

Ref. No. RA&SP/NEPRA/071/1336  
Dated: May 29, 2015

The Registrar  
N.E.P.R.A  
Islamabad

Subject: MONTHLY FUEL COST ADJUSTMENT (FCA) DUE TO VARIATION IN FUEL AND POWER PURCHASE PRICE FOR THE MONTH OF APRIL 2015.

Dear Sir

This is with reference to fuel cost adjustment based on units sent out for the month of April 2015, as per tariff determination of 23<sup>rd</sup> December 2009.

Monthly Fuel Cost Adjustment:

The submission is based on NTDC's power purchase invoice for the month of Apr-15, received on 29-May-15. Further, the units sent out on Gas and Furnace oil at BQPS-I have been worked out in the ratio of actual units generated on Gas & Furnace Oil at BQPS-I. Below is the summarized position of Fuel Cost Adjustment for the month of April 2015;

DESCRIPTION	April 2015 (Over Mar-15)	
	(Mill. Rs)	(Ps./kWh)
Fuel Price Variation	(137.811)	(9.436)
Power Purchase Price Variation	131.983	9.037
<b>Total Fuel Costs Adjustment</b>	<b>(5.828)</b>	<b>(0.399)</b>

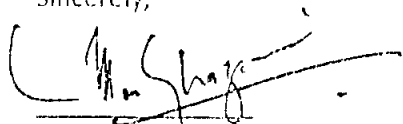
Registrar  
 Dy No. 6142  
 Dated: 04-06-15

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/ markup/ interest. All the requisite details including generating statistic sheets and invoices were already sent with earlier submission.

Moreover, we reiterate our earlier submission Ref.: GM (RA)/NEPRA/2014/274 dated: 03-Oct-14, regarding approval of pending Heat Rate results.

Sincerely,



M. Aamir Ghaziani  
Director (Finance & Regulations)

Encl.

Senior Advisor  
 Diary No: 2413  
 Date: 09-06-2015  
 5053  
 8-6-15

For information & info pt.  
 SAT-I  
 (Star b):  
 SAT-II 8/6  
 DDF-16  
 co: chairman  
 V/M(CA)  
 M(G)  
 M(M&E)  
 M(Lic)

## K Electric Limited (Formerly KESC Ltd.)

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

DESCRIPTION		Mar-15	Apr-15
<b>2 MONTHLY ALLOWABLE ADJUSTMENT ON UNITS SENT OUT BASIS</b>			
<b>I a. Monthly Variation in</b>			
I Fuel Price	Mill Rs.	(286.175)	(137.811)
II Power Purchase Price - Fuel component	Mill Rs.	(191.840)	131.983
III Total Monthly Variation ( I + II ) - Over Reference Tariff	Mill Rs.	<u>(478.015)</u>	<u>(5.828)</u>
<b>b. Units Sent Out</b>			
	Mill kWh	1,217.947	1,460.455
<b>II a. Monthly Variation in FSA - due to</b>			
I Fuel Price	Ps/kWh	(23.496)	(9.436)
II Power Purchase Price - Fuel component	Ps/kWh	(15.751)	9.037
<b>b. Monthly Increase/decrease to be passed to Consumers (I+II)</b>	Ps/kWh	<b>(39.248)</b>	<b>(0.399)</b>

