

EASTERN POWER DISTRIBUTION COMPANY OF A.P.LIMITED
CORPORATE OFFICE :: VISAKHAPATNAM

Memo.No.CGM/Projects/GM.P/DE.P2/ADE.P4/AE.P4/F.Cost DataD/D.No.876 /11Dt.30 -04-11

Sub:-EPDCL – Revised Cost Data of materials, equipment, H.T & L.T Line,
Services and 33 KV Substation to be adopted for the year 2010-11 – Reg.

Ref:- Memo.No.CGM/Projects/GM.P/DE.P2/ADE.P4/AE.P4/F.Cost DataD/D.No.699/11
Dt.06-04-11

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1. The Cost Data 2010-11 has come in to force with effect from 08.04.2011 vide reference cited above.
2. Certain modifications for rates of poles, conductor, Power transformers, 11KV and 33 KV XLPE cables and Labour and transport rates for service line estimates for the Cost Data 2010-11 have taken place and the revised Cost Data 2010-11 is herewith communicated.
3. Further, the field officers are requested to strictly adhere to the following instructions while sanctioning the estimates.
 - a) In case where the estimates are pending to be sanctioned on or after 08.04.2011, the same should be revised with latest cost data – 2010-11.
 - b) In case, where the applicants paid the necessary charges for the estimates on or before 08.04.2011 the estimates need not be revised.
 - c) In case where the applicants come forward after 08.04.2011, and willing to pay the necessary charges for the estimates sanctioned prior to 08.04.2011 within the stipulated time as mentioned in the intimation letter from the concerned authority, the estimates need not be revised upto stipulated time period as communicated in the estimates.
 - d) In case where the applicants come forward after 08.04.2011, and willing to pay the necessary charges for the estimates sanctioned prior to 08.04.2011, after lapse of the stipulated time as mentioned in the intimation letter from the concerned authority the estimates should be revised with latest cost data 2010-11.

4. For service connection estimates in non REC scheme areas and execution of 33 KV Substations with other than REC funds, extra amounts should be added are 11% Establishment and General charges on Labour and Transport and 3% S& H charges on materials also.

5. 1% Cess is to be adopted on total cost of the construction as per the rules laid down in the Building and other construction workers welfare Cess Act 1996.

B.SESHU KUMAR
Chief General Manager/Projects
APEPDCL::VISAKHAPATNAM

To

All Superintending Engineers

All Divisional Engineers/ADEs/AEs

Copy submitted to all The Directors/APEPDCL/Visakhapatnam

Copy to:

The Chief General Managers

The Chief Project Manager/REC Ltd., Hyderabad

The Managing Director/RECSO/Anakapalli & Chepurupalli

The Chief Engineer/O & RE/ V.S/Hyderabad

The Dy. General Manger /IT/APEPDCL/Visakhapatnam for uploading the Revised Cost data 2010-11 in EPIMRS

The Dy. General Manager/CC with a request to upload the Cost Data 2010-11 in EPDCL website immediately.

**EASTERN POWER DISTRIBUTION
COMPANY OF A.P. LIMITED
CORPORATE OFFICE : VISAKHAPATNAM**



**REVISED COST DATA
2010-11**

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DATA FOR R.E. SCHEMES

Abstract of schedule of rates for 2010-11 with modified rates : Cost Data per Km of 33/11 KV/LT Lines

Sl. No.	Particulars of items	Wind.pr. in kg/m ²	W.Load in kg.	Type of pole being used	No. of poles/ KM	Span in Mtrs.	Size of Conductor	Total Cost in Rs.
1	33 KV Line	75	280	9.1 Mtr. PSCC	12	105	100 Sqmm AAAC	312380
2	33 KV Line	100	280	9.1 Mtr. PSCC	14	80	100 Sqmm AAA	325160
3	11 KV Line	75	140	8 Mtr PSCC	18	60	55 Sqmm AAAC	204030
4	11 KV Line	100	200	8 Mtr PSCC	17	65	55 Sqmm AAA	203610
5	11 KV Line	75	140	8 Mtr PSCC	18	60	34 Sqmm AAA	165830
6	11 KV Line	100	200	8 Mtr PSCC	17	65	34 Sqmm AAA	165410
7	6.3 KV Line	75	140	8 Mtr PSCC	13	90	34 Sqmm AAAC	110340
8	6.3 KV Line	100	200	8 Mtr PSCC	13	90	34 Sqmm AAA	112520
9	L.T. 3Ph 5 Wire Line(Horizontal)	75	140	8 Mtr PSCC	16	65	3x55+2x34 Sqmm AAA	226400
10	L.T. 3Ph 5 Wire Line(Horizontal)	100	200	8 Mtr PSCC	18	60	3x55+2x34 Sqmm AAA	235210
11	L.T. 3Ph 5 Wire Line(Horizontal)	75	140	8 Mtr PSCC	16	65	5x34 Sqmm AAAC	188200
12	L.T. 3Ph 5 Wire Line(Horizontal)	100	200	8 Mtr PSCC	18	60	5x34 Sqmm AAAC	197010
13	L.T. 3Ph 4 Wire Line(Horizontal)	75	140	8 Mtr PSCC	16	65	3x55+1x34 Sqmm AAA	201480
14	L.T. 3Ph 4 Wire Line(Horizontal)	100	200	8 Mtr PSCC	15	60	3x55+1x34 Sqmm AAA	201260
15	L.T. 3Ph 4 Wire Line(Horizontal)	75	140	8 Mtr PSCC	16	65	4x34 Sqmm AAA	163280
16	L.T. 3Ph 4 Wire Line(Horizontal)	100	200	8 Mtr PSCC	15	60	4x34 Sqmm AAA	163100
17	L.T. 1Ph 3 Wire Line(Horizontal)	75	140	8 Mtr PSCC	16	65	34 Sqmm AAA	136600
18	L.T. 1Ph 2 Wire Line(Horizontal)	75	140	8 Mtr PSCC	16	65	2x34 Sqmm AAA	113210
19	L.T. AB Cable	75	140	8 Mtr PSCC	16	65	3x16+25 Sqmm	128280
20	L.T. AB Cable	75	140	8 Mtr PSCC	16	65	2x16+25 Sqmm	106960
21	L.T. AB Cable	75	140	8 Mtr PSCC	16	65	1x16+25 Sqmm	100990
22	L.T. AB Cable	100	200	8 Mtr PSCC	16	65	3x16+25 Sqmm	130960
23	L.T. AB Cable	100	200	8 Mtr PSCC	16	65	2x16+25 Sqmm	109640
24	L.T. AB Cable	100	200	8 Mtr PSCC	16	65	1x16+25 Sqmm	103680
25	Erection of 100KVA Conventional Distribution transformer							214300
26	Erection of 63 KVA Conventional Distribution transformer							184,470
27	Erection of 3-Ph 16KVA Conventional Distribution transformer							98430
28	Erection of 3-Ph 25KVA Conventional Distribution transformer							121640
29	Erection of 3-Ph 40KVA Conventional Distribution transformer							149930
30	Erection of 15 KVA Single Phase 6.3 KV/0-240V CSP OIL IMMERSED transformer							33070
31	Erection of 15 KVA Single Phase 6.3 KV/0-240V Amorphous metal core transformer							44870
32	Erection of S-Ph 15 KVA CSP transformer on 9.1M PSCC pole							42940
33	Release of Single phase Agl. Service erected on support							3030
34	Release of poly phase Agl. Service erected on support							6710
35	Release of single phase domestic and non domestic service with High Quality meter							3110
36	Release of single phase domestic and non domestic service with High Quality meter							2550
37	Release of single phase domestic and non domestic service with High Quality meter							2850
38	Release of single phase domestic and non domestic service with 3 Phase Energy meter							8080
39	Release of single phase domestic and non domestic service with Electronic meter							7960
40	Release of poly phase Indl.service upto 15 H.P with Energy meter							10440
41	Release of pol phase industrial service (upto 15 HP) with CT meter							20990
42	Release of poly phase Industrial service upto 15 H.P with C.T. operated meter							14450
43	Release of Single Phase Street light service with Electronic Meter							3120
44	Erection of 33/11 K.V. Substation with 1x5MVA power transformer & 3 Nos. 11KV feeders							9222000

**COST DATA OF CENTRALISED MATERIALS FOR
R.E. AND DISTRIBUTION WORKS
2010-11**

Sl. No.	Name of the Material	Unit	Rupees
SUBHEAD-I : SUPPORTS AND FIXTURES, IRON, STEEL AND CEMENT			
1	RS Joists 150 x 150mm(11 mtrs. Length)	MT	33793
2	RS Joists 175 x 85mm (9 to 11 Mtrs)	MT	34419
3	RS Joists 150 x 75mm (9 to 11 Mtrs)	MT	36414
4	B F Beams 150X150 MM (9 to 10 Mtrs)	MT	36400
5	B F Beams 150X150 MM (11 to 12 Mtrs)	MT	36400
6	11 mts. PSCC poles 365 Kgs	Each	5287
7	9.1 mts. PSCC poles 280 Kgs.	Each	2310
8	8 mts. PSCC poles 140 Kgs.	Each	1323
9	8 mts. PSCC poles 200 Kgs.	Each	1436
10	8 mts. PSCC poles 300 Kgs.	Each	1592
11	11 mts. Spun Poles	Each	8398
12	12.5 mts. Spun Poles	Each	8781
13	Rail poles upto 7 Mtrs	MT	64020
14	52 Kg (105 lb) Rails (up to 13 mtrs. length)	MT	35527
15	MS Channel 100 x 50MM	MT	39884
16	MS Channel 75 x 40MM	MT	34300
17	MS Angle 65 x 65 x 6mm	MT	39520
18	MS Angle 50 x 50 x 6mm	MT	40040
19	MS Flat 50 x 6/75 x 8mm	MT	31756
20	MS Rod 20mm	MT	46280
21	MS Rod 16mm	MT	34528
22	Cement	MT	4800
23	HT Steel wire-4mm	MT	50619
24	GI Stay wire 7/3.15 mm	MT	48796
25	GI Stay wire 7/2.5 mm	MT	49640
26	GI Wire 4 mm	MT	43402
27	GI Bolts and Nuts with Washers full thread(5/8"X6', 7', 9')	MT	49704
28	GI Bolts and Nuts with Washers full thread(5/8" X 2 1/2 ', 3', 4')	MT	47047
29	C R Sheet 1.6mm	MT	35000
30	M S Plate 12mm/6mm	MT	30500
31	Torsteel 10mm/12mm	MT	28500

