



# National Electric Power Regulatory Authority

## Islamic Republic of Pakistan

2nd Floor, OPF Building, G-5/2, Islamabad.  
Ph: 9206500, 9207200 Fax : 9210215  
E-mail: office@nepra.org.pk

Registrar

No. NEPRA/TRF-14/KESC-2002/4849-52  
November 15, 2007

Subject:- **Determination of the Authority on Tariff Adjustment of KESC for Variation in Fuel Price and Cost of Power Purchased for the Quarter July to September, 2007**  
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 (07 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, 2007.

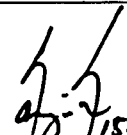
3. The determination is being intimated to the Federal Government for the purpose of notification of the approved tariff in the official gazette pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997) and Rule 16(11) of the National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

4. Please note that only Annexure-III to the attached determination containing the schedule of tariff needs to be notified in the official gazette.

5. In view of above, the tariff adjustment intimated vide letters No. NEPRA/TRF-14/KESC-2002/2101-4 dated 26.04.2007 and No. 3137-40 dated 31.07.2007 need to be notified prior to the notification of Annexure-III to the attached determination containing the schedule of tariff.

6. 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.

DA/As above.

  
15.11.07.  
(Mahjoob Ahmad Mirza)

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.



**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 2007**

Pursuant to the determination made on 10<sup>th</sup> September, 2002 in Case No. NEPRA/TRF-14/KESC-2002, as notified by the Federal Government vide SRO 716(I)/2002 dated 12<sup>th</sup> October 2002 (hereinafter "Determination"), the 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).

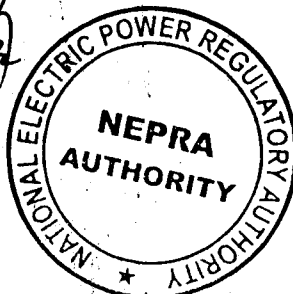
2. Pursuant to the aforesaid Determination, KESC vide communication No. CMF/NEPRA/071/333 dated 11<sup>th</sup> October, 2007 has requested for adjustment of its tariff. KESC has claimed that the variation in fuel cost due to fuel price variation and generation mix works out to be Rs. 1112 million or Ps. 10.34/kWh, whereas due to variation in cost of purchase of power amounts to Rs. 924 million or paisa 8.60/kWh. The cumulative effect after incorporating previous quarter's leftover amount of Rs. 328 million has thus been calculated to be Rs. 2364 million or paisa 22.00/kWh.

3. For the aforementioned variation in the cost of purchase of power, KESC has applied a fixed rate of Rs. 3.69 per kWh for the purchase of power from National Transmission and Despatch Company (hereinafter "NTDC").

4. Pursuant to the Authority's determination for NTDC in case No. NEPRA/TRF-19/NTDC-2003 dated 14<sup>th</sup> April 2004, KESC is required to pay NTDC, on the basis of marginal fuel cost per kWh along with system use charge, for the import of power from NTDC.

5. Since, the billing dispute between KESC and NTDC over the marginal cost rate has been conclusively resolved vide Authority's decision in case No. TCD-09-44 dated 6<sup>th</sup> May, 2006, it is, therefore, obligatory for KESC that adjustment of variation in power purchase cost for the energy received from NTDC be based on hourly marginal rate. Consequently, the Authority has found KESC subject request for tariff adjustment inconsistent with above decision of the Authority and has no legal basis or justification.

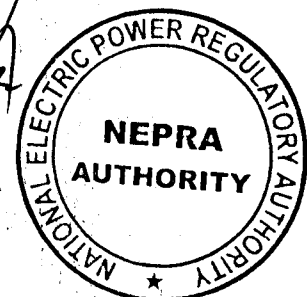
6. Additionally, NEPRA is informed that KESC has not so far made payments to NTDC on the basis of hourly marginal cost. In light of the Authority's determination (Reference Paragraph-5 hereabove), KESC can not insist on a rate of Rs. 3.69/kWh for its power purchase from NTDC. Accordingly, based on hourly marginal cost rate per kWh for the energy received from NTDC during the period July 07 to September 07, the total variation in power purchase cost for the current quarter has been recalculated by NEPRA on the basis of information received from KESC, which amounts to Rs. 3064 million or Paisa 28.52/kWh including Rs.328 million leftover of previous quarter.



