For information & ADG (Tariff) CC: Chairman nd (M&E)

- M (Tariff)



Mr. Syed Safeer Hussain, Registrar, National Electric Power Regulatory Authority, NEPRA Tower, Attaturk Avenue (East), Sector G-5/1, Islamabad.

Ref No. KE/BPR/NEPRA/2022/368 Aug 18, 2022

Subject: Quarterly variation for the quarter April 2022 to June 2022 under Multi-Year **Tariff 2017 - 2023 - Revised** 

M/F

Dear Sir,

This is with reference to out letter No. KE/BPR/NEPRA/2022/342 dated Aug 02, 2022 regarding the Quarterly Variation for the Quarter April 2022 to June 2022.

In this regard, please find attached the updated calculation of quarterly variation after actualizing monthly FCA of June 2022 with NEPRA's decision dated Aug 11, 2022 and including the net impact of Life Line, 300 Units and Agricultural Units.

Quarter	Quarterly Variation per unit (PKR / kWh)
April to June, 2022 (Revised)	14.533
April to June, 2022 (Original)	14.852

KE would request the Authority for the expeditious processing of quarterly tariff variations for the quarter April 2022 to June 2022.

Sincerely,

Ayaz Jaffar Ahmed Director - Finance

## **Enclosed:**

- Calculation sheet of quarterly variation June 2022 (Revised)
- KE's Letter dated Aug 02, 2022

## K ELECTRIC LIMITED

UARTERLY ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL AND POWER PURCHASE COS ND CAPACITY CHARGES	T INCLUDING O&M	Quarter ended June 2022			
and and a strong a strong and a strong a strong and a strong a strong and a strong and a strong a strong and a strong a strong a strong and a strong		Jun-22			
equired adjustment in Tariff	- 0				
Quarterly Revision to reset price levels Unrecovered Cost for current quarter	Rs/kWh	12.9			
on ecovered cost for current quarter	Rs/kWh	2.4			
Other tariff Adjustments - Refer 'Tariff Variation' sheet					
Annual CPI on O&M with T&D loss adjustment	Rs/kWh	0.2			
T&D loss adjustment for Fuel cost	Rs/kWh	(0.1			
T&D loss adjustment for Power purchase cost	Rs/kWh	(0.0			
T&D loss adjustment for Power purchase O&M & Capacity cost	Rs/kWh	(0.0			
T&D loss adjustment of other components	Rs/kWh	(0.0			
T&D loss and CPI adjustment on Unit 3 & 4 and Mid Term Review Adjustment	Rs/kWh	(0.0			
Revision of additional write off	Rs/kWh	0.7			
Total	Rs/kWh	0.6			
Reversal of unrecovered cost of previous quarter	Rs/kWh	(1.5			
Total Required adjustment in KE's Tariff	Rs/kWh	14.5			
Total Required adjustment in KE's Tariff	Ps/kWh	1,453.3			
arterly Revision to reset price levels					
Units Sent Out	GWh	1,954.0			
T&D Losses allowed	GWh	15.9			
Units billed	GWh	1,642.3			
Cost of Fuel - KE - Note 1	Mill Rs	35,962.4			
Weighted Average Fuel cost per unit billed	D. W. I	Mar-22         Jun-22         Variation           11.7530         21.897         10.1			
Weighted Average ruer cost per difft billed	Rs/Kwh	11.7330 21.037 10.1			
Cost of Power Purchases		Jun-22			
- Fuel Cost	Mill Rs	18,764.8			
- O&M and Capacity Cost	Mill Rs	6,667.6			
- Total Cost of Power Purchases	Mill Rs	25,432.4			
Weighted Average Cost of Power Purchases (cost per unit billed)		Mar-22 Jun-22			
- Fuel Cost -	Rs/kWh	8.334 11.426 3.0			
- O&M Cost and capacity cost	Rs/kWh	4.336 4.060 (0.2			
- Total Cost of Power Purchases	Rs/kWh	12.669 15.485 2.8			
QUARTERLY INCREASE/DECREASE IN COST PER UNIT BILLED	0. #14#	100			
- Cost of Fuel - KE	Rs/kWh	10.1			
- Cost of Power Purchases - Total	Rs/kWh	2.8			
- Total Cost Variation	Rs/kWh	12.9			

Note 1: Installment of GIDC arrears amounting to PKR 2,425 million per month is being billed by SSGC as per Supreme court order. However, NEPRA in its FCA decision for the month of June 2021 has stated "considering the fact that K-Electric has obtained stay order from the Honorable SHC in the matter, decided not to allow any amount on account of GIDC till final decision by the Honorable SHC in the matter". Accordingly, GIDC will be claimed as per the final decision of Honorable SHC in the matter.

