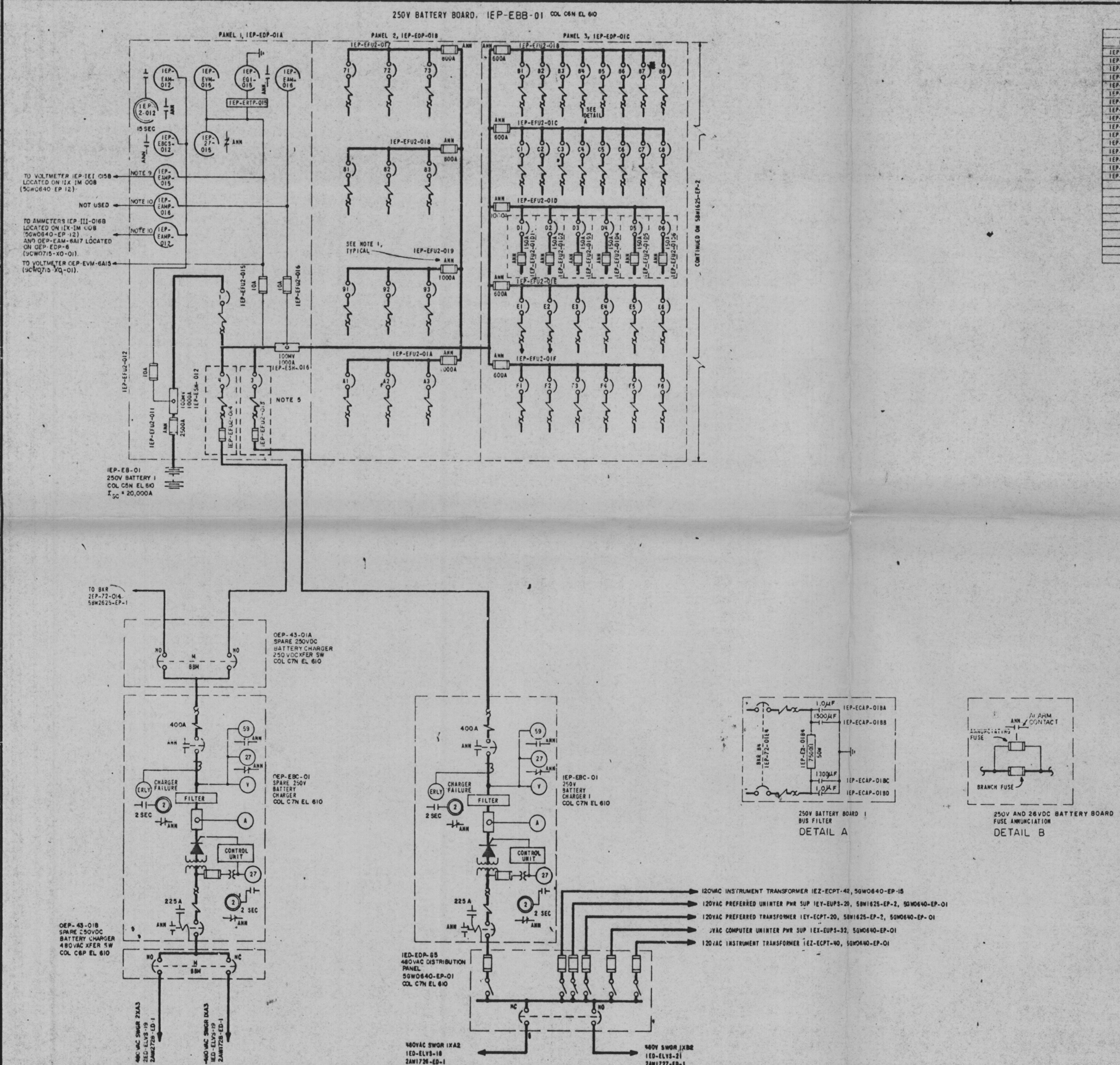
SBW1625-EP-01 | E | 88



250V BATTERY BOARD 1 BUS FILTER

DETAIL A

250V AND 26VDC BATTERY BOARD FUSE ANNUNCIATION

DETAIL B

FUSE ANN UNID	
FUSE	ANN FUSE
1EP-EFU2-011	1EP-EFF2-011
1EP-EFU2-017	1EP-EFF2-017
1EP-EFU2-018	1EP-EFF2-018
1EP-EFU2-019	1EP-EFF2-019
1EP-EFU2-01A	1EP-EFF2-01A
1EP-EFU2-01B	1EP-EFF2-01B
1EP-EFU2-01C	1EP-EFF2-01C
1EP-EFU2-01D	1EP-EFF2-01D
1EP-EFU2-01E	1EP-EFF2-01E
1EP-EFU2-01F	1EP-EFF2-01F
1EP-EFU2-01D1	1EP-EFF2-01D1
1EP-EFU2-01D2	1EP-EFF2-01D2
1EP-EFU2-01D3	1EP-EFF2-01D3
1EP-EFU2-01D4	1EP-EFF2-01D4
1EP-EFU2-01D5	1EP-EFF2-01D5
1EP-EFU2-01D6	1EP-EFF2-01D6

