

COST DATA SHEET - 24

Erection of 3 Phase, 11kV/433V, 25kVA BEE – 4/5 Star Rated Distribution Transformer Centre Using DPTS							
Sl No	Particulars	Unit	Qty	25 KVA			
				Material Cost (Rs)		Labour Cost (Rs)	
				Rate	Amt	Rate	Amt
1	Part-A: TRANSFORMER						
	a) 9 Mtr RCC DP Transformer Structure (Using 9 Mtr RCC Poles)	No	1	26439	26439	4527	4527
2	11 KV, 5KN Polymeric Pin Insulator (24mm Dia FRP Rod)	Sets	3	180	540	0	0
3	11KV 45 KN Polymeric Insulator	Sets	3	164	492	0	0
4	Guy Set Complete with No.15 strain insulator & Concreting materials	Nos	4	830	3320	390	1560
5	11kV/433V, 25KVA, 3 Phase, 50 Cys Distribution Transformer BEE-4 Star Rated with Oil	No	1	64900	64900	750	750
6	11kV/433V, 25KVA, 3 Phase, 50 Cys Distribution Transformer BEE-5 Star Rated with Oil	No	1	74365	74365	750	750
7	Earthing materials pipe type for grounding as per Drawing No. BESCO/GM/CP/15 & 34/ Dt: 24.10.07	Single Electrode with accessories	3	1501	4503	631	1893
8	Caution/Danger Board	No	1	146	146	53	53
9	Anti Climbing Device (12mtrs GI Barbed Wire) Lumpsum	Kgs	2	76	152	28	56
10	Guy concreting with Boulders, Mud and Sand	Nos	4	0	0	174	696
11	GI Wire 8 SWG	Kgs	5	63.293	316.465	0	0
12	Guy wire 7/10 SWG	Kgs	10	65.137	651.37	0	0
	Total using 9 mtr RCC Poles with 4 star rated transformer				101460		9535
	Total using 9mtr RCC Poles with 5 star rated transformer				110925		9535
13	Total for Part-A (Material + Labour)						
	i) Using 9 mtr RCC Poles with 4 star rated transformer				110995		
	ii) using 9 mtr RCC Poles with 5 star rated transformer				120460		
	Part-B:						
14	11kV Lightning Arester, Metal oxide, 9kV, 5kA Polymeric Type with ground disconnecter	Set of 3 Nos	1	1335	1335	78	78
15	Total				1335		78
16	Total for Part-B (Material + Labour)					1413	
	Part-C: SWITCH GEAR						
	a) LT Protection Kit for 25 kVA	No	1	1651	1651	226	226
	b) LT Wiring (From DTC to LT Line Through						

SI No	Particulars	Unit	Qty	25 KVA			
				Material Cost (Rs)		Labour Cost (Rs)	
				Rate	Amt	Rate	Amt
17	i. Al Lead Wire - 50 Sqmm	Mtrs	25	44.31	1107.75	625	
	ii. Heavy Duty Long barrel Copper Lugs - 50 Sqmm	Nos	4	40	160		
	iii. PG Clamps - Rabbit to 50 Sqmm	Nos	4	79	316		
	iv. Spacers for DTC Wiring	Nos	8	41	328		
	v. Fish Plate with necessary Clamps, bolts & nuts etc complete (Galvanised)	Nos	2	150	300		
	c) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS-42)	No	1	5287	5287	566	566
d) LT Electronic Tri-Vector Meter 5A, Class-0.5/1.0 accuracy	No	1	2525	2525	694	694	
18	11kV Solid Core Type HG Fuse Unit	Set/3 Nos	1	882	882	155	155
19	11kV, 200Amps, Single Break GOS	No	1	7799	7799	700	700
	Total Cost (Material) for Part-C				20355.75		2966
20	Labour Charges						
21	Total for Part-C (Material+Labour)				23322		
22	Total (A+B+C)						
	i) Using 9 mtr RCC Poles with 4 star rated transformer				123151		12579
	ii) using 9 mtr RCC Poles with 5 star rated transformer				132616		12579
23	Total (A+B+C)= (Material & Labour)						
	i) Using 9 mtr RCC Poles with 4 star rated transformer					135730	
	ii) using 9 mtr RCC Poles with 5 star rated transformer					145195	
Note: Provision for actual quantity of additional materials viz 45kN Disc Insulator, 11kV Pin Insulators ACSR/AAA Conductor, Transparent Alkathine Tube, PG Clamps and Terminal Connectors etc. Whenever required may be made in the estimate as per field requirement.							

COST DATA SHEET -25

Erection of 3 Phase, 11kV/433V, 63kVA BEE – 4/5 Star Rated Distribution Transformer Centre Using DPTS

Sl No	Particulars	Unit	Qty	63 KVA			
				Material Cost (Rs)		Labour Cost (Rs)	
				Rate	Amt	Rate	Amt
1	Part-A: TRANSFORMER						
	a) 9 Mtr RCC DP Transformer Structure (Using 9 Mtr RCC Poles)	No	1	26439	26439	4527	4527
2	11 KV, 5KN Polymeric Pin Insulator (24mm Dia FRP Rod)	Sets	3	180	540	0	0
3	11KV 45 KN Polymeric Insulator	Sets	3	164	492	0	0
4	Guy Set Complete with No.15 strain insulator & Concreting materials	Nos	4	830	3320	390	1560
5	11kV/433V, 63kVA, 3 Phase, 50 Cys Distribution Transformer BEE -4 Star Rated with Oil	No	1	120360	120360	750	750
6	11kV/433V, 63kVA, 3 Phase, 50 Cys Distribution Transformer BEE -5 Star Rated with Oil	No	1	128304	128304	750	750
7	Earthing materials pipe type for grounding as per Drawing No. BESCO/GM/CP/15 & 34/ Dt: 24.10.07	Single Electrode with accessories	3	1501	4503	631	1893
8	Caution/Danger Board	No	1	146	146	53	53
9	Anti Climbing Device (12mtrs GI Barbed Wire) Lumpsum	Kgs	2	76	152	28	56
10	Guy concreting with Boulders, Mud and Sand	Nos	4	0	0	174	696
11	GI Wire 8 SWG	Kgs	5	63.293	316.465	0	0
12	Guy wire 7/10 SWG	Kgs	10	65.137	651.37	0	0
	Total using 9 mtr Poles with 4 star rated transformer				156920		9535
	Total using 9 mtr Poles with 5 star rated transformer				164864		9535
13	Total for Part-A (Material + Labour)						
	Total using 9 mtr Poles with 4 star rated transformer				166455		
	Total using 9 mtr Poles with 5 star rated transformer				174399		
	Part-B:						
14	11kV Lightning Arester, Metal Oxide 9kV, 5kA, Polymetic type with ground disconnecter	Set of 3 Nos	1	1335		78	
	Total			1335		78	
15	Total for Part-B (Material+Labour)			1413			
	Part-C: SWITCH GEAR						
	a) LT Protection Kit for 63 kVA	Nos	2	1651	3302	226	452
	b) LT Wiring (From DTC to LT Line Through Metering Box & LT Protection Kit) SINGLE CIRCUIT	No					
	i. Al Lead Wire - 95 Sqmm	Mtrs	40	81.63	3265.2		

Sl No	Particulars	Unit	Qty	63 KVA			
				Material Cost (Rs)		Labour Cost (Rs)	
				Rate	Amt	Rate	Amt
16	iii. PG Clamps - Rabbit to 95 Sqmm	Nos	4	108	432		625
	iv. Spacers for DTC Wiring	Nos	8	41	328		
	v. Fish Plate with necessary Clamps,bolts & nuts etc complete (Galvanised)	Nos	2	150	300		
	c) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS-42)	No	1	4867	4867	566	566
	d) LT Electronic Tri-Vector Meter 5A, Class-0.5/1.0 accuracy	No	1	2525	2525	694	694
17	11kV Solid Core Type HG Fuse Unit	Set/ 3 nos	1	882	882	155	155
18	11kV, 200Amps, Single Break GOS	No	1	7799	7799	700	700
	Total Cost (Material) for Part-C				24052		3192
19	Total for Part-C (Material+Labour)					27244.2	
	Total (A+B+C)						
	1.using 9 mtr Poles with 4 star rated transformer				182307		12805
	2. using 9 mtr Poles with 5 star rated transformer				190251		12805
20	Total (A+B+C) (Material + Labour)						
	1.using 9 mtr Poles with 4 star rated transformer					195112	
	2. using 9 mtr Poles with 5 star rated transformer					203056	
Note: Provision for actual quantity of additional materials viz 45kN Disc Insulator, 11kV Pin Insulators ACSR/AAA Conductor, Transparent Alkathine Tube, PG Clamps and Terminal Connectors etc. Whenever required may be made in the estimate as per field requirement.							

