

29/07/2025

# REHABILITATION OF 15 MVA, 33/11KV INJECTION SUB-STATION AND UPTH RING **TRANSFORMERS**

**TOTAL COST OF UNAVAILABLE MATERIALS N12,491,000**

**LABOR COST:**

1. 33KV OVERHEAD LINE RECONSTRUCTION N1,500,000
2. SWITCH YARD RECONSTRUCTION N5,000,000

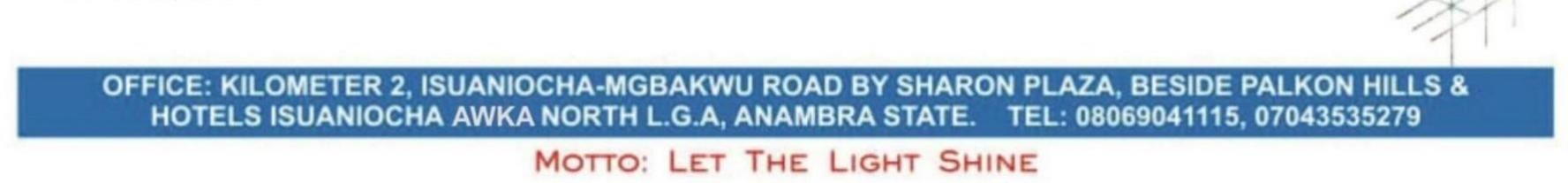
C. TRANSFORMER DRYING AND OIL FILTRATION N6,060,000

D. UPTH DOWNSTREAM N10,000,000

E. REMEDIAL WORKS AT MCR 2 N5,000,000

# TOTAL COST OF LABOR N27,560,000

**GRAND TOTAL N40,051,000**

Kindly make payment through our account below;

Acc. No.: 1026319868

Acc. Name: Dennic Electrical Construction Nig. LTD.

Bank: UBA

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Dan. Ntukokwu Managing Director

1. **OVERHEAD MATERIALS**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/ N** | **DESCRIPTION** | **QTY** | **UNIT** | **RATE** | **AMOUNT** |
| 1 | 40Feet Reinforced Concrete  Poles | 2 | Nos | 260,000 | 520,000 |
| 2 | Silicon Disc Insulator 33 KVA | 12 | Nos | 12,000 | 144,000 |
| 3 | Socket Adopter | 12 | Nos | 2,000 | 24,000 |
| 4 | 6 Bolt Clamp Big Size | 12 | Nos | 7,000 | 84,000 |
| 6 | 33 KVA Gang Isolator | 2 | Set | 480,000 | 960,000 |
| 6 | D-Fuse 33KVA | 1 | Set | 140,000 | 140,000 |
| 7 | Lighting Arrester | 2 | Set | 100,000 | 200,000 |
|  | **TOTAL** |  |  |  | **2,072,000** |

