

**BOQ OF  
ELECTRICAL WORKS OF SICHEY BRANCH , RBO-4, @ AO SILIGURI**

| Sl.No. | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | UNIT | QTY | RATE | AMOUNT |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----|------|--------|
| 1      | <b>PART - A</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |     |      |        |
| A.     | <b>MV PANELS &amp; DISTRIBUTION BOARDS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |     |      |        |
|        | <b>MCB DISTRIBUTION BOARDS : ALL DOUBLE DOORS - ABB,SCHNIDERS,INDO ASIAN(OPTIPRO),HAVELLS,LEGRAND.ETC</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |     |      |        |
|        | Supply, installation, testing and commissioning of the following cubicle type 1.2 mm thick CRCA sheet steel enclosed powder coated with approved shade and partitions to segregate phase with approved covers, single / double door, factory made recessed in wall or surface mounted final distribution boards of the following description. All final DB's shall have outgoing with internal wiring brought upto terminal block for external cable connections.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |     |      |        |
|        | NOTE : 1) Surface mounted DB's on walls shall be provided with suitable size frame work and neatly grouted on to wall and DB shall be fixed on to the frame work using bolts & nuts and other fixing accessories.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |     |      |        |
|        | 2) DB's conceald in wall shall include cut of necessary civil works and other fixing accessories.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |     |      |        |
|        | 3)The DB's shall be horizontal / vertical type as per configuration of incoming/outgoing feeders.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |     |      |        |
|        | 4)The DB's shall be factory made of approved make and necessary available higher size configured DB's shall be used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |      |     |      |        |
| 1.1    | Supply & installation of TPN front operated 125A, 16KA, 4P MCCB (adjustable overload and fixed short circuit) in factory fabricated, powder coat painted metal enclosure complete along with statutory caution board, earthing and having wall mounting hinges etc. The box must have sufficient space for Aluminium cable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Nos. | 1   |      |        |
| 2      | Supply and Installation,testing and commissioning of floor/wall mounted panel fabricated with 16SWG CRCA sheet. The panel shall be dust and vermin proof including internal connection with bus bar/cables up to the terminals duly painted with two coats of powder coated paint,danger board etc. and comprising of the following:-<br>I) INCOMER( CESC/WB ELECTRICITY BOARD): a) 125 amp ,4P ,16/25KA MCCB with control fuses three LEDs R,Y,B, along with ammeter & Voltmeters of relevant range and selector switch for EB supply<br>b) FOR DG-SET INPUT -(1) : 63A amp 4P MCCB, 10 KA with three LEDS with control fuse for R,Y,B indication along with ammeter & Voltmeters of relevant range & selector switch for DG set<br>c) 63 A,4P, On load Changeover front handle rotating type<br>ii) OUTGOING: a) 100 amp tinned copper busbar (Normal Supply busbar- without DG backup) & b) 01 no:-63A TP MCB and 2 Nos. 32/25 amp DP MCB<br>iii) 1 no.63A 10KA 4P MCCB b) 100 amp tinned copper busbar (DG supply),<br>i) 01 nos.63A + 2X 40AMPS, 4 POLE MCB ,10KA AND 2X 40A DP MCB for UPS I/P , C Series ii) 03 Nos. 32A SP MCB C series for critical loads , | nos  | 1   |      |        |
| 3      | <b>SUB DB'S</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |     |      |        |
| 3.1    | <b>12 ways -SPN MCB DB of approved makes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |     |      |        |
|        | Incomer:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |      |     |      |        |
|        | 1 No,32A, 2P, RCCB (0-100mA)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |     |      |        |
|        | Outgoing:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |     |      |        |
|        | 10 Nos. of 10/16/25A, SP, MCBs (C curve)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Set  | 1   |      |        |
| 3.2    | <b>LDB / RPDB FOR BRANCH</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |     |      |        |
|        | <b>6 WAY ETPN MCB DB</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Set  | 1   |      |        |
|        | Incomer:RCBO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |     |      |        |
|        | 1 No.40A, 4P, MCB+RCCB (0-100mA)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |     |      |        |
|        | Outgoing:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |     |      |        |
|        | 12 Nos. of 6/10/16A, SP, MCBs (C curve)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |     |      |        |
| 3.3    | <b>ACDB/PDB</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |     |      |        |

