THE U.P. ELECTRICITY REGULATORY COMMISSION



COST DATA BOOK FOR RECOVERY OF EXPENSES & OTHER CHARGES FROM PROSPECTIVE CONSUMERS FOR TAKING ELECTRIC SUPPLY

(APPLICABLE TO ALL LICENSEES IN UP STATE)

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CHAPTER 1

STATEMENT OF OBJECTS AND REASONS

- 1- Section 42 of the Electricity Act 2003 provides that a distribution licensee shall develop and maintain an efficient, co-coordinated and economical distribution system in his area of supply and supply electricity in accordance with the provisions of the Act.
- 2- Section 46 of the Electricity Act 2003 provides that the State Commission may, by regulations, authorize a distribution licensee to charge from a person requiring a supply of electricity in pursuance of Section 43, any expenses reasonably incurred in providing any electric Line or electrical plant for the purpose of giving that supply.
- 3- Section 47 of the Electricity Act 2003 provides that subject to the provisions of this section, a distribution licensee may require any person, who requires a supply of electricity in pursuance of Section 43, to give him reasonable security, as may be determined by regulations, for the payment to him of all monies which may become due to him
 - (a) In respect of electricity supplied to such person, or
 - (b) Where any electric Line or electrical plant or electric meter is to be provided for supplying electricity in respect of the provision of such Line or plant or meter.
- The U.P. Electricity Regulatory Commission has notified Electricity Supply Code 2005 and the third amendment was notified on 14-09-06. It has the following provisions:
 - (i) Clause 4.2 of the Code enjoins upon a distribution licensee an obligation to extend the distribution system. The cost of such strengthening and up gradation of the system to meet the enhanced demand of existing consumers as well as future growth, being recovered from the consumers through tariff.
 - (ii) Clause 4.6 of the Electricity Supply Code 2005 provides that,
 - (b) the estimate (for release of new connection) shall include security deposit, charges of laying Line, distribution mains (if required) and material, and system loading charges etc. as determined by the licensee with the approval of the Commission once in two years.

- (d) The above estimate shall be based on Rs/kW (or Rs/kVA) of the sanctioned / contracted load, or on Rs. per installation for specific bands of contractual load applied or sanctioned load at each voltage level up to 33kV voltage on which supply is to be given. Beyond 33 kV voltage level, the charges for laying shall be based on actual estimates of the licensees.
- (iii) Clause 4.11, 4.41, 4.42, 4.44 and 4.45 (B) provide for determination of fee for Tatkal temporary connection, processing charge for load reduction and load enhancement, fee for mutation of names and shifting charges with the approval of Electricity Regulatory Commission.
- (iv) Clause 4.20 of the Code governs the incidence and modalities of security amount deposited by consumer.
- 5. Specific words and expressions carry the meaning assigned to them in the Electricity Act and /or the Electricity Supply Code.
- 6. There will be one structure of charges for all the Distribution Licensees under UPERC. However, it shall not be applicable for the employees and pensioners of the licensees.
- 7. The total charges payable by an applicant shall comprise of Processing Fee, Security, System Loading Charge and Line Charge. All the four components shall be clearly and separately mentioned in the Estimate and Receipts issued by the Licensee to the applicants.
- 8. Electro-mechanical meters may be installed in villages for domestic and non-domestic consumers having load upto 2 kW only, however, licensees may install electronic meters if consumer opts for the same and has paid the cost.
- 9. Presently, the licensees are charging a part of the expenditure incurred or to be incurred to upgrade its system of supply from the applicants of new connection/ enhancement load as System Loading Charges, and also recovering a part of it from consumers through tariff. Analysis of this charge is given in **Annexure 1**.
- 10. Reasonability and analysis of Security Amount is being enclosed at **Annexure 2**. Details of Line Charges is enclosed as **Annexure-3 to 23**.
- 11. For conversion from H.P. to kW and from kVA to kW and vice versa, a factor of 0.746 and 0.90 respectively shall be taken, wherever necessary.

<u>CHAPTER 2</u> <u>PROCESSING FEE</u>

Sl.No.	Description	Processing Fee per connection in Rs.
1	Load upto 1 kW	50
2	Load above 1 kW less than 5 kW	100
3	5 kW or more upto 50 kW / 56 kVA	200
4	Above 56 kVA upto 3000 kVA	1,000
5	Above 3000 kVA upto 10000 kVA	5,000
6	Above 10000 kVA	10,000

NOTE:

- 1. The processing fee shall be non-refundable and non-adjustable.
- 2. This fee shall be applicable for new connection, Tatkal temporary connection, temporary connection, reduction and enhancement of load (depending on the final load), mutation of names and shifting of connection.
- 3. This will be applicable for all the categories of prospective/ existing consumers.

CHAPTER 3

SECURITY

(Refer Annexure 2)

Sl.No.	Description	Security in Rs.
1	Domestic Light & Fan	300/ kW
2	Private Tube well	300/KW
3	Non-Domestic Light and Fan, Light and Fan for Public and Private Institution.	800/kW
4	Small and Medium Power, State Tube well, Panchayatiraj Tube wells, Pumped Canals.	800/KW
5	Large and Heavy Power, Public Waterworks, Railway Traction and Public Lighting.	1000/kVA

Note:-

- 1. Initial security at above rates is payable per kW/H.P/kVA or part thereof as the case may be.
- 2. No security will be charged if the connection is given / to be given through prepaid meters.
- 4. No security will be charged from departmental consumers, if electricity bill is deducted from salary/ pension.
- 5. 25% higher amount of security will be charged from temporary connection of the respective category considering actual period of connection and expected amount of bill.
- 6. In case of enhancement of load, additional security will be charged on incremental load as per provisions of the Code.
- 7. The security may be adjusted against any outstanding bill and refunded after permanent disconnection.
- 8. The security may be enhanced or reduced subsequently as per provisions of the Electricity Supply Code.
- 9. Interest on security shall be paid by the licensee to the consumers as per bank rate prescribed by the R.B.I. (Refer Clause 4.20(i) of the Code 2005).

CHAPTER 4 SYSTEM LOADING CHARGES

Sl.No.	Description	Amount (in Rs.)
1	Load upto 1 kW	150/kW
2	Load above 1 kW less than 5 kW	200/kW
3	5 kW or more upto 50 kW/ 56 kVA	300/kW
4	Above 56 kVA upto 10,000 kVA	1,000/kVA
5	Above 10,000 kVA	300/kVA subject to maximum
		limit of Rs. 30 lac

Note:

- 1- No system loading charge will be charged from temporary connection.
- 2- No system loading charge will be charged from builder or promoters who develop Multistoried building or colony. However, it will be charged at the time of release of connection at single point or multipoint, as the case may be, from the applicant.
- 3- System loading charges will be charged from all the category of consumers.
- 4- In case of enhancement of load, SLC will be charged for the difference of load and under the slab the difference of load falls.

