



**NAYA RAIPUR DEVELOPMENT AUTHORITY**

**Tender Document for Design, Supply, Installation,  
Testing, Commissioning and operation & maintenance of  
two years of Electrical Infrastructure Development for  
Various Sectors at Naya Raipur**

**(Following Three-Envelope Tender Procedure)**

**Schedule – A  
Price Tender  
To be submitted in ENVELOPE-3**

**NIT No. : 149/EI-SEC/ELECT /CE(E)/NRDA/2016-17**

**Dated: 28.12.2016**

**Issued by:** Chief Executive Officer,  
Naya Raipur Development Authority (NRDA)  
Paryavas bhawan, North block, Sector- 19,  
Naya Raipur- 492 002, Chhattisgarh  
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## Tender Document Contains

- (a) Only schedule "A" and Section-I of schedule "D" are to be filled & signed by the tenderer
- (b) All the certificates as per pre qualification criteria shall be appended with relevant forms of schedule "D"

### 1. PART ONE (NRDA F-1)-(Attached herewith, to be submit along the tender)

#### Part (A)

- a) Press Notice
- b) Detailed NIT

#### Part (B)

##### a) Schedule-A

- (i) Cost Abstract
- (ii) Bill of Quantities

- b) Schedule-B –NIL
- c) Schedule-C –NIL
- d) Schedule-D

##### Section-I..... Technical tender forms

- (i) Letter of Technical Tender
- (ii) Tenderer's Information Sheet
- (iii) Annual Turnover
- (iv) Specific Construction Experience
- (v) Declaration
- (vi) Check list for Technical tender evaluation

##### Section –II .....Scope of work

##### Section –III..... Technical specifications of work

##### Section –IV..... Special Conditions of Contract

##### Section –V..... List of approved makes

##### Section –VI..... Drawings

- e) Schedule-E
- f) Schedule-F

### 2. PART TWO (NRDA F-2/3 )-Standard form (Not Attached herewith, and not to be submitted along the tender)

Important note: - Link site <http://nayarapur.com/documents/gcc.pdf>

1. General Guidelines
2. Tender
3. General rules and directions
4. Conditions of contract
5. Clauses of contract
6. Model rules relating to labour, water supply and sanitation in labour camps safety code
7. Contract forms
  - (a) Draft Format for Performance Security
  - (b) Earnest Money Deposit Form (Bank Guarantee)
  - (c) Format of Contract Agreement
  - (d) Draft Format for Performance Guarantee for Water Proofing and Anti-termite Works
  - (e) Indemnity Bond
  - (f) Indenture Bond
  - (g) Notice for Appointment of Arbitrator
8. Proforma of schedules (Schedule 'A' to Schedule 'F')

# Naya Raipur Development Authority (NRDA) Raipur, Chhattisgarh

## Document details

Name of work : “Design, Supply, Installation, Testing, Commissioning and operation & maintenance of two years of Electrical Infrastructure Development for Various Sectors at Naya Raipur ”.

Name of Tenderer:

### Details

a) Cost of Tender Document : Rs

b) EMD : Rs

Signature of Tenderer

Date:\_\_\_\_\_

Signature of Contractor.....

Signature of NRDA.....

**Cost Abstract  
for Electrical Infrastructure Development for Various Sectors at Naya Raipur**

| Sr. No.                    | Description of Works                                     | Total Amount in Rs. | Amount in Words ( In INR) |
|----------------------------|--|---------------------|---------------------------|
| A                          | 33KV Power Supply  | Rs. -               |                           |
| B                          | 11KV Power Supply  | Rs. -               |                           |
| C                          | Power Distribution for individual housig in plot B6 & C6 | Rs. -               |                           |
| <b>Total Amount in INR</b> |  | <b>Rs. -</b>        |                           |

