# STATE BANK OF INDIA LHO, MAHARASHTRA

## ELECTRICAL WORKS OF BALSUR BRANCH, OSMANABAD

SN	DESCRIPTION OF WORK	QTY	UNIT	RATE
1	ENERGY METER CUBICLE: Fabrication, Supply, Installation, testing & Commissioning of enery Meter cubicle made out of 16 SWG CRCA sheet consisting of the following. (to be fixed outside the building). Separate chamber for energy meter (with fixing plate, view glass and holes with rubber gromets), Separate Lockable CT chamber big enough to accommodate 3 nos. CTs comfortably, Chamber for Cutouts & switchgear etc. and consisting of the following. 3 Nos. 100 A Open Type cutout fuse with bakelite base and with 80A HRC fuses 100A, 16kA (at 415 volts), 4 Pole MCCB with operating handle - 1No. 25x3 mm	1	Set	
2	MAINS CHANGE OVER Supply and installation of 63A 4 Pole ON LOAD Change over switch with suitable metallic enclosure with cable entry box and powder coat painted and with 6 nos 2A SP MCB with 6 nos LED indicators for the identification of MSEB / DG Set 'ON' & neat marking thereof. (Separate chamber & door for COS chamber & Indicator + MCB Chamber). Use 1/1.5 Sq.mm rigid single core PVC insulated copper conductor for control wiring. Suitable metal supports shall be incorporated to guide/tie the control wiring and neat dressing thereof. All unused knock out holes/gaps shall be properly sealed.	1	No.	
3	MAIN PANEL: Supply, Installation, testing and commissioning of Double door 4 Way TPN DB consisting of the following. 100A, 300mA RCCB + 100 MCB as Incomer - 1 No. 40 A, SPole MCB (C Series) - 3 No. (To UPS, LDB & Spare) 40 A, TPole MCB (C Series) - 1 No. (To AC DB) 16A SP MCB (C-Series)- 3 Nos. (To Name Boad DB & Spare) Dummy Plate: 3 Nos 100A Copper busbar for 3 phases The incoming copper conductors should be connected directly to the DB Earth benches and the body should be earthed from DB earth bench or out side main earth bench if	1	Set	
4	MCB and separate 40A 4 Pole 100mA ELCB as Incomer - 1 No. 20/10 A SP MCB C series as out going - 3/6 nos. (To AC & Power points) Dummy Plate 3 nos The incoming copper conductors should be connected directly to the DB Earth benches and the body should be earthed from DB earth bench or out side main earth bench if any. Complete with all inter connections and neat marking/identification of DB Name, Cable Size and outgoing MCBs using good quality stickers /paint.	1	Set	
5	BRANCH LDB: Supply, erection, testing and commissioning of wall mounted type double door dust and vermin proof 12 way SPN MCB DB fixed on wall comprising the following: 32A DP MCB as Incomer - 1 No. 32A, 30mA ELCB as Incomer - 1 No. 6A SP MCB - 08 Nos. The DB Earth Bench and DB enclosure should be directly connected to the UPS Main Earth Bench using 4 Sq.mm PVC insulated copper wire with copper lugs, SS Nuts and bolts etc. Complete with all inter connections and neat marking/identification of DB Name, I/C Cable Size and outgoing	1	Set	

