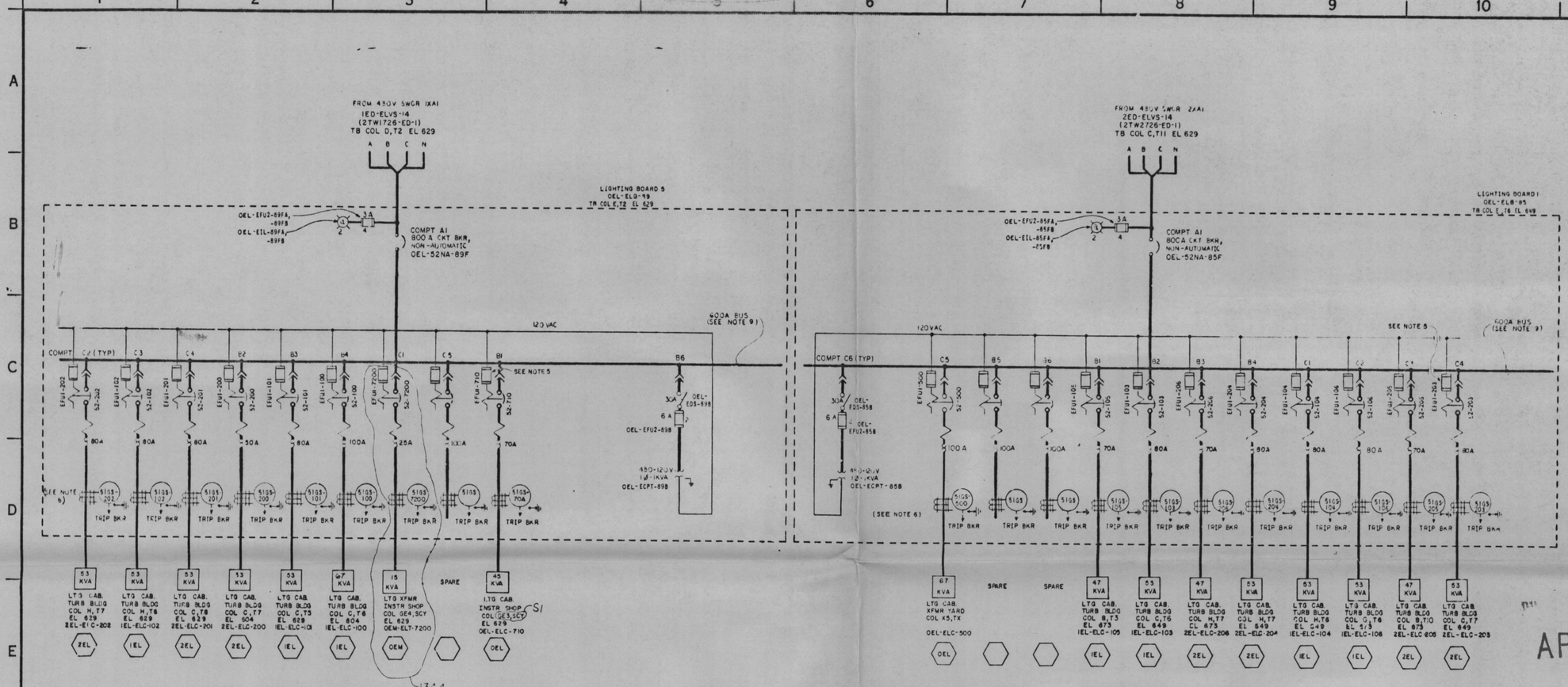
2TW0739-EL-1



REFERENCE DRAWINGS	
DWG NO.	TITLE
2TW0739-RP-01	PLANT AC AUX PWR SYS SINGLE LINE
2TW2726-EG-1	480V SWGR 1XA1 DEC (LVS 14 - 2 SH
2TW2726-EG-1	480V SWGR 2XA1 DEC (LVS 14 - 2 SH
50W0747-EL	NON AC LTG FOR WIRING DIAG
2TW0747-RP	480V MCC COMPARTMENT TYPICAL

