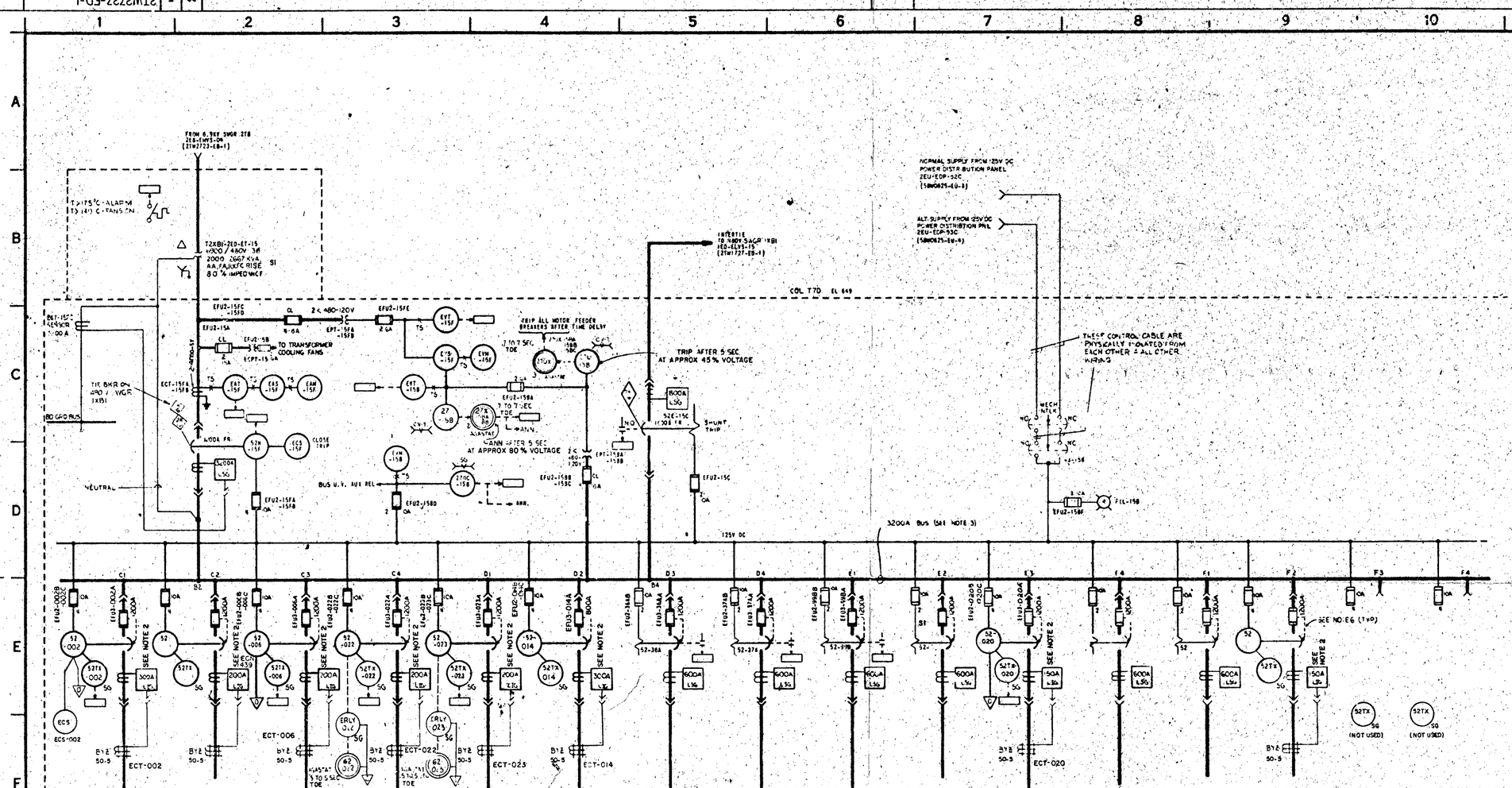

REFERENCE DRAWINGS	
DRAWING NUMBER	TITLE
2TW2720-EF-1	PLANT SC VENTILATION FOR SYSTEM 31-HVAC
2TW2740-EJ-1	480V SWGR 2TB1 SYSTEM SCHEMATIC

NOTES:

1. 480V SWGR PROVIDED ON CONTRACT NO. TCN5-85526
2. ALL CKT BKRS ARE 3-POLE, A 00A FR WITH REAR MOUNTED CURRENT LIMITING FUSE ON LINE SIDE OF EACH POLE, EXCEPT AS NOTED.
   800A FR BKRS HAVE 200,000A RMS SYM INTERRUPTING RATING AT 480V.
   1600A FR BKRS HAVE 50,000A RMS SYM INTERRUPTING RATING AT 480V.
   3200A FR BKRS HAVE 65,000A RMS SYM INTERRUPTING RATING AT 480V.
   ALL REMOTELY OPERATED BKRS ARE EQUIPPED WITH ANTI-ELECTRICAL LOCKOUT ATTACHMENT ACTUATED WHEN BKR IS TRIPPED AUTOMATICALLY BY THE ANTI-PUMP.
3. BUS TO BE 3Ø WITH HALF NEUTRAL. ALL LOADS THAT ARE 3Ø, 4 WIRE ARE SO INDICATED.

