

UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION



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

(APPLICABLE TO ALL DISTRIBUTION LICENSEES IN UTTAR PRADESH)

INDEX

<u>Sl.No</u>	<u>CONTENTS</u>	<u>PAGE</u>
1	Statement of Objects & Reasons	03
2	Processing Fee	06
3	Security	07
4	System Loading Charge	09
5	Line Charges	11-17
6	Annexure 1 – 29	18-59

CHAPTER 1

STATEMENT OF OBJECTS AND REASONS

- 1- Section 42 of the Electricity Act 2003 (herein after called “the Act”) and amendments there of 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 Act 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 Act 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 the electricity supplied to such person, or
 - (b) where any electric line or electrical plant or electric meter is to be provided for supplying electricity to such person, in respect of the provision of such line or plant or meter.
- 4- The U.P. Electricity Regulatory Commission (herein after called “the Commission”) has notified Electricity Supply Code 2005 (herein after called “the Code”). The third amendment was notified on 14-09-06, the fourth amendment was notified on 14.06.08, the fifth amendment was notified on 25.8.2014 and the sixth amendment is under the process of notification. It has the following provisions:
 - (i) Clause 4.2 of the Code enjoins upon a distribution licensee an obligation to upgrade/extend/strengthen the distribution system. The cost towards this to meet the enhanced demand of existing consumers as well as future growth shall be recovered from the consumers through tariff.
 - (ii) Clause 4.6 of the Code provides that,

(b) the estimate (for release of new connection) shall include security deposit, charges of laying the service line, distribution mains (if required) and material, and system loading charges etc. as determined by the licensee with the approval of the Commission every year.

(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(s) 4.11, 4.41, 4.42, 4.44 and 4.45 (B) of the Code 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 the 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 Act and /or the Code.
6. There will be one structure of charges for all the Distribution Licensees in the State.
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. 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 of 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**.
9. Reasonability and analysis of Security Amount is being enclosed at **Annexure 2**.
10. Details of Line Charges are enclosed at **Annexure-3 to 26**.

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. It is further clarified as follows:
0.749 KW = 1H.P.
0.9 KVA = 1 KW
12. In case of any inconsistency between Cost Data Book and Electricity Supply Code, the Cost Data Book shall prevail.
13. The connection charges for new connection up to 2KW may be paid in installments as per the following:
 - a. Out of the total amount of Rs. 1330/- payable by **Rural Consumers for availing connection of 1 KW** Rs. 130/- shall be payable at the time of providing connection and balance amount of Rs. 1200/- shall be payable in equal monthly installment of Rs. 100/- each for 12 months.
 - b. Out of the total amount of Rs. 1550/- payable by **Rural Consumers for availing connection of 2 KW** Rs. 250/- shall be payable at the time of providing connection and balance amount of Rs. 1300/- shall be payable in equal monthly installment of Rs. 100/- each for 13 months.
 - c. Out of the total amount of Rs. 1805/- payable by **Urban Consumers for availing connection of 1 KW** Rs. 205/- shall be payable at the time of providing connection and balance amount of Rs. 1600/- shall be payable in equal monthly installment of Rs. 100/- each for 16 months.
 - d. Out of the total amount of Rs. 2225/- payable by **Urban Consumers for availing connection of 2 KW** Rs. 625/- shall be payable at the time of providing connection and balance amount of Rs. 1600/- shall be payable in equal monthly installment of Rs. 100/- each for 16 months.
14. If the consumer opts for prepaid meter the meter charges may be paid in installments as provided in Annexure – 27.
15. The rates given for difference items of works for any type of connections shall not be taken as a base for justifying the rates where a work is to be undertaken on the basis of a transparent bidding process.

CHAPTER 2
PROCESSING FEE

Sl. No.	Description	Processing Fee Per connection in Rs.
1	Load upto 1 KW for BPL Consumers only	10
2	Load upto 1 KW for other than BPL Consumers	50
3	Load above 1 KW and less than 25 KW	100
4	25 KW or more upto 50 KW / 56 kVA	1000
5	Above 56 kVA upto 500 kVA	5,000
6	Above 500 kVA upto 3000 kVA	10,000
7	Above 3000 kVA upto 10000 kVA	15,000
8	Above 10000 kVA	25,000

NOTE :-

1. The processing fee shall be non-refundable and non-adjustable.
2. The processing fee under Sr. No. 1 shall be applicable only on those consumers who have BPL Card.
3. 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.
4. This shall be applicable for all the categories of prospective/ existing consumer.

CHAPTER 3
SECURITY
(Refer Annexure 2)

Sl.No.	Description	Security in Rs.
1	Domestic Light & Fan for load upto 1 KW only (LMV-1) (For BPL Consumers)	NIL
2	Rural Domestic Light & Fan for Load upto 2 KW (LMV-1)	100/kW
3	Urban Domestic Light & Fan for Load upto 2 KW (LMV-1)	300/kW
4	Domestic Light & Fan over 2 KW (LMV-1)	400/ kW
5	Non-Domestic Light and Fan (LMV-2)	1000/kW
6	Private Advertising, Sign Post, Sign Board, Glow Sign and Flex (LMV-2)	6000/kW
7	Public lighting (LMV-3)	3400/kW for Gram Panchayat, 4000/kW for Nagar Palika & Nagar Panchayat, 5000/kW for Nagar Nigam
8	Public Institution LMV-4 (A)	3000/KW
9	Private Institution LMV-4 (B)	3000/KW
10	Private Tube well (LMV-5)	300/HP
11	Small and Medium Power (LMV-6)	1200/KW
12	Public Water Work(LMV-7)	3400/KVA
13	State Tube well, Panchayatiraj Tube wells, Pump Canals. (LMV-8)	1500/KW
14	Non Industrial Bulk Load (HV-1)	4000/KVA
15	Large and Heavy Power (HV-2)	2000/kVA
16	Railway Traction (HV-3)	4500/KVA
17	Metro Rail (HV-3)	2500/KVA

18	Lift Irrigation works (HV-4)	3000/KVA
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NOTE:-

1. Initial security at above rates is payable per kW/HP/kVA or part thereof as the case may be.
2. No security shall be charged if the connection is given / to be given through pre-paid meter, subject to the condition mentioned in Annexure 27 under this heading note.
3. No security shall be charged from
 - (A) BPL consumer
 - (B) Departmental consumer, if electricity bill is deducted from salary/pension.
4. 40% higher amount of security shall be charged from temporary connection of the respective category considering actual period of connection and expected amount of bill except those opting for prepaid meter. .
5. In case of enhancement of load, additional security shall be charged on incremental load as per provisions of the Code.
6. The security may be adjusted against any outstanding bill after permanent disconnection.
7. The security may be enhanced or reduced subsequently as per provisions of the Electricity Supply Code.
8. Interest on security shall be paid by the licensee to the consumer as per bank rate prescribed by the R.B.I. (Refer Clause 4.20(i) of the Code 2005).
9. For Security Amount being above Rupees thirty lacs (Rupees 30,00000 only), the payment of first Rupees thirty lacs(Rupees 30,00000 only) has to be made by way of Banker's Cheque, Cheque or Demand Draft & amount exceeding Rupees thirty lacs (Rupees 30,00000 only) may be paid by way of a Bank Guarantee if consumer so desires. The Security Amount for contracted load exceeding 10MW, the total security amount may continue to be paid by way of Bank Guarantee. The renewal of Bank Guarantee shall be the responsibility of the consumer. If any default in renewal of bank guarantee occurs, the consumer would be liable to pay a penalty of **Rs. 500 (Five Hundred only) per lac per day of Bank Guarantee amount to the licensee for each default. Licensee may also disconnect the supply of power as per due process in such cases. In case the bank guarantee submitted by the consumer is found to be fake, the licensee will be**

entitled to disconnect the connection after giving a notice and in such cases the consumer will be bound to submit the security amount by way of a bank draft / banker's cheque.

CHAPTER 4
SYSTEM LOADING CHARGES

SI.No.	Description	Amount (in Rs.)
1	2	3
1	Load of 1kW for BPL Consumer	NIL
2	Load of 1kW for other than BPL Consumer	50/ kW
3	Load of 2 kW Consumer	60/ kW
4	Load above 2 kW but less than 5kW for Rural Domestic Light & Fan Consumer	60/ kW
5	Load above 2 kW but less than 5 kW for Urban Domestic Light & Fan Consumer	150/ kW
6	5 kW or more upto 50 kW/ 56 kVA	300/ kW
7	Above 56 kVA upto 10,000 kVA	1000/kVA
8	Supply on 132 kV and above	300/KVA Subject to maximum limit of Rs. 30 lac

The System Loading Charges of loads above 10000 KVA has been reduced from 1000 Rs. to 300 Rs. because the consumer pays for estimate including bay charges, independent feeder and 33 / 11 KV transformer, so the consumer can not be charged again. 132 KVA and above system is not with discom and it is with UPPTCL, with charges for any increment in system through capital expenditure which in turn is charged from consumer through ARR.

NOTE :-

1. No system loading charge shall be charged for temporary connection.
2. No system loading charge shall be charged from builder or promoter, who develops multistoried building or colony. However, it shall be charged at the time of release of connection at single point or multipoint, as the case may be, from the applicant. If the load for the multistoried building or colony is released in phases(in parts) then the total system loading charges (for the total load = sum of load of all the phases) is to be deposited at the time of release of connection for the first phase.
3. **For enhancement of load**
 - a) For **enhancement of load at the same voltage level**, consumer shall have to deposit system loading charge for the difference of load i.e. (Load after

- enhancement – Existing load); as per the Cost Data Book of the category in which consumer falls after load enhancement.
- b) In case **enhancement of load is done at a voltage higher than existing voltage**, the system loading charges for the total load after enhancement to be worked out based on Cost Data Book and credit shall be given for the already deposited system loading charges.
 - c) In case **enhancement of load is within or upto the earlier highest contracted load**, for which system loading charge have already been deposited, no further system loading charge shall be charged from the consumer.

Explanation

In case system loading charge for new load are lower than what is already paid by the consumer, no refund shall be made.