COST DATA SHEET -26

Erection of 3 Phase, 11kV/433 V, 100kVA BEE – 4/5 Star Rated Distribution Transformer Centre Using DPTS							
SI No	Particulars	Unit	Qty	100 KVA			
				Material cost (Rs)		Labour Cost (Rs)	
				Rate	Amt	Rate	Amt
1	Part-A: TRANSFORMER						
	a) 9 Mtr RCC DP Transformer Structure (Using 9 Mtr RCC Poles)	No	1	26439	26439	4527	4527
2	11 KV, 5KN Polymeric Pin Insulator (24mm Dia FRP Rod)	Sets	3	180	540	0	0
3	11KV 45 KN Polymeric Insulator	Sets	3	164	492	0	0
4	Guy Set Complete with No.15 strain insulator & Concreting materials	Nos	4	830	3320	390	1560
5	11kV/433V, 100kVA, 3 Phase 50 Cys Distribution Transformer BEE - 4 Star Rated with Oil	No	1	148680	148680	1001	1001
6	11kV/433V, 100kVA, 3 Phase 50 Cys Distribution Transformer BEE - 5 Star Rated with Oil	No	1	155931	155931	1001	1001
7	Earthing materials pipe type for grounding as per Drawing No. BESCO/M/GM/CP/15 & 34/ Dt: 24.10.07	Single Electrode with accessories	3	1501	4503	631	1893
8	Caution/Danger Board	No	1	146	146	53	53
9	Anti Climbing Device (12mtrs GI Barbed Wire) Lumpsum	Kgs	2	76	152	28	56
10	Guy concreting with Boulders, Mud and Sand	Nos	4	0	0	174	696
11	GI Wire 8 SWG	Kgs	5	63.293	316.465	0	0
12	Guy wire 7/10 SWG	Kgs	10	65.137	651.37	0	0
	Total using 9 mtr Poles with 4 star rated transformer				185240		9786
	Total using 9 mtr RCC Poles with 5 star rated transformer				192491		9786
13	Total for Part-A (Material+Labour)						
	I) Using 9 mtr RCC Poles with 4 star rated transformer					195026	
	I) Using 9 mtr RCC Poles with 5 star rated transformer					202277	
	Part-B:						
14	11kV Lightning Arester, Metal Oxide 9kV, 5kA Polymetic Type with ground disconnector	Set of 3 Nos	1	1335	1335	78	78
	Total for Part-B				1335		78
15	Total for Part-B (Material+Labour)					1413	
	Part-C: SWITCH GEAR						
	a) LT Protection Kit for 100 kVA	Nos	2	1651	3302	226	452
	b) LT Distribution box for 100 kVA with MCB	No	1	17545	17545	501	501
	c) LT Wiring (From DTC to LT Line Through Merering Box & LT Protection Kit/LT Distribution Box) SINGLE CIRCUIT	No					

SI No	Particulars	Unit	Qty	100 KVA			
				Material cost (Rs)		Labour Cost (Rs)	
				Rate	Amt	Rate	Amt
16	ii. Copper lugs - 120 Sqmm	Nos	12	96	1152	625	
	iii. PG Clamps - Rabbit to 120 Sqmm	Nos	4	210	840		
	iv. Spacers for DTC Wiring	Nos	8	41	328		
	v. Fish Plate with necessary Clamps,bolts & nuts etc complete (Galvanised)	Nos	2	150	300		
	d) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS-42)	No	1	4564	4564	566	566
	e) LT Electronic Tri-Vector Meter 5A, Class-0.5/1.0 accuracy	Nos	1	2525	2525	694	694
17	11kV Solid Core Type HG Fuse Unit	Set/3 Nos	1	882	882	155	155
18	11kV, 200Amps, Single Break GOS	No	1	7799	7799	700	700
			With LT Protection kit	With Distribution Box			
19	Total Cost Part -C(Material)		26508.8		40751.8		
20	Total for Part-C (Labour)		3192		3241		
		material	labour	material	labour		
21	Total (A+B+C)						
	I) Using 9 mtr RCC Poles with 4 star rated transformer	213084	13056	225992	13105		
	I) Using 9 mtr RCC Poles with 5 star rated transformer	219078	13056	233321	13105		
22	Total (A+B+C) (Material+Labour)						
	I) Using 9 mtr RCC Poles with 4 star rated transformer	226140		239097			
	I) Using 9 mtr RCC Poles with 5 star rated transformer	232134		246426			

Note: Provision for actual quantity of additional materials viz 45kN Disc Insulator, 11kV Pin Insulators ACSR/AAA Conductor, Transparent Alkathine Tube, PG Clamps and Terminal Connectors etc. Whenever required may be made in the estimate as per field requirement.

COST DATA SHEET - 27

Erection of 3 Phase, 11kV/433V, 250kVA 4/5 Star Rated Distribution Transformer Centre Using 9 mtrs RCC Pole DPTS							
Sl No	Particulars	Unit	Qty	250 KVA			
				Material cost (Rs)		Labour Cost (Rs)	
				Rate	Amt	Rate	Amt
1	Part-A: TRANSFORMER						
	a) 9 Mtr RCC DP Transformer Structure (Using 9 Mtr RCC Poles)	No	1	30213	30213	4662	4662
2	11 KV, 5KN Polymeric Pin Insulator (24mm Dia FRP Rod)	Sets	3	180	540	0	0
3	11KV 45 KN Polymeric Insulator	Sets	3	164	492	0	0
4	Guy Set Complete with No.15 strain insulator & Concreting materials	Nos	4	830	3320	390	1560
5	11kV/433V, 250kVA, 3 Phase, 50 Cys Distribution Transformer BEE 4 Star rated with oil	No	1	336300	336300	1502	1502
6	11kV/433V, 250kVA, 3 Phase, 50 Cys Distribution Transformer BEE 5 Star rated with oil	No	1	386745	386745	1502	1502
7	Earthing materials pipe type for grounding as per Drawing No. BESCO/GM/CP/15 & 34/ Dt: 24.10.07	Single Electrode with accessories	3	1501	4503	631	1893
8	Caution/Danger Board	No	1	146	146	53	53
9	Anti Climbing Device (12mtrs GI Barbed Wire) Lumpsum	Kgs	2	76	152	28	56
10	Guy concreting with Boulders, Mud and Sand	Nos	4	0	0	174	696
11	GI Wire 8 SWG	Kgs	5	63.293	316.465	0	0
12	Guy wire 7/10 SWG	Kgs	10	65.137	651.37	0	0
	Total using 9 mtr Poles with 4 star rated transformer				376634		10422
	Total using 9 mtr Poles with 5 star rated transformer				427079		10422
13	Total for Part-A (Material+Labour)						
	Total using 9 mtr Poles with 4 star rated transformer					387056	
	Total using 9 mtr Poles with 5 star rated transformer					437501	

Sl No	Particulars	Unit	Qty	250 KVA			
				Material cost (Rs)		Labour Cost (Rs)	
				Rate	Amt	Rate	Amt
	Part-B:						
14	11kV Lightning Arester, Metal Oxide 9kV, 5kA Polymeric type with ground disconnecter	Set of 3 Nos	1	1335	1335	78	78
15	Total for Part-B				1335		78
	Part-C: SWITCH GEAR						
16	a) LT Distribution box for 250kVA with MCCB	No	1	17644	17644	501	501
	b) LT Wiring (From DTC to LT Line via Metering Box & LT Protection Kit) SINGLE CIRCUIT	No					
	i. Al Lead Wire - 240 Sqmm	Mtrs	45	198.54	8934.3	1602	
	ii. Copper lugs - 240 Sqmm	Nos	12	244	2928		
	iii. PG Clamps - Rabbit to 240 Sqmm	Nos	4	316	1264		
	iv. Spacers for DTC Wiring	Nos	8	41	328		
	v. Fish Plate with necessary Clamps,bolts & nuts etc complete (Galvanised)	Nos	2	150	300		
	c) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS-42)	No	1	4726	4726	566	566
d) LT Electronic Tri-Vector Meter 5A, Class-0.5/1.0 accuracy	Nos.	1	2525	2525	694	694	
17	11kV Solid Core Type HG Fuse Unit	Set/ 3 nos	1	882	882	155	155
18	11kV, 200Amps, Single Break GOS	No	1	7799	7799	700	700
	Total Cost for Part-C				47330.3		4218
19	Total for Part-C (Material+Labour)					51548	
20	Total (A+B+C)						
	using 9 mtr Poles with 4 star rated transformer				425299		14718
	using 9 mtr Poles with 5 star rated transformer				475744		14718
21	Total (A+B+C)= (Material+Labour)						
	using 9 mtr Poles with 4 star rated transformer					440017	
	using 9 mtr Poles with 5 star rated transformer					490462	

Note: Provision for actual quantity of additional materials viz 45kN Disc Insulator, 11 kV Pin Insulators ACSR/AAA Conductor, Transparent Alkathine Tube, PG Clamps and Terminal Connectors etc. Whenever required may be made in the estimate as per field requirement.

