NEW TEMA SUBSTATION (E4)

4F10 VOLTA — 4F10LA — 4B2F10 — −G −L −S −B2
4F9 SPARE — 4F9LA — 4B2F9 — −G −L −S −B2
4F8 ILDC — 4F8LA — 4B2F8 — −G −L −B2
4F7 EPZ 2 — 4F7LA — 4B1F7 — −G −L −B1
4F6 EPZ 1 — 4F6LA — 4B1F6 — −G −L −S −B1
4F4 TO ALUWORKS — 4F4LA — 4B1F4 — −G −L −S −B1

11.5KV B2 BUS — 4B1B2 (−B2 −B1) — B1 BUS 11.5KV

4B1PT — X−

4B2PT — −X

4T6B2 — −B2 −T

20MVA 11.5KV
6.6MVA 3.5KV
20MVA 161KV
4T6
4T6LA1
4A1T6
4T6CT
4T6−A1 (M)

V9E
4V9ELA
4V9E−G
−9 M
4A1L9
−A1

V10E
4V10ELA
4V10E−G
−10 M
4A2L10
−A2

4T4B1 — −B1 −T
20MVA 11.5KV
6.6MVA 3.5KV
20MVA 161KV
4T4
4T4LA1
4A2T4
4T4CT
4T4−A2 (M)

SGT−300 (7.9MW EACH)
50G1 50G2 50G3 50G4 (G)
50G1B1 50G2B1 50G3B1 50G4B1
50B1 BUS 11KV
50B1F11 F11

SGT−400 (12.9MW EACH)
50G5 50G6 50G7 50G8 (G)
50G5B2 50G6B2 50G7B2 50G8B2
50B2 BUS 11KV
50B2F12 F12

TEMA THERMAL 1 POWER PLANT (SG50) − 80MW
NEW TEMA SUBSTATION
4B3−F11 (M) 4B3−F12 (M)
11KV 4B3 BUS
4T7 11KV 161KV 75MW
4A2T7
4A2−T7 (M) 4T7−G (M)

161KV A1−BUS 4A1A2 (−A1 −A2) A2−BUS 161KV

4E1MR−G (M) 4A1L1−L1
E1MR LINE
MINES RESERVE POWER (80MW)
46L1A
46A BUS 161KV
46T1−A 46T2−A
46T1 161KV 75/100MW 46T2
11.5KV
46B−T1 46B−T2 11.5KV 46B BUS
46G1B−B 46G2B−B 46G3B−B
46G1B 46G2B 46G3B
46G1 46G2 46G3 (G)

4T5−A1 (M) — 4A1T5 — 4T5LA1 — 4T5 161KV 50/66MVA 34.5KV — 4T5LA2 — 4T5F5 — 4T5F5−L
4T2−A1 (M) — 4A1T2 — 4T2LA1 — 4T2 161KV 25/33MVA 34.5KV — 4T2LA2 — 4T2F2 — 4T2F2−L
4T3−A2 (M) — 4A2T3 — 4T3LA1 — 4T3 161KV 50/66MVA 34.5KV — 4T3LA2 — 4T3F3 — 4T3F3−L
4T1−A2 (M) — 4A2T1 — 4T1LA1 — 4T1 161KV 50/66MVA 34.5KV — 4T1LA2 — 4T1F1 — 4T1F1−L

4SC1 — 4SC1−G — 4SC1−SC1 — 4SC1
4F1SC2−SC2 — 4F1SC2 — 4SC2 — 4SC2−G

ECG 33KV BUS
ECG 33KV BUS

4A2−L2 (M) 4E2TP−G
E2TP LINE
47A BUS
47T1A−A 47T2A−A
47T2A — 14.4KV 161KV — −T2 — 47G2T2 — 47G2 (G)
47T1A — 165MW 161KV 14.4KV — −T1 — 47G1T1 — 47G1 (G)

TEMA THERMAL 1 POWER PLANT 252MW

GHANA GRID COMPANY			
STATION NAME	NEW TEMA SUBSTATION (E4)		
OPERATING DIAGRAM	ISSUED	REVISION	
		REV DRW CHK APP	
SCALE: NONE	FEB 18, 2010	1 ABSE DAA NA	
DRAWN	CHECKED	APPROVED	
INITIAL ABSE	SOL	WA	
DATE JUNE 28, 2008	JUNE 28, 2008	JUNE 28, 2008	