BOQ FOR THE PROPOSED WORKS OF RENOVATION/INTERIOR/FURNISHING OF BRANCH FOR **STATE BANK OF INDIA**

BRANCH DETAIL: NARAYANGARH BRANCH UNDER MANDSAUR RBO-7

ELECTRICAL WORKS

I.No.	Description of items	Unit	Qty	ir	ı INR	
	•			Rate Rs		Amount Rs
(A)	ELECTRICAL WIRING WORK					
	Note: Use of Flexible conduits & Elbows in Circuit wiring is not					
	allowed except in exceptional site conditions with the approval					
	of Bank's Engineer / Architect and All wiring laying in the					
	MS/PVC conduit strickle follow IE(Indian Electricity) rules, IS					
	code, follow in all items of project/ work execution. Proper					
	ferrules, lux, thimble , gland termination to be done in all					
	cabling & wiring from both load/source end. Conduit carrying					
	submain will not carry circuit/point wiring. Similarly conduit					
	carrying circuit wiring will not carry submain/point wiring.					
	Conduit carrying point wiring will not carry submain/circuit					
	wiring. All Electrical works (Cabling/wiring/panel etc) to be					
	carried out as per layout/General Arrangement (GA)Drawing					
	attached only.					
	accached only.					
1	ELECTRICAL WIRING					
	Wiring for light point/ fan point/ wall fan point/ exhaust fan/					
	light sockets etc. with 1.5 sq.mm. PVC insulated 1100 V Grade					
	copper conductor (FRLS) wires & 1.5 sq.mm. copper earth wire					
	in concealed/ surface using 16 SWG MS conduits, accessories					
	such as bends, tees, saddles, draw boxes, mounting boxes,					
	inner plates, cover plates, ceiling rose etc (whereever required)					
	and chromium plates brass screws/ rowel plug etc. The circuit					
	wiring starting from DB to point control box/ switch box using					
	2 X 2.5 sq.mm PVC insulated 1100 V grade multi- stranded					
	copper conductor wire & 2.5 sq.mm. PVC insulated earth wire					
	(color code to be used). (Flexible conduit/ elbow not allowed).					
	The conduit to be laid in ceiling with proper clamps/ wall/ floor					
	and filing the chase with cement mortar and finishing the					
	same in original form/ wooden partition/ above false ceiling					
	with proper clamps etc. all complete.					
	(Wherever required as per standard specifications).			-		
	i) Each circuit shall have independent earth wire.					
	ii) Each point shall be earthed.					
	iii) Circuit wiring is to be included in point wiring rates.					
а	One light points controlled by one 6 amp. Modular switch.	Nos	. 17			
	, , ,					
D	Two, Three and/or Four light points controlled by one 6 amp. Modular switch.	Nos	31			
	One call bell point with ceiling rose/ 6amp. 3 pin socket	Nos	2			
·	controlled by one 6 amp. Push Modular switch. With call bell	1100	´[
	controlled by one of amp. I dan Floddidi Switch. With can ben					
d	Celing fan point with one nos 6 amp switch and 2 module	Nos	. 9			
	electronic regulator including wiring & ceiling rose					
е	One 5 pin socket controlled by one 6 amp. Modular switch	Nos	12			
	complete assembly includes plate box etc. on same light					
	switchhoard					
2	6 AMP. POINTS ON SEPARATE BOARD:					
	Same as serial no 1 but using 2*2.5 + 1*2.5 Sqmm Copper					
	Conductor FRLS wires from DB to first 6A, 5 Pin modular socket					
	controlled by one 6A switch and looped to the nearest second					
	point with same $2*2.5 + 1*2.5$ Sqmm copper conductor wires					
	FRLS insulated 1100V grade (max 3 points per circuit).					
	inco insulated 11000 grade (max 5 points per circuit).					