6	<b>UPS INPUT DB</b> : Supply and Installation of Single Door 4 Way SPN MCB DB Consisting of 40A DP MCB (C-Series) and Separate 40A, 100mA ELCB with all interconnections.	1	Set	
7	<b>UPS OUTPUT DB:</b> Supply and installation of <b>32 A DP MCB</b> in suitable metallic enclosure for UPS Output. (The earth conductor from UPS and encosure should be directly connected to UPS Earth bench only and joints inside enclosure should be avoided.)			
		1	Nos.	
8	COMPUTER DB: Supply, erection, testing and commissioning of wall mounted type double door dust and vermin proof 8 way SPN MCB DB fixed on wall comprising the following: 32 A DP MCB as Incomer - 1 No. 6A / 10A SP MCB - 6 Nos. The DB Earth Bench and DB enclosure should be directly connected to the UPS Main Earth Bench using 4 Sq.mm PVC insulated copper wire with copper lugs, SS Nuts and bolts etc. Complete with all	1	Set	
9	<b>NAME BOARD DB:</b> Supply and installation Single door 6 Way SPN MCB DB with <b>16 A DP MCB</b> and 16A 100mA ELCB as incomer and 2 Nos. 10 A SP MCB (C-Series) as out goings for Name Board & Outside Lights Control of Branch. The DB name and out going MCBs shall be marked neatly using good quality stickers / paint. Complete with all interconnections.	1	No.	
10	Supply and Installation of <b>L&amp;T/Legrand</b> make 24 Hour Dual Timer with enclosure for Branch Board Light & Outside lights / ATM Board Light & Raw power lights.	2	No.	
11	AC CONTROL: Supply and installation of modular type 25/32A		110.	
''	Double Pole <b>Two module</b> switch with indicator. (Branch Cassette AC-4 Nos). All AC switches (excluding BM, CO & ATM) should be placed together but mounted on separate boxes.	0		
10	A DIVID CONTER OF THE OTHER OF THE CONTER OF THE OTHER OF THE CONTER OF THE CONTER OF THE CONTER OF THE CONTER OF	3	Nos.	
12	AC PLUG SOCKET: Supply and installation of modular type 20/25A 3 Pin 3 module plug socket for Split AC Indoor unit (Server Room)	3	Nos.	
13	Supply and installation of 16A combined Power plug & 10A SP MCB in suitable PVC/metallic box. for Kitchen Power plug & ATM UPS Input. (corresponding MCB rating in PDB shall be 16A)	2	Nos.	
14	MAINS INDICATION: Supply and Installation of 3 nos. L & T make LED Indicators (R, Y & B) on suitable ready made indicator/push button box controlled by 3 nos. 6A Modular switches including wiring by 4x1 Sq.mm PVC insulated copper wire through 20mm medium guage PVC conduit for a length not less than 15 meters. (to be installed in Banking Hall in a indirectly visible from customer area). The switches shall be placed separately at user accessible heights for safe operation.	1	LS	
15	CABLE LAYING AND TERMINATIONS Supply, laying and dressing of the following size of 1.1 KV grade PVC insulated armoured cable with aluminium conductor concealed or clamped on wall / ceiling / trench / cable traylamps if necessary.			
i)	3.5 x 35 Sq.mm AYFY(Meter Box to Main VDB via COS)	40	Mtr.	
ii)	4 x 6 Sq.mm Armoured Copper Cable (AC DB)	90	Mtr.	
iii)	3 x 6 Sq.mm Armoured Copper Cable (LDB & UPS)	30	Mtr.	
16	End termination of the following size of cables using flange type cable glands and heavy duty tinned aluminium crimping type cable sockets including gland earthing.			

i)	3.5 x 35 Sq.mm AYFY	4	Nos.	
<b>⊢</b> ′	4 x 6 Sq.mm Armoured Copper Cable	2	Nos.	
<u> </u>	3 x 6 Sq.mm Armoured Copper Cable (LDB & UPS)	4	Nos.	
<b>⊢</b>	PIPE EARTHING: Supply and providing ISI pipe earthing as per IS 3043 with 2.5m long 40mm dia B class G.I. pipe providing GI clamp at the top of the GI pipe test joint, filling around the GI pipe at the radius of 15cm with homogeneous mixture of charcoal, commol salt and river sand up to height of 2.5m from the botton and the rest of the portion with excavated soil, providing brick work masonries, plastering, fixing cast iron/concrete cover of 30x30cm size etc. complete. (Use only SS Nuts, Bolts and washers along with copper sockets for giving connections).			
18	EARTH CONDUCTORS Supply and laying of the following size	4	Nos.	
10	of bare copper conductor along with above cables, for interconnections between panels, DBs, change over switches etc.and also for interconnections between earth pits.			
	ii) No.10 SWG (rate for single run) (From MVDB to Sub DBs) Total 2 runs 10SWG Cu for single and Independent DB Total 3 Runs 10 SWG Cu for two DBs placed nearby. (One run each to each DB and third one for interlinking) Total 4 Runs 10 SWG Cu for three or more DBs placed nearby. (One Run each to each DB and one for interlinking.			
10	`	60	Mtr.	
19	Supply and laying of 2 X No. 8 SWG copper conductor through 20mm PVC conduit for UPS earthing & Energy meter cubicle to VDB.	25	Mtr.	
	WIRING FOR LIGHT, FAN, PLUG, SOCKETS ETC			
	POINT WIRING Supply and wiring for light/fan/exhaust fan/calling bell/mirror lamp/bulk head light/wall fans etc.with 3 plate ceiling rose and by using 3 X 1.0 Sqmm FRLS PVC insulated copper conductor wire in 20mm dia 1.5mm thick rigid PVC conduit, controlled by 6 Amps modular type switch with provisions for modular type ceiling fan regulator on separately fabricated MS Box. The M. S. box should be earthed properly. One way point. (The switch boards shall be placed at user friendly locations for easy ON/OFF. Separate controls for EB/UPS lights for BM cabin and Cash Officer. All other counters including 1 row of customer area, 2 SBs + UPS SB on back side wall of counters. Separate SB near entrance & Visitors lounge).			
	The Raw Power & UPS Power Supply to Strong Room and Locker Room shall be taken though 16A S/S (Raw Power) and 6A S/S (UPS Power) fixed outside the respective entrance and to be taken to SBs inside Strong Room & locker Room using 6/16A plug Top with 3 core 2.5 Sq.mm flexible cable. Similarly 16A S/S for record Rooms (Raw Power Only)	30	No.	
21	Secondry Points (Looped from above)	20	No.	
22	Supply and fixing of Modular type 6A, 2/3 pin plug points controlled 6A modular switch mounted on suitable box. (on common switch board)	5	No.	
	Supply and fixing of modular type 6/16A, <b>3 module</b> plug socket with 16A modular type switch mounted on suitable Box.		No.	