CHAPTER 5

LINE CHARGES FOR OVERHEAD LINES

Sl. No.	Description	Fixed Charge per connection (for line up to 40 meter) (in Rs.)		Variable Line Charge beyond 40 meters (in Rs.)
1	2	3		4
1	a. Private Tube well and Pumping set (where transformer is to be installed)	Consumer does not provide meter	37110 (Annex-3)	Rs. 188 per meter (Annex-3)
		Consumer provide meter	34200 (Annex-3)	
1	b. Private Tube well and Pumping set (where transformer is not to be installed)	Consumer does not provide meter (for load above 7 HP)	5000 (Annex-7)	For Rural Areas only a. For 3-Phase LT line Rs. 175 per meter (Annex-16) b. For 1-Phase LT line Rs. 125 per meter (Annex-16) For Other Areas a. For 3-Phase LT line Rs. 500 per meter (Annex-15) b. For 1-Phase LT line Rs. 300 per meter (Annex-15)
		Consumer provide meter (for load above 7 HP)	2041 (Annex-7)	
		Consumer does not provide meter (for load 7 HP & below)	4100 for 3-Phase (Annex-7)	
			1472 for 1-Phase (Annex-7)	
Consumer provide meter (for load 7 HP & below)	1141 for 3 Phase (Annex-7) 492 for 1 Phase (Annex-7)			

2	In villages and having load upto 2 kW for domestic and non-domestic Light and Fan	Consumer does not provide meter	1130 (Annex-4)	Rs. 300 per meter (Annexure - 15).		
		Consumer provide meter	150 (Annex-4)			
3	Load below 5 kW but not covered under Sl. No. 2 above.	Consumer does not provide meter	1405 (Annex-5)	For District HQ	700 per meter	(Annex-14)
		Consumer provide meter	425 (Annex-5)	For area other than District HQ.	300 per meter	(Annex-15)
4	Load 5 kW or more but below 25 kW	Consumer does not provide meter	5000 (Annex-6)	For District HQ.	900 per meter	(Annex-14)
		Consumer provide meter	2041 (Annex-6)	For area other than District HQ.	500 per meter	(Annex-15)
5	Load 25 kW or more upto 50 kW	Line installed by the licensee	13105 (Annex-8)	For District HQ.	900 per meter	(Annex-14)
				For area other than District HQ.	500 per meter	(Annex-15)
6	Load above 50 kW/56 kVA up to 200kVA	Line installed by the licensee	155000 (Annex-9)	A. For District HQ	590 per meter	(Annex-18)
				B. For area other than District HQ.	260 per meter	(Annex-18)
		Line installed by the consumer	77000 (Annex-9)	15% of the amount calculated at serial No. A, B above.		
7	Load above 200 kVA up to 1MVA	Line installed by the licensee	194000 (Annex-10)	A. For District HQ	590 per meter	(Annex-18)
				B. For area other than District HQ.	260 per meter	(Annex-18)
		Line installed by the consumer	82700 (Annex-10)	15% of the amount calculated at serial No. A, B above.		

8	Load above 1MVA up to 3MVA	Line installed by the licensee	207000 (Annex-11)	A. For District HQ. B. For area other than District HQ.	590 per meter 260 per meter	(Annex-18) (Annex-18)
		Line installed by the consumer	85000 (Annex-11)	15% of the amount calculated at serial No. A, B above.		
9	Load above 3 MVA up to 4 MVA	Line installed by the licensee	424000 (Annex-12)	A. For District HQ B. For area other than District HQ.	1100 per meter 610 per meter	(Annex-24) (Annex-24)
		Line installed by the consumer	250000 (Annex-12)	15% of the amount calculated at serial No. A, B above.		
10	Load above 4MVA up to 10 MVA	Line installed by the licensee	459000 (Annex-13)	A. For District HQ B. For area other than District HQ.	1100 per meter 610 per meter	(Annex-24) (Annex-24)
		Line installed by the consumer	238000 (Annex-13)	08% of the amount calculated at serial No. A, B above.		
11	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.				

CHAPTER 5 A

LINE CHARGES FOR UNDERGROUND LINES

Sl. No.	Description	Fixed Charge per connection (for line up to 40 meter) (in Rs.)	Variable Line Charge beyond 40 meters (in Rs.)	
1	2	3	4	
1	For Load below 5 kW (other than rural consumer)	Consumer does not provide meter	3136 (Annex-5A)	As per estimate prepared by licensee
		Consumer provide meter	2156 (Annex-5A)	
2	For Load 5 KW or more but below 25 KW	Consumer does not provide meter	8525 (Annex-6A)	As per estimate prepared by licensee
		Consumer provide meter	5566 (Annex-6A)	
3	For Load 25 KW or more up to 50 KW	Line installed by the licensee	18745 (Annex-8A)	As per estimate prepared by licensee
4	For Load 50 KW / 26 KVA up to 200 KVA	Line installed by the licensee	203000 (Annex-9A)	C. 1470 per meter (Annex-19)
		Line installed by the consumer	84000 (Annex-9A)	15% of the amount calculated at serial No. C above.
5	For Load above 200 KVA up to 1 MVA	Line installed by the licensee	226000 (Annex-10A)	C. 1700 per meter (Annex-19)

		Line installed by the consumer	87500 (Annex-10A)	15% of the amount calculated at serial No. C above.
6	Load above 1MVA up to 3MVA	Line installed by the licensee	252000 (Annex-11A)	C. 1900 per meter (Annex-19)
		Line installed by the consumer	91400 (Annex-11A)	15% of the amount calculated at serial No. C above.
7	Load above 3 MVA up to 4 MVA	Line installed by the licensee	452300 (Annex-12A)	C. 2610 per meter (Annex-25)
		Line installed by the consumer	253500 (Annex-12A)	15% of the amount calculated at serial No. C above.
8	Load above 4MVA up to 10 MVA	Line installed by the licensee	566700 (Annex-13A)	C. 3370 per meter (Annex-25)
		Line installed by the consumer	297000 (Annex-13A)	08% of the amount calculated at serial No. C above.
9	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 premise 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 meters.
2. Meter board shall be provided by the consumer for load upto 50 kW.
3. Meters and metering cubical (including CT, PT) shall be provided by the licensee. However the consumer has an option to provide meter below load of 25 kW.
4. The schedule of charges shall be taken upto the point of supply (as defined in clause 2.2 (qq) of the Electricity Supply Code) and these charges shall form part of the estimate and the line upto this point shall be maintained by the distribution licensee. All installation beyond point of supply shall be installed and maintained 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 mentioned in the above table Nil
 - (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 shall be charged as per above schedule based on the additional length of line along with actual cost of dismantling.
7. For giving connection through 11 kV independent feeder, Rs. 6.259 lacs in urban area and Rs. 6.164 lacs in rural area will be additionally charged for the cost of circuit breaker and double pole.
8. For giving connection through 33 kV independent feeder, Rs. 25.274 lacs shall be additionally charged for 33 kV feeder bay including circuit breaker.
9. 40 meters line shall be clear aerial distance suitable for sagging between last pole of distribution mains and bracket/ rag bolt at consumer end.
10. The licensee shall bear the cost of extension and installation of 40 meters of LT line if a group of 3 consumers apply together and pay for all the charges for new connection. The cost of meter beyond 40 meters shall be borne by the consumer / consumers.
11. Additional length of line shall be the shortest clear 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 distribution licensee/supplier and nothing shall be charged for this purpose. Fraction of meter shall be ignored in measuring length of line.

12. Line charge for temporary connection shall be charged as per above schedule subject to adjustment of the cost of cable and other materials received back after deducting 10% depreciation.
13. The licensee shall not charge processing fee, line charge, system loading and security from its permanent employees and pensioners for one connection during their period of service or on retirement.
14. 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
15. Line charges in case of Railway crossing shall be charged as per actual expenses wherever applicable.
16. The above schedule of rates is based on lines constructed on Steel Tubular Pole in District Headquarter and PCC Pole in areas other than District Headquarter. Construction work shall be undertaken accordingly.
17. If required, double metering arrangement may be done by the licensees at their own cost and security.
18. Concreting material (brick ballast, sand, cement) and labour shall be provided by the consumer for the P.T.W. connection. However, actual requirement of material etc. shall be communicated by the licensee to the consumer while offering terms and conditions for PTW connections.
19. Any subsidy for PTW consumer in respect of new connection shall be deducted from line charge.
20. LT loads upto 50 kW released on LT, shall be developed by the licensee only, for which no supervision charges shall be applicable. If the applicant desires to undertake such work himself on the deposition of 15% supervision charges, the permission has to granted by the Managing Director of the Discom. The licensee shall ensure that the material used for construction by the applicant should be of good quality.
21. Consumer having load above 1 MVA may opt for connection at 33kV.
22. The Cost Data Book shall be effective from 03.03.2016. However, the connections which could not be released till then due to any reason what so ever shall not be reopened and such the connections shall be released on the basis of previous conditions.
23. Consumer shall provide separate earthing at the metering point.
24. If the Licensee so requires the consumer meter shall be installed at a place where the meter reading could be possible without opening the main gate of the premises.
25. The consumer shall be charged for underground services only when underground Distribution network is available in that area.

ANNEXURE-1

Analysis of Expenditure on System Upgradation

The earlier order for system loading charges was issued by the UPPCL on 01.01.2005. The charges varies from Rs. 150/kVA to Rs. 800/kVA for LT consumer, Rs. 858/kVA for 11kV and 33 kV consumer and Rs. 286/kVA with maximum limit of Rs 28.60 lacs for 132 kV. The prevailing order was issued through Cost Data Book vide letter no. Secretary/UPERC/Cost Data Book-2007/-1127 Dated 7 September, 2007. The present charges varies from Rs. 150/- to Rs. 300/- per kW for LT consumer, Rs. 1000/kVA for 11 kV and 33 kV consumer and Rs. 300/kVA with maximum limit of 30 lacs for consumer having supply on 132 kVA and above.

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 ST Pole
(Based on stock issue rates of RESSPO of UPPCL)

	Capacity	Cost of Sub station (Rs.)
1	25 kVA	131800
2	63 kVA	194290
3	100kVA	226310
4	250kVA	562744
Total	438kVA	1115144

Cost per KVA $1115144/438 = \text{Rs.}2546/\text{kVA}$

(ii) **Secondary Substations**

	Capacity	Cost of substation (Rs. Lac)
1	3MVA	108.092
2	5MVA	134.943
3	8MVA	161.300
4	10 MVA	166.480
Total	26 MVA	570.815

Cost Per KVA

$570815/26000 = \text{Rs } 2200/\text{KVA}$

(ii) **Primary Substations**

	Capacity	Cost of substation (Rs. Lac)
1	20MVA	696
2	40MVA	670
3	63 MVA	807
4	123 MVA	22
Total	123 MVA	2263

Cost Per KVA

$22,63,00,000/1,23,00 = \text{Rs } 1840/\text{KVA}$

Total cost of per kVA capacity addition from primary to LT is Rs. 2546 + 2200 + 2263 = Rs. 7009/- 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. $7009 \times 2 = \text{Rs.14018}$

Hence charges for system enhancement proposed in Cost Data Book as System Loading Charge Rs NIL at the 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.

ANNEXURE-2

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 April 2008 tariff), is given below on assumptions prescribed by the Commission as far as possible.