		Nos	5 9			
:\	Primary Point		. 4	1		
	Primary Point		_			
ii)	Primary Point Secondary Point looped Power Wiring (6 / 16 AMP. POWER POINTS)	Nos	_			

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I.No.	Description of items	Unit	Qty	in Rate Rs	INR Amount Rs
\vdash	Same as serial no.1, but wiring for 16 Amp, 6-pin sockets by		 	Rate KS	Amount KS
	using 2*4 sq.mm. PVC insulated 1100 V grade copper			1	
	conductor wire with independent 1* 4.0 sq.mm earth wire from			1	
	D.B. to first point 1st socket and 1st to 2nd, socket with 2*2.5			1	
	sg.mm. and 1*2.5 earth wire including providing and fixing of			1	
	16 Amp, 6 –pin socket with 16 Amp. Switch. (Modular type				
	switch/ socket/ plate etc. complete assembly) max 2 points per			1	
	circuit.			1	
	circuit.			1	
i)	Primary Point	Nos	12		
	Secondary Point looped	Nos		+	
	AC/Geyser Point (Single Phase)				
	Same as serial no.1, but wiring for A/C socket by using 2*4	Nos	7		
	sq.mm. PVC insulated 1100 V grade copper conductor wire and			1	
	earthing with 1*4.0 sq.mm. PVC insulated 1100 V grade copper			1	
	conductor wire with modular type AC box(tiny trip type) with			1	
	socket complete in all respects controlled by 25/32 A SP MCB			1	
	to be provided near indoor unit. The point starts from DB to			1	
	stabilizer to the point near the indoor unit including top.			1	
				1	
5	AC Point (Three Phase)				
	Same as serial no.1, but wiring for A/C socket by using 4*6	Nos	0		
1	sq.mm. PVC insulated 1100 V grade copper conductor wire and				
	earthing with 1*6.0 sq.mm. PVC insulated 1100 V grade copper				
	conductor wire of weather proof type 4 way SPN DB complete				
1	in all respects controlled by with 40 Amp TPN (10 KA) MCB to				
1	be provided near outdoor unit. The point starts from DB to the				
1	point near the outdoor unit. (includes wires for terminal				
	connection of outdoor unit from TPN)				
L		·			
6	SPECIAL POINTS: (For Computers)		_		
1	Wiring with 2x2.5 sq.mm. + 1x2.5 sq.mm. PVC insulated 1100	Nos	9		
1	V grade multi stranded copper conductor wires in 2 mm thick			1	
	PVC conduit from UPS DB to computer point. Each point to				
1	have 3 nos. 6 amps. 5 pin modular type sockets, one 6 amps				
	modular swtich with all accessories, inner/ outer plates, metal				
1	box etc. and to be fixed on wooden partitions/ by grouting on				
1	wall etc. as per requirement at site. The switch should be fixed				
	above the top of counter with indicator and sockets under the				
1	counter				
1	b) Same as above but looped from the above 1st point to 2nd,				
1	point and 2nd point to 3rd point. (Maximum 3 points in a				
L	circuit)		l		
	Primary Point	Nos	13	'	
ii)	Secondary Point looped	Nos	5		
	CONDUITING FOR TELEPHONE, COMPUTER &				
	CONDUITING, WIRING FOR T.V. SYSTEM.				
	TELEPHONE POINT		\Box		
a	Wiring for VOICE from Jack Panel in data rack to computer	Nos	10		
1	workstation with Cat-6 voice cable in PVC conduits of size 20/				
1	25 mm including providing ferrules at both ends and				
	termination at both ends including providing & fixing frame for				
1	Cat-6 with shutter, RJ 45 outlet, faceplate and mounting box				
1	complete of modular type. This work includes supply and laying			1	
1	of CAT-6 cable in PVC conduits throughout the lenght, from the				
1	I/O hub to the point.				
<u> </u>		l 			
1	Supplying, laying, effecting terminations, testing and	· 		·	
1	commissioning of 0.51 mm dia Cu. Conductor, twisted, colour				
1	coded with polythene capor barrier, telephone cables in the				
1	existing tray or in conduit including providing &fixing conduit				
1	pipe or cable tray as required from building tag block to the				
	floor as required.]		