CHAPTER 5

LINE CHARGES

SL. No	Description	Fixed Charge per coup to 40 meter in Rs.)	`	Variable Line Charge b	peyond 40 meter. (in	Rs.)
1	2	3		4		
1.0	Private Tube well and Pumping set	Consumer does not provide meter	34,000 (Annex-3)			
		Consumer provide meter.	29,000 (Annex-3)	150 per Meter (Annex-3)		
2.0	In villages and having load upto 2 kW for domestic and non-domestic Light and Fan (including cost of meter)	55 (Ann		For Line above 40 meter, charges mentioned at 3.0 will 1 applicable.		ned at 3.0 will be
3.0	Load below 5 kW but not covered under 2.0 above.	Consumer does not provide meter Consumer provide	1300 (Annex-5) 300 (Annex-5)	For District HQ For area other than	600 per Meter 200 per Meter	(Annex-12)
4.0	Y 1517Y 0417Y	meter	,	District HQ.	•	
4.0	Load 5kW to 24 kW.	Consumer does not provide meter	7000 (Annex-6)	For District HQ.	800 per Meter	(Annex-12)
		Consumer provide meter	2000 (Annex-6)	For area other than District HQ.	400 per Meter	(Annex-13)

SL. No	Description	Fixed Charge per c up to 40 meter in Rs.	`	Variable Line Charge beyond 40 meter.(in Rs.)		
1	2	3	i		4	
5.0	Load above 24 kW upto 50 kW.	Metering equipment provided by the	15000 (4	For District HQ.	800 per Meter	(Annex-12)
		licensee	15000 (Annex-7)	For area other than District HQ.	400 per Meter	(Annex-13)
6.0	Load above 50 kW/56 KVA up to 200KVA	Line installed by the licensee	1,56,000(Annex- 7A)	A. For Over Head Line in District HQ	750 per Meter	(Annex-15)
	-			B. For Over Head Line in area other than District HQ.	200 per Meter	(Annex-15)
				C. For Underground Line	2200 per Meter	(Annex-16)
		Line installed by the consumer	86,000(Annex-7A)	15% of the amount calculated at serial No. A, B, C above.		, B, C above.
7.0	Load above 200 KVA up to 1MVA	Line installed by the licensee		A. For Over Head Line in District HQ	750 per Meter	(Annex-15)
			2,15,000 (Annex-8)	B. For Over Head Line in area other than District HQ.	200 per Meter	(Annex-15)
				C. For Underground Line	2200 per Meter	(Annex-16)
		Line installed by the consumer	95,000 (Annex-8)	15% of the amount calcu	lated at serial No. A	, B, C above.

SL. No	Description	Fixed Charge per connection (for Line up to 40 meter in Rs.)		ne Variable Line Charge beyond 40 meter.(in Rs.)		Rs.)
1	2	3	3		4	
8.0	Load above 1MVA upto 3MVA	Line installed by the	2,36,000 (Annex-9)	A. For Over Head Line in District HQ.B. For Over Head Line	•	(Annex-15)
		licensee		in area other than District HQ.	1	,
				C. For Underground Line	2200 per Meter	(Annex-16)
		Line installed by the consumer 98,000 (Annex-9)		15% of the amount calculated at serial No. A, B, C above.		B, C above.

SL. No	Description	Fixed Charge per c up to 40 meter in Rs.	•	Variable Line Charge beyond 40 meter. (in Rs.)		
1	2	3	}		4	
9.0	Load above 3 MVA upto 4 MVA	Line installed by the licensee	4,68,000 (Annex-10)	A. For Over Head Line in District HQ	1000 per Meter	(Annex-21)
				B. For Over Head Line in area other than District HQ.	425 per Meter	(Annex-21)
				C. For Underground Line	2600 per Meter	(Annex-16)
		Line installed by the consumer	2,86,000 (Annex-10)	15% of the amount calcu	lated at serial No. A, B	, C above.
10.0	Load above 4MVA upto 10 MVA	Line installed by the licensee	4,65,000	A. For Over Head Line in District HQ	1000 per Meter	(Annex-21)
			(Annex-11)	B. For Over Head Line in area other than District HQ.	425 per Meter	(Annex-21)
				C. For Underground Line	4350 per Meter	(Annex-22)
		Line installed by the consumer	2,22,000 (Annex-11)	08% of the amount calcu	lated at serial No. A, B	, C above.
11.0	Load above 10 MVA	As per actual estimate. If Line installed by the consumer, 5% of the cost of Line installation and full cost of metering system shall be charged.				

NOTE:

- 1- Cable shall be provided by the consumer for load upto 50 kW as per actual requirement, subject to maximum limit of 50 meters. In case the applicant's premises is beyond 40 meters, the licensee shall erect additional poles and charges shall be recovered from consumer under variable line charges for additional length beyond 40 meter.
- 2- Meter board shall be provided by the consumer for load upto 24 kW.
- 3- The consumer has option to provide meter upto load of 24 kW. Above 24 kW load C.T, P.T. connected meters and metering cubical will be installed by the licensee.
- 4- The schedule of charges is based upto a cut off point of supply i.e meter, where the costs will form part of the estimate as defined in clause 2-2 (qq) of the Supply Code. Installation beyond the point of supply, shall be installed and maintained solely by the consumer.
- 5- In case of enhancement of load, Labour & Overhead Charge shall be charged as below:-
 - A If the load is in the same band of load as Nil mentioned in the above table.
 - B If the load is in the higher band of load. Labour & Overhead Charge for higher load.
- 6- In case of shifting of connection, Line charge will be charged as per above schedule based on the additional length of Line along with actual cost of dismantling.
- 7- For giving connection on 11 kV independent feeder, Rs. 4.46 lacs in urban area and Rs. 4.21 lacs in rural area will be additionally charged for the cost of circuit breaker and double pole.
- 8- For giving connection on 33 kV independent feeders, Rs. 20.24 lacs shall be additionally charged for bay and circuit breaker.
- 9- 40 Meter Line will be aerial distance between last pole of distribution mains and bracket/ rag bolt at consumer end. Beyond 40 meter length of Line, the licensee shall bear cost of Line in multiple of 40 meters for a group of 5 consumers provided all the charges for new connection is paid.
- 10- Additional length of Line will be the shortest route distance between the nearest available distribution mains and the last pole/point near consumer's premise. Required up gradation of the nearest available distribution mains is responsibility of the supplier and nothing shall be charged for this purpose. Fraction of meter shall be ignored in measuring length of Line.
- 11- Line charge for temporary connection will be charged as per above schedule subject to adjustment of the cost of able material received back after deducting 10% depreciation.

- 12- The licensee shall not charge processing fee, Line charge and security from its permanent employees and pensioners for one connection during their period or on retirement.
- 13- In case the applicant withdraws his application after making payment of Line charge and no work has been undertaken, the Line charge shall be refunded as under.

