

NAME OF WORK : Supply & Installation Work of Following Equipment for Augmentation of 11/0.433 KV Sub-Station at RDPL, Jaipur as per Technical Specifications and make Enclosed at Annexure

G-SCHEDULE

S. NO.	QTY.	ITEM	RATE		UNIT	AMOUNT RS.
			IN FIGURE RS.	IN WORDS		
1	2	3	4	5	6	7
Part - A 11Kv side Equipments (Tech. Ann. 1 A & B)						
1	1	Supply,Installation,Testing & Commissioning of Copper wound Transformer conforming to IS: 2026 & IS:335 for Tr. Insulating Oil of rating 11/0.433KV,1000 KVA Delta-Star Connected, Vector Group Dyn 11, standard accessories like conservator, silica gel breather,Dial Type Temperature Gauges,Magnetic Oil level Gauge (MOG), Winding & Oil Indicator cum controller,Buccolz Protection,radiator, fins, HT BUSHING & LT cableboxes, OFF-LTC (+/- 5% in steps of 2.5%) , ISI marked drain valve, first fill of oil, Epoxy based paint, including carrying of pre-commission Testing & Charging of Transformer.			Each	
2	2	Construction of foundation for Transformer in CC in the ratio 1:2:6 of size 2500mm X 2500mmX 1200mm (h) along with booting channels for transformer placing etc properly finished/white washed.			Each	
3	1	Supply,Installation,Testing & Commissioning of 11KV,630 A,21KA Horizontal Drawout,Horizontal Isolation Vacuum Circuit Breaker 1 Incomer,2 Outgoing Unit as per enclosed specifications Annexure-I. Model: New Univac.			Complete Set	
4	80	P & Laying XLPE insulated IS:7098/II/85 of Group1 and approved make H.T.cable for working voltage 11 K.V.Earthed direct in ground including excavation of 30cmx100cm size trench, 25cm layer of river sand, IInd class bricks covering, refilling earth, compaction of earth, making necessary connection testing etc.as required of size. 3 core 185.0 Sq.mm			R.Mtr	
5	6	Providing & making heat shrinkable type indoor terminations/joint kit of approved make suitable for XLPE insulated 11 KV cable, with required components, prepration of cable ends,testing etc. as required of following sizes. 3 core 185 Sq.mm			Each	

S. NO.	QTY.	ITEM	RATE		UNIT	AMOUNT RS.
			IN FIGURE RS.	IN WORDS		
1	2	3	4	5	6	7
6	2	Plate Earthing as per IS:3043 with G.I. Earth plate of size 600mm x 600mm x 6.0mm by embodying 3 to 4 mtr. below the ground level with 20 mm dia. G.I. 'B' class watering Pipe including all accessories like nut, bolts, reducer ,nipple, wire meshed funnel, and C.C. finished chamber covered with hinged type with locking arrangement C.I. Cover, C.I. Frame of size300mm x 300mm complete with alternate layers of salt and coke/charcoal, testing of earth resistance as required.			Each	
7	10	Plate Earthing as per IS:3043 with copper Earth plate of size 600mm x 600mm x 3.0mm by embodying 3 to 4 mtr. below the ground level with 20 mm dia. G.I. 'B' class watering Pipe including all accessories like nut, bolts, reducer, nipple ,wire meshed funnel, and C.C. finished chamber covered with hinged type with locking arrangement C.I. Cover, C.I. Frame of size300mm x 300mm complete with alternate layers of salt and coke/charcoal, testing of earth resistance as required.			Each	
8		Supply & Laying following size earth strip in horizontal or vertical run in ground / surface/ recess including riveting, soldering, saddles, making connection etc. as required.				
	60	25mm x 5mm copper strip			R.Mtr	
	30	25mm x 6mm G.I. Strip			R.Mtr	
9	20	S & Laying following size' A' class G.I. Pipe with accessories for laying earth conductor/strip in ground/surface/recess as required 32mm dia			R.Mtr	
Total Part A						

