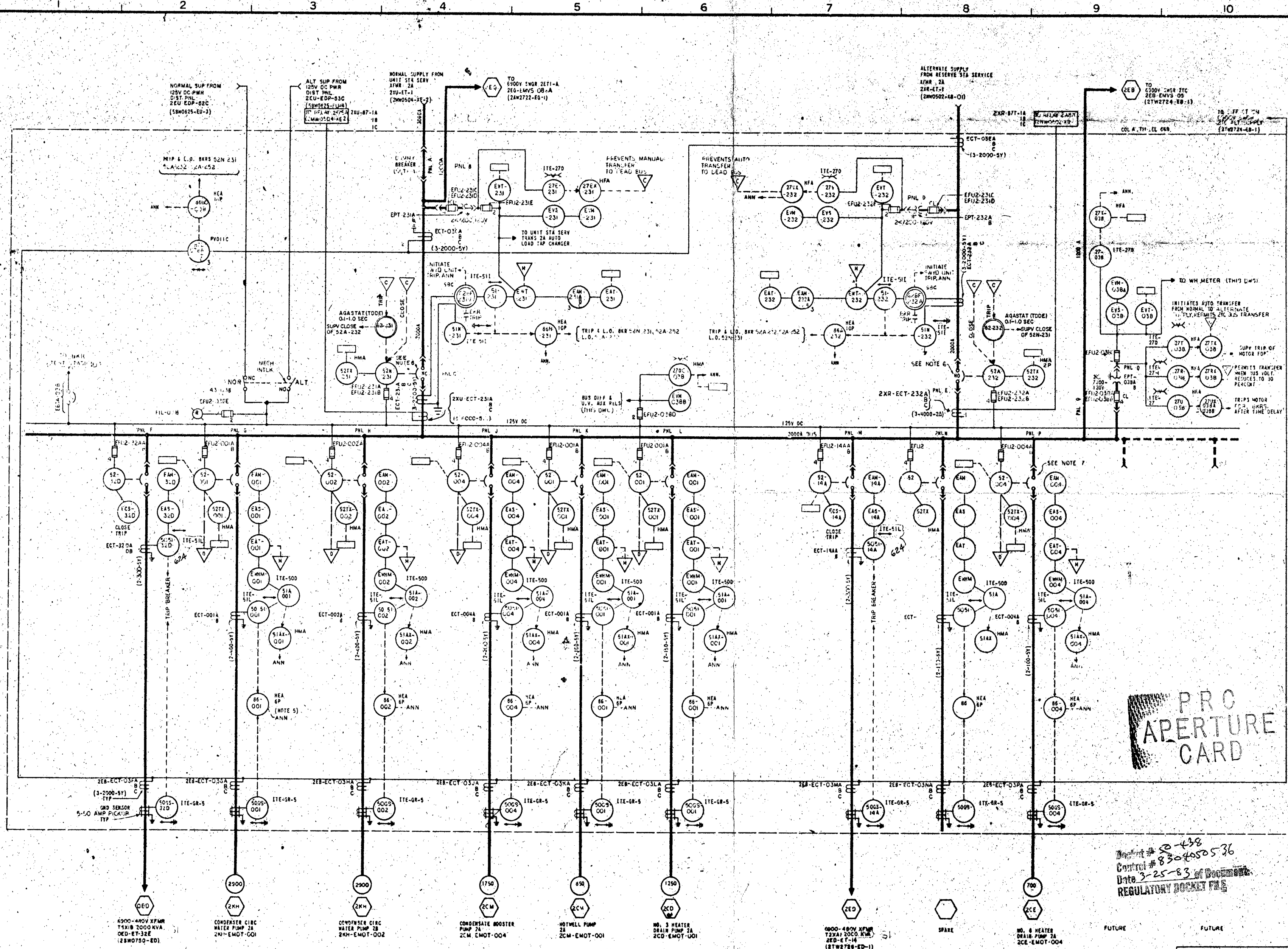


UNITS KEVED TO BUS
A7R-038A THRU C
A7M-038A THRU D
A7N-038A THRU E
A7P-038A THRU F
A7Q-038A THRU G

UNITS KEVED TO PANEL
B
C
D
E
F
G



REFERENCE DRAWINGS	
21W2722-EB-1	PLANT AC AUXILIARY POWER SYSTEM - SINGLE LINE
50A2740-EB	ELECTRICAL SYSTEM EB - SCHEMATIC
50A2749-RP	M/VG CRT ARRANGEMENT TYPICAL SCHEMATIC
21W4000-EB	SYSTEM EB CONTROL AND LOGIC DIAGRAM