**Cost of Estimates for Electrical Infrastructure Development for Various Sectors at Naya Raipur**

| Sr. No.  | Items Description   | Unit | Total Quantity | Rate in INR (in Figures) | Rate in Words ( In INR) | Total Amount in INR |
|----------|---|------|----------------|--------------------------|-------------------------|---------------------|
| <b>A</b> | <b>For 33KV System</b>  |      |                |                          |                         |                     |
| 1        | Supplying, Receiving, Storage, Installation, Testing and Commissioning of approved make Motorized type <b>Ring Main Unit (extendible type)</b> for out door installation, rated for 36KV, 50Hz, 630A, STR of 25kA for 1sec with SF6 insulation having 2 sets of three position Load break Switch with earthing switch as Incomer and 1 set of three position Load break Switch with earthing switch for Tee-off. The units shall be complete with interconnections of both Power & Control, accessories, hardwares etc as required for completeness and as per direction of engineer, attached specification, CSPDCL standards and Electrical Inspectorate Standards.<br>The accessories shall include:<br>3 Set of ON/ OFF and Phase indicating lamps<br>3 Nos end termination kit for 3 core XLPE cable | Set  | 15             |                          |                         | Rs. -               |
| 2        | Supplying and laying following sizes one number XLPE, steel armoured, aluminium conductor <b>power cable of 33 KV</b> grade in existing <b>RCC/HUME/STONEWARE/METAL/masonry open duct</b> as required.  |      |                |                          |                         |                     |
| a        | 3Cx400 sqmm   | mtr  | 650            |                          |                         | Rs. -               |
| b        | 3C X 300 sqmm   | mtr  | 14000          |                          |                         | Rs. -               |
| c        | 3C X 120 sqmm   | mtr  | 1160           |                          |                         | Rs. -               |
| 3        | Supplying and making <b>indoor</b> cable end termination with <b>heat shrinkable jointing kit</b> complete with all accessories including lugs suitable for following size of 3 core, XLPE aluminum conductor cable of <b>33 KV</b> grade as required :   |      |                |                          |                         |                     |
| a        | 400 sqm   | Each | 8              |                          |                         | Rs. -               |
| b        | 300 sqmm  | Each | 26             |                          |                         | Rs. -               |
| c        | 120 sqmm  | Each | 9              |                          |                         | Rs. -               |
| 4        | Supplying and making <b>straight through cable jointing</b> with <b>heat shrinkable jointing kit</b> complete with all accessories including ferrules suitable for following size of 3 core, XLPE aluminum conductor cable of <b>33 KV</b> grade as required :  |      |                |                          |                         |                     |
| a        | 300 sqmm  | Each | 29             |                          |                         | Rs. -               |
| b        | 120 sqmm  | Each | 6              |                          |                         | Rs. -               |

