



DAKSHIN HARYANA BULI VITRAN NIGAM

Chief Engineer / PD&C

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To

The All SE/OPs,
Under DHBVN

Memo No.Ch- 8 /DDD-193/P&D

Dated – 14/05/2018

Subject:- Labour Schedule Rates/Erection Charges (after inclusion of GST impact) Estimation purpose) for 33 KV, 11 KV & LT turnkey works w.e.f 14.05.2018.

Enclosed please find here with the Labour Schedule Rates/Erection Charges (Including GST) for Estimation purpose of 33 KV, 11 KV & LT turnkey works duly approved by WTDs of DHBVN on NP-8 of file DDD-193/P&D as per recommendation of committee of DHBVN.

The above rates are applicable w.e.f. 14.05.2018.

This is for your information & taking further necessary action in the matter, please.

DA/ As Above

**Superintending Engineer/P&D,
For CE/PD&C, DHBVN Hisar**

CC:-

1. SPS to worthy Chairman-cum-MD, DHBVN/UHBVN for kind information of worthy Chairman please.
2. PS to Director/Projects, DHBVN, Hisar for kind information of the Director/Projects please.
3. PS to Director/Operation, DHBVN, Hisar for kind information of the Director/ Operation please.
4. All Chief Engineer's & CAO under DHBVN Hisar for kind information and further necessary action please.
5. SE/IT, DHBVN Hisar for information and with a request to ensure the uploading the same on Nigam website for circulation.
6. SE/Construction Circle, DHBVN Hisar for kind information and further necessary action please.
7. SE/M&P Circle, DHBVN Gurugram for kind information and further necessary action please
8. COS, DHBVN Hisar for kind information and further necessary action please.
9. All Xen/Ops. under DHBVN Hisar for kind information and further necessary action please.
10. All Xen/works under DHBVN Hisar for kind information and further necessary action please.
11. All XEN/Const./DHBVN, Hisar for kind information & further necessary action, please.
12. CGM/PD&C, UHBVN, Panchkula for kind information and further necessary action, please.

**Labour schedule rates /Erection Charges for Estimation
purpose w.e.f 14.05.2018.**

Sr. No.	Description	Unit	Labour Erection rates in Rs.
SUB HEAD- (A) Erection of supports for lines varying from 11 KV to 33 KV complete with accessories including Insulators			
1	Erection of stay set complete.	One no.	299.00
2	Erection Flying Stay/Sturt stay set complete with 8.22 Mtr. (27') long pole.	One no.	419.00
3	Erection of Flying Stay Set with 4-6 Mtr. (13'-20') long pole on the road side/street.	One no.	307.00
4	Erection of H.T. Dead End, H. Pole structure with two stays.	One no.	1646.00
5	Erection of 11 KV Tee-off equipment complete with one stay set.	Each	748.00
6	Erection of H.T. Concrete poles. (11 mtr. long)	Each	898.00
7	Earthing of H.T. poles with road	One no.	151.00
8	Earth boring	Feet	31.00
Add 20% extra for erection of H.T. & L.T. poles in Hilly Zones & in the area's where metalled / Cement Concrete road is to be broken			
SUB HEAD- (B) Erection of supports for L.T. lines complete with accessories.			
1	Erection of L.T. Tee-off equipment.	Each	291.00
2	Erection of L.T. 3 phase equipment.	Each	252.00
3	Earthing of L.T. poles with rod.	One no.	151.00
4	Erection of PCC 9 Mtrs. (27') L.T. pole.	Each	798.00
5	Erection of L.T. Capacitor.	Each	44.00
6	Fixings of Egg. Type insulators in old stay sets.	Each	64.00
SUB HEAD- (C) Erection of Sub-station complete with accessories.			
1	Erection of 100 to 200 KVA T/Fs with pole mounting sub-station.	Each	3075.00
2	Erection of 25 & 63KVA T/Fs with pole mounted Sub-Station.	Each	2683.00
3	Erection of 11 KV Lightning Arrestors Set	One Set	559.00
4	Erection of R.D. Fuses with Fittings	Each	447.00
5	Erection of Cables box with fittings.	Each	280.00
6	Erection of transformer on plinth above 200 KVA to 500 KVA 11/4 complete in all respect.	Each	1258.00
7	Erection of transformer on plinth above 500 KVA to 1000 KVA 11/4 complete in all respect.	Each	1509.00
8	Erection of 11 KV VCB	Each	6708.00
9	Erection of Automatic Reclosures complete with fittings, jumpers, insulators platform and tear thing etc.	Each	2376.00

