

ANNEXURE 1D

LT PANEL & LT CABLES BOQ (HIGH SIDE WORK)

Project : - GTL Sitapura, Jaipur

1 SITC OF MAIN LT PANEL WITH 40KVAR APFC

Sr. No.	Description	AMP/K W	QTY	Unit	Rate	Amount	Makes
INCOMING SUPPLY 200KVA TRANSFORMER							
1	250A 4P BYPASS SWITCH	250A	1				SOCOME/C&S
2	250A 4P CHANGEOVER SWITCH	250A	1				L&T/C&S
3	250A 4P ATS	250A	1				SOCOME/C
4	250A 4P POWER CONTACTOR	250A	1				L&T/C&S
5	MCCB 4P 250A THERMAL MAGNETIC RELEASE WITH O/L AND S/C PROTECTION WITH SPREADER	250A	1				L&T/C&S
6	METERING CT CL 1.0, 15VA	250/5A	3				POWERTECH/PROCOM
7	APFC CT CL 1.0, 5VA	250/5A	3				POWERTECH/PROCOM
8	VIF,CL-1	230V AC	1				POWERTECH/PROCOM
9	VOLTAGE MONITORING RELAY(U/V,O/V,S/P)	230V AC	1				PROCOM
10	AC SPD 4P		1				PROCOM
11	LED FOR R,Y,B	230V AC	3				VAISHNO/SURDHI
12	CONTROL MCB 6A, SP	6A	4				L&T/C&S
13	5KVAR FIXED CAPACITOR WITH MCB	5KVAR	1				L&T/C&S
INCOMING SUPPLY DG(160KVA)							
1	MCCB 4P 250A THERMAL MAGNETIC RELEASE WITH O/L AND S/C PROTECTION WITH SPREADER	250A	1				L&T/C&S
2	LED FOR R,Y,B	230V AC	3				VAISHNO/SURDHI
3	CONTROL MCB 6A, SP, 10KA	6A	4				L&T/C&S
AMF SECTION(DG+RSEB)							
1	AMF CONTROLLER	24VDC	1				PROCOM/REPUTED
2	BATTERY CHARGER 24VDC		1				PROCOM/REPUTED
3	RELAY CARD 24VDC 6CHANNEL		1				PROCOM/REPUTED
4	AUTO/MANUAL SELECTOR SWITCH		1				VAISHNO/SURDHI
5	INDICATION LAMP DG ON,DG FAULT,BATTERY CHARGING INDICATION		3				VAISHNO/SURDHI
6	DC VOLTMETER	0-30V DC	1				PROCOM/REPUTED
7	DC AMPER METER	0-30A DC	1				PROCOM/REPUTED
8	START/STOP/RESET/ACK. PUSH BUTTON	6A	4				VAISHNO/SURDHI
9	HOOTER	24VDC	1				REPUTED
10	CONTROL MCB 6A, 2P, 10KA	6A	2				L&T/C&S
11	CONTROL TERMINAL		LS				REPUTED
OUTGOING							
1	MCCB 4P 160A THERMAL MAGNETIC RELEASE WITH O/L AND S/C PROTECTION WITH SPREADER	160A	1				L&T/C&S
2	MCB 63A 4P	63A	20				L&T/C&S
3	63A 4P MCB TYPE BYPASS SWITCH	63A	3				L&T/C&S
OTHERS							