**Karachi Electric Supply Corporation Ltd.**  
**Adjustment in tariff due to variation in fuel price**  
**Quarter ending September 2007**

Description	Generation GWh				
	1st Quarter			Next 3 Quarters	Total Jul 07 - Jun 08
	Jul-07	Aug-07	Sep-07		
<b>Generation on Furnace Oil at Bus Bar</b>	-	-	-	321	321
Korangi Thermal Power Station	359	199	255	1,145	1,958
Bin Qasim					
<b>Total Generation on F.O.</b>	<b>359</b>	<b>199</b>	<b>255</b>	<b>1,466</b>	<b>2,279</b>
<b>Generation on Gas at Bus Bar</b>	33	29	44	425	531
Korangi Thermal Power Station	74	60	56	574	764
Korangi/SITE Gas Turbine Power Station	316	419	390	4,245	5,370
Bin Qasim Power Station					
<b>Total Generation on Gas</b>	<b>423</b>	<b>508</b>	<b>490</b>	<b>5,244</b>	<b>6,665</b>
<b>Generation on LD/HSD Oil</b>	-	-	-	0.14	0.14
<b>Total Generation</b>	<b>782</b>	<b>707</b>	<b>745</b>	<b>6,710</b>	<b>8,945</b>
<b>Fuel Prices</b>					
Furnace Oil (Without GST) Rs./M.Ton	22,079	22,079	22,079	22,079	
Previous Price	23,495	24,594	23,995	23,995	
Revised Price					
Gas Rs./MMBTU	238	238	238	238	
Previous Price	238	238	238	238	
Revised Price					
<b>Coverision Factor</b>					
Furnace Oil Kg/kWh	0.32	0.32	0.32	0.32	
Korangi Thermal Power Station	0.25	0.25	0.25	0.25	
Bin Qasim					
Gas BTu/kWh	12,900	12,900	12,900	12,900	
Korangi Thermal Power Station	16,000	16,000	16,000	16,000	
Korangi /SITE Gas Turbine Power Station	10,000	10,000	10,000	10,000	
Bin Qasim					
<b>Variation in Fuel Cost - F.O. Rs. Million</b>					
Korangi Thermal Power Station	-	-	-	197	197
Bin Qasim	126	124	121	544	915
<b>Sub-total</b>	<b>126</b>	<b>124</b>	<b>121</b>	<b>740</b>	<b>1,112</b>
<b>variation in Fuel Cost - Gas Rs. Million</b>					
Korangi Thermal Power Station	-	-	-	-	-
Korangi/SITE Gas Turbine Power Station	-	-	-	-	-
Bin Qasim	-	-	-	-	-
<b>Sub-total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total Variation in Fuel Cost Rs. Million</b>	<b>126</b>	<b>124</b>	<b>121</b>	<b>740</b>	<b>1,112</b>
<b>Units expected to be sold GWh</b>					<b>1,112</b>
Variation in cost due to fuel price for the quarter (Million Rupees)					-
Balance (Leftover) at the end of last quarter (Apr-Jun 07) (Mln. Rs.)					1,112
Total Variation in cost due to fuel price variation (Million Rupees)					10.34
Required Adjustment in average sale rate Ps./kWh					2.5%
Maximum adjustment to be allowed in a quarter as percent of average sale rate					10.34
Allowable adjustment in average sale rate Ps./kWh					

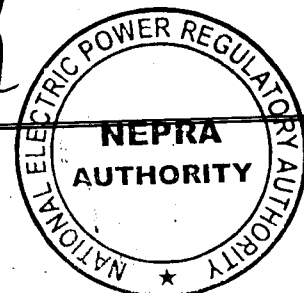
ATA-July-Sept 2007



**Karachi Electric Supply Corporation Ltd.**  
**Adjustment in tariff on account of purchase of power**  
 Quarter ending September 2007

