6.9KV SWITCHGEAR 2TA
2EB-EMVS-03

FOR INTERNAL EQPT SEE 5GW2740-EB-07

SSCS TERMINATION CAB.
2IX-II-013

FOR INTERNAL EQPT SEE 2TW0900-EB-01

NOTE 9
1 FOR GENERAL NOTES AND REFERENCE DRAWINGS SEE 5GW2740-EB-01.

(B)AK13 MOR SUP CURRENT EAT-241 (OUTPUT 0-3 MA)
(B)AK14 (+) (B)AK12 (-)
(B)AK15 MOR SUP VOLTAGE EVT-241 (OUTPUT 0-3 MA)
(B)AK16 (+) (B)AK8 (-)
(B)AK6 MAIN BUS VOLTAGE EVT-03B (OUTPUT 0-3 MA)
(B)AK7 (+) (B)AK5 (-)
(D)AK5 ALT SUP VOLTAGE EVT-232 (OUTPUT 0-3 MA)
(D)AK16 (+) (D)AK12 (-)
(D)AK4 ALT SUP CURRENT EAT-232 (OUTPUT 0-3 MA)
(D)AK13 (+)

CLOSES FOR LOSS OF NOR FEEDER BKR TRIP CAPABILITY OR BKR RACKED OUT
52N-231 52 S 52T-231
52N-231 52H-OUT
CLOSES FOR LOSS OF ALT FEEDER BKR TRIP CAPABILITY OR BKR RACKED OUT
52A-232 52 S 52T-232
52A-232 52H-OUT
CLOSES FOR SWGR DIFF OC ALT SUP OC OR NOR SUP OC
86SD-019
86A-232
86N-231
27DC-019
CLOSES WHEN MAIN BUS VOLTAGE LOW 27X-03B
CLOSES FOR LOSS OF CONTROL VOLTAGE 27DC-03B
CLOSES WHEN MAIN BUS VOLTAGE LOW 27X-03B
CLOSES WHEN 21A NOR SUP BKR FAILS TO TRIP UNDER FAULT 62BF-231
CLOSES WHEN MAIN BUS VOLTAGE LOW 27X-03B
CLOSES FOR SWGR DIFF OC ALT SUP OC OR NOR SUP OC
86SD-03B
86A-232
86N-231
CLOSES WHEN 21A ALT SUP BKR FAILS TO TRIP UNDER FAULT 62BF-232
CLOSES WHEN ALT SUP VOLTAGE LOW 27YX-232

21S-ECA2-726 (BK-BK, BK-W)
21S-ECA2-727 (W-BK, W-W)
21S-ECA2-728 (BK, W)
21S-ECA2-728 (BK-BK, BK-W)
21S-ECA2-737 (W-BK, W-W)
21S-ECA2-729 (BK, W)
21A-ECA2-32 (BK-BK, BA-W, W-BK, W-W)
21S-ECA2-731 (R-BK, R-W)
21S-ECA2-730 (BK-BK, BK-W)
OQA-ECA2-2051 (BK-W, BK-BK, W-W, W-BK, R-W, R-BK, G-W, G-BK, O-W, O-BK)
OQA-ECA2-2052 (W, BK)

I0056 AN — 1-15-4 / 1-15-5
I0058 AN — 1-16-1 / 1-16-2
I0059 AN — 1-16-4 / 1-16-5
I0060 AN — 1-16-7 / 1-16-8
I0061 AN — 1-15-10 / 1-15-11
I0057 AN
5GW0640-IS-01
SEAMS MULTIPLEXER 21S-IMUX-209 LOCATED IN 21X-IMXT-002

2-04-7 / 2-04-8 — 48V DC — A0157 AN
2-04-9 / 2-04-10 — 48V DC — A0158 AN
2-04-1 / 2-04-12 — 48V DC — A0155 AN
2-04-2 / 2-04-3 — 48V DC — A0163 AN
2-06-1 / 2-06-2 / 2-06-3
5GW0640-IS-01
SEAMS MULTIPLEXER 21S-IMUX-209 LOCATED IN 21X-IMXT-002

0356A 125V DC 1207 AN — 0356B GRD BUS
0356A 125V DC 1217 AN — 0356B GRD BUS
5GW2640-IA-01
UNIT ANN TERMINATION CAB. 21X-II-020B

TB10-8 / TB11-8 — 48V DC — 367 OR — GRD BUS
TB10-5 / TB11-5 — 48V DC — 364 OR — GRD BUS
TB10-6 / TB11-6 — 48V DC — 365 OR — GRD BUS
TB10-9 / TB11-9 — 48V DC — 368 OR — GRD BUS
TB10-10 / TB11-10 — 48V DC — 369 OR — GRD BUS
REF DWG 9CW7364-QA-02

OPERATIONS RECORDER OQD-EEQC-64

CLOSES WHEN NOR BKR OPENS — X3 — A0015 AN
CLOSES WHEN TRANSFER SCHEME IN MAN MODE — X1 — A0154 AN
CLOSES WHEN ALT BKR OPENS — X5 — A0016 AN
FOR CKT DET SEE 5GW0640-IS-22