| Sr. No. | Items Description   | Unit | Total Quantity | Rate in INR (in Figures) | Rate in Words ( In INR) | Total Amount in INR |
|---------|---|------|----------------|--------------------------|-------------------------|---------------------|
| 5       | Supplying and laying of <b>50mm x 6mm GI earth strip</b> along with the 33kV cable and making connection with steel supports enroute and connecting firmly with the earthing systems of end stations complete with ferrules, other accessories, hardwares etc as required for completeness and as per direction of engineer, attached specification, CSPDCL standards and Electrical Inspectorate Standards.  | mtr  | 12000          |                          |                         | Rs. -               |
| 6       | Supplying, making <b>Earth Pits of</b> GI earthing pipe of 40 mm dia 3.04 mtr long with 12 mm hole at 18 places at equal distance traped casing at lower endand as per direction of engineer, attached specification, CSPDCL standards and Electrical inspectorate standards.   | Set  | 17             |                          |                         | Rs. -               |
| 7       | Providing and fixing <b>HT Danger Notice Plate</b> of 250 mm x 200 mm 2mm thick, made of mild steel and vitreous enamelled white on both sides and inscription in signal red colour on front side as per IS:2551 with accessories, hardwares etc as per direction of engineer, CSPDCL standards and Electrical inspectorate standards.  | Each | 9              |                          |                         | Rs. -               |
| 8       | Construction of plinth for , RMU,Transformer in RM-15 RCC construction for installation of RMU,Transformer including excavation, laying of PCC, neatly dressed, plastered, supply of all materials as required for completeness, as per attached specification/ drawing, CSPDCL standards and direction of EIC.   | cum  | 21.2           |                          |                         | Rs. -               |
| 9       | Supplying and erecting chain link mesh fencing for electric sub-station switch yard of 2.5 m approx. height from ground level using angle iron size 50 X 50 X 6 mm erected in C.C.foundation 15 X 15 X 40 cm deep at every 2 metre fitted with flat iron support of size 25 X 6 mm on top, bottom and mid way and chain link mesh 50 x 50 mm aparture and 4 mm dia G.I. hard wire securing and screwing with 2mm dia G.I. wire,G.I. staples, G.I.U-nails or steel pins to the angle iron at every distance of 30 cms, by iron studs complete duly painted with one coats of red oxide and two coats of approved colour paint and direction of EIC | sqm  | 473            |                          |                         | Rs. -               |
| 10      | Supplying and erecting MS gate of approx. size 3.0 m (W) x 2.0 m (H) in two laps for electric sub-station switch yard fencing frame made of angle iron size 50 X 50 X 6 mm on top bottom and sides fitted with flat iron support of size 25 X 6 mm on mid way horizontally and square bar of size 8 mm at every 100mm vertically including 3 sets of heavy duty MS hinges and aldrop complete duly painted with one coats of red oxide and two coats of approved colour paint and direction of EIC  | sqm  | 90             |                          |                         | Rs. -               |

| Sr. No.  | Items Description  | Unit | Total Quantity | Rate in INR (in Figures) | Rate in Words ( In INR) | Total Amount in INR |
|----------|--|------|----------------|--------------------------|-------------------------|---------------------|
| 11       | Structural steel hot dip galvanized MS angle welded over a base plate including cutting, welding ,hoisting and fixing in position with 3 nos. of 12mm diameter fastners etc. complete as per drawings and direction of Engineer complete etc.  | Kg   | 41068          |                          |                         | Rs. -               |
| 12       | Supply, Installation, Testing & Commissioning of indoor, floor mounted 33 KV switchboard comprising of 2 vertical panels with horizontal top bus bars of Al rated for 800 A, VCBs and LBS, in draw out executions. The VCB shall be rated for 36 KV, 18.4kA. The panels shall be complete with all accessories, hard wares etc. as required for completeness, as per attached specification/ drawing, CSPDCL standards and direction of EIC. and as detailed below: -<br>1no. Panel for controlling OUT GOING with VCB of 1600 A ratings, CTs, PTs, digital Ammeter/ voltmeter/ Static Energy meter, O/C and E/F relay etc.<br>4nos. Panel for controlling outgoing feeders with VCB of 1600A rating, CTs, digital meter, Static Energy Meters, O/C and E/F relay, auxiliary relays etc. it should be connected to existing panel in sub station and direction of EIC. | set  | 2              |                          |                         | Rs. -               |
|          | <b>Total Amount of 33kv system (in INR)</b>  |      |                |                          |                         | Rs. -               |
| <b>A</b> | <b><u>For 11KV System</u></b>  |      |                |                          |                         |                     |
|          | <b>11 KV RMU</b>   |      |                |                          |                         |                     |
| 1        |  |      |                |                          |                         |                     |
| (a)      | Supply, Installation, Testing & Commissioning of floor mounted SF6, motorized type RMU comprising of 2 nos. 12 kV, 630 A LBS for loop in and loop out to form ring main system and 1 no VCB unit shall controlled distribution transformer complete with accessories, hard wares etc. as required for completeness as per attached specification/ drawing, CSPDCL standards and direction of EIC.  | Set  | 7              |                          |                         | Rs. -               |
| (b)      | Supply, Installation, Testing & Commissioning of floor mounted SF6, motorized type RMU comprising of 3 nos. 12 kV, 630 A LBS for loop in and loop out to form ring main system and 1 no VCB unit shall controlled distribution transformer complete with accessories, hard wares etc. as required for completeness as per attached specification/ drawing, CSPDCL standards and direction of EIC.  | Set  | 13             |                          |                         | Rs. -               |
| 2        | Supplying and laying following sizes one number XLPE, steel armoured, aluminium conductor <b>power cable of 11 KV</b> grade in existing <b>RCC/HUME/STONEWARE/METAL/masonry open duct</b> as required.   |      |                |                          |                         |                     |
| a        | 3Cx240 sqmm  | mtr  | 34700          |                          |                         | Rs. -               |
| b        | 3C X 300 sqmm  | mtr  | 250            |                          |                         | Rs. -               |
| c        | 3C X 120 sqmm  | mtr  | 400            |                          |                         | Rs. -               |
| d        | 3Cx 95 sqmm  | mtr  | 3500           |                          |                         | Rs. -               |
| e        | 3C X 70 sqmm   | mtr  | 5500           |                          |                         | Rs. -               |

