

MAHARASHTRA STATE ELECTRICITY TRANSMISSION CO. LTD.

Name of Office : Executive Engineer, EHV O&M Division, Latur.
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Ref. No. : EE/EHV/O&M/LTR/TS/0055

Date: - 09 JAN 2018

E-Enquiry

Sub :- E-Enquiry for work of supply, erection and commissioning of additional 132 kV Bay equipments in existing 132 kV Harangul Bay (Incomer Bay) at 132 kV Nilanga S/s under EHV (O&M) Dn, Latur.

Sealed and super scribed quotations are invited for the work as specification given below. The quotation giving full particulars should reach this office on or before 12.01.2018 up to 15.00 Hrs positively. The Taxation liability should show separately. Rights of cancellation/modification of E-Enquiry at any stage, is reserved at this office.

Schedule-A (Supply Portion)

<u>Sr. No.</u>	<u>Particulars</u>	<u>Details / Ratings</u>	<u>Unit</u>	<u>Qty</u>	<u>Rate/ Unit</u>	<u>GST</u>	<u>Amount (Including Tax)</u>
1	2	3	4	5	6	7	8
1	Supply of Palm for CB (C18a)	Aluminium, 4-holes, Comp. type	No	6			
2	Supply of Palm for Iso (C15a)	Electrolytic copper Comp. type	No	12			
3	Supply of Stud, single (C10b) for Zebra CT/ PT	Electrolytic copper Comp. type	No	6			
4	Supply of Earthing strips	75 x 10 mm, MS	Rmt	0			
5	Supply of Earthing strips	50 x 8 mm, MS	Rmt	50			

6	Supply of Earthing strips	50 x 8 mm, GI	Rmt	80			
7	Supply of Marshalling box	60 terminals, outdoor type	Nos	1			
8	Supply of Marshalling box	120 terminals, outdoor type	Nos	0			
9	Supply of PVC pipes	110 mm Dia, rigid PVC, Conforming to IS 13952 and of pressure 4 Kg/ Sq Cm along with necessary fittings conforming to IS 14735 amended up-to-date	Rmt	40			
Sub-Total - A (Amount Including Tax-Rs.)							

Schedule-B (Erection Portion)

Sr. No.	Particulars	Details / Ratings	Unit	Quantity	Rate/ Unit	GST	Amount (Including Tax)
1	2	3	4	5	6	7	8
A	<u>132 kV SWITCHYARD</u>	-	-	-	-	-	-
1	Erection of 132kV SF6 Circuit breaker on casted foundation with erection of support structure its levelling, mechanism, pole, required piping cabling and termination upto MB, earthing of CB Poles and structures, MB etc. with filling of SF6 gas if required to specified pressure, fixing of related accessories etc. Complete as directed by the Mfg. manual and assisting testing and attending the problems if any up to commissioning (SF6 shall be supplied by MSETCL).	1600A - 145kV, SC rating 40KA/3 Sec. Mechanically Gang Operated	Set	1			
2	Dismantling of BPI from the support structure with removal of jumper from terminal clamp with removal of earthing connection etc. complete for 132kV BPI.	145kV, 3625mm Cr. , 4KN	No.	3			
3	Erection of Current Transformer on provided support structure WITH NECESSARY MODIFICATION with connecting the terminal connectors and jumpers on both sides with required connection with available cables to the terminal box for 145kV CT	145kV, 800-400-200/1A, 5C	No	3			
4	<u>Earthing (Including cost of salt / coal / Black soil)</u>	-	-	-	-		
4.1	Laying the provided M.S. Flat in ground at @ 0.6 meter below ground with welding as per prescribed method at required place, bends and with required fabrication and connecting the same to the earth pit / or at any other place as directed		Rmt	50			

4.2	Earthing of Equipment /Gantry/Support Structure with provided MS Flat with bending / fabrication welding etc. making it flush with support structure / Equipment as directed with connecting the same with required size nut bolts (to be provided by agency)		Per Connection	20			
5	Laying of Control / Power cables on existing cable trays in cable trenches with aluminum tags at both ends with binding the same on cable trays at suitable intervals with dressing, with segregation of Control & Power Cables separate on cable trays rows as directed, the cables will be provided by MSETCL in drums, the same are required to be transported to required place and unwounded with turntable smoothly avoiding the damages to the cables						
5.1	2 core, 2.5 sq.mm	Steel Armoured, FRLS Copper Control Cable	Rmt	100			
5.2	4 core, 2.5 sq.mm.	Steel Armoured, FRLS Copper Control Cable	Rmt	500			
5.3	7 core, 2.5 sq.mm	Steel Armoured, FRLS Copper Control Cable	Rmt	90			
5.4	12 core, 2.5 sq.mm	Steel Armoured, FRLS Copper Control Cable	Rmt	150			
5.5	19 core, 2.5 sq.mm	Steel Armoured, FRLS Copper Control Cable	Rmt	100			
6	Cable termination at both ends as per termination schedule provided with cable glanding at both ends panels / MB etc. with drilling of suitable size holes for cable glands as per cable sizes with spare holes as directed, glanding the cable with proper size glands to make it tight and firm, checking the cable cores from both side for continuity with suitable arrangement and providing the cross feruling as per cable schedule to both ends of cable and crimping of suitable size required lugs as per cable core size with suitable crimping tool making it tight connection and then dressing up the same in TB's provided in panels / MB etc. as directed for following cables with sealing of spare holes... BY PROVIDING REQUIRED SIZE LUGS, GLANDS AND FERULES						
6.1	2 core, 2.5 sq.mm	Steel Armoured, FRLS Copper Control Cable	Per cable	4			

