



National Electric Power Regulatory Authority
Islamic Republic of Pakistan

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No. NEPRA/R/TRF-51/KESC-2006/6671-74
September 14, 2006

Subject: Intimation of Determination of Tariff Petition of Karachi Electric Supply Corporation Ltd. (KESC) for revision in the Formula for Quarterly Fuel Price and Power Purchase Cost Adjustment Mechanism (Case No. NEPRA/TRF-51/KESC-2006) 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 subject determination of the Authority (18 pages) in Case No. NEPRA/TRF-51/KESC-2006.


2. The determination is being intimated to the Federal Government for the purpose of notification of the Authority's determination in respect of revision in the mechanism for adjustment in tariff due to fuel price variation and the mechanism for adjustment in tariff due to power purchase cost notified vide SRO 716(I)/2002, dated October 12, 2002 to be published 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. Please note that only Order of the Authority at para 42 of the determination needs to be notified in the official gazette. The Order is reproduced for the purpose of clarity and is attached herewith.

DA/As above.

Secretary
Cabinet Division,
Government of Pakistan
Cabinet Secretariat
Islamabad




14.09.06
(Mahjoob Ahmad Mirza)

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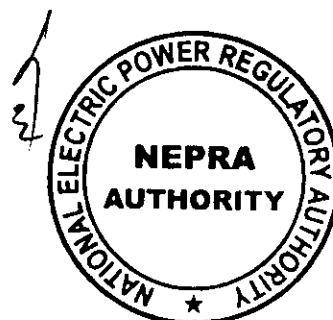
1. Secretary, Ministry of Water & Power, Islamabad.
2. Secretary, Ministry of Finance, Islamabad.
3. Secretary, Privatization Commission, EAC Building, Islamabad.

ORDER OF THE AUTHORITY
IN CASE NO. NEPRA/TRF-51/KESC-2006
TO BE NOTIFIED 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, the following decision of the Authority in respect of Tariff Petition of Karachi Electric Supply Corporation Ltd. (KESC) is intimated for notification in the official gazette.

- j) The condition applicable in the Mechanism for Adjustment in Tariff due to variation in Fuel price at item (5) of Schedule II issued vide SRO 716(I)/2002 dated 12th October 2002 and reproduced as "*If the allowed increase or decrease in average sale rate due to fuel price variation in a certain quarter is greater than 2.5% of the prevailing average sale rate, the adjustment will be restricted to 2.5% and the remaining burden or relief shall be carried forward to the next quarterly adjustment.*" is removed.
- ii) The condition applicable in the Mechanism for Adjustment in Tariff due to variation in Power Purchase Cost at item 5 of Schedule –III issued vide S.R.O 716(I)/2002 dated 12th October, 2002 and reproduced as "*If the allowed increase or decrease in average sale rate due to variation in power purchase cost in a certain quarter is greater than 1.5 per cent of the prevailing average sale rate, the adjustment will be restricted to 1.5 per cent and the remaining burden or relief shall be carried forward to the next quarterly adjustment.*" is removed.
- iii) The condition applicable under Para (1) of Schedule –II issued vide S.R.O. 716(I)/2002 dated 12th October, 2002 and reproduced as "*The price of fuel applicable to the past quarter shall be on actual basis whereas the latest fuel price of the past quarter shall be applicable to the next three quarters*" is substituted with;
- " The price of fuel (FO/HSD) applicable to the past quarter shall be on actual basis whereas the latest price of fuel (FO/HSD) of the past quarter shall be applicable to the next three quarters. The price of gas applicable to the past quarter shall be on actual basis whereas the latest gas price, available on the day when the quarterly adjustment becomes due, shall be applicable to the next three quarters"
- iv) All other terms and conditions currently applicable in respect of Mechanism for Adjustment in Tariff due to Variation in Fuel Price Schedule-II and Mechanism for Adjustment in Tariff due to Variation in Power Purchase Cost Schedule-III issued vide S.R.O. 716(I)/2002 dated 12th October, 2002 shall remain unchanged.

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**NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
(NEPRA)**

NO. NEPRA/TRF-51/KESC-2006

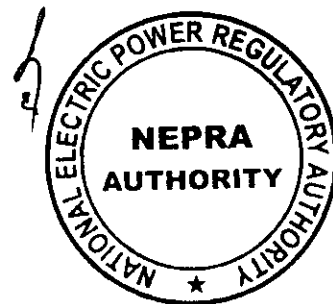
DETERMINATION

OF

TARIFF PETITION

Filed by

**KARACHI ELECTRIC SUPPLY
CORPORATION LIMITED (KESC)**



Background

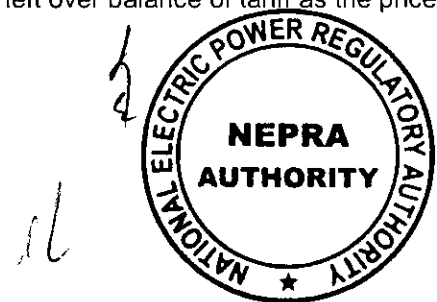
KESC filed a tariff petition on 20.02.2006 for revision in the formula for quarterly fuel price and power purchase cost adjustment mechanism approved by the Authority in its determination No.NEPRA/TRF-14/KESC-2002 dated 10-09-2002. KESC in its tariff petition sought relief for the following;