Sl. No	Name of the Material	REC Specification No.	Unit	Rupees
SUBHEAD-II : INSULATORS AND HARDWARE				
1	33 KV Pin Insulator	13/1979	Each	147
2	33 KV GI Pin	- do -	Each	88
3	33 KV Post Insulator Stack	- do -	Each	900
4	33 KV String Insulator Fittings (B&S)	- do -	Each	170
5	33 KV polymer disc insulator/string insulator (B&S)		Each	641
6	11 KV Pin Insulator	3/1971 (R-1993)	Each	27
7	11 KV GI Pin	- do -	Each	40
8	11 KV Post Insulator	- do -	Each	181
9	11 KV String Insulator (B&S)	- do -	Each	161
10	11 KV String Insulator (C&T)	- do -	Each	162
11	11 KV String Insulator Fittings (C&T)	3/1991 (R-1993)	Each	67
12	11 KV Polymer string insulator (C&T)		Each	147
13	LT Pin Insulator	4/1972 D-1 (R-1979)	Each	8
14	LT GI Pin	- do -	Each	38
15	LT Shackle Insulator	- do -	Each	8

Sl. No	Name of the Material	REC Specification No.	Unit	Rupees
16	LT Shackle Hardware	- do -	Each	24
17	HT Guy Insulator	21/1981	Each	23
18	LT Guy Insulator	- do -	Each	7
19	33 KV Solid Core Insulators	- do -	Each	1010
20	11 KV Solid Core Insulators for AB Switches	- do -	Each	156
21	11 KV Solid Core Insulators for 11 KV HG Fuse sets		Each	89
22	1.53 Mts Channel Cross arms without clamp		Each	950
23	1.07 Mts Channel Cross arms without clamp		Each	418
24	Top clamp with cleat (for 33 KV)		Each	214
25	Top clamp with cleat (for 11 KV)		Each	167
26	Top clamp for LT		Each	173
27	Stay set with clamp (for 33 KV)		Each	897
28	Stay set with clamp (for 11 KV)		Each	328
29	Stay set with clamp (for 6.3 KV)		Each	298
30	Stay set with clamp (for LT)		Each	328
31	LT 3-Ph Cross arm (for 5 Wire line)		Each	343
32	LT 3-Ph Cross arm (for 4 Wire line)		Each	277
33	LT S-Ph Cross arm (for 3 Wire line)		Each	145
34	LT S-Ph Cross arm (for 2 Wire line)		Each	136
35	Back Clamp for 9.1 Mts PSCC pole		Each	130
36	Back Clamp for 8 Mts PSCC pole		Each	93

Sl. No	Name of the Material	REC Specification No.	Unit	Rupees
37	D Clamp for 8.0 M poles		Each	100
38	Bracing set with double X arms with 9.1 Mts PSCC poles		set	3150
39	Bracing set with double X arms with 8 Mts PSCC poles		set	2700
40	DPC aluminium Winding Wire 1.25 mm		Kgs	172
41	DPC aluminium Winding Wire 1.6 mm		Kgs	167
SUBHEAD - III : CONDUCTORS				
1	ACSR Zebra Conductor		KM	235223
2	200 Sq.mm Panther Conductor 37/3.0 Sq.mm ACSR		KM	127384
3	100 Sq.mm AAA Conductor or 7/4.26 AAAC	1/1971 (R-1993) 33/1984 (R-1993)	KM	42465
4	55 Sq.mm AAA Conductor or 7/3.15 AAAC/RABBIT	- do -	KM	22871
5	34 Sq.mm AAA Conductor or 7/2.50 AAAC/Weasel	- do -	KM	14453
SUBHEAD-IV : CABLES				
SUBHEAD-IV : (A) LT XLPE SINGLE CORE CABLES				
1	2.50 Sq.mm	26/1993(R-1987)	KM	2550
2	4.00 Sq.mm	- do -	- do -	4050
3	6.00 Sq.mm	- do -	- do -	5100
4	10.00 Sq.mm	- do -	- do -	8100
5	25.00 Sq.mm	- do -	- do -	15000
6	50.00 Sq.mm	- do -	- do -	32180
7	70.00 Sq.mm	- do -	- do -	43400
8	95.00 Sq.mm	- do -	- do -	60830
9	120.00 Sq.mm	- do -	- do -	71500
10	150.00 Sq.mm	- do -	- do -	89850
11	185.00 Sq.mm	- do -	- do -	112340

Sl. No	Name of the Material	REC Specification No.	Unit	Rupees
SUBHEAD-IV : (B) LT PVC SINGLE CORE CABLES				
1	25.00 Sq.mm		KM	21460
2	50.00 Sq.mm		KM	39300
3	70.00 Sq.mm		KM	51300
4	120.00 Sq.mm		KM	84400
SUBHEAD-IV : (C) LT CONTROL CABLES				
1	2 X 2.5 Sq.mm (Cu)		KM	32300
2	4 X 2.5 Sq.mm (Cu)		KM	50134
3	10 x 2.5 Sq.mm (Cu)		KM	115077
4	4 x 4.0 Sq.mm (AL)		KM	22000
SUBHEAD-IV : (D)) LT XLPE CABLES				
1	3 1/2 X 300 sqmm LT XLPE cable		KM	640401
2	3 1/2 X 185 sqmm LT XLPE cable		KM	304890
3	3 1/2 X 150 sqmm LT XLPE cable		KM	347992
4	3 1/2 X 120 sqmm LT XLPE cable		KM	289956
5	3 1/2 X 95 sqmm LT XLPE cable		KM	202895
6	3 1/2 X 70 sqmm LT XLPE cable		KM	178272
7	3 1/2 X 50 sqmm LT XLPE cable		KM	139607
8	3 1/2 X 25 sqmm LT XLPE cable		KM	85187
SUBHEAD -IV: (E) LT AERIAL BUNCHED CABLES				
1	1 x 16+25 Sq.mm	32/1984	KM	20436
2	2 x 16+25 Sq.mm	32/1984	KM	24456
3	3 x 16+25 Sq.mm	32/1984	KM	38834
4	3 x 70 + 1x16 +1x50 Sqmm XLPE AB, Cable		KM	123000

Sl. No	Name of the Material	REC Specification No.	Unit	Rupees
SUBHEAD -IV: (F) LT AERIAL BUNCHED CABLE FITTINGS				
1	Suspension Clamp with eye hook	32/1984	Each	88
2	LT Connector with Insulator Cover	- do -	Each	80
3	Dead-end Clamp with eye hooks	- do -	Each	88
SUBHEAD -IV: (G) 11 KV XLPE POWER CABLES				
1	3 x 35 Sq.mm	63/1993	KM	293164
2	3 x 95 Sq.mm	63/1993	KM	558600
3	3 x 120 Sq.mm		KM	514277
4	3 x 185 Sq.mm	63/1993	KM	893413
5	3 x 300 Sq.mm	63/1993	KM	1116910
6	11 KV , 3 X 35 Sq mm XLPE Indoor type Raychem make		Each	551
7	11 KV , 3 X 35 Sq mm XLPE Outdoor type Raychem make		Each	643
8	3X185 Sq mm End termination kit (Indoor)		Each	1800
9	11KV out door jointing kit for 3x185Sqmm XLPE Cable		Each	1260
10	3 x 300 Sq.mm Raychem Termination Joints kit		Each	4924
SUBHEAD - IV (H)11 KV AB Cable (Aluminum)				
1	3x35+35 Sqmm.		KM	219898
2	3x70+70 Sqmm.		KM	318653
3	3x120+70 Sqmm.		KM	476000
4	3x185+70 Sqmm.		KM	429020
SUBHEAD -IV: (I) 33 KV XLPE POWER CABLES				
1	3 x 400 Sq.mm	63/1993	KM	1768379
2	3 x 185 Sq.mm		KM	1017161
3	3 x 400 Sq.mm Raychem End Termination Joints Kit		Each	5416

Sl. No	Name of the Material	REC Specification No.	Unit	Rupees
SUBHEAD -V: POWER TRANSFORMERS, CAPACITORS AND TRASFORMER OIL				
1	33/11 KV 3.15 MVA Power Transformer		Each	2691402
2	33/11 KV 5 MVA Power Transformer	7/1974 (R-1993)	Each	3074752
3	33/11 KV 8 MVA Power Transformer		Each	3976280
4	33/11 KV 12.5 MVA Power Transformer		Each	5474490
5	Transformer Oil		KL	61045
SUBHEAD -VI: DISTRIBUTION TRANSFORMERS (CRGO)				
1	S-Ph 5 KVA DTR 6.3 KV/0-240 V		Each	20693
2	1-Phase 10kVA 11kV/250V (CSP) (Aluminium)		Each	18600
3	S-Ph 15 KVA CSP DTR 6.3 KV/0-240V (Al)		Each	22566
4	S-Ph 15 KVA CSP DTR 6.3 KV/230-0-230V (Al)		Each	22969
5	1-Phase 25 KVA (CSP) (Copper)		Each	38457
6	3-Ph 16 KVA Amorphous/CRGO core conventional type copper wound DTR with BEE 5 star rating Conventional DTR (Cu)		Each	52168
7	3-Ph 25 KVA Amorphous/CRGO core conventional type copper wound DTR with BEE 5 star rating Conventional DTR (Cu)		Each	66000
8	3-Ph 40 KVA Amorphous/CRGO core conventional type copper wound DTR with BEE 5 star rating Conventional DTR (Cu)		Each	86285
9	3-Ph 63 KVA Amorphous/CRGO core conventional type copper wound DTR with BEE 5 star rating Conventional DTR (Cu)		Each	96541

Sl. No	Name of the Material	REC Specification No.	Unit	Rupees
10	3-Ph 100 KVA Amorphous/CRGO core conventional type copper wound DTR with BEE 5 star rating Conventional DTR (Cu)		Each	118403
11	3-Ph 160 KVA Amorphous/CRGO core conventional type copper wound DTR with BEE 5 star rating Conventional DTR (Cu)		Each	186576
12	250 KVA CSP DTR (Cu)		Each	297500
13	315 KVA CSP DTR (Cu) Conventional		Each	420152
14	500 KVA Conventional (Al)		Each	531833
15	Single Phase 15 KVA Transformer (Amorphous)		Each	33061
SUBHEAD -VII: SWITCH CONTROL AND PROTECTIVE GEAR				
1	33 KV VCB with CRPs & CTs ratio (400-200-100/1-1-1A)	12/1979 (R-1993)	Each	361232
2	11 KV VCB with CTs & Panels (Feeder Control)	22/1983	Each	182526
3	11 KV VCB with CTs & Panels (LV Control) without differential protection		Each	187731
4	11 KV VCB with CTs & Panels (LV Control) with differential protection		Each	227355
5	33 KV CTs 400-200-100/1-1A ratio 0.2 class accuracy		Each	24573
6	33 KV CTs 400-200-100/1-1A ratio 0.5 class accuracy		Each	16803
7	33 KV CTs (200-100/1-1A) 0.2 class accuracy		Each	18780
8	33 KV CTs (100-50/1-1A) 0.2 class accuracy		Each	20029
9	11 KV CTs (50-25/1-1A)	59/1993	Each	14640
10	11 KV CTs 200-100/5-5A		Each	14463
11	11 KV CTs 400-200/1-1A		Each	13564
12	11 KV CTs 200-100/1-1A		Each	13125
13	11 KV CTs (600-300/1-1-.577A)		Each	14640

