

**TENDER DOCUMENT FOR ELECTRICAL WORK
FOR
STATE BANK OF INDIA
TALEGAON BRANCH, PUNE**

PRICE BID

STATE BANK OF INDIA		
ELECTRICAL & ALLIED WORKS AT TALEGAON BRANCH, PUNE		
SUMMARY OF BILL OF QUANTITIES		

ELECTRICAL & ALLIED WORKS

SEC.	DESCRIPTION OF ITEM	AMOUNT(Rs.)
A	MAIN / SUB MAIN DB'S RS.	
B	CABLES / MAINS RS.	
C	LIGHTING & POWER WIRING RS.	
D	CONDUITS & RACEWAYS FOR POWER WIRING RS.	
E	LIGHTING FIXTURES RS.	
F	EARTHING RS.	
G	VOICE NETWORKING RS.	
	TOTAL - (A to G) Rs.	

- NOTE :-
1. Above quantities may vary as per the final approved interior layout plans.
 3. All the Light fitiings should be approved by the Bank
 4. Rate shall be quoted including all type of taxes applicable including Octroi

Signature and seal of the contractor

STATE BANK OF INDIA					
TALEGAON BRANCH , PUNE					
SCEHDULE OF QUANTITIES FOR ELELCTRCL WORK					
SI No	PARTICULARS	QTY	UNIT	RATE	AMOUNT
A	MAIN / SUB MAIN DB'S				
1	Supply, installation, testing & commissioning of 125A IC TPN SFU with 100A HRC fuses (L&T / Siemens/ABB make) 440 V 3 phase & neutral 50 c/s AC23 duty on MS angle iron frame fabricated out of 40 mm. x 40 mm. x 5 mm MS angle duly painted with cable end boxes, earthing, name plate danger board fixing accessories etc.	1	Nos		
Rate in words :-					
2	Supply and Installation of main LT panel and Automatic Power Factor Control panel floor ' mounted, front operated, dead back, totally enclosed vermin proof, indoor, non-drawout, cubicle type power dist. panel fabricated out of 2mm thick CRCA sheet having gasketed hinged door on each cubicle, fully powder coated / enamel painted after seven tank treatment, incorporating horizontal and vertical sleeved copper busbars 'complete with all internal wiring, danger board, two earthing lugs, cable chamber etc. as required 'housing below mentioned switch gears / meters.				
	Note :- GA & Control Drawing of the panel shall be approved by the Bank before fabrication. (Panel shall be CPRI approved only.)				
	Incomings -				
	1 Nos 100A MCCB, TP, 36 Ka breaking capacity with all standard accessories & with Static releases, as follows.				
	i) O/L Release Range: 0.4Ir-1.0Ir				
	ii) Rotary Operating Handle.				
	iii) Shunt trip				
	iv) 100x100mm Danger Notice Board in English and Marathi				
	Outgoings:				
	a) 4 Nos., 63A,TPN, MCB with neutral & accessories (submain panel for generator,AC panel,APFC & spare)				
	f) 1 Set of 125A TPN tinned Copper busbar with PVC sleeving & accessories				
	g) 1Set, RYB, LED indicating lamps with resistors and fuses				
	h) 1 no., 0-250A, Digital Ammeter with CT & inbuilt S/S				
	i) 1no., 0-500V, Digital Voltmeter with inbuilt S/S				
	k) 1 No of 100 A TPN SFU with 63A HRC fuses for APFC panel				
	l)1 no of 6 stage APFC Relay module Digital readout of Syntron 1179D/Beluk with Binary Switching				
	m)Auto Manual switch with On-delay timer in manual mode				
	n) Capacitors 1,2,3,5,10,&10 KVAR 415 volts 50 hz AC 3 Phase Delta connected Double Dielectric Metalised Polypropylene for 4stages with discharge resistors & series Inductor coil				
	o) 6 nos Capacitor duty Contactors with HRC fuses with base as backup fuses & 2A HRC fuses for contactor coils				