S. NO.	QTY.	ITEM	RATE		UNIT	AMOUNT RS.
			IN FIGURE RS.	IN WORDS		
1	2	3	4	5	6	7
Part - B L.T. Panel, on load Change Over Switch, MCCB, ACB of Generator (Tech. Ann. II)						
1	45	SITC of wall/ free standing floor mounted dust and vermin proof compartmentalised cubical panel made out of CRCA sheet , required hardware ,duly painted by either two coats of zinc/ red oxide primer followed by two coats of synthetic enamel paint or powder coating in grey or required shade after rinsing . The panel having PU/ Neoprene rubber gasket of not less than 3mm thickness , separate detachable gland plate M.S. base channel ,hinged door with locking arrangement for equipment / switchgear. Thickness of sheet shall not be less than 1.6 mm up to 600 mm length / width of any compartment and be of 2.0 mm above 600 mm. Load bearing structure shall be of 2.0 mm thick sheet supported by base M.S. channel if required . Side walls and cable alley compartments having bolted type doors with detachable extension type structure. (only outer area on all sides shall be measured) Powder coated / epoxy / PU painted with phosphatisation			Per Sq. Meter	
2	2	SITC of Draw out type Air Circuit Breaker of Group2 conforming to IS 13947 in existing LT panel suitable for LT installation 440 V, 50 Hz and having adjustable short-circuit, earth fault and over load MICRO-PROCESSOR release with LCD display, bargraph and separate LED indication for each type of fault , at least 4NO & 4NC auxiliary contacts safety shutter and fault position acknowledgement mechanism . type ACB shall have separate indication for service, test, isolation, maintenance position Electrically Drow Out(EDO) type 1600 A Rating , 50 / 65kA			Each	
3	380	Supplying and fixing of Aluminium bus bar 2000 Amp capacity by means of SMC / DMC type insulator, high tensile nuts and bolts spring washers in existing panel including bending , cutting in required shape and size and colour coding with heat shrinkable PVC sleeves.			Per Kg	
4	2	SF of (0-500) V range Volt meter on existing panel , making connection by PVC insulated copper conductor with PVC sleeves / channel etc. as required. Analog type (96 mm x 96 mm)			Each	
5	2	SF of selector switch for voltmeter (4 position) including making connection etc. as required .			Each	

S. NO.	QTY.	ITEM	RATE		UNIT	AMOUNT RS.
			IN FIGURE RS.	IN WORDS		
1	2	3	4	5	6	7
6	2	SF of CT operated direct reading type Ampere meter on existing panel , making connection by PVC insulated copper conductor with PVC sleeves / channel etc. as required. Analog type (96 mm x 96 mm), above1500 A			Each	
7	6	Supply & Fixing (SF) of Current Transformer , with all necessary support in existing panel including connection etc. as required. 1500 / 5 A Ratio, 15 VA , class 1 accuracy			Each	
8	2	SF of CT linked selector switch of 10 A for Ampere meter (4 position) including making connection etc. as required .			Each	
9	6	SF of 240/220 V, LED (22.5 mm dia) Pilot lamp with integral circuit, terminal block, including connection etc. as required. Red/yellow/Green colour			Each	
10		SITC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz; O/L & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, including making connections with lugs / spreaders etc. as required With Microprocessor based Release				
a	9	160 Amp , 16/25 kA, adjustable O/L & adjustable S/C setting			Each	
b	1	200 Amp , 25/35kA, adjustable O/L & adjustable S/C setting			Each	
c	4	250 Amp , 35/50 kA, adjustable O/L & adjustable S/C setting			Each	
d	4	400 Amp , 35/50 kA, adjustable O/L & adjustable S/C setting			Each	
11	450	P/Laying P.V.C. insulated & P.V.C. sheathed cable of 1.1 KV grade with aluminium conductor of IS:1554 P-I of Group2 of approved make in ground as per IS:1255 including excavation of 30cmx75cm size trench, 25 cm thick under layer of sand, 11nd class bricks covering, refilling earth, compaction of earth, making necessary connection, testing etc. as required of size. 630.0 Sq.mm 1 core			Metre	
12	45	Supplying and making one end termination with heavy duty single compression brass gland SIBG type, aluminium lugs duly crimped with crimping tool, PVC tape etc for following size of Armoured PVC insulated & PVC sheathed/ XLPE aluminium conductor cable of 1100 volt grade as required of size. 3.5 x 630.0 sq.mm			Each Set	

