

| THE ODISHA STATE POLICE HOUSING & WELFARE CORPORATION LTD. JANAPATH, BHOINAGAR, BHUBANESWAR - 22 [Electrical Division] Ph: 0674-2541545, 2542921, Fax: 0674-2541543 E-mail :- pmelectricalophwc2021@gmail.com, Website: www.ophwc.com/www.ophwc.nic.in | | | | | |
|--|---|-------------|-----------|-----------------------|---------------------|
| PRICE BID FOR THE WORK UNDER SL. NO :- 02 AS PER IFB | | | | | |
| NAME OF THE WORK :- EXECUTION OF EXTERNAL ELECTRIFICATION WORK FOR POWER SUPPLY TO COMMAND AND CONTROL CENTRE OF OSRTC, BHUBANESWAR IN THE DISTRICT OF KHURDA. | | | | | |
| BID REF NO :- 27/PM/ELECT/OPHWC/2024-25 | | | | | |
| NAME & ADDRESS OF THE FIRM | | | | | |
| PART-A-Construction of 11 kv line using 3Cx400 sq. mm XLPE UG Cable of Length 60 Mtr. Installation of 11 KV 3 way RMU with Metering unit. | | | | | |
| <u>SCHEDULE OF WORKS</u> | | | | | |
| Sl. No. | Description of work | Unit | Qty. | Estimated Cost in Rs. | |
| | | | | RATE IN RS. | AMOUNT IN RS. |
| Supply Portion | | | | | |
| 1 | Supply of materials for 11kV, 3Core, 400sqmm, XLPE insulation armoured UG cable with accessories | | | | |
| a | Length of 11kV 3C, 400sqmm cable (open trench) | Mtr. | 60 | | |
| 1.1 | Supply of 11kV, 3Core, 400sqmm, XLPE insulation armoured UG cable (SC rating of cable in kA- 37.7kA and SC rating of Armour in kA- 15kA) | Mtr. | 120.00 | 2,265.00 | 2,71,800.00 |
| 1.2 | Supply of Straight through jointing kits Heat Shrinkable type suitable for 11kV, 3Core, 400 sqmm, Aluminium UG cable for 3Core (Set) | Set | 1 | 32,912.10 | 32,912.10 |
| 1.3 | Supply of Indoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 400 sqmm, HT UG cable for 3Core (Set) | Set | 7 | 12,456.60 | 87,196.20 |
| 1.4 | Supply of HDPE PE 80-PN8 pipe of 160mm diameter (for 400sqmm HT cable laying) | Mtr. | 120.00 | 775.40 | 93,048.00 |
| | | | | | |
| 2 | Supply of 11kV RMU | | | | |
| a | No. of 11kV 3 Way RMU (LLV+M) | nos. | 1 | | |
| 2.1 | Supply of 11kV RMU 3 Way, 630A (LLVV)with metering unit & Aux PT (LLV+M)(MU CT ratio-20/5A & breaker CT ratio 50/1A) | Nos. | 1 | 6,42,100.00 | 6,42,100.00 |
| 3 | Earthing | | | | |
| 3.1 | Earthing Conductor: 50X6 mm (2.4kg./mtr.) GI Flat for equipment, structure etc.) | Kg | 13.20 | 97.50 | 1,287.00 |
| 3.2 | Pipe Earthing 40mm. GI Pipe | Nos. | 2 | 1,365.00 | 2,730.00 |
| | | | | | |
| Sub Total (Supply Portion) (in Rs.) | | | | | 11,31,073.30 |
| Erection Portion | | | | | |
| 1 | Laying, Commissioning, Testing of 11kV, 3core, 400sqmm, aluminium, XLPE insulation armoured (extruded type) UG cable by open trench method | | | | |
| 1.1 | Laying, Commissioning, Testing of 11kV, 3core, 400sqmm, aluminium, XLPE insulation armoured (extruded type) UG cable by open trench method . | Mtr. | 120.00 | 94.50 | 11,340.00 |
| 1.2 | Erection of Straight through jointing kits Heat Shrinkable type suitable for 11kV, 3Core, 400sqmm, aluminium UG cable kits for 3core (set) | Set | 1 | 2,400.00 | 2,400.00 |