6.2	4 core, 2.5 sq.mm.	Steel Armoured, FRLS Copper Control Cable	Per cable	20			
6.3	7 core, 2.5 sq.mm	Steel Armoured, FRLS Copper Control Cable	Per cable	8			
6.4	12 core, 2.5 sq.mm	Steel Armoured, FRLS Copper Control Cable	Per cable	4			
6.5	19 core, 2.5 sq.mm	Steel Armoured, FRLS Copper Control Cable	Per cable	4			
7	Erection of Control and Relay panels / BCU's in Main Control Room or in BCR with suitable anchoring as directed with cables glanding and termination etc. with earthing connection as directed						
7.1	132/33kV T/F Relay & Control panel	For 2 winding T/F Numerical type Differential Protection	Panel	1			
8	Erection of Marshalling boxes / lighting boxes with grouting of H.G. assembly along with structure etc.						
8.1	Fixing of MB by providing the required MS frame on cable trench or at other suitable place as directed with grouting of anchor bolts etc. with earthing connection complete		No.	1			
9	Providing & laying of PVC pipes for control cable including excavation, back filling along with bends, tees as required						
9.1	a) 6" (15 cm)		Rmt	20			
9.2	b) 4" (10 cm)		Rmt	20			
10	Jumpering : Replacement of jumper connection with its removal with spacers from the equipment terminals with removal of connector and its re-erection with provided terminal clamps at both ends						
10.1	a) 132kV Jumps (Single)		No	15			
Sub Total-B (Amount Including Tax-Rs.)							

Schedule-C (Civil Part)

SN	Description of Item	Qty.	Unit	Basic Rate	GST	Amount (Including Tax)
1	Excavation for foundation in earth, soils of all types sand, gravel and soft murum including removing the excavated material upto a distance of 50 m. beyond the building area stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering Including shoring and strutting etc. Complete including all lifts.	1.73	Cum.			
2	Excavation for foundation in hard murum and boulders including removing the excavated materials upto a distance of 50 meters beyond the building area and lift upto 1.5 mt., stacking and spreading, necessary dewatering unless provided elsewhere, preparing the bed for the foundation and required backfilling, ramming, watering, shoring and strutting etc. complete. As directed including all lift.	2.31	Cum.			
3	Excavation for foundation in Soft rock / old cement / lime masonry foundation including removing the excavated materials upto a distance of 50 meters beyond the building area and lift upto 1.5 mt., stacking, necessary dewatering unless provided elsewhere, preparing the bed for the foundation and required backfilling with available earth / murum, ramming, watering etc. complete. as directed excluding shoring and strutting including all lifts.	3.47	Cum.			
4	Excavation for foundation in hard rock by chiseling wedging including removing the excavated materials upto a distance of 50 meters beyond the building area and lift upto 1.5 mt., stacking, necessary dewatering unless provided elsewhere, preparing the bed for the foundation and required backfilling with available earth / murum, ramming, watering etc. complete. as directed excluding shoring and strutting for lift upto 1.5 m.	0.58	Cum.			