- 1 While preparing estimates for turnkey / total turnkey projects please refer to Sl. No. of General Guidelines vide a to in Page No.

COST DATA SHEET - 28

Erection of 3 Phase, 11kV/433V, 25kVA BEE 4/5 Star Rated Single Pole Mounted Transformer Centre on 9 Mtrs RCC Pole (Square Section)

Sl. No	Materials	Unit	Qty	Material cost (Rs)		Labour Cost (Rs)	
				Rate	Amt	Rate	Amt
1	9 Mtr long RCC pole (Square Section)	No	1	7165	7165	1166	1166
2	11 KV, 5KN Polymeric Pin Insulator (24mm Dia FRP Rod)	Nos	3	180	540	0	0
3	11KV 45 KN Polymeric Insulator	Nos	3	164	492	0	0
4	Guy Set Complete with No.15 strain insulator & Concreting materials	Set	1	830	830	390	390
5	Single pole TC set suitable for 25 kVA Transformer	Set	1	9180	9180	1118	1118
6	11kV/433V, 25kVA, 3 Phase, 50 Cys Distribution Transformer BEE-4 Star Rated with Oil	No	1	64900	64900	750	750
7	11kV/433V, 25kVA, 3 Phase, 50 Cys Distribution Transformer BEE-5 Star Rated with Oil	No	1	74365	74365	750	750
8	Earthing materials pipe type for grounding as per Drawing No. BESCO/GM/CP/15 & 34/ Dt: 24.10.07	Single Electrode with accessories	3	1501	4503	631	1893
9	Concreting materials for 9 mtr RCC Pole						
	a) Base concreting 1:4:8, 650x650x150 mm	Each	1	0	0	308	308
	b) Pole concreting 1:2:4, 650x650x1700	Each	1	0	0	3440	3440
	c) Coping 1:2:4 (as per actuals)	Each	1	0	0	471	471
10	Guy concreting with Boulders, Mud and Sand as per drawing No: BESCO/GM/C.P/7 dt:24.10.2007 (without cement)	No	1	0	0	174	174
11	GI Wire 8 SWG	Kgs	5	63.293	316.465	0	0
12	Guy Wire 7/10 SWG	Kgs	10	65.137	651.37	0	0
13	11kV Lightning Arester, Metal Oxide 9kV, 5kA Polymeric Type with ground disconnecter	Set/3 Nos	1	1335	1335	78	78
14	a) LT Protection Kit for 25 kVA	No	1	1651	1651	226	226
	b) LT Wiring (From DTC to LT Line Through Metering Box & LT Protection Kit) SINGLE CIRCUIT	No					
	i. Al Lead Wire - 50 Sqmm	Mtrs	25	44.31	1107.75	625	625
	ii. Copper lugs - 50 Sqmm	Nos	4	40	160		
	iii. PG Clamps - Rabbit to 50 Sqmm	Nos	4	79	316		
	iv. Spacers for DTC Wiring	Nos	8	41	328		
	v. Fish Plate with necessary Clamps,bolts & nuts etc complete (Galvanised)	Nos	2	150	300		
	c) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS-42)	No	1	5287	5287	566	566
d) LT Electronic Tri-Vector Meter 5A, Class-0.5/1.0 accuracy	No	1	2525	2525	694	694	
15	11kV Solid Core Type HG Fuse Unit	Set/3 Nos	1	882	882	155	155
16	11kV, 200Amps, Single Break GOS	Nos	1	7799	7799	700	700
17	Caution/Danger Board as per Drawing No. BESCO/GM/CP/40/ Dt: 24.10.07	No	1	146	146	53	53
18	Anti Climbing Device (12mtrs GI Barbed Wire) Lumpsum	Kg	1	76	76	28	28
19	Total Cost						
	For 25kVA 4 star rated transformer on single pole structure				110491		12835
	For 25kVA 5 star rated transformer on single pole structure				119956		12835
20	Total Cost (Material+Labour)						
	For 25kVA 4 star rated transformer on single pole structure					123325.585	
	For 25kVA 5 star rated transformer on single pole structure					132790.585	

Note: Provision for actual quantity of additional materials viz 45kN Disc Insulator, 11 kV Pin Insulators ACSR/AAA Conductor, Transparent Alkathine Tube, PG Clamps and Terminal Connectors etc. Whenever required may be made in the estimate as per field requirement.

COST DATA SHEET - 29							
Erection of 3 Phase, 11kV/433V, 63kVA BEE 3 Star Rated Single Pole Mounted Transformer Centre on 9 Mtrs RCC Pole (Square Section)							
Sl. No	Materials	Unit	Qty	Material cost (Rs)		Labour Cost (Rs)	
				Rate	Amt	Rate	Amt
1	9 Mtr long RCC pole (Square Section)	No	1	CDS Will be prepared after approval of DEL			
2	11 KV, 5KN Polymeric Pin Insulator (24mm Dia FRP Rod)	Nos	3				
3	11KV 45 KN Polymeric Insulator	Nos	3				
4	Guy Set Complete with No.15 strain insulator & Concreting materials	Set	1				
5	Single pole TC set suitable for 63 kVA Transformer	Set	1				
6	11kV/433V, 63kVA, 3 Phase, 50 Cys Distribution Transformer BEE-3 Star Rated with Oil	No	1				
7	Earthing materials pipe type for grounding as per Drawing No. BESCO/GM/CP/15 & 34/ Dt: 24.10.07	Single Electrode with accessories	3				
8	Concreting materials for 9 mtr RCC Pole						
	a) Base concreting 1:4:8, 650x650x150 mm	Each	1				
	b) Pole concreting 1:2:4, 500x500x1650	Each	1				
	c) Coping 1:2:4 (as per actuals)	Each	1				
9	Concreting materials for Guy sets (without cement)	No	1				
10	GI Wire 8 SWG	Kgs	5				
11	Guy Wire 7/10 SWG	Kgs	10				
12	11kV Lightning Arester, Metal Oxide 9kV, 5kA with ground disconnecter	Set/3 Nos	1				
13	a) LT Protection Kit for 63 kVA	Nos	2				
	b) LT Wiring (From DTC to LT Line Through Merering Box & LT Protection Kit) SINGLE CIRCUIT	No	1				
	i. Al Lead Wire - 95 Sqmm	Mtrs	40				
	ii. Copper lugs - 95 Sqmm	Nos	4				
	iii. PG Clamps - Rabbit to 95 Sqmm	Nos	4				
	iv. Spacers for DTC Wiring	Nos	8				
	v. Fish Plate with necessary Clamps,bolts & nuts etc complete (Galvanised)	Nos	2				
	c) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS-42)	No	1				
d) LT Electronic Tri-Vector Meter 5A, Class-0.5/1.0 accuracy	No	1					
14	11kV Solid Core Type HG Fuse Unit	Set/3 Nos	1				
15	11kV, 200Amps, Single Break GOS	Nos	1				
16	Caution/Danger Board as per Drawing No. BESCO/GM/CP/40/ Dt: 24.10.07	No	1				
17	Anti Climbing Device (12mtrs/ 1Kg GI Barbed Wire) Lumpsum	Kg	1				
18	Total material cost				0		
19	Labour Charges						
	a) Casual						0
							0
Total cost for Erection of a Single Pole Mounted 63kVA Transformer in Rs					0		

Note: Provision for actual quantity of additional materials viz 45kN Disc Insulator, 11 kV Pin Insulators ACSR/AAA Conductor, Transparent Alkathine Tube, PG Clamps and Terminal Connectors etc. Whenever required may be made in the estimate as per field requirement.

