

RAJASTHAN RAJYA VIDYUT PRASARAN NIGAM LIMITED
OFFICE OF THE ASSISTANT ENGINEER (T&C) JHUNJHUNU
No/RVPN/AEN/T&C/JJN/F. NIT/ 02/17-18/ D. 37 Dated 30.05.2017

NOTICE INVITING TENDER FOR CONSTRUCTION OF 33 KV BAY AT 132 KV GSS MANDAWA

Sealed tenders are hereby invited from reputed firms for construction of 33 KV Bay at 132 KV GSS Mandawa. Tender should be handed over personally or by post in the above said office. Tender will be accepted upto 3.00 PM of dated 06.06.2017 and will be opened on dated 06.06.2017 at 4.00 PM in the presence of tenderer or their representative.

S.No.	Particulars of item	Quantity
1	Construction of 33 KV Bay at 132 KV GSS Mandawa	As per G-Schedule enclosed

Subject to the following terms and conditions

1. The rate price should be quote by the firm as per attached G-Schedule.
2. Contractor will be liable for any damage during contract period of the above said work.



Assistant Engineer (T&C)
RVPN Jhunjhunu

Copy submitted to the following for information

- 1 The Superintending Engineer (T&C) RVPN, Babai.
- 2 The Executive Engineer (T&C) RVPN, Babai.
- 3 The Accounts Officer (T&C) RVPN, Babai.
- 4 Notice Board



Assistant Engineer (T&C)
RVPN Jhunjhunu

G -Schedule for Erection of Structure ,Equipments & Bus bar , stringing of Earth wire and Earthing work for 33 KV PHED Bay at 132 KV GSS Mandawa

(Ref. of BSR:- No. RVPN/SE (CONTRACTS-II)XEN-4/F./D.45 JAIPUR Dated 21.04.2017)

S.No	Particulars	Unit	Rate	Quantity	Amount
1	EARTH MESH WORK				
A-1	Laying of earth mesh with 25/28 mm dia M.S.Rod at a depth of 0.80m from top level of foundations ,including excavation of trench of required depth and backfilling of the same ,transportation of M.S.Rods from site store to locations ,welding of M.S.Rod to M.S.Rod along the length ,at the crossing and with earth electrodes as per drawing ,application of bitumen compound and covering with bitumen impregnated tape on all welded joint for all the type of soil prevalent at 0.8m below top level of foundations (M.S.Rod of above sizes &M.S.Flat as required shall be made available by RVPN)				
	(a) In case electricity is made available by RVPN without charge				
	i. Normal dry soil	Meter	24	150	3600
	ii. Hard soil/Murram/Black cotton soil	Meter	26		
	iii. Soft Rock	Meter	35		
	iv. Hard rock (with blasting)	Meter	54		
B-1	Laying of earthing riser of 50x10mm / 50x12mm size M.S.Flat at a depth of 0.8m form the top level of foundations ,including excavation of trench of required depth and backfilling of the same ,transportation of M.S.Flat from site store to locations preparation of risers bending as per requirement (after heating if necessary),fixing on and welding / bolting to equipments / structure and peaks of structures ,laying in the trench, welding to the earth mesh of M.S.Rod as per drawing ,including welding of extra length of M.S.Flat if required , application of bitumen compound and covering with bitumen impregnated tape on all welded joints , painting of all surfaces of risers above ground level with red oxide and green paint , for all the type of soil prevalent at 0.8m below top level of foundations (M.S.Rod of above sizes &M.S.Flat as required shall be made available by RVPN)				
	(a) In case electricity is made available by RVPN without charge				
	i. Normal dry soil	Meter	27	200	5400
	ii. Hard soil / Murram / Black Cotton soil	Meter	28		
	iii. Soft Rock	Meter	38		
	iv. Hard rock (with blasting)	Meter	59		
	v. Hard rock (blasting prohibited)	Meter	65		
	(b)In case diesel generator is arranged by the contractor at his own cost				
	i. Normal dry soil	Meter	38		
	ii. Hard soil / Murram / Black Cotton soil	Meter	40		
	iii. Soft Rock	Meter	51		
	iv. Hard rock (with blasting)	Meter	70		
	v. Hard rock (blasting prohibited)	Meter	78		

