



# National Electric Power Regulatory Authority

## Islamic Republic of Pakistan

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Registrar

No. NEPRA/TRF-14/KESC-2002/1429-1432  
April 10, 2009

Subject:- **Determination of the Authority on Karachi Electric Supply Co. Ltd. Request for Tariff Adjustment due to Variation in Fuel Price and Cost of Power Purchased for the Quarter October to December, 2008**  
Intimation of Determination of Tariff pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997)

Dear Sir,

Please find enclosed the determination of the Authority along with Annexure-I, II & III (08 pages) applying the Tariff Adjustment Mechanism specified in Case No. NEPRA/TRF-14/KESC-2002 notified vide SRO 716(I)/2002, dated 12<sup>th</sup> October 2002.

2. Summary of decision is:

- Adjustment on account of variation in fuel price and cost of power purchased during the quarter October to December, 2008.

3. The determination is being intimated to the Federal Government for the purpose of notification of the approved tariff in the official gazette pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997) and Rule 16(11) of the National Electric Power Regulatory Authority Tariff (Standards and Procedure) Rules, 1998.

4. In view of above, the tariff adjustment intimated vide letter No. NEPRA/TRF-14/KESC-2002/7408-11 dated 07.05.2008, No. 9418-21 dated 07.08.2008 and No. 334-337 dated 20.01.2009 need to be notified prior to the notification of Annexure-III to the attached determination containing the schedule of tariff.

5. The approval of the tariff is subject to the terms and conditions of schedule of tariff as notified vide SRO 819(I)/2001 dated November 29, 2001 and SRO 325(I)/2002 dated June 11, 2002.

Enclosure: As above

The Secretary,  
Cabinet Division,  
Government of Pakistan,  
Cabinet Secretariat,  
Islamabad

  
(Arshad Mehmood)

CC:

1. Secretary, Ministry of Water & Power, Islamabad.
2. Secretary, Ministry of Finance, Islamabad.
3. Secretary, Privatization Commission, Islamabad.



**DETERMINATION OF THE AUTHORITY ON KESCL'S REQUEST FOR TARIFF ADJUSTMENT DUE TO VARIATION IN FUEL PRICE AND COST OF POWER PURCHASED FOR THE QUARTER OCTOBER TO DECEMBER 2008.**

Pursuant to the NEPRA's Determination No. NEPRA/TRF-14/KESC-2002, dated September 10, 2002 as notified by the Federal Government vide SRO 716(I)/2002 dated October 12, 2002 (hereinafter the "Determination"), the tariff (hereinafter "Tariff") of Karachi Electric Supply Company Limited (hereinafter "KESCL") is subject to the following adjustments;

- a) A quarterly (after every three (3) months) adjustment to compensate for variation in the fuel price and the cost of power purchased; and
- b) An annual adjustment for indexation in the O&M component of tariff due to CPI (inflation) to be made in the month of July every year.

2. In the light of aforesaid, KESCL vide its communication No. DDRA/NEPRA/071 dated February 09, 2009 has sought tariff adjustment for the quarter Oct-Dec 2008. KESCL has claimed that the variation in fuel cost due to fuel price variation works out to be negative Rs. 3,602 million or minus *paisa 32.23/kWh*, while variation in cost of purchase of power is calculated to be Rs. 3,274 million or *paisa 29.29/kWh*. The net combined effect has thus been worked out to be negative Rs 328 million or *paisa -2.94/kWh*.

3. KESCL's above request for adjustment in tariff has been based on the following facts.

- i) The rate for purchase of power from National Transmission and Despatch Company (NTDC) for the month of October 2008 has been taken as *Paisa 369/kWh*.
- ii) Application of average rate (basket rate of NTDC) for purchase of power from NTDC with effect from November 2008 in accordance with Determination of the Authority, as notified by GOP vide S.R.O. No. 1130(I)/2008 dated October 30, 2008.

4. Additionally, KESCL through its subsequent communication No. DDRA/NEPRA/071/2009/155 dated February 23, 2009 also requested for adjustment of Rs. 6754 million on account of loss in revenue due to 4% price cap, which was not allowed by the Authority in its previous determination for quarterly adjustment in tariff (July- September 2008) issued by the Authority vide No NEPRA/TRF-14/KESC-2002/334-337 dated January 20, 2009.

