MCR PNL, IIX-IM-009, REF B & W DWG 02-23786NF & 02-23785NF

LOCATED ON MCR PNL IIX-IM-009

IRT-III-001C-A DG AMPS

IRT-IXI-001C-A DG KILOWATTS

IRT-IXI-001D-A DG KILOVARS

IHS-001H-A 5N3-32C DECR INCR

IHS-001G-A 5N3-32B LOWER RAISE

IHIS-001L-A 5N3-56B ENABLE LOCAL ENABLE MCR

IHIS-001I-A 5N3-9A STOP START

ECA2-54-A (SEE NOTE 2) (SHEET 1)

ECA2-55-A (SEE NOTE 2) (SHEET 1)

ECA2-56-A (SEE NOTE 2) (SHEET 1)

ECA2-57-A (SEE NOTE 2) (SHEET 1)

DG SPEED CONT

DG VOLT CONT

SEE 2GW0900-RT-1

DG TEST CONT

AN 9115 — FOR CKT DETAILS SEE 5GW1740-IA-01 — DSL IN TEST

MON M1221 — FOR CKT DETAILS SEE 5GW0640-25-18 — DSL IN TEST

(9GW7364-0A-02) OPERATIONS RECORDER-INPUT TERM CAB. OGD-EEQC-64

48V DC OR 432 SHLD GRD TBII-73 TBIO-73

BK W — OOA-ECA2-2030 — ENT D — TBIOI-17 -18 X5 — DSL IN MAINTENANCE OR TEST

SSCS LOGIC CAB IIX-IR-008-A

SSCS TERM CAB IIX-IR-007-A

BK-BK BK-W W-BK W-W R-BK R-W

ECA2-51-A

BK-S W-S R-S

SHLD GRD

(N)AL7 (N)AL6 (N)AK4 (N)AL11 (N)AL10 (N)AL9 (N)AL8

IEG-EAT-163-A (0-3ma) IEG-EWT-163-A (0-1ma) IEG-EVRT-163-A (0-1ma)

SEE NOTE 2 THIS SH. (TYPICAL)

RAISE VOLTAGE Z1 — LOWER VOLTAGE Z2 — LOCAL CONT ENABLE Z5 — INCR SPEED Z5 — DECR SPEED Z6 — LOCAL CONT ENABLED X2

K32AI0 K32AII K32AI2 K32BI2 K32BII K32BI0 K30A5 K30A4 K30B5 K30B4 SHLD GRD TB28A3

J1 J2 J3 J4

ENT A — ENT B

ECA3-58-A (SEE NOTE 2) SHEET 1

ECA2-52-A

R G O BL W BK W-BK R-BK BK W

630 206 150 198 199 160 208 207 192 193

TO VOLT REG PWR DRIVEN POT — TO 86L — TO GOV MOR

125V DC

86L

FOR CKT DETAILS SEE 5GW1740-EG-03

TEST START

X3 X5

K1IA5 K1IA4 K1IA8 K1IA9 Z1 Z2 Z3

ENT A — ENT A — ENT A

ECA3-59-4 ECA3-61-A

12 110 110 109B

TO START CKT A — TO START CKT B

125V DC

STOP Z2 K1IB4 K1IB5

ENT A — ENT A

ECA3-62-A

568 598 599

TO STOP CKT

DSL GEN IN MAINTENANCE X3 T8IIA5

TBIIA1 TEST START FEEDBACK X3

TBIIA2 48VDC COM X4

TBIIA6 STOP FEEDBACK

SHLD GRD

ECA2-63-A — ENT D

P5-13E J5 J6 600 589 590 482 483

R26-5 R1AUX2-4

X5 X6

89 90 169 170

R30A-1 R30B-1

(DG READY TO LOAD)

FOR CKT DETAILS SEE 5GW1740-EG-03

TB28AI MCR CONT ENABLE X2 — TB28A1 48V DC COM X2 — SHLD GRD

(SEE 5GW1740-RT-05 FOR SSCS CAB TO CAB WIRING)

ENT B — Y6

BK W — ECA2-66-A ENT D

901 593 594 902 159 159

R32-3 P5-9B

CLOSE FOR PROTECTIVE TRIPS

FOR CKT DETAILS SEE 5GW1740-EG-03

209 86HR 210 — CLOSE FOR GENERATOR PROTECTIVE RELAY TRIPS

190 86L 191 — OPEN FOR LOCAL CONT ENABLED

ENT D

BK — ECA2-68-A

W

DG 001-A ENG CONT PNL 100-ELCP-1-A

REF DELAVAL DWGS 09-500-7508D SH 1 THROUGH 9

6.9KV SWGR 1ET1-A COMPARTMENTS N,K,R, AND M IEG-EMVS-06N-A, IEG-EMVS-06K-A IEG-EMVS-06P-A, AND IEG-EMVS-06M-A

(5GW1740-EG-03, 10 AND 11)