	p) 6 nos of LED read indicating lamps for ON stage indication.				
	q) Push type Red & Green switches for making stages ON/OFF in manual mode.	1	no		
Rate in words :-					
3	Supply,installation,testing and commissioning of 6-way VTPN double door generator power main panel having vertical fishbone busbar type, factory assembled wall mounted sheet metal fabricated, fully power coated having dust proof & vermin proof hinged door with internals such as DIN channels, neutral link, internal wiring complete with double earthing lugs including DB wiring dressing with ferruling etc. with all accessories				
	Incomer: 1 No 63 A TP MCB Out going: 6Nos 20/25/32 A TPN MCBs (to UPS,E-lobby, Server room AC, Lighting DB & BM cabin AC)	1	No		
Rate in words :-					
4	Supply,installation,testing and commissioning of 6-way TPN double door AC panel having vertical fishbone busbar type, factory assembled wall mounted sheet metal fabricated, fully power coated having dust proof & vermin proof hinged door with internals such as DIN channels, neutral link, internal wiring complete with double earthing lugs including DB wiring dressing with ferruling etc. with all accessories				
	Incomer: 1 No 63 A FP MCB Out going:8Nos 20/25/32 A TPN MCBs (to singage,AC units & raw power)				
5	Supply, Installation, Testing & Commissioning of Distribution Boards complete with MCBs/Isolators/ Bus bars and interconnections. Standard DB's of specified makes as per list of materials shall be used (DOUBLE DOOR IP42)				
a)	SPN as follows: LDB & RPDB				
	1 no., 32A, FP MCB+ELCB as incomer				
	Outgoing 10 A/16A/20 A SP MCBs - 12Nos.				
		2	Nos		
Rate in words :-					
b)	SPN as follows (UPSDB's)				
	Incomer 32A, DP MCB - 1 No.				
	Outgoing 10/16A SP MCBs -12Nos.				
		2	Nos		
Rate in words :-					
6	Supply, installation, testing & commissioning of 20/25A Plug Sockets with 3P with 20/25A SP switch (for AC units). Socket to be installed near AC units and switches table top level.	14	Nos		
Rate in words :-					
7	Supply,Installation,Testing & Commissioning of 32A/25A DP MCB in M.S box UPS Input	1	Nos		
Rate in words :-					
8	Supply, installation, testing & commissioning Real Time Electronic cyclic timer Switch (DW219BLK of MK) for Server room AC Units for one working & one standby. The timer shall be programmable for upto 8 hours cyclic period with Auto & Manual modes, The rate to include all components, timers, controlling MCB, Powder coated M.S. housing, power wiring with Elmax make terminals for incoming /outgoing connections etc-	1	Nos		
Rate in words :-					
	TOTAL of SECTION (A)				
B	CABELS / MAINS				

1	Supply & Installation of 1100V grade armoured cable having sector / circular shaped Aluminium / copper conductor PVC insulated cores, laid up, PVC tape wrapped inner sheathed, GI strip / wire armoured and overall extruded PVC sheathed conforming to IS: 1554, laid on wall / ceiling using GI clamps & spacers as per route shown at site and further as directed by Consultant at site in the following sizes :-				
1.1	31/2C 50 sqmm AL armoured cable from main panel to generator panel & AC panel with 8swg Cu earth wire	60	Mtrs		
Rate in words :-					
1.2	4C x 6 Sq.mm Copper armoured cable from sub main (Generator) panel to UPS DB,LDB with bare 12 swg CU wire.	48	Mtrs		
Rate in words :-					
1.3	3C x 4 Sq.mm Copper armoured cable from AC panel to AC units and main panel to glow sign board.	220	Mtrs		
Rate in words :-					
1.4	4C x 6 Sq.mm Copper flexible lead wires from UPS input DB to UPS inputs with 1 run of 4sqmm Cu flexible wire for Body earth in PVC rigid or flexible pipe.	5	Mtrs		
Rate in words :-					
1.5	4C x 10 Sq.mm Copper armoured cable with bare 12 swg CU wire from generator panel to e-corner	20	Mtrs		
Rate in words :-					
2	Supply & Installation of end termination of above mentioned cables including compressed type brass glands, crimping type copper lugs, insulation tape etc. as 'required complete with earthing of glands in following sizes				
2.1	31/2Cx 50 Sq.mm AL	4	Nos		
Rate in words :-					
2.2	4C x 6 Sq.mm Copper	4	Nos		
Rate in words :-					
2.3	3C x 4 Sq.mm Copper	28	Nos		
Rate in words :-					
2.4	4 x 6 Sq.mm Copper flexible lead wires	2	Nos		
Rate in words :-					
2.5	4C x 10 Sq.mm Copper armoured cable	2	Nos		
Rate in words :-					
	TOTAL of SECTION (B)				
C	LIGHTING & POWER WIRING				
1	Supply & Installation of concealed / surface point wiring using 600v grade 3 nos of 1.5 sqmm copper conductor PVC insulated FRLS wires (with proper R,Y,B color code) pulled through heavy gauge PVC conduits / casing-capping laid concealed over false ceiling or in wall chases or on the ceiling in case of an open ceiling as per the instructions given at site including 2.5 sqmm circuit wires from the relevant DB and also including 2.5 sqmm green color copper earth wire and switch plate, switches, etc. as approved by the consultant. The wires from ceiling junction to light points shall be drawn in flexible PVC conduit with adopter & cover junction box & crimp type lugs at both ends. Saddle & clamps shall be PVC (Each circuit shall not feed more than 8 points OR 800 watts as per following configuration.)				

