

*Mr. Abdulqadir
AD (Tariff)
Date: 6/7/2020*



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

Ref No. KE/BPR/NEPRA/2020/613
June 22, 2020

Subject: Monthly Cost Variation for the month of May 2020 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 enclosed calculation of monthly variation for the month of May 2020 along with relevant supports, for Authority's approval. Please note that the calculation for the month of May 2020 is based on CPPA-G's latest fuel cost determined by NEPRA for the month of October 2019 and it is subject to adjustment based on the determination for May 2020 to be issued by NEPRA.

Month	Variation Amount (PKR Million)	Variation per unit (PKR / kWh)
May-20	(1,862)	(1.015)

Economic Dispatch Order

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. All the requisite details including generation statistic sheets and invoices are enclosed.

Heat Rate

In the MYT, NEPRA has determined provisional Heat rates for KE's generating plants and has 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.

Further, Heat rate tests of other plants have been conducted and Independent Engineers' reports have been submitted to NEPRA. The working for required adjustment will be submitted to NEPRA after determination of final Heat rates for these plants based on the test results.

For information & n.a. Please

- SA (Tariff-I)
- Copy to:
 - DG (M&E)
 - M/F

CC: Chairman
- M (Tariff)

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*Mr. Abdulqadir
AD (Tariff)
Date: 6/7/2020*

N 23/6/20

Senior Advisor (Amr-i)

Dy No: 4229

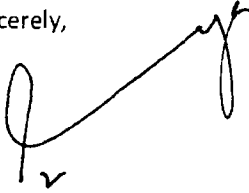
Date: 24.6.20

REGISTRAR

Dy No: 837
Date: 23.6.20

Furthermore, KE would humbly request NEPRA for expeditious processing of pending monthly variations for July 2019 to April 2020 and quarterly tariff variations for the period April 2019 to March 2020.

Sincerely,



Ayaz Jaffar Ahmed
Director – Finance & Regulations

Enclosed:

- Calculation sheet of monthly variation – May 2020
- Supporting Documents for May 2020

SUMMARY OF REQUIRED ADJUSTMENT ON ACCOUNT OF VARIATION IN COST OF FUEL AND POWER PURCHASES

DESCRIPTION		Unit	Mar-20	May-20
			Reference	Current
A)	Cost of fuel:			
	Cost of fuel - KE	Mill Rs.	6,948.931	9,389.650
	Cost of fuel - Power Purchases	Mill Rs.	3,778.301	4,747.131
	Total	Mill Rs.	10,727.232	14,136.781
B)	Units Sent Out			
	Units Sent Out - KE	GWh	638.156	1,060.658
	Units - Power purchases	GWh	591.834	773.740
	Total	GWh	1,229.990	1,834.398
C)	Cost per unit			
	Cost of fuel - KE	Rs./kWh	5.650	5.119
	Cost of fuel - Power Purchases	Rs./kWh	3.072	2.588
	Average	Rs./kWh	8.721	7.706
D)	Variation per unit			
	Cost of fuel - KE	Rs./kWh		(0.531)
	Cost of fuel - Power Purchases	Rs./kWh		(0.484)
	Total Fuel Cost Adjustment	Rs./kWh		(1.015)
E)	Total Fuel Cost Adjustment	Ps/kWh		(101.49)
F)	Variation amount			
	Cost of fuel - KE	Mill Rs.		(973.930)
	Cost of fuel - Power Purchases	Mill Rs.		(887.797)
	Total Fuel Cost Adjustment	Mill Rs.		(1,861.727)

