



UNITS KEYS TO PANEL
 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	
21W2724-AP-1	PLANT AC AUXILIARY POWER SYSTEM - SINGLE LINE
21W2724-EB	SYSTEM EB - CONTROL & LOGIC DIAGRAM
21W2724-EB	ELECTRICAL SYSTEM - 3 PHASE
21W2724-EB	WATER CONTROL ARRANGEMENT SYMBOLS
LAWRENCE MANUFACTURING CO. IMPERIAL CORPORATION	
CONTRACT NUMBER 77-568-83	

- 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.
 - AN AUTOMATIC TRANSFER IS INITIATED AND SUPERVISED BY UNDERVOLTAGE RELAYS. AUTOMATIC TRANSFER IS REVERSE OF THE NORMAL SUPPLY OR FROM ALTERNATE TO NORMAL SUPPLY IF THE NORMAL SUPPLY IS UNAVAILABLE. TRANSFER IS REVERSE OF 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.
 - 24 RELAYS IN MOTOR FEEDER. RELAYS TRIP AND LOCK OUT THEIR RESPECTIVE CIRCUIT BREAKERS.
 - ALL SUPPLY BREAKERS ARE 2000 AMP, 7.2KV MOMENTARY, AND 17,000 AMPS CLOSE AND LATCH.
 - ALL FEEDER BREAKERS ARE RATED THE SAME AS SUPPLY BREAKERS.
 - THE SWITCHGEAR MAIN BUS IS RATED AT 200 AMP CONTINUOUS, 40,000 AMP/1.0 SEC SHORT CIRCUIT, AND 7.2KV NOMINAL.
 - FOR A COMPLETE DEFINITION OF THE UNIQUE IDENTIFICATION NUMBERS (UNID) SEE TVA ENDS-8.01.
- EACH DEVICE ASSOCIATED WITH THE SWGR BUS, NORMAL SUPPLY, OR ALTERNATE SUPPLY. AUXILIARY POWER DISTRIBUTION SYSTEM WITH 3PHASE DISTRIBUTION. THE DEVICE UNID IS FORMED BY PREFIXING THE DESIGNATIONS SHOWN ON THIS DRAWING WITH 2EB; EXCEPT AS NOTED IN 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.

- SYMBOLS:
- UNIT AND SYSTEM DESIGNATION
 - INTERFACE WITH DECONTAMINATION SYSTEM
 - INTERFACE FOR 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

NO.	DATE	BY	DESCRIPTION
1	4-23-77
2	10-21-77
3	3-25-83

Docket # 58438
 Control # 4050536
 Date 3-25-83 of Document
 REGULATORY DOCKET FILE

PRC APERTURE CARD

POWERHOUSE-TURBINE BUILDING	
UNIT 2	
SINGLE LINE DIAGRAM	
6900V SWGR 2TC	
2EB-EMVS-05	
BELLEFONTE NUCLEAR PLANT	
TENNESSEE VALLEY AUTHORITY	
DIVISION OF ENGINEERING DESIGN	
SUBMITTED	RECOMMENDED
KNOXVILLE 2-19-78 21W2724-EB-1	
45W726-3	

NO.	DATE	BY	DESCRIPTION
1
2
3