ANNEXURE-3

11kV / LT REFURBISHMENT

ANNEXURE-3

11kV Network Refurbishment

Sl. No.	Description	Unit	Quantity (in km)	Unit Rate (in Rs.)	Amount (in cr.)
1	11kV Feeder Refurbishment to 100sqmm OH conductor	km	8	14,07,468.47	1.1
2	11kV Feeder Refurbishment to 99sqmm covered conductor	km	4	21,05,309.86	0.8
Total					**2.0**

LT Network Refurbishment

Sl. No.	DESCRIPTION OF WORK	Unit	Quantity (in km)	Unit Rate (in Rs.)	Amount (in cr.)
1	Conversion of LT Bare/ deteriorated LT AB Cable to LT AB Cable (4X95 sq.mm)	Km	1.1	9,13,536.67	0.10
2	Conversion of LT Bare/ deteriorated LT AB Cable to LT AB Cable (4CX70 sq.mm)	Km	2.95	8,13,204.60	0.24
3	Conversion LT Bare/ deteriorated LT AB Cable to LT AB Cable (4CX50 sq.mm)	Km	14.2	6,90,560.16	0.98
4	Conversion LT Bare/ deteriorated LT AB Cable to LT AB Cable (4CX35 sq.mm)	Km	10.35	5,98,035.85	0.62
5	Conversion LT Bare/ deteriorated LT AB Cable to LT AB Cable (2CX35 sq.mm+1CX35 sq.mm)	Km	1.35	4,31,176.63	0.06
Total			**30.0**		**2.00**
Grand Total					**4.0**

ANNEXURE-3 11kV Network Refurbishment				
Sl. No.	**Description**	**Quantity (in km)**	**Unit Rate (in Rs.)**	**Amount (in cr.)**
1	11kV Feeder Refurbishment to 100sqmm OH conductor	8	14,07,468.47	1.1
2	11kV Feeder Refurbishment to 99sqmm covered conductor	4	21,05,309.86	0.8
Total				**2.0**

Standard Estimate for 11kV Line Length with 40 Mtr. Span using 100 SQ.MM. -AAA Conductor (Network Refurbishment)					
	No. of DP required With AB Switch (Ref. Drawing No.- TPCODL-MVD-0001)			1	
	MATERIALS OF DP With AB Switch				
Sl. No.	***Description of Materials***	***Unit***	***Unit Rate***	***Total Quantity***	***Total Amount***
1	WPB (GI) Pole 160x152 (11Mtr. Long, 30.44KG/Mtr.)	No	29,661.00	2	59,322.00
2	Top Channel 100X50X6mm, 9.56 KG/Mtr., each channel length 3 mtr., 2 no's channel required =(2x9.56x3)	KG	76.00	57.36	4,359.36
3	Fish Plate 50x6 mm., 2.36 kg/Mtr., each 0.280 mtr. length, 6 no's required = (6x2.36x0.280)	KG	97.50	3.9648	386.57
4	AB switch Mounting Channel 75X40X4.8mm, 7.14KG/Mtr, each channel length 3 Mtr., 2 no's channel required =(7.14x3x2)	KG	76.00	42.84	3,255.84
5	AB Switch Side Support Channel 100X50X6mm,9.56 KG/Mtr., each channel length 0.35 mtr., 2 no's channel required =(9.56x2x0.35)	KG	76.00	6.692	508.59
6	Channel Support for down Pipe 75X40X 4.8mm., 7.14KG/Mtr., each channel length 0.8 Mtr., 1 no's channel required =(7.14x0.8x1)	KG	76.00	5.712	434.11
7	Double Pole Belting Channel 75X40X 4.8mm., 7.14KG/Mtr., each channel length 3.0 Mtr., 4 no's channel required =(7.14x3x4)	KG	76.00	85.68	6,511.68
8	50x50x6mm.GI Bracing Angle, 4.5Kg./mtr., each angle length 3.512 mtr., 4 nos angle required = (4.5x3.512x4)	KG	76.00	63.216	4,804.42
9	Danger Plate, 2 no's.	No.	104.00	2	208.00
10	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 2 no's = (2x0.59x0.510)	KG	97.50	0.6018	58.68
11	H.T. Stay clamp, 50x8 mm. flat, 3.14Kg/Mtr., 0.551 Mtr. Length, 2 no's qty. required (1 Pair)	Pair	162.50	2	325.00
12	H.T. Stay set (Complete)	Set	1,365.00	2	2,730.00
13	H.T. Stay Insulator Type-C	No.	65.00	2	130.00
14	7/10 SWG Stay Wire 15kg /stay	K.g.	97.50	30	2,925.00
15	Gi Pipe Earthing 40mm. 3 Mtr. Long	No.	1,365.00	2	2,730.00
16	50x6mm GI Flat for earthing, 2.36kg/mtr., (12.5 Mtr. For L.A, 3 Mtr for AB Switch Body, 2.5 mtr. For mesh formation and 2.5 mtr. For raising)= 20.5x2.36	KG	97.50	48.38	4,717.05
17	GI barbed wire anticlimbing device 3 Kg. Per support, 2 no's qty. required =(2x3kg)	Kg	104.00	6	624.00
18	Back Clamp for anticlimbing device 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 8 no's = (8x0.59x0.510)	KG	97.50	2.4072	234.70
19	Lightning Arrester(12KV,10KA) (Station Class,class-2)	EA	4,615.00	3	13,845.00
20	AB Switch (11KV,400A.3pole,50Hz)	Set	15,405.00	1	15,405.00
21	11 KV pin insulator polymer	No.	260.00	3	780.00
22	H W fitting(B&S) 70KN, 3Bolt	No.	455.00	6	2,730.00
23	Disc insulator (B&S) 70 KN polymer	No.	1,495.00	6	8,970.00
24	PG Clamp for 100 sq.mm AAA conductor	NO.	754.00	6	4,524.00
25	GI Nut , Bolt & Washer of different sizes (13.718 Kg each DP with AB Switch)	K.g.	101.40	13.718	1,391.01
26	Black Paint	Ltr	286.00	1	286.00
27	Yellow Colour Paint for Background	Ltr	216.00	2	432.00
A				**Total Cost of materials**	**1,42,628.00**
B				Stock, Storage & Insurance i.e 3% of A	4,278.84
C				**Sub Total (A+B)**	**1,46,906.84**
D				Contigency @ 3% of C	4,407.21
E				Tools & Plants @ 2% of C	2,756.03
F				Transportation @ 7.5% of C	11,018.01
G				Erection Charges @ 5% on Trf/Breaker/Joist	3,055.08
H				Erection Charges @ 10% of C (except Trf/Breaker/WPB/ H-Pole/HT stay set/GI Pipe/PSC pole)	7,670.00
I				Erection Charges @ 20% of PSC pole- Not to be used for 33kv	-
J				**Sum of (C to I)**	**1,75,813.17**
	Civil & Services				
Sl. No.	***Description of Materials***	***Unit***	***Unit Rate***	***Total Quantity***	***Total Amount***
1	Fixing of complete 11KV line Complete stay set includes 1) Turn Buckle Assembly 2) Stay Rod & Stay plate 3) Stay Insulator 4) Stay Wire. 5)Stay clamps with Nuts & bolts BA will do the excvation including excvation, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm) using 20mm BHG metal with all labour and material as per TPCODL Drawing & Standard.	No.	2,250.00	2	4,500.00
2	Concreting ratio 1:1.5:3 (500mmX500mmX1800mm) = 0.45Cu.mtr	Cu.mtr	6,500.00	0.90	5,850.00
3	Couping ratio 1:1.5:3 with dimension (500X500X450)= 0.1125 Cu mtr	Cu.mtr	6,500.00	0.23	1,462.50

4	Construction Earthing chamber including installation of earthing pipe.Making earthing chamber including excavation , soil treatment with bentonide powder , calculation of earth resistance, including Installation of 3Mtr GI Pipe 40mm/50mm including welding of GI flat around pipe .	No.	3,700.00	2	7,400.00
K				**Total Civil & Services**	**19,212.50**
L				**Total (J+K)**	**1,95,025.67**
M				Other overheads (Including 6% supervision charges) of L (for DP With AB Switch)	-
N				**Sub Total (L+M)**	**1,95,025.67**
O				Total GST @ 18% of (N)	35,104.62
O1				Total CESS @ 1% of (N)	1,950.26
P				**Gross Total Material +Services (N+O+O1) for DP With AB Switch**	**2,32,080.55**
	No. of Cut Point with 180 Degree Angle (Ref. Drawing No.- TPCODL-MVD-0004)		1		

