



PANEL DESCRIPTION FOR 11KV SWITCHGEAR

Sl. No.	PANEL No.	DESCRIPTION	TYPE OF PANEL	QTY.
1.	A	BUS VT-1	MEASURING PANEL	1 No.
2.	B	10KV ALX. TRANSFORMER-1	OUTGOING PANEL	1 No.
3.	C	23MVA TRANSFORMER-1	TRANSFORMER PANEL	1 No.
4.	D	CHANGAMA PORT	OUTGOING PANEL	1 No.
5.	E	KENYA OIL CORPORATION	OUTGOING PANEL	1 No.
6.	F	KENYA PIPELINE CORPORATION	INCOMING PANEL	1 No.
7.	G	DUMMY PANEL FOR AUX TRAF0-1	OUTGOING PANEL	1 No.
8.	H	BUS SECTION	BUS SECTION PANEL	1 No.
9.	I	23MVA TRANSFORMER-2	TRANSFORMER PANEL	1 No.
10.	J	10KV ALX. TRANSFORMER-1	OUTGOING PANEL	1 No.
11.	K	ISLAND-1	OUTGOING PANEL	1 No.
12.	L	ISLAND-2	OUTGOING PANEL	1 No.
13.	M	BUS VT-2	MEASURING PANEL	1 No.
12.	N	DUMMY PANEL FOR AUX. TRAF0-2	OUTGOING PANEL	1 No.

PANEL DESCRIPTION FOR 33KV SWITCHGEAR

Sl. No.	PANEL No.	DESCRIPTION	QTY.
1.	P1	BUS VT-1	MEASURING PANEL
2.	P2	BUS VT-2	MEASURING PANEL
3.	P3	SPARE-1	OUTGOING PANEL
4.	P4	MBARAK-2	OUTGOING PANEL
5.	P5	MBARAK-1	OUTGOING PANEL
6.	P6	BAMBAR-3	OUTGOING PANEL
7.	P7	60MVA TRANSFORMER	INCOMING PANEL
8.	P8	23MVA TRANSFORMER-1	TRANSFORMER PANEL
9.	P9	MACHINE-2	INCOMING PANEL
10.	P10	BAMBAR-2	OUTGOING PANEL
11.	P11	BUS COUPLER	BUS COUPLER PANEL
12.	P12	23MVA TRANSFORMER-2	TRANSFORMER PANEL
13.	P13	MACHINE-1	INCOMING PANEL
14.	P14	BUS SECTION	BUS SECTION PANEL
15.	P15	30MVA TRANSFORMER-3	INCOMING PANEL
16.	P16	60MVA TRANSFORMER-2	INCOMING PANEL
17.	P17	BAMBAR-1	OUTGOING PANEL
18.	P18	KENYA OIL REFINERY-3	OUTGOING PANEL
19.	P19	KENYA OIL REFINERY-2	OUTGOING PANEL
20.	P20	KENYA OIL REFINERY-1	OUTGOING PANEL
21.	P21	SPARE-2	OUTGOING PANEL
22.	P22	BUS VT-3	MEASURING PANEL
23.	R1	ACDB PANEL	1 No.
24.	R2	DCDB PANEL	1 No.
25.	R3	110V DC BATTERY CHARGER PANEL	1 No.
26.	R4	REMOTE CONTROL SYSTEM	1 No.
27.	R5	RTOC PANEL-1	1 No.
28.	R6	RTOC PANEL-2	1 No.

BILL OF QUANTITIES

Sl. No.	ITEM No.	DESCRIPTION	TOTAL QTY.
1.	M14-001	SWITCH BOARD PANEL FOR 33KV FEEDER	10 Nos.
2.	M14-002	SWITCH BOARD PANEL FOR BUS SECTION	1 No.
3.	M14-003	SWITCH BOARD PANEL FOR BUS COUPLER	1 No.
4.	M14-003a	SWITCH BOARD PANEL FOR 33KV TRANSFORMER BAYS	2 Nos.
5.	M14-003b	SWITCH BOARD PANEL FOR 33KV INCOMER BAYS	5 Nos.
6.	M14-004	SWITCH BOARD PANEL FOR 11KV TRANSFORMER BAYS	2 Nos.
7.	M14-005	33KV SURGE ARRESTERS	6 Nos.
8.	M14-005	33KV POST INSULATOR	6 Nos.
9.	M14-006	33KV CABLE TERMINATION	6 Nos.
10.	M14-006	AUXILIARY TRANSFORMER 100KVA, 11/0.4/19KV	2 Nos.
11.	M14-007	11KV FUSE SWITCH FOR AUXILIARY TRANSFORMER	2 Nos.
12.	M14-008	SWITCH BOARD PANEL FOR 11KV FEEDER	7 Nos.
13.	M14-009	SWITCH BOARD PANEL FOR BUS SECTION	1 No.
14.	M14-010	11KV SURGE ARRESTERS	6 Nos.
15.	M14-011	11KV NEUTRAL CURRENT TRANSFORMER	2 Nos.
16.	M14-012	11KV NEUTRAL LINK	2 Nos.
17.	M14-012	11KV POST INSULATOR	6 Nos.
18.	M14-012	11KV CABLE TERMINATION	6 Nos.
19.	M14-030	23MVA, 33/11KV TRANSFORMER	2 Nos.

LEGENDS:-

- Lighting Arrestor
- Post Insulator
- Present Scope
- Existing

NOTES:-

- DETAILED CONTROL ROOM AND PANEL ARRANGEMENT LAYOUT SHALL BE SUBMITTED SEPARATELY.
- ROAD SHOWN ARE INDICATIVE ONLY & DETAILED ROAD/DRAIN LAYOUT SHALL BE SHOWN IN SEPARATE DRAWING.

REVISIONS:

REV.	DESCRIPTION	DATE
0	FIRST ISSUE	10.08.07

APPROVALS:

NAME	DATE	NAME	DATE	NAME	DATE

CLIENT: KENYA POWER AND LIGHTING CO. LTD.
CONSULTANT: NORCONSULT
DISTRIBUTION REINFORCEMENT & UPGRADE CONTRACT III.
SUBSTATIONS, TRANSFORMERS LINES AND CABLES (AND FINANCED COMPONENT)
PROJECT: KIPKUV - M14
LOA No.: KPL/ESR/03/015
SUBSTATION: KIPKUV - M14
TITLE: 33/11KV LAYOUT PLAN AND SECTION

AREVA T&D INDIA LTD.
 A 21-24, SECTOR-16
 ELECTRONIC MARKET
 GATE NO. 1
 NEW DELHI - 110028 (INDIA)

AREVA
 A 21-24, SECTOR-16
 ELECTRONIC MARKET
 GATE NO. 1
 NEW DELHI - 110028 (INDIA)

DRAWING NO.: SYS-7602PN027-M14-F-035
SCALE: 1:225
TOTAL SHEETS: 09
SHEET NO.: 08