



SOUTHERN POWER DISTRIBUTION COMPANY OF TELANGANA. LIMITED  
6-1-50, Corporate Office, Mint Compound, Hyderabad - 63

O/o Chief General Manager Projects,  
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Mint Compound, Hyderabad -500 004.

**Memo No.CGM(P)/SE(P)/DE(R-APDRP)/F. /D.No.1984/2017, Dt:08-11-2017.**

**Sub:** Projects – Cost Data for the year 2017-18- Reg.

**Ref:** 1. Note approved by the Chairman and managing Director/TSSPDCL, Dt:26.10.2017

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The approved cost-data for the FY 2017-18 is herewith enclosed and the soft copy is placed in 202/cgm-proj/DE-RE/Cost-dataFY17-18.

Hence, it is requested to adopt the rates with effect from 01.07.2017. Further, cost data for FY2017-18 is also available in the TSSPDCL website ie., [www.tssouthernpower.com](http://www.tssouthernpower.com)

**Encls:** As above.

Sd/-  
Chief General Manager / Projects

**To:**

The Superintending Engineer/ Operation/  
The Superintending Engineer/ Master Plan/  
The Superintending Engineer/SCADA/

**Copy communicated to:**

The Chief General Manager/Operation/  
The Chief General Manager/Master Plan/  
All the Chief General Managers / Corporate office / TSSPDCL

**Copy submitted to**

The Director (Projects & IT)/ TSSPDCL, Corporate Office, Mint Compound, Hyderabad.  
The Director (Finance)/TSSPDCL, Corporate Office, Mint Compound, Hyderabad.

## INDEX

Sl. No.	Description	Page No.
1	Rates for <b>CENTRALIZED MATERIALS</b>	1-5
2	<b>ABSTRACT</b> of rates of 33 KV / 11 KV / LT Lines	6-7
3	Cost Data for Hilly and Tribal areas as adopted by Irrigation Department in the State	8
4	33 KV Single circuit Line over 11 Mts. RS Joists poles at 50 Mts. Span with 100 Sq.mm Conductor.	9
5	33 KV Double circuit line over 12 mts. RS Joists box poles at 50 Mts. Span with 100 Sq.mm Conductor.	10
6	33 KV Single circuit Line over 11 Mts. PSCC pole at 60 Mts.Span with 100 Sq.mm Conductor.	11
7	33 KV Double circuit Line over 11 Mts. PSCC pole at 40 Mts.with 100 Sq.mm Conductor.	12
8	33 KV Line over 9.1 Mts. PSCC Poles at 80 Mts.Span with 100 Sq.mm Conductor.	13
9	33 KV Line over 9.1 Mts. PSCC Poles at 65 Mts.Span with 100 Sq.mm Conductor.	14
10	11 KV Line over 9.1 Mts. PSCC Poles at 60 Mts.Span with 55 Sq.mm Conductor.	15
11	11 KV Line over 9.1 Mts. PSCC Poles at 60 Mts.Span with 34 Sq.mm Conductor.	16
12	11 KV Line over 8 Mts. PSCC Poles at 60 Mts.Span with 55 Sq.mm Conductor.	17
13	11 KV Line over 8 Mts. PSCC Poles at 60 Mts.Span with 34 Sq.mm Conductor.	18
14	11 KV Line over R.S Joist Poles at 50 Mts.Span with 55 Sq.mm Conductor.	19
15	6.3 KV Line over 8 Mts. PSCC Poles at 90 Mts.Span with 34 Sq.mm Conductor.	20
16	LT 3 Ph.5 Wire line (Horizontal) over 8 Mts. PSCC Poles at 65 Mts.Span with 3X55+2X34 Sq.mm Conductor.	21
17	LT 3 Ph.5 Wire line (Horizontal) over 8 Mts. PSCC Poles at 45 Mts.Span with 3X55+2X34 Sq.mm Conductor.	22
18	LT 3 Ph.5 Wire line (Horizontal) over 8 Mts. PSCC Poles at 65 Mts.Span with 34 Sq.mm Conductor.	23
19	LT 3 Ph.4 Wire line (Horizontal) over 8 Mts. PSCC Poles at 65 Mts.Span with 3X55+1X34 Sq.mm Conductor.	24
20	LT 3 Ph.4 Wire line (Horizontal) over 8 Mts. PSCC Poles at 65 Mts.Span with 34 Sq.mm Conductor.	25
21	LT 1 Ph. 3 Wire line (Horizontal) over 8 Mts. PSCC Poles at 65 Mts.Span with 34 Sq.mm Conductor.	26
22	LT 1 Ph. 2 Wire line (Horizontal) over 8 Mts. PSCC Poles at 65 Mts.Span with 34 Sq.mm Conductor.	27
23	L.T.AB Cable over 8 Mts. PSCC Poles at 65 Mts.Span with 3x16+25 Sqmm Cable	28
24	L.T.AB Cable over 8 Mts. PSCC Poles at 65 Mts.Span with 2x16+25 Sqmm Cable	29
25	Conversion of single Phase 2 W/L to 3 Phase 4 W/L	30
26	Erection of 100 KVA CSP Distribution Transformer	31
27	Erection of 63 KVA CSP Distribution Transformer	32
28	Erection of 63 KVA CSP Distribution Transformer on plinth	33
29	Erection of 63 KVA CSP Distribution Transformer on structure	34
30	Erection of 100 KVA DTR on column type plinth	35
31	Erection of Three Phase 25 KVA CRGO Distribution Transformer (Copper)	36
32	Erection of Three Phase 25 KVA CRGO Distribution Transformer (Alluminium)	37
33	Erection of 25 KVA Single Phase 6.3 KV/0-240 V CSP Distribution Transformer	38
34	Erection of 15 KVA Single Phase 6.3 KV/0-240 V CSP Distribution Transformer	39
35	Release of poly phase Agl. Service erected on support	40
36	Release of 1 ph ( Electronic Meter) Domestic & Non-domestic service	41

<b>Sl. No.</b>	<b>Description</b>	<b>Page No.</b>
37	Release of 3 ph. (Electronic Meter) Domestic & non-domestic service	42
38	Release of poly phase Industrial service (upto20HP) with Electronic Meter	43
39	Release of Industrial service (above 20 HP and upto 50) - with CT meter	44
40	Release of Industrial service (above 50 HP and upto 75 HP) - HT metering	45
41	Release of Street light service (1 -ph electronic meter)	46
42	Erection of L.T. Electronic trivector meter on LV side of DTR	47
43	Erection of 33/11 KV Sub-station with 2x8 MVA PTR & 6 Nos. 11 KV feeders ( without 11 KV 2 MVAR Capacitor Bank)	48
44	Erection of 33/11 KV Sub-station with 2X8 MVA Power Transformer & 6 Nos. 11 KV feeders ( with 11 KV 2 MVAR Capacitor Bank)	49
45	Erection of 33/11 KV Sub-station ( <b>Indoor</b> ) with 2X8 MVA Power Transformer & 6 Nos. 11 KV feeders ( without 11 KV 2 MVAR Capacitor Bank)	50
46	Erection of 33/11 KV Sub-station with 2x5 No. Power Transformer & 5 Nos. 11 KV feeders ( without 11 KV 2 MVAR Capacitor Bank)	51
47	Erection of 33/11 KV Sub-station with 2x5 No. Power Transformer & 5 Nos. 11 KV feeders ( with 11 KV 2 MVAR Capacitor Bank)	52
48	Erection of 33/11 KV Sub-station with 1x5 Power Transformer & 3 Nos. 11 KV feeders ( with 11 KV 2 MVAR Capacitor Bank)	53
49	Erection of 11 KV bay extension with girder poles	54
50	Erection of 11 KV bay extension with PSCC poles	55
51	Erection of 33 KV Extension Bay at 33/11 KV Sub-station	56
52	33KV bay at 132/33KV SS.	57
53	Erection of 11 KV VCB at 33/11 KV Sub-station	58
54	Erection of 33KV VCB and Twin feeder control pannel in 132/33KV SS	59
55	Erection of 2 MVAR capacitor bank	60
56	Enhancement of PTR capacity from 5 MVA to 8 MVA	61
57	Laying of 11KV, 3 core 95Sq.mm UG Cable	62
58	Laying of 33KV, 3 core 400Sq.mm UG Cable	63
59	Erection of M+3 tower	64-65
60	Erection of L+3 Towers	66-67
61	Erection of K+3 Towers	68-69
62	Extension of 3mtrs for K+3 Tower as per ASCI Standard	70-71
63	Extension of 3mtrs for L+3 Tower as per ASCI Standard	72-73
64	Extension of 3mtrs for M+3 Tower as per ASCI Standard	74-75
65	Erection of additional PTR in existing 33/11 KV Sub-station	76
66	REC Construction Standard Specification Nos. for items, other than included in the 33 KV, 11 KV & LT lines.	77
67	REC Construction Standard diagrams	78-96

**COST DATA OF CENTRALISED MATERIALS FOR R.E. AND DISTRIBUTION WORKS**

Sl. No	Name of the Material	P.O. No.	Unit	Rupees	EX-Works	F&I	Basic Price	GST	% GST	SAP Code No.
1	2	3	4	5						
<b>SUBHEAD - I : SUPPORTS AND FIXTURES, IRON, STEEL AND CEMENT</b>										
1 (a)	RS Joists 175 x 85 mm.	PM-946/16, dt. 03-01-2017	MT	41,851.06	35,467.00	-	35,467.00	6,384.06	18	MST00032
(b)	RS Joists 150 x 150 mm.	PM-946/16, dt. 03-01-2017	MT	44,052.94	37,333.00		37,333.00	6,719.94	18	MST00029
(c)	Spun Pole 9.5 m.		-	Not procured recently			-			
2	MS Channel 100 x 50.	PM-946/16, dt. 03-01-2017	MT	40,392.58	34,231.00		34,231.00	6,161.58	18	MST00012
3	MS Channel 75 x 40 mm	PM-946/16, dt. 03-01-2017	MT	36,894.66	31,266.66		31,266.66	5,628.00	18	MST00013
4	MS Angle 65 x 65 x 6 mm.	PM-946/16, dt. 03-01-2017	MT	39,841.83	33,764.26		33,764.26	6,077.57	18	MST00003
5	MS Angle 50 x 50 x 6 mm	PM-946/16, dt. 03-01-2017	MT	41,465.09	35,139.91		35,139.91	6,325.18	18	MST00002
6	MS Flat 75x 8	PM-946/16, dt. 03-01-2017	MT	42,952.00	36,400.00		36,400.00	6,552.00	18	MST00015
7	MS Flat 50 x 6 mm	PM-946/16, dt. 03-01-2017	MT	42,952.00	36,400.00		36,400.00	6,552.00	18	MST00014
8	MS Rod 20 mm.	PM-946/16, dt. 03-01-2017	MT	41,300.00	35,000.00		35,000.00	6,300.00	18	MST00019
9	MS Rod 16 mm.	PM-946/16, dt. 03-01-2017	MT	41,300.00	35,000.00		35,000.00	6,300.00	18	MST00018
10	GI Stay wire 7/3.15 mm.	PM-1046/16, dt. 13-03-2017	MT	53,583.87	44,260.06	1,150.00	45,410.06	8,173.81	18	WRS00006
11	GI Stay wire 7/2.5 mm	PM-1046/16, dt. 13-03-2017	MT	57,021.05	47,172.92	1,150.00	48,322.92	8,698.13	18	WRS00007
12	GI wire 4 mm	Rpt PM-538/15, dt. 31-10-2015	MT	57,434.00	47,722.88	950.00	48,672.88	8,761.12	18	WRS00005
13	PSCC Pole (9.1 M) - 280 Kg WL	PM-889/16, dt. 19-10-2016	Nos.	3,775.94	2,350.00	599.95	2,949.95	825.99	28	PLS00004
14	PSCC Pole (8.0 M) - 140 Kg WL	PM-952/16, dt. 25-01-2017	Nos.	1,619.07	1,125.00	139.90	1,264.90	354.17	28	PLS00001
15	PSCC Poles (11 Mtrs) 365 Kgs	Rpt PM-948/16, dt. 07-01-2017	Nos.	7,496.59	4,500.00	1,356.71	5,856.71	1,639.88	28	PLS00013
<b>SUBHEAD - II : INSULATORS AND HARDWARE</b>										
1	33 KV Pin Insulators		Nos.	Not procured recently			-			INS30001
2	33 KV GI Pins	PM-765/16, Dt: 21-05-2016	Nos.	154.37	123.90	6.92	130.82	23.55	18	HWR00003
3	33 KV Post Insulators	PM-1074/16, Dt. 27-03-2017	Sets	898.13	761.13	-	761.13	137.00	18	INS30004
4	33 KV Hard Ware Fittings (B&S)	PM-1298/17, Dt. 13-09-2017	Sets	185.25	150.00	6.99	156.99	28.26	18	HWR00004
5	33 KV Polymer String Insulator (B&S)	PM-1312/17, Dt. 18-09-2017	Nos.	282.40	239.32	-	239.32	43.08	18	INS30007
6	11KV Pin Insulator	PM-908/16, Dt: 16-11-2016	Nos.	42.53	36.04	-	36.04	6.49	18	INS10001
7	11 KV GI Pin	PM-928/16, Dt: 15-12-2016	Nos.	58.41	46.00	3.50	49.50	8.91	18	HWR00001
8	11 KV Post Insulator.	LOI issued	Nos.	300.00	254.24	-	254.24	45.76	18	INS10008
9	11 KV String Insulator (B&S).	PM-2385/07, Dt: 03-09-2007	Nos.	187.00	-	-	-	-		INS10004
10	11 KV String Insulator (C&T).	PM-2063/06, Dt. 26.08.06	Nos.	192.00	-	-	-	-		INS10002
11	11 KV String Hardware Fitting (C&T)	PM-1090/16, Dt: 31-03-2017	Sets	84.30	68.00	3.44	71.44	12.86	18	HWR00002
12	11 KV Polymer String insulator (C&T)	PM-1258/17, Dt: 05-08-2017.	Nos.	138.15	117.08	-	117.08	21.07	18	INS10003
13	11 KV Solid Core Insulators		Nos.	Not procured recently			-			INS10006
14	LT Pin Insulators	PM-1208/17, Dt: 17-06-2017.	Nos.	22.25	18.86	-	18.86	3.39	18	INS00001
15	LT GI Pins	PM-1233/17, Dt: 03-07-2017.	Nos.	32.26	25.50	1.84	27.34	4.92	18	HWR00015
16	LT Shackle Insulators	PM-1210/17, Dt: 17-06-2017.	Nos.	19.01	16.11	-	16.11	2.90	18	INS00002
17	LT Shackle Hardware (LT Metal Parts)	PM-1239/17, Dt: 03-07-2017.	Nos.	35.79	28.50	1.83	30.33	5.46	18	HWR00016
18	HT Guy Insulators	LOI issued	Nos.	53.10	45.00	-	45.00	8.10	18	INS10005
19	LT Guy Insulators	PM-981/16, Dt: 15-02-2017.	Nos.	23.60	20.00	-	20.00	3.60	18	INS00003
<b>SUBHEAD - III CONDUCTOR AND CABLES</b>										
1	ACSR Zebra Conductor			Not procured recently			-			CDR00011
2	ACSR Panther Conductor (200 sq mm).	PM-1181/17, Dt: 07-06-2017	KM	140,665.63	116,585.00	2,623.16	119,208.16	21,457.47	18	CDR00010
3	100 Sqmm AAA Conductor or 7/4.26 AAAC.	PM-1089/16, Dt: 31-03-2017	KM	50,489.25	41,700.00	1,087.50	42,787.50	7,701.75	18	CDR00004
4	55 Sqmm AAA Conductor or 7/3.15 AAAC/RABBIT	PM-1093/17, Dt: 03-04-2017.	KM	28,459.05	23,660.84	457.00	24,117.84	4,341.21	18	CDR00003
5	34 Sqmm AAA Conductor or 7/2.50 AAAC/Wweasel	PM-1109/17, Dt: 13-04-2017	KM	18,754.18	15,565.00	328.37	15,893.37	2,860.81	18	CDR00002
<b>SUBHEAD - III (A) LT AERIAL BUNCHED CABLE</b>										
1	2 x 16+25 Sqmm Cable	PM-691/15, Dt: 26-03-2016	KM	31,456.20	23,970.16	605.00	24,575.16	6,881.04	28	CBA00002
2	3 x 16+25 Sqmm Cable	PM-1049/16, Dt: 15-03-2017	KM	45,808.81	35,432.13	356.00	35,788.13	10,020.68	28	CBA00003
3	3 x 70 + 1x16 +1x50 Sqmm XLPE AB, Cable	PM-1224/17, Dt: 30-06-2017	KM	177,139.42	137,069.17	1,321.00	138,390.17	38,749.25	28	CBA00004
<b>SUBHEAD - III (B) 33 &amp; 11 KV XLPE POWER CABLE</b>										
1	33 KV 400 Sq.mm.	PM-1111/17, Dt: 15-04-2017	KM	2,347,045.04	1,711,912.00	121,716.94	1,833,628.94	513,416.10	28	CBX30001
2	11 KV 3x300 sq.mm	PM-1127/17, Dt: 21-04-2017	KM	1,092,399.36	811,937.00	41,500.00	853,437.00	238,962.36	28	CBX10008
3	11 KV 3x185 sq.mm.	PM-1144/17, Dt: 11-05-2017	KM	798,005.76	592,512.00	30,930.00	623,442.00	174,563.76	28	CBA10007
4	11 KV 3x95 sq.mm			Not procured recently			-			CBX10005
5	11 KV 3x35 sq.mm	PM-4327, 22.04.2015	KM	317,665.84			-			CBX10002

Sl. No	Name of the Material	P.O. No.	Unit	Rupees	EX-Works	F&I	Basic Price	GST	% GST	SAP Code No.
1	2	3	4	5						
<b>SUBHEAD - III (C)11 KV AB Cable (Aluminum)</b>										
1	3x35+35 Sqmm.			Not procured recently			-			CBX10004
2	3x70+70 Sqmm.			Not procured recently			-			CBX10005
3	3x120+70 Sqmm.			Not procured recently			-			CBX10007
4	3x185+70 Sqmm.	PM-772/16, Dt.24-05-2016	KM	729,325.29	548,200.00	21,585.38	569,785.38	159,539.91	28	CBX10006
<b>SUBHEAD - III (D) LT XLPE POWER CABLE</b>										
1	LT 3 ½ Cx300 sq.mm.			Not procured recently			-			CBX00016
2	3 ½ Cx185 sq.mm.	PM-1139/17, Dt.08-05-2017	KM	481,061.94	371,648.00	4,181.64	375,829.64	105,232.30	28	CBX00015
3	3 ½ Cx95 sq.mm			Not procured recently			-			CBX00013
4	3 ½ Cx70 sq.mm	PM-1285/17, 04-09-2017	KM	200,309.70	154,751.00	1,740.95	156,491.95	43,817.75	28	CBX00012
5	3 ½ Cx25 sq.mm			Not procured recently			-			CBX00010
6	1x120 sq mm	PM-1164/17, Dt.01-06-2017	KM	78,431.36	60,274.50	1,000.00	61,274.50	17,156.86	28	CBX00004
<b>SUBHEAD - III (E) L.T.P.CONTROL CABLE</b>										
1	2x2.5 sq.mm Copper	PM-662/15, Dt.25-02-2016	KM	40,022.45	31,002.54	265.00	31,267.54	8,754.91	28	CBP00001
2	4x2.5 sq.mm Copper.	PM-1098/17, Dt.06-04-2017	KM	73,987.76	55,000.00	2,802.94	57,802.94	16,184.82	28	CBP00002
3	10x2.5 sq.mm Copper.	PM-1226/17, Dt.30-06-2017	KM	155,595.67	121,001.00	558.12	121,559.12	34,036.55	28	CBP00006
<b>SUBHEAD - IV : POWER TRANSFORMERS &amp; TRANSFORMER OIL</b>										
1	5 MVA PTR	PM-1170/17, Dt.06-06-2017	Nos.	3,078,550.84	2,590,002.00	18,939.39	2,608,941.39	469,609.45	18	PTR00006
2	8 MVA PTR	PM-1124/17, Dt.21-04-2017	Nos.	4,559,641.66	3,845,070.00	19,033.10	3,864,103.10	695,538.56	18	PTR00008
3	12.5 MVA PTR	PM-1211/17, Dt.17-06-2017	Nos.	6,450,154.94	5,428,233.00	38,000.00	5,466,233.00	983,921.94	18	PTR00020
4	Transformer Oil (New) - (IOCL MOU)	PM-592/15, Dt.04-12-2015	L	68.62	58.15	0.00	58.15	10.47		OF010006
<b>SUBHEAD - IV (A) : Distribution Transformers</b>										
1	3-Phase 63 KVA (CSP) (Al)	PM-1161/17, Dt. 01-06-2017	Each	101,960.78	85,507.44	900.00	86,407.44	15,553.34	18	DTC30004
2	3-Phase 100 KVA (CSP) (Al)	PM-904/16, Dt.08-11-2016	Each	123,969.34	103,890.00	1,168.76	105,058.76	18,910.58	18	DTC30122
3	3-Phase 160 KVA (CSP) (Al)	PM-1012/16, Dt. 01-03-2017	Each	195,724.92	163,116.00	2,752.58	165,868.58	29,856.34	18	DTC30125
4	3-Phase 315 KVA (CSP) (Al)		Each	Not procuring			-			DTC30009
5	3-Phase 500 KVA (Con.) (Al)		Each	Not procuring			-			DTC30110
6	3-Phase 25 KVA (CSP) (Al)	PM-1166/17, Dt: 02-06-2017	Each	54,720.80	45,999.00	374.56	46,373.56	8,347.24	18	DTC30121
7	3-Phase 25KVA (CSP) (Copper)			Not procuring			-			DTC30011
8	3-Phase 16KVA (CSP) (Copper)			Not procuring			-			DTC30101
9	1-Ph 10kVA 11kV/250V (CSP) (Al)			Not procuring			-			DTC10002
10	1-Ph 10kVA 11kV/O3/250V (CSP) (Al)			Not procuring			-			DTC10003
11	1-Phase 15 KVA (CSP) (Copper)	PM-3546/11, 18.04.2012	Each	25868.57			-			DTC10004
12	1-Phase 25 KVA (CSP) (Aluminium)	PM-1005/16, Dt: 20-02-2017	Each	49,185.04	41,125.28	556.96	41,682.24	7,502.80	18	0008-DTC1
13	3-Phase 315 KVA (CSP) Copper	PM-1270/17, Dt: 16-08-2017	Each	620,143.37	519,745.23	5,800.00	525,545.23	94,598.14	18	DTC30123
14	3-Phase 500 KVA Copper (Conventional)	PM-1243/17, Dt: 13-07-2017	Each	809,267.60	681,054.00	4,766.00	685,820.00	123,447.60	18	DTC30124
<b>SUBHEAD - V : SWITCH CONTROL AND PROTECTIVE GEAR</b>										
1	33 KV 24V DC VCB with diff. prot. with CRPs & CTs ratio 400-200-100/1-1-1A	PM-578/15, Dt: 30-11-2015	Nos.	397,610.44	333,958.00	3,000.00	336,958.00	60,652.44	18	BRK30031
2	33 KV 24V DC VCB with CRPs & CTs ratio 400-200-100/1-1A	PM-1275/17, Dt: 28-08-2017	Nos.	385,014.58	318,753.00	7,530.54	326,283.54	58,731.04	18	BRK30019
3	11KV, 24V DC LV VCB with diff. prot. with CRPs & CTs of Ratio 600-300/01-01-0.577A	PM-596/15, Dt: 28-12-2015	Nos.	330,166.75	275,776.00	4,026.33	279,802.33	50,364.42	18	BRK10009
4	11KV 24V LV VCBs with CTs & Panel (600-300/1-1A)	PM-689/15, Dt: 24-03-2016	Nos.	260,654.07	216,881.00	4,012.28	220,893.28	39,760.79	18	BRK10014
5	11KV, 24V DC feeder VCBs with CRPs & CTs of Ratio 400-200-100/1-1A	PM-1182/17, Dt: 09-06-2017	Nos.	245848.7284	202050	6296.38	208,346.38	37502.3484	18	BRK10015
6	33 KV Feeder CTs (400-200-100/1-1A) 0.5 class			Not procured recently			-			ITR30011
7	33 KV CTs 25/1 for HT Metering (0.5 class)			Not procured recently			-			ITR30029
8	33 KV CTs 50/1 for HT Metering (0.2 class)			Not procured recently			-			ITR30028
9	33 KV CTs 100/1 for HT Metering (0.2 class)			Not procured recently			-			ITR30027
10	33 KV CTs 200/1A for HT Metering (0.2 Class)			Not procured recently			-			ITR30026
11	33 KV CTs 25/1 for HT Metering (0.2 class)			Not procured recently			-			ITR30055
12	33 KV CTs 50/1 for HT Metering (0.5 class)			Not procured recently			-			ITR30004
13	33 KV CTs 100/1 for HT Metering (0.5 class)			Not procured recently			-			ITR30003
14	33 KV CTs 200/1 for HT Metering (0.5 class)			Not procured recently			-			ITR30002
15	33 KV CTs 400-200-100/1-1A for HT Metering (0.5 class)			Not procured recently			-			ITR30011