A. Domestic Light Fan (LMV-1)

a. For load of 1 KW only

Present rate	-	Rs. 350/kW
Assumed load	-	1 kW
Load factor	-	0.3
Monthly consumption	-	1 x 0.3 x 14 x 30 126 units
Monthly bill	-	50 x 1 + 50x2.00+76x3.90 Rs. 446.4
Bi-monthly bill/kW	-	446.4 x 2 Rs. 892.8 / KW = 893 / KW

Security of Rs. 100 / KW for rural consumer and Rs. 300 / KW for urban consumer shall be charged.

b. For load more than 1 KW & below 75 KW (LMV-1)

Present rate	-	Rs. 350/kW
Assumed load	-	5 kW
Load factor	-	0.3
Monthly consumption	-	5 x 0.3 x 14 x 30 630 units
Monthly bill	-	90 x 5 + 150x4.40+150x4.95+200 x 5.60 + 130 x 6.20 Rs. 3778.5
Bi-monthly bill/kW	-	3778.5 x 2/5 Rs. 1511.4/KW = Rs.1511/ KW

Security of Rs. 100 / KW for rural consumer with load of 2KW and Rs. 300 / KW for urban consumer with load of 2 kW shall be charged, whereas the other consumers shall be charged Rs. 400/kW.

B. Non Domestic Light & Fan (LMV-2)

Present rate	-	Rs. 1000/kW
Assumed load	-	5 kW
Load factor	-	0.5
Monthly consumption	-	5 x 0.5 x 14 x 30

Monthly bill	-	5 x 225 + 300x6.70+700x7.10+50x7.25	1050 unit
			Rs.8467.50
Bi- monthly bill/ kW	-		8467.50x2/5
			Rs. 3387

Security of **Rs. 1000/kW** shall be charged.

C. Private Advertising / Sign Posts / Sign Boards / Glow Sign (LMV-2)

Assumed Load	-	5KW
Load Factor	-	0.5
Monthly Consumptions	-	5X0.5X14X30 = 1050
Monthly bills	-	1050 X18/KW = 18900
Bi-monthly bill/KW	-	7560

Security of **Rs. 6000/KW** shall be charged.

D. Public Lighting (LMV-3)

Present rate	-	Rs. 1200/kW
Monthly bill	-	For Gram Panchayat-Rs
1700		
	-	For Nagar Palika -Rs 2200
	-	For Nagar Nigam-Rs 3000
Bi-monthly bill / kW	-	For Gram Panchayat-Rs
3400		
	-	For Nagar Palika -Rs 4400
	-	For Nagar Nigam-Rs 6000

Security of **Rs. 3400/kW** for Gram Panchayat, **Rs 4000** for Nagar Palika Rs. **5000** for Nagar Nigam shall be charged.

E. Public Institution LMV – 4 (A)

Assumed Load	-	5 KW
Load Factor	-	0.5
Monthly Consumptions	-	5X0.5X14X30 = 1050 units
Monthly bills	-	5X200+1000X6.75+50X7 = 8100
Bi-monthly bill/KW	-	8100X2/5 = 3240

Security of **Rs. 3000/KW** shall be charged.

F. Public Institution LMV – 4 (B)

Assumed Load	-	5 KW
Load Factor	-	0.5

8590	Monthly Consumptions	- $5 \times 0.5 \times 14 \times 30 = 1050$ units	
	Monthly bills	- $5 \times 225 + 1000 \times 7.10 + 50 \times 7.30$	=
	Bi-monthly bill/KW	- $8590 \times 2/5 = 3436$	

Security of **Rs. 3000/KW** shall be charged.

G. P.T.W. (LMV-5)

Present rates	-	Rs 300/H.P.
Assumed load	-	5 H.P.
Load factor	-	0.5
Monthly consumption	-	$5 \times 0.746 \times 0.5 \times 11 \times 30$ 615.45 units say 616 units
Monthly bill	-	$5 \times 30 + 616 \times 1$ Rs. 766 /5 = 153.2 / HP
Bi- monthly bill /H.P.	-	$766 \times 2/5$ Rs. 306.4 say 306

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

H. Small and Medium Power (LMV-6)

Present rate	-	Rs. 1000/kW
Assumed load	-	10 H.P.
Load factor	-	0.5
Monthly consumption	-	$10 \times 0.746 \times 0.5 \times 14 \times 30$ 1566.6 units say 1567 units
Monthly bill	-	$10 \times 225 + 1000 \times$ $6.60 + 1567 \times 7.10$
Bi-monthly bill / kW	-	$Rs. 12875.7 = 12876/10 =$ $1287.6/HP$ or $1288/0.746$ $= 1726.54 = 1727/KW$ $2576/HP$ or $3454/KW$

Security of **Rs. 1200/KW** shall be charged.

I. Public Water Work (LMV-7)

Present rate	-	Rs. 1200/kVA
Assumed Load	-	10kW
Load factor	-	0.5
Monthly consumption	-	$10 \times 0.5 \times 14 \times 30$ 2100 units
Monthly bill	-	$10 \times 230 + 2100 \times 7.10$ $2300 + 14910 = 17210 / KW$
Bi-monthly bill/kW	-	$17210 \times 2/10$ Rs. 3442

Security of **Rs. 3400/kVA** shall be charged.

J. State Tube Well / Panchayati Raj Tube Well & Pumped Canals (LMV-8)

Present rate	-	Rs. 1000/kW
Assumed Load	-	Rs. 10 H.P.
Monthly consumption	-	$10 \times 0.746 \times 0.5 \times 11 \times 30$ 1230.9 units say 1231 units
Monthly bill	-	$10 \times 200 + 1231 \times 6.80 =$ 10370.8
		= 10371
Bi-monthly bill /KW	-	$20371/10 = 2037/H.P.$

Security of **Rs. 1500/ kW** shall be charged.

K. Non Industrial Bulk Load (HV-1)

Assumed Load	-	100 KVA
Load Factor	-	0.75
Monthly Consumptions	-	$100 \times 0.75 \times 14 \times 30 = 28350$
Monthly bill	-	$100 \times 250 + 28350 \times 6.90 = 220615$
Bi-monthly bill/KVA	-	$220615 \times 2 / 100 = 4412$

Security of **Rs. 4000/KVA** shall be charged.

L. Large & Heavy Power (HV-2)

Present rate	-	Rs. 1200/ kVA
Assumed load	-	100 kW (111 kVA at 0.9 P.F.)
Load factor	-	0.5
Monthly consumption	-	$100 \times 0.5 \times 14 \times 30$ 21000 units
Monthly bill	-	$240 \times 111 + 21000 \times 6.35$ Rs. 159990
		$159990 / 111 = 1441.35$
Bi-monthly bill	-	$2882.70 = 2883$ (say)

Security of **Rs. 2000/kVA** shall be charged.

M. Railway Traction (HV-3)

Present rate	-	Rs 1200/kVA
Assumed load	-	100kVA
Load factor	-	0.5
Monthly consumption	-	$100 \times 0.9 \times 0.5 \times 24 \times 30$ 32400 units
Monthly bill	-	$100 \times 290 + 32400 \times 6.60$ Rs.246030 = 246030 / 100 = 246.30 say 2460 / KVA

Bi-Monthly bill - 4920

Security of Rs. **4500/kVA** shall be charged.

N. **Metro Rail (HV-3)**

Assumed Load	- 100 KVA
Load Factor	-0.5
Monthly Consumptions	- $100 \times 0.9 \times 0.5 \times 16 \times 30 = 21600$
units	
Monthly bills	- $100 \times 125 + 21600 \times 5.6 = 133460$
Bi-monthly bill/KVA	- $133460 \times 2 / 100 = 2669.20$

Security of Rs. **2500/KVA** shall be charged.

O. **Lift Irrigation (HV-4)**

Assumed Load	- 100 KVA
Load Factor	-0.75
Monthly Consumptions	- $100 \times 0.9 \times 0.75 \times 14 \times 30 = 28350$
Monthly bill	- $100 \times 250 + 28350 \times 6.75 = 216362.5$
Bi-monthly bill/KVA	- $216362 \times 2 / 100 = 4327$

Security of Rs. **3000/KVA** shall be charged.

The reason for keeping the security deposit less at the time of connection is that the discom gets more new connections and the consumers are encouraged to take new connections. In due course of time the amount of security deposit can be enhanced as per the actual billing of a consumer as per the provisions of Electricity Supply Code, 2005 and its amendments there off.

ANNEXURE -3**Line Charge For Private Tube Well and Pump Set**

A.	Fixed charge per connection for line upto 40 meter and metering.		
(I)	Consumer does not provide meter - (As per Annexure-7)		Rs. 5000
(II)	Consumer provide meter (As per Annexure-7)		Rs. 2041
B.	Fixed charge per connection for transformer.		
	Cost of 25 kVA S/S on PCC Pole (As per Annexure-26)		Rs. 127888
	Cost of concreting of poles (As per Annexure-26)	(-)	Rs. 1426
	Cost of concreting of stays (As per Annexure -26)	(-)	Rs. 632
	Labour & overhead charges (Annexure-26)	(-)	Rs.29513
	Cost of 25 kVA s/s excluding Cost of concreting and labour		Rs.96317
	Assuming 3 connections on one 25 kVA sub-station, cost per connection		Rs. 32105.66 say Rs. 32110
C.	Total fixed charge (A+B)		
(a)	Consumer does not provide meter = 5000 + 32110 = 37110		say Rs. 37110
(b)	Consumer provide meter = 2041 + 32110 = 34151		say Rs. 34200
D.	Variable charge		
	Cost of 1 km 11 kV line on PCC Pole (Annexure-18)		Rs. 260644
	Cost of concreting of poles (Annexure – 18)	(-)	Rs. 12121
	Cost of concreting of stays (Annexure-18)	(-)	Rs. 632
	Labour & overhead charge (Annexure-18)	(-)	Rs. 60149
	Cost of 1 km line excluding cost of concreting and labour charges		Rs. 187742
	Cost of 11kV line per meter	187.742	say Rs. 188/-

Note: Consumer shall pay total charges under deposit scheme.

ANNEXURE-4**Fixed Line Charge for domestic & non-domestic connection in village Load Upto 2 KW for overhead services**

S.No.	Particulars	Unit	Rate	Qty.	Amt. (Rs.)
1	2	3	4	5	6
1	2×4 mm ² PVC Cable with catenary arrangement	Mtr.	34	50	1700
2	1 Ph-2 W Electro-static meter with meter box	No	980	1	980
3	Labour & overhead charges			L.S.	150
	Total				2830
	N.B: Cable shall be provided by consumer.				

Amount chargeable to consumer

(A) Meter provided by licensee	2830 – 1700 = Rs.	1130
(B) Meter provided by consumer	2830 – 1700 - 980 = Rs.	150

ANNEXURE-5**Fixed Line Charge****Load below 5 KW****Overhead services**

S.No.	Particulars	Unit	Rate	Qty.	Amt. (Rs.)
1	2	3	4	5	6
1	2×6 mm ² PVC Cable with catenary arrangement	Mtr.	47	50	2350
2	1 Ph-2 W Electro-static meter with meter box	No	980	1	980
3	Labour & overhead charges		425	L.S.	425
	Total				3755
N.B:- 1 . Cable shall be provided by consumer. 2 . Meter may be provided by the licensee or consumer.					