Sl. No	Name of the Material	REC Specification No.	Unit	Rupees
14	33 KV PT (Single Phase) class 0.5		Each	16448
15	33 KV PT (Single Phase) class 0.2		Each	18113
16	33 KV PT (Three Phase) of 0.5 class accuracy		Each	44263
17	11 KV PT (3 Phase)	60/1993	Each	11882
18	33 KV 800 Amps AB Switch Double break with solid core insulator	--	Each	27071
19	11 KV 800 Amps AB Switch	43/1987	Each	14976
20	11 KV 400 Amps AB Switch Double break		Each	9100
21	11 KV 400 Amps AB Switch with insulators	- do -	Each	11500
22	11 KV 200 Amps AB Switch (Tilting)	--	Each	4770
23	11 KV 200 Amps AB Switch (Horizontal)		Each	5300
24	30 KV 10 KA Metal Oxide Lighting Arrester (station type)	16/1981 (R-55/1987)	Each	3254
25	33 KV Line type Lighting Arrester		Each	2369
26	9 KV 10 KA Metal Oxide Lighting Arrester	- do -	Each	1753
27	9 KV 5 KA Metal Oxide Lighting Arrester	55/1987	Each	336
28	33 KV HG Fuse set		Set	9450
29	11 KV HG Fuse Set		Set	1195
30	6.3 KV HG Fuse Set		Set	415
31	LT HG Fuse Set		Set	959
32	24 Volts 40 AH Battery set including Battery charger		Each	13996

Sl. No	Name of the Material	REC Specification No.	Unit	Rupees
33	24 Volts 40 AH Battery set without Battery charger		Each	5425
34	12 V, 40 AH SMF Batteries cells		Each	2290
35	12 V, 80 AH SMF Batteries cells		Each	5290
36	220 V, 80 AH SMF Batteries and Chargers & DCDB		Each	210000
37	220 V, 80 AH SMF Batteries		Each	115000
38	LT Switched capacitors			
	1*9 KVAR		Each	2548
	1x10 KVAR		Each	2614
39	11 KV 2 MVAR Capacitor banks with associated equipment			
	a Type A		Each	768176
	b Type B with 40 Mtrs HT UG cable		Each	895869
	c Type C (Indoor Type with HT UG cable		Each	969867
40	Sectionalizers		Each	588444
41	Auto - Reclosures		Each	925206
42	11 KV 3 Way RMU (SF6)		Each	366000
43	11 KV SF6 5 Way RMU		Each	735000
44	33 KV Indoor twin feeder control panel		Each	125584
45	Indoor type VCB with control panel (LV)		Each	376368
46	Indoor type VCB with control panel (feeder)		Each	274818
47	11 VCB for bus coupler		Each	210677
48	11KV switch Fuse unit (SFU)		Each	100000

Sl. No	Name of the Material	REC Specification No.	Unit	Rupees
49	33KV switch Fuse unit (SFU)		Each	200000
49	33KV 3-way RMU without VCB		Each	1020110
50	33KV 3-way RMU with VCB		Each	1445325
50	11KV metering panel with CTS& PTS (Indoor)		Each	27569
51	33KV metering panel with CTS&PTS (Indoor)		Each	300000
SUBHEAD -VIII: ENERGY METERS AND METERING EQUIPMENT				
1	a) LT Single Phase High quality Meter Class 1 accuracy (5-20A)		Each	710
	b) LT Single Phase Electronic Energy Meter 2.5A - 10A		Each	447
	c) LT Single Phase Class 1 accuracy (push fit type box Non push fit type TC) 5-30A		Each	936
2	a) Three Phase Electronic Meter 10A - 40A with P P Box		Each	1835
	b) Three Phase High Quality Meter 10A - 40A (Counter type display without Box)		Each	900
3	a) LT 3-Ph Class-1 Accuracy CT Operated Electronic TVR Meter 200/5A		Each	6920
	b) LT 3-Ph Class-0.5 Accuracy CT Operated Electronic TVR Meter 125/5A		Each	7950
4	a) HT Trivector Meter 0.5 class accuracy(10/5A)		Each	4435
	b) HT Trivector Meter 0.5 class accuracy (200/1,100/1A)		Each	4435

Sl. No	Name of the Material	REC Specification No.	Unit	Rupees
5	11 KV Metering cubicles a) 10/5A class 0.5 accuracy		Each	26602
	b) 20/5 A		Each	23600
	c) 30/5A		Each	22977
	d) 40/5A		Each	26602
	e) 75/5 A		Each	22977
	f) 60/5 A, 0.5		Each	31961
6	Moulded Box for Single Phase service		Each	250
7	Moulded Box for 3 Phase service		Each	387
8	Moulded box for CT Meter(Poly phase)		Each	1647
9	HT Meter Box		Each	3587
10	A Type Distribution type BOX		Each	4836
11	B Type Distribution type BOX		Each	1199
12	SMC Meter Box with fixing clamps (3 phase meters)		Each	6750
13	SMC Meter Box with fixing clamps (S- phase meters)		Each	408
SUBHEAD -IX: EARTHING MATERIALS				
1	GI Earth pipe 40 mm , (1.8 mts. Length)		Each	380
2	GI Earth pipe 40 mm (2.5 mts. Length)		Each	496
3	CI Earth pipe 80mm dia, (2.5 mts. Length)		Each	1934
SUBHEAD -X: OTHER MATERIALS				
1	Hand Held Computers with Printer		Each	14913
2	CMRI		Each	29148
3	HT Meter Box		Each	3587

**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. 25% extra is allowed for the works located within the interior Agency / Tribal limits. (i.e.) for the works located within and upto 16 Kilometers from any all weather route inside Agency/Tribal.

a. 40% extra is allowed for the works located within the interior Agency / Tribal Area i.e., for the works located beyond 16 Kilometers from any all weather route inside Agency/Tribal.

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1 No extra percentage is permissible in respect of Forest produce such as Bamboo, Rellu grass and all materials obtained from outside the Agency/Tribal.

2 The extra percentage under Agency/Tribal areas allowance may be allowed on the labour component and on the labour charges in the rates for conveyance of materials.

3 The extra percentage on cost of materials in Agency/Tribal areas can be allowed on the labour component only, if they are manufactured in the Agency/Tribal areas itself except Forest produce.

1. R.E.C. - Construction Standard No. M11/1979 (R-1989)
Costdata per Km of 33 KV Line with 100 Sq.mm AAA Conductor over 9.1 Mts.
PSCC Poles at 105 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	12	2310	Each	27720
2	1.53M Cross Arm (Channel) without clamps	10	950	Each	9500
3	Top Clamp with cleat	10	214	Each	2140
4	Back Clamp	10	130	Each	1300
5	Stay sets with clamps	6	897	Each	5382
6	Bracing Set with double cross arm	1	3150	Set	3150
7	100 Sq.mm AAA Conductor	3.06	42465	K.M.	129943
8	33 KV Pin - Insulator with Pin	33	235	Each	7755
9	Strain Insulator set with metal parts(3x 11 KV B&S Insulator with 33 KV Hard ware fitting)	6	653	Set	3918
10	Concreting of Pole, Stay sets & Base concreting	LS	LS	LS	16940
11	Misc. Items like coil earthing, pipe earthing, danger-boards, bolts & nuts, etc.	LS	LS	LS	3300
Total Cost of Material					211048
3% storage & handling charges on items (1) to (9)			190808		5724
3% Contingencies on Materials					6331
Labour					52762
Transport					10552
1% Cess on Material, Labour & Transport					2744
11% Estt. & Genl. Charges On Materials					23215
Total or say					312376 312,380

2. R.E.C. - Construction Standard No. M11/1979 (R-1989)
Costdata per Km of 33 KV Line with 100 Sq.mm AAA Conductor over 9.1 Mts.
PSCC Poles at 80 Mts. Span, 100 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	2310	Each	32340
2	1.53M Cross Arm (Channel) without clamps	12	950	Each	11400
3	Top Clamp with cleat	12	214	Each	2568
4	Back Clamp	12	130	Each	1560
5	Stay sets with clamps	6	897	Each	5382
6	Bracing Set with double cross arm	1	3150	Set	3150
7	100 Sq.mm AAA Conductor	3.06	42465	K.M.	129943
8	33 KV Pin - Insulator with Pin	39	235	Each	9165
9	Strain Insulator set with metal parts	6	653	Set	3918
10	Concreting of Pole, Stay sets & Base concreting	LS	LS	LS	16940
11	Misc. Items like coil earthing, pipe earthing, danger-boards, bolts & nuts, etc.	LS	LS	LS	3300
Total Cost of Material					219666
3% storage & handling charges on items (1) to (9)			199426		5983
3% Contingencies on Materials					6590
Labour					54917
Transport					10983
1% Cess on Material, Labour & Transport					2856
11% Estt. & Genl. Charges On Materials					24163
Total or say					325158 325,160

3. R.E.C. - Construction Standard No. A-5/1972
Costdata 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	8.0 M PSCC Pole	18	1323	Each	23814
2	1.07M Cross Arm (Channel) without clamps	16	418	Each	6688
3	Top Clamp with cleat	16	167	Each	2672
4	Back Clamp	16	93	Each	1488
5	Stay sets with clamps	6	328	Each	1968
6	Bracing Set with double cross arm	1	2700	Set	2700
7	55 Sq.mm AAA Conductor	3.06	22871	K.M.	69985
8	11 KV Pin - Insulator with Pin	51	67	Each	3417
9	Strain Insulator set with metal parts	6	229	Set	1374
10	Concreting of Pole, Stay sets & Base concreting	LS	LS	LS	19556
11	Misc. Items like coil earthing, pipe earthing, danger-boards, bolts & nuts, etc.	LS	LS	LS	4400
Total Cost of Material					138062
3% storage & handling charges on items (1) to (9)			114106		3423
3% Contingencies on Materials					4142
Labour					34515
Transport					6903
1% Cess on Material, Labour & Transport					1795
11% Estt. & Genl. Charges On Materials					15187
				Total or say	204027 204,030

4. R.E.C. - Construction Standard No. A-5/1972
Costdata per Km of 11 KV Line with 55 Sq.mm AAA Conductor over 8 Mts.
PSCC Poles at 65 Mts. Span, 100 Kg/Sq.Mt wind pressure, working load 200 Kgs.