15 days from the date of deposit = 75%
30 days from the date of deposit = 50%
60 days from the date of deposit = 25%
After 60 days the date of deposit = Nil.

- 14- Cost of Railway crossing shall be charged as per actual expenses wherever applicable.
- 15- The above schedule of rates is based on Lines constructed on Steel Tubular Pole in District Headquarter and P.C.C. Pole in area other than District Headquarter. Construction work will be undertaken accordingly.
- 16- If required, double metering arrangement may be done by the licensee at their own cost and security.
- 17- Concreting material (brick ballast, sand, cement) and labour shall be provided for the P.T.W. connection and actual requirement shall be communicated to the consumer while offering Terms and Conditions.
- 18- An applicant may install his Line and transformer for load below 50 kW if he opts to take connection on 11kV. In such case, 15% supervision charge shall be charged on Line charge for the respective category. Metering shall be done on LT side and billing will be done at LT tariff.
- 19- Consumers having load above 1 MVA may opt for connection at 33kV.
- 20- Any subsidy for PTW consumers in respect of new connection shall be deducted from Line Charge.

Analysis of Expenditure on System Upgradation

The prevailing orders for system loading charges were issued by the UPPCL on 01.01.2005. The charges vary from Rs. 150/- to Rs. 800/kVA for L.T. consumers, Rs. 858/kVA for 11kV and 33 kV consumers and Rs. 286/kVA with maximum limit of Rs 28.60 lacs for 132 kV.

Up gradation of system includes the following:

- (A) Construction /increasing capacity of distribution substation, secondary substation and primary substation.
- (B) Strengthening construction of L.T., 11kV, 33kV, 132 kV and 220kV Lines.

A. (i) L.T. Substations.

Cost of substation with Double Pole of S.T.P (Based on stock issue rates of RESSPO of UPPCL).

Capacity		Cost in Rs.		
	25 kVA	99,200		
	63 kVA	1,56,400		
	100kVA	1,84,400		
	250kVA	2,84,000		
Total	438kVA	7,24,000		

Cost Per kVA 7, 24,000/438 =**Rs.1652/kVA**

(ii) Secondary Substation:-

	Capacity	Cost of substation (Rs. Lac)
	3MVA	133.382
	5MVA	162.867
	8MVA	178.900
	10 MVA	198.072
Total	26 MVA	673.221
Cost Per kVA		67322100/26000= Rs 2589kVA

(iii) Primary Substation

	Capacity	Cost (Rs. Lac)
	20MVA	250Lac
	40MVA	390 Lac
	63 MVA	500Lac
Total	123 MVA	1140 Lac

Cost Per kVA 11, 40, 00,000/123000 =Rs. 926/kVA

Total cost of per kVA capacity addition from primary to L.T. is Rs.1652 + 2589 + 1140 = Rs. 5381/- per kVA. In addition to this, there will be expenditure on Lines too. Taking equal amount for Lines from 132kV to LT, total expenditure per kVA will be Rs. 5381*2 = Rs.10762

Hence charges for system enhancement proposed in Cost Date Book as System Loading Charge Rs 150/- at lowest level to Rs. 1000/-kVA maximum is only a small part of total expenditure and hence justified. Though the liability of the licensee in respect of strengthening of system decreases on higher voltage but for social reasons, the rates of System Loading Charge are higher at higher voltage to cross-subsidize the consumers having lower load which shall be phased out in future.

DETERMINATION OF SECURITY AMOUNT

Section 4.20 of the Electricity Supply Code 2005 provides that a security deposit to cover the estimated power consumption for two months shall be made by all consumer/applicant. Sample calculation based on metered tariff (at December 2004 tariff), is given below on assumptions prescribed by the Commission as far as possible.

A. Domestic Light Fan

Present security rate - Rs. 300/kW Assumed load - 5 kw Load Factor - 0.3

Monthly Consumption - 5 x 0.3 x 14 x 30

= 630 units.

(a) For rural area

Monthly bill - $15 \times 5 + 630 \times 1$

= 705

Bi-monthly bill/kW = $705 \times 2/5$

= Rs. 282/-

(b) For urban area.

Monthly bill $-50 \times 5 + (70 \times 1.90)$

 $+(630-70) \times 3.0$

= Rs. 2063.

Bi-monthly bill per kW = $2063 \times 2/5$

= Rs. 825

In view of poor infrastructure for recovery of dues in villages and constraints to not increase security, rates for both rural and urban area are being taken as Rs. 300/- per kW.

B. Non Domestic Light & Fan.

Present rate - Rs. 300/kW

Assumed load - 5 kW Load Factor - 0.5

Monthly consumption - $5 \times 0.5 \times 20 \times 30$

= 1500 units.

Monthly Bill - $5 \times 80 + 1500 \times 3.90$

= Rs.6250

Bi- monthly bill/ kW = $6250 \times 2/5$

= Rs. 2500

Proposal of **Rs. 800/kw** by the licensees is well with in limit with scope of increase in future.

C. P.T.W.

Present rates - Rs 200/H.P.
Assumed load - 5 H.P.
Load Factor - 0.5

Monthly Consumption - $5 \times 0.746 \times 0.5 \times 14 \times 30$

=. 780 units

Monthly bill - $5 \times 15 + 780 \times 0.75$

= Rs. 660

Bi- monthly bill /H.P. $= 660 \times 2/5$

= Rs. 264

Security of Rs. 300/B.H.P. is justified.

D. Public Lighting

Present rate - Rs. 1000/kw

Bi-monthly bill per kW - For Gram Panchayat-Rs1300 - For Nagar Palika -Rs 1550

For Nagar Nigam–Rs 1700

Security of **Rs. 1000/kW** is justified.

E. Small and Medium Power

Present rate Rs. 300/H.P. or 2 x 290 (Rs. 580/H.P.) whichever is higher.

Assumed load - 10 H.P. Load Factor - 0.5

Monthly consumption - $10 \times 0.746 \times 0.5 \times 10 \times 30$

= 1120 Units.

Monthly bill = $10 \times 60 + 1120 \times 3.90$

= Rs. 4968

Bi-monthly/BHP = $4968 \times 2/10$

= Rs.994

Security of **Rs. 800/H.P**. is reasonable with scope of increase in future.

F. State Tube Wells.

Present Rate - Rs. 300/H.P.

Monthly Bill - Rs. 500/H.P.

Bi-monthly bill - Rs. 1000/H.P.

Hence security of Rs. 1000/ H.P. is justified.

G. Large & Heavy Power

Present Rate - Rs. 300 or 850/ kVA

- 100kw (111 kVA at 0.9 P.F.)

Load Factor - 0.5

Monthly consumption = $100 \times 0.5 \times 10 \times 30$

= 15000 units

Monthly bill - $180 \times 111 + 15000 \times 3.5$

= 72480

Bi-monthly bill/kVA = Rs.1306

In view of present rates, security of Rs. 1000/kVA is reasonable with scope of increase in future.