Work Sheet- Generation Fuel Cost Variation

DESCRIPTION		Mar-20	May-20
		Reference	Current
1 UNITS SENT OUT			
1a UNITS SENT OUT ON FURNACE OIL			
i Bin Qasim - I			
Unit 1	GWh	10.241	58.622
Unit 2	GWh	11.859	56.535
Unit 3	GWh	4.937	42.953
Unit 4	GWh	-	51.529
Unit 5	GWh	25.346	38.568
Unit 6	GWh	26.347	23.414
Total units sent out on furnace oil - Bin Qasim - I	GWh	78.729	271.620
1b UNITS SENT OUT ON GAS			
i Bin Qasim - I			
Unit 1	GWh	3.427	17.870
Unit 2	GWh	0.775	21.076
Unit 3	GWh	0.547	5.103
Unit 4	GWh	-	5.642
Unit 5	GWh	10.214	39.451
Unit 6	GWh	13.177	60.389
Total units sent out on gas - Bin Qasim - I	GWh	28.140	149.530
ii Bin Qasim II - 560 MW	GWh	226.196	265.211
iii Korangi Town Gas Turbine II	GWh	9.904	40.602
iv Site Gas Turbine II	GWh	25.270	39.608
v Korangi CCGP	GWh	54.411	93.767
Total units sent out on gas - KE	GWh	343.922	588.718
1c UNITS SENT OUT ON LNG			
i Bin Qasim - I			
Unit 1	GWh	2.076	5.877
Unit 2	GWh	0.470	6.931
Unit 3	GWh	0.331	1.678
Unit 4	GWh	-	1.856
Unit 5	GWh	6.186	12.974
Unit 6	GWh	7.981	19.861
Total units sent out on LNG - Bin Qasim - I	GWh	17.043	49.177
ii Bin Qasim II - 560 MW	GWh	146.455	91.569
iii Korangi Town Gas Turbine II	GWh	4.833	13.967
iv Site Gas Turbine II	GWh	14.301	13.498
v Korangi CCGP	GWh	32.874	32.108
Total units sent out on LNG - KE	GWh	215.505	200.319
Total units sent out KE	GWh	638.156	1,060.658
2 HEAT RATE AT BUS BAR			
i Bin Qasim - I			
Unit 1	Btu/kWh	10,802	10,802
Unit 2	Btu/kWh	10,650	10,650
Unit 3	Btu/kWh	10,996	10,996
Unit 4	Btu/kWh	10,899	10,899
Unit 5	Btu/kWh	10,304	10,304
Unit 6	Btu/kWh	10,249	10,249
ii Bin Qasim II - 560 MW	Btu/kWh	8,381	8,381
iii Korangi Town Gas Turbine II	Btu/kWh	8,738	8,738
iv Site Gas Turbine II	Btu/kWh	8,746	8,746
v Korangi CCGP	Btu/kWh	8,497	8,497

Work Sheet- Generation Fuel Cost Variation

DESCRIPTION		Mar-20	May-20	
		Reference	Current	
3	Calorific Value - Furnace Oil	Btu/kg	40,351	40,351
4	FUEL PRICES			
4a	Fuel Price - Gas	Rs./MMBTU	824	824
4b	Fuel Price - Furnace Oil	Rs./Mton	56,988	38,848
4c	Fuel Price - Furnace Oil	Rs./MMBTU	1,412	963
5	COST OF FUEL			
	5a Furnace oil			
	i Bin Qasim - I			
	Unit 1	Mill Rs.	156.230	609.654
	Unit 2	Mill Rs.	178.370	579.672
	Unit 3	Mill Rs.	76.672	454.728
	Unit 4	Mill Rs.	-	540.697
	Unit 5	Mill Rs.	368.839	382.601
	Unit 6	Mill Rs.	381.362	231.032
	Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	1,161.473	2,798.384
	5b Gas			
	i Bin Qasim - I			
	Unit 1	Mill Rs.	30.507	159.054
	Unit 2	Mill Rs.	6.805	184.953
	Unit 3	Mill Rs.	4.956	46.232
	Unit 4	Mill Rs.	-	50.672
	Unit 5	Mill Rs.	86.718	334.957
	Unit 6	Mill Rs.	111.283	509.999
	Total Cost of Gas - Bin Qasim - I	Mill Rs.	240.268	1,285.868
	ii Bin Qasim II - 560 MW	Mill Rs.	1,562.050	1,831.479
	iii Korangi Town Gas Turbine II	Mill Rs.	71.313	292.339
	iv Site Gas Turbine II	Mill Rs.	182.116	285.442
	v Korangi CCP	Mill Rs.	380.957	656.510
	Total Cost of Gas - KE	Mill Rs.	2,436.704	4,351.638
	5c LNG			
	i Bin Qasim - I			
	Unit 1	Mill Rs.	40.598	79.271
	Unit 2	Mill Rs.	9.056	92.178
	Unit 3	Mill Rs.	6.595	23.042
	Unit 4	Mill Rs.	-	25.254
	Unit 5	Mill Rs.	115.404	166.938
	Unit 6	Mill Rs.	148.095	254.177
	Total Cost of LNG - Bin Qasim - I	Mill Rs.	319.748	640.858
	ii Bin Qasim II - 560 MW	Mill Rs.	2,222.326	958.280
	iii Korangi Town Gas Turbine II	Mill Rs.	76.465	152.402
	iv Site Gas Turbine II	Mill Rs.	226.461	147.417
	v Korangi CCP	Mill Rs.	505.753	340.671
	Total Cost of LNG - KE	Mill Rs.	3,350.753	2,239.628
	Total cost of fuel - KE	a Mill Rs.	6,948.931	9,389.650
6	Variation in Cost of Fuel - KE			
	6a Units Sent Out - KE	GWh	638.156	1,060.658
	6b Units - Power Purchases	GWh	591.834	773.740
	Total Units Sent Out	b GWh	1,229.990	1,834.398
	6c Cost per unit	c = a/b Rs./kWh	5.650	5.119
	6d Variation per unit (Cost of Fuel - KE)	Rs./kWh		(0.531)
	6e Variation amount (Cost of Fuel - KE)	Mill Rs.		(973.930)