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	8.0 M PSCC Pole	17	1436	Each	24412
2	1.07M Cross Arm (Channel) without clamps	15	418	Each	6270
3	Top Clamp with cleat	15	167	Each	2505
4	Back Clamp	15	93	Each	1395
5	Stay sets with clamps	6	328	Each	1968
6	Bracing Set with double cross arm	1	2700	Set	2700
7	55 Sq.mm AAA Conductor	3.06	22871	K.M.	69985
8	11 KV Pin - Insulator with Pin	48	67	Each	3216
9	Strain Insulator set with metal parts	6	229	Set	1374
10	Concreting of Pole, Stay sets & Base concreting	LS	LS	LS	19556
11	Misc. Items like coil earthing, pipe earthing, danger-boards, bolts & nuts, etc.	LS	LS	LS	4400
Total Cost of Material					137781
3% storage & handling charges on items (1) to (9)			113825		3415
3% Contingencies on Materials					4133
Labour					34445
Transport					6889
1% Cess on Material, Labour & Transport					1791
11% Estt. & Genl. Charges On Materials					15156
Total or say					203610 203,610

5. R.E.C. - Construction Standard No. A-5/1972
Costdata 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	1323	Each	23814
2	1.07M Cross Arm (Channel) without clamps	16	418	Each	6688
3	Top Clamp with cleat	16	167	Each	2672
4	Back Clamp	16	93	Each	1488
5	Stay sets with clamps	6	328	Each	1968
6	Bracing Set with double cross arm	1	2700	Set	2700
7	34 Sq.mm AAA Conductor	3.06	14453	K.M.	44226
8	11 KV Pin - Insulator with Pin	51	67	Each	3417
9	Strain Insulator set with metal parts	6	229	Set	1374
10	Concreting of Pole, Stay sets & Base concreting	LS	LS	LS	19556
11	Misc. Items like coil earthing, pipe earthing, danger-boards, bolts & nuts, etc.	LS	LS	LS	4400
Total Cost of Material					112303
3% storage & handling charges on items (1) to (9)			88347		2650
3% Contingencies on Materials					3369
Labour					28076
Transport					5615
1% Cess on Material, Labour & Transport					1460
11% Estt. & Genl. Charges On Materials					12353
Total or say					165826 165,830

6. R.E.C. - Construction Standard No. A-5/1972
Costdata per Km of 11 KV Line with 34 Sq.mm AAA Conductor over 8 Mts.
PSCC Poles at 65 Mts. Span, 100 Kg/Sq.Mt wind pressure, working load 200 Kgs.

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	8 PSCC Pole	17	1436	Each	24412
2	1.53M Cross Arm (Channel) without clamps	15	418	Each	6270
3	Top Clamp with cleat	15	167	Each	2505
4	Back Clamp	15	93	Each	1395
5	Stay sets with clamps	6	328	Each	1968
6	Bracing Set with double cross arm	1	2700	Set	2700
7	34 Sq.mm AAA Conductor	3.06	14453	K.M.	44226
8	11 KV Pin - Insulator with Pin	48	67	Each	3216
9	Strain Insulator set with metal parts	6	229	Set	1374
10	Concreting of Pole, Stay sets & Base concreting	LS	LS	LS	19556
11	Misc. Items like coil earthing, pipe earthing, danger-boards, bolts & nuts, etc.	LS	LS	LS	4400
Total Cost of Material					112022
3% storage & handling charges on items (1) to (9)			88066		2642
3% Contingencies on Materials					3361
Labour					28005
Transport					5601
1% Cess on Material, Labour & Transport					1456
11% Estt. & Genl. Charges On Materials					12322
Total or say					165410 165,410

7. R.E.C. - Construction Standard No. A-17/1972
Costdata per Km of 6.3 KV S-ph 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	13	1323	Each	17199
2	Top Clamp with cleat	10	167	Each	1670
3	D clamp	10	100	Each	1000
4	MS Stay sets	6	298	Each	1788
5	34 Sq.mm AAA Conductor	2.04	14453	K.M.	29484
6	11 K.V.Pin-Insulator with Pin	11	67	Each	737
7	Strain Insulator set	4	229	Set	916
8	Concreting of Pole,Stay sets & Base concreting			L.S.	19556
9	Misc. Items like coil earthing, pipe earthings, danger-boards, bolts & nuts, etc.			L.S.	2500
Total Cost of Material					74850
	3% storage & handling charges on items (1) to (10)		52794		1584
	3% Contingencies on Materials				2245
	Labour				18712
	Transport				3742
	1% Cess on Material, Labour & Transport				973
	11% Estt. & Genl. Charges On Materials				8233
					Total
					110341
					or say 110,340

8. R.E.C. - Construction Standard No. A-17/1972
Costdata per Km of 6.3 KV S-ph Line with 34 Sq.mm AAA Conductor over 8 Mts.
PSCC Poles at 90 Mts. Span, 100 Kg/Sq.Mt wind pressure, working load 200 Kgs.

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	8 M PSCC Pole	13	1436	Each	18668
2	Top Clamp with cleat	10	167	Each	1670
3	D clamp	10	100	Each	1000
4	MS Stay sets	6	298	Set	1788
5	34 Sq.mm AAA Conductor	2.04	14453	K.M.	29484
6	11 K.V.Pin-Insulator with Pin	11	67	Each	737
7	Strain Insulator set	4	229	Set	916
8	Concreting of Pole,Stay sets & Base concreting			L.S.	19556
9	Misc. Items like coil earthing, pipe earthings, danger-boards, bolts & nuts, etc.			L.S.	2500
	Total Cost of Material				76319
	3% storage & handling charges on items (1) to (10)		54263		1628
	3% Contingencies on Materials				2290
	Labour				19080
	Transport				3816
	1% Cess on Material, Labour & Transport				992
	11% Estt. & Genl. Charges On Materials				8395
				Total or say	112519 112,520

9. R.E.C. - Construction Standard No. B-5/1972
Costdata 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	1323	Each	21168
2	L.T. 3 Phase cross arms	18	343	Each	6174
3	Back Clamp	18	93	Each	1674
4	Stay sets	4	328	Each	1312
5	55 Sq.mm AAA Conductor	3.06	22871	K.M.	69985
6	34 Sq.mm AAA Conductor	2.04	14453	K.M.	29484
7	Shakle Insulator set	42	32	Set	1344
8	L.T.pin insulator with pin	48	46	Set	2208
9	C.I. Knob	16	12	Each	192
10	Concreting of Pole,Stay sets & Base concreting			L.S.	16016
11	Misc. Items like coil earthing, pipe earthings, danger-boards, bolts & nuts, etc.			L.S.	3500
	Total Cost of Material				153057
	3% storage & handling charges on items (1) to (9)		133541		4006
	3% Contingencies on Materials				4592
	Labour				38264
	Transport				7653
	1% Cess on Material, Labour & Transport				1990
	11% Estt. & Genl. Charges On Materials				16836
				Total or say	226398 226,400

10. R.E.C. - Construction Standard No. B-5/1972
Costdata 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 60 Mts. Span, 100 Kg/Sq.Mt wind pressure, working load 200 Kgs.

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	8 M PSCC Pole	18	1436	Each	25848
2	L.T. 3 Phase cross arms	20	343	Each	6860
3	Back Clamp	20	93	Each	1860
4	LT Stay sets	4	328	Each	1312
5	55 Sq.mm AAA Conductor	3.06	22871	K.M.	69985
6	34 Sq.mm AAA Conductor	2.04	14453	K.M.	29484
7	Shakle Insulator set	42	32	Set	1344
8	L.T.pin insulator with pin	56	46	Set	2576
9	C.I. Knob	18	12	Each	216
10	Concreting of Pole,Stay sets & Base concreting			L.S.	16016
11	Misc. Items like coil earthing, pipe earthings, danger-boards, bolts & nuts, etc.			L.S.	3500
Total Cost of Material					159001
3% storage & handling charges on items (1) to (9)			139485		4185
3% Contingencies on Materials					4770
Labour					39750
Transport					7950
1% Cess on Material, Labour & Transport					2067
11% Estt. & Genl. Charges On Materials					17490
				Total or say	235213 235,210

11. R.E.C. - Construction Standard No. B-5/1972
Costdata per Km of LT 3-Ph 5 Wire Line(Horizontal formation) with
5 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	1323	Each	21168
2	L.T. 3 Phase cross arms	18	343	Each	6174
3	Back Clamp	18	93	Each	1674
4	LT Stay sets	4	328	Each	1312
5	34 Sq.mm AAA Conductor	5.10	14453	K.M.	73710
6	Shakle Insulator set	42	32	Set	1344
7	L.T.pin insulator with pin	48	46	Set	2208
8	C.I. Knob	16	12	Each	192
9	Concreting of Pole,Stay sets & Base concreting			L.S.	16016
10	Misc. Items like coil earthing, pipe earthings, danger-boards, bolts & nuts, etc.			L.S.	3500
Total Cost of Material					127298
3% storage & handling charges on items (1) to (8)			107782		3233
3% Contingencies on Materials					3819
Labour					31825
Transport					6365
1% Cess on Material, Labour & Transport					1655
11% Estt. & Genl. Charges On Materials					14003
Total or say					188197 188,200

12. R.E.C. - Construction Standard No. B-5/1972
Costdata per Km of LT 3-Ph 5 Wire Line(Horizontal formation) with
5 x 34 Sq.mm AAAC over 8 Mts.
PSCC Poles at 60 Mts. Span, 100 Kg/Sq.Mt wind pressure, working load 200 Kgs.