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION		Mar-15	Apr-15
<b>1 UNITS SENT OUT - KE</b>			
<b>1a UNITS SENT OUT ON GAS</b>			
i Bin Qasim	Mill kWh	87.549	134.833
ii Bin Qasim II - CCPP	Mill kWh	284.495	288.437
iii Korangi Gas 2	Mill kWh	14.499	33.254
iv Site Gas 2	Mill kWh	0.331	1.539
v Korangi combined	Mill kWh	36.130	96.658
Total (i to viii)	Mill kWh	<b>423.004</b>	<b>554.722</b>
<b>1b UNITS SENT OUT ON F. OIL</b>			
i Bin Qasim	Mill kWh	144.256	250.321
Total (i to viii)	Mill kWh	<b>144.256</b>	<b>250.321</b>
<b>1c TOTAL UNITS SENT OUT (1 + 2)</b>			
i Bin Qasim	Mill kWh	231.805	385.154
ii Bin Qasim II - CCPP	Mill kWh	284.495	288.437
iii Korangi Gas 2	Mill kWh	14.499	33.254
iv Site Gas 2	Mill kWh	0.331	1.539
v Korangi combined	Mill kWh	36.130	96.658
Total (i to vii)	Mill kWh	<b>567.260</b>	<b>805.043</b>
<b>2 HEAT RATE AT BUS BAR</b>			
<b>2a Heat Rate of GAS - of Item 1</b>			
i Bin Qasim	Btu/kWh	10,650	10,650
ii Bin Qasim II - CCPP	Btu/kWh	8,605	8,605
iii Korangi Gas 2	Btu/kWh	9,500	9,500
iv Site Gas 2	Btu/kWh	9,500	9,500
v Korangi combined	Btu/kWh	9,110	9,110
v			
<b>2b</b>			
i Bin Qasim	Kg/kWh	<b>0.264</b>	<b>0.264</b>
ii Korangi Thermal	Kg/kWh	<b>0.340</b>	<b>0.340</b>
<b>3 FUEL PRICES</b>			
a. Fuel Prices- Gas (Rs/MMBTu)	Rs/MMBTu	<b>488.23</b>	<b>488.23</b>
b. Fuel Price -F.O (Rs/Kg)	Rs/Kg	<b>41,641</b>	<b>38,623</b>
<b>4 COST OF FUEL</b>			
<b>4a COST OF GAS</b>			
i Bin Qasim	Mill Rs	455.224	701.086
ii Bin Qasim II - CCPP	Mill Rs	1,195.226	1,211.787
iv Korangi Gas 2	Mill Rs	67.249	154.240
v Site Gas 2	Mill Rs	1.537	7.139
vi Korangi combined	Mill Rs	160.698	429.914
Total (i to vii)	Mill Rs	<b>1,879.934</b>	<b>2,504.166</b>
<b>4b COST OF FURNACE OIL</b>			
i Bin Qasim	Mill Rs	1,585.832	2,552.411
Total (i to vii)	Mill Rs	<b>1,585.832</b>	<b>2,552.411</b>

