



# National Electric Power Regulatory Authority

## Islamic Republic of Pakistan

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No. NEPRA/TRF-14/KESC-2002/334-337  
January 20, 2009

Subject:- **Determination of the Authority on Tariff Adjustment of Karachi Electric Supply Co. Ltd. (formerly Karachi Electric Supply Corporation Ltd.) for Variation in Fuel Price and Cost of Power Purchased for the Quarter July to September, 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 July to September, 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 and No. 9418-21 dated 07.08.2008 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

CC:

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

(Hussnain Zaigham)



**DETERMINATION OF THE AUTHORITY ON TARIFF ADJUSTMENT OF  
KESC FOR VARIATION IN FUEL PRICE AND COST OF POWER PURCHASE  
FOR THE QUARTER JULY TO SEPTEMBER 2008.**

Pursuant to the NEPRA's Determination No. NEPRA/TRF-14/KESC-2002, dated 10<sup>th</sup> September, 2002 as notified by the Federal Government vide SRO 716(I)/2002 dated 12<sup>th</sup> October 2002 (hereinafter the "Determination"), the tariff (hereinafter "Tariff") of Karachi Electric Supply Corporation (hereinafter "KESC") is subject to adjustments: (a) every three (3) months to compensate for variation in the fuel price and cost of power purchased and (b) every year (in July) for indexation due to CPI (inflation).

2. In light of the aforesaid, KESC vide letter No. CMF/NEPRA/071 dated October 17, 2008 has sought adjustment in its tariff. KESC has claimed that the variation in fuel cost due to fuel price variation works out to be Rs. 10408 million or Ps. 95.05/kWh, while variation in cost of purchase of power is calculated to be Rs. 4925 million or paisa 44.98/kWh. The cumulative effect after incorporating leftover of previous quarter Rs 3192 million for the fuel price and Rs. 1712 million for the power purchase cost, has thus been worked out to a total of Rs 20237 million or paisa 184.80/kWh.

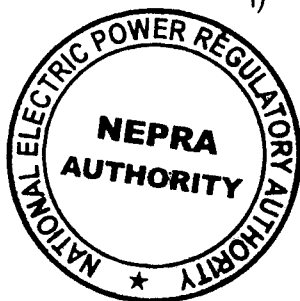
3. In respect of the aforesaid variation in the cost of purchase of power from National Transmission and Despatch Company (hereinafter "NTDC"), KESC has applied a previous fixed rate of Ps. 369 per kWh.

4. Additionally, for this quarterly adjustment in Tariff, KESC has requested for Authority's consideration on the following facts;

- i) Pursuant to Authority's Determination dated 14<sup>th</sup> September 2006, as notified by GOP vide SRO No. 979(I)/2008 dated September 12, 2008 to be effective from 1<sup>st</sup> July 2008, the current quarterly adjustment in KESC's tariff be made without application of 4% price cap.
- ii) Adjustment of loss in revenue amounting to Rs. 6,754 million. According to KESC, it has suffered a loss in revenue to the tune of Rs. 6,754 million due to the application of 4% price cap on its all past quarterly adjustments in tariff as per the prescribed adjustment mechanism. In support KESC also referred to the ECC decision of GOP dated October 10, 2008.

5. Having considered the aforesaid issues, the Authority has decided that:

- i) Pursuant to GOP notification effective 1<sup>st</sup> July 2008, in the matter of determination of the Authority for removal of 4% price cap, KESC 's request for



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adjustment in tariff due to variation in fuel price and power purchase cost for the quarter July-September 2008 is being considered without the application of 4% price cap. Therefore, the total variation in cost due to the fuel price as well as the power purchase cost including the leftover (unadjusted) amount of the previous quarters will be adjusted in KESC tariff.

- ii) With respect to KESC's request for adjustment of loss in revenue amounting to Rs. 6,754 million due to the application of 4% price cap in the past quarterly adjustments, it may be clarified that the Authority has already decided to adjust the leftover (unadjusted) amount of the previous quarters which could not be adjusted in the past essentially due to the restriction of 4% price cap on KESC's tariff as provided in the quarterly adjustments mechanism. The Authority, however, considers that there is no provision under the existing mechanism for adjustment in tariff due to fuel price and the mechanism for adjustment in tariff due to power purchase cost for the adjustment of such loss in revenue as requested by KESC.

6. It was also decided by the Authority, that before KESC is allowed the requested increase in tariff, the data/information submitted along with its quarterly adjustment request will be verified by a committee comprising NEPRA professionals. The committee which visited KESC on 9<sup>th</sup> & 10<sup>th</sup> of January 2009 for the aforesaid purpose has submitted its report whereby it has pointed out to some discrepancies as well as weaknesses in the KESC system for reporting accurate data/information, which is being taken up with KESC separately.