* EACH DEVICE ASSOCIATED WITH THE SWGR BUS, TRANSFORMER, AND THE NORMAL OR TIE CKT BKRS, IS PART OF THE 480V NORMAL 3Ø AUX PWR DISTRIBUTION SYS WITH UNIT AND SYS DESIGNATION "2ED". THE DEVICE UNID IS FORMED BY PREFIXING THE DESIGNATIONS SHOWN ON THE DWG WITH 2ED, EXCEPT AS NOTED. ALL OTHER BKRS WITH INDIVIDUAL ASSOCIATED DEVICES ARE PART OF THE SYSTEM WHICH THEY SUPPLY. THE UNID IS FORMED BY PREFIXING THE DESIGNATIONS SHOWN ON THE DWG WITH THE UNIT AND SYS DESIGNATION SHOWN IN THE HEXAGON SYMBOL, EXCEPT AS NOTED. THE SWGR COMPARTMENT NO. UNID DESIGNATIONS ARE FORMED AS FOLLOWS USING THE COMPARTMENT NO. (XX) AND THE BOARD NO. (YY): 2ED-ELVS-YYXX.

3 ALL 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
L - LONG TIME DELAY (OVERLOAD)
S - SHORT TIME DELAY (SELECTIVE TRIP)
I - INSTANTANEOUS (FAULT CURRENT)
G - GROUND (FAULT CURRENT)
INTERFACE FOR STATUS, ENVIRONMENTAL, AND ALARM MONITORING SYS (SEAMS)

RED INDICATING LIGHT.

INTERFACE WITH REMOTE CONTROL

INTERFACE WITH DECONTIC

UNIT AND SYS DESIGNATION (SEE NOTE 2)

REV	ECN NO.	DATE	DSGN	DRWN	CHKD	SUPV	ENGR	MGR	TURBINE	MECH	APPR
4	31, 242, 439										

DELETE SWYD POWER DISTRIBUTION CAB FDR AND RETAIN AS SPARE PER ECN 242. ADD CKT BKR CONTROL SWITCH AND MODIFIED SENSOR RATING PER ECN 439. GEN REVISIONS PER SI-VARIOUS

REV	ECN NO.	DATE	DSGN	DRWN	CHKD	SUPV	ENGR	MGR	TURBINE	MECH	APPR
3	144, 51, 67, 34	10-18-74	LDG	RDR	TES	[illegible]	[illegible]	-	[illegible]	[illegible]	[illegible]

INCORPORATED SEAMS PER ECN 44 VARIOUS INCORPORATED UNID SYS, GEN, SEI PER ECN 51 VARIOUS SEPARATED SWYD DISTR CABS PER ECN 67 SEAT FOR MAJOR CHANGES PER ECN 134

REV	ECN NO.	DATE	DSGN	DRWN	CHKD	SUPV	ENGR	MGR	TURBINE	MECH	APPR
2	20	10-8-74	BJN	RDR	TES	[illegible]	[illegible]	-	[illegible]	[illegible]	[illegible]

ADD TRANSFORMER COOLING FANS

REV	ECN NO.	DATE	DSGN	DRWN	CHKD	SUPV	ENGR	MGR	TURBINE	MECH	APPR
1	12, 20	9-9-74	LDG	REN	TES	[illegible]	[illegible]	-	[illegible]	[illegible]	[illegible]

CHG 480V DISTR SYS FROM DELTA TO GRD WYE AND ADDED GRD FAULT PROT PER ECN 12. REV LOADS PER ECN 20.

REV	ECN NO.	DATE	DSGN	DRWN	CHKD	SUPV	ENGR	MGR	TURBINE	MECH	APPR
6	1133	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

REPLACED 5 AMP FUSES WITH 8 AMP FUSES

REV	ECN NO.	DATE	DSGN	DRWN	CHKD	SUPV	ENGR	MGR	TURBINE	MECH	APPR
5	582, 31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

ADDED MAIN TURBINE LUBE OIL TK HTR, & REPLACED 1200 A CL FUSE WITH 800 A CL FUSE, & MINOR CHANGES

DESIGN: H. B. SOUNDS
DRWN: S. MONGER
CHKD: R.K.S. ATES
APPR: R.W. SHORTER

INSP:
ENGR: [illegible]

INSPECTED AND APPROVED FOR ISSUE: R.M. Hodges
DESIGN PROJECT MANAGER

TURBINE BUILDING
UNIT 2

SINGLE LINE DIAGRAM
480V SWITCHGEAR 2XB1
2ED-ELVS-15

BELLEFONTE NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

N

SUBMITTED	RECOMMENDED	APPROVED
[illegible]	[illegible]	[illegible]

KNOXVILLE 2-19-74 | 88 | E | 2TW2727-ED-1 | 88

45W728-2

RECORD DRAWING AS CONSTRUCTED

Docket # 50-438
Control # 8304050536
Date 3-25-83 of Document
REGULATORY DOCKET FILE

PRC APERTURE CARD