S. NO.	QTY.	ITEM	RATE		UNIT	AMOUNT RS.
			IN FIGURE RS.	IN WORDS		
1	2	3	4	5	6	7
13	4	Plate Earthing as per IS:3043 with Copper Earth plate of size 600mm x 600mm x 6.0mm by embodying 3 to 4 mtr. below the ground level with 20 mm dia. G.I. 'B' class watering Pipe including all accessories like nut, bolts, reducer ,nipple, wire meshed funnel, and C.C. finished chamber covered with hinged type with locking arrangement C.I. Cover, C.I. Frame of size300mm x 300mm complete with alternate layers of salt and coke/charcoal, testing of earth resistance as required.			Each	
14	40	S & Laying following size earth strip in horizontal or vertical run in ground/surface/recess including riveting, soldering, saddles, making connection etc. as required. 25mm x 5mm copper strip			R.Mtr	
15	15	S & Laying following size' A' class G.I. Pipe with accessories for laying earth conductor/strip in ground/surface/recess as required 32mm dia			Per Mtr	
16	1	ON LOAD CHANGE OVER SWITCH P&F onload change over switch, With sheet steel enclosure front handle operated, four pole 415 V conforming to IS:13947 P-III including connections , testing etc. as required in the following rating: 1600 A			Each	
Total Part B						
Part - C Supply & Installation Work of 1 No. 625 KVA D.G. Set (Tech. Ann. III & IV)						
1	1	Supply of 1 No. 625 kVA D.G. 625 KVA with acoustic canopy, water Cooled D.G. Set with battery starting, AVM, Electronic control panel providing Engine / DG set protection complete and with ant vibration pad etc as required with 1No 990 liter Capacity HSD tank, with supporting structure, & hand charging pump and flexible hose and hose clamp etc. complete as required			Set	
2	1	Installation of 1 No. 625 kVA D.G. Set Installation, testing & commissioning of following DG sets as per detail scope of work and specifications including supply of all necessary material for installation like tools tackels etc. and equipment required for proper operation of D.G. Set complete.			Set	
Total Part - C						
Part-D Supply &Installation Work of 660 KVAr APFC Panel as per enclosed Make Annexure-V.						

S. NO.	QTY.	ITEM	RATE		UNIT	AMOUNT RS.
			IN FIGURE RS.	IN WORDS		
1	2	3	4	5	6	7
1		SITC of wall/ free standing floor mounted dust and vermin proof compartmentalised cubical panel made out of CRCA sheet , required hardware ,duly painted by either two coats of zinc/ red oxide primer followed by two coats of synthetic enamel paint or powder coating in grey or required shade after rinsing . The panel having PU/ Neoprene rubber gasket of not less than 3mm thickness , separate detachable gland plate M.S. base channel ,hinged door with locking arrangement for equipment/switchgear . Thickness of sheet shall not be less than 1.6 mm up to 600 mm length / width of any compartment and be of 2.0 mm above 600 mm. Load bearing structure shall be of 2.0 mm thick sheet supported by base M.S. channel if required . Side walls and cable alley compartments having bolted type doors with detachable extension type structure. (only outer area on all sides shall be measured)			Per Sq. Meter	
	30	Powder coated / epoxy / PU painted with phosphatisation			Per Sq. Meter	
2		SITC of quick make and quick break 3 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz; O/L & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, including making connections with lugs / spreaders etc. as required			Each	
	2	630 A Rating , 35 kA			Each	
3	50	Supplying and fixing of Aluminium 2000 Amp bus bar by means of SMC / DMC type insulator, high tensile nuts and bolts spring washers in existing panel including bending , cutting in required shape and size and colour coding with heat shrinkable PVC sleeves.			Per Kg	
4		SF of (0-500) V range Volt meter on existing panel , making connection by PVC insulated copper conductor with PVC sleeves / channel etc. as required.			Each	
	0	Analog type (96 mm x 96 mm)			Each	
5		SF of CT operated direct reading type Ampere meter on existing panel , making connection by PVC insulated copper conductor with PVC sleeves / channel etc. as required.			Each	
	0	Analog type (96 mm x 96 mm),above 1000A			Each	
6		Supply & Fixing (SF) of Current Transformer , with all necessary support in existing panel including connection etc. as required .			Each	