COST DATA SHEET - 30

Erection of 3 Phase, 11kV/433V, 100kVA BEE 3 Star Rated Single Pole Mounted Transformer Centre on 9 Mtrs RCC Pole (Square Section)

Sl. No	Materials	Unit	Qty	Material cost (Rs)		Labour Cost (Rs)	
				Rate	Amt	Rate	Amt
1	9 Mtr long RCC pole (Square Section)	No	1	CDS Will be prepared after approval of DEI			
2	11 KV, 5KN Polymeric Pin Insulator (24mm Dia FRP Rod)	Nos	3				
3	11KV 45 KN Polymeric Insulator	Nos	3				
4	Guy Set Complete with No.15 strain insulator & Concreting materials	Set	1				
5	Single pole TC set suitable for 100 kVA Transformer	Set	1				
6	11kV/433V, 100kVA, 3 Phase, 50 Cys Distribution Transformer BEE-3 Star Rated with Oil	No	1				
7	Earthing materials pipe type for grounding as per Drawing No. BESCOM/GM/CP/15 & 34/Dt: 24.10.07.	Nos	3				
8	Providing Concreting for 9 mtr RCC Pole				0		
	a) Base concreting 1:4:8, 500x650x150 mm	Each	1				
	b) Pole concreting 1:2:4, 500x500x1700	Each	1				
	c) Coping 1:2:4 (as per actuals)	Each	1				
9	Concreting materials for Guy sets (without cement)	No	1				
10	GI Wire 8 SWG	Kgs	5				
11	Guy Wire 7/10 SWG	Kgs	10				
12	11kV Lightning Arester, Metal Oxide 9kV, 5kA with ground disconnecter	Set/3 Nos	1				
13	a) LT Protection Kit	No	2				
	b) LT Distribution Box for 100kVA with MCB	No	1				
	c) LT Wiring (From DTC to LT Line Through Mererung Box & LT Protection Kit/LT Distribution Box) SINGLE CIRCUIT	No	1				
	i. Al Lead Wire - 120 Sqmm	Mtrs	45				
	ii. Copper lugs - 120 Sqmm	Nos	12				
	iii. PG Clamps - Rabbit to 120 Sqmm	Nos	4				
	iv. Spacers for DTC Wiring	Nos	8				
	v. Fish Plate with necessary Clamps, bolts & nuts etc complete (Galvanised)	Nos	2				
d) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS-42)	No	1					
e) LT Electronic Tri-Vector Meter 5A, Class-0.5/1.0 accuracy	No	1					
14	11kV Solid Core Type HG Fuse Unit	Set/3 Nos	1				
15	11kV, 200Amps, Single Break GOS	Nos	1				
16	Caution/Danger Board as per Drawing No. BESCOM/GM/CP/40/ Dt: 24.10.07	No	1				
17	Anti Climbing Device (12mtrs/1Kg GI Barbed Wire) Lumpsum	Kg	1				
18	Total Material Cost						
	a) With LT Distribution Box						
	b) With LT Protection Kit						
19	Labour Charges	for LT Distribution Box		for LT Protection Kit			
	a) Casual		0			0	
			0			0	
	Total						
	Total Cost for Erection of a Single Pole Mounted 100kVA Transformer with LT Distribution Box in Rs				0		
	Total Cost for Erection of a Single Pole Mounted 100kVA Transformer with LT Protection KIT in Rs				0		

Note: Provision for actual quantity of additional materials viz 45kN Disc Insulator, 11 kV Pin Insulators ACSR/AAA Conductor, Transparent Alkathine Tube, PG Clamps and Terminal Connectors etc. Whenever required may be made in the estimate as per field requirement.

COST DATA SHEET-31

Erection of 3 Phase, 11kV/433V, 250 kVA Transformer mounting structure on 11Mtr Spun Pole with 3 GOS System and Transformer mounted on Plinth (Cost of Separate Masonry Platform for mounting transformer shall be extra)

SI No.	Materials	Unit	Qty	Material cost (Rs)		Labour Cost (Rs)	
				Rate	Amt	Rate	Amt
1	Spun pole 11.0 Mtr Long	No	1	16850	16850	2901	2901
2	Single Pole Transformer Structure Kit with Three H Frames without tranformer seating and seating Angle support cross arm for 63/100/250/500kVA (UG Cable) MS	Set	1	16352	16352	2236	2236
3	HT Single Top Support with bolts, nuts & washers	Sets	9	112	1008	70	630
4	11 KV, 5KN Polymeric Pin Insulator (24mm Dia FRP Rod)	Nos	9	180	1620	0	0
5	Rabbit ACSR Conductor for jumps	Mtrs	50	36.50	1825	0	0
6	Alkathene Tube 19mm Dia and in coils of 30 Mtrs	Coils	2	458	916	0	0
7	Concreting materials for 11 Mtrs Spun Pole						
	a) Base concreting 1:4:8, 1000x1000x150mm	Each	1	0	0	730	730
	b) Pole concreting 1:2:4, 1000x1000x2500 mm	Each	1	0	0	12177	12177
	c) Coping 1:2:4 (as per actuals)	Each	1	0	0	1930	1930
8	GI Wire 10 SWG	Kgs	5	66.78	333.9	0	0
9	Guy Wire 7/10 SWG	Kgs	10	63.14	631.4	0	0
10	GI Pipe 100 mm Dia	Mtrs	10	1243	12430	0	0
11	PVC Pipe 150 mm Dia	Mtrs	20	267	5340	0	0
12	PVC Bend 150 mm Dia	Nos	8	183	1464	0	0
13	PVC Pipe 25mm Dia	Mtrs	40	25	1000	0	0
14	11kV/433V, 250kVA, 3 Phase, 50 Cys Distribution Transformer BEE 4 Star rated with oil	No	1	336300	336300	1502	1502
15	11kV/433V, 250kVA, 3 Phase, 50 Cys Distribution Transformer BEE 5 Star rated with oil	No	1	386745	386745		
16	11kV Solid Core Type HG Fuse Unit	Set/3 Nos	1	882	882	155	155
17	11kV, 200Amps, Single Break GOS	Nos	3	7799	23397	700	2100
18	Earthing materials pipe type for grounding as per Drawing No. BESCO/GM/CP/15 & 34/Dt: 24.10.07.	Single Electrode with accessories	3	1501	4503	631	1893

SI No.	Materials	Unit	Qty	Material cost (Rs)		Labour Cost (Rs)	
				Rate	Amt	Rate	Amt
19	a) LT Distribution Box for 250kVA with MCCB	No	1	17644	17644	501	501
	b) LT Wiring (From DTC to LT Line via Metering Box & LT Protection Kit) DOUBLE CIRCUIT						
	i. Al Lead Wire - 240 Sqmm	Mtrs	90	198.54	17868.6	1602	
	ii. Heavy Duty Long Barrel Copper lugs - 240 Sqmm	Nos	24	244	5856		
	iii. PG Clamps - Rabbit to 240 Sqmm	Nos	8	316	2528		
	iv. Spacers for DTC Wiring	Nos	16	41	656		
	v. Fish Plate with necessary Clamps, bolts & nuts etc complete (Galvanised)	Nos	4	150	600		
	c) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS-42)	No	1	4726	4726	566	566
d) LT Electronic Tri-Vector Meter 5A, Class-0.5/1.0 accuracy	No	1	2525	2525	694	694	
20	11kV Lightning Arrester, Metal Oxide, 9kV, 5kA Polymeric Type with ground disconnecter	Set/ 3 Nos	1	1335	1335	78	78
21	PVC Insulation Tape in rolls of 10 mtrs	Roll	3	14	42	0	0
22	Horizontal Cross Arms	Nos	4	251	1004	0	0
23	MS Fish plate	Nos	9	54	486	0	0
24	Caution/Danger Board	No	1	146	146	53	53
25	Anti Climbing Device (12mtrs GI Barbed Wire) Lumpsum	Kg	2	76	152	28	56
	Total using BEE 4 Star rated				480421		29804
	Total using BEE 5 Star rated				526305		
26	Total cost (Material+Labour)						
	Total using BEE 4 Star rated					510225	
	Total using BEE 5 Star rated					556109	
	Providing Platform for seating transformer	shall be added as per actuals					

Note:

1. Cost of providing separate masonry/concrete platform for mounting the Distribution Transformer shall be added as per site requirements
2. Provision for actual quantity of additional materials viz 45kN Disc Insulator, 11 kV Pin Insulators ACSR/AAA Conductor, Transparent Alkathine Tube, PG Clamps and Terminal Connectors etc. Whenever required may be made in the estimate as per field requirement.

