

For information & n.a. Please



• SA(Tariff-I)  
Copy to:  
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- ~~KIPI~~ (KIP)  
- MF

CC: Chairman  
- M (Tariff) / M (M&E)  
- m (ct) Ref No. KE/BPR/NEPRA/2019/405  
- m (H)

May 27, 2019

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

**Subject: Monthly and Quarterly variations for the period July 2016 to April 2019 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 calculations of monthly and quarterly variations for the period July 2016 to April 2019 along with relevant supports, for Authority's approval.

#### Monthly Fuel Cost Variations

Summary of Monthly Fuel cost variations to be passed on to consumers as per the mechanism given in MYT is as follows:

Month	Variation Amount – Note (PKR Million)	Variation per unit – Note (PKR / kWh)
Jul-16	424	0.263
Aug-16	363	0.232
Sep-16	307	0.204
Oct-16	(66)	(0.045)
Nov-16	(229)	(0.189)
Dec-16	1,124	0.996
Jan-17	(66)	(0.068)
Feb-17	(805)	(0.829)
Mar-17	(137)	(0.106)
Apr-17	(378)	(0.255)
May-17	(628)	(0.374)
Jun-17	(755)	(0.430)
Jul-17	(356)	(0.217)
Aug-17	105	0.064
Sep-17	(440)	(0.280)
Oct-17	702	0.432
Nov-17	(152)	(0.122)
Dec-17	(236)	(0.236)
Jan-18	1,204	1.151

Received of  
of Long term  
Price Variation  
Dy. No: 4734  
Dated: 29-05-19  
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Month	Variation Amount – Note (PKR Million)	Variation per unit – Note (PKR / kWh)
Feb-18	1,035	0.976
Mar-18	2,977	2.094
Apr-18	578	0.371
May-18	2,191	1.185
Jun-18	1,827	0.991
Jul-18	1,139	0.623
Aug-18	927	0.566
Sep-18	1,218	0.776
Oct-18	2,710	1.629
Nov-18	847	0.614
Dec-18	767	0.703
Jan-19	(37)	(0.037)
Feb-19	(894)	(0.933)
Mar-19	(1,544)	(1.226)
Apr-19	959	0.594

Note: Variations for the period July 2016 to November 2016 are net of provisional Fuel cost adjustment already passed on to consumers.

#### Quarterly Variations

Summary of quarterly variations required in the Schedule of Tariff (SoT) is given below. Considering Government of Pakistan's (GoP) Uniform Tariff Policy, it is expected that these variations will not have any impact on the consumer-end Tariff and will result in increase / decrease in Tariff Differential Claims (TDC).

Quarter	Quarterly Variation per unit (PKR / kWh)
July to Sep, 2016	(0.141)
Oct to Dec, 2016	2.739
Jan to March, 2017	(0.887)
April to June, 2017	(1.154)
July to Sep, 2017	0.171
Oct to Dec, 2017	0.975
Jan to March, 2018	2.653
April to June, 2018	(0.243)
July to Sep, 2018	1.738
Oct to Dec, 2018	3.392
Jan to March, 2019	(3.778)

**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, Heat rate test for BQPS – II was conducted in June 2018 and Independent Engineer's test report was submitted to NEPRA, based on which NEPRA issued its decision on Heat rate of BPQS – II on May 9, 2019. However, being aggrieved with certain points in the decision, KE filed a motion for review with NEPRA on May 16, 2019.

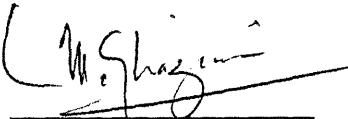
The attached calculations are based on BQPS – II Heat rates as given in NEPRA's decision dated May 9, 2019 and required adjustment will be submitted to NEPRA after any change in the Heat rate pursuant to the review procedure.

Further, Heat rate test of other plants is planned to be conducted in due course and working for required adjustment will be submitted to NEPRA after determination of final Heat rates for these plants based on the test results.

**Write-off Claims**

The attached calculations include provisional amount of write-offs for FY 2017 and 2018. Verification by Auditors, as required under criteria for write-off claims in the MYT, is in progress and will be submitted to NEPRA in due course.

Sincerely,



Muhammad Aamir Ghaziani  
Chief Financial Officer

 Enclosed:

- Calculation sheet of monthly and quarterly adjustments – July 2016 to April 2019
- Supporting Documents for the period July 2016 to April 2019

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/2019/468

June 19, 2019

*Mr. Zaman (S)*  
*M. Abbasi AD (I)*  
*M. Ali (S)*  
*SAY II*  
*Chairman*  
*MF*  
*26/6/19*  
*Chairman*  
*(S)*  
*MF*  
*26/6/19*  
*MF*  
*26/6/19*

Subject: Monthly Cost Variation for the months of April 2019 (revised) and May 2019 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 2019 along with relevant supports, for Authority's approval. Please note that the calculation for the month of May 2019 is based on CPPA-G's fuel cost determined by NEPRA for the month of April 2019 and is subject to adjustment based on the determination for May 2019 to be issued by NEPRA.

Further, please note that KE in its letter KE/BPR/NEPRA/2019/405 dated May 27, 2019 submitted monthly and quarterly variations wherein fuel cost variation for the month of April 2019 was based on power purchase invoice of CPPA-G with energy charges of PKR 5.5472/kWh. Subsequently, NEPRA in its determination of Fuel Cost Adjustment for XWDISCOs (CPPA-G) issued vide ref: NEPRA/R/TRF-100/MFPA/9867-84 dated June 3, 2019 and notified vide SRO 605(I)/2019 dated June 3, 2019 has determined fuel cost at PKR 5.7867/kWh for the month of April 2019. Accordingly, revised calculation of monthly fuel cost variation for April 2019 is being submitted, after incorporating the aforementioned decision of NEPRA.

Summary of monthly variations as per the mechanism given in MYT is as follows:

Month	Variation Amount (PKR Million)	Variation per unit (PKR / kWh)
Apr-19 (Revised)	1,065	0.660
May-19	2,968	1.585

#### 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.

Dy. No: 5304  
 Date: 25-6-19

Dy. No: 5352  
 Dated: 24-6-19

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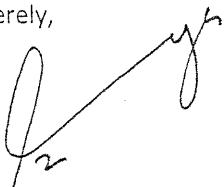
Keen and diligent work folder

In this regard, Heat rate test for BQPS – II was conducted in June 2018 and Independent Engineer's test report was submitted to NEPRA, based on which NEPRA issued its decision on Heat rate of BPQS – II on May 9, 2019. However, being aggrieved with certain points in the decision, KE filed a motion for review with NEPRA on May 16, 2019.

The attached calculations are based on BQPS – II Heat rates as given in NEPRA's decision dated May 9, 2019 and required adjustment will be submitted to NEPRA after any change in the Heat rate pursuant to the review procedure.

Further, Heat rate test of KCCP Plant has been conducted on June 15<sup>th</sup> & 16<sup>th</sup>, 2019, whereas heat rate test of other plants is planned to be conducted in due course and working for required adjustment will be submitted to NEPRA after determination of final Heat rates for these plants based on the test results.

Sincerely,



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Ayaz Jaffar Ahmed  
Director – Finance & Regulations

Enclosed:

- Calculation sheet of monthly variation – April 2019 (revised) and May 2019
- Supporting Documents for May 2019



Received alongwith folder

REGISTRAR  
Dy. No: 6367  
Dated: 16-07-19

For information &  
of a Pl.  
— SAT-II  
Gp/bs.

— SAC(Tech) — DG(m/s) 16-07-19

— ADG (Dir) — LA(CIP) cc v. claim

— DR.I/04-I/MF

Ref No. KE/BPR/NEPRA/2019/568

July 12, 2019

Mr. Syed Safeer Hussain,

Registrar,

National Electric Power Regulatory Authority,

NEPRA Tower, Attaturk Avenue (East),

Sector G-5/1,

Islamabad.

m(T)

m(ea)

m(G)

**Subject: Monthly Cost Variation for the months of May 2019 (revised) and June 2019 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 June 2019 along with relevant supports, for Authority's approval. Please note that the calculation for the month of June 2019 is based on CPPA-G's fuel cost determined by NEPRA for the month of May 2019 and is subject to adjustment based on the determination for June 2019 to be issued by NEPRA.

Further, please note that KE in its letter KE/BPR/NEPRA/2019/468 dated June 19, 2019 submitted monthly cost variation for the month of May 2019 wherein the fuel cost variation was based on CPPA-G's fuel cost determined by NEPRA for the month of April 2019 i.e. PKR 5.7867/kWh. Subsequently, NEPRA in its determination of Fuel Cost Adjustment for XWDISCOs (CPPA-G) Issued vide ref: NEPRA/R/TRF-100/MFPA/11565-82 dated July 9, 2019 and notified vide SRO 742(I)/2019 dated July 9, 2019 has determined fuel cost at PKR 5.1456/kWh for the month of May 2019. Accordingly, revised calculation of monthly fuel cost variation for May 2019 is being submitted, after incorporating the aforementioned decision of NEPRA.

Summary of monthly variations as per the mechanism given in MYT is as follows:

Month	Variation Amount (PKR Million)	Variation per unit (PKR / kWh)
May-19 (Revised)	2,672	1.427
Jun-19	2,831	1.503

#### 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, Heat rate test for BQPS – II was conducted in June 2018 and Independent Engineer's test report was submitted to NEPRA, based on which NEPRA issued its decision on Heat rate of BPQS – II on May 9, 2019. However, being aggrieved with certain points in the decision, KE filed a motion for review with NEPRA on May 16, 2019.

The attached calculations are based on BQPS – II Heat rates as given in NEPRA's decision dated May 9, 2019 and required adjustment will be submitted to NEPRA after any change in the Heat rate pursuant to the review procedure.

Further, Heat rate test of KCCP and SGTPS Plants have been conducted on June 15<sup>th</sup> & 16<sup>th</sup>, 2019 and July 6<sup>th</sup> & 7<sup>th</sup>, 2019 respectively. Whereas, heat rate test of other plants is planned to be conducted in due course and working for required adjustment will be submitted to NEPRA after determination of final Heat rates for these plants based on the test results.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ayaz Jaffar Ahmed'.

Ayaz Jaffar Ahmed  
Director – Finance & Regulations

**Enclosed:**

- Calculation sheet of monthly variation – May 2019 (revised) and June 2019
- Supporting Documents for June 2019

K Electric Limited

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

Revised

	DESCRIPTION	Unit	Mar-19	May-19
			Reference	Current
A)	Cost of fuel:			
	Cost of fuel - KE	Mill Rs.	7,193.043	13,115.812
	Cost of fuel - Power Purchases	Mill Rs.	3,739.121	5,818.503
	Total	Mill Rs.	<u>10,932.163</u>	<u>18,934.315</u>
B)	Units Sent Out			
	Units Sent Out - KE	GWh	673.174	1,113.571
	Units - Power purchases	GWh	585.770	759.164
	Total	GWh	<u>1,258.944</u>	<u>1,872.735</u>
C)	Cost per unit			
	Cost of fuel - KE	Rs./kWh	5.714	7.004
	Cost of fuel - Power Purchases	Rs./kWh	2.970	3.107
	Average	Rs./kWh	<u>8.684</u>	<u>10.111</u>
D)	Variation per unit			
	Cost of fuel - KE	Rs./kWh		1.290
	Cost of fuel - Power Purchases	Rs./kWh		0.137
	Total Fuel Cost Adjustment	Rs./kWh		<u>1.427</u>
E)	Total Fuel Cost Adjustment	Ps/kWh		<u>142.691</u>
F)	Variation amount			
	Cost of fuel - KE	Mill Rs.	2,435.837	
	Cost of fuel - Power Purchases	Mill Rs.	256.392	
	Total Fuel Cost Adjustment	Mill Rs.	<u>2,672.229</u>	

**Work Sheet- Generation Fuel Cost Variation**

Revised

DESCRIPTION	Mar-19	May-19
	Reference	Current

**1 UNITS SENT OUT**

**1a UNITS SENT OUT ON FURNACE OIL**

**i Bin Qasim -I**

Unit 1	GWh	12,358	67,040
Unit 2	GWh	65,028	78,588
Unit 3	GWh	2,942	79,310
Unit 4	GWh	30,432	72,760
Unit 5	GWh	52,162	41,541
Unit 6	GWh	-	37,388
<b>Total units sent out on furnace oil - Bin Qasim - I</b>	<b>GWh</b>	<b>162,923</b>	<b>376,627</b>

**1b UNITS SENT OUT ON GAS**

**i Bin Qasim -I**

Unit 1	GWh	10,883	13,752
Unit 2	GWh	10,501	18,523
Unit 3	GWh	0,454	0,934
Unit 4	GWh	1,569	6,998
Unit 5	GWh	17,881	48,395
Unit 6	GWh	-	9,062
<b>Total units sent out on gas - Bin Qasim - I</b>	<b>GWh</b>	<b>41,288</b>	<b>97,665</b>

**ii Bin Qasim II - 560 MW**

**iii Korangi Town Gas Turbine II**

**iv Site Gas Turbine II**

**v Korangi CCPP**

**Total units sent out on gas - KE**

	<b>GWh</b>	<b>290,458</b>	<b>522,722</b>
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**1c UNITS SENT OUT ON LNG**

**i Bin Qasim -I**

Unit 1	GWh	6,267	5,336
Unit 2	GWh	6,047	7,186
Unit 3	GWh	0,262	0,362
Unit 4	GWh	0,903	2,715
Unit 5	GWh	10,298	18,776
Unit 6	GWh	-	3,516
<b>Total units sent out on LNG - Bin Qasim - I</b>	<b>GWh</b>	<b>23,778</b>	<b>37,892</b>

**ii Bin Qasim II - 560 MW**

**iii Korangi Town Gas Turbine II**

**iv Site Gas Turbine II**

**v Korangi CCPP**

**Total units sent out on LNG - KE**

**Total units sent out KE**

	<b>GWh</b>	<b>219,793</b>	<b>214,222</b>
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**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	8,358	8,358
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 CCPP	Btu/kWh	8,497	8,497

**Work Sheet- Generation Fuel Cost Variation**

Revised

DESCRIPTION	Mar-19		May-19	
	Reference	Current	Reference	Current
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351	Btu/kg	40,351
<b>4 FUEL PRICES</b>				
4a Fuel Price - Gas	Rs./MMBTU	629	Rs./MMBTU	629
4b Fuel Price - Furnace Oil	Rs./Mton	67,465	Rs./Mton	73,479
4c Fuel Price - Furnace Oil	Rs./MMBTU	1,672	Rs./MMBTU	1,821
4d Fuel Price - LNG	Rs./MMBTU	1,432	Rs./MMBTU	1,514
<b>5 COST OF FUEL</b>				
<b>5a Furnace oil</b>				
I Bin Qasim - I				
Unit 1	Mill Rs.	223.195	Mill Rs.	1,318.698
Unit 2	Mill Rs.	1,157.913	Mill Rs.	1,524.092
Unit 3	Mill Rs.	54.088	Mill Rs.	1,588.067
Unit 4	Mill Rs.	554.544	Mill Rs.	1,444.072
Unit 5	Mill Rs.	898.640	Mill Rs.	779.462
Unit 6	Mill Rs.	-	Mill Rs.	697.789
<b>Total Cost of Furnace Oil - Bin Qasim - I</b>	Mill Rs.	2,888.380	Mill Rs.	7,352.180
<b>5b Gas</b>				
I Bin Qasim - I				
Unit 1	Mill Rs.	73.944	Mill Rs.	93.439
Unit 2	Mill Rs.	70.343	Mill Rs.	124.082
Unit 3	Mill Rs.	3.143	Mill Rs.	6,461
Unit 4	Mill Rs.	10.754	Mill Rs.	47,977
Unit 5	Mill Rs.	115.890	Mill Rs.	313.660
Unit 6	Mill Rs.	-	Mill Rs.	58,418
<b>Total Cost of Gas - Bin Qasim - I</b>	Mill Rs.	274.073	Mill Rs.	644.036
II Bin Qasim II - 560 MW	Mill Rs.	1,042.546	Mill Rs.	1,334.616
III Korangi Town Gas Turbine II	Mill Rs.	61.034	Mill Rs.	200.042
IV Site Gas Turbine II	Mill Rs.	31.553	Mill Rs.	189.361
V Korangi CCPP	Mill Rs.	181.888	Mill Rs.	536.535
<b>Total Cost of Gas - KE</b>	Mill Rs.	1,591.094	Mill Rs.	2,904.591
<b>5c LNG</b>				
I Bin Qasim - I				
Unit 1	Mill Rs.	96.914	Mill Rs.	87.272
Unit 2	Mill Rs.	92.196	Mill Rs.	115.892
Unit 3	Mill Rs.	4.119	Mill Rs.	6,034
Unit 4	Mill Rs.	14.095	Mill Rs.	44,810
Unit 5	Mill Rs.	151.891	Mill Rs.	292.959
Unit 6	Mill Rs.	-	Mill Rs.	54,563
<b>Total Cost of LNG - Bin Qasim - I</b>	Mill Rs.	359.215	Mill Rs.	601.531
II Bin Qasim II - 560 MW	Mill Rs.	1,993.839	Mill Rs.	1,331.497
III Korangi Town Gas Turbine II	Mill Rs.	74.713	Mill Rs.	200.181
IV Site Gas Turbine II	Mill Rs.	39.396	Mill Rs.	187.680
V Korangi CCPP	Mill Rs.	246.405	Mill Rs.	538.153
<b>Total Cost of LNG - KE</b>	Mill Rs.	2,713.568	Mill Rs.	2,859.042
<b>Total cost of fuel - KE</b>	a	Mill Rs.	7,193.043	13,115.812
<b>6 Variation In Cost of Fuel - KE</b>				
6a Units Sent Out - KE	GWh	673.174	GWh	1,113.571
6b Units - Power Purchases	GWh	585.770	GWh	759.164
<b>Total Units Sent Out</b>	GWh	1,258.944	GWh	1,872.735
6c Cost per unit	c = a/b	Rs./kWh	5.714	7.004
6d Variation per unit (Cost of Fuel - KE)		Rs./kWh		1,290
6e Variation amount (Cost of Fuel - KE)		Mill Rs.		2,415.837

## Work Sheet- Power Purchase Cost Variation

Revised

DESCRIPTION	Mar-19		May-19	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	-	16.452	
b TAPAL	GWh	36.056	70.191	
c GUL AHMED	GWh	36.811	81.615	
d CPPA-G	GWh	386.348	462.029	
e ANOUD POWER	GWh	3.375	3.931	
f INT IND (IIL)	GWh	2.866	5.865	
g FFBL	GWh	40.325	40.377	
h SNPC	GWh	71.408	70.071	
i OURSUN	GWh	8.582	8.633	
<b>TOTAL</b>	<b>GWh</b>	<b>585.770</b>	<b>759.164</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	-	205.735	
b TAPAL	Mill Rs.	493.461	1,094.253	
c GUL AHMED	Mill Rs.	521.936	1,311.276	
d CPPA-G	Mill Rs.	1,917.754	2,377.416	
e ANOUD POWER	Mill Rs.	42.602	51.069	
f INT IND (IIL)	Mill Rs.	21.925	44.879	
g FFBL	Mill Rs.	328.275	328.439	
h SNPC	Mill Rs.	413.168	405.435	
i OURSUN	Mill Rs.	-	-	
<b>TOTAL</b>	<b>Mill Rs.</b>	<b>3,739.121</b>	<b>5,818.503</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	-	12.505	
b TAPAL	Rs./kwh	13.686	15.590	
c GUL AHMED	Rs./kwh	14.179	16.067	
d CPPA-G	Rs./kwh	4.964	5.146	
e ANOUD POWER	Rs./kwh	12.624	12.993	
f INT IND (IIL)	Rs./kwh	7.651	7.651	
g FFBL	Rs./kwh	8.141	8.134	
h SNPC	Rs./kwh	5.786	5.786	
i OURSUN	Rs./kwh	-	-	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
<b>4a Cost of Fuel - Power Purchases</b>	<b>a</b>	<b>Mill Rs.</b>	<b>3,739.121</b>	<b>5,818.503</b>
<b>Units Sent out:</b>				
Units Sent Out - KE	GWh	673.174	1,113.571	
Units - Power Purchases	GWh	585.770	759.164	
<b>4b Total Units Sent Out</b>	<b>b</b>	<b>GWh</b>	<b>1,258.944</b>	<b>1,872.735</b>
<b>4c Cost per unit</b>	<b>c = a/b</b>	<b>Rs./kwh</b>	<b>2.970</b>	<b>3.107</b>
<b>4d Variation per unit (Cost of Fuel - Power Purchases)</b>		<b>Rs./kwh</b>		<b>0.137</b>
<b>4e Variation amount (Cost of Fuel - Power Purchases)</b>		<b>Mill Rs.</b>		<b>256.392</b>

\* K Electric Limited

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

	DESCRIPTION	Unit	Mar-19	Jun-19
			Reference	Current
A)	<b>Cost of fuel:</b>			
	Cost of fuel - KE	Mill Rs.	7,193.043	13,032.318
	Cost of fuel - Power Purchases	Mill Rs.	3,739.121	6,154.866
	Total	Mill Rs.	<u>10,932.163</u>	<u>19,187.183</u>
B)	<b>Units Sent Out</b>			
	Units Sent Out - KE	GWh	673.174	1,087.775
	Units - Power purchases	GWh	585.770	795.761
	Total	GWh	<u>1,258.944</u>	<u>1,883.536</u>
C)	<b>Cost per unit</b>			
	Cost of fuel - KE	Rs./kWh	5.714	6.919
	Cost of fuel - Power Purchases	Rs./kWh	2.970	3.268
	Average	Rs./kWh	<u>8.684</u>	<u>10.187</u>
D)	<b>Variation per unit</b>			
	Cost of fuel - KE	Rs./kWh		1.206
	Cost of fuel - Power Purchases	Rs./kWh		0.298
	<b>Total Fuel Cost Adjustment</b>	Rs./kWh		<u>1.503</u>
E)	<b>Total Fuel Cost Adjustment</b>	Ps/kWh		<b>150.32</b>
F)	<b>Variation amount</b>			
	Cost of fuel - KE	Mill Rs.	2,270.630	
	Cost of fuel - Power Purchases	Mill Rs.	560.675	
	<b>Total Fuel Cost Adjustment</b>	Mill Rs.		<b>2,831.306</b>

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Mar-19	Jun-19
	Reference	Current
<b>1 UNITS SENT OUT</b>		
<b>1a UNITS SENT OUT ON FURNACE OIL</b>		
i Bin Qasim - I		
Unit 1	GWh	12,358
Unit 2	GWh	65,028
Unit 3	GWh	2,942
Unit 4	GWh	30,432
Unit 5	GWh	52,162
Unit 6	GWh	-
Total units sent out on furnace oil - Bin Qasim - I	GWh	<u>162,923</u>
		390,975
<b>1b UNITS SENT OUT ON GAS</b>		
i Bin Qasim - I		
Unit 1	GWh	10,883
Unit 2	GWh	10,501
Unit 3	GWh	0,454
Unit 4	GWh	1,569
Unit 5	GWh	17,881
Unit 6	GWh	-
Total units sent out on gas - Bin Qasim - I	GWh	<u>41,288</u>
		83,439
ii Bin Qasim II - 560 MW	GWh	198,298
iii Korangi Town Gas Turbine II	GWh	11,105
iv Site Gas Turbine II	GWh	5,736
v Korangi CCPP	GWh	34,032
Total units sent out on gas - KE	GWh	<u>290,458</u>
		489,740
<b>1c UNITS SENT OUT ON LNG</b>		
i Bin Qasim - I		
Unit 1	GWh	6,267
Unit 2	GWh	6,047
Unit 3	GWh	0,262
Unit 4	GWh	0,903
Unit 5	GWh	10,298
Unit 6	GWh	-
Total units sent out on LNG - Bin Qasim - I	GWh	<u>23,778</u>
		34,650
ii Bin Qasim II - 560 MW	GWh	166,638
iii Korangi Town Gas Turbine II	GWh	5,973
iv Site Gas Turbine II	GWh	3,147
v Korangi CCPP	GWh	20,258
Total units sent out on LNG - KE	GWh	<u>219,793</u>
Total units sent out KE	GWh	<u>673,174</u>
		<u>1,087,775</u>
<b>2 HEAT RATE AT BUS BAR</b>		
i Bin Qasim - I		
Unit 1	Btu/kWh	10,802
Unit 2	Btu/kWh	10,650
Unit 3	Btu/kWh	10,996
Unit 4	Btu/kWh	10,899
Unit 5	Btu/kWh	10,304
Unit 6	Btu/kWh	10,249
ii Bin Qasim II - 560 MW	Btu/kWh	8,358
iii Korangi Town Gas Turbine II	Btu/kWh	8,738
iv Site Gas Turbine II	Btu/kWh	8,746
v Korangi CCPP	Btu/kWh	8,497

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Mar-19		Jun-19	
	Reference	Current	Reference	Current
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351	Btu/kg	40,351
<b>4 FUEL PRICES</b>				
4a Fuel Price - Gas	Rs./MMBTU	629	Rs./MMBTU	629
4b Fuel Price - Furnace Oil	Rs./Mton	67,465	Rs./Mton	70,129
4c Fuel Price - Furnace Oil	Rs./MMBTU	1,672	Rs./MMBTU	1,738
4d Fuel Price - LNG	Rs./MMBTU	1,432	Rs./MMBTU	1,691
<b>5 COST OF FUEL</b>				
<b>5a Furnace oil</b>				
<b>i Bin Qasim - I</b>				
Unit 1	Mill Rs.	223.195	Mill Rs.	1,634.198
Unit 2	Mill Rs.	1,157.913	Mill Rs.	1,133.878
Unit 3	Mill Rs.	54.088	Mill Rs.	1,319.087
Unit 4	Mill Rs.	554.544	Mill Rs.	1,020.614
Unit 5	Mill Rs.	898.640	Mill Rs.	744.883
Unit 6	Mill Rs.	-	Mill Rs.	1,392.397
<b>Total Cost of Furnace Oil - Bin Qasim - I</b>	Mill Rs.	2,888.380	Mill Rs.	7,245.059
<b>5b Gas</b>				
<b>i Bin Qasim - I</b>				
Unit 1	Mill Rs.	73.944	Mill Rs.	54.451
Unit 2	Mill Rs.	70.343	Mill Rs.	54.762
Unit 3	Mill Rs.	3.143	Mill Rs.	2.755
Unit 4	Mill Rs.	10.754	Mill Rs.	34.868
Unit 5	Mill Rs.	115.890	Mill Rs.	288.854
Unit 6	Mill Rs.	-	Mill Rs.	110.864
<b>Total Cost of Gas - Bin Qasim - I</b>	Mill Rs.	274.073	Mill Rs.	546.555
ii Bin Qasim II - 560 MW	Mill Rs.	1,042.546	Mill Rs.	1,251.735
iii Korangi Town Gas Turbine II	Mill Rs.	61.034	Mill Rs.	214.854
iv Site Gas Turbine II	Mill Rs.	31.553	Mill Rs.	216.373
v Korangi CCPP	Mill Rs.	181.888	Mill Rs.	479.902
<b>Total Cost of Gas - KE</b>	Mill Rs.	1,591.094	Mill Rs.	2,709.418
<b>5c LNG</b>				
<b>i Bin Qasim - I</b>				
Unit 1	Mill Rs.	96.914	Mill Rs.	60.797
Unit 2	Mill Rs.	92.196	Mill Rs.	61.145
Unit 3	Mill Rs.	4.119	Mill Rs.	3.077
Unit 4	Mill Rs.	14.095	Mill Rs.	38.932
Unit 5	Mill Rs.	151.891	Mill Rs.	322.523
Unit 6	Mill Rs.	-	Mill Rs.	123.787
<b>Total Cost of LNG - Bin Qasim - I</b>	Mill Rs.	359.215	Mill Rs.	610.262
ii Bin Qasim II - 560 MW	Mill Rs.	1,993.839	Mill Rs.	1,430.890
iii Korangi Town Gas Turbine II	Mill Rs.	74.713	Mill Rs.	244.402
iv Site Gas Turbine II	Mill Rs.	39.396	Mill Rs.	245.971
v Korangi CCPP	Mill Rs.	246.405	Mill Rs.	546.316
<b>Total Cost of LNG - KE</b>	Mill Rs.	2,713.568	Mill Rs.	3,077.841
<b>Total cost of fuel - KE</b>	a	Mill Rs.	7,193.043	13,032.318
<b>6 Variation in Cost of Fuel - KE</b>				
6a Units Sent Out - KE	b	GWh	673.174	1,087.775
6b Units - Power Purchases	b	GWh	585.770	795.761
<b>Total Units Sent Out</b>	b	GWh	1,258.944	1,883.536
6c Cost per unit	c = a/b	Rs./kWh	5.714	6.919
6d Variation per unit (Cost of Fuel - KE)		Rs./kWh		1.206
6e Variation amount (Cost of Fuel - KE)		Mill Rs.		2,270.630

**Work Sheet- Power Purchase Cost Variation**

DESCRIPTION	Mar-19		Jun-19	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	-	25,483	
b TAPAL	GWh	36,056	74,538	
c GUL AHMED	GWh	36,811	83,486	
d CPPA-G	GWh	386,348	466,630	
e ANOUD POWER	GWh	3,375	4,551	
f INT IND (IIL)	GWh	2,866	5,734	
g FFBL	GWh	40,325	39,128	
h SNPC	GWh	71,408	68,024	
i OURSUN	GWh	8,582	7,760	
j CPPA-G - 150 MW	GWh	-	20,426	
<b>TOTAL</b>	<b>GWh</b>	<b>585,770</b>	<b>795,761</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	-	324,572	
b TAPAL	Mill Rs.	493,461	1,157,457	
c GUL AHMED	Mill Rs.	521,936	1,354,128	
d CPPA-G	Mill Rs.	1,917,754	2,401,091	
e ANOUD POWER	Mill Rs.	42,602	56,750	
f INT IND (IIL)	Mill Rs.	21,925	43,879	
g FFBL	Mill Rs.	328,275	318,279	
h SNPC	Mill Rs.	413,168	393,603	
i OURSUN	Mill Rs.	-	105,105	
<b>TOTAL</b>	<b>Mill Rs.</b>	<b>3,739,121</b>	<b>6,154,866</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	-	12.737	
b TAPAL	Rs./kwh	13,686	15,528	
c GUL AHMED	Rs./kwh	14,179	16,220	
d CPPA-G	Rs./kwh	4,964	5,146	
e ANOUD POWER	Rs./kwh	12,624	12,469	
f INT IND (IIL)	Rs./kwh	7,651	7,653	
g FFBL	Rs./kwh	8,141	8,134	
h SNPC	Rs./kwh	5,786	5,786	
i OURSUN	Rs./kwh	-	-	
j CPPA-G - 150 MW	Rs./kwh	-	5,146	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
<b>4a Cost of Fuel - Power Purchases</b>	<b>a</b>	<b>Mill Rs.</b>	<b>3,739,121</b>	<b>6,154,866</b>
Units Sent out:				
Units Sent Out - KE		GWh	673,174	1,087,775
Units - Power Purchases		GWh	585,770	795,761
<b>4b Total Units Sent Out</b>	<b>b</b>	<b>GWh</b>	<b>1,258,944</b>	<b>1,883,536</b>
<b>4c Cost per unit</b>	<b>c = a/b</b>	<b>Rs./kwh</b>	<b>2.970</b>	<b>3.268</b>
<b>4d Variation per unit (Cost of Fuel - Power Purchases)</b>		<b>Rs./kwh</b>		<b>0.298</b>
<b>4e Variation amount (Cost of Fuel - Power Purchases)</b>		<b>Mill Rs.</b>		<b>560,675</b>

