



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-2002/6439-42
February 28, 2008

Subject:- **Determination of the Authority on Tariff Adjustment of KESC for Variation in Fuel Price and Cost of Power Purchased for the Quarter October to December, 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 (08 pages) applying the Tariff Adjustment Mechanism specified in Case No. NEPRA/TRF-14/KESC-2002 notified vide SRO 716(I)/2002, dated 12th 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, 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 adjustments intimated vide letters No. NEPRA/TRF-14/KESC-2002/2101-4 dated 26.04.2007, No. 3137-40 dated 31.07.2007 and No. 4849-52 dated 28.02.2008 need to be notified prior to the notification of Annexure-III to the attached determination containing the schedule of tariff.

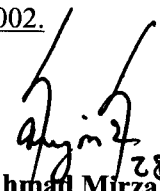
6. The approval of the tariff is subject to the terms and conditions of schedule of tariff as notified vide SRO 819(I)/2001 dated November 29, 2001 and SRO 325(I)/2002 dated June 11, 2002.

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.


(Mahjoob Ahmad Mirza) 28.02.08



**DETERMINATION OF THE AUTHORITY ON TARIFF ADJUSTMENT OF
KESC FOR VARIATION IN FUEL PRICE AND COST OF POWER PURCHASE
FOR THE QUARTER OCTOBER TO DECEMBER 2007**

Pursuant to the NEPRA's Determination No. NEPRA/TRF-14/KESC-2002, dated 10th September, 2002 as notified by the Federal Government vide SRO 716(I)/2002 dated 12th 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/071/376 dated 26th January, 2008 has sought adjustment in its tariff. KESC has claimed that the variation in fuel cost due to fuel price variation and generation mix works out to be Rs. 4926 million or Ps. 45.30/kWh, while variation in cost of purchase of power is calculated to be Rs. 1269 million or paisa 11.60/kWh. The cumulative effect after incorporating leftover of previous quarter (Rs. 212 million) has thus been worked out to be Rs. 5628 million or paisa 58.92/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 quarterly adjustment in Tariff, KESC requested Authority's consideration on the following facts;

- i) Pursuant to Authority's Determination dated 14th September 2006, an increase in Tariff by Ps. 58.92/kWh without application of 4% price cap and change in gas price mechanism, may be allowed.
- ii) Basis for calculating variation in cost of purchase of power from NTDC should be a previous rate i.e. Paisa 369/kWh.
- iii) Authority's determination for the quarter Jul-Sep 2007 was based on marginal cost rate of NTDC. The reference marginal cost rate of Ps. 593.09/kWh was applied to work out variation in purchase of power from NTDC, whereas Ps 369/kWh as reference rate should have been applied to work out variation in cost of purchase of power from NTDC. Accordingly, leftover amount for the previous quarter (Jul-Sep 2007) be re-worked and adjusted in the current quarter.



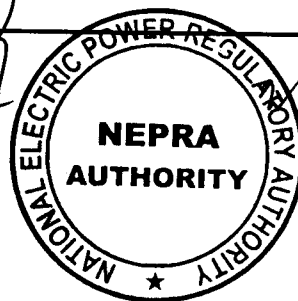
5. Having considered the aforesaid issues, the Authority has decided that:
- i) KESC's request for increase in tariff by 58.92/kWh on account of removal of 4% price cap as mentioned at paragraph- 4(i) hereabove, can only be considered when the Authority's determination dated 14th September 2006 is notified by Government of Pakistan (hereinafter "GoP").
 - ii) With respect to purchase of power from NTDC by KESC at the rate of Ps 369/kWh, it may be clarified that the Authority has already Determined in case No.NEpra/TRF-19/NTDC-2003 dated 14.04.2004 also notified by GoP vide S.R.O No. 647(I)/2004 dated 04.06.2004, that NTDC can charge a marginal cost rate in addition to the wheeling charges.
 - iii) Regarding variation in cost on account of purchase of power from NTDC by KESC for the quarter July-Sept 2007 (quarter), the reference rate of Ps 369/kWh requested by KESC is hereby approved. The same is found to be consistent with the mechanism for adjustment in tariff due to variation in power purchase cost already notified by GoP.