Work Sheet- Power Purchase Cost Variation

DESCRIPTION		Mar-20	May-20		
		Reference	Current		
1 POWER PURCHASES					
a	KANUPP	GWh	29.730	7.934	
b	TAPAL	GWh	25.553	70.058	
c	GUL AHMED	GWh	10.307	64.801	
d	CPPA-G	GWh	369.721	450.992	
e	ANOUD POWER	GWh	5.349	5.052	
f	INT IND (IIL)	GWh	6.207	4.210	
g	FFBL	GWh	39.058	37.858	
h	SNPC	GWh	62.857	57.782	
i	OURSUN	GWh	8.613	8.900	
j	CPPA-G - 150 MW	GWh	24.162	54.432	
k	GHARO SOLAR	GWh	10.277	11.722	
TOTAL		GWh	591.834	773.740	
2 COST OF POWER PURCHASES - FUEL COST					
a	KANUPP - Note 1	Mill Rs.	330.281	72.699	
b	TAPAL	Mill Rs.	332.585	578.079	
c	GUL AHMED	Mill Rs.	136.396	610.605	
d	CPPA-G - Note 2	Mill Rs.	1,968.210	2,400.856	
e	ANOUD POWER	Mill Rs.	61.409	40.802	
f	INT IND (IIL)	Mill Rs.	62.148	42.154	
g	FFBL	Mill Rs.	295.353	286.278	
h	SNPC	Mill Rs.	463.291	425.891	
i	OURSUN	Mill Rs.	-	-	
j	CPPA-G - 150 MW - Note 2	Mill Rs.	128.629	289.766	
k	GHARO SOLAR	Mill Rs.	-	-	
TOTAL		Mill Rs.	3,778.301	4,747.131	
3 FUEL COST / UNIT					
a	KANUPP - Note 1	Rs./kwh	11.110	9.163	
b	TAPAL	Rs./kwh	13.016	8.251	
c	GUL AHMED	Rs./kwh	13.233	9.423	
d	CPPA-G - Note 2	Rs./kwh	5.324	5.324	
e	ANOUD POWER	Rs./kwh	11.480	8.076	
f	INT IND (IIL)	Rs./kwh	10.013	10.014	
g	FFBL	Rs./kwh	7.562	7.562	
h	SNPC	Rs./kwh	7.371	7.371	
i	OURSUN	Rs./kwh	-	-	
j	CPPA-G - 150 MW - Note 2	Rs./kwh	5.324	5.324	
k	GHARO SOLAR	Rs./kwh	-	-	
4 VARIATION IN COST OF FUEL - POWER PURCHASES					
4a	Cost of Fuel - Power Purchases	a	Mill Rs.	3,778.301	4,747.131
Units Sent out:					
	Units Sent Out - KE		GWh	638.156	1,060.658
	Units - Power Purchases		GWh	591.834	773.740
4b	Total Units Sent Out	b	GWh	1,229.990	1,834.398
4c	Cost per unit	c = a/b	Rs./kwh	3.072	2.588
4d	Variation per unit (Cost of Fuel - Power Purchases)		Rs./kwh		(0.484)
4e	Variation amount (Cost of Fuel - Power Purchases)		Mill Rs.		(887.797)

Note 1: Kanupp details are provisional as the invoice for the month is yet to be received.

Note 2: CPPA-G's fuel cost for the month of May 2020 is based on NEPRA's determination of fuel cost for the month of October 2019 (latest determined) as the fuel cost for the month of May 2020 is yet to be determined.