Sl. No	Name of the Material	P.O. No.	Unit	Rupees	EX-Works	F&I	Basic Price	GST	% GST	SAP Code No.
1	2	3	4	5						
16	11 KV Feeder CTs (400-200-100/1-1A) (0.5 class)			Not procured recently			-			ITR10020
18	33 KV PT (Single Phase) 0.5 Class	PM-976/16, Dt.14-02-2017		17,962.26	14,001.49	1,220.76	15,222.25	2,740.01	18	ITR30061
19	33 KV PT (Single Phase) 0.2 Class	PM-661/16, Dt.20-02-2016		21,004.00	17,400.00	400.00	17,800.00	3,204.00	18	ITR30058
20	11 KV PT 3 Phase 0.5Class	PM-1192/17, Dt.15-06-2017		18,167.48	14,975.00	421.17	15,396.17	2,771.31	18	ITR10065
21	33 KV 800 Amps AB Switch	Rpt PM-1031/16, Dt.09-03-2017	Nos.	30,585.60	25,920.00	-	25,920.00	4,665.60	18	ABS30004
22	11 KV 800 Amps (Conventional) AB Switch	PM-804/16, Dt.24-06-2016	Nos.	16,867.75	14,294.70	-	14,294.70	2,573.05	18	ABS10015
23	11 KV 400 Amps (Conventional) SB AB Switch with post type porcelain insulators	PM-799/16, Dt.24-06-2016	Nos.	7,068.20	5,990.00	-	5,990.00	1,078.20	18	ABS10008
24	11 KV 400 Amps AB Switch for single phasing		Nos.	12,026.69	10,192.11	-	10,192.11	1,834.58	18	
25	11 KV 200 Amps AB Switch (Tilting) round pipe		Nos.	6,212.70	5,265.00	-	5,265.00	947.70	18	ABS10002
26	30 KV 10 KA Metal Oxide Lightning Arresters (station type)	PM-1227/17, Dt.30-06-2017	Nos.	3,321.37	2,769.72	45.00	2,814.72	506.65	18	LAS00004
27	9 KV 10 KA Metal Single Phase Lightning Arrester (station type)	PM-619/16, Dt.18-01-2016	Nos.	2,014.80	1,659.93	47.53	1,707.46	307.34	18	LAS00002
28	9 KV 5 KA Metal Oxide Lightning Arrester (DTR Class)	PM-963/16, Dt.02-02-2017	Nos.	1,087.46	891.00	30.58	921.58	165.88	18	LAS00001
29	11 KV HG Fuse set with insulators	PM-871/16, Dt.14-09-2016	Nos.	1,843.04	1,561.90	-	1,561.90	281.14	18	HGF10002
30	24 V, 40 AH Batteries with Chargers (Conventional)	PM-1231/17, Dt.03-07-2017	Nos.	25,600.00	20,000.00	-	20,000.00	5,600.00	28	BAT00074
31	24 V, 40 AH SMF Batteries			Not procuring			-			BAT00025
32	24 V, 40 AH Chargers (Conventional)	PM-20/14, Dt.11-06-2014	Nos.	12,312.32	9,619.00	-	9,619.00	2,693.32	28	BAT00075
33	12 V 42 AH SMF VRLA Batteries	PM-1025/16, Dt.08-03-2017	Nos.	3,520.00	2,750.00	-	2,750.00	770.00	28	BAT00056
34	12 V, 80 AH SMF Batteries cells			Not procured recently			-			SBA10051
35	220V 80 AH Battery charger & DCDB	PM-1137/17, Dt.28-04-2017	Nos.	329,093.12	254,020.00	3,084.00	257,104.00	71,989.12	28	BAT00072
36	220 V, 80 AH SMF Batteries	PM-1141/17, Dt.10-05-2017	Nos.	194,427.84	150,040.00	1,856.75	151,896.75	42,531.09	28	BAT00023
37	LT Switched capacitors		-				-			
(a)	1*9 KVAR (Shunt)		-				-			CPT00027
(b)	1x10 KVAR		-				-			CPT00025
38	11 KV 2 MVAR Capacitor banks with associated equipment			Not procured in 2016-17			-			
(a)	Type A		Nos.				-			CPT10009
(b)	Type B with 40 Mtrs HT UG cable		-				-			
(c)	Type C (Indoor Type with HT UG cable)		Nos.				-			CPT10014
39	Sectionalizers	Not procured (Procured exclusively)					-			
40	Auto - Reclosures	Not procured (Procured exclusively)					-			
41	11 KV 3 Way RMU			Not procuring			-			
42	11 KV 3 Way RMU (SF6)	PM-1178/17, Dt.07-06-2017	Nos.	480,787.46	371,115.20	4,500.00	375,615.20	105,172.26	28	BRK00001
43	11 KV SF6 5 Way RMU	PM-1179/17, Dt.07-06-2017	Nos.	808,876.66	625,926.00	6,008.89	631,934.89	176,941.77	28	BRK00002
44	33 KV Indoor twin feeder control panel	PM-579/15, Dt.30-11-2015	Nos.	418,324.95	324,299.00	2,517.37	326,816.37	91,508.58	28	BRK30014
45	Indoor type VCB with control panel (LV)			Not Procured in P&MM wing			-			
46	Indoor type VCB with control panel (feeder)			Not Procured in P&MM wing			-			
47	33/11 KV Indoor switch gear (8 feeders)	PM-774/16, Dt.26-05-2016	Nos.	19,188,115.44	14,990,715.19	-	14,990,715.19	#####	28	BRK30020
48	33 KV CTs of ratio 600-300/1-1A 0.2S Class of Accuracy	PM-1116/17, Dt.17-04-2017	Nos.	22,566.91	18,400.00	724.50	19,124.50	3,442.41	18	ITR30068
49	33 KV HG fuse set			Not Procured in P&MM wing			-			HGF30001
50	11KV switch Fuse unit (SFU)			Not Procured in P&MM wing			-			
51	33KV switch Fuse unit (SFU)			Not Procured in P&MM wing			-			
52	33KV 3-way RMU without VCB			Not Procured in P&MM wing			-			
53	33KV 3-way RMU with VCB	PM-151/14, Dt.09-09-2014	Nos.	3349433.792	2589062	27683.15	2,616,745.15	732688.642	28	BRK30024
54	11KV metering panel with CTS& PTS (Indoor)			Not Procured in P&MM wing			-			
55	33KV metering panel with CTS&PTS (Indoor)			Not Procured in P&MM wing			-			
<b>SUBHEAD - VI : METERS AND METERING EQUIPMENT</b>										
<b>I</b>	<b>HT Metering</b>						-			
1	HT Trivector Meter of class 0.2S	PM-604/ 05-01-2016	Nos.	8,271	6,960	50	7,009.60	1,262	18	0031□MHT3
2	HT Trivector Meter of class 0.5S	Rpt PM-3283/ 01-04-2011	Nos.	4,159.55	3,510.00	15.04	3,525.04	634.51	18	MHT30022
<b>II</b>	<b>11 KV Metering (11 KV CT PT Sets)</b>						-			
1	10/5, 20/5, 40/5 (0.5 class)		EA	30,059.43	23,994.00	1,480.09	25,474.09	4,585.34	18	ITR10006 ITR10007
2	5/5A (0.5 class)		EA	35,051.90	29,055.00	650.00	29,705.00	5,346.90	18	ITR10057
3	60/5 & 100/5 (0.5 class)		Nos.	30,857.00	25,800.00	350.00	26,150.00	4,707.00	18	ITR10042 ITR10043
4	40/5A,60/5,100/5A(0.2S CLASS)	PM-843/16, Dt.06-08-2016	Nos.	38,908.46	32,600.00	373.27	32,973.27	5,935.19	18	ITR10047, ITR10046

Sl. No	Name of the Material	P.O. No.	Unit	Rupees	EX-Works	F&I	Basic Price	GST	% GST	SAP Code No.
1	2	3	4	5						
5	100/5A & 40/5A (0.2s class)	PM-843/16, Dt.06-08-2016	Nos.	38,908.46	32,600.00	373.27	32,973.27	5,935.19	18	ITR10047
6	60/5A (0.2s class)	PM-843/16, Dt.06-08-2016	EA	38,908.46	32,600.00	373.27	32,973.27	5,935.19	18	ITR10046
7	20/5A & 10/5A (0.2s class)	PM-843/16, Dt.06-08-2016	EA	37,611.51	31,500.00	374.16	31,874.16	5,737.35	18	0048-ITR100
<b>III LT Meters</b>										
1	LT Trivector meter (without CTs & Meter box) 50/5A (with DLMS) - Cat- C with IRDA port	PM-862/16, Dt.01-09-2016	Nos.	2,057.38	1,725.30	18.24	1,743.54	313.84	18	MTE30041
2	LT TVR Meters Cl. 0.5 (Including Box & 3 CTs) 200/5A for DTR Metering	PM-4291/ 14-03-2014	Nos.	6,272.75	5,216.25	99.64	5,315.89	956.86	18	MTE30025
3	LT TVR Meters Cl. 0.5S (Including Box & 3 CTs) 200/5A for AGL DTRs	PM-4291/ 14-03-2014	Nos.	6,676.44	5,558.08	99.92	5,658.00	1,018.44	18	MTE30023
4	LT TVR Meters Cl. 0.5S (Including Box & 3 CTs) 100/5A	PM-4291/ 14-03-2014	Nos.	6,492.07	5,401.61	100.14	5,501.75	990.32	18	MTE30024
<b>IV Single phase electronic meter</b>										
1	5-30A With PP box & IR port		Nos.	957.18	790.29	20.88	811.17	146.01	18	MTE10018
2	5-30A Without PP Box & IR port		Nos.	714.31	600.30	5.05	605.35	108.96	18	MTE10017
<b>V Three phase Electronic meters</b>										
1	5-20 A with PP Box			Not Procured in 2016-17			-			
2	5-20 A without PP Box			Not Procured in 2016-17			-			
3	10-40 A with PP Box with trivector features	Rpt.PM-4060, Dt.02-07-2013	Nos.	2,001.47	1,675.80	20.36	1,696.16	305.31	18	MTE30027
4	10-40 A without PP Box with trivector features	Rpt.PM-4060, Dt.02-07-2013	Nos.	1,655.17	1,389.15	13.54	1,402.69	252.48	18	MTE30028
5	LT pole mounted meter box (Type-A)	PM-4313/13, Dt.27-03-2014	Nos.	10,432.00	7,800.00	350.00	8,150.00	2,282.00	28	BX300051
6	LT pole mounted meter box (Type-B)	Rpt.PM-3567, Dt.08-05-2012	Nos.	6,437.72	4,802.00	227.47	5,029.47	1,408.25	28	BX300047
7	3 - Phase meter box			Not Procured in 2016-17			-			
<b>VI Testing equipments &amp; others</b>										
1	LT ERS Field Testing Kit (Along with accessories)			Not Procured in 2016-17			-			
2	ERS Testing kits of accuracy 0.02 Class	Extn.PM-3357, 28.06.11	Nos.	1,467,694.62	1,242,809.00	1,000.00	1,243,809.00	223,885.62	18	TEQ10029
3	Semi Automatic Master Test benches of class 0.1 accuracy	PM-2627, Dt.03-10-2008	Nos.	2,320,506.58	1,959,881.00	6,650.00	1,966,531.00	353,975.58	18	
4	Hand held computers			Not Procured in 2016-17			-			OMT10026
5	Integrated spot billing machine with GSM/GPRS Modems	PM-2627, Dt.03-10-2008	Nos.	10,802.02	9,154.25	-	9,154.25	1,647.77	18	OMT10088
6	CMRI	PM-4316, Dt.02-04-2014	Nos.	26,137.00	22,150.00	-	22,150.00	3,987.00	18	OMT10015
7	LT distribution box (SMC)	PM-1050/16, Dt.16-03-2017	Nos.	7,935.69	5,999.00	200.76	6,199.76	1,735.93	28	BXS00047
8	Special moulded Box for HT meter			Not Procured			-			
<b>SUBHEAD - VII : VCB &amp; PTR spares</b>										
1	IDMT (3 O/L+E/L) Numerical Relay 24V DC	PM-931/16, Dt. 16-12-2016	Nos.	8,841.09	6,800.00	107.10	6,907.10	1,933.99	28	SBR00177
2	IDMT Static Relay (3 O/L+1E/L) 220 V DC Relays	PM-931/16, Dt. 16-12-2016	Nos.	8841.088	6800	107.1	6,907.10	1933.988	28	SBR00216
3	11KV Breaker, Single Pole Assembly (Complete Set)			Not Procured in P&MM wing			-			
4	33KV Breaker, Single Pole Assembly (Complete Set)			Not Procured in P&MM wing			-			
5	Driving Mechanism (Complete Set)			Not Procured in P&MM wing			-			
6	11KV Breaker, Vacuum interrupter			Not Procured in P&MM wing			-			SBR00010
7	33KV Breaker, Vacuum interrupter			Not Procured in P&MM wing			-			SBR00014
8	Trip / Close coil (Complete Set)			Not Procured in P&MM wing			-			SBR00048
9	11KV VCB Bushing			Not Procured in P&MM wing			-			MIS10004
10	33KV VCB Bushing			Not Procured in P&MM wing			-			MIS10001
11	Bucholz Relay			Not Procured in P&MM wing			-			-
12	PTR winding & oil temperature meters			Not Procured in P&MM wing			-			STR10183 STR10184
13	250 W SV Lamps (Complete set)			Not Procured in P&MM wing			-			SLA10069
14	150 W SV Lamps (Complete set)			Not Procured in P&MM wing			-			SLA10074
15	400 W metal halloid			Not Procured in P&MM wing			-			-
Rates are as per prevailing market rates										
<b>VIII COMPUTERS/LAPTOPS</b>										
1	Desktop Computers(Make HP)	PM-923/16, Dt.08-12-2016	Nos.	43,022.80	36,460.00	-	36,460.00	6,562.80	18	CAH00011
2	Desktop Computers(Make DELL)	PM-807/16, Dt. 04-07-2016	Nos.	44,053.35	37,333.35	-	37,333.35	6,720.00	18	CAH00011
3	Desktop Computers(Make ACER)	PM-238/14, Dt. 22-12-2014	Nos.	43,660.00	37,000.00	-	37,000.00	6,660.00	18	CAH00011
4	Printers Dot Matrix Printers: Epson LQ - 300 (80 Column)	PM-3485, Dt. 29-12-2011	Nos.	11,392.00	8,900.00	-	8,900.00	2,492.00	28	CAH00016
5	Dot Matrix Printers: Epson LQ - 1150+II Pin:24, Column 136, cpi:300;(136 Column)	PM-2737, Dt: 29-04-2009	Nos.	12,339.69	9,640.38	-	9,640.38	2,699.31	28	CAH00003

Sl. No	Name of the Material	P.O. No.	Unit	Rupees	EX-Works	F&I	Basic Price	GST	% GST	SAP Code No.
1	2	3	4	5						
6	Laser Jet Printer	PM-893/16, Dt: 26-10-2016	Nos.	7,033.91	5,495.24	-	5,495.24	1,538.67	28	CAH00004
7	i. 1.0 KVA UPS with 2 Hrs. online Backup	PM-2731, Dt: 23-04-2009	Nos.	40,495.71	31,637.27	-	31,637.27	8,858.44	28	CAH00052
8	ii. 2.0 KVA UPS with 2 Hrs. online Backup	PM-2731, Dt: 23-04-2009	Nos.	70,059.64	54,734.09	-	54,734.09	15,325.55	28	CAH00053
9	iii. 3.0 KVA UPS with 2 Hrs. online Backup	PM-2731, Dt: 23-04-2009	Nos.	90,526.98	70,724.20	-	70,724.20	19,802.78	28	CAH00054
10	Fax Machine Model: Samsung SCX 451 F/XIP digital copier multifunction printer with Fax (DGS&D rate contract)	PM-3217, Dt: 21-12-2010	Nos.	16,156.16	12,622.00	-	12,622.00	3,534.16	28	OEE10016
11	Transformer winding resistance kit	PM-2729, Dt: 23-04-2009	Nos.	121,540.00	100,000.00	3,000.00	103,000.00	18,540.00	18	TEQ10033
12	Transformer Turns Ratio Test Kit	PM-2729, Dt: 23-04-2009	Nos.	133,340.00	110,000.00	3,000.00	113,000.00	20,340.00	18	TEQ10034
13	Tan Delta and Capacitance Test Kit	PM-2729, Dt: 23-04-2009	Nos.	572,300.00	480,000.00	5,000.00	485,000.00	87,300.00	18	TEQ10035
14	Transformer Oil Resistivity Test kit	PM-2729, Dt: 23-04-2009	Nos.	357,540.00	300,000.00	3,000.00	303,000.00	54,540.00	18	TEQ10036
15	Supply & fixing of Mini Water Cooler Dispenser		-				-			
16	Digital Earth Clamp Testers	PM-3180, Dt: 06-10-2010	Nos.	63,592.56	53,892.00	-	53,892.00	9,700.56	18	TEQ10073
17	High Voltage Detectors	PM-3180, Dt: 06-10-2010	Nos.	17,211.07	14,585.65	-	14,585.65	2,625.42	18	TEQ10074
18	<b>11KV LV VCBs with CTs and panel (CTs ratio 600-300/1-1A)</b>						-			
19	9KV 10KA LAS (Line type) Porcelain	PM-221/28-11-2014	Nos.	1,055.97			-			LAS00001
20	Three phase portable analyzers	PM-2833, Dt: 10-11-2009	Nos.	404,740.00	340,000.00	3,000.00	343,000.00	61,740.00	18	TEQ10067
21	Circuit Breaker Time interval Meter with PC download so	PM-2834, Dt: 10-11-2009	Nos.	88,500.00	75,000.00	-	75,000.00	13,500.00	18	TEQ10068
22	Dissolved Gas Analyzer(DGA) with water PPM kit(Model: Transport-V)	PM-2835, Dt: 10-11-2009	Nos.	3,148,240.00	2,668,000.00	-	2,668,000.00	480,240.00	18	TEQ10069
23	RGGVY SMC Meter Boxes along with accessories	PM-3227, Dt: 07-01-2011	Nos.	374.89	280.00	12.88	292.88	82.01	28	BXS00048
24	RGGVY Polycarbonate Meter Boxes along with accessor	PM-3076, Dt: 06-09-2010	Nos.	305.92	239.00	-	239.00	66.92	28	BXS00049
25	Digital Clamp Meters	PM-3286, Dt: 06-04-2011	Nos.	2,745.57	2,270.00	56.75	2,326.75	418.82	18	OMTI0050
26	Single phase Variacs	PM-3286, Dt: 06-04-2011	Nos.	15,723.50	13,000.00	325.00	13,325.00	2,398.50	18	TEQ10075
27	Electronic Insulated Testers/Meggors	PM-3286, Dt: 06-04-2011	Nos.	79,461.20	65,690.00	1,650.00	67,340.00	12,121.20	18	TEQ10076
28	Ratio Test Kits	PM-3287, Dt: 06-04-2011	Nos.	105,374.00	87,300.00	2,000.00	89,300.00	16,074.00	18	TEQ10079
29	Capacitance Meters	PM-3287, Dt: 06-04-2011	Nos.	30,975.00	24,250.00	2,000.00	26,250.00	4,725.00	18	TEQ10080
30	Portable Relay Test Kits	PM-3288, Dt: 06-04-2011	Nos.	531,000.00	450,000.00	-	450,000.00	81,000.00	18	TEQ10077
31	Time interval Meter	PM-3289, Dt: 06-04-2011	Nos.	20,650.00	17,500.00	-	17,500.00	3,150.00	18	TEQ10078
32	Earth Tester (0-20-200-2000Ω)	PM-3290, Dt: 06-04-2011	Nos.	4,743.60	3,920.00	100.00	4,020.00	723.60	18	OMTI0074
33	Primary Injection Kit	PM-3291, Dt: 06-04-2011	Nos.	90,034.00	75,300.00	1,000.00	76,300.00	13,734.00	18	TEQ10081
34	56 W LED Light Fixtures (equivalent to 150 W HPSV light fixtures)		Nos.	Not procured			-			SLA10102
35	33KV, 3CX400 Sq.mm XLPE UG Cable Straight through heat shrinkable jointing kits	PM-968/16, Dt: 09-02-2017	Nos.	26,035.60	21,738.00	326.07	22,064.07	3,971.53	18	SCB10113
36	Integrated Spot Billing Machines Without GSM/GPRS Modems	PM-4181, Dt: 12-11-2013	Nos.	7,265.00			-			OMTI0083
37	9KV 10KA LAS (Line type) Polymer		Nos.				-			LAS00009
<b>Additional Items</b>								-		
1	Spun Pole 12Mtrs/300 Kgs.		Nos.				-			PLS00008
2	Spun Poles 12.9 Mtrs/350 Kgs		Nos.				-			
3	11KV 400 Amps (Conventional) DB AB Switch with Porcelain type insulators	PM-953/16, Dt: 25-01-2017	Nos.	12,026.69	10,192.11	-	10,192.11	1,834.58	18	ABS510009
4	11 KV 200 Amps AB Switch (Tilting) Square pipe (a) Polymer Type	Rpt PM-1041/16, Dt: 09-03-2017	Nos.	6,212.70	5,265.00	-	5,265.00	947.70	18	ABS10002
5	11 KV HG Fuse set without solid core insulator		Nos.				-			HGF10003
6	33 KV Solid Core Insulators		Nos.				-			INS30002
7	11 KV Polymer Pin Insulators along with Pins	PM-157/12, Dt: 25-09-2014	Nos.	184.58			-			INS10009
8	11 KV Solid Core Insulators for HG Fuses		Nos.				-			INS10007
9	LT Capacitor 1x10KVAR 2x10KVAR						-			CPT00025 CPT00026
10	LT Shunt Capacitor 1x9 KVAR - i) Supply, ii) Erection & Commissioning 2x9 KVAR - i) Supply, ii) Erection & Commissioning						-			CPT00027 CPT00028
11	33KV / 11KV indoor switch gear (8 feeders)	PM-187.24.11.14	Nos.	16,869,455.87			-			BRK 30020