I.No.	Description of items	Unit	Qty		ı INR
h	Supplying & fixing 20 pair krone tag block with enclosure.	Noo	1	Rate Rs	Amount Rs
		Nos			
С	P/L 10 Pair of PVC insulated PVC sheathed multi core jelly filled armored telephone.	Mtr	86		
8	COMPUTER NETWORKING				
а	Wiring for computer networking from Jack Panel in data rack to computer workstation with Cat-6 computer cable in PVC conduits of size 20/ 25 mm including providing ferrules at both ends and termination at both ends including providing & fixing frame for Cat-6 with shutter, RJ 45 outlet, faceplate and mounting box complete of modular type, This work includes supply and laying of CAT-6 cable in PVC conduits throughout the length, from the I/O hub to the point.	Nos	20		
b	Supplying and fixing 9 U (Rack with glass door, opening in the front power panel 1 (horizontal), cable manager 1 lock & key).	Nos	1		
	Supply, Installation, Testing & Commissioning of 16 port Jack Panel.	Nos	2		
d	Providing and fixing Patch Panels 8 port (100 base TX) CAT 6 patch/jack panel with connector, out lets and necessary connectivity complete as required & (D-Link make)	Nos	3		
е	Providing and fixing of flowing factory fabricated Patch cords. (DBPS Mounting Cord) (UTP/CAT 6 complete with connector on both side.)				
i)	Supplying and fixing Patch Cord-2 Meter- (DBPS Mounting Cord)	Nos.	20		_
ii)	Supplying and fixing Patch Cord-1 Meter-	Nos	20		
9	TV Point				
a	Supply and fixing of 1.6 mm thick G.I. Box along with RG 6 T.V Co axial socket with Cover Plate.	Nos	1		
b	Supply, drawing, connecting, testing and commissioning of T.V Coaxial cable RG 6 in existing conduit.	R.Mtr	18		
	CABLES AND DISTRIBUTION BOARDS				
10	CABLES, MAINS & SUBMAINS Supplying all materials and laying/ pulling 1100 volts grade PVC insulated copper conductor wires (FRLS) in MS conduit with all fixing accessories after cutting the floor, wall and the like etc. and replastering the floor level to original. Conduit must be 30 mm below the floor finish level.				
i	3.5 X 70 Sq.mm XLPE. Al. armoured Cable (AC VTPN, BUS BARS & A.C. DB)/Main cable	Mtr	18		
ii	Supplying, laying, testing & commissioning of 4 C X 10 sq.mm. at 1100 volts grade PVC insulated <u>copper conductor</u> armoured cable with 10 gauge earth copper wire including cables end termination using appropriate Lugs, Glands, termination acessories, Clamps etc. as required as per specification from <i>Main board to UPS Room</i>	Mtr	35		
iii	Supplying, laying, testing & commissioning of 4 C X 25 sq.mm. at 1100 volts grade PVC insulated aluminum conductor armoured cable with 10 gauge earth copper wire including cables end termination using appropriate Lugs, Glands, termination acessories, Clamps etc. as required as per specification <i>Pane to (POWER/UPS) DB</i>	Mtr	30		

I.No.	Description of items	Unit	Qty	ii	ı INR
	<u>-</u>			Rate Rs	Amount Rs
	Supplying, laying, testing & commissioning of 4 C X 16 sq.mm. at 1100	Mtr	20		
	volts grade PVC insulated aluminum conductor armoured cable with 10 gauge earth copper wire including cables end termination using				
iv	appropriate Lugs, Glands, termination acessories, Clamps etc. as				
	required as per specification (<i>Light DB</i>).				