S. NO.	QTY.	ITEM	RATE		UNIT	AMOUNT RS.
			IN FIGURE RS.	IN WORDS		
1	2	3	4	5	6	7
	0	from 1500 / 5 Ratio , 15 VA , class 1 accuracy			Each	
7	0	SF of selector switch for voltmeter (4 position) including making connection etc. as required .			Each	
8	0	SF of CT linked selector switch of 10 A for Ampere meter (4 position) including making connection etc. as required .			Each	
9		SF of 240/220 V, LED (22.5 mm dia) Pilot lamp with integral circuit, terminal block, including connection etc. as required.			Each	
	30	Red/yellow/Green colour			Each	
10		SITC of self healing MPP/MP type shunt capacitor (banks) conforming to IS:13340-41 / IEC :831-1&2 in existing panel or parallel with load terminals , the capacitor shall be fitted with discharge resistors, pressure sensitive disconnecter (PSD) and shall have dissipation factor less than 0.0025 at 50 Hz and total wattage loss less than 0.5 Watt per KVAR . including making connections with suitable capacity conductors/cables testing as required.			Per KVAR	
	660	Heavy duty Three phase 440 V , 50 Hz capacitor (Bank)			Per KVAR	
11		SITC of microprocessor based intelligent power factor correction relay having following sensing capacity secondary current , self analysing auto c/k setting according to targeted power factor setting, the relay shall have minimum three digit display unit			Each	
	2	sensitivity up to 50 milli Amp			Each	
12		P & F Cam operated rotary switches on existing panel with 2 way and off position				
	24	6A			Each	
13		P & F of 440 Volt 3 pole capacitor (AC 6 B) duty contactor with 3 no. early make and post break auxiliary contacts in series with quick discharge damping resistors/ reactors to limit the inrush current , conforming to IS:13947-4-1				
a	8	50 KVAR			Each	
b	8	30 KVAR			Each	
c	0	15 KVAR			Each	
d	8	10 KVAR			Each	
e	0	5 KVAR			Each	
14		(B/ C/ D tripping characteristic) ISI marked IS 8828(1996)] conforming to IEC 60898 in				
		Triple pole MCB				
a	0	50 A rating			Each	

S. NO.	QTY.	ITEM	RATE		UNIT	AMOUNT RS.
			IN FIGURE RS.	IN WORDS		
1	2	3	4	5	6	7
b	8	32 A rating			Each	
c	0	16 A rating			Each	
15		SITC of quick make and quick break 3 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz; O/L & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, including making connections with lugs / spreaders etc. as required				
a	0	200 Amp , 25/35kA, adjustable O/L & adjustable S/C setting			Each	
b	16	160 Amp , 16/25 kA, adjustable O/L & adjustable S/C setting			Each	
16		Supplying and drawing PVC insulated & sheathed solid/ stranded copper conductor multi core control cable ISI marked (IS:1554) of 1.1 kV grade of approved make of Group2 as per chapter E11,in existing surface or recessed conduit/ casing capping.			R. Metre	
	30	2.5 sq. mm. armoured,2 core				
Total Part - D						
Part -E						
		Labour charges for shifting of old transformer from existing foudation to new foundation including connection etc.				
		Labour Charges for erection,commissioning,testing of all equipment(including Earthing,foundation,cabling etc.)				
		Grand Total =A+B+C+D+E+Labour Charges				

I/We hereby tender for the execution of the above work within the time specified and with terms and condition enclosed in the tender document.

Signature of Contractor

Signature of RDPL Authority.