Amount chargeable to consumer

(A) Meter provided by licensee = 3755-2350 = Rs 1405
(B) Meter provided by consumer = 3755-2350-980 = Rs 425

;

Fixed Line Charge

Load below 5 KW

Underground Services**Annexure-5A**

SI. No.	Item	UOM	Qty.	Material Cost	Total
			N	A	C = Nx A
1	2C x 10 sq mm armoured cable	Meter	50	47	2,350
2	PVC pipe of 2" Diameter	Meter	5	22	110
3	10 Sqmm Aluminium Thimble	Nos.	4	2	8
4	Single phase static whole current meter with meter box	No	1	980	980
5	PVC Tape	Nos.	2	9	18
7	Trenchless road crossing	LS			1,500
	Labour at the rate of 15%				520
	Total				5,486

N.B:- 1 . Cable shall be provided by consumer. 2 . Meter may be provided by the licensee or consumer.

Amount chargeable to consumer

(A) Meter provided by licensee 5486 -2350 = Rs 3136

(B) Meter provided by consumer 5486-2350-980 = Rs 2156

ANNEXURE-6**Fixed Line Charge****Load 5 kw or more but below 25 KW****Overhead Services**

S.No.	Particulars	Unit	Rate	Qty.	Amt. (Rs.)
1	2	3	4	5	6
1	4×25 mm ² Armoured PVC Cable with catenary arrangement	Mtr.	213	50	10650
2	3 Phase-4 W static meter 10-60 A with meter box	No	2959	1	2959
3	Labour & overhead charges		2041	L.S.	2041
	Total				15650
N.B:-					
1 . Cable shall be provided by consumer.					
2 . Meter may be provided by the licensee or consumer.					

Amount chargeable to consumer

(A) Meter provided by licensee	15650-10650 = Rs	5000
(B) Meter provided by consumer	15650-10650-2959 = Rs	2041

ANNEXURE – 6 A

Fixed Line Charge

Load 5 kw or more but below 25 KW

Underground Services

Sl. No.	Item	UOM	Qty.	Material Cost	Total
			N	A	C = N x A
1	3.5 C x 35 sq mm armoured cable	Meter	50	213	10650
2	PVC pipe of 3" Diameter	Meter	8	37	296
3	16 Sqmm Alumimum Thimble	Nos.	2	3	6
4	35 sqmm, Alumimum Thimble	Nos.	6	5	30
5	Three Phase Static whole current meter with meter box	No.	1	2959	2959
6	PVC Tape	Nos.	4	9	36
7	PVC flexible wire (m)	Meter	4	22	88
8	Trenchless road crossing	LS			3000
9	Labour & overhead charges at the rate of 15 %	L.S.	2110		2109.75
	Total Cost				19175
	N.B:- 1. Cable shall be provided by consumer. 2. Meter may be provided by the licensee or				

Amount chargeable to consumer

(A) Meter provided by licensee 19175 – 10650 = **Rs. 8525**

(B) Meter provided by consumer 19175 – 10650 – 2959 = **Rs. 5566**

ANNEXURE-7

Fixed Line Charge

PTW connection for load above 7 HP where only cable connection is required

No	Particulars	Unit	Rate	Qty.	Amt. (Rs.)
1	2	3	4	5	6
1	4x25 mm ² Armoured PVC Cable with catenary arrangement	Mtr.	213	50	10650
2	3 Ph-4 W static meter 10-60 A with meter box	No	2959	1	2959
3	Labour & overhead charges		2041	L.S.	2041
	Total				15650
N.B:-					
1. Cable shall be provided by consumer.					
2. Meter may be provided by the licensee or consumer.					

Amount chargeable to consumer

(A) Meter provided by licensee	15650-10650	5000
(B) Meter provided by consumer	15650-10650-2959	2041

PTW connection for load 1 HP to 7 HP where only cable connection is required

S. No	Particulars	Unit	Qty.	Single Phase		Three Phase	
				Rate	Amt.(Rs.)	Rate	Amt.(Rs.)
1	2	3	4	5	6	7	8
1	4x10 mm ² PVC Cable with catenary arrangement	Mtr.	50			93	4650
2	2x6 mm ² PVC Cable with catenary arrangement	Mtr.	50	46	2300		0
3	3 Ph-4 W static Meter 30-60 A with meter box	No	1			2959	2959
4	1 Ph-2 W electro-static Meter with meter box	No	1	980	980		
5	Labour & overhead charges		L.S.	492	492	1141	1141
	Total				3772		8750
N.B:-							
1 . Cable shall be provided by consumer.							
2 . Meter may be provided by the licensee or consumer.							

Amount chargeable to consumer

	<u>Three Phase</u>		<u>Single Phase</u>	
(A) Meter provided by licensee	8750-4650	4100	3772-2300	1472
(B) Meter provided by consumer	8750-4650-2959	1141	3772-2300-980	492

Note : For PTW connections, the supply shall be provided as follows :

Load for PTW or Pumping Set	Type of supply
7 HP or below	Single Phase/ Three phase
Above 7 HP	Three phase

ANNEXURE-8**Fixed Line Charge****Load above 25 KW or more upto 50 KW (56 KVA)****Overhead Services**

S.No.	Particulars	Unit	Rate	Qty.	Amt. (Rs.)
1	2	3	4	5	6
1	3.5×35 mm ² Armoured PVC Cable with catenary arrangement	Mtr.	253	50	12650
2	3 Phase-4 W static LT TVM with metering cubicle.	No	9746	1	9746
3	Labour & overhead charges		3359	L.S.	3359
	Total				25755
N.B:- Cable shall be provided by consumer.					

Amount chargeable to consumer 25755 - 12650 = Rs 13105

Fixed Line Charge**ANNEXURE - 8 A****Load above 25 KW or more upto 50 KW (56 KVA)****Underground Services**

SI.No	Particulars	Unit	Rate	Qty.	Amount (Rs.)
1	2	3	4	5	6
1	Cable 1100 V, XLPE 35 SQ MM/3 1/2 CORE	Mtr.	253	50	12650
2	3 Phase-4 W static LT TVM with metering cubicle.	Nos	9746	1	9746
3	100 mm Dia. X 1 M long RCC half round muff for cables	Nos	77	25	1925
4	Bracket clamps for three phase meter box	No.	18	1	18
5	Clamps – Three phase meter box	No.	1	52	52
6	Sundry items	NOs.	300	1	300
7	Total				24691
8	Labour and overhead charges @ 15 % of material cost	L.S.			3704
9	Trenchless road crossing	LS			3000
	Sub Total				31395

Cable shall be provided by the consumer**Amount chargeable to consumer 31395-12650 = Rs 18745**

ANNEXURE-9

Fixed Line Charge

Load above 50 KW/56 KVA upto 200 KVA

Overhead Services

S.No.	Particulars	Unit	Rate	Qty.	Amt. (Rs.)
1	2	3	4	5	6
A	Service Line Installation				
1	3×70 mm ² 11 KV XLPE Cable	Mtr.	460	50	23000
2	I/D & O/D Cable Jointing Kit suitable for 3×70 mm ² XLPE Cable	No	3500	2	7000
3	GI Pipe 6" dia	Mtr.	1229	8	9832
4	Earthing Complete	No	698	4	2792
5	Stay Set Coplete	No.	1648	4	6592
6	ACSR Dog Conductor	Mtr.	68.76	60	4126
7	11 KV Pin Insulator	No.	41	6	246
8	11 KV Pin with nut	No.	63	6	378
9	11 KV Disc Insulator	No.	237	3	711
10	11 KV Disc fitting	No.	93	3	279
11	Top Channel M.S. 100×50×2240 mm	No.	1700	1	1700
12	Droper Channel M.S. 100×50×2000 mm	No.	1189	1	1189
13	PCC Pole 8.5 Mtr.	No.	2375	2	4750
14	Concreting of Support	No.	713	2	1426
15	Number Plate	No.	110	1	110
16	Danger board with clamp	No.	384	1	384
17	Barbed Wire	Kg.	134	4	536
18	Alluminium tape	Kg.	255	1	255
19	Stone pad 300×300×75 mm	No.	117	2	234
20	concreting of stay	No.	316	4	1264
21	Clamp with bolt & nut	No.	253	16	4048
	Sub Total				70852
22	Labour & overhead charges			L.S.	21255
	Sub Total Service line Installation				92107
B	Metering system				
23	3 Ph -4 W Static TVM 11 KV	No.	3768	1	3768
24	11 KV Pilfer proof metering cubicle	No.	44709	1	44709
	Sub Total				48477
25	Labour & overhead charges			L.S.	14543
	Sub Total Metering System				63020
	Total Service Line +metering				155127

Amount chargeable to consumer :

(A) Line installed by licensee	: Rs.	155127	Say Rs. 155000
(B) Line installed by consumer	: Rs.	92107 × 0.15 + 63020 = 76836	Say Rs. 77000

Fixed Line Charge**ANNEXURE-9 A****Load above 50 kW/ 56 kVA upto 200 kVA****Underground Services**

Sl. No.	Particulars	Unit	Rate	Qty	Amount (Rs.)
		2	3	4	5
					6
A	Service Line Installation				
1	Cable 11 KV (E) XLPE 70 SQ. MM/3 CORE Aluminium conductor (EC Grade)	Mtr.	460	100	46000
2	Straight through joint for 11 KV (E) 70 mm 2 3 – Core A2XCEF Y compact Aluminium	No.	7620	2	15240
3	Indoor type cable termination for 11 KV (E) 70 mm 2 3-Core AZXCEF Y Compact	No.	3500	4	14000
4	Heat shrinkable Busbar insulating tape of size: 50 mm X 10 meter long	Roll	2808	2	5616
5	140 mm OD PN-4 PE – 80 Grade UV stabilized HDPE pipe as per IS: 4984 in 6 mtr	No.	2945	1	2945
6	Rigid PVC pipes: Size 110 mm OD X thickness 6.1 mm X 2.5 mtr long	No.	508	6	3048
7	Ht Dip Galvanized Earthing pipe electrode of size 1.5" dia, as per Drg No.	No.	927	2	1854
8	Hot Dip Galvaniseed Earthing Strip of size 50 mm X 6 mm X 2500 mm long as per D	No.	367	20	7340
9	EPOXY Compound General Purpose	KG	175	0.4	70
10	Hot Dip Galvanized cable support clams for 120 sq mm to 150 sq mm 3 core 1	No.	696	4	2784
11	6" Dia RCC half round Muffs for HT Cables	No.	95	90	8550
	Sub Total				107447
12	Labour and overhead charges		15070	L.S	32234.1
	Sub Total Service Line Installation				139681.1
B	Metering System				
13	3 Ph - 4 W static TVM 11 kV	No.	3768	1	3768
14	11 kV Pilfer proof metering cubicle	No.	44709	1	44709
	Sub Total				48477
	Labour and overhead charges @ 30% of the material cost			L.S.	14543.1
	Sub Total Metering System				63020.1
	Total Service line metering				202701.2