- a) Waiver of maximum limit (4%) applied on average sale of KESC in the quarterly Fuel Price and Purchase of power cost adjustment mechanism.
 - b) Change in Price mechanism of gas for the next three quarters.
2. The Authority admitted the petition for consideration on 22.02.2006. Salient features of the petition were advertised in the newspapers on 25-02-2005 to inform all the interested persons / stakeholders and to invite participation in the proceedings through their comments or by becoming a party to the proceedings as interveners. Invitations were also sent to the concerned Federal & Provincial Government ministries, Chambers of Commerce and Industries, Representatives of Professional bodies and Experts, soliciting their views on the petition. We received comments from the Ministry of Industries, Production & Special Initiatives, Ministry of Finance, Ministry of Water & Power and the Privatisation Commission. However, the following intervention requests were received and approved by the Authority;
- Mr. Mohsin Ali Choudhry.
AZ Zaman Advocates & Legal Consultants, 2C Margalla Road, F-7/2 Islamabad.
 - Mr. Roland De Souza
Liberal Forum Karachi Shehri CBE, P.E.C.H.S Karachi
 - Syed Sohail Akhter
Karachi Chamber of Commerce & Industry Karachi.
 - Mr Muhammad Arif Bilwani
Mushtaq & Company (Pvt) Limited, SITE Karachi.
3. A public hearing on the petition was held on April 12, 2006. The hearing was participated by the applicant, stakeholders, commentators as well as members of general public.

Submissions of the Petitioner

4. KESC submitted that the Authority in its determination for multi-year tariff allowed 6.5% increase in tariff against 16.5% requested by KESC and approved the adjustment mechanism for quarterly adjustment of variations in fuel and power purchase cost subject to restriction on maximum increase in tariff by 4% in a particular quarter.
5. KESC submitted that the quarterly fuel price and power purchase adjustment mechanism worked smoothly till December 2004 and there was no left over balance of tariff as the price

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of fuel increased slightly during the said period. However, since January 2005 an abnormal increase in fuel prices has occurred and only a part of these increases have been adjusted through tariff increase in each quarter and the remaining cost (burden) was carried forward to the next quarterly adjustment due to the maximum limit of 4% as shown in the following table.

DESCRIPTION	LEFT OVER RATE					PAISA/KWH				
	Jan-Mar 2005	Apr-Jun 2005	Jul-Sep 2005	Oct-Dec 2005	TOTAL 2005	Jan-Mar 2005	Apr-Jun 2005	Jul-Sep 2005	Oct-Dec 2005	TOTAL 2005
Fuel price variation	17.63	25.77	22.68	(0.58)	65.50	17.63	25.77	22.68	(0.58)	65.50
Power purchase price variation	0.11	16.27	4.48	9.11	29.97	0.11	16.27	4.48	9.11	29.97
Required increase in tariff	17.74	42.04	27.16	8.53	95.47	17.74	42.04	27.16	8.53	95.47
Previous quarter left over	0	5.05	26.46	31.97	0	0	5.05	26.46	31.97	0
Total adjustment required in tariff	17.74	47.09	53.62	40.50	95.47	17.74	47.09	53.62	40.50	95.47
Increase allowed due to Max. Limit	12.69	20.63	21.65	22.40	77.37	12.69	20.63	21.65	22.40	77.37
Balance left over	5.05	26.46	31.97	18.10	18.10	5.05	26.46	31.97	18.10	18.10

6. According to KESC it has suffered a loss in revenue by Rs.1843 million during the period January - December 2005, only due to the application of 4% maximum limit in the quarterly fuel price and power purchase cost adjustment mechanism as shown in a table below:-

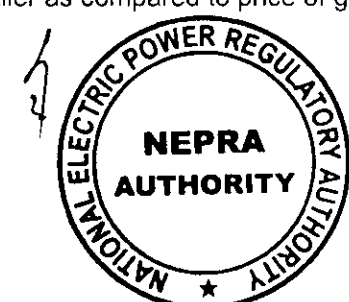
LOSS IN REVENUE DUE TO MAXIMUM LIMIT

Quarter / Sale	Units Sold GWH	Left Over Balance Ps/kWh	Loss of Revenue Million Rs.
Jan – Mar 2005 (Apr-Jun)	2458	5.05	124
Apr – Jun 2005 (Jul-Sep)	2434	26.46	644
Jul – Sep 2005 (Oct-Dec)	2199	31.97	703
Sub-Total (Apr – Dec)	7091	20.74	1471
Oct – Dec 2005 (Jan-Mar)	2054	18.10	372
Total	9145	20.15	1843

7. KESC further stated that as per provision of fuel price adjustment mechanism the latest fuel price of the last quarter is taken for cost estimates of the next three quarters for determination of required increase in tariff over estimated annual unit sales. KESC has given calculation that due to increase in gas price from 208.91/MMBTU to 240.91/MMBTU in January 2006 and provision of latest price of the last quarter in the formula for quarterly fuel price adjustment, it has lost revenue of Rs. 400 million in the quarter Jan-Mar 2006.
8. In support of request for modification in the fuel price & power purchase cost adjustment mechanism KESC provided the following justification for consideration by the Authority.
- The fuel prices are continuously increasing at a higher rate.
 - The cost of fuel is also increasing due to availability of gas in limited quantity, alternate fuel i.e. furnace oil and HSD are costlier as compared to price of gas. The

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price of oil is expected to be increased further in international market due to uncertainty of oil supplies.