| | | | | | |
|--|---|-------------|-----------|-----------|---------------------|
| 1.3 | Erection of Indoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 400sqmm, aluminium UG cable kits for 3core (set) | Set | 7 | 1,900.80 | 13,305.60 |
| 1.4 | Laying of 160mm dia PE 80-PN8, HDPE pipe inside open trench. | Mtr. | 120.00 | 300.00 | 36,000.00 |
| 2 | Erection, Commissioning, Wiring and Testing of 11kV RMU | | | | |
| 2.1 | Erection of 11kV RMU 3 Way with Metering unit (LLV+M) | Nos. | 1 | 15,000.00 | 15,000.00 |
| Sub Total (Erection Portion) (in Rs.) | | | | | 78,045.60 |
| Civil Portion | | | | | |
| 1 | Civil works with supply of all materials like cement, MS tor rod, brick, coarse & fine aggregates and labour, T&P, etc for UG Cable Trench | | | | |
| 1.1 | Earth work excavation of soil (1mtr. width X 1mtr. depth) Route Length | Mtr | 60 | | |
| 1.1.a | Earth work excavation of soil | Cum | 42 | 700.00 | 29,400.00 |
| 1.1.b | Earth work excavation of hard rock | Cum | 18 | 1,720.00 | 30,960.00 |
| 1.2 | Back filling with excavated soil outside and above the trench | Cum | 60 | 202.00 | 12,120.00 |
| 1.3 | Damage of asphalt/tar road and other utilities and reconstructing to bring to its original shape after laying of cable in open trench (1mtr. width) | Mtr | 40 | 2,643.67 | 1,05,746.83 |
| 2 | Civil works for Prefabricated RCC foundation with supply of all materials | | | | |
| 2.1 | Prefabricated RCC foundation of 11kV RMU | No | 1 | 23,145.30 | 23,145.30 |
| 3 | Supply of GI Fencing with Gate around each RMU | sqmtr | 20 | 3,600.00 | 72,000.00 |
| 4 | Construction Earthing chamber including installation of earthing pipe. Making earthing chamber including excavation , soil treatment with bentonide powder , calculation of earth resistance, including Installation of 3Mtr GI Pipe 40mm/50mm including welding of GI flat around pipe . | Set | 2 | 3,700.00 | 7,400.00 |
| 5 | Supply and Erection of Cable Route Marker along the cable route at an interval of 30mtrs with civil works | Nos. | 2 | 1,012.00 | 2,024.00 |
| Sub Total (Civil Portion) (in Rs.) | | | | | 2,82,796.13 |
| A | Sub Total (Supply Portion) | | | | 11,31,073.30 |
| B | Stock, Storage & Insurance @ 3 % of A | | | | 33,932.20 |
| C | Sub Total (A+B) | | | | 11,65,005.50 |
| D | Contingency @ 3 % of C | | | | 34,950.16 |
| E | Tools & Plants Charges @ 2% of C (considered for earthing items) | | | | 26.51 |
| F | Transportation @ 7.5% of C | | | | 87,375.41 |
| G | Erection Charges @ 10% of earthing items | | | | 132.56 |
| H | Total (C+D+E+F+G) | | | | 12,87,490.15 |
| I | Sub Total (Erection Portion + Civil Portion) | | | | 3,60,841.73 |
| J | Total Cost (H+I) | | | | 16,48,331.87 |
| PART-B-Construction of 11 kv line using 3Cx95 sq. mm of Length 20 Mtr with 1 Run spare. | | | | | |
| Supply Portion | | | | | |
| 1 | Supply of materials for 11kV, 3Core, 95sqmm, XLPE insulation armoured UG cable with accessories | | | | |
| a | Length of 11kV 3C, 95sqmm cable (HDD) | Mtr. | 20 | | |
| 1.1 | Supply of 11kV, 3Core, 95sqmm, XLPE insulation armoured UG cable (SC rating of cable in kA- 9kA and SC rating of Armour in kA- 9kA) | Mtr. | 40.00 | 1,019.00 | 40,760.00 |