H. Public Water Works

Present Rates - Rs. 1000/kw

Assumed Load - 10kw Load factor - 0.5

Monthly consumption - $10 \times 0.5 \times 24 \times 30$

= 3600 units.

Monthly bill $- 10 \times 75 + 3600 \times 3.25$

= 12450

Bi-monthly bill/kw = $12450 \times 2/10$

= 2490 say 2500/-

Proposed security rates of Rs. 1000/kVA is justified with scope of increase in future.

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I. Railway Traction

Present Rate Rs 300/H.P. or 850/kVA which ever is higher

Load Factor - 0.5

Monthly consumption - $100 \times 0.9 \times 0.5 \times 24 \times 30$

= 32400units.

Monthly bill $- 100 \times 170 + 32400 \times 3.35$

- Rs.125540

Bi- monthly/kVA - 125540 X 2/100=Rs. 2510

Security of **Rs. 1000/kVA** is reasonable with scope of increase in future.

Line Charge For Private Tube well and Pump Sets

A.	Fixed	Fixed charge per connection for Line upto 40 meter and metering.						
	(I)	Consumer does not provide meter -		Rs. 7000/-				
		(As per Annexure-6)						
	(II)	Consumer provide meter						
		(As per Annexure-6)		Rs. 2000/-				
В.	Fixed	d charge per connection for transformer	r.					
		Cost of 25 kVA s/s on P.C.C. Pole		Rs. 95,376				
		(As per Annexure-23)						
		Cost of concreting of pole	(-)	Rs.752				
		(As per Annexure-23)						
		Cost of Concreting of stays	(-)	Rs. 306				
		(As per Annexure -23)		D 42 022				
		Labour Cost	(-)	Rs.13, 823				
		Cost of 25 kVA s/s excluding		Rs. 80,495				
		Cost of concreting and labour						
		Assuming 3 connections on one		Rs. 26,831				
		25 kVA sub-station, cost per connection	า	13. 20,031				
		25 KV/1 Sub-Station, cost per connection	1					
C.	Tota	l fixed charge (A+B)						
C.	(a)	Consumer does not provide meter						
	(4)	= 7000 + 26831 = 33831 say Rs. 34,0						
	(b)	•						
	(-)	= 2000 + 26,831	= 28831	say Rs. 29,000				
D.	Vari	able charge						
		Cost of 1 km 11 kV Line on P.C.C. Pole	e	1, 80,656				
		(Annexure-15)						
		Cost of concreting of poles	(-)	1504				
		(Annexure - 15)						
		Cost of concreting of stay (Annexure-23	3) (-)	306				
		Labour charge (Annexure-23)	(-)	26,191				
		Cost of 1 km Line excluding cost of						
		Concreting and labour charge		1, 52,655				
	Cost	of 1 meter Line 15	52.6	say Rs. 150/-				

ANNEXURE- 4

Fixed Line Charge for domestic & non-domestic connections in villages Load Upto 2 kW

S. No	Particulars	Unit	Rate	Qty.	Amt. (Rs.)
1	2	3	4	5	6
1	2 x 4 mm PVC Cable with catenary arrangement	Mtr.	40	50	2000
2	1Ph- 2 W Electro-mechanical Meter with meter box	Nos.	250	1	250
3	Labour & overhead charges	L.S.	300	1	300
4	Total				2550
	N.B:- 1. Cable shall be provide	ed by con	sumer.		

Amount chargeable to consumer -2550 - 2000 = Rs.550

Fixed Line Charge Load below 5 kW

S. No	Particulars	Unit	Rate	Qty.	Amt. (Rs.)
1	2	3	4	5	6
1	2 x 6 mm PVC Cable with catenary arrangement	Mtr.	58	50	2900
2	1Ph- 2 W Electro-static Meter with meter box	Nos.	1000	1	1000
3	Labour & overhead charges	L.S.	300	1	300
4	Total				4200
	N.B:- 1. Cable shall be provide 2. Meter may be provide 3. Where electromechani per Annex 4 shall be tak	d by the dical meter	consumer		

Amount chargeable to Consumer

(A) Meter provided by licensee = 4200 - 2900 = Rs. 1300/-

(B) Meter provided by consumer = 4200 - 2900 - 1000 = Rs. 300/-

ANNEXURE - 6

Fixed Line Charge Load 5 kW or more upto 24 kw.(including PTW connection 5 HP and above)

S. No.	Particulars	Unit	Rate	Qty.	Amt. (Rs.)		
1	2	3	4	5	6		
1	4 x 25 mm Armoured PVC cable with catenary arrangement	Mtr.	200	50	10000		
2	3 Ph - 4 W static meter 30-60 A. with meter box	Nos.	5000	1	5000		
3	Labour & overhead charges	L.S.	2000	1	2000		
4	Total				17000		
	N.B:- 1.Cable shall be provided by consumer.						
	2. Meter may be provided by the cons	sumer or l	icensee.				

Amount chargeable to consumer:

(A) Meter provided by licensee 17000 - 10,000 = Rs.7000

(B) Meter provided by consumer 17000 - 10,000 - 5000 = Rs. 2000

Fixed Line Charge Load above 24 kW upto 50 kW

S.No	Particulars	Unit	Rate	Qty.	Amt. (Rs.)
1	2	3	4	5	6
1	3.5 x 35 mm Armoured PVC Cable with catenary arrangement	Mtr.	300	50	15000
2	3 Ph - 4 W Static meter TVM with metering cubicle.	Nos.	12000	1	12000
3	Labour & Overhead charges	L.S.	3000	1	3000
4	Total				30000
	N.B:- 1. Cable shall be provided by consumer.				

 $\textbf{Amount chargeable to consumer-}\ 30000\text{--}15000\text{=-}15,\!000\ /\text{--}$

Fixed Line Charge Load above 50 kW/ 56 kVA upto 200 kVA

Sl.No.	Particulars	Unit	Rate	Qty.	Amt. (Rs.)
1	2	3	4	5	6
A	Service Line Installation				
1	3 x 70 mm 11 KV XLPE Cable	Mtr.	600	50	30000
2	O/D Cable Jointing Kit suitable for 3x120 mm XLPE Cable	Nos.	10000	1	10000
3	GI Pipe with Clamp 6" dia	Mtr.	700	8	5600
4	Earthing	Nos.	360	4	1440
5	Stay Set	Nos.	794	4	3176
6	ACSR Dog Conductor	Mtr.	68	60	4080
7	11 KV Pin Insulator	Nos.	35	6	210
8	11 KV Pin		65	6	390
9	11 KV Disc Insulator 45 KN with fitting	Nos.	415	3	1245
10	Top Channel M.S. 100x50x2240 mm		860	1	860
11	Droper Channel M.S. 100x50x2000 mm	Nos.	770	1	770
12	PCC Pole 8.5 Mtr	Nos.	1754	2	3508
13	Concreting of Pole	Nos.	617	2	1234
14	Sub Total				62513
15	Labour and Overhead charge			1	20000
16	Sub Total service line Installation				82513
В	Metering system				
17	3 Ph - 4 W Static meter TVM 11 KV	Nos.	12000	1	12000
18	11 KV Pilfer proof metering cubicle	Nos.	43125	1	43125
19	Sub Total				55125
20	Labour and Overhead charge				18400
21	Sub Total metering system				73525
22	Total metering +service line installation				156038
	N.B:- 1. Meter & metering Cubicle shall be p 2. If service line is installed by consum installation and cost of metering syster	er, 15%	of cost of	of service	line

