



National Electric Power Regulatory Authority
Islamic Republic of Pakistan

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Registrar

No. NEPRA/TRF-133/KESC-2009/4771-4774
December 27, 2010

Subject:- **Determination of the Authority in the matter of Karachi Electric Supply Co. Ltd. Quarterly Adjustment in Tariff for the Quarter July 2010 to September 2010 [Case No. NEPRA/TRF-133/KESCL-2009(6)]**
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 schedule of electricity tariff, Annexure-I (08 pages) applying the Tariff Adjustment Mechanism specified in Case No. NEPRA/TRF-133/KESC-2009(6) notified vide SRO 11(I)/2010 dated January 01, 2010.

2. 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.

3. Pursuant to the orders of Honorable High Court of Sindh, Karachi, passed in Writ Petition No. 1380 of 2009 titled the Law Foundation and 16 others Vs NEPRA and 9 others on 25.06.2010, the Fuel Adjustment Surcharge (FAS) shall not be passed on to the consumers till final orders are passed in the Petition.

4. Please note that revised schedule of tariff attached to the determination as Annex-I is required to be notified in the official Gazette.

5. It may be noted that **prior to notification of the subject determination, Law, Justice and Parliamentary Affairs Division may be consulted for legal opinion in the light of order of the Sindh High Court, as referred in para 3 above.**

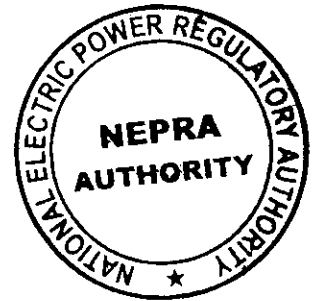
Enclosure: As above

Secretary,
Ministry of Water & Power,
'A' Block, Pak Secretariat,
Islamabad

CC:

1. Secretary, Cabinet Division, Cabinet Secretariat, Islamabad.
2. Secretary, Ministry of Finance, Islamabad.
3. Secretary, Privatization Commission, Islamabad.


(Syed Safer Hussain)



**DETERMINATION OF THE AUTHORITY IN THE MATTER OF KARACHI ELECTRIC
SUPPLY COMPANY LIMITED (KESCL) QUARTERLY ADJUSTMENT IN TARIFF
FOR THE QUARTER JULY 2010 TO SEPTEMBER 2010
Case No. NEPRA/TRF-133/KESCL-2009(6)**

Pursuant to Section 31(4) of the Act and in accordance with the determination of the Authority in case No. NEPRA/TRF-133/KESCL-2009(6) notified vide S.R.O. No. 11(1)/2010 dated January 01, 2010, Karachi Electric Supply Company Limited (KESCL) has been allowed certain adjustments in its tariff on monthly as well as quarterly basis respectively in the following manner;

Monthly Adjustment

2. On monthly basis any variation in the fuel cost component of KESCL own generation and the fuel cost component of power purchased by KESCL from IPPs and other external sources is adjusted without taking into account T&D losses (i.e. on units sent out basis) and passed the same to the consumers directly in their monthly bills for recovery by KESCL.

Quarterly Adjustment

3. The variation in the cost of power purchase by KESCL from IPPs and other external sources other than the fuel cost component i.e. the O&M cost and the fixed capacity charge is adjusted on quarterly basis. Quarterly adjustment also includes the impact of T&D losses in the fuel cost component of KESCL own generation as well as fuel cost component of power purchased from IPPs and other external sources, which is not adjusted in the monthly adjustment of KESCL. The total impact of variation in the cost for the quarter is passed on to the consumer end tariff of KESCL.
4. KESCL, in accordance with the prescribed mechanism for adjustment of fuel cost and power purchase cost variation, submitted quarterly adjustment request vide its letter No.CMF/NEPRA/071/384 dated October 28, 2010 for the quarter ended September , 2010.
5. The date of hearing for the aforesaid purpose was fixed as November 10, 2010 at NEPRA, Main Office, Islamabad and the request was advertised in leading national newspapers on November 03, 2010, inviting thereby written/oral objections from the affected/interested persons/parties. Notices were also sent to the interested stakeholders/experts to participate in the hearing to assist Authority in order to arrive at a just and informed decision. In spite of publication of the aforesaid notice of public hearing in the newspapers, no objections/comments relevant to the request were filed by any person. However, Choudhry Mazhar Ali as KESCL consumer, Ali Pakistan Textile Processing Mills Association, Karachi Chamber of Commerce & Industry and S.I.T.E. Association of Industry requested the Authority to convene the hearing in Karachi instead of Islamabad so that consumers and other stakeholders of Karachi could have an opportunity to express their views on the subject matter but all these requests were received by the Authority right on the date of hearing.