Description	Purchase of Power GWh					Total Jul 07 - Jun 08
	1st Quarter			Next 3 Quarters Jul	Total 07 - Jun 08	
	Jul-07	Aug-07	Sep-07			
<b>Source of Purchase</b>	83	66	74	611	833	
Tapal	83	82	83	607	854	
Gul Ahmad	469	430	448	2,393	3,741	
WAPDA	40	42	30	223	335	
KANUPP	4	4	6	33	47	
PASMIC	2	3	3	-	9	
ANOUD						
<b>Total Purchase of Power</b>	<b>681</b>	<b>627</b>	<b>644</b>	<b>3,866</b>	<b>5,819</b>	
<b>Reference Energy Purchase Price not subject to indexation Ps/kWh</b>	593.09	593.09	593.09	593.09		
WAPDA	245.58	245.58	245.58	245.58		
KANUPP	242.12	242.12	242.12	242.12		
PASMIC						
<b>Revised Energy Purchase Price not subject to indexation Ps/kWh</b>	596.63	651.89	647.36	647.36		
WAPDA	245.58	245.58	245.58	245.58		
KANUPP	242.12	242.12	242.12	242.12		
PASMIC						
<b>Reference Energy Purchase Price subject to fuel price change Ps/kWh</b>	493.79	493.79	493.79	493.79		
Tapal	509.66	509.66	509.66	509.66		
Gul Ahmad						
<b>Revised Energy Purchase Price subject to fuel price change Ps/kWh</b>	496.43	525.17	553.54	553.54		
Tapal	511.54	551.18	572.74	572.74		
Gul Ahmad						
<b>Fuel Prices</b>						
<b>Reference fuel prices</b>	22,287	22,287	22,287	22,287		
Tapal	22,330	22,330	22,330	22,330		
Gul Ahmad						
<b>Revised fuel prices</b>	22,406	23,704	24,984	24,984		
Tapal	22,412	24,149	25,094	25,094		
Gul Ahmad						
<b>Reference Energy Purchase Price other than fuel subject to indexation Ps/kWh</b>	18.50	18.50	18.50	18.50		
Tapal	10.00	10.00	10.00	10.00		
Gul Ahmad						
<b>Reference Energy Purchase Price</b>	46.59	46.59	46.59	46.59		
Tapal	25.19	25.19	25.19	25.19		
Gul Ahmad						
<b>Revised Energy Purchase Price</b>	46.99	46.99	46.99	46.99		
Tapal	25.40	25.40	25.40	25.40		
Gul Ahmad						
<b>Indexation Factors for Energy Charges</b>						
<b>Reference Indexation Factors</b>	2.94	2.94	2.94	2.94		
Tapal	2.94	2.94	2.94	2.94		
Gul Ahmad						
<b>Revised Indexation Factors</b>	2.96	2.96	2.96	2.96		
Tapal	2.96	2.96	2.96	2.96		
Gul Ahmad						
<b>Reference Capacity Charges Rs./kW/Month</b>						
<b>Capacity Charges - non-escalable</b>	303	303	303	303		
Tapal	620	620	620	620		
Gul Ahmad						
<b>Capacity Charges -escalable</b>	293	293	293	293		
Tapal	378	378	378	378		
Gul Ahmad						
<b>Indexation Factors for Capacity Charges</b>	139.12	139.12	139.12	139.12		
<b>Reference Indexation Factors for escalable - US CPI</b>	140.30	140.30	140.30	140.30		
<b>Revised Indexation Factors for escalable - US CPI</b>	60.67	60.67	60.67	60.67		
<b>Reference Indexation Factors for escalable - Exchange Rate</b>	60.67	60.67	60.67	60.67		
<b>Revised Indexation Factors for non-escalable - Exchange Rate</b>						
<b>Dependable Capacity MW</b>	125	125	125	125		
Tapal	128	128	128	128		
Gul Ahmad						
<b>Variation in Cost of Purchase of Power Rs.Million</b>	21	308	340	2,050	2,719	
Energy	1	1	1	13	17	
Capacity	22	310	341	2,063	2,736	
<b>Total Variation in Cost of Purchase of Power</b>					<b>10,746</b>	
<b>Overall units expected to be sold in next 12 months GWh</b>	(July 2007 - June 2008)					
					2,736	
Variation in cost of power purchase for the quarter (Million Rupees)					328	
Balance (Leftover) at the end of last quarter (Apr-Jun 07) (Mln. Rs.)					3,064	
Total Variation in cost of power purchase (Million Rupees)					28.52	
Required Adjustment in average sale rate (Ps./kWh)					1.5%	
Maximum adjustment to be allowed in a quarter as percent of average sale rate					9.70	
Allowable adjustment in average sale rate (Ps./kWh)						

