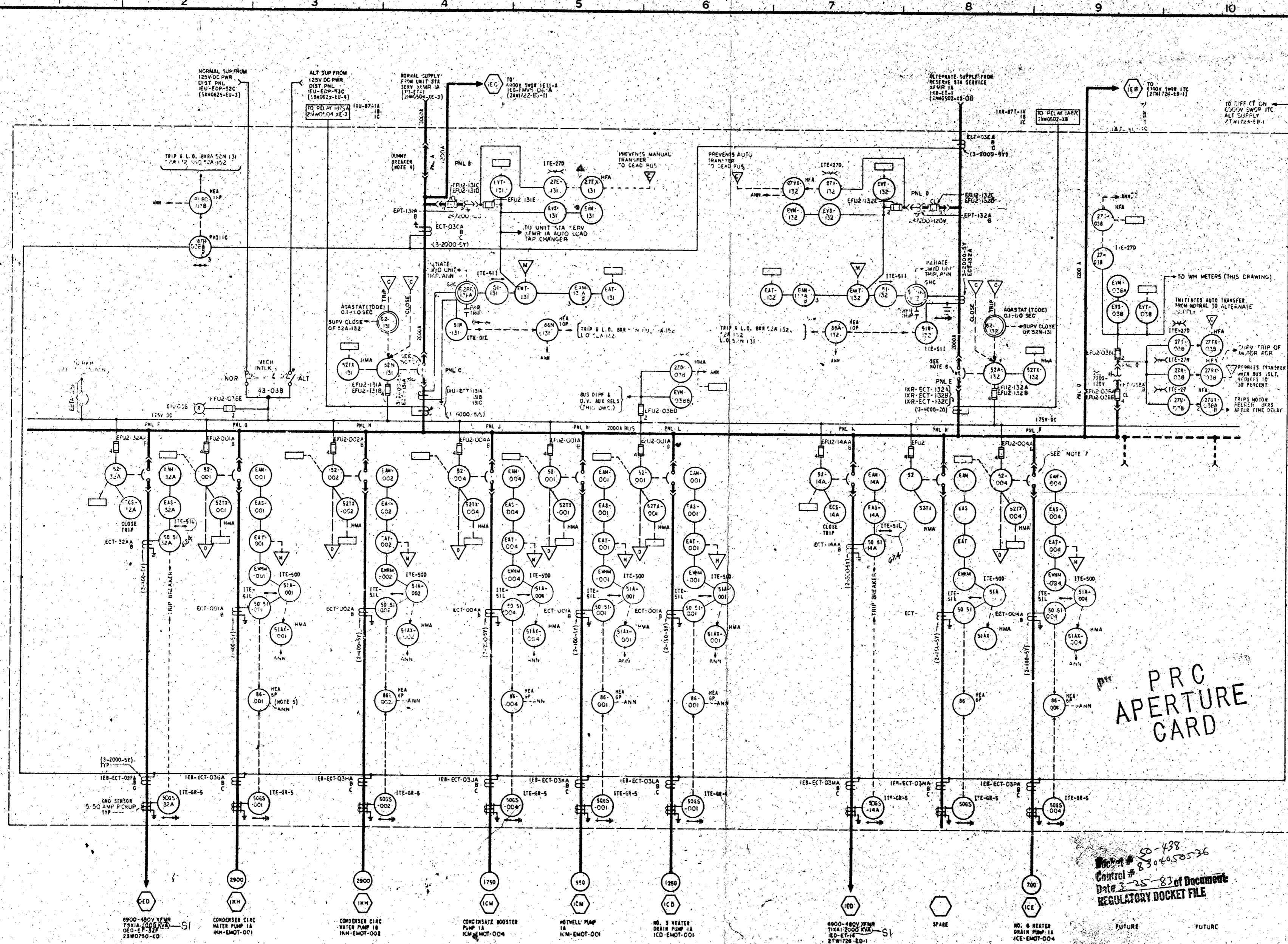


UNITS KEYS TO BUS  
 B1B-038A THRU C  
 B7UX-038A THRU B  
 EVM-038A THRU B  
 EPUZ-038A THRU E  
 EPT-038A THRU B

UNITS KEYS TO PANEL  
 ECT-038A THRU C  
 ECT-038A THRU C  
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REFERENCE DRAWINGS	
21W122-EB-01	PLANT AC AUXILIARY POWER SYSTEM - SINGLE LINE
21W122-EB-02	ELECTRICAL SYSTEM SCHEMATICS
21W122-EB-03	SYSTEM EB CONTROL AND LOGIC DIAGRAM

