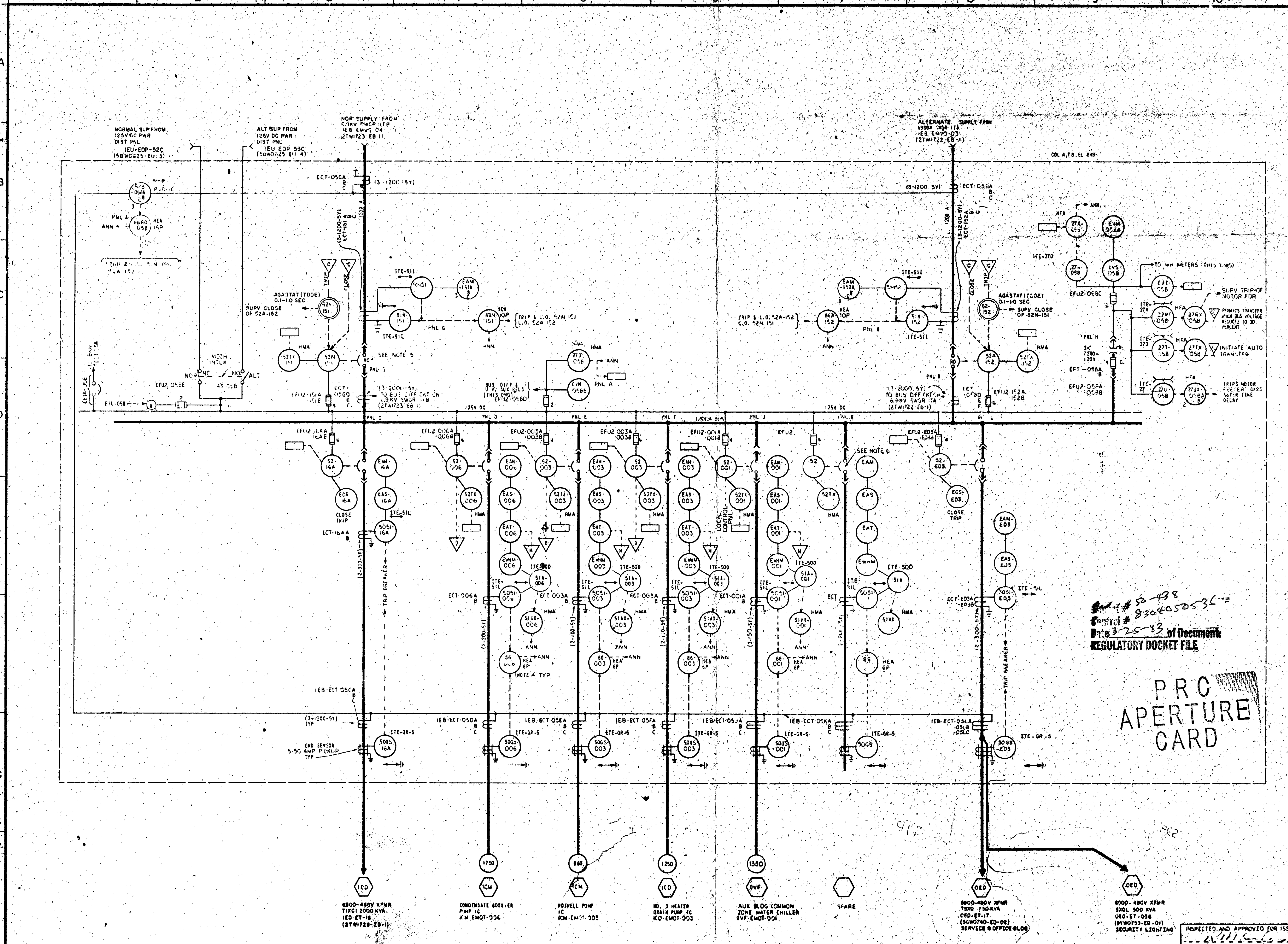
2TW1724-EB-1 | 1 | 88

UNID'S KEYED TO BUS

878-058A THRU C
27UX-058A THRU B
EVM-058A THRU B
EFU2-058A THRU E
EPT-058A THRU B

UNID'S KEYED TO PANEL

ECT-058A THRU C
ECT-05CA THRU C
ECT-05DA THRU C
ECT-05EA THRU C
ECT-05FA THRU C
ECT-05GA THRU C
ECT-05JA THRU C
ECT-05KA THRU C



REFERENCE DRAWINGS	
25W0720-RP-1	PLANT AC AUXILIARY POWER SYSTEM - SINGLE LINE
2TW0000-EB	SYSTEM EB CONTROL & LOGIC DIAGRAM
5GW1740-EB	ELECTRICAL SYSTEM EB. SCHEMATICS
5GW0740-RP	MVSG CKT ARRANGEMENT TYPICAL SCHEMATICS

SWITCHGEAR MANUFACTURER I-T-E IMPERIAL CORPORATION
CONTRACT NUMBER 75K 5-85583

NOTES:

1. A MANUAL TRANSFER IS INITIATED BY A SINGLE CLOSE COMMAND TO THE SELECTED BREAKER. THE COMMAND WILL SIMULTANEOUSLY TRIP THE CLOSE 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 SUP BKR.
2. AN AUTOMATIC TRANSFER IS INITIATED AND SUPERVISED BY UNDERVOLTAGE RELAYS. AUTOMATIC TRANSFER IS RECLOSURE OF THE NORMAL SUPPLY OR FROM ALTERNATE TO NORMAL SUPPLY. IF THE NORMAL SUPPLY IS UNAVAILABLE, TRANSFER IS RECLOSURE OF THE ALTERNATE SUPPLY OR FROM NORMAL TO ALTERNATE SUPPLY.
3. PARALLELING OF THE NORMAL AND ALTERNATE SUPPLIES UNDER MANUAL OR AUTOMATIC TRANSFER IS INHIBITED BY INTERLOCKS.
4. 86 RELAYS IN MOTOR FEEDER CIRCUITS TRIP AND LOCK OUT THEIR RESPECTIVE CIRCUIT BREAKERS.
5. ALL SUPPLY BREAKERS ARE RATED AT 1200 AMPS CONTINUOUS, 500MVA INTERRUPTING, 7.2KV NOMINAL, 80,000 AMPS MOMENTARY, AND 77,000 AMPS CLOSE AND LATCH.
6. ALL FEEDER BREAKERS ARE RATED THE SAME AS SUPPLY BREAKERS
7. THE SWITCHGEAR MAIN BUS IS RATED AT 1200 AMPS CONTINUOUS, 80,000 AMPS MOMENTARY, AND 7.2KV NOMINAL.
8. FOR A COMPLETE DEFINITION OF THE UNIQUE IDENTIFICATION NUMBERS (UNID) SEE EN-DES-EP-8.01.
   EACH DEVICE ASSOCIATED WITH THE SWGR BUS, NORMAL SUPPLY, OR ALTERNATE SUPPLY CIRCUIT BREAKERS IS PART OF THE 6900 VOLT AC AUXILIARY POWER DISTRIBUTION SYSTEM WITH SYSTEM DESIGNATION EB. THE DEVICE UNID IS FORMED BY PREFIXING THE DESIGNATIONS SHOWN ON THIS DRAWING WITH IEB, EXCEPT AS NOTED ON THIS 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 THIS DRAWING WITH THE UNIT AND SYSTEM DESIGNATOR SHOWN IN THE HEXAGON SYMBOL.
9. RELAYS SHALL BE THE TYPES SHOWN ON THIS DRAWING.

SYMBOLS:

- (XXX) UNIT AND SYSTEM DESIGNATON
- (D) INTERFACE WITH DECONTIC SYSTEM
- (C) INTERFACE WITH REMOTE CONTROL
- (R) RED INDICATING LIGHT
- (rectangle) INTERFACE WITH STATUS ENVIRONMENTAL ALARM MONITORING SYSTEM (SEAMS)
- (M) CONNECTION TO REMOTE METER
- ANN THIS FUNCTION TO BE MONITORED BY ONE OR MORE ANNUNCIATION OR ALARM SYSTEMS

Control # 83040505 3C
Date 3-25-83 of Document
REGULATORY DOCKET FILE

PRC APERTURE CARD

REV NO.	ECN NO.	DATE	DSGN	DRWN	CHKD	SUPV	ENGR	INSP	DSGN	RECM	APPR
5	317,862	5-14-81									
ADDED BKR & ASSOCIATED EQPT TO PNL L. ADDED PARALLEL SUPPLY TO XFMR 3XDL											
4	624,SI	4-23-79									
CHANGED XFMR OC PROT. MINOR CHANGES.											
3	341,466,SI	2-4-77									
IMPLEMENTED ANTICIPATORY RELAY SCHEME PER ECN 341 REVISED NOTE 2 PER ECN 466. MINOR REVISIONS PER SI											
2	102,SI	11-19-76	JCH		DMI						
IMPLEMENTED SS RELAYS PER ECN 102 - VARIOUS MINOR REV PER SI - VARIOUS											
1	SI, 44	4-17-75	LDG	RDR	TES	WAT					
ADD AMPERE ... AND TO NOR & ALT SUP. ADD AB COM ZONE WATER CHILLER AND GEN REV PER ECN SI INC SEAMS PER ECN 44											

DSGN R.M. SLATER
DRWN R. SPENCER
CHKD H.B. BOUNDS
SUPV R.M. SLATER
INSP
ENGINEER J.H. Boehme

POWERHOUSE-TURBINE BUILDING
UNIT 1

SINGLE LINE DIAGRAM
6900V SWGR 1TC
IEB-EMVS-05

BELLEFONTE NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

N

SUBMITTED	RECOMMENDED	APPROVED
R.M. Maxwell	[signature]	[signature]

INSPECTED AND APPROVED FOR ISSUE
DESIGN PROJECT MANAGER

KNOXVILLE 2-19-74 | 88 | 1 | 2TW1724-EB-1 | R5

45W725-3

RECORD DRAWING AS CONSTRUCTED