MATERIALS FOR 11 KV Cut Point with 180 Degree Angle

Sl. No.	***Description of Materials***	***Unit***	***Unit Rate***	***Total Quantity***	***Total Amount***
1	WPB (GI) Pole 160x152 (11Mtr. Long, 30.44KG/Mtr.)	No	29,661.00	1	29,661.00
2	Straight Cross Arm 100X50X6mm, 9.56 KG/Mtr., each channel length 1.2 mtr., 2 no's channel required =(2x9.56x1.2)	KG	76.00	22.944	1,743.74
3	Fish Plate 50x6 mm., 2.36 kg/Mtr., each 0.280 mtr. length, 8 no's required = (8x2.36x0.280)	KG	97.50	5.2864	515.42
4	Straight Cross Arm 100X50X6mm, 9.56 KG/Mtr., each channel length 0.306 mtr., 2 no's channel required =(2x9.56x0.306)	KG	76.00	5.85072	444.65
5	Danger Plate, 1 no's.	No.	104.00	1	104.00
6	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 1 no's = (1x0.59x0.510)	KG	97.50	0.3009	29.34
7	GI barbed wire anticlimbing device 3 Kg. Per support	Kg	104.00	3	312.00
8	Back Clamp for anticlimbing device 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 4 no's = (4x0.59x0.510)	KG	97.50	1.2036	117.35
9	11 KV pin insulator polymer	No.	260.00	3	780.00
10	H W fitting(B&S) 70KN, 3Bolt	No.	455.00	6	2,730.00
11	Disc insulator (B&S) 70 KN polymer	No.	1,495.00	6	8,970.00
12	Earthing of Support (Coil Type)	EA	215.80	1	215.80
13	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	K.g.	97.50	0.262	25.55
14	PG Clamp for 100 sq.mm AAA conductor	NO.	754.00	6	4,524.00
15	GI Nut , Bolt & Washer of different sizes (3.55 Kg each Cut Pole)	K.g.	101.40	3.55	359.97
16	Black Paint	Ltr	286.00	0.5	143.00
17	Yellow Colour Paint for Background	Ltr	216.00	2	432.00
A				**Total Cost of materials**	**51,107.83**
B				Stock, Storage & Insurance i.e 3% of A	1,533.23
C				**Sub Total (A+B)**	**52,641.06**
D				Contigency @ 3% of C	1,579.23
E				Tools & Plants @ 2% of C	1,052.82
F				Transportation @ 7.5% of C	3,948.08
G				Erection Charges @ 5% on Trf/Breaker/Joist	1,527.54
H				Erection Charges @ 10% of C (except Trf/Breaker/WPB/ H-Pole/HT stay set/PSC pole)	2,209.02
I				Erection Charges @ 20% of PSC pole- Not to be used for 33kv	-
J				**Sum of (C to I)**	**62,957.76**

Civil & Services

Sl. No.	***Description of Materials***	***Unit***	***Unit Rate***	***Total Quantity***	***Total Amount***
1	Concreting ratio 1:1.5:3 (500mmX500mmX1800mm) = 0.45Cu.mtr	Cu.mtr	6,500.00	0.45	2,925.00
2	Couping ratio 1:1.5:3 with dimension (500X500X450)= 0.1125 Cu mtr	Cu.mtr	6,500.00	0.11	731.25
K				**Total Civil & Services**	**3,656.25**
L				**Total (J+K)**	**66,614.01**
M				Other overheads (Including 6% supervision charges) of L (for 11 KV Cut Point with 180 Degree Angle)	-
N				**Sub Total (L+M)**	**66,614.01**
O				Total GST @ 18% of (N)	11,990.52
O1				Total CESS @ 1% of (N)	666.14
P				**Gross Total Material +Services (N+O+O1) for 11 KV Cut Point with 180 Degree Angle**	**79,270.67**

	No. of Cut Point with 90 Degree Angle (Ref. Drawing No.- TPCODL-MVD-0005)			1	
	MATERIALS FOR 11 KV Cut Point with 90 Degree Angle				
Sl. No.	***Description of Materials***	***Unit***	***Unit Rate***	***Total Quantity***	***Total Amount***
1	WPB (GI) Pole 160x152 (11Mtr. Long, 30.44KG/Mtr.)	No	29,661.00	1	29,661.00
2	Straight Cross Arm 100X50X6mm, 9.56 KG/Mtr., each channel length 1.2 mtr., 4 no's channel required =(4x9.56x1.2)	KG	76.00	45.888	3,487.49
3	Fish Plate 50x6 mm., 2.36 kg/Mtr., each 0.280 mtr. length, 16 no's required = (16x2.36x0.280)	K.g.	97.50	10.5728	1,030.85
4	Straight Cross Arm 100X50X6mm, 9.56 KG/Mtr., each channel length 0.306 mtr., 4 no's channel required =(4x9.56x0.306)	KG	76.00	11.70144	889.31
5	Danger Plate, 1 no's.	No.	104.00	1	104.00
6	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 1 no's = (1x0.59x0.510)	KG	97.50	0.3009	29.34
7	GI barbed wire anticlimbing device 3 Kg. Per support	Kg	104.00	3	312.00
8	Back Clamp for anticlimbing device 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 4 no's = (4x0.59x0.510)	KG	97.50	1.2036	117.35
9	11 KV pin insulator polymer	No.	260.00	4	1,040.00
10	H W fitting(B&S) 70KN, 3Bolt	No.	455.00	6	2,730.00
11	Disc insulator (B&S) 70 KN polymer	No.	1,495.00	6	8,970.00
12	Earthing of Support (Coil Type)	EA	215.80	1	215.80
13	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	K.g.	97.50	0.262	25.55
14	PG Clamp for 100 sq.mm AAA conductor	NO.	754.00	6	4,524.00
15	H.T. Stay clamp, 50x8 mm. flat, 3.14Kg/Mtr., 0.551 Mtr. Length, 2 no's qty. required (1 Pair)	Pair	162.50	2	325.00
16	H.T. Stay set (Complete)	Set	1,365.00	2	2,730.00
17	H.T. Stay Insulator Type-C	No.	65.00	2	130.00
18	7/10 SWG Stay Wire 15kg /stay	K.g.	97.50	30	2,925.00
19	GI Nut , Bolt & Washer of different sizes (7.433 Kg each Cut Pole)	K.g.	101.40	7.433	753.71
20	Black Paint	Ltr	286.00	0.5	143.00
21	Yellow Colour Paint for Background	Ltr	216.00	2	432.00
A				**Total Cost of materials**	**60,575.39**
B				Stock, Storage & Insurance i.e 3% of A	1,817.26
C				**Sub Total (A+B)**	**62,392.65**
D				Contigency @ 3% of C	1,871.78
E				Tools & Plants @ 2% of C	1,121.99
F				Transportation @ 7.5% of C	4,679.45
G				Erection Charges @ 5% on Trf/Breaker/Joist	1,527.54
H				Erection Charges @ 10% of C (except Trf/Breaker/WPB/ H-Pole/HT stay set/PSC pole)	2,554.85
I				Erection Charges @ 20% of PSC pole- Not to be used for 33kv	-
J				**Sum of (C to I)**	**74,148.26**
	Civil & Services				
Sl. No.	***Description of Materials***	***Unit***	***Unit Rate***	***Total Quantity***	***Total Amount***
1	Fixing of complete 11KV line Complete stay set includes 1) Turn Buckle Assembly 2) Stay Rod & Stay plate 3) Stay Insulator 4) Stay Wire. 5)Stay clamps with Nuts & bolts BA will do the excvation including excvation, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm) using 20mm BHG metal with all labour and material as per TPCODL Drawing & Standard.	No.	2,250.00	2	4,500.00
2	Concreting ratio 1:1.5:3 (500mmX500mmX1800mm) = 0.45Cu.mtr	Cu.mtr	6,500.00	0.5	2,925.00
3	Couping ratio 1:1.5:3 with dimension (500X500X450)= 0.1125 Cu mtr	Cu.mtr	6,500.00	0.1	731.25
K				**Total Civil & Services**	**8,156.25**
L				**Total (J+K)**	**82,304.51**
M				Other overheads (Including 6% supervision charges) of L (for 11 KV Cut Point with 90 Degree Angle)	-
N				**Sub Total (L+M)**	**82,304.51**
O				Total GST @ 18% of (N)	14,814.81
O1				Total CESS @ 1% of (N)	823.05
P				**Gross Total Material +Services (N+O+O1) for 11 KV Cut Point with 90 Degree Angle**	**97,942.36**
	11 Kv Line Length In KM with 40 Mtr. Span (Ref. Drawing No.- TPCODL-MVD-0003)			1	
	MATERIALS FOR 11 KV Pin Points With WPB				
Sl. No.	***Description of Materials***	***Unit***	***Unit Rate***	***Total Quantity***	***Total Amount***
1	WPB (GI) Pole 160x152 (11Mtr. Long, 30.44KG/Mtr.)	No.	29,661.00	12	3,55,932.00

2	11 KV V cross Arm (10.2 K.g. each)	No.	1,053.00	12	12,636.00
3	Top bracket 100x50X6 mm GI channel (2kg each)	No.	195.00	12	2,340.00
4	Danger Plate, 1 no's. for each pole	No.	104.00	12	1,248.00
5	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 1 no's = (1x0.59x0.510)	KG	97.50	3.61	352.05
6	GI barbed wire anticlimbing device 3 Kg. Per support	Kg	104.00	36.00	3,744.00
7	Back Clamp for anticlimbing device 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 4 no's = (4x0.59x0.510)	KG	97.50	14.44	1,408.21
8	11 KV pin insulator polymer, 3 Nos. required for each support	No.	260.00	36	9,360.00
9	Earthing of Support (Coil Type)	No.	215.80	12	2,589.60
10	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	K.g.	97.50	3.14	306.54
11	GI Nut , Bolt & Washer of different sizes (1.45 Kg/ Pin Point)	K.g.	101.40	17.40	1,764.36
12	100 mm2 AAAC	Mtr.	71.50	3090.00	2,20,935.00
13	Crimping type Midspan Compression Joint for 100 sq.mm AAA conductor	EA	175.25	3	525.75
14	Black Paint	Ltr	286.00	12.0	3,432.00
15	Yellow Colour Paint for Background	Ltr	216.00	24.0	5,184.00
A				**Total Cost of materials**	**6,21,757.52**
B				Stock, Storage & Insurance i.e 3% of A	18,652.73
C				**Sub Total (A+B)**	**6,40,410.24**
D				Contigency @ 3% of C	19,212.31
E				Tools & Plants @ 2% of C	12,808.20
F				Transportation @ 7.5% of C	48,030.77
G				Erection Charges @ 5% on Trf/Breaker/WPB/ H-Pole	18,330.50
H				Erection Charges @ 10% of C (except Trf/Breaker/WPB/ H-Pole/HT stay set/PSC pole)	27,380.03
I				Erection Charges @ 20% of PSC pole- Not to be used for 33kv	-
J				**Sum of (C to I)**	**7,66,172.05**
	Civil & Services				
1	Concreting ratio 1:1.5:3 (500mmX500mmX1800mm) = 0.45Cu.mtr	Cu.mtr	6,500.00	5.40	35,100.00
2	Couping ratio 1:1.5:3 with dimension (500X500X450)= 0.1125 Cu mtr	Cu.mtr	6,500.00	1.35	8,775.00
	Dismantling of ACSR/AAAC 80/100 mm2 from overhead line, recoiling, loading, transportation, unloading and staking at a proper place in safe position/site store	Mtr.	9.00	3090.00	27,810.00
K				**Total Civil & Services**	**71,685.00**
L				**Total Material+Services (I+K)**	**8,37,857.05**
M				Other overheads (Including 6% supervision charges) (for 11 KV Pin Points With WPB)	-
N				**Sub Total (L+M)**	**8,37,857.05**
O				Total GST @ 18% of (N)	1,50,814.27
O1				Total CESS @ 1% of (N)	8,378.57
P				**Gross Total Material +Services (N+O+O1) for 11 KV Pin Points With WPB**	**9,97,049.89**
	Gross Total Summary				
1				Gross Total Material +Services (N+O+O1) for DP Without AB Switch	-
2				Gross Total Material +Services (N+O+O1) for DP With AB Switch	2,32,080.55
3				Gross Total Material +Services (N+O+O1) for 11 KV Cut Point with 180 Degree Angle	79,270.67
4				Gross Total Material +Services (N+O+O1) for 11 KV Cut Point with 90 Degree Angle	97,942.36
5				Gross Total Material +Services (N+O+O1) for 11 KV Pin Points With WPB	9,97,049.89
Q				**Gross Total Material +Services**	**14,06,343.47**
R				Inspection Fee of Over Head Line (HT) - Rs. 375 up to 1 km.	375.00
S				Inspection Fee of Over Head Line (HT) - Rs. 225/ Additional Km	
T				Inspection Fee of Drawing Checking and Approval	750.00
U				**Gross Total Material, Services and Inspection Fees (Q+R+S+T)**	**14,07,468.47**

