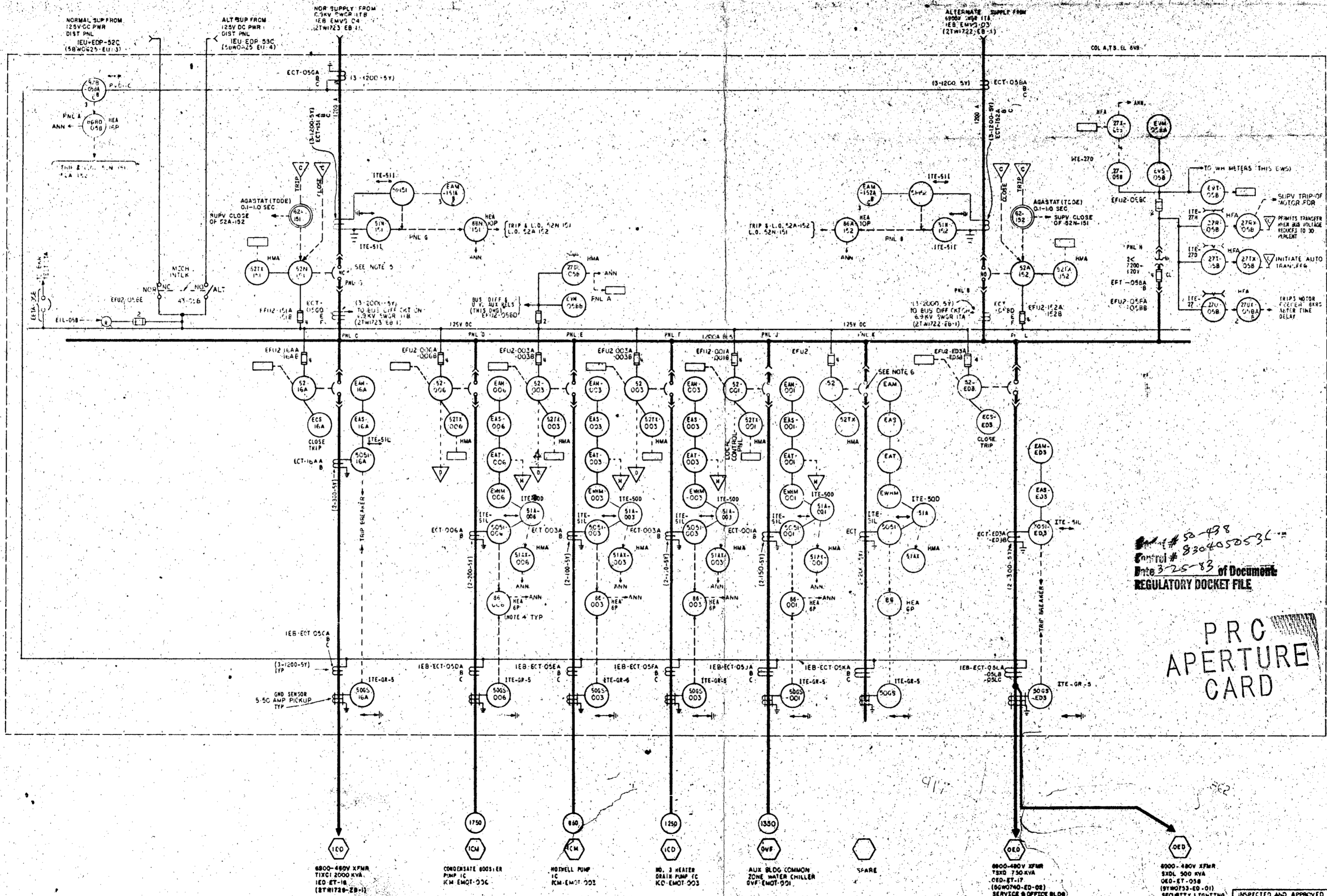


UNID'S KEYS TO BUS
 87B-05BA THRU C
 27UX-05BA THRU B
 EVM-05BA THRU B
 EFU2-05BA THRU E
 EPT-05BA THRU B

UNID'S KEYS TO PANEL
 ECT-05BA THRU C
 ECT-05CA THRU C
 ECT-05DA THRU C
 ECT-05EA THRU C
 ECT-05FA THRU C
 ECT-05GA THRU C
 ECT-05HA THRU C
 ECT-05IA THRU C