- Two IPPs in KESC system are also based on furnace oil.
- The limit of 4% is not applicable to NTDC, IPPs and fuel suppliers.
- The loss in revenue is growing continuously due to application of maximum limit under the existing formula of quarterly tariff adjustment, primarily as a result of the fuel price increase not being allowed in consumer end tariff in full.
- The cash shortfall of KESC was being met by GOP prior to its privatization. The investor is now required to provide funds for operational shortfall and the GOP is providing subsidy just to compensate the difference between the determined and the notified tariff.
- To meet the existing power shortage and the future demand, significant operational efficiency improvements and to undertake aggressive loss reduction program to achieve profitability, the Corporation requires huge investment.
- The Corporation should be allowed to recover the costs, prudently incurred, for meeting the needs of its customers, consistent with the Standards and Guidelines contained in Section 17 of the Tariff Standards and Procedure Rules 1998.
- KESC has been facing financial crises due to insufficient tariff under quarterly tariff adjustment as against the exorbitant increase in the prices of fuels. The revenue from the existing tariff is insufficient to cover the additional cost of fuel and power purchase, mainly due to maximum limit and price mechanism.

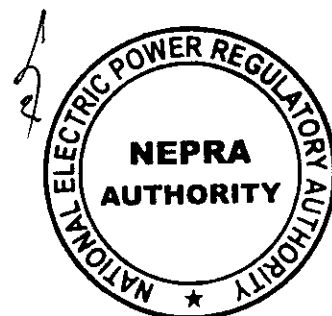
9. KESC in its tariff petition has stated that the proposed revision in quarterly tariff adjustment structure will facilitate significant improvements in customer service. Customers will benefit through improved availability and reliability of power supply, reductions in costly outages and voltage spikes, more accurate meter readings and bills.

Comments of the Interveners

S.I.T.E KARACHI

10. M/s Mushtaq & Company representing SITE Karachi stated that if the above demand of KESC is approved, and the increase of Rs. 1843/- million is passed on to the consumer as stated in the tariff petition filed by KESC, it will adversely affect the working of industrial units because of the creation of cost-push and inflationary environment and will also lead to un-competitiveness at the export front. Further the above tariff mechanism was initially fixed for 7 years, which cannot be altered, amended or changed if it is detrimental to the interest of KESC at a later stage. If the request of KESC is approved it will set precedence to amend, alter or change all the previous determinations which are against the interest of the consumers.

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Liberal Forum Karachi, Shehri; CBE

- 11 Mr. Roland DeSouza representing Liberal Forum and Shehre; CBE in his comments stated that the KESC 's stand that there will be no additional burden on the consumer if the maximum limit of 4% is waived off is only valid as long as GOP subsidizes the difference between the 'NEPRA-determined" and "GOP-notified" tariffs. When GOP decided to withdraw the subsidy, the entire burden would fall directly on the consumer. He further argued that while it is in the interest of the consumer to ensure that KESC must show prudence, it is also in the consumer's interest to ensure that KESC becomes viable and does not sink. He said that the cap on quarterly fuel-price variations has only been included in the KESC tariff determination; the ex-WAPDA spin-offs are not similarly constrained. Yet the consumer end tariff for KESC is higher than consumers of DISCOs.

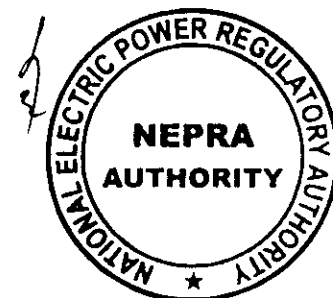
A Z Zaman Advocates & Legal Consultants

- 12 Mr. A Z Zaman representing APTMA in the public hearing of the case raised a point that KESC was allowed tariff for 7 years along with certain provisions for adjustment of uncontrollable costs which it accepted in totality. Now after a period of 3 years of NEPRA determination in 2002, KESC has realized that one or two components of tariff are detrimental and therefore be revised or modified, holds no ground on the basis of which its tariff petition be entertained. He also requested that the Authority should have rejected KESC tariff petition in the first place. He said that KESC 's tariff can not be reviewed before expiry of 7 years in view of previous NEPRA determination for multi-year tariff.
- 13 Almost similar comments were offered by other interveners and representatives of organizations.

Comments of the Ministries

14. No comments were received from the concerned ministries in the beginning. However letters were again sent to the Ministry of Finance and Ministry of Water & Power for their specific comments in the light of KESC privatization and possible implications of Implementation Agreement signed with KESC's new management. We have received their comments which are reproduced as hereunder.
15. The Finance Division, GOP in its comments stated "KESC was privatized on the basis of the formula based tariff of 10-09-2002. This formula will remain in force for a period of seven (7) years after the privatization of KESC. Finance Division, therefore, regrets its inability to concur the proposal of KESC and advise NEPRA not to entertain the tariff petitions".
16. The ministry of Water & Power in its comments stated " In principle, the Ministry of Water & Power does not support any change in the existing mechanism/ formula pertaining to the two components of multi-year tariff as mentioned in your letter, as there is no such provision in the notification No. S.R.O 715(I)/2002 12th October, 2002 and therefore any

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change in the formula subsequent to the privatization process (in which the formula was fully declared) will be imprudent”.

Comments of the Privatization Commission

17. The Privatization Commission, Ministry of Privatization & Investment GOP in its letter received on 19.06.2006 has offered comments which are reproduced as hereunder;

“Privatization Commission is of the view that the maximum limit of 4% currently applicable for increase/decrease in tariff through quarterly adjustments on account of variations in fuel prices and the application of the latest gas price of the past quarter for the next three quarters in NEPRA’s determination of September 2002 were not equitable and were, thus, source of continuous loss of revenue to KESC particularly in view of the considerable increase in the fuel price. Privatization Commission, therefore, supports KESC’s tariff petition as the resulting tariffs due to prudently incurred costs such as fuel costs should not be withheld, capped or denied”.

Issues arising out of the tariff Petition

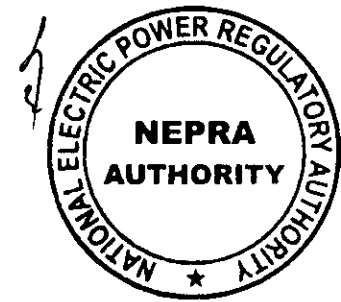
18. The following issues have come up during proceedings of the case and comments offered by the interveners and other concerned agencies.