| Sr. No. | Items Description   | Unit | Total Quantity | Rate in INR (in Figures) | Rate in Words ( In INR) | Total Amount in INR |
|---------|---|------|----------------|--------------------------|-------------------------|---------------------|
| 3       | Supplying and making <b>indoor</b> cable end termination with <b>heat shrinkable jointing kit</b> complete with all accessories including lugs suitable for following size of 3 core, XLPE aluminum conductor cable of <b>11 KV</b> grade as required :   |      |                |                          |                         |                     |
| a       | 240 sqmm  | Each | 66             |                          |                         | Rs. -               |
| b       | 300 sqmm  | Each | 5              |                          |                         | Rs. -               |
| c       | 120 sqmm  | Each | 4              |                          |                         | Rs. -               |
| d       | 95 sqmm   | Each | 6              |                          |                         | Rs. -               |
| e       | 70 sqmm   | Each | 6              |                          |                         | Rs. -               |
| 4       | Supplying and making <b>straight through cable jointing</b> with Heat Shrinkable Jointing Kit complete with all accessories including ferrule suitable for following size of 3 core, XLPE aluminum conductor cable of <b>11 KV</b> grade as required :  |      |                |                          |                         |                     |
| a       | 240 sqmm  | Each | 63             |                          |                         | Rs. -               |
| b       | 300 sqmm  | Each | 1              |                          |                         | Rs. -               |
| c       | 120 sqmm  | Each | 1              |                          |                         | Rs. -               |
| d       | 95 sqmm   | Each | 10             |                          |                         | Rs. -               |
| e       | 70 sqmm   | Each | 13             |                          |                         | Rs. -               |
| 5       | Supply and fixing of <b>11 kV Danger plates</b> as per specification of Discom on the existing poles complete in all respect as per Discom specification.   | Each | 27             |                          |                         | Rs. -               |
| 6       | Earthing with <b>G.I. earth pipe</b> 4.5 mtr long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal and salt as required.  | Set  | 27             |                          |                         | Rs. -               |
| 7       | Construction of plinth for , RMU in RCC construction for installation of RMU including excavation, laying of PCC, neatly dressed, plastered, supply of all materials as required for completeness, as per attached specification/ drawing, CSPDCL standards and direction of EIC.   | cmt  | 15.5628        |                          |                         | Rs. -               |
| 8       | Supplying and erecting chain link mesh fencing for electric sub-station switch yard of 2.5 m approx. height from ground level using angle iron size 50 X 50 X 6 mm erected in C.C.foundation 15 X 15 X 40 cm deep at every 2 metre fitted with flat iron support of size 25 X 6 mm on top, bottom and mid way and chain link mesh 50 x 50 mm aparture and 4 mm dia G.I. hard wire securing and screwing with 2mm dia G.I. wire, G.I. staples, G.I.U-nails or steel pins to the angle iron at every distance of 30 cms, by iron studs complete duly painted with one coats of red oxide and two coats of approved colour paint as per CSPDCL standards and direction of EIC. | Sqm  | 286            |                          |                         | Rs. -               |