Standard Estimate for 11kV Line Length with 40 Mtr. Span using 99 SQ.MM. -AAA Conductor (Network Refurbishment)					
No. of DP required With AB Switch (Ref. Drawing No.- TPCODL-MVD-0001)			1		
MATERIALS OF DP With AB Switch					
Sl. No.	***Description of Materials***	***Unit***	***Unit Rate***	***Total Quantity***	***Total Amount***
1	WPB (GI) Pole 160x152 (11Mtr. Long, 30.44KG/Mtr.)	No	29,661.00	2	59,322.00
2	Top Channel 100X50X6mm, 9.56 KG/Mtr., each channel length 3 mtr., 2 no's channel required =(2x9.56x3)	KG	76.00	57.36	4,359.36
3	Fish Plate 50x6 mm., 2.36 kg/Mtr., each 0.280 mtr. length, 6 no's required = (6x2.36x0.280)	KG	97.50	3.9648	386.57
4	AB switch Mounting Channel 75X40X4.8mm, 7.14KG/Mtr, each channel length 3 Mtr., 2 no's channel required =(7.14x3x2)	KG	76.00	42.84	3,255.84
5	AB Switch Side Support Channel 100X50X6mm,9.56 KG/Mtr., each channel length 0.35 mtr., 2 no's channel required =(9.56x2x0.35)	KG	76.00	6.692	508.59
6	Channel Support for down Pipe 75X40X 4.8mm., 7.14KG/Mtr., each channel length 0.8 Mtr., 1 no's channel required =(7.14x0.8x1)	KG	76.00	5.712	434.11
7	Double Pole Belting Channel 75X40X 4.8mm., 7.14KG/Mtr., each channel length 3.0 Mtr., 4 no's channel required =(7.14x3x4)	KG	76.00	85.68	6,511.68
8	50x50x6mm.GI Bracing Angle, 4.5Kg./mtr., each angle length 3.512 mtr., 4 nos angle required = (4.5x3.512x4)	KG	76.00	63.216	4,804.42
9	Danger Plate, 2 no's.	No.	104.00	2	208.00
10	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 2 no's = (2x0.59x0.510)	KG	97.50	0.6018	58.68
11	H.T. Stay clamp, 50x8 mm. flat, 3.14Kg/Mtr., 0.551 Mtr. Length, 2 no's qty. required (1 Pair)	Pair	162.50	2	325.00
12	H.T. Stay set (Complete)	Set	1,365.00	2	2,730.00
13	H.T. Stay Insulator Type-C	No.	65.00	2	130.00
14	7/10 SWG Stay Wire 15kg /stay	K.g.	97.50	30	2,925.00
15	Gi Pipe Earthing 40mm. 3 Mtr. Long	No.	1,365.00	2	2,730.00
16	50x6mm GI Flat for earthing, 2.36kg/mtr., (12.5 Mtr. For L.A, 3 Mtr for AB Switch Body, 2.5 mtr. For mesh formation and 2.5 mtr. For raising)= 20.5x2.36	KG	97.50	48.38	4,717.05
17	GI barbed wire anticlimbing device 3 Kg. Per support, 2 no's qty. required =(2x3kg)	Kg	104.00	6	624.00
18	Back Clamp for anticlimbing device 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 8 no's = (8x0.59x0.510)	KG	97.50	2.4072	234.70
19	Lightning Arrester(12KV,10KA) (Station Class,class-2)	EA	4,615.00	3	13,845.00
20	AB Switch (11KV,400A.3pole,50Hz)	Set	15,405.00	1	15,405.00
21	11 KV pin insulator polymer	No.	260.00	3	780.00
22	H W fitting(B&S) 70KN, 3Bolt	No.	455.00	6	2,730.00
23	Disc insulator (B&S) 70 KN polymer	No.	1,495.00	6	8,970.00
24	Non Metallic Ties 11KV (For covered conductor)	No.	251.00	3	753.00
25	IPC for 99 sq.mm AAA conductor (For covered conductor)	NO.	371.00	6	2,226.00
26	Spike (GI) (using 50x6mm Flat welded with 8 mm square bar) (2 Nos of spike per Set in each Pole)	Set	332.00	4	1,328.00
27	GI Nut , Bolt & Washer of different sizes (13.718 Kg each DP with AB Switch)	K.g.	101.40	13.718	1,391.01
28	Black Paint	Ltr	286.00	1	286.00
29	Yellow Colour Paint for Background	Ltr	216.00	2	432.00
A				**Total Cost of materials**	**1,42,411.00**
B				Stock, Storage & Insurance i.e 3% of A	4,272.33
C				**Sub Total (A+B)**	**1,46,683.33**
D				Contigency @ 3% of C	4,400.50
E				Tools & Plants @ 2% of C	2,751.56
F				Transportation @ 7.5% of C	11,001.25
G				Erection Charges @ 5% on Trf/Breaker/Joist	3,055.08
H				Erection Charges @ 10% of C (except Trf/Breaker/WPB/ H-Pole/HT stay set/GI Pole/PSC pole)	7,647.65
I				Erection Charges @ 20% of PSC pole- Not to be used for 33kv	-

J				**Sum of (C to I)**	**1,75,539.37**
	Civil & Services				
Sl. No.	***Description of Materials***	***Unit***	***Unit Rate***	***Total Quantity***	***Total Amount***
1	Fixing of complete 11KV line Complete stay set includes 1) Turn Buckle Assembly 2) Stay Rod & Stay plate 3) Stay Insulator 4) Stay Wire. 5)Stay clamps with Nuts & bolts BA will do the excvation including excvation, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm) using 20mm BHG metal with all labour and material as per TPCODL Drawing & Standard.	No.	2,250.00	2	4,500.00
2	Concreting ratio 1:1.5:3 (500mmX500mmX1800mm) = 0.45Cu.mtr	Cu.mtr	6,500.00	0.90	5,850.00
3	Couping ratio 1:1.5:3 with dimension (500X500X450)= 0.1125 Cu mtr	Cu.mtr	6,500.00	0.23	1,462.50
4	Construction Earthing chamber including installation of earthing pipe.Making earthing chamber including excavation , soil treatment with bentonide powder , calculation of earth resistance, including Installation of 3Mtr GI Pipe 40mm/50mm including welding of GI flat around pipe .	No.	3,700.00	2	7,400.00
K				**Total Civil & Services**	**19,212.50**
L				**Total (J+K)**	**1,94,751.87**
M				Other overheads (Including 6% supervision charges) of L (for DP With AB Switch)	-
N				**Sub Total (L+M)**	**1,94,751.87**
O				Total GST @ 18% of (N)	35,055.34
O1				Total CESS @ 1% of (N)	1,947.52
P				**Gross Total Material +Services (N+O+O1) for DP With AB Switch**	**2,31,754.73**
	No. of Cut Point with 180 Degree Angle (Ref. Drawing No.- TPCODL-MVD-0004)		1		
	MATERIALS FOR 11 KV Cut Point with 180 Degree Angle				
Sl. No.	***Description of Materials***	***Unit***	***Unit Rate***	***Total Quantity***	***Total Amount***
1	WPB (GI) Pole 160x152 (11Mtr. Long, 30.44KG/Mtr.)	No	29,661.00	1	29,661.00
2	Straight Cross Arm 100X50X6mm, 9.56 KG/Mtr., each channel length 1.2 mtr., 2 no's channel required =(2x9.56x1.2)	KG	76.00	22.944	1,743.74
3	Fish Plate 50x6 mm., 2.36 kg/Mtr., each 0.280 mtr. length, 8 no's required = (8x2.36x0.280)	KG	97.50	5.2864	515.42
4	Straight Cross Arm 100X50X6mm, 9.56 KG/Mtr., each channel length 0.306 mtr., 2 no's channel required =(2x9.56x0.306)	KG	76.00	5.85072	444.65
5	Danger Plate, 1 no's.	No.	104.00	1	104.00
6	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 1 no's = (1x0.59x0.510)	KG	97.50	0.3009	29.34
7	GI barbed wire anticlimbing device 3 Kg. Per support	Kg	104.00	3	312.00
8	Back Clamp for anticlimbing device 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 4 no's = (4x0.59x0.510)	KG	97.50	1.2036	117.35
9	11 KV pin insulator polymer	No.	260.00	3	780.00
10	H W fitting(B&S) 70KN, 3Bolt	No.	455.00	6	2,730.00
11	Disc insulator (B&S) 70 KN polymer	No.	1,495.00	6	8,970.00
12	Non Metallic Ties 11KV (For covered conductor)	No.	251.00	3	753.00
13	IPC for 99 sq.mm AAA conductor (For covered conductor)	NO.	371.00	6	2,226.00
14	Spike (GI) (using 50x6mm Flat welded with 8 mm square bar) (2 Nos of spike per Set in each Pole)	Set	332.00	2	664.00
15	Earthing of Support (Coil Type)	EA	215.80	1	215.80
16	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	K.g.	97.50	0.262	25.55
17	GI Nut , Bolt & Washer of different sizes (3.55 Kg each Cut Pole)	K.g.	101.40	3.55	359.97
18	Black Paint	Ltr	286.00	0.5	143.00
19	Yellow Colour Paint for Background	Ltr	216.00	2	432.00
A				**Total Cost of materials**	**50,226.83**
B				Stock, Storage & Insurance i.e 3% of A	1,506.80
C				**Sub Total (A+B)**	**51,733.63**