1.1	Primary light points including the cost of MS concealed box grid plate & 6A switch.	60	Nos		
Rate in words :-					
1.2	Secondary light points looped from the above point	45	Nos		
Rate in words :-					
1.3	6A 2/3 -pin combined shuttered socket points on lighting switch boards.	2	Nos		
Rate in words :-					
1.4	Secondary 6A Plug point on switch board / looped from above 6A primary plug point.	4	Nos		
Rate in words :-					
1.5	Exhaust/wall fan points comprising of 5A socket near fan and switch on light switch board or exhaust/wall fan	2	Nos		
Rate in words :-					
1.6	Ceiling fan points comprising of wiring as above with steps type electronic regulator on lighting board(120 watts) and supply and installation of anchor fastener & hook to suspend the ceiling fan	6	Nos		
Rate in words :-					
1.7	BELL POINT comprising of wiring as above including G-Magic wireless out door bell 4061 with remote, 32 -melodies & flash light.	1	nos		
Rate in words :-					
1.80	Wall fan points comprising of wiring as above on lighting board	10	nos		
Rate in words :-					
2	Supply,laying,installation & testing of following concealed SOCKET POINT wiring using 1100 v grade 3 nos of 2.5 sqmm Copper conductor PVC insulated FRLS wires (with Proper RYB colour code) pulled through rigid /flexible 25mm /20mm PVC conduits of medium quality & crimp type lugs at both ends for pantry/toilet/strong room etc .Each circuit feeding not more than 4 points.				
2.1	5/15 A socket & 16 A switch point directly taken from lighting DB	3	nos		
Rate in words :-					
	TOTAL of SECTION (C)				
D	CONDUITS / RACEWAYS FOR POWER WIRING:				
1	Supply and laying of following RACEWAYS/CONDUITS in required size trenches with proper ties / clamps at appropriate intervals. The rate shall be inclusive of carefully removing the floor tiles by machine cutting &removing the malwa below the tiles for laying raceways conduits for power, telephone,Data cables etc. aThe depth of the trenches shall be minimum 2" or upto the RCC of slab from the finished floor level . The rate shall also inclusive of back filling the trenches withmix of 1:2 PCC after laying the raceways /conduits for smooth finish upto the floor level.				
1.1	25 mm dia ISI mark PVC heavy duty conduits	350	Mtrs		
Rate in words :-					

2	Supply and laying of following sizes of FLOOR JUNCTION BOXES with top cover for above raceways /conduits fabricated out of hot dip Galvanized Steel with removable screwed cover plates on all four sides for blocking the entry. All the junction boxes to be properly earth bonded with raceways pipe using 14 SWG GI bare wire. Stainless Steel plate of 14 SWG paper coated mirror finish for junction boxes with mirror screws for fixing)				
2.1	200mm X 200mm X 50mm X 2mm thick	12	Nos		
Rate in words :-					
2.2	100mm X 100mm X 50mm X 2mm thick	10	Nos		
Rate in words :-					
3	Supply,laying,installation & testing of following RAW POWER SWITCH SOCKET POINTS on skirting/walls by using 3 X 2.5 sqmm Copper conductor PVC FRLS wires pulled through already laid floor . raceways/conduits and taken upto the position marked, using PVC rigid /flexible conduits run concealed within walls/partitions/ work station etc with concealed MS box flush to the surface, front plate etc & hardware as required. Not more than 4 points in one circuits .Rate is inclusive of all raiser PVC flexible conduits as required.				
3.1	5/16 A socket & 16 A switch point	25	Nos		
Rate in words :-					
3.2	6 A 2/3 pin socket & 6 A switch point	2	Nos		
Rate in words :-					
4	Supply,laying,installation & testing of following COMPUTER SWITCH SOCKET POINTS on skirting/walls by using 3C X 2.5 sqmm Copper conductor PVC FR sheathed WHITE colour flexible cable pulled through already laid floor . raceways/conduits and taken upto the position marked, using PVC rigid /flexible conduits run concealed within walls/partitions/ work station etc with concealed MS box flush to the surface, front plate etc & hardware as required.Not more than 4 points in one circuits .Rate is inclusive of all raiser PVC flexible conduits as required.				
4.1	2nos of 6A 3-pin socket below the work station on 4 module plate & 1 no 5/16 A 3-pin socket and 16 A SP switch with indicator above the work station	1	Nos		
Rate in words :-					
4.2	3nos of 6A 3-pin socket below the work station on 8 module plate & 1 no 5/16 A 3-pin socket and 16 A SP switch with indicator above the work station	25	Nos		
Rate in words :-					
4.3	2nos of 5/16A 3-pin socket & 2 no 16A SP switch with indicator above the work station	1	Nos		
Rate in words :-					
	TOTAL of SECTION (D)				
E	LIGHTING FIXTURES				
1	Supply ,installation and commissioning of the following concealed or surface mounted LIGHT FIXTURES with lamps of makes as specified or equivalent (from approved makes only) with all accessories like suitable ballast/Drivers etc.The fixturers shall be assembled and installed at position with necessary required for installation hardware such as clamps,nuts, bolts, screws,S-hook,chain and suspension rods as required or as per the requirement of light fixtures.				