Work Sheet- Generation Fuel Cost Variation

Revised

DESCRIPTION	Mar-19	Apr-19
	Reference	Current

**1 UNITS SENT OUT**

**1a UNITS SENT OUT ON FURNACE OIL**

i Bin Qasim - I

Unit 1	GWh	12.358	42.148
Unit 2	GWh	65.028	57.417
Unit 3	GWh	2.942	73.428
Unit 4	GWh	30.432	59.332
Unit 5	GWh	52.162	31.129
Unit 6	GWh	-	0.226
Total units sent out on furnace oil - Bin Qasim - I	GWh	162.923	263.680

**1b UNITS SENT OUT ON GAS**

i Bin Qasim - I

Unit 1	GWh	10.883	26.107
Unit 2	GWh	10.501	23.192
Unit 3	GWh	0.454	1.180
Unit 4	GWh	1.569	6.108
Unit 5	GWh	17.881	45.924
Unit 6	GWh	-	0.611
Total units sent out on gas - Bin Qasim - I	GWh	41.288	103.122

ii Bin Qasim II - 560 MW

iii Korangi Town Gas Turbine II

iv Site Gas Turbine II

v Korangi CCPP

Total units sent out on gas - KE	GWh	290.458	483.560
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**1c UNITS SENT OUT ON LNG**

i Bin Qasim - I

Unit 1	GWh	6.267	10.496
Unit 2	GWh	6.047	9.324
Unit 3	GWh	0.262	0.474
Unit 4	GWh	0.903	2.456
Unit 5	GWh	10.298	18.463
Unit 6	GWh	-	0.246
Total units sent out on LNG - Bin Qasim - I	GWh	23.778	41.459

ii Bin Qasim II - 560 MW

iii Korangi Town Gas Turbine II

iv Site Gas Turbine II

v Korangi CCPP

Total units sent out on LNG - KE	GWh	219.793	204.353
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Total units sent out KE

Total units sent out KE	GWh	673.174	951.594
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**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	8,358	8,358
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 CCPP	Btu/kWh	8,497	8,497

**Work Sheet- Generation Fuel Cost Variation**

Revised

DESCRIPTION	Mar-19		Apr-19	
	Reference	Current	Reference	Current
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351	40,351	
<b>4 FUEL PRICES</b>				
4a Fuel Price - Gas	Rs./MMBTU	629	629	
4b Fuel Price - Furnace Oil	Rs./Mton	67,465	69,312	
4c Fuel Price - Furnace Oil	Rs./MMBTU	1,672	1,718	
4d Fuel Price - LNG	Rs./MMBTU	1,432	1,491	
<b>5 COST OF FUEL</b>				
<b>5a Furnace oil</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	223.195	782.056	
Unit 2	Mill Rs.	1,157.913	1,050.376	
Unit 3	Mill Rs.	54.088	1,386.927	
Unit 4	Mill Rs.	554.544	1,110.794	
Unit 5	Mill Rs.	898.640	550.973	
Unit 6	Mill Rs.	-	3.971	
Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	2,888.380	4,885.097	
<b>5b Gas</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	73.944	177.386	
Unit 2	Mill Rs.	70.343	155.360	
Unit 3	Mill Rs.	3.143	8.158	
Unit 4	Mill Rs.	10.754	41.871	
Unit 5	Mill Rs.	115.890	297.640	
Unit 6	Mill Rs.	-	3.941	
Total Cost of Gas - Bin Qasim - I	Mill Rs.	274.073	684.356	
ii Bin Qasim II - 560 MW	Mill Rs.	1,042.546	1,286.278	
iii Korangi Town Gas Turbine II	Mill Rs.	61.034	105.415	
iv Site Gas Turbine II	Mill Rs.	31.553	118.602	
v Korangi CCPP	Mill Rs.	181.888	507.964	
Total Cost of Gas - KE	Mill Rs.	1,591.094	2,702.616	
<b>5c LNG</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	96.914	169.039	
Unit 2	Mill Rs.	92.196	148.049	
Unit 3	Mill Rs.	4.119	7.774	
Unit 4	Mill Rs.	14.095	39.901	
Unit 5	Mill Rs.	151.891	283.634	
Unit 6	Mill Rs.	-	3.755	
Total Cost of LNG - Bin Qasim - I	Mill Rs.	359.215	652.152	
ii Bin Qasim II - 560 MW	Mill Rs.	1,993.839	1,306.657	
iii Korangi Town Gas Turbine II	Mill Rs.	74.713	104.990	
iv Site Gas Turbine II	Mill Rs.	39.396	120.987	
v Korangi CCPP	Mill Rs.	246.405	515.638	
Total Cost of LNG - KE	Mill Rs.	2,713.568	2,700.425	
<b>Total cost of fuel - KE</b>	a	Mill Rs.	<u>7,193.043</u>	<u>10,288.138</u>
<b>6 Variation in Cost of Fuel - KE</b>				
6a Units Sent Out - KE	b	GWh	673.174	951.594
6b Units - Power Purchases	b	GWh	585.770	663.343
Total Units Sent Out	b	GWh	1,258.944	1,614.936
6c Cost per unit	c = a/b	Rs./kWh	5.714	6.371
6d Variation per unit (Cost of Fuel - KE)		Rs./kWh		0.657
6e Variation amount (Cost of Fuel - KE)		Mill Rs.		<u>1,061.112</u>

## Work Sheet- Power Purchase Cost Variation

Revised

DESCRIPTION	Mar-19		Apr-19	
	Reference	Current		
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh		0.116	
b TAPAL	GWh	36.056	37.064	
c GULAHMED	GWh	36.811	56.841	
d CPPA-G	GWh	386.348	444.522	
e ANOUD POWER	GWh	3.375	5.313	
f INT IND (IIL)	GWh	2.866	4.534	
g FFBL	GWh	40.325	38.754	
h SNPC	GWh	71.408	67.563	
i OURSUN	GWh	8.582	8.636	
TOTAL	GWh	585.770	663.343	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.		1.341	
b TAPAL	Mill Rs.	493.461	542.208	
c GULAHMED	Mill Rs.	521.936	875.775	
d CPPA-G	Mill Rs.	1,917.754	2,572.315	
e ANOUD POWER	Mill Rs.	42.602	68.131	
f INT IND (IIL)	Mill Rs.	21.925	34.688	
g FFBL	Mill Rs.	328.275	315.237	
h SNPC	Mill Rs.	413.168	390.921	
i OURSUN	Mill Rs.			
TOTAL	Mill Rs.	3,739.121	4,800.616	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh		11.546	
b TAPAL	Rs./kwh	13.686	14.629	
c GULAHMED	Rs./kwh	14.179	15.407	
d CPPA-G	Rs./kwh	4.964	5.787	
e ANOUD POWER	Rs./kwh	12.624	12.824	
f INT IND (IIL)	Rs./kwh	7.651	7.650	
g FFBL	Rs./kwh	8.141	8.134	
h SNPC	Rs./kwh	5.786	5.786	
i OURSUN	Rs./kwh			
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
4a Cost of Fuel - Power Purchases	a Mill Rs.	3,739.121	4,800.616	
Units Sent out:				
Units Sent Out - KE	GWh	673.174	951.594	
Units - Power Purchases	GWh	585.770	663.343	
4b Total Units Sent Out	b GWh	1,258.944	1,614.936	
4c Cost per unit	c = a/b Rs./kwh	2.970	2.973	
4d Variation per unit (Cost of Fuel - Power Purchases)	Rs./kwh	0.003		
4e Variation amount (Cost of Fuel - Power Purchases)	Mill Rs.		4.180	



# National Electric Power Regulatory Authority

## Islamic Republic of Pakistan

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Web: www.nepra.org.pk, E-mail: registrar@nepra.org.pk

No. NEPRA/R/TRF-100/MFPA/9867 -84

June 3, 2019

1.	Chief Executive Officer, Faisalabad Electric Supply Company Abdullahpur, Canal Bank Road Faisalabad	2.	Chief Executive Officer, Gujranwala Electric Power Company Ltd. 565/A, Model Town, G.T. Road, Gujranwala
3.	Chief Executive Officer, Hyderabad Electric Supply Co. Ltd. WAPDA Offices Complex, Hussainabad, Hyderabad	4.	Chief Executive Officer Islamabad Electric Supply Co. Ltd. Street # 40, Sector G-7/4, Islamabad.
5.	Chief Executive Officer, Lahore Electric Supply Company Ltd. 22-A, Queens Road, Lahore	6.	Chief Executive Officer Multan Electric Power Co. Ltd. MEPCO Headquarter, Khanewal Road, Multan
7.	Chief Executive Officer, Peshawar Electric Supply Company WAPDA House, Shami Road, Sakhi Chashma, Peshawar	8.	Chief Executive Officer Quetta Electric Supply Company Zarghoon Road, Quetta
9.	Chief Executive Officer, Sukkur Electric Power Company Ltd. (SEPCOL) Administration Block, Thermal Power Station, Old Sukkur.	10	Chief Executive Officer Tribal Areas Electricity Supply Company Limited (TESCO) Room No. 213, 1 <sup>st</sup> Floor, WAPDA House, Shami Road, Sakhi Chashma, Peshawar

Subject: Decision of the Authority in the matter of Fuel Charges Adjustment for the Month of April 2019 for XWDISCOs along with Notification Thereof

Enclosed please find herewith copy of the decision of the Authority (08 pages) regarding adjustment in fuel charges in respect of Ex-WAPDA Distribution Companies for the month of April 2019 along with its Notification i.e. S.R.O. 605(I)/2019 dated 03.06.2019.

2. XWDISCOs are directed that while charging the fuel charges adjustment from their consumers, the Order of the Honourable Court(s), if any, be kept in mind and ensure compliance with the Order(s) of the Court(s), whatsoever, in this regard. In case of non-compliance of Courts Order the concerned DISCO shall be held responsible for violating / defying the orders of the Honourable Court(s).

Enclosure: As above (Decision alongwith Notification is also available on NEPRA's website)

3/6/19  
2  
(Syed Safeer Hussain )

CC:

1. Secretary, Ministry of Energy (Power Division), 'A' Block, Pak Secretariat, Islamabad.
2. Secretary, Cabinet Division, Cabinet Secretariat, Islamabad.
3. Secretary, Ministry of Finance, 'Q' Block, Pak Secretariat, Islamabad.
4. Managing Director, PEPCO, 721 - WAPDA House, Lahore.
5. Member (Power), WAPDA, WAPDA House, Lahore.
6. Managing Director, NTDC, 414 WAPDA House, Lahore.
7. Registrar, Supreme Court of Pakistan, Islamabad.
8. Chief Executive Officer, Central Power Purchasing Agency Guarantee Limited, Shaheen Plaza, 73-West, Fazl-e-Haq Road, Islamabad.

K Electric Limited

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

	DESCRIPTION	Unit	Mar-19	Apr-19
			Reference	Current
A)	Cost of fuel:			
	Cost of fuel - KE	Mill Rs.	7,193.043	10,288.138
	Cost of fuel - Power Purchases	Mill Rs.	3,739.121	4,694.149
	Total	Mill Rs.	<u>10,932.163</u>	<u>14,982.288</u>
B)	Units Sent Out			
	Units Sent Out - KE	GWh	673.174	951.594
	Units - Power purchases	GWh	585.770	663.343
	Total	GWh	<u>1,258.944</u>	<u>1,614.936</u>
C)	Cost per unit			
	Cost of fuel - KE	Rs./kWh	5.714	6.371
	Cost of fuel - Power Purchases	Rs./kWh	2.970	2.907
	Average	Rs./kWh	<u>8.684</u>	<u>9.277</u>
D)	Variation per unit			
	Cost of fuel - KE	Rs./kWh	0.657	
	Cost of fuel - Power Purchases	Rs./kWh	(0.063)	
	Total Fuel Cost Adjustment	Rs./kWh	<u>0.594</u>	
E)	Total Fuel Cost Adjustment	Ps/kWh		59.372
F)	Variation amount			
	Cost of fuel - KE	Mill Rs.	1,061.112	
	Cost of fuel - Power Purchases	Mill Rs.	(102.287)	
	Total Fuel Cost Adjustment	Mill Rs.	<u>958.825</u>	

**Work Sheet- Generation Fuel Cost Variation**

	DESCRIPTION	Mar-19		Apr-19		
		Reference	Current	Reference	Current	
<b>1 UNITS SENT OUT</b>						
<b>1a UNITS SENT OUT ON FURNACE OIL</b>						
i	<u>Bin Qasim - I</u>					
	Unit 1	GWh	12.358	42.148		
	Unit 2	GWh	65.028	57.417		
	Unit 3	GWh	2.942	73.428		
	Unit 4	GWh	30.432	59.332		
	Unit 5	GWh	52.162	31.129		
	Unit 6	GWh	-	0.226		
	Total units sent out on furnace oil - Bin Qasim - I	GWh	162.923	263.680		
<b>1b UNITS SENT OUT ON GAS</b>						
i	<u>Bin Qasim - I</u>					
	Unit 1	GWh	10.883	26.107		
	Unit 2	GWh	10.501	23.192		
	Unit 3	GWh	0.454	1.180		
	Unit 4	GWh	1.569	6.108		
	Unit 5	GWh	17.881	45.924		
	Unit 6	GWh	-	0.611		
	Total units sent out on gas - Bin Qasim - I	GWh	41.288	103.122		
ii	Bin Qasim II - 560 MW	GWh	198.298	244.658		
iii	Korangi Town Gas Turbine II	GWh	11.105	19.180		
iv	Site Gas Turbine II	GWh	5.736	21.559		
v	Korangi CCPP	GWh	34.032	95.042		
	Total units sent out on gas - KE	GWh	290.458	483.560		
<b>1c UNITS SENT OUT ON LNG</b>						
i	<u>Bin Qasim - I</u>					
	Unit 1	GWh	6.267	10.496		
	Unit 2	GWh	6.047	9.324		
	Unit 3	GWh	0.262	0.474		
	Unit 4	GWh	0.903	2.456		
	Unit 5	GWh	10.298	18.463		
	Unit 6	GWh	-	0.246		
	Total units sent out on LNG - Bin Qasim - I	GWh	23.778	41.459		
ii	Bin Qasim II - 560 MW	GWh	166.638	104.854		
iii	Korangi Town Gas Turbine II	GWh	5.973	8.059		
iv	Site Gas Turbine II	GWh	3.147	9.279		
v	Korangi CCPP	GWh	20.258	40.703		
	Total units sent out on LNG - KE	GWh	219.793	204.353		
	Total units sent out KE	GWh	673.174	951.594		
<b>2 HEAT RATE AT BUS BAR</b>						
i	<u>Bin Qasim - I</u>					
	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	8,358	8,358		
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 CCPP	Btu/kWh	8,497	8,497		

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Mar-19		Apr-19	
	Reference	Current	Reference	Current
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351	40,351	
<b>4 FUEL PRICES</b>				
4a Fuel Price - Gas	Rs./MMBTU	629	629	
4b Fuel Price - Furnace Oil	Rs./Mton	67,465	69,312	
4c Fuel Price - Furnace Oil	Rs./MMBTU	1,672	1,718	
4d Fuel Price - LNG	Rs./MMBTU	1,432	1,491	
<b>5 COST OF FUEL</b>				
<b>5a Furnace oil</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	223.195	782.056	
Unit 2	Mill Rs.	1,157.913	1,050.376	
Unit 3	Mill Rs.	54.088	1,386.927	
Unit 4	Mill Rs.	554.544	1,110.794	
Unit 5	Mill Rs.	898.640	550.973	
Unit 6	Mill Rs.	-	3.971	
Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	2,888.380	4,885.097	
5b Gas				
i Bin Qasim - I				
Unit 1	Mill Rs.	73.944	177.386	
Unit 2	Mill Rs.	70.343	155.360	
Unit 3	Mill Rs.	3.143	8.158	
Unit 4	Mill Rs.	10.754	41.871	
Unit 5	Mill Rs.	115.890	297.640	
Unit 6	Mill Rs.	-	3.941	
Total Cost of Gas - Bin Qasim - I	Mill Rs.	274.073	684.356	
ii Bin Qasim II - 560 MW	Mill Rs.	1,042.546	1,286.278	
iii Korangi Town Gas Turbine II	Mill Rs.	61.034	105.415	
iv Site Gas Turbine II	Mill Rs.	31.553	118.602	
v Korangi CCPP	Mill Rs.	181.888	507.964	
Total Cost of Gas - KE	Mill Rs.	1,591.094	2,702.616	
5c LNG				
i Bin Qasim - I				
Unit 1	Mill Rs.	96.914	169.039	
Unit 2	Mill Rs.	92.196	148.049	
Unit 3	Mill Rs.	4.119	7.774	
Unit 4	Mill Rs.	14.095	39.901	
Unit 5	Mill Rs.	151.891	283.634	
Unit 6	Mill Rs.	-	3.755	
Total Cost of LNG - Bin Qasim - I	Mill Rs.	359.215	652.152	
ii Bin Qasim II - 560 MW	Mill Rs.	1,993.839	1,306.657	
iii Korangi Town Gas Turbine II	Mill Rs.	74.713	104.990	
iv Site Gas Turbine II	Mill Rs.	39.396	120.987	
v Korangi CCPP	Mill Rs.	246.405	515.638	
Total Cost of LNG - KE	Mill Rs.	2,713.568	2,700.425	
Total cost of fuel - KE	a	Mill Rs.	<u>7,193.043</u>	<u>10,288.138</u>
<b>6 Variation in Cost of Fuel - KE</b>				
6a Units Sent Out - KE		GWh	673.174	951.594
6b Units - Power Purchases		GWh	585.770	663.343
Total Units Sent Out	b	GWh	1,258.944	1,614.936
6c Cost per unit	c = a/b	Rs./kWh	5.714	6.371
6d Variation per unit (Cost of Fuel - KE)		Rs./kWh		0.657
6e Variation amount (Cost of Fuel - KE)		Mill Rs.		<u>1,061.112</u>

## Work Sheet- Power Purchase Cost Variation

DESCRIPTION	Mar-19		Apr-19	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh		0.116	
b TAPAL	GWh	36.056	37.064	
c GUL AHMED	GWh	36.811	56.841	
d CPPA-G	GWh	386.348	444.522	
e ANOUD POWER	GWh	3.375	5.313	
f INT IND (IIL)	GWh	2.866	4.534	
g FFBL	GWh	40.325	38.754	
h SNPC	GWh	71.408	67.563	
i OURSUN	GWh	8.582	8.636	
<b>TOTAL</b>	<b>GWh</b>	<b>585.770</b>	<b>663.343</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.		1.341	
b TAPAL	Mill Rs.	493.461	542.208	
c GUL AHMED	Mill Rs.	521.936	875.775	
d CPPA-G	Mill Rs.	1,917.754	2,465.849	
e ANOUD POWER	Mill Rs.	42.602	68.131	
f INT IND (IIL)	Mill Rs.	21.925	34.688	
g FFBL	Mill Rs.	328.275	315.237	
h SNPC	Mill Rs.	413.168	390.921	
i OURSUN	Mill Rs.			
<b>TOTAL</b>	<b>Mill Rs.</b>	<b>3,739.121</b>	<b>4,694.149</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh		11.546	
b TAPAL	Rs./kwh	13.686	14.629	
c GUL AHMED	Rs./kwh	14.179	15.407	
d CPPA-G	Rs./kwh	4.964	5.547	
e ANOUD POWER	Rs./kwh	12.624	12.824	
f INT IND (IIL)	Rs./kwh	7.651	7.650	
g FFBL	Rs./kwh	8.141	8.134	
h SNPC	Rs./kwh	5.786	5.786	
i OURSUN	Rs./kwh			
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
4a Cost of Fuel - Power Purchases	a	Mill Rs.	3,739.121	4,694.149
Units Sent out:				
Units Sent Out - KE		GWh	673.174	951.594
Units - Power Purchases		GWh	585.770	663.343
4b Total Units Sent Out	b	GWh	<b>1,258.944</b>	<b>1,614.936</b>
4c Cost per unit	c = a/b	Rs./kwh	2.970	2.907
4d Variation per unit (Cost of Fuel - Power Purchases)		Rs./kwh		(0.063)
4e Variation amount (Cost of Fuel - Power Purchases)		Mill Rs.		<b>(102.287)</b>

K Electric Limited

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

	DESCRIPTION	Unit	Dec-18	Mar-19
			Reference	Current
A)	Cost of fuel:			
	Cost of fuel - KE	Mill Rs.	6,822.622	7,193.044
	Cost of fuel - Power Purchases	Mill Rs.	3,983.672	3,739.121
	Total	Mill Rs.	<u>10,806.294</u>	<u>10,932.165</u>
B)	Units Sent Out			
	Units Sent Out - KE	GWh	553.615	673.174
	Units - Power purchases	GWh	536.852	585.770
	Total	GWh	<u>1,090.467</u>	<u>1,258.944</u>
C)	Cost per unit			
	Cost of fuel - KE	Rs./kWh	6.257	5.714
	Cost of fuel - Power Purchases	Rs./kWh	3.653	2.970
	Average	Rs./kWh	<u>9.910</u>	<u>8.684</u>
D)	Variation per unit			
	Cost of fuel - KE	Rs./kWh		(0.543)
	Cost of fuel - Power Purchases	Rs./kWh		(0.683)
	Total Fuel Cost Adjustment	Rs./kWh		<u>(1.226)</u>
E)	Total Fuel Cost Adjustment	Ps/kWh		<u>(122.618)</u>
F)	Variation amount			
	Cost of fuel - KE	Mill Rs.		(683.670)
	Cost of fuel - Power Purchases	Mill Rs.		(860.027)
	Total Fuel Cost Adjustment	Mill Rs.		<u>(1,543.697)</u>
		e = d x b (total)		

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Dec-18	Mar-19
	Reference	Current
<b>1 UNITS SENT OUT</b>		
<b>1a UNITS SENT OUT ON FURNACE OIL</b>		
i Bin Qasim - I		
Unit 1	GWh	12.358
Unit 2	GWh	24.852
Unit 3	GWh	2.328
Unit 4	GWh	2.722
Unit 5	GWh	59.631
Unit 6	GWh	35.739
Total units sent out on furnace oil - Bin Qasim - I	GWh	125.271
		162.923
<b>1b UNITS SENT OUT ON GAS</b>		
i Bin Qasim - I		
Unit 1	GWh	10.883
Unit 2	GWh	4.878
Unit 3	GWh	0.261
Unit 4	GWh	0.229
Unit 5	GWh	6.304
Unit 6	GWh	3.529
Total units sent out on gas - Bin Qasim - I	GWh	15.200
		41.288
ii Bin Qasim II - 560 MW	GWh	168.862
iii Korangi Town Gas Turbine II	GWh	4.443
iv Site Gas Turbine II	GWh	-
v Korangi CCPP	GWh	13.953
Total units sent out on gas - KE	GWh	202.458
		290.458
<b>1c UNITS SENT OUT ON LNG</b>		
i Bin Qasim - I		
Unit 1	GWh	6.267
Unit 2	GWh	4.929
Unit 3	GWh	0.264
Unit 4	GWh	0.231
Unit 5	GWh	6.370
Unit 6	GWh	3.566
Total units sent out on LNG - Bin Qasim - I	GWh	15.360
		23.778
ii Bin Qasim II - 560 MW	GWh	194.753
iii Korangi Town Gas Turbine II	GWh	3.726
iv Site Gas Turbine II	GWh	-
v Korangi CCPP	GWh	12.046
Total units sent out on LNG - KE	GWh	225.886
Total units sent out KE	GWh	553.615
		673.174
<b>2 HEAT RATE AT BUS BAR</b>		
i Bin Qasim - I		
Unit 1	Btu/kWh	10,802
Unit 2	Btu/kWh	10,650
Unit 3	Btu/kWh	10,996
Unit 4	Btu/kWh	10,899
Unit 5	Btu/kWh	10,304
Unit 6	Btu/kWh	10,249
ii Bin Qasim II - 560 MW	Btu/kWh	8,358
iii Korangi Town Gas Turbine II	Btu/kWh	8,738
iv Site Gas Turbine II	Btu/kWh	8,746
v Korangi CCPP	Btu/kWh	8,497

**Work Sheet- Generation Fuel Cost Variation**

	DESCRIPTION	Dec-18		Mar-19	
		Reference	Current	Reference	Current
3	<u>Calorific Value - Furnace Oil</u>	Btu/kg	40,351	40,351	
4	<u>FUEL PRICES</u>				
4a	Fuel Price - Gas	Rs./MMBTU	629	629	
4b	Fuel Price - Furnace Oil	Rs./Mton	72,926	67,465	
4c	Fuel Price - Furnace Oil	Rs./MMBTU	1,807	1,672	
4d	Fuel Price - LNG	Rs./MMBTU	1,761	1,432	
5	<u>COST OF FUEL</u>				
5a	<u>Furnace oil</u>				
i	<u>Bin Qasim - I</u>				
	Unit 1	Mill Rs.	-	223.196	
	Unit 2	Mill Rs.	478.339	1,157.913	
	Unit 3	Mill Rs.	46.262	54.088	
	Unit 4	Mill Rs.	53.609	554.545	
	Unit 5	Mill Rs.	1,110.466	898.640	
	Unit 6	Mill Rs.	661.986	-	
	Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	2,350.662	2,888.382	
5b	<u>Gas</u>				
i	<u>Bin Qasim - I</u>				
	Unit 1	Mill Rs.	-	73.944	
	Unit 2	Mill Rs.	32.674	70.343	
	Unit 3	Mill Rs.	1.805	3.143	
	Unit 4	Mill Rs.	1.568	10.754	
	Unit 5	Mill Rs.	40.856	115.890	
	Unit 6	Mill Rs.	22.750	-	
	Total Cost of Gas - Bin Qasim - I	Mill Rs.	99.653	274.073	
ii	Bin Qasim II - 560 MW	Mill Rs.	887.787	1,042.546	
iii	Korangi Town Gas Turbine II	Mill Rs.	24.419	61.034	
iv	Site Gas Turbine II	Mill Rs.	-	31.553	
v	Korangi CCPP	Mill Rs.	74.575	181.888	
	Total Cost of Gas - KE	Mill Rs.	1,086.434	1,591.094	
5c	<u>LNG</u>				
i	<u>Bin Qasim - I</u>				
	Unit 1	Mill Rs.	-	96.914	
	Unit 2	Mill Rs.	92.424	92.196	
	Unit 3	Mill Rs.	5.105	4.119	
	Unit 4	Mill Rs.	4.437	14.095	
	Unit 5	Mill Rs.	115.569	151.891	
	Unit 6	Mill Rs.	64.352	-	
	Total Cost of LNG - Bin Qasim - I	Mill Rs.	281.887	359.215	
ii	Bin Qasim II - 560 MW	Mill Rs.	2,866.092	1,993.839	
iii	Korangi Town Gas Turbine II	Mill Rs.	57.331	74.713	
iv	Site Gas Turbine II	Mill Rs.	-	39.396	
v	Korangi CCPP	Mill Rs.	180.217	246.405	
	Total Cost of LNG - KE	Mill Rs.	3,385.526	2,713.568	
	Total cost of fuel - KE	a	Mill Rs.	<u>6,822.622</u>	<u>7,193.044</u>
6	<u>Variation in Cost of Fuel - KE</u>				
6a	Units Sent Out - KE	b	GWh	553.615	673.174
6b	Units - Power Purchases		GWh	536.852	585.770
	Total Units Sent Out	b	GWh	1,090.467	1,258.944
6c	Cost per unit	c = a/b	Rs./kWh	6.257	5.714
6d	Variation per unit (Cost of Fuel - KE)		Rs./kWh		(0.543)
6e	Variation amount (Cost of Fuel - KE)		Mill Rs.		<u>(683.670)</u>

Work Sheet- Power Purchase Cost Variation

DESCRIPTION	Dec-18		Mar-19	
	Reference	Current		
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	25.333	36.056	
b TAPAL	GWh	22.021	36.811	
c GUL AHMED	GWh	373.734	386.348	
d CPPA-G	GWh	4.400	3.375	
e ANOUD POWER	GWh	5.432	2.866	
f INT IND (IIL)	GWh	40.470	40.325	
g FFBL	GWh	58.552	71.408	
h SNPC	GWh	6.910	8.582	
i OURSUN	GWh			
<b>TOTAL</b>	<b>GWh</b>	<b>536.852</b>	<b>585.770</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	-	-	
b TAPAL	Mill Rs.	425.461	493.461	
c GUL AHMED	Mill Rs.	378.350	521.936	
d CPPA-G	Mill Rs.	2,403.222	1,917.754	
e ANOUD POWER	Mill Rs.	52.121	42.602	
f INT IND (IIL)	Mill Rs.	41.553	21.925	
g FFBL	Mill Rs.	344.181	328.275	
h SNPC	Mill Rs.	338.784	413.168	
i OURSUN	Mill Rs	-	-	
<b>TOTAL</b>	<b>Mill Rs.</b>	<b>3,983.672</b>	<b>3,739.121</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	-	-	
b TAPAL	Rs./kwh	16.795	13.686	
c GUL AHMED	Rs./kwh	17.181	14.179	
d CPPA-G	Rs./kwh	6.430	4.964	
e ANOUD POWER	Rs./kwh	11.847	12.624	
f INT IND (IIL)	Rs./kwh	7.649	7.651	
g FFBL	Rs./kwh	8.505	8.141	
h SNPC	Rs./kwh	5.786	5.786	
i OURSUN	Rs./kwh	-	-	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
4a Cost of Fuel - Power Purchases	a Mill Rs.	3,983.672	3,739.121	
Units Sent out:				
Units Sent Out - KE	GWh	553.615	673.174	
Units - Power Purchases	GWh	536.852	585.770	
4b Total Units Sent Out	b GWh	1,090.467	1,258.944	
4c Cost per unit	c = a/b Rs./kwh	3.653	2.970	
4d Variation per unit (Cost of Fuel - Power Purchases)	Rs./kwh	(0.683)		
4e Variation amount (Cost of Fuel - Power Purchases)	Mill Rs.		<b>(860.027)</b>	

**K ELECTRIC LIMITED**

QUARTERLY ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL AND POWER PURCHASE COST  
INCLUDING O&M AND CAPACITY CHARGES

Quarter ended March 2019

**Required adjustment in Tariff**

		Mar-19
Quarterly Revision to reset price levels	Rs/kWh	(2.244)
Unrecovered Cost for current quarter	Rs/kWh	(0.227)
Reversal of unrecovered cost of previous quarter	Rs/kWh	(1.307)
Total Required adjustment in KE's Tariff	Rs/kWh	<u>(3.778)</u>
Total Required adjustment in KE's Tariff	Ps/kWh	<u>(377.804)</u>

**Quarterly Revision to reset price levels**

Units Sent Out	GWh	1,258.944
T&D Losses allowed	GWh	18.75%
Units billed	GWh	1,022.892

**Cost of Fuel - KE** Mill Rs      7,193.043

	Dec-18	Mar-19	Variation
Weighted Average Fuel cost per unit billed	Rs/Kwh	7.700      7.032	(0.668)

	Mar-19
- Fuel Cost	3,739.121
- O&M and Capacity Cost	3,044.677
- Total Cost of Power Purchases	6,783.798

	Dec-18	Mar-19	Variation
Weighted Average Cost of Power Purchases (cost per unit billed)			
- Fuel Cost	Rs/kWh	4.496      3.655	(0.841)
- O&M Cost and capacity cost	Rs/kWh	3.711      2.977	(0.735)
- Total Cost of Power Purchases	Rs/kWh	8.207      6.632	(1.575)

	Dec-18	Mar-19	Variation
QUARTERLY INCREASE/DECREASE IN COST PER UNIT BILLED			
- Cost of Fuel - KE	Rs/kWh	(0.668)	
- Cost of Power Purchases - Total	Rs/kWh	(1.575)	
- Total Cost Variation	Rs/kWh	(2.244)	

Note: Please note that the SoT attached with the MYT notification is based on updated terms and conditions including changes in definition of lifeline consumers and the assumption of conversion of eligible consumers to "A3" category along with enabling of Time of Use (ToU) metering for Residential and Commercial consumers etc. However, as the MYT has been notified on May 22, 2019, these changes will be effective from the date of notification. Accordingly, KE would like to request NEPRA to adjust the related impact while issuing determination of Quarterly SoTs.