D	Contigency @ 3% of C	1,552.01
E	Tools & Plants @ 2% of C	1,034.67
F	Transportation @ 7.5% of C	3,880.02
G	Erection Charges @ 5% on Trf/Breaker/Joist	1,527.54
H	Erection Charges @ 10% of C (except Trf/Breaker/WPB/ H-Pole/HT stay set/PSC pole)	2,118.28
I	Erection Charges @ 20% of PSC pole- Not to be used for 33kv	-
J	**Sum of (C to I)**	**61,846.16**

Civil & Services

Sl. No.	*Description of Materials*	*Unit*	*Unit Rate*	*Total Quantity*	*Total Amount*
1	Concreting ratio 1:1.5:3 (500mmX500mmX1800mm) = 0.45Cu.mtr	Cu.mtr	6,500.00	0.45	2,925.00
2	Couping ratio 1:1.5:3 with dimension (500X500X450)= 0.1125 Cu mtr	Cu.mtr	6,500.00	0.11	731.25
K	**Total Civil & Services**				**3,656.25**
L	**Total (J+K)**				**65,502.41**
M	Other overheads (Including 6% supervision charges) of L (for 11 KV Cut Point with 180 Degree Angle)				-
N	**Sub Total (L+M)**				**65,502.41**
O	Total GST @ 18% of (N)				11,790.43
O1	Total CESS @ 1% of (N)				655.02
P	**Gross Total Material +Services (N+O) for 11 KV Cut Point with 180 Degree Angle**				**77,947.86**
	No. of Cut Point with 90 Degree Angle (Ref. Drawing No.- TPCODL-MVD-0005)	1			

MATERIALS FOR 11 KV Cut Point with 90 Degree Angle

Sl. No.	*Description of Materials*	*Unit*	*Unit Rate*	*Total Quantity*	*Total Amount*
1	WPB (GI) Pole 160x152 (11Mtr. Long, 30.44KG/Mtr.)	No	29,661.00	1	29,661.00
2	Straight Cross Arm 100X50X6mm, 9.56 KG/Mtr., each channel length 1.2 mtr., 4 no's channel required =(4x9.56x1.2)	KG	76.00	45.888	3,487.49
3	Fish Plate 50x6 mm., 2.36 kg/Mtr., each 0.280 mtr. length, 16 no's required = (16x2.36x0.280)	K.g.	97.50	10.5728	1,030.85
4	Straight Cross Arm 100X50X6mm, 9.56 KG/Mtr., each channel length 0.306 mtr., 4 no's channel required =(4x9.56x0.306)	KG	76.00	11.70144	889.31
5	Danger Plate, 1 no's.	No.	104.00	1	104.00
6	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 1 no's = (1x0.59x0.510)	KG	97.50	0.3009	29.34
7	GI barbed wire anticlimbing device 3 Kg. Per support	Kg	104.00	3	312.00
8	Back Clamp for anticlimbing device 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 4 no's = (4x0.59x0.510)	KG	97.50	1.2036	117.35
9	11 KV pin insulator polymer	No.	260.00	4	1,040.00
10	H W fitting(B&S) 70KN, 3Bolt	No.	455.00	6	2,730.00
11	Disc insulator (B&S) 70 KN polymer	No.	1,495.00	6	8,970.00
12	Non Metallic Ties 11KV (For covered conductor)	No.	251.00	4	1,004.00
13	IPC for 99 sq.mm AAA conductor (For covered conductor)	NO.	371.00	6	2,226.00
14	Spike (GI) (using 50x6mm Flat welded with 8 mm square bar) (2 Nos of spike per Set in each Pole)	Set	332.00	2	664.00
15	Earthing of Support (Coil Type)	EA	215.80	1	215.80
16	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	K.g.	97.50	0.262	25.55
17	H.T. Stay clamp, 50x8 mm. flat, 3.14Kg/Mtr., 0.551 Mtr. Length, 2 no's qty. required (1 Pair)	Pair	162.50	2	325.00
18	H.T. Stay set (Complete)	Set	1,365.00	2	2,730.00
19	H.T. Stay Insulator Type-C	No.	65.00	2	130.00
20	7/10 SWG Stay Wire 15kg /stay	K.g.	97.50	30	2,925.00
21	GI Nut , Bolt & Washer of different sizes (7.433 Kg each Cut Pole)	K.g.	101.40	7.433	753.71

22	Black Paint	Ltr	286.00	0.5	143.00
23	Yellow Colour Paint for Background	Ltr	216.00	2	432.00
A	**Total Cost of materials**				**59,945.39**
B	Stock, Storage & Insurance i.e 3% of A				1,798.36
C	**Sub Total (A+B)**				**61,743.75**
D	Contigency @ 3% of C				1,852.31
E	Tools & Plants @ 2% of C				1,109.01
F	Transportation @ 7.5% of C				4,630.78
G	Erection Charges @ 5% on Trf/Breaker/Joist				1,527.54
H	Erection Charges @ 10% of C (except Trf/Breaker/WPB/ H-Pole/HT stay set/PSC pole)				2,489.96
I	Erection Charges @ 20% of PSC pole- Not to be used for 33kv				-
J	**Sum of (C to I)**				**73,353.35**

Civil & Services

Sl. No.	***Description of Materials***	***Unit***	***Unit Rate***	***Total Quantity***	***Total Amount***
1	Fixing of complete 11KV line Complete stay set includes 1) Turn Buckle Assembly 2) Stay Rod & Stay plate 3) Stay Insulator 4) Stay Wire. 5)Stay clamps with Nuts & bolts BA will do the excvation including excvation, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm) using 20mm BHG metal with all labour and material as per TPCODL Drawing & Standard.	No.	2,250.00	2	4,500.00
2	Concreting ratio 1:1.5:3 (500mmX500mmX1800mm) = 0.45Cu.mtr	Cu.mtr	6,500.00	0.5	2,925.00
3	Couping ratio 1:1.5:3 with dimension (500X500X450)= 0.1125 Cu mtr	Cu.mtr	6,500.00	0.1	731.25
K	**Total Civil & Services**				**8,156.25**
L	**Total (J+K)**				**81,509.60**
M	Other overheads (Including 6% supervision charges) of L (for 11 KV Cut Point with 90 Degree Angle)				-
N	**Sub Total (L+M)**				**81,509.60**
O	Total GST @ 18% of (N)				14,671.73
O1	Total CESS @ 1% of (N)				815.10
P	**Gross Total Material +Services (N+O+O1) for 11 KV Cut Point with 90 Degree Angle**				**96,996.43**
	11 Kv Line Length In KM with 40 Mtr. Span (Ref. Drawing No.- TPCODL-MVD-0003)	1			

MATERIALS FOR 11 KV Pin Points With WPB

Sl. No.	***Description of Materials***	***Unit***	***Unit Rate***	***Total Quantity***	***Total Amount***
1	WPB (GI) Pole 160x152 (11Mtr. Long, 30.44KG/Mtr.)	No.	29,661.00	12	3,55,932.00
2	11 KV V cross Arm (10.2 K.g. each)	No.	1,053.00	12	12,636.00
3	Top bracket 100x50X6 mm GI channel (2kg each)	No.	195.00	12	2,340.00
4	Danger Plate, 1 no's. for each pole	No.	104.00	12	1,248.00
5	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 1 no's = (1x0.59x0.510)	KG	97.50	3.61	352.05
6	GI barbed wire anticlimbing device 3 Kg. Per support	Kg	104.00	36.00	3,744.00
7	Back Clamp for anticlimbing device 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 4 no's = (4x0.59x0.510)	KG	97.50	14.44	1,408.21
8	11 KV pin insulator polymer, 3 Nos. required for each support	No.	260.00	36	9,360.00
9	Spike (GI) (using 50x6mm Flat welded with 8 mm square bar) (2 Nos of spike per Set in each Pole)	Set	332.00	24	7,968.00
10	Non Metallic Ties 11KV (For covered conductor)	No.	251.00	36	9,036.00
11	Earthing of Support (Coil Type)	No.	215.80	12	2,589.60
12	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	K.g.	97.50	3.14	306.54
13	GI Nut , Bolt & Washer of different sizes (1.45 Kg/ Pin Point)	K.g.	101.40	17.40	1,764.36
14	99 SQ.MM. AAAC XLPE Covered Conductor	K.M.	2,15,000.00	3.09	6,64,350.00
15	Midspan Joint for 99 sq.mm AAAC XLPE Covered Conductor	EA	2,201.00	3	6,603.00