Amount chargeable to consumer:

(A) Line installed by Licensee: Rs.156038 say Rs. 1,56,000

(B) Line installed by consumer: Rs. 82513*0.15 + 73525 = 85902 say Rs. 86,000

Fixed Line Charge Load above 200KVA upto 1 MVA

Sl.No.	Particulars	Unit	Rate	Qty.	Amt. (Rs.)
1	2	3	4	5	6
A	Service Line Installation				
1	3 x 120 mm 11 KV XLPE Cable	Mtr.	920	50	46000
2	O/D Cable Jointing Kit suitable for 3x120 mm XLPE Cable	Nos.	12350	1	12350
3	GI Pipe with Clamp 6" dia	Mtr.	700	8	5600
4	Earthing	Nos.	360	4	1440
5	Stay Set	Nos.	794	4	3176
6	ACSR Dog Conductor	Mtr.	68	60	4080
7	11 KV Pin Insulator	Nos.	35	6	210
8	11 KV Pin		65	6	390
9	11 KV Disc Insulator 45 KN with fitting	Nos.	415	3	1245
10	Top Channel M.S. 100x50x2240 mm	Nos.	860	1	860
11	Droper Channel M.S. 100x50x2000 mm	Nos.	770	1	770
12	11 Mtr. long STP Pole	Nos.	14330	2	28660
13	Concreting of Pole	Nos.	617	2	1234
14	Sub Total				106015
15	Connection charge			1	35400
16	Sub Total service line Installation				141415
В	Metering system				
17	3 Ph - 4 W Static meter TVM 11 KV	Nos.	12000	1	12000
18	11 KV Pilfer proof metering cubicle	Nos.	43125	1	43125
19	Sub Total				55125
20	Labour & overhead charges				18400
21	Sub Total metering system				73525
22	Total metering +service line installation				214940
	N.B:- 1. Meter & metering Cubicle shall be prov	ided by	the licens	see.	

Amount chargeable to consumer-

- (A) Line Installed by licensee Rs. 2,14,940 say Rs. 2,15,000/-
- (B) Line Installed by consumer Rs. 2,14,940 * 0.15 + 73,525 = 94,737 say Rs.95000/-

Fixed Line Charge

Load above 1 MVA upto 3 MVA

S.No.	Particulars	Unit	Rate	Qty.	Amt. (Rs.)
1	2	3	4	5	6
	Line installation				
1	3 C x 185 mm 11 KV XLPE Cable	Mtr.	1240	50	62000
2	O/D Cable Jointing Kit suitable for 3x185 mm XLPE Cable	Nos.	12350	1	12350
3	GI Pipe with Clamp 6" dia	Mtr.	700	8	5600
4	Earthing System	Nos. 360 4 Nos. 794 4		1440	
5	Stay Set	Nos.	794	4	3176
6	ACSR Dog Conductor	Mtr.	68	60	4080
7	11 KV Pin Insulator	Nos.	35	6	210
8	11 KV Pin	Nos.	65	6	390
9	11 KV Disc Insulator with fitting	Nos.	415	3	1245
10	Top Channel M.S. 100x50x2240 mm	Nos.	860	1	860
11	Droper Channel M.S. 100x50x2000 mm	Nos.	770	1	770
12	11 Mtr. long STP Pole	Nos.	14330	2	28660
13	Concreting of Pole	Nos.	617	2	1234
14	Sub Total				122015
15	Connection charges				40750
16	Sub Total Line installation				162765
В	Metering system				
17	3 Ph - 4 W Static meter TVM 11 KV	Nos.	12000	1	12000
18	11 KV Pilfer proof metering cubical	Nos.	43125	1	43125
19	Sub Total				55125
20	Labour & overhead charges				18400
21	Sub Total metering				73525
22	Total metering + Line				236290

Amount chargeable to consumer

- (a) Line Installed by licensee Rs. 2,36,290/- say Rs. 2,36,000
- (b) Line Installed by consumer = 1,62,765 * 0.15 + 73,525= $97,939 \text{ say } \mathbf{Rs.} \cdot \mathbf{98,000}$

Fixed Line Charge Load above 3MVA upto 4MVA

S.No.	Particulars	Unit	Rate	Qty.	Amt. (Rs.)
1	2	3	4	5	6
A	Line installation				
1	3 C x 120 mm 33 KV XLPE Cable	Mtr.	1970	50	98500
2	O/D Cable Jointing Kit suitable for 3x120 mm XLPE Cable	Nos.	36500	1	36500
3	GI Pipe with Clamp 6" dia	Mtr.	700	8	5600
4	Earthing System	Nos.	360	4	1440
5	Stay Set	Nos.	794	4	3176
6	ACSR Dog Conductor	Mtr.	68	60	4080
7	33 KV Pin Insulator	Nos.	235	6	1410
8	33 KV Pin		170	6	1020
9	11KV Disc Insulator 70 KN		300	12	3600
10	33 KV Disc fitting		335	3	1005
11	Top Channel M.S. 125x65x3200 mm	Nos.	1690	1	1690
12	Droper Channel M.S. 100x50x2600 mm	Nos.	1000	1	1000
13	11 Mtr. long ST Pole	Nos.	14330	2	28660
14	Concreting of Pole	Nos.	617	2	1234
15	Sub Total				188915
16	Connection charges				63000
17	Sub Total Line installation				251915
В	Metering system				
18	3 Ph - 4 W Static meter TVM 33 KV	Nos.	12000	1	12000
19	33 KV Pilfer proof metering cubical	Nos.	150000	1	150000
20	Sub Total				162000
21	Labour & Overhead Charges				54100
22	Sub Total metering system				216100
23	Total metering + Line Installation				468015

Amount chargeable to consumer

(A) Line Installed by licensee –Rs. 4,68,015

say **Rs. 4,68,000/-**

(B) Line Installed by Consumer -4,68,015 * 0.15 + 2,16,100 = 2,86302 say Rs. 2,86,000/-