C-1	Placing / Driving of earth electrodes of 25/28mm dia M.S.Rod of length 3.30 meter (approx) to a depth of 3.80 meter from the top level of foundations , including excavation of pit as required and back filling of the same , transportation of M.S.Rod from site store to locations cutting of M.S. Rod to desired length ,preparation of one end as spike if necessary , welding of earth electrodes to earth mesh of M.S.rod as per drawing, application of bitumen compound and covering with bitumen impregnated tape on all welded joints , painting of all surfaces of risers above ground level with red oxide and green paint , for all the type of soil prevalent at 3.8m below top level of foundations (M.S.Rod of above sizes & M.S.Flat as required shall be made available by RVPN)				
	(a)In case electricity is made available by RVPN without charge				
	i. Normal dry soil	Nos.	200	4	800
	ii. Hard soil / Murrum / Black Cotton soil	Nos.	333		
	iii. Soft Rock	Nos.	532		
	v. Hard rock (blasting prohibited)	Nos.	932		
2	ERECTION OF SUBSTATION STEEL STRUCTURE columns, beams lighting mast and equipment structures (excluding circuit Breakers and Capacitor Banks) of all type including transportation of structure member, nuts & bolts, washers, etc. from site store to locations, their assembly, placing on foundation, fixing of template, with foundation bolts as required, leveling and preparing for grouting as required, but excluding grouting, erection after grouting and tightening & punching of nuts & bolts. (Maximum height of structures upto 20 meters)	MT	2321	2.7	6266.7
3	BUS BAR WORK				
A	STRINGING of 220,132,33 & 11 KV bus bar of ACSR conductor including transportation of conductor, disc isolator and tension hardware from site store to location, laying and cutting required length of conductor, cleaning and assembly of disc insulator as required along with fitting of bolted type or compression type tension hardware as made available (compression machine shall be provided by RVPN on rent basis), making up at one end, stringing of conductor between the beams with specified sag and tension, also equalizing sag and fitting spacers and spacer T- Clamps for twin conductor for three phase of conductor in each section				
	i) Single ACSR panther	section	1165	0	0
	ii) Single ACSR Zebra	section	1356		
	iii) Double ACSR Zebra	section	1955	0	0
B	JUMPERS of ACSR conductor (3 nos. Y-type) between bus to equipment, or between equipment to equipment or between bus to bus, including transportation of conductor, disc insulator and hardware from site store to location, cleaning and assembly of disc insulator as required along with fitting of suspension hardware and erection as required, cutting required length of conductor, making connection, fixing of spacer & spacer T- clamp as required, tightening of clamps/ connectors. dressing etc.. for three phase.				
	i) Single ACSR Zebra/Panther conductor	Set	333	8	2664
	ii) Double ACSR Zebra cond.	Set	665	0	0