16	Black Paint	Ltr	286.00	12.0	3,432.00
17	Yellow Colour Paint for Background	Ltr	216.00	24.0	5,184.00
A	**Total Cost of materials**				**10,88,253.77**
B	Stock, Storage & Insurance i.e 3% of A				32,647.61
C	**Sub Total (A+B)**				**11,20,901.38**
D	Contigency @ 3% of C				33,627.04
E	Tools & Plants @ 2% of C				22,418.03
F	Transportation @ 7.5% of C				84,067.60
G	Erection Charges @ 5% on Trf/Breaker/WPB/ H-Pole				18,330.50
H	Erection Charges @ 10% of C (except Trf/Breaker/WPB/ H-Pole/HT stay set/PSC pole)				75,429.14
I	Erection Charges @ 20% of PSC pole- Not to be used for 33kv				-
J	**Sum of (C to I)**				**13,54,773.69**
	Civil & Services				
1	Concreting ratio 1:1.5:3 (500mmX500mmX1800mm) = 0.45Cu.mtr	Cu.mtr	6,500.00	5.40	35,100.00
2	Couping ratio 1:1.5:3 with dimension (500X500X450)= 0.1125 Cu mtr	Cu.mtr	6,500.00	1.35	8,775.00
	Dismantling of ACSR/AAAC 80/100 mm2 from overhead line, recoiling, loading, transportation, unloading and staking at a proper place in safe position/site store	Mtr.	9.00	3090.00	27,810.00
K	**Total Civil & Services**				**71,685.00**
L	**Total Material+Services (J+K)**				**14,26,458.69**
M	Other overheads (Including 6% supervision charges) (for 11 KV Pin Points With WPB)				-
N	**Sub Total (L+M)**				**14,26,458.69**
O	Total GST @ 18% of (N)				2,56,762.56
O1	Total CESS @ 1% of (N)				14,264.59
P	**Gross Total Material +Services (N+O+O1) for 11 KV Pin Points With WPB**				**16,97,485.84**
	Gross Total Summary				
1	Gross Total Material +Services (N+O+O1) for DP Without AB Switch				-
2	Gross Total Material +Services (N+O+O1) for DP With AB Switch				2,31,754.73
3	Gross Total Material +Services (N+O) for 11 KV Cut Point with 180 Degree Angle				77,947.86
4	Gross Total Material +Services (N+O+O1) for 11 KV Cut Point with 90 Degree Angle				96,996.43
5	Gross Total Material +Services (N+O+O1) for 11 KV Pin Points With WPB				16,97,485.84
Q	**Gross Total Material +Services**				**21,04,184.86**
R	Inspection Fee of Over Head Line (HT) - Rs. 375 upto 1 KM				375.00
S	Inspection Fee of Over Head Line (HT) - Rs. 225/ Additional Km				
T	Inspection Fee of Drawing Checking and Approval				750.00
U	**Gross Total Material, Services and Inspection Fees (Q+R+S+T)**				**21,05,309.86**

ANNEXURE-3 LT Network Refurbishment					
Sl. No.	**DESCRIPTION OF WORK**	**Unit**	**Quantity (in km)**	**Unit Rate (in Rs.)**	**Amount (in cr.)**
1	Conversion of LT Bare/ deteriorated LT AB Cable to LT AB Cable (4X95 sq.mm)	Km	1.1	9,13,536.67	0.10
2	Conversion of LT Bare/ deteriorated LT AB Cable to LT AB Cable (4CX70 sq.mm)	Km	2.95	8,13,204.60	0.24
3	Conversion LT Bare/ deteriorated LT AB Cable to LT AB Cable (4CX50 sq.mm)	Km	14.2	6,90,560.16	0.98
4	Conversion LT Bare/ deteriorated LT AB Cable to LT AB Cable (4CX35 sq.mm)	Km	10.35	5,98,035.85	0.62
5	Conversion LT Bare/ deteriorated LT AB Cable to LT AB Cable (2CX35 sq.mm+1CX35 sq.mm)	Km	1.35	4,31,176.63	0.06
Total			**30.0**		**2.00**

Standard Estimate for LT AB Cable Line Length with 33 Mtr. Span using - 4C×95 mm² (P)+1C×95 mm²(M)+1CX16 mm²(Street Light) (LT Network Refurbishment)					
AB Cable LT Line Length In KM with 33 Mtr. Span (Ref. Drawing No.- TPCODL-…….)			1		
MATERIALS FOR LT AB Cable Line					
Sl. No.	**Description of Materials**	**Unit**	**Unit Rate**	**Total Quantity**	**Total Amount**
1	9 Mtr. long 300 Kg. PSC Pole	No.	3,900.00	10	39,000.00
2	LT Stay set Complete	Set	676.00	5	3,380.00
3	7/12 SWG GI stay wire, Grade -2	Kg	97.50	60.0	5,850.00
4	LT stay Clamp (1.40Kg/pair)	Pair	143.00	5	715.00
5	LT Stay insulator	No.	39.00	5	195.00
6	**LT Accessories with Eye hook and Clamp**				-
6.i.	Pole clamp for EYE hook for (XLPE Aerial bunched Cable)	Pair	260.00	39	10,140.00
6.ii.	EYE hook for XLPE Aerial bunched Cable	No.	78.00	18	1,404.00
6.iii.	Dead End Clamp suitable for messenger XLPE Aerial bunched Cable	No.	84.50	18	1,521.00
6.iv.	Suspension Clamp with EYE hook for ABC	Pair	442.00	21	9,282.00
7	4C×95 mm² (P)+1C×95 mm²(M)+1CX16 mm²(Street Light) (LT AB Cable)	Mtr.	368.64	1050.00	3,87,072.00
8	4 WAY SERVICE Distb. Box with kit kat fuse and Aluminium bus bar.	No.	2,873.00	5.00	14,365.00
9	8 WAY SERVICE Distb.Box with kit kat fuse and Aluminium bus bar.	No.	5,200.00	2.00	10,400.00
10	Insulated piercing connector.Type-A-main 50 to 150 sq.mm & Tap-50 to 150 sq.mm	No.	113.08	20	2,261.60
11	Insulated piercing connector.Type-B-main 25 to 150 sq.mm & Tap-6 to 35 sq.mm	No.	62.13	40	2,485.20
12	Insulated piercing connector.Type-C-main 16 to 95 sq.mm & Tap-1.5 to 16 sq.mm	No.	60.00	30	1,800.00
13	GI Pipe Earthing (each 5th pole to earth)	No.	1,365.00	5	6,825.00
14	Coil Earthing	No's	215.80	5	1,079.00
15	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	Kg	97.50	2.6	255.45
16	Danger plate (LT)	No	104.00	10	1,040.00
17	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 1 no's = (1x0.59x0.510)	KG	97.50	3.01	293.38
18	2C X 4sq. mm. Armoured Aluminium Cable - XLPE Insulated	Mtr.	53.81	250	13,452.50
19	2C X 10sq. mm. Armoured Aluminium Cable - XLPE Insulated	Mtr.	82.71	100	8,271.00
20	4C X 10sq. mm. Armoured Aluminium Cable - XLPE Insulated	Mtr.	100.33	200	20,066.00
21	GI barbed wire anticlimbing device 3 Kg. Per support	Kg	104.00	30.00	3,120.00
22	Back Clamp for anticlimbing device 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 4 no's = (4x0.59x0.510)	KG	97.50	12.04	1,173.51
23	GI Nut , Bolt & Washer of different sizes (0.5 Kg/ Pole)	Kg	101.40	5.00	507.00
24	Black Paint	Ltr	286.00	10.0	2,860.00
25	Yellow Colour Paint for Background	Ltr	216.00	20.0	4,320.00
A				**Total Cost of materials**	**5,53,133.64**
B				Stock, Storage & Insurance i.e 3% of A	16,594.01
C				**Sub Total (A+B)**	**5,69,727.65**
D				Contigency @ 3% of C	17,091.83
E				Tools & Plants @ 2% of C	11,045.07
F				Transportation @ 7.5% of C	42,729.57
G				Erection Charges @ 5% on Trf/Breaker/WPB/ H-Pole	-
H				Erection Charges @ 10% of C (except Trf/Breaker/WPB/ H-Pole/ LT Stay set/GI Pipe/PSC Pole)	51,208.37
I				Erection Charges @ 20% of PSC pole- Not to be used for 33kv	8,034.00
J				**Sum of (C to I)**	**6,99,836.49**
Civil & Services					
Sl. No.	**Description of Materials**	**Unit**	**Unit Rate**	**Total Quantity**	**Total Amount**
1	Fixing of LT Complete stay set includes 1) Turn Buckle Assembly 2) Stay Rod & Stay plate 3) Stay Insulator 4) Stay Wire. 5)Stay clamps with Nuts & bolts, including excvation, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm) using 20mm BHG metal with all labour and material (Excavation of earth will be done of size 500X500X1500 mm.)	No.	2,250.00	5	11,250.00
2	Concreting ratio 1:1.5:3 (500mmX500mmX1500mm) = 0.375Cu.mtr	Cu.mtr	6,500.00	3.75	24,375.00
3	Construction Earthing chamber including installation of earthing pipe.Making earthing chamber including excavation , soil treatment with bentonide powder , calculation of earth resistance, including Installation of 3Mtr GI Pipe 40mm/50mm including welding of GI flat around pipe .	No.	3,700.00	5	18,500.00