Note 2: Please note that the latest SoT determined by NEPRA, applicable for the quarter Apri to Jun 2022, is in continuation of SoTs determined by NEPRA vide its decision dated December 31, 2019 which were based on sales mix of FY 17 to 19. However, post MYT notification on May 22, 2019 updated terms and conditions have been applied including changes in definition of lifeline consumers and conversion of eligible consumers to "A3" category along with enabling of Time of Use (ToU) metering for Residential and Commercial consumers etc. Accordingly, KE would request NEPRA to adjust the impact while issuing determination of Quarterly SoTs.

Note 3: FCA Details from March 2022 to June 2022 are inline with NEPRA's Decisions. Further, the references for the Quarter March 2022 have also been updated based on Authority's decision dated July 22, 2022

# K ELECTRIC LIMITED

QUARTERLY ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL AND POWER PURCHASE CO AND CAPACITY CHARGES	Quarter ended June 2022					
ADJUSTMENT IN TARIFF DUE TO UNRECOVERED COST		Mar-22	Apr-22	May-22	Jun-22	QTR
		Reference	<u></u>			
Units Sent Out	GWh		1,926.580	1,999.270	1,954.987	
T&D Losses allowed			15.95%	15.95%	15.95%	
Units billed	GWh	•	1,619.290	1,680.386	1,643.166	4,942.843
a. O&M and Capacity cost of Power purchases						
O&M and Capacity cost of Power purchases	Mill Rs		5,819.992	6,392.373	6,667.605	
O&M and Capacity cost of power purchases (per unit billed)	Rs/kWh	4.336	3.594	3.804	4.058	
Increase or decrease in O&M and Capacity cost (over Reference)	Rs/kWh		(0.741)	(0.531)	(0.278)	
O&M and Capacity Cost of Power Purchases - Monthly variations Amount	Mill Rs	-	(1,200.603)	(893.111)	(456.507)	(2,550.220
b. Unrecovered Cost of FCA due to non adjustment of T&D losses						
i Monthly variation in Fuel Cost (FCA) - Per unit						
Cost of Fuel - KE	Rs/kWh		4.9163	8.0226	8.5164	
Cost of Fuel - Power Purchases	Rs/kWh		0.3552	1.6342	2.5949	
Adjustment			0.0003	(0.1388)	(0.0090)	
Total	Rs/kWh	:	5.2718	9.5180	11.1023	
ii Monthly variation in Fuel Cost (FCA) - Amount						
Cost of Fuel - KE	Mill Rs		9,471.644	16,039.344	16,649.448	42,160.436
Cost of Fuel - Power Purchases	Mill Rs		684.321	3,267.207	5,072.995	9,024.52
Adjustment			0.578	(277.499)	(17.595)	(294.51
Total	Mill Rs		10,156.543	19,029.052	21,704.848	50,890.44
iii Unrecovered Cost of FCA due to non adjustment of T&D losses						
Cost of Fuel - KE	Mill Rs		1,510.727	2,558.275	2,655.587	6,724.59
Cost of Fuel - Power Purchases	Mill Rs		109.149	521.120	809.143	1,439.41
Adjustment Total	Mill Rs		0.092 <b>1,619.969</b>	(44.261) 3,035.134	(2.806) <b>3,461.923</b>	(46.97 <b>8,117.02</b>
		:				
<u>Summary of Unrecovered cost for the quarter</u> a. O&M and Capacity cost of Power purchases	Mill Rs				Γ	(2,550.22
b. Unrecovered Cost of FCA due to non adjustment of T&D losses	Mill Rs					8,117.02
c. Net impact of Life Line, 300 Units and Agricultural Units						57.97
d. Other Adjustments	Mill Rs					5,660.93
Total Unrecovered cost for the quarter	Mill Rs				-	11,285.71
Estimated Units to be sold in next quarter at allowed T&D losses - Note 1	GWh					4,61
Unrecovered Cost per unit for current quarter	Rs/kWh				-	2.44