# LABOUR: = N1,500,000

Laying of cable with dressing

Tree cutting

Excavation

Transportation of materials

Line Stringing

1. **SWITCH YARD/SUBSTATION MATERIALS.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/N** | **DESCRIPTION** | **QTY** | **UNIT** | **RATE** | **AMOUNT** |
| 1 | Gang Isolator | 3 | Sets | ----- | ---- |
| 2 | Lighting Arrester Silicon | 3 | Set | ---- | ---- |
| 3 | Pot Insulator 33kv | 15 | Nos | ----- | ----- |
| 4 | Voltage Transformer | 1 | Set | ------ | ------- |
| 5 | Current Transformer(Control Breaker) | 1 | Set | ------------ | ---------- |
| 6 | 150mm Aluminum Bare Conductor  ACSR | 150 | M | ---------- | ------- |
| 7 | Bi-metallic cable log  Copper/Aluminum | 36 | Nos | 5,000 | 180,000 |
| 8 | XLPE Cable High Voltage 33kv 300mm² Single Core | 45 | M | ------- | -------- |
| 9 | Raychem Kit 300mm² 33kv | 2 | Sets | 25,000 | 50,000 |
| 10 | XLPE Cable 11kv 240mm² Single  Core | 210 | M | -------- | ------ |
| 11 | Raychem Kit 185/240mm² 11kv | 2 | Sets | 20,000 | 40,000 |
| 12 | Cable Lugs 240mm² | 15 | Nos | 6,000 | 90,000 |
| 13 | Scotch Tape | 10 | Nos | 4,000 | 40,000 |
| 14 | Lassovic Tape PVC | 3 | Rolls | 10,000 | 30,000 |
| 15 | Cable Lugs 150mm copper/Aluminum | 140 | Nos | 4,000 | 560,000 |
| 16 | Angle Boot | 2 | Sets | 50,000 | 100,000 |
| 17 | Stirrup Insulation For Gang Handle | 3 | Sets | 20,000 | 60,000 |
| 19 | Bolt and Nuts(21,4,6) | 20 | Pcs | 1,000 | 20,000 |
|  | **TOTAL** |  |  |  | **1,170,000** |

**Installation ---------------- 5,000,000**

**EARTHING PROTECTION SYSTEM MATERIALS.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/N** | **DESCRIPTION** | **QTY** | **UNIT** | **RATE** | **AMOUNT** |
| 1 | Copper Wire 70mm | 250 | M | ------ | -------- |
| 2 | Earth Rod Original 9 feet copper | 20 | Nos | ------ | ---------- |
| 3 | Galvanize Pipe (Fuse) | 8 | Nos | ----- | ------- |
| 4 | Charcoal | 12 | Bags | 10,000 | 120,000 |
| 5 | Earth Clamp | 12 | Nos | 5,000 | 60,000 |
| 6 | 35mm Copper Wire Overhead  Protection On The Switch | 150 | M | ---- | ------ |
| 7 | 2.5mm Wire 3 core | 200 | M | ------ | -------- |
| 8 | Shirup Slap | 6 | Sets | 10,000 | 60,000 |
| 9 | Excavation and backfill Of Earth Pit | 6 | Holes | 100,000 | 600,000 |
| 10 | Greasing Of Earth Points | 3 | Tins | 10,000 | 30,000 |
| 11 | Industrial Salt | 8 | Bags | 25,000 | 200,000 |
| 12 | (4X4)Feet earth mat | 6 | No | ------- | ----- |
|  | **TOTAL** |  |  |  | **1,070,000** |

1. **TRANSFORMER DRYING/OIL FILTRATION.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/N** | **DESCRIPTION** | **QTY** | **UNIT** | **RATE** | **AMOUNT** |
| 1 | Hiring of a 40-ton crane to  Open the  Transformer Coil And tanking of the Transformer oil | 2 | Days | 500,000 | 1,000,000 |
| 2 | Drying Of The Coil/Insulation | 1 | NO | 1,500,000 | 1,500,000 |
| 3 | Insulation Materials | 8 | Nos | 20,000 | 160,000 |
| 4 | Gasket | 4 | Nos | 50,000 | 200,000 |
| 5 | Filtration Of The Transformer oil | 1 | No | 700,000 | 700,000 |
| 6 | Topping of Transformer Oil | 2 | Drums | 500,000 | 1,000,000 |
| 7 | Storage Tank For Oil |  |  |  | 500,000 |
| 8 | Installation |  |  |  | 1,000,000 |
|  | **TOTAL** |  |  |  | **6,060,000** |

1. **UPTH DOWNSTREAM (REHABILITATION OF EIGHT RING SUBSTATIONS)**
2. Bush clearing
3. General substation test for commissioning
4. Repairing and repainting of the feeder pillars
5. Installation of intermediate cable in two sub stations
6. Earth improvement in vandalized substations
7. Installation of rapid rupture fuses in the feeder pillars
8. Installation of 500KVA transfers at the mortuary and officers mess
9. Civil work in affected substations.
10. Evacuation of power from MCR3/ laying and joining of vandalized underground cable for the ring transformers.
11. Laying of underground cable from Pediatrics to Officers mess substations (120m)
12. **Labour cost**  = **N10,000,000**