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10	Erection of Sub-Station structure steel work, frame and bus bars etc .		
i)	For one Panel	Each	123.00
ii)	For two panels	Each	184.00
iii)	For three panels	Each	224.00
iv)	For four panels	Each	263.00
11	Welding of Transformers with Platform at site.	Each	90.00
12	Replacement of Thimble for HT Cable	Each	55.90
SUB HEAD- (D)			
Erection of conductor wires etc. complete with accessories.			
1	Stringing & Sagging of Conductor of sizes single wire including jointing and binding with insulators at supports.		
i)	ACSR Conductor 30mm2	per km	1230.00
ii)	ACSR Conductor 50mm2	per km	2070.00
iii)	ACSR Conductor 80mm2	per km	2520.00
iv)	ACSR Conductor 100mm2	per km	3350.00
v)	ACSR Conductor 130mm2 (leopard)	per km	4470.00
vi)	ACSR Conductor 150mm2	per km	5590.00
vii)	ACSR Conductor 0.2 Sq. Inch (panther)	per km	8390.00
viii)	GSL No. 8 SWG.	per km	1120.00
ix)	Earth Wire 7/14 SWG.	per km	1620.00
2	Making and fixing of cradle guards H.T. & L.T.	Each	28.00
3	Making and fixing of cage guards.	Each	67.00
4	Erection of L.T. Lighting Arrestors (set of 3)	Each	447.00
SUB HEAD- (E) Erection of L.T. Cables in position including accessories, bearer wire joints etc.			
1	L.T. PVC S/C CABLES		
i)	S/C 50 mm2	100 Mtr.	430.00
ii)	S/C 95 mm2	100 Mtr.	615.00
iii)	S/C 120 mm2.	100 Mtr.	738.00
iv)	S/C 185 mm2.	100 Mtr.	983.00
v)	S/C 300 mm2	100 Mtr.	1353.00
vi)	S/C 630 mm2	100 Mtr.	2091.00
2	Erection of 2/Core PVC Sub Main of sizes.		
i)	4,6,10mm2	100 Mtr.	503.00
ii)	2/Core PVC 16mm2	100 Mtr.	671.00
3	Making Straight through or T. Joint of PVC Rubber	Each	73.00
4	Fixing of Load T-Box or link box.	Each	39.00
5	Erection of Sealing end	Each	73.00
6	Erection of 4/Core PVC cable of sizes complete in position.		
i)	10,16mm2	100 Mtr.	894.00
ii)	25, 50mm2	100 Mtr.	1118.00

7	Erection of 3.5/Core PVC cable of sizes complete in position.		
i)	3.5C x 95mm ²	100 Mtr.	1677.00
ii)	3.5C x 120mm ²	100 Mtr.	2012.00
iii)	3.5C x 185mm ²	100 Mtr.	2683.00
iv)	3.5C x 300mm ²	100 Mtr.	3354.00
8	Erection of L.T. Armoured Cable of sizes complete in position.		
i)	2/C 6mm ²	100 Mtr.	615.00
ii)	2/C 10mm ²	100 Mtr.	615.00
iii)	3.5/C 25 mm ²	100 Mtr.	1230.00
iv)	3.5/C 50 mm ²	100 Mtr.	1230.00
iv) a.	3.5/C 95 mm ²	100 Mtr.	1761.00
iv) b.	3.5/C 120 mm ²	100 Mtr.	2113.00
v)	4Cx16mm ²	100 Mtr.	1006.00
vi)	4Cx25mm ²	100 Mtr.	1230.00
9	Erection of Channel Iron / Angle Iron with catenary Stay.	One No.	151.00
SUB HEAD- (F) : Erection/laying of H.T. & L.T. cable underground, including digging and refilling of trenches etc.			
1	L.T. ARMOURED CABLES		
i)	2/C 6mm ² ,	100 Mtr.	839.00
i) a	2/C 10mm ²	100 Mtr.	839.00
ii)	3.5/C 25 mm ²	100 Mtr.	1509.00
iii)	3.5/C 50 mm ²	100 Mtr.	1509.00
iv)	4Cx16mm ²	100 Mtr.	1286.00
v)	4Cx25mm ²	100 Mtr.	1509.00
2	L.T. ARMOURED Single Core XLPE cable		
i)	Single Core 50 mm ²	100 Mtr.	559.00
ii)	Single Core 95 mm ²	100 Mtr.	783.00
3	11 KV H.T. XLPE CABLES		
i)	Single Core 630mm ²	100 Mtr.	2236.00
ii)	3C x 25mm ²	100 Mtr.	2012.00
iii)	3C x 50mm ²	100 Mtr.	2236.00
iv)	3C x 95mm ²	100 Mtr.	2683.00
v)	3C x 185mm ²	100 Mtr.	3354.00
vi)	3C x 300mm ²	100 Mtr.	4472.00
vi) a.	3C x 400mm ²	100 Mtr.	5963.00
4	UN-ARMOURED COPPER CONTROL CABLE		
i)	2C x 4mm ² ,	Mtr.	11.00
i) a	2C x 6mm ²	Mtr.	11.00
ii)	3C x 4mm ²	Mtr.	13.00
iii)	4C x 4mm ²	Mtr.	13.00
iv)	6C x 4mm ²	Mtr.	16.00