5. The information/data submitted by KESCL along with its instant tariff adjustment request has been evaluated and discussed as hereunder;



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### Adjustment in tariff due to fuel price variation

5.1. According to the information submitted by KESC, the variation in the cost of fuel due to fuel price variation at KESC's own generation system for the quarter October- December 2008, works out to be minus Rs. 3662 million or decrease in KESC's consumer end tariff by Paisa 33.46/kWh. The aforesaid reduction in the fuel cost from that of the previous quarter has occurred primarily due to decrease in the price of furnace oil purchased and consumed by KESC at its own operated generating units during the current quarter and, therefore, approved by the Authority.

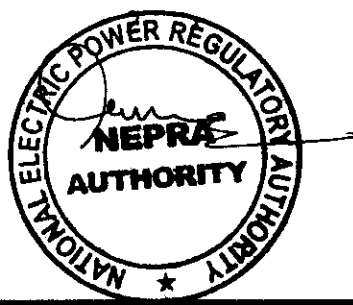
### Adjustment in tariff due to power purchase cost variation

5.2. KESC has applied a rate of paisa 369/kWh for working out variation in the cost of power purchased from NTDC during the month of October 2008, which is not consistent with the previous decision of the Authority dated April 14, 2003 whereby NTDC has been allowed to charge KESC on the basis of marginal cost. Accordingly, variation in cost of power purchased from NTDC has been reworked on the basis of marginal cost rate for October 2008 as minus Rs 635 million and adjusted against the leftover (unadjusted amount) of Rs. 35820 million (Authority's determination for the quarter July-September 2008). The net unadjusted amount works out to be Rs. 35185 million (Rs. 35820- Rs.635). The Authority observed that the dispute between NTDC and KESC over the past arrears on the basis of marginal rate is under consideration by a committee already constituted by GOP, and as such decided, not to adjust any amount pertaining to accumulated arrears on account of purchase of power by KESC from NTDC on marginal cost basis.

5.3 As per determination of the Authority already notified by GOP vide S.R.O. No. 1130(I)/2008 dated October 30, 2008, KESC is required to pay NTDC at an average rate (basket rate of NTDC) for the purchase of power from NTDC, with effect from 1<sup>st</sup> November 2008. Accordingly, the variation in the power purchase cost for the quarter under review has been worked out Rs. 3274 million or paisa 29.91/kWh. Since, KESC has not been allowed adjustment in its tariff for the accumulated amount of Rs. 35820 million on account of variation in cost due to the marginal cost rate as stated in the preceding paragraph, therefore in order for KESC to fulfill its obligations for payment of power purchases from NTDC at the average rate (basket rate of NTDC), the Authority has decided to adjust Rs. 3274 million or paisa 29.91/kWh in KESC's tariff.

### Loss in revenue due to 4% price cap

5.4. KESC's request for adjustment of loss in revenue of Rs. 6754 million (para 4 above) was considered by the Authority in its last determination for quarterly adjustment in KESC's tariff dated January 20, 2009 and it was then decided by the Authority that KESC does not qualify for such adjustment of loss in revenue due to the reason that the mechanism for adjustment in tariff due to fuel price variation and the mechanism for adjustment in tariff due to power purchase cost variation already approved by the Authority and notified by GOP does not allow for adjustment of such loss in revenue. Further the Authority has already adjusted the cumulative leftover (unadjusted) amount of the previous quarters in its last determination for KESC quarterly adjustment in tariff for the quarter



July-September 2008. The Authority, therefore, maintains that any loss to the utility either actual or implied which is not covered under the approved mechanism for adjustment in KESCL's tariff can not be considered a pass through cost and adjusted in KESCL's tariff. The Authority, therefore, maintains its previous decision on the matter.

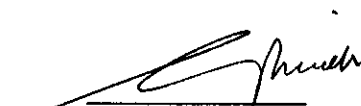
6. In view of the above, the net combined effect, while incorporating both variations i.e the fuel price variation as well as the variation in the purchase purchased for the quarter Oct-Dec 2008 comes out to be minus Rs. 388 million or negative Paisa 3.55/kWh.