- Waiver of maximum limit of 4%
- Change in price mechanism of gas for the next three quarters
- Multi-year tariff for 7 years – modification not allowed
- KESC privatization and proposed change in quarterly adjustment mechanism

Waiver of maximum limit of 4%

19. The Authority in its earlier determination for multiyear tariff had restricted adjustment in tariff to the maximum of 4% in aggregate with individual limit of 2.5% for adjustment in fuel cost of KESC’s own generation and 1.5% for adjustment in power purchase cost. The limit of 4% increase/decrease in tariff was allowed to shield the consumers against abrupt hike in the tariff due to abnormal increase in fuel prices in a particular quarter. The mechanism worked smoothly for at least two years and there was no left over amount at the end of December 2004, which has also been acknowledged by KESC. From January 2005 the fuel prices increased at a tremendous rate. The required increase in tariff due to fuel price variations became more than 4% but the adjustment in tariff was restricted to the prescribed limit. Consequently, substantial amount of fuel cost and power purchase cost remained unabsorbed at the end of each quarter. According to the petitioner the unabsorbed amount at the end of December 2005 was Rs. 1843 which increased to Rs. 2990 million at the end of March 2006 and expected to increase further in view of current situation of fuel prices in the international market.
20. The utility which is already making a loss due to inefficiency and other socio-political problems, can not sustain further pressure on its already constrained financial resources,

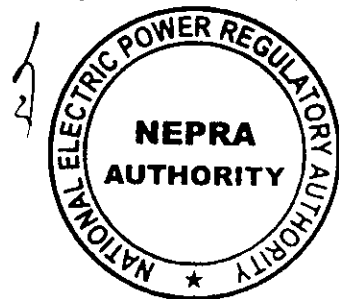
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especially after being privatised when financial assistance from GOP which was available prior to privatization is no longer available to KESC. The deteriorating financial health of KESC, due to aforementioned factors, therefore, necessitates review of the existing fuel price and power purchase cost adjustment mechanism, to provide a relief to the utility so that it remains afloat and continue providing better service to the consumers.

21. One of the issues that came under discussion during proceedings of the case was that by waiver of 4% limit applicable in the fuel price and power purchase adjustment mechanism, the entire burden of increase in cost shall be transferred to the consumers which would expose them to a new hike in electricity tariff. The issue raised by the parties and other stakeholders is not maintainable as under the current fuel price and power purchase cost adjustment mechanism the whole burden is ultimately transferred to the consumers. The quarterly adjustment in tariff is restricted to 4% and any balance (unabsorbed) amount in a certain quarter is carried forward to the next quarterly adjustment and so on till the whole balance of amount is adjusted in the tariff. The whole burden, therefore, is compensated to the utility through quarterly adjustments no matter whether the existing 4% price cap is removed or not.
22. KESC is being allowed quarterly adjustments in tariff since January 2003 under the approved adjustment mechanism and as a result of these quarterly adjustments, its tariff has already been increased by paisa 140 per kWh. The increase in tariff is not being felt by the consumers due to the reason that GOP is absorbing the additional impact of fuel and power purchase cost by providing subsidy to KESC for the difference in tariff determined by NEPRA and the actual tariff charged to the consumers. However, the fact remains that the fuel cost and power purchase cost of the utility has increased manifold due to exorbitant fuel price increases over time. The fuel price variation is not in control of the utility. Ideally variation in cost due to fuel price revision is considered as pass through cost and should be duly compensated as in case of Ex-WAPDA Gencos, and IPPs where such cost is passed on to the power purchaser on revision in fuel prices on fortnightly basis.
23. It has been seen that provision of individual limits in the existing adjustment mechanism such as 2.5% in the mechanism for adjustment in tariff due to fuel price variation and 1.5% in the mechanism for adjustment in tariff due to power purchase cost, were a major source of increase in the leftover amount at the end of each quarter. Substantial part of unabsorbed fuel cost and power purchase cost could be adjusted within 4% limit, had there been no individual limits of 2.5% and 1.5%.
24. While considering KESC's demand of waiver of 4% price cap, we also considered to enhance the existing cap to a suitable level where the utility is adequately compensated with the quarterly adjustment in tariff due to variation in fuel price and power purchase cost. It has been seen through working for various options that with 6% price cap on overall basis with no individual limits of 2.5% & 1.5%, the utility would be able to recover the whole amount of additional fuel cost due to variations in fuel price and power purchase cost, on quarter to quarter basis, but there is no guarantee that fuel price in future will increase at the same pace at which it has increased in the past, and any variation in fuel price on the

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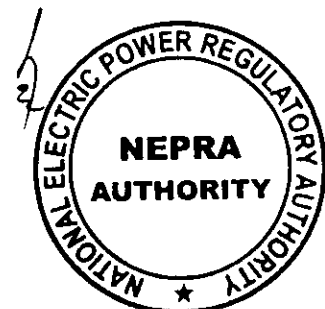


upper side would not result in leftover balance in the quarterly adjustments. We believe that shifting of limit (price cap) from one level to another is not a solution as it will not relieve the utility from carrying extra burden of cost unadjusted at each quarterly adjustment in the long run. It is an established fact that provision of price cap of 2.5% and 1.5% (total 4%) in the quarterly adjustment mechanism for fuel price and power purchase cost respectively were a continuous source of loss to the utility and provision of any condition by the application of which all the prudently incurred cost such as fuel cost is withheld, capped or denied should be removed altogether.

