

BHARAT HEAVY ELECTRICALS LIMITED

RAMACHANDRAPURAM :: HYDERABAD-32

MAINTENANCE & SERVICES DIVISION

FORMAT 6-C

TENDER DOCUMENT (PRICE BID)**NAME OF WORK : Electrical Works for power evacuation from BHEL 1.5 MWp Solar Power Plant to TSTRANSCO Sub-Station, R.C.Puram****Tender Notice : M&S/P&C/2015/16 Date: 20.05.2015****BID PRICE SCHEDULE(BPS)****1(a) 33KV LINE - MATERIAL**

S.NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
				Rs. Ps.	Rs. Ps.
1	RS Joist 150x150mm	3600	KG	56.16	202176
2	33KV 800A D/B AB SWITCH WITH INSULATORS	3	EA	42000	126000
3	LT PVC Cu Contr Cable 10 Core 2.5 Sq.mm	100	M	167.51	16751
4	LT PVC Cu Contr Cable 4 Core 2.5 Sq.mm	100	M	69.95	6995
5	33KV Lighting Arrestors Station Type	6	EA	2995.96	17975.76
6	33KV Polymer Insulators (B&S)	30	EA	284.30	8529
7	33KV Metal parts (B&S)	30	SET	162.92	4887.6
8	MS Flat 75x8	620	KG	47.25	29295
9	T Clamps for 33kv Bay	12	EA	500.00	6000
10	Spacer Clamp for 33kv Bus	9	EA	484.00	4356
11	Spacer Clamp with T off Zebra 1 feeder	3	EA	750.00	2250
12	33kv Tension Hard ware for twin zebra	6	EA	2392.00	14352
13	GI structure for 33kv Bay	5000	KG	86.62	433100
14	ACSR Conductor Zebra	150	M	235.22	35283
15	CI Earth Pipe 100 mm Dia 2.75 Mts Long	10	EA	2620.00	26200
16	HT TVR METER Housing BOXES	2	EA	5500.00	11000
17	33KV XLPE Cable 3 Core 400 Sq.mm	60	M	1918.51	115110.6
18	33KV 3X400 Heat Shble out/d end ter kit	2	EA	3250.00	6500
19	MS Flat 100x16	630	KG	51.82	32646.6
20	GI Flat 100x16	151	KG	63.47	9583.97
21	Twin Zebra connector for 33kv Bay	12	EA	600.00	7200
22	MS Channel 100x50 mm	3000	KG	46.04	138120
23	GI Earth Flat 25mm x 3 mm	200	KG	30.60	6120
24	ACSR Conductor Panther	200	M	101.84	20368
25	HT Tri Open Access 33KV 200/1 A IP:15min	3	EA	125000.00	375000
26	33KV 220V VCB with CTs 400-200-100/1-1A	1	EA	304551.00	304551
27	33KV 1ph PTs,10 VA Burden 0.2 Class	6	EA	19966.94	119801.64
28	220V 80AH BATTERY WITH CHARGER	1	EA	214200.00	214200
29	33KV Metering CT's 50/1A 0.2S Class	6	EA	15957.83	95746.98
	Sub Total - 1(a)				2390099.15

1 (b) 33KV LINE - LABOUR WORK

S.NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
				Rs. Ps.	Rs. Ps.
1	Ere of 33kv VCB & Twin fedr control panel	1	LS	76186	76186
2	Extension of 33kv Bay at 132/33kv SS	2	LS	112121	224242
3	Erection of 33kv ABS witch incl earthing	3	EA	1912.00	5736
4	Erect and commn of Battery charger etc,	1	EA	653.00	653
5	Complete Civil Work- entire Sub station	1	LS	100000.00	100000
6	Erection of HT Trivector Meter	3	EA	1100.00	3300
7	Fixing of HT Trivector Meter Housing Box	2	EA	1000.00	2000
8	11KV XLPE outdoor End kit (3x35 sq mm)	2	EA	1636.00	3272
9	Const of Pinth HTTVR meter 0.6x0.3x0.9m	2	EA	1309.00	2618
10	Const of Pinth for 11kv & 33kv VCB's	1	EA	13470.00	13470
11	TRASPORT OF STEEL MATERIAL UPTO 10KM	3.6	TO	269.00	968.4
12	Laying of UG Cable 33 KV 3x400 sqmm	60	M	369.00	22140
13	Laying 4 core/10 core, 2.5 sq.mm control	0.2	KM	13000.00	2600
14	Erect of 33kv LA stn type incl earthing	2	SET	838.00	1676
15	ERECT OF LINES-Providing of earthing	10	EA	1359.00	13590
16	Stringing of bus with panther conductor	67	M	202.00	13534
17	Erection of 33kv single phase PTs	2	SET	1186.00	2372
18	Erection of 33kv CTs	2	SET	1186.00	2372
19	Labour for Fixing of all types of clamps	24	EA	60.00	1440
20	Conn. Of equip/bus single zebra/panther	15	EA	183.00	2745
21	Laying of earth mat, excavation 75x8mm	62	RMT	62.00	3844
22	Laying of MS/GI 100x16mm earth flat	125	RMT	62.00	7750
23	Erec 220V Battery with charger incl eart	1	EA	5327.00	5327
	Sub Total - 1(b)				511835.40