**K ELECTRIC LIMITED**

QUARTERLY ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL AND POWER PURCHASE COST INCLUDING O&M AND CAPACITY CHARGES			Quarter ended March 2019				
ADJUSTMENT IN TARIFF DUE TO UNRECOVERED COST			Dec-18	Jan-19	Feb-19	Mar-19	QTR
			Reference				
Units Sent Out	GWh	a	1,015.045	958.510	1,258.944		
T&D Losses allowed		b	18.8%	18.8%	18.8%		
Units billed	GWh	c = a x (1-b)	824.724	778.789	1,022.892	2,626.405	
<b>a. O&amp;M and Capacity cost of Power purchases</b>							
O&M and Capacity cost of Power purchases	Mill Rs	d	3,009.093	3,164.869	3,044.677		
O&M and Capacity cost of power purchases (per unit billed)	Rs/kWh	e = d/c	3.711	3.649	4.064	2.977	
Increase or decrease in O&M and Capacity cost (over Reference)	Rs/kWh	f	(0.063)	0.353	(0.735)		
<b>O&amp;M and Capacity Cost of Power Purchases - Monthly variations Amount</b>	Mill Rs	g = f x c					
			(51.626)	274.624	(751.482)	(528.484)	
<b>b. Unrecovered Cost of FCA due to non adjustment of T&amp;D losses</b>							
I Monthly variation in Fuel Cost (FCA) - Per unit							
Cost of Fuel - KE	Rs/kWh	h	(1.387)	(0.388)	(0.543)		
Cost of Fuel - Power Purchases	Rs/kWh	i	1.350	(0.545)	(0.683)		
Total	Rs/kWh	j = h + i	(0.037)	(0.933)	(1.226)		
II Monthly variation in Fuel Cost (FCA) - Amount							
Cost of Fuel - KE	Mill Rs	k = h x a	(1,407.704)	(371.923)	(683.671)	(2,463.299)	
Cost of Fuel - Power Purchases	Mill Rs	l = i x a	1,370.323	(522.020)	(860.027)	(11.725)	
Total	Mill Rs	m = k + l	(37.381)	(893.943)	(1,543.699)	(2,475.023)	
III Unrecovered Cost of FCA due to non adjustment of T&D losses							
Cost of Fuel - KE	Mill Rs	n = k x b	(263.945)	(69.736)	(128.188)	(461.869)	
Cost of Fuel - Power Purchases	Mill Rs	o = l x b	256.936	(97.879)	(161.255)	(2.198)	
Total	Mill Rs	p = n + o	(7.009)	(167.614)	(289.444)	(464.067)	
<b>Summary of Unrecovered cost for the quarter</b>							
a. O&M and Capacity cost of Power purchases	Mill Rs						(528.484)
b. Unrecovered Cost of FCA due to non adjustment of T&D losses	Mill Rs						(464.067)
Total Unrecovered cost for the quarter	Mill Rs	q					(992.551)
<b>Expected units to be sold in next quarter at allowed T&amp;D losses</b>	GWh	r					4,363.038
Unrecovered Cost per unit for current quarter	Rs/kWh	s = q / r					(0.227)

Work Sheet- Power Purchase O&M and Capacity Cost

DESCRIPTION		Dec-18	Jan-19	Feb-19	Mar-19
	Reference				
<b>1 O&amp;M COST</b>					
a KANUPP	Mill Rs.				
b TAPAL	Mill Rs.	30.633	79.527	57.639	49.634
c GUL AHMED	Mill Rs.	15.545	32.554	28.754	29.581
d CPPA-G	Mill Rs.	120.679	137.699	86.759	122.859
e ANOUD POWER	Mill Rs.	8.926	9.537	6.512	6.846
f INT IND (IIL)	Mill Rs.	8.116	8.427	4.575	4.877
g FFBL	Mill Rs.	21.979	21.187	9.737	22.417
h SNPC	Mill Rs.	45.050	52.000	45.777	59.299
i OURSUN	Mill Rs.	12.213	12.030	12.773	15.168
TOTAL	Mill Rs.	<b>263.140</b>	<b>352.961</b>	<b>252.527</b>	<b>310.680</b>
<b>2 CAPACITY COST</b>					
a KANUPP	Mill Rs.				
b TAPAL	Mill Rs.	164.514	183.488	183.488	183.488
c GUL AHMED	Mill Rs.	150.774	169.536	169.536	169.536
d CPPA-G	Mill Rs.	2,156.761	1,743.305	2,113.252	1,752.317
e ANOUD POWER	Mill Rs.	-	-	-	-
f INT IND (IIL)	Mill Rs.	-	-	-	-
g FFBL	Mill Rs.	246.207	233.438	107.284	246.987
h SNPC	Mill Rs.	223.440	244.305	251.656	278.206
i OURSUN	Mill Rs.	83.306	82.059	87.127	103.463
TOTAL	Mill Rs.	<b>3,025.002</b>	<b>2,656.132</b>	<b>2,912.343</b>	<b>2,733.997</b>
<b>3 TOTAL O&amp;M &amp; CAPACITY COST</b>					
a KANUPP	Mill Rs.				
b TAPAL	Mill Rs.	195.147	263.015	241.127	233.122
c GUL AHMED	Mill Rs.	166.319	202.090	198.290	199.117
d CPPA-G	Mill Rs.	2,277.439	1,881.004	2,200.011	1,875.176
e ANOUD POWER	Mill Rs.	8.926	9.537	6.512	6.846
f INT IND (IIL)	Mill Rs.	8.116	8.427	4.575	4.877
g FFBL	Mill Rs.	268.187	254.625	117.021	269.403
h SNPC	Mill Rs.	268.490	296.305	297.433	337.504
i OURSUN	Mill Rs.	95.518	94.089	99.900	118.631
TOTAL	Mill Rs.	<b>3,288.142</b>	<b>3,009.093</b>	<b>3,164.869</b>	<b>3,044.677</b>

GENERATION STATISTICS FOR THE MONTH OF MAR 2019

DESCRIPTION	BQPS (KWH)	BQPS II-560 MW (KWH)	SGTPS-II (KWH)	KTGTPS-II (KWH)	KCCPP (KWH)	KE (KWH)
UNITS GENERATED	247,695,740	388,684,538	9,110,020	17,515,567	58,326,100	721,331,965
AUXILIARY CONSUMPTION	9.9%	5.5%	4.3%	4.5%	7.7%	7.1%
UNITS SENT OUT	223,233,000	367,335,000	8,714,000	16,728,000	53,817,686	669,827,686

K Electric Limited

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

	DESCRIPTION	Unit	Dec-18	Feb-19
			Reference	Current
A)	Cost of fuel:			
	Cost of fuel - KE	Mill Rs.	6,822.622	5,625.096
	Cost of fuel - Power Purchases	Mill Rs.	3,983.672	2,979.589
	Total	Mill Rs.	<u>10,806.294</u>	<u>8,604.685</u>
B)	Units Sent Out			
	Units Sent Out - KE	GWh	553.615	472.465
	Units - Power purchases	GWh	536.852	486.045
	Total	GWh	<u>1,090.467</u>	<u>958.510</u>
C)	Cost per unit			
	Cost of fuel - KE	Rs./kWh	6.257	5.869
	Cost of fuel - Power Purchases	Rs./kWh	3.653	3.109
	Average	Rs./kWh	<u>9.910</u>	<u>8.977</u>
D)	Variation per unit			
	Cost of fuel - KE	d	Rs./kWh	(0.388)
	Cost of fuel - Power Purchases		Rs./kWh	<u>(0.545)</u>
	Total Fuel Cost Adjustment		Rs./kWh	<u>(0.933)</u>
E)	Total Fuel Cost Adjustment		Ps/kWh	<u>(93.264)</u>
F)	Variation amount			
	Cost of fuel - KE	e = d x b (total)	Mill Rs.	(371.923)
	Cost of fuel - Power Purchases		Mill Rs.	<u>(522.020)</u>
	Total Fuel Cost Adjustment		Mill Rs.	<u>(893.943)</u>

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Dec-18	Feb-19
	Reference	Current

**1 UNITS SENT OUT**

**1a UNITS SENT OUT ON FURNACE OIL**

i Bin Qasim - I

Unit 1	GWh	24.852	21.912
Unit 2	GWh	3.328	31.477
Unit 3	GWh	2	47.178
Unit 4	GWh	59.631	59.246
Unit 5	GWh	35.739	
Unit 6	GWh	125.271	148.814
Total units sent out on furnace oil - Bin Qasim - I			

**1b UNITS SENT OUT ON GAS**

i Bin Qasim - I

Unit 1	GWh	4.878	0.609
Unit 2	GWh	0.261	1.131
Unit 3	GWh	0.229	2.427
Unit 4	GWh	6.304	10.401
Unit 5	GWh	3.529	
Unit 6	GWh	15.200	14.568
Total units sent out on gas - Bin Qasim - I			

ii Bin Qasim II - 560 MW

iii Korangi Town Gas Turbine II

iv Site Gas Turbine II

v Korangi CCPP

Total units sent out on gas - KE

**1c UNITS SENT OUT ON LNG**

i Bin Qasim - I

Unit 1	GWh	-	-
Unit 2	GWh	4.929	0.779
Unit 3	GWh	0.264	1.447
Unit 4	GWh	0.231	3.105
Unit 5	GWh	6.370	13.305
Unit 6	GWh	3.566	
Total units sent out on LNG - Bin Qasim - I	GWh	15.360	18.636

ii Bin Qasim II - 560 MW

iii Korangi Town Gas Turbine II

iv Site Gas Turbine II

v Korangi CCPP

Total units sent out on LNG - KE

Total units sent out KE

**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	8,358	8,358
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 CCPP	Btu/kWh	8,497	8,497

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Dec-18	Feb-19
	Reference	Current
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351
		40,351
<b>4 FUEL PRICES</b>		
4a Fuel Price - Gas	Rs./MMBTU	629
4b Fuel Price - Furnace Oil	Rs./Mton	72,926
4c Fuel Price - Furnace Oil	Rs./MMBTU	1,807
4d Fuel Price - LNG	Rs./MMBTU	1,761
		63,331
		1,570
		1,515
<b>5 COST OF FUEL</b>		
<b>5a Furnace oil</b>		
i Bin Qasim - I		
Unit 1	Mill Rs.	-
Unit 2	Mill Rs.	478.339
Unit 3	Mill Rs.	46.262
Unit 4	Mill Rs.	53.609
Unit 5	Mill Rs.	1,110.466
Unit 6	Mill Rs.	661.986
Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	<u>2,350.662</u>
		2,496.784
<b>5b Gas</b>		
i Bin Qasim - I		
Unit 1	Mill Rs.	-
Unit 2	Mill Rs.	32.674
Unit 3	Mill Rs.	1.805
Unit 4	Mill Rs.	1.568
Unit 5	Mill Rs.	40.856
Unit 6	Mill Rs.	22.750
Total Cost of Gas - Bin Qasim - I	Mill Rs.	<u>99.653</u>
		95.954
ii Bin Qasim II - 560 MW	Mill Rs.	887.787
iii Korangi Town Gas Turbine II	Mill Rs.	24.419
iv Site Gas Turbine II	Mill Rs.	-
v Korangi CCPP	Mill Rs.	74.575
Total Cost of Gas - KE	Mill Rs.	<u>1,086.434</u>
		769.675
<b>5c LNG</b>		
i Bin Qasim - I		
Unit 1	Mill Rs.	-
Unit 2	Mill Rs.	92.424
Unit 3	Mill Rs.	5.105
Unit 4	Mill Rs.	4.437
Unit 5	Mill Rs.	115.569
Unit 6	Mill Rs.	64.352
Total Cost of LNG - Bin Qasim - I	Mill Rs.	<u>281.887</u>
		295.592
ii Bin Qasim II - 560 MW	Mill Rs.	2,866.092
iii Korangi Town Gas Turbine II	Mill Rs.	57.331
iv Site Gas Turbine II	Mill Rs.	-
v Korangi CCPP	Mill Rs.	180.217
Total Cost of LNG - KE	Mill Rs.	<u>3,385.526</u>
		2,358.636
<b>Total cost of fuel - KE</b>	a Mill Rs.	<u>6,822.622</u>
		<u>5,625.096</u>
<b>6 Variation in Cost of Fuel - KE</b>		
6a Units Sent Out - KE	b GWh	553.615
6b Units - Power Purchases	b GWh	536.852
Total Units Sent Out	b GWh	<u>1,090.467</u>
		472.465
		486.045
		958.510
6c Cost per unit	c = a/b Rs./kWh	6.257
		5.869
6d Variation per unit (Cost of Fuel - KE)	Rs./kWh	(0.388)
6e Variation amount (Cost of Fuel - KE)	Mill Rs.	<u>(371.923)</u>

**Work Sheet- Power Purchase Cost Variation**

DESCRIPTION	Dec-18		Feb-19	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh		25.333	41.871
b TAPAL	GWh		22.021	35.781
c GUL AHMED	GWh		373.734	322.286
d CPPA-G	GWh		44.400	3.210
e ANOUD POWER	GWh		5.432	3.026
f INT IND (IIL)	GWh		40.470	17.516
g FFBL	GWh		58.552	55.129
h SNPC	GWh		6.910	7.227
i OURSUN	GWh			
<b>TOTAL</b>	<b>GWh</b>	<b>536.852</b>	<b>486.045</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.		425.461	481.652
b TAPAL	Mill Rs.		378.350	428.817
c GUL AHMED	Mill Rs.		2,403.222	1,540.527
d CPPA-G	Mill Rs.		52.121	37.525
e ANOUD POWER	Mill Rs.		41.553	23.146
f INT IND (IIL)	Mill Rs.		344.181	148.967
g FFBL	Mill Rs.		338.784	318.955
h SNPC	Mill Rs.			
i OURSUN	Mill Rs.			
<b>TOTAL</b>	<b>Mill Rs.</b>	<b>3,983.672</b>	<b>2,979.589</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh			
b TAPAL	Rs./kwh		16.795	11.503
c GUL AHMED	Rs./kwh		17.181	11.984
d CPPA-G	Rs./kwh		6.430	4.780
e ANOUD POWER	Rs./kwh		11.847	11.691
f INT IND (IIL)	Rs./kwh		7.649	7.650
g FFBL	Rs./kwh		8.505	8.505
h SNPC	Rs./kwh		5.786	5.786
i OURSUN	Rs./kwh			
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
4a Cost of Fuel - Power Purchases	a Mill Rs.	3,983.672	2,979.589	
Units Sent out:				
Units Sent Out - KE	GWh	553.615	472.465	
Units - Power Purchases	GWh	536.852	486.045	
4b Total Units Sent Out	b GWh	1,090.467	958.510	
4c Cost per unit	c = a/b Rs./kwh	3.653	3.109	
4d Variation per unit (Cost of Fuel - Power Purchases)	Rs./kwh	(0.545)		
4e Variation amount (Cost of Fuel - Power Purchases)	Mill Rs.	(522.020)		

K Electric Limited

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

DESCRIPTION	Unit	Dec-18	Jan-19
		Reference	Current
A) Cost of fuel:			
Cost of fuel - KE	Mill Rs.	6,822.622	4,943.034
Cost of fuel - Power Purchases	Mill Rs.	3,983.672	5,078.466
Total	Mill Rs.	<u>10,806.294</u>	<u>10,021.500</u>
B) Units Sent Out			
Units Sent Out - KE	GWh	553.615	418.701
Units - Power purchases	GWh	536.852	596.344
Total	GWh	<u>1,090.467</u>	<u>1,015.045</u>
C) Cost per unit			
Cost of fuel - KE	Rs./kWh	6.257	4.870
Cost of fuel - Power Purchases	Rs./kWh	3.653	5.003
Average	Rs./kWh	<u>9.910</u>	<u>9.873</u>
D) Variation per unit			
Cost of fuel - KE	Rs./kWh		(1.387)
Cost of fuel - Power Purchases	Rs./kWh		1.350
Total Fuel Cost Adjustment	Rs./kWh		<u>(0.037)</u>
E) Total Fuel Cost Adjustment	Ps/kWh		<u>(3.683)</u>
F) Variation amount			
Cost of fuel - KE	Mill Rs.		(1,407.704)
Cost of fuel - Power Purchases	Mill Rs.		1,370.323
Total Fuel Cost Adjustment	Mill Rs.		<u>(37.381)</u>

**Work Sheet- Generation Fuel Cost Variation**

	DESCRIPTION	Dec-18	Jan-19	
		Reference	Current	
<b>1 UNITS SENT OUT</b>				
<b>1a UNITS SENT OUT ON FURNACE OIL</b>				
i	<u>Bin Qasim - I</u>			
	Unit 1	GWh	-	
	Unit 2	GWh	24.852	
	Unit 3	GWh	2.328	
	Unit 4	GWh	2.722	
	Unit 5	GWh	59.631	
	Unit 6	GWh	35.739	
	Total units sent out on furnace oil - Bin Qasim - I	GWh	<u>125.271</u> <u>78.618</u>	
<b>1b UNITS SENT OUT ON GAS</b>				
i	<u>Bin Qasim - I</u>			
	Unit 1	GWh	-	
	Unit 2	GWh	4.878	
	Unit 3	GWh	0.261	
	Unit 4	GWh	0.229	
	Unit 5	GWh	6.304	
	Unit 6	GWh	3.529	
	Total units sent out on gas - Bin Qasim - I	GWh	<u>15.200</u> <u>18.032</u>	
ii	Bin Qasim II - 560 MW	GWh	168.862	
iii	Korangi Town Gas Turbine II	GWh	4.443	
iv	Site Gas Turbine II	GWh	-	
v	Korangi CCPP	GWh	13.953	
	Total units sent out on gas - KE	GWh	<u>202.458</u> <u>129.202</u>	
<b>1c UNITS SENT OUT ON LNG</b>				
i	<u>Bin Qasim - I</u>			
	Unit 1	GWh	-	
	Unit 2	GWh	4.929	
	Unit 3	GWh	0.264	
	Unit 4	GWh	0.231	
	Unit 5	GWh	6.370	
	Unit 6	GWh	3.566	
	Total units sent out on LNG - Bin Qasim - I	GWh	<u>15.360</u> <u>36.024</u>	
ii	Bin Qasim II - 560 MW	GWh	194.753	
iii	Korangi Town Gas Turbine II	GWh	3.726	
iv	Site Gas Turbine II	GWh	-	
v	Korangi CCPP	GWh	12.046	
	Total units sent out on LNG - KE	GWh	<u>225.886</u> <u>210.881</u>	
	Total units sent out KE	GWh	<u>553.615</u> <u>418.701</u>	
<b>2 HEAT RATE AT BUS BAR</b>				
i	<u>Bin Qasim - I</u>			
	Unit 1	Btu/kWh	10,802	
	Unit 2	Btu/kWh	10,650	
	Unit 3	Btu/kWh	10,996	
	Unit 4	Btu/kWh	10,899	
	Unit 5	Btu/kWh	10,304	
	Unit 6	Btu/kWh	10,249	
ii	Bin Qasim II - 560 MW	Btu/kWh	8,358	
iii	Korangi Town Gas Turbine II	Btu/kWh	8,738	
iv	Site Gas Turbine II	Btu/kWh	8,746	
v	Korangi CCPP	Btu/kWh	8,497	

**Work Sheet- Generation Fuel Cost Variation**

	DESCRIPTION	Dec-18		Jan-19	
		Reference	Current	Reference	Current
<b>3</b>	<b><u>Calorific Value - Furnace Oil</u></b>	Btu/kg	40,351	40,351	
<b>4</b>	<b><u>FUEL PRICES</u></b>				
4a	Fuel Price - Gas	Rs./MMBTU	629	629	
4b	Fuel Price - Furnace Oil	Rs./Mton	72,926	63,540	
4c	Fuel Price - Furnace Oil	Rs./MMBTU	1,807	1,575	
4d	Fuel Price - LNG	Rs./MMBTU	1,761	1,582	
<b>5</b>	<b><u>COST OF FUEL</u></b>				
5a	<u>Furnace oil</u>				
i	<u>Bin Qasim - I</u>				
	Unit 1	Mill Rs.	-	-	
	Unit 2	Mill Rs.	478.339	-	
	Unit 3	Mill Rs.	46.262	457.575	
	Unit 4	Mill Rs.	53.609	172.331	
	Unit 5	Mill Rs.	1,110.466	683.917	
	Unit 6	Mill Rs.	661.986	-	
	Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	2,350.662	1,313.823	
5b	<u>Gas</u>				
i	<u>Bin Qasim - I</u>				
	Unit 1	Mill Rs.	-	-	
	Unit 2	Mill Rs.	32.674	-	
	Unit 3	Mill Rs.	1.805	12.686	
	Unit 4	Mill Rs.	1.568	10.685	
	Unit 5	Mill Rs.	40.856	94.879	
	Unit 6	Mill Rs.	22.750	-	
	Total Cost of Gas - Bin Qasim - I	Mill Rs.	99.653	118.250	
ii	Bin Qasim II - 560 MW	Mill Rs.	887.787	413.146	
iii	Korangi Town Gas Turbine II	Mill Rs.	24.419	21.917	
iv	Site Gas Turbine II	Mill Rs.	-	-	
v	Korangi CCPP	Mill Rs.	74.575	152.857	
	Total Cost of Gas - KE	Mill Rs.	1,086.434	706.170	
5c	<u>LNG</u>				
i	<u>Bin Qasim - I</u>				
	Unit 1	Mill Rs.	-	-	
	Unit 2	Mill Rs.	92,424	-	
	Unit 3	Mill Rs.	5.105	63.743	
	Unit 4	Mill Rs.	4.437	53.691	
	Unit 5	Mill Rs.	115.569	476.751	
	Unit 6	Mill Rs.	64.352	-	
	Total Cost of LNG - Bin Qasim - I	Mill Rs.	281.887	594.185	
ii	Bin Qasim II - 560 MW	Mill Rs.	2,866.092	1,527.104	
iii	Korangi Town Gas Turbine II	Mill Rs.	57.331	131.810	
iv	Site Gas Turbine II	Mill Rs.	-	-	
v	Korangi CCPP	Mill Rs.	180.217	669.942	
	Total Cost of LNG - KE	Mill Rs.	3,385.526	2,923.041	
	Total cost of fuel - KE	a	Mill Rs.	<u>6,822.622</u>	<u>4,943.034</u>
<b>6</b>	<b>Variation in Cost of Fuel - KE</b>				
6a	Units Sent Out - KE		GWh	553.615	418.701
6b	Units - Power Purchases		GWh	536.852	596.344
	Total Units Sent Out	b	GWh	1,090.467	1,015.045
6c	Cost per unit	c = a/b	Rs./kWh	6.257	4.870
6d	Variation per unit (Cost of Fuel - KE)		Rs./kWh		(1.387)
6e	Variation amount (Cost of Fuel - KE)		Mill Rs.		<u>(1,407.704)</u>

Work Sheet- Power Purchase Cost Variation

DESCRIPTION		Dec-18	Jan-19	
		Reference	Current	
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	-	-	
b TAPAL	GWh	25.333	57.770	
c GUL AHMED	GWh	22.021	40.510	
d CPPA-G	GWh	373.734	380.384	
e ANOUD POWER	GWh	4.400	4.701	
f INT IND (IIL)	GWh	5.432	5.529	
g FFBL	GWh	40.470	38.113	
h SNPC	GWh	58.552	62.622	
i OURSUN	GWh	6.910	6.715	
<b>TOTAL</b>	<b>GWh</b>	<b>536.852</b>	<b>596.344</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	-	-	
b TAPAL	Mill Rs.	425.461	814.850	
c GUL AHMED	Mill Rs.	378.350	610.889	
d CPPA-G	Mill Rs.	2,403.222	2,876.958	
e ANOUD POWER	Mill Rs.	52.121	47.030	
f INT IND (IIL)	Mill Rs.	41.553	42.288	
g FFBL	Mill Rs.	344.181	324.136	
h SNPC	Mill Rs.	338.784	362.315	
i OURSUN	Mill Rs.	-	-	
<b>TOTAL</b>	<b>Mill Rs.</b>	<b>3,983.672</b>	<b>5,078.466</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	-	-	
b TAPAL	Rs./kwh	16.795	14.105	
c GUL AHMED	Rs./kwh	17.181	15.080	
d CPPA-G	Rs./kwh	6.430	7.563	
e ANOUD POWER	Rs./kwh	11.847	10.004	
f INT IND (IIL)	Rs./kwh	7.649	7.648	
g FFBL	Rs./kwh	8.505	8.505	
h SNPC	Rs./kwh	5.786	5.786	
i OURSUN	Rs./kwh	-	-	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
<b>4a Cost of Fuel - Power Purchases</b>	<b>a</b>	<b>Mill Rs.</b>	<b>3,983.672</b>	<b>5,078.466</b>
<b>Units Sent out:</b>				
Units Sent Out - KE		GWh	553.615	418.701
Units - Power Purchases		GWh	536.852	596.344
<b>4b Total Units Sent Out</b>	<b>b</b>	<b>GWh</b>	<b>1,090.467</b>	<b>1,015.045</b>
<b>4c Cost per unit</b>	<b>c = a/b</b>	<b>Rs./kwh</b>	<b>3.653</b>	<b>5.003</b>
<b>4d Variation per unit (Cost of Fuel - Power Purchases)</b>		<b>Rs./kwh</b>		<b>1.350</b>
<b>4e Variation amount (Cost of Fuel - Power Purchases)</b>		<b>Mill Rs.</b>		<b>1,370.323</b>

K ELECTRIC LIMITED

QUARTERLY ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL AND POWER PURCHASE COST INCLUDING O&M AND CAPACITY CHARGES			Quarter ended December 2017				
ADJUSTMENT IN TARIFF DUE TO UNRECOVERED COST			Sep-17	Oct-17	Nov-17	Dec-17	QTR
			Reference				
Units Sent Out	GWh	a	1,626.337	1,237.619	1,001.423		
T&D Losses allowed		b	19.8%	19.8%	19.8%		
Units billed	GWh	c = a x (1-b)	1,304.322	992.571	803.141	3,100.034	
<b>a. O&amp;M and Capacity cost of Power purchases</b>							
O&M and Capacity cost of Power purchases	Mill Rs	d	1,730.149	2,168.564	1,975.309		
O&M and Capacity cost of power purchases (per unit billed)	Rs/kWh	e = d/c	1.653	1.326	2.185	2.459	
Increase or decrease in O&M and Capacity cost (over Reference)	Rs/kWh	f	(0.326)	0.532	0.807		
<b>O&amp;M and Capacity Cost of Power Purchases - Monthly variations Amount</b>	Mill Rs	g = f x c					
			(425.553)	528.105	647.928	750.480	
<b>b. Unrecovered Cost of FCA due to non adjustment of T&amp;D losses</b>							
i Monthly variation in Fuel Cost (FCA) - Per unit							
Cost of Fuel - KE	Rs/kWh	h	0.172	(0.204)	(1.031)		
Cost of Fuel - Power Purchases	Rs/kWh	i	0.260	0.081	0.795		
Total	Rs/kWh	j = h + i	0.432	(0.122)	(0.236)		
ii Monthly variation in Fuel Cost (FCA) - Amount							
Cost of Fuel - KE	Mill Rs	k = h x a	279.388	(251.919)	(1,032.005)	(1,004.536)	
Cost of Fuel - Power Purchases	Mill Rs	l = i x a	422.680	100.410	795.690	1,318.780	
Total	Mill Rs	m = k + l	702.068	(151.509)	(236.315)	314.245	
iii Unrecovered Cost of FCA due to non adjustment of T&D losses							
Cost of Fuel - KE	Mill Rs	n = k x b	55.319	(49.880)	(204.337)	(198.898)	
Cost of Fuel - Power Purchases	Mill Rs	o = l x b	83.691	19.881	157.547	261.118	
Total	Mill Rs	p = n + o	139.010	(29.999)	(46.790)	62.220	
<b>Summary of Unrecovered cost for the quarter</b>							
a. O&M and Capacity cost of Power purchases	Mill Rs						750.480
b. Unrecovered Cost of FCA due to non adjustment of T&D losses	Mill Rs						62.220
c. Other Adjustments							178.898
WWF/WPPF / Bonus to IPPs - Note 1	Mill Rs						991.598
<b>Total Unrecovered cost for the quarter</b>	Mill Rs	q					
Units to be sold in next quarter at allowed T&D losses	GWh	r					2,829.849
<b>Unrecovered Cost per unit for current quarter</b>	Rs/kWh	s = q / r					0.350

Notes:

1 Tapal Energy WPPF Rs.66.074 million, WWF Rs. 26.430 million and Gul Ahmed Energy Excess Energy Bonus Rs. 35.136 million and WPPF Rs. 51.259 million.