Note 1: To be actualized

DESCRIPTION		Mar-22	Apr-22	May-22	Jun-22
	- · · · · · · · · · · · · · · · · · · ·	Current	Current	Current	Current
		warruit.		Juinelle	can cit
1 O&M COST		•			
a KANUPP	Mill Rs.	-	-	_	-
b TAPAL	Mill Rs.	58.610	59.321	- 60.371	63.916
c GUL AHMED	Mill Rs.	57.140	79.586	68.727	65.830
d CPPA-G	Mill Rs.	270.243	261.506	267.704	284.112
e ANOUD POWER	Mill Rs.	270.243	201.500	207.704	204.112
f INT IND (IIL)	Mill Rs.	4.775	11.976	8.410	6.891
g FFBL	Mill Rs.	6.148	7.107	7.297	7.128
h SNPC - Note 1	Mill Rs.	62.674	55.618	57.592	65.505
i OURSUN	Mill Rs	24.179	24.760	23.863	21.435
j CPPA-G - 150 MW	Mill Rs	-	-	-	21.433
k Gharo Solar	Mill Rs	14.542	15.988	15.205	13.650
I LOTTE	Mill Rs	3.294	3.848	3.698	0.957
m LUCKY	Mill Rs	0.402	0.467	0.402	0.472
TOTAL	Mill Rs.	502.007	520.177	513.268	529.899
2 CAPACITY COST					_ <del></del>
a KANUPP	Mill Rs.	=			
b TAPAL	Mill Rs.	131.866	144.869	147.433	156.037
c GUL AHMED	Mill Rs.	132.795	200.031	172.736	165.457
d CPPA-G	Mill Rs.	4,434.963	4,222.035	4,849.739	5,157.485
e ANOUD POWER	Mill Rs.		4,222.033	4,643.733	J,137.465 -
f INT IND (IIL)	Mill Rs.	-	-	-	-
g FFBL	Mill Rs.	183.311	211.904	217.573	212.534
h SNPC - Note 1	Mill Rs.	235.764	233.437	215.877	197.054
i OURSUN	Mill Rs	169.794	178.698	172.223	154.705
j CPPA-G - 150 MW	Mill Rs	-	-	-	-
k Gharo Solar	Mill Rs	95.500	106.393	101.186	93.690
l Lotte	Mill Rs	1.945	2.272	2.183	0.565
m LUCKY	Mill Rs	0.152	0.177	0.152	0.179
TOTAL	Mill Rs.	5,386.090	5,299.815	5,879.105	6,137.707
3 TOTAL O&M & CAPACITY COST					
a KANUPP	Mill Rs.	-	-	-	-
b TAPAL	Mill Rs.	190.477	204.190	207.805	219.954
c GUL AHMED	Mill Rs.	189.935	279.618	241.463	231.287
d CPPA-G	Mill Rs.	4,705.206	4,483.540	5,117.443	5,441.597
e ANOUD POWER	Mill Rs.	-	-	-	-
f INT IND (IIL)	Mill Rs.	4.775	11.976	8.410	6.891
g FFBL	Mill Rs.	189.459	219.010	224.870	219.662
h SNPC - Note 1	Mill Rs.	298.438	289.055	273.469	262.559
i OURSUN	Mill Rs	193.972	203.458	196.086	176.140
j CPPA-G - 150 MW	Mill Rs	-	<u>-</u>	-	_
k Gharo Solar	Mill Rs	110.042	122.381	116.392	107.341
I LOTTE	Mill Rs	5.239	6.120	5.882	1.522
m LUCKY	Mill Rs	0.554	0.644	0.554	0.651
TOTAL	Mill Rs.	5,888.097	5,819.992	6,392.373	6,667.605

Note 1: Pursuant to NEPRA's decision of SNPC dated November 05, 2020, charges for January 2022 to March 2022 includes O&M and Debt Service Component at indexed rate and insurance components at reference rates and excludes ROE & ROEDC component. Any further adjustments / indexations will be claimed in future upon final determination by NEPRA.