4	Dismantling of 9/8 Mtr. PCC/Joist Pole (Serviceable Pole) after digging the pit and taking out the pole, transportation and stacking the pole at a proper place in safe position within10km /site store and refilling the pit with loose earth and amming including removal and disposal of malba at proper location as per instruction of EIC.	No.	900.00	5	4,500.00
5	Dismantling of ACSR/AAAC 34/ 55mm2 from overhead line, recoiling, loading, transportation, unloading and staking at a proper place in safe position/ site store	KM	6,300.00	1.00	6,300.00
6	Dismantling of Insulator with Pin including loading, transportation, unloading and staking at a proper place in safe position/ site store.	EA	8.10	90	729.00
7	Dismantling / Removal of V Cross arm/ channel from pole including loading, transportation, unloading and staking of dismantled material at a proper place in safe position at Site Store.	EA	41.40	30	1,242.00
K				**Total Civil & Services**	**66,896.00**
L				**Total (J+K)**	**7,66,732.49**
M				Other overheads (Including 6% supervision charges) of L	-
N				**Sub Total (L+M)**	**7,66,732.49**
O				Total GST @ 18% of (N)	1,38,011.85
O1				Total CESS @ 1% of (N)	7,667.32
P				**Gross Total Material +Services (N+O+O1) for LT AB Cable Line**	**9,12,411.67**
Q				Inspection Fee of Over Head Line (LV)-Rs. 375 upto 1 KM.	375.00
R				Inspection Fee of Over Head Line (LV)- Rs. 225/ Additional Km	
S				Inspection Fee of Drawing Checking and Approval	750.00
T				**Gross Total Material, Services and Inspection Fees (P+Q+R+S)**	**9,13,536.67**

Standard Estimate for LT AB Cable Line Length with 33 Mtr. Span using - 4C×70 mm² (P)+1C×70 mm²(M)+1CX16 mm²(Street Light) (LT Network Refurbishment)					
AB Cable LT Line Length In KM with 33 Mtr. Span (Ref. Drawing No.- TPCODL-…….)			1		
MATERIALS FOR LT AB Cable Line					
Sl. No.	**Description of Materials**	**Unit**	**Unit Rate**	**Total Quantity**	**Total Amount**
1	9 Mtr. long 300 Kg. PSC Pole	No.	3,900.00	10	39,000.00
2	LT Stay set Complete	Set	676.00	5	3,380.00
3	7/12 SWG GI stay wire, Grade -2	Kg	97.50	60.0	5,850.00
4	LT stay Clamp (1.40Kg/pair)	Pair	143.00	5	715.00
5	LT Stay insulator	No.	39.00	5	195.00
6	**LT Accessories with Eye hook and Clamp**				-
6.i.	Pole clamp for EYE hook for (XLPE Aerial bunched Cable)	Pair	260.00	39	10,140.00
6.ii.	EYE hook for XLPE Aerial bunched Cable (25-70 sq.mm)	No.	78.00	18	1,404.00
6.iii.	Dead End Clamp suitable for messenger XLPE Aerial bunched Cable (25-70 sq.mm)	No.	84.50	18	1,521.00
6.iv.	Suspension Clamp with EYE hook for ABC (25-70 sq.mm)	Pair	442.00	21	9,282.00
7	4C×70 mm² (P)+1C×70 mm²(M)+1CX16 mm²(Street Light) (LT AB Cable)	Mtr.	305.00	1050.00	3,20,250.00
8	4 WAY SERVICE Distb. Box with kit kat fuse and Aluminium bus bar.	No.	2,873.00	5.00	14,365.00
9	8 WAY SERVICE Distb.Box with kit kat fuse and Aluminium bus bar.	No.	5,200.00	2.00	10,400.00
10	Insulated piercing connector.Type-A-main 50 to 150 sq.mm & Tap-50 to 150 sq.mm	No.	113.08	20	2,261.60
11	Insulated piercing connector.Type-B-main 25 to 150 sq.mm & Tap-6 to 35 sq.mm	No.	62.13	40	2,485.20
12	Insulated piercing connector.Type-C-main 16 to 95 sq.mm & Tap-1.5 to 16 sq.mm	No.	60.00	30	1,800.00
13	GI Pipe Earthing (each 5th pole to earth)	No.	1,365.00	5	6,825.00
14	Coil Earthing	No's	215.80	5	1,079.00
15	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	Kg	97.50	2.62	255.45
16	Danger plate (LT)	No	104.00	10	1,040.00
17	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 1 no's = (1x0.59x0.510)	KG	97.50	3.01	293.38
18	2C X 4sq. mm. Armoured Aluminium Cable - XLPE Insulated	Mtr.	53.81	250	13,452.50
19	2C X 10sq. mm. Armoured Aluminium Cable - XLPE Insulated	Mtr.	82.71	100	8,271.00
20	4C X 10sq. mm. Armoured Aluminium Cable - XLPE Insulated	Mtr.	100.33	200	20,066.00
21	GI barbed wire anticlimbing device 3 Kg. Per support	Kg	104.00	30.00	3,120.00
22	Back Clamp for anticlimbing device 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 4 no's = (4x0.59x0.510)	KG	97.50	12.04	1,173.51
23	GI Nut , Bolt & Washer of different sizes (0.5 Kg/ Pole)	Kg	101.40	5	507.00
24	Black Paint	Ltr	286.00	10	2,860.00
25	Yellow Colour Paint for Background	Ltr	216.00	20	4,320.00
A				**Total Cost of materials**	**4,86,311.64**
B				Stock, Storage & Insurance i.e 3% of A	14,589.35
C				**Sub Total (A+B)**	**5,00,900.99**
D				Contigency @ 3% of C	15,027.03
E				Tools & Plants @ 2% of C	9,668.54
F				Transportation @ 7.5% of C	37,567.57
G				Erection Charges @ 5% on Trf/Breaker/WPB/ H-Pole	-
H				Erection Charges @ 10% of C (except Trf/Breaker/WPB/ H-Pole/ LT Stay set/GI Pipe/PSC Pole)	44,325.70
I				Erection Charges @ 20% of PSC pole- Not to be used for 33kv	8,034.00
J				**Sum of (C to I)**	**6,15,523.83**
Civil & Services					
Sl. No.	**Description of Materials**	**Unit**	**Unit Rate**	**Total Quantity**	**Total Amount**

1	Fixing of LT Complete stay set includes 1) Turn Buckle Assembly 2) Stay Rod & Stay plate 3) Stay Insulator 4) Stay Wire. 5)Stay clamps with Nuts & bolts, including excvation, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm) using 20mm BHG metal with all labour and material (Excavation of earth will be done of size 500X500X1500 mm.)	No.	2,250.00	5	11,250.00
2	Concreting ratio 1:1.5:3 (500mmX500mmX1500mm) = 0.375Cu.mtr	Cu.mtr	6,500.00	3.75	24,375.00
3	Construction Earthing chamber including installation of earthing pipe.Making earthing chamber including excavation , soil treatment with bentonide powder , calculation of earth resistance, including Installation of 3Mtr GI Pipe 40mm/50mm including welding of GI flat around pipe .	No.	3,700.00	5	18,500.00
4	Dismantling of 9/8 Mtr. PCC/Joist Pole (Serviceable Pole) after digging the pit and taking out the pole, transportation and stacking the pole at a proper place in safe position within10km /site store and refilling the pit with loose earth and amming including removal and disposal of malba at proper location as per instruction of EIC.	No.	900.00	5	4,500.00
5	Dismantling of ACSR/AAAC 34/ 55mm2 from overhead line, recoiling, loading, transportation, unloading and staking at a proper place in safe position/ site store	KM	6,300.00	1.00	6,300.00
6	Dismantling of Insulator with Pin including loading, transportation, unloading and staking at a proper place in safe position/ site store.	EA	8.10	90	729.00
7	Dismantling / Removal of V Cross arm/ channel from pole including loading, transportation, unloading and staking of dismantled material at a proper place in safe position at Site Store.	EA	41.40	30	1,242.00
K				**Total Civil & Services**	**66,896.00**
L				**Total (J+K)**	**6,82,419.83**
M				Other overheads (Including 6% supervision charges) of L	-
N				**Sub Total (L+M)**	**6,82,419.83**
O				Total GST @ 18% of (N)	1,22,835.57
O1				Total CESS @ 1% of (N)	6,824.20
P				**Gross Total Material +Services (N+O+O1) for LT AB Cable Line**	**8,12,079.60**
Q				Inspection Fee of Over Head Line (LV)-Rs. 375 upto 1 KM.	375.00
R				Inspection Fee of Over Head Line (LV)- Rs. 225/ Additional Km	
S				Inspection Fee of Drawing Checking and Approval	750.00
T				**Gross Total Material, Services and Inspection Fees (P+Q+R+S)**	**8,13,204.60**