Change in price mechanism of gas for the next three quarters

25. Under the existing mechanism the latest price of Gas and Furnace Oil for the last quarter is applied to work out fuel cost for the next three quarters on respective fuels. KESC has now demanded that gas price for the present month instead of latest price of the last quarter may be applied to work out impact of increased fuel cost. KESC has not proposed the same treatment in case of price for the Furnace Oil. In its support, KESC has submitted that Gas prices are varied only upwards once or twice a year whereas the price for Furnace Oil is set according to the trend in the international markets on fortnightly basis and are varied both upwards and downwards.
26. KESC has been requesting through their various letters in the past that gas price for the present month instead of latest price for the last quarter be applied to work out fuel cost of the next three quarters. If the request of KESC is accepted it will benefit the utility to the extent that KESC will be able to recover part of its additional fuel cost due to increase in price in the same month instead of next quarter as per existing mechanism. This shall reduce time lag in the application of mechanism and actual recovery of additional impact of fuel cost.
27. According to the quarterly adjustment mechanism, the additional fuel cost of the utility in a quarter due to fuel price variations is compensated in the next quarter through adjustment in tariff. The price of gas is normally revised on the 1st of July or 1st of January by the relevant Authority (OGRA). The adjustment for the quarter April-June becomes due on 1st of July when the price for gas is already revised and the utility has to make payment to the fuel supplier on the basis of revised price of gas. The adjustment in the tariff for this quarter is made on the basis of gas price for the last quarter (i.e. June in this case). The utility has to bear additional impact of cost due to gas price revision for a period of 3 months (July-September) till next quarterly adjustment, which becomes due in October. It has been seen that the utility has to bear additional impact of cost amounting to Rs. 344 million (approx) in a quarter under the existing gas price mechanism. The utility has to make payment at the revised price of gas to the fuel supplier from the day of notification by the relevant authority (OGRA), which is met with by cutting funds on various investment activities to be carried out by the utility for system improvement and augmentation to provide reliable and satisfactory service to the consumers.

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Multi-year tariff for 7 years - Modification not allowed

28. Para 134 (ii) of the Authority's determination No. NEPRA/TRF-14/KESC-2002/4121-23 for multiyear tariff for KESC provides;

"For a period of seven years (commencing from the date KESC is privatized) the consumer end tariff shall be capped at the notified level prevailing at the time of privatization (Commencement of the first review period of 7 years) subject to the following adjustments whichever are applicable at the time of adjustment and aggregated together:

- (a) Quarterly adjustment of tariff on account of fuel price/cost variation according to the mechanism/formula prescribed as Annexure-5 to this determination.
- (b) Quarterly adjustment of tariff on account of power purchase price/cost variation according to mechanism/formula prescribed as Annexure-6 to this determination.
- (c) Annual CPI-X adjustment on account of inflation according to mechanism/formula prescribed as Annexure-7 to this determination."

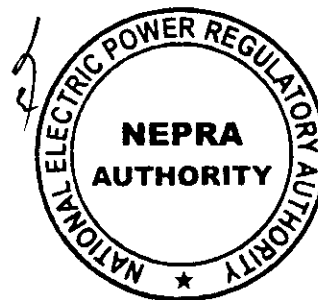
29. According to the above mentioned order of the Authority, the base tariff which comprises Generation Cost, Cost of purchase of power from IPPs, Transmission Cost and Distribution Cost is fixed at then prevailing level for 7 years from date of its privatization while adjustment/ indexation over the fixed level of cost due to fuel price variation and inflation is to be provided for the uncontrollable cost such as fuel cost, Power purchase cost and O&M cost of the utility, on quarterly and annual basis respectively. Fuel cost and power purchase cost of the utility are adjusted quarterly due to fuel price variations as per approved mechanism.

30. KESC in its reply to the comment of the intervener has categorically mentioned that it is not requesting for change or modification in its base tariff which is fixed for seven years before a further review by the Authority, rather it is requesting for modification in the adjustment mechanism which is not part of the base tariff. KESC has further stated that the Authority has already allowed 14 adjustments on this account since approval of multiyear tariff in 2002.

31. The justification provided by KESC is in line with the spirit of Authority's determination of multiyear tariff for KESC. The base tariff is fixed for 7 years from the date of KESC's privatization and quarterly adjustment/indexation which is allowed over the base tariff to recover additional costs should not be mixed up as these are separate and distinct components as provided in Authority's determination for multiyear tariff for KESC.

32. The mechanism for quarterly adjustment of fuel price and power purchase cost has been provided to pass on uncontrollable costs of KESC to the consumers so that utility remains financially viable while placing check on all other costs resulting due to inefficiency of the utility through fixation of a base tariff. The 4% price cap is applicable on the average sale rate of KESC (Tariff) to recover additional revenue requirement due to fuel price increases

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while the formula for calculation of additional fuel and power purchase cost is not affected if KESC's request for waiver of 4% cap is accepted.