#### Annual Tariff Variation - June 2022

Description	Tariff components		Quarterly a	djustments		Tariff components	T&Diloss adjustment factor	T&D loss adjustment	Tariff components adjusted for T&D losses	CPI-X	CPI Indexation	Tariff components adjusted for T&D losses and CPI
	July 2021	Sep 2021	Dec 2021	March 2022	June 2022	June 2022			July 2022			July;2022
	PKR / kWh	PKR / kWh	PKR / kWh	PKR / kWh	PKR / kWh	PKR / kWh	Factor	PKR / kWh	PKR / kWh	%	PKR / kWh	PKR / kWh
	3	b	С	d	e	f = sum a to f	g	h=fxg	I = f + h	J	k=1xJ	L = I + K
Fuel and power purchase												
Fuel cost - own generation	8.1683	3.4368	(5.8498)	5.9977	10.144	21.897	0.993	(0.153)	21.744			21.744
Power purchase - fuel cost	4.7909	1.0332	2.7642	(0.2547)	3.0921	11.426	0.993	(0.080)	11.346			11.346
Power purchase - O&M and capacity cost	3.3407	0.3688	1.0121	(0.3860)	(0.2758)	4.060	0.993	(0.028)	4.031			4.031
Sub-total	16.2998	4.8388	(2.0735)	5.3570	12.9604	37.382		(0.261)	37.122		I	37.122
O&M Generation Transmission Distribution	0.572 0.267 1.391					0.572 0.267 1.391	0.993 0.993 0.993	(0.004) (0.002) (0.010)	0.568 0.265 1.381	13.76% 11.76% 10.76%	0.078 0.031 0.149	0.646 0.296 1.530
Sub-total	2.2301				L	2.230		(0.016)	2.215	2011011	0.258	2.473
Other components	0.2007				Reversal of Additional write off		1				Additional write off - Please refer working	
Bad debts	0.2005					0.200	0.993	(0.001)	0.199		0.707	0.906
Other income	(0.2899)					(0.290)	0.993	0.002	(0.288)			(0.288)
Depreciation	0.5058					0.506	0.993	(0.004)	0.502			0.502
Return component	1.3627					1.363	0.993	(0.009)	1.353			1.353
Base rate adjustment component	1.0107					1.011	0.993	(0.007)	1.004			1.004
								(0.019)				

#### T&D loss adjustment factor for FY 2022

Current T&D level - FY 2022	C T&D	15:36%
Previous 1&D level - FY 2022	P T&O	15.95%
T&D Adjustment factor	(1 · P T&D) / (1 · C T&D)	0.993

CPI

Current CPI - May 2022	165.23
Reference CPI - May 2021	145.24
Increase in CPI (%)	13.76%

Description	CPI	X Factor	- Lower of	Lower of fixed or	an v	
Description	CPi	Fixed 30% of CP1		30% of CPI	CPI-X	
Generation	13.76%	n/a	n/a	n/a	13.76%	
Transmission	13.76%	2.00%	4.13%	2.00%	11.76%	
Distribution	13.76%	3.00%	4.13%	3.00%	10.76%	

K-Electric Limited
Mid Term Review and BQPS I (Unit 3 & 4) adjustment

Description	As at June 2021	T&D loss FY-21	T&D loss FY-22	T&D loss adjustment factor	T&D loss adjustment	Tariff level adjusted for T&D losses	CPI	CPI indexation	Total adjustment
	PKR / kWh	%	%	Factor	Factor	PKR / kWh	%	PKR / kWh	PKR / kWh
	а	b	С	d=(1-b)/(1-c)	e=(a*d)-a	f=e*a	g	h=g*f	i=e+h
<u>Unit 3 &amp; 4</u>									
O&M	(0.0498)	15.95%	15.36%	0.9930	0.0003	(0.0495)	13.76%	(0.0068)	(0.0065)
Others	(0.0449)	15.95%	15.36%	0.9930	0.0003	(0.0446)	0.00%	· -	0.0003
	(0.0947)				0.0006	(0.0941)		(0.0068)	(0.0062)
Mid Term Review Adjustment									
Base	(0.1676)	15.95%	15.36%	0.9930	0.0012	(0.1664)	0.00%	-	0.0012
Working capital	(0.0540)	15.95%	15.36%	-	-	(0.0540)	0.00%	-	-
	(0.2216)				0.0012	(0.2204)		-	0.0012
Total Impact									(0.0050)

K-Electric Limited
Mid Term Review Adjustment

Description	Reference	Previous T&D level	Current T&D level	T&D Adjustment Factor	T&D loss Adjustment	Applicable units	Amount
	PKR / kWh	%	%	Factor	PKR / kWh	GWh	PKR Million
	a	b	С	d=(1-b)/(1-c)	e=(a*d)-a	f	g=f*e
Mid term adjustment - Base Tariff							
FY 2020-21	(0.1696)	17.76%	16.80%	0.9885	0.0020	16,208	32.4
FY 2021-22	(0.1676)	16.80%	15.95%	0.9899	0.0017	16,648	28.3
						_	60.7

## K-Electric Limited

Details of Other Adjustments for the Quarter April 2022 to June 2022

5.Na	Details / Invoice	Ameunt in Milljen
1	Gharo's Differential Energy Payment for the period Dec 23, 2021 to May 31, 2022 (Invoice Date - Jun 17, 2022)	15
2	Lotte's Fuel Price Adjustment for May 2022 (Invoice Date - Jun 24, 2022)	0.2
_ 3	FPCL Fuel Price Adjustment for March 2022 and April 2022 (Invoice Date - May 30, 2022)	149
4	SNPC's Rrevised Fuel Cost Component for the period Jan 2018 to May 2022 as per NEPRA's Decision dated Jun 20, 2022 (Invoice Date - Jun 16, 2022)	916
5	Impact relating to average sales rate, netting of kanupp with purchases and grossing up submitted vide Letter No. KE/BPR/NEPRA/2022/331 dated Jul 27, 2022	3,931
6	SGTPS - Heat Rate impact from July 2016 to June 2022 as per NEPRA's decision dated Jul 26, 2022	590
6	Annual T&D Indexation on Mid term review adjustment based on NEPRA's decision dated March 01, 2022	61
		5.661