K Electric Limited

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

	DESCRIPTION	Unit	Sep-18	Dec-18
			Reference	Current
A)	Cost of fuel:			
	Cost of fuel - KE	Mill Rs.	9,626.876	6,822.622
	Cost of fuel - Power Purchases	Mill Rs.	4,812.404	3,983.672
	<b>Total</b>	Mill Rs.	<b>14,439.279</b>	<b>10,806.294</b>
B)	Units Sent Out			
	Units Sent Out - KE	GWh	913.522	553.615
	Units - Power purchases	GWh	654.798	536.852
	<b>Total</b>	GWh	<b>1,568.320</b>	<b>1,090.467</b>
C)	Cost per unit			
	Cost of fuel - KE	Rs./kWh	6.138	6.257
	Cost of fuel - Power Purchases	Rs./kWh	3.069	3.653
	Average	Rs./kWh	<b>9.207</b>	<b>9.910</b>
D)	Variation per unit			
	Cost of fuel - KE	d		0.118
	Cost of fuel - Power Purchases	Rs./kWh		0.585
	<b>Total Fuel Cost Adjustment</b>	Rs./kWh		<b>0.703</b>
E)	<b>Total Fuel Cost Adjustment</b>	Ps/kWh		<b>70.294</b>
F)	Variation amount			
	Cost of fuel - KE	e = d x b (total)	Mill Rs.	128.969
	Cost of fuel - Power Purchases	Mill Rs.		637.565
	<b>Total Fuel Cost Adjustment</b>	Mill Rs.		<b>766.534</b>

**Work Sheet- Generation Fuel Cost Variation**

	DESCRIPTION	Sep-18	Dec-18	
		Reference	Current	
<b>1 UNITS SENT OUT</b>				
<b>1a UNITS SENT OUT ON FURNACE OIL</b>				
i	<u>Bin Qasim - I</u>			
	Unit 1	GWh	45.950	
	Unit 2	GWh	41.722	
	Unit 3	GWh	69.386	
	Unit 4	GWh	47.139	
	Unit 5	GWh	19.017	
	Unit 6	GWh	64.965	
	Total units sent out on furnace oil - Bin Qasim - I	GWh	288.178	
			125.271	
<b>1b UNITS SENT OUT ON GAS</b>				
i	<u>Bin Qasim - I</u>			
	Unit 1	GWh	22.345	
	Unit 2	GWh	25.834	
	Unit 3	GWh	0.304	
	Unit 4	GWh	4.904	
	Unit 5	GWh	46.123	
	Unit 6	GWh	15.221	
	Total units sent out on gas - Bin Qasim - I	GWh	114.732	
			15.200	
ii	Bin Qasim II - 560 MW	GWh	169.917	
iii	Korangi Town Gas Turbine II	GWh	26.059	
iv	Site Gas Turbine II	GWh	38.678	
v	Korangi CCPP	GWh	80.898	
	Total units sent out on gas - KE	GWh	430.284	
			202.458	
<b>1c UNITS SENT OUT ON LNG</b>				
i	<u>Bin Qasim - I</u>			
	Unit 1	GWh	10.043	
	Unit 2	GWh	11.612	
	Unit 3	GWh	0.137	
	Unit 4	GWh	2.204	
	Unit 5	GWh	20.731	
	Unit 6	GWh	6.841	
	Total units sent out on LNG - Bin Qasim - I	GWh	51.568	
			15.360	
ii	Bin Qasim II - 560 MW	GWh	77.272	
iii	Korangi Town Gas Turbine II	GWh	11.820	
iv	Site Gas Turbine II	GWh	17.581	
v	Korangi CCPP	GWh	36.818	
	Total units sent out on LNG - KE	GWh	195.060	
			225.886	
	Total units sent out KE	GWh	913.522	
			553.615	
<b>2 HEAT RATE AT BUS BAR</b>				
i	<u>Bin Qasim - I</u>			
	Unit 1	Btu/kWh	10,802	
	Unit 2	Btu/kWh	10,650	
	Unit 3	Btu/kWh	10,996	
	Unit 4	Btu/kWh	10,899	
	Unit 5	Btu/kWh	10,304	
	Unit 6	Btu/kWh	10,249	
ii	Bin Qasim II - 560 MW	Btu/kWh	8,358	
iii	Korangi Town Gas Turbine II	Btu/kWh	8,738	
iv	Site Gas Turbine II	Btu/kWh	8,746	
v	Korangi CCPP	Btu/kWh	8,497	
			8,497	

**Work Sheet- Generation Fuel Cost Variation**

	DESCRIPTION	Sep-18		Dec-18	
		Reference	Current	Reference	Current
3	<u>Calorific Value - Furnace Oil</u>	Btu/kg	40,351	40,351	
4	<u>FUEL PRICES</u>				
4a	Fuel Price - Gas	Rs./MMBTU	423	629	
4b	Fuel Price - Furnace Oil	Rs./Mton	68,668	72,926	
4c	Fuel Price - Furnace Oil	Rs./MMBTU	1,702	1,807	
4d	Fuel Price - LNG	Rs./MMBTU	1,562	1,761	
5	<u>COST OF FUEL</u>				
5a	<u>Furnace oil</u>				
i	<u>Bin Qasim - I</u>				
	Unit 1	Mill Rs.	844.670		
	Unit 2	Mill Rs.	756.159	478.339	
	Unit 3	Mill Rs.	1,298.388	46.262	
	Unit 4	Mill Rs.	874.315	53.609	
	Unit 5	Mill Rs.	333.461	1,110.466	
	Unit 6	Mill Rs.	1,133.081	661.986	
	Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	5,240.075	2,350.662	
5b	<u>Gas</u>				
i	<u>Bin Qasim - I</u>				
	Unit 1	Mill Rs.	102.165		
	Unit 2	Mill Rs.	116.460	32.674	
	Unit 3	Mill Rs.	1.416	1.805	
	Unit 4	Mill Rs.	22.624	1.568	
	Unit 5	Mill Rs.	201.165	40.856	
	Unit 6	Mill Rs.	66.033	22.750	
	Total Cost of Gas - Bin Qasim - I	Mill Rs.	509.864	99.653	
ii	Bin Qasim II - 560 MW	Mill Rs.	601.157	887.787	
iii	Korangi Town Gas Turbine II	Mill Rs.	96.382	24.419	
iv	Site Gas Turbine II	Mill Rs.	143.186		
v	Korangi CCPP	Mill Rs.	290.958	74.575	
	Total Cost of Gas - KE	Mill Rs.	1,641.547	1,086.434	
5c	<u>LNG</u>				
i	<u>Bin Qasim - I</u>				
	Unit 1	Mill Rs.	169.488		
	Unit 2	Mill Rs.	193.202	92.424	
	Unit 3	Mill Rs.	2.349	5.105	
	Unit 4	Mill Rs.	37.533	4.437	
	Unit 5	Mill Rs.	333.725	115.569	
	Unit 6	Mill Rs.	109.547	64.352	
	Total Cost of LNG - Bin Qasim - I	Mill Rs.	845.845	281.887	
ii	Bin Qasim II - 560 MW	Mill Rs.	1,009.056	2,866.092	
iii	Korangi Town Gas Turbine II	Mill Rs.	161.367	57.331	
iv	Site Gas Turbine II	Mill Rs.	240.231		
v	Korangi CCPP	Mill Rs.	488.756	180.217	
	Total Cost of LNG - KE	Mill Rs.	2,745.254	3,385.526	
	<b>Total cost of fuel - KE</b>	a	<b>Mill Rs.</b>	<b>9,626.876</b>	<b>6,822.622</b>
6	<u>Variation in Cost of Fuel - KE</u>				
6a	Units Sent Out - KE	GWh	913.522	553.615	
6b	Units - Power Purchases	GWh	654.798	536.852	
	<b>Total Units Sent Out</b>	b	<b>GWh</b>	<b>1,568.320</b>	<b>1,090.467</b>
6c	Cost per unit	c = a/b	Rs./kWh	6.138	6.257
6d	Variation per unit (Cost of Fuel - KE)		Rs./kWh		0.118
6e	Variation amount (Cost of Fuel - KE)		Mill Rs.		<u>128.969</u>

## Work Sheet- Power Purchase Cost Variation

DESCRIPTION	Sep-18		Dec-18	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	18.704	-	
b TAPAL	GWh	60.738	25.333	
c GUL AHMED	GWh	68.993	22.021	
d CPPA-G	GWh	427.533	373.734	
e ANOUD POWER	GWh	3.912	4.400	
f INT IND (IIL)	GWh	5.134	5.432	
g FFBL	GWh	6.590	40.470	
h SNPC	GWh	63.194	58.552	
i OURSUN	GWh	-	6.910	
<b>TOTAL</b>	GWh	<b>654.798</b>	<b>536.852</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	215.914	-	
b TAPAL	Mill Rs.	888.814	425.461	
c GUL AHMED	Mill Rs.	1,053.982	378.350	
d CPPA-G	Mill Rs.	2,275.160	2,403.222	
e ANOUD POWER	Mill Rs.	45.016	52.121	
f INT IND (IIL)	Mill Rs.	30.221	41.553	
g FFBL	Mill Rs.	52.503	344.181	
h SNPC	Mill Rs.	250.795	338.784	
i OURSUN	Mill Rs.	-		
<b>TOTAL</b>	Mill Rs.	<b>4,812.404</b>	<b>3,983.672</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	11.544	-	
b TAPAL	Rs./kwh	14.633	16.795	
c GUL AHMED	Rs./kwh	15.277	17.181	
d CPPA-G	Rs./kwh	5.322	6.430	
e ANOUD POWER	Rs./kwh	11.507	11.847	
f INT IND (IIL)	Rs./kwh	5.887	7.649	
g FFBL	Rs./kwh	7.967	8.505	
h SNPC	Rs./kwh	3.969	5.786	
i OURSUN	Rs./kwh	-		
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
<b>4a Cost of Fuel - Power Purchases</b>	a	Mill Rs.	<b>4,812.404</b>	<b>3,983.672</b>
Units Sent out:				
Units Sent Out - KE		GWh	913.522	553.615
Units -Power Purchases		GWh	654.798	536.852
<b>4b Total Units Sent Out</b>	b	GWh	<b>1,568.320</b>	<b>1,090.467</b>
<b>4c Cost per unit</b>	c = a/b	Rs./kwh	3.069	3.653
<b>4d Variation per unit (Cost of Fuel - Power Purchases)</b>		Rs./kwh	-	0.585
<b>4e Variation amount (Cost of Fuel - Power Purchases)</b>		Mill Rs.	<b>637.565</b>	

**K ELECTRIC LIMITED**

QUARTERLY ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL AND POWER PURCHASE COST  
INCLUDING O&M AND CAPACITY CHARGES

Quarter ended December 2018

**Required adjustment in Tariff**

		Dec-18
Quarterly Revision to reset price levels	Rs/kWh	2.518
Unrecovered Cost for current quarter	Rs/kWh	1.307
Reversal of unrecovered cost of previous quarter	Rs/kWh	(0.432)
Total Required adjustment in KE's Tariff	Rs/kWh	<u>3.392</u>
Total Required adjustment in KE's Tariff	Ps/kWh	<u>339.229</u>

**Quarterly Revision to reset price levels**

Units Sent Out	GWh	1,090.467
T&D Losses allowed	GWh	18.75%
Units billed	GWh	886.004
<b>Cost of Fuel - KE</b>	Mill Rs	6,822.622

	Sep-18	Dec-18	Variation
Weighted Average Fuel cost per unit billed	7.555	7.700	0.146

	Dec-18
- Fuel Cost	3,983.672
- O&M and Capacity Cost	3,288.142
- Total Cost of Power Purchases	7,271.814

	Sep-18	Dec-18
- Fuel Cost	3.777	4.496
- O&M Cost and capacity cost	2.058	3.711
- Total Cost of Power Purchases	5.835	8.207

	0.146
- Cost of Fuel - KE	2.372
- Cost of Power Purchases - Total	2.518

**QUARTERLY INCREASE/DECREASE IN COST PER UNIT BILLED**

- Cost of Fuel - KE	Rs/kWh	0.146
- Cost of Power Purchases - Total	Rs/kWh	2.372
- Total Cost Variation	Rs/kWh	2.518

Note: Please note that the SoT attached with the MYT notification is based on updated terms and conditions including changes in definition of lifeline consumers and the assumption of conversion of eligible consumers to "A3" category along with enabling of Time of Use (ToU) metering for Residential and Commercial consumers etc. However, as the MYT has been notified on May 22, 2019, these changes will be effective from the date of notification. Accordingly, KE would like to request NEPRA to adjust the related impact while issuing determination of Quarterly SoTs.

K ELECTRIC LIMITED

QUARTERLY ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL AND POWER PURCHASE COST INCLUDING O&M AND CAPACITY CHARGES			Quarter ended December 2018				
ADJUSTMENT IN TARIFF DUE TO UNRECOVERED COST			Sep-18	Oct-18	Nov-18	Dec-18	QTR
			Reference				
Units Sent Out	GWh	a	1,663.494	1,378.724	1,090.467		
T&D Losses allowed		b		18.8%	18.8%	18.8%	
Units billed	GWh	c = a x (1-b)	1,351.589	1,120.213	886.004	3,357.807	
<b>a. O&amp;M and Capacity cost of Power purchases</b>							
O&M and Capacity cost of Power purchases	Mill Rs	d	2,813.480	3,230.894	3,288.142		
O&M and Capacity cost of power purchases (per unit billed)	Rs/kWh	e = d/c	2.058	2.082	2.884	3.711	
Increase or decrease in O&M and Capacity cost (over Reference)	Rs/kWh	f		0.028	0.826	1.653	
<b>O&amp;M and Capacity Cost of Power Purchases - Monthly variations Amount</b>	Mill Rs	g = f x c					
			31.410	925.080	1,464.417	2,420.908	
<b>b. Unrecovered Cost of FCA due to non adjustment of T&amp;D losses</b>							
i Monthly variation in Fuel Cost (FCA) - Per unit							
Cost of Fuel - KE	Rs/kWh	h	1.447	0.788	0.118		
Cost of Fuel - Power Purchases	Rs/kWh	i	0.183	(0.174)	0.585		
Total	Rs/kWh	j = h + i	1.629	0.614	0.703		
ii Monthly variation in Fuel Cost (FCA) - Amount							
Cost of Fuel - KE	Mill Rs	k = h x a	2,406.685	1,086.823	128.969	3,622.477	
Cost of Fuel - Power Purchases	Mill Rs	l = i x a	303.627	(239.654)	637.565	701.538	
Total	Mill Rs	m = k + l	2,710.312	847.169	766.534	4,324.016	
iii Unrecovered Cost of FCA due to non adjustment of T&D losses							
Cost of Fuel - KE	Mill Rs	n = k x b	451.253	203.779	24.182	679.215	
Cost of Fuel - Power Purchases	Mill Rs	o = i x b	56.930	(44.935)	119.543	131.538	
Total	Mill Rs	p = n + o	508.184	158.844	143.725	810.753	
<b>Summary of Unrecovered cost for the quarter</b>							
a. O&M and Capacity cost of Power purchases	Mill Rs						2,420.908
b. Unrecovered Cost of FCA due to non adjustment of T&D losses	Mill Rs						810.753
c. Other Adjustments	Mill Rs						
WWF/WPPF / Bonus to IPPs - Note 1	Mill Rs	q					200.346
<b>Total Unrecovered cost for the quarter</b>	Mill Rs	q					3,432.007
<b>Units to be sold in next quarter at allowed T&amp;D losses</b>	GWh	r					2,626.405
<b>Unrecovered Cost per unit for current quarter</b>	Rs/kWh	s = q / r					1.307

Notes:

1 Tapal Energy WPPF Rs. 72,712 million, WWF Rs. 29,085 million, Gul Ahmed Energy Excess Energy Bonus Rs. 5,055 million, WPPF Rs. 59,259 million and FPCL WPPF 34,235 million

Work Sheet- Power Purchase O&M and Capacity Cost

DESCRIPTION	Reference	Sep-18	Oct-18	Nov-18	Dec-18
<b>1 O&amp;M COST</b>					
a KANUPP	Mill Rs.	18,388	-	-	-
b TAPAL	Mill Rs.	73,445	91,482	59,671	30,633
c GUL AHMED	Mill Rs.	48,702	56,925	29,672	15,545
d CPPA-G	Mill Rs.	102,993	118,241	81,544	120,679
e ANOUD POWER	Mill Rs.	7,937	8,404	8,071	8,926
f INT IND (IIL)	Mill Rs.	8,550	7,983	7,579	8,116
g FFBL	Mill Rs.	3,561	18,304	20,957	21,979
h SNPC	Mill Rs.	47,604	52,211	51,513	45,050
i OURSUN	Mill Rs.	-	-	4,175	12,213
<b>TOTAL</b>	Mill Rs.	<b>311,178</b>	<b>353,549</b>	<b>263,182</b>	<b>263,140</b>
<b>2 CAPACITY COST</b>					
a KANUPP	Mill Rs.	-	-	-	-
b TAPAL	Mill Rs.	160,527	164,514	164,514	164,514
c GULAHMED	Mill Rs.	148,562	150,774	150,774	150,774
d CPPA-G	Mill Rs.	1,726,910	1,684,256	2,157,891	2,156,761
e ANOUD POWER	Mill Rs.	-	-	-	-
f INT IND (IIL)	Mill Rs.	-	-	-	-
g FFBL	Mill Rs.	40,014	205,033	234,758	246,207
h SNPC	Mill Rs.	235,708	255,355	247,747	223,440
i OURSUN	Mill Rs.	-	-	12,028	83,306
<b>TOTAL</b>	Mill Rs.	<b>2,311,720</b>	<b>2,459,931</b>	<b>2,967,712</b>	<b>3,025,002</b>
<b>3 TOTAL O&amp;M &amp; CAPACITY COST</b>					
a KANUPP	Mill Rs.	18,388	-	-	-
b TAPAL	Mill Rs.	233,972	255,996	224,185	195,147
c GULAHMED	Mill Rs.	197,264	207,699	180,446	166,319
d CPPA-G	Mill Rs.	1,829,902	1,802,497	2,239,435	2,277,439
e ANOUD POWER	Mill Rs.	7,937	8,404	8,071	8,926
f INT IND (IIL)	Mill Rs.	8,550	7,983	7,579	8,116
g FFBL	Mill Rs.	43,574	223,336	255,715	268,187
h SNPC	Mill Rs.	283,312	307,566	299,260	268,490
i OURSUN	Mill Rs.	-	-	16,203	95,518
<b>TOTAL</b>	Mill Rs.	<b>2,622,899</b>	<b>2,813,480</b>	<b>3,230,894</b>	<b>3,288,142</b>

**GENERATION STATISTICS FOR THE MONTH OF DEC 2018**

DESCRIPTION	BQPS (KWH)	BQPS II-560 MW (KWH)	SGTPS-II (KWH)	KTGTPS-II (KWH)	KCCPP (KWH)	KE (KWH)
UNITS GENERATED	169,037,930	387,277,778	-	8,378,825	27,932,300	592,626,83
AUXILIARY CONSUMPTION	11.5%	5.7%	0.0%	6.5%	9.4%	7.6
UNITS SENT OUT	149,583,060	365,105,000	-	7,834,000	25,309,170	547,831,23

K Electric Limited

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

DESCRIPTION	Unit	Sep-18	Nov-18
		Reference	Current
A) Cost of fuel:			
Cost of fuel - KE	Mill Rs.	9,626.876	9,549.896
Cost of fuel - Power Purchases	Mill Rs.	4,812.404	3,990.973
Total	Mill Rs.	<u>14,439.279</u>	<u>13,540.869</u>
B) Units Sent Out			
Units Sent Out - KE	GWh	913.522	797.729
Units - Power purchases	GWh	654.798	580.996
Total	GWh	<u>1,568.320</u>	<u>1,378.724</u>
C) Cost per unit			
Cost of fuel - KE	Rs./kWh	6.138	6.927
Cost of fuel - Power Purchases	Rs./kWh	3.069	2.895
Average	Rs./kWh	<u>9.207</u>	<u>9.821</u>
D) Variation per unit			
Cost of fuel - KE	Rs./kWh		0.788
Cost of fuel - Power Purchases	Rs./kWh		(0.174)
Total Fuel Cost Adjustment	Rs./kWh		<u>0.614</u>
E) Total Fuel Cost Adjustment	Ps/kWh		<u>61.446</u>
F) Variation amount			
Cost of fuel - KE	Mill Rs.	1,086.823	
Cost of fuel - Power Purchases	Mill Rs.	(239.654)	
Total Fuel Cost Adjustment	Mill Rs.	<u>847.169</u>	

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Sep-18	Nov-18	
	Reference	Current	
<b>1 UNITS SENT OUT</b>			
<b>1a UNITS SENT OUT ON FURNACE OIL</b>			
i Bin Qasim - I			
Unit 1	GWh	45.950	34.601
Unit 2	GWh	41.722	46.789
Unit 3	GWh	69.386	10.321
Unit 4	GWh	47.139	46.433
Unit 5	GWh	19.017	21.710
Unit 6	GWh	64.965	48.083
Total units sent out on furnace oil - Bin Qasim - I	GWh	288.178	207.938
<b>1b UNITS SENT OUT ON GAS</b>			
i Bin Qasim - I			
Unit 1	GWh	22.345	22.036
Unit 2	GWh	25.834	28.059
Unit 3	GWh	0.304	0.022
Unit 4	GWh	4.904	5.042
Unit 5	GWh	46.123	1.526
Unit 6	GWh	15.221	22.429
Total units sent out on gas - Bin Qasim - I	GWh	114.732	79.114
ii Bin Qasim II - 560 MW	GWh	169.917	218.049
iii Korangi Town Gas Turbine II	GWh	26.059	26.511
iv Site Gas Turbine II	GWh	38.678	-
v Korangi CCPP	GWh	80.898	62.020
Total units sent out on gas - KE	GWh	430.284	385.694
<b>1c UNITS SENT OUT ON LNG</b>			
i Bin Qasim - I			
Unit 1	GWh	10.043	9.784
Unit 2	GWh	11.612	12.458
Unit 3	GWh	0.137	0.010
Unit 4	GWh	2.204	2.239
Unit 5	GWh	20.731	0.678
Unit 6	GWh	6.841	9.959
Total units sent out on LNG - Bin Qasim - I	GWh	51.568	35.127
ii Bin Qasim II - 560 MW	GWh	77.272	122.184
iii Korangi Town Gas Turbine II	GWh	11.820	13.966
iv Site Gas Turbine II	GWh	17.581	-
v Korangi CCPP	GWh	36.818	32.819
Total units sent out on LNG - KE	GWh	195.060	204.097
Total units sent out KE	GWh	913.522	797.729
<b>2 HEAT RATE AT BUS BAR</b>			
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	8,358	8,358
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 CCPP	Btu/kWh	8,497	8,497

**Work Sheet- Generation Fuel Cost Variation**

	DESCRIPTION	Sep-18	Nov-18	
		Reference	Current	
<b>3</b>	<b><u>Calorific Value - Furnace Oil</u></b>	Btu/kg	40,351      40,351	
<b>4</b>	<b>FUEL PRICES</b>			
4a	Fuel Price - Gas	Rs./MMBTU	423      629	
4b	Fuel Price - Furnace Oil	Rs./Mton	68,668      77,712	
4c	Fuel Price - Furnace Oil	Rs./MMBTU	1,702      1,926	
4d	Fuel Price - LNG	Rs./MMBTU	1,562      1,754	
<b>5</b>	<b>COST OF FUEL</b>			
5a	<u>Furnace oil</u>			
i	<u>Bin Qasim - I</u>			
Unit 1	Mill Rs.	844.670	719.834	
Unit 2	Mill Rs.	756.159	959.695	
Unit 3	Mill Rs.	1,298.388	218.568	
Unit 4	Mill Rs.	874.315	974.650	
Unit 5	Mill Rs.	333.461	430.830	
Unit 6	Mill Rs.	1,133.081	949.095	
Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	<u>5,240.075</u>	<u>4,252.671</u>	
5b	<u>Gas</u>			
i	<u>Bin Qasim - I</u>			
Unit 1	Mill Rs.	102.165	149.725	
Unit 2	Mill Rs.	116.460	187.961	
Unit 3	Mill Rs.	1,416	0.150	
Unit 4	Mill Rs.	22.624	34.567	
Unit 5	Mill Rs.	201.165	9.892	
Unit 6	Mill Rs.	66.033	<u>144.591</u>	
Total Cost of Gas - Bin Qasim - I	Mill Rs.	<u>509.864</u>	<u>526.886</u>	
ii	Bin Qasim II - 560 MW	Mill Rs.	601.157      1,146.383	
iii	Korangi Town Gas Turbine II	Mill Rs.	96.382      145.711	
iv	Site Gas Turbine II	Mill Rs.	143.186      -	
v	Korangi CCPP	Mill Rs.	290.958      331.473	
Total Cost of Gas - KE	Mill Rs.	<u>1,641.547</u>	<u>2,150.454</u>	
5c	<u>LNG</u>			
i	<u>Bin Qasim - I</u>			
Unit 1	Mill Rs.	169.488	185.375	
Unit 2	Mill Rs.	193.202	232.715	
Unit 3	Mill Rs.	2.349	0.186	
Unit 4	Mill Rs.	37.533	42.797	
Unit 5	Mill Rs.	333.725	12.247	
Unit 6	Mill Rs.	109.547	<u>179.019</u>	
Total Cost of LNG - Bin Qasim - I	Mill Rs.	<u>845.845</u>	<u>652.339</u>	
ii	Bin Qasim II - 560 MW	Mill Rs.	1,009.056      1,791.260	
iii	Korangi Town Gas Turbine II	Mill Rs.	161.367      214.049	
iv	Site Gas Turbine II	Mill Rs.	240.231      -	
v	Korangi CCPP	Mill Rs.	488.756      489.122	
Total Cost of LNG - KE	Mill Rs.	<u>2,745.254</u>	<u>3,146.770</u>	
Total cost of fuel - KE	a	Mill Rs.	<u>9,626.876</u> <u>9,549.896</u>	
<b>6</b>	<b>Variation in Cost of Fuel - KE</b>			
6a	Units Sent Out - KE	GWh	913.522      797.729	
6b	Units - Power Purchases	GWh	<u>654.798</u> <u>580.996</u>	
	Total Units Sent Out	GWh	<u>1,568.320</u> <u>1,378.724</u>	
6c	Cost per unit	c = a/b	Rs./kWh	6.138      6.927
6d	Variation per unit (Cost of Fuel - KE)		Rs./kWh	<u>0.788</u>
6e	Variation amount (Cost of Fuel - KE)		Mill Rs.	<u>1,086.823</u>

Work Sheet- Power Purchase Cost Variation

DESCRIPTION	Sep-18		Nov-18	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	18.704	-	-
b TAPAL	GWh	60.738	49.348	
c GUL AHMED	GWh	68.993	42.034	
d CPPA-G	GWh	427.533	373.198	
e ANOUD POWER	GWh	3.912	3.979	
f INT IND (IIL)	GWh	5.134	4.546	
g FFBL	GWh	6.590	38.588	
h SNPC	GWh	63.194	66.941	
i OURSUN	GWh	-	2.362	
<b>TOTAL</b>	<b>GWh</b>	<b>654.798</b>	<b>580.996</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	215.914	-	-
b TAPAL	Mill Rs.	888.814	741.394	
c GUL AHMED	Mill Rs.	1,053.982	697.198	
d CPPA-G	Mill Rs.	2,275.160	1,764.070	
e ANOUD POWER	Mill Rs.	45.016	53.880	
f INT IND (IIL)	Mill Rs.	30.221	34.780	
g FFBL	Mill Rs.	52.503	312.264	
h SNPC	Mill Rs.	250.795	387.387	
<b>TOTAL</b>	<b>Mill Rs.</b>	<b>4,812.404</b>	<b>3,990.973</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	11.544	-	-
b TAPAL	Rs./kwh	14.633	15.024	
c GUL AHMED	Rs./kwh	15.277	16.586	
d CPPA-G	Rs./kwh	5.322	4.727	
e ANOUD POWER	Rs./kwh	11.507	13.542	
f INT IND (IIL)	Rs./kwh	5.887	7.650	
g FFBL	Rs./kwh	7.967	8.092	
h SNPC	Rs./kwh	3.969	5.787	
i OURSUN	Rs./kwh	-	-	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
4a Cost of Fuel - Power Purchases	a Mill Rs.	4,812.404	3,990.973	
Units Sent out:				
Units Sent Out - KE	GWh	913.522	797.729	
Units - Power Purchases	GWh	654.798	580.996	
4b Total Units Sent Out	b GWh	1,568.320	1,378.724	
4c Cost per unit	c = a/b Rs./kwh	3.069	2.895	
4d Variation per unit (Cost of Fuel - Power Purchases)	Rs./kwh	(0.174)		
4e Variation amount (Cost of Fuel - Power Purchases)	Mill Rs.	(239.654)		

**K Electric Limited**

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

	DESCRIPTION	Unit	Sep-18	Oct-18
			Reference	Current
A)	Cost of fuel:			
	Cost of fuel - KE	Mill Rs.	9,626.876	12,617.769
	Cost of fuel - Power Purchases	Mill Rs.	4,812.404	5,408.073
	Total	Mill Rs.	<u>14,439.279</u>	<u>18,025.842</u>
B)	Units Sent Out			
	Units Sent Out - KE	GWh	913.522	985.717
	Units - Power purchases	GWh	654.798	677.777
	Total	GWh	<u>1,568.320</u>	<u>1,663.494</u>
C)	Cost per unit			
	Cost of fuel - KE	Rs./kWh	6.138	7.585
	Cost of fuel - Power Purchases	Rs./kWh	3.069	3.251
	Average	Rs./kWh	<u>9.207</u>	<u>10.836</u>
D)	Variation per unit			
	Cost of fuel - KE	Rs./kWh		1.447
	Cost of fuel - Power Purchases	Rs./kWh		0.183
	Total Fuel Cost Adjustment	Rs./kWh		<u>1.629</u>
E)	Total Fuel Cost Adjustment	Ps/kWh		<u>162.929</u>
F)	Variation amount			
	Cost of fuel - KE	Mill Rs.	2,406.685	
	Cost of fuel - Power Purchases	Mill Rs.	303.627	
	Total Fuel Cost Adjustment	Mill Rs.	<u>2,710.312</u>	