NOTES:

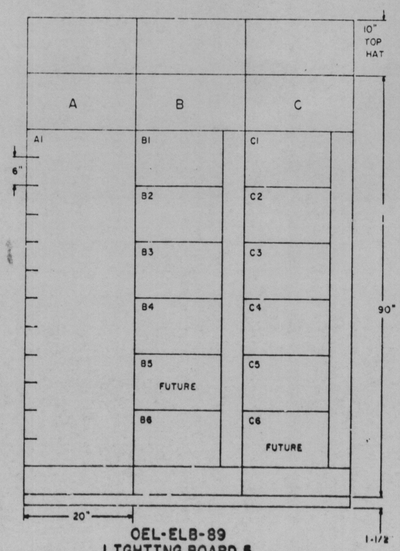
1. LIGHTING BOARDS (MCC) ARE PROVIDED ON TVA CONTRACT 76K5-86242 WITH GOULD/ITE.
2. ALL MOLDED CASE CIRCUIT BREAKERS ARE 3-POLE, 600V, THERMAL-MAGNETIC WITH AN INTERRUPTING RATING OF NOT LESS THAN 25,000A RMS SYMMETRICAL AT 480 VOLTS. ALL CIRCUIT BREAKERS ARE 100A FRAME,ITE HK SERIES,WITH SH TRIP, EXCEPT AS NOTED. THE PICK UP VOLTAGE OF THE SHUNT TRIP COIL IS 55% OF THE RATED VOLTAGE.
3. GROUND FAULT PROTECTION(51GS)IS ADJUSTABLE FROM 200 TO 1200 AMPS. TIME ADJUSTMENT IS PROVIDED FROM 6 TO 30 CYCLES. ALL 51GS RELAYS ARE SET AT 800 AMPS PICK UP AND AT 6 CYCLES.
4. UNIDS FOR LOAD BREAKERS AND THEIR ASSOCIATED DEVICES ARE FORMED BY PREFIXING THE DESIGNATIONS SHOWN ON THE DWG WITH THE UNIT AND SYS DESIGNATION SHOWN IN THE HEXAGON SYMBOL, EXCEPT AS NOTED. THE LIGHTING BOARD COMPARTMENT UNID DESIGNATION IS FORMED AS FOLLOWS USING THE COMPARTMENT NO. (XX) AND THE BOARD NO. (YY): OEL-ELB-YYXX.
5. ALL SHUNT TRIP COIL FUSES ARE 5A, GOULD/SHAWMUT, AMP-TRAP, FORM 600, MIDGET TYPE 2. A NO AUXILIARY CONTACT IS PROVIDED ON THE BREAKER TO DISCONNECT THE SHUNT TRIP COIL VOLTAGE WHEN THE BREAKER IS OPEN.
6. LIGHTING CABINET LOADS ARE ESTIMATED FOR MAXIMUM DEMAND. FOR ACTUAL TOTAL DEMAND LOAD,SEE LIGHTING CIRCUIT BREAKER SCHEDULES.
7. FUSES IN POWER CIRCUITS ARE GOULD/SHAWMUT CLASS J (CUR LIMITING. (FUSES ARE REQD TO PROVIDE REDUNDANT SHR CKT PROTECTION FOR PC PEN).
8. THIS EQUIPMENT IS NON-CLASS IE LOCATED IN A NON-CATEGORY I STRUCTURE
9. THE BOARD BUS IS 3Ø,4 WIRE,FULL NEUTRAL.
10. VERTICAL BUS RATING IS 600 A
11. THE LIGHTING BOARD FRONT VIEW IS CONTROLLED BY THIS SINGLE LINE COMPARTMENT TYPICAL SCHEMATICS AND VENDOR WIRING DIAGRAMS ARE CONTROLLED BY THE MCC COMPUTERIZED CIRCUIT SCHEDULE.

