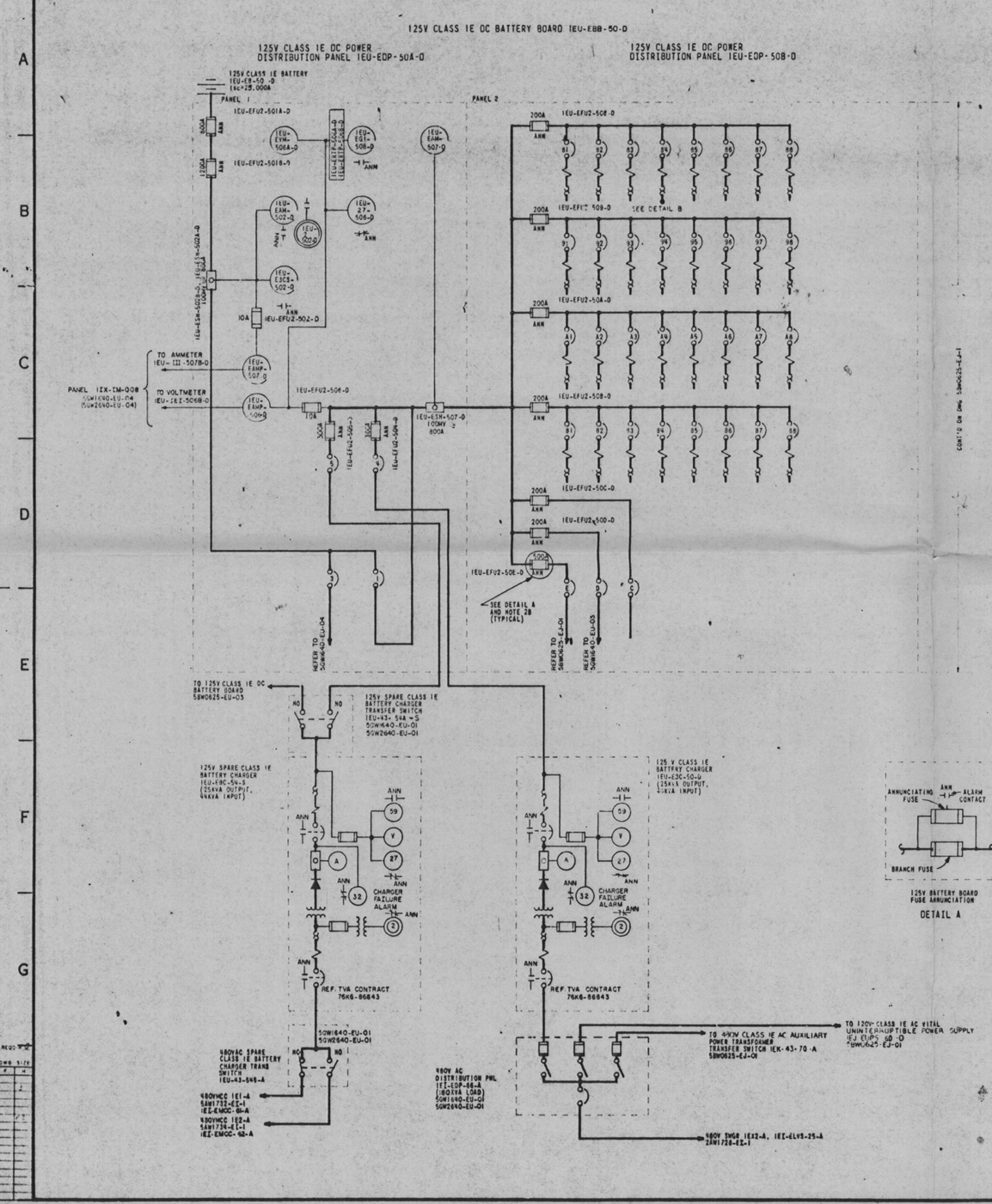
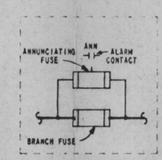
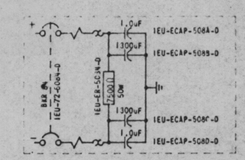