| Sr. No. | Items Description  | Unit | Total Quantity | Rate in INR (in Figures) | Rate in Words ( In INR) | Total Amount in INR |
|---------|--|------|----------------|--------------------------|-------------------------|---------------------|
| 9       | Supplying and erecting MS gate of approx. size 3.0 m (W) x 2.0 m (H) in two laps for electric sub-station switch yard fencing frame made of angle iron size 50 X 50 X 6 mm on top bottom and sides fitted with flat iron support of size 25 X 6 mm on mid way horizontally and square bar of size 8 mm at every 100mm vertically including 3 sets of heavy duty MS hinges and aldrop complete duly painted with one coats of red oxide and two coats of approved colour paint as per CSPDCL standards and direction of EIC.  | Sqm  | 120            |                          |                         | Rs. -               |
| 10      | Structural steel hot dip galvanized MS angle welded over a base plate including cutting, welding ,hoisting and fixing in position with 3 nos. of 12mm diameter fastnerrs etc. complete as per drawings and direction of Engineer complete etc.   | kg   | 79516          |                          |                         | Rs. -               |
| 11      | Supply, Installation, Testing & Commissioning of floor mounted Outdoor type package substation with facility for internal lighting, earthing, padlocks etc.Connection between RMU & transformer will be by Aluminium bus bar and connections from transformer to LT ACB. Package Substations will have following equipment.<br>1. HT side Non extensible 12 kv 630 RMU having SF6/Air insulation with 2 nos. LBS and 1 nos VCB for transformer protection having fault rating of 25KA for 1 Sec.<br>2. 11/.433 Kv 500 KVA Oil type Transformer having doubled wound copper winding with A Class insulation.<br>3. LT Side having 800 amp ACB with O/C,E/F protection and having 6 nos 250 amp MCCB for outgoing. The equipment shall be SCADA compatible having communication port and having provision of DT Metering within it, completeness as per attached specification/ drawing, CSPDCL standards and direction of EIC.  | Nos  | 5              |                          |                         | Rs. -               |
| 12      | Horizontal drilling: Horizontal directional drilling along roads for laying XLPE HT/ LT, UG cable, for communication cable along with suitable HDPE Duct at various locations as pointed out by departmental officers, includes Survey of site information collection regarding underground utilities, sensing of utilities by sensing equipment, pit making, pilot drilling, pre-reaming pulling HDPE duct of suitable size in single roll, pulling HT/ LT UG cable through installed HDPE duct, providing barricades and necessary signal lights, closing of pits with excavated earth including cost of HDPE pipe, consolidating pit are, including road restoration/supervision departments, cost of all materials, labour, conveyance, hire charges etc. complete preparation of pit by excavated soil/ hard morum & refilling compacting surface as it is position / horizontal drilling across road for cable laying propose with disturbing present installation as per instruction, Guide line Detail technical specifications as per direction of Engineer in charge | rmt  | 1700           |                          |                         | Rs. -               |

| Sr. No. | Items Description   | Unit | Total Quantity | Rate in INR (in Figures) | Rate in Words ( In INR) | Total Amount in INR |
|---------|---|------|----------------|--------------------------|-------------------------|---------------------|
| 13      | Supply, Installation, Testing & Commissioning of indoor, floor mounted 11KV switchboard comprising of 3 vertical panels with horizontal top bus bars of Al rated for 800 A, VCBs and LBS, in draw out executions. The VCB shall be rated for 12KV, 18.4kA. The panels shall be complete with all accessories, hard wares etc. as required for completeness, as per attached specification/ drawing, CSPDCL standards and direction of EIC. and as detailed below: -<br>1no. Panel for controlling OUTGOING with VCB of 800 A ratings, CTs, PTs, digital Ammeter/ voltmeter/ Static Energy meter, O/C and E/F relay etc.<br>4nos. Panel for controlling outgoing feeders with VCB of 400A rating, CTs, digital meter, Static Energy Meters, O/C and E/F relay, auxiliary relays etc. | set  | 2              |                          |                         | Rs. -               |
|         | <b>Total Amount of 11kv system (in INR)</b>   |      |                |                          |                         | Rs. -               |
|         |   |      |                |                          |                         |                     |