KESC privatization and change in quarterly adjustment mechanism

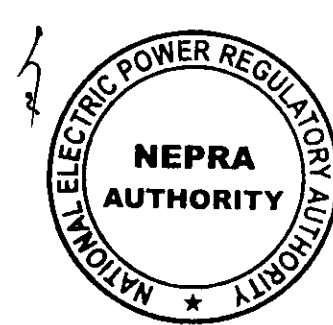
33. KESC has been privatized and its new management has taken control of the utility w.e.f. 29th November 2005. In order to know the possible implications of change in quarterly adjustment mechanism in the multiyear tariff determined by the Authority in 2002 and conditions applicable on KESC's new management under different sets of privatization agreements, comments of the concerned ministries and the Privatization Commission were sought through our letters. We have received comments of the Ministry of Finance, the Ministry of Water & Power and the Privatization Commission separately. The Ministry of Finance and the Ministry of Water & Power, Government of Pakistan has not supported any change in the existing adjustment mechanism. However, the Privatization Commission who was the main player in KESC's privatization has fully supported KESC's request.
34. KESC was asked to provide a copy of the Implementation Agreement signed by KESC's new management with GOP, in order to ensure if there are any conditions applicable with respect to provisions of multiyear tariff. Comments from our legal experts were also obtained in the matter. In view of the opinion of our experts, comments received from the concerned agencies and after going through the contents of Implementation Agreement, it is clear that there is no such provision which prohibits any change or modification in the quarterly adjustment mechanism during the tariff control period.

Decision of the Authority

Based on discussion and comments made in the foregoing paras, the decision of the Authority is recapitulated in the following Paras.

35. The Authority is cognizant of the fact that KESC after privatization in November 2005, is facing multifarious financial and operational problems to meet the demand of energy in its territorial jurisdiction and to provide a reliable and better service to its consumers. The Authority considers that under the present circumstances KESC is not in a position to cope with demand of electricity and expectations of the consumers within its constrained financial resources. It is therefore, imperative to address, as far as possible, all those issues which come under the role of the regulator so that KESC remains financially viable and continue to provide satisfactory service to its consumers.
36. The Authority considers that KESC's new management has taken over control of the utility and embarked on a plan to revamp the whole organization. For this purpose it has to invest a lot of money in rehabilitation of obsolete and deteriorated generation and distribution system. The Authority understands that GOP's financial assistance would be available to KESC for its investment program under Financial Improvement Plan (FIP). However, substantial investment is required to be made by the new KESC's management itself and

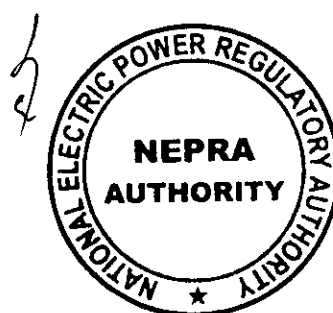
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also through savings resulting from efficiency improvement in KESC's Generation and Distribution system as well as better overall governance.

37. As per rule 17 of Tariff Standards & Procedure Rules 1998, the utility should be allowed to recover all prudent costs. The variation in fuel price is not in KESC's control. There has been an exorbitant increase in fuel prices which has resulted in very high fuel cost. Over time it has been observed that KESC has not been able to recover the whole impact of additional fuel and power purchase cost through quarterly adjustment mechanism only due to restriction of 4% price cap on its average sale rate. Consequently, the utility has suffered a shortfall in its revenue accumulating to Rs. 2.30 billion at the end of June 2006, which is expected to increase further in the foreseeable future due to rising trend of fuel prices in the international market. The amount which remains unadjusted in the quarterly adjustments is borne by the utility through arranging short term borrowing that has a cost which the utility has to bear. Further, the financial assistance which was provided by GOP in the past for shortfall in revenue due to operational loss is no longer available to KESC after its privatization. Hence, KESC is unable to accept further pressure on its constrained financial resources.
38. The Authority has considered the apprehensions expressed by the interveners and other stakeholders during the hearing and proceedings of the case about increase in consumer end tariff if the revision in the existing quarterly adjustment mechanism proposed by the petitioner is accepted. The Authority considers that it would be unjust if the legitimate costs are not allowed to the petitioner, as it is tantamount to deny the basic cost of the utility.
39. The Authority considers that removal of 4% price cap on quarterly adjustment mechanism for fuel price and power purchase cost shall not affect or alter the base tariff. The base tariff which has been fixed for 7 years shall continue for the tariff control period while indexation and adjustment which are separate and distinct components are to be treated in accordance with the mechanism as determined by the Authority and notified by the Federal Government from time to time.
40. While considering KESC's proposed change in the existing quarterly adjustment mechanism the Authority also viewed the current mechanism applicable in case of GENCOs and other IPPs. The Authority has been informed that no such restriction of pass through costs in case of GENCOs is applicable in the current scenario. The Authority understands that the legal status of GENCOs is different from KESC and KESC being vertically integrated utility can not be compared with GENCOs which have an independent status under the new restructured regime. However, in both the cases the uncontrollable cost at the generation level has to be ultimately passed on to the end consumer. In view of this the Authority, therefore, considers that KESC merits the same treatment as for GENCOs with regard to fuel price variations and accepts petitioner's demand for removal of 4% price cap.

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41. KESC has also requested for change in gas price mechanism for working out fuel cost variation for next three quarters provided in the mechanism for adjustment in tariff due to fuel price variations. The Authority has been informed that with application of the existing gas price mechanism, the utility is not compensated for additional impact of cost due to revision in gas price for a period of 3 months (till next quarterly adjustment). It has been seen that the utility has to face shortfall in revenue to the tune of Rs. 344 million in a quarter under the existing gas price mechanism, which is not sustainable for the utility in the long run. The Authority therefore, considers that proposed change in the gas price mechanism is justified and, therefore, accepted.

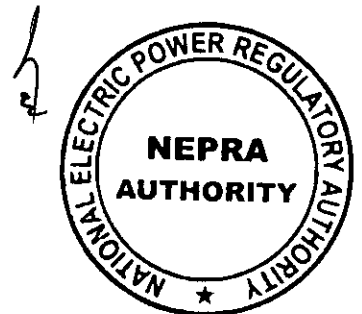
ORDER

42. The following decision of the Authority in respect of tariff petition of Karachi Electric Supply Corporation Ltd. (KESC) Case No. NEPRA/TRF-51/KESC-2006 is hereby intimated to the Federal Government for notification in the official gazette.

