

**PRICEBID- EXTERNAL ELECTRICAL WORKS FOR PROPOSED  
CONSTRUCTION OF RURAL SELF EMPLOYMENT TRAINING  
INSTITUTE AT KHAMMAM, TELANGANA.**

| Sl No | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Unit | Qty | Unit Rate | Total Amount |
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| 1     | <b>11 KV Single Pole Disconnect Structure:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |     |           |              |
|       | Supply, installation, testing and commissioning only of 11 kV Single pole disconnect structure with 2 nos x 175 x 85mm R.S Joist of 10m long as a box section located at transformers comprising of :-<br>1 set of 3 nos 11 kV 200 Amps AB switch (vertical type) fixed to a suitable 4" x 2" channel cross arm complete with 1 no operating rod handle at ground level.<br>2 sets of (3 nos each) 11 kV disc insulators fixed to 4" x 2" channel cross arm.<br>2 sets of (3 nos each) 11 kV pin insulators fixed to a 4" x 2" single channel cross arm for fixing the jumpers.<br>1 set of 3 nos 11 kV dropout HG fuse (vertical type) fixed suitably on the structure.<br>Fixing the jumpers with all suitable interconnections with No.0 SWG HDBC jumpers to connect up to dropout fuse. |      |     |           |              |
|       | All necessary civil works like excavation of pit. Concreting and making holes, painting with 2 coats of aluminium paint over 1 coat of red oxide etc. Cost should include the supply of galvanized channel to support 11 kV 3C x 185 sq.mm XLPE cable up to AB Switch as per site condition to make the installation complete with all necessary supports, accessories as per the drawings as required. The entire arrangement should be as per drawings enclosed complete in all respects and as per the requirements of Elect dept.                                                                                                                                                                                                                                                       | No   | 1   | 100000    | 100000       |
| 2     | Supplying and erection of 11 kV AAA conductor of size 55 sq.mm to make the loops from cable to insulators, AB switch, HG fuse etc. including all required hardware etc. to complete with all necessary supports, accessories as per the drawings as required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Rmt  | 10  | 300       | 3000         |
| 3     | Supply, Installation, Testing and Commissioning of 11KV 1 way, 3Pole HT Panel with one incomer and out outgoing incomer with 630A, 350MVA air break HT SFU with HRC Fuses and outgoing with 630A,350MVA air break HT SFU with HRC fuses and heating element with thermostart control (Outdoor type panel with double doors), with all interlocking and Protections. The scope of work includes supply of two sets of spare semi conductor                                                                                                                                                                                                                                                                                                                                                   | no   | 1   | 102925    | 102925       |

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|     | HRC fuses.<br>Make: Magawin/ CG/ Pentagon/ABB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |    |   |        |        |
| 4   | <b>TRANSFORMER</b><br>Supply, installation, testing and commissioning only of 11 kV/433V, 50Hz, 100 kVA, Delta/Star, Dyn11, ONAN, 17 positions OLTC ( $\pm 10\%$ in steps of 1.25%), outdoor Transformer , HV&LV cable boxes, with complete set.<br>Cost should include loading, transportation, unloading, placement on the plinth etc. including crane charges complete with all necessary supports, accessories as per the drawings as required.<br>The transformer should be designed and manufactured as per IS: 1180 (Part 1): 2014 & IS: 2026-2011 and should be supplied with first filling of oil to IS: 335 of 2018. Paint finish: Enamel Light Grey Shade No. 631 - IS: 5 and as per Energy Efficiency Level-2.<br>The scope of work includes supply and fixing of new metering cubicle as per TSSPDCL standards.                                                                                                                                                                                                                                                | No | 1 | 687085 | 687085 |
| 5   | <b>"DISTRIBUTION PANEL:</b><br>Fabrication, Supply, installation, Testing and Commissioning of 3 phase and neutral 415V, 4 wire, free standing floor mounted M.V panel made out of 14SWG MS sheet after seven tank process and painting with epoxy powder coating. The panel shall consist of suitable rating TPN Aluminium busbar (at the rating of 1.0A/ sq.mm) supported with DMC/ SMC barriers and colour coded with heat shrinkable sleeves. The metering shall be provided as specified. The panel shall have short circuit withstanding capacity of minimum 50KA and consist of switchgear details mentioed as below. The panel shall be got fabricated with CPRI test certificate and OEM or their channel partners only. The size of all panel mounting meters shall be 96 X 96 MM. The panels shall be mounted on U channels including supply and fixing of the same. The scope of work includes transportation, loading, unloading of the panel and supply the 3 sets of hard copy drawings and one set of soft copy. Complete the work as directed by the Bank. |    |   |        |        |
| 5.1 | <b>OUTDOOR TYPE PANEL (IP65)</b><br>supply and installation of 160A 36KA 4P MCCB with very deep handle-1no doble door in a fabricated outdoor type enclosure. The scope of work includes all internal wiring etc,.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | no | 1 | 45000  | 45000  |