TECHNICAL SPECIFICATION

S.NO.	EQUIPMENT	SPECIFICATION	
1	TRANSFORMER		
	Rated Capacity	1000 KVA	
	HT Voltage	11KV	
	LT Voltage	433V(P-P)	
	Frequency	50 Hz+-3%	
	No of Phase	3	
	Primary Connection	Delta	
	Secondary Connection	Star	
	Type Of Cooling	ONAN	
	HV Amp	52.5 A	
	LV Amp	1333A	
	Max.Permissible Temp. Rise above ambient: winding :	50 C	
	Top Oil :	40 C	
	Thickness of TR. Tank(rolling tolerance as per IS)		
	Top & Bottom:	5.0 mm	
	Side :	4.0 mm	
	Basic Electrical parameters :		
	Max.No Load Losses(watts):	1400	
	Max.Full Load copper Losses at 75 C(watts):	10400	
	% Impedance at 75 C(tolerance+/-10 %) :	5	
	Magnetising current as % of full load current :		
	At 100 % rated voltage :	2	
	At 110 % rated voltage :	4	
2	VACUUM CIRCUIT BREAKER		
		I/C	O/G
	Vacuum Circuit Breaker	1	2
	Copper Bus Bar 630 A, With PVC Sleeve	1	1
	230V AC Motorised Mechanism	1	1
	Control Wiring Colour Black, 2.5 Sq.mm for CT Ckt. & 1.5 Sq.mm for other	1	1
	Degree of Protection - IP4X	1	1
	Paint Shade- RAL 7032	1	1
	Shunt coils first – 24VDC AND second 110VAC	1	1
	Closing coil – 24VDC	1	1
	EPOXY RESIN CAST,1-Ph CT (21 KA/1sec)		
	MAKE : CGL,AREVA,SIEMENS		
	400/5-5 Amp , CL-1.0/5P10, Burden-15VA	3	0
	100/5-5 Amp for O/G No1 & 100/5-5 Amp for O/G No2,CL-1.0/5P10,Burden-15VA	0	3
	EPOXY RESIN CAST V.T.:		
	MAKE : CGL		

3Ph, 3-Limb, D/O TYPE, 1 No., 11KV/110V	1	0
Class-1, Burden-100 VA		
METERS		
Digital Ammeter with S/S	1	1
Digital Voltmeter with S/S	1	0
Three Phase Three wire Digital TVM CL1.0 Of L&T make Quasar intelligent	1	0
INDICATING LAMPS		
(TEKNIK/L&T-ESBEE/BINAY)		
Red Phase - Red	1	0
Yellow Phase - Yellow	1	0
Blue Phase - Blue	1	0
BREAKER ON - Red	1	1
BREAKER OFF - GREEN	1	1
TRIP CIRCUIT Healthy - White	1	1
Spring Charged -Blue	1	1
ACCESSORIES		
Push Button for trip circuit healthy check	1	1
Panel Space Heater with Thermostat & switch	1	1
Panel Illumination Lamp with Switch	1	1
TNC Switch Non Lockable	1	1
Local Remote Switch Non -Lockable	1	1
6 Window Annunciator with hotter/bell	0	1
RELAYS		
Numerical IDMTL 3O/c+1E/f relay of L&T make MC31 OR equivalent	1	0
Numerical IDMTL+INST , 3O/c+1E/f relay of L&T make MC61 OR equivalent	0	1
Auxiliary Relay for WTI/OTI/Bucz Alarm & Trip	0	3
Master Trip Relay 24 V DC	1	1
Power pack with battery back up input 110VAC, output 30VDC 100 Watt continuously,450 momentary Only Alan make Mumbai(Only)	1	0

LIST OF APPROVED MAKES FOR EQUIPMENT

S.NO.	EQUIPMENT	MAKE
1	Transformer	Uttam Bharat,Rajasthan Transformer & Switchgear,Indian Transformer
2	VCB	CGL,AREVA,SIEMENS
3	11 KV XLPE Cable	PolyCab,Gloster,Havells

Signature of RDPL Authority.

LIST OF APPROVED MAKES FOR EQUIPMENT

S.NO.	EQUIPMENT	MAKE
1	ACB	Siemens,Merlin Gerin,ABB,GE
2	MCCB	Siemens,Merlin Gerin,ABB,GE
3	MCB	Legrand(Lexic),Hager,ABB,Siemens
4	ON LOAD TAPCHANGER SWITCH	HPL(Socomac),C&S,GE,L&T
5	CAPACITORS	EPCOS,L&T,NEPTUNE-DUCATI
6	VOLTMETER	MECO,ESSVEE,RISHAB,MOELLER(HPL),
7	AMMETER	MECO,ESSVEE,RISHAB,MOELLER(HPL),
8	C.T.	C&S,L&T,Schneider
9	SELECTOR SWITCH	C&S,L&T(selzer),Schneider,Siemens
10	LED Pilot Lamp	C&S,GE,Siemens,L&T(ESBEE)

Signature of RDPL Authority.