TO BKR IEG-52E-163-A

ECA5-69-A ECA5-70-A ECA5-71-A

(N)AØ (N)BØ (N)CØ

LOAD 9A LOAD 9B LOAD 9C

6.9KV DG 001-A GEN CONT PNL ELCP-1-A

REF DELTA SWITCHBOARD DWG 054200 SH1-4 DELAVAL DWG 52391 SH 1 & 2

125V DC

ENER STOP CKT — GEN DIFF ANN — 6.9KV SWGR 1ET1-A BUS FAILURE ANN

1 30 — 761 614U 773 614X

ENT A — ENT D — ENT D

R1AUX2-1 R1AUX2-2 R1AUX2-3 R1AUX2-5

476 477 478 479 480 481 484 485

FOR CKT DETAILS SEE 5GW1740-XE-18 — FOR CKT DETAILS SEE 5GW1740-VG-02 — FOR CKT DETAILS SEE 5GW1740-VG-02 — FOR CKT DETAILS SEE 5GW1740-XE-18

IXE-IFCV-295-A OPEN — IVG-MFAN-001-A START — IVG-MFAN-002-A START — IXE-IFCV-338-A OPEN

(K)AK23 86A (K)AK24 — (M)AK23 (M)AK24 — (N)AK9 86E (N)AK10 — (P)AK36 86BD (P)AK38

J1 J2 J4 J6 J11 J3 J5

(N)AK13 (N)AK14 (N)AK15 (N)AK16

ECA3-72-A — ECA3-73-A

(K)AK19 86A (K)AK20 — (M)AK19 (M)AK20 — (P)AK37 86BD (P)AK39

J7 J8 J9 J10

ECA2-74-A

DIFF CT — (N)AK8 (N)AK7 (N)AK6 (N)AK5 — IAØ IBØ ICØ GRD

BK G R W — ECA3-76-A

CT5-X1 CT5-X2 CT3-X1 CT3-X2 CT1-X1 CT1-X2

DIFF CT

REF ELECTRIC PRODUCTS DWG D69513

DG 001-A CT SECONDARY LEAD BOX EMB-001H-A LOCATED ON GEN

DG 001-A NORMAL AND TEST CONTROL CIRCUITS, METERING, AND ANNUNCIATION

NOTES:
1. FOR GENERAL NOTES AND SYMBOLS SEE 5GW1740-RT-01.
2. THE ALPHA SHOWN IN ( ) INDICATES IN WHICH PANEL IN THE SWITCHGEAR THE TERMINAL IS LOCATED. EX: (N) = PANEL N.

APERTURE CARD

Docket #50-438
Control #8202080064
Date 8202028 of Document
REGULATORY DOCKET FILE

REV NO.	DCN NO.	DATE	DSGN	DRWN	CHKD	SUPV	ENGR	INSP	SUBM/RECM	APPD
2	SI	9-3-82								
1	SI	5-8-79								

2 SI: MADE MINOR CHANGES. REMOVED EL & COL.
1 SI: ADDED ANN. PT NO. SEAMS. PT NO. AND REF DWG NO. ADDED ORA TERMINAL NO., AND OTHER MINOR CHANGES.

DSGN S.D. Dyer
DRWN E.A. Hughes — J.W. Grove
CHKD M.R. Cowden
SUPV L.L. Cassady
INSP
ENGINEER W.L. Aldridge

SCALE: NONE — EXCEPT AS NOTED

GENERAL
UNIT 1

SYSTEM SCHEMATIC

DG CONT SYS-RT

BELLEFONTE NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

Q

SUBMITTED	RECOMMENDED	APPROVED
W.L. Aldridge		R.M. Hedgens

KNOXVILLE 10-2-78 — 88 E — 5GW1740-RT-06 R2

RECORD DRAWING AS CONSTRUCTED

REVIEWED
RC(CIVIL) N/A
RE(ELEC) N/A
RM(MECH) N/A

PRINT H
SIZE F
BR OR PROJ ME EE CE AD CD ED MD SW BL PA
PRINTS REQD-R