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Sep-18	Oct-18	
	Reference	Current	
<b>1 UNITS SENT OUT</b>			
<b>1a UNITS SENT OUT ON FURNACE OIL</b>			
i Bin Qasim - I			
Unit 1	GWh	45.950	58.684
Unit 2	GWh	41.722	66.675
Unit 3	GWh	69.386	64.176
Unit 4	GWh	47.139	54.861
Unit 5	GWh	19.017	77.632
Unit 6	GWh	64.965	75.671
Total units sent out on furnace oil - Bin Qasim - I	GWh	288.178	397.699
<b>1b UNITS SENT OUT ON GAS</b>			
i Bin Qasim - I			
Unit 1	GWh	22.345	7.226
Unit 2	GWh	25.834	18.173
Unit 3	GWh	0.304	0.130
Unit 4	GWh	4.904	6.334
Unit 5	GWh	46.123	9.789
Unit 6	GWh	15.221	7.113
Total units sent out on gas - Bin Qasim - I	GWh	114.732	48.765
ii Bin Qasim II - 560 MW	GWh	169.917	219.962
iii Korangi Town Gas Turbine II	GWh	26.059	21.023
iv Site Gas Turbine II	GWh	38.678	27.787
v Korangi CCPP	GWh	80.898	64.165
Total units sent out on gas - KE	GWh	430.284	381.702
<b>1c UNITS SENT OUT ON LNG</b>			
i Bin Qasim - I			
Unit 1	GWh	10.043	3.718
Unit 2	GWh	11.612	9.351
Unit 3	GWh	0.137	0.067
Unit 4	GWh	2.204	3.259
Unit 5	GWh	20.731	5.037
Unit 6	GWh	6.841	3.660
Total units sent out on LNG - Bin Qasim - I	GWh	51.568	25.091
ii Bin Qasim II - 560 MW	GWh	77.272	120.448
iii Korangi Town Gas Turbine II	GWh	11.820	11.048
iv Site Gas Turbine II	GWh	17.581	14.520
v Korangi CCPP	GWh	36.818	35.208
Total units sent out on LNG - KE	GWh	195.060	206.316
Total units sent out KE	GWh	913.522	985.717
<b>2 HEAT RATE AT BUS BAR</b>			
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	8,358	8,358
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 CCPP	Btu/kWh	8,497	8,497

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Sep-18		Oct-18	
	Reference	Current	Reference	Current
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351	40,351	
<b>4 FUEL PRICES</b>				
4a Fuel Price - Gas	Rs./MMBTU	423	629	
4b Fuel Price - Furnace Oil	Rs./Mton	68,668	71,670	
4c Fuel Price - Furnace Oil	Rs./MMBTU	1,702	1,776	
4d Fuel Price - LNG	Rs./MMBTU	1,562	1,685	
<b>5 COST OF FUEL</b>				
<b>5a Furnace oil</b>				
i <u>Bin Qasim - I</u>				
Unit 1	Mill Rs.	844.670	1,125.916	
Unit 2	Mill Rs.	756.159	1,261.232	
Unit 3	Mill Rs.	1,298.388	1,253.393	
Unit 4	Mill Rs.	874.315	1,062.012	
Unit 5	Mill Rs.	333.461	1,420.787	
Unit 6	Mill Rs.	1,133.081	1,377.491	
Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	<u>5,240.075</u>	<u>7,500.830</u>	
<b>5b Gas</b>				
i <u>Bin Qasim - I</u>				
Unit 1	Mill Rs.	102.165	49.097	
Unit 2	Mill Rs.	116.460	121.740	
Unit 3	Mill Rs.	1.416	0.896	
Unit 4	Mill Rs.	22.624	43.425	
Unit 5	Mill Rs.	201.165	63.445	
Unit 6	Mill Rs.	66.033	45.853	
Total Cost of Gas - Bin Qasim - I	Mill Rs.	<u>509.864</u>	<u>324.456</u>	
ii Bin Qasim II - 560 MW	Mill Rs.	601.157	1,156.441	
iii Korangi Town Gas Turbine II	Mill Rs.	96.382	115.545	
iv Site Gas Turbine II	Mill Rs.	143.186	152.865	
v Korangi CCPP	Mill Rs.	290.958	342.939	
Total Cost of Gas - KE	Mill Rs.	<u>1,641.547</u>	<u>2,092.246</u>	
<b>5c LNG</b>				
i <u>Bin Qasim - I</u>				
Unit 1	Mill Rs.	169.488	67.680	
Unit 2	Mill Rs.	193.202	167.819	
Unit 3	Mill Rs.	2.349	1.236	
Unit 4	Mill Rs.	37.533	59.861	
Unit 5	Mill Rs.	333.725	87.459	
Unit 6	Mill Rs.	109.547	63.209	
Total Cost of LNG - Bin Qasim - I	Mill Rs.	<u>845.845</u>	<u>447.264</u>	
ii Bin Qasim II - 560 MW	Mill Rs.	1,009.056	1,696.577	
iii Korangi Town Gas Turbine II	Mill Rs.	161.367	162.690	
iv Site Gas Turbine II	Mill Rs.	240.231	214.009	
v Korangi CCPP	Mill Rs.	488.756	504.152	
Total Cost of LNG - KE	Mill Rs.	<u>2,745.254</u>	<u>3,024.693</u>	
<b>Total cost of fuel - KE</b>	a	<b>Mill Rs.</b>	<b><u>9,626.876</u></b>	<b><u>12,617.769</u></b>
<b>6 Variation in Cost of Fuel - KE</b>				
6a Units Sent Out - KE	GWh	913.522	985.717	
6b Units - Power Purchases	GWh	654.798	677.777	
<b>Total Units Sent Out</b>	b	<b>GWh</b>	<b>1,568.320</b>	<b>1,663.494</b>
6c Cost per unit	c = a/b	Rs./kWh	6.138	7.585
6d Variation per unit (Cost of Fuel - KE)		Rs./kWh		1.447
6e Variation amount (Cost of Fuel - KE)		Mill Rs.		<u>2,406.685</u>

**Work Sheet- Power Purchase Cost Variation**

DESCRIPTION	Sep-18		Oct-18	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	18.704	-	
b TAPAL	GWh	60.738	75.655	
c GUL AHMED	GWh	68.993	80.642	
d CPPA-G	GWh	427.533	410.987	
e ANOUD POWER	GWh	3.912	4.142	
f INT IND (IIL)	GWh	5.134	4.793	
g FFBL	GWh	6.590	33.702	
h SNPC	GWh	63.194	67.856	
<b>TOTAL</b>	GWh	<b>654.798</b>	<b>677.777</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	215.914	-	
b TAPAL	Mill Rs.	888.814	1,094.701	
c GUL AHMED	Mill Rs.	1,053.982	1,214.459	
d CPPA-G	Mill Rs.	2,275.160	2,347.023	
e ANOUD POWER	Mill Rs.	45.016	54.066	
f INT IND (IIL)	Mill Rs.	30.221	36.679	
g FFBL	Mill Rs.	52.503	268.507	
h SNPC	Mill Rs.	250.795	392.638	
<b>TOTAL</b>	Mill Rs.	<b>4,812.404</b>	<b>5,408.073</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	11.544	-	
b TAPAL	Rs./kwh	14.633	14.470	
c GUL AHMED	Rs./kwh	15.277	15.060	
d CPPA-G	Rs./kwh	5.322	5.711	
e ANOUD POWER	Rs./kwh	11.507	13.052	
f INT IND (IIL)	Rs./kwh	5.887	7.653	
g FFBL	Rs./kwh	7.967	7.967	
h SNPC	Rs./kwh	3.969	5.786	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
<b>4a Cost of Fuel - Power Purchases</b>	a Mill Rs.	<b>4,812.404</b>	<b>5,408.073</b>	
<b>Units Sent out:</b>				
Units Sent Out - KE	GWh	913.522	985.717	
Units - Power Purchases	GWh	654.798	677.777	
<b>4b Total Units Sent Out</b>	b GWh	<b>1,568.320</b>	<b>1,663.494</b>	
<b>4c Cost per unit</b>	c = a/b Rs./kwh	3.069	3.251	
<b>4d Variation per unit (Cost of Fuel - Power Purchases)</b>	Rs./kwh	0.183		
<b>4e Variation amount (Cost of Fuel - Power Purchases)</b>	Mill Rs.	<b>303.627</b>		

K Electric Limited

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

DESCRIPTION	Unit	Jun-18	Sep-18
		Reference	Current
A) Cost of fuel:			
Cost of fuel - KE	Mill Rs.	10,374.153	9,626.876
Cost of fuel - Power Purchases	Mill Rs.	5,165.764	4,812.404
Total	Mill Rs.	15,539.917	14,439.279
B) Units Sent Out			
Units Sent Out - KE	GWh	1,114.242	913.522
Units - Power purchases	GWh	729.081	654.798
Total	GWh	1,843.323	1,568.320
C) Cost per unit			
Cost of fuel - KE	Rs./kWh	5.628	6.138
Cost of fuel - Power Purchases	Rs./kWh	2.802	3.069
Average	Rs./kWh	8.430	9.207
D) Variation per unit			
Cost of fuel - KE	Rs./kWh		0.510
Cost of fuel - Power Purchases	Rs./kWh		0.266
Total Fuel Cost Adjustment	Rs./kWh		0.776
E) Total Fuel Cost Adjustment	Ps/kWh		77.646
F) Variation amount			
Cost of fuel - KE	Mill Rs.	800.429	
Cost of fuel - Power Purchases	Mill Rs.	417.313	
Total Fuel Cost Adjustment	Mill Rs.	1,217.741	

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Jun-18		Sep-18	
	Reference	Current	Reference	Current
<b>1 UNITS SENT OUT</b>				
<b>1a UNITS SENT OUT ON FURNACE OIL</b>				
i Bin Qasim - I				
Unit 1	GWh	69.192	GWh	45.950
Unit 2	GWh	61.207	GWh	41.722
Unit 3	GWh	57.143	GWh	69.386
Unit 4	GWh	53.040	GWh	47.139
Unit 5	GWh	50.500	GWh	19.017
Unit 6	GWh	71.886	GWh	64.965
Total units sent out on furnace oil - Bin Qasim - I	GWh	<u>362.968</u>	GWh	<u>288.178</u>
<b>1b UNITS SENT OUT ON GAS</b>				
i Bin Qasim - I				
Unit 1	GWh	16.477	GWh	22.345
Unit 2	GWh	26.189	GWh	25.834
Unit 3	GWh	2.513	GWh	0.304
Unit 4	GWh	6.617	GWh	4.904
Unit 5	GWh	42.900	GWh	46.123
Unit 6	GWh	20.327	GWh	15.221
Total units sent out on gas - Bin Qasim - I	GWh	<u>115.022</u>	GWh	<u>114.732</u>
ii Bin Qasim II - 560 MW	GWh	241.666	GWh	169.917
iii Korangi Town Gas Turbine II	GWh	40.803	GWh	26.059
iv Site Gas Turbine II	GWh	44.060	GWh	38.678
v Korangi CCPP	GWh	99.307	GWh	80.898
Total units sent out on gas - KE	GWh	<u>540.857</u>	GWh	<u>430.284</u>
<b>1c UNITS SENT OUT ON LNG</b>				
i Bin Qasim - I				
Unit 1	GWh	5.632	GWh	10.043
Unit 2	GWh	8.952	GWh	11.612
Unit 3	GWh	0.859	GWh	0.137
Unit 4	GWh	2.262	GWh	2.204
Unit 5	GWh	14.664	GWh	20.731
Unit 6	GWh	6.948	GWh	6.841
Total units sent out on LNG - Bin Qasim - I	GWh	<u>39.317</u>	GWh	<u>51.568</u>
ii Bin Qasim II - 560 MW	GWh	97.174	GWh	77.272
iii Korangi Town Gas Turbine II	GWh	16.163	GWh	11.820
iv Site Gas Turbine II	GWh	17.671	GWh	17.581
v Korangi CCPP	GWh	40.091	GWh	36.818
Total units sent out on LNG - KE	GWh	<u>210.416</u>	GWh	<u>195.060</u>
Total units sent out KE	GWh	<u>1,114.242</u>	GWh	<u>913.522</u>
<b>2 HEAT RATE AT BUS BAR</b>				
i Bin Qasim - I				
Unit 1	Btu/kWh	10,802	Btu/kWh	10,802
Unit 2	Btu/kWh	10,650	Btu/kWh	10,650
Unit 3	Btu/kWh	10,996	Btu/kWh	10,996
Unit 4	Btu/kWh	10,899	Btu/kWh	10,899
Unit 5	Btu/kWh	10,304	Btu/kWh	10,304
Unit 6	Btu/kWh	10,249	Btu/kWh	10,249
ii Bin Qasim II - 560 MW	Btu/kWh	8,358	Btu/kWh	8,358
iii Korangi Town Gas Turbine II	Btu/kWh	8,738	Btu/kWh	8,738
iv Site Gas Turbine II	Btu/kWh	8,746	Btu/kWh	8,746
v Korangi CCPP	Btu/kWh	8,497	Btu/kWh	8,497

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Jun-18		Sep-18	
	Reference	Current	Reference	Current
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351	40,351	
<b>4 FUEL PRICES</b>				
4a Fuel Price - Gas	Rs./MMBTU	400	423	
4b Fuel Price - Furnace Oil	Rs./Mton	60,212	68,668	
4c Fuel Price - Furnace Oil	Rs./MMBTU	1,492	1,702	
4d Fuel Price - LNG	Rs./MMBTU	1,443	1,562	
<b>5 COST OF FUEL</b>				
<b>5a Furnace oil</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	1,115.294	844.670	
Unit 2	Mill Rs.	972.707	756.159	
Unit 3	Mill Rs.	937.629	1,298.388	
Unit 4	Mill Rs.	862.626	874.315	
Unit 5	Mill Rs.	776.481	333.461	
Unit 6	Mill Rs.	1,099.396	1,133.081	
Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	<u>5,764.132</u>	<u>5,240.075</u>	
<b>5b Gas</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	71.195	102.165	
Unit 2	Mill Rs.	111.566	116.460	
Unit 3	Mill Rs.	11.051	1.416	
Unit 4	Mill Rs.	28.847	22.624	
Unit 5	Mill Rs.	176.815	201.165	
Unit 6	Mill Rs.	83.331	66.033	
Total Cost of Gas - Bin Qasim - I	Mill Rs.	<u>482.805</u>	<u>509.864</u>	
ii Bin Qasim II - 560 MW	Mill Rs.	807.980	601.157	
iii Korangi Town Gas Turbine II	Mill Rs.	142.614	96.382	
iv Site Gas Turbine II	Mill Rs.	154.140	143.186	
v Korangi CCPP	Mill Rs.	337.524	290.958	
Total Cost of Gas - KE	Mill Rs.	<u>1,925.063</u>	<u>1,641.547</u>	
<b>5c LNG</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	87.764	169.488	
Unit 2	Mill Rs.	137.531	193.202	
Unit 3	Mill Rs.	13.623	2.349	
Unit 4	Mill Rs.	35.561	37.533	
Unit 5	Mill Rs.	217.965	333.725	
Unit 6	Mill Rs.	102.725	109.547	
Total Cost of LNG - Bin Qasim - I	Mill Rs.	<u>595.169</u>	<u>845.845</u>	
ii Bin Qasim II - 560 MW	Mill Rs.	1,171.682	1,009.056	
iii Korangi Town Gas Turbine II	Mill Rs.	203.740	161.367	
iv Site Gas Turbine II	Mill Rs.	222.948	240.231	
v Korangi CCPP	Mill Rs.	491.418	488.756	
Total Cost of LNG - KE	Mill Rs.	<u>2,684.958</u>	<u>2,745.254</u>	
<b>Total cost of fuel - KE</b>	a	Mill Rs.	<u>10,374.153</u>	<u>9,626.876</u>
<b>6 Variation in Cost of Fuel - KE</b>				
6a Units Sent Out - KE	b	GWh	1,114.242	913.522
6b Units - Power Purchases		GWh	729.081	654.798
Total Units Sent Out	b	GWh	<u>1,843.323</u>	<u>1,568.320</u>
6c Cost per unit	c = a/b	Rs./kWh	5.628	6.138
6d Variation per unit (Cost of Fuel - KE)		Rs./kWh		0.510
6e Variation amount (Cost of Fuel - KE)		Mill Rs.		<u>800.429</u>

**Work Sheet- Power Purchase Cost Variation**

DESCRIPTION	Jun-18		Sep-18	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	38.540	18.704	
b TAPAL	GWh	67.113	60.738	
c GUL AHMED	GWh	69.794	68.993	
d CPPA-G	GWh	442.286	427.533	
e ANOUD POWER	GWh	5.037	3.912	
f INT IND (IIL)	GWh	5.507	5.134	
g FFBL	GWh	38.668	6.590	
h SNPC	GWh	62.136	63.194	
<b>TOTAL</b>	<b>GWh</b>	<b>729.081</b>	<b>654.798</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	377,948	215,914	
b TAPAL	Mill Rs.	827,023	888,814	
c GUL AHMED	Mill Rs.	924,429	1,053,982	
d CPPA-G	Mill Rs.	2,433,060	2,275,160	
e ANOUD POWER	Mill Rs.	55,418	45,016	
f INT IND (IIL)	Mill Rs.	32,410	30,221	
g FFBL	Mill Rs.	270,131	52,503	
h SNPC	Mill Rs.	245,347	250,795	
<b>TOTAL</b>	<b>Mill Rs.</b>	<b>5,165,764</b>	<b>4,812,404</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	9.807	11.544	
b TAPAL	Rs./kwh	12.323	14.633	
c GUL AHMED	Rs./kwh	13.245	15.277	
d CPPA-G	Rs./kwh	5.501	5.322	
e ANOUD POWER	Rs./kwh	11,001	11,507	
f INT IND (IIL)	Rs./kwh	5.885	5.887	
g FFBL	Rs./kwh	6.986	7.967	
h SNPC	Rs./kwh	3.949	3.969	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
<b>4a Cost of Fuel - Power Purchases</b>	a	Mill Rs.	5,165,764	4,812,404
<b>Units Sent out:</b>				
Units Sent Out - KE	GWh	1,114,242	913,522	
Units - Power Purchases	GWh	729,081	654,798	
<b>4b Total Units Sent Out</b>	b	GWh	<b>1,843,323</b>	<b>1,568,320</b>
<b>4c Cost per unit</b>	c = a/b	Rs./kwh	2.802	3.069
<b>4d Variation per unit (Cost of Fuel - Power Purchases)</b>		Rs./kwh	<b>0.266</b>	
<b>4e Variation amount (Cost of Fuel - Power Purchases)</b>		Mill Rs.		<b>417.313</b>

**K ELECTRIC LIMITED**

QUARTERLY ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL AND POWER PURCHASE COST INCLUDING O&M AND CAPACITY CHARGES	Quarter ended September 2018
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Sep-18

**Required adjustment in Tariff**

Quarterly Revision to reset price levels	Rs/kWh	1.091
Unrecovered Cost for current quarter	Rs/kWh	0.432
Reversal of unrecovered cost of previous quarter	Rs/kWh	0.215
Total Required adjustment in KE's Tariff	Rs/kWh	1.738
Total Required adjustment in KE's Tariff	Ps/kWh	173.825

**Quarterly Revision to reset price levels**

Units Sent Out	GWh	1,568.320
T&D Losses allowed	GWh	18.75%
Units billed	GWh	1,274.260

**Cost of Fuel - KE** Mill Rs 9,626.876

	Jun-18	Sep-18	Variation
Weighted Average Fuel cost per unit billed	6.927	7.555	0.628

	Sep-18
- Fuel Cost	4,812.404
- O&M and Capacity Cost	2,622.899
- Total Cost of Power Purchases	7,435.302

	Jun-18	Sep-18	Variation
- Fuel Cost	3.449	3.777	0.327
- O&M Cost and capacity cost	1.923	2.058	0.135
- Total Cost of Power Purchases	5.373	5.835	0.462

	Jun-18	Sep-18	Variation
- Cost of Fuel - KE	0.628		
- Cost of Power Purchases - Total	0.462		
- Total Cost Variation	1.091		

Note: Please note that the SoT attached with the MYT notification is based on updated terms and conditions including changes in definition of lifeline consumers and the assumption of conversion of eligible consumers to "A3" category along with enabling of Time of Use (ToU) metering for Residential and Commercial consumers etc. However, as the MYT has been notified on May 22, 2019, these changes will be effective from the date of notification. Accordingly, KE would like to request NEPRA to adjust the related impact while issuing determination of Quarterly SoTs.

**K ELECTRIC LIMITED**

QUARTERLY ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL AND POWER PURCHASE COST INCLUDING O&M AND CAPACITY CHARGES			Quarter ended September 2018				
ADJUSTMENT IN TARIFF DUE TO UNRECOVERED COST			Jun-18	Jul-18	Aug-18	Sep-18	QTR
			Reference				
Units Sent Out	GWh	a	1,828.522	1,637.406	1,568.320		
T&D Losses allowed		b	18.8%	18.8%	18.8%		
Units billed	GWh	c = a x (1-b)	1,485.674	1,330.392	1,274.260	4,090.327	
<b>a. O&amp;M and Capacity cost of Power purchases</b>							
O&M and Capacity cost of Power purchases	Mill Rs	d	3,021.232	3,059.463	2,622.899		
O&M and Capacity cost of power purchases (per unit billed)	Rs/kWh	e = d/c	1.923	2.034	2.300	2.058	
Increase or decrease in O&M and Capacity cost (over Reference)	Rs/kWh	f	0.110	0.376	0.135		
<b>O&amp;M and Capacity Cost of Power Purchases - Monthly variations Amount</b>	Mill Rs	g = f x c		163.704	500.603	172.003	<b>836.310</b>
<b>b. Unrecovered Cost of FCA due to non adjustment of T&amp;D losses</b>							
<b>i Monthly variation in Fuel Cost (FCA) - Per unit</b>							
Cost of Fuel - KE	Rs/kWh	h	0.475	0.286	0.510		
Cost of Fuel - Power Purchases	Rs/kWh	i	0.148	0.280	0.266		
Total	Rs/kWh	j = h + i	<b>0.623</b>	<b>0.566</b>	<b>0.776</b>		
<b>ii Monthly variation in Fuel Cost (FCA) - Amount</b>							
Cost of Fuel - KE	Mill Rs	k = h x a	867.866	468.443	800.429	<b>2,136.738</b>	
Cost of Fuel - Power Purchases	Mill Rs	l = i x a	271.388	458.309	417.313	<b>1,147.010</b>	
Total	Mill Rs	m = k + l	<b>1,139.254</b>	<b>926.752</b>	<b>1,217.741</b>	<b>3,283.748</b>	
<b>iii Unrecovered Cost of FCA due to non adjustment of T&amp;D losses</b>							
Cost of Fuel - KE	Mill Rs	n = k x b	162.725	87.833	150.080	400.638	
Cost of Fuel - Power Purchases	Mill Rs	o = l x b	50.885	85.933	78.246	215.064	
Total	Mill Rs	p = n + o	<b>213.610</b>	<b>173.766</b>	<b>228.327</b>	<b>615.703</b>	
<b>Summary of Unrecovered cost for the quarter</b>							
a. O&M and Capacity cost of Power purchases	Mill Rs						<b>836.310</b>
b. Unrecovered Cost of FCA due to non adjustment of T&D losses	Mill Rs						<b>615.703</b>
<b>Total Unrecovered cost for the quarter</b>	Mill Rs	<b>q</b>					<b>1,452.012</b>
<b>Units to be sold in next quarter at allowed T&amp;D losses</b>	GWh	<b>r</b>					<b>3,357.807</b>
<b>Unrecovered Cost per unit for current quarter</b>	Rs/kWh	<b>s = q / r</b>					<b>0.432</b>

Work Sheet- Power Purchase O&M and Capacity Cost

DESCRIPTION	Reference	Jun-18	Jul-18	Aug-18	Sep-18
<b>1 O&amp;M COST</b>					
a KANUPP	Mill Rs.	37.888	36.835	31.226	18.388
b TAPAL	Mill Rs.	74.079	81.549	59.267	73.445
c GUL AHMED	Mill Rs.	44.975	51.040	38.470	48.702
d CPPA-G	Mill Rs.	127.113	215.342	117.048	102.993
e ANOUD POWER	Mill Rs.	10.219	8.980	11.440	7.937
f INT IND (IIL)	Mill Rs.	9.178	8.975	9.574	8.550
g FFBL	Mill Rs.	20.641	21.789	21.408	3.561
h SNPC	Mill Rs.	44.417	49.013	48.272	47.604
<b>TOTAL</b>	Mill Rs.	<b>368.511</b>	<b>473.522</b>	<b>336.704</b>	<b>311.178</b>
<b>2 CAPACITY COST</b>					
a KANUPP	Mill Rs.				
b TAPAL	Mill Rs.	149.840	160.527	160.527	160.527
c GUL AHMED	Mill Rs.	137.445	148.562	148.562	148.562
d CPPA-G	Mill Rs.	1,762.324	1,750.461	1,930.021	1,726.910
e ANOUD POWER	Mill Rs.				
f INT IND (IIL)	Mill Rs.				
g FFBL	Mill Rs.	233.845	244.868	240.581	40.014
h SNPC	Mill Rs.	228.693	243.291	243.069	235.708
<b>TOTAL</b>	Mill Rs.	<b>2,512.146</b>	<b>2,547.709</b>	<b>2,722.759</b>	<b>2,311.720</b>
<b>3 TOTAL O&amp;M &amp; CAPACITY COST</b>					
a KANUPP	Mill Rs.	37.888	36.835	31.226	18.388
b TAPAL	Mill Rs.	223.919	242.077	219.794	233.972
c GUL AHMED	Mill Rs.	182.420	199.601	187.032	197.264
d CPPA-G	Mill Rs.	1,889.437	1,965.803	2,047.068	1,829.902
e ANOUD POWER	Mill Rs.	10.219	8.980	11.440	7.937
f INT IND (IIL)	Mill Rs.	9.178	8.975	9.574	8.550
g FFBL	Mill Rs.	254.486	266.657	261.989	43.574
h SNPC	Mill Rs.	273.110	292.304	291.340	283.312
<b>TOTAL</b>	Mill Rs.	<b>2,880.657</b>	<b>3,021.232</b>	<b>3,059.463</b>	<b>2,622.899</b>

GENERATION STATISTICS FOR THE MONTH OF SEP 2018

DESCRIPTION	BQPS (KWH)	BQPS II-560 MW (KWH)	SGTPS-II (KWH)	KTGTPS-II (KWH)	KCCPP (KWH)	KE (KWH)
UNITS GENERATED	493,872,330	263,274,812	57,701,796	38,850,749	126,467,500	980,167,187
AUXILIARY CONSUMPTION	9.4%	7.6%	3.2%	3.5%	7.2%	8.0%
UNITS SENT OUT	447,651,270	243,285,000	55,875,800	37,480,000	117,345,641	901,637,711

**K Electric Limited**

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

	DESCRIPTION	Unit	Jun-18	Aug-18
A)	Cost of fuel:		Reference	Current
	Cost of fuel - KE	Mill Rs.	10,374.153	9,683.702
	Cost of fuel - Power Purchases	Mill Rs.	5,165.764	5,047.008
	Total	Mill Rs.	<u>15,539.917</u>	<u>14,730.710</u>
B)	Units Sent Out			
	Units Sent Out - KE	GWh	1,114.242	957.038
	Units - Power purchases	GWh	729.081	680.368
	Total	GWh	<u>1,843.323</u>	<u>1,637.406</u>
C)	Cost per unit			
	Cost of fuel - KE	Rs./kWh	5.628	5.914
	Cost of fuel - Power Purchases	Rs./kWh	2.802	3.082
	Average	Rs./kWh	<u>8.430</u>	<u>8.996</u>
D)	Variation per unit			
	Cost of fuel - KE	Rs./kWh		0.286
	Cost of fuel - Power Purchases	Rs./kWh		0.280
	Total Fuel Cost Adjustment	Rs./kWh		<u>0.566</u>
E)	Total Fuel Cost Adjustment	Rs./kWh		<u>56.599</u>
F)	Variation amount			
	Cost of fuel - KE	Mill Rs.	468.443	
	Cost of fuel - Power Purchases	Mill Rs.	458.309	
	Total Fuel Cost Adjustment	Mill Rs.	<u>926.752</u>	
		e = d x b (total)		

**Work Sheet- Generation Fuel Cost Variation**

	DESCRIPTION	Jun-18		Aug-18		
		Reference	Current	Reference	Current	
<b>1 UNITS SENT OUT</b>						
<b>1a UNITS SENT OUT ON FURNACE OIL</b>						
i Bin Qasim - I						
Unit 1	GWh	69.192	42.234			
Unit 2	GWh	61.207	58.873			
Unit 3	GWh	57.143	52.532			
Unit 4	GWh	53.040	48.009			
Unit 5	GWh	50.500	32.476			
Unit 6	GWh	71.886	45.068			
Total units sent out on furnace oil - Bin Qasim - I	GWh	362.968	279.192			
<b>1b UNITS SENT OUT ON GAS</b>						
i Bin Qasim - I						
Unit 1	GWh	16.477	18.371			
Unit 2	GWh	26.189	19.434			
Unit 3	GWh	2.513	1.253			
Unit 4	GWh	6.617	6.185			
Unit 5	GWh	42.900	32.847			
Unit 6	GWh	20.327	20.779			
Total units sent out on gas - Bin Qasim - I	GWh	115.022	98.869			
ii Bin Qasim.II - 560 MW	GWh	241.666	206.292			
iii Korangi Town Gas Turbine II	GWh	40.803	31.403			
iv Site Gas Turbine II	GWh	44.060	41.159			
v Korangi CCPP	GWh	99.307	89.521			
Total units sent out on gas - KE	GWh	540.857	467.243			
<b>1c UNITS SENT OUT ON LNG</b>						
i Bin Qasim - I						
Unit 1	GWh	5.632	8.077			
Unit 2	GWh	8.952	8.544			
Unit 3	GWh	0.859	0.551			
Unit 4	GWh	2.262	2.719			
Unit 5	GWh	14.664	14.442			
Unit 6	GWh	6.948	9.136			
Total units sent out on LNG - Bin Qasim - I	GWh	39.317	43.469			
ii Bin Qasim.II - 560 MW	GWh	97.174	93.845			
iii Korangi Town Gas Turbine II	GWh	16.163	14.078			
iv Site Gas Turbine II	GWh	17.671	18.614			
v Korangi CCPP	GWh	40.091	40.597			
Total units sent out on LNG - KE	GWh	210.416	210.603			
Total units sent out KE	GWh	1,114.242	957.038			