**COST OF ESTIMATES**

**Power Distribution for individual housiq in plot's B6 & C6 at sector-30**

| Sr. No.                          | Items Description   | Unit | Quantity | Rate in INR | Rate in Words ( In INR) | Amount in INR |
|----------------------------------|---|------|----------|-------------|-------------------------|---------------|
| <b>Power Distribution system</b> |   |      |          |             |                         |               |
| 1                                | Supplying and laying following sizes one number XLPE, steel armoured, aluminium conductor <b>power cable of 11 KV</b> grade in existing RCC/HUME/STONEWARE/METAL PIPE as required.  |      |          |             |                         |               |
| a                                | 3Cx240 sqmm   | mtr  | 100      |             |                         | Rs. -         |
| 2                                | Supplying and making <b>indoor</b> cable end termination with <b>heat shrinkable jointing kit</b> complete with all accessories including lugs suitable for following size of 3 core, XLPE aluminum conductor cable of <b>11 KV</b> grade as required :   |      |          |             |                         |               |
| a                                | 240 sqmm  | Each | 6        |             |                         | Rs. -         |
| 3                                | Supply, Installation, Testing & Commissioning of floor mounted Outdoor type package substation with facility for internal lighting, earthing, padlocks etc.Connection between RMU & transformer will be by Aluminium bus bar and connections from transformer to LT ACB. Package Substations will have following equipment.<br>1. HT side Non extensible 12 kv 630 RMU having SF6/Air insulation with 2 nos. LBS and 1 nos VCB for transformer protection having fault rating of 25KA for 1 Sec.<br>2. 11/.433 Kv 500 KVA Oil type Transformer having doubled wound copper winding with A Class insulation.<br>3. LT Side having 800 amp ACB with O/C,E/F protection and having 6 nos 250 amp MCCB for outgoing. The equipment shall be SCADA compatible having communication port and having provision of DT Metering within it, completeness as per attached specification/ drawing, CSPDCL standards and direction of EIC. | nos  | 3        |             |                         | Rs. -         |
| 4                                | Supplying and laying double wall HDPE pipe having corrugation on the outer wall and plan surface on inner wall in ground below road, path etc at a depth not less than 40 cm including excavation, dismantling of road if required and refilling the trench etc. as required.   |      |          |             |                         |               |
| a                                | 63 mm dia   | mtr  | 550      |             |                         | Rs. -         |
| b                                | 90 mm dia   | mtr  | 900      |             |                         | Rs. -         |
| c                                | 120 mm dia  | mtr  | 350      |             |                         | Rs. -         |
| 5                                | Supplying and laying following sizes one number PVC insulated/ XLPE, PVC sheathed, steel armoured, aluminium conductor power cable of 1.1 KV grade in existing RCC/ HUME/ STONEWARE/ METAL/ HDPE pipe as required..   |      |          |             |                         |               |
| a                                | 3.5C x 150 sq. mm.  | mtr  | 430      |             |                         | Rs. -         |
| b                                | 3.5C x 1 20 sq. mm.   | mtr  | 330      |             |                         | Rs. -         |
| d                                | 3.5C x 70 sq. mm.   | mtr  | 240      |             |                         | Rs. -         |