ATA-July-Sept 2007



## KESC

### SCHEDULE OF ELECTRICITY TARIFFS

TARIFF CATEGORY/PARTICULARS	Fixed Charges	Energy Charges	F.A.S	Additional
	Rs/kW/Month	Ps/kWh	Ps/kWh	Surcharge 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	239	174
For next 200 units (101-300) in a month	-	63	239	247
For next 700 units (301-1000) in a month	-	156	239	382
Above 1000 units in a month	-	193	239	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	191	418
Above 100 units in a month	-	315	191	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	206	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	206	250
B-3* Up to 5000 kW (11 kV)	290	134	206	234
B-4* For all loads (at 66, 132 kV).	280	129	206	215
B-5* For all loads (at 220 kV and above)	273	129	206	208

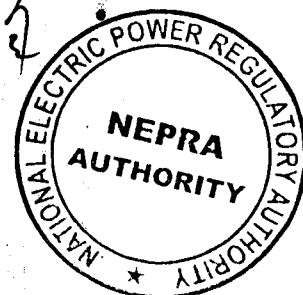
**TIME OF DAY (TOD) TARIFF FOR INDUSTRIAL CONSUMERS**

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	206	234	313
B-3 Upto 5000 kW (11 kV)	290	120	202	206	191	266
B-4 For all loads (at 66, 132 kV).	280	116	192	206	177	256
B-5 For all loads (at 220 kV and above)	273	116	192	206	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
	Rs/kW/Month	Ps/kWh	Ps/kWh	Surcharge Ps/kWh
<b><u>BULK SUPPLY --- TARIFF - C</u></b>				
C-1 (a) 400 Volts	-	129	231	353
C-1 (b) 400 Volts	220	114	231	354
C-2 (a) 11 kV	-	115	231	333
C-2 (b) 11 kV	216	111	231	345
C3 (at 66, 132 & 220 kV) --- for all loads	214	106	231	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	219	236
D-2 Sindh and Balochistan	176	80	219	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	239	388
E-1 (ii) Commercial Supply	-	386	191	528

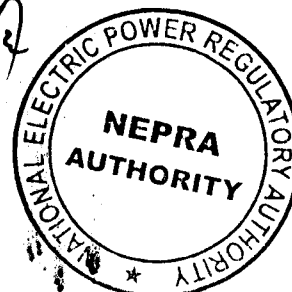
For the above two categories, the minimum bill of the consumer shall be Rs 46/- per day subject to minimum of Rs.200/- for the entire period of supply, even if no energy is consumed.

E-2 (i) Industrial supply	-	241	206	382
E-2 (ii) Bulk Supply	-	181	231	409
(a) at 400 Volts	-	169	231	391
(b) at 11 kV	-	190	231	407
E-2 (iii) Bulk supply to other consumers	-	190	231	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 Rs/kW/Month	Energy Charges Ps/kWh	F.A.S Ps/kWh	Additional Surcharge Ps/kWh
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**PUBLIC LIGHTING TARIFF-G**

G-1 Units Charges	-	220	210	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	239	426
Consumers not having their own transformers	151	239	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.**