v)	7C x 2.5mm ²	Mtr.	18.00
vi)	10C x 2.5mm ²	Mtr.	18.00
5	HT AERIAL BUNCHED CABLE (ABC)		
i)	3Cx35+35mm ²	100 Mtr.	2012.00
ii)	3Cx35+70mm ²	100 Mtr.	2012.00
iii)	3Cx50mm ² + 70mm ²	100 Mtr.	2348.00
iv)	3Cx70mm ² + 70mm ²	100 Mtr.	2460.00
v)	3Cx95mm ² + 80mm ²	100 Mtr.	3131.00
vi)	3Cx150mm ² + 120mm ²	100 Mtr.	3578.00
vii)	3Cx185mm ² + 150mm ²	100 Mtr.	4025.00
viii)	3Cx185mm ² + 240mm ²	100 Mtr.	4025.00
5A	LT AERIAL BUNCHED CABLE (ABC)		
i)	3Cx16+25mm ²	100 Mtr.	900.00
ii)	3Cx25+25mm ²	100 Mtr.	1100.00
iii)	3Cx50+35mm ²	100 Mtr.	1100.00
iv)	3Cx95+70mm ²	100 Mtr.	1500.00
v)	3Cx120+70mm ²	100 Mtr.	1800.00
6	33 KV HT XLPE Cable		
i)	S/C 300mm ²	100 Mtr.	2236.00
ii)	S/C 630mm ²	100 Mtr.	3019.00
iii)	3C x 95mm ²	100 Mtr.	3354.00
iv)	3C x 120mm ²	100 Mtr.	3913.00
v)	3C x 150mm ²	100 Mtr.	3913.00
vi)	3C x 185mm ²	100 Mtr.	4472.00
vii)	3/C 300mm ²	100 Mtr.	5590.00
vii) a.	3/C 400mm ²	100 Mtr.	7453.00
vii) b.	3/C 400mm ² with trenchless boring along with road restoration.	per Mtr.	550.00
7	33 KV Aerial Bunched Cable		
i)	3 core X 95+95mm ²	100 Mtr.	3578.00
ii)	3 Core X 120+150mm ²	100 Mtr.	3801.00
iii)	3 Core X 185+240mm ²	100 Mtr.	4249.00
8	Making of Cable Joint		
i)	H.T Joint	Each	727.00
ii)	L.T Joint	Each	391.00
SUB HEAD- (G) Erection of service connections (excluding energy meter)			
1	General service connecting with PVC to be tapped off from the existing cable sub-main.		
i)	Service upto 5 Mtrs.	Each	78.00
ii)	Service upto 10 Mtrs.	Each	112.00
iii)	Service upto 20 Mtrs.	Each	145.00
iv)	Service upto 25 Mtrs	Each	207.00
v)	Service upto 30 Mtrs.	Each	268.00

vi)	Service upto 40 Mtrs.	Each	335.00
vii)	Service upto 50 Mtrs.	Each	403.00
viii)	Service upto 60 Mtrs.	Each	458.00
ix)	Service upto 75 Mtrs.	Each	475.00
2	Industrial / Tube well Service connections to be tapped off from the existing cable sub main or service or pole.		
i)	Service length upto 5 Mtrs.	Each	145.00
ii)	Service length upto 10 Mtrs.	Each	201.00
iii)	Service length upto 20 Mtrs.	Each	291.00
iv)	Service length upto 25 Mtrs.	Each	419.00
v)	Service length upto 30 Mtrs.	Each	531.00
vi)	Service length upto 40 Mtrs.	Each	671.00
vii)	Service length upto 50 Mtrs.	Each	839.00
viii)	Service length upto 60 Mtrs.	Each	922.00
ix)	Service length upto 75 Mtrs.	Each	950.00
x	Installation of 3 Phase meters in urban areas.	Each	91.00
xi)	Installation of 3 Phase meters in rural areas	Each	120.00
xii)	Installation of Single phase meters in urban areas.	Each	50.00
xiii)	Installation of single phase meters in rural areas	Each	71.00
xiv)	Installation of LT CT Meter only	Each	250.00
xv)	Installation of three Ph. 4 Wire 11 KV feeder meter (DLMS compliant) of class 0.5S accuracy	Each	213.00
xvi)	Installation of three phase 4 -- wire LT CT operated Including CTs) Static Energy meters (DLMS compliant)	Each	492.00
xvii)	Installation of three phase 4 -- wire HT CT operated (Including CTs & PTs) Trivector meter (DLMS compliant)	Each	894.00
xviii)	Installation of single phase MCB	Each	50.00
xix)	Installation of three phase MCB	Each	67.00
SUB HEAD- (H)			
1	Fixing of street light bracket, wall mounting pole mounting or hanging type.	Each	123.00
2	Fixing of Fluorescent tube complete in all respect on the pole.	Each	134.00
SUB HEAD- (I)			
1	Erection of jumpers and transposition.	Each	42.00
2	Erection of cross arms and other fittings where line is to be run under the 11 KV / 33 KV line.	Each	74.00
3	Installation of protection equipment (complete one set) for telephone line including earthing etc.	Each Set	1118.00 -
SUB HEAD- (J)			
1	Erection of 11 KV CT or PT complete in all respect	Each	184.00
2	Erection of L.T. CT complete in all respect	Each	123.00
3	Erection of G.O. SWITCH complete in all respect	Each	738.00
4	Erection of Meter Box including meter outgoing connectors box, connections, installation of cleats etc. complete in all respect		