| 1.2 | Supply of Straight through jointing kits Heat Shrinkable type suitable for 11kV, 3Core, 95 sqmm, Aluminium UG cable kits . | Set | 2 | 23,776.88 | 47,553.76 |
|--|--|------|----------|---------------|--------------------|
| 1.3 | Supply of Indoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 95 sqmm, HT UG cable kits. | Set | 2 | 9,664.16 | 19,328.32 |
| 1.4 | Supply of Outdoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 95 sqmm, HT UG cable kits. | Set | 2 | 14,890.64 | 29,781.28 |
| 1.5 | Supply of HDPE PE 80-PN8 pipe of 160mm diameter (for 11 KV UG cable laying) | Mtr. | 34.00 | 667.00 | 22,678.00 |
| 2 | Earthing | | | | |
| 2.1 | Earthing Conductor: 50X6 mm (2.4kg./mtr.) GI Flat for equipment, structure etc.) | Kg | 7.20 | 97.50 | 702.00 |
| 2.2 | Pipe Earthing 40mm. GI Pipe | Nos. | 2 | 1,365.00 | 2,730.00 |
| Sub Total (Supply Portion) (in Rs.) | | | | | 1,63,533.36 |
| Erection Portion | | | | | |
| Sl. No. | Description of items | Unit | Quantity | Rate (in Rs.) | Amount (in Rs.) |
| 1 | Laying, Commissioning, Testing of 11kV, 3core, 95sqmm, aluminium, XLPE insulation armoured (extruded type) UG cable by open trench method | | | | |
| 1.1 | Laying, Commissioning, Testing of 11kV, 3core, 95sqmm, aluminium, XLPE insulation armoured (extruded type) UG cable by open trench method. | Mtr. | 40.00 | 100.17 | 4,006.80 |
| 1.2 | Erection of Straight through jointing kits Heat Shrinkable type suitable for 11kV, 3Core, 95sqmm, aluminium UG cable kits for 3core (set) | Set | 6 | 1,944.33 | 11,665.98 |
| 1.3 | Laying of 160mm dia PE 80-PN8, HDPE pipe inside open trench. | Mtr. | 34.00 | 306.87 | 10,433.58 |
| Sub Total (Erection Portion) (in Rs.) | | | | | 26,106.36 |
| Civil Portion | | | | | |
| Sl. No. | Description of items | Unit | Quantity | Rate (in Rs.) | Amount (in Rs.) |
| 1 | Civil works with supply of all materials like cement, MS tor rod, brick, coarse & fine aggregates and labour, T&P, etc for UG Cable Trench | | | | |
| 1.1 | Earth work excavation of soil (1mtr. width X 1mtr. depth) Route Length | | | | |
| 1.1.a | Earth work excavation of soil | Cum | 11.9 | 716.03 | 8,520.76 |
| 1.1.b | Earth work excavation of hard rock | Cum | 5.1 | 1,759.39 | 8,972.89 |
| 1.2 | Back filling with excavated soil outside and above the trench | Cum | 17 | 204.58 | 3,477.86 |
| 1.3 | Construction Earthing chamber including installation of earthing pipe.Making earthing chamber including excavation , soil treatment with bentonide powder , calculation of earth resistance, including Installation of 3Mtr GI Pipe 40mm/50mm including welding of GI flat around pipe . | Mtr | 2 | 3,784.73 | 7,569.46 |
| 2 | Civil works for Prefabricated RCC foundation with supply of all materials | | | | |
| 5 | Supply and erection of GI Pipe of dia. 150mm, Class-B (8Mtr.) | Mtr | 16 | 1,496.91 | 23,950.56 |
| 5 | Supply and Erection of Cable Route Marker along the cable route at an interval of 30mtrs with civil works | Nos. | 2 | 1,035.17 | 2,070.34 |
| Sub Total (Civil Portion) (in Rs.) | | | | | 54,561.87 |
| A | Sub Total (Supply Portion) | | | | 1,63,533.36 |