CIRCUIT SCHEDULE

PNL	BKR	UNID	FRAME	TRIP	CABLE	CIRCUIT
1	1	1EP-72-011	2000	2000	1EP-ECA4-14,2	250V BATTERY 1
1	4	1EP-72-014	400	400	1EP-ECA4-17	SPARE 250VDC BATTERY CHARGER (NOTE 5)
1	3	1EP-72-013	400	400	1EP-ECA4-12	250VDC BATTERY CHARGER 1 (NOTE 5)
2	71	1EP-72-0171	400	250		
2	72	1EP-72-0172	400	250		
2	73	1EP-72-0173	400	250		
2	81	1EP-72-0181	400	200	1EP-ECA4-62	120V AC COMPUTER UNINTERRUPTIBLE POWER SUPPLY 1EX-EUPS-32
2	82	1EP-72-0182	400	200		TURBINE EMERGENCY LUBE OIL PUMP MOTOR ALT FOR UNIT 2 2TC-43-022
2	83	1EP-72-0183	400	200		TURBINE EMERGENCY LUBE OIL PUMP MOTOR NORM FOR UNIT 1 1TC-43-022
2	91	1EP-72-0191	400	300		
2	92	1EP-72-0192	400	350		EMERGENCY AIR OIL PUMP ALT FOR UNIT 2, 2TO-43F-065
2	93	1EP-72-0193	400	350		EMERGENCY AIR OIL PUMP NORM FOR UNIT 1, 1TO-43F-065
2	A1	1EP-72-01A1	400	300		
2	A2	1EP-72-01A2	400	300		
2	A3	1EP-72-01A3	400	350	1EP-ECA4-61	120VAC PREFERRED UNINTERRUPTIBLE POWER SUPPLY 1EY-EUPS-20
3	B1	1EP-72-01B1	100	30		
3	B2	1EP-72-01B2	100	30		
3	B3	1EP-72-01B3	100	30		
3	B4	1EP-72-01B4	100	30		250V BATTERY BOARD BUS FILTER (SEE DETAIL A)
3	B5	1EP-72-01B5	100	15		
3	B6	1EP-72-01B6	100	15		
3	B7	1EP-72-01B7	100	15		
3	B8	1EP-72-01B8	100	15		
3	C1	1EP-72-01C1	100	50		GENERATOR EXCITATION FIELD BKR CLOSE & CHARGE 1TE-ECAB-E002
3	C2	1EP-72-01C2	100	50		LOAD BREAK SWITCH TRIP & CLOSE 1XN-EMCP-1
3	C3	1EP-72-01C3	100	50		
3	C4	1EP-72-01C4	100	50		
3	C5	1EP-72-01C5	100	30		
3	C6	1EP-72-01C6	100	30		
3	C7	1EP-72-01C7	100	15		
3	C8	1EP-72-01C8	100	15		
3	D1	1EP-72-01D1	250	NOTE 6	1EP-ECA4-49	UNIT 1 CONTROL RM DISTR PNL 1EP-EDP-02 NOR FDR (PNL 1IX-IM-021)
3	D2	1EP-72-01D2	250	"	0EP-ECA4-11-P	ELECTRICAL CONTROL RM DISTR PNL 0EP-EDP-07 NOR FDR
3	D3	1EP-72-01D3	250	"	2EP-ECA4-50	UNIT 2 CONTROL RM DISTR PNL 2EP-EDP-02 ALT FDR (PNL 2IX-IM-021)
3	D4	1EP-72-01D4	250	"	0EP-ECA4-14-R	ELECTRICAL CONTROL RM DISTR PNL 0EP-EDP-06 ALT FDR
3	D5	1EP-72-01D5	250	"		
3	D6	1EP-72-01D6	250	"		
3	E1	1EP-72-01E1	250	100		MAIN FEED PUMP TURBINE 1A EMERGENCY OIL PUMP (NOR FEEDER) 1CP-43-919
3	E2	1EP-72-01E2	250	100		MAIN FEED PUMP TURBINE 2B EMERGENCY OIL PUMP (ALT FEEDER) 2CP-43-922
3	E3	1EP-72-01E3	250	100		250VDC OPO SHOP AREA TEST BENCH OMS ETTB-101
3	E4	1EP-72-01E4	250	70		
3	E5	1EP-72-01E5	250	70		
3	E6	1EP-72-01E6	250	70		
3	F1	1EP-72-01F1	250	150		
3	F2	1EP-72-01F2	250	150		
3	F3	1EP-72-01F3	250	150		
3	F4	1EP-72-01F4	250	100		MAIN FEED PUMP TURBINE 2A EMERGENCY OIL PUMP (ALT FEEDER) 2CP-43-919
3	F5	1EP-72-01F5	250	100		MAIN FEED PUMP TURBINE 1B EMERGENCY OIL PUMP (NOR FEEDER) 1CP-43-922
3	F6	1EP-72-01F6	250	100		

