

REFERENCE DRAWINGS	
21W1726-ED-1	PLANT AC SUPPLY POWER SYSTEM SINGLE LINE
21W1726-ED-2	480V AC SUPPLY SYSTEM SCHEMATIC

- NOTES:
- 480V SWGR PROVIDED ON CONTRACT NO. TMS-85526.
  - ALL CKT BRKS ARE 3-POLE, 800A FR WITH REAR MOUNTED CURRENT LIMITING FUSE ON LINE SIDE OF EACH POLE, EXCEPT AS NOTED.
  - 800A FR BRKS HAVE 20,000 RMS SYM INTERRUPTING RATING AT 480V.
  - 1200A FR BRKS HAVE 50,000 RMS SYM INTERRUPTING RATING AT 480V.
  - 2000A FR BRKS HAVE 85,000 RMS SYM INTERRUPTING RATING AT 480V.
  - ALL REMOTELY OPERATED BRKS ARE EQUIPPED WITH AN ELECTRICAL LOCKOUT ATTACHMENT ACTUATED WHEN BRK IS TRIPPED AUTOMATICALLY BY THE SUPERVISOR.
  - BUS TO BE 3P WITH HALF NEUTRAL. ALL LOADS THAT ARE 3P, 4 WIRE ARE SO INDICATED.

- EACH DEVICE ASSOCIATED WITH THE SWGR BUS, TRANSFORMER, AND THE NORMAL OR TIE Ckt BRK, IS PART OF THE 480V NORMAL AC AIR PWR DISTRIBUTION SYS WITH UNIT AND SYS DESIGNATION. IED, THE DEVICE UNIT IS FORMED BY PREFIXING THE DESIGNATIONS SHOWN ON THE Dwg WITH IED, EXCEPT AS NOTED. ALL OTHER BRKS WITH THEIR ASSOCIATED DEVICES ARE PART OF THE SYS WHICH THE SUPPLY, THE UNIT IS FORMED BY PREFIXING THE DESIGNATIONS SHOWN ON THE Dwg WITH THE UNIT AND SYS DESIGNATION SHOWN IN THE DESIGN SYMBOL, EXCEPT AS NOTED. THE SWGR COMPARTMENT NO, UNIT DESIGNATIONS ARE FORMED AS FOLLOWS USING THE COMPARTMENT NO. (X) AND THE BOARD NO. (Y): IED-ELV5-YXX.
- KVA LOADS SHOWN ARE ESTIMATED MAXIMUM DEMAND.
- BLOWN FUSE TRIPS, BREAKER.

- SYMBOLS:
- ANN - THIS FUNCTION TO BE MONITORED BY ONE OR MORE ANNUNCIATION OR ALARM SYSTEMS.
  - KEY INTERLOCK
  - SOLID STATE TRIP DEVICE WITH SENSOR RATING SHOWN
  - 3 - SHORT TIME DELAY (SELECTIVE TRIP)
  - I - INSTANTANEOUS (FAULT CURRENT)
  - G - GROUND (FAULT CURRENT)
  - INTERFACE FOR STATUS ENVIRONMENTAL ALARM MONITORING SYM (SEASMS)
  - INTERFACE FOR DEONTIC SYS
  - UNIT AND SYS DESIGNATION (SEE NOTE 4)
  - RED INDICATING LIGHT

REV	DATE	DESCRIPTION	BY	CHKD
1	12-27-76	REPLACED 3 AMP FUSES WITH 6 AMP FUSES		
2	1-15-77	EXCHANGED SENSORS IN COMPARTMENTS E2 AND E3. MINOR CHANGES.		
3	4-15-77	DELETE SWGR POWER DISTR CAB PDR AND RETAIN AS SPARE PER ECN 242. ADD CKT BKR CONTROL SWITCH PER ECN 439. GEN REVISIONS PER SI-VARIOUS		
4	5-19-76	INCORPORATED SEAMS PER ECN 40 VARIOUS. INCORPORATED UNID SYS, GEN REV PER ECN 3-1 VARIOUS. UPDATE FOR MAJOR CHANGES PER ECN 134.		
5	12-27-76	ADD TRANSFORMER COOLING FANS		
6	9-9-76	CHANGE 480V DIST SYS FROM DELTA TO GRD WYE AND ADDED GRD FAULT PROT PER ECN 12 REV LOADS PER ECN 20.		