CLOSES FOR AUTO TRANSFER — TB1041 X1 TB1042 — ENT A

TB10-7 / TB11-7 — 48V DC — 366 OR — GRD BUS
REF DWG 9CW7364-QA-02
OPERATIONS RECORDER OQD-EEQC-64

6.9KV SWITCHGEAR 2TA, EMVS-03, MONITORING

6.9KV SWITCHGEAR 2TB
2EB-EMVS-04

FOR INTERNAL EQPT SEE 5GW2740-EB-08

SSCS TERMINATION CAB
2IX-II-013

FOR INTERNAL EQPT SEE 2TW0900-EB-02

(B)AK1 (-) (B)AK3 (+) — MOR SUP CURRENT EAT-241 (OUTPUT 0-3 MA)
(B)AK4 (+) (B)AK2 (-)
(B)AK5 — NOR SUP VOLTAGE EVT-241 (OUTPUT 0-3 MA)
(B)AK6 (+) (B)AK10 (-)
(B)AK8 — MAIN BUS VOLTAGE EVT-04B (OUTPUT 0-3 MA)
(B)AK9 (+) (B)AK7 (-)
(B)AK5 — ALT SUP VOLTAGE EAT-242 (OUTPUT 0-3 MA)
(B)AK6 (+) (B)AK12 (-)
(B)AK3 — ALT SUP CURRENT EAT-242 (OUTPUT 0-3 MA)
(B)AK4 (+) (B)AK14 (-)

CLOSES FOR LOSS OF NOR FEEDER BKR TRIP CAPABILITY OR BKR RACKED OUT
52N-241 52 S 52T-241
52N-241 52H-OUT
CLOSES FOR LOSS OF ALT FEEDER BKR TRIP CAPABILITY OR BKR RACKED OUT
52A-242 52 S 52T-242
52A-242 52H-OUT
CLOSES FOR SWGR DIFF OC ALT SUP OC OR LOSS OF CONTROL VOLTAGE
86BD-04B
86A-242
86N-241
27DC-04B
CLOSES WHEN MAIN BUS VOLTAGE LOW 27X-04B
CLOSES FOR LOSS OF CONTROL VOLTAGE 27DC-04B
CLOSES WHEN MAIN BUS VOLTAGE LOW 27X-04B
CLOSES W/N 2TB NOR SUP BKR FAILS TO TRIP UNDER FAULT 62BF-241
CLOSES WHEN MAIN BUS VOLTAGE LOW 27X-04B
CLOSES FOR SWGR DIFF OC ALT SUP OC OR NOR SUP OC
86BD-04B
86A-242
86N-241
CLOSES WHEN 21B ALT SUP BKR FAILS TO TRIP UNDER FAULT 62BF-242
CLOSES WHEN ALT SUP VOLTAGE LOW 27YX-242

2IS-ECA2-730 (BK-BK, BK-W)
2IS-ECA2-731 (W-BK, W-W)
2IS-ECA2-732 (BK, W)
2IS-ECA2-732 (BK-BK, BK-W)
2IS-ECA2-733 (W-BK, W-W)
2IS-ECA2-733 (R-BK, R-W)
2IA-ECA2-31 (BK-BK, BK-W, W-BK, W-W)
OA-ECA2-2053 (BK-W, BK-BK, W-W, W-BK, R-W, R-BK, G-W, G-BK, O-W, O-BK)
OQA-ECA2-2054 (W, BK)

I0053 AN — 1-14-4 / 1-14-5
I0052 AN — 1-14-1 / 1-14-2
I0042 AN — 1-13-10 / 1-13-11
I0054 AN — 1-14-7 / 1-14-8
I0055 AN — 1-14-10 / 1-14-11
5GW0640-IS-01
SEAMS MULTIPLEXER 21S-IMUX-209 LOCATED IN 21X-IMXT-002

2-13-4 / 2-13-5 — 48V DC — A0190 AN
2-13-6 / 2-13-7 — 48V DC — A0189 AN
2-13-1 / 2-13-2 — 48V DC — A0194 AN
2-14-4 / 2-14-5 — 48V DC — A0195 AN
2-14-7 / 2-14-8 / 2-14-9
5GW0640-IS-01
SEAMS MULTIPLEXER 21S-IMUX-209 LOCATED IN 21X-IMXT-002

0357A 125V DC 1208 AN — 0357B GRD BUS
0367A 125V DC 1218 AN — 0367B GRD BUS
5GW2540-IA-01
UNIT ANN TERMINATION CAB. 21X-II-020B

TB10-14 / TB11-14 — 48V DC — 373 OR — GRD BUS
TB10-11 / TB11-11 — 48V DC — 370 OR — GRD BUS
TB10-12 / TB11-12 — 48V DC — 371 OR — GRD BUS
TB10-15 / TB11-15 — 48V DC — 374 OR — GRD BUS
TB10-16 / TB11-16 — 48V DC — 375 OR — GRD BUS
REF DWG 9CW7364-QA-02

OPERATIONS RECORDER OQD-EEQC-64

CLOSES WHEN NOR BKR OPENS — X3 — A0014 AN
CLOSES WHEN TRANSFER SCHEME IN MAN MODE — X1 — A0193 AN
CLOSES WHEN ALT BKR OPENS — X5 — A0017 AN
FOR CKT DET SEE 5GW0640-IS-22

CLOSES FOR AUTO TRANSFER — TB1045 X1 TB1043 — ENT A

TB10-13 / TB11-13 — 48V DC — 372 OR — GRD BUS
REF DWG 9CW7364-QA-02
OPERATIONS RECORDER OQD-EEQC-64

6.9KV SWITCHGEAR 2TB, EMVS-04, MONITORING

PRC APERTURE CARD

REV NO	ECN NO	DATE	DSGN	DRWN	CHKD	SUPV	ENGR	NSP	SUBMIT	ECN	APPD
DSGN											
DRWN											
CHKD											
SUPV											

INSP
ENGINEER

SCALE: EXCEPT AS NOTED

GENERAL
UNIT 2

SYSTEM SCHEMATIC 6.9KV NORMAL AC AUX POWER DISTRIBUTION SYSTEM

BELLEFONTE NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

N

SUBMITTED	RECOMMENDED	APPROVED

KNOXVILLE

88 E 5GW2740-EB-05 R0

RECORD DRAWING AS CONSTRUCTED

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