i)	Erection of Meter Box to house 20 Nos. of Single Phase Meters in accordance with approved design / drawing of Nigam with separators, in-let and out-let holes per cable, door lock, transparent glass cover for Meter Reading etc. (20X1) complete in all respect.	Each	559.00
ii)	Erection of Meter Box to house 6 Nos. of Single Phase Meters in accordance with approved design / drawing of Nigam, in-let and out-let holes per cable, transparent glass cover for Meter Reading, to be mounted on PCC Poles etc (6 X 1) complete in all respect.	Each	224.00
iii)	Erection of Meter Box to house 4 Nos. of Single Phase Meters in accordance with approved design / drawing of Nigam, in-let and out-let holes per cable, transparent glass cover for Meter Reading, to be mounted on PCC Poles etc (4 X 1) complete in all respect.	Each	224.00
SUB HEAD- (K)			
1	Erection of steel item		
1.1	V-Shape X Arm 100x50x6mm	No.	95.00
1.2	V-Shape X Arm 75x40x6mm	No.	73.00
1.3	M.S. Channel (X-Arm) 100x50x6mm 2200mm (for H pole)	No.	151.00
1.4	MS Channel 75x40x6mm (2200mm) For fuse unit.	No.	111.00
1.5	MS Channel T-off 100x50x6 mm 1600mm	No.	111.00
1.6	M.S. Angle 50x50x6mm-3220mm (Bracing 4 pole)	No.	105.00
1.7	M.S. Angle 50x50x6mm-2860mm (Bracing H. Pole)	No.	92.00
1.8	M.S. Angle Iron 50x50x6mm 2400mm (for earth wire)	No.	77.00
1.9	M.S Angle 50x50x6mm-2200mm (Belting for H-pole)	No.	71.00
1.10	M.S. Angle 50x50x6mm- 2040mm (Belting 4 Pole)	No.	66.00
1.11	MS flat for T-off Bracing (900mm) 50x6mm	No.	16.00
2	Galvanized Angle and Channel of various size TATA/SAIL		
2.1	Channel 1) 100x50mm	Kg.	7.00
2.2	2) 75x40mm	Kg.	7.00
2.3	Angle 1) 50x50x6mm	Kg.	7.00
2.4	2) 65x65x6mm	Kg.	7.00
2.5	MS Channel 100x50mm SAIL/TATA	Kg.	5.00
2.6	MS Channel 75x40mm SAIL/TATA	Kg.	5.00
2.7	MS Angle 50x50x6mm SAIL/TATA	Kg.	5.00
2.8	MS Angle 65x65x6mm SAIL/TATA	Kg.	5.00
2.9	MS flat 50X6mm SAIL/TATA	Kg.	5.00
2.10	MS X Plate of Channel 100 x 50 x 6mm, 300mm Long	No.	34.00
2.11	MS X Plate of Channel 100 x 50 x 6mm, 460mm Long	No.	52.00
2.12	MS X Plate of Channel 75 x 40 x 6mm, 300mm Long	No.	25.00
2.13	MS X Plate of Channel 75 x 40 x 6mm, 460mm Long	No.	38.00
2.14	MS X Plate of Angle 40 x 40 x 6mm,300mm Long	No.	15.00
2.15	MS X Plate of Angle 40 x 40 x 6mm,460mm Long	No.	23.00
2.16	MS X Plate of Angle 50 x 50 x 6mm,300mm Long	No.	20.00