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	8 M PSCC Pole	18	1436	Each	25848
2	L.T. 3 Phase cross arms	20	343	Each	6860
3	Back Clamp	20	93	Each	1860
4	LT Stay sets	4	328	Each	1312
5	34 Sq.mm AAA Conductor	5.10	14453	K.M.	73710
6	Shakle Insulator set	42	32	Set	1344
7	L.T.pin insulator with pin	56	46	Set	2576
8	C.I. Knob	18	12	Each	216
9	Concreting of Pole,Stay sets & Base concreting			L.S.	16016
10	Misc. Items like coil earthing, pipe earthings, danger-boards, bolts & nuts, etc.			L.S.	3500
	Total Cost of Material				133242
	3% storage & handling charges on items (1) to (8)		113726		3412
	3% Contingencies on Materials				3997
	Labour				33311
	Transport				6662
	1% Cess on Material, Labour & Transport				1732
	11% Estt. & Genl. Charges On Materials				14657
				Total or say	197012 197,010

13. R.E.C. - Construction Standard No. B-12/1981
Costdata per Km of LT 3-Ph 4 Wire Line(Horizontal formation) with
3 x 55 Sq.mm + 1 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	1323	Each	21168
2	L.T. 3 Phase cross arms	18	277	Each	4986
3	Back Clamp	18	93	Each	1674
4	LT Stay sets	4	328	Each	1312
5	55 Sqmm AAA Conductor	3.06	22871	K.M.	69985
6	34 Sq.mm AAA Conductor	1.02	14453	K.M.	14742
7	Shakle Insulator set	32	32	Set	1024
8	L.T.pin insulator with pin	36	46	Set	1656
9	C.I. Knob	16	12	Each	192
10	Concreting of Pole,Stay sets & Base concreting			L.S.	16016
11	Misc. Items like coil earthing, pipe earthings, danger-boards, bolts & nuts, etc.			L.S.	3500
	Total Cost of Material				136255
	3% storage & handling charges on items (1) to (9)		116739		3502
	3% Contingencies on Materials				4088
	Labour				34064
	Transport				6813
	1% Cess on Material, Labour & Transport				1771
	11% Estt. & Genl. Charges On Materials				14988
				Total or say	201481 201,480

14. R.E.C. - Construction Standard No. B-12/1981
Costdata per Km of LT 3 Ph 4 Wire Line(Horizontal formation) with
3 x 55 Sq.mm + 1 x 34 Sqmm AAAC over 8 Mts.
PSCC Poles at 60 Mts. Span, 100 Kg/Sq.Mt wind pressure, working load 200 Kgs.

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	8 M PSCC Pole	15	1436	Each	21540
2	L.T. 3 Phase cross arms	17	277	Each	4709
3	Back Clamp	17	93	Each	1581
4	LT Stay sets	4	328	Each	1312
5	55 Sqmm AAA Conductor	3.06	22871	K.M.	69985
6	34 Sq.mm AAA Conductor	1.02	14453	K.M.	14742
7	Shakle Insulator set	32	32	Set	1024
8	L.T.pin insulator with pin	33	46	Set	1518
9	C.I. Knob	15	12	Each	180
10	Concreting of Pole,Stay sets & Base concreting			L.S.	16016
11	Misc. Items like coil earthing, pipe earthings, danger-boards, bolts & nuts, etc.			L.S.	3500
	Total Cost of Material				136107
	3% storage & handling charges on items (1) to (9)		116591		3498
	3% Contingencies on Materials				4083
	Labour				34027
	Transport				6805
	1% Cess on Material, Labour & Transport				1769
	11% Estt. & Genl. Charges On Materials				14972
				Total or say	201261 201,260

15. R.E.C. - Construction Standard No. B-12/1981
Costdata 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	1323	Each	21168
2	L.T. 3 Phase cross arms	18	277	Each	4986
3	Back Clamp	18	93	Each	1674
4	LT Stay sets	4	328	Each	1312
5	34 Sq.mm AAA Conductor	4.08	14453	K.M.	58968
6	Shakle Insulator set	32	32	Set	1024
7	L.T.pin insulator with pin	36	46	Set	1656
8	C.I. Knob	16	12	Each	192
9	Concreting of Pole,Stay sets & Base concreting			L.S.	16016
10	Misc. Items like coil earthing, pipe earthings, danger-boards, bolts & nuts, etc.			L.S.	3500
	Total Cost of Material				110496
	3% storage & handling charges on items (1) to (8)		90980		2729
	3% Contingencies on Materials				3315
	Labour				27624
	Transport				5525
	1% Cess on Material, Labour & Transport				1436
	11% Estt. & Genl. Charges On Materials				12155
				Total or say	163280

16. R.E.C. - Construction Standard No. B-12/1981
Costdata per Km of LT 3-Ph 4 Wire Line(Horizontal formation)
with 4 x 34 Sqmm AAAC over 8 Mts.
PSCC Poles at 60 Mts. Span, 100 Kg/Sq.Mt wind pressure, working load 200 Kgs.

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	8 M PSCC Pole	15	1436	Each	21540
2	L.T. 3 Phase cross arms	17	277	Each	4709
3	Back Clamp	17	93	Each	1581
4	LT Stay sets	4	328	Each	1312
5	34 Sq.mm AAA Conductor	4.08	14453	K.M.	58968
6	Shakle Insulator set	32	32	Set	1024
7	L.T.pin insulator with pin	33	46	Set	1518
8	C.I. Knob	17	12	Each	204
9	Concreting of Pole, Stay sets & Base concreting			L.S.	16016
10	Misc. Items like coil earthing, pipe earthings, danger-boards, bolts & nuts, etc.			L.S.	3500
	Total Cost of Material				110372
	3% storage & handling charges on items (1) to (8)		90856		2726
	3% Contingencies on Materials				3311
	Labour				27593
	Transport				5519
	1% Cess on Material, Labour & Transport				1435
	11% Estt. & Genl. Charges On Materials				12141
				Total or say	163096 163,100

17. R.E.C. - Construction Standard No. B-14/1981
Costdata per Km of LT S-Ph 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	1323	Each	21168
2	L.T. 1 Phase cross arms	18	145	Each	2610
3	Back Clamp	18	93	Each	1674
4	LT Stay sets	4	328	Each	1312
5	34 Sq.mm AAA Conductor	3.06	14453	K.M.	44226
6	Shakle Insulator set	22	32	Set	704
7	L.T.pin insulator with pin	24	46	Set	1104
8	C.I. Knob	16	12	Each	192
9	Concreting of Pole,Stay sets & Base concreting			L.S.	16016
10	Misc. Items like coil earthing, pipe earthings, danger-boards, bolts & nuts, etc.			L.S.	3500
	Total Cost of Material				92506
	3% storage & handling charges on items (1) to (8)		72990		2190
	3% Contingencies on Materials				2775
	Labour				23127
	Transport				4625
	1% Cess on Material, Labour & Transport				1203
	11% Estt. & Genl. Charges On Materials				10176
				Total or say	136601 136,600

Note : Substitute the cost of 8 mts PSCC pole in above data for wind pressure of 100 kgs/Sqmts, and working load of 200 Kgs.

18. R.E.C. - Construction Standard No. B-14/1981
Costdata per Km of LT S-Ph 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	1323	Each	21168
2	L.T. 1 Phase cross arms	18	136	Each	2448
3	Back Clamp	18	93	Each	1674
4	LT Stay sets	4	328	Each	1312
5	34 Sq.mm AAA Conductor	2.04	14453	K.M.	29484
6	Shakle Insulator set	12	32	Set	384
7	L.T.pin insulator with pin	12	46	Set	552
8	C.I. Knob	16	12	Each	192
9	Concreting of Pole,Stay sets & Base concreting			L.S.	16016
10	Misc. Items like coil earthing, pipe earthings, danger-boards, bolts & nuts, etc.			L.S.	3500
	Total Cost of Material				76730
	3% storage & handling charges on items (1) to (8)		57214		1716
	3% Contingencies on Materials				2302
	Labour				19183
	Transport				3837
	1% Cess on Material, Labour & Transport				997
	11% Estt. & Genl. Charges On Materials				8440
				Total or say	113205 113,210

19. R.E.C. - Construction Standard No. B-32/1984
Costdata 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	1323	Each	21168
2	Suspension clamp assembly with eye hook	12	88	Each	1056
3	Dead end clamp assembly with eye hook	6	88	Each	528
4	LT Stay sets	4	328	Set	1312
5	L.T. A.B. Cable 3 x 16 x 25 Sqmm	1	38834	K.M.	38834
6	Insulated connectors with covers	56	80	Each	4480
7	Concreting of Pole, Stay concreting & Base concreting			L.S.	16016
8	Misc. Items like coil earthing, bolts & nuts, etc.			L.S.	3500
Total Cost of Material					86894
	3% storage & handling charges on items (1) to (6)		67378		2021
	3% Contingencies on Materials				2607
	Labour				21724
	Transport				4345
	1% Cess on Material, Labour & Transport				1130
	11% Estt. & Genl. Charges On Materials				9558
Total					128278
or say					128,280

20. R.E.C. - Construction Standard No. B-32/1984
Costdata 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	1323	Each	21168
2	Suspension clamp assembly with eye hook	12	88	Each	1056
3	Dead end clamp assembly with eye hook	6	88	Each	528
4	LT Stay sets	4	328	Set	1312
5	L.T. A.B. Cable 2 x 16 x 25 Sqmm	1	24456	K.M.	24456
6	Insulated connectors with covers	56	80	Each	4480
7	Concreting of Pole, Stay concreting & Base concreting			L.S.	16016
8	Misc. Items like coil earthing, bolts & nuts, etc.			L.S.	3500
Total Cost of Material					72516
	3% storage & handling charges on items (1) to (6)		53000		1590
	3% Contingencies on Materials				2175
	Labour				18129
	Transport				3626
	1% Cess on Material, Labour & Transport				943
	11% Estt. & Genl. Charges On Materials				7977
Total or say					106956 106,960

21. R.E.C. - Construction Standard No. B-32/1984
Costdata per Km of LT line with 1 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	1323	Each	21168
2	Suspension clamp assembly with eye hook	12	88	Each	1056
3	Dead end clamp assembly with eye hook	6	88	Each	528
4	LT Stay sets	4	328	Set	1312
5	L.T. A.B. Cable 1 x 16 + 25 Sqmm	1	20436	K.M.	20436
6	Insulated connectors with covers	56	80	Each	4480
7	Concreting of Pole, Stay concreting & Base concreting			L.S.	16016
8	Misc. Items like coil earthing, bolts & nuts, etc.			L.S.	3500
Total Cost of Material					68496
	3% storage & handling charges on items (1) to (6)		48980		1469
	3% Contingencies on Materials				2055
	Labour				17124
	Transport				3425
	1% Cess on Material, Labour & Transport				890
	11% Estt. & Genl. Charges On Materials				7535
Total or say					100994 100,990

22. R.E.C. - Construction Standard No. B-32/1984
Costdata per Km of LT line with 3 x 16 + 25 Sqmm AB Cable over 8 Mts.
PSCC Poles at 65 Mts. Span, 100 Kg/Sq.Mt wind pressure, working load 200 Kgs.