Work Sheet- Generation Fuel Cost Variation

DESCRIPTION		Mar-15	Apr-15	
<b>4c TOTAL COST OF FUEL</b>				
i	Bin Qasim	Mill Rs	2,041.056	3,253.497
ii	Bin Qasim II - CCPP	Mill Rs	1,195.226	1,211.787
iii	Korangi Gas 2	Mill Rs	67.249	154.240
iv	Site Gas 2	Mill Rs	1.537	7.139
v	Korangi combined	Mill Rs	160.698	429.914
	Total	Mill Rs	<b>3,465.765</b>	<b>5,056.577</b>
<b>5 COST OF FUEL PER KWH</b>				
a	Bin Qasim	Rs/kWh	8.805	8.447
b	Bin Qasim II - CCPP	Rs/kWh	4.201	4.201
d	Korangi Gas 2	Rs/kWh	4.638	4.638
e	Site Gas 2	Rs/kWh	4.638	4.638
f	Korangi combined	Rs/kWh	4.448	4.448
<b>6 INCREASE/DECREASE IN COST OF FUEL PER KWH</b>				
a	Bin Qasim	Rs/kWh	(1.235)	(0.358)
b	Bin Qasim II - CCPP	Rs/kWh	-	-
d	Korangi Gas 2	Rs/kWh	-	-
e	Site Gas 2	Rs/kWh	-	-
f	Korangi combined	Rs/kWh	-	-
<b>7 INCREASE / DECREASE IN FUEL COST OVER PREVIOUS MONTH</b>				
a	Bin Qasim	Mill Rs	(286.175)	(137.811)
b	Bin Qasim II - CCPP	Mill Rs	-	-
d	Korangi Gas 2	Mill Rs	-	-
e	Site Gas 2	Mill Rs	-	-
f	Korangi combined	Mill Rs	-	-
	Total (a to g)	Mill Rs	<b>(286.175)</b>	<b>(137.811)</b>
<b>8 INCREASE / DECREASE IN TARIFF TO BE PASSED IN THE MONTHLY BILLS</b>				
a	Fuel price variation (Item 7-h)	Mill Rs	(286.175)	(137.811)
b	Units Sent Out - KE	Mill kWh	567.260	805.043
c	Power Purchase	Mill kWh	650.687	655.412
d	Total Units Sent Out (b + c)	Mill kWh	1,217.947	1,460.455
e	Increase / Decrease In Tariff (8a / 8d x 100) To be passed on to the consumers - FSA	Ps/kWh	<b>(23.496)</b>	<b>(9.436)</b>
<b>9 INCREASE / DECREASE IN REVENUE</b>				
a	Units Sold	Mill kWh	1,035.255	1,241.387
b	Increase / Decrease In Tariff	Ps/kWh	(23.496)	(9.436)
c	Increase / Decrease In Revenue (9a / 9b x 100)	Mill Rs	(243.249)	(117.139)
d	Accumulated Increase / decrease In revenue	Mill Rs	<b>(982.055)</b>	<b>(117.139)</b>
d	Unrecovered Cost due to T&D loss		<b>(42.926)</b>	<b>(20.672)</b>
<b>10 INCREASE / DECREASE IN TARIFF TO BE ADJUSTED ON QUARTERLY BASIS</b>				
a	Fuel price variation - Item 8a	Mill Rs	<b>(286.175)</b>	<b>(137.811)</b>
b	Units Sent Out - KE	Mill kWh	567.260	805.043
c	Power Purchase	Mill kWh	650.687	655.412
d	Total Units Sent Out	Mill kWh	1,217.947	1,460.455
e	Trans & Dist Losses		15%	15%
f	Units Sold (10d - 10e)	Mill kWh	<b>1,035.255</b>	<b>1,241.387</b>
g	Increase / Decrease In Tariff (10a / 10f x 100) To be passed on to the consumers - SoT	Ps/kWh	<b>(27.643)</b>	<b>(11.101)</b>

## Work Sheet- Power Purchase Cost Variation

DESCRIPTION		Mar-15	Apr-15
<b>1 POWER PURCHASES</b>			190.918
a KANUPP	Mill kWh	44.699	37.455
b PASMIC	Mill kWh	1.131	0.962
c TAPAL	Mill kWh	66.039	78.161
d GUL AHMED	Mill kWh	58.552	75.302
e NTDC/WAPDA	Mill kWh	466.274	450.544
f ANOUD POWER	Mill kWh	7.905	7.422
g INT IND (IIL)	Mill kWh	6.087	5.566
<b>TOTAL</b>	<b>Mill kWh</b>	<b>650.687</b>	<b>655.412</b>
<b>2 COST OF POWER PURCHASE - FUEL COST</b>			1,544.358
a KANUPP	Mill Rs	287.990	245.847
b PASMIC	Mill Rs	7.290	6.314
c TAPAL	Mill Rs	546.186	629.026
d GUL AHMED	Mill Rs	556.102	669.484
e NTDC/WAPDA	Mill Rs	2,952.851	2,973.239
f ANOUD POWER	Mill Rs	58.364	52.032
g INT IND (IIL)	Mill Rs	33.971	31.053
<b>TOTAL</b>	<b>Mill Rs</b>	<b>4,442.753</b>	<b>4,606.995</b>
<b>3 COST OF POWER PURCHASE- Fuel Cost/kV</b>		-	8.089
a KANUPP	Rs/kWh	6.443	6.564
b PASMIC	Rs/kWh	6.443	6.564
c TAPAL	Rs/kWh	8.271	8.048
d GUL AHMED	Rs/kWh	9.498	8.891
e NTDC/WAPDA	Rs/kWh	6.333	6.599
f ANOUD POWER	Rs/kWh	7.383	7.010
g INT IND (IIL)	Rs/kWh	5.581	5.579
<b>AVERAGE</b>	<b>Rs/kWh+E</b>	<b>6.828</b>	<b>7.029</b>
<b>4 INCREASE / DECREASE IN FUEL COMPONENT OF POWER PURCHASE - TO BE PASSED IN THE MONTHLY BILLS</b>			
a Averse Monthly Fuel cost of Rs/kWh		6.828	7.029
b Reference Rate - Previous Mont Rs/kWh		7.123	6.828
c Increase / Decrease in Average Rs/kWh		<b>(0.295)</b>	<b>0.201</b>
d Total Power Purchase (Item Mill kWh)		650.687	655.412
e Increase / Decrease in Fuel Cost Mill Rs		<b>(191.840)</b>	<b>131.983</b>
<b>5 INCREASE / DECREASE IN TARIFF TO BE PASSED IN THE MONTHLY BILLS</b>			
a Fuel price variation In cost of power purch:		(191.840)	131.983
b Units Sent Out - KE	Mill kWh	567.260	805.043
c Power Purchase	Mill kWh	650.687	655.412
d Total Units Sent Out (b + c)	Mill kWh	<b>1,217.947</b>	<b>1,460.455</b>
e Increase / Decrease In Tarlff (5a / 5d x 100)			
To be passed on to the consum Ps/kWh		<b>(15.751)</b>	<b>9.037</b>
<b>6 INCREASE / DECREASE IN REVENUE</b>			
a Units Sold	Mill kWh	1,035.255	1,241.387
b Increase / Decrease in Tarlff (it Ps/kWh)		(15.751)	9.037
c Increase / Decrease In Revenue Mill Rs		(163.064)	112.186
d Accumulated Increase / decrea Mill Rs		<b>(173.311)</b>	