125V BATTERY BOARD FUSE ANNUNCIATION

DETAIL A



125V BATTERY BOARD BUS FILTER

DETAIL B

FUSE ANNUNCIATION UNID		
FUSE	ANN FUSE	FUSE SET
1EU-EFU2-501A-D	1EU-EFF2-501A-D	1A
1EU-EFU2-501B-D	1EU-EFF2-501B-D	1B
1EU-EFU2-502-D	1EU-EFF2-502-D	2
1EU-EFU2-504-D	1EU-EFF2-504-D	4
1EU-EFU2-506-D	1EU-EFF2-506-D	5
1EU-EFU2-508-D	1EU-EFF2-508-D	8
1EU-EFU2-509-D	1EU-EFF2-509-D	9
1EU-EFU2-50A-D	1EU-EFF2-50A-D	A
1EU-EFU2-50B-D	1EU-EFF2-50B-D	B
1EU-EFU2-50C-D	1EU-EFF2-50C-D	C
1EU-EFU2-50D-D	1EU-EFF2-50D-D	D
1EU-EFU2-50E-D	1EU-EFF2-50E-D	E

CIRCUIT SCHEDULE

	PNL	BKR	BKR UNID	FRAME	TRIP	CABLE	CIRCUIT
	1	5	1EU-72-503-D	400	-	1EU-ECA4-12-D	125V PANEL CLASS 1E BATTERY CHARGER 1EU-EBC-54-S
NOTE 6	1	4	1EU-72-504-D	400	-	1EU-ECA4-14-D	125V CLASS 1E BATTERY CHARGER 1EU-EBC-50-D
	1	3	1EU-72-501-D	800	-	1EU-ECA4-53,54	125V CLASS 1E BATTERY DISCHARGE TEST 1EU-EJB-90
	1	1	1EU-72-501-D	800	-	1EU-ECA4-41,43-D	125V CLASS 1E BATTERY 1EU-EB-50-D
	2	81	1EU-72-5081-D	100	100		
	2	82	1EU-72-5082-D	100	70		
	2	83	1EU-72-5083-D	100	0		
	2	84	1EU-72-5084-D	100	30	——	125V BATTERY BOARD BUS FILTER
	2	85	1EU-72-5085-D	100	30		6.9KV SWGR 1EF1-A, EI-EMVY-08-A, NOR FOR
	2	86	1EU-72-5086-D	100	15		
	2	87	1EU-72-5087-D	100	15		
	2	88	1EU-72-5088-D	100	15		
	2	91	1EU-72-5091-D	100	100		INTAKE PUMP STA-125V CLASS 1E DC CONTROL PWR DISTR PNL 1A 1EU-EDP-56-D
	2	92	1EU-72-5092-D	100	70		
	2	93	1EU-72-5093-D	100	50		
	2	94	1EU-72-5094-D	100	30		13.8KV SWGR 1EA, 1EA-EMVS-01, NOR FOR PWR SYS CONTROL
	2	95	1EU-72-5095-D	100	30	1EU-ECA3-99-D	125V DC CLASS 1E DISTR PNL 1EU-EDP-58-D, 1EX-IR-001-A
	2	96	1EU-72-5096-D	100	15		
	2	97	1EU-72-5097-D	100	15		
	2	98	1EU-72-5098-D	100	15		
	2	A1	1EU-72-50A1-D	100	50		
	2	A2	1EU-72-50A2-D	100	50		
	2	A3	1EU-72-50A3-D	100	30		480V SWGR 1EX1-S, EI-ELVS-24-A, NOR FOR
	2	A4	1EU-72-50A4-D	100	30		13.8KV SWGR 1EA, 1EA-EMVS-01, ALT FOR RCP CONTROL
	2	A5	1EU-72-50A5-D	100	15		
	2	A6	1EU-72-50A6-D	100	15		
	2	A7	1EU-72-50A7-D	100	15		
	2	A8	1EU-72-50A8-D	100	15		
	2	B1	1EU-72-5081-D	100	50		
	2	B2	1EU-72-5082-D	100	50		
	2	B3	1EU-72-5083-D	100	30		480V SWGR 1EX2-A, EI-ELVS-27-A, NOR FOR
	2	B4	1EU-72-5084-D	100	30		
	2	B5	1EU-72-5085-D	100	15		PAR HTR BD 1ED-EMCC-51
	2	B6	1EU-72-5086-D	100	15		
	2	B7	1EU-72-5087-D	100	15		
	2	B8	1EU-72-5088-D	100	15		
NOTE 6	2	E	1EU-72-50E-D	100	-	1EU-ECA4-63-D	120V CLASS 1E AC VITAL UNINTERRUPTIBLE PWR SUP 1EJ-EUPS-60-D
	2	D	1EU-72-500-D	225	-	1EU-ECA4-61-A	125VDC DIESEL GENERATOR ELEC BD 1EU-EDP-56-A
	2	C	1EU-72-50C-D	225	-		