2.17	MS X Plate of Angle 50 x 50 x 6mm, 460mm Long	No.	30.00
2.18	MS X Plate of Angle 65 x 65 x 6mm,300mm Long	No.	25.00
2.19	MS X Plate of Angle 65x65x6mm,460mm Long	No.	38.00
3	Erection of CLAMPS		
3.1	P.G. Clamps for 30/50/80/100/130/150 mm ² .	No.	5.00
3.2	Half Clamps Wt. 1.47 Kg.	No.	10.00
3.3	Full Clamps Wt.2.325 Kg.	No.	15.00
3.4	33 KV Top Brackets / hamper	No.	21.00
3.5	11 KV Top Brackets/hamper	No.	10.00
3.6	Suspension Clamp Assembly with eye hook	No.	52.00
3.7	Dead end clamp Assembly with eye hook	Set	30.00
4	Erection of INSULATORS		
4.1	11 kV Pin Insulator with G.I. Pin	No.	10.00
4.2	11 KV Disc. Insulator 45 KN. (T&C type)	No.	22.00
4.3	11 KV Disc. Insulator 45 KN. (B&S type)	No.	22.00
4.4	11 KV Polymeric Disc Insulator 45KN (with fitting (T&C Type)	No.	16.00
4.5	11 KV Polymeric Disc Insulator 45KN (with fitting (B&S Type)	No.	16.00
4.6	11 KV Polymeric Insulator with G.I. Pin	No.	10.00
4.7	11KV Polymeric Composite Disc Insulator	No.	22.00
4.8	C-wedge Connector for 0.2sq" Panther Conductor (Nominal Aluminum Area 200 mm ²)	No.	123.00
4.9	33 KV Pin Insulator with Pin	No.	77.00
4.10	Disc Fitting (T &C type)	No.	11.00
4.11	Disc Fitting (B &S type)	No.	16.00
4.12	LT Insulator	No.	1.00
4.13	Guy Insulator	No.	1.00
4.14	Single tension fittings for 130/150mm ² ACSR Conductor.	No.	16.00
4.15	Suspension fitting for 130/150mm ² ACSR Conductor.	No.	14.00
5	Erection of G.I. WIRE		
5.1	Stay wire 7/8 SWG	Kg.	6.00
5.2	Barbed wire	Kg.	6.00
5.3	G.I. Strip 25x6 mm 9 mtr. For earthing	No.	82.00
6	Erection of POWER T/Fs		
6.1	3.5 / 5MVA three phase 50 Hz, 33/3.3 KV Step down, outdoor ONAN Power Transformer Complete with all accessories / fittings.	No.	62302.00
6.2	10 /12.5 MVA three phase 50 Hz, 33/11 KV Step down, outdoor ONAN Power Transformer Complete with all accessories / fittings.	No.	105926.00
7	Erection of 33 kV VCB's		
7.1	33 KV VCB, 36 KV, 1250A with 1000 MVA (16 KA for 1 second) rupturing capacity VCB for outdoor use.	No.	4796.00
8	Erection of LA'S		
8.1	Lightening Arrestor 9 KV	No.	52.00

8.2	33 KV Lightening Arrestor S/Stn. Type 30 KV 10KA Heavy Duty.	No.	291.00
9	Erection of G.O. SWITCH.		
9.1	11 KV double throw GO Switch 400A, having Y type blades complete in all respect as per latest Nigam's tech. spec. relevant ISS and latest amendments.	No.	1093.00
10	Fixing of Nuts & Bolts		
10.1	Nuts Bolts off sizes	kg.	7.00
10.2	Eye Screw Bolts 9"x5/8" Wt. 0.483 Kg.	No.	4.00
10.3	U-Bolt for suspension fittings	No.	5.00
11	Erection of 33 KV CTs		
11.1	33 KV CTs		
(i)	400-200/5-5-5-5A	No.	1247.00
(ii)	300-150/5-5-5-5A	No.	1195.00
(iii)	200-100/5-5-5-5A	No.	1165.00
12	Erection of PTs		
12.1	33 KV PTs	No.	974.00
13	Erection of POST INSULATOR		
13.1	33 KV Post insulator	No.	30.00
14	Erection of SPACERS		
14.1	LT Line spacers	No.	1.00
15	Erection of Meter Cover Box		
15.1	Deep Drawn type double door & double compartment LT CT Three Phase Metering Box for DT meter as per Nigam's Tech. Spec.	No.	232.00
16	Erection of C&R Panel		
16.1	33 KV C&R panel 24 V DC Operated suitable for controlling single T/Fs with all accessories.	No.	9599.00
17	Erection of ISOLATOR		
17.1	36 KV Isolator (630 AMPS)	No.	2155.00
18	Erection of L&E Switch		
18.1	36 KV Isolator cum earth switch	No.	2745.00
19	Erection of 11 KV 8 Panel Board		
19.1	11 KV 8 panel boards 24v DC operated consisting of following:	Set	52146.00
	Out Going Panel = 6 No		
	I.C Panel = 1 No.		
	Capacitor Panel = 1 No.		
20	Erection of 33 KV STEEL STRUCTURE Galvanized		
20.1	CTs/PTs	No.	434.00
20.2	LA's/Post Insulators	No.	379.00
20.3	Isolator/L& E Switch	No.	1430.00
20.4	11 KV NCT	No.	459.00