**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	8,358	8,358		
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 CCPP	Btu/kWh	8,497	8,497		

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Jun-18		Aug-18	
	Reference	Current	Reference	Current
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351	40,351	
<b>4 FUEL PRICES</b>				
4a Fuel Price - Gas	Rs./MMBTU	400	400	
4b Fuel Price - Furnace Oil	Rs./Mton	60,212	67,640	
4c Fuel Price - Furnace Oil	Rs./MMBTU	1,492	1,676	
4d Fuel Price - LNG	Rs./MMBTU	1,443	1,616	
<b>5. COST OF FUEL</b>				
<b>5a Furnace oil</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	1,115.294	764.734	
Unit 2	Mill Rs.	972.707	1,051.030	
Unit 3	Mill Rs.	937.629	968.293	
Unit 4	Mill Rs.	862.626	877.115	
Unit 5	Mill Rs.	776.481	560.932	
Unit 6	Mill Rs.	1,099.396	774.273	
Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	5,764.132	4,996.376	
<b>5b Gas</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	71.195	79.379	
Unit 2	Mill Rs.	111.566	82.789	
Unit 3	Mill Rs.	11.051	5.512	
Unit 4	Mill Rs.	28.847	26.963	
Unit 5	Mill Rs.	176.815	135.383	
Unit 6	Mill Rs.	83.331	85.184	
Total Cost of Gas - Bin Qasim - I	Mill Rs.	482.805	415.209	
ii Bin Qasim II - 560 MW	Mill Rs.	807.980	689.712	
iii Korangi Town Gas Turbine II	Mill Rs.	142.614	109.759	
iv Site Gas Turbine II	Mill Rs.	154.140	143.990	
v Korangi CCP	Mill Rs.	337.524	304.265	
Total Cost of Gas - KE	Mill Rs.	1,925.063	1,662.935	
<b>5c LNG</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	87.764	140.995	
Unit 2	Mill Rs.	137.531	147.053	
Unit 3	Mill Rs.	13.623	9.791	
Unit 4	Mill Rs.	35.561	47.892	
Unit 5	Mill Rs.	217.965	240.472	
Unit 6	Mill Rs.	102.725	151.306	
Total Cost of LNG - Bin Qasim - I	Mill Rs.	595.169	737.508	
ii Bin Qasim II - 560 MW	Mill Rs.	1,171.682	1,267.586	
iii Korangi Town Gas Turbine II	Mill Rs.	203.740	198.782	
iv Site Gas Turbine II	Mill Rs.	222.948	263.077	
v Korangi CCP	Mill Rs.	491.418	557.438	
Total Cost of LNG - KE	Mill Rs.	2,684.958	3,024.392	
<b>Total cost of fuel - KE</b>	a	Mill Rs.	<u>10,374.153</u>	<u>9,683.702</u>
<b>6 Variation in Cost of Fuel - KE</b>				
6a Units Sent Out - KE		GWh	1,114.242	957.038
6b Units - Power Purchases		GWh	729.081	680.368
Total Units Sent Out	b	GWh	1,843.323	1,637.406
6c Cost per unit	c = a/b	Rs./kWh	5.628	5.914
6d Variation per unit (Cost of Fuel - KE)		Rs./kWh		0.286
6e Variation amount (Cost of Fuel - KE)		Mill Rs.		<u>468.443</u>

## Work Sheet- Power Purchase Cost Variation

DESCRIPTION	Jun-18		Aug-18	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	38.540	31.762	
b TAPAL	GWh	67.113	49.013	
c GUL AHMED	GWh	69.794	54.498	
d CPPA-G	GWh	442.286	430.006	
e ANOUD POWER	GWh	5.037	5.639	
f INT IND (IIL)	GWh	5.507	5.745	
g FFBL	GWh	38.668	39.622	
h SNPC	GWh	62.136	64.083	
<b>TOTAL</b>	<b>GWh</b>	<b>729.081</b>	<b>680.368</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	377.948	346.991	
b TAPAL	Mill Rs.	827.023	679.077	
c GUL AHMED	Mill Rs.	924.429	804.953	
d CPPA-G	Mill Rs.	2,433.060	2,545.034	
e ANOUD POWER	Mill Rs.	55.418	67.161	
f INT IND (IIL)	Mill Rs.	32.410	33.806	
g FFBL	Mill Rs.	270.131	315.672	
h SNPC	Mill Rs.	245.347	254.313	
<b>TOTAL</b>	<b>Mill Rs.</b>	<b>5,165.764</b>	<b>5,047.008</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	9.807	10.925	
b TAPAL	Rs./kwh	12.323	13.855	
c GUL AHMED	Rs./kwh	13.245	14.770	
d CPPA-G	Rs./kwh	5.501	5.919	
e ANOUD POWER	Rs./kwh	11.001	11.910	
f INT IND (IIL)	Rs./kwh	5.885	5.885	
g FFBL	Rs./kwh	6.986	7.967	
h SNPC	Rs./kwh	3.949	3.969	
<b>4 VARIATION IN COST OF FUEL -POWER PURCHASES</b>				
<b>4a Cost of Fuel - Power Purchases</b>	<b>a</b>	<b>Mill Rs.</b>	<b>5,165.764</b>	<b>5,047.008</b>
<b>Units Sent out:</b>				
<b>4b Total Units Sent Out</b>	<b>b</b>	<b>GWh</b>	<b>1,843.323</b>	<b>1,637.406</b>
<b>4c Cost per unit</b>	<b>c = a/b</b>	<b>Rs./kwh</b>	<b>2.802</b>	<b>3.082</b>
<b>4d Variation per unit (Cost of Fuel -Power Purchases)</b>		<b>Rs./kwh</b>		<b>0.280</b>
<b>4e Variation amount (Cost of Fuel - Power Purchases)</b>		<b>Mill Rs.</b>		<b>458.309</b>

K Electric Limited

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

	DESCRIPTION	Unit	Jun-18	Jul-18
			Reference	Current
A)	Cost of fuel:			
	Cost of fuel - KE	Mill Rs.	10,374.153	11,158.721
	Cost of fuel - Power Purchases	Mill Rs.	5,165.764	5,395.674
	Total	Mill Rs.	<u>15,539.917</u>	<u>16,554.396</u>
B)	Units Sent Out			
	Units Sent Out - KE	GWh	1,114.242	1,077.052
	Units - Power purchases	GWh	729.081	751.470
	Total	GWh	<u>1,843.323</u>	<u>1,828.522</u>
C)	Cost per unit			
	Cost of fuel - KE	Rs./kWh	5.628	6.103
	Cost of fuel - Power Purchases	Rs./kWh	2.802	2.951
	Average	Rs./kWh	<u>8.430</u>	<u>9.053</u>
D)	Variation per unit			
	Cost of fuel - KE	Rs./kWh		0.475
	Cost of fuel - Power Purchases	Rs./kWh		0.148
	Total Fuel Cost Adjustment	Rs./kWh		<u>0.623</u>
E)	Total Fuel Cost Adjustment	Ps/kWh		<u>62.305</u>
F)	Variation amount			
	Cost of fuel - KE	Mill Rs.	867.866	
	Cost of fuel - Power Purchases	Mill Rs.	271.388	
	Total Fuel Cost Adjustment	Mill Rs.	<u>1,139.254</u>	

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Jun-18		Jul-18	
	Reference	Current	Reference	Current
<b>1 UNITS SENT OUT</b>				
<b>1a UNITS SENT OUT ON FURNACE OIL</b>				
i Bin Qasim - I				
Unit 1	GWh	69.192	62.377	
Unit 2	GWh	61.207	64.004	
Unit 3	GWh	57.143	72.902	
Unit 4	GWh	53.040	55.399	
Unit 5	GWh	50.500	52.631	
Unit 6	GWh	71.886	65.511	
Total units sent out on furnace oil - Bin Qasim - I	GWh	362.968	372.824	
<b>1b UNITS SENT OUT ON GAS</b>				
i Bin Qasim - I				
Unit 1	GWh	16.477	17.785	
Unit 2	GWh	26.189	4.559	
Unit 3	GWh	2.513	0.328	
Unit 4	GWh	6.617	6.487	
Unit 5	GWh	42.900	30.272	
Unit 6	GWh	20.327	12.836	
Total units sent out on gas - Bin Qasim - I	GWh	115.022	72.267	
ii Bin Qasim II - 560 MW	GWh	241.666	243.132	
iii Korangi Town Gas Turbine II	GWh	40.803	29.932	
iv Site Gas Turbine II	GWh	44.060	38.684	
v Korangi CCPP	GWh	99.307	100.706	
Total units sent out on gas - KE	GWh	540.857	484.722	
<b>1c UNITS SENT OUT ON LNG</b>				
i Bin Qasim - I				
Unit 1	GWh	5.632	8.050	
Unit 2	GWh	8.952	2.063	
Unit 3	GWh	0.859	0.149	
Unit 4	GWh	2.262	2.937	
Unit 5	GWh	14.664	13.702	
Unit 6	GWh	6.948	5.810	
Total units sent out on LNG - Bin Qasim - I	GWh	39.317	32.711	
ii Bin Qasim II - 560 MW	GWh	97.174	110.106	
iii Korangi Town Gas Turbine II	GWh	16.163	13.563	
iv Site Gas Turbine II	GWh	17.671	17.519	
v Korangi CCPP	GWh	40.091	45.606	
Total units sent out on LNG - KE	GWh	210.416	219.506	
Total units sent out KE	GWh	1,114.242	1,077.052	
<b>2 HEAT RATE AT BUS BAR</b>				
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	8,358	8,358	
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 CCPP	Btu/kWh	8,497	8,497	

Work Sheet- Power Purchase Cost Variation

DESCRIPTION	Jun-18		Jul-18	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	38.540	37.468	
b TAPAL	GWh	67.113	67.441	
c GUL AHMED	GWh	69.794	72.304	
d CPPA-G	GWh	442.286	459.053	
e ANOUD POWER	GWh	5.037	4.426	
f INT IND (IIL)	GWh	5.507	5.384	
g FFBL	GWh	38.668	40.328	
h SNPC	GWh	62.136	65.065	
<b>TOTAL</b>	<b>GWh</b>	<b>729.081</b>	<b>751.470</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	377.948	409.513	
b TAPAL	Mill Rs.	827.023	894.193	
c GUL AHMED	Mill Rs.	924.429	1,021.060	
d CPPA-G	Mill Rs.	2,433.060	2,448.405	
e ANOUD POWER	Mill Rs.	55.418	50.794	
f INT IND (IIL)	Mill Rs.	32.410	31.683	
g FFBL	Mill Rs.	270.131	281.809	
h SNPC	Mill Rs.	245.347	258.218	
<b>TOTAL</b>	<b>Mill Rs.</b>	<b>5,165.764</b>	<b>5,395.674</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	9.807	10.930	
b TAPAL	Rs./kwh	12.323	13.259	
c GUL AHMED	Rs./kwh	13.245	14.122	
d CPPA-G	Rs./kwh	5.501	5.334	
e ANOUD POWER	Rs./kwh	11.001	11.475	
f INT IND (IIL)	Rs./kwh	5.885	5.884	
g FFBL	Rs./kwh	6.986	6.988	
h SNPC	Rs./kwh	3.949	3.969	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
<b>4a Cost of Fuel -Power Purchases</b>	<b>a Mill Rs.</b>	<b>5,165.764</b>	<b>5,395.674</b>	
Units Sent out:				
Units Sent Out -KE	GWh	1,114.242	1,077.052	
Units -Power Purchases	GWh	729.081	751.470	
<b>4b Total Units Sent Out</b>	<b>b GWh</b>	<b>1,843.323</b>	<b>1,828.522</b>	
<b>4c Cost per unit</b>	<b>c = a/b</b>	<b>2.802</b>	<b>2.951</b>	
<b>4d Variation per unit (Cost of Fuel -Power Purchases)</b>	<b>Rs./kwh</b>	<b>0.148</b>		
<b>4e Variation amount (Cost of Fuel -Power Purchases)</b>	<b>Mill Rs.</b>		<b>271.388</b>	

**Work Sheet- Generation Fuel Cost Variation**

	DESCRIPTION		Jun-18	Jul-18
			Reference	Current
<b>3</b>	<b><u>Calorific Value - Furnace Oil</u></b>	Btu/kg	40,351	40,351
<b>4</b>	<b>FUEL PRICES</b>			
4a	Fuel Price - Gas	Rs./MMBTU	400	400
4b	Fuel Price - Furnace Oil	Rs./Mton	60,212	63,727
4c	Fuel Price - Furnace Oil	Rs./MMBTU	1,492	1,579
4d	Fuel Price - LNG	Rs./MMBTU	1,443	1,655
<b>5</b>	<b>COST OF FUEL</b>			
<b>5a</b>	<b>Furnace oil</b>			
i	<u>Bin Qasim - I</u>			
	Unit 1	Mill Rs.	1,115.294	1,064.142
	Unit 2	Mill Rs.	972.707	1,076.534
	Unit 3	Mill Rs.	937.629	1,266.040
	Unit 4	Mill Rs.	862.626	953.590
	Unit 5	Mill Rs.	776.481	856.484
	Unit 6	Mill Rs.	1,099.396	1,060.397
	Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	5,764.132	6,277.186
<b>5b</b>	<b>Gas</b>			
i	<u>Bin Qasim - I</u>			
	Unit 1	Mill Rs.	71.195	76.847
	Unit 2	Mill Rs.	111.566	19.419
	Unit 3	Mill Rs.	11.051	1,444
	Unit 4	Mill Rs.	28.847	28.283
	Unit 5	Mill Rs.	176.815	124.768
	Unit 6	Mill Rs.	83.331	52.621
	Total Cost of Gas - Bin Qasim - I	Mill Rs.	482.805	303.382
ii	Bin Qasim II - 560 MW	Mill Rs.	807.980	812.884
iii	Korangi Town Gas Turbine II	Mill Rs.	142.614	104.620
iv	Site Gas Turbine II	Mill Rs.	154.140	135.334
v	Korangi CCPP	Mill Rs.	337.524	342.280
	Total Cost of Gas - KE	Mill Rs.	1,925.063	1,698.500
<b>5c</b>	<b>LNG</b>			
i	<u>Bin Qasim - I</u>			
	Unit 1	Mill Rs.	87.764	143.951
	Unit 2	Mill Rs.	137.531	36.376
	Unit 3	Mill Rs.	13.623	2.704
	Unit 4	Mill Rs.	35.561	52.980
	Unit 5	Mill Rs.	217.965	233.718
	Unit 6	Mill Rs.	102.725	98.570
	Total Cost of LNG - Bin Qasim - I	Mill Rs.	595.169	568.299
ii	Bin Qasim II - 560 MW	Mill Rs.	1,171.682	1,523.446
iii	Korangi Town Gas Turbine II	Mill Rs.	203.740	196.184
iv	Site Gas Turbine II	Mill Rs.	222.948	253.640
v	Korangi CCPP	Mill Rs.	491.418	641.465
	Total Cost of LNG - KE	Mill Rs.	2,684.958	3,183.035
	<b>Total cost of fuel - KE</b>	a	<b>Mill Rs.</b>	<b>10,374.153</b>
				<b>11,158.721</b>
<b>6</b>	<b>Variation in Cost of Fuel - KE</b>			
6a	Units Sent Out - KE	GWh	1,114.242	1,077.052
6b	Units - Power Purchases	GWh	729.081	751.470
	<b>Total Units Sent Out</b>	b	<b>GWh</b>	<b>1,843.323</b>
				<b>1,828.522</b>
6c	Cost per unit	c = a/b	Rs./kWh	5.628
6d	Variation per unit (Cost of Fuel - KE)		Rs./kWh	0.475
6e	Variation amount (Cost of Fuel - KE)		Mill Rs.	<b>867.866</b>

K Electric Limited

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

	DESCRIPTION	Unit	Mar-18	Jun-18
			Reference	Current
A)	Cost of fuel:			
	Cost of fuel - KE	Mill Rs.	5,463.162	10,374.153
	Cost of fuel - Power Purchases	Mill Rs.	5,116.247	5,165.764
	Total	Mill Rs.	<u>10,579.409</u>	<u>15,539.917</u>
B)	Units Sent Out			
	Units Sent Out - KE	GWh	690.833	1,114.242
	Units - Power purchases	GWh	731.271	729.081
	Total	GWh	<u>1,422.104</u>	<u>1,843.323</u>
C)	Cost per unit			
	Cost of fuel - KE	Rs./kWh	3.842	5.628
	Cost of fuel - Power Purchases	Rs./kWh	3.598	2.802
	Average	Rs./kWh	<u>7.439</u>	<u>8.430</u>
D)	Variation per unit			
	Cost of fuel - KE	Rs./kWh		1.786
	Cost of fuel - Power Purchases	Rs./kWh		(0.795)
	Total Fuel Cost Adjustment	Rs./kWh		<u>0.991</u>
E)	Total Fuel Cost Adjustment	Ps/kWh		<u>99.112</u>
F)	Variation amount			
	Cost of fuel - KE	Mill Rs.	3,292.836	
	Cost of fuel - Power Purchases	Mill Rs.	<u>(1,465.884)</u>	
	Total Fuel Cost Adjustment	Mill Rs.		<u>1,826.952</u>

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Mar-18	Jun-18
	Reference	Current
<b>1 UNITS SENT OUT</b>		
<b>1a UNITS SENT OUT ON FURNACE OIL</b>		
i Bin Qasim - I		
Unit 1	GWh	96.591
Unit 2	GWh	61.207
Unit 3	GWh	87.720
Unit 4	GWh	70.611
Unit 5	GWh	10.820
Unit 6	GWh	80.354
Total units sent out on furnace oil - Bin Qasim - I	GWh	346.096
		362.968
<b>1b UNITS SENT OUT ON GAS</b>		
i Bin Qasim - I		
Unit 1	GWh	1.783
Unit 2	GWh	26.189
Unit 3	GWh	2.513
Unit 4	GWh	11.826
Unit 5	GWh	3.302
Unit 6	GWh	13.203
Total units sent out on gas - Bin Qasim - I	GWh	30.115
		115.022
ii Bin Qasim II - 560 MW	GWh	240.124
iii Korangi Town Gas Turbine II	GWh	10.752
iv Site Gas Turbine II	GWh	45.912
v Korangi CCPP	GWh	17.834
Total units sent out on gas - KE	GWh	344.737
		540.857
<b>1c UNITS SENT OUT ON LNG</b>		
i Bin Qasim - I		
Unit 1	GWh	5.632
Unit 2	GWh	8.952
Unit 3	GWh	0.859
Unit 4	GWh	2.262
Unit 5	GWh	14.664
Unit 6	GWh	6.948
Total units sent out on LNG - Bin Qasim - I	GWh	-
		39.317
ii Bin Qasim II - 560 MW	GWh	-
iii Korangi Town Gas Turbine II	GWh	-
iv Site Gas Turbine II	GWh	-
v Korangi CCPP	GWh	-
Total units sent out on LNG - KE	GWh	-
		210.416
Total units sent out KE	GWh	690.833
		1,114.242
<b>2 HEAT RATE AT BUS BAR</b>		
i Bin Qasim - I		
Unit 1	Btu/kWh	10,802
Unit 2	Btu/kWh	10,650
Unit 3	Btu/kWh	10,996
Unit 4	Btu/kWh	10,899
Unit 5	Btu/kWh	10,304
Unit 6	Btu/kWh	10,249
ii Bin Qasim II - 560 MW	Btu/kWh	7,991
iii Korangi Town Gas Turbine II	Btu/kWh	8,738
iv Site Gas Turbine II	Btu/kWh	8,746
v Korangi CCPP	Btu/kWh	8,497
		8,358
		8,738
		8,746
		8,497

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Mar-18	Jun-18	
	Reference	Current	
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351	40,351
<b>4 FUEL PRICES</b>			
4a Fuel Price - Gas	Rs./MMBTU	400	400
4b Fuel Price - Furnace Oil	Rs./Mton	46,842	60,212
4c Fuel Price - Furnace Oil	Rs./MMBTU	1,161	1,492
4d Fuel Price - LNG	Rs./MMBTU	-	1,443
<b>5 COST OF FUEL</b>			
<b>5a Furnace oil</b>			
i Bin Qasim - I			
Unit 1	Mill Rs.	1,211.221	1,115.294
Unit 2	Mill Rs.	-	972.707
Unit 3	Mill Rs.	1,119.748	937.629
Unit 4	Mill Rs.	893.394	862.626
Unit 5	Mill Rs.	129.420	776.481
Unit 6	Mill Rs.	956.035	1,099.396
Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	4,309.818	5,764.132
<b>5b Gas</b>			
i Bin Qasim - I			
Unit 1	Mill Rs.	7.705	71.195
Unit 2	Mill Rs.	-	111.566
Unit 3	Mill Rs.	-	11.051
Unit 4	Mill Rs.	51.557	28.847
Unit 5	Mill Rs.	13.610	176.815
Unit 6	Mill Rs.	54.128	83.331
Total Cost of Gas - Bin Qasim - I	Mill Rs.	127.000	482.805
ii Bin Qasim II - 560 MW	Mill Rs.	767.530	807.980
iii Korangi Town Gas Turbine II	Mill Rs.	37.581	142.614
iv Site Gas Turbine II	Mill Rs.	160.618	154.140
v Korangi CCPP	Mill Rs.	60.614	337.524
Total Cost of Gas - KE	Mill Rs.	1,153.343	1,925.063
<b>5c LNG</b>			
i Bin Qasim - I			
Unit 1	Mill Rs.	-	87.764
Unit 2	Mill Rs.	-	137.531
Unit 3	Mill Rs.	-	13.623
Unit 4	Mill Rs.	-	35.561
Unit 5	Mill Rs.	-	217.965
Unit 6	Mill Rs.	-	102.725
Total Cost of LNG - Bin Qasim - I	Mill Rs.	-	595.169
ii Bin Qasim II - 560 MW	Mill Rs.	-	1,171.682
iii Korangi Town Gas Turbine II	Mill Rs.	-	203.740
iv Site Gas Turbine II	Mill Rs.	-	222.948
v Korangi CCPP	Mill Rs.	-	491.418
Total Cost of LNG - KE	Mill Rs.	-	2,684.958
<b>Total cost of fuel - KE</b>	a	Mill Rs.	<u>5,463.162</u> <u>10,374.153</u>
<b>6 Variation in Cost of Fuel - KE</b>			
6a Units Sent Out - KE	b	GWh	690.833    1,114.242
6b Units - Power Purchases		GWh	731.271    729.081
Total Units Sent Out	b	GWh	1,422.104    1,843.323
6c Cost per unit	c = a/b	Rs./kWh	3.842    5.628
6d Variation per unit (Cost of Fuel - KE)		Rs./kWh	1.786
6e Variation amount (Cost of Fuel - KE)		Mill Rs.	<u>3,292.836</u>

Work Sheet- Power Purchase Cost Variation

DESCRIPTION	Mar-18		Jun-18	
	Reference	Current		
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	26.272	38.540	
b TAPAL	GWh	71.093	67.113	
c GUL AHMED	GWh	72.742	69.794	
d CPPA-G	GWh	442.012	442.286	
e ANOUD POWER	GWh	3.889	5.037	
f INT IND (IIL)	GWh	5.360	5.507	
g FFBBL	GWh	39.993	38.668	
h SNPC	GWh	69.911	62.136	
<b>TOTAL</b>	GWh	<b>731.271</b>	<b>729.081</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	224.525	377.948	
b TAPAL	Mill Rs.	736.791	827.023	
c GUL AHMED	Mill Rs.	801.748	924.429	
d CPPA-G	Mill Rs.	2,746.397	2,433.060	
e ANOUD POWER	Mill Rs.	34.356	55.418	
f INT IND (IIL)	Mill Rs.	31.536	32.410	
g FFBBL	Mill Rs.	264.850	270.131	
h SNPC	Mill Rs.	276.044	245.347	
<b>TOTAL</b>	Mill Rs.	<b>5,116.247</b>	<b>5,165.764</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	8.546	9.807	
b TAPAL	Rs./kwh	10.364	12.323	
c GUL AHMED	Rs./kwh	11.022	13.245	
d CPPA-G	Rs./kwh	6.213	5.501	
e ANOUD POWER	Rs./kwh	8.834	11.001	
f INT IND (IIL)	Rs./kwh	5.884	5.885	
g FFBBL	Rs./kwh	6.622	6.986	
h SNPC	Rs./kwh	3.949	3.949	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
4a Cost of Fuel - Power Purchases	a Mill Rs.	<b>5,116.247</b>	<b>5,165.764</b>	
Units Sent out:				
Units Sent Out - KE	GWh	690.833	1,114.242	
Units - Power Purchases	GWh	731.271	729.081	
4b Total Units Sent Out	b GWh	<b>1,422.104</b>	<b>1,843.323</b>	
4c Cost per unit	c = a/b Rs./kwh	3.598	2.802	
4d Variation per unit (Cost of Fuel - Power Purchases)	Rs./kwh	(0.795)		
4e Variation amount (Cost of Fuel - Power Purchases)	Mill Rs.	<b>(1,465.884)</b>		

## K ELECTRIC LIMITED

QUARTERLY ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL AND POWER PURCHASE COST INCLUDING O&M AND CAPACITY CHARGES	Quarter ended June 2018
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Jun-18

Required adjustment in Tariff

Quarterly Revision to reset price levels	Rs/kWh	0.656
Unrecovered Cost for current quarter	Rs/kWh	(0.215)
<b>Other tariff Adjustments - Refer 'Tariff Variation' sheet</b>		
Annual CPI on O&M with T&D loss adjustment	Rs/kWh	0.035
T&D loss adjustment for Fuel cost	Rs/kWh	(0.091)
T&D loss adjustment for Power purchase cost	Rs/kWh	(0.045)
T&D loss adjustment for Power purchase O&M & Capacity cost	Rs/kWh	(0.025)
T&D loss adjustment of other components	Rs/kWh	(0.038)
Revision of additional write off	Rs/kWh	(0.195)
<b>Total</b>	Rs/kWh	(0.360)
Reversal of unrecovered cost of previous quarter	Rs/kWh	(0.324)
<b>Total Required adjustment in KE's Tariff</b>	Rs/kWh	<u>(0.243)</u>
<b>Total Required adjustment in KE's Tariff</b>	Ps/kWh	(24.318)

Quarterly Revision to reset price levels

Units Sent Out	GWh	Jun-18	1,843.323												
T&D Losses allowed	GWh		19.80%												
Units billed	GWh		1,478.345												
<b>Cost of Fuel - KE</b>		Mill Rs	10,374.153												
Weighted Average Fuel cost per unit billed		Rs/Kwh	<table border="1"> <tr> <th>Mar-18</th> <th>Jun-18</th> <th>Variation</th> </tr> <tr> <td>4.790</td> <td>7.017</td> <td>2.227</td> </tr> </table>	Mar-18	Jun-18	Variation	4.790	7.017	2.227						
Mar-18	Jun-18	Variation													
4.790	7.017	2.227													
<b>Cost of Power Purchases</b>			<table border="1"> <tr> <th>Jun-18</th> </tr> <tr> <td>5,165.764</td> </tr> <tr> <td>2,880.657</td> </tr> <tr> <td><b>8,046.422</b></td> </tr> </table>	Jun-18	5,165.764	2,880.657	<b>8,046.422</b>								
Jun-18															
5,165.764															
2,880.657															
<b>8,046.422</b>															
- Fuel Cost		Mill Rs	5,165.764												
- O&M and Capacity Cost		Mill Rs	2,880.657												
- Total Cost of Power Purchases		Mill Rs	<b>8,046.422</b>												
Weighted Average Cost of Power Purchases (cost per unit billed)			<table border="1"> <tr> <th>Mar-18</th> <th>Jun-18</th> <th>Variation</th> </tr> <tr> <td>4.486</td> <td>3.494</td> <td>(0.992)</td> </tr> <tr> <td>2.529</td> <td>1.949</td> <td>(0.580)</td> </tr> <tr> <td><b>7.015</b></td> <td><b>5.443</b></td> <td><b>(1.572)</b></td> </tr> </table>	Mar-18	Jun-18	Variation	4.486	3.494	(0.992)	2.529	1.949	(0.580)	<b>7.015</b>	<b>5.443</b>	<b>(1.572)</b>
Mar-18	Jun-18	Variation													
4.486	3.494	(0.992)													
2.529	1.949	(0.580)													
<b>7.015</b>	<b>5.443</b>	<b>(1.572)</b>													
<b>QUARTERLY INCREASE/DECREASE IN COST PER UNIT BILLED</b>															
- Cost of Fuel - KE		Rs/kWh	2.227												
- Cost of Power Purchases - Total		Rs/kWh	(1.572)												
<b>- Total Cost Variation</b>		Rs/kWh	<b>0.656</b>												

Note: Please note that the SoT attached with the MYT notification is based on updated terms and conditions including changes in definition of lifeline consumers and the assumption of conversion of eligible consumers to "A3" category along with enabling of Time of Use (ToU) metering for Residential and Commercial consumers etc. However, as the MYT has been notified on May 22, 2019, these changes will be effective from the date of notification. Accordingly, KE would like to request NEPRA to adjust the related impact while issuing determination of Quarterly SoTs.