6. The summary of the requested adjustments by KESCL is tabulated below:

Item	Description	Proposed Adjustment
1	Fuel Price Variation of September over June 2010 (Ps/kWh)	45.00
	Power Purchase Price Variation of September over June (Ps/kWh)	-84.05
	Total Variation in Tariff (Ps/kWh)	-39.05
	Un Recovered Cost For the period Jul-Sep 2010	Mill Rs
	Variation in O&M cost of IPPs and Other External Sources	-468.53
	Variation in Capacity charges of IPPs and Other External Sources	-105.43
	Un-recovered cost of fuel due to non-adjustment of T&D losses	-102.72
	Un-recovered cost for the previous quarter (April to June 2010)	0.72
	WWF and WPPF payment to Tapal and Gul Ahmed	107.13
	Amortization of Mobilization advance Payment to Aggreko (Mar09-Jun 10)	72.57
	Custom Duties Payment and Currency Adjustment of Aggreko	69.11
	Total Un-recovered cost Jul-Sep 2010	-427.15
2	Estimated Units to be Sold Oct-Dec 2010 (GWh)	3308.64
	Total Unrecovered Cost (Ps/kWh)	-12.91
3	Cost recovered in the quarter(Jul-Sep 10) pertaining to quarter (Apr-Jun-10)	-0.82
	Total Required Adjustment in KESCL's Tariff (Ps/kWh) (1+2+3)	-52.78

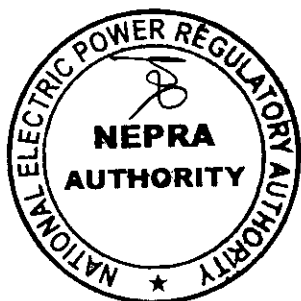
7. During the course of hearing, the Authority observed that KESCL had applied heat rate of 9,500 BTU/kWh for Korangi Gas-2 (KTGT-2) and heat rate of 10,000 BTU/kWh for Site gas-2 (STG-2), both KESCL's owned power plants, despite the fact that these two plants are of identical make and model i.e. Jan Bacher. KESCL replied that few variables like SITE conditions, Gas Quality, Gas Pressure etc. are different for these power plants due to which heat rates of these power plants are different from one another. The Authority while disagreeing with KESCL's assertion on this issue directed it to provide solid reasons for this discrepancy in heat rates in writing within three working days.
8. KESCL's reply on the said matter was received vide letter No.CMF/NEPRA/071/419 dated November 15, 2010. KESCL while supporting the difference in heat rates argued on the following grounds:
- That due to extreme low gas pressure at STG-2, there are usually load reductions in the engines which impacts the heat rate/efficiency of the engine.



- The auxiliary consumption is higher in STG2 than KTGT2 since mostly all the gas compressors are in operation due to low gas pressure at STG2.
9. The Authority did not accept above stated reply of KESCL and directed KESCL to submit documentary evidence, i.e. heat rate test report of these two power plants. The Authority directed KESCL to get heat rate tests conducted for these two plants from a reputable independent consultant maximum by March 06, 2010 and to submit reports of these heat rate tests to the Authority for consideration. Pending final adjustment based on heat rate test reports, the Authority has decided to use the following heat rates provisionally for calculation of KESCL monthly and quarterly fuel price adjustments:

Korangi Gas Turbine-2	9500 Btu/kWh
Site Gas Turbine-2	9500 Btu/kWh

10. The Authority also inquired from KESCL's representatives about the reasons for extensive load shedding in Karachi. The Authority questioned why KESCL is not generating electricity on furnace oil when it has enough available capacity to considerably reduce the load shedding. KESCL replied that it operates its power plants in economic merit order. In high demand scenario KESCL is constrained not to dispatch energy generated from less efficient plants on expensive furnace oil in areas where there is high theft. KESCL further stated that considering that it has no provision for investment in its tariff to overhaul the transmission lines, load shedding then essentially becomes its management tool to minimize the theft and losses. The Authority in this regard has already taken notice of under utilization of available capacity by KESCL, which is being taken up separately with KESCL.
11. The data provided by KESCL was duly verified by NEPRA's professionals through invoices of IPPs and other sources for the period July to September 2010 and was presented before the Authority. The Authority observed that KESCL has claimed in its quarterly request a cost of Rs 141.68 million on account of customs duties and mobilization advance of Aggreko power plant and Rs 107.13 million relating to Workers Welfare Fund (WWF) and Workers Profit Participation Fund (WPPF) of Tapal and Gul Ahmed IPPs. While justifying these costs, KESCL explained during the hearing that these are fixed components of power purchase cost and as per para 9, Annex-B of the Authority's determination, these costs should be allowed.
12. While deliberating on the issue, the Authority noted that these costs were disallowed by the Authority in the last quarterly decision for the period Apr-June, 2010 based on the reason that KESCL's latest determination given by the Authority in December 2009 is continuation of the spirit of the determination given in 2002 in which a Multi Year Tariff (MYT) with a fixed base rate was approved. Accordingly, an average sale rate was given and variations in certain cost components, that is fuel cost, O&M cost and capacity charges were allowed to be passed on to the consumers. The cost of WWF, WPPF amounting to Rs 107.13 million have neither been claimed by KESCL in the past since 2002 through its quarterly tariff adjustment requests nor the Authority has allowed the same under the approved monthly fuel and power purchase cost adjustment mechanism for KESCL. Moreover such costs as per the



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respective PPAs are required to be passed on through supplementary tariff for which there is no provision under the current adjustment mechanism. With regards to the cost associated with customs duties and mobilization advance of Aggreko, the Authority observed that these costs are neither the part of O&M nor of capacity payment charge of Aggreko tariff. These are one time capital costs and cannot be allowed in KESCL tariff. In view thereof, the authority has decided to disallow all these additional costs totaling Rs. 248.81 million.

13. On the issue of mobilization advance of Aggreko, KESCL further pleaded that the Authority is allowing net rental charges of Aggreko. The Authority directed NEPRA professionals to discuss this issue with the KESCL team and confirm whether total rental of Aggreko is allowed in KESCL's tariff by NEPRA. After the hearing NEPRA professionals discussed this issue with KESCL representatives. On the basis of previous record provided by KESCL, it was established that the Authority has allowed adjustments to KESCL in respect of Aggreko on the basis of actual invoices i.e. on the basis of gross rentals which do not include the impact of mobilization advance. During this meeting KESCL representatives also agreed that KESCL has been allowed gross rental charges of Aggreko.
14. KESCL's existing tariff is based on fuel prices of June 2010. KESCL has not been allowed any adjustment in its tariff since June 2010. Therefore, it is required that KESCL's tariff be adjusted to the price level of September 2010 as reference for subsequent quarterly adjustments, while incorporating the variation in fuel and power purchase cost for the month of September 2010 over the previous reference month of June 2010.
15. As per calculations the required adjustment in KESCL tariff due to variation in the fuel and power purchase cost including O&M, and capacity charges for the month of September 2010 over the previous reference month of June 2010 works out to be minus Rs. 458.09 million or Ps. 43.99/kWh as per the following details;

Component	September 2010	
	Requested by KESCL	Approved by the Authority
Fuel Cost variation over June 2010 - KESCL own generation(Million Rs.)	468.65	468.65
Power Purchase cost variation over June 2010 - IPPs & other external sources (Million Rs.)	(875.27)	(926.73)
Total	(406.62)	(458.09)
Units sold for September 2010 (GWh)	1041.37	1041.37
Required Adjustment in Tariff (Ps/kWh)	(39.05)	(43.99)

16. There is a difference of Rs. 51.46 million between what was claimed by KESCL in its request in respect of power purchase cost variation over June 2010 - IPPs & other external sources and what is approved by the Authority. This difference is due to variation in claimed and approved rates of fuel component for the energy sold by NTDC to KESCL for the month of September, 2010.