- i) The condition applicable in the Mechanism for Adjustment in Tariff due to variation in Fuel price at item (5) of Schedule II issued vide SRO 716(I)/2002 dated 12th October 2002 and reproduced as "*If the allowed increase or decrease in average sale rate due to fuel price variation in a certain quarter is greater than 2.5% of the prevailing average sale rate, the adjustment will be restricted to 2.5% and the remaining burden or relief shall be carried forward to the next quarterly adjustment.*" is removed.
- ii) The condition applicable in the Mechanism for Adjustment in Tariff due to variation in Power Purchase Cost at item 5 of Schedule –III issued vide S.R.O 716(I)/2002 dated 12th October, 2002 and reproduced as "*If the allowed increase or decrease in average sale rate due to variation in power purchase cost in a certain quarter is greater than 1.5 per cent of the prevailing average sale rate, the adjustment will be restricted to 1.5 per cent and the remaining burden or relief shall be carried forward to the next quarterly adjustment*" is removed.
- iii) The condition applicable under Para (1) of Schedule –II issued vide S.R.O. 716(I)/2002 dated 12th October, 2002 reproduced as "*The price of fuel applicable to the past quarter shall be on actual basis whereas the latest fuel price of the past quarter shall be applicable to the next three quarters*" is substituted with;

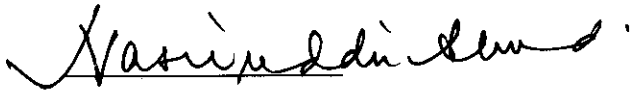
" The price of fuel (FO/HSD) applicable to the past quarter shall be on actual basis whereas the latest price of fuel (FO/HSD) of the past quarter shall be applicable to the next three quarters. The price of gas applicable to the past quarter shall be on actual basis whereas the latest gas price available on the day when the quarterly adjustment becomes due, shall be applicable to the next three quarters"

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- iv) All other terms and conditions currently applicable in respect of Mechanism for Adjustment in Tariff due to Variation in Fuel Price Schedule-II and Mechanism for Adjustment in Tariff due to Variation in Power Purchase Cost Schedule-III issued vide S.R.O. 716(I)/2002 dated 12th October, 2002 shall remain unchanged.

Authority



(Nasiruddin Ahmed)
Member

(*)

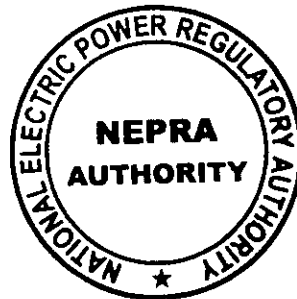

(Abdul Rahim Khan)
Member


(Lt. Gen® Saeed uz Zafar)
Chairman

(*) My decision recorded separately is attached.


(Abdul Rahim Khan)
Member





Determination of Member Mr. Abdul Rahim Khan in Case No.NEPRA/TRF-51/KESC-2006
(Tariff Revision Request Filed by KESC)

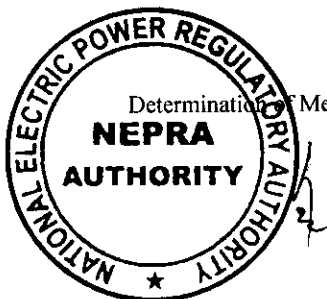
I have considered the tariff petition submitted and pleadings made by KESC, the comments/arguments proffered by the commentators and intervenors, the proceedings in the case and the point of view of the Ministry of Water & Power, Ministry of Finance and the Privatization Commission.

The relief sought by KESC relates to:

- (i) Removal of the limits of 2½% and 1½% on Adjustment in Rates for compensation due to variation in Fuel Usage Cost and Power Purchase Cost respectively.
- (ii) To change the basis of adjustment in rates for future three quarters in respect of adjustment in fuel price and Power Purchase from the existing criterion of price on the basis of latest fuel price of the past quarter to the new price in the beginning of the next quarter.

The main reason offered by KESC is that the proposed arrangement is not allowing its prudent costs incurred to be recovered through sale rate adjustments allowed under the mechanism. KESC has further submitted that substantial and continuous fuel price increases in the past two years has resulted in an under recovery of these costs which is adversely affecting its finances to the extent that the financial viability of KESC is being threatened.

The Privatization Commission has supported the petition; whereas the ministry of Finance, the Ministry of Water & Power, Intervenor (SITE Karachi) and Intervenor (APTMA) have not supported the petition mainly on the ground that the multi-year tariff determination for 7 years and the adjustment mechanism laid therein should not be disturbed during the currency of the Multi Year Period. Intervenor SHEHRI has shown



its concern that the consumer's interest of not subjecting it to substantial rate variation should be balanced against the concern to maintain the financial viability of KESC so that it is able to continue to provide reliable service to consumers.

The main points of concern therefore are:-

- (i) The justification of the need to alter the parameters of adjustment in Rates due to variation in Fuel Price and Power purchase price.
- (ii) The need to maintain the sanctity of the Regulatory compact of the Multi-year tariff accepted by the Investor at the time of Privatization.
- (iii) The need to maintain the capability of KESC to provide service to its consumers as committed in the Multi Year tariff.