21	Erection of Battery & Battery Charger		
21.1	NI-Cd Alkaline Batteries (Partial recombination type) with charger for 33/11KV & 66/11 KV S/Stn. As per Nigam's tech. Spec., relevant ISS with latest amendments.	Set.	7308.00
22	Erection of HT APFC Panel 12 KV, 4 Step with enclosures, Relay, Vacuum contractor, Reactor 0.2% S.R, HTHRC, Fuse 63/100 Amp 11KV all fittings, Panel, Busbar, Post Insulator, Structure, Elect Consumable etc. and all Acc reqd.		
	(i) Rating 3600 KVAR	No.	76977.00
	(ii) Rating 3000 KVAR	No.	61386.00
	(iii) Rating 2400 KVAR	No.	60286.00
	Capacitor Cells 200 KVAR	No.	977.00
	Capacitor Cells 400 KVAR	No.	1719.00
23	Erection of MISCELLANEOUS MATERIALS		
23.1	Transformer plat form complete with clamp.	No.	314.00
23.2	11 KV Single Pole mounted GO/AB switch with operating handle and insulator	No.	640.00
23.3	Phase plate for each phase set of 3 (on each H-Pole & 4-Pole	Set	7.00
23.4	Danger Plate Enameled with Clamp	No.	9.00
23.5	Number Plate with Clamp	No.	9.00
23.6	D-Straps	No.	9.00
23.7	Insulated connectors	No.	9.00
23.8	L.T. Distribution box (sealable with lock facility) suitable for 10 No. Consumers. (2mm CRCA sheet box, Bus bars for load as per 25 KVA DT/Fs only with holes for incoming cable and O/G cable with rubber glands.	No.	61.00
23.9	Earth Mat for switch yard	Kg.	4.00
23.10	Earthing of 33 KV S/Stn. With earth rod & Earthing plate	No.	365.00
23.11	LT Distribution panel board for 33 KV S/Stn complete.	No.	2512.00
23.12	C.I Pipe 250 mm dia 14mm thick for U/G railway x -ing	Mtr.	165.00
23.13	LT Fuse Unit Board for use on DTs from 25,63,100 & 200 KVA Distribution Transformer	No.	63.00
24	Erection 11 KV Vacuum Interrupters		
24.1	Model WL-34599 M3+	Nos.	1564.00
24.2	Model VG-2	Nos.	1673.00
24.3	Model WL-33379 M3+	Nos.	1713.00
24.4	Model VL-35463.50+	Nos.	1564.00
NEW ADDITIONS			
1	Insulated Piercing Connector (IPC)		
i)	50 - 150 sqmm	Each	6.00
ii)	16 - 95 / 4 - 50 sqmm	Each	5.00
2	Suspension clamp with bracket (NFC type)		
		Each	20.00
3	Mid Span Joints		
i)	95 sqmm	Each	8.00