TECHNICAL SPECIFICATION & SCOPE OF WORK FOR DG SET

S.No.	Item Description	Unit	Quantity
	Scope of Work:		
2.1	Installation, testing & commissioning of 1 No., 625 KVA D.G. Set, with accoustic canopy Complete.	Job	1
2.2	Unloading shifting, placing, grouting with foundation bolts and leveling of pre -aligned 1 No., 625 kVA D.G. Set on the existing foundation and anti-vibration pad complete as required.	Job	1
2.3	Supply, installation, testing and commissioning of Exhaust pipe class B suitable to carry exhaust of 625 KVA DG set with necessary flanges gaskets nut bolts etc. including silencers. Exhaust pipes heights to be taken as per RPCB/CPCB rules, exhaust pipe to be painted with Heat resistant paint.	Job	1
2.4	Supply and fixing of rock wool / Mineral wool to the exhaust gas pipe line binding with chicken mesh and cladding with 24 guage Al. sheet etc up to required and safe working height of personnel.	Job	1
2.5	Supply and installation of structural support for exhaust piping, and 990 Ltrs diesel tank, fuel pipe line etc fabricated from M.S. section etc complete including painting with red oxide and black enamel paint and heat resistant paint wherever required in the room and duct.	Job	1
2.6	Fuel piping for the D.G. sets from day tank using 1" MS Black class B pipe & flexible hose connection complete with necessary valves, filters, etc. and drain lines to the tank I.	Job	1
2.7	Installation of fuel tank 990 liter capacity tank on existing structure.	Job	1
2.8	Supply and installation of alternator termination adaptor box including necessary bus-bar extension.	Set	1
2.9	First charging of dry batteries.	Job	1

3	Plate Earthing as per IS:3043 with Copper Earth plate of size 600mm x 600mm x 6.0mm by embodying 3 to 4 mtr. below the ground level with 20 mm dia. G.I. 'B' class watering Pipe including all accessories like nut, bolts, reducer ,nipple, wire meshed funnel, and C.C. finished chamber covered with hinged type with locking arrangement C.I. Cover, C.I. Frame of size300mm x 300mm complete with alternate layers of salt and coke/charcoal, testing of earth resistance as required.	Each	2
3.1	S & Laying following size earth strip in horizontal or vertical run in ground/surface/recess including riveting, soldering, saddles, making connection etc. as required.		
	25mm x 5mm copper strip	R.Mtr	20
3.2	S & Laying following size 'A' class G.I. Pipe with accessories for laying earth conductor/strip in ground/surface/recess as required		
	32mm dia	Per Mtr	6
4	Liasioning for statuary approval if any.	Job	1

Signature of RDPL Authority.

F
Recommended make for DG Set

S.No.	Item Description	Recommended make	Remarks
1	Engine	Cummins/KOEL/Cater-pillar/Greaves Cotton	
2	Alternator	Stampford/Kirloskar-Green/CG	
3	Battery	Excide/Amraraja	
4	Canopy	Sudheer/Kirloskar-Green(Bhaskar,IEC)	
5	Axial Flow Fan	Alstom/CG/Almonard	
6	C-Channel	TATA/SAIL	
7	Other accessories	Should be approved from the Consultant	
		before assembling.	

Signature of RDPL Authority.

LIST OF APPROVED MAKES FOR EQUIPMENT

S.NO.	EQUIPMENT	MAKE
1	ACB	Siemens,Merlin Gerin,ABB,GE
2	MCCB	Siemens,Merlin Gerin,ABB,GE
3	MCB	Legrand(Lexic),Hager,ABB,Siemens
4	CAPACITORS	EPCOS,L&T,NEPTUNE-DUCATI
5	VOLTMETER	MECO,ESSVEE,RISHAB,MOELLER(HPL),
6	AMMETER	MECO,ESSVEE,RISHAB,MOELLER(HPL),
7	C.T.	C&S,L&T,Schneider
8	SELECTOR SWITCH	C&S,L&T(selzer),Schneider,Siemens
9	LED Pilot Lamp	C&S,GE,Siemens,L&T(ESBEE)
10	RELAY	NEPTUNE(Phase Track),ENERCON,Beluk,GE,EPCOS
11	CONTRACTOR	Telemecanique,Siemens,C&S,GE
12	ROTARY SWITCH	C&S,L&T(selzer),HPL,Siemens,GE
13	CABLE 2.5 Sq. mm	PolyCab,Gloster,ICL,Havells,KEI

Signature of RDPL Authority.