2(a) METERING & BAY EXTENSION - MATERIAL

S.NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
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				Rs. Ps.	Rs. Ps.
1	MS Flat 50x6 mm	150	KG	47.25	7087.50
2	MS Channel 100x50mm	300	KG	46.04	13812.00
3	33KV Lighting Arrestors station Type	3	EA	2995.96	8987.88
4	33KV HG Fuse Sets with Insulators	2	M	9450.00	18900.00
5	LT PVC Cu Contr Cable 10 Core 2.5 Sq.mm	100	M	167.51	16751.00
6	LT PVC Cu Contr Cable 4 Core 2.5 Sq. mm	100	M	69.95	6995.00
7	LT PVC Cu Contr Cable 2 Core 2.5 Sq.mm	100	EA	38.85	3885.00
8	33KV 800A D/B AB SWITCH WITH INSULATORS	2	EA	42000.00	84000.00
9	HT Pilfer proof Boxes	1	EA	494.55	494.55
10	CI Earth pipe 50mm Dia 2 Mts long	6	KG	1103.23	6619.38
11	G.I.Wire 4mm (No.8)	50	M	58.40	2920.00
12	ACSR Conductor Panther	60	EA	101.84	6110.40
13	33KV Polymer Insulator (B&S)	30	SET	284.30	8529.00
14	33KV Metal parts (B&S)	30	KG	162.92	4887.60
15	MS Flat 75x8	620	KG	47.25	29295.00
16	MS Flat 100x16	630	KG	51.82	32646.60
17	GI Flat 100x16	151	EA	63.47	9583.97
18	Twin Zebra connector for 33kv Bay	12	EA	600.00	7200.00
19	RS Joist (150x75) 11Mts box pole	4	EA	25381.00	101524.00
20	33KV 1ph PTs, 10VA Burden 0.2 Class	3	EA	19966.94	59900.82
21	HT Tri Open Access 33KV 100/1 A IP:15 min	1	EA	125000.00	125000.00
22	33KV Metering CT's 100/1A, 0.2S Class	3	EA	16753.11	50259.33
23	33KV 24V FED VCB WITH CTS & CR PANEL	1	EA	342077.52	342077.52
24	24V 40AH Battery with charger	1	EA	17150.00	17150.00
	Sub Total - 2(a)				964616.55

2(b) METERING & BAY EXTENSION - LABOUR WORK

S.NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
				Rs. Ps.	Rs. Ps.
1	TRANSPORT OF STEEL MATERIAL UPTO 10KM	3.6	TO	296.00	1065.60
2	Mass concreting of supports incl.cement	12.684	M3	5405.00	68557.02
3	Erection of 33kv VCB	1	EA	4783	4783.00
4	Erection of 33kv ABS witch incl earthing	2	EA	2103.00	4206.00
5	Stringing of bus with panther conductor	20	M	202.00	4040.00
6	Ref-Erection of control oanel	1	EA	1100.00	1100.00
7	Erect of 33kv LA stn type incl earthing	1	SET	838.00	838.00
8	LOADING OF 33/11 KV CTs/PTs	3	EA	143.00	429.00
9	UNLOADING 33 KV CTs/PTs	3	EA	110.00	330.00
10	LOADING 33 KV PTs	3	EA	143.00	429.00
11	UNLOADING 33 KV PTs	3	EA	110.00	330.00
12	Erection of 33kv CTs	2	SET	1186.00	2372.00
13	Erection of 33kv single phase PTs	2	SET	1186.00	2372.00
14	Con of Plinth HTTVR meter 0.6x0.3x0.9m	3	EA	1309.00	3927.00
15	Erect and commn of Battery charger etc	1	EA	653.00	653.00
16	ERECT OF LINES - Providing of earthing	6	EA	1359.00	8154.00
17	Laying 4 core/10 core, 2.5 sqmm control cable	0.2	KM	13000.00	2600.00
18	Ref-Laying 2 core 2.5 sqmm control cable	100	RMT	22.05	2205.00
19	Painting of RS Joist (1C Ro, 2C AL Paint)	4	EA	732.00	2928.00
20	Erect. Of 33kv HG Fusest incl earthing	2	SET	981.00	1962.00
21	Erect of 33/11 Bay incl concreting	2	EA	5847.00	11694.00
22	Security fencing for switchyard	1	LS	5500.00	5500.00
23	Ref-Prov of GI Bolts & Nuts, Washers etc	200	KG	85.00	17000.00
24	Erection of HT Trivector Meter	1	EA	1100.00	1100.00
25	Ref-Labour for running 25x3mm GI flat	100	RMT	18.00	1800.00
26	Ref - Cost of GI Flat 25x3mm include 4%VAT	100	KG	73.50	7350.00
27	Fabrication -welding charges	1	LS	4000.00	4000.00
28	Erect of HT Metering Box Excl box cost	2	EA	1000.00	2000.00
29	Erection of RS Joist 150 x 150 mm	4	EA	1920.00	7680.00
30	EXCAVATION OF PIT (2.6" x 2.6" x 6.0")	4	EA	327.00	1308.00
31	Labour and Transport Charges	1	LS	20000.00	20000.00
32	Construction of plinth - VCB	1	EA	14817.00	14817.00
	Sub Total - 2(b)				207529.62