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	8 M PSCC Pole	16	1436	Each	22976
2	Suspension clamp assembly with eye hook	12	88	Each	1056
3	Dead end clamp assembly with eye hook	6	88	Each	528
4	LT Stay sets	4	328	Set	1312
5	L.T. A.B. Cable 3 x 16 + 25 Sqmm	1	38834	K.M.	38834
6	Insulated connectors with covers	56	80	Each	4480
7	Concreting of Pole, Stay concreting & Base concreting			L.S.	16016
8	Misc. Items like coil earthing, bolts & nuts, etc.			L.S.	3500
	Total Cost of Material				88702
	3% storage & handling charges on items (1) to (6)		69186		2076
	3% Contingencies on Materials				2661
	Labour				22176
	Transport				4435
	1% Cess on Material, Labour & Transport				1153
	11% Estt. & Genl. Charges On Materials				9757
				Total or say	130960

23. R.E.C. - Construction Standard No. B-32/1984
Costdata per Km of LT line with 2 x 16 + 25 Sqmm AB Cable over 8 Mts.
PSCC Poles at 65 Mts. Span, 100 Kg/Sq.Mt wind pressure, working load 200 Kgs.

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	8 M PSCC Pole	16	1436	Each	22976
2	Suspension clamp assembly with eye hook	12	88	Each	1056
3	Dead end clamp assembly with eye hook	6	88	Each	528
4	LT Stay sets	4	328	Set	1312
5	L.T. A.B. Cable 2 x 16 + 25 Sqmm	1	24456	K.M.	24456
6	Insulated connectors with covers	56	80	Each	4480
7	Concreting of Pole, Stay concreting & Base concreting			L.S.	16016
8	Misc. Items like coil earthing, bolts & nuts, etc.			L.S.	3500
Total Cost of Material					74324
	3% storage & handling charges on items (1) to (6)		54808		1644
	3% Contingencies on Materials				2230
	Labour				18581
	Transport				3716
	1% Cess on Material, Labour & Transport				966
	11% Estt. & Genl. Charges On Materials				8176
					Total or say
					109637
					109,640

24. R.E.C. - Construction Standard No. B-32/1984
Costdata per Km of LT line with 1 x 16 + 25 Sqmm AB Cable over 8 Mts.
PSCC Poles at 65 Mts. Span, 100 Kg/Sq.Mt wind pressure, working load 200 Kgs.

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	8 M PSCC Pole	16	1436	Each	22976
2	Suspension clamp assembly with eye hook	12	88	Each	1056
3	Dead end clamp assembly with eye hook	6	88	Each	528
4	LT Stay sets	4	328	Set	1312
5	L.T. A.B. Cable 1 x 16 + 25 Sqmm	1	20436	K.M.	20436
6	Insulated connectors with covers	56	80	Each	4480
7	Concreting of Pole, Stay concreting & Base concreting			L.S.	16016
8	Misc. Items like coil earthing, bolts & nuts, etc.			L.S.	3500
	Total Cost of Material				70304
	3% storage & handling charges on items (1) to (6)		50788		1524
	3% Contingencies on Materials				2109
	Labour				17576
	Transport				3515
	1% Cess on Material, Labour & Transport				914
	11% Estt. & Genl. Charges On Materials				7733
				Total or say	103675 103,680

**25. R.E.C. - CONSTRUCTION STANDARD SPECIFICATION NO. F3&F4/1981
COST DATA FOR ERRECTION OF 100KVA-11KV/433V CONVENTIONAL TRANSFORMER**

Sl. No.	Particulars	Cost of Material (Rs.)	Labour & Transport (Rs.)
1	11 KV/433V 100KVA Conventional Transformer	118403	3,213
2	Erection of 11 KV AB Switch (200A)	5300	909
3	D.P.Structure (Including all Earthing)	21600	9,702
4	Erection of 11 KV H.G. Fuse set	1195	388
5	Installation of L.T.H.G. Fuse sets (2 Nos.) including connections	1918	726
6	LT Metering arrangements with CTs including cable connections and cleat arrangement	8368	940
7	Installation of A type distribuion box	4836	162
8	Installation of HT Lightening Arrestors	5259	605
9	Misc. Items	500	
	Total Cost of Material	167,380	16,645
	3% storage & handling charges on items (1) to (8)	5006	
	3% Contingencies on Materials	5021	
	Labour & Transport	16,645	
	1% Cess on Material, Labour & Transport	1840	
	11% Estt. & Genl. Charges on Materials	18412	
	Total Cost in Rs.	214,304	
	or say :	214,300	

Sub data for Sl.No.3 of Estimate Nos. 25 & 26

Sl. No.	Description	Unit	Qty.	Rate (Rs.)	Per	Amount (Rs.)
1	9.1 Mtr., 280 Kg WL PSCC Pole	No.	2	2071.00	Each	4142.00
2	<u>Distribution Transformer mounting arrangement:</u>					
	a) 100 X 50 mm MS Channel	Kg	88.32	39.88	Kg	3522.55
	b) 75 X 40 mm MS Channel	Kg	32.64	34.30	Kg	1119.55
	c) 50 X 50 X 6 mm MS Angle	Kg	54	40.04	Kg	2162.16
	d) Stay clamp set	Nos.	8	328.00	Each	2624.00
	e) MS Back clamps	Nos.	7	130.00	Each	910.00
3	Cl Earth pipe 80mm dia., 2.5 M long	No.	2	1934.00	Each	3868.00
4	GI Earth pipe 40mm dia., 1.8 M long	No.	1	380.00	Each	380.00
5	7/12 stay wire (12M)	Kg	20	48.80	Kg	975.92
6	4 mm GI Wire	Kg	20	43.40	Kg	868.04
7	Bentonite compound	LS	1	330.00	LS	330.00
8	Black cotton soil	LS	1	220.00	LS	220.00
	Sub-Total for materials					21122.23

26. COST DATA FOR ERRECTION OF 63KVA-11KV/433V CONVENTIONAL TRANSFORMER

Sl. No.	Particulars	Cost of Material (Rs.)	Labour & Transport (Rs.)
1	11 KV/433V 63KVA Conventional Distribution Transformer	96541	3,213
2	Erection of 11 KV AB Switch (200A)	5300	909
3	D.P.Structure (Including all Earthing)	21600	9,702
4	Erection of 11 KV H.G. Fuse set	1195	388
5	Installation of L.T.H.G. Fuse sets (2 Nos.) including connections	1918	726
6	LT Metering arrangements with CTs including cable connections and cleat arrangement	8368	940
7	Installation of A type distribuion box	4836	162
8	Installation of HT Lightening Arrestors with earth connection	1918	605
9	Misc. Items	420	
	Total Cost of Material	142,097	16,645
	3% storage & handling charges on items 1 to 8	4,250	
	3% Contingencies on Materials	4,263	
	Labour & Transport	16,645	
	1% Cess on Material, Labour & Transport	1587	
	11% Estt. & Genl. Charges on Materials	15,631	
Total Cost in Rs.		184,473	
or say :		184,470	

**27. Cost Data For Erection of 3 Phase 16 KVA-11KV/433V
Conventional Distribution Transformer On Single Pole Structure**

Sl. No.	Particulars	Cost of Material (Rs.)	Labour & Transport (Rs.)
1	11 KV/433V 16KVA Conventional Distribution Transformer	52168	613
2	Erection of 11 KV AB Switch (200A)	5300	909
3	Single Pole Structure with 9.1Mtr PSCC Pole (Including Earthing)	9877	3,448
4	Erection of 11 KV H.G. Fuse set	1195	388
5	CT Distribution box including CT wiring with 1x25 sqmm XLPE cable and cleat wiring	8279	253
6	Misc. Items(Danger boards,Bolts &Nuts,Concreting etc.)	1650	214
	Total Cost of Material	78469	5825
		2,305	
	3% storage & handling charges on items (1) to (5)		
	3% Contingencies on Materials	2,354	
	Labour & Transport	5,825	
	1% Cess on Material, Labour & Transport	843	
	11% Estt. & Genl. Charges on Materials	8,632	
	Total Cost in Rs.	98,427	
	or say :	98,430	

Sub data for Sl.No.3 of Estimate Nos. 27, 28 & 29

Sl. No.	Description	Unit	Qty.
1	9.1M/280 Kg WL PSCC Pole	Nos.	1
2	100 X 50 mm MS Channel	Kg	40
3	65X65X6 mm MS Angle	Kg	20
4	50X6 mm MS Flat	Kg	22
5	G.I.Earth Pipe 40 mm dia., 1.8M long	Nos.	2
6	4 mm G.I.Wire	Kg	15
7	LT Side arm with strut	Nos.	1
8	Cross arms, back clamps for cleat wiring	Set	4
9	C.I.Earth Pipe 75 mm dia., 2.5M long	Nos.	1
10	Bentonite compuond	LS	1
	Sub Total for materials		

**28. Cost Data For Erection of 3 Phase 25 KVA-11KV/433V
Conventional Distribution Transformer On Single Pole Structure**

Sl. No.	Particulars	Cost of Material (Rs.)	Labour & Transport (Rs.)
1	11 KV/433V 25KVA Conventional Distribution Transformer	66000	673
2	Erection of 11 KV AB Switch (200A)	5300	909
3	Single Pole Structure with 9.1Mtr PSCC Pole (Including Earthing)	9877	3,448
4	Erection of 11 KV H.G. Fuse set	1195	388
5	CT Distribution box including CT wiring with 1x50 sqmm XLPE cable and cleat wiring	14228	252
6	Misc. Items(Danger boards,Bolts &Nuts,Concreting etc.)	1500	196
	Total Cost of Material	98,100	5,866
		2,898	
	3% storage & handling charges on items (1) to (5)		
		2,943	
	3% Contingencies on Materials		
		5,866	
	Labour & Transport		
		1040	
	1% Cess on Material, Labour & Transport		
		10,791	
	11% Estt. & Genl. Charges on Materials		
		121,638	
	Total Cost in Rs.	121,638	
	or say :	121,640	

**29. Cost Data For Erection of 3 Phase 40 KVA-11KV/433V
Conventional Distribution Transformer On Single Pole Structure**