Extra Items										
Sl. No	Name of the Material	P.O. No.	Unit	Rupees	Ex works	F&I	Basic Price	GST Rs. Ps	GST%	SAP Code No..
1	11 KV Solid Core Insulator for HG Fuses	Rpt. & Extn. PM-120/16-08-2014	Nos.							INS10007
2	33 KV CTs 100/1 for HT Metering (0.2 class)	PM-184/18-10-2014	Nos.	17,759.98	13,470.00	1,580.83	15,050.83	2,709.15	18	ITR30054
3	11 KV CTs 900-450/1-1-0.577A, 0.2 Class (with Diff. Core)	PM-1712/20-06-2017	Nos.	22,943.27	19,043.45	400.00	19,443.45	3,499.82	18	ITR10064
4	33 KV Single Phase PTs, 10VA Burden, 0.2 Class.	PM-976/14-02-2017	Nos.	17,962.26	14,001.49	1,220.76	15,222.25	2,740.01	18	ITR30061
5	11 KV 24V DC LV VCBs with CRPS & CTs of ratio 600-300/1-1A	PM-689/24-03-2016	Nos.	260,652.89	216,880.00	4,012.28	220,892.28	39,760.61	18	BRK10014
6	33 KV CTs of ratio 400-200/1-1A, 0.2 Class	PM-993/18-02-2017	Nos.	22,273.68	18,589.00	287.00	18,876.00	3,397.68	18	ITR30060
7	11KV 3Ph PTs, 50VA Burden, 0.2 Class	PM-1192/15-06-2017	Nos.	18,167.48	14,975.00	421.17	15,396.17	2,771.31	18	ITR10065
8	11KV CTs 600-300/1-1-0.577A, 0.577A, 0.2 Class	PM-1116/17-04-2017	Nos.	22,566.91	18,400.00	724.50	19,124.50	3,442.41	18	ITR10066
9	11KV CTs 600-300/1-1A, 0.2 Class	PM-668/27-02-2017	Nos.	16,468.75	12,996.00	960.57	13,956.57	2,512.18	18	ITR10067
10	24V AC/DC Non- Directional Numerical 30/C + 1E/F Relays (IDMTL with Highest ) 1A & 5A(Multiple Secondary option)	PM-932/16-12-2016	Nos.	8,845.94	6,775.10	135.79	6,910.89	1,935.05	28	SBR00177
11	220V AC/DC Non- Directional Numerical 30/C + 1E/F Relays(IDMTL with Highest ) 1A & 5A(Multiple Secondary option)	PM-931/16-12-2016	Nos.	8,841.09	6,800.00	107.10	6,907.10	1,933.99	28	SBR00216
12	33KV 24V DC HV VCBs, CTs(3 core) and CRPs	PM-578/30-11-2015	Nos.	397,610.44	333,958.00	3,000.00	336,958.00	60,652.44	18	BRK30031
13	11KV CTs 400-200-100/1-1A, 0.2 Class	PM-958/28-01-2017	Nos.	15,104.00	12,400.00	400.00	12,800.00	2,304.00	18	ITR10062
14	33KV 220V DC VCBs CTs, CRPs & Differential IED Relay	PM-1245/25-07-2017	Nos.	492,456.53	412,360.00	4,976.04	417,336.04	75,120.49	18	BRK30027
15	33KV 220V DC VCBs CTs & CRPs & Prot. IED Relay									BRK30028
Not procuring										
16	33KV 220V DC VCBs with CTs 400-200-100/1-1A (W/o CRPS)	PM-542/04-11-2015	Nos.	307,652.43	249,764.00	10,958.40	260,722.40	46,930.03	18	BRK30029
17	11KV,220V LV VCBs CTs & CRPs and with Differential and Prot. IED Relays	PM-259/24-01-2015	Nos.	394,694.39	326,949.75	7,537.02	334,486.77	60,207.62	18	BRK10020
18	11KV, 220V fed VCBs with CTs & CRPs and IED Relays	PM-1172/06-06-2017	Nos.	319,360.57	266,750.00	3,894.55	270,644.55	48,716.02	18	BRK10019
19	HT Trivector Meter 33/110V 25/1A 30min 0.2S Class	PM-69/16-07-2014	Nos.	8,238.38	6,952.00	29.68	6,981.68	1,256.70	18	MHT30031
20	HT Trivector Meter 33/110V 50/1A 30min 0.2S Class	PM-69/16-07-2014	Nos.	8,238.38	6,952.00	29.68	6,981.68	1,256.70	18	MHT30032
21	HT Trivector Meter 33/110V 100/1A 30min 0.2S Class	PM-1294/08-09-2017	Nos.	5,575.50	4,705.00	20.00	4,725.00	850.50	18	MHT30028
22	HT Trivector Meter 33/110V 100/1A 15min 0.2S Class	PM-1294/08-09-2017	Nos.	5,575.50	4,705.00	20.00	4,725.00	850.50	18	MHT30027
23	HT Trivector Meter 33/110V 200/1A 15min 0.2S Class	PM-1294/08-09-2017	Nos.	5,575.50	4,705.00	20.00	4,725.00	850.50	18	MHT30033
24	HT Trivector Meter 33/110V 10/5A 30min 0.2S Class	PM-69/16-07-2014	Nos.	8,238.38	6,952.00	29.68	6,981.68	1,256.70	18	MHT30057
25	HT Trivector Meter 33/110V 50/1A 30min 0.2S Class	PM-69/16-07-2014	Nos.	8,238.38	6,952.00	29.68	6,981.68	1,256.70	18	MHT30058
41	LT CT Meters with DLMs (i) Protocol (Cat-A) 200/5A, 400/5A CT ratio along with TTB in PP Box			-				-		
42	200/5A	PM-1288/06-09-2017	Nos.	5,923.60	4,900.00	120.00	5,020.00	903.60	18	MTE30026
43	400/5A	PM-319/07-03-2015	Nos.	6,706.90	5,454.00	229.81	5,683.81	1,023.09	18	MTE30036
44	1Ph meter 10-60A Meter with PP Box (Net meters)	PM-1217/27-07-2017	Nos.	1,302.72	1,057.62	46.38	1,104.00	198.72	18	MTN10001
45	3 Ph meter 10-60A Meter with PP Box (Net Meters)	PM-1331/05-10-2017	Nos.	3,091.60	2,570.00	50.00	2,620.00	471.60	18	MTN30001
46	HT ERS Field Testing Kit (Along with accessories)			-				-		
47	ERS Testing kits of accuracy 0.05 Class	PM-328/18-03-2015	Nos.	1,407,469.10	1,187,427.00	5,343.42	1,192,770.42	214,698.68	18	TEQ10087
48	3-Phase 63 KVA DTR (CSP) with 3-star rating	PM-196/30-10-2014	Each	-				-		DTC30004
49	33KV, 3x400 Sq.mm Heat Shrinkable Indoor End Termination kits	PM-1213/21-06-2017	Each	2,776.39	2,306.74	46.13	2,352.87	423.52	18	SCB10115

Sl. No	Name of the Material	P.O. No.	Unit	Rupees	Ex works	F&I	Basic Price	GST Rs. Ps	GST%	SAP Code No..
50	33KV, 3x400 Sq.mm Heat Shrinkable Outdoor End Termination kits	PM-1215/21-06-2017	Each	3,181.43	2,643.26	52.87	2,696.13	485.30	18	SCB10114
51	Fake Note Detection and Loose Note Counting Machines	PM-875/17-09-2016	Each	7,866.67	6,666.67	0.00	6,666.67	1,200.00	18	TS100191
52	Agricultural Load Management Units (ALMUs)	PM-34/19-06-2014	Each	6,742.85	5,714.28	0.00	5,714.28	1,028.57	18	
53	HP Probook 440G1 model Laptops with Universal Prop Cable	PM-97/31-07-2014	Each	49,279.04	41,761.90	0.00	41,761.90	7,517.14	18	
54	Line Matrix Printers (500 LPM) Model : LIPI 6605L	PM-220/21-11-2014	Each	163,430.00	138,500.00	0.00	138,500.00	24,930.00	18	
55	Line Matrix Printers (1000 LPM) Model : LIPI 6610L			289,100.00	245,000.00	0.00	245,000.00	44,100.00	18	
56	11KV, 3x300 Sq.mm Heat Shrinkable Straight Through Cable Jointing Kits (SCB10101)	PM-1199/17-06-2017	Each	2,767.08	2,299.00	45.98	2,344.98	422.10	18	SCB10101
57	11KV, 3x185 Sq.mm Heat Shrinkable Straight Through Jointing Kits (SCB10104)	PM-1201/17-06-2017	Each	2,682.85	2,229.00	44.60	2,273.60	409.25	18	SCB10104
58	11KV 3x185 Sq.mm Outdoor End Termination Kits (SCB10105)	PM-1203/17-06-2017	Each	942.05	782.70	15.65	798.35	143.70	18	SCB10105
59	Garmin make eTrex 20 Hand Held GPS Devices	4381/21-05-2014	Each	21,855.96	18,522.00	0.00	18,522.00	3,333.96	18	
60	24V, 40AH Batteries with Chargers (Conv. type)	PM-23/11-06-2014	Each	-				-		
61	24V, 40AH Battery Chargers Of Conv. Type (Linear Type)	PM-20/11-06-2014	Each	-				-		
62	Capacitor cells of rating 7.3KV, 220KVAR (Internal Fuse Protection)	PM-1007/23-02-2017	Each	11,810.86	9,900.00	109.20	10,009.20	1,801.66	18	SGE10050
63	LT TVR Meters of 0.5S Class with PP Box with 4 CTs with Modem (Cat-C)	PM-401/26-05-2015	Nos.	10,692.94	8,820.00	241.81	9,061.81	1,631.13	18	MTE30030
64	<b>New Addl. Items</b>									
65	33KV Polymer Pin Insulators With GI Pins	PM-1310/17, Dt: 18-09-2017.	Nos.	538.29	456.18	0.00	456.18	82.11	18	INS30008
66	11KV Polymer Pin Insulators with GI pins	PM-1251/17, Dt: 31-07-2017.	Nos.	179.36	152.00	0.00	152.00	27.36	18	INS30001
67	11 KV Solid Core Insulators for HG Fuses	PM-868/16, Dt: 12-09-2016	Nos.	178.69	151.43	0.00	151.43	27.26	18	INS10007
68	33 KV PT (1-Phase) 10 VA Burden 0.2 Class	PM-976/16, Dt.14-02-2017		17,962.26	14,001.49	1,220.76	15,222.25	2,740.01	18	ITR30061
69	33 KV PT (1-Phase) 100 VA Burden	PM-661/16, Dt.20-02-2016		21,004.00	17,400.00	400.00	17,800.00	3,204.00	18	ITR30058
70	11 KV PT 3 Phase 50VA Burden 0.2Class	PM-1192/17, Dt.15-06-2017		18,167.48	14,975.00	421.17	15,396.17	2,771.31	18	ITR10065
71	9 KV 10 KA Metal Oxide Lightning Arrester (Line Type)	PM-963/16, Dt: 02-02-2017	Nos.	1,087.46	891.00	30.58	921.58	165.88	18	LAS00001
72	Capacitor cells of rating 7.3KV,220 KVAR, Internal Fuse Protection	PM-1007/16, Dt. 23-02-2017	Nos.	11,469.45						SGE10050
73	33KV Metering CT's 200/1A 0.2S Class	PM-725/16, Dt: 27-04-2016	Nos.	15,416.09	12,777.00	287.48	13,064.48	2,351.61	18	ITR30053
74	33KV Metering CT's 100/1A, 0.2S Class	PM-184/14, Dt: 18-10-2014	Nos.	17,759.98	13,470.00	1,580.83	15,050.83	2,709.15	18	ITR30054
75	33KV Metering CT's 25/1A 0.2S		Nos.	15,995.76	0.00	0.00	0.00	0.00	0	ITR30055
76	33KV Metering CT's 50/1A 0.2S Class	PM-817/16, Dt: 14-07-2016	Nos.	15,420.83	12,711.00	357.50	13,068.50	2,352.33	18	ITR30057
77	11KV CT's 400-200/1-1A.0.2 S Class	PM-958/16, Dt: 28-01-2017	Nos.	15,104.00	12,400.00	400.00	12,800.00	2,304.00	18	ITR10072
78	11KV CT's 600-300/1-1A, 0.2 S Class	PM-668/16, Dt: 27-02-2016	Nos.	16,468.75	12,996.00	960.57	13,956.57	2,512.18	18	ITR10067
79	220V 80AH Battery with Charger& DC Board	PM-1137/17, Dt: 28-04-2017	Nos.	528,897.10	408,150.00	5,050.86	413,200.86	115,696.24	28	BAT00020
80	HT Trivector Meter of class 0.2S	PM-924/16, Dt.13-12-2016	EA	8,238.38	6,952.00	29.68	6,981.68	1,256.70	18	MHT10029
81	LT Trivector meter (without CTs & Meter box) 100/5A (with DLMS) -	PM-862/16, Dt.01-09-2016	Nos.	2,057.38	1,725.30	18.24	1,743.54	313.84	18	MTE30042
82	LT TVR 100/5A PP 0.5S (CAT-C) DLMS&IRDA	PM-795/16, Dt.20-06-2016	Nos.	9,654.42	7,992.00	189.71	8,181.71	1,472.71	18	MTE30040
83	1ph 5-30A Electronic IRDA port in PPBox	PM-1051/16, Dt.20-03-2017	Nos.	696.34	574.22	15.90	590.12	106.22	18	MTE10023

Sl. No	Name of the Material	P.O. No.	Unit	Rupees	Ex works	F&I	Basic Price	GST Rs. Ps	GST%	SAP Code No..
84	1ph 5-30A Electronic IRDA port w/o PPBox	PM-398/15, Dt.26-05-2015	Nos.	658.96	552.94	5.50	558.44	100.52	18	MTE10024
85	3ph 10-40A Electronic IRDA port in PPBox	PM-826/16, Dt.25-07-2016	Nos.	2,134.36	1,788.30	20.48	1,808.78	325.58	18	MTE30038
86	Integrated Spot Billing Machines with IR and IRDA ports	PM-1008/16, Dt.01-03-2017	Nos.	10,489.02	8,889.00			1,600.02	18	OMT10083
87	CMRI WITH ACCESSORIES	PM-723/16, Dt.26-04-2016	Nos.	26,137.00	22,150.00			3,987.00	18	OMT10014
88	Spot Collection Mach with RFID&RFID card	PM-902/16, Dt.02-11-2016	Nos.	14,984.14	12,698.42			2,285.72	18	OMT10086
89	11KV 3x300 Sq.mm Heat Shrinkable Outdoor End Termination Kits	PM-985/16, Dt. 15-02-2017	Nos.	1,087.88	903.86	18.07	921.93	165.95	18	SCB10102
90	11KV, 3x300 Sq.mm Heat Shrinkable Indoor End Termination Kits	PM-838/16, Dt. 30-07-2016	Nos.	850.78	700.00	21.00	721.00	129.78	18	SCB10103
91	33KV, 3x400 Sq..mm Heat Shrinkable Outdoor End Termination Kits	PM-984/16, Dt. 15-02-2017	Nos.	3,356.19	2,788.46	55.77	2,844.23	511.96	18	SCB10114
92	11KV, 3x300 Sq.mm Heat Shrinkable Straight Through Cable Jointing Kits	PM-969/16, Dt.13-02-2017	Nos.	2,918.73	2,425.00	48.50	2,473.50	445.23	18	SCB10101
93	11KV, 3x185 Sq.mm Heat Shrinkable Straight Through Jointing Kits	PM-969/16, Dt.13-02-2017	Nos.	2,820.37	2,343.27	46.87	2,390.14	430.23	18	SCB10104
94	11KV 3x185 Sq.mm Outdoor End Termination Kits	PM-867/16, Dt.10-09-2016	Nos.	1,009.17	838.46	16.77	855.23	153.94	18	SCB10105
95	Cash Counting Cum Fake Note Detecting Machines	PM-875/16, Dt.17-09-2016	Nos.	7,000.00						TS100191

Amount in Rs.

<b>Name of the Material</b>	<b>Total Cost</b>	<b>Basic Price</b>	<b>% GST</b>	<b>GST</b>
33KV Back Clamp	174.64	148.00	18	26.64
33KV Top Clamp	306.80	260.00	18	46.80
33KV Stay sets	978.22	829.00	18	149.22
33KV Stay	528.78	448.12	18	80.66
33KV Xarm	1168.20	990.00	18	178.20
11KV DP structure Bracing set	5806.78	4921	18	885.78
33KV DP structure Bracing set	7096.52	6014	18	1082.52
33KV DP structure Double Bracing set	8828.76	7482	18	1346.76
11KV top cleat with clamp	322.14	273.00	18	49.14
11KV Back Clamp	129.80	110.00	18	19.80
LT Top clamp	177.00	150.00	18	27.00
11KV-LT Stay sets	827.18	701.00	18	126.18
sph mounting arrangements	1509.22	1279	18	230.22
1-phase X arm	165.20	140.00	18	25.20
11KV 'V' cross arm	519.20	440.00	18	79.20
LT 3-Ph cross arm	310.34	263.00	18	47.34
LT Back Clamp	69.62	59.00	18	10.62
Stay clamp	106.63	90.37	18	16.27
1-Ph arm	164.98	139.82	18	25.17

**COST - DATA ABSTRACT**

Sl. No	Particulars of items	Wind. Pr. In Kg /m2	W.Load in Kg.	Type of pole being used	Span in Mtrs.	No. of poles/ KM	Size of conductor	Total Cost in Rs.
1	33 KV Line	75	365	11 M RS Joist	50	21	100 sqmm AAAC	1005131
2	33 KV DC Line	75	365	12 M RS Joist	50	21	100 sqmm AAAC	1387870
3	33 KV Line	75	365	11 M PSCC	60	17	100 sqmm AAAC	763576
4	33 KV DC Line	75	365	11 M PSCC	40	26	100 sqmm AAAC	1284067
5	33 KV Line	75	280	9.1 Mtr.PSCC	80	14	100 sqmm AAAC	533400
6	33 KV Line	75	280	9.1 Mtr.PSCC	65	16	100 sqmm AAAC	547900
7	11 KV line	75	140	9.1 Mtr.PSCC	60	18	55 sqmm AAAC	431459
8	11 KV line	75	140	9.1 Mtr.PSCC	60	18	34 sqmm AAAC	391090
9	11 KV line	75	140	8 Mtr.PSCC	60	18	55 sqmm AAAC	374343
10	11 KV line	75	140	8 Mtr.PSCC	60	18	34 sqmm AAAC	335481
11	11 KV line	75	140	RSJoist Poles	50	21	55 sqmm AAAC	582123
12	6.3 KV line	75	140	8 Mtr.PSCC	90	11	34 sqmm AAAC	155692
13	LT 3 Ph.5 Wire line (Horizontal)	75	140	8 Mtr.PSCC	65	16	3x55+2x34sqmmAAA	346266
14	LT 3 Ph.5 Wire line (Horizontal)	75	140	8 Mtr.PSCC	45	23	3x55+2x34sqmmAAA	386042
15	LT 3 Ph.5 Wire line (Horizontal)	75	140	8 Mtr.PSCC	65	16	5x34sqmm AAA	311612
16	LT 3 Ph.4 Wire line (Horizontal)	75	140	8 Mtr.PSCC	65	16	3x55+1x34sqmmAAA	316004
17	LT 3 Ph.4 Wire line (Horizontal)	75	140	8 Mtr.PSCC	65	16	4x34sqmm AAA	281556
18	LT 1 Ph. 3 Wire line (Horizontal)	75	140	8 Mtr.PSCC	65	16	3x34 sqmm AAA	240275
19	LT 1 Ph. 2 Wire line (Horizontal)	75	140	8 Mtr.PSCC	65	16	2x34 sqmm AAA	208972
20	L.T.AB Cable	75	140	8 Mtr.PSCC	65	16	3x16+25sqmm	219929
21	L.T.AB Cable	75	140	8 Mtr.PSCC	65	16	2x16+25sqmm	200288
22	Conversion of 1Ph 2 W/L to 3 Ph 4 W/L	75	140	8 Mtr.PSCC	65	16	2x55xqmm	98003
22	Erection of 100 KVA CSP CRGO Distribution Transformer							244735
23	Erection of 63 KVA CSP Distribution Transformer							219205
24	Erection of 63 KVA CSP CRGO core Distribution Transformer on plinth							186975
25	Erection of 63 KVA CSP CRGO core Distribution Transformer on structure							186804
26	Erection of 100 KVA CSP CRGO core Distribution Transformer on column plinth							234125
27	Erection of 25 KVA, 3- Phase CRGO core Distribution Transformer							120993
28	Erection of 25 KVA, 3-Phase, 11 KV/433 V /250 V CRGO Conventional Transformer							108461
29	Erection of 25 KVA, Single Phase, 6.3 KV/0-240 V C.S.P. CRGO Transformer							72100
30	Erection of 15 KVA Single Phase 6.3 KV/0-240 V CSP CRGO Distribution Transformer							44532
31	Release of poly phase Agl. Service erected on support							6572
32	Release of 1 ph Domestic & non-domestic service (Electronic meter)							2544
33	Release of 3 ph. Domestic & non-domestic service (Electronic meter)							5867