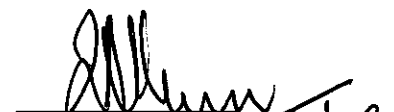
7. In order to compensate KESCL on account of variation in the fuel price and the cost of purchase of power for the current quarter (October- December 2008), the Authority has decided to allow a uniform decrease in KESCL's consumer end tariff by Paisa four (4) per kWh for all consumer categories except for the life-line consumers consuming up to 50 units per month and the Agriculture consumers (category D-1 and D-2),


8. In light of the aforesaid, the Authority recommends to the Federal Government that the KESCL Tariff be modified in accordance with the afore-mentioned Paragraph-7 for the variation in cost of fuel and power purchased for the quarter October-December 2008. For this purpose a new schedule of tariff appended herewith as Annexure-III, is hereby intimated for Notification in the Official Gazette in accordance with the provisions of Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997), read with Rule-6 of the NEPRA Tariff Standards and Procedure Rules, 1998.

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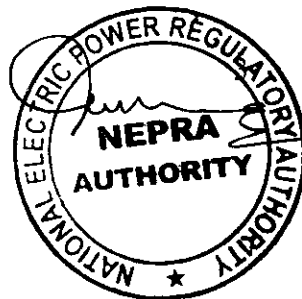
**Authority**

  
Ghasiuddin Ahmed  
Member

  
Zafar Ali Khan  
Member 4/4/09

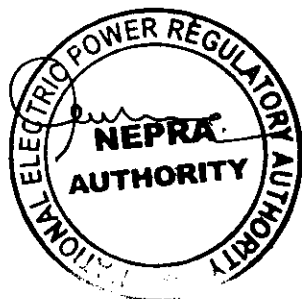
  
Maqbool Ahmad Khawaja  
Vice Chairman/Member

  
Khalid Saeed  
Chairman



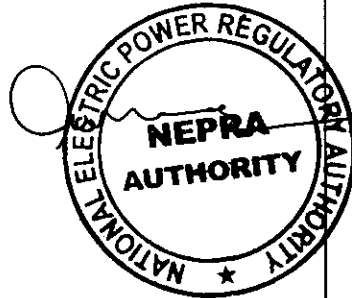
**Karachi Electric Supply Corporation Ltd.**  
**Adjustment in tariff due to variation in fuel price**  
**Quarter ending December 2008**

Description	Generation GWh				
	2nd Quarter			Next 3 Quarters	Total Oct 08 - Sep 09
	Oct-08	Nov-08	Dec-08		
<b>Generation on Furnace Oil at Bus Bar</b>					
Korangi Thermal Power Station	-	-	-	251	251
Bin Qasim	48	20	13	914	995
<b>Total Generation on F.O.</b>	<b>48</b>	<b>20</b>	<b>13</b>	<b>1,166</b>	<b>1,247</b>
<b>Generation on Gas at Bus Bar</b>					
Korangi Thermal Power Station	94	62	77	527	760
Korangi/SITE Gas Turbine Power Station	64	34	10	591	699
Korangi Combined Cycle Power Plant	5	15	25	135	180
Bin Qasim Power Station	434	416	251	4,253	5,354
<b>Total Generation on Gas</b>	<b>597</b>	<b>527</b>	<b>363</b>	<b>5,506</b>	<b>6,993</b>
<b>Generation on LD/HSD Oil</b>	-	-	-	-	-
<b>Total Generation</b>	<b>645</b>	<b>547</b>	<b>377</b>	<b>6,671</b>	<b>8,239</b>
<b>Fuel Prices</b>					
Furnace Oil (Without GST) Rs./M.Ton					
Previous Price	52,093	52,093	52,093	52,093	
Revised Price	46,739	39,072	36,833	36,833	
Gas Rs./ MMBTU					
Previous Price	330	330	330	330	
Revised Price	330	330	330	350	
<b>Coverison Factor</b>					
Furnace Oil Kg/kWh					
Korangi Thermal Power Station	0.32	0.32	0.32	0.32	
Bin Qasim	0.25	0.25	0.25	0.25	
Gas BTu/kWh					
Korangi Thermal Power Station	12,900	12,900	12,900	12,900	
Korangi /SITE Gas Turbine Power Station	16,000	16,000	16,000	16,000	
Korangi Combined Cycle Power Plant	8,554	8,554	8,554	8,554	
Bin Qasim	10,000	10,000	10,000	10,000	
<b>Variation in Fuel Cost - F.O. Rs. Million</b>					
Korangi Thermal Power Station	-	-	-	(1,226)	(1,226)
Bin Qasim	(64)	(65)	(49)	(3,458)	(3,636)
<b>Sub-total</b>	<b>(64)</b>	<b>(65)</b>	<b>(49)</b>	<b>(4,685)</b>	<b>(4,862)</b>
<b>Variation in Fuel Cost - Gas Rs. Million</b>					
Korangi Thermal Power Station	-	-	-	136	136
Korangi/SITE Gas Turbine Power Station	-	-	-	189	189
Korangi Combined Cycle Power Plant	-	-	-	23	23
Bin Qasim	-	-	-	851	851
<b>Sub-total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,200</b>	<b>1,200</b>
<b>Total Variation in Fuel Cost Rs. Million</b>	<b>(64)</b>	<b>(65)</b>	<b>(49)</b>	<b>(3,485)</b>	<b>(3,662)</b>
<b>Units expected to be sold GWh</b>	(Oct 2008-Sep 2009)				<b>10,944</b>
Variation in cost due to fuel price for the quarter (Million Rupees)					(3,662)
Balance (Spillover) at the end of last quarter Jul-Sep 08) (Min. Rs.)					-
Total Variation in cost due to fuel price variation (Million Rupees)					(3,662)
Total allowed Adjustment in average sale rate Ps./kWh					(33.46)