| Sr. No. | Items Description   | Unit | Quantity | Rate in INR | Rate in Words ( In INR) | Amount in INR |
|---------|---|------|----------|-------------|-------------------------|---------------|
| 6       | Supplying and making outdoor end termination with cast resin compound including aluminum lugs and other jointing materials for following size of PVC insulated and PVC sheathed / XLPE aluminum conductor power cable of 1.1 KV grade as required   |      |          |             |                         |               |
| a       | 3.5C x 150 sq. mm.  | Each | 6        |             |                         | Rs. -         |
| b       | 3.5C x 120 sq. mm.  | Each | 10       |             |                         | Rs. -         |
| c       | 3.5C x 70sq. mm.  | Each | 12       |             |                         | Rs. -         |
| 7       | Construction of plinth for , RMU in RM-15 RCC construction for installation of RMU including excavation, laying of PCC, neatly dressed, plastered, supply of all materials as required for completeness, as per attached specification/ drawing, CSPDCL standards and direction of EIC.   | cum  | 8        |             |                         | Rs. -         |
| 8       | Supplying, making <b>Earth Pits of GI pipe</b> of 4.5m long, 40mm dia, providing masonry enclosure, cover plate having locking arrangement, watering pipe, including excavation, refilling with charcoal, salt, excavated soil, accessories, hardwares, making good the damages caused etc as required for completeness and as per attached specification, direction of engineer, CSPDCL standards and Electrical inspectorate standards.   | set  | 8        |             |                         | Rs. -         |
| 9       | Earthing with <b>copper earth plate</b> 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe, with charcoal and salt as required   | set  | 4        |             |                         | Rs. -         |
| 10      | Providing and fixing <b>HT Danger Notice Plate</b> of 250 mm x 200 mm 2mm thick, made of mild steel and vitreous enamelled white on both sides and inscription in signal red colour on front side as per IS-2551 with accessories, hardwares etc as per direction of engineer, CSPDCL standards and Electrical inspectorate standards.  | Each | 8        |             |                         | Rs. -         |
| 11      | Supplying and fixing <b>cable route marker</b> with 10 cm X 10 cm X 5 mm thick G.I. plate with inscription there on, bolted/ welded to 35 mm X 35 mm X 6 mm angle iron, 60 cm long and fixing the same in ground as required.   | Each | 40       |             |                         | Rs. -         |
|         | MDB   |      |          |             |                         |               |
| 12      | Fabrication, supply, installation, testing and commissioning of cubicle type compartmentalized wall/ floor mounted power cum <b>control panel board</b> of specified size and depth above 300 mm and upto 450mm made out of not less than 2 mm thick CRCA MS sheet with suitable size compartments for bus bars, switchgears and necessary cutouts for voltmeters, ameters ets as per specifications including powder coating painting with busbars, switchgears and other accessories etc complete as required as following:.<br>4 strip al bus bar of size 50 x 5mm and 300amps (1no.)<br>analog type 0-500 amp ammeter of size 100x100 (NS) (1no.) | Set  | 10       |             |                         | Rs. -         |