## K ELECTRIC LIMITED

QUARTERLY ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL AND POWER PURCHASE COST INCLUDING O&M AND CAPACITY CHARGES				Quarter ended June 2018				
ADJUSTMENT IN TARIFF DUE TO UNRECOVERED COST				Mar-18	Apr-18	May-18	Jun-18	QTR Reference
Units Sent Out	GWh	a	1,555.703	1,848.735	1,843.323			
T&D Losses allowed		b	19.8%	19.8%	19.8%			
Units billed	GWh	c = a x (1-b)	1,247.673	1,482.686	1,478.345	4,208.704		
<b>a. O&amp;M and Capacity cost of Power purchases</b>								
O&M and Capacity cost of Power purchases	Mill Rs	d	2,667.619	3,277.598	2,880.657			
O&M and Capacity cost of power purchases (per unit billed)	Rs/kWh	e = d/c	2.529	2.138	2.211	1.949		
Increase or decrease in O&M and Capacity cost (over Reference)	Rs/kWh	f	(0.391)	(0.318)	(0.580)			
O&M and Capacity Cost of Power Purchases - Monthly variations Amount	Mill Rs	g = f x c						
			(487.404)	(471.707)	(857.671)	(1,816.782)		
<b>b. Unrecovered Cost of FCA due to non adjustment of T&amp;D losses</b>								
<b>i Monthly variation in Fuel Cost (FCA) - Per unit</b>								
Cost of Fuel - KE	Rs/kWh	h	0.661	1.546	1.786			
Cost of Fuel - Power Purchases	Rs/kWh	i	(0.290)	(0.361)	(0.795)			
Total	Rs/kWh	j = h + i	0.371	1.185	0.991			
<b>ii Monthly variation in Fuel Cost (FCA) - Amount</b>								
Cost of Fuel - KE	Mill Rs	k = h x a	1,028.194	2,857.929	3,292.836	7,178.959		
Cost of Fuel - Power Purchases	Mill Rs	l = i x a	(450.388)	(666.820)	(1,465.884)	(2,583.092)		
Total	Mill Rs	m = k + l	577.806	2,191.109	1,826.952	4,595.867		
<b>iii Unrecovered Cost of FCA due to non adjustment of T&amp;D losses</b>								
Cost of Fuel - KE	Mill Rs	n = k x b	203.582	565.870	651.981	1,421.434		
Cost of Fuel - Power Purchases	Mill Rs	o = l x b	(89.177)	(132.030)	(290.245)	(511.452)		
Total	Mill Rs	p = n + o	114.406	433.840	361.736	909.982		
<b>Summary of Unrecovered cost for the quarter</b>								
a. O&M and Capacity cost of Power purchases	Mill Rs							(1,816.782)
b. Unrecovered Cost of FCA due to non adjustment of T&D losses	Mill Rs							909.982
c. Other Adjustments								26.600
WWF/WPPF / Bonus to IPPs - Note 1	Mill Rs							(880.201)
<b>Total Unrecovered cost for the quarter</b>	Mill Rs	q						
Units to be sold in next quarter at allowed T&D losses	GWh	r						4,090.327
Unrecovered Cost per unit for current quarter	Rs/kWh	s = q / r						(0.215)

## Notes:

1 Tapal Energy Excess Energy Bonus Rs. 26.6 million.

Work Sheet- Power Purchase O&M and Capacity Cost

DESCRIPTION	Reference	Mar-18	Apr-18	May-18	Jun-18
<b>1 O&amp;M COST</b>					
a KANUPP	Mill Rs.	25.828	23.210	34.364	37.888
b TAPAL	Mill Rs.	78.472	83.372	95.701	74.079
c GUL AHMED	Mill Rs.	46.875	52.255	52.836	44.975
d CPPA-G	Mill Rs.	128.980	137.064	132.189	127.113
e ANOUD POWER	Mill Rs.	7.389	9.454	9.580	10.219
f INT IND (IIL)	Mill Rs.	8.936	9.171	9.706	9.178
g FFBL	Mill Rs.	21.148	20.906	21.413	20.641
h SNPC	Mill Rs.	48.540	42.408	47.731	44.417
<b>TOTAL</b>	Mill Rs.	<b>366.169</b>	<b>377.840</b>	<b>403.520</b>	<b>368.511</b>
<b>2 CAPACITY COST</b>					
a KANUPP	Mill Rs.	-	-	-	-
b TAPAL	Mill Rs.	146.404	137.353	147.020	149.840
c GUL AHMED	Mill Rs.	135.540	137.445	137.445	137.445
d CPPA-G	Mill Rs.	1,761.901	1,549.935	2,111.647	1,762.324
e ANOUD POWER	Mill Rs.	-	-	-	-
f INT IND (IIL)	Mill Rs.	-	-	-	-
g FFBL	Mill Rs.	241.354	236.844	242.595	233.845
h SNPC	Mill Rs.	232.712	228.201	235.370	228.693
<b>TOTAL</b>	Mill Rs.	<b>2,517.912</b>	<b>2,289.779</b>	<b>2,874.078</b>	<b>2,512.146</b>
<b>3 TOTAL O&amp;M &amp; CAPACITY COST</b>					
a KANUPP	Mill Rs.	25.828	23.210	34.364	37.888
b TAPAL	Mill Rs.	224.877	220.725	242.721	223.919
c GUL AHMED	Mill Rs.	182.415	189.700	190.280	182.420
d CPPA-G	Mill Rs.	1,890.881	1,686.999	2,243.836	1,889.437
e ANOUD POWER	Mill Rs.	7.389	9.454	9.580	10.219
f INT IND (IIL)	Mill Rs.	8.936	9.171	9.706	9.178
g FFBL	Mill Rs.	262.502	257.750	264.009	254.486
h SNPC	Mill Rs.	281.253	270.610	283.101	273.110
<b>TOTAL</b>	Mill Rs.	<b>2,884.081</b>	<b>2,667.619</b>	<b>3,277.598</b>	<b>2,880.657</b>

## Annual Tariff Variation - June 2018

Description	Tariff components		Quarterly adjustments			Tariff components	T&D loss adjustment factor	T&D loss adjustment for T&D losses	CPI-X	CPI Indexation	Tariff components adjusted for T&D losses and CPI
	July 2017	Sep 2017	Dec 2017	March 2018	June 2018						
	PKR / kWh	PKR / kWh	PKR / kWh	PKR / kWh	PKR / kWh						
a	b	c	d	e	f	g = sum a to f	i	h = t & k	j	k = l x j	l = t + k
Fuel and power purchase											
Fuel cost - own generation	4.567	(0.340)	(1.285)	1.848	2.227	7.017	0.987	(0.091)	6.927		6.927
Fuel purchase - fuel cost	2.242	(0.009)	0.991	0.763	3.494	0.987	(0.045)	(0.025)	3.449		3.449
Power purchase - O&M and capacity cost	1.335	0.118	0.807	0.069	1.949	0.987	(0.025)	(0.025)	1.923		1.923
Sub-total	8.844	(0.232)	0.533	2.660	6.656	12.450	(0.161)	(0.161)	12.269		12.269

Q&M											
Generation	0.436										
Transmission	0.217										
Distribution	1.161										
Sub-total	1.814										

Other components											
Bad debts	0.516										
Other income	(0.304)										
Depreciation	0.330										
Return component	1.428										
Base rate adjustment component	1.059										
Sub-total	4.364										

Reversal of Additional write off											
-Please refer working											
	0.111										
T&D loss adjustment factor for FY 2019											
Current T&D level FY 2019	C T&D										
Previous T&D level - FY 2018	P T&D										
T&D Adjustment factor	(1 - P T&D) / (1 - C T&D)										
	0.987										

## T&amp;D loss adjustment factor for FY 2019

Current CPI - May 2018	C T&D	18.75%
Reference CPI - May 2017	P T&D	19.80%
Increase in CPI (%)	(1 - P T&D) / (1 - C T&D)	0.987

## CPI

Current CPI - May 2018	275.4
Reference CPI - May 2017	265.33
Increase in CPI (%)	4.19%

Description	CPI	Fixed	X Factor - lower of 30% of CPI	CPI-X
Generation	4.19%	0.00%	0.00%	4.19%
Transmission	4.19%	2.00%	1.26%	2.93%
Distribution	4.19%	3.00%	1.26%	2.93%

K Electric Limited

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

DESCRIPTION	Unit	Mar-18	May-18
		Reference	Current
A) Cost of fuel:			
Cost of fuel - KE	Mill Rs.	5,463.162	9,960.038
Cost of fuel - Power Purchases	Mill Rs.	5,116.247	5,984.301
Total	Mill Rs.	<u>10,579.409</u>	<u>15,944.339</u>
B) Units Sent Out			
Units Sent Out - KE	GWh	690.833	1,062.856
Units - Power purchases	GWh	731.271	785.879
Total	GWh	<u>1,422.104</u>	<u>1,848.735</u>
C) Cost per unit			
Cost of fuel - KE	Rs./kWh	3.842	5.387
Cost of fuel - Power Purchases	Rs./kWh	<u>3.598</u>	<u>3.237</u>
Average	Rs./kWh	<u>7.439</u>	<u>8.624</u>
D) Variation per unit			
Cost of fuel - KE	Rs./kWh		1.546
Cost of fuel - Power Purchases	Rs./kWh		(0.361)
Total Fuel Cost Adjustment	Rs./kWh		<u>1.185</u>
E) Total Fuel Cost Adjustment	Ps/kWh		<u>118.519</u>
F) Variation amount			
Cost of fuel - KE	Mill Rs.	2,857.929	
Cost of fuel - Power Purchases	Mill Rs.	(666.820)	
Total Fuel Cost Adjustment	Mill Rs.	<u>2,191.109</u>	

**Work Sheet- Generation Fuel Cost Variation**

	DESCRIPTION	Mar-18		May-18		
		Reference	Current	Reference	Current	
<b>1 UNITS SENT OUT</b>						
<b>1a UNITS SENT OUT ON FURNACE OIL</b>						
i	<b>Bin Qasim - I</b>					
	Unit 1	GWh	96.591	84.974		
	Unit 2	GWh	-	42.211		
	Unit 3	GWh	87.720	57.187		
	Unit 4	GWh	70.611	70.234		
	Unit 5	GWh	10.820	88.924		
	Unit 6	GWh	80.354	64.416		
	Total units sent out on furnace oil - Bin Qasim - I	GWh	346.096	407.946		
<b>1b UNITS SENT OUT ON GAS</b>						
i	<b>Bin Qasim - I</b>					
	Unit 1	GWh	1.783	21.772		
	Unit 2	GWh	-	6.893		
	Unit 3	GWh	-	0.628		
	Unit 4	GWh	11.826	6.991		
	Unit 5	GWh	3.302	24.898		
	Unit 6	GWh	13.203	12.684		
	Total units sent out on gas - Bin Qasim - I	GWh	30.115	73.866		
ii	Bin Qasim II - 560 MW	GWh	240.124	191.367		
iii	Korangi Town Gas Turbine II	GWh	10.752	33.907		
iv	Site Gas Turbine II	GWh	45.912	38.923		
v	Korangi CCPP	GWh	17.834	98.337		
	Total units sent out on gas - KE	GWh	344.737	436.399		
<b>1c UNITS SENT OUT ON LNG</b>						
i	<b>Bin Qasim - I</b>					
	Unit 1	GWh	-	10.833		
	Unit 2	GWh	-	3.430		
	Unit 3	GWh	-	0.312		
	Unit 4	GWh	-	3.479		
	Unit 5	GWh	-	12.389		
	Unit 6	GWh	-	6.311		
	Total units sent out on LNG - Bin Qasim - I	GWh	-	36.755		
ii	Bin Qasim II - 560 MW	GWh	-	96.009		
iii	Korangi Town Gas Turbine II	GWh	-	16.958		
iv	Site Gas Turbine II	GWh	-	19.518		
v	Korangi CCPP	GWh	-	49.271		
	Total units sent out on LNG - KE	GWh	-	218.511		
<b>Total units sent out KE</b>						
		GWh	<u>690.833</u>	<u>1,062.856</u>		
<b>2 HEAT RATE AT BUS BAR</b>						
i	<b>Bin Qasim - I</b>					
	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	7,991	7,991		
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 CCPP	Btu/kWh	8,497	8,497		

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Mar-18		May-18	
	Reference	Current	Reference	Current
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351	40,351	40,351
<b>4 FUEL PRICES</b>				
4a Fuel Price - Gas	Rs./MMBTU	400	400	
4b Fuel Price - Furnace Oil	Rs./Mton	46,842	54,405	
4c Fuel Price - Furnace Oil	Rs./MMBTU	1,161	1,348	
4d Fuel Price - LNG	Rs./MMBTU	-	1,374	
<b>5 COST OF FUEL</b>				
<b>5a Furnace oil</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	1,211.221	1,237.593	
Unit 2	Mill Rs.	-	606.122	
Unit 3	Mill Rs.	1,119.748	847.850	
Unit 4	Mill Rs.	893.394	1,032.090	
Unit 5	Mill Rs.	129.420	1,235.409	
Unit 6	Mill Rs.	956.035	890.152	
Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	4,309.818	5,849.215	
ii Bin Qasim II - 560 MW	Mill Rs.	767.530	611.681	
iii Korangi Town Gas Turbine II	Mill Rs.	37.581	118.512	
iv Site Gas Turbine II	Mill Rs.	160.618	136.170	
v Korangi CCPP	Mill Rs.	60.614	334.227	
Total Cost of Gas - KE	Mill Rs.	1,153.343	1,511.883	
<b>5b Gas</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	7.705	94.073	
Unit 2	Mill Rs.	-	29.362	
Unit 3	Mill Rs.	-	2.762	
Unit 4	Mill Rs.	51.557	30.479	
Unit 5	Mill Rs.	13.610	102.620	
Unit 6	Mill Rs.	54.128	51.999	
Total Cost of Gas - Bin Qasim - I	Mill Rs.	127.000	311.294	
ii Bin Qasim II - 560 MW	Mill Rs.	767.530	611.681	
iii Korangi Town Gas Turbine II	Mill Rs.	37.581	118.512	
iv Site Gas Turbine II	Mill Rs.	160.618	136.170	
v Korangi CCPP	Mill Rs.	60.614	334.227	
Total Cost of Gas - KE	Mill Rs.	1,153.343	1,511.883	
<b>5c LNG</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	-	160.750	
Unit 2	Mill Rs.	-	50.174	
Unit 3	Mill Rs.	-	4.719	
Unit 4	Mill Rs.	-	52.082	
Unit 5	Mill Rs.	-	175.356	
Unit 6	Mill Rs.	-	88.856	
Total Cost of LNG - Bin Qasim - I	Mill Rs.	-	531.936	
ii Bin Qasim II - 560 MW	Mill Rs.	-	1,053.879	
iii Korangi Town Gas Turbine II	Mill Rs.	-	203.552	
iv Site Gas Turbine II	Mill Rs.	-	234.485	
v Korangi CCPP	Mill Rs.	-	575.088	
Total Cost of LNG - KE	Mill Rs.	-	2,598.940	
Total cost of fuel - KE	a	Mill Rs.	5,463.162	9,960.038
<b>6 Variation in Cost of Fuel - KE</b>				
6a Units Sent Out - KE		GWh	690.833	1,062.856
6b Units - Power Purchases		GWh	731.271	785.879
Total Units Sent Out	b	GWh	1,422.104	1,848.735
6c Cost per unit	c = a/b	Rs./kWh	3.842	5.387
6d Variation per unit (Cost of Fuel - KE)		Rs./kWh		1.546
6e Variation amount (Cost of Fuel - KE)		Mill Rs.		2,857.929

**Work Sheet- Power Purchase Cost Variation**

DESCRIPTION	Mar-18		May-18	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	26.272	34.955	
b TAPAL	GWh	71.093	86.701	
c GUL AHMED	GWh	72.742	81.992	
d CPPA-G	GWh	442.012	464.800	
e ANOUD POWER	GWh	3.889	4.722	
f INT IND (IIL)	GWh	5.360	5.823	
g FFBBL	GWh	39.993	40.115	
h SNPC	GWh	69.911	66.772	
<b>TOTAL</b>	GWh	<b>731.271</b>	<b>785.879</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	224.525	344.639	
b TAPAL	Mill Rs.	736.791	966.255	
c GUL AHMED	Mill Rs.	801.748	1,024.013	
d CPPA-G	Mill Rs.	2,746.397	3,026.778	
e ANOUD POWER	Mill Rs.	34.356	48.055	
f INT IND (IIL)	Mill Rs.	31.536	34.262	
g FFBBL	Mill Rs.	264.850	276.645	
h SNPC	Mill Rs.	276.044	263.653	
<b>TOTAL</b>	Mill Rs.	<b>5,116.247</b>	<b>5,984.301</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	8.546	9.860	
b TAPAL	Rs./kwh	10.364	11.145	
c GUL AHMED	Rs./kwh	11.022	12.489	
d CPPA-G	Rs./kwh	6.213	6.512	
e ANOUD POWER	Rs./kwh	8.834	10.177	
f INT IND (IIL)	Rs./kwh	5.884	5.884	
g FFBBL	Rs./kwh	6.622	6.896	
h SNPC	Rs./kwh	3.949	3.949	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
<b>4a Cost of Fuel - Power Purchases</b>	a	Mill Rs.	<b>5,116.247</b>	<b>5,984.301</b>
Units Sent out:				
Units Sent Out - KE	GWh	690.833	1,062.856	
Units - Power Purchases	GWh	731.271	785.879	
<b>4b Total Units Sent Out</b>	b	GWh	<b>1,422.104</b>	<b>1,848.735</b>
<b>4c Cost per unit</b>	c = a/b	Rs./kwh	<b>3.598</b>	<b>3.237</b>
<b>4d Variation per unit (Cost of Fuel - Power Purchases)</b>		Rs./kwh		(0.361)
<b>4e Variation amount (Cost of Fuel - Power Purchases)</b>		Mill Rs.		<b>(666.820)</b>

K Electric Limited

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

	DESCRIPTION	Unit	Mar-18	Apr-18
			Reference	Current
A)	Cost of fuel:			
	Cost of fuel - KE	Mill Rs.	5,463.162	7,004.587
	Cost of fuel - Power Purchases	Mill Rs.	5,116.247	5,146.501
	Total	Mill Rs.	<u>10,579.409</u>	<u>12,151.088</u>
B)	Units Sent Out			
	Units Sent Out - KE	GWh	690.833	821.186
	Units - Power purchases	GWh	731.271	734.517
	Total	GWh	<u>1,422.104</u>	<u>1,555.703</u>
C)	Cost per unit			
	Cost of fuel - KE	Rs./kWh	3.842	4.503
	Cost of fuel - Power Purchases	Rs./kWh	3.598	3.308
	Average	Rs./kWh	<u>7.439</u>	<u>7.811</u>
D)	Variation per unit			
	Cost of fuel - KE	Rs./kWh		0.661
	Cost of fuel - Power Purchases	Rs./kWh		(0.290)
	Total Fuel Cost Adjustment	Rs./kWh		<u>0.371</u>
E)	Total Fuel Cost Adjustment	Ps/kWh		<u>37.141</u>
F)	Variation amount			
	Cost of fuel - KE	Mill Rs.	1,028.194	
	Cost of fuel - Power Purchases	Mill Rs.	(450.388)	
	Total Fuel Cost Adjustment	Mill Rs.	<u>577.806</u>	

**Work Sheet- Generation Fuel Cost Variation**

	DESCRIPTION	Mar-18	Apr-18	
		Reference	Current	
<b>1 UNITS SENT OUT</b>				
<b>1a UNITS SENT OUT ON FURNACE OIL</b>				
i Bin Qasim - I				
Unit 1	GWh	96.591	73.045	
Unit 2	GWh			
Unit 3	GWh	87.720	92.280	
Unit 4	GWh	70.611	79.600	
Unit 5	GWh	10.820	95.888	
Unit 6	GWh	80.354	75.951	
Total units sent out on furnace oil - Bin Qasim - I	GWh	346.096	416.765	
<b>1b UNITS SENT OUT ON GAS</b>				
i Bin Qasim - I				
Unit 1	GWh	1.783	7.065	
Unit 2	GWh			
Unit 3	GWh	-	0.012	
Unit 4	GWh	11.826	9.725	
Unit 5	GWh	3.302	12.684	
Unit 6	GWh	13.203	9.262	
Total units sent out on gas - Bin Qasim - I	GWh	30.115	38.748	
ii Bin Qasim II - 560 MW	GWh	240.124	242.142	
iii Korangi Town Gas Turbine II	GWh	10.752	14.312	
iv Site Gas Turbine II	GWh	45.912	24.785	
v Korangi CCPP	GWh	17.834	46.951	
Total units sent out on gas - KE	GWh	344.737	366.938	
<b>1c UNITS SENT OUT ON LNG</b>				
i Bin Qasim - I				
Unit 1	GWh	0.790		
Unit 2	GWh	-		
Unit 3	GWh	-	0.001	
Unit 4	GWh	-	1.088	
Unit 5	GWh	-	1.419	
Unit 6	GWh	-	1.036	
Total units sent out on LNG - Bin Qasim - I	GWh	-	4.334	
ii Bin Qasim II - 560 MW	GWh	-	20.174	
iii Korangi Town Gas Turbine II	GWh	-	2.422	
iv Site Gas Turbine II	GWh	-	3.165	
v Korangi CCPP	GWh	-	7.389	
Total units sent out on LNG - KE	GWh	-	37.483	
Total units sent out KE	GWh	690.833	821.186	
<b>2 HEAT RATE AT BUS BAR</b>				
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	7,991	7,991	
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 CCPP	Btu/kWh	8,497	8,497	

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Mar-18	Apr-18	
	Reference	Current	
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351	
<b>4 FUEL PRICES</b>			
4a Fuel Price - Gas	Rs./MMBTU	400	
4b Fuel Price - Furnace Oil	Rs./Mton	46,842	
4c Fuel Price - Furnace Oil	Rs./MMBTU	1,161	
4d Fuel Price - LNG	Rs./MMBTU	1,329	
<b>5 COST OF FUEL</b>			
<b>5a Furnace oil</b>			
i Bin Qasim - I			
Unit 1	Mill Rs.	1,211.221	
Unit 2	Mill Rs.	-	
Unit 3	Mill Rs.	1,119.748	
Unit 4	Mill Rs.	893.394	
Unit 5	Mill Rs.	129.420	
Unit 6	Mill Rs.	956.035	
Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	4,309.818	
		950.862	
		1,222.826	
		1,045.493	
		1,190.662	
		938.075	
		5,347.919	
<b>5b Gas</b>			
i Bin Qasim - I			
Unit 1	Mill Rs.	7.705	
Unit 2	Mill Rs.	-	
Unit 3	Mill Rs.	-	
Unit 4	Mill Rs.	0.055	
Unit 5	Mill Rs.	51.557	
Unit 6	Mill Rs.	42.395	
Total Cost of Gas - Bin Qasim - I	Mill Rs.	13.610	
		52.280	
		37.972	
		127.000	
		163.227	
ii Bin Qasim II - 560 MW	Mill Rs.	767.530	
iii Korangi Town Gas Turbine II	Mill Rs.	37.581	
iv Site Gas Turbine II	Mill Rs.	160.618	
v Korangi CCPP	Mill Rs.	86.707	
		60.614	
		159.577	
<b>Total Cost of Gas - KE</b>	Mill Rs.	1,153.343	
		1,233.512	
<b>5c LNG</b>			
i Bin Qasim - I			
Unit 1	Mill Rs.	-	
Unit 2	Mill Rs.	-	
Unit 3	Mill Rs.	-	
Unit 4	Mill Rs.	0.020	
Unit 5	Mill Rs.	15.752	
Unit 6	Mill Rs.	19.424	
Total Cost of LNG - Bin Qasim - I	Mill Rs.	14.108	
		60.645	
ii Bin Qasim II - 560 MW	Mill Rs.	-	
iii Korangi Town Gas Turbine II	Mill Rs.	214.196	
iv Site Gas Turbine II	Mill Rs.	28.115	
v Korangi CCPP	Mill Rs.	36.775	
		83.426	
<b>Total Cost of LNG - KE</b>	Mill Rs.	-	
		423.157	
<b>Total cost of fuel - KE</b>	a	Mill Rs.	
		<u>5,463.162</u>	
		<u>7,004.587</u>	
<b>6 Variation in Cost of Fuel - KE</b>			
6a Units Sent Out - KE	GWh	690.833	
6b Units - Power Purchases	GWh	731.271	
Total Units Sent Out	b GWh	1,422.104	
		821.186	
		734.517	
		1,555.703	
6c Cost per unit	c = a/b	Rs./kWh	3.842
6d Variation per unit (Cost of Fuel - KE)		Rs./kWh	4.503
6e Variation amount (Cost of Fuel - KE)		Mill Rs.	<u>0.661</u>
			<u>1,028.194</u>

**Work Sheet- Power Purchase Cost Variation**

DESCRIPTION	Mar-18		Apr-18	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	26.272	23.609	
b TAPAL	GWh	71.093	75.532	
c GUL AHMED	GWh	72.742	81.091	
d CPPA-G	GWh	442.012	445.317	
e ANOUD POWER	GWh	3.889	4.976	
f INT IND (IIL)	GWh	5.360	5.501	
g FFBL	GWh	39.993	39.164	
h SNPC	GWh	69.911	59.328	
<b>TOTAL</b>	GWh	<b>731.271</b>	<b>734.517</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	224.525	212.115	
b TAPAL	Mill Rs.	736.791	777.552	
c GUL AHMED	Mill Rs.	801.748	897.776	
d CPPA-G	Mill Rs.	2,746.397	2,686.553	
e ANOUD POWER	Mill Rs.	34.356	46.523	
f INT IND (IIL)	Mill Rs.	31.536	32.369	
g FFBL	Mill Rs.	264.850	259.360	
h SNPC	Mill Rs.	276.044	234.253	
<b>TOTAL</b>	Mill Rs.	<b>5,116.247</b>	<b>5,146.501</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	8.546	8.985	
b TAPAL	Rs./kwh	10.364	10.294	
c GUL AHMED	Rs./kwh	11.022	11.071	
d CPPA-G	Rs./kwh	6.213	6.033	
e ANOUD POWER	Rs./kwh	8.834	9.350	
f INT IND (IIL)	Rs./kwh	5.884	5.884	
g FFBL	Rs./kwh	6.622	6.622	
h SNPC	Rs./kwh	3.949	3.948	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
<b>4a Cost of Fuel - Power Purchases</b>	a Mill Rs.	<b>5,116.247</b>	<b>5,146.501</b>	
<b>Units Sent out:</b>				
Units Sent Out - KE	GWh	690.833	821.186	
Units - Power Purchases	GWh	<b>731.271</b>	<b>734.517</b>	
<b>4b Total Units Sent Out</b>	b GWh	<b>1,422.104</b>	<b>1,555.703</b>	
<b>4c Cost per unit</b>	c = a/b Rs./kwh	3.598	3.308	
<b>4d Variation per unit (Cost of Fuel - Power Purchases)</b>	Rs./kwh	(0.290)		
<b>4e Variation amount (Cost of Fuel - Power Purchases)</b>	Mill Rs.	<b>(450.388)</b>		

K Electric Limited

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

	DESCRIPTION	Unit	Dec-17	Mar-18
			Reference	Current
A)	Cost of fuel:			
	Cost of fuel - KE	Mill Rs.	2,363.016	5,463.162
	Cost of fuel - Power Purchases	Mill Rs.	2,990.312	5,116.247
	Total	Mill Rs.	<u><u>5,353.328</u></u>	<u><u>10,579.409</u></u>
B)	Units Sent Out			
	Units Sent Out - KE	GWh	476.629	690.833
	Units - Power purchases	GWh	524.794	731.271
	Total	GWh	<u><u>1,001.423</u></u>	<u><u>1,422.104</u></u>
C)	Cost per unit			
	Cost of fuel - KE	Rs./kWh	2.360	3.842
	Cost of fuel - Power Purchases	Rs./kWh	2.986	3.598
	Average	Rs./kWh	<u><u>5.346</u></u>	<u><u>7.439</u></u>
D)	Variation per unit			
	Cost of fuel - KE	Rs./kWh		1.482
	Cost of fuel - Power Purchases	Rs./kWh		0.612
	Total Fuel Cost Adjustment	Rs./kWh		<u><u>2.094</u></u>
E)	Total Fuel Cost Adjustment	Ps/kWh		<u><u>209.354</u></u>
F)	Variation amount			
	Cost of fuel - KE	Mill Rs.	2,107.480	
	Cost of fuel - Power Purchases	Mill Rs.	869.753	
	Total Fuel Cost Adjustment	Mill Rs.	<u><u>2,977.233</u></u>	

**Work Sheet- Generation Fuel Cost Variation**

	DESCRIPTION	Dec-17		Mar-18		
		Reference	Current	Reference	Current	
<b>1 UNITS SENT OUT</b>						
<b>1a UNITS SENT OUT ON FURNACE OIL</b>						
i Bin Qasim - I						
Unit 1	GWh	38.171	96.591			
Unit 2	GWh	-	-			
Unit 3	GWh	-	87.720			
Unit 4	GWh	3.746	70.611			
Unit 5	GWh	-	10.820			
Unit 6	GWh	50.909	80.354			
Total units sent out on furnace oil - Bin Qasim - I	GWh	92.826	346.096			
<b>1b UNITS SENT OUT ON GAS</b>						
i Bin Qasim - I						
Unit 1	GWh	14.376	1.783			
Unit 2	GWh	-	-			
Unit 3	GWh	-	-			
Unit 4	GWh	1.840	11.826			
Unit 5	GWh	-	3.302			
Unit 6	GWh	34.510	13.203			
Total units sent out on gas - Bin Qasim - I	GWh	50.726	30.115			
ii Bin Qasim II - 560 MW	GWh	276.295	240.124			
iii Korangi Town Gas Turbine II	GWh	8.964	10.752			
iv Site Gas Turbine II	GWh	11.286	45.912			
v Korangi CCPP	GWh	36.531	17.834			
Total units sent out on gas - KE	GWh	383.802	344.737			
Total units sent out KE	GWh	476.629	690.833			
<b>2 HEAT RATE AT BUS BAR</b>						
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	7,991	7,991			
iii Korangi Town Gas Turbine II	Btu/kWh	18,738	18,738			
iv Site Gas Turbine II	Btu/kWh	8,746	8,746			
v Korangi CCPP	Btu/kWh	8,497	8,497			