34	Release of poly phase Indl.service below 20 HP (Electronic meter)	6521
35	Release of Industrial service above 20H.P upto 50 HP with LT Trivector meter	11867
36	Release of Industrial service above 50 HP and upto 75 HP (HT metering)	189125
37	Release of Street light service (1 -ph electronic meter)	3039
38	Erection of L.T. C.T. Operated Electronic trivector meter on LV side of DTR	12450
39	Erection of 33/11 KV Sub-station with 2 x 8 MVA power transformer & 6 Nos. 11 KV feeders ( without 11 KV 2 MVAR capacitor Bank)	26200000
40	Erection of 33/11 KV Sub-station with 2 x 8 MVA power transformer & 6 Nos. 11 KV feeders ( with 11 KV 2 MVAR capacitor Bank)	27600000
41	Erection of 33/11 KV Sub-station (Indoor substation) with 2x8 MVA power transformer & 6 Nos. 11 KV feeders ( without 11 KV 2 MVAR capacitor Bank)	46175298
42	Erection of 33/11 KV Sub-station with 9.1 mts PSCC Poles and 2x5 MVA power transformer & 5 Nos. 11 KV feeders ( without 11 KV 2 MVAR capacitor Bank)	16027000
43	Erection of 33/11 KV Sub-station with 9.1 mts PSCC Poles and 2x5 MVA power transformer & 5 Nos. 11 KV feeders ( with 11 KV 2 MVAR capacitor Bank)	17200000
44	Erection of 33/11 KV Sub-station with 9.1 mts PSCC Poles and 1 No. power transformer & 3 Nos. 11 KV feeders ( with 11 KV 2 MVAR capacitor Bank)	12040000
45	11 KV Bay extension in existing 33/11 KV Sub-stations with girder poles	80093
46	11 KV Bay extension in existing 33/11 KV Sub-stations with PSCC poles	58839
47	33KV Bay Extension at 33/11 kV Sub-station	118000
48	33KV Bay Extension at 132/33KV SS	839747
49	Erection of 11 KV VCB at 33/11 kV Sub-station	332280
50	Erection of 33KV VCB at 132/33KV SS	1260786
51	Erection of 2MVAR Capacitor Bank	1173062
52	Enhancement of PTR Capacity	3920169
53	Laying of 11 KV, 3 core 300 Sq.mm UG Cable	2400571
54	Laying of 33 KV, 3 core 400 Sq.mm UG Cable	3459025
55	Erection of M+3 tower	150494
56	Erection of K+3 tower	103887
57	Erection of L+3 tower	118883
58	Erection of additional 5 MVA PTR in existing 33/11 KV Sub-station	3787100
59	Extension of 3Mtrs for K+3 Towers as per ASCI Standard	16729
60	Extension of 3Mtrs for L+3 Towers as per ASCI Standard	25209
61	Extension of 3Mtrs for M+3 Towers as per ASCI Standard	30493
62	REC construction standard Drawings (19 Nos.)	

## **COST DATA FOR HILLY AND TRIBAL AREAS AS ADOPTED BY IRRIGATION DEPARTMENT IN THE STATE**

For hilly and tribal areas, the following extra rates are allowed over and above approved cost data of labour.

a. 40% extra is allowed for the works located within the interior Agency / Tribal areas. (i.e.) for works located beyond 16 Kilometers from any all-weather bus route inside the agency / tribal area. (Where Bus routes are not available)

b. 25% extra is allowed for the works located inside the agency / tribal area.

c. 15% extra is allowed for the works located in the border of agency / tribal area. (i.e.) works located within a belt of 16 kilometers from the boundary of agency / tribal area.

**Cost data per Km of 33 KV Line with 100 Sq.mm AAA Conductor over 11 Mts.  
RS Joist box type at 50 Mts. Span, 100 Kg/sq.Mt wind pressure, working load 365 Kgs.**

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	RS Joist box type 11mtrs Pole (150x75mm)	21	18,833	Each	395,493
2	1.53 M Channel / 'V' Cross Arm (100x50mm)	21	1,142	Each	23,982
3	Top Clamp with cleat(75x8mm)	20	302	Each	6,040
4	Back Clamp	20	169	Each	3,380
5	Stay Set complete	12	982	Each	11,784
6	Bracing Set with double cross arm	1	6,775	Set	6,775
7	100 Sq.mm AAA Conductor	3.06	50,489	K.M.	154,496
8	33KV Polymer Pin Insulators With GI Pins	63	538	Each	33,912
9	Strain Insulators set ( 3x 11 KV B&S Insulator with 33 KV Hard ware fitting))	12	746	Set	8,952
10	Concreting of Pole, Stay sets & Base concreting	L.S		L.S	98,354
11	Misc. Items like coil earthing, pipe earthing, danger, bolts & nuts, etc	L.S		L.S	9036
<b>Total Cost of Material</b>					<b>752,204</b>

3% storage & handling charges on items (1) to (9)	19,344
3% Contingencies on Materials	22,566
Labour & Transport	115,082
GST at 18 % on L&T	20,715
10% Estt. & Genl. Charges on Materials	75,220
<b>Total</b>	<b>1005131.06</b>
<b>Or Say</b>	<b>1,005,131</b>



**Cost data per Km of 33 KV DC Line with 100 Sq.mm AAA Conductor over 12 Mts.  
RS Joist box type at 50 Mts. Span, 100 Kg/sq.Mt wind pressure, working load 365 Kgs.**

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	RS Joist box type 12mtrs Pole	21	22,026	Each	462,556
2	1.53 M Channel / 'V' Cross Arm	60	1,142	Each	68,520
3	Back Clamp	60	169	Each	10,140
4	Stay Set complete	12	982	Each	11,784
5	Double Bracing Set with double cross arm	1	8,508	Set	8,508
6	100 Sq.mm AAA Conductor	6.12	50,489	K.M.	308,993
7	33KV Polymer Pin Insulators With GI Pins	108	538	Each	58,136
8	Strain Insulators set ( 3x 11 KV B&S Insulator with 33 KV Hard ware fitting)	24	746	Set	17,904
9	Concreting of Pole, Stay sets & Base concreting	L.S		L.S	99,314
10	Misc. Items like coil earthing, pipe earthing, danger, bolts & nuts, etc	L.S		L.S	9,036
	<b>Total Cost of Material</b>				<b>1,054,891</b>

3% storage & handling charges on items (1) to (8) 28,396

3% Contingencies on Materials 31,647

Labour & Transport 141904

GST at 18 % on L&T 25,543

10% Estt. & Genl. Charges on Materials 105,489

**Total 1,387,870**

**Or Say 1,387,870**

**REC Construction Standard No.M2/1979 (R-1989)**

**Cost data per Km of 33 KV Line (SC) with 100 Sq.mm AAA Conductor over  
11 Mts. PSCC Poles at 60 Mts. Span, 75 Kg/sq.Mt wind pressure, working load  
365 Kgs.**

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	11 M PSCC Pole	17	7497	Each	127,449
2	1.53 M Channel / 'V' Cross Arm	17	1142	Each	19,414
3	Top Clamp with cleat	16	302	Each	4,832
4	Back Clamp	17	169	Each	2,873
5	Stay Set complete	12	982	Each	11,784
6	Bracing Set with double cross arm	1	6775	Set	6,775
7	100 Sq.mm AAA Conductor	3.06	50489	K.M.	154,496
8	33KV Polymer Pin Insulators With GI Pin	48	538	Each	25,838
9	Strain Insulators set ( 3x 11 KV B&S Insulator with 33 KV Hard ware fitting)	12	746	Set	8,952
10	Concreting of Pole, Stay sets & Base concreting	L.S		L.S	113842
11	Misc. Items like coil earthing, pipe eathing, danger, bolts & nuts, etc	L.S		L.S	6050
<b>Total Cost of the Material</b>					<b>482,305</b>

3% storage & handling charges on items (1) to (9)	10,872
3% Contingencies on Materials	14,469
Labour & Transport	176016
GST at 18 % on L&T	31,683
10% Estt. & Genl. Charges on Materials	48,231
<b>Total</b>	<b>763,576</b>
<b>Stays Pits (0.76x0.76x1.5) Excavation</b>	<b>Or Say 763,576</b>

**REC Construction Standard No.M2/1979 (R-1989)**

**Cost data per Km of 33 KV Line (DC) with 100 Sq.mm AAA Conductor over 11 Mts.  
PSCC Poles at 40 Mts. Span, 75 Kg/sq.Mt wind pressure, working load 365 Kgs.**

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	11 M PSCC Pole	26	7497	Each	194,922
2	1.53 M Channel / 'V' Cross Arm	72	1142	Each	82,224
3	Back Clamp	75	169	Each	12,675
4	Stay Set complete	12	982	Each	11,784
5	Double Bracing Set with double cross arm	1	8508	Set	8,508
6	100 Sq.mm AAA Conductor	6.12	50489	K.M.	308,993
7	33KV Polymer Pin Insulators With GI Pins	156	538	Each	83,974
8	Strain Insulators set ( 3x 11 KV B&S Insulator with 33 KV Hard ware fitting)	24	746	Set	17,904
9	Concreting of Pole, Stay sets & Base concreting	L.S		L.S	136923
10	Misc. Items like coil earthing, pipe eathing, danger, bolts & nuts, etc	L.S		L.S	6655
<b>Total Cost of the Material</b>					<b>864,562</b>

3% storage & handling charges on items (1) to (8) 21,630

3% Contingencies on Materials 25,937

Labour & Transport 241934

GST at 18 % on L&T 43,548

10% Estt. & Genl. Charges on Materials 86,456

**Total 1,284,067**

**Or Say 1,284,067**

**REC Construction Standard No.M-2/1979 (R-1989)**  
**Cost data per Km of 33 KV Line with 100 Sq.mm AAA Conductor over 9.1 Mts.**  
**PSCC Poles at 80 Mts. Span, 75 Kg/sq.Mt wind pressure, working load 280 Kgs.**

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	9.1 M PSCC Pole	14	3,776	Each	52,863
2	1.53 M Channel / 'V' Cross Arm	14	1,142	Each	15,988
3	Top Clamp with cleat	12	302	Each	3,624
4	Back Clamp	13	169	Each	2,197
5	Stay Set complete	12	982	Each	11,784
6	Bracing Set with double cross arm	1	6,775	Set	6,775
7	100 Sq.mm AAA Conductor	3.06	50,489	K.M.	154,496
8	33KV Polymer Pin Insulators With GI Pins	39	538	Each	20,993
9	Strain Insulators set ( 3x 11 KV B&S Insulator with 33 KV Hard ware fitting)	12	746	Set	8,952
10	Concreting of Pole, Stay sets & Base concreting	L.S		L.S	84,567
11	Misc. Items like coil earthing, pipe eathing, danger, bolts & nuts, etc	L.S		L.S	5500
<b>Total Cost of Material</b>					<b>367,739</b>

3% storage & handling charges on items (1) to (9)	8,330
3% Contingencies on Materials	11,032
Labour & Transport	92842
GST at 18 % on L&T	16,712
10% Estt. & Genl. Charges on Materials	36,774
<b>Total</b>	<b>533,429</b>
<b>Or Say</b>	<b>533,400</b>

Standard No.M-2/1979 (R-1989)  
 for 100 Sq.mm AAA Conductor over 9.1 Mts.  
 against 1.5q.Mt wind pressure, working load 280 Kgs.

Sl.	Particulars	Qty.	Rate in	Per Unit	Amount in
1	9.1 M PSCC Pole	16	3,776	Each	60,415
2	1.53 M Channel / 'V' Cross Arm	16	1,142	Each	18,272
3	Top Clamp with cleat	15	302	Each	4,530
4	Back Clamp	15	169	Each	2,535
5	Stay Set complete	10	982	Each	9,820
6	Bracing Set with double cross arm	1	6,775	Set	6,775
7	100 Sq.mm AAA Conductor	3.06	50,489	K.M.	154,496
8	33KV Polymer Pin Insulators With GI Pins	45	538	Each	24,223
9	Strain Insulators set ( 3x 11 KV B&S Insulator with 33 KV Hard ware fitting)	12	746	Set	8,952
10	Concreting of Pole, Stay sets & Base concreting	L.S		L.S	79,485
11	Misc. Items like coil earthing, pipe earthing, danger, bolts & nuts, etc	L.S		L.S	5500
<b>Total Cost of Material</b>					<b>375,003</b>

3% storage & handling charges on items (1) to (9)	8,701
3% Contingencies on Materials	11,250
Labour & Transport	97802
GST at 18 % on L&T	17,604
10% Estt. & Genl. Charges on Materials	37,500
<b>Total</b>	<b>547,860</b>
<b>Or Say</b>	<b>547,900</b>

**REC Construction Standard No. A-34/1993**  
**Cost data per Km of 11 KV Line with 55 Sq.mm AAA Conductor over 9.1 Mts.**  
**PSCC Poles at 60 Mts. Span, 75 Kg/sq.Mt wind pressure, working load 140 Kgs.**

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	9.1 M PSCC Pole	18	3,776	Each	67,967
2	1.07 M Channel / 'V' Cross Arm	18	506	Each	9,108
3	Top Clamp with cleat	16	314	Each	5,024
4	Back Clamp	17	125	Each	2,125
5	Stay Set complete	10	827	Each	8,270
6	Bracing Set with double cross arm	1	5,427	Set	5,427
7	55 Sq.mm AAA Conductor	3.06	28,459	K.M.	87,085
8	11 KV Pin Insulator with Pin	54	101	Each	5,451
9	Strain Insulator with metal parts	12	276	Each	3,316
10	Concreting of Pole, Stay sets & Base concreting			L.S	74,569
11	Misc. Items like coil earthing, pipe eathing, danger, bolts & nuts, etc			L.S	4000
<b>Total Cost of Material</b>					<b>272,342</b>

3% storage & handling charges on items (1) to (9) 5,813

3% Contingencies on Materials 8,170

Labour & Transport 99915

GST at 18 % on L&T 17,985

10% Estt. & Genl. Charges on Materials 27,234

**Total 431,459**

**Or Say 431,459**

**Cost data per Km of 11 KV Line with 34 Sq.mm AAA Conductor over 9.1 Mts.  
PSCC Poles at 60 Mts. Span, 75 Kg/sq.Mt wind pressure, working load 140 Kgs.**

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	9.1 M PSCC Pole	18	3,776	Each	67,967
2	1.07 M Channel / 'V' Cross Arm	18	506	Each	9,108
3	Top Clamp with cleat	16	314	Each	5,024
4	Back Clamp	17	125	Each	2,125
5	Stay Set complete	10	827	Each	8,270
6	Bracing Set with double cross arm	1	5,427	Set	5,427
7	34 Sq.mm AAA Conductor	3.06	18,754	K.M.	57,387
8	11 KV Pin Insulator with Pin	54	101	Each	5,451
9	Strain Insulator with metal parts	12	276	Each	3,316
10	Concreting of Pole, Stay sets & Base concreting			L.S	74569
11	Misc. Items like coil earthing, pipe earthing, danger, bolts & nuts, etc			L.S	4000
	<b>Total Cost of Material</b>				<b>242,644</b>

3% storage & handling charges on items (1) to (9) 4,922

3% Contingencies on Materials 7,279

Labour & Transport 94899

GST at 18 % on L&T 17,082

10% Estt. & Genl. Charges on Materials 24,264

**Total 391,090**

**Or Say 391,090**

**REC Construction Standard No. A-34/1993**

**Cost data per Km of 11 KV Line with 55 Sq.mm AAA Conductor over 8 Mts.  
PSCC Poles at 60 Mts. Span, 75 Kg/sq.Mt wind pressure, working load 140 Kgs.**

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	8 M PSCC Pole	18	1,619	Each	29,143
2	1.07 M Channel / 'V' Cross Arm	18	506	Each	9,108
3	Top Clamp with cleat	16	314	Each	5,024
4	Back Clamp	17	125	Each	2,125
5	Stay Set complete	10	827	Each	8,270
6	Bracing Set with double cross arm	1	5,427	Set	5,427
7	55 Sq.mm AAA Conductor	3.06	28,459	K.M.	87,085
8	11 KV Pin Insulator with Pin	54	101	Each	5,451
9	Strain Insulator with metal parts	12	276	Each	3,316
10	Concreting of Pole, Stay sets & Base concreting			L.S	74,569
11	Misc. Items like coil earthing, pipe eathing, danger, bolts & nuts, etc			L.S	4000
<b>Total Cost of Material</b>					<b>233,518</b>

3% storage & handling charges on items (1) to (9) 4,648

3% Contingencies on Materials 7,006

Labour & Transport 89677

GST at 18 % on L&T 16,142

10% Estt. & Genl. Charges on Materials 23,352

**Total 374,343**

**Or Say 374,343**



**REC Construction Standard No. A-34/1993**

**Cost data per Km of 11 KV Line with 34 Sq.mm AAA Conductor over 8 Mts.  
PSCC Poles at 60 Mts. Span, 75 Kg/sq.Mt wind pressure, working load 140 Kgs**

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	8 M PSCC Pole	18	1,619	Each	29,143
2	1.07 M Channel / 'V' Cross Arm	18	506	Each	9,108
3	Top Clamp with cleat	16	314	Each	5,024
4	Back Clamp	17	125	Each	2,125
5	Stay Set complete	10	827	Each	8,270
6	Bracing Set with double cross arm	1	5,427	Set	5,427
7	34 Sq.mm AAA Conductor	3.06	18,754	K.M.	57,387
8	11 KV Pin Insulator with Pin	54	101	Each	5,451
9	Strain Insulator with metal parts	12	276	Each	3,316
10	Concreting of Pole, Stay sets & Base concreting			L.S	74,569
11	Misc. Items like coil earthing, pipe eathing, danger, bolts & nuts, etc			L.S	4000
<b>Total Cost of Material</b>					<b>203,820</b>

3% storage & handling charges on items (1) to (9) 3,758

3% Contingencies on Materials 6,115

Labour & Transport 85937

GST at 18 % on L&T 15,469

10% Estt. & Genl. Charges on Materials 20,382

**Total 335,481**

**Or Say 335,481**

**REC Construction Standard No. A-34/1993**  
**Cost data per Km of 11 KV Line with 55 Sq.mm AAA Conductor over RS**  
**Joist Poles at 50 Mts. Span, 75 Kg/sq.Mt wind pressure, working load 140 Kgs.**

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	RSJoist Poles (175x85mm)	21	8,811	Each	185,022
2	1.07 M Channel / 'V' Cross Arm	21	506	Each	10,626
3	Top Clamp with cleat	20	314	Each	6,280
4	Back Clamp	21	125	Each	2,625
5	Stay Set complete	10	827	Each	8,270
6	Bracing Set with double cross arm	1	5,427	Set	5,427
7	55 Sq.mm AAA Conductor	3.06	28,459	K.M.	87,085
8	11 KV Pin Insulator with Pin	54	101	Each	5,451
9	Strain Insulator with metal parts	12	276	Each	3,316
10	Concreting of Pole, Stay sets & Base concreting			L.S	84,401
11	Misc. Items like coil earthing, pipe earthing, danger, bolts & nuts, etc			L.S	4000
<b>Total Cost of Material</b>					<b>402,503</b>

3% storage & handling charges on items (1) to (9) 9,423

3% Contingencies on Materials 12,075

Labour & Transport 99892

GST at 18 % on L&T 17,981

10% Estt. & Genl. Charges on Materials 40,250

**Total 582,123**

**Or Say 582,123**

**REC Construction Standard No. A-17/1987**

**Cost data per Km of 6.3 KV Sph Line with 34 Sq.mm AAA Conductor over 8 Mts. PSCC Poles at 90 Mts. Span, 75 Kg/sq.Mt wind pressure, working load 140 Kgs.**

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	8 M PSCC Pole	11	1,619	Each	17,810
2	Top Clamp with cleat	11	314	Each	3,454
3	Back Clamp	10	125	Each	1,250
4	Stay Set complete	4	827	Each	3,308
5	34 Sq.mm AAA Conductor	1.02	18,754	K.M.	19,129
6	11 KV Pin Insulator with Pin	10	101	Each	1,009
7	Strain Insulator with metal parts	4	276	Each	1,105
8	Concreting of Pole, Stay sets & Base concreting			L.S	29828
9	Misc. Items like coil earthing, danger board, bolts & nuts, etc			L.S	2100
<b>Total Cost of Material</b>					<b>78,993</b>

3% storage & handling charges on items (1) to (7) 1,412

3% Contingencies on Materials 2,370

Labour & Transport 55100

GST at 18 % on L&T 9,918

10% Estt. & Genl. Charges on Materials 7,899

**Total 155,692**

**Or Say 155,692**

**REC Construction Standard No. B-8/1984**  
**Cost data per Km of LT 3 Ph 5 Wire line (Horizontal formation) with**  
**3 x 55 Sq. mm + 2 x 34 Sq. mm AAAC over 8 Mts.**  
**PSCC Poles at 65 Mts. Span, 75 Kg/sq.Mt wind pressure, working load 140 Kgs.**

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	8 M PSCC Pole	16	1,619	Each	25,905
2	LT 3 Phase cross arms	18	305	Each	5,490
3	LT top fitting	18	172	Each	3,096
4	Back Clamp	18	67	Each	1,206
5	Stay Set complete	6	827	Each	4,962
6	55 Sq.mm AAA Conductor	3.06	28,459	KM	87,085
7	34 Sq.mm AAA Conductor	2.04	18,754	KM	38,258
8	Shackle Insulator with metal parts	16	55	Each	880
9	LT pin insulator with pin	56	55	Each	3,080
10	C.I. Knob	16	10	Each	160
11	Concreting of Pole, Stay sets & Base concreting			L.S	44741
12	Misc. Items like coil earthing, danger board, bolts & nuts, etc			L.S	4000
<b>Total Cost of Material</b>					<b>218,863</b>