Work Sheet- Power Purchase Cost Variation

DESCRIPTION		Mar-15	Apr-15
<b>7 O&amp;M PAYMENT</b>			
a	KANUPP	Mill Rs 43.136	36.145
b	PASMIC	Mill Rs 2.454	2.086
c	TAPAL	Mill Rs 67.022	79.325
d	GUL AHMED	Mill Rs 34.692	44.616
e	NTDC/WAPDA	Mill Rs 900.098	696.652
f	ANOUD POWER	Mill Rs 11.589	11.487
g	INT IND (IIL)	Mill Rs 9.748	8.933
	<b>TOTAL</b>	<b>Mill Rs 1,068.739</b>	<b>879.244</b>
<b>8 O&amp;M PAYMENT (Rs/kWh)</b>			
a	KANUPP	Rs/kWh 0.965	0.965
b	PASMIC	Rs/kWh 2.169	2.169
c	TAPAL	Rs/kWh 1.015	1.015
d	GUL AHMED	Rs/kWh 0.593	0.593
e	NTDC/WAPDA	Rs/kWh 1.930	1.546
f	ANOUD POWER	Rs/kWh 1.466	1.548
g	INT IND (IIL)	Rs/kWh 1.601	1.605
	<b>TOTAL</b>	<b>Rs/kWh 1.642</b>	<b>1.342</b>
	Variation over Base Rate	Rs/kWh (0.181)	(0.301)
	Variation over Base Rate (8a*1) Mill Rs	<b>(117.838)</b>	<b>(197.255)</b>
<b>9 CAPACITY PAYMENT</b>			
a	TAPAL	Mill Rs 136.753	136.571
b	GUL AHMED	Mill Rs 125.811	125.710
	<b>TOTAL</b>	<b>Mill Rs 262.564</b>	<b>262.281</b>
<b>10 CAPACITY PAYMENT (Rs/ kWh)</b>			
a	TAPAL	Rs/kWh 2.071	1.747
b	GUL AHMED	Rs/kWh 2.149	1.569
	<b>TOTAL</b>	<b>Rs/kWh 0.404</b>	<b>0.400</b>
	Variation over Base Rate	Rs/kWh (0.026)	(0.003)
	Variation over Base Rate (10n*: Mill Rs	<b>(16.602)</b>	<b>(2.190)</b>
<b>11 TOTAL O&amp;M &amp; CAPACITY PAYMENT</b>			
a	KANUPP	Mill Rs 43.136	36.145
b	PASMIC	Mill Rs 2.454	2.086
c	TAPAL	Mill Rs 203.775	215.896
d	GUL AHMED	Mill Rs 160.503	170.327
e	NTDC/WAPDA	Mill Rs 900.098	696.652
f	ANOUD POWER	Mill Rs 11.589	11.487
g	INT IND (IIL)	Mill Rs 9.748	8.933
	<b>TOTAL</b>	<b>Mill Rs 1,331.304</b>	<b>1,141.525</b>
<b>12 TOTAL COST WITH O&amp;M AND CAPACITY PAYMENT</b>			
a	KANUPP	Mill Rs 331.126	281.992
b	PASMIC	Mill Rs 9.743	8.401
c	TAPAL	Mill Rs 749.962	844.922
d	GUL AHMED	Mill Rs 716.605	839.811
e	NTDC/WAPDA	Mill Rs 3,852.950	3,669.892
f	ANOUD POWER	Mill Rs 69.953	63.518
g	INT IND (IIL)	Mill Rs 43.719	39.985
	<b>TOTAL</b>	<b>Mill Rs 5,774.056</b>	<b>5,748.521</b>