Amount chargeable to consumer**(A) Line installed by licensee Rs. 202701.2 say Rs. 203000****(B) Line installed by consumer Rs. 139681.1x 0.15 + 63020.1 = Rs. 83972.26 say Rs. 84000****Ring main unit shall be installed for underground services**

ANNEXURE-10

**Fixed Line Charge
Load above 200 KVA upto 1 MVA
Overhead Services**

S.No.	Particulars	Unit	Rate	Qty.	Amt. (Rs.)
1	2	3	4	5	6
A	Service Line Installation				
1	3×120 mm ² 11 KV XLPE Cable	Mtr.	614	50	30700
2	I/D & O/D Cable Jointing Kit suitable for 11 KV 3×120 mm ² XLPE Cable	No.	3600	2	7200
3	GI Pipe 6" dia	Mtr.	1219	8	9752
4	Earthing Complete	No.	692	4	2768
5	Stay Set Coplete	Nos.	1634	4	6536
6	ACSR Dog Conductor	Mtr.	68.76	60	4125.6
7	11 KV Pin Insulator	No.	41	6	246
8	11 KV Pin with nut	No.	63	6	378
9	11 KV Disc Insulator	No.	237	3	711
10	11 KV Disc fitting	No.	93	3	279
11	Top Channel M.S. 100×50×2240 mm	No.	1307	1	1307
12	Droper Channel M.S. 100×50×2000 mm	No.	1189	1	1189
13	ST Pole 11 Mtr.	No.	13620	2	27240
14	Concreting of Support	No.	713	2	1426
15	Number Plate	No.	110	1	110
16	Danger board with clamp	No.	384	1	384
17	Barbed Wire	Kg.	134	4	536
18	Alluminium tape	Kg.	255	1	255
19	Stone pad 300×300×75 mm	No.	117	2	234
20	concreting of stay	No.	316	4	1264
21	Clamp with bolt & nut	No.	253	16	4048
	Sub Total				100689
22	Labour & overhead charges			L.S.	30207
	Sub Total Service line Installation				130895
B	Metering system				
23	3 Ph -4 W Static TVM 11 KV	No.	3768	1	3768
24	11 KV Pilfer proof metering cubicle	No.	44709	1	44709
	Sub Total				48477
25	Labour & overhead charges			L.S.	14543
	Sub Total Metering System				63020
	Total Service Line+ metering				193915

Amount chargeable to consumer :

(A) Line installed by licensee : Rs. 193915 **Say Rs. 194000**

(B) Line installed by consumer : Rs. $130895 \times 0.15 + 63020$
= 82654 **Say Rs. 82700**

Fixed Line Charge

Load above 200 kVA up to 1 MVA

ANNEXURE-10 A

Underground Services

Sl. No.	Particulars	Unit	Rate	Qty	Amount (Rs.)
1		2	3	4	5
A	Service Line Installation				
1	Cable 11 KV (E) XLPE 120 SQ. MM/3 CORE Aluminium conductor (EC Grade)	Mtr.	614	100	61400
2	Straight through joint for 11 KV (E) 120 mm ² 3 – Core A2XCEFYY compact Aluminium	No.	8000	2	16000
3	Indoor type cable termination for 11 KV (E) 120 mm 2 3-Core AZXCEFYY Compact	No.	3600	2	7200
4	Heat shrinkable Busbar insulating tape of size: 50 mm X 10 meter Long	Roll	2808	2	5616
5	140 mm OD PN-4 PE – 80 Grade UV stabilized HDPE pipe as per IS: 4984 in 6 mtr	No.	2945	1	2945
6	Rigid PVC pipes: Size 110 mm OD X thickness 6.1 mm X 2.5 mtr Long	No.	508	6	3048
7	Hot Dip Galvanized Earthing pipe electrode of size 1.5" dia, as per Drg No.	No.	956	2	1912
8	Hot Dip Galvaniseed Earthing Strip of size 50 mm X 6 mm X 2500 mm long as per D	No.	366	20	7320
9	EPOXY Compound General Purpose	KG	174	0.4	69.6
10	Hot Dip Galvanized cable support clams for 120 sq mm to 150 sq mm 3 core 1	No.	697	4	2788
11	6" Dia RCC half round Muffs for HT Cables	No.	95	150	14250
12	Sundry Items	LS.	3000	1	3000
	Sub Total				125548
13	Labour and overhead @ 30% material cost	Mtr.			37664.4
	Sub Total				163212.4
B	Metering System				
14	3 Ph - 4 W static TVM 11 kV	No.	3768	1	3768
16	11 kV Pilfer proof metering cubicle	No.	44709	1	44709
	Sub Total				48477
17	Labour & overhead charges			L.S.	14543.1
	Sub Total metering system				63020.1
	Total Service line metering				226232.5

Amount chargeable to consumer

(A) Line installed by licensee Rs. 226233 say Rs. 226000

(B) Line installed by consumer Rs. 163212.4*.15+63020.1 = 87501.96

say 87500

Ring main unit shall be installed for underground services

ANNEXURE-11

**Fixed Line Charge
Load above 1 MVA upto 3 MVA**

S.No.	Particulars	Unit	Rate	Qty.	Amt. (Rs.)
1	2	3	4	5	6
A	Service Line Installation				
1	3×185 mm ² 11 KV XLPE Cable	Mtr.	794	50	39700
2	I/D & O/D Cable Jointing Kit suitable for 11 KV 3×185 mm ² XLPE Cable	Nos.	4000	2	8000
3	GI Pipe 6" dia	Mtr.	1229	8	9832
4	Earthing Complete	No.	698	4	2792
5	Stay Set Coplete	No.	1648	4	6592
6	ACSR Dog Conductor	Mtr.	68.76	60	4126
7	11 KV Pin Insulator	No.	41	6	246
8	11 KV Pin with nut	No.	63	6	378
9	11 KV Disc Insulator	No.	237	3	711
10	11 KV Disc fitting	No.	93	3	279
11	Top Channel M.S. 100×50×2240 mm	No.	1307	1	1307
12	Droper Channel M.S. 100×50×2000 mm	No.	1189	1	1189
13	STP Pole 11 Mtr.	No.	13620	2	27240
14	Concreting of Support	No.	713	2	1426
15	Number Plate	No.	109	1	109
16	Danger board	No.	384	1	384
17	Barbed Wire	Kg.	134	4	536
18	Alluminium tape	Kg.	255	1	255
19	Stone pad 300×300×75 mm	No.	117	2	234
20	concreting of stay	No.	316	4	1264
21	Clamp with bolt & nut	No.	253	16	4048
	Sub Total				110648
22	Labour & overhead charges			L.S.	33194
	Sub Total Service line Installation				143842
B	Metering system				
23	3 Ph -4 W Static TVM 11 KV	No.	3768	1	3768
24	11 KV Pilfer proof metering cubicle	No.	44709	1	44709
	Sub Total				48477
25	Labour & overhead charges			L.S.	14543
	Sub Total Metering System				63020
	Total Service line+ metering				206862

Amount chargeable to consumer :

(A) Line installed by licensee : Rs. 206862 **Say Rs. 207000**

(B) Line installed by consumer : Rs. 143842 × 0.15 + 63020
84596 **Say Rs.85000**

Fixed Line Charge

ANNEXURE-11A

Load above 1 MVA upto 3 MVA
Underground Services

Sl. No.	Particulars	Unit	Rate	Qty	Amount (Rs.)
1	2	3	4	5	6
A	Service Line Installation				
1	Cable 11 KV (E) XLPE 185 SQ. MM/3 CORE Aluminium conductor (EC Grade)	Mtr.	794	100	79400
2	Straight through joint for 11 KV (E) 185 mm ² 3 – Core A2XCEF Y compact Aluminium	No.	8200	2	16400
3	Indoor type cable termination for 11 KV (E) 185 mm 2 3-Core AZXCEF Y Compact	No.	4000	2	8000
4	Heat shrinkable Busbar insulating tape of size: 50 mm X 10 meter long	Roll	2808	2	5616
5	160 mm OD PN-4 PE – 80 Grade UV stabilized HDPE pipe as per IS: 4984 in 6 mtr	No.	3240	1	3240
6	Rigid PVC pipes: Size 160 mm OD X thickness 6.1 mm X 2.5 mtr long	No.	600	6	3600
7	Hot Dip Galvanized Earthing pipe electrode of size 1.5" dia, as per Drg No.	No.	956	2	1912
8	Hot Dip Galvaniseed Earthing Strip of size 50 mm X 6 mm X 2500 mm long as per D	No.	366	20	7320
9	EPOXY Compound General Purpose	KG	174	0.4	69.6
10	Hot Dip Galvanized cable support clams for 120 sq mm to 150 sq mm 3 core 1	No.	697	4	2788
11	6" Dia RCC half round Muffs for HT Cables	No.	95	150	14250
12	Sundry Items	LS.	3000	1	3000
	Sub Total				145595.6
13	Labour and overhead	Mtr.			43678.68
	Sub Total				189274
B	Metering System				
14	3 Ph - 4 W static TVM 11 kV	No.	3768	1	3768
16	11 kV Pilfer proof metering cubical	No.	44709	1	44709
	Sub Total				48477
17	Labour & overhead charges			L.S.	14543.1
	Sub Total metering system				63020
	Total Service line metering				252294

Amount chargeable to consumer**(A) Line installed by licensee** Rs. 252294 say **Rs. 252000****(B) Line installed by consumer** Rs. 189274x 0.15 +63020 = 91411.1 say **Rs. 91400****Ring main unit shall be installed for underground services**

ANNEXURE-12

**Fixed Line Charge
Load above 3 MVA upto 4 MVA**

S.No.	Particulars	Unit	Rate	Qty.	Amt. (Rs.)
1	2	3	4	5	6
A	Service Line Installation				
1	3×120 mm ² 33KV XLPE Cable	Mtr.	1113	50	55650
2	I/D & O/D Cable Jointing Kit suitable for 33 kv 3×120 mm ² XLPE Cable	No.	16650	2	33300
3	GI Pipe 6" dia	Mtr.	1229	8	9832
4	Earthing Coplete	No.	698	4	2792
5	Stay Set Complete	No.	1648	4	6592
6	ACSR Dog Conductor	Mtr.	68.76	60	4125.6
7	33 KV Pin Insulator	No.	196	6	1176
8	33 KV Pin with nut	No.	201	6	1206
9	Disc Insulator 70 KN	No.	258	12	3096
10	33 KV Disc fitting	No.	228	3	684
11	Top Channel M.S. 125×65×3200 mm	No.	2342	1	2342
12	Droper Channel M.S. 100×50×2600 mm	No.	1485	1	1485
13	ST Pole 11 Mtr.	No.	13620	2	27240
14	Concreting of support	No.	713	2	1426
15	Number Plate	No.	110	1	110
16	Danger board with clamp	No.	384	1	384
17	Barbed Wire	Kg.	134	4	536
18	Alluminium tape	Kg.	255	1	255
19	Stone pad 300×300×75 mm	No.	117	2	234
20	concreting of stay	No.	316	4	1264
21	Clamp with bolt & nut	No.	253	16	4048
	Sub Total				157778
22	Labour & overhead charges			L.S.	47333
	Sub Total Service line Installation				205111
B	Metering system				
23	3 Ph -4 W Static TVM 33 KV	No.	3768	1	3768
24	33 KV Pilfer proof metering cubicle	No.	164230	1	164230
	Sub Total				167998
25	Labour & overhead charges			L.S.	50399
	Sub Total Metering System				218397
	Total Service line+metering				423508