	Supplying, laying, testing & commissioning of 4 C x 50 sq.mm. at 1100	Mtr	25		
	volts grade PVC insulated aluminum conductor armoured cable with 10				
v	gauge earth copper wire including cables end termination using				
ľ	appropriate Lugs, Glands, termination acessories, Clamps etc. as				
	required as per specification (<i>Mains</i>).				
11	DISTRIBUTION BOARDS				
	Note:-The Panel shall be approved by The Bank Authority				
	before Placing the Panel order, otherwise it will not				
	considered				
	Supplying, installing, testing & commissiong of				
	surface/recessed mountings, Double door 415 volts TPN MCB distribution board of steel steel, 1.6mm thick dust				
	distribution board of steel steel, 1.6mm thick dust phosphatized and painted, inclusive of 100 amps, tinned				
	copper busbars, earthbar, common neutral link, din bar for				
	mounting of MCB's detachable gland / knock out plate & with				
	built in loose wire boxl, and superior make terminal				
	connectors for all incoming and outgoing circuits duly				
	prewired with adequate size of PVC insulated copper wires				
	between the bus bars and the MCB's as well as the incomer				
	and upto the terminal connectors/ neutral link and ready for				
	installation of following ways as required.				
	Use 'B' curve MCB's for lighting & small power circuits, 'C'				
	curve for motor duty i.e. for pumps, AC motors, window and				
	split AC's etc. & 'D' curve for UPS DB's i.e. for computers/ PC's				
	circuit. Main incomer & outgoing circuit MCB's shall be selected accordingly i.e. type B,C & D. Contractor to select the MCB's				
	accordingly as per the nature of the circuit/ load.				
	accordingly as por the mataric or the threaty road.				
	Each DB shall have separate neutral links of rating not less				
	than 100A for each phase. The main incoming neutral link shall				
	be in addition to three outgoing neutral links and shall be of				
	125 A UPS DB's shall have a dedicated Earthing link fixed on				
	insulated supports, which will be in addition to body earth link.				
	All internal inter connecting wiring with in the DB's shall be PVC insulated flexible copper conductor wires of adequate				
	capacity as per the current rating.				
	Inside each DB, a DB chart is to be fixed.				
а	6-way TPN DB (LIGHT DB)	Set	1		
	Incomer:-				
	1 No. 32 Amp TPN (10 KA) MCB with 40 A DP RCCB (100 MA) each				
	phase Outgoing:-				
—	10-12 Nos.6/10/25 Amp (10 KA) SP MCB				
b	4-way TPN DB (POWER DB)	Set	1		
	Incomer:-				
	1 No. 63 Amp TPN (10 KA) MCB				
	Outgoing:-				
	10 Nos.16 Amp (10 KA) SP MCB				
С	4-way V-TPN DB (LIGHT)	Set	1		
٣	Incomer:-	361	<u>'</u>		
	1 No. 80 Amp 4 Pole (16 KA) MCCB				
	Outgoing:-				
-					