3(a) ERECTION OF 33 KV LINE - MATERIAL

S.NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
				Rs. Ps.	Rs. Ps.
1	33KV Polymer Insulators (B&S)	6	EA	284.30	1705.80
2	33KV Metal parts (B&S)	6	SET	162.92	977.52
3	33KV "V" Cross Arms without Clamps	19	EA	1254	23826.00
4	33KV M.S.Back Clamps	23	SET	176.00	4048.00
5	AAA conductor 100 Sq.mm	2520	M	49.17	123908.40
6	33KV Pin Insulators	57	EA	155.97	8890.29
7	33KV GI Pins	57	EA	168.12	9582.84
8	MS Channel 75x40mm	125	KG	44.78	5597.50
9	33KV Stay set 2 nos clamps w/o baseplate	6	EA	990.00	5940.00
10	G.I Stay Wire 7/2.5mm (12SWG)	60	KG	63.55	3813.00
11	11KV Guy Insulators (HT)	12	EA	24.93	299.16
12	M.S.Stay Clamps for 8 MPSCC Poles	6	SET	103.43	620.58
13	PSCC Poles 9.1 Mts 280Kgs	3	EA	3105.00	9315.00
14	33KV Top Cleat with Clamps	21	SET	332.00	6972.00
15	RS Joist (150x75) 11Mts box pole	21	EA	25381.00	533001.00

16	33KV XLPE Cable 3 core 400Sq.mm	200	M	1918.51	383702.00
17	33KV 3x400 Heat Shble out/d end ter kit	2	EA	3250.00	6500.00
	Sub Total - 3(a)				1128699.09

3(b) ERECTION OF 33 KV LINE- LABOUR WORK

S.NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
				Rs. Ps.	Rs. Ps.
1	Labour and Transport Charges	1	LS	10000.00	10000.00
2	Ref-Prov of GI Bolts &Nuts, Washers etc	10	KG	85.00	850.00
3	Stringing 100 sqmm 33/11kv Line 3 Cond SC	0.84	KM	11760	9878.40
4	Other miscellaneous items not covered	1	LS	20000.00	20000.00
5	EXCAVATION OF PIT (2.6" x 2.6" x 6.0")	21	EA	284.00	5964.00
6	Erection of Spun pole 11Mt	21	EA	3068.00	64428.00
7	Exc stay pit 45x45x1.34m solex hard	6	EA	200.00	1200.00
8	Assembly and erection of Stay set 11kv <	6	SET	505.00	3030.00
9	Laying of UG Cable 33KV 3x400 SQmm	200	M	369.00	73800.00
10	33 KV XLPE Out.Door.End kit (3x400sqmm)	2	EA	4231.00	8462.00
11	Mass concreting of stay	6	EA	1351.00	8106.00
12	9.1 m pscC POLE WITH 280kg WL-L	3	LS	1536.00	4608.00
13	Excavation 9.1 M pole pit 0.9X0.9X1.65M	3	EA	327.00	981.00
	Sub Total - 3(b)				211307.40

A.	Cost of Material (Sub Total 1(a) + Sub Total 2(a) + Sub Total 3(a))	4483414.79
B.	Cost of Labour (Sub Total 1(b)+ Sub Total 2(b)+Sub Total 3(b))	930672.42
C.	Total (Material(A)+ Labour(B))	5414087.21
D.	Storage & Handling Charges	119502.44
E.	Establishment & General Charges	448341.48
F.	Total Amount, Rs.	5981931.13

Tenderers are required to quote their tender value on % age basis in the following table at excess, less or on par with estimated value

Tender (%)	In Figures	In Words
Excess		
Less		
Estimate Rate Only (On Par)		

	Taxes & Duties (if applicable):	%
1	Service Tax on "B" above	
2	VAT/CST on "A" above	
3	Excise Duty on "A" above"	
4	Any other Taxes	

(Signature & Stamp of the Vendor)