SYMBOLS:

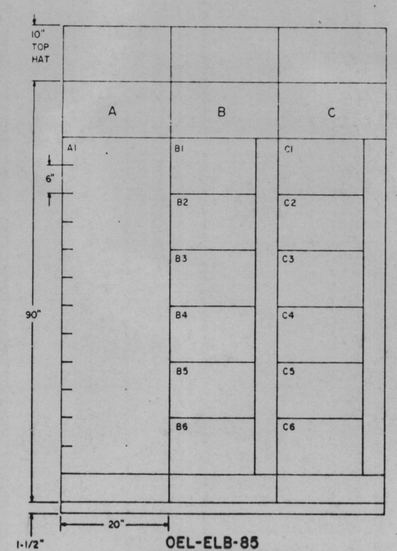
XXX ---------- UNIT & SYSTEM DESIGNATION (SEE NOTE 5)

A ---------- AMBER INDICATING LIGHT

PRC APERTURE CARD



OEL-ELB-89
LIGHTING BOARD 5
FRONT VIEW (COL E,T2 EL 629)



OEL-ELB-85
LIGHTING BOARD 1
FRONT VIEW (COL E,T6 EL 649)

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

INSPECTED AND APPROVED FOR ISSUE
R M Hedgix
DESIGN PROJECT MANAGER

REV	ECN NO.	DATE	DSGN	DRWN	CHKD	SUPV	ENGR	WSP	SUBM	RECM	APPR
7	1344, S1	[illegible]	KPW	[illegible]	[illegible]	[illegible]	-	[illegible]	[illegible]	[illegible]	[illegible]
	ADDED LTG XFMR 7200 TO LTG BD 5, MINOR CHANGES										
6	650	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-	[illegible]	[illegible]	[illegible]	[illegible]
	ADDED LTG CAB. 710.										
5	S1, 86A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-	[illegible]	[illegible]	[illegible]	[illegible]
	ADDED FRONT VIEWS, UPDATED COMPARTMENT ASSIGNMENTS, EST MAX DEMANDS, BKR TRIP RATINGS, & OTHER MINOR CHANGES. SWAPPED BREAKERS										
4	S1	4-15-76	RDR	[illegible]	RGL	[illegible]	-	[illegible]	[illegible]	[illegible]	[illegible]
	INCORPORATED UNID SYS. GEN REV PER ECN S1 --VARIOUS										
3	S-1	1-8-75	WTM	[illegible]	[illegible]	[illegible]	-	[illegible]	[illegible]	[illegible]	[illegible]
	DELETED CURRENT LIMITING REACTOR ON LIGHTING BOARD 5, CHGD NOTE 6, & OTHER MINOR CHANGES.										
2	S1	12-6-74	ENI	RDR	HFJ	[illegible]	[illegible]	-	[illegible]	[illegible]	[illegible]
	CHANGED GROUND FAULT PROTECTION FROM INSTANTANEOUS TO TIME DELAY, REPLACE CONTROL VOLTAGE CIRCUIT BREAKER WITH FUSED DISCONNECT SWITCH.										
1	12	8-20-74	BJN	RDR	HFJ	[illegible]	[illegible]	-	[illegible]	[illegible]	[illegible]
	CHANGED LTG SYS FROM 208/120V TO 480/277V GROUNDED WYE.										

DSGN R.B. BOUNDS
DRWN S.L.B. TEMPLE
CHKD R.W. WAUGH
SUPV R.W. WAUGH
INGR
ENGINEER

TURBINE BUILDING
UNITS 1 & 2

SINGLE LINE
480/277 V LIGHTING BOARDS 1&5
OEL-ELB-85 & 89

BELLEFONTE NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN
N

SUBMITTED	RECOMMENDED	APPROVED
[illegible]	[illegible]	[illegible]

KNOXVILLE | 2-19-74 | CD | E | 2TW0739-EL-1 | R7

AS-BUILT DRAWING AS CONSTRUCTED

THIS DRAWING IS UNDER CONFIGURATION CONTROL

PRINTS REQD # 2
GR #1
PROJ 0H9 1/26

	F	H
NE	2	5
EE		
EG		
AD		
CD		
ED		3
MD		
BF		
SW		
BL		
PA		