7. Reference the aforementioned Paragraph-5, relying upon the information/data provided by KESC, the variation in cost for the quarter July-September 2008 due to fuel price is worked out to be Rs. 10,404 million or Paisa 95.01/kWh. Incorporating the leftover (unadjusted) amount of Rs. 3191 million (Ps 29.14/kWh) of the previous quarters, the total variation in cost due to the fuel price works out to Rs. 13, 595 million or Ps. 124.16/kWh (Annex-I).

8. The variation in cost due to power purchase price for the current quarter works out to Rs.14,434 million (Ps 131.82/kWh). KESC had leftover (unadjusted) amount of Rs. 28,023 million (Ps 255.92/kWh). The total variation in cost of purchase of power, therefore, amounts to a total of Rs. 42,457 million or Ps 387.74/kWh (Annex-II). Out of this total amount, Rs. 35,820 million (Ps 327.12/kWh) pertain to purchase of power from NTDC at marginal cost rate for the period July 2007 to September 2008, while the balance amount of Rs 6,637 million (Ps 60.61/kWh) relates to purchase of power from other sources (IPPs & others). The Authority considers that the dispute between NTDC and KESC over past arrears on the basis of marginal cost rate is under consideration of a committee already constituted by GOP. The Authority has, therefore, decided not to adjust Rs. 35,820 million (Ps 327.12/kWh) pertaining to accumulated arrears on account of purchase of power by KESC from NTDC on marginal cost basis till resolution of the issue by the committee already constituted by GOP. KESC,



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however, is allowed an adjustment of the balance amount of Rs. 6,637 million (Ps 60.61/kWh) pertaining to the purchase of power from the sources other than NTDC.

9. In view of the above the overall approved variation in cost for the current quarter inclusive of the leftover (unadjusted) amount of the previous quarters works out to a total of Rs. 20,232 million or Ps 184.77/kWh which is being adjusted in current quarterly adjustment in tariff for Jul-Sep 2008 .

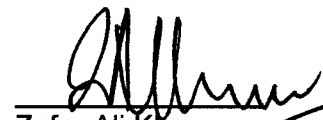
10. In order to compensate KESC, on account of variation in the fuel price and the cost of purchase of power for the current quarter (Jul-Sep 08), the Authority has decided to allow a uniform increase in consumer end tariff for all consumer categories by Paisa 185.0 per kWh, except for the life-line consumers consuming up to 50 units per month.


11. In light of the aforesaid, the Authority recommends to the Federal Government that the KESC Tariff be modified in accordance with aforementioned Paragraph-10 for the variation in cost of fuel and power purchase for the quarter July-September 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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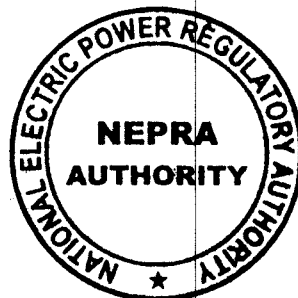
**Authority**

  
Ghiasuddin Ahmed  
Member

  
Zafar Ali Khan  
Member 19/1/09

  
Maqbool Ahmad Khawaja  
Vice Chairman / Member

  
Khalid Saeed  
Chairman

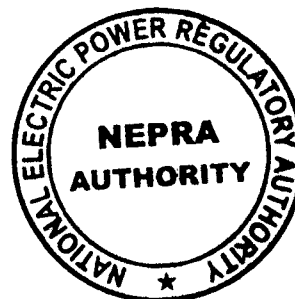




**Karachi Electric Supply Corporation Ltd.**  
**Adjustment in tariff due to variation in fuel price**  
**Quarter ending September 2008**