I.No.	Description of items	Unit	Qty	i	n INR
	•			Rate Rs	Amount Rs
	4No. 40 Amp (16 KA) TP MCB				
	5 Nos. 25 Amp (10 KA) SP MCB				
d	4-way TPN DB UPS ROOM	Set	1		
	Incomer:-				
	1 No. 63 Amp TPN (10 KA) MCB with 40 A DP RCCB (100 MA) each				
	phase				
	Outgoing:-				
	2Nos. 40 Amp (10 KA) DP MCB, For UPS outgoings tto individual SDB				
е	8-way V-TPN DB (AC)	Set	1		
	Incomer:-				
	1 No. 80 Amp 4 Pole (16 KA) MCCB				
	Outgoing:-				
	4No. 40 Amp (16 KA) TP MCB				
	5 Nos. 25 Amp (10 KA) SP MCB				
	- · · · · · · · · · · · · · · · · · · ·				
f	12-way SPN DB (For UPS Sub DB)	Set	2		
•	Incomer:-	361			
	1 No. 40 Amp DP (10 KA) MCB with 25 A DP RCCB (100 MA)				
	, , , , , , , , , , , , , , , , , , , ,				
	Outgoing:-				
	8-10 Nos.6/10Amp (10 KA) SP MCB				
g	KIT KAT 200 AMP.	Set	1		
	Providing and fixing of Kit Kat Rewirable Porcelian fuse carrier & base				
	with wooden frame of 200 amp/415 Volt near meter box				
(D)	LICHT FITTINGS FANS CALL DELL				
	LIGHT FITTINGS, FANS, CALL BELL LIGHT FITTINGS & ACCESSORIES				
	Supplying, installation with hanging support, testing and				
	commissioning of following light fixtures with electronic				
	Ballasts, Tubes, lamps, all fixing materials including connecting				
	wires etc. all complete as per the directions of Engineer-in-				
	charge (All LED Light Fixures should be covered with minimum				
	3 Years onsite replacement warranty).				
	LED LUMINARES:- 2' x2' (FULL GLOW TYPE)	Nos	27		
	LED light fittings (600 X600mm) dimension suitable for grid/gypsum	1105	21		
	ceiling complete with its electrionic driver as required per instruction of				
	Bank's Model No are as under:-				
	PHILIPS:- RC380B G2 LED 35S-6500 PSU OD WH LED (FULLGLOW)				
13	WIPRO:- CRCO1ORO 38 HP57				
	HAVELLS:- LHECDIL7IL1W036 (Edge- Lit)				
	CG:- LCTAR3-40-CDL				
	LED DOWN LOUTED (D		00		
	LED DOWNLIGHTER (Recessed):	Nos	22		
	15 Watt, recessed mounted circular down lighter , 6" dimension with				
	complete its electronic driver are as under:- PHILIPS:- GREENLED-DN193B LED-12S-6500 PSU				
14	WIPRO:- IRIS LED LD 71-121-XXX-50-XX				
	HAVELLS:- LHEBJNP ZPZ 1W 015(ENDURA LOW DEPTH)				
	CG:- LC DD-15-CDL,				
	,				
15	LED DOWNLIGHTER (Surface Mounted):	Nos	5		
	15 Watt, recessed mounted circular down lighter, 6" dimension with	1100			
	complete its electronic driver are as under:-				
	PHILIPS:- GREENLED-DN193B LED-12S-6500 PSU				
	WIPRO:- IRIS LED LD 71-121-XXX-50-XX				
	HAVELLS:- LHEBJNP ZPZ 1W 015(ENDURA LOW DEPTH)				
	CG:- LC DD-15-CDL,				
	CG:- LC DD-15-CDL,				

I.No.	Description of items	Unit	Qty	in 1	INR
	2 cochpain of feeling		2.,	Rate Rs	Amount Rs
16	LED Spot Light, 3 Watt, 2/3"(Inches) size as per site requirment. PHILIPS, WIPRO, HAVELLS, CG	Nos	11		
17	LED 18 watt Tube Light 1200mm with all accessories.make As specified in tender document or approved by bank	Nos	8		
18	LED 9 watt Tube Light 600mm with all accessories.make As specified in tender document or approved by bank	Nos	3		
19	LED COVE / STRIP LIGHT WITH ITS ELECTRONIC DRIVER(BLUE COLOUR):- Supply, installation, testing and commissioning of bright LED strip light with its electronic driver complete as required. PHILIPS, WIPRO, HAVELLS, CG	Mtr	35		
20	BLDC (Brushless Direct Current) FANS FIVE STAR RATING Single phase heavy duty grease filled double ball bearing, aerodynamically designed heavy gauge aluminium blades, copper wounded and impregnated silicon stamping motors etc 1200 mm sweep, brilliant white CG/ USHA/ ORIENT/ HAVELLS				
i)	Ceiling Fan 1200mm dia	Nos	11		
ii)	Oscillating wall fan (Metallic Body) Sweep 400/450 mm , RPM 1300	Nos	3		
21	EXHAUST FAN:- Single phase, 300mm sweep, 900 rpm, metallic exhaust fan of the following single phase Exhaust fan continuously rated, capacitor start and run type, totally enclosed and ruggedly built, pre lubricated double ball bearing, copper wounded, A & E class insulation, dynamically balanced, below 40 db sound level etc, front cover with grill/gravity louver for protection purpose with 12 mm plywood complete in all respect make as under: CG/USHA/ ORIENT/HAVELLS/ALMONARD/ALSTOM	Nos	3		