SWITCHGEAR MANUFACTURER: I-T-E (IMPERIAL CORPORATION)
CONTRACT NUMBER: 75K5-B-583

- NOTES:
- A MANUAL TRANSFER IS INITIATED BY A SINGLE CLOSE COMMAND TO THE SELECTED BREAKER. THE COMMAND WILL SIMULTANEOUSLY TRIP THE CLOSED SUPPLY BREAKER AND COMPLETE THE CLOSE CIRCUIT OF THE SELECTED BREAKER. IF ANY ABNORMAL CONDITION EXISTS WHICH INHIBITS THE CLOSE COMMAND, THE TRIP SIGNAL IS SUPPRESSED, AND THE BUS WILL REMAIN ON THE CLOSED SUPPLY BREAKER.
 - AUTOMATIC TRANSFER IS INITIATED AND SUPERVISED BY UNDERVOLTAGE RELAYS. AUTOMATIC TRANSFER IS FROM NORMAL TO ALTERNATE SUPPLY ONLY. RETURN TO NORMAL SUPPLY IS MANUAL.
 - PARALLELING OF THE NORMAL AND ALTERNATE SUPPLIES UNDER MANUAL OR AUTOMATIC TRANSFER IS INHIBITED BY INTERLOCKS.
 - DUMMY BREAKER IS RATED AT 3000 AMP CONTINUOUS, 80,000 AMP MOMENTARY, AND 7.2KV NOMINAL.
 - 66 RELAYS IN MOTOR FEEDER CIRCUITS TRIP AND LOCK OUT THEIR RESPECTIVE CIRCUIT BREAKERS.
 - ALL SUPPLY BREAKERS ARE RATED AT 2000 AMPS CONTINUOUS, 500MVA INTERRUPTING, 7.2KV NOMINAL, 80,000 AMP MOMENTARY, AND 7.2KV AMPS CLOSE AND LATCH.
 - ALL FEEDER BREAKERS ARE RATED THE SAME AS SUPPLY BREAKERS EXCEPT 1200 AMPS CONTINUOUS.
 - THE SWITCHGEAR MAIN BUS IS RATED AT 2000 AMPS CONTINUOUS, 20,000 AMPS MOMENTARY, AND 7.2KV NOMINAL.
 - FOR A COMPLETE DEFINITION OF THE UNIT IDENTIFICATION NUMBERS (UNID) SEE EN-DES-EP-8.01. EACH DEVICE ASSOCIATED WITH THE SWGR BUS AND THE NORMAL, ALTERNATE, OR DUMMY BREAKERS, IS PART OF THE 690V VOLT AC AUXILIARY POWER DISTRIBUTION SYSTEM WITH SYSTEM DESIGNATION EB. THE DEVICE UNID IS FORMED BY PREFIXING THE DESIGNATION SHOWN ON THE DRAWING WITH ZEB, EXCEPT AS NOTED ON THE DRAWING. ALL FEEDER BREAKERS WITH THEIR ASSOCIATED DEVICES ARE PART OF THE SYSTEM WHICH THEY SUPPLY. THE COMPLETE UNID IS FORMED BY PREFIXING THE DESIGNATIONS SHOWN ON THE DRAWING WITH THE UNIT AND SYSTEM DESIGNATOR SHOWN IN THE HEADLINE SYMBOL.
 - RELAYS SHALL BE THE TYPES SHOWN ON THIS DRAWING.

- SYMBOLS
- XXX UNIT AND SYSTEM DESIGNATIONS
 - ▽ INTERFACE WITH DECONTAMINATION SYSTEM
 - ▽ INTERFACE WITH REMOTE CONTROL
 - ⊙ RED INDICATING LIGHT
 - INTERFACE WITH STATUS ENVIRONMENTAL ALARM MONITORING SYSTEM (SEAMS)
 - W CONNECTION TO REMOTE METER
 - ANN THIS FUNCTION TO BE MONITORED BY ONE OR MORE ANNUNCIATION OR ALARM SYSTEMS

PRC APERTURE CARD

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

NO.	DATE	BY	REVISION
1	12-23-77	J.P. [Signature]	INITIAL DESIGN
2	1-23-78	J.P. [Signature]	REVISED PER ECR 341
3	3-21-78	J.P. [Signature]	REVISED PER ECR 341
4	4-27-78	J.P. [Signature]	REVISED PER ECR 341
5	5-27-78	J.P. [Signature]	REVISED PER ECR 341
6	6-27-78	J.P. [Signature]	REVISED PER ECR 341
7	7-27-78	J.P. [Signature]	REVISED PER ECR 341
8	8-27-78	J.P. [Signature]	REVISED PER ECR 341
9	9-27-78	J.P. [Signature]	REVISED PER ECR 341
10	10-27-78	J.P. [Signature]	REVISED PER ECR 341
11	11-27-78	J.P. [Signature]	REVISED PER ECR 341
12	12-27-78	J.P. [Signature]	REVISED PER ECR 341

POWERHOUSE - URBINE BUILDING UNIT 2	
SINGLE LINE DIAGRAM 6900V SWGR 2TA 2EB-EMVS-03	
BELLEFONTE NUCLEAR PLANT TENNESSEE VALLEY AUTHORITY DIVISION OF ENGINEERING DESIGN	
SUBMITTED	RECOMMENDED
APPROVED	APPROVED
INSPECTED AND APPROVED FOR ISSUE [Signature] DESIGN PROJECT MANAGER	
KNOXVILLE	21W2722-EB-1
45W726-1	84