Sheet # 50-438  
Control # 8364-050536  
Date 3-25-83 of Document  
REGULATORY DOCKET FILE

PRC  
APERTURE  
CARD

TURBINE BUILDING  
UNIT 1  
SINGLE LINE DIAGRAM  
480V SWITCHGEAR IXA1  
IED-ELV5-14

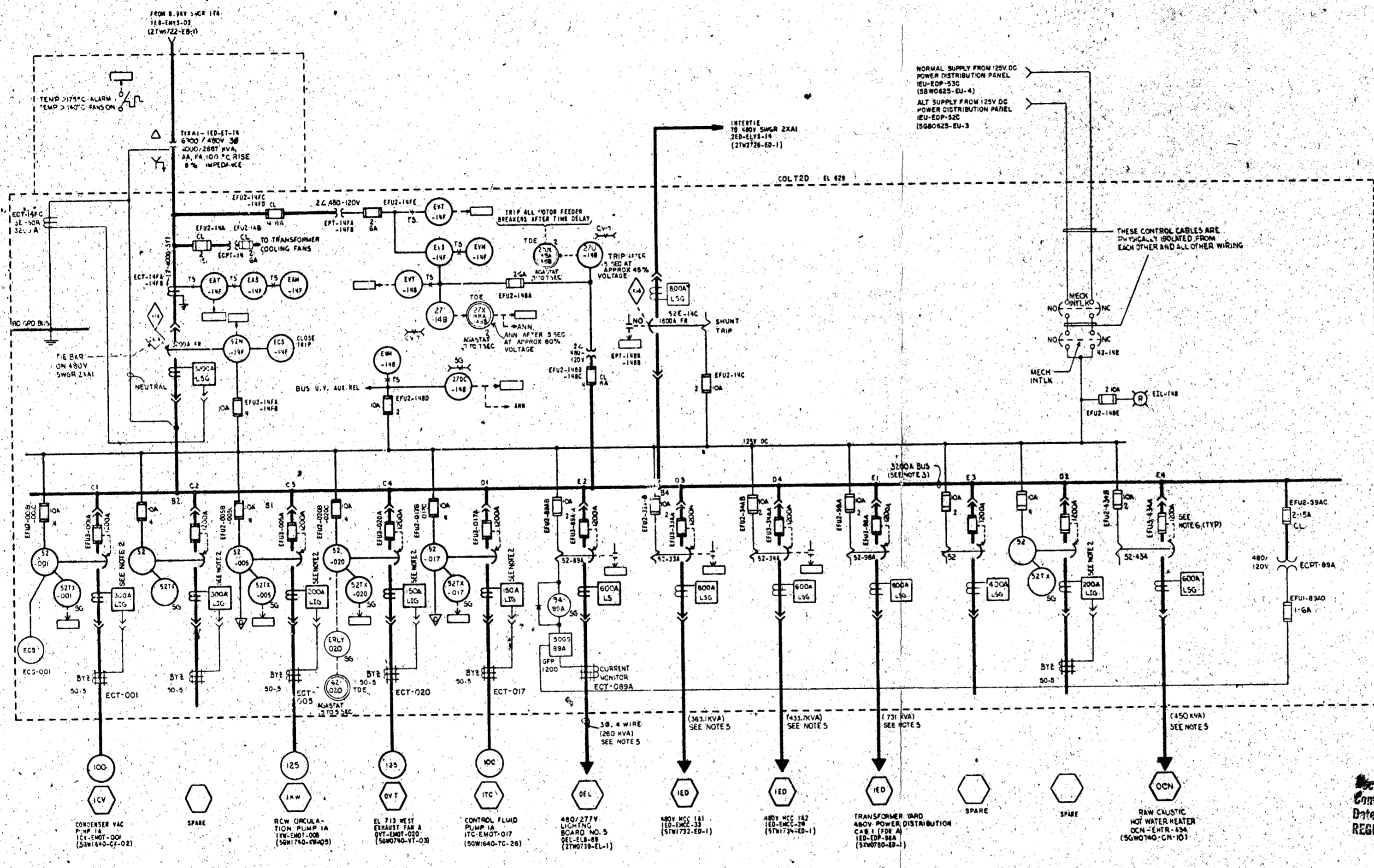
BELLEVILLE NUCLEAR PLANT  
TENNESSEE VALLEY AUTHORITY  
DIVISION OF ENGINEERING DESIGN

APPROVED FOR ISSUE  
R.M. Hodges  
DESIGN PROJECT MANAGER

SUBMITTED  
R.M. Hodges  
RECOMMENDED  
T. R. ...  
APPROVED  
T. R. ...

KNOXVILLE 2-19-76 80 E 21W1726-ED-1  
45W727-1

A  
B  
C  
D  
E  
F  
G



REV	DATE	DESCRIPTION
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