COST DATA SHEET - 32

Providing Compact RMU 11kV Class SF6/VCB Type (1 Incomer + 2 Breaker + 1 Outgoing)

Sl. No	Materials	Unit	Rate (Rs)	At Common CSR Rate							
				Qty	Amt (Rs)	Qty	Amt (Rs)	Qty	Amt (Rs)	Qty	Amt (Rs)
				Schenider Make		ABB Make		Siemens Make		MEI	
	Material Cost	Unit	Rate (Rs)	Qty	Amt (Rs)	Qty	Amt (Rs)	Qty	Amt (Rs)	Qty	Amt (Rs)
1	RMU 4 Way, (2OD + 2VL), One Incomer + Two Breaker + One out going, 350 MVA, 630Amps	Set	600000	1	600000	1	600000	1	600000	1	600000
2	Bed Concreting with CC 1:2:4 as per item in Labour Charges	Cmt	5441	0.15	816	0.37	2013	0.53	2884	0.64	3482
3	Foundation with Reinforcement CC 1:2:4 as per item in Labour Charges	Cmt	5441	0.65	3537	1.44	7835	0.56	3047	0	0
4	Providing Reinforcement as per Labour Charges Item No. 28.1	Kgs	6048	40	241920	14	84672	23	139104	0	0
5	Providing Plinth with CC 1:2:4 on the Stone Masonary	Cmt	5441	0	0	0	0	0	0	0.08	435
6	Construction of Stone Masonary	Cmt	4037	0	0	0	0	0	0	0.57	2301
7	Supplying of Frame of MS Channel 100x50mm and MS angle 40x40x5mm welding etc., complete.	Kgs	50	50	2500	50	2500	50	2500	50	2500
8	Rod type earthing with 40 mm Dia, 3 Mtrs long MS rod as per specification & drawing (enclosed)	No	1832	2	3664	2	3664	2	3664	2	3664
9	Lettering the RMU with enamel paint and also writing single line diagram of each panel, caution Board, Danger Board etc., including cost of Paint, Brush etc.,	No	656	1	656	1	656	1	656	1	656
	Total cost of material				853093		701340		751855		613039
	Labour Charges										
1	Earth Excavation for R.M.U. Foundation depositing of earth on bank up to a lead of 50 mtrs and with a lift up to 1.5 mtrs	cmt	189	1.29	244	3.33	629	2.63	497.07	5.72	1081
2	Labour charges for Fixing foundation frame of MS channel 100X50mm and MS angle 40X40X5mm welding, fixing in concrete, aligning the RMU on foundation bed, assembly of units, connecting Bus Bars from panel to panel etc., complete.	No.	3120	4	12480	4	12480	4	12480	4	12480
	Labour Charges				12724		13109		12977		13561
	Total cost of Etimate (Material+Labour)				865817		714450		764832		626600
	Note:-										
1	The measurements for Earth work and concreting works have been provision as per the dimensions of the equipments of makes which are in use at present in BESCOM. Detail for the measurement are furnished in the data sheet furnished in Page No.										
2	While preparing estimates for turnkey / total turnkey projects please refere to Sl. No. To general guidelines vide a to page No. To										

COST DATA SHEET - 33

Providing Compact RMU 11kV Class SF6/VCB Type (1 Incomer + 1 Breaker +1 Outgoing)

Sl. No	Materials	Unit	Rate (Rs)	Schenider Make		ABB Make		Siemens Make		MEI	
				Qty	Amt (Rs)	Qty	Amt (Rs)	Qty	Amt (Rs)	Qty	Amt (Rs)
1	RMU 3 Way, (2OD + 1VL,) One Incomer + One Breakers + One outgoing, 350 MVA, 630Amps	Set	425000	1	425000	1	425000	1	425000	1	425000
Sl. No	Materials	Unit	Rate (Rs)	Schenider Make		ABB Make		Siemens Make		MEI	
				Qty	Amt (Rs)	Qty	Amt (Rs)	Qty	Amt (Rs)	Qty	Amt (Rs)
2	Bed Conceting with CC 1:2:4 as per Labour Charges	Cmt	5441	0.08	435	0.28	1523	0.43	2340	0.48	2612
3	Foundation with Reinforcement CC 1:2:4 as per Labour Charges	Cmt	5441	0.36	1959	1.08	5876	0.42	2285	0	0
4	Providing Reinforcement as per Labour Charges Item No. 28.1	Kgs	6048	30	181440	10	60480	17	102816	0	0
5	Providing Plinth with CC 1:2:4 on the Stone Masonary	Cmt	5441	0	0	0	0	0	0	0.06	326
6	Construction of Stone Masonary	Cmt	4037	0	0	0	0	0	0	0.43	1736
7	Supplying of Frame of MS Channel 100x50mm and MS angle 40x40x5mm welding etc., complete.	Kgs	50	40	2000	40	2000	40	2000	40	2000
8	Rod type earthing with 40 mm Dia, 3 Mtrs long MS rod as per specification & drawing (enclosed)	No	1832	2	3664	2	3664	2	3664	2	3664
9	Lettering the RMU with enamel paint and also writing single line diagram of each panel, caution Board, Danger Board etc., including cost of Paint, Brush etc.,	No	656	1	656	1	656	1	656	1	656
	Total cost of material.				615154		499200		538761		435994
	Labour Charges										
1	Earth Excavation for R.M.U. Foundation depositing of earth on bank up to a lead of 50 mtrs and with a lift up to 1.5 mtrs	cmt	189	0.72	136.08	2.5	472.5	2	378	4.35	822
2	Labour charges for fixing foundation frame of MS channel 100X50mm and MS angle 40X40X5mm welding, fixing in concrete, aligning the RMU on foundation bed, assembly of units, connecting Bus	No.	3120	3	9360	3	9360	3	9360	3	9360
	Labour Charges				9496.08		9832.5		9738		10182
	Total cost of Estimate (Material+Labour)				624650		509032		548499		446176
Note:-											
1	The measurements for Earth work and concreting works have been provision as per the dimensions of the equipments of makes which are in use at present in BESCO. Detail for the measurement are furnished in the data sheet furnished in Page No.										
2	While preparing estimates for turnkey / total turnkey projects please refer to Sl. No. To general guidelines vide a to page No. To										

COST DATA SHEET-34

Providing Compact RMU 11kV Class SF6/VCB Type (1 OD)

Sl. No	Materials	Unit	Rate (Rs)	Schenider Make		ABB Make		Siemens Make		MEI	
				Qty	Amt (Rs)	Qty	Amt (Rs)	Qty	Amt (Rs)	Qty	Amt (Rs)
1	RMU 1 OD, 350 MVA, 630 Amps	No.	150000	1	150000	1	150000	1	150000	1	150000
2	Bed Concreting with CC 1:2:4 as per Labour Charges	Cmt	5441	0.07	380.87	0.09	489.69	0.1	544.1	0.16	870.56
3	Foundation with Reinforcement CC 1:2:4 as per Labour Charges	Cmt	5441	0.29	1577.89	0.36	1958.76	0.14	761.74	0	0
4	Providing Reinforcement as per Labour Charges Item No. 28.1	Kgs	6048	10	60480	3.5	21168	6	36288	0	0
5	Providing Plinth with CC 1:2:4 on the Stone Masonary	Cmt	5441	0	0	0	0	0	0	0.02	108.82
6	Construction of Stone Masonary	Cmt	4037	0	0	0	0	0	0	0.14	565.18
7	Supplying of Frame of MS Channel 100x50mm and MS angle 40x40x5mm welding etc., complete.	Kgs	50	12	600	12	600	12	600	12	600
8	Rod type earthing with 40 mm Dia, 3 Mtrs long MS rod as per specification & drawing (enclosed)	No	1832	2	3664	2	3664	2	3664	2	3664
9	Lettering the RMU with enamel paint and also writing single line diagram of each panel, caution Board, Danger Board etc., including cost of Paint, Brush etc.,	No	656	1	656	1	656	1	656	1	656
	Total cost of material.				217358.76		178536		192514		156465
	Labour Charges										
1	Earth Excavation for R.M.U. Foundation depositing of earth on bank up to a lead of 50 mtrs and with a lift up to 1.5 mtrs	cmt	189	0.57	108	0.83	157	0.63	119	1.37	259
2	Labour charges for fixing foundation frame of MS channel 100X50mm and MS angle 40X40X5mm welding, fixing in concrete, aligning the RMU on foundation bed, assembly of units, connecting Bus	No.	3120	1	3120	1	3120	1	3120	1	3120
	Labour Charges				3227.73		3277		3239		3379
	Total cost of Estimate (Material+Labour)				220586		181813		195753		159843
	Note:-										
1	The measurements for Earth work and concreting works have been provision as per the dimensions of the equipments of makes which are in use at present in BESCO. Detail for the measurement are furnished in the data sheet furnished in Page No.										
2	While preparing estimates for turnkey / total turnkey projects please refer to Sl. No. To general guidelines vide a to ... page No. To										