Description	Generation GWh				
	1st Quarter			Next 3 Quarters	Total Jul 08 - Jun 09
	Jul-08	Aug-08	Sep-08		
<b>Generation on Furnace Oil at Bus Bar</b>					
Korangi Thermal Power Station	0	4	1	273	279
Bin Qasim	135	90	58	1,145	1,428
<b>Total Generation on F.O.</b>	<b>135</b>	<b>94</b>	<b>59</b>	<b>1,419</b>	<b>1,706</b>
<b>Generation on Gas at Bus Bar</b>					
Korangi Thermal Power Station	81	67	70	401	620
Korangi/SITE Gas Turbine Power Station	66	58	72	595	791
Bin Qasim Power Station	463	449	502	4,245	5,659
<b>Total Generation on Gas</b>	<b>611</b>	<b>575</b>	<b>644</b>	<b>5,241</b>	<b>7,070</b>
<b>Generation on LD/HSD Oil</b>					
	-	-	-		-
<b>Total Generation</b>	<b>745</b>	<b>668</b>	<b>704</b>	<b>6,660</b>	<b>8,777</b>
<b>Fuel Prices</b>					
Furnace Oil (Without GST) Rs./M.Ton					
Previous Price	41,666	41,666	41,666	41,666	
Revised Price	45,792	51,047	52,093	52,093	
Gas Rs./MMBTU					
Previous Price	252	252	252	252	
Revised Price	330	330	330	330	
<b>Coverision 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	
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	12	3	911	927
Bin Qasim	138	208	149	2,960	3,455
<b>Sub-total</b>	<b>138</b>	<b>220</b>	<b>152</b>	<b>3,871</b>	<b>4,382</b>
<b>Variation in Fuel Cost - Gas Rs. Million</b>					
Korangi Thermal Power Station	82	68	71	403	623
Korangi/SITE Gas Turbine Power Station	83	72	90	742	987
Bin Qasim	361	350	391	3,309	4,411
<b>Sub-total</b>	<b>526</b>	<b>490</b>	<b>552</b>	<b>4,454</b>	<b>6,022</b>
<b>Total Variation in Fuel Cost Rs. Million</b>	<b>664</b>	<b>711</b>	<b>704</b>	<b>8,325</b>	<b>10,404</b>
<b>Units expected to be sold GWh</b>	(Jul 2008 - Jun 2009)				<b>10,950</b>
Variation in cost due to fuel price for the quarter (Million Rupees)					10,404
Balance (Leftover) at the end of last quarter (Apr-Jun 08) (Mln. Rs.)					3,191
Total Variation in cost due to fuel price variation (Million Rupees)					13,595
Total Allowed Adjustment in average sale rate Ps/kWh					124.16

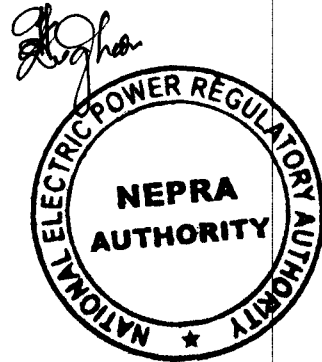
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**Karachi Electric Supply Corporation Ltd.**  
**Adjustment in tariff on account of purchase of power**  
 Quarter ending September 2008

Description	Purchase of Power GWh					Total 08 -Jun 09
	1st Quarter			Next 3 Quarters	Total	
	Jul-08	Aug-08	Sep-08			
<b>Source of Purchase</b>						
Tapal	79	74	48	611	812	
Gul Ahmad	79	76	49	607	811	
WAPDA	405	414	456	2,843	4,117	
KANUPP	18	35	36	222	311	
PASMIC	5	9	8	33	54	
Others	49	33	27	109	218	
<b>Total Purchase of Power</b>	<b>634</b>	<b>641</b>	<b>624</b>	<b>4,425</b>	<b>6,324</b>	
Reference Energy Purchase Price not subject to indexation Ps/kWh						
WAPDA	1,098.61	1,098.61	1,098.61	1,098.61		
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	1,212.25	1,369.00	1,339.00	1,339.00		
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	884.45	884.45	884.45	884.45		
Gul Ahmad	867.22	867.22	867.22	867.22		
Revised Energy Purchase Price subject to fuel price change Ps/kWh						
Tapal	974.70	1,122.56	1,171.48	1,171.48		
Gul Ahmad	988.83	1,094.73	1,207.97	1,207.97		
<b>Fuel Prices</b>						
Reference fuel prices						
Tapal	39,920	39,920	39,920	39,920		
Gul Ahmad	37,996	37,996	37,996	37,996		
Revised fuel prices						
Tapal	43,994	50,667	52,875	52,875		
Gul Ahmad	43,324	47,964	52,925	52,925		
Reference Energy Purchase Price other than fuel subject to indexation Ps/kWh						
Tapal	18.50	18.50	18.50	18.50		
Gul Ahmad	10.00	10.00	10.00	10.00		
Reference Energy Purchase Price						
Tapal	46.59	46.59	46.59	46.59		
Gul Ahmad	25.18	25.18	25.18	25.18		
Revised Energy Purchase Price						
Tapal	53.53	53.53	53.53	53.53		
Gul Ahmad	28.94	28.94	28.94	28.94		
<b>Indexation Factors for Energy Charges</b>						
Reference Indexation Factors						
Tapal	3.13	3.13	3.13	3.13		
Gul Ahmad	3.13	3.13	3.13	3.13		
Revised Indexation Factors						
Tapal	3.60	3.60	3.60	3.60		
Gul Ahmad	3.60	3.60	3.60	3.60		
<b>Reference Capacity Charges Rs./kW/Month</b>						
Capacity Charges - non-escalable						
Tapal	313	313	313	313		
Gul Ahmad	640	640	640	640		
Capacity Charges -escalable						
Tapal	310	310	310	310		
Gul Ahmad	401	401	401	401		
<b>Indexation Factors for Capacity Charges</b>						
Reference Indexation Factors for escalable - US CPI	143.09	143.09	143.09	143.09		
Revised Indexation Factors for escalable - US CPI	146.03	146.03	146.03	146.03		
Reference Indexation Factors for escalable - Exchange Rate	62.68	62.68	62.68	62.68		
Revised Indexation Factors for non-escalable - Exchange Rate	66.41	66.41	66.41	66.41		
<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	636	1,476	1,407	10,720	14,239	
Capacity	16	16	16	147	195	
<b>Total Variation in Cost of Purchase of Power</b>	<b>652</b>	<b>1,493</b>	<b>1,423</b>	<b>10,867</b>	<b>14,434</b>	
<b>Overall units expected to be sold in next 12 months GWh</b>	(July 2008 - June 2009)				<b>10,950</b>	
Variation in cost of power purchase for the quarter (Million Rupees)					14,434	
Balance (Leftover) at the end of last quarter (Apr-Jun 08) (Mln. Rs.)					28,023	
Total Variation in cost of power purchase (Million Rupees)					42,457	
Total allowed Adjustment in average sale rate (Ps/kWh)					387.74	