Standard Estimate for LT AB Cable Line Length with 33 Mtr. Span using - 4C×50 mm² (P)+1C×50 mm²(M)+1CX16 mm²(Street Light) (LT Network Refurbishment)					
AB Cable LT Line Length In KM with 33 Mtr. Span (Ref. Drawing No.- TPCODL-…….)			1		
MATERIALS FOR LT AB Cable Line					
Sl. No.	**Description of Materials**	**Unit**	**Unit Rate**	**Total Quantity**	**Total Amount**
1	9 Mtr. long 300 Kg. PSC Pole	No.	3,900.00	10	39,000.00
2	LT Stay set Complete	Set	676.00	5	3,380.00
3	7/12 SWG GI stay wire, Grade -2	Kg	97.50	60.0	5,850.00
4	LT stay Clamp (1.40Kg/pair)	Pair	143.00	5	715.00
5	LT Stay insulator	No.	39.00	5	195.00
6	**LT Accessories with Eye hook and Clamp**				-
6.i.	Pole clamp for EYE hook for (XLPE Aerial bunched Cable)	Pair	260.00	39	10,140.00
6.ii.	EYE hook for XLPE Aerial bunched Cable (25-70 sq.mm)	No.	78.00	18	1,404.00
6.iii.	Dead End Clamp suitable for messenger XLPE Aerial bunched Cable (25-70 sq.mm)	No.	84.50	18	1,521.00
6.iv.	Suspension Clamp with EYE hook for ABC (25-70 sq.mm)	Pair	442.00	21	9,282.00
7	4C×50 mm² (P)+1C×50 mm²(M)+1CX16 mm²(Street Light) (LT AB Cable)	Mtr.	226.00	1050.00	2,37,300.00
8	4 WAY SERVICE Distb. Box with kit kat fuse and Aluminium bus bar.	No.	2,873.00	5	14,365.00
9	8 WAY SERVICE Distb.Box with kit kat fuse and Aluminium bus bar.	No.	5,200.00	2	10,400.00
10	Insulated piercing connector.Type-A-main 50 to 150 sq.mm & Tap-50 to 150 sq.mm	No.	113.08	20	2,261.60
11	Insulated piercing connector.Type-B-main 25 to 150 sq.mm & Tap-6 to 35 sq.mm	No.	62.13	20	1,242.60
12	Insulated piercing connector.Type-C-main 16 to 95 sq.mm & Tap-1.5 to 16 sq.mm	No.	60.00	30	1,800.00
13	Insulated piercing connector.Type-D-main 10 to 50 sq.mm & Tap-1.5 to 10 sq.mm	No.	80.00	30	2,400.00
14	GI Pipe Earthing (each 5th pole to earth)	No.	1,365.00	5	6,825.00
15	Coil Earthing	No's	215.80	5	1,079.00
16	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	Kg	97.50	2.62	255.45
17	Danger plate (LT)	No	104.00	10	1,040.00
18	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 1 no's = (1x0.59x0.510)	KG	97.50	3.01	293.38
19	2C X 4sq. mm. Armoured Aluminium Cable - XLPE Insulated	Mtr.	53.81	250	13,452.50
20	2C X 10sq. mm. Armoured Aluminium Cable - XLPE Insulated	Mtr.	82.71	100	8,271.00
21	4C X 10sq. mm. Armoured Aluminium Cable - XLPE Insulated	Mtr.	100.33	200	20,066.00
22	GI barbed wire anticlimbing device 3 Kg. Per support	Kg	104.00	30.00	3,120.00
23	Back Clamp for anticlimbing device 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 4 no's = (4x0.59x0.510)	KG	97.50	12.04	1,173.51
24	GI Nut , Bolt & Washer of different sizes (0.5 Kg/ Pole)	Kg	101.40	5	507.00
25	Black Paint	Ltr	286.00	10	2,860.00
26	Yellow Colour Paint for Background	Ltr	216.00	20	4,320.00
A				**Total Cost of materials**	**4,04,519.04**
B				Stock, Storage & Insurance i.e 3% of A	12,135.57
C				**Sub Total (A+B)**	**4,16,654.61**
D				Contigency @ 3% of C	12,499.64
E				Tools & Plants @ 2% of C	8,122.87
F				Transportation @ 7.5% of C	31,249.10
G				Erection Charges @ 5% on Trf/Breaker/WPB/ H-Pole	-
H				Erection Charges @ 10% of C (except Trf/Breaker/WPB/ H-Pole/ LT Stay set/GI Pipe/PSC Pole)	35,901.07
I				Erection Charges @ 20% of PSC pole- Not to be used for 33kv	8,034.00
J				**Sum of (C to I)**	**5,12,461.28**
Civil & Services					
Sl. No.	**Description of Materials**	**Unit**	**Unit Rate**	**Total Quantity**	**Total Amount**
1	Fixing of LT Complete stay set includes 1) Turn Buckle Assembly 2) Stay Rod & Stay plate 3) Stay Insulator 4) Stay Wire. 5)Stay clamps with Nuts & bolts, including excvation, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm) using 20mm BHG metal with all labour and material (Excavation of earth will be done of size 500X500X1500 mm.)	No.	2,250.00	5	11,250.00
2	Concreting ratio 1:1.5:3 (500mmX500mmX1500mm) = 0.375Cu.mtr	Cu.mtr	6,500.00	3.75	24,375.00
3	Construction Earthing chamber including installation of earthing pipe.Making earthing chamber including excavation , soil treatment with bentonide powder , calculation of earth resistance, including Installation of 3Mtr GI Pipe 40mm/50mm including welding of GI flat around pipe .	No.	3,700.00	5	18,500.00

4	Dismantling of 9/8 Mtr. PCC/Joist Pole (Serviceable Pole) after digging the pit and taking out the pole, transportation and stacking the pole at a proper place in safe position within10km /site store and refilling the pit with loose earth and amming including removal and disposal of malba at proper location as per instruction of EIC.	No.	900.00	5	4,500.00
5	Dismantling of ACSR/AAAC 34/ 55mm2 from overhead line, recoiling, loading, transportation, unloading and staking at a proper place in safe position/ site store	KM	6,300.00	1.00	6,300.00
6	Dismantling of Insulator with Pin including loading, transportation, unloading and staking at a proper place in safe position/ site store.	EA	8.10	90	729.00
7	Dismantling / Removal of V Cross arm/ channel from pole including loading, transportation, unloading and staking of dismantled material at a proper place in safe position at Site Store.	EA	41.40	30	1,242.00
K	**Total Civil & Services**				**66,896.00**
L	**Total (J+K)**				**5,79,357.28**
M	Other overheads (Including 6% supervision charges) of L				-
N	**Sub Total (L+M)**				**5,79,357.28**
O	Total GST @ 18% of (N)				1,04,284.31
O1	Total CESS @ 1% of (N)				5,793.57
P	**Gross Total Material +Services (N+O+O1) for LT AB Cable Line**				**6,89,435.16**
Q	Inspection Fee of Over Head Line (LV)-Rs. 375 upto 1 KM.				375.00
R	Inspection Fee of Over Head Line (LV)- Rs. 225/ Additional Km				
S	Inspection Fee of Drawing Checking and Approval				750.00
T	**Gross Total Material, Services and Inspection Fees (P+Q+R+S)**				**6,90,560.16**

Standard Estimate for LT AB Cable Line Length with 33 Mtr. Span using - 4C×35 mm² (P)+1C×35 mm²(M)+1CX16 mm²(Street Light) (LT Network Refurbishment)					
AB Cable LT Line Length In KM with 33 Mtr. Span (Ref. Drawing No.- TPCODL-…….)			1		
MATERIALS FOR LT AB Cable Line					
Sl. No.	***Description of Materials***	***Unit***	***Unit Rate***	***Total Quantity***	***Total Amount***
1	9 Mtr. long 300 Kg. PSC Pole	No.	3,900.00	10	39,000.00
2	LT Stay set Complete	Set	676.00	5	3,380.00
3	7/12 SWG GI stay wire, Grade -2	Kg	97.50	60.0	5,850.00
4	LT stay Clamp (1.40Kg/pair)	Pair	143.00	5	715.00
5	LT Stay insulator	No.	39.00	5	195.00
6	**LT Accessories with Eye hook and Clamp**				-
6.i.	Pole clamp for EYE hook for (XLPE Aerial bunched Cable)	Pair	260.00	39	10,140.00
6.ii.	EYE hook for XLPE Aerial bunched Cable (25-70 sq.mm)	No.	78.00	18	1,404.00
6.iii.	Dead End Clamp suitable for messenger XLPE Aerial bunched Cable (25-70 sq.mm)	No.	84.50	18	1,521.00
6.iv.	Suspension Clamp with EYE hook for ABC (25-70 sq.mm)	Pair	442.00	21	9,282.00
7	4C×35 mm² (P)+1C×35 mm²(M)+1CX16 mm²(Street Light) (LT AB Cable)	K.M	169.00	1050.00	1,77,450.00
8	4 WAY SERVICE Distb. Box with kit kat fuse and Aluminium bus bar.	No.	2,873.00	5	14,365.00
9	8 WAY SERVICE Distb.Box with kit kat fuse and Aluminium bus bar.	No.	5,200.00	2	10,400.00
10	Insulated piercing connector.Type-B-main 25 to 150 sq.mm & Tap-6 to 35 sq.mm	No.	62.13	20	1,242.60
11	Insulated piercing connector.Type-C-main 16 to 95 sq.mm & Tap-1.5 to 16 sq.mm	No.	60.00	40	2,400.00
12	Insulated piercing connector.Type-D-main 10 to 50 sq.mm & Tap-1.5 to 10 sq.mm	No.	80.00	30	2,400.00
13	GI Pipe Earthing (each 5th pole to earth)	No.	1,365.00	5	6,825.00
14	Coil Earthing	No's	215.80	5	1,079.00
15	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	Kg	97.50	2.62	255.45
16	Danger plate (LT)	No	104.00	10	1,040.00
17	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 1 no's = (1x0.59x0.510)	KG	97.50	3.01	293.38
18	2C X 4sq. mm. Armoured Aluminium Cable - XLPE Insulated	Mtr.	53.81	250	13,452.50
19	2C X 10sq. mm. Armoured Aluminium Cable - XLPE Insulated	Mtr.	82.71	100	8,271.00
20	4C X 10sq. mm. Armoured Aluminium Cable - XLPE Insulated	Mtr.	100.33	200	20,066.00
21	GI barbed wire anticlimbing device 3 Kg. Per support	Kg	104.00	30.00	3,120.00
22	Back Clamp for anticlimbing device 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 4 no's = (4x0.59x0.510)	KG	97.50	12.04	1,173.51
23	GI Nut , Bolt & Washer of different sizes (0.5 Kg/ Pole)	Kg	101.40	5	507.00
24	Black Paint	Ltr	286.00	10	2,860.00
25	Yellow Colour Paint for Background	Ltr	216.00	20	4,320.00
A				**Total Cost of materials**	**3,43,007.44**
B				Stock, Storage & Insurance i.e 3% of A	10,290.22
C				**Sub Total (A+B)**	**3,53,297.66**
D				Contigency @ 3% of C	10,598.93
E				Tools & Plants @ 2% of C	6,716.47
F				Transportation @ 7.5% of C	26,497.32
G				Erection Charges @ 5% on Trf/Breaker/WPB/ H-Pole	-
H				Erection Charges @ 10% of C (except Trf/Breaker/WPB/ H-Pole/ LT Stay set/GI Pipe/PSC Pole)	29,565.37
I				Erection Charges @ 20% of PSC pole- Not to be used for 33kv	8,034.00
J				**Sum of (C to I)**	**4,34,709.76**
Civil & Services					
Sl. No.	***Description of Materials***	***Unit***	***Unit Rate***	***Total Quantity***	***Total Amount***
1	Fixing of LT Complete stay set includes 1) Turn Buckle Assembly 2) Stay Rod & Stay plate 3) Stay Insulator 4) Stay Wire. 5)Stay clamps with Nuts & bolts, including excvation, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm) using 20mm BHG metal with all labour and material (Excavation of earth will be done of size 500X500X1500 mm.)	No.	2,250.00	5	11,250.00