| Sr. No.   | Items Description  | Unit | Quantity | Rate in INR | Rate in Words ( In INR) | Amount in INR |
|-----------|--|------|----------|-------------|-------------------------|---------------|
|           | analog type 0-500 volt voltmeter of size 100x100 (NS) (1no.)   |      |          |             |                         |               |
|           | selector switch fro voltmeter (1no.)   |      |          |             |                         |               |
|           | selector switch fro ammeter (1no.)   |      |          |             |                         |               |
|           | 230 volt LED type indicating lamp (3nos.)  |      |          |             |                         |               |
|           | 4 pole MCCB, 250A, 35KA (for Transformer Panel) (1no.)   |      |          |             |                         |               |
|           | 4 Nos 4 pole, 63A MCCB, 35ka as outgoing feeders   |      |          |             |                         |               |
| <b>13</b> | Supplying and laying following sizes one number XLPE insulated, PVC sheathed, steel armoured, aluminium conductor power cable of 1.1 KV grade in existing RCC/ HUME/ STONEWARE/ METAL pipe as required.  |      |          |             |                         |               |
| <b>a</b>  | 3.5 x 50 sq. mm.   | mtr  | 850      |             |                         | Rs. -         |
| <b>b</b>  | 3.5 x 25 sq. mm.   | mtr  | 700      |             |                         | Rs. -         |
| <b>c</b>  | 4x10 sqm (for domestic connection)   | mtr  | 1110     |             |                         | Rs. -         |
| <b>d</b>  | 2x6 sqm  | mtr  | 150      |             |                         | Rs. -         |
| <b>14</b> | Supplying and making end termination with brass compression gland and <b>aluminum lugs</b> for following size armoured aluminum conductor power cable of 1.1 KV grade as required.   |      |          |             |                         |               |
| <b>a</b>  | 3.5 x 50 sq. mm.   | Each | 48       |             |                         | Rs. -         |
| <b>b</b>  | 3.5 x 25 sq. mm.   | Each | 16       |             |                         | Rs. -         |
| <b>c</b>  | 4x10 sqm (for domestic connection)   | Each | 266      |             |                         | Rs. -         |
| <b>d</b>  | 2x6 sqm  | Each | 40       |             |                         | Rs. -         |
| <b>15</b> | LT PANNAL (HOUSING CONNECTION )  |      |          |             |                         |               |
|           | Design,Fabrication,supply,installation,testing and commissioning of pedestal mounted Block Main Power Board, made out of 2 mm thick CRCA sheet steel, cubicle type,FRLSee standing,dust/vermin/ weather proof with busbars, switchgears,earth bus etc including powder coated painting along with accessories,hardwares etc. required for completeness and as per attached specification, direction of Engineer, CGPWD standards and Electrical Inspectorate standards. The panel box shall house : 1 No 4 pole 63A isolator as Incomer ; 100A four pole Al busbrs 6 Nos 32 TP MCB C series, 10kA as outgoing feeders:6 Nos lockable compartments for housing kWh meters Interconnection by Copper insulated leads(DOUBLE DOOR TYPE) |      |          |             |                         |               |
|           | 1 Set of 100A 4P Aluminium Bus Bar with colour coded PVC Sleeves   | Each | 26       |             |                         | Rs. -         |
|           | 63 A Isolator  |      |          |             |                         |               |
|           | 32A TP MCB   |      |          |             |                         |               |
|           | LED indicating lamp  |      |          |             |                         |               |
|           | Acrelik sheet  |      |          |             |                         |               |
|           | power contactor  |      |          |             |                         |               |

| Sr. No.                    | Items Description  | Unit | Quantity | Rate in INR | Rate in Words ( In INR) | Amount in INR |
|----------------------------|--|------|----------|-------------|-------------------------|---------------|
| 16                         | Supplying and laying PVC pipe in ground below road, path etc at a depth not less than 40 cm including excavation, dismantling of road if required and refilling the trench etc. as required.   |      |          |             |                         |               |
| a                          | 20 mm dia  | mtr  | 1000     |             |                         | Rs. -         |
| b                          | 40 mm dia  | mtr  | 783      |             |                         | Rs. -         |
| 17                         | Providing and fixing wooden board of suitable size for energy meter etc complete as required   | Each | 129      |             |                         | Rs. -         |
| 18                         | Providing and fixing porcelain re-wireble fuse carrier and base unit on wooden board including drilling holes on the board, screws,earthing connections and etc. as required   |      |          |             |                         |               |
| a                          | 16 amps  | Each | 40       |             |                         | Rs. -         |
| b                          | 32 amps  | Each | 262      |             |                         | Rs. -         |
| 19                         | Horizontal drilling: Horizontal directional drilling along roads for laying XLPE HT/ LT, UG cable, for communication cable along with suitable HDPE Duct at various locations as pointed out by departmental officers, includes Survey of site information collection regarding underground utilities, sensing of utilities by sensing equipment, pit making, pilot drilling, pre-reaming pulling HDPE duct of suitable size in single roll, pulling HT/ LT UG cable through installed HDPE duct, providing barricades and necessary signal lights, closing of pits with excavated earth including cost of HDPE pipe, consolidating pit are, including road restoration/supervision departments, cost of all materials, labour, conveyance, hire charges etc. complete preparation of pit by excavated soil/ hard morum & refilling compacting surface as it is position / horizontal drilling across road for cable laying propose with disturbing present installation as per instruction, Guide line Detail technical specifications as per direction of Engineer in charge | Rmt  | 76       |             |                         | Rs. -         |
| <b>Total Amount in INR</b> |  |      |          |             |                         | Rs. -         |