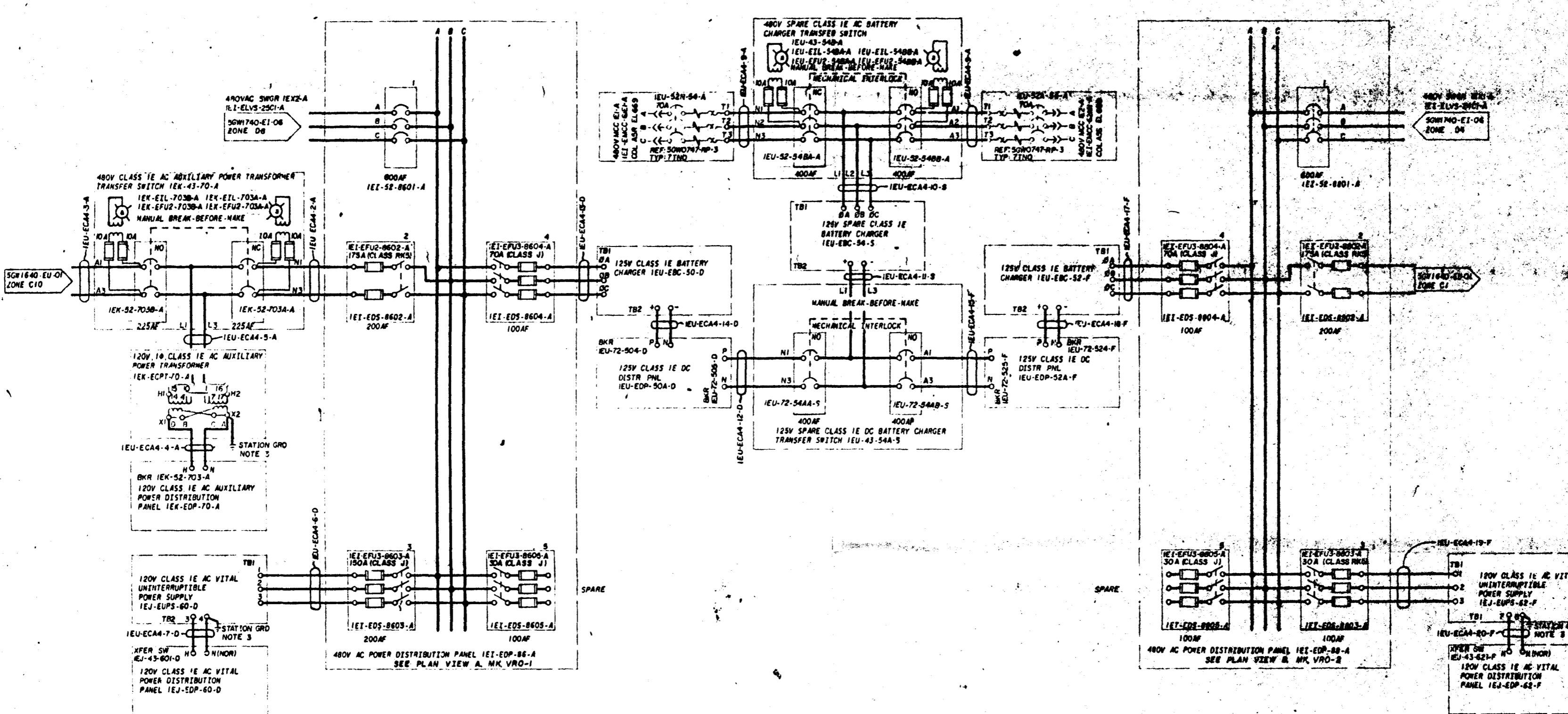
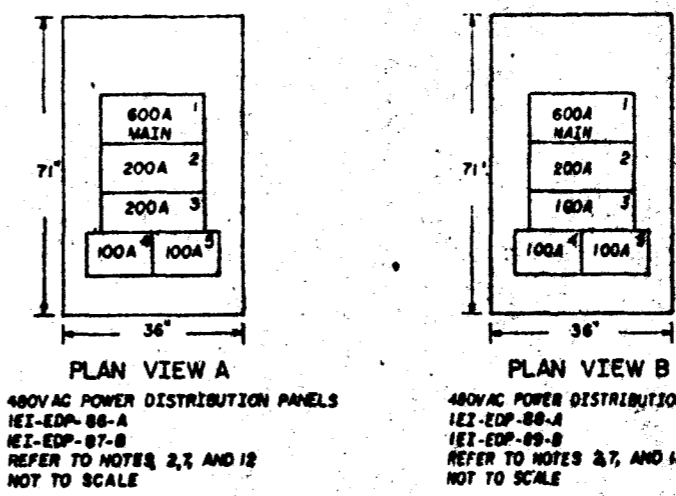