2	Concreting ratio 1:1.5:3 (500mmX500mmX1500mm) = 0.375Cu.mtr	Cu.mtr	6,500.00	3.75	24,375.00
3	Construction Earthing chamber including installation of earthing pipe.Making earthing chamber including excavation , soil treatment with bentonide powder , calculation of earth resistance, including Installation of 3Mtr GI Pipe 40mm/50mm including welding of GI flat around pipe .	No.	3,700.00	5	18,500.00
4	Dismantling of 9/8 Mtr. PCC/Joist Pole (Serviceable Pole) after digging the pit and taking out the pole, transportation and stacking the pole at a proper place in safe position within10km /site store and refilling the pit with loose earth and amming including removal and disposal of malba at proper location as per instruction of EIC.	No.	900.00	5	4,500.00
5	Dismantling of ACSR/AAAC 34/ 55mm2 from overhead line, recoiling, loading, transportation, unloading and staking at a proper place in safe position/ site store	KM	6,300.00	1.00	6,300.00
6	Dismantling of Insulator with Pin including loading, transportation, unloading and staking at a proper place in safe position/ site store.	EA	8.10	90	729.00
7	Dismantling / Removal of V Cross arm/ channel from pole including loading, transportation, unloading and staking of dismantled material at a proper place in safe position at Site Store.	EA	41.40	30	1,242.00
K	**Total Civil & Services**				**66,896.00**
L	**Total (J+K)**				**5,01,605.76**
M	Other overheads (Including 6% supervision charges) of L				-
N	**Sub Total (L+M)**				**5,01,605.76**
O	Total GST @ 18% of (N)				90,289.04
O1	Total CESS @ 1% of (N)				5,016.06
P	**Gross Total Material +Services (N+O+O1) for LT AB Cable Line**				**5,96,910.85**
Q	Inspection Fee of Over Head Line (LV)-Rs. 375 upto 1 KM.				375.00
R	Inspection Fee of Over Head Line (LV)- Rs. 225/ Additional Km				
S	Inspection Fee of Drawing Checking and Approval				750.00
T	**Gross Total Material, Services and Inspection Fees (P+Q+R+S)**				**5,98,035.85**

Standard Estimate for LT AB Cable Line Length with 33 Mtr. Span using - 2X35 + 1X35 (LT Network Refurbishment)					
AB Cable LT Line Length In KM with 33 Mtr. Span (Ref. Drawing No.- TPCODL-…….)			1		
MATERIALS FOR LT AB Cable Line					
Sl. No.	***Description of Materials***	***Unit***	***Unit Rate***	***Total Quantity***	***Total Amount***
1	9 Mtr. long 300 Kg. PSC Pole	No.	3,900.00	10	39,000.00
2	LT Stay set Complete	Set	676.00	5	3,380.00
3	7/12 SWG GI stay wire, Grade -2	Kg	97.50	60.0	5,850.00
4	LT stay Clamp (1.40Kg/pair)	Pair	143.00	5	715.00
5	LT Stay insulator	No.	39.00	5	195.00
6	**LT Accessories with Eye hook and Clamp**				-
6.i.	Pole clamp for EYE hook for (XLPE Aerial bunched Cable)	Pair	260.00	39	10,140.00
6.ii.	EYE hook for XLPE Aerial bunched Cable (25-70 sq.mm)	No.	78.00	18	1,404.00
6.iii.	Dead End Clamp suitable for messenger XLPE Aerial bunched Cable (25-70 sq.mm)	No.	84.50	18	1,521.00
6.iv.	Suspension Clamp with EYE hook for ABC (25-70 sq.mm)	Pair	442.00	21	9,282.00
7	2X35 + 1X35 (LT AB Cable)	Mtr.	85.14	1050.00	89,397.00
8	4 WAY SERVICE Distb. Box with kit kat fuse and Aluminium bus bar.	No.	2,873.00	5	14,365.00
9	8 WAY SERVICE Distb.Box with kit kat fuse and Aluminium bus bar.	No.	5,200.00	2	10,400.00
10	Insulated piercing connector.Type-B-main 25 to 150 sq.mm & Tap-6 to 35 sq.mm	No.	62.13	15	931.95
11	Insulated piercing connector.Type-C-main 16 to 95 sq.mm & Tap-1.5 to 16 sq.mm	No.	60.00	15	900.00
12	Insulated piercing connector.Type-D-main 10 to 50 sq.mm & Tap-1.5 to 10 sq.mm	No.	80.00	15	1,200.00
13	GI Pipe Earthing (each 5th pole to earth)	No.	1,365.00	5	6,825.00
14	Coil Earthing	No's	215.80	5	1,079.00
15	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	Kg	97.50	2.62	255.45
16	Danger plate (LT)	No	104.00	10	1,040.00
17	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 1 no's = (1x0.59x0.510)	KG	97.50	3.01	293.38
18	2C X 4sq. mm. Armoured Aluminium Cable - XLPE Insulated	Mtr.	53.81	250	13,452.50
19	2C X 10sq. mm. Armoured Aluminium Cable - XLPE Insulated	Mtr.	82.71	100	8,271.00
20	4C X 10sq. mm. Armoured Aluminium Cable - XLPE Insulated	Mtr.	100.33		-
21	GI barbed wire anticlimbing device 3 Kg. Per support	Kg	104.00	30.00	3,120.00
22	Back Clamp for anticlimbing device 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 4 no's = (4x0.59x0.510)	KG	97.50	12.04	1,173.51
23	GI Nut , Bolt & Washer of different sizes (0.5 Kg/ Pole)	Kg	101.40	5	507.00
24	Black Paint	Ltr	286.00	10	2,860.00
25	Yellow Colour Paint for Background	Ltr	216.00	20	4,320.00
A				**Total Cost of materials**	**2,31,877.79**
B				Stock, Storage & Insurance i.e 3% of A	6,956.33
C				**Sub Total (A+B)**	**2,38,834.12**
D				Contigency @ 3% of C	7,165.02
E				Tools & Plants @ 2% of C	4,427.20
F				Transportation @ 7.5% of C	17,912.56
G				Erection Charges @ 5% on Trf/Breaker/WPB/ H-Pole	-
H				Erection Charges @ 10% of C (except Trf/Breaker/WPB/ H-Pole/ LT Stay set/GI Pipe/PSC Pole)	18,119.02
I				Erection Charges @ 20% of PSC pole- Not to be used for 33kv	8,034.00
J				**Sum of (C to I)**	**2,94,491.92**
Civil & Services					
Sl. No.	***Description of Materials***	***Unit***	***Unit Rate***	***Total Quantity***	***Total Amount***

1	Fixing of LT Complete stay set includes 1) Turn Buckle Assembly 2) Stay Rod & Stay plate 3) Stay Insulator 4) Stay Wire. 5)Stay clamps with Nuts & bolts, including excvation, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm) using 20mm BHG metal with all labour and material (Excavation of earth will be done of size 500X500X1500 mm.)	No.	2,250.00	5	11,250.00
2	Concreting ratio 1:1.5:3 (500mmX500mmX1500mm) = 0.375Cu.mtr	Cu.mtr	6,500.00	3.75	24,375.00
3	Construction Earthing chamber including installation of earthing pipe.Making earthing chamber including excavation , soil treatment with bentonide powder , calculation of earth resistance, including Installation of 3Mtr GI Pipe 40mm/50mm including welding of GI flat around pipe .	No.	3,700.00	5	18,500.00
4	Dismantling of 9/8 Mtr. PCC/Joist Pole (Serviceable Pole) after digging the pit and taking out the pole, transportation and stacking the pole at a proper place in safe position within10km /site store and refilling the pit with loose earth and amming including removal and disposal of malba at proper location as per instruction of EIC.	No.	900.00	5	4,500.00
5	Dismantling of ACSR/AAAC 34/ 55mm2 from overhead line, recoiling, loading, transportation, unloading and staking at a proper place in safe position/ site store	KM	6,300.00	1.00	6,300.00
6	Dismantling of Insulator with Pin including loading, transportation, unloading and staking at a proper place in safe position/ site store.	EA	8.10	90	729.00
7	Dismantling / Removal of V Cross arm/ channel from pole including loading, transportation, unloading and staking of dismantled material at a proper place in safe position at Site Store.	EA	41.40	30	1,242.00
K				**Total Civil & Services**	**66,896.00**
L				**Total (J+K)**	3,61,387.92
M				Other overheads (Including 6% supervision charges) of L	-
N				**Sub Total (L+M)**	**3,61,387.92**
O				Total GST @ 18% of (N)	65,049.83
O1				Total CESS @ 1% of (N)	3,613.88
P				**Gross Total Material +Services (N+O+O1) for LT AB Cable Line**	**4,30,051.63**
Q				Inspection Fee of Over Head Line (LV)-Rs. 375 upto 1 KM.	375.00
R				Inspection Fee of Over Head Line (LV)- Rs. 225/ Additional Km	
S				Inspection Fee of Drawing Checking and Approval	750.00
T				**Gross Total Material, Services and Inspection Fees (P+Q+R+S)**	**4,31,176.63**