K-Electric Limited
Calculation of additional write off component - June 2022

Description		Amount	
Write off claim for FY 2022 - Note 1	PKR million	15,000	a
Amount recovered in FY 2022			
Write off component included in Tariff	PKR / kWh	0.213	b
Units billed FY 2022 (based on NEPRA allowed T&D)	GWh	16,641	c ·
Amount Recovered in FY 2022	PKR million	3,545	d = b x c
Remaining amount - FY 2021 (to be recovered in FY 2022)	PKR million	11,455	e = a - b
Estimated Units billed FY 2023 (based on NEPRA allowed T&D) - Note 2	GWh	16,200	f
Additional write off component	PKR / kWh	0.707	g = e / f

Note 1 - Represents provisional amount of write offs for FY 2022. Verification by Auditors, as required under criteria for write off claim under the MYT, will be submitted to NEPRA in due course.

Note 2 - To be actualized



Mr. Syed Safeer Hussain,
Registrar,
National Electric Power Regulatory Authority,
NEPRA Tower, Attaturk Avenue (East),
Sector G-5/1,
Islamabad.

Ref No. KE/BPR/NEPRA/2022/342 Aug 02, 2022

Subject: Quarterly variation for the quarter April 2022 to June 2022 under Multi-Year

Tariff 2017 – 2023

Dear Sir,

This is with reference to the mechanism for monthly and quarterly variations provided in the Multi-Year Tariff Determination of K-Electric Limited (KE) dated July 5, 2018 (MYT), notified vide SRO No. 576 (I)/2019 dated May 22, 2019.

In this regard, please find attached calculation of quarterly variation for the quarter April 2022 to June 2022 along with relevant supports, for Authority's approval.

Quarter	Quarterly Variation per unit (PKR / kWh)
April to June, 2022	14.852

KE dispatches as per Economic Merit Order from its own generating units (with the available fuel resources) and import from external sources. It is also certified that the cost of fuel and power purchase claim does not include any amount of late payment surcharge / mark-up / interest. Requisite details including generation statistic sheets and invoices have already been submitted with monthly cost variations for the months of April to June 2022

## **Heat Rate**

In the MYT, NEPRA determined provisional Heat rates for KE's generating plants and directed KE to conduct fresh Heat rate test for its plants, based on which final Heat rates will be determined by NEPRA.

In this regard, NEPRA has issued its decision on Heat rate for BQPS - II plant on January 1, 2020 and accordingly the calculations are based on Heat rates determined therein.

With respect to Heat Rate of KGTPS, NEPRA issued its determination on January 18, 2021, against which KE filed review motion. NEPRA issued its decision on the review motion of KGTPS on November 05, 2021. Accordingly, calculations for the quarterly tariff variation for April 2022 to June 2022 are based on Heat Rates determined.

Further, with respect to Heat Rate of SGTPS, NEPRA issued its determination on January 18, 2021, against which KE filed review motion. NEPRA issued its decision on review motion of SGTPS on July 26, 2022. Accordingly, KE has included the impact of prior period in the Quarterly Variation of April 2022 to June 2022.





With respect to Heat Rate of KCCP, NEPRA issued its determination on September 02, 2020 against which KE filed review motion. NEPRA issued its decision on review motion for Heat Rates till June 2020 on January 27, 2022. Decision for Heat Rates from July 2020 onwards is still pending. The required adjustment will be incorporated after the final Heat Rates are determined.

Moreover, NEPRA issued its determination regarding the approval of Heat Rate for BQPS I Plant dated April 21, 2022. The same has been updated by KE in its quarterly tariff variation for the quarter April 2022 to June 2022.

Considering the quarterly tariff variation for the quarter from Apr 2022 to Jun 2022 has significant impact, KE would request the Authority for the expeditious processing of quarterly tariff variations for the quarter April 2022 to June 2022.

Sincerely,

Ayaz Jaffar Ahmed Director — Finance

### **Enclosed:**

- Calculation sheet of quarterly variation June 2022
- Supporting documents of quarterly variation June 2022