17. Further, as per the mechanism, monthly variation in the O&M cost and capacity charge for the power purchased from IPPs and other external sources, accumulated and not adjusted in monthly adjustment for the quarter Jul-Sep, 2010 amounting to minus Rs. 587.82 million is required to be adjusted in KESCL tariff. Also un-recovered cost of fuel amounting to minus Rs.144.30 million, due to impact of T&D losses which has not been allowed in the monthly fuel price adjustment for the period Jul-Sep 2010 is required to be adjusted in KESCL tariff.
18. The Authority in the previous quarterly tariff adjustment of KESCL for the quarter ending June 2010 had allowed Ps.0.82/kWh for recovery by KESCL of the outstanding amount of Rs.27.85 million in the current quarter, i-e Jul-Sep 2010. As per the information provided by KESCL, it has recovered Rs. 27.13 million leaving a balance of Rs. 0.72 million which is required to be adjusted in the current quarter. The combined effect on account of the aforementioned adjustments works out to be minus Rs. 731.40 million as per details given hereunder;

Rs. in Million

	September 2010	
	Requested by KESCL	Approved by the Authority
Un-recovered Cost for the period Jul 2010 to Sep 2010		
Variation in O&M cost of IPPs & other sources	(468.53)	(482.39)
Variation in Capacity charges of IPPs and other sources	(105.43)	(105.43)
WWF & WPPF (Tapal & Gul Ahmed) Custom Duties & Mobilization Advance (Aggreko)	248.81	-
Un-recovered fuel cost due to non-adjustment of T&D losses in the monthly fuel cost adjustment	(102.72)	(144.30)
Un-recovered Cost/Shortfall Jul 09 to Mar 10	0.72	0.72
Total	(427.15)	(731.40)
Estimated units to be sold @ 23% T&D Losses in the next quarter (Oct-Dec 2010) GWh	3308.64	2986.8
Required Adjustment in KESCL's Tariff (Ps/kWh)	(12.91)	(24.49)

19. There is a difference of around Rs. 304 million between the requested and approved unrecovered cost of KESCL. This difference is primarily due to disapproval by the Authority of the following additional costs:

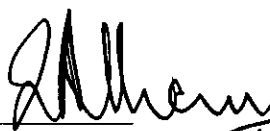
- Difference of around ^{Rs.} 13 million on account of variation in O&M costs of IPPs and other sources due to inclusion of mobilization advance of Aggreko by KESCL for the three months, i.e. Jul-Sep 2010 which has been disallowed by the Authority.
- Rs. 248.81 million claimed by KESCL on account of WWF, WPPF of Tapal and Gul Ahmed, Customs duties, Mobilization Advance of Aggreko.
- Difference of around Rs. 42 million on account of un-recovered fuel cost by taking the impact of T&D losses between what was claimed by KESCL in its request and what is approved by the Authority. This difference is due to variation



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in claimed and approved rates of the fuel component for the energy sold by NTDC to KESCL for each month of the quarter.