**Karachi Electric Supply Corporation Ltd.**  
**Adjustment in tariff on account of purchase of power**  
**Quarter ending December 2008**

Description	Purchase of Power GWh				
	2nd Quarter			Next 3 Quarters	Total 08 -Sep 09
	Oct-08	Nov-08	Dec-08		
<b>Source of Purchase</b>					
Tapal	59	27	30	623	739
Gul Ahmad	64	21	5	622	712
WAPDA	459	425	413	3,205	4,502
KANUPP	42	42	51	262	397
PASMIC	6	12	9	40	67
Others	12	11	12	142	177
<b>Total Purchase of Power</b>	<b>642</b>	<b>538</b>	<b>520</b>	<b>4,894</b>	<b>6,595</b>
Reference Energy Purchase Price not subject to indexation Ps/kWh					
WAPDA	369.00	369.00	369.00	369.00	
KANUPP	245.58	245.58	245.58	245.58	
PASMIC	242.12	242.12	242.12	242.12	
Revised Energy Purchase Price not subject to indexation Ps/kWh					
WAPDA	369.00	517.33	526.96	526.96	
KANUPP	245.58	245.58	245.58	245.58	
PASMIC	242.12	242.12	242.12	242.12	
Reference Energy Purchase Price subject to fuel price change Ps/kWh					
Tapal	1,171.48	1,171.48	1,171.48	1,171.48	
Gul Ahmad	1,207.97	1,207.97	1,207.97	1,207.97	
Revised Energy Purchase Price subject to fuel price change Ps/kWh					
Tapal	1,132.29	978.08	707.86	707.86	
Gul Ahmad	1,179.96	1,148.52	1,148.52	1,148.52	
<b>Fuel Prices</b>					
Reference fuel prices					
Tapal	52,875	52,875	52,875	52,875	
Gul Ahmad	52,925	52,925	52,925	52,925	
Revised fuel prices					
Tapal	51,106	44,146	31,950	31,950	
Gul Ahmad	51,698	50,320	50,320	50,320	
Reference Energy Purchase Price other than fuel subject to indexation					
Tapal	18.50	18.50	18.50	18.50	
Gul Ahmad	10.00	10.00	10.00	10.00	
Reference Energy Purchase Price					
Tapal	53.53	53.53	53.53	53.53	
Gul Ahmad	28.94	28.94	28.94	28.94	
Revised Energy Purchase Price					
Tapal	60.60	60.60	60.60	60.60	
Gul Ahmad	32.75	32.75	32.75	32.75	
Indexation Factors for Energy Charges					
Reference Indexation Factors					
Tapal	3.37	3.37	3.37	3.37	
Gul Ahmad	3.37	3.37	3.37	3.37	
Revised Indexation Factors					
Tapal	3.81	3.81	3.81	3.81	
Gul Ahmad	3.81	3.81	3.81	3.81	
<b>Reference Capacity Charges Rs./kW/Month</b>					
Capacity Charges - non-escalable					
Tapal	331	331	331	331	
Gul Ahmad	678	678	678	678	
Capacity Charges -escalable					
Tapal	336	336	336	336	
Gul Ahmad	433	433	433	433	
<b>Indexation Factors for Capacity Charges</b>					
Reference Indexation Factors for escalable - US CPI	146.03	146.03	146.03	146.03	
Revised Indexation Factors for escalable - US CPI	146.03	146.03	146.03	146.03	
Reference Indexation Factors for escalable - Exchange Rate	66.41	66.41	66.41	66.41	
Revised Indexation Factors for non-escalable - Exchange Rate	75.17	75.17	75.17	75.17	
<b>Dependable Capacity MW</b>					
Tapal	125	125	125	125	
Gul Ahmad	128	128	128	128	
<b>Variation in Cost of Purchase of Power Rs.Million</b>					
Energy	(34)	569	510	1,872	2,917
Capacity	30	30	30	268	357
<b>Total Variation in Cost of Purchase of Power</b>	<b>(5)</b>	<b>599</b>	<b>540</b>	<b>2,139</b>	<b>3,274</b>
<b>Overall units expected to be sold in next 12 months GWh</b>	<b>( Oct 2008 -Sep 2009)</b>				<b>10,944</b>
Variation in cost of power purchase for the quarter (Million Rupees)					3,274
Balance (Spillover) at the end of last quarter (Jul-Sep 08) (Mln. Rs.)					-
Total Variation in cost of power purchase (Million Rupees)					3,274
Total allowed Adjustment in average sale rate (Ps./kWh)					29.91