**MATERIALS FOR EVACUATION OF POWER FROM MCR3 TO RING TRANSFORMERS**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/N** | **DESCRIPTION** | **QTY** | **UNIT** | **RATE** | **AMOUNT** |
| 1 | 300mm² x 1 Core 11kv XLPE Amoured Cable | 1,200 | m | -- | -- |
| 2 | RayChem Joint Kit (300mm²) 11kv | 24 | Nos | 35,000 | 840,000 |
| 3 | RayChem Termination Kit (300mm²) 11kv | 6 | Set | 20,000 | 120,000 |
| 4 | 300mm² Cable Lug | 18 | Nos | 9,000 | 162,000 |
| 5 | 50mm² Bare copper wire | 400 | M | --- | -- |
| 6 | 500mm² Cable Lug | 24 | Nos |  |  |
| 7 | 50mm² Cable Lug | 40 | Pcs | 700 | 28,000 |
| 8 | 400amps Rapid rupture fuse | 96 | Nos | 5,500 | 528,000 |
| 9 | 800amps Rapid rupture fuse | 24 | Nos | 8,500 | 240,000 |
| 10 | 500kva 11/0.415 Transformer secondary coil bushing | 12 | Nos | 25,000 | 300,000 |
| 11 | Lockable gate | 2 | Nos | 50,000 | 100,000 |
| 12 | Cements | 6 | Bags | --- | --- |
| 13 | 6inches Block | 200 | Pcs | 700 | 140,000 |
| 14 | 30ton Granite | 1 | Trip | --- | --- |
| 15 | 11kv RMU Outdoor bushing | 6 | Nos | 25,000 | 150,000 |
| 16 | Sharp Sand | 5 | Trips | 81,000 | 405,000 |
| 17 | 0.40x0.43 Concrete kerbs | 235 | Nos | 1,400 | 329,000 |
| 18 | Transformer oil | 2 | Drums | 500,000 | 1,000,000 |
|  | **TOTAL** |  |  |  | **4,342,000** |

**SEGREGATION OF 11KVA FEEDERS FROM UNIPORT POWER HOUSE TO MCR2**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/N** | **DESCRIPTION** | **QTY** | **UNIT** | **RATE** | **AMOUNT** |
| 1 | 40 Feet Reinforced  Concrete  Pole | 11 | Nos | **\_\_\_\_\_** | \_\_\_\_\_\_\_ |
| 2 | 6 Feet Channel Iron | 5 | Nos | ----- | ------ |
| 3 | 11 KV Silicon Disc Insulator | 15 | Nos | 7,000 | 105,000 |
| 4 | Tension Clamps | 15 | Nos | 7,000 | 105,000 |
| 5 | Socket Adopter | 15 | Nos | 2,000 | 30,000 |
| 6 | 50mm Stay Wires | 300 | m | ------ | ----- |
| 7 | Stay Block | 20 | Nos | ------ | -------- |
| 8 | 11KVA Stay Insulators | 20 | Nos | 2,000 | 40,000 |
| 9 | Bimetallic Cable Lug 150mm | 30 | Pcs | 5,000 | 150,000 |
| 10 | 150mm Copper cable Lug | 20 | Pcs | 3,500 | 70,000 |
| 11 | 150mm ACSR | 120 | m | ----------- | ------ |
| 12 | 11Kv Pot Insulator Silicon | 15 | Nos | 22,000 | 330,000 |
| 13 | Bolts and Nuts (8,6,12) | 60 | Pcs | 1,000 | 60,000 |
| 14 | Stay Rods | 20 | Nos | 15,000 | 300,000 |
|  | **TOTAL** |  |  |  | **1,190,000** |

