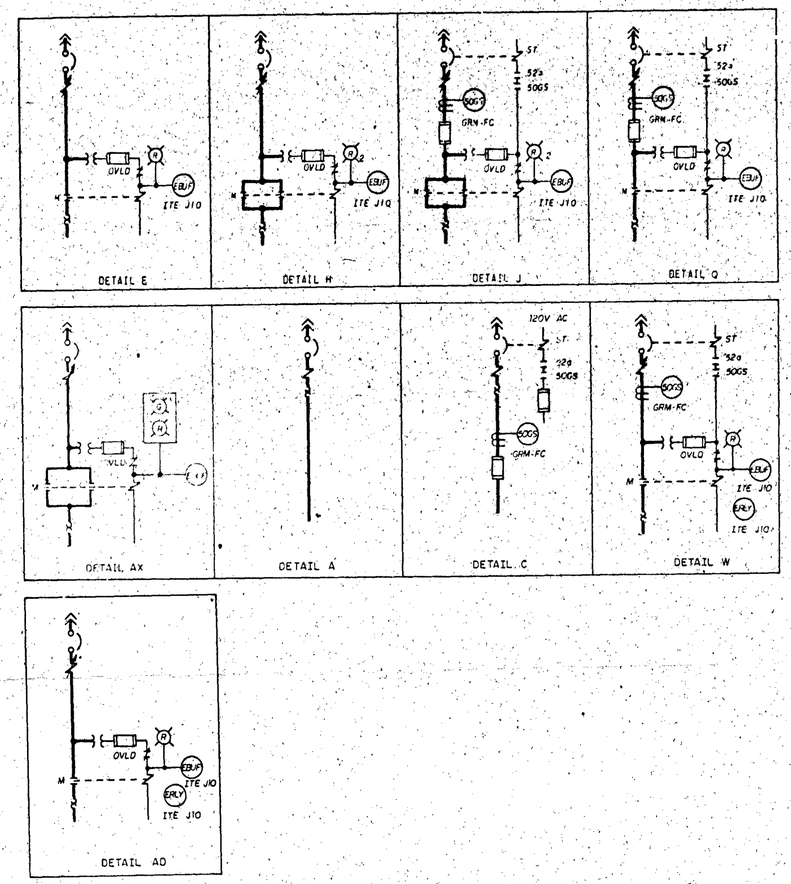
COMPT NO.	LOAD	UNID	DETAIL	LOAD SIZE	SCHEMATIC DWG REFERENCE
J2	FUTURE 12 INCH	2EI			
J3	SPARE	2EI	E		
J4	SPARE	2EI	E		
J5	CRD COOLING RB INLET ISOLATION MOV (CC-HV3)	2KD-IFCV-045-B	H	0.33HP	5GW2740-KD-03
J6	ZONE 2B EL 590 AREA AHU	2VA-EMOT-198-B	E	7.5HP	5GW2740-VA-16
K1	FIRE PROTECTION SYSTEM ISOLATION MOV	2RF-IFCV-A05-B	H	0.13HP	5GW0640-RF-45
K2	TRAIN B ERCW SUPPLY TO AFW TURBINE PUMP MOV	2CA-IFCV-092-B	H	1HP	5GW0640-CA-12
K3	ST GEN A VLV COLD SHUTDOWN	2SM-IFCV-868-B	AX	0.37HP	5GW2640-SM-31
K4	CONE FLOODING TANK OOI VENT TO WD RC DRAIN TANK	2NL-IFCV-062-B	J	0.13HP	5GW0640-NL-02
K5	SPARE	2EI	J		
L1L	CNTMT PURGE EXH RADN MON FDR	2EI-ILPR-029-B	A	3.4KVA	5GW0640-1R-02
L1R	SPARE	2EI	A		
L2L	SPARE	2EI	A		
L2R	FUTURE - HALF COMPT	2EI			
L3	TRAIN B ERCW SUPPLY TO AFW TURBINE PUMP MOV	2CA-IFCV-091-B	H	1HP	5GW0640-CA-11
L4	SPARE	2EI	J		
L5	SPARE	2EI	J		
M1	STARTUP & RECIRC PMP ISLN FROM ST GEN B	2SM-IFCV-040-B	H	2.6HP	5GW2640-SM-03
M2	AFW TURBINE PMP DISCHARGE TO ST GEN 2A MOV	2CA-IFCV-064-B	H	1.6HP	5GW0640-CA-14
M3	SPARE	2EI	C		
M4	CRD COOLING RB OUTLET ISOLATION MOV (CC-HV5)	2KD-IFCV-053-B	J	0.33HP	5GW2740-KD-04
M6	FUEL HANDLING AREA SUPPLY FAN	2VB-EMOT-002-B	E	25HP	5GW2740-VB-03
N1	WD RC DRAIN TANK VENT MOV (WD-HV1)	2WG-IFCV-011-B	J	0.33HP	5GW2740-WD-05
N2	WD RB NORMAL SUMP PUMP SUCTION MOV (WD-HV3)	2WL-IFCV-068-B	J	0.33HP	5GW2740-WD-06
N4	WD RC DRAIN TANK SHUTOFF MOV (WD-HV5)	2WL-IFCV-090-B	J	0.66HP	5GW2740-WD-06
N5	SEC CONTAINMENT CLEANUP FAN	2VX-EMOT-004-B	AD	25HP	5GW2740-VX-05
N6	FUTURE - 6 INCH	2EI			
P1	STEAM GEN 2B MAIN FW ISLN VLV	2CF-IFCV-080-B	E	2HP	5GW2640-CF-09
P2	FIRE PROTECTION SYSTEM ISLN MOV	2RF-IFCV-A09-B	H	0.13HP	5GW0640-RF-46
P3	SPARE	2EI	J		
P4	RCP P2A2 LUBE OIL PUMP B	2NC-EMOT-032-B	Q	25HP	5GW2740-NC-10