## KESC

### SCHEDULE OF ELECTRICITY TARIFFS

TARIFF CATEGORY/PARTICULARS	Fixed Charges	Energy Charges	F.A.S	Additional Surcharge
	Rs/kW/Month	Ps/kWh	Ps/kWh	Ps/kWh

**RESIDENTIAL --- TARIFF A-1**

Up to 50 units consumption in a month	-	61	-	79
<b>For consumption above 50 units</b>				
For first 100 units (1-100) in a month	-	46	513	174
For next 200 units (101-300) in a month	-	63	513	247
For next 700 units (301-1000) in a month	-	156	513	382
Above 1000 units in a month	-	193	513	469

Under this Tariff, there shall be minimum monthly charges at the following rates, even if no energy is consumed during the month.

- a. Single phase connections Rs.45/-  
 b. Three phase connections Rs.100/- plus Rs.25/- per kW for load in excess of 5 kW

**COMMERCIAL --- TARIFF A-2**

For first 100 units in a month	-	291	465	418
Above 100 units in a month	-	315	465	430

Under this Tariff, there shall be minimum monthly charges at the following rates, even if no energy is consumed during the month.

- a. Single phase connections Rs 150/-  
 b. Three phase connections Rs 300/- plus Rs 30/- per kW for load in excess of 10 kW

**INDUSTRIAL --- TARIFF - B**

B-1 Up to 40 kW (At 400 Volts)	-	186	480	337
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There shall be minimum monthly charges of Rs. 70 per kW for first 20 kilowatt of load and Rs. 90 per kW for loads between 20-40 kW even if no energy is consumed.

B-2 From 41-500 kW (at 400 volts)	300	135	480	250
B-3* Up to 5000 kW (11 kV)	290	134	480	234
B-4* For all loads (at 66, 132 kV).	280	129	480	215
B-5* For all loads (at 220 kV and above)	273	129	480	208

**TIME OF DAY (TOD) TARIFF FOR INDUSTRIAL CONSUMERS**

PARTICULARS	Fixed Charges Rs/kW/Month	Energy Charges		F A S Ps/kWh	Additional Surcharge	
		Off-Peak Hours	Peak Hours		Off-Peak Hours	Peak Hours
		Ps/kWh	Ps/kWh		Ps/kWh	Ps/kWh
B-2 From 41-500 kW (at 400 volts)	300	125	203	480	234	313
B-3 Upto 5000 kW (11 kV)	290	120	202	480	191	266
B-4 For all loads (at 66, 132 kV).	280	116	192	480	177	256
B-5 For all loads (at 220 kV and above)	273	116	192	480	170	251

**Note:** B-2 consumers can opt for TOD Tariff

All B-3 & B-4 consumers were to be converted to TOD Tariff by 30-06-2000, after installation of electronic meters with TOD provisions. Normal Tariff (\*) will be only applicable to B-3, B-4 and B-5 consumers who have not been provided with TOD meters, till such time TOD meters are provided.