### Work Sheet- Power Purchase Cost Variation

DESCRIPTION	Mar-15	Apr-15
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#### 13 COST OF POWER PURCHASE- TOTAL Cost/kWh

a	KANUPP	Rs/kWh	7.408	7.529
b	PASMIC	Rs/kWh	8.611	8.732
c	TAPAL	Rs/kWh	11.356	10.810
d	GUL AHMED	Rs/kWh	12.239	11.153
e	NTDC/WAPDA	Rs/kWh	8.263	8.145
f	ANOUD POWER	Rs/kWh	8.849	8.558
g	INT IND (IIL)	Rs/kWh	7.182	7.183
	AVERAGE	Rs/kWh	<b>8.874</b>	<b>8.771</b>

#### 14 INCREASE / DECREASE IN POWER PURCHASE COST - TOTAL

a	Average Monthly cost of Pow	Rs/kWh	8.874	8.771
b	Reference Rate - Previous Month	Rs/kWh	9.375	8.874
c	Increase / Decrease In Average	Rs/kWh	(0.501)	(0.103)
d	Total Power Purchase (Item	Mill kWh	650.687	655.412
e	Increase / Decrease In Total Cost	Mill Rs	<b>(326.281)</b>	<b>(67.462)</b>
f	Adjustment in cost of KANUPP			
g	Unrecovered cost Previous Quarter			
h	Total (e+f+g)		<b>(326.281)</b>	<b>(67.462)</b>

#### 15 INCREASE / DECREASE IN TARIFF

##### TO BE ADJUSTED ON QUARTERLY BASIS

a	Total price variation in cost of p	Mill Rs	(326.281)	(67.462)
b	KE - Units Sent Out	Mill kWh	567.260	805.043
c	Power Purchase	Mill kWh	650.687	655.412
d	Total Units Sent Out (b+c)	Mill kWh	1,217.947	1,460.455
e	Trans & Dist Losses		15.0%	15.0%
f	Units Sold (15d-15e)	Mill kWh	<b>1,035.255</b>	<b>1,241.387</b>
g	Increase / Decrease In Tariff			
h	Power Purchase (15a/15f)	Ps/kWh	<b>(31.517)</b>	<b>(5.434)</b>

Description	MMBTU (As per Bills)	Cubic Meters PER BILLS	GCV AS PER BILLS	GCV AS PER BTU's OR BILLS	MMCF	MMCFD	MMBTUs	Amount excluding Meter rent	Meter rent	Total Amount of SSGC Bills	Rs/ MMBTU
Bin Qasim Power Station (1)			1,032.570	#DIV/0!				15,463	2,500	18,963	#DIV/0!
Bin Qasim Power Station (2)	358,455,9254	9,789,500	1,032.570	1,032.57333	347,148	11,572	358,454.77	175,008,936	2,500	175,011,436	483.23
Bin Qasim Power Station (3)	357,685,2473	9,759,472	1,032.570	1,032.57333	346,402	11,547	357,684.09	174,632,669	2,500	174,635,169	483.23
Bin Qasim Power Station (4)	6,375,0583	173,944	1,032.570	1,032.57334	6,174	0.206	6,375.04	3,112,495	2,500	3,114,995	483.23
Bin Qasim Power Station (5)	357,551,5485	9,755,824	1,032.570	1,032.57333	346,272	11,542	357,550.39	174,567,353	2,500	59,914,782	483.23
Bin Qasim Power Station (6)	359,931,2003	9,820,753	1,032.570	1,032.57333	348,577	11,619	359,930.04	175,729,210	2,500	175,731,710	483.23
<b>Total</b>	1,439,998,9804	39,290,493	1,032,5700	1,032,57333	1,394,57	46,43	1,439,994,3336	703,067,165	15,000	703,082,166	483.24