Amount chargeable to consumer :

(A) Line installed by licensee : Rs. 423508 **Say Rs. 424000**

(B) Line installed by consumer : Rs. 205111 × 0.15 + 218397
= 249164 **Say Rs. 250000**

Fixed Line Charge**Load above 3MVA upto 4MVA****ANNEXURE-12 A****Underground Services**

Sl. No.	Particulars	Unit	Rate	Qty	Amount (Rs.)
1		2	3	4	5
A	Service Line Installation				
1	Cable 33 KV (E) XLPE 120 SQ. MM/3 CORE Aluminium conductor (EC Grade)	Mtr.	1113	100	111300
2	Outdoor type cable termination for 33 KV (E) 120 mm 2 3-Core AZXCEFY Compact	No.	16650	2	33300
3	Indoor type cable termination for 33 KV (E) 120 mm 2 3-Core AZXCEFY Compact	No.	5664	4	22656
4	Heat shrinkable Busbar insulating tape of size: 50 mm X 10 meter long	Roll	2808	4	11232
5	140 mm OD PN-4 PE – 80 Grade UV stabilized HDPE pipe as per IS: 4984 in 6 mtr	No.	6545	1	6545
6	Rigid PVC pipes: Size 160 mm OD X thickness 6.1 mm X 2.5 mtr long	No.	662	6	3972
7	Hot Dip Galvanized Earthing pipe electrode of size 1.5" dia, as per Drg No.	No.	957	4	3828
8	Hot Dip Galvaniseed Earthing Strip of size 50 mm X 6 mm X 2500 mm long as per D	No.	366	20	7320
9	EPOXY Compound General Purpose	KG	174	0.4	69.6
10	Hot Dip Galvanized cable support clams for 120 sq mm to 150 sq mm 3 core 1	No.	708	2	1416
11	6" Dia RCC half round Muffs for HT Cables	No.	95	150	14250
12	Sundry Items	LS.	8000	1	8000
13	Trenchless road crossing	Mtr.	10000	1	10000
	Sub Total				233889
B	Metering System				
14	3 Ph - 4 W static TVM 33 kV	No.	3768	1	3768
16	33 kV Pilfer proof metering cubical	No.	164230	1	164230
	Sub Total				167998
17	Labour & overhead charges			L.S.	50399.4
	Sub Total Metering System				218397
	Total Service line metering				452286

Amount chargeable to consumer**(A) Line installed by licensee Rs. 452286 say Rs. 452300****(B) Line installed by consumer Rs. 233889x 0.15 + 218397 = 253480 say Rs. 253500****Ring main unit shall be installed for underground services**

ANNEXURE-13

**Fixed Line Charge
Load above 4 MVA upto 10 MVA**

S.No.	Particulars	Unit	Rate	Qty.	Amt. (Rs.)
1	2	3	4	5	6
A	Service Line Installation				
1	3×300 mm ² 33KV XLPE Cable	Mtr.	1644	50	82200
2	I/D & O/D Cable Jointing Kit suitable for 33 KV 3×300 mm ² XLPE Cable	No.	17100	2	34200
3	GI Pipe 6" dia	Mtr.	1229	8	9832
4	Earthing Complete	No.	698	4	2792
5	Stay Set Complete	Nos.	1648	4	6592
6	ACSR Dog Conductor	Mtr.	68.76	60	4126
7	33 KV Pin Insulator	No.	196	6	1176
8	33 KV Pin With nut	No.	201	6	1206
9	Disc Insulator 70 KN	No.	258	12	3096
10	33 KV Disc fitting	No.	228	3	684
11	Top Channel M.S. 125×65×3200 mm	No.	2343	1	2343
12	Droper Channel M.S. 100×50×2600 mm	No.	1485	1	1485
13	S.T. Pole 11 Mtr	No.	13620	2	27240
14	Concreting of support	No.	713	2	1426
15	Number Plate	No.	110	1	110
16	Danger board with clamp	No.	384	1	384
17	Barbed Wire	Kg.	134	4	536
18	Alluminium tape	Kg.	255	1	255
19	Stone pad 300×300×75 mm	No.	117	2	234
20	concreting of stay	No.	316	4	1264
21	Clamp with bolt & nut	No.	249	16	3984
	Sub Total				185165
22	Labour & overhead charges			L.S.	55549
	Sub Total Service line Installation				240714
B	Metering system				
23	3 Ph -4 W Static TVM 33 KV	No.	3768	1	3768
24	33 KV Pilfer proof metering cubicle	No.	164230	1	164230
	Sub Total				167998
25	Labour & overhead charges			L.S.	50399
	Sub Total Metering System				218397
	Total Service line+metering				459111

Amount chargeable to consumer :

(A) Line installed by licensee : Rs. 459111 Say Rs. 459000

(B) Line installed by consumer : Rs. 240714 × 0.08 + 218397
= 237655 Say Rs. 238000

ANNEXURE-13A

**Fixed Line Charge
Load above 4 MVA upto 10 MVA
Underground Services**

Sl. No.	Particulars	Unit	Rate	Qty	Amount (Rs.)
1		2	3	4	5
A	Service Line Installation				
1	Cable 33 KV (E) XLPE 300 SQ. MM/3 CORE Aluminium conductor (EC Grade)	Mtr.	1644	100	164400
2	Outdoor type cable termination for 33 KV (E) 300 mm 2 3-Core AZXCEFY Compact	No.	17100	2	34200
3	Indoor type cable termination for 33 KV (E) 300 mm 2 3-Core AZXCEFY Compact	No.	7000	4	28000
4	Heat shrinkable Busbar insulating tape of size: 50 mm X 10 meter long	Roll	2808	4	11232
5	140 mm OD PN-4 PE – 80 Grade UV stabilized HDPE pipe as per IS: 4984 in 6 mtr	No.	6545	1	6545
6	Rigid PVC pipes: Size 300 mm OD X thickness 6.1 mm X 2.5 mtr long	No.	662	6	3972
7	Hot Dip Galvanized Earthing pipe electrode of size 1.5" dia, as per Drg No.	No.	957	4	3828
8	Hot Dip Galvaniseed Earthing Strip of size 50 mm X 6 mm X 2500 mm long as per D	No.	367	20	7340
9	EPOXY Compound General Purpose	KG	174	0.4	69.6
10	Hot Dip Galvanized cable support clams for 120 sq mm to 300 sq mm 3 core 1	No.	708	2	1416
11	6" Dia RCC half round Muffs for HT Cables	No.	95	150	14250
12	Sundry Items	LS.	8000	1	8000
13	Trenchless road crossing	Mtr.	10000	1	10000
	Sub Total				293252.6
B	Metering System				
14	3 phase 4 wire 11000/110 V 100/5 A C.T. Operated H.T. Trivector meter	No.	3768	1	3768
16	0.5s class 33 KV metering cubicle with 3 Nos CT's & 3 Nos. P.T's with CTR5/5A	No.	206531	1	206531
	Sub Total Metering System				210299
17	Labour and overhead charges at the rate of 30% of material cost			L.S	63089.7
	Sub Total Metering System				273388.7
	Total Service line metering				566641.3

Amount chargeable to consumer

(A) Line installed by licensee Rs 566641.3 say **Rs. 566700**

(B) Line installed by consumer Rs. 293252.6x 0.08 + 273389 = 296849.2 say **297000**

Ring main unit shall be installed for underground services

ANNEXURE-14

Cost Analysis Of One Kilometer of L.T. Single & 3-phase Line On S T Pole

S.No.	Particulars	Unit	Rate (Rs.)	L.T. 3-Phase		L.T. 1- Phase	
				Qty.	Amt. (Rs.)	Qty.	Amt. (Rs.)
1	2	3	4	5	6	7	8
1	ST Pole 11 Mtr.	No.	13620	25	340500	25	340500
2	Stone Pad 300×300×75 mm	No.	117	25	2925	25	2925
3	L.T. Clamp with bolt & Nut	No.	216	75	16200	50	10800
4	Earth wire clamp	No.	216	25	5400	25	5400
5	L.T. Shakle insulator	No.	30	75	2250	50	1500
6	Bolt & Nut for Shakle insulator	Kg.	162	30	4860	20	3240
7	Loop guard complete 3-Phase	No.	38	50	1900		
8	Loop guard complete 1-Phase	No.	29			50	1450
9	Phase wire ACSR Dog	Km.	68758	3.09	212462	1.03	70821
10	Neutral cum earth wire	Kg.	118	157	18526	157	18526
11	Aluminum binding wire	Kg.	206	8	1648	4	824
12	Jointing sleeve for ACSR Dog	No.	85	3	255	1	85
13	Spacer L.T. P.V.C.	No.	74	75	5550	50	3700
14	Extra for stays at angle Location	No.	1634	8	13072	8	13072
15	Concreting of support	No.	707	25	17675	25	17675
16	Earthing complete	No.	692	8	5536	8	5536
17	Concreting of Stay	No.	313	8	2504	8	2504
	Sub Total				651263		498558
18	Labour & overhead charges			L.S.	195378.9	L.S.	149567
	Total				846642		648125