A
B
C
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G



- NOTES:
- SYSTEMS EJ AND EK SHOWN ON THE 801640-EU SCHEMATIC SERIES ARE CONSIDERED SUBSYSTEMS OF SYSTEM EU.
 - ALL DEVICES SHOWN ON THIS DRAWING ARE CLASS 1E.
 - 120V CLASS 1E AC VITAL UNINTERRUPTIBLE POWER SUPPLIES AND 480V CLASS 1E AC VITAL UNINTERRUPTIBLE POWER SUPPLIES HAVE COMMON GROUND POINT IN THEIR RESPECTIVE TRANSFORMER BATTERY ROOM AREA.
 - INDICATING LIGHTS SHALL BE 1/2 IN. 120V, SINGLE CONDUCTOR, 600V, TYPOLON COATED.
 - INDICATING LIGHTS ARE OILTIGHT UNITS COMPLETE WITH LAMP BASE, AMBER LENS, 6-W LAMP, AND TRANSFORMER FOR 480V AC OPERATION, CUTLER HAMMER TYPE 1055018-CK.
 - INSTRUMENT FUSES ARE CURRENT LIMITING - CLASS J.
 - 480V POWER DISTRIBUTION PANELS:
 - PANELS ARE PROVIDED ON CONTRACT NO. 77K3-82037.
 - PANELS ARE DESIGNED FOR 600 AMP SERVICE, WESTINGHOUSE TYPE FOP, OR EQUAL.
 - 600 AMP FRAME BREAKER IS NON-AUTOMATIC USED AS MAIN BREAKER - WESTINGHOUSE TYPE LA, THREE POLE, OR EQUAL.
 - 100 AMP FUSIBLE SWITCHES HAVE INTERRUPTING CAPACITY OF 100,000 RMS SYMMETRICAL AMPS. FUSES SIZED AS SHOWN, WESTINGHOUSE 200 AMP SINGLE UNIT FUSIBLE SWITCH, CLASS RH5 FUSES (SEE NOTE 16), TWO POLE, OR EQUAL.
 - 100 AMP FUSIBLE SWITCHES HAVE INTERRUPTING CAPACITY OF 100,000 RMS SYMMETRICAL AMPS. FUSES SIZED AS SHOWN, WESTINGHOUSE 100 AMP SINGLE UNIT FUSIBLE SWITCH, CLASS RH5 FUSES, THREE POLE, OR EQUAL.
 - 100 AMP FUSIBLE SWITCHES HAVE INTERRUPTING CAPACITY OF 100,000 RMS SYMMETRICAL AMPS. FUSES SIZED AS SHOWN, WESTINGHOUSE 100 AMP TWIN UNIT FUSIBLE SWITCH, CLASS J FUSES, THREE POLE, OR EQUAL.
 - 480V CLASS 1E SPARE BATTERY CHARGER TRANSFER SWITCH:
 - SWITCH IS PROVIDED ON CONTRACT NO. 77K3-82098A.
 - 400 AMP FRAME BREAKERS ARE NON-AUTOMATIC WITH MECHANICAL INTERLOCK FOR MAKE-BEFORE-BREAK TRANSFER - WESTINGHOUSE TYPE LA (WITH WALKING BEAM INTERLOCK), THREE POLE.
 - 125V SPARE CLASS 1E DC BATTERY CHARGER TRANSFER SWITCH:
 - SWITCH IS PROVIDED ON CONTRACT NO. 77K3-82098A.
 - 400 AMP FRAME BREAKERS ARE NON-AUTOMATIC WITH MECHANICAL INTERLOCK FOR MAKE-BEFORE-BREAK TRANSFER - WESTINGHOUSE TYPE LA (WITH WALKING BEAM INTERLOCK), TWO POLE.
 - 120V CLASS 1E AC AUXILIARY POWER TRANSFORMER TRANSFER SWITCH:
 - SWITCH IS PROVIDED ON CONTRACT NO. 77K3-82098A.
 - 225 AMP FRAME BREAKERS ARE NON-AUTOMATIC WITH MECHANICAL INTERLOCK FOR MAKE-BEFORE-BREAK TRANSFER - WESTINGHOUSE TYPE JA (WITH WALKING BEAM INTERLOCK), TWO POLE.
 - 120V CLASS 1E AC AUXILIARY POWER TRANSFORMER:
 - TRANSFORMER IS PROVIDED ON CONTRACT NO. 77K3-82098A.
 - DRY TYPE TRANSFORMER, 240 x 400-120/240, 1F, 60HZ, 75KVA, 90°C TEMPERATURE RISE, WITH TWO, 2 1/2% FULL-CAPACITY ABOVE-NORMAL TAPS AND TWO, 2 1/2% FULL-CAPACITY BELOW-NORMAL TAPS - IEV1-SHIFT TYPE (SMB).
 - 600A AND 400A NON-AUTOMATIC BREAKERS HAVE MINIMUM SHORT-TIME CURRENT RATINGS AT 60°C AS FOLLOWS:

CURRENT	DURATION
600A	1 SECOND
400A	0.168 SECONDS
200A	0.018 SECONDS
100A	0.003 SECONDS
 - 120V CLASS 1E AC VITAL UPS ARE SUPPLIED ON CONTRACT 77K3-82055.
 - 125VDC CLASS 1E BATTERY CHARGERS ARE SUPPLIED ON CONTRACT 76K3-86443.
 - 480V SWITCHGEAR IS SUPPLIED ON CONTRACT 76K3-83528.
 - CLASS RH5 FUSES FOR TRANSFORMER FEEDS ARE PROVIDED ON CONTRACT 80K3-826663.
 - CLASS RH5 FUSES FOR 75 KVA UPS FEEDS PROVIDED BY FIELD.



COMPARISON DRAWINGS:
 80W1640-EU-02 SCHEMATICS
 80W2640-EU-01-02 SCHEMATICS
 REFERENCE DRAWINGS:
 80N0425-EU-01-04 SINGLE LINES
 80W0425-EU-01-04 KEY DIAGRAM
 80W0820-RU-01 BOLEP LAYOUT

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 REGULATORY DOCKET FILE

REVIEWED	BY
RC (CIVIL)	BB
RE (ELEC.)	W/A
RM (MECH.)	N/A
INSPECTED AND APPROVED FOR ISSUE	

4 51	23 22	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
INCORPORATED PER E-3488 REVISED BY PER SW FUSE & LIGHT UNITS.																												
REVISED FUSE CLASS																												
MISC CHANGES																												
ADDED CABLE AND TERMINAL DESIG. INCREASED PNC. CAR REV FUSE CLASS																												
GENERAL UNIT 1																												
SCHEMATIC DIAGRAM																												
125V CLASS 1E DC POWER DISTRIBUTION SYSTEM																												
BELLEFONTE NUCLEAR PLANT TENNESSEE VALLEY AUTHORITY DIVISION OF ENGINEERING DESIGN																												
SUBMITTED BY: <i>[Signature]</i>																												
APPROVED BY: <i>[Signature]</i>																												
INSPECTED AND APPROVED FOR ISSUE: <i>[Signature]</i>																												
RNOXVILLE 3-9-78 88 E SGW1640-EU-01																												