| | | | | | |
|---------------|---|-----|--------|---|--------------------|
| B | Stock, Storage & Insurance @ 3 % of A | | | | 4,906.00 |
| C | Sub Total (A+B) | | | | 1,68,439.36 |
| D | Contingency @ 3 % of C | | | | 5,053.18 |
| E | Tools & Plants Charges @ 2% of C (considered for earthing items) | | | | 15.13 |
| F | Transportation @ 7.5% of C | | | | 12,632.95 |
| G | Erection Charges @ 10% of earthing items | | | | 75.64 |
| H | Total (C+D+E+F+G) | | | | 1,86,216.26 |
| I | Sub Total (Erection Portion + Civil Portion) | | | | 80,668.23 |
| J | Total Cost (H+I) | | | | 2,66,884.49 |
| PART-C | INSTALLATION OF 250 KVA S/S. | | | | |
| 1 | 50x6mm GI Flat for earthing, 2.36kg/mtr., (2.5x7 mtr. For mesh formation, 12 Mtr. For L.A and 2.5 Mtr for raising, 11 Mtr. For AB Switch ,2.8 Mtr. for HG Fuse, 5x2 Mtr. For DTR neutral,(13-4.5)mtr. For DTR Body, 0.500 Mtr. For LTDB & AB switch operating handle, 3 Mtr. for fencing.) | Kg | 154.82 | 102.00 | 15791.64 |
| 2 | 250 KVA , 11/0.4 KV (CU) Transformer BIS Energy Level-II | No | 1 | 601213.06 | 601213.06 |
| 3 | LT Distribution Box with MCCB, Aluminium Busbar of 3 Bay with kit kat fuse for 250 KVA S/S | No | 1 | 65280.00 | 65280.00 |
| 4 | 55 sq. mm All Alloy conductor-PVC insulated | Mtr | 50 | 55.24 | 2762.00 |
| 5 | 1 Cx 400 mm ² LT XLPE Cable(Armoured) - FOR 250 KVA Trf. | Mtr | 120 | 363.08 | 43569.60 |
| 6 | Channel for 11 KV UG cable rising , GI 100x50x6 mm (3000 mm Long)(9.56 Kg/Mtr., 2 Nos.) | Kg | 286.8 | 102.00 | 29253.60 |
| 7 | LT cable supporting angle (GI),50x50x6 mm ,GI, 4.5 Kg/Mtr., each angle Length 2 mtr.,4 nos. angle required(4.5x4x2) | Kg | 36 | 102.00 | 3672.00 |
| 8 | 11 KV LA (12KV,10 KA)station class-2 | No | 3 | 4828.00 | 14484.00 |
| 9 | GI Pipe for earthing 40mm dia 3mtr long | No | 5 | 1428.00 | 7140.00 |
| 10 | GI Nut, Bolt & washers of different sizes | Kg | 35 | 106.08 | 3712.80 |
| 11 | Danger plate | Kg | 2 | 108.80 | 217.60 |
| 12 | Back clamp for Danger Plate 25x3 mm ,flat, 0.59 Kg/Mtr., flat of 0.510 Mtr. Length 1 Nos=(1x0.59x0.510) | Kg | 0.6018 | 102.00 | 61.38 |
| 13 | Name Plate | No | 1 | 108.80 | 108.80 |
| A | | | | A. Sub total | 7,87,266.48 |
| B | | | | B. Stock, Storage & Insurance @ 3% of A | 23,617.99 |
| C | | | | Sub Total (C=A+B) | 8,10,884.48 |
| D | | | | T&P @ 2% of C | 15,173.00 |
| E | | | | Contingency @ 3% of C | 24,326.53 |
| F | | | | Transportation @ 7.5% of C | 60,816.34 |
| G | | | | Erection Charges @ 5% for transformer and joist pole cost including stock, storage & insurance @3% | 30,962.47 |
| H | | | | Erection Charges @ 20% on PSC Poles | |
| I | | | | Erection Charges @ 10% for other materials | 13,940.48 |
| J | | | | Total | 9,56,103.30 |
| 14 | Construction of earthing chamber including installation of earthing pipe.Making earthing chamber including excavation, soil treatment with betonide powder, calculation of earth resistance,including installation of 3 Mtr. GI Pipe 40/50 mm including welding of GI flat around pipe. | No | 5 | 3784.73 | 18,923.65 |
| 15 | LT DB Plinth | No | 1 | 6000.00 | 6000.00 |
| 16 | DTR Plinth | No | 1 | 28000.00 | 28000.00 |
| 17 | Laying of 1Cx400 sq. mm LT XLPE cable | Mtr | 120 | 96.66 | 11,599.20 |
| 18 | SITC and erection of GI fencing with gate | RM | 20 | 3682.44 | 73,648.80 |