4	Stringing of Earth wire (Size 7/3.15mm or 7/4.00mm),including transportation of earth wire,tension hardware,etc from site store to location,lying and cutting required length of earth wire, fitting of bolted type or compression type hardware as made available (Compression machine shall be provided by RVPN on rent free basis),making up at one end. Stringing of earth wire between structure peaks with specified sag and tension, jumpering and connecting earth bond for single earth wire.	Each	292	2	584
5	ERECTION OF SUB STATION EQUIPMENTS				
A	i) Erection of 33/0.4 KV or 11/0.4 KV Station Transformer upto 500KVA on existing masonry plat form including transportation	Each	3967		
B	Erection of current transformer/ potential transformer / capacitive voltage transformer / series reactor / residual voltage transformer / natural current transformer with clamps & connectors, on already erected steel structure including transportation from site store to location. fabrication of base frame, fixing of terminal connectors, tightening of nuts & bolts etc. complete in all respects.				
	i) 220 KV CT/PT/CVT	Nos.	2529		
	ii) 132 KV CT/PT/CVT	Nos	1415		
	iii) 33 KV or 11 KV CT/PT	Nos	532	3	1596
	iv) 33 KV or 11 KV SR/RVT/NCT	Nos.	1016		
C	Erection of Lightning arrestors on already erected structures including transportation of LA,clamps & connectors,surge counter etc. from site store to locations. fabrication of base frame, fixing of terminal connectors, surge counter, tightening of nuts & bolts etc. complete in all respects.				
	i) 220 KV	Nos.	1996		
	ii) 132 KV	Nos.	1422		
	iii) 33 or 11 KV	Nos.	317	3	951
D	Erection of isolators on already erected steel structure including transportation of base frame, P.Is, contacts, mechanism-box, clamps & connectors etc. from site store to location, minor fabrication as required, and fixing of terminal connectors, for their smooth operation and final adjustment if required after umpiring.				
	i) 220 KV				
	a) without earth blade	Nos.	4400		
	b) with single earth blade	Nos.	4899		
	c) with double earth blade	Nos.	5557		
	d) tandem	Nos.	4899		
	ii) 132 KV				
	a) without earth blade	Nos.	2596		
	b) with single earth blade	Nos.	3045		
	c) tandem	Nos.	3045		
	iii) 33 KV or 11 KV				
	a) without earth blade	Nos.	916	2	1832
	b) with single earth blade	Nos.	1364	1	1364

G	Erection of 220 KV or 132 KV Circuit Breaker, including transportation of equipment, structure members, nuts & bolts, clamps & connectors, accessories etc. from site store to location, assembly of support structure their placing on foundation, leveling and preparing for grouting as required, but excluding grouting, assembly/ placing of support columns/ poles mechanism box/ control cubical, and other accessories as per manufacturers drawing fitting of SF-6 gas pipeline, fabrication of air/ oil pipeline as required, electrical wiring from pole to control cubical, fixing of terminal				
	i) 220 KV	Nos.	19216		
	ii) 132 KV	Nos.	15223		
	i) 33 or 11 KV outdoor type (VCB/SF-6)	Nos	7404	1	7404
	ii) 11 KV Kiosk (VCB/SF-5/MOCB)	Nos.	2620		
7	Erection of marshalling kiosk / line matching unit (LMU)/ line matching & distribution unit (LMDU) complete in all respect including transportation from site store to location, placing on foundation/ cable trench as per layout, preparing for grouting of foundation bolts but excluding grouting etc.				
	i) 220 or 132 KV Marshalling Kiosk	Nos.	374		
	ii) 33 or 11 KV Marshalling Kiosk	Nos.	192	1	192
	iii) PLCC LMU/LMDU	Nos.	432		
10	LAYING AND TERMINATION OF CABLES				
A.	i) laying of PVC insulated unarmoured /armoured control cable of 1.1 KV grade with copper conductor in cable trenches as per specification as required, including transportaion of cable drums from site store to locations, laying in cable trenches, cutting to required length, placing them on cable racks/ cables trays/ cable batten & dressing.				
	a) Unarmoured control cable	Meters	5	1200	6000
	b) Armoured control cable	Meters	6		
	ii) Fixing of control cable in position with single compression				
	a) 19 mm unarmoured control cable	Nos.	44		
	b) 19 mm armoured control cable	Nos.	49		
	c) 25 mm unarmoured control cable	Nos.	67		
	d) 25 mm armoured control cable	Nos.	73		
	e) 32 mm unarmoured control cable	Nos.	96		
	f) 32 mm armoured control cable	Nos.	106		

38653.7

Say Rs. 38654

(Rs. Thirty eight thousand six hundred fifty four only)



Assistant Engineer (T&C)

RVPN Jhunjunu