22	CALL BELL: Electronic Bell with battery backup, simple dingdong type, each unit to have a different sound.	Nos	2		
23	"S" TYPE M.S. FAN HOOKS:- Supplying & Fixing "S" Type Fan Hooks in Ceiling of R.C.C. Slab by Cutting, Chiseling & Making Good all the Damages with 1:4 Cement Sand Mortar wherever required, Painting, Cleaning the Site etc., as per Instructions of the Architect	Nos	5		
24	STEEL DOWN RODS:- Supply & Fixing of M.S. Down Rods up to 1.00Mt. length, wherever required, with necessary Ball Sockets, Anchor Fasteners etc., complete as per Instructions of the Architect.	Nos	5		
25	Providing & fixing of "Digital Clock" /Digital Panel indicating Time, Day, Date, Temperature at outside of big size,(Ajanta - OLC-1070) as suitable over the facade as advised by the Bank with standard power back up. Make:- Ajanta, Titan	Nos	1		
	EARTHING, MAIN PANEL, METER BOARD				
	EARTHING SYSTEM				•

I.No.	Description of items	Unit	Qty	iı	ı INR
	•			Rate Rs	Amount Rs
a	Supply, Installation, Testing and Commissioning of Maintenace Free Earthing system made up of copper-bonded rod of 10 feet length, 23 mm dia. (Minimum copper bonding shall be 0.25mm) along with Rod-to-Conductor connectors, Earth enhancement material, Pit Cover and other accessories as required and as per specification and other applicable codes (include chamber for earthing, Earthing certificate to be submitted along with the bill).	Nos	2		
b	Supply, Installation, Testing and Commissioning of Maintenace Free Earthing system made up of GI rod of 10 feet length, 17.2 mm dia. along with Rod-to-Conductor connectors, Earth enhancement material, Pit Cover and other accessories as required and as per specification and other applicable codes (include chamber for earthing, Earthing certificate to be submitted along with the bill).	Nos	1		
С	Providing and fixing of Copper/ GI strips in surface or in recess for loop earthing etc. as required.				
i)	Copper Strip 25 mm x 3 mm with proper clamps	Mtr.	6		
	G.I.Strip 25 X 5 mm	Mtr			
iii)	Providing and fixing 2 X 8 SWG dia. Cu earth wire in PVC conduit on surface or in recess for loop earthing along with the existing surface/ recess cable as required. (Dedicated Earthing for UPS output DB only)	Mtr.	30		
14	MAIN PANEL AND METER BOARD				
	Designing, fabrication, supply, installation, testing and commissionings of front operated cubicle type compartmentalised, front access, free standing on 75MM "[" MS channel, dust and vermin proof (IP 42 degree protection) panel suitable for use at 415V, 3 phase, 4-wire 50Hz system suitable for fault level of required value symmetrical at 415V fabricated from 2mm thick CRCA MS sheets with hinged, gaskettted (Metal based neoprene) locable doors having structural reinforcement including 3mm thick gland plates on top and bottom, lifting hooks, GI earth strip of required size with 2 nos earth terminals, 2 nos 230V AC operated 250mm X 250mm size axial fans for exhaust of heat with On-Off toggle switches including 2 coated primer and 2 power coated paint fnish of approved shade over metal surface cleaned and treated with seven tank process complete with interconnections etc as per specifications as required.main panel board of approved make (KRYPTON POWER CONTROLS/NEPTUNE/TRICOLITE/AMPTECH Or should be CPRI Approved, Type of Approval as instructed by the SBI/Architect)as per the following specifications, should be CPRI Approved. All live accessible parts shall be shrouded and all equipment shall be finger touch proof. The busbars insulation shall be withheat shrinkable sleeves SMC/ DMC shrouds and busbar supports shall be used. Padlocking facility shall be provided on all outgoing feeders doors and switch handles shall be locable				
	in OFF position. Suitable arrangement shall be made for termination of multiple incoming cables.				