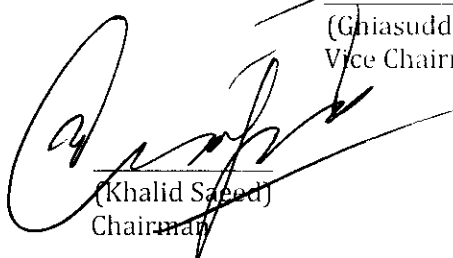
20. The un-recovered cost of minus Rs. 731.40 million and thus the resulting decrease in tariff by Ps 24.49/kWh on the basis of estimated units generated of 2986.8 GWh shall be applicable for the next quarter only i.e. Oct-Dec 2010 and therefore, cease automatically at the end of that quarter. However, any amount still un-recovered on this account due to any variation in the actual number of units sold from the above estimated unit sales for the quarter Oct-Dec 2010 shall be carried forward for adjustment in the next quarterly adjustment (Oct-Dec 2010).
21. The Authority in its last quarterly adjustment pertaining to Apr-Jun 2010, allowed Ps. 0.82/kWh in KESCL's tariff for the recovery of outstanding amount of Rs 27.85 million by KESCL during the quarter Jul-Sep 2010. As per the direction in the same decision such cost is required to be deducted in the KESCL's current quarterly adjustment.
22. In view of the above, the overall cumulative decrease in the KESCL's tariff on account of fuel price, power purchase cost for the quarter Jul-Sep 2010 as discussed in the preceding paragraphs works out to be minus Ps. 69.30/kWh (-43.99-24.49-0.82).
23. In order to allow adjustment in KESCL's tariff for the aforesaid variations for the current quarter i.e. Jul-Sep 2010, it is recommended that a uniform decrease in consumer-end tariff for all consumer categories by paisa 70 per kWh except for the life-line consumers consuming up to 50 units per month and for agriculture consumers (D1 and D2 category) may be allowed to KESCL for the quarter Jul-Sep 2010. The revised schedule of tariff to be applicable from October 01 2010 to December 31, 2010 is attached herewith as Annexure-1


 (Zafar Ali Khan)
 Member
 14/12/10


Authority: *I had dissented in the determination dated 23.12.2009 on the modified adjustment mechanism. I maintain my dissent.*
 (Shaukat Ali Kundi)
 Member
 24.12.2010


 (Maqbool Ahmed Khawaja)
 Member


 (Ghiasuddin Ahmed)
 Vice Chairman
 24/12


 (Khalid Saeed)
 Chairman




 In my considered opinion, KESC has not complied with directions/instructions as per Determination 2009 regarding performance of Heat rate test & utilization of available generating units required for calculation of Adjustment. As such I dissent from decision of Authority of allowing adjustments despite of non compliance of KESC.
 MAQBOOL AHMED KHAWAJA
 21/12

**SCHEDULE OF ELECTRICITY TARIFF
FOR KARACHI ELECTRIC SUPPLY COMPANY LIMITED (KESCL)**

A-1 GENERAL SUPPLY TARIFF - RESIDENTIAL

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES Rs/kW/M	VARIABLE CHARGES	
			Rs/kWh	
a)	For Sanctioned load less than 5 kW			
i	Up to 50 Units	-		2.00
	For Consumption exceeding 50 Units			
ii	1- 100 Units	-		8.95
iii	101- 300 Units	-		10.45
iv	301- 700 Units	-		12.65
v	Above 700 Units			14.25
b)	For Sanctioned load 5 kW & above			
	Time Of Use		Peak	Off-Peak
			15.25	9.25

Under tariff A-1, there shall be minimum monthly customer charge at the following rates even if no energy is consumed.

a) Single Phase Connections:

Rs. 75/- per consumer per month

b) Three Phase Connections:

Rs. 150/- per consumer per month

A-2 GENERAL SUPPLY TARIFF - COMMERCIAL

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES Rs/kW/M	VARIABLE CHARGES	
			Rs/kWh	
a)	For Sanctioned load less than 5 kW			14.75
b)	For Sanctioned load 5 kW & above	400.00		11.95
	Time Of Use	400.00	Peak	Off-Peak
			16.25	10.75

Under tariff A-2, there shall be minimum monthly charges at the following rates even if no energy is consumed.

a) Single Phase Connections:

Rs. 175/- per consumer per month

b) Three Phase Connections:

Rs. 350/- per consumer per month

B INDUSTRIAL SUPPLY TARIFFS

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES Rs/kW/M	VARIABLE CHARGES	
			Rs/kWh	
B1	Less than 5 kW (at 400/230 Volts)	-		11.25
B2(a)	5-500 kW (at 400 Volts)	400.00		9.85
B3(a)	For all loads upto 5000 KW (at 11,33 kV)	380.00		9.45
B4(a)	For all loads upto 5000 KW (at 66,132 kV)	360.00		9.05
	Time Of Use		Peak	Off-Peak
B2(b)	5-500 kW (at 400 Volts)	400.00	15.25	9.00
B3(b)	For All Loads up to 5000 kW (at 11,33 kV)	380.00	14.75	8.50
B4(b)	For All Loads (at 66,132 kV & above)	360.00	14.25	8.25
B5	For All Loads (at 220 kV & above)	340.00	13.75	8.00

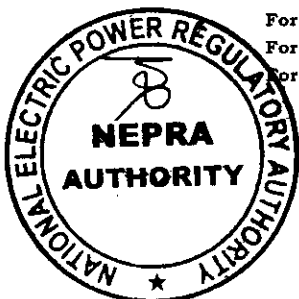
For B1 consumers there shall be a fixed minimum charge of Rs. 350 per month.

For B2 consumers there shall be a fixed minimum charge of Rs. 2,000 per month.

For B3 consumers there shall be a fixed minimum charge of Rs. 50,000 per month.

For B4 consumers there shall be a fixed minimum charge of Rs. 500,000 per month.

For B5 consumers there shall be a fixed minimum charge of Rs. 1,000,000 per month.



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C - SINGLE-POINT SUPPLY FOR PURCHASE IN BULK BY A DISTRIBUTION LICENSING AND MIXED LOAD CONSUMERS NOT FALLING IN ANY OTHER CONSUMER CLASS

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES Rs/kW/M	VARIABLE CHARGES Rs/kWh	
			Peak	Off-Peak
C-1	For supply at 400/230 Volts			
a)	Sanctioned load less than 5 kW	-		11.25
b)	Sanctioned load 5 kW & up to 500 kW	400.00		10.40
C-2(a)	For supply at 11,33 kV up to and including 5000 kW	380.00		10.40
C-3(a)	For supply at 132 and above, up to and including 5000 kW	360.00		10.25
	Time Of Use			
C-1(c)	For supply at 400/230 Volts 5 kW & up to 500 kW	400.00	15.25	9.25
C-2(b)	For supply at 11,33 kV up to and including 5000 kW	380.00	14.75	8.45
C-3(b)	For supply at 132 kV up to and including 5000 kW	360.00	14.25	8.25

D - AGRICULTURE TARIFF

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES Rs/kW/M	VARIABLE CHARGES Rs/kWh	
			Peak	Off-Peak
D-1	For all Loads	200.00		9.17
	Time of Use			
D-2	For all Loads	200.00	15.29	7.29

Note: The consumers having sanctioned load less than 5 kW can opt for TOU metering.

E - TEMPORARY SUPPLY TARIFFS

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES Rs/kW/M	VARIABLE CHARGES Rs/kWh	
			Peak	Off-Peak
E-1(i)	Residential Supply	-		14.65
E-1(ii)	Commercial Supply	-		17.55
E-2 (i)	Industrial Supply	-		14.25
E-2 (ii)	Bulk Supply			
	(a) at 400 Volts	-		14.65
	(b) at 11 kV			14.25

For the categories of E-1(i&ii) and E-2 (i&ii) above, the minimum bill of the consumers shall be Rs. 50/- per day subject to a minimum of Rs.500/- for the entire period of supply, even if no energy is

F - SEASONAL INDUSTRIAL SUPPLY TARIFF

125% of relevant industrial 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 remains in force for at least one year.

G. PUBLIC LIGHTING

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES Rs/kW/M	VARIABLE CHARGES Rs/kWh	
			Peak	Off-Peak
	Street Lighting	-		14.25

Under Tariff G, there shall be a minimum monthly charge of Rs.500/- per month per kW of lamp capacity installed.

H. RESIDENTIAL COLONIES ATTACHED TO INDUSTRIAL PREMISES

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES Rs/kW/M	VARIABLE CHARGES Rs/kWh	
			Peak	Off-Peak
	Residential Colonies attached to industrial premises	-		12.25