REFERENCE DRAWINGS	
25W220-PP-1	PLANT AC AUXILIARY POWER SYSTEM - SINGLE LINE
21W0900-EB	SYSTEM EB CONTROL LOGIC DIAGRAM
20W1740-EB	ELECTRICAL SYSTEM EB SCHEMATICS
20W1740-PP	SWGR CKT ARRANGEMENT TYPICAL SCHEMATICS

SWITCHGEAR MANUFACTURER: I-T-E IMPERIAL CORPORATION
 CONTRACT NUMBER: 15W-5-85-102

- NOTES:
- 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.
 - AN AUTOMATIC TRANSFER IS INITIATED AND SUPERVISED BY UNDERVOLTAGE RELAYS. AUTOMATIC TRANSFER IS PROHIBITED IF THE NORMAL SUPPLY OR FROM ALTERNATE SUPPLY IS AVAILABLE. IF THE NORMAL SUPPLY IS UNAVAILABLE, TRANSFER IS PROHIBITED UNTIL THE ALTERNATE SUPPLY OR FROM NORMAL TO ALTERNATE SUPPLY.
 - PARALLELING OF THE NORMAL AND ALTERNATE SUPPLIES UNDER MANUAL OR AUTOMATIC TRANSFER IS INHIBITED BY INTERLOCKS.
 - NO RELAYS IN MAJOR FEEDER CIRCUITS TRIP AND LOCK OUT THEIR RESPECTIVE CIRCUIT BREAKERS.
 - P.L. SUPPLY BREAKERS ARE RATED AT 1,000 AMPS CONTINUOUS, 100MVA INTERRUPTING, 7,2KV NOMINAL, 80,000 AMP MOMENTARY, AND 77,000 AMPS CLOSE AND LATCH.
 - ALL FEEDER BREAKERS ARE RATED THE SAME AS SUPPLY BREAKERS.
 - THE SWITCHGEAR MAIN BUS IS RATED AT 1,000 AMPS CONTINUOUS, 90,000 AMP MOMENTARY, AND 7,2KV NOMINAL.
 - FOR A COMPLETE DEFINITION OF THE UNIQUE IDENTIFICATION NUMBERS (UNID) SEE EN-05B-EP-01.
 - EACH DEVICE ASSOCIATED WITH THIS BUS, NORMAL SUPPLY OR ALTERNATE SUPPLY, CIRCUIT BREAKER 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 HEADOR SYMBOL.
 - RELAYS SHALL BE THE TYPES SHOWN ON THIS DRAWING.

- SYMBOLS:
- XXX UNIT AND SYSTEM DESIGNATION
 - ◇ INTERFACE WITH DEONTIC SYSTEM
 - ▽ INTERFACE WITH REMOTE CONTROL
 - RED INDICATING LIGHT
 - INTERFACE WITH STATUS ENVIRONMENTAL ALARM MONITORING SYSTEM (SEAMS)
 - △ CONNECTION TO REMOTE METER
 - ANN THIS FUNCTION TO BE MONITORED BY ONE OR MORE ANNUNCIATION OR ALARM SYSTEMS

52438
 Control # 830405053
 Date 3-25-83 of Document
 REGULATORY DOCKET FILE

PRC
 APERTURE
 CARD

NO.	DATE	DESCRIPTION
1	11-14-82	ISSUED FOR CONSTRUCTION
2	11-14-82	ISSUED FOR CONSTRUCTION
3	11-14-82	ISSUED FOR CONSTRUCTION
4	11-14-82	ISSUED FOR CONSTRUCTION
5	11-14-82	ISSUED FOR CONSTRUCTION
6	11-14-82	ISSUED FOR CONSTRUCTION
7	11-14-82	ISSUED FOR CONSTRUCTION
8	11-14-82	ISSUED FOR CONSTRUCTION
9	11-14-82	ISSUED FOR CONSTRUCTION
10	11-14-82	ISSUED FOR CONSTRUCTION

POWERHOUSE-TURBINE BUILDING
 UNIT 1
 SINGLE LINE DIAGRAM
 6900V SWGR ITC
 IEB-EMVS-05

BELLEFONTE NUCLEAR PLANT
 TENNESSEE VALLEY AUTHORITY
 DIVISION OF ENGINEERING DESIGN

SUBMITTED: [Signature]
 RECOMMENDED: [Signature]
 APPROVED: [Signature]

INSPECTED AND APPROVED FOR ISSUE: [Signature]
 DESIGN PROJECT MANAGER

KNOXVILLE 2-17-88 21W1724-EB-1 25
 45W725-3