	ANNEXURE-11					
	d Line Charge					
	d above 4 MVA upto 10 MVA		T _ T		T	
S.	Particulars	Unit	Rate	Qty.	Amt. (Rs.)	
No 1	2	3	4	5	6	
A	Line installation	3	4	3	0	
		N #4	2415	7.0	120750	
1	3 x 300 mm 33 KV XLPE Cable	Mtr.	2415	50		
2	O/D Cable Jointing Kit suitable for 3x300 mm XLPE Cable	Nos.	36500	I	36500	
3	GI Pipe with Clamp 6" dia	Mtr.	700	8	5600	
4	Earthing System	Nos.	360	4	1440	
5	Stay Set	Nos.	794	4	3176	
6	ACSR Dog Conductor	Mtr.	68	60	4080	
7	33 KV Pin Insulator	Nos.	235	6	1410	
8	33 KV Pin	Nos.	170	6	1020	
9	11 KV Disc Insulator 70 KN	Nos.	300	12		
10	33 KV Disc fitting	Nos.	335	3	1005	
11	Top Channel M.S. 125x65x3200 mm	Nos.	1690	1	1690	
12	Droper Channel M.S. 100x50x2600 mm	Nos.	1000	1	1000	
13	11 Mtr. long STP Pole	Nos.	14330	2	28660	
14	Concreting of Pole	Nos.	617	2	1234	
15	Sub Total				211165	
16	Labour & Overhead Charges				53400	
	Sub Total Line installation				264565	
В	Metering system					
18	3 Ph - 4 W Static meter TVM 33 KV	Nos.	12000	1	12000	
19	33 KV Pilfer proof metering cubical	Nos.	150000	1	150000	
20	Sub Total				162000	
21	Labour & Overhead Charges				38880	
22	Sub Total metering				200880	
23	Total metering + Line Insallation				465445	

Amount chargeable to consumer

(A) Line installed by licensee 4,65,445

say Rs. 4,65,000

(B) Line installed by consumer 264565 *0.08 + 2,00,800 = 2,22,045 say Rs. 2,22,000

Cost analysis of one kilometer of LT. Single & 3-Phase lines on Steel Tubular Pol

				LT. 3	-Phase	LT. Or	ne Phase
S. No	Particulars	Unit	Rate	Qty.	Amt.	Qty.	Amt.
5.110	i ai ticulai s	Cint	(Rs.)				
					(Rs.)		(Rs.)
1	2	3	4	5	6	7	8
1	ST Pole 11 Mtr.	Nos.	14330	25	358250	25	358250
2	Stone pad 300x300x75mm	Nos.	69	25	1725	25	1725
3	LT. Clamp with bolts & Nuts	Nos.	100	75	7500	50	5000
4	Earth wire clamp for ST pole	Nos.	115	25	2875	25	2875
5	LT Shakle insulator	Nos.	18	75	1350	50	900
6	Bolts & Nuts for Shakle Insulatar	kg.	84	30	2520	20	1680
7	Loop guard complete 3-Phase	Nos.	23	50	1150		0
8	Loop guard complete 1-Phase	Nos.	17			50	850
9	Phase wire ACSR Dog	Kms.	68080	3.09	210367	1.03	70122
10	Neutral cum earth wire	Kg.	49	157	7693	157	7693
11	Aluminium binding wire (6 mm	Kg.	136	8	1088	4	544
12	Jointing sleave for ACSR Dog	Nos.	55	3	165	1	55
13	Spacer LT. P.V.C	Nos.	52	75	3900	50	2600
14	Extra for stays at angle Location.	Nos.	794	8	6352	8	6352
15	Concreting of supports	Nos.	617	25	15425	25	15425
16	Earthing complete.	Nos.	357	8	2856	8	2856
17	Sub Total				623216		476927
18	Labour & overhead charges				165000		120000
19	Total				788216		602927

Cost of 3 Phase L.T. Line per meter = 7, $88,216 \times 0.001 = 788$ say Rs. 800/-

Cost of 1- Phase L.T. Line per meter = $6,02,927 \times 0.001 = 603$ say Rs. 600/-

ANNEXURE-13
Cost Analysis of one kilometer of LT. Single & 3-Phase lines on P.C.C.Pole

			Rate	LT. 3-	Phase	LT. Sing	gle Phase
S. No	Particulars	Unit	(Rs.)	Qty.	Amt. (Rs.)	Qty.	Amt. (Rs.)
1	2	3	4	5	6	7	8
1	P.C.C. Pole	Nos.	1700	25	42500	25	42500
2	Stone pad 300x300x75mm	Nos.	69	25	1725	25	1725
3	LT. Clamp with bolts & Nuts	Nos.	100	75	7500	50	5000
4	Earth wire clamp for ST pole	Nos.	115	25	2875	25	2875
5	LT Shakle insulator	Nos.	18	75	1350	50	900
6	Bolts & Nuts for Shakle Insulator	kg.	84	30	2520	20	1680
7	Loop guard complete 3-Phase	Nos.	23	50	1150		0
8	Loop guard complete 1-Phase	Nos.	17			50	850
9	Phase wire ACSR Dog	Kms.	68080	3.09	210367	1.03	70122
10	Neutral cum earth wire	Kg.	49	157	7693	157	7693
11	Aluminium binding wire	Kg.	136	8	1088	4	544
12	Jointing sleave for ACSR Dog	Nos.	55	3	165	1	55
13	Spacer LT. P.V.C	Nos.	52	75	3900	50	2600
14	Extra for stays at angle Location.	Nos.	794	8	6352	8	6352
15	Concreting of supports	Nos.	617	25	15425	25	15425
	0.44CM/pole						
16	Earthing complete.	Nos.	357	8	2856	8	2856
17	Sub Total				307466		1,61,177
18	Labour & overhead charges				102600		53800
19	Total				410066		214977

Cost of 3 Phase L.T. Line per meter = 4, $10,066 \times 0.001 = 410$ say Rs. 400 Cost of 1-Phase L.T. Line per meter = 2, $14,977 \times 0.001 = 214$ say Rs. 200

Cost of material for Double Pole Structure with PCC/STP Poles for 11 KV Line

			Data		8.5 Mtr. PCC Pole		r. STP Pole
S. No	Particulars	Unit	Rate (Rs.)	Qty.			Amt.
			(143.)	Qiy.	(Rs.)	Qty.	(Rs.)
1	2	3	4	5	6	7	8
1	ST Pole 11 Mtr. Long		14330			2	28660
2	P.C.C. Pole 8.5 M long	Nos.	1754	2	3508		
3	Stone pad 300x300x75mm	Nos.	69	2	138	2	138
4	Top Channel	Nos.	860	1	860	1	860
5	Cross bracing M.S. Angle	Set	1725	1	1725	1	1725
6	Clamps with Nuts & Bolts for top channel	Nos.	70	2	140	2	140
7	Barbed wire G.I.	Kg.	101	2	202	2	202
8	Danger board & clamps with bolts & nuts.	Nos.	196	1	196	1	196
9	Concreting of PCC poles.	Nos.	376	2	752		
10	Concreting of ST poles.	Nos.	617			2	1234
11	Earthing complete.	Nos.	360	2	720	2	720
12	F Bracket with bolts & nuts.	Nos.	82	3	246	3	246
13	11KV Disc Insulators B&C type (4500 kg) with fittings.	Set	415	6	2490	6	2490
14	11 KV Pin Insulators with pins	Nos.	99	3	297	3	297
15	P.G. clamps	Nos.	82	6	492	6	492
16	Stay complete	Nos.	794	6	4764	6	4764
	Total				16530		42164

Cost Analysis of one kilometer of 11 kV line on PCC Pole/ S.T.P.