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| 6   | <b>Stranded Compact Circular Aluminium Conductor</b> , Conductor Screen With Extruded Semi Conducting Compound, XLPE Insulated, Insulation Screening with extruded Semi Conducting Compound in combination with Copper Tape, cores laid up, innersheath of PVC tape, galvanised flat steel strip armoured and overall PVC Sheathed Cable conforming to IS 7098 / (PART-II) 1985 with latest amendments. The scope of work includes excavation of loose soil, cutting of hard rock and filling with sand and covering the cables with bricks etc.   |     |     |       | 0      |
| 6.1 | supply and laying of 3core 90 sqmm HT armoured cable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Rmt | 90  | 1369  | 123210 |
| 6.2 | HT termination                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |     |       | 0      |
| 6.3 | HT out door kits                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | NO  | 5   | 10000 | 50000  |
| 6.4 | HT indoor kits                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No  | 3   | 7500  | 22500  |
| 7   | <b>ARMOURED CABLES</b><br>Supply,Laying, Testing and commissioning of 1.1 KV grade XLPE insulated armoured alluminium/copper conductor cable of the following size including laying in trenches, cable trays, on wall including claming and including civil works etc complete as per IS 7098 - Part 1 - 1983. The scope of work includes supply & laying of 2 runs of 8 SWG GI wire along with the cable.The scope of work includes excavation of loose soil, cutting of hard rock and filling with sand and covering the cables with bricks etc. |     |     |       |        |
| 7.1 | Supply & laying of 3.5C x90 sqm Aluminium ar cable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Rmt | 130 | 1289  | 167570 |
| 7.2 | Supply & laying of 3.5Cx50 sqm al ar cable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Rmt | 20  | 691   | 13820  |
| 8   | <b>TERMINATIONS:</b><br>Termination of the following cables with <b>double compression(DC) cable glands</b> and also with suitable size alluminium/copper lugs including supply and fixing of Lugs.                                                                                                                                                                                                                                                                                                                                                |     |     |       |        |
| 8.1 | Supply & laying of 3.5C x90 sqm al ar cable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Set | 6   | 3000  | 18000  |
| 8.2 | Supply & laying of 3.5Cx50 sqm al ar cable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Set | 4   | 2000  | 8000   |
| 9   | Providing and erecting of minimum 1.8 metre length cross linked welded fencing wire supported on M.S.Angles (50 mm x 50 mm x 6mm) at 2.5 Metres, center to center including excavating pits for foundation, fixing post in cement concrete 1:4:8 of size 45 x 45 x 45 cm . fastening the wire and painting the M.S.Angles with one coat of red lead primer and two coats of painting etc. complete                                                                                                                                                 | Rmt | 25  | 5000  | 125000 |
| 10  | Providing and fixing mild steel grill gate with angle iron frame 65 mm x 65 mm x 10 mm with iron bars at 150mm.C/C and diagonal flats as per the standards including hinges, pivot blocks locking arrangement, welding riveting and oil                                                                                                                                                                                                                                                                                                            | sqm | 4   | 6000  | 24000  |

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|      | painting of three coats of approved shade. Weight of gate 35 Kg/smt. the scope of work includes earthing of gate.                                                                                                                                                                                                                                                                                                                                                                                                                      |     |     |        |       |
| 11   | Supply & laying of 40mm stone metal and the bed thickness should be 150mm. The scope of work includes spreading of metal uniformly.                                                                                                                                                                                                                                                                                                                                                                                                    | sqm | 100 | 270    | 27000 |
| 12   | <b>Special Lightning Protection System</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |     |        |       |
| 12.1 | Supply, installation, testing & commissioning only of Advanced Lightning Protection rod with stainless steel body, working on the principal of Early Streamer Emission (ESE) technology, having a coverage radius of <b>79 metres</b> when mounted at a height of 5 mtrs under LEVEL-I Protection and anticipation emission time of 72 micro seconds, complying to NF C 17-102.                                                                                                                                                        | nos | 1   | 76,000 | 76000 |
| 12.2 | Supply, installation, testing & commissioning only of suitable Mast (4.5 mtrs) for mounting Lightning Protection rod.                                                                                                                                                                                                                                                                                                                                                                                                                  | nos | 1   | 12,750 | 12750 |
| 12.3 | Supply, installation, testing & commissioning only of electro-mechanical Counter.                                                                                                                                                                                                                                                                                                                                                                                                                                                      | nos | 1   | 11,200 | 11200 |
| 12.4 | Supply, installation, testing & commissioning only of readymade earth electrode of low carbon rod of 17.2mm dia, coated with 250 microns thick copper of 3 metre long with clamps and all required excavation or bore drilling, Eco safe back fill compound, and providing masonry enclosure with 18"x18" cast iron cover having locking arrangement and watering pipe etc. as required.                                                                                                                                               | nos | 1   | 13,000 | 13000 |
| 12.5 | Supplying and laying only of down conductor for earthing with 1 core x 16 sq.mm 1.1 kV grade, PVC insulated multistrand copper conductor flexible cable (YY) in suitable size FRLS grade PVC conduit with all installation materials including end termination.                                                                                                                                                                                                                                                                        | m   | 40  | 530    | 21200 |
| 12.6 | Supplying and laying only of 25 x 3mm HDBC strip for interconnection between the electrodes and run horizontally up to the duct where the down conductor terminates to the earth bus with porcelain based insulator at every 1 mtr for fixing the tape to the walls and structures.                                                                                                                                                                                                                                                    | m   | 40  | 580    | 23200 |
| 13.1 | Earthing<br>Supply, installation, testing & commissioning only of standard Cast Iron Pipe earth stations as per IS:3043, 1987 with 100mm ID 12.5mm thick cast iron pipe with flange of 10ft long and 12mm dia holes made at 250mm centre to centre along, 3/4" G.I Pipe one foot long reducer and funnel mesh, spreading a homogeneous mixture of salt, charcoal around the pipe etc., 18"x18" cast iron cover including all necessary civil works, complete with all necessary supports, accessories as per the drawings as required. | no  | 4   | 15000  | 60000 |