6. Reference Paragraph-5 here above, relying upon the information/data provided by KESC, the variation in cost for the quarter October-December 2007, due to fuel price is worked out to be Rs. 4065.19 million or Paise 37.39/kWh and Rs. 7987.70 million or paise 73.46/kWh due to variation in power purchase cost. Thus the combined effect after previous quarter's leftover (revised) amount of Rs. 10404.69 million, which needs to be adjusted in the current quarter is worked out Rs. 22457.58 million or Paise 206.54/kWh.

7. According to the mechanism prescribed by NEpra, the maximum adjustment that can be allowed in a quarter due to variation in fuel price is 2.5% and due to variation in power purchase price 1.5% of the overall average sale rate. Therefore, the allowable adjustment in KESC's tariff on account of variation in fuel price and generation mix is calculated as Paise 16.67/kWh and on account of power purchase cost Paise 10.00/kWh. The overall adjustment both on account of fuel price and power purchase cost, thus works out to be Paise 26.67/kWh (Annex-I & II).


8. The leftover (balance) after this current adjustment in respect of fuel price variation Rs. 2253.08 million and Rs. 17305.13 million on account of power of purchase cost will be adjusted in the next quarterly adjustment.

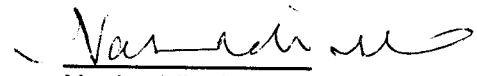
9. In order to compensate KESC on account of variation in fuel price and cost of purchase of power, the Authority has decided to allow a uniform increase in consumer end tariff for all consumer categories by Paise 27.00 per kWh, except for the life-line consumers consuming up to 50 units per month.




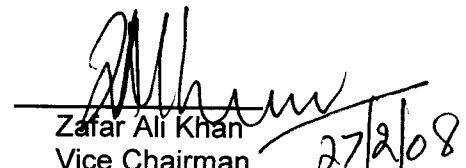
10. In light of the aforesaid, the Authority recommends to the Federal Government that the KESC Tariff be modified in accordance with Paragraph-9 hereabove for the variation in cost of fuel and power purchase for the quarter October-07 to December-07. For this purpose a new schedule of tariff appended 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.