An examination of the earlier determination of the Authority of Sept. 10, 2002 (Det-2002) reveals that at page 41 Para 103 (g) the Authority states, "*As past quarter adjustment would be based on actual prices the formulae would lead to a continuous adjustment of the estimated fuel cost to the actual fuel cost*". Thus the fuel cost adjustment pass through was assured on actual basis for the past quarter. The volatility of rates and its attenuation is mentioned as being achieved through spreading the required adjustment over the next four quarters. Attenuation of rates due to limitation on the adjustment accruing out of applying actual rates is mentioned at Para 106 of Det-2002, however here also adjustment due to quarterly fuel cost variation is mentioned without expressly denying the adjustment for ex-post compensation on account of variation in fuel price on actual basis experienced in the past quarter. The rate adjustment cap is then mentioned in the Annexures 5 and 6 at Para 5 in each case again without expressly denying the ex-post adjustment on actual basis for the past quarter as a pass through.

The rate adjustment on account of the past quarter is meant to compensate for difference in fuel cost actually incurred by KESC as compared to the estimated price allowed for the quarter in the previous quarter. The rate adjustment on account of the next three quarters is meant only to correct the estimation of the expected expense on fuel for the next three quarters.



Determination of Member Mr. Abdul Rahim Khan in Case No. NEPRA/TRF-51/KESC-2006

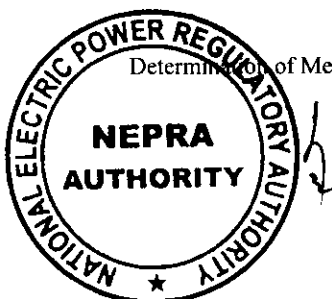
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The former relates to compensation for actual cost incurred and the later relates to a refinement of estimation for the purpose of application in the succeeding quarter. A limitation on the former would deny immediate compensation for a part of the cost incurred whereas a limitation on the later would only vary the estimated price for the next quarter. The limitation in case of Power purchase price has a similar effect.

Continuous and substantial price increases over the last two years in fuel price and consequently in Power purchase price has made the effect of denying complete compensation of the past quarter significant with respect to requirement of carrying charges of denied fuel cost and power purchase cost.

The analysis provided by the Case Officer indicates that an increase in the limits of 2½% adjustment of rate due to fuel price and a 1½% in adjustment due to Power purchase price to the extent of 4% and 2% respectively would solve the problem of inadequate compensation. Taken together as a 6% limitation on final consumer rate adjustment in a quarter would give adequate relief to KESC by reducing the probability of inadequate compensation of Fuel and Power purchase Cost to a reasonable level.

The above relaxation in upper limits will maintain the essence of the Det-2002 and not disturb the regulatory compact envisaged in the Multi Year Tariff formulae. It will also continue to maintain a balance between the interest of the consumers in the shape of protection from aggressive volatility in rates and the interest of the service provider, KESC, to be protected from being adversely effected financially to an extent which renders it unable to provide reliable service to consumers. The financial viability of KESC is of particular significance and importance to the Power Sector because KESC is being seen as the first in a series and a model of privatization of Public Utilities. On the success of KESC as a private electricity service rendering company hinges the success of privatization of other Public Utilities initiated by the Federal Government to reform the Public sector Utilities so that they can provide reliable service to consumers without budgetary support in the shape of subsidies.



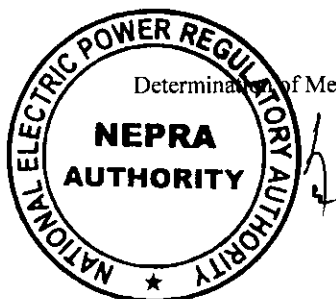
I am therefore convinced that it is in the Public interest in general and the Power Sector in particular to relax the limit of adjustment in consumer end rates on account of fuel price variation and Power Purchase Price variation taken together to a limit of 6%. Any adjustment required in excess of 6% would be transferred to the next quarter's assessment.

As regards the date of application of fuel price for the next 3 quarters, this is a factor of estimation and not compensation for actual cost incurred. Under or over estimation of this price will only result in variation of the actual from the estimate with respect to the next quarter. Some variation will always be expected between the estimated and actual costs for the next or second quarter. The question then arises as to what is the most likely expectation of a price in the next quarter according to which the utility has to pay its fuel cost. Ideally a regression analysis of the data for a reasonable past period would give us an expectation of the price with reasonable confidence; however to make the process of adjustment simple and keeping in view the increasing trend in the price of oil and gas, an estimation based on the price variation experienced in the past quarter would be fair. The application of latest price actually observed in the past quarter to the next quarters adequately protects KESC from any adverse financial impact due to variation between estimated price of fuel and actual price of fuel for the next quarter. Therefore there is no justifiable need to alter the factor of estimation of price for the next quarters on the basis of the latest fuel price of the past quarter.

In view of the above the following be implemented:-

Order

- (i) Para (5) at Page 3 of Annexure-5 (MECHANISM FOR ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL PRICE) of the order at Para 134 of the Authority's determination of Sept. 10, 2002 is hereby removed in its entirety and replaced with "If the allowed increase/decrease in weighted



Determination of Member Mr. Abdul Rahim Khan in Case No. NEPRA/TRF-51/KESC-2006

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average sale rate (due to above fuel price variation and any Power purchase price variation, taken together) is greater than 6% the overall adjustment would be restricted to 6% and the remaining burden / relief shall be carried forward to the next quarterly adjustment”.

- (ii) Para (5) at page 3 of Annexure-6 (MECHANISM FOR ADJUSTMENT IN TARIFF DUE TO VARIATION IN POWER PURCHASE COST) of the order at Para 134 of the Authority’s determination of Sept. 10, 2002 is hereby removed in its entirety and replaced with “If the allowed increase/decrease in weighted average sale rate (due to above Power purchase price variation and any Fuel Price Variation, taken together) is greater than 6% the overall adjustment would be restricted to 6% and the remaining burden / relief shall be carried forward to the next quarterly adjustment”.



(Abdul Rahim Khan)
Member