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| 13.2 | <b>COPPER EARTHING:</b><br>Providing independent earthing for sophisticated electronic equipment with 600 mm x 600 mm x 3.5 mm thick copper plate rigidly fixed to 40 mm dia G.I. pipe of 3 mtr length connected with reducer providing .GI. funnel with wiremesh as per national electric code including C.C. Chamber of size 400 mm x 400 mm x 400 mm covered with RCC slab filling with salt and charcoal giving earth connection from electrode copper strip 2 runs of 50 mm x 6 mm x 3000 mm length with all accessories and labour charges complete, as per IS specifications 732/1982 (Part II) & IS:3043,1987 | no   | 2   | 20000    | 40000  |
| 13.3 | Supply and laying 50X 6mm hot dipGI flat, the scope of work includes two coats of red oxide paint and one coat of green colour paint                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Rmt  | 120 | 430      | 51600  |
| 13.4 | Supply and laying 50X 6mm CU flat, the scope of work includes covering of flat with black sleeve                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Rmt  | 40  | 3700     | 148000 |
| 14   | sand filling<br>Supply & filling with river sand sand in the substation area                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Cum  | 10  | 500      | 5000   |
| 15   | preparation of drawings, co.ordination and getting approvals from CEA, TSSPDCL, CPCB, TSPCB and all other statutory bodies . The scope of work includes getting approvals for temporary DG sets and solar power plants ,etc.                                                                                                                                                                                                                                                                                                                                                                                          | Job  | 1   | 45000    | 45000  |
| 16   | <b>ELECTRICAL SAFETY &amp; INDICATION ITEMS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |      |     |          | 0      |
| 16.1 | "Supply & laying of ISI marked Electrical Insulating dotted floor mat of dimension 2000 x 600mm 12mm thick in Electrical / UPS room -IS 15652:2006"                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | No   | 2   | 3000     | 6000   |
| 16.2 | "Supply & installation of Laminated Electrical Shock Treatment Chart (50x75cm) in UPS / Electrical Room."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No   | 2   | 1000     | 2000   |
| 16.3 | Danger Boards (English, Telugu & Hindi languages) in metal sheet at entrance of electrical room.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Each | 2   | 500      | 1000   |
| 16.4 | First Aid kit with complete set of medicines                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Each | 1   | 1000     | 1000   |
| 16.5 | Sand buckets with stand                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | no   | 4   | 1500     | 6000   |
| 17   | <b>EXTERNAL ELECTRIFICATION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |      |     |          |        |
| 17.1 | 4.0Mtr Height Street Light Fixture                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |     |          |        |
|      | Supply & Installation of 4.0Mtr height Single bracket GI Street light fixture. The pole shall be with base plate of 300mmX300mm 12mm thick (Similar to Schreder Douro Square) with 1no 70W LED Light Fixture (IP 66) along with Junction box with 1no 6A SPMCB, Connectors and wiring upto terminal box from fitting with 1.1 KV grade PVC insulated multi stranded 3 x 2.5 Sq.mm multi strand copper conductor cable, and 2nos of 40mm                                                                                                                                                                               | no   | 5   | 26500.00 | 132500 |

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|                      | Dia Class B GI Pipes for cable entry. The pole shall be erected on existing PCC/Grouting Base plate (The PCC is not included and shall be measured separately but Ground base plate and Fixing bolts, nuts etc shall be included) and complete as required. |  |  |  |                |
|                      |                                                                                                                                                                                                                                                             |  |  |  |                |
| <b>Total</b>         |                                                                                                                                                                                                                                                             |  |  |  | <b>2172560</b> |
| <b>Quote + / - %</b> |                                                                                                                                                                                                                                                             |  |  |  |                |
| <b>Grand total</b>   |                                                                                                                                                                                                                                                             |  |  |  |                |