## OPENING OF LHOU BRANCH, ARUNACHAL PRADESH BOQ for Electrical Installation Works

	BOQ for Electrical Installation Work			1	
SL No	DESCRIPTION	UOM	<u>QTY</u>	Rate (Rs.) (Exclusive of GST on work contract)	Amount (Rs.) (Exclusive of GST on work contract)
1	a. Main Panel: - Supplying, Installing, testing and commissioning of factory fabricated 2MM thick CRCA, floor mounted cubicle type districution Panel Board with 150 MM X 75 MM X 6MM ISMC base channel, suitalbe for 415 V TPN comprising of 200A suitable copper bus bars with color codded heat shrink insulation with the followings: 125 A, 4P MCCB, 35 kA with overvoltage protection as incommer, R-Y-B LED indicating lamps, Digital multifunction meter of minimum size 150 MM X 150 MM to measure Voltage, Current, PF etc with all excessories Outgoing: 40 A 4P MCCB, 25kA for POWER -2 Nos 40 Amp TPN MCCB, 35kA for UPS - 2 Nos, for External equipment and raw Power. All MCCBs are strictly as specified above only. All outgoing must be in compartmentalized chamber fully isolated with 2 mm thick CRCA and 3 mm steel channel painted with 2 coats of red oxide primer paint followed by finishing paint with interconnection etc. as required.	Set	1		
	b) APFC Panel:- Supplying, Installing, testing and commissioning of 5 kVAr APFC panel floor/wall mounted front operated toatlly enclosed vermin proof indoor non drowout cubical type power panel fabricated out of 16SWG thick CRCA sheet having gasketed hinged cover on each cubicle fully powder coated with suitable bus bar for connecting the capacitors, MCBs, contactors etc. wth the following accessories: A set of RYB LED indication lamp as incomer 32A TPN MCB C-type as incomer-01no., 2 nos. 20A 3P contactor for 2 kVAR and 1 nos. 16A 3P contactor for 1 kVAR with 2 nos. 2KVAr and 1 no. 1KVar capacitor alongwith 5 step APFC relay. The panel should have On/OFF push button for each capacitor with respective ON/OFF indication LED lamp (Make - as in tender make list)		1		
2	Sub-main line:- Wiring in MS conduit of IS specification of Proper size with core PVC insulated stranded copper wire 11KV grade (Finolex/Havells/Polycab/ RR Kabel/ Richa/KEI or equivalent) and with supply ,installation, commissioning of all the materials required including proper termination, connection in complete as required from main DB to various DBs:-				
i)	with 3nos 4sq.mm (1ECC)	RM	120		
ii)	with 3nos 6sq.mm (1ECC)	RM	40		
3	Supply ,installation ,testing and commissioning of distribution board manufactures made sheet steel enclosure With the following MCBs (DB,MCB and MCCB Make-Legrands/ Havells/ L&T/ SIEMENS or equivalent) and connecting the same to the system.				
i)	Computer/Raw power DB, SPN double door with 40A (30mA)DP RCCB as incomer & 5nos 10A SP MCB as outgoing.	No.s	2		
ii)	DB with 32A DP MCB.(UPS IN & OUT)	No.s	4		
iii)	DB with 16A DP MCB.(Security & Signage)	No.s	2		
iv)	DB with 32A DP RCCB.	No.s	1		
V)	DB with 32A MCB Changeover	Nos.	1		
∨i)	Modular 5 pin Socket With 20A SP MCB protected switch (Each Table for Power Plug).	No.s	8		
∨ii)	Supply & installation of double door 4 way ETPN MCB DB with following accessories a) 1 No.40 amp. TPN MCB as incomer, b) 7 Nos. 25 Amps SP MCB and 2 nos. 16A SP MCB in outgoing (POWER LINE)	Nos.	1		