Cost of 3-Phase L.T. Line per meter = 846642 × 0.001 = 846.642 Say Rs. 900

Cost of 1-Phase L.T. Line per meter = 648125 × 0.001 = 648.125 Say Rs. 700

ANNEXURE-15

Cost Analysis Of One Kilometer of L.T. Single & 3-phase Line On P.C.C. Pole

S.No.	Particulars	Unit	Rate (Rs.)	L.T. 3-Phase		L.T. 1- Phase	
				Qty.	Amt. (Rs.)	Qty.	Amt. (Rs.)
1	2	3	4	5	6	7	8
1	P.C.C. Pole 8.5 Mtr.	No.	2375	25	59375	25	59375
2	Stone Pad 300×300×75 mm	No.	117	25	2925	25	2925
3	L.T. Clamp with bolt & Nut	No.	218	75	16350	50	10900
4	Earth wire clamp	No.	218	25	5450	25	5450
5	L.T. Shakle insulator	No.	30	75	2250	50	1500
6	Bolt & Nut for Shakle insulator	Kg.	163	30	4890	20	3260
7	Loop guard complete 3-Phase	No.	39	50	1950		
8	Loop guard complete 1-Phase	No.	29			50	1450
9	Phase wire ACSR Dog	Km.	68758	3.09	212462	1.03	70821
10	Neutral cum earth wire	Kg.	119	157	18683	157	18683
11	Aluminum binding wire	Kg.	208	8	1664	4	832
12	Jointing sleeve for ACSR Dog	No.	86	3	258	1	86
13	Spacer L.T. P.V.C.	No.	75	75	5625	50	3750
14	Extra for stay at angle Location	No.	1648	8	13184	8	13184
15	Concreting of support	No.	713	25	17825	25	17825
16	Earthing complete	No.	698	8	5584	8	5584
17	Concreting of Stay	No.	316	8	2528	8	2528
	Sub Total				371003		218153
18	Labour & overhead charges			L.S.	111300.9	L.S.	65446
	Total				482304		283599

Cost of 3-Phase L.T. Line per meter = 482304 × 0.001 = 482.304 Say Rs. 500

Cost of 1-Phase L.T. Line per meter = 283599 × 0.001 = 283.599 Say Rs.300

ANNEXURE-16

**Cost Analysis Of One Kilometer of L.T. Single & 3-phase Line on P.C.C. Pole
in Rural Area for PTW and Pumping Set**

S.No.	Particulars	Unit	Rate (Rs.)	L.T. 3-Phase		L.T. 1- Phase	
				Qty.	Amt. (Rs.)	Qty.	Amt. (Rs.)
1	2	3	4	5	6	7	8
1	P.C.C. Pole 8.5 M	No.	2375	20	47500	20	47500
2	Stone Pad 300×300×75 mm	No.	117	20	2340	20	2340
3	L.T. Clamp with bolt & Nut	No.	218	60	13080	60	13080
4	Earth wire clamp	No.	218	20	4360	20	4360
5	L.T. Shakle insulator	No.	30	60	1800	20	600
6	Bolt & Nut for Shakle insulator	Kg.	163	18	2934	6	978
7	Loop guard complete 3-Phase	No.	39	40	1560		
8	Loop guard complete 1-Phase	No.	29			40	1160
9	Phase wire ACSR Weasel	Km.	22959	3.09	70943	1.03	23648
10	Neutral cum earth wire	Kg.	119	157	18683	157	18683
11	Aluminum binding wire	Kg.	208	3	624	1	208
12	Jointing sleeve for Weasel	No.	86	3	258	1	86
13	Spacer L.T. P.V.C.	No.	75	60	4500	60	4500
14	Extra for stay at angle Location	No.	1648	3	4944	3	4944
15	Concreting of support	No.	713	3	2139	3	2139
16	Earthing complete	No.	698	3	2094	3	2094
17	Concreting of stay	No.	316	3	948	3	948
	Sub Total				178707		127268
18	Labour & overhead charges			L.S.	53076	L.S.	34744
	Total				231783		162012

Variable Charge**(3-Phase LT Line)****(1-Phase LT Line)**

Cost of 1 Km L.T.Line on PCC Pole	231783	162012
Cost of concreting of support	(-) 2139	(-) 2139
Cost of concreting of Stay	(-) 948	(-) 948
Labour & overhead Charges	(-) 53076	(-) 34744.2
Cost of 1 Km L.T.Line excluding cost of Concreting and labour charges	<u>175620</u>	<u>124181</u>
Cost of LT line per meter	175.62	124.181
Say	Rs 175	Rs 125

ANNEXURE-17

Cost Of material for Double Pole Structure with PCC/ST Pole for 11 KV Line

S.No.	Particulars	Unit	Rate (Rs.)	PCC Pole		ST Pole	
				Qty.	Amt. (Rs.)	Qty.	Amt. (Rs.)
1	2	3	4	5	6	7	8
1	ST Pole 11 Mtr.	No.	13620			2	27240
2	P.C.C. Pole 8.5 Mtr.	No.	2,375	2	4750		
3	Stone Pad 300×300×75 mm	No.	117	2	234	2	234
4	Top Channel M.S.100x50x2240	No.	1307	1	1307	1	1307
5	Cross bracing M.S. Angle	Set	2751	1	2751	1	2751
6	Clamps with Bolt & Nut	No.	253	12	3036	12	3036
7	Barbed wire	Kg.	134	4	536	4	536
8	Danger board with clamp	No.	384	1	384	1	384
9	Concreting of PCC Pole	No.	713	2	1426		
10	Concreting of ST Pole	No.	713			2	1426
11	Earthing complete	No.	698	2	1396	2	1396
12	F Bracket	No.	219	3	657	3	657
13	11 KV Disc Insulators B&S type	No.	258	6	1548	6	1548
14	11 KV Disc fittings	No.	93	6	558	6	558
15	11 KV Pin Insulator	No.	41	3	123	3	123
16	11 KV Pin	No.	63	3	189	3	189
17	P.G. clamp	No.	126	6	756	6	756
18	Stay Complete	No.	1648	6	9888	6	9888
19	Concreting of stay	No.	316	6	1896	6	1896
20	Number plate	No.	110	1	110	1	110
	Total				31545		54035

ANNEXURE-18

Cost Analysis Of One Kilometer of 11 KV Line on PCC Pole/S.T.Pole

S.No.	Particulars	Unit	Rate (Rs.)	PCC Pole		ST Pole	
				Qty.	Amt. (Rs.)	Qty.	Amt. (Rs.)
1	2	3	4	5	6	7	8
1	ST Pole 11 Mtr.	No.	13620			17	231540
2	P.C.C. Pole 8.5 Meter	No.	2375	17	40375		
3	Stone Pad 300×300×75 mm	No.	117	17	1989	17	1989
4	X-arm M.S. Angle 65×65×6 m m V Type	No.	526	17	8942	17	8942
5	Cross arms holding clamp	No.	144	17	2448	17	2448
6	11 KV Pin Insulator	No.	41	51	2091	51	2091
7	11 KV Pin with nut	No.	63	51	3213	51	3213
8	F Bracket	No.	219	17	3723	17	3723
9	ACSR Rabbit Conductor	Km.	33313			3.09	102937
10	ACSR Weasel Conductor	Km.	20428	3.09	63123		
11	Aluminum Tape	Kg.	255	1	255	1	255
12	Aluminum binding wire	Kg.	208	2	416	2	416
13	Jointing sleeve for ACSR Rabbit	No.	86			3	258
14	Jointing sleeve for ACSR Weasel	No.	86	3	258		
15	Danger board with clamp	No.	384	17	6528	17	6528
16	Concreting of Stay	No.	316	2	632	2	632
17	Barbed wire	Kg.	134	34	4556	34	4556
18	Extra for stays at angle Location	No.	1648	2	3296	2	3296
19	Extra with stays at Road crossing	No.	1249	1	1249	1	1249
20	Sectional D/P on STP (Annexure 17)	No.	54035			1	54035
21	Sectional D/P on PCC (Annexure 17)	No.	31545	1	31545		
22	Concreting of PCC Pole	No.	713	17	12121		
23	Concreting of ST Pole	No.	713			17	12121
24	Earthing Complete	No.	698	17	11866	17	11866
25	Number Plate	No.	110	17	1870	17	1870
	Sub Total				200496		453965
26	Labour & overhead charges			L.S.	60149	L.S.	136189.5
	Total				260644		590154.5

Cost of 11 KV Line per meter on P.C.C. Pole = 260644 × 0.001 260.644 **260**

Cost of 11 KV Line per meter on S.T. Pole = 590155 × 0.001 590.1545 **Say Rs.590**

Cost Analysis Of 1 Kilometer 11 KV Underground Line/Cable

S.No.	Particulars	Unit	Rate (Rs.)	11 KV 3×70 mm ²		11 KV 3×120 mm		11 KV 3×185 mm ²	
				Qty.	Amt. (Rs.)	Qty.	Amt. (Rs.)	Qty.	Amt. (Rs.)
1	2	3	4			5	6	7	8
1	11 KV XLPE cable 3×70 mm ²	Km.	406000	1.1	446600				
1	11 KV XLPE cable 3×120 mm ²	Km.	614000		0	1.10	675400		
2	11 KV XLPE cable 3×185 mm ²	Km.	794000		0			1.1	873400
	Cable jointing kit straight through 11 KV (E) 70 mm ²	Km.	7620	2	15240				
	Cable jointing kit straight through 11 KV (E) 120 mm ²	Km.	8000	0	0	2	16000		
3	Cable jointing kit straight through 11 KV (E) 185 mm ²	No.	8200	0	0			2	16400
4	Cable jointing kit out door	No.	3600	2	7200	2	7200	2	7200
5	G.I. Pipe 6" dia	Mtr.	1229	20	24580	20	24580	20	24580
	Sub Total				493620		723180		921580
6	Cable laying charges along with cost of bricks & sand			L.S.	228206	L.S.	228206	L.S.	228206
	Total				721826		951386		1149786
7	Road restoration charges for pucca road crossing	Km.	1863400	0.2	372680	0.2	372680	0.2	372680
8	Road restoration charges for footpath side	Km.	465850	0.8	372680	0.8	372680	0.8	372680
	Grand Total				1467186		1696746		1895146

Cost of underground 11 KV Line per meter

with 3×70 mm² cable 1467186 *0.001 = 1467.186 Say Rs.1470

Cost of underground 11 KV Line per meter

with 3×120 mm² cable 1696746 *0.001 = 1696.746 Say Rs.1700

Cost of underground 11 KV Line per meter

with 3×185 mm² cable 1895146 *0.001 = 1895.146 Say Rs. 1900

ANNEXURE-20

Cost of material for single support on PCC Pole 9 Mtr.for 33 KV Lline

S.No.	Particulars	Unit	Rate	Qty.	Amt. (Rs.)
1	2	3	4	5	6
1	PCC Pole 9.0 Mtr.	No.	4716	1	4716
2	V-type cross arm	No.	1002	1	1002
3	Cross arm holding clamp with bolts & nuts	No.	480	1	480
4	F-bracket	No.	219	1	219
5	33 KV Pin Insulator	No.	196	3	588
6	33 KV Pin with nut	No.	201	3	603
7	Armour Rod with Ferrule for Dog	Set	230	3	690
8	Stone Pad 300x300x75 mm	No.	117	1	117
9	Number plate	No.	110	1	110
10	Danger board with clamp	No.	384	1	384
11	Barbed Wire	Kg.	134	2	268
12	Bolt, Nut & washer	Kg.	163	1	163
13	Aluminium binding wire	Kg.	208	0.5	104
14	Earthing complete	No.	698	1	698
15	Concreting support	No.	713	1	713
	Total				10855