## 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
<u>For consumption above 50 units</u>				
For first 100 units (1-100) in a month	-	46	517	174
For next 200 units (101-300) in a month	-	63	517	247
For next 700 units (301-1000) in a month	-	156	517	382
Above 1000 units in a month	-	193	517	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	469	418
Above 100 units in a month	-	315	469	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	484	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	484	250
B-3* Up to 5000 kW (11 kV)	290	134	484	234
B-4* For all loads (at 66, 132 kV).	280	129	484	215
B-5* For all loads (at 220 kV and above)	273	129	484	208

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

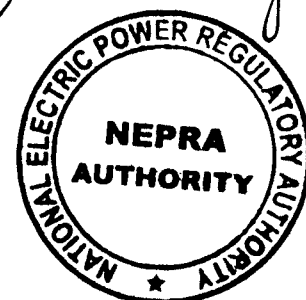
PARTICULARS	Fixed Charges Rs/kW/Month	Energy Charges		F A S Ps/kWh	Additional Surcharge	
		Off-Peak Hours	Peak Hours		Off-Peak Hours	Peak Hours
		Ps/kWh	Ps/kWh		Ps/kWh	Ps/kWh
B-2 From 41-500 kW (at 400 volts)	300	125	203	484	234	313
B-3 Upto 5000 kW (11 kV)	290	120	202	484	191	266
B-4 For all loads (at 66, 132 kV).	280	116	192	484	177	256
B-5 For all loads (at 220 kV and above)	273	116	192	484	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.

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TARIFF CATEGORY/PARTICULARS	Fixed Charges	Energy Charges	F.A.S	Additional
	Rs/kW/Month	Ps/kWh	Ps/kWh	Surcharge Ps/kWh
<b><u>BULK SUPPLY --- TARIFF - C</u></b>				
C-1 (a) 400 Volts	-	129	509	353
C-1 (b) 400 Volts	220	114	509	354
C-2 (a) 11 kV	-	115	509	333
C-2 (b) 11 kV	216	111	509	345
C3 (at 66, 132 & 220 kV) --- for all loads	214	106	509	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	517	388
E-1 (ii) Commercial Supply	-	386	469	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	484	382
E-2 (ii) Bulk Supply				
(a) at 400 Volts	-	181	509	409
(b) at 11 kV	-	169	509	391
E-2 (iii) Bulk supply to other consumers	-	190	509	407

**SEASONAL INDUSTRIAL SUPPLY TARIFF-F**

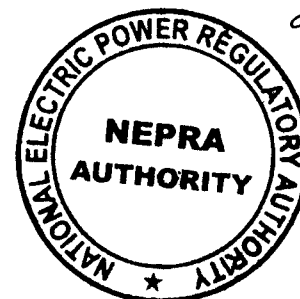
SUPPLY CHARGES  
125% of the "Supply Charges"  
of relevant industrial supply  
tariff

ADDITIONAL SURCHARGE  
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

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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	488	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**

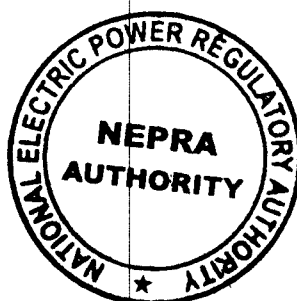
(i) Where the entire capital cost in laying street lighting supply line which is exclusively meant for street lighting is borne by the Corporation.				253
(ii) Where the entire capital cost in laying street lighting supply line, which is exclusively meant for street lighting is borne by the Consumer.				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	517	426
Consumers not having their own transformers		151	517	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.**



*Signature*

*Signature*