The time period for measuring the maximum demand of B-2, B-3, B-4 and B-5 industrial and TOD meters has been changed from 15 minutes to 30 minutes. Change to take effect on installation of meters capable of measuring the maximum demand in 30 minutes period.



TARIFF CATEGORY/PARTICULARS	Fixed Charges	Energy Charges	F.A.S	Additional Surcharge
	Rs/kW/Month	Ps/kWh	Ps/kWh	Ps/kWh
<b><u>BULK SUPPLY --- TARIFF - C</u></b>				
C-1 (a) 400 Volts	-	129	505	353
C-1 (b) 400 Volts	220	114	505	354
C-2 (a) 11 kV	-	115	505	333
C-2 (b) 11 kV	216	111	505	345
C3 (at 66, 132 & 220 kV) --- for all loads	214	106	505	315

**Note:** The time period for measuring the maximum demand of C-1, C-2, and C-3 meters has been changed from 15 minutes to 30 minutes. Change to take effect on installation of meters capable of measuring maximum demand in 30 minutes period.

**AGRICULTURE --- TARIFF - D**

D-1 Sindh and Balochistan	72	80	497	236
D-2 Sindh and Balochistan	176	80	497	172

**Note:** Consumer falling in category D shall have the option to choose between Tariff D-1 and D-2.

**TEMPORARY SUPPLY --- TARIFF - E**

E-1 (i) Domestic Supply	-	216	513	388
E-1 (ii) Commercial Supply	-	386	465	528

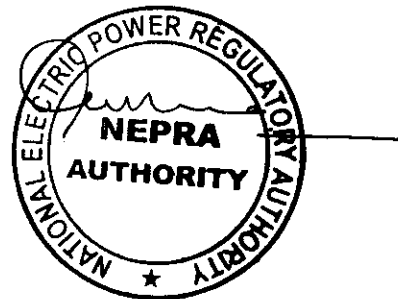
For the above two categories, the minimum bill of the consumer shall be Rs 46/- per day subject to minimum of Rs.200/- for the entire period of supply, even if no energy is consumed.

E-2 (i) Industrial supply	-	241	480	382
E-2 (ii) Bulk Supply				
(a) at 400 Volts	-	181	505	409
(b) at 11 kV	-	169	505	391
E-2 (iii) Bulk supply to other consumers	-	190	505	407

**SEASONAL INDUSTRIAL SUPPLY TARIFF-F**

SUPPLY CHARGES	ADDITIONAL SURCHARGE
125% of the "Supply Charges" of relevant industrial supply tariff	125% of the Additional Surcharge of the relevant industrial supply tariff

**Note:** Tariff-F Consumers will have the option to convert to Regular Tariff and vice versa. This option can be exercised at the time of a new connection or at the beginning of the season. Once exercised, the option will remain in force at least for one year





TARIFF CATEGORY/PARTICULARS	Fixed Charges	Energy Charges	F.A.S	Additional
	Rs/kW/Month	Ps/kWh	Ps/kWh	Surcharge Ps/kWh

**PUBLIC LIGHTING TARIFF-G**

G-1 Units Charges	-	220	484	488
G-2 (a) for 60 watts		Rs 495/per year per lamp		470
(b) for 100 watts		Rs 908/per year per lamp		470

**Note:** Consumer falling in category G shall have the option to choose between Tariff G-1 and G-2.

**Fixed Line Charges Per Month Per Mile****Rs**

- |   |                        |
|---|------------------------|
| (i) Where the entire capital cost in laying street lighting supply line which is exclusively meant for street lighting is borne by the Corporation. | 253                    |
| (ii) Where the entire capital cost in laying street lighting supply line, which is exclusively meant for street lighting is borne by the Consumer.  | 23                     |
| (iii) Where the entire capital cost in laying street lighting supply line, over the existing distribution system is borne by the Corporation.       | 158                    |
| (iv) Where the entire capital cost in laying street lighting supply line, over the existing distribution system is borne by the consumer.           | 33                     |
| (v) For street lighting supply through underground cables.  | Rates to be negotiated |

**RESIDENTIAL COLONIES ATTACHED TO INDUSTRIAL PREMISES (TARIFF-H)**

Consumers having their own transformers	150	513	426
Consumers not having their own transformers	151	513	428

**Note:**

**Terms and conditions of the Schedule of Tariff as notified vide SRO 819(1)/2001 dated November 29, 2001 shall continue to remain in force.**