Say 10900

ANNEXURE-21

**Cost of material for Sectional Double Pole Structure on PCC Pole 9 Mtr.for 33 KV
Lline**

S.No.	Particulars	Unit	Rate	Qty.	Amt. (Rs.)
1	2	3	4	5	6
1	PCC Pole 9 Mtr.	No.	4716	2	9432
2	M.S. Angle Iron 65×65×6 mm bracing with 4 clamp	Set	2751	1	2751
3	Top Channel 125×65 mm, 3200 mm with clamp	No.	2320	1	2320
4	Stone Pad 300x300x75 mm	No.	117	2	234
5	11 KV Disc Insulators B&S type	No.	258	24	6192
6	Disc Fittings Dog/Racoon	No.	228	6	1368
7	33 KV pin Insulator	No.	196	3	588
8	33 KV pin with nut	No.	201	3	603
9	Earth clamp with bolt & nut	No.	280	1	280
10	PG Clamp for Dog	No.	214	12	2568
11	E Bracket	No.	351	3	1053
12	Number Plate	No.	110	1	110
13	Danger board with clamp	No.	384	1	384
14	Barbed wire	Kg.	134	4	536
15	Alluminium tape	Kg.	255	1	255
16	Bolt, Nut and washer	Kg.	163	3	489
17	Stay set Complete	No.	1689	8	13512
18	Concreting of support	No.	713	2	1426
19	Earthing complete	No.	698	2	1396
20	Concreting of stay	No.	316	8	2528
	Total				48025

Say **48000**

ANNEXURE-22

Cost of material for Single Line support on ST Pole11 mtr. for 33 KV Line

S.No.	Particulars	Unit	Rate	Qty.	Amt. (Rs.)
1	2	3	4	5	6
1	ST Pole11 Mtr.	No.	13620	1	13620
2	V-type Cross Arm	No.	1002	1	
3	Packing piece and clamp for above with bolts & nuts	No.	702	1	702
4	F Bracket	No.	363	1	363
5	33 KV pin Insulator	No.	196	3	588
6	33 KV pin with nut	No.	201	3	603
7	Earth wire clamp with bolt & nut	No.	280	1	280
8	Amour rod with ferules for Dog	Set	230	3	690
9	Stone Pad 300x300x75 mm	No.	117	1	117
10	Number Plate	No.	110	1	110
11	Danger board with clamp	No.	384	1	384
12	Barbed wire	Kg.	134	2	268
13	Bolt, Nut and washer	Kg.	163	1	163
14	Alluminium paint	Ltr.	266	1	266
15	Red Oxide paint	Ltr.	133	1	133
16	Alluminium binding wire	Kg.	208	0.5	104
17	Concreting of support	No.	713	1	713
18	Earthing complete	No.	698	1	698
	Total				19802

Say 20000

ANNEXURE-23

Cost of material for Section Double Pole Structure on ST 11 Mtr. for 33 KV Lline

S.No.	Particulars	Unit	Rate	Qty.	Amt. (Rs.)
1	2	3	4	5	6
1	ST Pole 11 Mtr.	No.	13620	2	27240
2	M.S. Angle Iron 65×65×6 mm bracing with 4 clamp	Set	2751	1	2751
3	Top Channel 125×65 mm, 3200 mm with clamp	No.	2320	1	2320
4	Stone Pad 300×300×75 mm	No.	117	2	234
5	11 KV Disc Insulators B&S type	No.	258	24	6192
6	Disc Fittings Dog/Racoon	No.	228	6	1368
7	33 KV pin Insulator	No.	196	3	588
8	33 KV pin with nut	No.	201	3	603
9	Earth wire clamp with bolt & nut	No.	280	1	280
10	PG Clamp for Dog	No.	126	12	1512
11	F Bracket	No.	363	3	1089
12	Number Plate	No.	110	1	110
13	Danger board with clamp	No.	384	1	384
14	Barbed wire	Kg.	134	4	536
15	Alluminium tape	Kg.	255	1	255
16	Alluminium paint	Ltr.	266	2	532
17	Bolt, Nut and washer	Kg.	163	3	489
18	Red OXide Paint	Ltr.	133	2	266
19	Stay set complete	No.	3066	8	24528
20	Concreting of support	No.	713	2	1426
21	Earthing complete	No.	698	2	1396
22	Concreting of stay	No.	316	8	2528
	Total Cost				76627

Say 76700

ANNEXURE-24

**Cost Analysis Of One Kilometer of 33 KV Line with ACSR Dog Conductor on
S.T. Pole and P.C.C. Pole**

S.No.	Particulars	Unit	Rate (Rs.)	On STP 11 Mtr.		PCC Pole 9 Mtr.	
				Qty.	Amt. (Rs.)	Qty.	Amt. (Rs.)
1	2	3	4	5	6	7	8
1	Cost of single support as per Annexure 20 & 22						
	ST Pole 11 Mtr.as per annex-2	No.	20000	25	500000		
	PCC Pole 9 Mtr.asper annex-20	No.	11000			16	176000
2	Extra Cost of section and heavy angle points on double pole as per Annexure 21 & 23						
	ST Pole 11 Mtr.	No.	76627	1	76627		
	PCC Pole 9 Mtr.	No.	45497			1	45497
3	Extra Cost of stay at right angle	No.		4	0	2	0
4	ACSR Dog Conductor	Km.	68758	3.09	212462.22	3.09	212462
5	GS/GI Earthwire	Kg.	92.000	127	11684.000	127	11684.000
6	Alluminium jointing sleeves	No.	86	3	258	3	258
7	Earthing complete	No.	698	6	4188	6	4188
8	Extra Cost of Road/Communication lines/11 KV lines crossing	No.	9414	4	37656	2	18828
9	Tree cutting compensation			L.S.	970	L.S.	970
	Sub Total				843845.22		469887
10	Labour & overhead charges			L.S.	253153.566	L.S.	140966
	Total				1096998.79		610853

Cost of 33 KV Line per Meter on ST Pole $1096999 \times 0.001 = 1096.999$ **Say Rs1100**

Cost of 33 KV Line per meter on P.C.C.Pole $610853 \times 0.001 = 610.853$ **Say Rs 610**

ANNEXURE-25

Cost analysis of 1 Kilo meter 33 KV underground Line/Cable

S.No.	Particulars	Unit	Rate (Rs.)	33 KV 3×120 mm ²		33 KV 3×300 mm ²	
				Qty.	Amt. (Rs.)	Qty.	Amt. (Rs.)
1	2	3	4	5	6	7	8
1	33 KV XLPE cable 3×120 mm ²	Km.	1113000	1.10	1224300		
2	33 KV XLPE cable 3×300 mm ²	Km.	1644000			1.1	1808400
3	Cable jointing kit straight through	No.	46585	2	93170	2	93170
4	Cable jointing kit out door	No.	17100	2	34200	2	34200
5	G.I. Pipe 6" dia	Mtr.	1229	20	24580	20	24580
	Sub Total				1376250		1960350
6	Labour charges with laying materials			L.S.	412875	L.S.	588105
	Total				1789125		2548455
7	Road restoration charges for pucca road crossing	Km.	2049740	0.2	409948	0.2	409948
8	Road restoration charges for footpath side	Km.	512435	0.8	409948	0.8	409948
	Grand Total				2609021		3368351

Cost of 33 kV line per meter with 3 x 120 mm² cable= 2609021 x 0.001
2609.02 say 2610

Cost of 33 kV line per meter with 3 x 300 mm² cable= 3368351 x 0.001
3368.35 say 3370

ANNEXURE-26

Cost analysis of 25 KVA S/S On P.C.C. Pole

S.No.	Particulars	Unit	Rate	Qty.	Amt. (Rs.)
1	2	3	4	5	6
1	P.C.C.Pole 8.5 Mtr.	No.	2375	2	4750
2	Stone Pad 300x300x75 mm	No.	117	2	234
3	Top channel	No.	1368	1	1368
4	Dropper channel	No.	1232	1	1232
5	M.S. Angle 75x75x6x2028 mm	No.	904	2	1808
6	M.S. T- off Channel	No.	1119	1	1119
7	Clamps with bolt & nut	No.	253	11	2783
8	11 KV disc Insulator	No.	237	3	711
9	11 KV disc fitting	No.	93	3	279
10	11 KV pin Insulator	No.	41	3	123
11	11 KV pin	No.	63	3	189
12	Transformer 25 KVA	No.	63175	1	63175
13	11 KV T.P.M.O.	Set	15118	1	15118
14	Danger board with clamp	No.	384	1	384
15	Stay set Complete	No.	1648	1	1648
16	Earthing Complete	No.	698	2	1396
17	Concreting of Stay	No.	316	2	632
18	Concreting of support	No.	713	2	1426
	Total				98375
19	Labour & Overhead Charges			L.S.	29513
	Grand Total				127888

ANNEXURE-27

Cost of prepaid meter

S.No.	Particulars	Unit	Qty.	Rate (Rs.)
1	2	3	4	5
1	Single phase prepaid meter	No	1	6000
2	Three phase prepaid meter	No	1	12000

Note

1. Token charges (extra) for code generation for prepaid meter = Rs. 10 per token.

2. The Prepaid meters are the whole current meters as per IS 15884 so they are only available for connection up to 45 KW No prepaid meters are available for connections above 45 KW. If the consumer wishes to install prepaid meter on connections above 45 KW, he shall arrange the meter as per IS 15884 himself with in 2 months and this meter shall be tested by the Discom as per the provisions of Electricity Supply Code before installations if he is unable to provide such meter within 2 month he is liable to deposit the requisite security/additional security

3. In case of Juggi Jopadi and Patri Dukandars the consumer can pay the cost of prepaid meter in installments in either of the methods as mentioned below.

(a) Rs. 150 per month for 60 months.

(b) On initial payment of Rs. 1000 at the time of the Connection and rest on the payment of Rs. 125 per month for 60 months.

ANNEXURE-28**Rate of 11 KV Ring Main Unit**

S.No.	Particulars	Unit	Qty.	Rate (Rs.)
1	2	3	4	5
1	Load upto 200 KVA 11 KV- 21 KA-3 Sec.-95 Bill-50 HZ 3 way	No	1	393250
2	Load above 200 KVA and upto 1000 KVA	No	1	61710

Note : If load is increased at a later date upto 200 KVA no additional cost of RMU shall be charged. However if load is increased above 200 KVA, additional charges payable shall be specified as serial No. 2 minus the charges already paid for RMU by the consumer.

ANNEXURE-29

Cost of Transformers to be charged by the licensee:

In case T/F is installed by the licensee at the consumer premises.

Sl. No.	Capacity	Cost
1	10 KVA Single Phase TFs	34508
2	25 KVA Three Phase TFs	63175
3	63 KVA Three Phase TFs	110884
4	100 KVA Three Phase TFs	145308
5	250 KVA Copper Wound TFs	596591
6	400 KVA Copper Wound TFs	752531

By the Order of the Commission

Secretary