	DESCRIPTION	UOM	QTY	Rate (Rs.) (Exclusive of GST on work contract)	Amount (Rs.) (Exclusive of GST on work contract)
∨iii)	4way VTPN Double Door Distribution Board with 40A 4 Pole MCCB (36kA) as incomer and 12 nos. of 10-40 A SP MCB at outgoing. All MCB should be C curve type (LPDB in UPS Room & power)	Set	1		
ix)	4way VTPN Double Door Distribution Board with 40A 4 Pole MCCB ( 36kA) as incomer and 12 Nos. 20A C curve type SP MCB's at outgoing (ACDB)	Set	1		
x)	Light DB SPN double door with 40A (30mA)DP RCCB as incomer & 5 nos 10A SP MCB as outgoing.	No.s	2		
4	Supplying, installing and commissioning of PVC Armored cable complete with proper cable glands and two nos. of 8SWG GI wire (Havell's/Richa/RR kebel/KEI or equivalent) alongwith all the other materials required including proper connection in complete as required from main Panel, Power Distribution Board to various DBs.				
i)	With 3.5 core x 25 sq. mm cable	RM	60		
ii)	With 3.5 core x 35 sq. mm cable	RM	40		
5	Supply, installing and commissioning of earth station including digging and refilling back the pit with black soil and with 3.15mm x300mm size copper plate duly tinned through out the surface of the plate, placed at least 1.5Mtr,below the ground level with 2nos 10sq.mm PVC insulated stranded copper conductor in 20mm GI pipe, fixed to the plate and providing 40mm,2mtr,long GI pipe with reducer and funnel at top for watering pipe with supplying and laying earth continuity wire of 2x10sq.mm copper stranded PVC green color in heavy duty MS conduit on the wall from earth plate to starting point of the line earth connector with proper earth pit.		4		
	i) Supplying and fixing 25x3 mm copper strip, insulated by heat pressurized heavy gauge PVC sleeve, duly jointed by full lap brazing and drawn underground in 40 mm class B GI pipe from the inspection pit to the inside of the branch premises.	RM	20		
	ii)Supplying and fixing 2X8 SWG dia copper earth wire in PVC conduit on surface or in recess for loop earthing from panel to DB	RM	40		
6	Computer/Raw Power point wiring in MS conduit of IS specification of proper size with 3nos 2.5sq.mm single core PVC insulated stranded copper wire 1.1KV grade(Finolex/Havells/Polycab/ RR Kabel/ Richa/KEl or equivalent) and with all material supply installation and commissioning complete from /PDB(Raw). The wiring shall be carried out on surface above false ceiling by chiseling the existing surface and plastering the same with cement etc. after fixing the MS conduit with all accessories like saddles screws, bends T-joint etc. 2 coats of painting Matching to the surface including supply installing, testing, commissioning of modular plate type switch and socket (Legrands / MK or equivalent) for computer terminal on sheet steel enclosure (cadmium plated),duly fitted with screw to the steel conduit and fixed to the wall partition furniture with all interconnection and proper earthing. All the opening shall be covered with blank plate and be sealed to make the box vermin proof.B48(maximum three points in single circuit)				
i)	With 3nos 6A socket with single 16A switch.	No.s	12		
ii)	With 2nos 16A socket with individual switch.	No.s	8		
iii)	With 1 nos 16A socket with individual switch.	No.s	3		

C1 11	DESCRIPTION	luoss			
SL No	DESCRIPTION	UOM	<u>QTY</u>	Rate (Rs.) (Exclusive of GST on work contract)	Amount (Rs.) (Exclusive of GST on work contract)
7	Supply & Fixing of 15Watt commercial down lights of system efficacy >100lm/W. The light should be recessed mounted slim circular type LED panel with die-cast aluminium housing and smooth powder coated finish with anti glare UV stabilized diffuser and separate energy efficient electronic driver having inbuilt surge protection upto 2.5kV. (Make - as in tender make list)		18		
8	Supply, installation testing and commissioning of surface mounted circular LED downlighter with 15W LED lamp. (Make - as in tender make list)	Nos	5		
9	Supply and fixing of 2'x2' LED commercial Luminaire of 36 Watt with system efficacy of 110Im/W. The light should be recessed mounted type and low depth with CRCA poweder coated housing, high transmittance diffuser for sysmmetric light distribution with non-integral enegy efficient isolated electronic driver and inbuilt surge protection upto 3kV. (Make - as in tender make list)		10		
10	Supply installation testing and commissioning of LED batten Single Tube light fittings with 20W with glare free light distribution wall mounted at ceiling/false ceiling level/. (Make - as in tender make list)	1	15		
11	Supply and installation of Wall Mounted fan 400 mm full Metallic body and metallic Blade, 1400 rpm (Make - as in tender make list)	No.s	5		
13	Supply and installation of heavy duty Exhaust Fan 300 mm (Make - as in tender make list)	No.s	6		
14	Supplying, installation, testing & commissioning of Security ligh with 25W LED lamps with pressure die cast housing with epoxy coated dark graphite grey colour finish and prismatic polycarbonates cover with individual LED lenses, including necessary GI bracket with clamp. (Make - as in tender make list)	Nos.	4		
15	Supply and installation of 10 Meter roll 55W, IP20 Flexible LED Strip surface mounted alongwith required LED Driver as back lighting. Havells or equivalent make.	No.s	10		
16	Supply installation testing and commissioning of batten holder with 9W LED bulb as complete set. (Make - as in tender make list)	No.s	5		
17	Wiring for light/fan/exhaust fan points using 3 X 1.5 1.1 kV grade PVC insulated stranded copper conductor wire (Finolex/ Havell's/ Richa/ RR kebel/ KEI or equivalent) for phase, neutral and earth in 25 mm dia heavy duty MS conduit along with associated accessories like MS junction boxes, bends, saddles, screws et. concealed in wall, floor, under flooring, below false ceiling or on surface as well as suspended from ceiling with 25mm X 3 mm MS flat suspenders duly painted above false ceiling from individual light/Fan/Exhaust Fan point outlet. etc. to individual modular type switch boards, 10 Amp modular plate type switches etc.(MK/Legrands/Havel's or equivalent), as required complete including circuit wiring with 3 X 2.5 sqmm. 1.1 kV grade PVC insulated stranded copper conductor wire and as per site requirement and as instructed by SBIIMS Engineer.				
i)	Light/fan point (one downlighter/ 2"X 2" rececced light fittings to be connected through one point)	No.s	30		
ii)	Light/fan point two downlighter/ two 2"X 2" rececced light fittings to be connected through one point)		15		
iii)	6A socket & switch at same board	No.s	8		
iv)	16A, 5 pin industrail plug & Socket with 25 A MCB protected (for Safe room & Record room)	Nos.	2		
v)	Modular type with 6A SP MCB for Exhaust fan and wall fan  Total	No.s	11		

GST on work contract will be extra as applicable.