24	<b>RAW POWER STATION</b> : Supply and installation of combined 6A, 3pin modular plug socket & 16A combined 3 module modular plug socket in suitable single PVC box.			
	for raw power supply in counters, tables etc. 1 No. each in all counters and tables including BM & Cash Officer.	3	Nos.	
25	Same as above but with additional 5A Modular switch on the same box. (for cash Officer side table / back side for Note sorting machine and BM cabin - above side table.	3	Nos.	
26	Supply and providing 6/16 A plug top and 1.5m long 3 core 2.5Sqmm flexible copper cable for taking incoming supply from 6/16A socket. (For Raw Power & UPS power supply to Strong room (Cash), Record Rooms and Water Pump. The 3 core cable shall be laid through braided hose (green) with supporting clamps placed inside strong room/locker room/record room for safe keeping of connecting cable.	2	Nos.	
27	CIRCUIT WIRING Supply and wiring wall / floor etc. / recessed / surface as per colour code with 3 runs of 1.1KV grade 2.5 Sqmm FRLS PVC insulated flexible copper wire for phase neutral and earth conductor with standard colour coding, through ISI marked 20mm dia rigid PVC conduit with all accessories. The rate includes the cost of complete wiring from switch box to switch box. (For lighting circuit & sub circuit & Outside lights, (UPS Circuit- Max 3 Computers per circuit, Raw Power Circuit-Max 3 tables per circuit, Name Board, Water pump, etc.)	400		
20	Same as above but with 2 x 4 Same EDIC DVC Insulated	100	Mtr.	
28	Same as above but with <b>3 x 4</b> Sq.mm <b>FRLS</b> PVC Insulated copper wire. (for 1.5/2 Tonne AC and UPS I/P & O/P to COS to Computer DB and for Name Boards if there are multiple Nameboards or extra ordinarily lengthy Name Boards)	50	Mtr.	
29	<b>UPS POWER STATIONS</b> Supply, install, test and commissioning of computer power stations with 4 Nos. 6A modular type two module 2/3 pin sockets mounted on suitable PVC / M.S.Box. The boxes should be fixed on wall / partitions (wooden) consealed or open as required at site. (2 Sets per table / counter including BM and cash officer)	5	No.	
30	Supply, install, test and commissioning of 16A modular type master switch with indicator with suitable PVC box for the <b>main</b> control of UPS & raw Power Station in the Tables.	6	No.	
31	Marking of Panels, DBs, its switch and fuse ratings, cable size, location etc (Neat identification from top to extreme load end of both light and power distribution including Raw Power / UPS plug sockets and generator switch boards) using white / black paint and stencil. (free hand writing not allowed). Good quality stickers may also be used.	1	LS	
32	Charges for fixing wooden/steel framed laminated copies of Electrical Inspectorate/GED/Bank's Engineer/Architect approved as fitted drawings inside the UPS room.( Copy of final as fitted drawing approved by Electrical Inspectorate. both schematic and layout drawings.)		LS	
33	Charges for marking the telephone sockets and its correspondonding cable in the KRONE Box and preparation of single line diagram / layout of the whole telephone wiring showing location and numbering marked in the plan using AutoCAD, lamination and displaying it inside the Server			
	Room/Manager Cabin.	1	LS	