5	Excavation for foundation in hard rock by chisling, wedging, line drilling etc. Including trimming and leveling the bed, removing the Excavated material upto a distance Of 50 M. beyond the building Area and all lifts, stacking as directed, dewatering and back filling with available earth / murum, ramming, watering complete. (Lift above 1.50 Meter) Spec No.Bd.A.6 Page No 260	1.00	Cum.			
6	Providing and laying in situ, cement concrete in 1:4:8 of trap / granite / quartzite / gneiss metal for foundation and bedding including bailing-out water manually, formwork, compacting, covering newly laid concrete by gunny bag, plastic or tarpaulin, curing etc. complete. (Wooden planks / shuttering will not be allowed)	0.58	Cum.			
7	Providing and fixing in position steel bar reinforcement HYSD of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams, columns, canopies, staircases, newels, chajjas, lintels, pardies, coping, fins, arches, etc. as per detailed designs, drawings and schedules, including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required etc. complete. Spec. No.:BdF - 17 Page No. 306	0.25	M.T.			
8	Providing and casting in situ cement concrete M-20 of trap metal for R.C.C.. work like raft, grillage, strip, foundations and footing of R.C.C. Columns and steel stanchions, including bailing out water manually, centering, formwork, compacting, finishing and curing etc. complete. (Excluding steel reinforcement) Spec. No.:BdF -3 Page No. 298	1.13	Cum.			
9	Providing and casting in situ cement concrete M-20 of trap metal for R.C.C. columns as per detailed designs and drawings or As directed by Engineer-In-Charge., including centering, formwork, compacting, roughening the surface if special finish is to be provided and curing etc. complete. (Excluding steel reinforcement) Spec. No.:BdF -4 Page No. 298	2.62	Cum.			

10	Providing and fixing template for bolt of required size for gantry foundation in line and level including fixing of all foundation bolts, conveying and leveling centering removing the same after casting of foundation etc. complete as directed by Engineer in charge (template to be arranged by the Contractor).	2.00	No.			
11	Providing sand face plaster externally in two coats using approved screened sand in all positions, including providing base coat of 15 mm thick in cement mortar 1:4 mixing approved water proofing compound at the rate of 1 kilograms / 50 kg of cement and curing the same for not less than two days and keeping the surface of base coat rough to receive the sand faced treatment 8 mm thick in cement mortar 1:4 and finishing the surface by taking out grains and curing for 14 days including preparing the surface, watering and scaffolding etc. complete. Spec. No.:BdL.-7 Page No.369	3.84	Sqm.			
12	Providing surface dressing to the switch yard surface (upto plinth level of 0.1 m) incl sectioning and leveling etc Spec no : as directed by engineer-in-charge	60.00	Sqm.			
13	Providing and applying three coats of waterproof cement paint of approved manufacture and colour to the plastered surface, including, primer coat, scaffolding preparing the surface, watering for two days etc. complete. Spec. No.:BdO.-8. Page No.406 incl. primer coat etc.	3.84	Sqm.			
14	Supplying stone dust of trap stone aggregate at the road side, including conveying and stacking etc. complete for use in bituminous road surface. Spec. No.:Rd. 41 Page No.215	2.50	Cum.			
15	Supplying stone dust of trap stone aggregate at the road side, including conveying and stacking etc. complete for use in bituminous road surface. Spec. No.:Rd. 41 Page No.215	2.50	Cum.			

16	Supplying 40 mm crushed metal of trap / granite / quartzite / gneiss stone aggregate at the road side, including conveying and stacking etc. complete for use in bituminous road surface. Spec. No.:Rd.41 Page No. 215	3.25	Cum.			
17	Spreading 40mm Metal for spreading in the substation yard in required uniform thickness of 65 mm including all leads, loading, unloading etc. complete as directed. (Stack measurement shall be paid) details as per APPENDIX - E. , Sr. No. F 2 as per PWD red book specifications. 930	3.25	Cum.			
18	Supplying 20 mm crushed metal of trap / granite / quartzite / gneiss stone aggregate at the road side, including conveying and stacking etc. complete for use in bituminous road surface. Spec. No.:Rd.41 Page No. 217	1.75	Cum.			
19	Spreading 20mm Metal for spreading in the substation yard in required uniform thickness of 35 mm including all leads, loading, unloading etc. complete as directed. (Stack measurement shall be paid) details as per APPENDIX - E. , Sr. No. F 2 as per PWD red book specifications. 930	2.00	Cum.			
20	Removing rich mix cement concrete including stacking the spoils as directed with all leads, lifts, complete As directed by Engineer in charge.	0.50	Cum.			
Sub-Total - C (Rs.)						-

Estimated amount for above cited works are as follows:

SN	Particulars	Estimated Amount(Including Tax) (Amount in Rs.)
1	Schedule-A	1,00,627.66
2	Schedule-B	1,13,248.73
3	Schedule-C	59,707.33
Grand Total (Rs.)		2,73,583.72

Note: Zerox signed copies of below mentioned documents should be attached along with quotation.

- a) PAN Card.
- b) GST Registration No.
- c) Electrical Contractor License.
- d) Bombay shop Act License
- e) Experience certificate from office not below the rank of Executive Engineer for successfully execution of similar work.



**Executive Engineer,
EHV O&M Division Latur**

Copy s.w.r.to:- The Superintending Engineer, EHV (O & M) Circle, Parli(V).