ii)	50 sqmm	Each	7.00
iii)	25 sqmm	Each	7.00
4	Dead end Clamp for bare messenger with hook bolt through Pole		
i)	16-95 sqmm	Each	26.00
5	Bi-metallic PG clamp Cu/Al with cover		
i)	12mm dia. Rod - 95 sqmm Al cable	Each	13.00
6	Anchoring / Dead end clamp for 6/3 SWG (4.877 - 4.064 sqmm) GSL Tension clamp	Each	30.00
7	SS strap with adjustable screw (for clamping of armour for 25, 50, 95 sqmm) & support GSL / jubilee clamp	Each	1.00
8	Insulation Mastic Tape (2 inch x 10 ft.)	Each	48.00
9	Dead end clamp for armoured cable wooden cleat (Lopp)		
i)	25- 95 sqmm	Each	27.00
10	Service clamp for 2C - 10 sqmm PVC cable with strap, buckle & bracket	Each	15.00
11	Insulated Bi-metallic lugs/ Thimble		
i)	95 sqmm	Each	25.00
12	LT Fuse box - SMC with pole clamp		
i)	30 inch x 18 inch x 8 inch	Each	32.00
13	SS cable ties releasable ARC		
i)	dia - 200 mm	Each	0.31
ii)	dia - 250 mm	Each	0.39
	Sub-Station items :		
14	33 KV Indoor VCB	Each	7000.00
15	33 KV LBS 33/0.400 KV	Each	2000.00
16	33 KV / 0.400 kV copper wound, 100 kVA DT	Each	6400.00
17	PA type monopole	per unit	184080.00
18	PB type monopole	per unit	547842.00
19	PC type monopole	per unit	525692.00
20	PD type monopole	per unit	761696.00
21	24V DC Ni-Cd alkaline battery (partial recombination type) with charger for 33/11 kV & 66/11 kV Sub/Stn.	per unit	4073.00
22	HDPE Pipe 160mm ²	per meter	650.00
23	Muffing of PCC poles		
(i)	9 meter long PCC Pole (1.5 m below the ground and 0.3 m above the ground)	per Pole	826.00
(ii)	11 meter long PCC Pole (1.8 m below the ground and 0.3 m above the ground)	per Pole	1408.00

Note:-

1. The new erection rates of all the aforementioned items have been ascertained by the committee keeping in view various aspects i.e. Consumer Price Index, existing erection rates, rates finalized by the committee in 2015 etc. as mention in the 'reference drawn' column of Annexure-
2. The above rates are inclusive of all taxes, F&I FOR destination.
3. The steel items used should be of SAIL/TATA make only. The rates of steel fabricated items are inclusive of painting (Red Oxide + Aluminium paints of Asian/Nerolac/Berger make).
4. The rates of fabrication of steel items shall be Rs.15/- kg (inclusive of transportation charges).
5. The rates of galvanizing of steel items shall be Rs.13/- kg for preparation of estimates.
6. Before preparation of estimates, the below mentioned aspects/bifurcation of rates of various items may also be taken into account.

Detail of various aspects to be taken into account while preparation of estimates:-

1. Work in Hilly, Sandy & Expensive Localities.

- a) An addition of 20% over and above the schedule of labour rates may be allowed for the jobs to be executed in hilly areas.
- b) In difficult terrains not easily approachable by road and in sandy area an addition of 10% over and above the schedule of labour rates may be allowed.
- c) Delhi, Faridabad, Ballabgrah, Gurgaon and Panchkula are considered an relatively expensive areas. An addition of 10% over and above the schedule of labour rates may be allowed in these localities.

2). Dismantlement of works:

- a) Wherever dismantlement of lines/substations is necessitated due to augmentation or otherwise a regular estimate of dismantlement should be prepared and in estimate a provision of labour at 50% of the schedule for erection may be made.

3) Transportation of Poles, Transformer & Conductor:-

For lifting/transportation of poles/transportation including loading/unloading field labour charges are proposed as under.

The rates applicable shall be as per already negotiated rates finalized in EOI for 33kV & 11kV works

4) Formula for calculating the supply rate of steel item:-

The fabrication of steel items shall be Rs.15 per Kg including painting (Red oxide + Aluminium paints of Asian/Nerolac/Berger make) and inclusive of Transportation charges.

- 5) The rates of galvanizing of the steel items shall be Rs. 13/- per kg. in case the galvanized material for preparation of the estimates.
- 6) The road restoration charges (Broken during erection of pole) shall be Rs. 525 per pole. However number of such poles shall be mentioned in the estimated clearly.
- 7) Trenchless laying of HDPE and PLB-HDPE pipe by using HDD method Rs. 715 per meter including laying of cable, Digging & refilling of pits etc.
- 8) **Erection charges of Rs 798.00/- in sub head – (B) 4 of HT PCC Single Pole 9 Mtrs long include the following i.e.**

i) Hole in ground	= Rs. 179.54 /-
ii) Fixing of X-arms, knee bracing, poles caps/top hamper and pin insulator etc.	= Rs. 303.23/-
iii) Erection of pole as site	= Rs. 199.51/-
iv) Fixing barbed wire, danger plate and bird guards etc.	=Rs. 115.72/-
Total	= Rs. 798.00/-

9) Erection charges of Rs. 898/- in sub head – (A) 6 of HT PCC Single Pole 11 Mtrs long include the following i.e.

i) Hole in ground	= Rs. 120.56/-
ii) Fixing of X-arms, knee bracing, poles caps/top hamper and pin insulator etc.	= Rs. 425.78/-
iii) Erection of pole as site	= Rs. 277.02/-
iv) Fixing barbed wire, danger plate and bird guards etc.	= Rs. 74.39/-
Total	= Rs. 897.75/- (Say Rs. 898/-)