**BIN QASIM COMBINED CYCLE POWER PLANT**

Bin Qasim Power Station (7)	467,203,4850	12,747,850	1,032.570	1,032.57333	452,471	15,082	467,207.98	228,105,687	2,500	228,106,187	483.23
Bin Qasim Power Station (8)	479,573,3833	13,085,200	1,032.570	1,032.57333	464,445	15,481	479,571.84	234,142,113	2,500	234,144,613	483.23
Bin Qasim Power Station (9)	489,571,8865	13,358,010	1,032.570	1,032.57333	474,128	15,804	489,570.31	239,023,682	2,500	239,026,182	483.23
Bin Qasim Power Station (10)	500,858,5661	13,665,968	1,032.570	1,032.57333	485,059	16,169	500,856.95	244,534,178	2,500	244,536,678	483.23
Bin Qasim Power Station (11)	528,462,1096	14,419,133	1,032.570	1,032.57333	511,791	17,060	528,460.40	258,011,056	2,500	258,013,556	489.23
<b>Total</b>	2,465,675,4305	67,276,161	1,032,570	1,032,57333	2,387,893.8	79,596	2,465,667.47	1,203,816,715	12,500	1,203,829,215	482.23

**KORANGI THERMAL POWER STATION**

<b>Total</b>			1,022,750	#DIV/0!				16,463	3,000	19,463	
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**KORANGI TOWN GAS TURBINE-II**

Korangi Town Gas Turbine 00095	221,455,5348	6,553,977	951,980	951,98000	232,525	7,734	221,455.53	108,121,236	3,000	108,124,235	438.23
Korangi Town Gas Turbine 00095	105,672,4712	3,127,377	951,980	951,98000	111,003	3,700	105,672.47	51,592,471	2,500	51,594,971	488.23
Korangi Town Gas Turbine				#DIV/0!				16,463	2,500	18,963	#DIV/0!
<b>Total</b>	327,128,00600	9,681,354	951,980	951,98000	343,529	11,434	327,128.01	159,730,170	8,000	159,738,170	483.23

**SITE GAS TURBINE-II**

Site Gas Turbine	12,699,6908	382,906	949,150	949,14567	13,591	0.453	12,699.74	6,298,016	3,000	5,301,015	483.23
Site Gas Turbine - 2	10,463,2405	310,584	949,150	949,14667	11,024	0.367	10,463.28	5,108,468	2,500	5,110,968	433.23
<b>Total</b>	23,162,9313	693,490	949,150	949,14567	24,6147	0.820	23,163.01	11,406,484	5,500	11,411,924	433.23

**KORANGI COMBINED CYCLE POWER PLANT**

(KTPS 1)	424,152,5577	11,684,157	1,022,750	1,022,75333	414,716	13,824	424,151.17	207,084,003	2,500	207,086,503	433.23
(KTPS 2)	440,069,5725	12,122,624	1,022,750	1,022,75334	430,279	14,343	440,068.14	214,855,167	2,500	214,857,667	433.23
	854,222,1302	23,806,781	1,022,750	1,022,75333	844,9957	28,167	854,219.31	421,939,170	5,000	421,944,170	483.23
<b>Total</b>	5,120,387,4784	140,748,279	1,024,955	1,024,95767	4,995,7063	166,52	5,120,372,1395	2,499,992,632	51,000	2,500,043,632	488.24

Without SSWW

2,499,976,169 GST @17%

425,007,417

2,499,992,631

SSGC Billed

2,925,051,049

16,462

2977200.353

3570516.823