34	Service charge for liaison work with Maharashtra Electricity Department authorities on behalf of bank/landlord for submission of completion report & getting order for statutory payments, obtaining new power connection / enhancement of connected load / shifting/replacement of suitable energy meter if necessary with MSEDCL.	1	LS	
35	<u>LIGHT FIXTURES &amp; FANS</u>			
а	Supply and Installation of Philips make recess mounting (gypsum board ceiling) 30 Watts LED FULL GLOW type square luminaire Cat. No.RC380B G5 LED 36S-6500 PSE OD WH Or OSRAM Luxpower (including fixing frame if any required)	7	Nos.	
b	Supply & installation of 1 X 13.5 Watts Philips Greenperform sleek DN 296B LED 15S-6500 PSU WH led Down Light fitiing with lamps and white reflector on false ceiling or Osram Luxstar 13/14Watts.(including UPS Lights)	10	Nos.	
С	Supply and Installation of <b>21 watts LED type</b> weather proof Yard lighting Luminaire with suitable angle <b>GI pipe support</b> for wall mounting. Philips GreenLine Smart Hi power <b>LED BRP 022</b>	1	Nos.	
d	Supply and Installation of 20 / 21W, 4 Feet LED Batten Light fitting with suitable mounting clips. <b>Philips Slimline</b> / <b>Panasonic Harrow AL</b>	5	Nos.	
е	Supply and providing IP 20 type, 4.8w / Metre LED Strip light (Blue Colour) with the corresponding driver of 5/10A including cost of driver unit. <b>Wipro Garnet make.</b>	25	Mtr.	
f	Supply and installation of 6W LED Bulkhead <b>Philips Endura</b> WT202W LED 6S	2	Nos.	
g	Supply & installation of Mains power operated electronic calling bell	1	No.	
h	Supply and installation of Angle batten holder with 9W Cool Day Light LED bulb on suitable PVC box (for toilets/UPS Points)	3	Nos.	
İ	Supply and installation of 9" size <b>medium duty</b> exhaust fan with metallic body and blades. (Toilets) Crompton / Almonard make. The cost shall be inclusive of cost of wall cutting, its re-plastering finishing and mettalic grill grouted to the outside wall.	3	Nos.	
j	Supply and installation of 12" size <b>Heavy duty</b> exhaust fan with metallic body and blades in the new UPS Room with required wall opening and its finishing thereof. The cost shall be inclusive of cost of wall cutting, its re-plastering finishing and mettalic grill grouted to the outside wall.	2	No.	
k	Supply and installation of 1200mm Sweep ceiling fan (Crompton High Speed)	5	Nos.	
I	Supply and Installation of step type modular electronic regulator.	5	No.	
m	Supply and providing fan rod with painting (upto 1m length) (other than that supplied with fan and if required)	3	Nos.	
n	Supply and providing fan hook on ceiling.	3	No.	
0	Supply and providing <b>tinned</b> copper earth bench using 25 x 3 mm copper strip (25 Cm in length)	3	Nos.	
р	Supply and providing of 6A, 3 pin modular socket on suitable metal box for TV /Token Display	2	Nos.	

q	Supply and providing of Electrical Grade Rubber Mat (2m x 1m x 6mm) (for COS & UPS room)	2	Nos.	
r	Supply and fixing of wooden/steel framed Shock Treatment chart with glass of Standard size. (UPS room & Near VDB)	1	Nos.	
S	Supply and fixing of LT DANGER BOARD with weather proof and non corrosive metal plates Sticker (Red back ground with white letters and size of Min. 15x10 Cms) (on All DBs & UPS Room Door)		LS	
	TELEPHONE Supply and wiring using 2 pair telephone cable 20mm PVC conduit from the EPABX to the individual points. One separate cable for each point. Number of cables in one conduit limited to 5.			
a.	2 pair telephone cabling <b>(0.50 Sq.mm</b> )	46	m	
b.	10 pair Armoured telephone cabling (0.50 Sq.mm)	20	m	
37	Supply and fixing of RJ 11 type modular telephone socket on suitable PVC / metal boxes.			
a.	Telephone socket - single (modular type)	2	No.	
b	Telephone socket - double (modular type)	1	No.	
	Supply and installation of KRONE connector telephone junction box of 10 pair. (Outside & Inside)	1	Nos.	
	GRAND TOTAL			

(GST EXTRA AT ACTUALS)

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