NOTES:

1. ALL BREAKERS ARE PROVIDED ALARM CONTACTS WHICH CLOSE WHEN BREAKER TRIPS DUE TO OVERLOAD OR SHORT CIRCUIT.
   FUSES, DESIGNATED BY "ANN", ARE PROVIDED ALARM CONTACTS WHICH CLOSE WHEN FUSE OPENS DUE TO OVERLOAD OR SHORT CIRCUIT (SEE DETAIL B).
   ALL CONTACTS ARE INDIVIDUALLY WIRED OUT TO MANUFACTURER'S TERMINAL BLOCKS AND ARE TO BE CONNECTED IN PARALLEL FOR COMMON ALARM PER SYSTEM, ie, 250VDC SYSTEM, 26V DC SYSTEM A, 26V DC SYSTEM B, AND 120V AC PREFERRED SYSTEM
2. PANEL 4A, 4B, AND 5 INSTRUMENT FUSES ARE BUSS TYPE KWN
3. ALL 250V BATTERY BOARD FUSES ARE CHASE-SHAWMUT 600V FORM 101 AMP TRAP, OR EQUAL, EXCEPT BATTERY FUSES-BUSS TYPE KLP AND 150A BRANCH FUSES-BUSS TYPE FRS.
4. THE 250V BATTERY BOARD MAIN FEED BREAKER IS TO BE SET AS FOLLOWS: SHORT TIME MAGNETIC DELAY, ADJUSTABLE PICK UP SET AT 11,000 AMPS.
5. BREAKERS 3 AND 4 ARE W TYPE LA TRI-PAC, 400A THERMAL SET, WITH 600 LAP09 LIMITER.
6. BREAKERS D1-D6 ARE NON-AUTOMATIC.
7. BREAKERS 71-73, 81-83, 91-93, AND A1-A3 HAVE LOW MAGNETIC TRIP SETTINGS.
8. THE 250V DC BATTERY SYSTEM VOLTAGE WILL NORMALLY BE 260V BUT MAY BE 280V DURING EQUALIZE CHARGING OR 210V WHEN THE BATTERY IS DISCHARGED.
9. 1EP-EAMP-015 SHUNT/ISOLATION/AMPLIFIER, HAS SIGNAL LEVEL OF 0.0 TO +30 MILLIAMPS. SCIENTIFIC COLUMBUS MODEL 6271A.
10. 1EP-EAMP-016 AND 1EP-EAMP-012, SHUNT/ISOLATION/AMPLIFIERS, HAVE SIGNAL LEVELS OF ±3.0 MILLIAMPS. SCIENTIFIC COLUMBUS MODEL 6271A.
11. PANEL 1 INSTRUMENT FUSES ARE BUSS TYPE KLC PER MIL SPEC MIL-F-15160/61, PART NO. F61C-500V-10A.

REFERENCE DRAWINGS:

5BW0620-EP-1 - - - - - KEY DIAGRAM
5CW0624-EP-1 - - - - - FRONT VIEW
ELECTRICAL COMPONENT TAB - - - SYSTEM EP, ES, AND EY
5GW0640-EP-1-14- - - SCHEMATICS
9CW0716-X0-5, 6, 7 - - ELEC CONT BD WIRING DIAGRAMS
5GC0600-EP, 5GC1600-EP, 5GC2600-EP - - - - - - - CABLE SCHEDULES

Docket # 50-483
Control # 8304050536
Date 3-25-83 of Document:
REGULATORY DOCKET FILE

PRC APERTURE CARD

REV NO.	ECN NO.	DATE	DSGN	DRWN	CHKD	SUPV	ENGR	INSP	SUBM	RECM	APPR
3	SI	4-1-80			BLW	DEC				JLS	
CORRECTED TRIP SETTING REVISED LOADS.											
2	SI, 422	4-17-78		RLP	BLW	DEC	MWS		MWS	JLS	
REVISED 480VAC SUPPLY TO SPARE 250V BATTERY CHARGER.											
1	SI, 154	1-10-78	CGP	KGF	BLW	DEC	MWS		MWS	JLS	
REV. TO MFGR'S DWG'S, MODIFIED UNID NO'S, LOADS AND NOTES.											

DSGN C.G. PETERSON
DRWN G.R. BELL / J.E. WORKMAN
CHKD W.B. TATUM
SUPV DECOUNTISS
INSP
ENGINEER M.W. Stevenson

POWERHOUSE
UNIT 1

SINGLE LINE 250VDC BATTERY SYSTEM

BELLEFONTE NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

N

SUBMITTED M.W. Stevenson | RECOMMENDED | APPROVED R.M. Hodges

INSPECTED AND APPROVED FOR ISSUE

KNOXVILLE 8-28-74 | 88 | E | 5BW1625-EP-01 R3

RECORD DRAWING AS CONSTRUCTED

THIS DRAWING IS UNDER CONFIGURATION CONTROL