S.			Rate		P.C.C. Pole	On S	S.T.Pole
No	Particulars	Unit	(Rs.)	Qty.	Amt.	Qty.	Amt.
			(====)	20,	(Rs.)		(Rs.)
1	2	3	4	5	6	7	8
1	ST Pole 11 Mtr.	Nos.	14330			25	358250
2	P.C.C. Supports 8.5 Meter long	Nos.	1754	13	22802		
3	Stone pad 300x300x75mm	Nos.	69	13	897	25	1725
4	X-arm M.S. Angle 65x65x6mm V Type	Nos.	426	13	5538	25	10650
5	Cross arms holding clamps.	Nos.	70	13	910	25	1750
6	11 KV Pin Insulators with pins.	Nos.	99	39	3861	75	7425
7	F-bracket for fitting top insulator.	Nos.	112	13	1456	25	2800
8	ACSR Rabbit conductor	Kms.	34440			3.09	106420
9	ACSR Weasel condutor	Kms.	20183	3	62365		
11	Aluminium tape	Kg.	167	1	84	1	84
12	Aluminium binding wire	Kg.	136	2	204	4	544
13	Jointing sleave for ACSR Rabbit	Nos.	58			3	174
14	Jointing sleave for ACSR Weasel.	Nos.	56	3	168		
15	Jointing sleave for ACSR Weasel.	Nos.	56				
16	Danger Plate with clamps & bolts.	Nos.	251	3	753	25	6275
17	Painting number mark with paint.	Nos.	12	13	156	25	300
18	Barbed wire G.I.	Kg.	101	4	404	8	808
19	Extra for stays at angle location.	Nos.	794	1	794	5	3970
20	Extra with stays at Road crossing.	Nos.	7889	1	7889	2	15778
21	Sectional D/P on STP (Annexure 14)	Nos.	42164			1	42164
22	Sectional D/P on PCC (Annexure 14)	Nos.	16530	1.0	16530		
22	Concreting of supports PCC Pole	Nos.	376	4	1504		
23	Concreting of supports ST Pole	Nos.	617			25	15425
23	Earthing complete.	Nos.	357	13	4641	25	8925
	Sub Total				130956		583466
24	Labour & overhead charges				49700		154600
26	Total				180656		738066

Cost of 1 Meter 11 kV Line on P.C.C. Pole $-180,656 \times 0.001 = 180$ say Rs.200/-Cost of 1 Meter 11 kV Line on S.T. Pole $-7,38,066 \times 0.001 = 738$ say Rs.750/-

Cost analysis of 1 km 11kV under ground line

S.	Item	Unit	Rate	11kv 3X	X120 mm	11kv 3	X185 mm
No.				Qty	Amount	Qty	Amount
1	11kV XLPE cable 3x120mm	km.	920000	1.10	1012000		
2	11kV XLPE cable 3x185mm	km.	1240000			1.1	1364000
3	Cable jointing kit straight through	No.	9200	2	18400	2	18400
4	Cable jointing kit out door	No.	12350	2	24700	2	24700
5	G.I Pipe 6 Inch dia	Mtr	700	20	14000	20	14000
6	Sub total				1069100		1421100
7	Connection charges			1.1	564400		625350
8	Total				1633500		2046450
9	Road restoration charges for pucca road crossing	km.	1400000	0.2	280000	0.2	280000
10	Road restoration charges for footpath side	km.	350000	0.8	280000	0.8	280000
11	Grand Total				2193500		2606450

Cost of 1 meter underground 11kV Line with 3 x 120mm cable = 2193 say Rs. 2,200/Cost of 1 meter underground 11kV Line with 3 x 185 mm cable = 2606 say Rs. 2,600/-

Cost of material for single support on 9.0 mtr. long PCC Pole for 33 KV Line

S.	Particular		Rate		
No.		Unit	(Rs.)	Qty.	Amount (Rs.)
1	9.0M long PCC Pole	Nos.	2323	1	2323
2	V-type cross arm	Nos.	813	1	813
3	Cross arm holding clamp with bolts & nuts	Nos.	242	1	242
4	F-bracket	Nos.	185	1	185
5	33 KV pin Insulator	Nos.	236	3	708
6	33 KV pin with nuts	Nos.	168	3	504
7	Armour Rod with Ferrule for Dog	Sets	160	3	480
8	Stone pad	Nos.	69	1	69
9	Number plate	Nos.	56	1	56
10	Danger board with clamp	Nos.	196	1	196
11	Barbed wire	kg	101	2	202
12	Bolts, Nuts & washers	kg.	84	1	84
13	Alluminium binding wire	kg	136	0.5	68
14	Earthing	Nos.	357	1	357
15	Concreting	Nos.	400	1	400
	Total				6687

ANNEXURE-18
Cost of material for Sectional Double Pole Structure with 9 mtr. long PCC pole for 33 KV line

S.	particular		Rate		Amount
No.	_	Unit	(Rs.)	Qty.	(Rs.)
1	9.0 M long PCC-Pole	Nos.	2323	2	4646
2	M.S. Angle Iron 65x65x6mm. bracing with 4 clamp	Nos.	3691.5	1	3692
3	Top channel 125x65mm, 3200mm (10.7kg/M) with clamp	Nos.	1692.8	1	1693
4	Stone pad	Nos.	69	2	138
5	11KV Disc. Insulators B&S type 7000kg.	Nos.	299	24	7176
6	Disc. Fittings dog/Racoon 7000kg.	Nos.	334.65	6	2008
7	33 KV pin Insulator	Nos.	236	3	707
8	33 KV pin with nuts	Nos.	168	3	504
9	Earth clamp with bolts & nuts	Nos.	144	1	144
10	PG Clamp for Dog	Nos.	140	12	1684
11	E Bracket for 33 KV	Nos.	182	3	545
12	Number plate with clamps for pcc poles	Nos	56	1	56
13	Danger board with clamps for 33KV	Nos.	196	1	196
14	Barbed wire	kg	101	4	405
15	Alluminium tape	kg	167	1	167
16	Alluminium paint	Ltrs.	230	1	230
17	Bolts, nuts and washers	kg	84	3	252
18	Stays	Nos.	1438	8	11500
19	Concreting of support .	Nos.	400	2	800
20	Earthing	Nos.	357	1	357
	Total				36897

ANNEXURE-19
Cost of Material for Single Line Support on 11 Mtr. Long ST Pole inclusive of fitting for 33 KV Line