3% storage & handling charges on items (1) to (10) 5,104

3% Contingencies on Materials 6,566

Labour & Transport 79531

GST at 18 % on L&T 14,316

10% Estt. & Genl. Charges on Materials 21,886

**Total 346,266**

**Or Say 346,266**

**REC Construction Standard No. B-8/1984**  
**Cost data per Km of LT 3 Ph 5 Wire line (Horizontal formation) with**  
**3 x 55 Sq. mm + 2 x 34 Sq. mm AAAC over 8 Mts.**  
**PSCC Poles at 45 Mts. Span, 75 Kg/sq.Mt wind pressure, working load 140 Kgs.**

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	8 M PSCC Pole	23	1,619	Each	37,239
2	LT 3 Phase cross arms	24	305	Each	7,320
3	LT top fitting	24	172	Each	4,128
4	Back Clamp	24	67	Each	1,608
5	Stay Set complete	6	827	Each	4,962
6	55 Sq.mm AAA Conductor	3.06	28,459	KM	87,085
7	34 Sq.mm AAA Conductor	2.04	18,754	KM	38,258
8	Shackle Insulator with metal parts	16	55	Each	880
9	LT pin insulator with pin	84	55	Each	4,620
10	C.I. Knob	23	10	Each	230
11	Concreting of Pole, Stay sets & Base concreting			L.S	54573
12	Misc. Items like coil earthing, danger board, bolts & nuts, etc			L.S	4000
<b>Total Cost of Material</b>					<b>244,903</b>

3% storage & handling charges on items (1) to (10) 5,590

3% Contingencies on Materials 7,347

Labour & Transport 87,892

GST at 18 % on L&T 15,821

10% Estt. & Genl. Charges on Materials 24,490

**Total 386,042**

**Or Say 386,042**

**REC Construction Standard No. B-8/1984**  
**Cost data per Km of LT 3 Ph 5 Wire line (Horizontal formation) with**  
**5 x 34 Sqmm AAAC over 8 Mts.**  
**PSCC Poles at 65 Mts. Span, 75 Kg/sq.Mt wind pressure, working load 140 Kgs.**

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	8 M PSCC Pole	16	1,619	Each	25,905
2	LT 3 Phase cross arms	18	305	Each	5,490
3	LT top fitting	18	172	Each	3,096
4	Back Clamp	18	67	Each	1,206
5	Stay Set complete	6	827	Each	4,962
6	34 Sq.mm AAA Conductor	5.1	18,754	KM	95,645
7	Shackle Insulator with metal parts	16	55	K.M.	880
8	LT pin insulator with pin	56	55	Each	3,080
9	C.I. Knob	16	10	Each	160
10	Concreting of Pole, Stay sets & Base concreting			L.S	44741
11	Misc. Items like coil earthing, danger board, bolts & nuts, etc			L.S	4000
<b>Total Cost of Material</b>					<b>189,165</b>

3% storage & handling charges on items (1) to (9) 4,213

3% Contingencies on Materials 5,675

Labour & Transport 79358

GST at 18 % on L&T 14,284

10% Estt. & Genl. Charges on Materials 18,917

**Total 311,612**

**Or Say 311,612**

**REC Construction Standard No. B-8/1984**  
**Cost data per Km of LT 3 Ph 4 Wire line (Horizontal formation) with**  
**3 x 55 Sqmm + 1 x 34 mm AAAC over 8 Mts.**  
**PSCC Poles at 65 Mts. Span, 75 Kg/sq.Mt wind pressure, working load 140 Kgs.**

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	8 M PSCC Pole	16	1,619	Each	25,905
2	LT 3 Phase cross arms	18	305	Each	5,490
3	Back Clamp	18	67	Each	1,206
4	Stay Set complete	6	827	Each	4,962
5	55 Sq.mm AAA Conductor	3.06	28,459	K.M.	87,085
6	34 Sq.mm AAA Conductor	1.02	18,754	K.M.	19,129
7	Shackle Insulator with metal parts	12	55	Each	660
8	LT pin insulator with pin	42	55	Each	2,310
9	C.I. Knob	16	10	Each	160
10	Concreting of Pole, Stay sets & Base concreting			L.S	44741
11	Misc. Items like coil earthing, danger board, bolts & nuts, etc			L.S	4000
<b>Total Cost of Material</b>					<b>195,648</b>

3% storage & handling charges on items (1) to (9)	4,407
3% Contingencies on Materials	5,869
Labour & Transport	76707
GST at 18 % on L&T	13,807
10% Estt. & Genl. Charges on Materials	19,565
<b>Total</b>	<b>316,004</b>
<b>Or Say</b>	<b>316,004</b>

**REC Construction Standard No. B-8/1984**  
**Cost data per Km of LT 3 Ph 4 Wire line (Horizontal formation) with**  
**4 x 34 Sqmm AAAC over 8 Mts.**  
**PSCC Poles at 65 Mts. Span, 75 Kg/sq.Mt wind pressure, working load 140 Kgs.**

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	8 M PSCC Pole	16	1,619	Each	25,905
2	LT 3 Phase cross arms	18	305	Each	5,490
3	Back Clamp	18	67	Each	1,206
4	Stay Set complete	6	827	Each	4,962
5	34 Sq.mm AAA Conductor	4.08	18754.2	K.M.	76,517
6	Shackle Insulator with metal parts	12	55	Each	660
7	LT pin insulator with pin	42	55	Each	2,310
8	C.I. Knob	16	10	Each	160
9	Concreting of Pole, Stay sets & Base concreting			L.S	44741
10	Misc. Items like coil earthing, danger board, bolts & nuts, etc			L.S	4000
<b>Total Cost of Material</b>					<b>165,951</b>

3% storage & handling charges on items (1) to (8) 3,516

3% Contingencies on Materials 4,979

Labour & Transport 76,707

GST at 18 % on L&T 13,807

10% Estt. & Genl. Charges on Materials 16,595

**Total 281,556**

**Or Say 281,556**



**REC Construction Standard No. B-11/1984**  
**Cost data per Km of LT Single Phase 3 Wire line (Horizontal formation)**  
**with 34 Sqmm AAAC over 8 Mts.**  
**PSCC Poles at 65 Mts. Span, 75 Kg/sq.Mt wind pressure, working load 140 Kgs.**

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	8 M PSCC Pole	16	1,619	Each	25,905
2	LT 1 Phase cross arms	18	161	Each	2,890
3	LT top fitting	18	172	Each	3,096
4	Back Clamp	18	67	Each	1,206
5	Stay Set complete	4	827	Each	3,308
6	34 Sq.mm AAA Conductor	3.06	18,754	K.M.	57,387
7	Shackle Insulator with metal parts	8	55	Each	440
8	LT pin insulator with pin	28	55	Each	1,540
9	C.I. Knob	16	10	Each	160
10	Concreting of Pole, Stay sets & Base concreting			L.S	34743
11	Misc. Items like coil earthing, danger board, bolts & nuts, etc			L.S	4000
<b>Total Cost of Material</b>					<b>134,675</b>

3% storage & handling charges on items (1) to (9)	2,878
3% Contingencies on Materials	4,040
Labour & Transport	72,215
GST at 18 % on L&T	12,999
10% Estt. & Genl. Charges on Materials	13,468
<b>Total</b>	<b>240,275</b>
<b>Or Say</b>	<b>240,275</b>

**REC Construction Standard No. B-11/1984**  
**Cost data per Km of LT Single Phase 2 Wire line (Horizontal formation)**  
**with 2 x 34 Sqmm AAAC over 8 Mts.**  
**PSCC Poles at 65 Mts. Span, 75 Kg/sq.Mt wind pressure, working load 140 Kgs.**

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	8 M PSCC Pole	16	1,619	Each	25,905
2	LT 1 Phase cross arms	18	161	Each	2,898
3	Back Clamp	18	67	Each	1,206
4	Stay Set complete	4	827	Each	3,308
5	34 Sq.mm AAA Conductor	2.04	18,754	K.M.	38,258
6	Shackle Insulator with metal parts	4	55	Each	220
7	LT pin insulator with pin	14	55	Each	770
8	C.I. Knob	16	10	Each	160
9	Concreting of Pole, Stay sets & Base concreting			L.S	34743
10	Misc. Items like coil earthing, danger board, bolts & nuts, etc			L.S	2900
<b>Total Cost of Material</b>					<b>110,368</b>

3% storage & handling charges on items (1) to (8) 2,182

3% Contingencies on Materials 3,311

Labour & Transport 69,554

GST at 18 % on L&T 12,520

10% Estt. & Genl. Charges on Materials 11,037

**Total 208,972**

**Or Say 208,972**

**REC Construction Standard No. B-32/1984**

**Cost data per Km of LT Line with 3 x 16 + 25 Sqmm AB Cable over 8 Mts.  
PSCC Poles at 65 Mts. Span, 75 Kg/sq.Mt wind pressure, working load 140 Kgs.**

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	8 M PSCC Pole	16	1,619	Each	25,905
2	Suspension clamp assembly with eye hook	14	65	Each	910
3	Dead end clamp assembly with eye hook	4	80	Each	320
4	Stay Set complete	4	827	Set	3,308
5	L.T. A.B. Cable 3 x 16 + 25 Sq.mm	1.02	45,809	K.M.	46,725
6	Insulated Connectors with covers	56	80	Each	4,480
7	Concreting of Pole, Stay sets & Base concreting			L.S	34743
8	Misc. Items like coil earthing, danger board, bolts & nuts, etc			L.S	3000
<b>Total Cost of Material</b>					<b>119,391</b>

3% storage & handling charges on items (1) to (6) 2,449

3% Contingencies on Materials 3,582

Labour & Transport 69,972

GST at 18 % on L&T 12,595

10% Estt. & Genl. Charges on Materials 11,939

**Total 219,929**

**Or Say 219,929**

**REC Construction Standard No. B-32/1984**  
**Cost data per Km of LT Line with 2 x 16 + 25 Sqmm AB Cable over 8 Mts.**  
**PSCC Poles at 65 Mts. Span, 75 Kg/sq.Mt wind pressure, working load 140 Kgs.**

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	8 M PSCC Pole	16	1,619	Each	25,905
2	Suspension clamp assembly with eye hook	14	65	Each	910
3	Dead end clamp assembly with eye hook	4	80	Each	320
4	Stay Set complete	4	827	Set	3,308
5	L.T. A.B. Cable 2 x 16 + 25 Sq.mm	1.02	31,456	K.M.	32,085
6	Insulated Connectors with covers	56	80	Each	4,480
7	Concreting of Pole, Stay sets & Base concreting			L.S	34743
8	Misc. Items like coil earthing, danger board, bolts & nuts, etc			L.S	3000
<b>Total Cost of Material</b>					<b>104,751</b>

3% storage & handling charges on items (1) to (6) 2,010

3% Contingencies on Materials 3,143

Labour & Transport 67,720

GST at 18 % on L&T 12,190

10% Estt. & Genl. Charges on Materials 10,475

**Total 200,288**

**Or Say 200,288**

**Cost Data for Conversion of Single Phase 2 wire line to Three Phase 4 wire line over existing 8 M PSCC poles at 65 Mts. Span, 75 Kg/sq.Mt wind pressure, working load 140 Kgs.**

Sl. No.	Particulars	Qty.	Rate in Rs.	Unit	Amount in Rs.
1	55 Sq.mm AAA conductor	2.04	28459	KM	58056
2	LT 3 phase X arms	17	305.00	Each	5185
3	Back Clamps	17	67.00	Each	1139
4	Shackle Insulators with metal parts	12	54.7992	Each	657.5904
5	Pin Insulators with pins	45	54.516	Each	2453.22
6	Stay sets complete	6	827	Each	4962
	<b>Total Cost of Material</b>				<b>72,453</b>

3% storage & handling charges on items (1) to (6)	2,174
3% Contingencies on Materials	2,174
Labour & Transport	14,300
Dismantling Charges	1,000
GST at 18 % on L&T	2,574
10% Estt. & Genl. Charges on Materials	7,245
<b>Total</b>	<b>101,920</b>
<b>Or Say</b>	<b>101,920</b>

**Less Credits**

1	Single Phase cross arms (scrap)	51	11	Kg	561
2	Original Erection charges				2200
3	Dismantling charges				1100
4	Original Estt & Genl Charges				56
	<b>Total</b>				<b>3917</b>
	<b>Or Say</b>				<b>3917</b>
	<b>Net Cost</b>			<b>Gross - Less</b>	<b>98,003</b>

**REC - CONSTRUCTION STANDARD SPECIFICATION No. F3 & F4/1993**

**COST DATA FOR ERECTION OF 100 KVA - 11 KV/433 V CSP TRANSFORMER**

S. No.	Particulars	Cost of Material (Rs.)	Labour & Transport (Rs.)
1	11 KV/433 V 100 KVA CSP TRANSFORMER (Aluminium)	123969.34	9,645
2	Erection of 11 KV AB Switch (200A)	6,213	2,063
3	D.P. Structure	15,682	16,720
4	Erection of 11 K.V. H.G. Fuse set	1,843	777
5	Installation of L.T.H.G. Fuse sets including connections	968	484
6	L.T. Metering arrangement with CTs including cable connections and cleat arrangement	9,710	866
7	Installation of HT Lightening Arresters	3,262	780
8	C.I. Pipe earthing (3 Nos.)	10,725	6,617
	<b>Total Cost of Material</b>	<b>172,372</b>	<b>37,952</b>
	3% Storage & handling charges	5,171	
	3% Contingencies on Materials	5,171	
	Labour & Transport	37,952	
	GST at 18 % on L&T	6,831	
	10% Estt. & General charges on Materials	17,237	
	<b>Total Cost in Rs.</b>	<b>244,735</b>	
	<b>Or Say</b>	<b>244,735</b>	

**REC - CONSTRUCTION STANDARD SPECIFICATION No. F3 & F4/1981**

**COST DATA FOR ERECTION OF 63 KVA - 11 KV/433 V CSP TRANSFORMER**

S. No.	Particulars	Cost of Material (Rs.)	Labour & Transport (Rs.)
1	11 KV/433 V 63 KVA CSP Distribution Transformer (Aluminium)	101,960.78	9,645
2	Erection of 11 KV AB Switch (200A)	6,213	2,063
3	D.P. Structure	15,682	16,720
4	Erection of 11 K.V. H.G. Fuse set	1,843	777
5	Installation of L.T.H.G. Fuse sets including connections	968	484
6	Metering arrangement with CTs including cable connections and cleat arrangement	9,710	866
7	Installation of HT Lightening Arresters	3,262	780
8	C.I. Pipe earthing (3 Nos.)	10,725	6,617
<b>Total Cost of Material</b>		<b>150,364</b>	<b>37,952</b>
3% Storage & handling charges		4,511	
3% Contingencies on Materials		4,511	
Labour & Transport		37,952	
GST at 18 % on L&T		6,831	
10% Estt. & General charges on Materials		15,036	
<b>Total Cost in Rs.</b>		<b>219,205</b>	
<b>Or say</b>		<b>219,205</b>	

**REC - CONSTRUCTION STANDARD SPECIFICATION No. F3 & F4/1981**

**COST DATA FOR ERECTION OF 63 KVA - 11 KV/433 V TRANSFORMER**

S. No.	Particulars	Cost of Material (Rs.)	Labour & Transport (Rs.)
1	11 KV/433 V 63 KVA Distribution Transformer (Aluminium)	101,961	9,645
2	Erection of 11 KV AB Switch (200A)	6,213	2,063
3	Plinth for distribution transformer (5'x4'x8')	0	4,823
4	Erection of 11 K.V. H.G. Fuse set	1,843	777
5	Installation of L.T.H.G. Fuse sets including connections	968	484
6	L.T. Metering arrangement with CTs including cable connections and cleat arrangement	9,710	866
7	Installation of HT Lightening Arresters	3,262	780
8	C.I. Pipe earthing (3 Nos.)	10,725	6,617
	<b>Total Cost of Material</b>	<b>134,682</b>	<b>26,055</b>
	3% Storage & handling charges	4,040	
	3% Contingencies on Materials	4,040	
	Labour & Transport	26,055	
	GST at 18 % on L&T	4,690	
	10% Estt. & General charges on Materials	13,468	
	<b>Total Cost in Rs.</b>	<b>186,975</b>	
	<b>Or say</b>	<b>186,975</b>	



**REC - CONSTRUCTION STANDARD SPECIFICATION No. F3 & F4/1981**

**COST DATA FOR ERECTION OF 63 KVA - 11 KV/433 V TRANSFORMER**

S. No.	Particulars	Cost of Material (Rs.)	Labour & Transport (Rs.)
1	11 KV/433 V 63 KVA CSP Distribution Transformer (Aluminium)	101,961	9,645
2	Erection of 11 KV AB Switch (200A)	6,213	2,063
3	Erection of structure for mounting of transformer	3,880	863
4	Erection of 11 K.V. H.G. Fuse set	1,843	777
5	Installation of L.T.H.G. Fuse sets including connections	968	484
6	L.T. Metering arrangement with CTs including cable connections and cleat arrangement	9,710	866
7	Installation of HT Lightning Arresters	3,262	780
8	C.I. Pipe earthing (3 Nos.)	10,725	6,617
	<b>Total Cost of Material</b>	<b>138,562</b>	<b>22,095</b>
	3% Storage & handling charges	4,157	
	3% Contingencies on Materials	4,157	
	Labour & Transport	22,095	
	GST at 18 % on L&T	3,977	
	10% Estt. & General charges on Materials	13,856	
	<b>Total Cost in Rs.</b>	<b>186,804</b>	
	<b>Or say</b>	<b>186,804</b>	

**REC - CONSTRUCTION STANDARD SPECIFICATION No. F3 & F4/1981**

**COST DATA FOR ERECTION OF 100 KVA - 11 KV/433 V**

**CSP TRANSFORMER**

S. No.	Particulars	Cost of Material (Rs.)	Labour & Transport (Rs.)
1	11 KV/433 V 100 KVA CSP Distribution Transformer (Aluminium)	123,969	9,645
2	Erection of 11 KV AB Switch (200A)	6,213	2,063
3	Construction of RCC Column type DTR Plinth of size 1'X1'X10',topslab 4'x4'x6" & beam size 4'X8'X8"	0	23,144
4	Erection of 11 K.V. H.G. Fuse set	1,843	777
5	Installation of L.T.H.G. Fuse sets including connections	968	484
6	L.T. Metering arrangement with CTs including cable connections and cleat arrangement	9,710	866
7	Installation of HT Lightning Arresters with earth connection	3,262	780
8	C.I. Pipe earthing (3 Nos.)	10,725	6,617
<b>Total Cost of Material</b>		<b>156,690</b>	<b>44,376</b>
3% Storage & handling charges		4,701	
3% Contingencies on Materials		4,701	
Labour & Transport		44,376	
GST at 18 % on L&T		7,988	
10% Estt. & General charges on Materials		15,669	
<b>Total Cost in Rs.</b>		<b>234,125</b>	
<b>Or say</b>		<b>234,125</b>	

**REC - CONSTRUCTION STANDARD SPECIFICATION No. F3 & F4/1981**

**COST DATA FOR ERECTION OF 25 KVA, 3-Ph, 11 KV/433 V/250 V  
DISTRIBUTION TRANSFORMER (COPPER)**

S. No.	Particulars	Cost of Material (Rs.)	Labour & Transport (Rs.)
1	11 KV/433V/250 V 25 KVA 3-Ph Distribution Transformer (Copper)	65,524	9,645
2	Erection of 11 KV AB Switch (200A)	6,213	2,063
3	Erection of 11 KV HG Fuse set	1,843	777
4	Mounting arrangements for Transformer	3,880	550
5	Installation of L.T.H.G. Fuse sets including connect	968	484
6	C.I. Pipe earthing (2 Nos.)	7,150	4,411
7	Misc. items (like bolts & nuts, washers etc.)	500	
	<b>Total Cost of Material</b>	<b>86,078</b>	<b>17,930</b>
	3% Storage & handling charges	2,567	
	3% Contingencies on Materials	2,582	
	Labour & Transport	17,930	
	GST at 18 % on L&T	3,227	
	10% Estt. & General charges on Materials	8,608	
	<b>Total Cost in Rs.</b>	<b>120,993</b>	
	<b>Or Say</b>	<b>120,993</b>	

**COST DATA FOR ERECTION OF 25 KVA, 3-Ph, 11 KV/433 V /250 V CONVENTIONAL TRANSFORMER (Alluminium)**

S. No.	Particulars	Cost of Material (Rs.)	Labour & Transport (Rs.)
1	11 KV/433V/250 V 25 KVA 3-Ph Conventional Distribution Transformer (Aluminium)	54,721	9,645
2	Erection of 11 KV AB Switch (200A)	6,213	2,063
3	Erection of 11 KV HG Fuse set	1,843	777
4	Mounting arrangements for Transformer	3,880	550
5	Installation of L.T.H.G. Fuse sets including connect	968	484
6	C.I. Pipe earthing (2 Nos.)	7,150	4,411
7	Misc. items (like bolts & nuts, washers etc.)	500	
	<b>Total Cost of Material</b>	<b>75,275</b>	<b>17,930</b>
	3% Storage & handling charges	2,243	
	3% Contingencies on Materials	2,258	
	Labour & Transport	17,930	
	GST at 18 % on L&T	3,227	
	10% Estt. & General charges on Materials	7,527	
	<b>Total Cost in Rs.</b>	<b>108,461</b>	
	<b>Or Say</b>	<b>108,461</b>	

**REC - CONSTRUCTION STANDARD SPECIFICATION No. F-13/1987**

**COST DATA FOR ERECTION OF 25 KVA SINGLE PHASE 6.3 KV/0-240 V**

**C.S.P. TRANSFORMER ON EXISTING 8 M PSCC SUPPORT**

S. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	25 KVA Oil Immersed Single Phase 6.3 KV/0-240 V CSP CRGO core Transformer (Copper)	1	49,185	Each	49,185
2	Mounting arrangements for Transformer	1	1,345	Set	1,345
3	C.I. Pipe earthing	2	3,575	Each	7,150
4	LT Distribution Box (1-Phase) with XLPE 70 sq mm cable and 100 A fuse unit completely	1	1,000	Each	1,000
5	Misc. items (like bolts & nuts, washers etc.)	L.S.	500	L.S.	500
<b>Total Cost of Material</b>					<b>59,180</b>
3% Storage & handling charges on items 1 to 3					1,730
3% Contingencies on Materials					1,775
Labour & Transport					3,000
GST at 18 % on L&T					540
10% Estt. & General charges on Materials					5,918
<b>Total Cost in Rs.</b>					<b>72,143</b>
<b>Or Say</b>					<b>72,100</b>