1	APFC 40KVAR		1				
2	CONTROL AND POWER WIRING		LS				
3	Missil.(Insulators,Acrylic Sheet,Baklight Sheet,Hardware,Wire,Name Plates,Lugs,PVC Channel,MCB Channel,Lock,Hings,Bidding,Connector s,Neutral Links,Sprial,Saddle & Packing Material		LS				
4	ENCLOSURE		LS				
5	BUSBAR (AL.),INSUL.,SLEEVE & HARDWARE		LS				
Total As above (1)				Set	1		
1A SITC OF APFC PANEL 40KVAR							
APFC SECTION 40 KVAR							
1	MCCB 3P 100A THERMAL MAGNETIC RELEASE WITH O/L AND S/C PROTECTION WITH SPREADER	100A	1				L&T/C&S
2	CONTROL MCB 6A, SP, 10KA	6A	6				L&T/C&S
3	APFCR RELAY 8-STAGE	8- STAGE	1				L&T/C&S/SHREEM/EPCOS/NE PTUNE
OUTGOINGS							
CAPACITOR BANK 1 KVAR*1 NOS.							
1	CAPACITOR HEAVY DUTY 1 KVAR	1 KVAR	1				L&T/C&S/SHREEM/EPCOS/NE PTUNE
2	MCB 6A, TP, 10KA C-CURVE	6A	1				L&T/C&S
3	5KVAR CAPACITOR DUTY CONTACTOR	5KVAR	1				L&T/C&S
4	ON INDICATING LIGHTS RED		1				VAISHNO/SURDHI
5	AUTO/MANUAL SELECTOR SWITCH 1P2W		1				VAISHNO/SURDHI
CAPACITOR BANK 2 KVAR*1 NOS.							
1	CAPACITOR HEAVY DUTY 2 KVAR	2 KVAR	1				L&T/C&S/SHREEM/EPCOS/NE PTUNE
2	MCB 6A, TP, 10KA C-CURVE	6A	1				L&T/C&S
3	5KVAR CAPACITOR DUTY CONTACTOR	5KVAR	1				L&T/C&S
4	ON INDICATING LIGHTS RED		1				VAISHNO/SURDHI
5	AUTO/MANUAL SELECTOR SWITCH 1P2W		1				VAISHNO/SURDHI
CAPACITOR BANK 4 KVAR*1 NOS.							
1	CAPACITOR HEAVY DUTY 4 KVAR	4 KVAR	1				L&T/C&S/SHREEM/EPCOS/NE PTUNE
2	MCB 10A, TP, 10KA C-CURVE	10A	1				L&T/C&S
3	5KVAR CAPACITOR DUTY CONTACTOR	5KVAR	1				L&T/C&S
4	ON INDICATING LIGHTS RED		1				VAISHNO/SURDHI
5	AUTO/MANUAL SELECTOR SWITCH 1P2W		1				VAISHNO/SURDHI
CAPACITOR BANK 8 KVAR*1 NOS.							
1	CAPACITOR HEAVY DUTY 8 KVAR	8 KVAR	1				L&T/C&S/SHREEM/EPCOS/NE PTUNE
2	MCB 20A, TP, 10KA C-CURVE	20A	1				L&T/C&S
3	10KVAR CAPACITOR DUTY CONTACTOR	10KVAR	1				L&T/C&S
4	ON INDICATING LIGHTS RED		1				VAISHNO/SURDHI
5	AUTO/MANUAL SELECTOR SWITCH 1P2W		1				VAISHNO/SURDHI