	All kA values indicated shall be Ics breaking capacity				
	GA drawings shall be got approved by SBI				
a	Fabrication, supply, installation, testing and commissionings of cubicle type floor/wall mounted L.T. panel made out of 2 mm thick CRCA sheet including connection, inter-connection alongwith 4 strip aluminium busbar as per CPWD specifications, (Part IV-Sub-station) etc. as required. (Meter Board)				

о.		Unit	Qty	in INR		
				Rate Rs	Amou	
	Incoming :-					
	i) 1no. 125 Amp 4P MCCB (25 KA) thermal over current, instantaneous, Short circuit realease, Earth fault.					
	ii) Busbar :-200 Amps 4P aluminum conductor bus bar (BPTM type Heat-shrinkable busbar insulation) supported by DMC / FRP insulators					
	Space shall be provide for the BSES Meter					
	Meter board shall be lockable.					
	Complete panel described as above.					
b.	Floor panel shall consists of : -					
	INCOMER					
	1no. 125 Amp 4P On Load Change over switch with 1 No. 125 Amps,TPN MCCB (25 KA) with extendeble rotary handle each thermal over current, instantaneous, Short circuit realease Farth fault					
	BUSBARS					
	125 amps TPN pole busbar chamber of suitable length with copper busbars. All busbars and interconnections shall be of suitable size copper strips.					
	INDICATING PANEL					
	Digital flush type class-1.0 accuracy multifunction meter showing V, A, PF etc. with 3 Nos. current transformers of 100/5A ratio 10 VA Class-1.0 metering - 1 sets					
	Red/Green/Amber ON/OFF/TRIP indicating lamps with 2A SP MCB backup protection.					
	1 set of three phase indicating lamps along with 2A SP MCB backup protection.					
	Restricted Earth fault relay with 3 Nos. current transformers of 160/5 ratio, 15 VA Class 5P 10 (Numeric Relay not required.)					
	Undervoltage, Overvoltage & phase reversal relay for persisted voltage of 105-180% & 20-95% of rated voltage. (Numeric Relay not required.)					
	OUTGOINGS:-					
	3 Nos 63A TPN MCCB (16 kA) for Power, Electrical & AC terminals					
	suitable to receive cable on one side and wire connection to Bus bars. For capacitor Bank AND AC VTPN,					
	2 Nos 63A TPN MCB (10 kA) terminals suitable to receive cable on one side and wire connection to Bus bars. (For PDB.UPS)					
	1 Nos 40A TPN MCB (10 kA) terminals suitable to receive cable on one side and wire connection to Bus bars. (For LDB)					
	2 Nos 40A DP MCB (10 kA) terminals suitable to receive cable on one side and wire connection to Bus bars. The electrical panel as described above and specifications	Se	at.	1		
	complete.	56	:ι	1		
	Supplying, installation, testing & commissioning of 12.5 KVAR, APFC Panel autooperation and power factor should be nearing unity complete as required inluding all contactors, relays, indivating units etc. as required at site". Capacitor make: L&T/ ABB/ Siemens/ Neptune	Se	et	1		
\dashv	TOTAL OF ELECTRICAL WORKS					
	TOTAL OF ELECTRICAL WORKS			Rs		