10). Erection charges of Rs 2683/- in sub head – (c) 2 of 25 to 63 KVA pole mounting substation without poles include the following i.e.

i). Erection of plat from set	= Rs. 100.00/-
ii). Installation of Transformer	= Rs. 567.48/-
ii). Erection of GO Switch with Fuses	= Rs. 743.50/-
iv). Erection of LT Switch with fittings	= Rs. 203.48/-
v). a. Erection of T/F Earthing -2 nos.	= Rs. 333.18/-
b. Digging and filling of 20' deep pits -2 nos.	= Rs. 306.35/-
vi). Erection of jumper set – 2 nos.	= Rs. 131.93/-
vii).Erection of cable with fittings and connecting the same to Transformer	= Rs. 297.40/-
Total	= Rs. 2683.32/- (Say Rs. 2683/-)

11). Erection charges of Rs 3075/- in sub head – (c) 1 of 100 to 200 KVA pole mounting substation without poles include the following i.e.

i). Erection of plate from set	= Rs. 100.00/-
ii). Installation of Transformer	= Rs. 664.75/-
ii). Erection of GO Switch with Fuses	= Rs. 851.95/-
iv). Erection of LT Switch with fittings	= Rs. 233.68/-
v).a. Erection of T/F Earthing -2 nos.	= Rs. 382.38/-
b. Digging and filling of 20' deep pits -2 nos.	= Rs. 349.95/-
vi). Erection of jumper set – 2 nos.	= Rs. 150.93/-

vii). Erection of cable with fittings and connecting
the same to Transformer = Rs. 341.00/-

Total = Rs. 3074.64/-
(Say Rs. 3075/-)

12). Erection charges of Rs 1258/- in sub head – (c) 6 of 200 to 500 KVA on plinth complete in all respect, include the following i.e.

i) Placing of transformer on plinth = Rs. 536.67/-
ii) Earthing for transformer -2 Nos. = Rs. 640.64/-
iii) Making connection to transformer = Rs. 80.50/-

Total = Rs.1257.81/-
(Say Rs. 1258/-)

13). Erection charges of Rs 1509/- in sub head – (c) 7 of 500 to 1000 KVA on plinth complete in all respect, include the following i.e.

i) Placing of transformer on plinth = Rs. 788.23/-
ii) Earthing for transformer- 2 Nos. = Rs. 640.64/-
iii) Making connection to transformer = Rs. 80.50/-

Total = Rs. 1509.37/-
(Say Rs. 1509/-)

14). Erection charges of Rs 6708/- in sub head – (c) 8 of 11 KV VCB complete in all respect, include the following i.e.

i) Placing of VCB = Rs. 4391.70/-
ii) Making connection to earthing = Rs. 80.50/-
iii) Making connection to the VCB = Rs. 2236.10/-

Total = Rs. 6708.30/-
(Say Rs. 6708/-)

15). Erection charges of Rs 8/- Mtr in sub head – (F) 1 (i) of LT armoured underground cables of sizes 2/c 6mm sq., 10mm sq. Include the following i.e.

i)	Digging of trench	= Rs. 3.17/-
ii)	Spreading of sand	= Rs 0.78/-
iii)	Laying of cables	= Rs. 2.24/-
iv)	Placing of bricks	= Rs. 1.12/-
v)	Back filling	= Rs. 1.12/-
Total		= Rs. 8.39/- (Say Rs. 8/-)

16). Erection charges of Rs 13/- Mtr in sub head – (F) 1 (iv) of LT armoured underground cables of sizes 4/c 16mm sq. include the following i.e.

i)	Digging of trench	= Rs. 4.81/-
ii)	Spreading of sand	= Rs 1.20/-
iii)	Laying of cables	= Rs. 3.43/-
iv)	Placing of bricks	= Rs. 1.71/-
v)	Back filling	= Rs. 1.71/-
Total		= Rs. 12.86/- (Say Rs. 13/-)

17). Erection charges of Rs 15/- Mtr in sub head – (F) 1 (ii, iii & v) of LT armoured underground cables of sizes 3.5/c 25mm² & 50mm², 4/C 25mm² sq. include the following i.e.

i)	Digging of trench	= Rs. 5.63/-
ii)	Spreading of sand	= Rs 1.41/-
iii)	Laying of cables	= Rs. 4.02/-
iv)	Placing of bricks	= Rs. 2.01/-
v)	Back filling	= Rs. 2.01/-
Total		= Rs. 15.09/- (Say Rs. 15/-)


14/5/2018
Superintending Engineer/P&D,
For CE/PD&C, DHBVN, Hisar