Sl. No.	Particulars	Cost of Material (Rs.)	Labour & Transport (Rs.)
1	11 KV/433V 40KVA Conventional Distribution Transformer	86285	542
2	Erection of 11 KV AB Switch (200A)	5300	909
3	Single Pole Structure with 9.1Mtr PSCC Pole (Including Earthing)	9877	3,448
4	Erection of 11 KV H.G. Fuse set	1195	388
5	CT Distribution box including CT wiring with 1x70 sqmm XLPE cable and cleat wiring	18043	238
6	Misc. Items(Danger boards,Bolts &Nuts,Concreting etc.)	1500	196
	Total Cost of Material	122,200	5,721
		3,621	
	3% storage & handling charges on items (1) to (5)		
		3,666	
	3% Contingencies on Materials		
		5,721	
	Labour & Transport		
		1279	
	1% Cess on Material, Labour & Transport		
		13,442	
	11% Estt. & Genl. Charges on Materials		
		149,929	
	Total Cost in Rs.	149,929	
	or say :	149,930	

**30. Cost Data For Erection of Single Phase 15 KVA-6.3KV/0-240V
CSP Transformer(Oil immersed) On 9.1Mtr PSCC Pole Support**

Sl. No.	Particulars	Cost of Material (Rs.)	Labour & Transport (Rs.)
1	9.1 Mtr PSCC Pole	2310	994
2	15KVA Single Phase CSP Distribution Transformer	22566	285
3	Mounting arrangements for transformer	1996	618
4	Earthing with 1No 2.5 Mts Long 75 mm CI earth pipe	1912	431
5	Distribution box with 1 No 100A Fuse unit and cleat wiring with 50 sqmm XPLE cable & LT side arm with strut	4378	303
6	Misc. Items(Danger boards,Bolts &Nuts,Concreting etc.)	1000	
	Total Cost of Material	34,163	2,631
		995	
	3% storage & handling charges on items (1) to (5)		
	3% Contingencies on Materials	1,025	
	Labour & Transport	2,631	
	1% Cess on Material, Labour & Transport	368	
	11% Estt. & Genl. Charges on Materials	3,758	
	Total Cost in Rs.	42,940	
	or say :	42,940	

**31. R.E.C. - CONSTRUCTION STANDARD SPECIFICATION NO. F3&F4/1981
COST DATA FOR ERECTION OF 15KVA SINGLE PHASE 6.3KV/0-240V
C.S.P TRANSFORMER (OIL IMMERSED) ON EXISTING 8M PSCC SUPPORT**

Sl.No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	15KVA Single Phase CSP Distribution Transformer	1 No.	22,566	Each	22,566
2	Mounting arrangements for Transformer	1 Set	1,996	Each	1,996
3	Pipe earthing	1 No.	753	Each	753
4	Misc. Items	L.S.	L.S.	L.S.	500
Total Cost of Material					25,816
3% storage & handling charges on items (1) to (3)					759
3% Contingencies on Materials					774
Labour & Transport					2,592
1% Cess on Material, Labour & Transport					284
11% Estt. & Genl. Charges On Materials					2,840
Total Cost in Rs.					33,065
Or say :					33,070

**32. R.E.C. - CONSTRUCTION STANDARD SPECIFICATION NO. F3&F4/1981
 COST DATA FOR ERECTION OF 15KVA SINGLE PHASE 6.3KV/0-240V
 AMORPHOUS METAL CORE C.S.P TRANSFORMER (OIL IMMERSED)
 ON EXISTING 8M PSCC SUPPORT**

Sl.No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	15 KVA Oil Immersed Single Phase 6.3KV/0-240V Amorphous Metal Core Transformer	1 No.	33,061	Each	33,061
2	Mounting arrangements for Transformer	1 Set	1,996	Each	1,996
3	Pipe earthing	1 No.	753	Each	753
4	Misc. Items	L.S.	L.S.	L.S.	500
Total Cost of Material					36,311
3% storage & handling charges on items (1) to (3)					1,074
3% Contingencies on Materials					1,089
Labour & Transport					2,403
1% Cess on Material, Labour & Transport					387
11% Estt. & Genl. Charges On Materials					3,994
Total Cost in Rs.					44,872
Or say :					44,870

33. R.E.C. - CONSTRUCTION STANDARD SPECIFICATION NO. H1&H3/1981
COST DATA FOR SINGLE PHASE AGRICULTURE SERVICE ERECTED ON SUPPORT

Sl.No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	1 Phase (5A-20A) Energy meter	1	710	Each	710
2	1 Phase 15A M.C.B./Fuse Unit	1	115	Each	115
3	P.V.C. Cable 6 Sq.mm Single Core	20	26	Each	520
4	Moulded Distribution Box	1	250	Each	250
5	P.V.C. Bends 38mm	1	12	Each	12
6	Bolts, Nuts etc.	L.S.	L.S.	L.S.	80
Total Cost of Material					1,687
3% Contingencies					51
Labour & Transport					1,076
1% Cess on Material, Labour & Transport					28
11% Estt. & Genl. Charges					186
Total Cost in Rs.					3,027
Or say :					3,030

**34. R.E.C. - CONSTRUCTION STANDARD SPECIFICATION NO. H6&H8/1981
COST DATA FOR RELEASE OF POLY PHASE AGRICULTURE SERVICE ERECTED ON
SUPPORT**

Sl.No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	3 Phase (10A-40A) Energy meter	1	1,835	Each	1,835
2	3 Phase 40A M.C.B./Fuse Unit (3 Nos.)	1	729	Each	729
3	P.V.C. Cable 6 Sq.mm Single Core	30	26	Each	780
4	Moulded Distribution Box	1	387	Each	387
5	Installation of 2KVAR Capacitor	1	500	1	500
6	Misc. items such as Bolts, Nuts & Board etc.	L.S.	L.S.	L.S.	80
Total Cost of Material					4,311
3% Contingencies					129
Labour & Transport					1,739
1% Cess on Material, Labour & Transport					61
11% Estt. & Genl. Charges					474
Total Cost in Rs.					6,714
Or say :					6,710

**35. R.E.C.-CONSTRUCTION STANDARD SPECIFICATION NO.H1 TO H3/1981
COST DATA FOR DOMESTIC AND NON-DOMESTIC SERVICE CONNECTION (SINGLE PHASE)
WITH QUALITY METER**

Sl. No.	Particulars	Rate	Chargable to		Chargable to		Amount in Rs.
			Qty.	Amount	Qty.	Amount	
1	Single Phase electronic Energy Meter 5-30A	936	1	936			936
2	15A M.C.B./Fuse Unit	115/E	1	115			115
3	P.V.C. Cable single core 2.5 Sq.mm	11.5/M			60	690	690
4	Moulded Distribution Box	250/E	1	250			250
5	G.I. Wire No.8	48/Kg			1 Kg.	48	48
6	P.V.C. Pipe 20mm	11/M			2 M	22	22
7	P.V.C. Bends 20mm	2.5/E			2 Nos.	5	5
8	Misc.	L.S				85	85
	Total			1301		850	2151
	3% Contingencies on Materials			39		26	65
	Labour & Transport			202		430	633
	1% Cess on Material, Labour & Transport			15		13	28
	11% Estt. & Genl. Charges			143		94	237
	Total Cost in Rs.			1701		1412	3,112
	Or say :						3,110

Note : Item Nos. 4 to 7 are to be borne & arranged by the Consumer.

**36. R.E.C.-CONSTRUCTION STANDARD SPECIFICATION NO.H1 TO H3/1981
COST DATA FOR DOMESTIC AND NON-DOMESTIC SERVICE CONNECTION (SINGLE PHASE)
WITH ELECTRONIC METER**

Sl. No.	Particulars	Rate	Chargable to DISCOM		Chargable to Consumer		Amount in Rs.
			Qty.	Amount	Qty.	Amount	
1	Single Phase electronic Energy Meter 2.5A-10A	447	1	447			447
2	15A M.C.B./Fuse Unit	115/E	1	115			115
3	P.V.C. Cable single core 2.5 Sq.mm	11.5/M			60	690	690
4	Moulded Distribution Box	250/E	1	250			250
5	G.I. Wire No.8	48/Kg			1 Kg.	48	48
6	P.V.C. Pipe 20mm	11/M			2 M	22	22
7	P.V.C. Bends 20mm	2.5/E			2 Nos.	5	5
8	Misc.	L.S				85	85
Total				812		850	1662
3% Contingencies on Materials				24		26	50
Labour & Transport				202		430	633
1% Cess on Material, Labour & Transport				10		13	23
11% Estt. & Genl. Charges				89		94	183
Total Cost in Rs.				1138		1412	2,550
Or say :							2,550

Note : Item Nos. 4 to 7 are to be borne & arranged by the Consumer.

**37. R.E.C.-CONSTRUCTION STANDARD SPECIFICATION NO.H1 TO H3/1981
COST DATA FOR DOMESTIC AND NON-DOMESTIC SERVICE CONNECTION (SINGLE PHASE)
WITH QUALITY METER**

Sl. No.	Particulars	Rate	Chargable to DISCOM		Chargable to Consumer		Amount in Rs.
			Qty.	Amount	Qty.	Amount	
1	Single Phase Quality Energy Meter 5A-20A	710	1	710			710
2	15A M.C.B./Fuse Unit	115/E	1	115			115
3	P.V.C. Cable single core 2.5 Sq.mm	11.5/M			60	690	690
4	Moulded Distribution Box	250/E	1	250			250
5	G.I. Wire No.8	48/Kg			1 Kg.	48	48
6	P.V.C. Pipe 20mm	11/M			2 M	22	22
7	P.V.C. Bends 20mm	2.5/E			2 Nos.	5	5
8	Misc.	L.S				85	85
Total				1075		850	1925
3% Contingencies on Materials				32		26	58
Labour & Transport				202		430	633
1% Cess on Material, Labour & Transport				13		13	26
11% Estt. & Genl. Charges				118		94	212
Total Cost in Rs.				1441		1412	2,853
Or say :							2,850

Note : Item Nos. 4 to 7 are to be borne & arranged by the Consumer.

**38. R.E.C.-CONSTRUCTION STANDARD SPECIFICATION NO.H1 TO H3/1981
COST DATA FOR DOMESTIC AND NON-DOMESTIC SERVICE CONNECTION (THREE PHASE)**

Sl. No.	Particulars	Rate	Chargable to DISCOM		Chargable to Consumer		Amount in Rs.
			Qty .	Amount	Qty.	Amount	
1	Three Phase electronic Energy Meter 10-40A	1835	1	1835			1835
2	3 Phase 60A M.C.B./Fuse Unit	955/E	1	955			955
3	Moulded Distribution Box	387/E	1	387			387
4	P.V.C. Cable single core 6 Sq.mm	26/M			120	3120	3120
5	G.I. Wire No.8	48/Kg			1 Kg.	48	48
6	P.V.C. Pipe 20mm	11/M			2 M	22	22
7	P.V.C. Bends 20mm	2.5/E			2 Nos.	5	5
8	Misc.	L.S				95	95
Total				3177		3290	6467
3% Contingencies on Materials				95		99	194
Labour & Transport				202		430	633
1% Cess on Material, Labour & Transport				34		37	71
11% Estt. & Genl. Charges				349		362	711
Total Cost in Rs.				3858		4218	8,076
Or say :							8,080

Note : Item Nos. 4 to 7 are to be borne & arranged by the Consumer.