COST DATA SHEET - 35

Providing Compact RMU 11kV Class SF6/VCB Type (1VL)

Sl. No	Materials	Unit	Rate (Rs)	Schenider Make		ABB Make		Siemens Make		MEI	
				Qty	Amt	Qty	Amt	Qty	Amt	Qty	Amt
1	RMU 1 VL, 350 MVA, 630Amps	No	150000	1	150000	1	150000	1	150000	1	150000
2	Bed Conceting with CC 1:2:4 as per Labour Charges	Cmt	5441	0.07	380.87	0.09	489.69	0.1	544.1	0.16	870.56
3	Foundation with Reinforcement CC 1:2:4 as per Labour Charges	Cmt	5441	0.29	1577.89	0.36	1958.76	0.14	761.74	0	0
4	Providing Reinforcement as per Labour Charges Item No. 28.1	Kgs	6048	10	60480	3.5	21168	6	36288	0	0
5	Providing Plinth with CC 1:2:4 on the Stone Masonary	Cmt	5441	0	0	0	0	0	0	0.02	108.82
6	Construction of Stone Masonary	Cmt	4037	0	0	0	0	0	0	0.14	565.18
7	Supplying of Frame of MS Channel 100x50mm and MS angle 40x40x5mm welding etc., complete.	Kgs	50	12	600	12	600	12	600	12	600
8	Rod type earthing with 40 mm Dia, 3 Mtrs long MS rod as per specification & drawing (enclosed)	No	1832	2	3664	2	3664	2	3664	2	3664
9	Lettering the RMU with enamel paint and also writing single line diagram of each panel, caution Board, Danger Board etc., including cost of Paint, Brush etc.,	No	656	1	656	1	656	1	656	1	656
Total cost of material.						217359		178536		192514	156465
Labour Charges											
1	Earth Excavation for R.M.U. Foundation depositing of earth on bank up to a lead of 50 mtrs and with a lift up to 1.5 mtrs	cmt	189	0.57	107.73	0.83	156.87	0.63	119.07	1.37	258.93
2	Labour charges for Fixing foundation frame of MS channel 100X50mm and MS angle 40X40X5mm welding, fixing in concrete, aligning the RMU on foundation bed, assembly of units, connecting Bus Bars from panel to panel etc., complete.	No.	3120	1	3120	1	3120	1	3120	1	3120
Labour Charges						3228		3277		3239	3379
Total cost of Estimate (Material+Labour)						220586		181813		195753	159843

Note:-

1 **The measurements for Earth work and concreting works have been provision as per the dimensions of the equipments of makes which are in use at present in BESCO. Detail for the measurement are furnished in the data sheet furnished in Page No.**

2 **While preparing estimates for turnkey / total turnkey projects please refer to Sl. No. To general guidelines vide a to page No. To**

COST DATA SHEET - 36 (AB CABLE)

**Running Single Circuit 11kV, 3 Phase Power Line on 9 Mtr Supports with an Average Span of 30 Mtrs
Using 3x95 Sqmm + 1x70 Sqmm Aerial Bunched Cables (ABC)**

SL. No	Particulars	Unit	Qty	Material cost (Rs)		Labour Cost (Rs)	
				Rate	Amt	Rate	Amt
1	RCC Poles 9 Mtr long with 145 Kg WL	Nos	10	6258	62580	1166	11660
2	PSCC Poles 9 Mtr long with 200 Kg WL	Nos	24	3689	88536	1166	27984
3	11kV Class 3 phase Aerial Bunched Cable 3x95 + 70 Sqmm	Kms	1.03	680510	700925.3	22469	23143.1
4	Cable Straight thru' joint kits suitable for 95 Sqmm	Set/3Nos	6	6813	40878	911	5466
5	11 KV AB Cable Termination Kits for 95 to 120 Sqmm	Set/3Nos	6	2532	15192	770	4620
6	Suspension Clamp Assembly 16 to 70 mm (Excluding pole clamp & Eye Hook)	Sets	30	196	5880	127	3810
7	Pole clamp for HT/LT AB cable	Sets	30	103	3090	211	6330
8	Eye Hook (Flat type) for fixing Clamps	Sets	30	90	2700	0	0
9	Dead End Clamp/Anchor Clamp Assembly 16 to 70 sqmm (excluding pole clamps and Eye hook)	Sets	12	206	2472	169	2028
10	End Caps	Nos	10	20	200	6	60
11	11kV Lightning Arrester, Metal Oxide 9kV, 5kA Polymeric Type with ground disconnector	Set (3Nos)	2	1335	2670	78	156
12	Guy Set Complete with No. 8 strain insulator & Concreting materials	Sets	6	830	4980	390	2340
13	Guy concreting with Boulders, Mud and Sand	Sets	6	0	0	174	1044
14	Grounding connection for messenger wire	Nos	4	12	48	29	116
15	Spiral Earth Electrodes	Nos	34	165	5610	61	2074
	Total Cost of Material & Labour				935761		90831
	Total Cost of the Estimate					1026592	

Note

1. While preparing estimates for turnkey / total turnkey projects please refer to Sl. No. To general guidelines vide a to page No. To
2. Any other item required as per filed requirement may be included/deleted.

COST DATA SHEET - 37 (AB CABLE)

Running Single Circuit 1.1 kV 3 Phase 5 Wire Power Line on 9 Mtr Supports with Average Span of 40 Mtrs Using 3x95 + 1x16 + 1x70 Sqmm Aerial Bunched Cables (ABC)

SL. No	Particulars	Unit	Qty	Material cost (Rs)		Labour Cost (Rs)	
				Rate	Amt	Rate	Amt
1	RCC Poles 9 Mtr long with 145 Kg WL	Nos	10	6858	68580	1166	11660
2	PSC Poles 9 Mtr long with 200 Kg WL	Nos	15	3689	55335	1166	17490
3	1.1kV Class 3 Phase Aerial Bunched Cable of size 3x95+1x16+1x70 Sqmm	kms	1.03	435622	448691	22469	23143
4	Three Phase Distribution box for 6 Connections	Nos	20	2128	42560	592	11840
5	Piercing connector suitable for 16 Sqmm - 95 Sqmm AB Cable - Service Connections	Nos	80	235	18800	85	6800
6	Piercing connector suitable for 16 Sqmm - 95 Sqmm AB Cable - Street Light Connections	Nos	50	165	8250	59	2950
7	Suspension Clamp Assembly 16 to 70 mm (Excluding pole clamp & Eye Hook)	Sets	20	196	3920	127	2540
8	Pole clamp for HT/LT AB cable	Sets	20	103	2060	211	4220
9	Eye Hook (Flat type) for fixing Clamps	Sets	20	90	1800	0	0
10	Dead End Clamp/Anchor Clamp Assembly 25 to 95 Sq mm (excluding pole clamps and Eye hook)	Sets	16	135	2160	169	2704
11	Universal Hook, Bolts & nuts	Nos	16	314	5024	127	2032
12	T-connector KZ3 95	Nos	20	348	6960	143	2860
13	Cable Straight thru' joints suitable for 95 Sqmm LT ABC	Nos	5	373	1865	169	845
14	Pre-Insulated lugs-CPTAU for 95 Sqmm	Nos	8	348	2784	176	1408
15	End cap for 50/70 Sqmm	Nos	50	20	1000	6	300
16	Guy Set Complete with No. 8 strain insulator & Concreting materials	Sets	8	830	6640	390	3120
17	Guy concreting with Boulders, Mud and Sand	Sets	8	0	0	174	1392
18	PVC Insulated wire 25 Sqmm	Mtrs	400	32.31	12924	0	0
19	Spiral Earth Electrodes	Nos	25	165	4125	61	1525
Total Cost of Material & Labour					693478		96829
Total Cost of the Estimate						790307	

Note

1. While preparing estimates for turnkey / total turnkey projects please refer to Sl. No. To general guidelines refer to page No. To
2. Any other item required as per filed requirement may be included/deleted.