S1



FRONT VIEW



NOTES

1. 480V MOTOR CONTROL CENTER PROVIDED ON TVA CONTRACT NO 76K5-86242 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 A TRIP COIL CAPABLE OF OPERATING AT 55 PERCENT RATED VOLTAGE. ALL 100A FRAME 480V CIRCUIT BREAKERS ARE ITE "HEY" 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 00G, WIDGET TYPE 2.
5. FUSES IN THE POWER CIRCUITS ARE GOULD/SHAWMUT CLASS "J" CURRENT LIMITING. FUSES ARE REQUIRED TO PROVIDE REDUNDANT PROTECTION FOR PRIMARY CONTAINMENT PENETRATIONS
6. ALL CONTROL TRANSFORMERS ARE 1Ø, 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 250 VA TRANSFORMER IS FUSED WITH A 3.5A DUAL-ELEMENT TIME-DELAY GOULD/SHAWMUT TYPE TRM FUSE
7. GROUND FAULT PROTECTION (50GS), ITE TYPE GRM-FC, PICKS UP AT APPROXIMATELY 10 AMPS PRIMARY CURRENT WITH NO INTENTIONAL TIME DELAY.
8. THE PRIMARY OF THE 5KVA CONTROL POWER TRANSFORMER IS FUSED WITH A 15A TIME DELAY, BUSSMANN TYPE JMC-15 FUSE.
9. 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.
10. THIS MCC IS CLASS 1E
11. ALL THERMAL RELAYS ARE OF THE 2000 SERIES

REFERENCED DRAWINGS AND DOCUMENTS

PLANT AC AUXILIARY POWER SYSTEM SINGLE LINE	2GW0720-RP-01
SINGLE LINE DIAGRAM 480V SWITCHGEAR 2EX1-B	2SW2727-EI-1
480V CLASS 1E MC AUXILIARY POWER DISTRIBUTION SYSTEM SCHEMATIC	5GW2740-EI-16
480V MCC COMPARTMENT TYPICALS	5GW0747-RP
480V MCC 2E5-B COMPUTERIZED CIRCUIT SCHEDULE	5AC2767-EI

SYMBOLS

MAGNETIC TRIP ONLY CIRCUIT BREAKER (ADJUSTABLE)

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

PRC APERTURE CARD

REV NO	ECN NO	DATE	DSGN	DFTG	CHKD	SUPV	CHGR	PROJ	SUBMITTED	APPD
4	1372, S1									
	ADDED "N" SYS LOAD TO COMPT K4 ADDED LOAD SIZE & SCHEMATIC DWG REF COL TO TABLES, REV NOTES 8 & 9 AND MOVED KEY DIAGRAM TO SHEET 3.									
3	920									
	INCREASE SIZE OF COMPARTMENTS TO ALLOW FOR CHANGING FROM SIZE 2 TO SIZE 3 MOTOR STARTERS.									
2	S1	3-10-80								
	RECORD DWG REV FOR THE MCC COMPUTERIZED CKT SCH HISTORICAL DATA BASE R4									
1	S1, '83	4-2-76								
	INCORPORATED UNID SYS. GER REV PER ECN S1-VARIOUS. ADDED AHU PER ECN 87.									

DSGN G.D. McINTOSH
DFTG R. SPENCER, J.E. WILLIAMS
CHKD M.F. JONES, E.R. TWIN
SUPV W.H. BLOR, DGE
INSP
ENGINEER C.T. Garner

SCALE NTS EXCEPT AS NOTED

AUXILIARY BUILDING
UNIT 2

SINGLE LINE
480V MCC 2E5-B
2EI-EMCC-70-B

BELLEFONTE NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIV OF ENGINEERING DESIGN

Q

SUBMITTED C.T. Garner RECOMMENDED J.E. Spencer APPROVED R.M. Hodges

KNOXVILLE 12-6-74 88 E 5AW2737-EI-1 R4

RECORD DRAWING AS CONSTRUCTED

COMPANION DWG: 5AW2737-EI-03
5AW2737-EI-02 HAS BEEN VOIDED
INSPECTED AND APPROVED FOR ISSUE

S1

PRINT