**REC - CONSTRUCTION STANDARD SPECIFICATION No. F-13/1987**  
**COST DATA FOR ERECTION OF 15 KVA SINGLE PHASE 6.3 KV/0-240 V**  
**CRGO CORE C.S.P. TRANSFORMER ON EXISTING 8 M PSCC SUPPORT**

S. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	15 KVA Oil Immersed Single Phase 6.3 KV/0-240 V CRGO Core Transformer (Copper)	1	25,869	Each	25,869
2	Mounting arrangements for Transformer	1	1,345	Set	1,345
3	C.I. Pipe earthing	2	3,575	Each	7,150
4	LT Distribution Box (1-Phase) with XLPE 70 sq mm cable and 100 A fuses complete.	1	1,000	Each	1,000
5	Misc. Items	L.S.	400		
<b>Total Cost of Material</b>					<b>35,364</b>
3% Storage & handling charges on items 1 to 3					1,031
3% Contingencies on Materials					1,061
Labour & Transport					3,000
GST at 18 % on L&T					540
10% Estt. & General charges on Materials					3,536
<b>Total Cost in Rs.</b>					<b>44,532</b>
<b>Or Say</b>					<b>44,532</b>

**REC - CONSTRUCTION STANDARD SPECIFICATION No. H6 & H8/1981**  
**COST DATA FOR RELEASE OF POLY PHASE AGRICULTURAL SERVICE ERECTED**  
**ON SUPPORT**

S. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	10-40 A with PP Box with trivector features	1	2,001	Each	2,001
2	3 Phase 63 A M.C.B.	1	1477	Each	1477
3	P.V.C. Cable 6 Sq.mm Single Core	90	8.91	Each	802
4	Installation of 2 KVAR Capacitor	1	550	Each	550
5	Misc. items such as Bolts, Nuts & Board etc.	L.S.	220	L.S.	220
<b>Total Cost of Material</b>					<b>5,050</b>
3% Contingencies on Materials					152
Labour & Transport					733
GST at 18 % on L&T					132
10% Estt. & General charges on Materials					505
<b>Total Cost in Rs.</b>					<b>6,572</b>
<b>Or say</b>					<b>6,572</b>

**REC - CONSTRUCTION STANDARD SPECIFICATION No. H-1 TO H3/1981**  
**COST DATA FOR DOMESTIC AND NON-DOMESTIC SERVICE CONNECTION (SINGLE PHASE)**  
**WITH ELECTRONIC METER**

S. No.	Particulars	Rate	Chargeable to DISCOM		Chargeable to Consumers		Amount in Rs.
			Qty.	Amount	Qty.	Amount	
1	Single Phase Electronic meter (5 A to 20 A) housed in a PP box	957 Each	1	957			957
2	M.C.B. 16 A	200.6 Each	1	201			201
3	P.V.C. Cable Single Core 2.5 Sq.mm	5 Mts.			60	300	300
4	G.I. Wire No. 6	48 Kg			1	48	48
5	P.V.C. Pipe 25 mm	30.3 Mts.			2	61	61
6	P.V.C. Bends 25 mm	6.1 Each			2	12	12
7	Misc.items (meter board & bolts & nuts etc.)	L.S. L.S.		50		100	150
<b>Total Cost of Material</b>				<b>1,208</b>		<b>521</b>	<b>1,729</b>
3% Contingencies on Materials					36	16	52
Labour & Transport					160	340	500
GST at 18 % on L&T					29	61	90
10% Estt. & General charges on Materials					121	52	173
<b>Total Cost in Rs.</b>					<b>1,554</b>	<b>990</b>	<b>2,544</b>
<b>Or Say</b>							<b>2,544</b>



**REC - CONSTRUCTION STANDARD SPECIFICATION No. H1 TO H3/1981  
COST DATA FOR DOMESTIC AND NON-DOMESTIC SERVICE CONNECTION  
(THREE PHASE) (Electronic)**

S. No.	Particulars	Rate	Chargeable to DISCOM		Chargeable to Consumers		Amount in Rs.
			Qty.	Amount	Qty.	Amount	
1	3 Phase Electronic Energy Meter (10 A - 40 A) with PP Box	2001 Each	1	2,001			2,001
2	3 Phase 63 A M.C.B.	1477 Each	1	1,477			1,477
3	P.V.C. Cable Single Core 2.5 Sq.mm	5 Mts.			120	600	600
4	G.I. Wire No. 8	53 Kg			1	53	53
5	P.V.C. Pipe 40 mm	77.5 Mts.			2	155	155
6	P.V.C. Bends 40 mm	18.2 Each			2	36	36
7	Misc.	L.S. L.S.				75	75
<b>Total Cost of Material</b>				<b>3,478</b>		<b>919</b>	<b>4,397</b>
3% Contingencies on Materials					104	28	132
Labour & Transport					320	440	760
GST at 18 % on L&T					58	79	137
10% Estt. & General charges on Materials					348	92	440
<b>Total Cost in Rs.</b>					<b>4,308</b>	<b>1,559</b>	<b>5,867</b>
<b>Or Say</b>							<b>5,867</b>

**Note:** Item Nos. 3 to 7 are to be borne & arranged by the consumer as per latest APTRANSCO rules.

**REC - CONSTRUCTION STANDARD SPECIFICATION No. H-5/1981  
POLY PHASE SERVICE CONNECTION CHARGES FOR ERECTION OF  
1 NO. INDUSTRIAL SERVICE (BELOW 20 H.P.) (ELECTRONIC METER)**

S. No.	Particulars	Rate	Chargeable to DISCOM		Chargeable to Consumers		Amount in Rs.
			Qty.	Amount	Qty.	Amount	
1	3-Phase (10 - 40 A) Electronic meter housed in a PP box	2001 Each	1	2,001			2,001
2	3 Phase 63 A M.C.B.	1477 Each	1	1,477			1,477
3	P.V.C. Cable Single Core 10 Sq.mm	12 Mts.			80	960	960
4	G.I. Wire 8 mm	48 Kg			1	48	48
5	P.V.C. Pipe 40 mm	77.5 Mts.			2	155	155
6	P.V.C. Bends 40 mm	18.2 Each			2	36	36
7	Misc. items viz. link clips, wooden box, bolts & nuts etc.	L.S. L.S.		100		200	300
<b>Total Cost of Material</b>				<b>3,578</b>		<b>1,399</b>	<b>4,977</b>
3% Contingencies on Materials				107		42	149
Labour & Transport				320		440	760
GST at 18 % on L&T				58		79	137
10% Estt. & General charges on Materials				358		140	498
<b>Total Cost in Rs.</b>				<b>4,421</b>		<b>2,101</b>	<b>6,521</b>
<b>Or Say</b>							<b>6,521</b>

**REC - CONSTRUCTION STANDARD SPECIFICATION No. H-5/1981  
POLY PHASE SERVICE CONNECTION CHARGES FOR ERECTION OF  
1 NO. INDUSTRIAL SERVICE (20 HP & ABOVE) (LT TRIVECTOR METER)**

S. No.	Particulars	Rate	Chargeable to DISCOM		Chargeable to Consumers		Amount in Rs.
			Qty.	Amount	Qty.	Amount	
1	LT TVR Meters Cl. 0.5S (Including Box & 4 CTs)	6492 Each	1	6,492			6,492
2	3 Phase 63 A M.C.B.	1477 Each	1	1,477			1,477
3	P.V.C. Cable Single Core 10 Sq.mm	15 Mts.			80	1,200	1,200
4	G.I. Wire 8 mm	48 Kg			1	48	48
5	P.V.C. Pipe 40 mm	77.5 Mts.			2	155	155
6	P.V.C. Bends 40 mm	18.2 Each			2	36	36
7	Misc. items viz. link clips, wooden box, bolts & nuts etc.	L.S. L.S.		100		200	300
<b>Total Cost of Material</b>				<b>8,069</b>		<b>1,639</b>	<b>9,708</b>
3% Contingencies on Materials				242		49	291
Labour & Transport				320		440	760
GST at 18 % on L&T				58		79	137
10% Estt. & General charges on Materials				807		164	971
<b>Total Cost in Rs.</b>				<b>9,496</b>		<b>2,372</b>	<b>11,867</b>
<b>Or Say</b>							<b>11,867</b>

**REC - CONSTRUCTION STANDARD SPECIFICATION No. H-5/1981  
POLY PHASE SERVICE CONNECTION CHARGES FOR ERECTION OF  
1 NO. INDUSTRIAL SERVICE (50 HP & UPTO 75 HP) (HT METERING)**

Amount in Rs.

S. No.	Particulars	Rate	Material		Labour	
			Qty.	Amount	Qty.	Amount
1	DP Structure with 9.1 mts. PSCC poles	15682 Each	2	31,365	2	16,720
2	11 KV 400 Amps conventional type AB switch	7,068 Each	2	14,136	2	2,984
3	11 KV HG Fuse set	1,843 Each	2	3,686	2	1,555
4	3x35 sq.mm 11 KV XLPE cable	317.67 Mts.	30	9,530	30	14,460
5	End termination suitable for 35 sq.mm XLPE (Cable outdoor type)	1375 Each	4	5,500	4	6,544
6	G.I. earthing (3 Nos. GI Pipe)	4012.8 Nos.	1	4,013	1	3,600
7	11 KV CT PT 10-20/5	30,059 Each	1	30,059	1	870
8	HT Trivector Meter (Clause 0.2 S)	8,271 Each	1	8,271	1	3,830
9	Special type box for Trivector meter	5500 Each	1	5,500	1	200
10	Transport of material					1,650
11	Misc. items viz. link clips, wooden box, bolts & nuts etc.	L.S.	L.S.			550
<b>Total Cost of Material</b>				<b>112,061</b>	<b>52,963</b>	<b>-</b>
3% Contingencies on Materials					3,362	
Labour & Transport					52,963	
GST at 18 % on L&T					9,533	
10% Estt. & General charges on Materials					11,206	
<b>Total Cost in Rs.</b>					<b>189,125</b>	
<b>Or Say</b>				<b>Rs.</b>	<b>189,125.00</b>	

**COST DATA FOR STREET LIGHT SERVICE CONNECTION (SINGLE PHASE)**

S. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	1 Phase (5-20A) Electronic Meter housed in a PP box	1	957	Each	957
2	1 Phase 20 A M.C.B.	1	179	Each	179
3	Light sensitive switch	1	400	Each	400
4	P.V.C. Cable 4 Sq.mm Single Core	15	10	Mts.	150
5	P.V.C. Pipe 25 mm	2	30	Mts.	61
6	P.V.C. Bends 25 mm	2	6.10	Each	12
7	Moulded Distribution Box	1	250	Each	250
8	Wooden, Plugs, clamps, bolts, nuts, link clips etc.	L.S.		L.S.	150
Total Cost of Material					2,158
3% Contingencies on Materials					65
Labour & Transport					600
GST at 18 % on L&T					108
10% Estt. & General charges on Materials					216
<b>Total Cost in Rs.</b>					<b>3,039</b>
<b>Or Say</b>					<b>3,039</b>

**COST ESTIMATE FOR ERECTION OF 1 NO. LT ELECTRONIC TRIVECTOR METERS ON  
LV SIDE OF DTR**

<b>Sl. No.</b>	<b>Particulars</b>	<b>Qty.</b>	<b>Unit</b>	<b>Rate per (in Rs.)</b>	<b>Amount (in Rs.)</b>
1	LT 3-Phase class 0.5S Accuracy CT Operated Energy Meter Housed in a box with 3 Nos. CTs	1	Each	6,676.44	6,676.44
2	3.5 Core 95 LT XLPE Cable (for 10 meters) to LT side of DTR with cleat wiring.	LS			3,437.25
	<b>Total</b>				<b>10,113.69</b>
	3% Contingencies				303.41
	Fixing of CT operated meter on LV side of Distribution transformers with box including cost of lugs, clamps, GI wire and transport from district store to site.				866.00
	GST at 18 % on L&T				156
	10% Estt. & Genl. Charges				1,011.37
	<b>Total Cost in Rs.</b>				<b>12,450.35</b>
	<b>Or Say</b>				<b>12,450.00</b>

**COST DATA FOR ERECTION OF 33/11 KV SUBSTATION WITH 2X8MVA POWER TRANSFORMERS AND NF = 6 NO. 11  
KV FEEDERS (WITH OUT 11 KV 2 MVAR CAPACITORS BANK)**

Rs. in Lakhs

Sl. No		Qty.	Rate (Rs. in lakhs)	Unit	Amount (Rs. in lakhs)
1 (a)	Lands and Rights	LS	As per local conditions		50.00
(b)	Plantation of Trees	LS		LS	0.15
2	Control Room and Consumer service centre (including furniture)	LS		LS	12.00
3	Station Auxillaries				
a)	Peripheral, Security Fencing, Approach road, retaining wall around switchward with gravel filling, gate and bore well	LS		LS	16.50
b)	Yard lighting	LS		LS	0.80
c)	Fire fighting Equipment	LS		LS	0.70
d)	P&T Phone and wireless set	LS		LS	0.05
4	Foundations for structures, PTRs & breakers	LS		LS	3.30
5	Bus bars, Jumpers, Connectors claps etc.	LS		LS	1.32
6	Control Cables	LS		LS	1.19
7	Structural Steel	13	0.441	MT	5.73
8	Transformers				
a)	33/11kv 8 MVA Power Transformer	2	45.596	Each	91.19
b)	11kv / 433 v 25 kva 3-ph Stn. Transformer (CSP copper)	1	0.547	Each	0.55
9	Circuit Breakers (including trivector meters)				
a)	33 KV Group control VCB with CTs and panel	1	3.976	Each	3.98
b)	20 KA 11 kv feeder VCB including Control panel and CTs (NF=6)	6	2.458	Each	14.75
c)	20 KA 11 kv LV VCB including Control panel and CTs	2	3.302	Each	6.60
10	Control Circuit Panels				
a)	AC Supply Panel	1	0.330	Each	0.33
b)	Alaram Panel	1	0.330	Each	0.33
11	Instrumnet Transformers				
a)	33KV PT (single unit)	3	0.210	Each	0.63
b)	11kv P.T (3 Phase)	1	0.182	Each	0.18
12	Lightning Arrestors				
a)	33KV 10KA	6	0.033	Each	0.20
b)	11KV Line Type (NF=6)	18	0.020	Each	0.36
c)	11KV Station Type 10 KA	6	0.020	Each	0.12
13	Isolating Switches				
a)	33KV 800A AB Switch (Double Breaker)	3	0.306	Each	0.92
b)	11KV 800A AB Switch (Double Breaker)	3	0.169	Each	0.51
c)	11KV 400A AB Switch (Double Breaker)	12	0.071	Each	0.85
d)	11KV 200A AB Switch	1	0.062	Each	0.06
e)	11KV HG fuse Switch	3	0.018	Each	0.06
f)	33KV Horn Gap Fuse Set (1XNT)	2	0.000	Each	0.00
14	Data Acquisition equipment (SIM, modem, cabling etc)			LS	0.45
15	220 Volts 80 AH SMF Battery Set including Battery Charger and DC DB	1	3.29	Each	3.29
16	Earthing of Power Transformer VCBs, AB Swiches, Strucutres with 75x8mm GI Flat			LS	1.98
	<b>Sub Total</b>				<b>219.07</b>
	3% Contingencies on items 7 to 15				3.93
	1% T&P Charges on items No. 7 to 15				1.31
	10% Erection and transport and commissioning charges on items 7 to 15				13.11
	GST at 18% on L&T				2.36
	10% Establishment and General Charges				21.91
	<b>Grand Total</b>				<b>261.69</b>

Or Say

**262.00**

**COST DATA FOR ERECTION OF 33/11 KV SUBSTATION WITH 2X8MVA POWER TRANSFORMERS AND  
NF = 6 NO. 11 KV FEEDERS (WITH 11 KV 2 MVAR CAPACITORS BANK)**

					Rs. in Lakhs
Sl. No	Particulars	Qty.	Rate (Rs. in	Unit	Amount (Rs. in lakhs)
1 (a)	Lands and Rights	LS	As per local conditions		50.00
(b)	Plantation of Trees	LS		LS	0.15
2	Control Room and Consumer service centre (including furniture)	LS		LS	12.00
3	Station Auxillaries				
a)	Peripheral, Security Fencing, Approach road, retaining wall around switchward with gravel filling, gate and bore well	LS		LS	16.50
b)	Yard lighting	LS		LS	0.80
c)	Fire fighting Equipment	LS		LS	0.70
d)	P&T Phone and wireless set	LS		LS	0.05
4	Foundations for structures, PTRs & breakers	LS		LS	3.30
5	Bus bars, Jumpers, Connectors claps etc.	LS		LS	1.32
6	Control Cables	LS		LS	1.19
7	Structural Steel	20	0.441	MT	8.81
8	Transformers				
a)	33/11kv 8 MVA Power Transformer	2	45.596	Each	91.19
b)	11kv / 433 v 25 kva 3-ph Stn. Transformer	1	0.547	Each	0.55
9	Circuit Breakers (including trivector meters)				
a)	33 KV Group control VCB with CTs and panel	1	3.976	Each	3.98
b)	20 KA 11 kv feeder VCB including Control panel and CTs (NF=6)	6	2.458	Each	14.75
c)	20 KA 11 kv LV VCB including Control panel and CTs	2	3.302	Each	6.60
10	Control Circuit Panels				
a)	AC Supply Panel	1	0.330	Each	0.33
b)	Alarm Panel	1	0.330	Each	0.33
11	Instrument Transformers				
a)	33KV PT (single unit)	3	0.210	Each	0.63
b)	11kv P.T (3 Phase)	1	0.182	Each	0.18
12	Lightning Arrestors				
a)	33KV 10KA	6	0.033	Each	0.20
b)	11KV Line Type (NF=6)	18	0.020	Each	0.36
c)	11KV Station Type 10 KA	6	0.020	Each	0.12
13	Isolating Switches (Double Breaker)				
a)	33KV 800A AB Switch (Double Breaker)	3	0.306	Each	0.92
b)	11KV 800A AB Switch (Double Breaker)	3	0.169	Each	0.51
c)	11KV 400A AB Switch (Double Breaker)	12	0.071	Each	0.85
d)	11KV 200A AB Switch	1	0.062	Each	0.06
e)	11KV HG fuse Switch	3	0.018	Each	0.06
f)	33KV Horn Gap Fuse Set (1XNT)	2	0.000	Each	0.00
14	2MVAR 11KV Capacitor Bank along with Associated Equipment (Type A)	1	8.700	Each	8.70
15	220 Volts 80 AH Battery Set including Battery Charger and DC DB	1	3.291	Each	3.29
16	Earthing of Power Transformer VCBs, AB Switches, Structures with 75x8mm GI Flat			LS	1.98
	<b>Sub Total</b>				<b>230.40</b>
	3% Contingencies on items 7 to 15				4.27
	1% T&P Charges on items No. 7 to 15				1.42
	10% Erection and transport and commissioning charges on items 7 to 15				14.24
	GST at 18% on L&T				2.56
	10% Establishment and General Charges				23.04
	<b>Grand Total</b>				<b>275.95</b>

Or Say **276.00**



**COST DATA FOR ERECTION OF 33/11KV INDOOR SUBSTATION WITH 2 Nos. 8MVA POWER TRANSFORMERS & 6 Nos. 11KV FEEDERS**

Sl. No.	PARTICULARS	QTY	RATE	UNIT	AMOUNT Rs in Lakhs
1 a)	Lands and rights	Ls	As per local conditions		50.00
b)	Plantation of Trees	Ls	0.15	LS	0.15
<b>2</b>	<b>Civil Works</b>				
i	Construction of Control room	LS	22.00	LS	22.00
ii	Compound wall, Gate,levelling of site and Borewell	LS	4.95	LS	4.95
iii	special foundations				
iv	Laying of Cable Trench	LS	3.03	LS	3.03
v	Electrification and sanitation arrangements	LS	0.83	LS	0.83
vi	Construction of Transformer plinth	LS	0.83	LS	0.83
<b>3</b>	<b>Station Auxillaries</b>				0.00
a)	Yard lighting	Ls	0.55	LS	0.55
b)	Spreading of Metal	Ls	0.11	LS	0.11
c)	Telephone (P &T) and wireless set	Ls	1.38	LS	1.38
d)	Fire fighting Equipment, Miscellenous items like Rubber Mats, Earth rods, Helmets, Gloves, Furniture, T&P etc	Ls	1.10	LS	1.10
e)	Water supply arrangements	Ls	0.55	LS	0.55
<b>4</b>	Foundations for breakers etc.	Ls	0.66	LS	0.66
<b>5</b>	Bus bar arrangements	Ls	2.75	LS	2.75
<b>6</b>	Control cables	Ls	1.10	LS	1.10
<b>7</b>	<b>Power and Distribution Transformers</b>				
a)	33/11 KV, 8 MVA Power Transformers	2	45.596	E	91.19
b)	25KVA 11/04KV Station Transformer	1	0.547	E	0.55
<b>8</b>	<b>Indoor switch gear &amp; Control panels</b>				
a)	33 KV, 25 KVA, 1250 A, 8 Panels SF-6, GIS Switch gear consisting of the following				
i	1250 A Transformers control cubicals 2 Nos.				
ii	1250 - A Incoming feeder cubicals - 3 Nos.				
iii	1250 - A Bus coupler - 1 No.				
b)	11 KV, 20 KVA, 1250 A ,14 panels SF6 GIS switch gear consisting the following equipments	1	191.88	E	191.88
i	1250 A Transformers control cubicals 2 Nos.				
ii	1250 - A feeder cubicals - 6 Nos.				
iii	1250 - A Bus coupler - 1 No.				
iv	Bus transformers panel - 1 No.				
v	Adopter for station transformer - 1 No.				
<b>9</b>	<b>Alaram and Annunciation Panel</b>	1	0.31	E	0.31
10	AC Panel	1	0.33	E	0.33
11	220 Volts, 200 AH, Battery with trickle charger	1	3.29	E	3.29
12	Data Acquisition equipment (SIM, modem, cabling etc)			LS	0.45
<b>13</b>	<b>Earthing Arrangements</b>				
a)	MS Flat75x8 mm for providing earthing matting complete	2	0.430	MT	0.58
b)	MS Flat 50x6 mm for earthing the equipment	2	0.430	MT	0.58
c)	Earthing electrodes & GI pipes	LS	0.90	LS	0.90
<b>14</b>	RS Joist 175x85/150x150(Girder poles) for base of switch gear	1.5	0.4185	MT	0.63
	<b>Total</b>				<b>380.66</b>
	3% Contingencies on Items 7 To 14				8.72
	10% Transport, Erection and Commissioning charges on items 7 To 14				29.07
	GST at 18% on L&T				5.23
	10% Establishment and General Charges				38.07
	<b>Grand Total</b>				<b>461.75</b>

