

REFERENCE DRAWINGS	
21W1726-EP-1	PLANT AC UTILITY POWER SYSTEM SINGLE LINE
21W1726-EP-2	480V AC TRANSFORMER SCHEMATIC

- NOTES:
- 480V SWGR PROVIDED ON CONTRACT NO. TMS-85526.
 - ALL CBT BRK ARE 3-POLE, 800A FB WITH REAR MOUNTED CURRENT LIMITING FUSE ON THE SIDE OF EACH POLE. EXCEPT AS NOTED.
 - 800A FB BRK HAVE 20,000 RMS SYM INTERRUPTING RATING AT 480V.
 - 1200A FB BRK HAVE 50,000 RMS SYM INTERRUPTING RATING AT 480V.
 - 2000A FB BRK HAVE 65,000 RMS SYM INTERRUPTING RATING AT 480V.
 - ALL REMOTELY OPERATED BRK ARE EQUIPPED WITH AN ELECTRICAL LOCKOUT ATTACHMENT ACTUATED WHEN BAR 5 IS TRIPPED AUTOMATICALLY BY THE SUPPLIERS.
 - 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 CAT 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 BRK 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. SHOW IN THE DESIGN SYMBOL, EXCEPT AS NOTED. THE SWGR COMPARTMENT NO. UNIT DESIGNATIONS ARE FORMED AS FOLLOWS USING THE COMPARTMENT NO. (1A) AND THE BOARD NO. (1Y): IED-ELV3-Y1A2.
- 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)

1 - INSTANTANEOUS (FAULT CURRENT)

G - GROUND (FAULT CURRENT)

INTERFACE FOR STATUS ENVIRONMENTAL ALARM MONITORING SYM (SEAMS)

INTERFACE FOR DECATIC SYS

UNIT AND SYS DESIGNATION (SEE NOTE 4)

RED INDICATING LIGHT

1	11/13	2-1/2	13-1/2	13-1/2	13-1/2	13-1/2	13-1/2	13-1/2	13-1/2	13-1/2	13-1/2	13-1/2	13-1/2	13-1/2	13-1/2
REPLACED 3 AMP FUSES WITH 6 AMP FUSES															
EXCHANGED SENSORS IN COMPARTMENTS E2 AND E3. MINOR CHANGES.															
DELETE SWGR POWER DISTR CAB FOR AND RETAIN AS SPARE PER ECN 242.															
ADD CKT BKR CONTROL SWITCH PER ECN															
439. GEN REVISIONS PER SI-VARIOUS															
INCORPORATED SEAMS PER ECN 40 VARIOUS. INCORPORATED UNID SYS, GEN REV PER ECN 3-1. VARIOUS UPDATE FOR MAJOR CHANGES PER ECN 134.															
ADD TRANSFORMER COOLING FANS															
CHANGE 480V DIST SYS FROM DELTA TO GRD WYE AND ADDED GRD FAULT PROT PER ECN 12 REV LOADS PER ECN 20.															
439. GEN REVISIONS PER SI-VARIOUS															

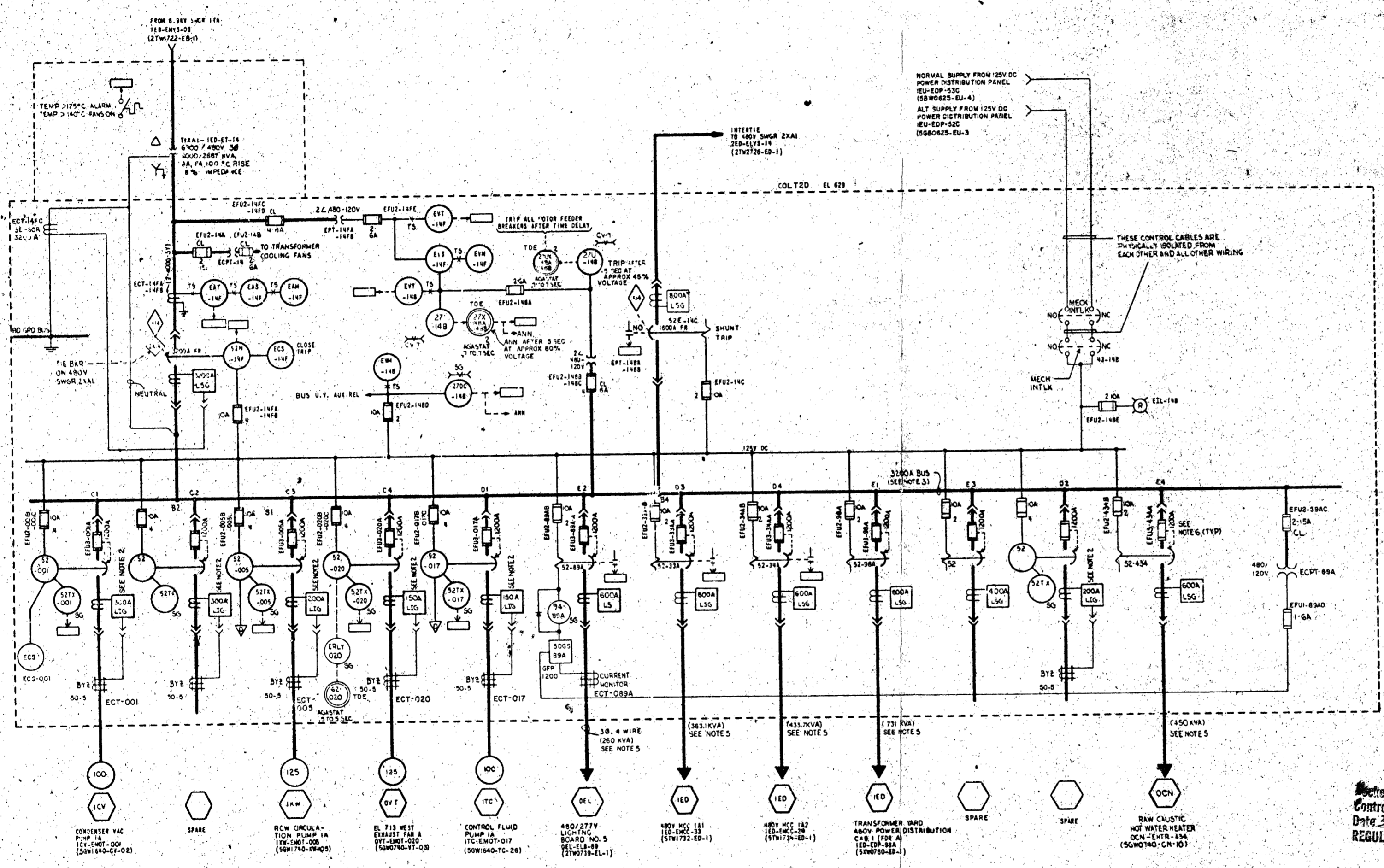
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REGULATORY DOCKET FILE

PRC
APERTURE
CARD

TURBINE BUILDING
UNIT 1
SINGLE LINE DIAGRAM
480V SWITCHGEAR IXA1
IED-ELV3-14
BELLEFONTE NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

SUBMITTED	RECOMMENDED	APPROVED
R.M. Hodgson	J.H. ...	J.H. ...
DESIGN PROJECT MANAGER		

NOXVILLE 2-19-78 80 E 21W1726-ED-1
45W727-1



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