COST DATA SHEET - 38 (RLMU)**Installing RLMU for the Existing 15/25kVA Distribution Transformer Center**

SI No	Particulars	Unit	Qty	Material cost (Rs)	
				Rate	Amt
1	Metallic Enclosure with Busbars	No	1	Proposed for Deletion has RLMU works are not taken up	
2	Programmable Logic Controllers with communication ports	No	1		
3	GSM Modem	No	1		
4	MCCB - 40 Amps for 15/25 kVA DTC	No	1		
5	MCB 6 amps	No	1		
6	Contactors - 40 Amps for 15/25 kVA DTC	No	2		
7	Current Transformers 50/5 amps for 15/25 kVA DTC	No	3		
8	Electronic Trivector Meter 3 Phase, 4 Wire, Accuracy 0.5 Cl	No	1		
9	Transformer wiring kit to Connect RLM Unit box to the transformer using PVC sheathed aluminium lead wire, Lugs etc.,	Kit	1		
10	Miscellaneous materials	LS	LS		
	Total Cost of Material				0
11	Labour Charges				
	a) Casual				
					0
	Total Cost				0
Note:	(1) For 15 /25 kVA Transformer feeding to individual IP sets, use only one contactor & without MCCB .				
1)	While preparing estimates for turnkey / total tunkey projects please refer to Sl. No. of General Guidelines vide a to in Page No.				

COST DATA SHEET - 39**Installing RLMU for the Existing 63 kVA Distribution Transformer Center**

SI No	Particulars	Unit	Qty	Material cost (Rs)	
				Rate	Amt
1	Metallic Enclosure with Busbars	No	1	Proposed for Deletion has RLMU works are not taken up	
2	Programmable Logic Controllers with communication ports	No	1		
3	GSM Modem	No	1		
4	MCCB - 100 Amps for 63 kVA DTC	No	1		
5	MCB 6 amps	No	1		
6	Contactors - 100 Amps for 63 kVA DTC	No	2		
7	Current Transformers 100/5 amps for 63 kVA DTC	No	3		
8	Electronic Trivector Meter 3 Phase, 4 Wire, Accuracy 0.5 Cl	No	1		
9	Transformer wiring kit to Connect RLM Unit box to the transformer using PVC sheathed aluminium lead wire, Lugs etc.,	Kit	1		
10	Miscellaneous materials	LS	LS		
	Total Cost (Material)				0
11	Labour Charges				
	a) Casual				
					0
	Total Cost				0
1)	While preparing estimates for turnkey/total tunkey projects please refer to Sl. No. of General Guidelines vide a to in Page No.				

COST DATA SHEET - 40**Installing RLMU for the Existing 100kVA Distribution Transformer Center**

SI No	Particulars	Unit	Qty	Material cost (Rs)	
				Rate	Amt
1	Metallic Enclosure with Busbars	No	1	Proposed for Deletion has RLMU works are not taken up	
2	Programmable Logic Controllers with communication ports	No	1		
3	GSM Modem	No	1		
4	MCCB - 150 Amps for 100 kVA DTC	No	1		
5	MCB 6 amps	No	1		
6	Contactors - 160 Amps for 100 kVA DTC	No	2		
7	Current Transformers 150/5 amps for 100 kVA DTC	No	3		
8	Electronic Trivector Meter 3 Phase, 4 Wire, Accuracy 0.5 Cl	No	1		
9	Transformer wiring kit to Connect RLM Unit box to the transformer using PVC sheathed aluminium lead wire, Lugs etc.,	Kit	1		
10	Miscellaneous materials	LS	LS		
	Total Cost (Material)				0
11	Labour Charges				
	a) Casual				
					0
12	Total Cost				0
	Note:				
	While preparing estimates for turnkey / total tunkey projects please refer to Sl. No. of General Guidelines vide a to in Page No.				

COST DATA SHEET - 41

Providing Compact Pre-fabricated Packaged Sub-station 11kV/433V

Sl No	Particulars	Unit	Total Cost
1	COMPACT PRE - FABRICATED PACKAGED SUB - STATION		
	Compact Pre - fabricated Packaged Sub - Station 11kv/433V consisting of 3 way SF6/VCB insulated compact RMU, oil cooled CRGO/Amoprhous Core Star-2 rated (5-star) Transformer and LT section with one MCCB/ACB as incoming and following ougoing MCCB feeders and with enclosure made of electronically Galvanized steel sheet (min 2 mm Thickness) with powder coated finish, Cu bus bar with LT Metering facility	Set	
a	100kVA Al. Wound Transformer, 250A MCCB 50ka 4 pole fixed type micro processor based for LT incomer and 2 Nos. 100A MCCB 4 pole 36kA TM Based for out going	Set	1293000
b	250kVA Al. Wound Transformer, 400A MCCB 50ka 4 pole fixed type micro processor based for LT incomer and 3 Nos. 250A MCCB 4 pole 36kA TM Based for out going	Set	1655000
c	500kVA Al. Wound Transformer, 800A ACB 50ka 4 pole fixed type micro processor based for LT incomer and 4 Nos. 250A MCCB 4 pole 36kA TM Based for out going	Set	2176000
d	800kVA Copper Wound Transformer, 1250A ACB 50ka 4 pole fixed type micro processor based for LT incomer and 6 Nos. 250 A MCCB 4 pole 36kA TM Based for LT out going	Set	2700000
e	1000 kVA Copper Wound Transformer, 1600A ACB 50ka 4 pole fixed type micro processor based for LT incomer and 2 Nos. 400A MCCB + 4 No.250A MCCB 4 pole 36 kA TM Based for LT out going.	Set	3327000
2	Installing & fixing the compact pre-fabricated packaged sub-station with 100/250/500/800/1000kVA transformer on the existing concrete plinth.(This does not include the cost of plinth, cable duct,laying & termination of cable etc. provision for the same shall be made		10525
	Note:Labour charges and installing the CSS is not furnished as the platform size cable duct Laying & Termination varies from Make/Capacity and hence estimate has to be prepared as per actual field/site condition		
1	While preparing estimates for turnkey/total turnkey projects please refere to Sl. No. To general guidelines vide a to page No. To		

COST DATA SHEET - 42

For Providing Electronic Trivector Meters with Associated CT's Metering Box etc., on LT Side of Distribution Transformer Center							
Sl. No	Materials	Unit	Qty	Material cost (Rs)		Labour Cost (Rs)	
				Rate	Amt	Rate	Amt
1	LT CT's Class - 0.5 Accuracy Ring Type Ratio 50/5 for 15/25kVA DTC	Nos	3	541	1623	69	207
2	LT CT's Class - 0.5 Accuracy Ring Type Ratio 100/5 for 50/63kVA DTC	Nos	3	401	1203	69	207
3	LT CT's Class - 0.5 Accuracy Ring Type Ratio 150/5 for 100kVA DTC	Nos	3	300	900	69	207
4	LT CT's Class - 0.5 Accuracy Ring Type Ratio 400/5 for 250kVA DTC	Nos	3	354	1062	69	207
5	LT CT's Class - 0.5 Accuracy Ring Type Ratio 800/5 for 500 kVA DTC	Nos	3	398	1194	69	207
6	Electronic Trivector Meter 3 Phase, 4 Wire, Accuracy 0.5 CI	No	1	2525	2525	694	694
7	Weather Proof, Vermin Proof LT Metering Box with clamping arrangement for mounting on the Transformer structure with necessary terminal strip and CT mounting arrangement for housing the ETV Meters and connecting to the existing ground.	No	1	3664	3664	359	359
Total Cost in Rs.				With Meter		Without Meter	
	a) 15/25kVA DTC			7812	1260	5287	566
	b) 63kVA DTC			7392	1260	4867	566
	c) 100kVA DTC			7089	1260	4564	566
	d) 250kVA DTC			7251	1260	4726	566
	e) 500kVA DTC			7383	1260	4858	566
Note:							
While preparing estimates for turnkey/total turnkey projects please refer to Sl. No. To general guidelines vide a to page No. To							

COST DATA SHEET - 43

For providing LT Capacitor to the Distribution Transformer							
Sl. No	Materials	Unit	Qty	Material cost (Rs)		Labour Cost (Rs)	
				Rate	Amt	Rate	Amt
1	Fixing 3 kVAr, 3 Phase, LT Capacitor housed in a enclosure with necessary Fuses, wiring, mounting arrangement for 15/25kVA DTC (including connection to transformer, grounding etc., complete)	Set	1	Proposed for deletion has fixed KVAR capacitors are not to be installed on DTC's			
2	Fixing 9 kVAr, 3 Phase, LT Capacitor housed in a enclosure with necessary Fuses, wiring, mounting arrangement for 63kVA DTC (including connection to transformer, grounding etc., complete)	Set	1				
3	Fixing 18 kVAr, 3 Phase, LT Capacitor housed in a enclosure with necessary Fuses, wiring, mounting arrangement for 100kVA DTC (including connection to transformer, grounding etc., complete)	Set	1				
4	Fixing 27 kVAr, 3 Phase, LT Capacitor housed in a enclosure with necessary Fuses, wiring, mounting arrangement for 250kVA DTC (including connection to transformer, grounding etc., complete)	Set	1				
5	Fixing 54 kVAr, 3 Phase, LT Capacitor housed in a enclosure with necessary Fuses, wiring, mounting arrangement for 300/500 kVA DTC (including connection to transformer, grounding etc., complete)	Set	1				
6	Wiring Materials for connecting the Capacitors to the Transformer (16 Sqmm Single Core PVC insulated sheathed aluminium wire, aluminium lugs, 2mm thick 40mm dia PVC pipe with Bend) and connecting the capacitor box to existing grounding	Set	1				
	Total				Material + Labour	Material	Labour
	a) For 25KVA Transformer				0	0	0
	b) For 63KVA Transformer				0	0	0
	c) For 100KVA Transformer				0	0	0
	d) For 250KVA Transformer				0	0	0
	e) For 300/500 KVA Transformer				0	0	0
1	While preparing estimates for turnkey / total turnkey projects please refer to Sl. No. To general guidelines vide a to page No. To						