**COST DATA FOR ERECTION OF 33/11 KV SUBSTATION WITH 9.1 Mtrs PSCC POLES, 2 X 5 MVA  
POWER TRANSFORMERS AND 5 NO. 11 KV FEEDERS  
(WITH 11 KV 2 MVAR CAPACITORS BANK)**

Rs. in Lakhs

Sl. No	Particulars	Qty.	Rate (Rs. in lakhs)	Unit	Amount (Rs. in lakhs)
(a)	Lands and Rights	LS	As per local conditions		11.00
(b)	Plantation of Trees	LS		LS	0.15
2	Control Room and Consumer service centre (including furniture)	LS		LS	12.00
3	Station Auxillaries				
a)	Peripheral, Security Fencing, Approach road, retaining wall around switchward with gravel filling, gate and bore well	LS		LS	11.00
b)	Yard lighting	LS		LS	0.80
c)	Fire fighting Equipment	LS		LS	0.70
d)	P&T Phone and wireless set	LS		LS	0.05
4	Foundations for structures, PTRs & breakers	LS		LS	3.30
5	Bus bars, Jumpers, Connectors claps etc.	LS		LS	1.32
6	Control Cables	LS		LS	1.19
7	Structural Steel	4.5	0.441	MT	1.98
8	9.1 meters PSCC poles	30	0.04	Each	1.13
9	Transformers				
a)	33/11kv 5 MVA Power Transformer	2	30.79	Each	61.57
b)	3-Phase 25 KVA (CSP) (Al)	1	0.547	Each	0.55
10	Circuit Breakers (including trivector meters)				
a)	20 KA 11 kv feeder VCB including Control panel and CTs (NF=5)	5	2.458	Each	12.29
b)	20 KA 11 kv LV VCB including Control panel and CTs	2	3.302	Each	6.60
11	Control Circuit Panels				
a)	AC Supply Panel	1	0.303	Each	0.30
b)	Alarm Panel	1	0.303	Each	0.30
12	Instrument Transformers				
a)	11kv P.T (3 Phase)	1	0.182	Each	0.18
13	Lightning Arrestors				
a)	33KV 10KA	6	0.033	Each	0.20
b)	11KV Line Type (NF=5)	15	0.020	Each	0.30
c)	11KV Station Type 10 KA	6	0.020	Each	0.12
14	Isolating Switches				
a)	33KV 800A AB Switch (Double Break)	3	0.306	Each	0.92
b)	11KV 800A AB Switch (NT X 1+1) (Double Break)	3	0.169	Each	0.51
c)	11KV 400A AB Switch (NF X 2+2) (Double Break)	12	0.071	Each	0.85
d)	33KV Horn Gap Fuse Set (1XNT)	2	0.000	Each	0.00
15	Data Acquisition equipment (SIM, modem, cabling etc)			LS	0.40
16	24 Volts 40 AH Battery Set including Battery Charger	7	0.256	Each	1.79
17	2MVAR 11KV Capacitor Bank along with Associated Equipment	1	8.700	Each	8.70
18	Earthing of Power Transformer VCBs, AB Switches, Structures with 75x8mm GI Flat			LS	1.98
	<b>Sub Total</b>				<b>142.19</b>
	3% Contingencies on items 7 to 17				2.96
	1% T&P Charges on items No. 7 to 17				0.99
	Erection and transport and commissioning charges on items 7 to 17 at 10%				9.87
	GST at 18% on L&T				1.777
	10% Establishment and General Charges				14.22
	<b>Total</b>				<b>172.00</b>

Or say **172.00**

**Note :** NF = No. of 11 KV Feeders, The number of outgoing feeders at substation limited to the demand in MVA i.e. if substation demand is 5 MVA, the number of feeders should not exceed five.

In GHMC area include 33 KV group control VCB

**COST DATA FOR ERECTION OF 33/11 KV SUBSTATION WITH 9.1 Mtrs PSCC POLES, 2 X 5 MVA POWER TRANSFORMERS AND 5 NO. 11 KV FEEDERS (WITH OUT 11 KV 2 MVAR CAPACITORS BANK)**

Rs. in Lakhs

Sl. No	Particulars	Qty.	Rate (Rs. in lakhs)	Unit	Amount (Rs. in lakhs)
1 (a)	Lands and Rights	LS	As per local conditions		11.00
(b)	Plantation of Trees	LS		LS	0.15
2	Control Room and Consumer service centre (including furniture)	LS		LS	12.00
3	Station Auxillaries				
a)	Peripheral, Security Fencing, Approach road, retaining wall around switchward with gravel filling, gate and bore well	LS		LS	11.00
b)	Yard lighting	LS		LS	0.80
c)	Fire fighting Equipment	LS		LS	0.70
d)	P&T Phone and wireless set	LS		LS	0.00
4	Foundations for structures, PTRs & breakers	LS		LS	3.30
5	Bus bars, Jumpers, Connectors claps etc.	LS		LS	1.32
6	Control Cables	LS		LS	1.19
7	Structural Steel	6	0.441	MT	2.64
8	9.1 meters PSCC poles	38	0.038	Each	1.43
9	Transformers				
a)	33/11kv 5 MVA Power Transformer	2	30.79	Each	61.57
b)	3-Phase 25 KVA (CSP) (Al)	1	0.547	Each	0.55
10	Circuit Breakers (including trivector meters)				
a)	20 KA 11 kv feeder VCB including Control panel and CTs (NF=5)	5	2.458	Each	12.29
b)	20 KA 11 kv LV VCB including Control panel and CTs	2	2.607	Each	5.21
11	Control Circuit Panels				
a)	AC Supply Panel	1	0.303	Each	0.30
b)	Alarm Panel	1	0.303	Each	0.30
12	Instrument Transformers				
a)	11kv P.T (3 Phase)	1	0.182	Each	0.18
13	Lightning Arrestors				
a)	33KV 10KA	6	0.033	Each	0.20
b)	11KV Line Type (NF=5)	15	0.020	Each	0.30
c)	11KV Station Type 10 KA	6	0.020	Each	0.12
14	Isolating Switches				
a)	33KV 800A AB Switch (Double Breaker)	3	0.306	Each	0.92
b)	11KV 800A AB Switch (NT X 1+1) (Double Breaker)	3	0.169	Each	0.51
c)	11KV 400A AB Switch (NF X 2+2) (Double Breaker)	12	0.071	Each	0.85
d)	33KV Horn Gap Fuse Set (1XNT)	2	0.000	Each	0.00
15	Data Acquisition equipment (SIM, modem, cabling etc)			LS	0.40
16	24 Volts 40 AH Battery Set including Battery Charger	7	0.256	Each	1.79
17	Earthing of Power Transformer VCBs, AB Switches, Structures with 75x8mm GI Flat			LS	1.80
	<b>Sub Total</b>				<b>132.83</b>
	3% Contingencies on items 7 to 16				2.69
	1% T&P Charges on items No. 7 to 16				0.90
	Erection and transport and commissioning charges on items 7 to 16 at 10%				8.96
	GST at 18% on L&T				1.612
	10% Establishment and General Charges				13.28
	<b>Total</b>				<b>160.27</b>

Or say **160.27**

**Note :** NF = No. of 11 KV Feeders, The number of outgoing feeders at substation limited to the demand in MVA i.e. if substation demand is 5 MVA, the number of feeders should not exceed five.

**COST DATA FOR ERECTION OF 33/11 KV SUBSTATION WITH PSCC POLES, 1 X 5 MVA POWER TRANSFORMERS and 3 NO. 11 KV FEEDERS WITH 11 KV 2 MVAR CAPACITORS BANK**

Rs. in Lakhs

Sl. No	Particulars	Qty.	Rate (Rs. in lakhs)	Unit	Amount (Rs. in lakhs)
1 (a)	Lands and Rights	LS	11.00		11.00
(b)	Plantation of Trees	LS		LS	0.15
2	Control Room and Consumer service centre (including furniture)	LS		LS	12.00
3	Station Auxillaries				
a)	Peripheral, Security Fencing, Approach road, retaining wall around switchward with gravel filling, gate and bore well	LS		LS	11.00
b)	Yard lighting				0.80
c)	Fire fighting Equipment	LS		LS	0.70
d)	P&T Phone and wireless set	LS		LS	0.05
4	Foundations for structures, PTRs & breakers	LS		LS	3.30
5	Bus bars, Jumpers, Connectors claps etc.	LS		LS	1.32
6	Control Cables	LS		LS	1.19
7	Structural Steel	5.5	0.441	MT	2.42
8	9.1 meters PSCC poles	23	0.038	Each	0.87
9	8 meters PSCC poles	8	0.016	Each	0.13
10	Transformers				
a)	33/11kv 5 MVA Power Transformer	1	30.79	Each	30.79
b)	3-Phase 25 KVA (CSP) (Al)	1	0.547	Each	0.55
11	Circuit Breakers (including trivector meters)				
a)	20 KA 11 kv feeder VCB including Control panel and CTs (NF=3)	3	2.458	Each	7.38
b)	20 KA 11 kv LV VCB including Control panel and CTs	1	2.607	Each	2.61
12	Control Circuit Panels				
a)	AC Supply Panel	1	0.303	Each	0.30
b)	Alarm Panel	1	0.303	Each	0.30
13	Instrument Transformers				
a)	11kv P.T (3 Phase)	1	0.182	Each	0.18
14	Lightning Arrestors				
a)	33KV 10KA	6	0.033	Each	0.20
b)	11KV Line Type (NF=3)	9	0.020	Each	0.18
c)	11KV Station Type 10 KA	3	0.020	Each	0.06
15	Isolating Switches				
a)	33KV 800A AB Switch	3	0.306	Each	0.92
b)	11KV 800A AB Switch (NT X 1+1)	2	0.169	Each	0.34
c)	11KV 400A AB Switch (NF X 2+2)	8	0.071	Each	0.57
d)	33KV Horn Gap Fuse Set (1XNT)	1	0.000	Each	0.00
16	Data Acquisition equipment (SIM, modem, cabling etc)			LS	0.30
17	24 Volts 40 AH Battery Set including Battery Charger	4	0.256	Each	1.02
18	2MVAR 11KV Capacitor Bank along with Associated Equipment	1	8.700	Each	8.70
19	Earthing of Power Transformer VCBs, AB Switches, Structures with 75x8mm GI Flat			LS	1.80
	<b>Sub Total</b>				<b>101.12</b>
	3% Contingencies on items 7 to 17				1.73
	1% T&P Charges on items No. 7 to 17				0.58
	10% Erection and transport and commissioning charges on items 7 to 17				5.78
	GST at 18% on L&T				1.041
	10% Establishment and General Charges				10.11
	<b>Total</b>				<b>120.36</b>

Or say **120.40**

**Note :** NF = No. of 11 KV Feeders, The number of outgoing feeders at substation limited to the demand in MVA i.e. if substation demand is 5 MVA, the number of feeders should not exceed five.

**Cost data for erection of 11 KV Bay Extension in existing 33/11 KV sub-station  
(with RS Joist)**

<b>S. No.</b>	<b>Particulars</b>	<b>Qty.</b>	<b>Rate in Rs.</b>	<b>Per Unit</b>	<b>Amount in Rs.</b>
1	150X150 mm H type beam of 8.5 mts length (2 Nos. RS Joist)	0.5984	44,052.94	MT	26361.00
2	100x50 mm Channel	0.1659	40,392.58	MT	6701.00
3	MS flat 75x8 mm	0.05	42,952.00	MT	2148.00
4	AB switch 400 Amps conventional type	1	7,068.20	Each	7068.00
5	200 sqmm ACSR Conductor (Panther-conductor)	0.02	140,665.63	KM	2813.00
6	Disc type Insulator with metal parts	18	276	Each	4973.00
7	Earthing arrangement (20 mts length with 75x8 MS flat (20x4.7=94)	94	42.95	KG	4037.00
8	Pad clamps, bolts & nuts & Miscellaneous items	LS			1650.00
	<b>Sub-Total</b>				<b>55751.00</b>
	3% Contingencies				1672.53
	Labour & Transport				14487.11
	GST at 18% on L&T				2607.680
	10% Establishment & General charges				5575.100
	<b>Grand Total</b>				<b>80093.42</b>
			<b>or say</b>		<b>80093.00</b>

**Cost data for erection of 11 KV Bay Extension in existing 33/11 KV sub-station  
(with 9.1 mts PSCC poles)**

<b>S. No.</b>	<b>Particulars</b>	<b>Qty.</b>	<b>Rate in Rs.</b>	<b>Per Unit</b>	<b>Amount in Rs.</b>
1	9.1 mts. PSCC poles	2	3,776	Each	7552.00
2	100x50 mm Channel	0.1659	40,392.58	MT	6701.00
3	MS flat 75x8 mm	0.05	42,952.00	MT	2148.00
4	AB switch 400 Amps conventional type	1	7,068.20	Each	7068.00
5	200 sqmm ACSR Conductor (Panther conductor)	0.02	140,665.63	KM	2813.00
6	Disc type Insulator with metal parts	18	276	Each	4973.00
7	Earthing arrangement (20 mts length with 75x8 MS flat (20x4.7=94)	94	42.95	KG	4037.00
8	Pad clamps, bolts & nuts & Miscellaneous items	LS			1650.00
	<b>Sub-Total</b>				<b>36942.00</b>
	3% Contingencies				1108.26
	Labour & Transport				14487.11
	GST at 18% on L&T				2607.680
	10% Establishment & General charges				3694.200
	<b>Grand Total</b>				<b>58839.25</b>
			<b>or say</b>		<b>58839.00</b>

## Cost Data for 33 KV Bay Extension in 33/11 KV substation

Sl.No	Description of Material	Qty	Unit	Rate	Amount in Rs.
1	150 x 150 RSJ pole (8m)	0.6	MT	44,052.94	26431.764
2	100 x 50 mm MS channel	0.27	MT	40,392.58	10906
3	75 x 8mm flat for clamps & earthing	0.2	MT	42,952.00	8590.4
4	200 sqmm Panther conductor	0.02	KM	140,665.63	2813.3126
5	Strain Insulator set with metal parts (each set consists 3 Nos 11 KV strain insulators)	6	Set	706	4234
6	Erection of 33 KV AB switch (800 Amps, Conventional)	1	Each	30,585.60	30585.6
7	Miscellaneous items like fabrication of channels & pad clamps etc.		LS		2750

**Sub-Total**

**86312**

3% Contingencies

2589.35

3% S&H charges

2589.35

Labour & Transport

15129.51

GST at 18 % on L&T

2723.31

10% Estt & General charges on material

8631.15

**Total**

**117974.18**

**Or Say Rs**

**118000.00**

**Cost-Data for Extention of 33KV Bay at 132/33KV Sub-station**

<b>Sl.No.</b>	<b>Description</b>	<b>Qty</b>	<b>Rate</b>	<b>Per</b>	<b>Amount in Rs.</b>
1	Galvanised steel such as M.S.angles, flats, channels for TC & TD towers. (GHMC SSR Pg.83)	5.00	69249	MT	346246
2	Spacer clamps for 33KV bus	9	508	Each	4572
3	Spacer clamp with T off zebra for one feeder	3	153	Each	459
4	33 KV Polymer String Insulator (B&S)	8	282	Each	2259
5	Tension hardware for twin zebra	6	2,512	Each	15072
6	Zebra condutor	0.150	143869	KM	21580
7	33KV AB Switch 800 A	1	30586	Each	30586
8	Twin Zebra connector	12	600	Each	7200
9	T Clamps	12	500	Each	6000
10	MS.Flat 100x16	0.63	46904	MT	29550
11	MS.Flat 50X8	0.62	51817	MT	32127
12	GI Flat 100X16	0.151	63235	MT	9548
13	GI Flat 50X8	0.155	63478	MT	9839
14	Civil works for erection of towers in sub-station yard and other miscellaneous items.			LS	100000

**Sub-Total**

**615038**

3% S&H charges on Material

15451

3% Contingencies on Material

15451

Labour & Transport

112121

GST at 18 % on L&T

20181.78

10% Estt. & Gen. Chargtes

61504

**Gross Total 839747**

**Or Say in Rs. 839747**



**Cost Data for erection of 11 KV breaker in sub-station**

<b>Sl.No</b>	<b>Description of work</b>	<b>Qty</b>	<b>Unit</b>	<b>Rate</b>	<b>Amount in Rs.</b>
1	11 KV VCB along with all Accessories Including CTs	1	Each	245849	245848.73
2	4x2.5 sqmm Control cable	0.05	KM	73988	3699
3	Earthing arrangements	LS			1650
4	Miscellaneous items like conductor and clamps etc	LS			1650

<b>Sub-Total</b>	<b>252848</b>
3% Contingencies	7585
3% S&H charges	7585
Labour & Transport	33031
GST at 18 % on L&T	5945.50
10% Estt & General charges	25285
<b>Total</b>	<b>332280</b>
<b>Or Say Rs</b>	<b>332280</b>

**Cost-Data for erection of 33 KV VCB and Twin feeder Control Pannel  
at 132/33KV Sub-stations**

S.No.	Description of work	Qty	Rate	Per	Amount in Rs.
1	33 KV VCB with relay& CTs (400-200-100/1-1-1A)	1	397,610.44	Each	397610
2	LT PVC Copper Control Cable 10 C x2.5 Sq.mm	0.75	155,595.67	KM	116697
3	LT PVC Copper Control Cable 4 C x2.5 Sq.mm	0.75	73,987.76	KM	55491
4	33KV LAS line type	3	3,321.37	Each	9964
5	33 KV Twin feeder control panel	1	418,324.95	No	418324.95
6	Miscellaneous items			LS	1100

**Sub-Total** **999187**

3% S&H charges 29976

3% Contingencies on material 29976

Labour & Transport 86211

GST 18 % on L&T 15518.04

10% Estt. & General Charges 99919

**Gross Total** **1260786**

**Or Say Rs.** **1260786**

**Cost data for erection of 2 MVAR Capacitor Bank**

<b>S. No.</b>	<b>Particulars</b>	<b>Qty.</b>	<b>Rate in Rs.</b>	<b>Per Unit</b>	<b>Amount in Rs.</b>
1	2 MVAR 11KV Capacitor Bank along with associated Equipment (Capactors, Structure and VCB ) (Type A)	1	870,000.00	Each	870000
2	24 volts 40AH Battery Set including Battery Charger	1	25,600.00	Each	25600
3	M.S.Flat 50x6mm	0.36	42,952.00	MT	15463
4	Panther Conductor	0.05	140,665.63	KM	7033
5	4 Core 2.5 Sqmm PVC Copper Control Cable	0.05	73,987.76	KM	3699
6	10 Core 2.5 Sqmm PVC Copper Control Cable	0.1	155,595.67	KM	15560
7	2 Core 2.5 Sqmm PVC Copper Control Cable	0.06	40,022.45	KM	2401
8	11KV Post type insulators	3	300.00	Each	900
9	Cost of CI pipe of 100 mm dia, 8 mm thick and 2.75 Mts long	2	3328	Each	6656
10	11KV H.G. Fuse Set with Insulators	1	1,843.04	Each	1843
11	11KV LA's Station type	3	2,014.80	Each	6044
12	M.S. Channel 100x50mm	0.24	40,392.58	MT	9694
13	Miscellaneous items	LS			550.00

**Sub-Total**

**965443.00**

3% Contingencies

28963.29

Labour ,Transport & Commsioning charges

69586.31

GST at 18 % on L&T

12525.535

10% Establishment & General charges

96544.3

**Grand Total 1173062.43**

**or say 1173062.00**

**Cost Data for Enhancement of capacity of existing Power Transformer from 5 MVA to 8 MVA.**

Sl.No	Particulars	Qty	Rate in Rs.	Unit	Amount in Rs.
1	33/11 KV 8 MVA Power Transformer	1	4559641.66	Each	4559642
2	Erection of 33 KV VCB with directional relay	1	397,610.44	Each	397610
3	Miscellaneous Items			LS	50000
			<b>Sub-Total</b>		5007252
	3 % Storage & Handling charges				150218
	3% Contingencies on material				150218
	Labour & Transport				120000
	GST at 18% on L&T				21600.00
	10% Estt & General charges on material				500725
	Add: Dismantling charges				50000
			<b>Grand Total</b>		<b>6000013</b>
			Or say		<b>6000013</b>
	Less Credit				
	Less Credit has to be valued as per the respective PTR book value in SAP, if data is not available in SAP, the following value may be considered.				
1	33/11KV 5 MVA Power Transformer	1	3078550.84	Each	3078551
	Depreciation 40% (Variable as per life served)		1231420.00		1231420
				Net	1847131
	Original erection charges (SWR 21275 MP)				32000
	Original dismantling charges				16000
	10% Estt. & General charges				184713
			Total		2079844
			Or Say	Rs.	2079844
	Net Amount = Grand total - Less credit		6000013	2079844	3920169

## Cost data for laying of 3 core 300 Sq.mm 11 KV UG Cable

Sl. No.	Description of the material	Qty	Rate	Unit	Amount
1	Laying 11 KV 3 core 300Sq.mm UG Cable at depth of 1.20mtrs along CC road	1.03	1092399.36	KM	1125171.34
2	Erection of 3 way RMU (SF6) outdoor type	1	480787.46	Each	480,787.46
3	Straight through joints for 3 core 11KV 300Sq.mm UG Cable	1	3025	Each	3025.00
4	End termination suitable for 3 core 300 Sq.mm UG cable	4	1925	Each	7700.00
5	Earthing of Cable with GI pipe of 2mt length	3	635.00	Nos	1905.00

**Sub-Total** **1618588.80**

3 % storage & handling charges 33755.14

3 % contingencies 33755.14

Labour and Transport 468316.42

GST at 18 % on L&T 84296.956

10 % Estt & General charges 161858.88

**Grand Total** **2400571.33**

**Or Say**      **Rs**      **2400571**

### Cost data for laying of 3 core 400Sq.mm 33KV UG Cable

Sl. No.	Description of the material	Qty	Rate	Unit	Amount in Rs.
1	Laying 33 KV 3 core 400Sq.mm UG Cable at depth of 1.20mtrs along CC road	1.03	2347045.04	KM	2417456.39
2	Straight through joints and end terminators suitable for 3 core 33KV 400Sq.mm UG Cable and Hume pipes and GI pipe (15% of cost cable)	1	4537.5	Each	4537.50
3	End termination suitable for 400 Sq.mm (outdoor type)	2	2200	Nos	4400.00
4	Earthing of Cable with GI pipe of 2mt length (SMR 11480 RZ PG.NO.119)	2	666.00	Nos	1332.00