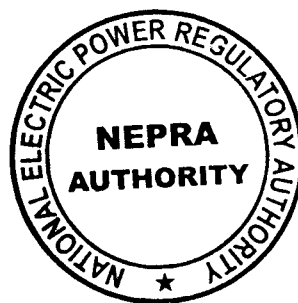
Authority


Abdul Raheem Khan
Member


Nasiruddin Ahmad
Member


Maqbool Ahmad Khawaja
Member


Zafar Ali Khan
Vice Chairman 27/2/08





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

Description	Generation GWh				
	2nd Quarter			Next 3 Quarters	Total Oct 07 Sep 08
	Oct-07	Nov-07	Dec-07		
Generation on Furnace Oil at Bus Bar					
Korangi Thermal Power Station	3	6	1	396	406
Bin Qasim	276	224	58	1,263	1,821
Total Generation on F.O.	279	230	59	1,659	2,227
Generation on Gas at Bus Bar					
Korangi Thermal Power Station	66	73	50	322	511
Korangi/SITE Gas Turbine Power Station	47	35	42	661	785
Bin Qasim Power Station	337	326	361	4,245	5,269
Total Generation on Gas	450	434	453	5,228	6,565
Generation on LD/HSD Oil	-	-	-	0.11	0.11
Total Generation	729	664	512	6,887	8,792
Fuel Prices					
Furnace Oil (Without GST) Rs./M.Ton					
Previous Price	23,995	23,995	23,995	23,995	
Revised Price	25,342	28,779	32,133	32,133	
Gas Rs./ MMBTU					
Previous Price	238	238	238	238	
Revised Price	238	238	238	238	
Conversion Factor					
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	
Variation in Fuel Cost - F.O. Rs. Million					
Korangi Thermal Power Station	1	9	3	1,030	1,043
Bin Qasim	92	266	117	2,547	3,022
Sub-total	93	275	120	3,577	4,065
Variation in Fuel Cost - Gas Rs. Million					
Korangi Thermal Power Station	-	-	-	-	-
Korangi/SITE Gas Turbine Power Station	-	-	-	-	-
Bin Qasim	-	-	-	-	-
Sub-total	-	-	-	-	-
Total Variation in Fuel Cost Rs. Million	93	275	120	3,577	4,065
Units expected to be sold GWh	(Oct 2007 - Sep 2008)				10,873
Variation in cost due to fuel price for the quarter (Million Rupees)					4,065
Balance (Leftover) at the end of last quarter (Jul-Sep 07) (Mln. Rs.)					-
Total Variation in cost due to fuel price variation (Million Rupees)					4,065
Required Adjustment in average sale rate Ps./kWh					37.39
Maximum adjustment to be allowed in a quarter as percent of average sale rate					2.5%
Allowable adjustment in average sale rate Ps./kWh					16.67

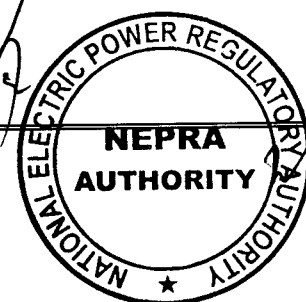


ATA-Oct-Dec 07

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

Description	Purchase of Power GWh				
	2nd Quarter			Next 3 Quarters Jul	Total 07 -Sep 08
	Oct-07	Nov-07	Dec-07		
Source of Purchase					
Tapal	59	73	44	628	804
Gul Ahmad	77	77	44	623	821
WAPDA	385	307	278	3,073	4,043
KANUPP	22	53	26	223	324
PASMIC	7	6	11	33	57
ANOUD	4	2	1	-	7
Total Purchase of Power	554	518	404	4,580	6,056
Reference Energy Purchase Price not subject to indexation Ps/kWh					
WAPDA	647.36	647.36	647.36	647.36	
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	663.87	719.87	839.31	839.31	
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	553.54	553.54	553.54	553.54	
Gul Ahmad	572.74	572.74	572.74	572.74	
Revised Energy Purchase Price subject to fuel price change Ps/kWh					
Tapal	544.61	576.78	645.62	645.62	
Gul Ahmad	565.42	599.11	665.80	665.80	
Fuel Prices					
Reference fuel prices					
Tapal	24,984	24,984	24,984	24,984	
Gul Ahmad	25,094	22,330	22,330	22,330	
Revised fuel prices					
Tapal	24,581	26,033	29,140	29,140	
Gul Ahmad	24,773	26,249	29,171	29,171	
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	46.99	46.99	46.99	46.99	
Gul Ahmad	25.40	25.40	25.40	25.40	
Revised Energy Purchase Price					
Tapal	47.04	47.04	47.04	47.04	
Gul Ahmad	25.43	25.43	25.43	25.43	
Indexation Factors for Energy Charges					
Reference Indexation Factors					
Tapal	2.94	2.94	2.94	2.94	
Gul Ahmad	2.94	2.94	2.94	2.94	
Revised Indexation Factors					
Tapal	2.94	2.94	2.94	2.94	
Gul Ahmad	2.94	2.94	2.94	2.94	
Reference Capacity Charges Rs./kW/Month					
Capacity Charges - non-escalable					
Tapal	303	303	303	303	
Gul Ahmad	620	620	620	620	
Capacity Charges -escalable					
Tapal	294	294	294	294	
Gul Ahmad	380	380	380	380	
Indexation Factors for Capacity Charges					
Reference Indexation Factors for escalable - US CPI	140.30	140.30	140.30	140.30	
Revised Indexation Factors for escalable - US CPI	140.30	140.30	140.30	140.30	
Reference Indexation Factors for escalable - Exchange Rate	60.67	60.67	60.67	60.67	
Revised Indexation Factors for non-escalable - Exchange Rate	60.74	60.74	60.74	60.74	
Dependable Capacity MW					
Tapal	125	125	125	125	
Gul Ahmad	128	128	128	128	
Variation in Cost of Purchase of Power Rs.Million					
Energy	53	260	615	7,057	7,985
Capacity	0	0	0	2	3
Total Variation in Cost of Purchase of Power	53	260	615	7,059	7,988
Overall units expected to be sold in next 12 months GWh	(October 2007 - September 2008)				10,873
Variation in cost of power purchase for the quarter (Million Rupees)					7,988
Balance (Leftover) at the end of last quarter (Jul-Sep 07) (Mln. Rs.)					10,405
Total Variation in cost of power purchase (Million Rupees)					18,392
Required Adjustment in average sale rate (Ps./kWh)					169.16
Maximum adjustment to be allowed in a quarter as percent of average sale rate					1.5%
Allowable adjustment in average sale rate (Ps./kWh)					10.00