Sr. No.	Description	AMP/K W	QTY	Unit	Rate	Amount	Makes
CAPACITOR BANK 10 KVAR*1 NOS.							
1	CAPACITOR HEAVY DUTY 10 KVAR	10 KVAR	2				L&T/C&S/SHREEM/EPCOS/NE PTUNE
2	MCB 32A, TP, 10KA C-CURVE	32A	2				L&T/C&S
3	CAPACITOR DUTY CONTACTOR	10KVAR	2				L&T/C&S
4	ON INDICATING LIGHTS RED		2				VAISHNO/SURDHI
5	AUTO/MANUAL SELECTOR SWITCH 1P2W		2				VAISHNO/SURDHI
CAPACITOR BANK 15 KVAR*1 NOS.							
1	CAPACITOR HEAVY DUTY 15 KVAR	15 KVAR	1				L&T/C&S/SHREEM/EPCOS/NE PTUNE
2	MCB 32A, TP, 10KA C-CURVE	32A	1				L&T/C&S
3	CAPACITOR DUTY CONTACTOR	15KVAR	1				L&T/C&S
4	ON INDICATING LIGHTS RED		1				VAISHNO/SURDHI
5	AUTO/MANUAL SELECTOR SWITCH 1P2W		1				VAISHNO/SURDHI
Total As above (1A)				Set	1		
2 SITC OF AC PANEL							
INCOMING SUPPLY							
1	160A 4P CHANGEOVER SWITCH	160A	1				L&T/C&S
2	MCCB 4P 160A THERMAL MAGNETIC RELEASE WITH O/L AND S/C PROTECTION WITH SPREADER	160A	1				L&T/C&S
3	160A 4P POWER CONTACTOR	160A	1				L&T/C&S
4	LED FOR R,Y,B	230V AC	3				VAISHNO/SURDHI
5	CONTROL MCB 6A, SP, 10KA	6A	3				L&T/C&S
OUTGOING							
1	MCCB 4P 100A THERMAL MAGNETIC RELEASE WITH O/L AND S/C PROTECTION WITH SPREADER	100A	1				L&T/C&S
2	MCB 63A 2P	63A	3				L&T/C&S
3	MCB 32A 1P	32A	27				L&T/C&S
OTHERS							
1	CONTROL AND POWER WIRING			LS			
2	Missil.(Insulators,Acrylic Sheet,Baklight Sheet,Hardware,Wire,Name Plates,Lugs,PVC Channel,MCB Channel,Lock,Hings,Bidding,Connector s,Neutral Links,Sprial,Saddle & Packing Material			LS			
3	ENCLOSURE			LS			
4	BUSBAR (AL.),INSUL.,SLEEVE & HARDWARE			LS			
Total As above (2)				Set	1		
3 SUPPLY & LAYING OF LT CABLES							
1	P/Laying P.V.C. /XLPE insulated Arm. & P.V.C. sheathed cable of 1.1 KV grade with aluminium conductor of IS:1554 P-I / IS :7098 P - I of Group 1 of approved make in ground as per IS:1255 including excavation of 30cmx75cm size trench, 25 cm thick under layer of sand, lnd class bricks covering, refilling earth, compaction of earth, making necessary connection, testing etc. as required of size.						Havell's, Polycab, RR Kable
i	3.5Cx185 sqmm			Mtr	100		
ii	3.5Cx150 sqmm			Mtr	RO		
iii	3.5Cx95 sqmm			Mtr	RO		
iv	4.0Cx10.0 sqmm			Mtr	20		
v	4.0Cx16.0 sqmm			Mtr	20		
2	P/Laying P.V.C. /XLPE insulated & P.V.C. sheathed cable of 1.1 KV grade with Copper conductor of IS:1554 P-I / IS :7098 P - I of Group 1 of approved make in ground as per IS:1255 including excavation of 30cmx75cm size trench, 25 cm thick under layer of sand, lnd class bricks covering, refilling earth, compaction of earth, making necessary connection, testing etc. as required of size.						Havell's, Polycab, RR Kable
i	2Cx6.0 sqmm			Mtr	20		
ii	4Cx6.0 sqmm			Mtr	20		
iii	4Cx10.0 sqmm			Mtr	80		
iv	4Cx16.0 sqmm			Mtr	80		
3	Supplying and making one end termination with heavy duty single compression brass gland SIBG type, heavy duty 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.						Jainsons, Elcon, Metalcraft
i	3.5Cx185 sqmm			Each	4		
ii	3.5Cx150 sqmm			Each	RO		
iii	3.5Cx95 sqmm			Each	RO		
iv	4.0Cx10.0 sqmm			Each	12		
v	4.0Cx16.0 sqmm			Each	12		
vi	2Cx6.0 sqmm			Each	6		
vii	4Cx6.0 sqmm			Each	6		
4 EARTHING							
1	Maintenance free Gel Earthing with Pipe in strip technology filled with anti corrosive conductive compound (CPRI Tested) below the ground in 150 - 200 mm dia. earth pit & surrounding filled with required mineral filling compound (MFC should have hygroscopic property to retain the moisture for long time to create low resistance zone) and C.C. finished chamber covered with hinged type with locking arrangement C.I. Cover, C.I. Frame of size 300mm x 300mm complete testing of earth resistance as required. of following sizes.						
	With Strip in Pipe Technology with 80 - 100 micron GI Coating GI pipe 3000 mm long ,63 mm, Inner strip 50 mm x 3 mm copper			Set	6		
2	SITC of earth pit with 600mm x 600mm, 6mm thick earth electrode plate including necessary materials like side fill compound etc. as required with standards brick masonry chamber with hinged cover and watering arrangement						
i	Copper Earth for dedicated earth/ Ashlok/ Erico Single rod Maintenance Free Earth Pits 50MMX3MTR			Nos	2		
ii	GI Earth for body earth for all equipment 80MMX 3MTR			Nos	2		

Sr. No.	Description	AMP/K W	QTY	Unit	Rate	Amount	Makes
3	SITC of Cu /GI earthing wires/strips in following sizes with fully welded/brazed joints and painted green						
i	8 SWG Cu. bare wire			Mtr	100		
ii	25mm x 3mm thick GI strip			Mtr	80		
iii	32mm x 6mm thick GI strip			Mtr	30		
iv	25mm x 3mm thick cu strip			Mtr	60		
	Total LT Panel, Cables & Earthing Cost (1+1A+2+3+4)						