1.1	34/36w LED FULL GLOW	14	Nos		
Rate in words :-					
1.2	15W LED DOWN LIGHT	70	Nos		
Rate in words :-					
1.3	(1 X 18W) LED Tubelight.	7	Nos		
Rate in words :-					
1.4	(1 X 9W) LED Tubelight.	4	Nos		
Rate in words :-					
1.5	S & I of Wall mounted Exhaust fan (9" dia,230V,1400 rpm) of decorative plastic body and blade with louvers outside.	2	Nos		
Rate in words :-					
1.60	S & I of Wall mounted Ceiling fan (48").	5	Nos		
Rate in words :-					
1.70	S & I of Wall mounted wall fan.	10	Nos		
Rate in words :-					
	TOTAL of SECTION (E)				

F	EARTHING				
1	Preparation and commissioning of earth pits as per IS 3043-1987 made up of the following size electrode embedded 3 meter in ground with 115mm alternate layer of charcoal ,salt and sand.The bus bar bolted to earth plate by a bolt and check nut & washer. Watering arrangement of funnel for chamber with cast iron cover for whole assembly.				
1.1	GI earthing pit made up of 600 x 600 x6mm thick hot dipped galvanized electrode.	2	Nos		
Rate in words :-					
1.2	COPPER PLATE earthing pit made up of 600 x 600 x6mm thick hot dipped galvanized electrode.	2	Nos		
Rate in words :-					
1.3	8 SWG GI bare wire.	80	Mtrs		
Rate in words :-					
1.4	12 SWG GI bare wire.	5	Mtrs		
Rate in words :-					
1.5	25 X 3mm thick GI strip	20	Mtrs		
Rate in words :-					
1.6	1C x 10 sq.mm flexible Cu. Wire through heavy gauge PVC conduit (Dedicated UPS Earthing)	80	Mtrs		
Rate in words :-					
2	Isolated Earthing bus bar comprising of 300 X 40 X 6 mm thick Copper bar fixed on insulated support and having 25 nos of holes and nut and bolts for clamping the earth leads. The whole assembly in MS box of size 400mmX 300mm X50mm deep and having transparent acrylic cover etc.	1	No		
Rate in words :-					
	TOTAL of SECTION (F)				
G	VOICE NETWORKING				
1	Supply and fixing of 30 Pair telephone MDF consisting of tag blocks in groups of 10 Pair krone, disconnecter type, with S.S brackets for krone complete with powder coated metal enclosure, krone tag block mounting arrangement, telephone distribution chart and locking arrangement (for EPABX Field side).	1	Nos.		
Rate in words :-					
2	Supply and laying of 10 pair Cu ARM jelly field cable of 0.5 sqmm electrolytic grade tinned copper PVC insulated twin twisted pairs with terminations and ferruling in respective of Krone type connector where ever necessary through already laid conduits/ Raceways.	70	mtrs		
Rate in words :-					
3	Supply & installation of Telephone point wiring on workstations/tables/partitions by using 2-pair cable pulled through already laid floor raceways/conduits and taken upto the table top using PVC rigid / flexible conduits run concealed. Each point consists of one RJ-11 jack type telephone socket, MS box flush to the surface, front plate etc & hardware as required.	25	Nos.		
Rate in words :-					
4	Supply of D-link make Information outlet with Single/Dual/Quad Face Plate along with necessary hardware & accessories, etc.	25	Nos.		
Rate in words :-					
5	Supply of PVC back box for face plate.	25	Nos.		
Rate in words :-					
	TOTAL of SECTION (G)				