NOTES:

1. DRAWING SHOWN FOR UNIT 1; UNIT 2 IS SIMILAR, EXCEPT AS NOTED.
2. PROTECTIVE DEVICE ALARM CONTACTS:
   A. ALL BREAKERS ARE PROVIDED ALARM CONTACTS WHICH CLOSE ONLY WHEN BREAKER TRIPS DUE TO OVERLOAD OR SHORT CIRCUIT.
   B. FUSES DESIGNATED BY "ANN" ARE PROVIDED ALARM CONTACTS WHICH CLOSE WHEN FUSE OPENS DUE TO OVERLOAD OR SHORT CIRCUIT (SEE DETAIL A).
   C. ALL CONTACTS ARE INDIVIDUALLY WIRED OUT TO MANUFACTURER'S TERMINAL BLOCKS AND ARE CONNECTED IN PARALLEL FOR COMMON ALARM
3. ALL INSTRUMENT FUSES ARE BUSS TYPE KNM OR EQUAL.
4. ALL BRANCH OR FEEDER FUSES ARE BUSS TYPE FRN OR EQUAL UNLESS OTHERWISE NOTED. (SEE NOTES 5 AND 10).
5. 125V BATTERY MAIN FEED 800A FUSES ARE BUSS TYPE KLP OR EQUAL.
6. NON-AUTOMATIC BREAKERS: 1,3,4,5,C,D,E,F.
7. 125VDC SYSTEM BATTERY VOLTAGE HAS LOWER AND UPPER LIMITS OF 105VDC AND 140VDC RESPECTIVELY.
8. 1EU-EAMP-507-D, SHUNT/ISOLATION/AMPLIFIER, HAS SIGNAL LEVELS AS FOLLOWS:
   INPUT: -10MV TO +100MV
   OUTPUT: -0.9MA TO +3.0MA
   SCIENTIFIC COLUMBUS MODEL 6271A (MODIFIED) OR EQUAL.
9. 1EU-EAMP-506-D ISOLATION AMPLIFIER HAS SIGNAL LEVELS AS FOLLOWS:
   INPUT: 0 TO 100VDC
   OUTPUT: 0 TO 3 OMA
   SCIENTIFIC COLUMBUS MODEL 6271A (MODIFIED) OR EQUAL.
10. 1200A AND 500A FUSES ARE CHASE-SHAWMUT FORM 600 AMP TRAP TYPE A6Y OR EQUAL.
11. BATTERY BOARDS ARE CLASS 1 AS DEFINED BY IEEE 308.
12. BKR 1 (ALL SHEETS) HAS AUXILIARY SW WHICH CLOSES WHEN BKR IS OPENED.

REFERENCE DRAWINGS:

5BW0620-EU-01 . . . . . KEY DIAGRAM
5AW0624-EU-01-02 . . . . . FRONT VIEWS
5BW0625-EJ-01-04 . . . . . SINGLE LINES
5BW1640-EU-01-07 . . . . . SCHEMATICS
5BW2640-EU-01-07 . . . . . SCHEMATICS

FSAR FIG. 8.3.2-1

INSPECTED AND APPROVED FOR ISSUE

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

PRC APERTURE CARD

6	1483														
ADDED FSAR FIG.															
5	1139														
REVISED BAT CHGR SINGLE LINE, MISC CHANGES.															
4	31,578														
MISCELLANEOUS CHANGES ADDED "Q".															
3	ECN-51	8-15-77	CGP	KGP	DRC	CEC									
REVISED LOADS, UNID NO'S.															
2	ECN-51														
REVISED LOADS, UNID NO'S, SYS CAPACITY, SHUNT CKTS.															
1	ECN-51	3-11-75													
CHANGED 100A FRAME BKR TRIP SETTINGS.															

REV NO.	ECN NO.	DATE	DSGN	DRWN	CHKD	SUPV	ENGR	NSP	SUBM	RECM	APPR

DSGN L.A. CHERRYSON
DRWN R. ROSEMAN
CHKD R.L. WEBSTER
SUPV
INSP
ENGINEER

POWERHOUSE

UNITS 1 & 2

SINGLE LINE
125V CLASS 1E DC POWER
DISTRIBUTION SYSTEM
CHANNEL D

BELLEFONTE NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

Q

SUBMITTED	RECOMMENDED	APPROVED

KNOXVILLE | 1 2 73 | 88 | E | 5BW0625-EU-01 | R6

FSAR

RECORD DRAWING AS CONSTRUCTED