ATA-Oct-Dec 07



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	266	174
For next 200 units (101-300) in a month	-	63	266	247
For next 700 units (301-1000) in a month	-	156	266	382
Above 1000 units in a month	-	193	266	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	218	418
Above 100 units in a month	-	315	218	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	233	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	233	250
B-3* Up to 5000 kW (11 kV)	290	134	233	234
B-4* For all loads (at 66, 132 kV).	280	129	233	215
B-5* For all loads (at 220 kV and above)	273	129	233	208

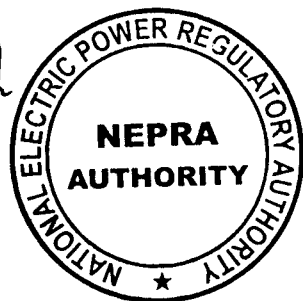
TIME OF DAY (TOD) TARIFF FOR INDUSTRIAL CONSUMERS

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	233	234	313
B-3 Upto 5000 kW (11 kV)	290	120	202	233	191	266
B-4 For all loads (at 66, 132 kV).	280	116	192	233	177	256
B-5 For all loads (at 220 kV and above)	273	116	192	233	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
<u>BULK SUPPLY --- TARIFF - C</u>				
C-1 (a) 400 Volts	-	129	258	353
C-1 (b) 400 Volts	220	114	258	354
C-2 (a) 11 kV	-	115	258	333
C-2 (b) 11 kV	216	111	258	345
C3 (at 66, 132 & 220 kV) --- for all loads	214	106	258	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	246	236
D-2 Sindh and Balochistan	176	80	246	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	266	388
E-1 (ii) Commercial Supply	-	386	218	528

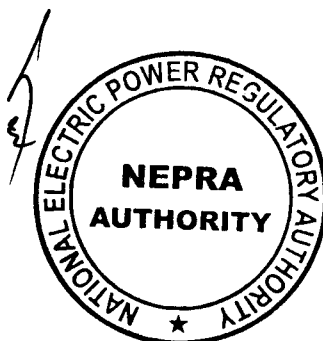
For the above two categories, the minimum bill of the consumer shall be Rs 46/- per day subject to minimum of Rs.200/- for the entire period of supply, even if no energy is consumed.

E-2 (i) Industrial supply	-	241	233	382
E-2 (ii) Bulk Supply				
(a) at 400 Volts	-	181	258	409
(b) at 11 kV	-	169	258	391
E-2 (iii) Bulk supply to other consumers	-	190	258	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	237	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 MileRs

- | | |
|---|------------------------|
| (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	266	426
Consumers not having their own transformers	151	266	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.