MANUFACTURER: I-T-E IMPERIAL CORPORATION  
 CONTRACT NUMBER: 7545-8558

- 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 BUS.
  - 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 INITIATED BY INTERLOCKS.
  - DUMMY BREAKER IS RATED AT 3000 AMP CONTINUOUS, 60,000 AMP MOMENTARY, AND 7.2KV NOMINAL.
  - 50 RELAYS IN MOTOR FEEDER CIRCUITS TRIP AND LOCK OUT THEIR RESPECTIVE CIRCUIT BREAKERS.
  - ALL SUPPLY BREAKERS ARE RATED AT 2000 AMPS CONTINUOUS, 40000 AMP INTERRUPTING, 7.2KV NOMINAL, 60,000 AMP MOMENTARY, AND 7.2KV NOMINAL 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 AMP CONTINUOUS, 60,000 AMP MOMENTARY, AND 7.2KV NOMINAL.
  - FOR A COMPLETE DEFINITION OF THE UNIQUE IDENTIFICATION NUMBERS (UNIN) SEE ENCL 15A.D. EACH SERVICE ASSOCIATED WITH THE SWGR BUS AND THE NORMAL, ALTERNATE, OR DUMMY BREAKERS, IS PART OF THE 6900 VOLT AC AUXILIARY POWER DISTRIBUTION SYSTEM WITH SYSTEM DESIGNATION EB. THE DEVICE UNITS IS FORMED BY PREFIXING THE DESIGNATIONS SHOWN ON THE DRAWING WITH IEB, EXCEPT AS NOTED ON THE DRAWING. ALL FEEDER BREAKERS WITH THEIR ASSOCIATED DEVICES ARE PART OF THE SYSTEM WHICH THEY SUPPLY. THE COMPLETE UNIT IS FORMED BY PREFIXING THE DESIGNATIONS SHOWN ON THE DRAWING WITH THE UNIT AND SYSTEM DESIGNATION SHOWN IN THE HEXAGON SYMBOL.
  - RELAYS SHALL BE I-T-E TYPES SHOWN ON THIS DRAWING.

- SYMBOLS:
- XXX UNIT AND SYSTEM DESIGNATIONS
  - ∇ INTERFACE WITH DEONTIC SYSTEM
  - C INTERFACE FOR REMOTE CONTROL
  - R RED INDICATING LIGHT
  - INTERFACE WITH STATUS ENVIRONMENTAL/ARM MONITORING SYSTEM (SEAMS)
  - △ CONNECTION TO REMOTE METER
  - ANN THIS FUNCTION TO BE MONITORED BY ONE OR MORE ANNUNCIATION OR ALARM SYSTEMS

REV	NO.	DATE	DESCRIPTION
4	024.SI	11/19/74	REVISED TO REFLECT REVISIONS
3	341.SI	11/19/74	CHANGED FROM DC PROT. MINOR CHANGES
2	02.SI	11/19/74	IMPLEMENTED ANTICIPATORY RELAY SCHEME PER ENCL 15A.D. MINOR REVISIONS PER 31.
1	01.SI	11/19/74	IMPLEMENTED 50 RELAYS PER ECT-038A AND 120V AC CONT. PWR TO AUTO LOCK UP CHARGER PER ECT-038A. SEE PER 31 FOR CHANGES TO MOTOR FEEDER CIRCUITS PER ECT-038A.

POWERHOUSE-TURBINE BUILDING  
**UNIT 1**  
 SINGLE LINE DIAGRAM  
 6900V SWGR ITA  
 IEB-EMVS-03

BELLEVILLE NUCLEAR PLANT  
 TENNESSEE VALLEY AUTHORITY  
 DIVISION OF ENGINEERING DESIGN

APPROVED: [Signature]  
 SUBMITTED: [Signature]  
 KNOXVILLE 2-19-74 88 21W122-EB-1

PRC APERTURE CARD

Doc # 50-438  
 Control # 8304058536  
 Date 3-25-83 of Document  
 REGULATORY DOCKET FILE

POINT	COORD. X	COORD. Y
ME		
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