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|     | <b>6 WAY ETPN DB'S</b>                                                                                                                                                                                                                                                                                                                                                                                    | NO   | 1  |  |  |
|     | Incomer:RCBO                                                                                                                                                                                                                                                                                                                                                                                              |      |    |  |  |
|     | 1 No, 63A-4P MCB +(0-300MA) 4P RCCB                                                                                                                                                                                                                                                                                                                                                                       |      |    |  |  |
|     | Outgoing:                                                                                                                                                                                                                                                                                                                                                                                                 |      |    |  |  |
|     | 10 Nos. of 25/32 A SP MCBs (D/C curve)                                                                                                                                                                                                                                                                                                                                                                    |      |    |  |  |
| 4   | Supply, installation, testing and commissioning following sizes Double door Master CONTROLS WITH <b>4 P MCB's within a 12way SPN DB to accommodate 4 set of Armoured cables ( for end terminations ) of 25/16 Sqmm</b> . The isolator shall be wall mounted using necessary brackets and fixing accessories and to have <b>sufficient space to gland of all 4 set of In-Out Cables</b> of above ratings . |      |    |  |  |
| a)  | <b>1x 40 Amps &amp; 1X63 AMPS , 4P MCB's for Branch Isolation to AC DB &amp; LDB's for total isolations of Branch</b>                                                                                                                                                                                                                                                                                     | Set  | 1  |  |  |
| B   | <b>SITC OF standard SBI UPS Change Over panel with double Bus, P+N+ E and provision of 5 x 32 Amps DP MCB's</b>                                                                                                                                                                                                                                                                                           | set  | 1  |  |  |
| 5   | Supply, installation, testing and commissioning following sizes MCB in metallic enclosure. The MCB shall be wall mounted using necessary brackets and fixing accessories.                                                                                                                                                                                                                                 |      |    |  |  |
| b)  | Supply & fixing on wall industrial Plug & socket DB in metal enclosure with one 40 Amps industrial socket (P+N+E) but with 40Amps DP MCB (Legrand)duly inter connected.                                                                                                                                                                                                                                   | nos  | 4  |  |  |
| B.  | <b>LT CABLES:</b>                                                                                                                                                                                                                                                                                                                                                                                         |      |    |  |  |
| 1   | Supply & Laying of 1100V grade, XLPE/ PVC insulated, PVC sheathed, Aluminium / copper conductor, steel armoured cables. The cable shall be laid in exsiting trench, cable tray / clamped on to the walls using necessary fixing accessories. The cable shall be provided with cable identification tags made out of Aluminium strip, engraved with                                                        |      |    |  |  |
| 1.1 | 3x1/2 core x35 sq.mm.                                                                                                                                                                                                                                                                                                                                                                                     | Mtrs | 30 |  |  |
| 1.3 | 4CX16 sq mm                                                                                                                                                                                                                                                                                                                                                                                               | Mtrs | 30 |  |  |
| 2   | End connection of above cable with heavy duty nickle plated brass compression gland crimping type socket insulation tape etc. with all concern.                                                                                                                                                                                                                                                           |      |    |  |  |
| 2.1 | 3x1/2 c X 35 SQ MM                                                                                                                                                                                                                                                                                                                                                                                        | nos  | 3  |  |  |
| 2.2 | 4 c X 16 SQ MM                                                                                                                                                                                                                                                                                                                                                                                            | nos  | 6  |  |  |
| C.  | <b>POINT -WIRING SYSTEM</b>                                                                                                                                                                                                                                                                                                                                                                               |      |    |  |  |
| 1   | "Distribution wiring(concealed) including new point wiring 660 volt grade 3x1.5 sq.mm. (cu) PVC flexible wire in 20 SWG Rigid PVC (ISI Marked medium grade) conduit along with Conduit accessories circular boxes, MS boxes, 6 Amps Modular Type switch with socket outlets 6 pin, all individual control switch etc. Conduit size & nos of wires in light fittings/fans.                                 |      |    |  |  |
| a)  | Light point(one switch controls one light)                                                                                                                                                                                                                                                                                                                                                                | Nos  | 22 |  |  |
| b)  | Light point(one switch control two lights)                                                                                                                                                                                                                                                                                                                                                                | Nos  | 25 |  |  |