**Sub-Total** **2427725.89**

3 % Storage & handling charges 72523.69

3 % Contingencies 72523.69

Labour and Transport 545321.37

GST at 18 % on L&T 98157.847

10 % Estt & General charges 242772.59

**Grand Total** **3459025.08**

**Or Say**      **Rs**      **3459025**

**Erection of Galvanised "M" Tower as per ASCI Standard for span length 100m for angle deviation  
20degrees to 60degrees/Cut point/Deadend**

<b>S. No.</b>	<b>Particulars</b>	<b>Qty.</b>	<b>Per Unit</b>	<b>Rate</b>	<b>Amount in Rs.</b>
1	Supply of Galvanised M type tower including 6arms as per Specification. (GHMC SSR)	1.133	MT	69249.20	78459.34
2	Supply of Suitable Hot dip Galvanised, Zinc coated Nuts and bolts with suitable plain and spring washers. (MP SSR)	158	KG	90.00	14220.00
3	Fabrication of tower Parts as per Specification	1.133	MT	5775.00	6543.08
4	Excavation of pit including dewatering, planking, showing and shuttering( where ever necessary) and leveling a) in all types of soils such as BC, red earth, hard gravel etc., b) in hard rock sites (where blasting is prohibited) with size 1.2x1.2x3.3 mtr i.e.4.752 cum GHMC SSR	4.752	CUM		0.00
5	Setting of stubs in position for laying of foundation of towers with 1:2:4 cc mix using 40 mm HBG metal including cost of all concreting materials, form boxes and cement and curing for 14 days (40 mm HBG metal for pyramid portion and 20 mm HBG metal for chimney portion) i.e 4.434 cu.mts including coping	4.752	CUM	6515.25	30960.47
6	Erection of tower parts completely as per specifications including erection of insulators with all accessories, jumpering,transport of material and bolts and nuts etc.,	1.133	MT	6825.00	7732.73
7	Tack welding of total tower nuts and bolts	1	Job	1575.00	1575.00
8	Pipe earthing of towers with 40mm dia GI pipe, including cost of pipe, bentonite powder and running of GI flat etc., (MP SSR)	2	Each	1553.48	3106.96
9	Transport of Material to site including loading and unloading	1.291	MT	2100.00	2711.10

S. No.	Particulars	Qty.	Per Unit	Rate	Amount in Rs.
10	Painting of sub-station structures with two coats of Aluminium paint using Aluminium paint 1st grade containing 3.6 kg of Aluminium paste for 18 litres of thinner 1st coat is to be applied before erection of tower and 2nd coat after stringing and half round welding including cost of paint, cost of brushes, labour charges etc., complete.				
a	Material for First coat of 1st Grade Aluminium Paint, paint, brushes etc.	1.133	MT	2077.00	2353.24
b	Labour charges for painting including scratching and cleaning of tower	1.133	MT	810.00	917.73
c	Material for Second coat of 1st Grade Aluminium Paint, brushes, etc.,	1.133	MT	1231.00	1394.72
d	Labour charges for painting including scratching and cleaning of tower	1.133	MT	459.00	520.05
				<b>Total:</b>	<b>150494.41</b>

(\* ) Note:-The requirement of 2nd coat is to be justified by the concerned Divisional Engineer /Executive Engineer before execution of this work

**Tower details**

1	Weight of M type tower	1.133 MT	
2	Weight of 1 No. extension of 3 Mts	0.313 MT	(313.59Kgs)
3	Weight of M+3 tower	1.446	
4	Weight of M+6 tower	1.759	
5	Weight of M+9	2.072	
6	Weight of each arm	0.015 MT	(15.17Kgs)
<b>stubs</b>	110X110X8 = 4.56 mts		
	100X100X8=1.998 mts		
	80X80X8 =1.898 mtrs		
	65X65X6 = 2.274 mts		
	45X45X5=2.761 mtrs		
	Total height 13.5 mts		
	Depth of tower below ground level : 3.2 mts		
	Height of tower above ground level : 10.3 mts.		



**Erection of Galvanised K Tower as per ASCI Standard for span length 100mts for angle deviation not exceeding 2degrees**

<b>S. No.</b>	<b>Particulars</b>	<b>Qty</b>	<b>Per Unit</b>	<b>Rate</b>	<b>Amount</b>
1	Supply of Galvanised K type tower including six arms as per Specification. (MP SSR)	0.75	MT	69249.20	51936.90
2	Supply of Suitable Hot dip Galvanised, Zinc coated Nuts and bolts with suitable plain and spring washers.(MP SSR)	118.27	KG	90.00	10644.30
3	Fabrication of tower Parts as per Specification	0.75	MT	5775.00	4331.25
4	Excavation of pit including dewatering, planking, showing and shuttering( where ever necessary) and leveling a) in all types of soils such as BC, red earth, hard gravel etc., b) in hard rock sites (where blasting is prohibited) with size 1.0x1.0x2.5 mtr i.e.2.5 cum (GHMC SSR)	2.5	CUM	0.00	0.00
5	Setting of stubs in position for laying of foundation of towers with 1:2:4 cc mix using 40 mm HBG metal including cost of all concreting materials and cement, form boxes and curing for 14 days (40 mm HBG metal for pyramid portion and 20 mm HBG metal for chimney portion) i.e 3.5 cu.mts including coping (GHMC SSR)	3.5	CUM	6261.15	21914.03
6	Erection of tower parts completely as per specification including erection of insulators with all accessories, jumpering and bolts and nuts etc.,	0.75	MT	6825.00	5118.75
7	Tack welding of total tower nuts and bolts	1	Job	1575.00	1575.00
8	Pipe earthing of towers with 40mm dia GI pipe, including cost of pipe, bentonite powder and running of GI flat etc., (MP SSR)	2	Each	1553.48	3106.96
9	Transport of Material to site including loading and unloading	0.87	MT	2100.00	1827.00

S. No.	Particulars	Qty	Per Unit	Rate	Amount
10	Painting of sub-station structures with two coats of Aluminium paint using Aluminium paint 1st grade containing 3.6 kg of Aluminium paste for 18 litres of thinner 1st coat is to be applied before erection of tower and 2nd coat after stringing and half round welding including cost of paint, cost of brushes, labour charges etc., complete.				
a	Material for First coat of 1st Grade Aluminium Paint, paint, brushes etc.	0.75	MT	2077.00	1557.75
b	Labour charges for painting including scratching and cleaning of tower	0.75	MT	810.00	607.50
c	Material for Second coat of 1st Grade Aluminium Paint, brushes, etc.,	0.75	MT	1231.00	923.25
d	Labour charges for painting including scratching and cleaning of tower	0.75	MT	459.00	344.25
				<b>Total:</b>	<b>103886.94</b>

(\*) Note:-The requirement of 2nd coat is to be justified by the concerned Divisional Engineer /Executive Engineer before execution of this work

#### Tower details

1	Weight of K type tower including nuts&bolts	0.75 MT	
2	Weight of 1 No. extension of 3 Mts	0.163 MT	
3	Weight of K+3 tower	0.913	
4	Weight of K+6 tower	1.076	
5	Weight of K+9	1.239	
6	Weight of each arm	0.0097 MT	(9.7Kgs)
<b>stubs</b>	75X75X6 = 3.76 mts		
	65X65X6=1.054 mts		
	50X50X5 =1.103 mtrs		
	45X45X5 = 3.883 mts		
	45X45X5=4.817 mtrs		
	Total height 14.6 mts		
	Depth of tower below ground level : 2.4 mts		
	Height of tower above ground level : 12.2 mts.		

**Erection of Galvanised L Tower as per ASCI Standard for span length 100mts for angle deviation between 2degrees to 3degrees**

S. No.	Particulars	Qty.	Per Unit	Rate	Amount
1	Supply of Galvanized L type tower including six arms as per Specification. (GHMC SSR)	0.827	MT	69249.20	57269.09
2	Supply of Suitable Hot dip Galvanised, Zinc coated Nuts and bolts with suitable plain and spring washers.	168	KG	90.00	15120.00
3	Fabrication of tower Parts as per Specification	0.827	MT	5775.00	4775.93
4	Excavation of pit including dewatering, planking, showring and shuttering( where ever necessary) and leveling a) in all types of soils such as BC, red earth, hard gravel etc., b) in hard rock sites (where blasting is prohibited) with size 1.0x1.0x3.0 mtr i.e.3.0cum	3	CUM		0.00
5	Setting of stubs in position for laying of foundation of towers with 1:2:4 cc mix using 40 mm HBG metal including cost of all concreting materials, form boxes and cement and curing for 14 days (40 mm HBG metal for pyramid portion and 20 mm HBG metal for chimney portion) i.e 4 cu.mts including coping	4	CUM	6261.15	25044.60
6	Erection of tower parts completely as per specifications including erection of insulators with all accessories, jumpering,transport of material and bolts and nuts etc.,	0.827	MT	6825.00	5644.28
7	Tack welding of total tower nuts and bolts	1	Job	1575.00	1575.00
8	Pipe earthing of towers with 40mm dia GI pipe, including cost of pipe, bentonite powder and running of GI flat etc., (MP SSR)	2	Each	1553.48	3106.96
9	Transport of Material to site including loading and unloading	1.22	MT	2100.00	2562.00

S. No.	Particulars	Qty.	Per Unit	Rate	Amount
10	Painting of sub-station structures with two coats of Aluminium paint using Aluminium paint 1st grade containing 3.6 kg of Aluminium paste for 18 litres of thinner 1st coat is to be applied before erection of tower and 2nd coat after stringing and half round welding including cost of paint, cost of brushes, labour charges etc., complete.				
a	Material for First coat of 1st Grade Aluminium Paint, paint, brushes etc.	0.827	MT	2077.00	1717.68
b	Labour charges for painting including scratching and cleaning of tower	0.827	MT	810.00	669.87
c	Material for Second coat of 1st Grade Aluminium Paint, brushes, etc.,.	0.827	MT	1231.00	1018.04
d	Labour charges for painting including scratching and cleaning of tower	0.827	MT	459.00	379.59
				<b>Total:</b>	<b>118883.03</b>

(\*) Note:-The requirement of 2nd coat is to be justified by the concerned Divisional Engineer /Executive Engineer before execution of this work

**Tower details**

1	Weight of L type tower including nuts&bolts	0.827 MT	
2	Weight of 1 No. extension of 3 Mts	0.26325 MT	
3	Weight of L+3 tower	1.09025	
4	Weight of L+6 tower	1.3535	
5	Weight of L+9	1.61675	
6	Weight of each arm	0.0097 MT	(9.7Kgs)
<b>stubs</b>	90X90X8 = 4.256 mts		
	80X80X8=1.998 mts		
	65X65X6 =2.898 mtrs		
	50X50X5 = 1.274 mts		
	45X45X5=2.726 mtrs		
	Total height 13.15 mts		
	Depth of tower below ground level : 2.9 mts		
	Height of tower above ground level : 10.25mts.		

**DATA-VIII**

**Extension of 3mtrs for Galvanized K Tower as per ASCI Standard for span length 100mts for angle deviation not exceeding 2degrees**

S. No	Description	Qty	Per Unit	Rate	Amount
<b>Material</b>					
1	Supply of Galvanised K+3 type tower as per Specification. (GHMC SSR)	0.163	MT	69249.20	11287.62
2	Supply of Suitable Hot dip Galvanised, Zinc coated Nuts and bolts with suitable plain and spring washers. (MP SSR)	24.96	KG	90.00	2246.80
3	Painting of sub-station structures with two coats of Aluminium paint using Aluminium paint 1st grade containing 3.6 kg of Aluminium paste for 18 litres of thinner 1st coat is to be applied before erection of tower and 2nd coat after stringing and half round welding including cost of paint, cost of brushes, labour charges etc., complete.				
a	Material for First coat of 1st Grade Aluminium Paint, paint, brushes etc.	0.163	MT	2077.00	338.55
b	Material for Second coat of 1st Grade Aluminium Paint, brushes, etc.,	0.163	MT	1231.00	200.65
			<b>Total:</b>		<b>14073.62</b>
<b>Labour</b>					
1	Fabrication of tower Parts as per Specification	0.163	MT	5775.00	941.33
2	Erection of tower parts completely as per specification including erection of insulators with all accessories, jumpering and bolts and nuts etc.,	0.163	MT	6825.00	1112.48
3	Transport of Material to site including loading and unloading	0.19	MT	2100.00	394.73

S. No	Description	Qty	Per Unit	Rate	Amount
4	Painting of sub-station structures with two coats of Aluminium paint using Aluminium paint 1st grade containing 3.6 kg of Aluminium paste for 18 litres of thinner 1st coat is to be applied before erection of tower and 2nd coat after stringing and half round welding including cost of paint, cost of brushes, labour charges etc., complete.				
a	Labour charges for painting including scratching and cleaning of tower	0.163	MT	810.00	132.03
b	Labour charges for painting including scratching and cleaning of tower	0.163	MT	459.00	74.82
				<b>Total:</b>	<b>2655.37</b>

(\*) Note:-The requirement of 2nd coat is to be justified by the concerned Divisional Engineer /Executive Engineer before execution of this work

#### Tower details

1	Weight of K type tower including nuts&bolts	0.75 MT	
2	Weight of 1 No. extension of 3 Mts	0.163 MT	
3	Weight of K+3 tower	0.913	
4	Weight of K+6 tower	1.076	
5	Weight of K+9	1.239	
6	Weight of each arm	0.0097 MT	(9.7Kgs)
<b>stubs</b>	75X75X6 = 3.76 mts		
	65X65X6=1.054 mts		
	50X50X5 =1.103 mtrs		
	45X45X5 = 3.883 mts		
	45X45X5=4.817 mtrs		
	Total height 14.6 mts		
	Depth of tower below ground level : 2.4 mts		
	Height of tower above ground level : 12.2 mts.		

**DATA-IX**

**Extension of 3mtrs for Galvanized L Tower as per ASCI Standard for span length 100mts for angle deviation between 2degrees to 3degrees**

S. No	Description	Qty.	Per Unit	Rate	Amount
	<b>Material</b>				
1	Supply of Galvanized L+3 type tower as per Specification.(GHMC SSR)	0.26	MT	69249.20	18004.79
2	Supply of Suitable Hot dip Galvanised, Zinc coated Nuts and bolts with suitable plain and spring washers. (MP SSR)	23.81	KG	90.00	2142.63
3	Painting of sub-station structures with two coats of Aluminium paint using Aluminium paint 1st grade containing 3.6 kg of Aluminium paste for 18 litres of thinner 1st coat is to be applied before erection of tower and 2nd coat after stringing and half round welding including cost of paint, cost of brushes, labour charges etc., complete.				
a	Material for First coat of 1st Grade Aluminium Paint, paint, brushes etc.	0.26	MT	2077.00	540.02
b	Material for Second coat of 1st Grade Aluminium Paint, brushes, etc.,	0.26	MT	1231.00	320.06
				<b>Total:</b>	<b>21007.50</b>
	<b>Labour</b>				
1	Fabrication of tower Parts as per Specification	0.26	MT	5775.00	1501.50
2	Erection of tower parts completely as per specifications including erection of insulators with all accessories, jumpering,transport of meterial and bolts and nuts etc.,	0.26	MT	6825.00	1774.50
3	Transport of Material to site including loading and unloading	0.28	MT	2100.00	595.99

S. No	Description	Qty.	Per Unit	Rate	Amount
4	Painting of sub-station structures with two coats of Aluminium paint using Aluminium paint 1st grade containing 3.6 kg of Aluminium paste for 18 litres of thinner 1st coat is to be applied before erection of tower and 2nd coat after stringing and half round welding including cost of paint, cost of brushes, labour charges etc., complete.				
a	Labour charges for painting including scratching and cleaning of tower	0.26	MT	810.00	210.60
b	Labour charges for painting including scratching and cleaning of tower	0.26	MT	459.00	119.34
				<b>Total:</b>	<b>4201.93</b>

(\*) Note:-The requirement of 2nd coat is to be justified by the concerned Divisional Engineer /Executive Engineer before execution of this work

#### **Tower details**

1	Weight of L type tower including nuts&bolts	0.827 MT	
2	Weight of 1 No. extension of 3 Mts	0.26325 MT	
3	Weight of L+3 tower	1.09025	
4	Weight of L+6 tower	1.3535	
5	Weight of L+9	1.61675	
6	Weight of each arm	0.0097 MT	(9.7Kgs)
<b>stubs</b>	90X90X8 = 4.256 mts		
	80X80X8=1.998 mts		
	65X65X6 =2.898 mtrs		
	50X50X5 = 1.274 mts		
	45X45X5=2.726 mtrs		
	Total height 13.15 mts		
	Depth of tower below ground level : 2.9 mts		
	Height of tower above ground level : 10.25mts.		



**DATA-X**

**Extension of 3mtrs for M+3 Tower as per ASCI Standard**

S. No	Description	Qty.	Per Unit	Rate	Amount
<b>Material</b>					
1	Supply of Galvanised M+3 type tower as per Specification. (GHMC SSR)	0.31	MT	69249.20	21675.00
2	Supply of Suitable Hot dip Galvanised, Zinc coated Nuts and bolts with suitable plain and spring washers.	30.23	KG	90.00	2720.43
3	Painting of sub-station structures with two coats of Aluminium paint using Aluminium paint 1st grade containing 3.6 kg of Aluminium paste for 18 litres of thinner 1st coat is to be applied before erection of tower and 2nd coat after stringing and half round welding including cost of paint, cost of brushes, labour charges etc., complete.				
a	Material for First coat of 1st Grade Aluminium Paint, paint, brushes etc.	0.31	MT	2077.00	650.10
b	Material for Second coat of 1st Grade Aluminium Paint, brushes, etc.,	0.31	MT	1231.00	385.30
			<b>Total:</b>		<b>25430.83</b>
<b>Labour</b>					
1	Fabrication of tower Parts as per Specification	0.31	MT	5775.00	1807.58
2	Erection of tower parts completely as per specifications including erection of insulators with all accessories, jumpering, transport of material and bolts and nuts etc.,	0.31	MT	6825.00	2136.23
3	Transport of Material to site including loading and unloading	0.34	MT	2100.00	720.78

S. No	Description	Qty.	Per Unit	Rate	Amount
4	Painting of sub-station structures with two coats of Aluminium paint using Aluminium paint 1st grade containing 3.6 kg of Aluminium paste for 18 litres of thinner 1st coat is to be applied before erection of tower and 2nd coat after stringing and half round welding including cost of paint, cost of brushes, labour charges etc., complete.				
a	Labour charges for painting including scratching and cleaning of tower	0.31	MT	810.00	253.53
b	Labour charges for painting including scratching and cleaning of tower	0.31	MT	459.00	143.67
				<b>Total:</b>	<b>5061.77</b>

(\*) Note:-The requirement of 2nd coat is to be justified by the concerned Divisional Engineer /Executive Engineer before execution of this work

#### **Tower details**

1	Weight of M type tower	1.133 MT	
2	Weight of 1 No. extension of 3 Mts	0.313 MT	
3	Weight of M+3 tower	1.446	
4	Weight of M+6 tower	1.759	
5	Weight of M+9	2.072	
6	Weight of each arm	0.0152 MT	(15.17KGs)
<b>stubs</b>	110X110X8 = 4.56 mts		
	100X100X8=1.998 mts		
	80X80X8 =1.898 mtrs		
	65X65X6 = 2.274 mts		
	45X45X5=2.761 mtrs		
	Total height 13.5 mts		
	Depth of tower below ground level : 3.2 mts		
	Height of tower above ground level : 10.3 mts.		

**Cost Data for Erection of 5MVA Additional Power Transformer with  
33 KV Bay Extension in 33/11 KV substation**

Sl.No	Description of Material	Qty	Unit	Rate	Amount in Rs.
1	150 x 150 RSJ pole (8m)	0.6	MT	44,052.94	26431.76
2	100 x 50 mm MS channel	0.27	MT	40,392.58	10906
3	75 x 8mm flat for clamps & earthing	0.4	MT	42,952.00	17180.8
4	200 sqmm Panther conductor	0.02	KM	140,665.63	2813.31
5	Strain Insulator set with metal parts (each set consists 3 Nos 11 KV strain insulators)	6	Set	269	1614
5	Erection of 33 KV AB switch	1	Each	30,585.60	30585.6
6	5 MVA Power Transformer	1	Each	3078551	3078550.84
7	Foundation of Power Transformer	1	LS	50000	50000
8	Miscellaneous items like fabrication of channels & pad clamps etc.		LS		5000

<b>Sub-Total</b>	<b>3223082.313</b>
3% Contingencies	96692.47
3% S&H charges	96692.47
Labour & Transport	40938.81
GST at 18 % on L&T	7368.986
10% Estt & General charges on material	322308.23
<b>Total</b>	<b>3787083.28</b>
<b>Or Say Rs</b>	<b>3787100.00</b>

**REC- CONSTRUCTION STANDARD NOS. OTHER THAN THE ITEMS INCLUDED IN  
THE 33 KV 11 KV & LT LINES ERECTION AND CENTRALISED MATERIAL**

<b>S. No</b>	<b>Particulars</b>	<b>REC Construction Standard No./ Specification No.</b>	<b>Remarks/ Notes</b>
1	1.53 Mts. Cross arm (Channel)	M-1/1981	33 KV line
2	Top clamp with cleat	M-4/1984	33 KV line
3	Back clamp	K-1/1972	33 KV line & 11 KV line
4	Base concreting	K-2/1972 (R-1987)	33 KV line & 11 KV line
5	Stay sets complete with concreting	G-1/1972	33 KV line & 11 KV line
6	Coil earthing	J-1/1972	33 KV line & 11 KV line
7	Pipe earthing	J-2/1972	33 KV line & 11 KV line
8	Concreting of poles	K-1/1972	All lines
9	8 M PSCC poles	15/1979	11 KV line
10	1.07 M Cross arm (Channel)	A-6/1972	11 KV line
11	Top clamp with cleat	A-7/1972	11 KV line
12	Bracing set with double cross arm	A-12/1972	H.T. line
13	Guy grip dead end	G-1/1972 & SP.No.25/1983	H.T. line
14	C.I. Knob	31/1983	L.T. lines
15	L.T. conductor dead end	G-2/1984	L.T. lines
16	Guy grip dead end	G-2/1984	L.T. lines
17	L.T. Spares	29/1983 (R-1987)	L.T. lines
18	Spool for shackle insulator tieing	D-6/1984	L.T. lines
19	D.P. Structure for distribution substation	F-1/1981 (R-1993)	L.T. lines
20	HT and LT conductor dead end fittings	Sp. No. 25/1983	All lines
21	Side tie for pin insulator tieing	Sp. No. 25/1983	All lines
22	Fibre Reinforced Plastic Cross Arms	40/1987	