**Labour ------------------------ 2,500,000**

**REMEDIAL WORKS AT MCR2:**

1. **INSTALLATION OF AUXILIARY TRANSFORMER AT MCR2 UNIPORT.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/N** | **DESCRIPTION** | **QTY** | **UNIT** | **RATE** | **AMOUNT** |
| 1 | 50KVA Pole Mounted Transformer | 1 | Nos | ------ | ----- |
| 2 | 33kv Gang Isolator | 1 | Nos | 480,000 | 480,000 |
| 3 | 33kv D-Fuse | 1 | Nos | 140,000 | 140,000 |
| 4 | Lighting Arrester Silicon | 1 | Nos | 100,000 | 100,000 |
| 5 | 100 Amps Feeder Pillar | 1 | Nos | ----- | ----- |
| 6 | 9 Feet Channel Iron (original) | 10 | Nos | 55,000 | 550,000 |
| 7 | Disc Insulator | 12 | Nos | 12,000 | 144,000 |
| 8 | Tension Clamp | 12 | Nos | 7,000 | 84,000 |
| 9 | Socket Adapter | 12 | Nos | 2,000 | 24,000 |
| 10 | Bolts and Nuts (6,8,10,12) 10 Each | 80 | Nos | 1,000 | 80,000 |
| 11 | Square Washer | 80 | Pcs | 250 | 20,000 |
| 12 | 50mm Copper Wire | 60 | m | -------- | ----- |
| 13 | 150mm ACSR | 300 | m | --------- | ---------- |
| 14 | 40 F Reinforced Concrete Pole | 2 | Nos | -------- | --------- |
| 15 | 95mm2 0.415 x LPE Cable | 6 | m | ----- | ----- |
| 16 | 70mm x 4C 0.145 X LPE Cable | 20 | m | ----- | ----- |
| 17 | 95mm Cable Lug | 10 | pcs | 1,000 | 10,000 |
| 18 | 70mm Cable Lug | 10 | pcs | 1,000 | 10,000 |
| 19 | 50mm Cable Lug | 10 | pcs | 700 | 7,000 |
| 20 | Earth Rod 26mm Heavy Duty | 9 | Nos | 6,000 | 51,000 |
| 21 | Animal Dung and Charcoal (4 bags each) | 8 | bags | 10,000 | 80,000 |
| 22 | 19 Bolts and Nuts with Washer (2,4,6 inches) 10 each | 60 | pcs | 7,00 | 42,000 |
|  | **TOTAL** |  |  |  | **1,822,000** |

**Labour ------------- 1,000,000**

# INSTALLATION OF THE FEEDER RISERS IN MCR2 AND LAYING OF INTERMEDIATE CABLES FROM UNIPORT POWER HOUSE TO MCR2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/N** | **DESCRIPTION** | **QTY** | **UNIT** | **RATE** | **AMOUNT** |
| 1 | 300mm x 1 Core XLPE caple | 175 | m | --- | --- |
| 2 | 300mm Cable Lug | 6 | Pcs | ------ | -------- |
| 3 | 300mm RayChem Terminating Kit | 1 | Set | ---- | ---- |
| 4 | Sharp sand | 1 | Trip | --- | ----- |
| 5 | D-fuse 11kv | 5 | Set | 95,000 | 475,000 |
| 6 | Lightning Arrester | 5 | Set | 45,000 | 225,000 |
| 7 | 50mm Corper Wire | 50 | m | ---- | --- |
| 8 | 6ft Channel Iron | 15 | Nos | ---- | ---- |
| 9 | Bots and Nuts (8, 10 inches) | 60 | Nos | 1,000 | 60,000 |
| 10 | Earthrod | 5 | Nos | 6,000 | 30,000 |
| 11 | 15mm Corper Cable Lug | 50 | Nos | 700 | 35,000 |
|  | **TOTAL** |  |  |  | **825,000** |

**LABOUR --- N1,500,000**



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**Engr. Dan. Ntukokwu**

Managing Director

29/07/2025