|           |                                                                                                                                                                                                                                                                                                                                   |       |     |  |  |
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| c)        | Exhaust fan point                                                                                                                                                                                                                                                                                                                 | Nos.  | 5   |  |  |
| d)        | Ceiling Fan point <b>with REGULATORS</b>                                                                                                                                                                                                                                                                                          | Nos   | 3   |  |  |
| e)        | <b>Call bell point</b> with supply and fixing of <b>call bell</b>                                                                                                                                                                                                                                                                 | Nos.  | 1   |  |  |
| f)        | Wall Mounted Fan point with 6 amp 3 pin socket including wirings from sw boards till sockets                                                                                                                                                                                                                                      | nos   | 8   |  |  |
| g)        | Board plug point 3 pin 5 Amps with switch.                                                                                                                                                                                                                                                                                        | Nos.  | 8   |  |  |
| h         | Supply & fixing 25 amp north-west motor starter with <b>indicator type socket, legrand/Havells</b>                                                                                                                                                                                                                                | No.   | 4   |  |  |
| i         | Supply & fixing 16 amp plug top with indicator                                                                                                                                                                                                                                                                                    | No.   | 6   |  |  |
| k         | Supply & fixing 3cx2.5 sq.mm. PVC insulated multistrand flexible cable                                                                                                                                                                                                                                                            | Mtr.  | 10  |  |  |
| m         | Marking with printed stiker of electrical DBs,SFU,and individual circuit in UPS DB,LDB of switch board and UPS power etc.                                                                                                                                                                                                         | LS.   | 1   |  |  |
| n         | Light point(one switch control 3 lights)                                                                                                                                                                                                                                                                                          | nos   | 6   |  |  |
| <b>D</b>  | <b>LIGHTING WIRING / SUB MAINS/POWER WIRING UPS WIRINGS ETC :</b>                                                                                                                                                                                                                                                                 |       |     |  |  |
|           | Supply & Drawing power wiring circuit /sub mains using flexible, copper conductor, FRLSHF wires of 1100V grade, PVC insulated wires drawn in 2mm thick suitable size FR PVC conduit. The rate shall also include running of PVC insulated copper conductor as earth wire. All circuits starting from the respected db should have |       |     |  |  |
| d1        | 3 x 1.5 sqmm Copper wires in 20 mm dia PVC conduit                                                                                                                                                                                                                                                                                | Rmtr. | 40  |  |  |
| d2        | 2 x 2.5 +1x1.5 sqmm Copper wires in 20 mm dia PVC conduit                                                                                                                                                                                                                                                                         | Rmtr. | 300 |  |  |
| d3        | 2x 4.0 +1X2.5sqmm Copper wires in 20 mm dia PVC conduit.                                                                                                                                                                                                                                                                          | Rmtr. | 200 |  |  |
| d4        | 2 x 6.0 +1X2.5sqmm Copper wires in 32 mm dia PVC conduit                                                                                                                                                                                                                                                                          | Rmtr. | 40  |  |  |
| d5        | 4x4 sqmm +1x4 sq mm Copper wires in 25 mm dia PVC conduit.                                                                                                                                                                                                                                                                        | Rmtr. | 25  |  |  |
| d6        | 4x6 sqmm +1x4 sq mm Copper wires in 25 mm dia PVC conduit.                                                                                                                                                                                                                                                                        | Rmtr. | 20  |  |  |
| d7        | 4 x 16.0 sq.mm + 1x6.0 sq.mm copper wires in 50mm dia PVC conduit.                                                                                                                                                                                                                                                                | Rmtr. | 5   |  |  |
| <b>E.</b> | <b>POWER RECEPTACLES</b>                                                                                                                                                                                                                                                                                                          |       |     |  |  |

