

### NAYA RAIPUR DEVELOPMENT AUTHORITY

# Tender Document for Supply, Installation, Testing and Commissioning of HT Panel, HT Meter, Its Cabling & Termination for Commercial Complex & Office Complex Buildings at sector-21 & 24 of Naya Raipur

(Following Three-Envelope Tender Procedure)

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

NIT No.: 109/HT-DS/CC&OC/ELECT /CE (E)/NRDA/2016-17, Naya Raipur Dated: 03.10.2016

**Issued by:** Chief Executive Officer,

Naya Raipur Development Authority (NRDA)

4th Floor, Paryavasbhawan, 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 & singed 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:// nayaraipur.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')

Signature of Contractor	Signature of NRDA

### Naya Raipur Development Authority (NRDA) Raipur, Chhattisgarh

### Document details

		Document	ietaiis	
	of work :"Supply, Installat g & Termination for Comme ".".			
Name	of Tenderer:			
Detai	ls			
a)	Cost of Tender Document	: Rs		
b)	EMD	: Rs		
				Signature of Tendere
				Date:

	C: (AIDDA
Signature of Contractor	Signature of NRDA

### Cost Abstract

Supply, Installation, Testing and Commissioning of HT Panel, HT Meter, HT Cabling & Termination for Commercial Complex /Office Complex building at sector-21 & sector-24 of Naya Raipur

Sr. No.	Item Description	Total Amount in Rs (In Figure)	Total Amount in Words (Rs) (In Words)
1	Supply, Installation, Testing and Commissioning of HT Panel, HT Meter, HT Cabling & Termination for Commercial Complex /Office Complex building at sector-21 & sector-24 of Naya Raipur		
	Total Amount of Electrical work		

	Bill of quantity					
Sr.				Rate(In INR)	Rate(In INR)	
No.	Item Description	Qty.	Unit	(In Figure)	(In Words)	Amount (In INR)
	BUILDING - A (C03)					
1	HV EQUIPMENTS					
	33 KV, MULTIPLE VERTICALS HT PANEL AS BELOW:					
	Supply, Installation, Testing & Commissioning of indoor floor mounted 33KV switchboard comprising of 5 vertical panels with horizontal top bus bars of AL rated for 800 A with VCBs, in draw out executions. The VCB shall be rated for 36kV, 1600 A, 26kA for 3 sec., 24 Volt DC power pack complete & suitable for operating the control devices of HT panel. The panels shall be complete with all accessories with suitable capacity of Ammeter , Voltmeter & all internal connections with 2.5 sq. mm FRLS insulated copper conductor cable & hard wares etc. as required for completeness, as per attached specification/ drawing, CSPDCL standards and direction of EIC and as detailed below:					
	Incomer					
	1 No. Panel for controlling incomer with VCB having motorised spring charge closing mechanism with antipumping protection and trip free features ,motor voltage 230V AC and tripping / closing coil of 24 DC voltage, CTs 150/75/5A ,core-1 class 1.0 accuracy, 15 VA current transformer (cast resin) for metering & core-2 class 5P10 accuracy current transformer (cast resin) for protection. PTs of ratio 33kV/√3 : 110V/√3, 100VA, CL-1 per phase with control fuse. digital Ammeter/ voltmeter/ Static Energy meter, O/C, E/F relay etc. The cable chamber shall have 3 nos. 20kV, 10kA station class, valve type lightning arrester.					
	Outgoing for transformer protection					
	Multiple Nos.(5/4) Panel for controlling distribution transformer with VCB 1600A, 26 kA for 3 second, horizontal drawout type, CTs 50/25/5A, 15 VA burden, core 1 ,class 1.0 accuracy & core-2, 5P10 current transformer (cast resin) for protection for metering, digital meters, Static energy Meters etc.					
	Each breaker complete with following common accessary :-					
	230V AC spring charge motor.					
	24V DC shunt trip coil.					
	Triple pole IDMTL over current and earth fault relay with instantaneous high set over current and earth fault relay should be SCADA compatible having 61850 protocol.					
	Master trip lock out relay.					
	Trip circuit supervision relay.					
	Auxillary relay.					
	Antipumping relay.					
	Ammeter (0-50A) with three way ON and OFF selector switch.					
	Breaker control switch : (TNC)					
	Circuit breaker ON / OFF / Autotrip / Spring charged / Trip circuit healthy indicating					
	lamp/Draout indication (LED type). It should have sufficient no. of NO/NC no volt					
	contacts for BMS integration.					
-	100W anticondensation space heater with thermostat.  6 Window Annunciator with Audio & Visual Alarm and ccept/Test/Reset Push					
	Button.					
-	NOTE- ABOVE PANEL SHOULD BE RS485 COMPATIBILE					

Sr. No.	Item Description	Qty.	Unit	Rate(In INR) (In Figure)	Rate(In INR) (In Words)	Amount (In INR)
NO.				(III Figure)	(III Words)	
1.1.1	33 KV, 5 VERTICALS HT PANEL :	1	No.			-
112	33 KV, 4 VERTICALS HT PANEL :	2	No.			-
1.1.2	33 KV, 4 VERTICALS HT PAINEL.		INO.			-
2	Supplying and laying following sizes one number XLPE, steel armoured, aluminium conductor power cable of 33 KV grade in existing RCC/ HUME/ STONEWARE/ METAL pipe as required					
2.1	3 x 300 sq mm	860	Rmt			-
3	Supplying and making indoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for following size of 3 core, XLPE aluminum conductor cable of 33 KV grade as required:					
3.1	300 sq. mm	24	Each			-
	METERING UNIT					
4	Supplying/Receiving, Installation, Testing and Commissioning of Powder coated, 14 SWG CRCA sheet steel enclosed 33 KV H.T. Metering Panel complete with the following:  1set of 33/ 3KV / 110/ 3 Volt, 100 VA burden & accuracy class 0.5, single phase construction, dry type cast resin PT.  3 Nos. of dual core 100/5-5A, 15 VA burden, accuracy class 0.5, 33 KV cast resin CTs. The short circuit ratio should be 25KA for 1 sec One Set of Phase Indicating Lamps.  2 Sets of HRC fuses with fuse base (H.T. Fuse - 1A & LT fuse 2-6A).  2 Nos. indoor cable end box for suitable for 3C x 300 sq.mm. 33 KV(E), aluminium conductor XLPE Ar. cable (Incoming & Outgoing cable).	2	Each			-
	1 No. approved digital Trivector meter with MDI in KVA of accuracy class - 0.5.					
5	Earthing with G.I. earth pipe 4.5 metre 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	38	Set			-
6	Supplying and laying 25 mm X 6 mm G.I. strip at 0.50 metre below ground as strip earth electrode, including soldering, excavation and refilling the trench etc. as required.	300	Meter			-
	Total of Electrical work					-