COST DATA SHEET - 44

Estimate for Carrying Out 1 to 2 (One to Two) Poles Works in respect of Ganga Kalyana and Drinking Water Supply Works only (not applicable for works awarded on tender/RC)

(Not applicable for any other type of work)

SL. No	Paritculars	Unit	Qty	Consolidated Amount in Rs.
	PART-A (Materials)			
1	Material cost Estimate shall be prepared as per site requirement			
	PART-B (Labour)			
2	Consolidated labour charges involving 1 to 2 (ONE to TWO) pole works for Ganga Kalyana and Drinking Water supply works only.	LS	LS	9712

Note:-

1. The labour charges includes all works such as digging of pits, Erection of Poles, Fixing of Cross Arms, Stringing of conductor, fixing of Conductor accessories, insulators, Fixing guy sets, Anti climbing device, spiral earth electrode and danger board etc complete

2. No other labour charges or any other charges towards special locality allowance LC Charges, additional labour charges, transportation charges etc., are payable.

3. Estimate shall not split to bring them into this category

4. Certificate has to be furnished by the section officer who prepares the estimate that the estimates are not split to claim the above labour charges

5. The above rates are not applicable for works awarded on tender

COST DATA SHEET - 45

Estimate for Carrying Out 3 to 5 (THREE to FIVE) Poles Works in respect of Ganga Kalyana and Drinking Water Supply Works only (not applicable for works awarded on tender/RC)

(Not applicable for any other type of work)

SL. No	Paritculars	Unit	Qty	Consolidated Amount in Rs.	
	PART-A (Materials)				
1	Material cost Estimate shall be prepared as per site requirement				
	PART-B (Labour)				
2	Consolidated labour charges involving 3 to 5 (THREE to FIVE) pole works for Ganga Kalyana and Drinking Water supply works only.	LS	LS	15344	

Note:-

- 1. The labour charges includes all works such as digging of pits, Erection of Poles, Fixing of Cross Arms, Stringing of conductor, fixing of Conductore accessories, insulators, Fixing guy sets, Anti climbing device, spiral earth electrode and danger board etc complete**
- 2. No other labour charges or any other charges towards special locality allowance LC Charges, additional labour charges, transportation charges etc., are payable.**
- 3. Estimate shall not split to bring them into this category**
- 4. Certificate has to be furnished by the section officer who prepares the estimate that the estimates are not split to claim the above labour charges**
- 5. The above rates are not applicable for works awarded on tender**

COST DATA SHEET - 46**Estimate for carrying out 1 to 4 (ONE to FOUR) poles works in respect of Service Main Connection and E&I Works only (not applicable for works awarded on tender/RC)****(Not applicable for any other type of work)**

SL. No	Paritculars	Unit	No. of Pole Works Involved	Consolidated Amount in Rs.
	PART-A (Materials)			
1	Material cost Estimate shall be prepared as per site requirement			
	PART-B (Labour)			
2	Consolidated labour charges for works 1 to 4 (ONE to FOUR) poles including excavation of pit, pole erection, fixing of cross arms, stringing of conductor, fixing of conductor accessories, fixing guy sets, fixing of anti climbing device, spiral earth electrode, danger board etc if any (Applicable for both HT & LT Line)	Nos	1	4662
		Nos	2	6215
		Nos	3	7769
		Nos	4	9323
			5 & Above	as per Common SR 2018-19

Note:-

- 1. The labour charges includes all works such as digging of pits, Erection of Poles, Fixing of Cross Arms, Stringing of conductor, fixing of Conductore accessories, insulators, Fixing guy sets, Anti climbing device, spirral earth electrode and danger board etc complete**
- 2. No other labour charges or any other charges towards special locality allowance LC Charges, additional labour charges, transportation charges etc., are payable.**
- 3. Estimate shall not split to bring them into this category**
- 4. Certificate has to be furnished by the section officer who prepares the estimate that the estimates are not split to claim the above labour charges**
- 5. The above rates are not applicable for works awarded on tender**

COST DATA SHEET - 47

Consolidated Labour charges for shifting of conductor terminations and all other fittings existing on the deteriorated pole while replacing termination(cut point) poles(Does not include labour chages for releasing and erection of pole) (not applicable for works awarded on tender/RC)

Sl. No.	Description of the work	Unit	Labour charges of the work
1	Consolidated Labour charges for shifting of the conductor terminations (existing cut points) in deteriorated existing poles to new poles erected. Work includes all works associated with shifting of the terminations, like shifting of aerial fuse boards, cut outs, service main(UG cable and over head) and any other existing fitting.	Per Pole	3300

NOTE:

1. The above rates are not applicable for works awarded on tender/RC

COST DATA SHEET - 48

Consolidated Labour charges for shifting of conductor and all other fittings existing on the deteriorated pole while replacing intermediate poles(Does not include labour chages for releasing and erection of pole) (not applicable for works awarded on tender/RC)

Sl. No.	Description of the work	Unit	Labour charges of the work
1	Consolidated Labour charges for shifting of the existing conductor, including all works associated with shifting of the conductor such as any fittings, aerial fuse boards, cut outs, service main (UG cable and over head) etc., on the existing deteriorated intermediate pole to new pole erected.	Per Pole	2420

NOTE:

1. The above rates are not applicable for works awarded on tender/RC

COST DATA SHEET - 49

Standard Requirement of Materials for providing LT Wiring for Distribution Transformer Centers of various capacities

LT Wiring for - 250/500 KVA

Sl No	Material	Unit	Rate/Unit (in Rs)
1	Al Lead Wire - 240 Sqmm	Mtrs	199
2	Heavy Duty Long Barrel Copper Lugs - 240 Sqmm	Nos	244
3	PG Clamps - Rabbit to 240 Sqmm	Nos	316
4	Spacers for DTC Wiring	Nos	41
5	Fish Plate with necessary Clamps,bolts & nuts etc complete (Galvanised)	Nos	150

LT Wiring for - 100 KVA

Sl No	Material	Unit	Rate/Unit (in Rs)
1	Al Lead Wire - 120 Sqmm	Mtrs	107
2	Heavy Duty Long Barrel Copper Lugs - 120 Sqmm	Nos	96
3	PG Clamps - Rabbit to 120 Sqmm	Nos	210
4	Spacers for DTC Wiring	Nos	41
5	Fish Plate with necessary Clamps,bolts & nuts etc complete (Galvanised)	Nos	150

LT Wiring for - 63 KVA

Sl No	Material	Unit	Rate/Unit (in Rs)
1	Al Lead Wire - 95 Sqmm	Mtrs	82
2	Heavy Duty Long Barrel Copper Lugs - 95 Sqmm	Nos	88
3	PG Clamps - Rabbit to 95 Sqmm	Nos	108
4	Spacers for DTC Wiring	Nos	41
5	Fish Plate with necessary Clamps,bolts & nuts etc complete (Galvanised)	Nos	150

LT Wiring for - 25 KVA

Sl No	Material	Unit	Rate/Unit (in Rs)
1	Al Lead Wire - 50 Sqmm	Mtrs	44
2	Heavy Duty Long Barrel Copper Lugs - 50 Sqmm	Nos	40
3	PG Clamps - Rabbit to 50 Sqmm	Nos	79
4	Spacers for DTC Wiring	Nos	41
5	Fish Plate with necessary Clamps,bolts & nuts etc complete (Galvanised)	Nos	150

NOTE:

- 1. The size of the lead wire provisioned are as per Standard requirement depending on the Ampere rating of the transformer.**
- 2. The Size of the cable mabe modified to suite field requirement where ever necessary.**
- 3. Estimate shall be prepared for actual quantity as per field requirements.**