|          |                                                                                                                                                                                                                                                                                                                                                                                                        |      |    |  |  |
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|          | <b>DOMESTIC TYPE:</b>                                                                                                                                                                                                                                                                                                                                                                                  |      |    |  |  |
| .        | Supply & fixing of 3/5 pin, commercial combination type socket outlet with indicator mounted on a outlet box with necessary interconnection. The box shall be flush mounted in brick/stone wall. The switches shall be of type Anchor roma make / equivalent. The rate shall also include cost of civil works involved in fixing of boxes,                                                             |      |    |  |  |
| 1        | <b>UPS- POWER SOCKET</b>                                                                                                                                                                                                                                                                                                                                                                               |      |    |  |  |
| a)       | "Supply & installation of MS Flush Metal box with front plate enclosing the following duly interconnected :a) 2 Nos 16 amp switch & 2 Nos 6 amps and 1 no. 6/16 amps socket outlet with indicatorb) 1 No. mounting box c) 1 No. front plate "                                                                                                                                                          | sets | 10 |  |  |
| b)       | Distribution wiring including new point wiring 660 volt grade 2x2.5+1x1.5 sq.mm. (copper ) PVC insulated flexible wire in 20 mm dia. Rigid PVC (ISI Marked) conduit along with Conduit accessories circular boxes, MS boxes, 2x 6 Amps + 2x6Amps modular type switch and socket                                                                                                                        | set  | 5  |  |  |
| c)       | Distribution wiring including new point wiring 660 volt grade 2x1.5+1x1.5 sq.mm. (copper ) PVC insulated flexible wire in 20 mm dia Rigid PVC (ISI Marked) conduit along with Conduit accessories circular boxes, MS boxes, 1x 6 Amps + 1x6Amps modular type switch and socket                                                                                                                         | set  | 2  |  |  |
| d)       | "Supply & installation of MS Flush metal box with front plate enclosing the following duly interconnected make:( Crabtree /Legrand/ Philips)a) 1 Nos 16 amp switch & 1 Nos 6/16 amps socket outlet with indicator b) 1 No. mounting box c) 1 No. front plate"                                                                                                                                          | set  | 5  |  |  |
| <b>F</b> | <b>SUPPLY AND INSTALLATION OF FAN FIXTURES</b>                                                                                                                                                                                                                                                                                                                                                         |      |    |  |  |
| 1        | Supply and fixing of BLDC ceiling fan without fan regulator and without remotes and shall be of Crompton/Havells /Bajaj or equivalent.( Prior sample/ model approvals are required) Ex :Crompton make or equivalent Energon Nstar - 5 Star BEE, 1200mm sweep , Opal White , Model No-ENERGOS • <b>BEE 5 STAR Rated fan(MAX 28-35w)</b> ,                                                               | Nos. | 3  |  |  |
| 2        | Supply and fixing of <b>400mm wall mounted fan</b> of crompton /equivalent.WM S storm-2 Crompton make or equivalent, 5 Star BEE, Matt Silver Black • High Air Delivery with Low noise operation, • Thermal protection for long lasting motor , • Smooth oscillation , 90watt Power Inputs(Watts), Speed (rpm) 1350, Air delivery ( 100 CFM) Metal body only is acceptable of approved brands.          | Nos. | 6  |  |  |
| 3        | Supply and fixing of 200-225mm dia. single phase. MEDIUM DUTY exhaust fan with necessary angle iron bracket, double ball bearing wall mounted fan ( metal body) <b>Model BAHAR-225 of Bajaj or equivalents</b>                                                                                                                                                                                         | Nos. | 5  |  |  |
| 4        | <b>Supply &amp; fixing of Timer for UPS room 2 No's - Exhaust Fans/ 2 No's -AC of E-lobby areas /and All types of Signages of load upto 20Amps</b> without contactors with electronic time delays Programmable timings ( Microcontroller based Prog timers) , etc OF APPROVED MAKES:- <b>CAMIPRO OR EQUIVALANTS , Model No-MSCMTV01, HAVING OUTPUT CONTACTS -25A-max with ontime delays 150Seconds</b> | Nos. | 1  |  |  |
| 5        | Supply 2x2 Frame for LED Fittings( powder coated only)                                                                                                                                                                                                                                                                                                                                                 | nos  | 3  |  |  |
| <b>H</b> | <b>EARTHING SYSTEM</b>                                                                                                                                                                                                                                                                                                                                                                                 |      |    |  |  |
| 1        | Supply & installation of 38mm dia, 2.5 Mtr. long G.I.pipe electrode earthing station complete with manholes, brick masonry chamber, heavy duty CI covers, funnel etc., The cost shall also include providing of salt and charcoal layer by layer, excavation and back filling etc., all complete as required and shall confirm to IS - 3043.                                                           | Set  | 2  |  |  |
| 2        | Supply & installation of 300 x 300 x5 mm, copper plate earthing station complete with GI pipe, manholes, brick masonry chamber, heavy duty C I covers, funnel, etc., The cost shall also include providing of salt and charcoal layer by layer, excavation and back filling etc., all complete as required and shall confirm to IS - 3043.                                                             | Set  | 1  |  |  |
| 3        | Supply, installation & connecting of G.I.tape /wire being clamped to walls, cable trays, ladders, run in pipes with Sleeves etc , laid underground etc.,as required including interconnection between the earth stations etc.,all complete as required. (Note : The excavation and back filling is measured separately) .                                                                              |      |    |  |  |

|                                         |                                                                                                                                                                      |     |    |  |  |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|--|--|
| a)                                      | 3 core armoured cable of 3x2.5 sqmm Copper wires for earthing/Street Lightings                                                                                       | M   | 30 |  |  |
| b)                                      | Supply and fixing of GI earth strip of size 25 mm x 3mm with insulator at 2 feet interval and all accesssories nut bolts wasser etc. as required connection complete | mtr | 6  |  |  |
| <b>K</b>                                | <b>MISCELLANEOUS WORKS:</b>                                                                                                                                          |     |    |  |  |
| 1                                       | Electrical safety - RUBBER mats of 1.1kV grade 1.8mx0.9m                                                                                                             | Nos | 1  |  |  |
| 2                                       | Supply and fixing : of 1nos First aid kit, Safety chart, Danger boards-2nos , No Admission boards-1nos                                                               | set | 1  |  |  |
| 3                                       | Submitting electrical SLD for entire works                                                                                                                           | job | 1  |  |  |
|                                         | <b>TOTAL:- (A+B+C+D+E+F+G+H+I+J+K)</b>                                                                                                                               |     |    |  |  |
| <b>GST AS APPLICABLE SHALL BE EXTRA</b> |                                                                                                                                                                      |     |    |  |  |



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