**39. R.E.C.-CONSTRUCTION STANDARD SPECIFICATION NO.H1 TO H3/1981
COST DATA FOR DOMESTIC AND NON-DOMESTIC SERVICE CONNECTION (THREE PHASE)
WITH ELECTRONIC METER**

Sl. No.	Particulars	Rate	Chargable to DISCOM		Chargable to Consumer		Amount in Rs.
			Qty.	Amount	Qty.	Amount	
1	3 Phase Electronic Energy Meter Housed in box 10-40A	1835	1	1835			1835
2	3 phase 60A M.C.B./Fuse Unit	955/E	1	955			955
3	P.V.C. Cable single core 6 Sq.mm	26/M			120 Mts.	3120	3120
4	G.I. Wire No.8	48/Kg			1 Kg.	48	48
5	P.V.C. Pipe 20mm	11/M			2 M	22	22
6	P.V.C. Bends 20mm	2.5/E			2 Nos.	5	5
7	Misc.	L.S				95	95
Total				2790		3290	6080
3% Contingencies on Materials				84		99	182
Labour & Transport				405		557	961
1% Cess on Material, Labour & Transport				32		38	70
11% Estt. & Genl. Charges				307		362	669
Total Cost in Rs.				3617		4346	7,963
Or say :							7,960

Note : Item Nos. 4 to 7 are to be borne & arranged by the Consumer.

**40. R.E.C.-CONSTRUCTION STANDARD SPECIFICATION NO.H-5/1981
POLY PHASE SERVICE CONNECTION CHARGES FOR
ERECTION OF 1 NO. INDUSTRIAL SERVICE (UPTO 15 H.P.)**

Sl. No.	Particulars	Rate	Chargable to DISCOM		Chargable to Consumer		Amount in Rs.
			Qty.	Amount	Qty.	Amount	
1	Poly Phase Energy Meter housed 10A - 40A	1835	1	1835			1835
2	3 phase 60A M.C.B./Fuse unit	955/E	1	955			955
3	Moulded Box for CT Meter	1647/E		1647			1647
4	P.V.C. Cable single core 10 Sq.mm	43/M			80	3440	3440
5	G.I. Wire No.8	48/Kg			1 Kg.	48	48
6	P.V.C. Pipe 38mm	41.4/M			2 M	83	83
7	P.V.C. Bends 38mm	12/E			2 Nos.	24	24
8	Misc. items viz. link clips, wooden box, Bolts & Nuts.	L.S		75		125	200
Total				4512		3719.8	8231.8
3% Contingencies				135		112	247
Labour & Transport				405		557	961
1% Cess on Material, Labour & Transport				49		43	92
11% Estt. & Genl. Charges				496		409	905
Total Cost in Rs.				5598		4840	10,438
Or say :							10,440

**41. R.E.C.-CONSTRUCTION STANDARD SPECIFICATION NO.H-5/1981
COST DATA FOR POLY PHASE SERVICE CONNECTION CHARGES FOR
ERECTION OF 1 NO. INDUSTRIAL SERVICE (UPTO 15 H.P.) (C T METER)**

Sl. No.	Particulars	Rate	Chargable to DISCOM		Chargable to Consumer		Amount in Rs.
			Qty.	Amount	Qty.	Amount	
1	3 Phase electronic energy meter 10-40 A	7950	1	7950			7950
2	3 phase 60A M.C.B./Fuse unit	955/E	1	955			955
3	Moulded Box for C T Meter	1647/E	1	1647			1647
4	L T Current Transformers	447/E	3	1341			1341
5	P.V.C. Cable single core 10 Sq.mm	43/M			120	5160	5160
6	G.I. Wire No.8	48/Kg			1 Kg.	48	48
7	P.V.C. Pipe 38mm	41.4/M			2 M	83	83
8	P.V.C. Bends 38mm	12/E			2 Nos.	24	24
9	Misc. items viz. link clips, wooden box, Bolts & Nuts.	L.S		75		125	200
Total				11968	5439.8	17407.8	
3% Contingencies				359		163	522
Labour & Transport				405		557	961
1% Cess on Material, Labour & Transport				124		60	184
11% Estt. & Genl. Charges				1316		598	1915
Total Cost in Rs.				14172	6818	20,990	
Or say :						20,990	

**42. R.E.C.-CONSTRUCTION STANDARD SPECIFICATION NO.H-5/1981
COST DATA FOR POLY PHASE SERVICE CONNECTION FOR
ERECTION OF 1 NO. INDUSTRIAL SERVICE (ABOVE 15 H.P.) (C.T. METER)**

Sl. No.	Particulars	Rate	Chargable to DISCOM		Chargable to Consumer		Amount in Rs.
			Qty.	Amount	Qty.	Amount	
1	L.T. 3-Phase class-0.5 Accuracy CT Operated Energy Meter Housed in a box	7950	1	7950			7950
2	P.V.C. Cable single core 10 Sq.mm	43/M			80	3440	3440
3	G.I. Wire No.8	48/Kg			1 Kg.	48	48
4	P.V.C. Pipe 38mm	41.4/M			2 M	83	83
5	P.V.C. Bends 38mm	12/E			2 Nos.	24	24
6	Misc. items viz. link clips, wooden box, Bolts & Nuts.	L.S		75		100	175
Total				8025		3694.8	11719.8
3% Contingencies				241		111	352
Labour & Transport				405		557	961
1% Cess on Material, Labour & Transport				84		43	127
11% Estt. & Genl. Charges				883		406	1289
Total Cost in Rs.				9638		4811	14,449
Or say :							14,450

43. COST DATA FOR STREET LIGHT SERVICE CONNECTION (SINGLE PHASE)

Sl. No.	Particulars	Qty.	Rate in Rs.	Per Unit	Amount in Rs.
1	LT 1 phase Electronic Meter 5A-30A	1 No.	936	Each	936
2	1 phase 15A M.C.B./Fuse Unit	1 No.	115	Each	115
3	Light sensitive switch	1 No.	400	Each	400
4	P.V.C. Cable 4 Sq.mm Single Core	15 M	17		255
5	P.V.C. Pipe 25mm	2 Mts	17.45		35
6	P.V.C. Bends 25mm	2 No.	3.5	Each	7
7	Moulded Distribution Box	1 No.	250	Each	250
8	Wooden, plugs, clamps, bolts, nuts link clips etc	L.S.	L.S.	L.S.	50
Total					2,048
3% Contingencies					61
Labour & Transport					759
1% Cess on Material, Labour & Transport					28
11% Estt. & Genl. Charges					225
Total Cost in Rs.					3,122
Or say :					3,120

**44. DETAILED ESTIMATE FOR ERECTION OF 1No. 33/11 KV SUBSTATION
WITH (NT) X 5 MVA POWER TRANSFORMERS AND NF = 3 NO. 11 KV FEEDERS**

Sl. No	Particulars	Qty.	Rate (Rs. in lakhs)	Unit	Amount (Rs. in lakhs)
1 (a)	Lands and Rights	LS	As per local conditions		0.000
(b)	Plantation of Trees	LS		LS	0.061
2	Control Room and Consumer service centre (including furniture)	LS		LS	3.630
3	Station Auxillaries				
a)	Peripheral, Security Fencing, Approach road, retaining wall around switchward with gravel filling, gate and bore well	LS		LS	6.655
b)	Yard lighting				0.550
c)	Fire fighting Equipment	LS		LS	0.660
d)	P&T Phone and wireless set	LS		LS	1.375
4	Foundations for structures, PTRs & breakers	LS		LS	3.025
5	Bus bars, Jumpers, Connectors claps etc.	LS		LS	1.100
6	Control Cables	LS		LS	1.210
7	Structural Steel	15	0.338	MT	5.069
8	Transformers				
a)	33/11KV, 5 MVA Power Transformer	1	30.748	Each	30.748
b)	11KV/ 415V 16KVA Stn. Transformer	1	0.522	Each	0.522
9	Circuit Breakers (including trivector meters)				
a)	20 KA 11 kv feeder VCB including Control panel and CTs (NF=3)	3	1.825	Each	5.476
b)	20 KA 11 kv LV VCB including Control panel and CTs	1	1.877	Each	1.877
10	Control Circuit Panels				
a)	AC Supply Panel	1	0.330	Each	0.330
b)	DC Annunciation Panel	1	0.330	Each	0.330
11	Instrument Transformers				
a)	11kv P.T (3 Phase)	1	0.119	Each	0.119
12	Lightning Arrestors				
a)	33KV 10KA	6	0.033	Each	0.195
b)	11KV Line Type (NFX3)	9	0.018	Each	0.158
c)	11KV Station Type 10 KA	3	0.018	Each	0.053
13	Isolating Switches				
a)	33KV 800A double break centrally operated Horizontal AB Switch	3	0.271	Each	0.812
b)	11KV 800A double break centrally operated Horizontal AB Switch (NT X 1+1)	2	0.150	Each	0.300
c)	11KV 400A Horizontal AB Switch (NF X 2+2)	8	0.115	Each	0.920
d)	11KV 200A Horizontal AB Switch for station transformer	1	0.053	Each	0.053
e)	33KV Horn Gap Fuse Set (1XNT)	1	0.095	Each	0.095
14	2MVAR 11KV Capacitor Bank along with Associated Equipment	1	7.682	Each	7.682
15	24V, 40 AH Battery Set including Battery Charger	4	0.140	Each	0.560
16	Earthing of PTR, VCBs, AB Swiches, Strucutres with 75x8mm GI Flat			LS	1.815
	Sub Total				75.377
17	Erection and transport and commissioning charges on items 7 to 15 at 10%				5.530
18	Contingencies on items 7 to 15 at 3%				1.659
19	T&P Charges on items No. 7 to 15 at 1%				0.553
20	1% Cess on Material, Labour & Transport				0.809
21	Establishment and General Charges at 11%				8.291
				Total Rs. in Lakhs	92.219
				Or say (Rs. lakhs)	92.220

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.