S.	particular		Rate		Amount
No.		Unit	(Rs.)	Qty.	(Rs.)
1	11 M long STP Pole.	Nos.	14330	1	14330
2	X-Arm channel 100x50 mm V type	Nos.	813	1	813
3	Packing piece and clamp for above with bolts & nuts	Nos.	359	1	359
4	F' bracket for 33 KV	Nos,	185	1	185
5	33 KV pin Insulators	Nos.	236	3	708
6	33 KV Pin with nuts	Nos.	168	3	504
7	Earth wire clamp with bolts & nuts	Nos.	144	1	144
8	Amour rod with ferules for Dog	Sets	160	3	480
9	Stone pad	Nos.	69	1	69
10	Number plates	Nos.	56	1	56
11	Danger board with clamp for 33 KV	Nos.	196	1	196
12	Barbed wire	kg.	101	2	202
13	Bolts, nuts & washers all size	kg.	84	1	84
14	Alluminium paint	Ltrs.	230	1	230
15	Red Oxide paint	Ltrs.	184	1	184
16	Alluminium binding wire-6 SWG	kg.	136	0.5	68
17	Concreting of supports	Nos.	617	1	617
	Total				19229

Cost of Material of Section Double Pole Structure with 11 Mtr. long ST Pole for 33 KV Line

S.	particular		Rate		Amount
No.	•	Unit	(Rs.)	Qty.	(Rs.)
1	11 Mtr. long ST Pole	Nos.	14330	2	28660
2	M.S. Angle Iron 65x65x6 mm bracing with 4 clamps	Set	3692	1	3692
3	Top channel 125x65mm 3200mm (10.70 kg/M).	No.	1693	1	1693
4	Stone pad	Nos.	69	2	138
5	11KV Disc Insulators B&S type 7000 kg	Nos.	299	24	7176
6	Disc. Fittings Dog/Racoon 7000 kg	Nos.	335	6	2010
7	33KV Pin Insulators	Nos.	236	3	708
8	33 KV Pin with nuts	Nos.	168	3	504
9	Earth wire clamp with bolts & nuts	No.	144	1	144
10	P.G. clamps for Dog	Nos.	140	12	1680
11	E-bracket for 33 KV	Nos.	182	3	546
12	Number plates	No.	56	1	56
13	Danger board with clamp	No.	196	1	196
14	Barbed wire	Kg.	101	4	404
15	Alluminium tape	Kg.	167	1	167
16	Alluminium paint	Ltrs.	230	2	460
17	Bolts, nuts & washers	Kg.	84	3	252
18	Red Oxide paint	Ltrs.	184	2	368
19	Stay	Nos.	1438	8	11504
20	Concreting of supports	Nos.	617	2	1234
21	Earthing.	No.	357	1	357
	Total Cost				61949

ANNEXURE-21

Cost Analysis of one kilometer of 33 KV Line with ACSR Dog Conductor On S.T.Pole and P.C.C. Pole

S.	Particulars	Unit	Rate	On STP 11 Mtr.		On 9 mtr. PCC	
No.			(Rs.)			Pole	
				Qty.	Amt.	Qty.	Amt.
					(Rs.)		(Rs.)
1	Cost of single support as par	3	4	5	6	7	8
	Cost of single support as per Annexure 17, 19						
	STP		19229	25	480725		
	PCC		6687		100720	10	66870
2	Extra cost of section and heavy						
	angle points on double pole as per						
	Annexure- 18 & 20						
	STP		61949	1	61949		
	PCC		36897			0.5	18449
3	Extra cost of stay at right angle	No.	1438	4	5752	2	2876
4	ACSR Dog Conductor	Km.	68080	3.09	210367	3.09	210367
5	GS/GI Earthwire 7/16 SWG	Kg.	49	127	6223	127	6223
6	Alluminium jointing sleeves	No.	55	3	165	3	165
7	Earthing complete	No.	357	6	2142	3	1071
8	Extra cost of Road/ Communication	No.	7889	4	31556	0.5	3945
	lines / 11 KV lines xing						
9	Tree cutting compensation	Km.	564	1	564	1	564
	Sub Total				799443		310529
10	Labour & overhead charges			-	212000		118000
12	Total				1011443		428529

Cost of 1 meter 33kV Line on S.T.Pole = $1011443 \times 0.001 = 1011$ say Rs. 1000 Cost of 1 meter 33 kV Line on P.C.C. Pole = $428529 \times 0.001 = 428$ say Rs. 425

ANNEXURE-22 Per km. Cost of under ground 33kV Line .

S.	Item	Unit	Rate	33kv 3X	120 mm	33kv 3	X300 mm
No.				Qty	Amount	Qty	Amount
1	33kv XLPE cable 3x120mm	km.	1970000	1.10	2167000		
2	33kv XLPE cable 3x300mm	km.	2415000			1.10	2656500
3	Cable jointing kit straight through	No.	26000	2	52000	2	52000
4	Cable jointing kit out door	No.	36500	2	73000	2	73000
5	G.I Pipe 6 Inch Dia	Mtr	700	20	14000	20	14000
6	Sub total				2306000		2795500
7	Connection charges	%	2		905000		989600
8	Total				3211000		3785100
11	Road restoration charges for pucca road crossing	km.	1400000	0.2	280000	0.2	280000
12	Road restoration charges for footpath side	km.	350000	0.8	280000	0.8	280000
	Grand Total				3771000		4345100

Cost of 1 Meter 33 kV Line with 3 x 120mm cable= $37, 71,000 \times 0.001 = 3771$ say Rs. 3,800 Cost of 1 Meter 33 kV Line with 3 x 300mm cable = $43, 45,100 \times 0.001 = 4345$ say Rs. 4,350

ANNEXURE-23 COST OF ONE 25 kVA S/S ON P.C.C. POLE

Sl	Name of Material	Unit	Rate	Quantity	Amount
No.					in Rs.
1	2	3	4	5	6
1	P.C.C. Pole 8.5M	No	1754	2	3508
2.	Stone Pad	No	69	2	138
3.	Top Channel	No	1150	1	1150
4.	Dropper Channel	No	750	1	750
5.	M.S. Angle 75 x 75 x 6x 2028mm	No	650	22	1300
6.	M.S. T- off Channel	No	650	1	650
7.	Clamps with bolt nut	No	70	11	770
8.	11 kV disc insulator with fittings	No	415	3	1245
9.	11 kV pin insulator with pin	No	99	3	297
10.	Transformer 25 kVA	No.	48,000	1	48,000
11.	11 kV T.P.M.O.	Set	7,200	1	7,200
12.	Danger Board	No	750	1	750
13.	Stay Complete	Set	794	2	1588
14.	Earthing Complete	No	360	2	720
15.	Concreting of stays	No	153	2	306
16.	Concreting of pole	No	376	2	752
	Total				69114
17.	Labour & Overhead Charges	%	20		13823
.18	Grand Total				95376