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|----|--|------|--------|---|--------------|
| 18 | Supply and erection of GI pipe dia ,150 mm, class-B(8 Mtr.) | Mtr. | 24 | 1496.91 | 35,925.84 |
| 19 | Supply of ALL lugs suitable for 400 sq. mm cable/conductor,crimping with cable and fixing /connecting include supply and erection of PVC Tape as per voltage requirement. | EA | 16 | 322.21 | 5,155.36 |
| 20 | Supply and erection of double compression Flameproof type Glanding for armoured cable 1 C 300-1000 sq. mm including making hole in Base plate and dressing of cable along with vermin proofing properly.Supply to be done as per TPCODL specification and approed make dowells. | EA | 8 | 1227.48 | 9,819.84 |
| | | | | | 1,89,072.69 |
| | | | | Sub total Rs | 11,45,175.99 |
| IV | Construction of LT UG LINE of 50 Mtr. | | | | |
| | Length of 1.1 KV, 4C, 70 sq. mm cable(Open trench) | Km | 0.05 | | |
| 1 | Supply of 1.1 KV , 4 core 70 sq. mm XLPE insulation armoured UG Cable | Mtr. | 100 | 342.37 | 34,237.00 |
| 2 | Supply of HDPE PE 80-PN8 pipe of 160mm diameter | Mtr. | 100 | 667.00 | 66,700.00 |
| A | | | | A. Sub total | 1,00,937.00 |
| | Laying , Commissioning ,Testing of 1.1 KV aluminium, XLPE insulation armoured UG cable by open trench method | | | | |
| 1 | Laying of 1.1 KV ,4 core 70 sq. mm XLPE insulation armoured-Aluminium UG cable | Mtr | 100 | 47.87 | 4,787.00 |
| 2 | Laying of 160 mm dia HDPE pipe | Mtr. | 100.00 | 306.87 | 30,687.00 |
| 3 | Supply and erection of double compression Flameproof type Glanding for armoured cable 3.5/4C 50-95 sq. mm including making hole in Base plate and dressing of cable along with vermin proofing properly.Supply to be done as per TPCODL specification and approved make dowells. | EA | 4 | 690.46 | 2,761.84 |
| | | | | | 38,235.84 |
| | Civil works with supply of all materials like cement, MS ton rod, bricks, course & fine aggregates and labour, T&P, etc for UG Cable trench | | | | |
| | Earth work excavation of soil(1 Mtr. Width x 1 mtr. Depth) | | | | |
| 1 | Earth work excavation of soil | cum | 35 | 716.03 | 25,061.05 |
| 2 | Earth work excavation of hard rock | Cum | 15 | 1759.39 | 26,390.85 |
| 3 | Back filling with excavation soil outside and above the trench | Cum | 50 | 204.58 | 10,229.00 |
| 4 | Damage of asphalt/tar road and other utilities and reconstructing to bring to its original shape after laying of cable in open trench (1mtr. width) | Km | 0.03 | 38,74,084.29 | 1,16,222.53 |
| | | | | Total Rs. | 1,77,903.43 |
| A | | | | A. Sub total | 1,00,937.00 |
| B | | | | B. Stock, Storage & Insurance @ 3% of A | 3,028.11 |
| C | | | | Sub Total (C=A+B) | 1,03,965.11 |

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|-------------------------|--|---|--|--|---------------------|
| D | | T&P @ 2% | | | |
| E | | Contingency @ 3% of C | | | 3,118.95 |
| F | | Transportation @ 7.5% of C | | | 7,797.38 |
| G | | Erection charges @10% of earthing items and Multimeter Panel | | | |
| H | | Total | | | 1,14,881.45 |
| I | | Sub Total(Erection+civil) | | | 2,16,139.27 |
| | | Total Cost (H+I) | | | 3,31,020.72 |
| | Total Rs. | | | | 33,91,413.07 |
| | Cess @ 1% | | | | 33,914.13 |
| | Total Estimated Cost | | | | 34,25,327.20 |
| | Total Estimated Cost in Figures | | | | 34,25,327.00 |
| EXCESS | <input type="checkbox"/> LESS <input type="checkbox"/> (Please Tick) | _____ % | | | |
| Quoted Amount in Figure | | | | | |
| Quoted Amount in word | | | | | |

N:B- The Estimated cost is exclusive of GST.

Signature of Tenderer with seal

Sd/-
Asst. Project Manager (Elect)

Sd/-
D.M I/C (Elect)

Sd/-
Project Manager(Elect)

6359090.31

9009859.74