**Work Sheet- Generation Fuel Cost Variation**

	DESCRIPTION		Dec-17	Mar-18
			Reference	Current
<b>3</b>	<b><u>Calorific Value - Furnace Oil</u></b>	Btu/kg	40,351	40,351
<b>4</b>	<b>FUEL PRICES</b>			
4a	Fuel Price - Gas	Rs./MMBTU	400	400
4b	Fuel Price - Furnace Oil	Rs./Mton	44,422	46,842
4c	Fuel Price - Furnace Oil	Rs./MMBTU	1,101	1,161
<b>5</b>	<b>COST OF FUEL</b>			
5a	<u>Furnace oil</u>			
i	<u>Bin Qasim - I</u>			
	Unit 1	Mill Rs.	453.923	1,211.221
	Unit 2	Mill Rs.	-	-
	Unit 3	Mill Rs.	-	1,119.748
	Unit 4	Mill Rs.	44,946	893.394
	Unit 5	Mill Rs.	-	129.420
	Unit 6	Mill Rs.	574,410	956.035
	Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	1,073.279	4,309.818
5b	<u>Gas</u>			
i	<u>Bin Qasim - I</u>			
	Unit 1	Mill Rs.	62.116	7.705
	Unit 2	Mill Rs.	-	-
	Unit 3	Mill Rs.	-	-
	Unit 4	Mill Rs.	8,024	51.557
	Unit 5	Mill Rs.	-	13.610
	Unit 6	Mill Rs.	141,476	54.128
	Total Cost of Gas - Bin Qasim - I	Mill Rs.	211.616	127.000
ii	Bin Qasim II - 560 MW	Mill Rs.	883.146	767.530
iii	Korangi Town Gas Turbine II	Mill Rs.	31,332	37.581
iv	Site Gas Turbine II	Mill Rs.	39,482	160.618
v	Korangi CCPP	Mill Rs.	124,161	60.614
	Total Cost of Gas - KE	Mill Rs.	1,289.737	1,153.343
	Total cost of fuel - KE	a	Mill Rs.	<u>2,363.016</u> <u>5,463.162</u>
<b>6</b>	<b>Variation in Cost of Fuel - KE</b>			
6a	Units Sent Out - KE	GWh	476.629	690.833
6b	Units - Power Purchases	GWh	524.794	731.271
	Total Units Sent Out	GWh	1,001.423	1,422.104
6c	Cost per unit	c = a/b	Rs./kWh	2.360    3.842
6d	Variation per unit (Cost of Fuel - KE)		Rs./kWh	1.482
6e	Variation amount (Cost of Fuel - KE)		Mill Rs.	<u>2,107.480</u>

Work Sheet- Power Purchase Cost Variation

DESCRIPTION		Dec-17	Mar-18
	Reference	Current	
<b>1 POWER PURCHASES</b>			
a KANUPP	GWh	21.345	26.272
b TAPAL	GWh	30.676	71.093
c GUL AHMED	GWh	29.776	72.742
d CPPA-G	GWh	387.402	442.012
e ANOUD POWER	GWh	3.441	3.889
f INT IND (IIL)	GWh	5.432	5.360
g FFBL	GWh	36.605	39.993
h SNPC	GWh	10.118	69.911
<b>TOTAL</b>	GWh	<b>524.794</b>	<b>731.271</b>
<b>2 COST OF POWER PURCHASES - FUEL COST</b>			
a KANUPP	Mill Rs.	112.486	224.525
b TAPAL	Mill Rs.	284.309	736.791
c GUL AHMED	Mill Rs.	282.917	801.748
d CPPA-G	Mill Rs.	1,983.227	2,746.397
e ANOUD POWER	Mill Rs.	27.802	34.356
f INT IND (IIL)	Mill Rs.	31.960	31.536
g FFBL	Mill Rs.	227.694	264.850
h SNPC	Mill Rs.	39.917	276.044
<b>TOTAL</b>	Mill Rs.	<b>2,990.312</b>	<b>5,116.247</b>
<b>3 FUEL COST / UNIT</b>			
a KANUPP	Rs./kwh	5.270	8.546
b TAPAL	Rs./kwh	9.268	10.364
c GUL AHMED	Rs./kwh	9.502	11.022
d CPPA-G	Rs./kwh	5.119	6.213
e ANOUD POWER	Rs./kwh	8.080	8.834
f INT IND (IIL)	Rs./kwh	5.884	5.884
g FFBL	Rs./kwh	6.220	6.622
h SNPC	Rs./kwh	3.945	3.949
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>			
<b>4a Cost of Fuel - Power Purchases</b>	a Mill Rs.	<b>2,990.312</b>	<b>5,116.247</b>
<b>Units Sent out:</b>			
Units Sent Out - KE	GWh	476.629	690.833
Units - Power Purchases	GWh	524.794	731.271
<b>4b Total Units Sent Out</b>	b GWh	<b>1,001.423</b>	<b>1,422.104</b>
<b>4c Cost per unit</b>	c = a/b Rs./kwh	2.986	3.598
<b>4d Variation per unit (Cost of Fuel - Power Purchases)</b>	Rs./kwh	0.612	
<b>4e Variation amount (Cost of Fuel - Power Purchases)</b>	Mill Rs.	<b>869.753</b>	

## K ELECTRIC LIMITED

QUARTERLY ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL AND POWER PURCHASE COST INCLUDING O&M AND CAPACITY CHARGES	Quarter ended March 2018
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Required adjustment in Tariff

	Mar-18
Quarterly Revision to reset price levels	2.680
Unrecovered Cost for current quarter	0.324
Reversal of unrecovered cost of previous quarter	(0.350)
 Total Required adjustment in KE's Tariff	 <u>2.653</u>
 Total Required adjustment in KE's Tariff	 <b>265.317</b>

Quarterly Revision to reset price levels

Units Sent Out	GWh	1,422.104												
T&D Losses allowed	GWh	19.80%												
Units billed	GWh	1,140.528												
 Cost of Fuel - KE	Mill Rs	 5,463.162												
 Weighted Average Fuel cost per unit billed	Rs/Kwh	 <table border="1"><tr><th>Dec-17</th><th>Mar-18</th><th>Variation</th></tr><tr><td>2.942</td><td>4.790</td><td>1.848</td></tr></table>	Dec-17	Mar-18	Variation	2.942	4.790	1.848						
Dec-17	Mar-18	Variation												
2.942	4.790	1.848												
 <b>Cost of Power Purchases</b>		 <table border="1"><tr><th>Mar-18</th></tr><tr><td>5,116.247</td></tr><tr><td>2,884.081</td></tr><tr><td><b>8,000.328</b></td></tr></table>	Mar-18	5,116.247	2,884.081	<b>8,000.328</b>								
Mar-18														
5,116.247														
2,884.081														
<b>8,000.328</b>														
- Fuel Cost	Mill Rs													
- O&M and Capacity Cost	Mill Rs													
- Total Cost of Power Purchases	Mill Rs													
 Weighted Average Cost of Power Purchases (cost per unit billed)		 <table border="1"><tr><th>Dec-17</th><th>Mar-18</th><th>Variation</th></tr><tr><td>3.723</td><td>4.486</td><td>0.763</td></tr><tr><td>2.459</td><td>2.529</td><td>0.069</td></tr><tr><td><b>6.183</b></td><td><b>7.015</b></td><td><b>0.832</b></td></tr></table>	Dec-17	Mar-18	Variation	3.723	4.486	0.763	2.459	2.529	0.069	<b>6.183</b>	<b>7.015</b>	<b>0.832</b>
Dec-17	Mar-18	Variation												
3.723	4.486	0.763												
2.459	2.529	0.069												
<b>6.183</b>	<b>7.015</b>	<b>0.832</b>												
 <b>QUARTERLY INCREASE/DECREASE IN COST PER UNIT BILLED</b>		 <table border="1"><tr><th>1.848</th></tr><tr><td>0.832</td></tr><tr><td><b>2.680</b></td></tr></table>	1.848	0.832	<b>2.680</b>									
1.848														
0.832														
<b>2.680</b>														
- Cost of Fuel - KE	Rs/kWh													
- Cost of Power Purchases - Total	Rs/kWh													
- Total Cost Variation	Rs/kWh													

**Note:** Please note that the SoT attached with the MYT notification is based on updated terms and conditions including changes in definition of lifeline consumers and the assumption of conversion of eligible consumers to "A3" category along with enabling of Time of Use (ToU) metering for Residential and Commercial consumers etc. However, as the MYT has been notified on May 22, 2019, these changes will be effective from the date of notification. Accordingly, KE would like to request NEPRA to adjust the related impact while issuing determination of Quarterly SoTs.

## K ELECTRIC LIMITED

QUARTERLY ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL AND POWER PURCHASE COST INCLUDING O&M AND CAPACITY CHARGES			Quarter ended March 2018				
ADJUSTMENT IN TARIFF DUE TO UNRECOVERED COST			Dec-17	Jan-18	Feb-18	Mar-18	QTR
			Reference				
Units Sent Out	GWh	a	1,046.310	1,060.075	1,422.104		
T&D Losses allowed		b	19.8%	19.8%	19.8%		
Units billed	GWh	c = a x (1-b)	839.141	850.180	1,140.528	2,829.849	
<b>a. O&amp;M and Capacity cost of Power purchases</b>							
O&M and Capacity cost of Power purchases	Mill Rs	d	2,090.482	2,315.842	2,884.081		
O&M and Capacity cost of power purchases (per unit billed)	Rs/kWh	e = d/c	2.459	2.491	2.724	2.529	
Increase or decrease in O&M and Capacity cost (over Reference)	Rs/kWh	f	0.032	0.264	0.069		
<b>O&amp;M and Capacity Cost of Power Purchases - Monthly variations Amount</b>	Mill Rs	g = f x c	26.632	224.841	78.976	330.449	
<b>b. Unrecovered Cost of FCA due to non adjustment of T&amp;D losses</b>							
i Monthly variation in Fuel Cost (FCA) - Per unit							
Cost of Fuel - KE	Rs/kWh	h	0.324	0.567	1.482		
Cost of Fuel - Power Purchases	Rs/kWh	i	0.827	0.409	0.612		
Total	Rs/kWh	j = h + i	1.151	0.976	2.094		
ii Monthly variation in Fuel Cost (FCA) - Amount							
Cost of Fuel - KE	Mill Rs	k = h x a	338.710	601.285	2,107.480	3,047.475	
Cost of Fuel - Power Purchases	Mill Rs	l = i x a	865.539	433.794	869.753	2,169.085	
Total	Mill Rs	m = k + l	1,204.248	1,035.079	2,977.233	5,216.561	
iii Unrecovered Cost of FCA due to non adjustment of T&D losses							
Cost of Fuel - KE	Mill Rs	n = k x b	67.065	119.055	417.281	603.400	
Cost of Fuel - Power Purchases	Mill Rs	o = l x b	171.377	85.891	172.211	429.479	
Total	Mill Rs	p = n + o	238.442	204.946	589.492	1,032.879	
<b>Summary of Unrecovered cost for the quarter</b>							
a. O&M and Capacity cost of Power purchases	Mill Rs						330.449
b. Unrecovered Cost of FCA due to non adjustment of T&D losses	Mill Rs						1,032.879
<b>Total Unrecovered cost for the quarter</b>	Mill Rs	q					1,363.328
<b>Units to be sold in next quarter at allowed T&amp;D losses</b>	GWh	r					4,208.704
<b>Unrecovered Cost per unit for current quarter</b>	Rs/kWh	s = q / r					0.324

Work Sheet- Power Purchase O&M and Capacity Cost

DESCRIPTION	Reference	Dec-17	Jan-18	Feb-18	Mar-18
<b>1 O&amp;M COST</b>					
a KANUPP	Mill Rs.	20.984	33.203	27.924	25.828
b TAPAL	Mill Rs.	33.056	50.050	63.044	78.472
c GUL AHMED	Mill Rs.	18.732	18.186	29.473	46.875
d CPPA-G	Mill Rs.	116.004	121.700	110.794	128.980
e ANOUD POWER	Mill Rs.	6.538	6.743	6.599	7.389
f INT IND (IIL)	Mill Rs.	7.925	8.609	7.444	8.936
g FFBL	Mill Rs.	19.181	10.470	16.848	21.148
h SNPC	Mill Rs.		18.628	42.898	48.540
<b>TOTAL</b>	Mill Rs.	<b>222.421</b>	<b>267.589</b>	<b>305.024</b>	<b>366.169</b>
<b>2 CAPACITY COST</b>					
a KANUPP	Mill Rs.	-	-	-	-
b TAPAL	Mill Rs.	143.477	146.404	146.404	146.404
c GUL AHMED	Mill Rs.	132.625	135.540	135.540	135.540
d CPPA-G	Mill Rs.	1,256.516	1,332.243	1,326.399	1,761.901
e ANOUD POWER	Mill Rs.	-	-	-	-
f INT IND (IIL)	Mill Rs.	-	-	-	-
g FFBL	Mill Rs.	220.271	119.491	192.278	241.354
h SNPC	Mill Rs.	-	89.215	210.196	232.712
<b>TOTAL</b>	Mill Rs.	<b>1,752.888</b>	<b>1,822.894</b>	<b>2,010.818</b>	<b>2,517.912</b>
<b>3 TOTAL O&amp;M &amp; CAPACITY COST</b>					
a KANUPP	Mill Rs.	20.984	33.203	27.924	25.828
b TAPAL	Mill Rs.	176.533	196.454	209.448	224.877
c GUL AHMED	Mill Rs.	151.357	153.726	165.013	182.415
d CPPA-G	Mill Rs.	1,372.520	1,453.943	1,437.193	1,890.881
e ANOUD POWER	Mill Rs.	6.538	6.743	6.599	7.389
f INT IND (IIL)	Mill Rs.	7.925	8.609	7.444	8.936
g FFBL	Mill Rs.	239.452	129.961	209.126	262.502
h SNPC	Mill Rs.	-	107.843	253.094	281.253
<b>TOTAL</b>	Mill Rs.	<b>1,975.309</b>	<b>2,090.482</b>	<b>2,315.842</b>	<b>2,884.081</b>

**GENERATION STATISTICS FOR THE MONTH OF Mar 2018**

DESCRIPTION	BQPS (KWH)	BQPS II-560 MW (KWH)	SGTPS-II (KWH)	KTGTPS-II (KWH)	KCCPP (KWH)	KE (KWH)
UNITS GENERATED	409,126,600	255,750,767	47,089,192	11,027,765	19,159,900	
AUXILIARY CONSUMPTION	9.0%	7.6%	3.0%	7.2%	12.9%	
UNITS SENT OUT	372,194,460	236,250,000	45,657,400	10,229,000	16,692,894	681,023,75

K Electric Limited

(1)

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

	DESCRIPTION	Unit	Dec-17	Feb-18
			Reference	Current
A)	Cost of fuel:			
	Cost of fuel - KE	Mill Rs.	2,363.016	3,102.701
	Cost of fuel - Power Purchases	Mill Rs.	2,990.312	3,599.246
	Total	Mill Rs.	<u>5,353.328</u>	<u>6,701.947</u>
B)	Units Sent Out			
	Units Sent Out - KE	GWh	476.629	453.755
	Units - Power purchases	GWh	524.794	606.321
	Total	GWh	<u>1,001.423</u>	<u>1,060.075</u>
C)	Cost per unit			
	Cost of fuel - KE	Rs./kWh	2.360	2.927
	Cost of fuel - Power Purchases	Rs./kWh	2.986	3.395
	Average	Rs./kWh	<u>5.346</u>	<u>6.322</u>
D)	Variation per unit			
	Cost of fuel - KE	Rs./kWh		0.567
	Cost of fuel - Power Purchases	Rs./kWh		<u>0.409</u>
	Total Fuel Cost Adjustment	Rs./kWh		<u>0.976</u>
E)	Total Fuel Cost Adjustment	Ps/kWh		<u>97.642</u>
F)	Variation amount			
	Cost of fuel - KE	Mill Rs.	601.285	
	Cost of fuel - Power Purchases	Mill Rs.	433.794	
	Total Fuel Cost Adjustment	Mill Rs.	<u>1,035.079</u>	
	e = d x b (total)			

**Work Sheet- Generation Fuel Cost Variation**

	DESCRIPTION	Dec-17		Feb-18		
		Reference	Current	Reference	Current	
<b>1 UNITS SENT OUT</b>						
<b>1a UNITS SENT OUT ON FURNACE OIL</b>						
i	<b>Bin Qasim - I</b>					
	Unit 1	GWh	38.171	47.842		
	Unit 2	GWh	-	-		
	Unit 3	GWh	-	34.604		
	Unit 4	GWh	3.746	17.516		
	Unit 5	GWh	-	-		
	Unit 6	GWh	50.909	57.074		
	<b>Total units sent out on furnace oil - Bin Qasim - I</b>	GWh	<b>92.826</b>	<b>157.036</b>		
<b>1b UNITS SENT OUT ON GAS</b>						
i	<b>Bin Qasim - I</b>					
	Unit 1	GWh	14.376	10.469		
	Unit 2	GWh	-	-		
	Unit 3	GWh	-	2.843		
	Unit 4	GWh	1.840	3.562		
	Unit 5	GWh	-	-		
	Unit 6	GWh	34.510	12.164		
	<b>Total units sent out on gas - Bin Qasim - I</b>	GWh	<b>50.726</b>	<b>29.038</b>		
ii	Bin Qasim II - 560 MW	GWh	276.295	217.916		
iii	Korangi Town Gas Turbine II	GWh	8.964	3.334		
iv	Site Gas Turbine II	GWh	11.286	36.176		
v	Korangi CCPP	GWh	36.531	10.254		
	<b>Total units sent out on gas - KE</b>	GWh	<b>383.802</b>	<b>296.718</b>		
	<b>Total units sent out KE</b>	GWh	<b>476.629</b>	<b>453.755</b>		
<b>2 HEAT RATE AT BUS BAR</b>						
i	<b>Bin Qasim - I</b>					
	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	7,991	7,991		
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 CCPP	Btu/kWh	8,497	8,497		

**Work Sheet- Generation Fuel Cost Variation**

	DESCRIPTION	Dec-17		Feb-18	
		Reference	Current	Reference	Current
<b>3</b>	<b><u>Calorific Value - Furnace Oil</u></b>	Btu/kg	40,351	40,351	
<b>4</b>	<b>FUEL PRICES</b>				
4a	Fuel Price - Gas	Rs./MMBTU	400	400	
4b	Fuel Price - Furnace Oil	Rs./Mton	44,422	50,885	
4c	Fuel Price - Furnace Oil	Rs./MMBTU	1,101	1,261	
<b>5</b>	<b>COST OF FUEL</b>				
5a	<u>Furnace oil</u>				
i	<u>Bin Qasim - I</u>				
	Unit 1	Mill Rs.	453.923	651.711	
	Unit 2	Mill Rs.	-	-	
	Unit 3	Mill Rs.	-	479.841	
	Unit 4	Mill Rs.	44.946	240.751	
	Unit 5	Mill Rs.	-	-	
	Unit 6	Mill Rs.	574.410	737.656	
	Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	1,073.279	2,109.959	
5b	<u>Gas</u>				
i	<u>Bin Qasim - I</u>				
	Unit 1	Mill Rs.	62.116	45.236	
	Unit 2	Mill Rs.	-	-	
	Unit 3	Mill Rs.	-	12.505	
	Unit 4	Mill Rs.	8.024	15.528	
	Unit 5	Mill Rs.	-	-	
	Unit 6	Mill Rs.	141.476	49.866	
	Total Cost of Gas - Bin Qasim - I	Mill Rs.	211.616	123.135	
ii	Bin Qasim II - 560 MW	Mill Rs.	883.146	696.543	
iii	Korangi Town Gas Turbine II	Mill Rs.	31.332	11.654	
iv	Site Gas Turbine II	Mill Rs.	39.482	126.558	
v	Korangi CCPP	Mill Rs.	124.161	34.852	
	Total Cost of Gas - KE	Mill Rs.	1,289.737	992.742	
	Total cost of fuel - KE	a	Mill Rs.	<u>2,363.016</u>	<u>3,102.701</u>
<b>6</b>	<b>Variation in Cost of Fuel - KE</b>				
6a	Units Sent Out - KE				
6b	Units - Power Purchases				
	Total Units Sent Out	b	GWh	476.629	453.755
			GWh	524.794	606.321
			GWh	1,001.423	1,060.075
6c	Cost per unit	c = a/b	Rs./kWh	2.360	2.927
6d	Variation per unit (Cost of Fuel - KE)		Rs./kWh		0.567
6e	Variation amount (Cost of Fuel - KE)		Mill Rs.		<u>601.285</u>

**Work Sheet- Power Purchase Cost Variation**

DESCRIPTION	Dec-17		Feb-18	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	21.345	28.404	
b TAPAL	GWh	30.676	57.115	
c GUL AHMED	GWh	29.776	45.737	
d CPPA-G	GWh	387.402	372.861	
e ANOUD POWER	GWh	3.441	3.473	
f INT IND (IIL)	GWh	5.432	5.084	
g FFBL	GWh	36.605	31.861	
h SNPC	GWh	10.118	61.785	
<b>TOTAL</b>	GWh	<b>524.794</b>	<b>606.321</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	112.486	214.435	
b TAPAL	Mill Rs.	284.309	523.146	
c GUL AHMED	Mill Rs.	282.917	495.435	
d CPPA-G	Mill Rs.	1,983.227	1,854.499	
e ANOUD POWER	Mill Rs.	27.802	31.704	
f INT IND (IIL)	Mill Rs.	31.960	29.915	
g FFBL	Mill Rs.	227.694	206.155	
h SNPC	Mill Rs.	39.917	243.957	
<b>TOTAL</b>	Mill Rs.	<b>2,990.312</b>	<b>3,599.246</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	5.270	7.549	
b TAPAL	Rs./kwh	9.268	9.159	
c GUL AHMED	Rs./kwh	9.502	10.832	
d CPPA-G	Rs./kwh	5.119	4.974	
e ANOUD POWER	Rs./kwh	8.080	9.129	
f INT IND (IIL)	Rs./kwh	5.884	5.885	
g FFBL	Rs./kwh	6.220	6.470	
h SNPC	Rs./kwh	3.945	3.948	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
<b>4a Cost of Fuel - Power Purchases</b>	a Mill Rs.	<b>2,990.312</b>	<b>3,599.246</b>	
Units Sent out:				
Units Sent Out - KE	GWh	476.629	453.755	
Units - Power Purchases	GWh	<b>524.794</b>	<b>606.321</b>	
<b>4b Total Units Sent Out</b>	b GWh	<b>1,001.423</b>	<b>1,060.075</b>	
<b>4c Cost per unit</b>	c = a/b Rs./kwh	2.986	3.395	
<b>4d Variation per unit (Cost of Fuel - Power Purchases)</b>	Rs./kwh	0.409		
<b>4e Variation amount (Cost of Fuel - Power Purchases)</b>	Mill Rs.	<b>433.794</b>		

K Electric Limited

(12)

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

DESCRIPTION	Unit	Sep-17	Dec-17
		Reference	Current
A) Cost of fuel:			
Cost of fuel - KE	Mill Rs.	5,325.557	2,363.016
Cost of fuel - Power Purchases	Mill Rs.	3,442.566	2,990.312
Total	Mill Rs.	8,768.123	5,353.328
B) Units Sent Out			
Units Sent Out - KE	GWh	923.319	476.629
Units - Power purchases	GWh	647.550	524.794
Total	GWh	1,570.869	1,001.423
C) Cost per unit			
Cost of fuel - KE	Rs./kWh	3.390	2.360
Cost of fuel - Power Purchases	Rs./kWh	2.192	2.986
Average	Rs./kWh	5.582	5.346
D) Variation per unit			
Cost of fuel - KE	Rs./kWh		(1.031)
Cost of fuel - Power Purchases	Rs./kWh		0.795
Total Fuel Cost Adjustment	Rs./kWh		(0.236)
E) Total Fuel Cost Adjustment	Ps/kWh		(23.598)
F) Variation amount			
Cost of fuel - KE	Mill Rs.		(1,032.005)
Cost of fuel - Power Purchases	Mill Rs.		795.690
Total Fuel Cost Adjustment	Mill Rs.		(236.315)

**Work Sheet- Generation Fuel Cost Variation**

	DESCRIPTION	Sep-17	Dec-17
		Reference	Current

**1 UNITS SENT OUT**

**1a UNITS SENT OUT ON FURNACE OIL**

i **Bin Qasim - I**

Unit 1	GWh	68.390	38.171
Unit 2	GWh	7.583	-
Unit 3	GWh	65.724	-
Unit 4	GWh	41.247	3.746
Unit 5	GWh	70.252	-
Unit 6	GWh	79.103	50.909
<b>Total units sent out on furnace oil - Bin Qasim - I</b>	<b>GWh</b>	<b>332.298</b>	<b>92.826</b>

**1b UNITS SENT OUT ON GAS**

i **Bin Qasim - I**

Unit 1	GWh	13.667	14.376
Unit 2	GWh	2.912	-
Unit 3	GWh	0.801	-
Unit 4	GWh	15.381	1.840
Unit 5	GWh	17.562	-
Unit 6	GWh	16.723	34.510
<b>Total units sent out on gas - Bin Qasim - I</b>	<b>GWh</b>	<b>67.046</b>	<b>50.726</b>

ii **Bin Qasim II - 560 MW**

iii **Korangi Town Gas Turbine II**

iv **Site Gas Turbine II**

v **Korangi CCPP**

**Total units sent out on gas - KE**

**Total units sent out KE**

**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 <b>Bin Qasim II - 560 MW</b>	<b>Btu/kWh</b>	<b>7,991</b>	<b>7,991</b>
iii <b>Korangi Town Gas Turbine II</b>	<b>Btu/kWh</b>	<b>8,738</b>	<b>8,738</b>
iv <b>Site Gas Turbine II</b>	<b>Btu/kWh</b>	<b>8,746</b>	<b>8,746</b>
v <b>Korangi CCPP</b>	<b>Btu/kWh</b>	<b>8,497</b>	<b>8,497</b>

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Sep-17	Dec-17	
	Reference	Current	
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351	40,351
<b>4 FUEL PRICES</b>			
4a Fuel Price - Gas	Rs./MMBTU	400	400
4b Fuel Price - Furnace Oil	Rs./Mton	38,038	44,422
4c Fuel Price - Furnace Oil	Rs./MMBTU	943	1,101
<b>5 COST OF FUEL</b>			
<b>5a Furnace oil</b>			
i Bin Qasim - I			
Unit 1	Mill Rs.	696.398	453.923
Unit 2	Mill Rs.	76.125	-
Unit 3	Mill Rs.	681.273	-
Unit 4	Mill Rs.	423.779	44.946
Unit 5	Mill Rs.	682.381	-
Unit 6	Mill Rs.	764.255	574.410
Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	<u>3,324.211</u>	<u>1,073.279</u>
<b>5b Gas</b>			
i Bin Qasim - I			
Unit 1	Mill Rs.	59.054	62.116
Unit 2	Mill Rs.	12.405	-
Unit 3	Mill Rs.	3.525	-
Unit 4	Mill Rs.	67.053	8.024
Unit 5	Mill Rs.	72.384	-
Unit 6	Mill Rs.	68.557	141.476
Total Cost of Gas - Bin Qasim - I	Mill Rs.	<u>282.978</u>	<u>211.616</u>
ii Bin Qasim II - 560 MW	Mill Rs.	1,109.515	883.146
iii Korangi Town Gas Turbine II	Mill Rs.	118.858	31.332
iv Site Gas Turbine II	Mill Rs.	156.827	39.482
v Korangi CCPP	Mill Rs.	333.169	124.161
Total Cost of Gas - KE	Mill Rs.	<u>2,001.346</u>	<u>1,289.737</u>
Total cost of fuel - KE	a	Mill Rs.	<u>5,325.557</u> <u>2,363.016</u>
<b>6 Variation in Cost of Fuel - KE</b>			
6a Units Sent Out - KE	b	GWh	923.319     476.629
6b Units - Power Purchases		GWh	<u>647.550</u> <u>524.794</u>
Total Units Sent Out	b	GWh	<u>1,570.869</u> <u>1,001.423</u>
6c Cost per unit	c = a/b	Rs./kWh	3.390     2.360
6d Variation per unit (Cost of Fuel - KE)		Rs./kWh	(1.031)
6e Variation amount (Cost of Fuel - KE)		Mill Rs.	<u>(1,032.005)</u>

Work Sheet- Power Purchase Cost Variation

DESCRIPTION	Sep-17		Dec-17	
	Reference	Current		
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	24.545	21.345	
b TAPAL	GWh	71.527	30.676	
c GUL AHMED	GWh	61.088	29.776	
d CPPA-G	GWh	443.273	387.402	
e ANOUD POWER	GWh	3.112	3.441	
f INT IND (IIL)	GWh	5.793	5.432	
g FFBL	GWh	37.691	36.605	
h SNPC	GWh	0.522	10.118	
<b>TOTAL</b>	GWh	<b>647.550</b>	<b>524.794</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	153.054	112.486	
b TAPAL	Mill Rs.	601.932	284.309	
c GUL AHMED	Mill Rs.	544.945	282.917	
d CPPA-G	Mill Rs.	1,878.813	1,983.227	
e ANOUD POWER	Mill Rs.	23.752	27.802	
f INT IND (IIL)	Mill Rs.	34.077	31.960	
g FFBL	Mill Rs.	203.935	227.694	
h SNPC	Mill Rs.	2.059	39.917	
<b>TOTAL</b>	Mill Rs.	<b>3,442.566</b>	<b>2,990.312</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	6.236	5.270	
b TAPAL	Rs./kwh	8.415	9.268	
c GUL AHMED	Rs./kwh	8.921	9.502	
d CPPA-G	Rs./kwh	4.239	5.119	
e ANOUD POWER	Rs./kwh	7.633	8.080	
f INT IND (IIL)	Rs./kwh	5.883	5.884	
g FFBL	Rs./kwh	5.411	6.220	
h SNPC	Rs./kwh	3.945	3.945	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
4a Cost of Fuel - Power Purchases	a Mill Rs.	<b>3,442.566</b>	<b>2,990.312</b>	
Units Sent out:				
Units Sent Out - KE	GWh	923.319	476.629	
Units - Power Purchases	GWh	647.550	524.794	
4b Total Units Sent Out	b GWh	<b>1,570.869</b>	<b>1,001.423</b>	
4c Cost per unit	c = a/b Rs./kwh	2.192	2.986	
4d Variation per unit (Cost of Fuel - Power Purchases)	Rs./kwh	0.795		
4e Variation amount (Cost of Fuel - Power Purchases)	Mill Rs.	<b>795.690</b>		

**K ELECTRIC LIMITED**

QUARTERLY ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL AND POWER PURCHASE COST  
INCLUDING O&M AND CAPACITY CHARGES

Quarter ended December 2017

**Required adjustment in Tariff**

		Dec-17
Quarterly Revision to reset price levels		
Unrecovered Cost for current quarter	Rs/kWh	0.513
Reversal of unrecovered cost of previous quarter	Rs/kWh	0.350
	Rs/kWh	0.112
Total Required adjustment in KE's Tariff	Rs/kWh	<u>0.975</u>
Total Required adjustment in KE's Tariff	Ps/kWh	<b>97.501</b>

**Quarterly Revision to reset price levels**

Units Sent Out	GWh	1,001.423
T&D Losses allowed	GWh	19.80%
Units billed	GWh	803.141
Cost of Fuel - KE	Mill Rs	2,363.016

	Sep-17	Dec-17	Variation
Weighted Average Fuel cost per unit billed	Rs/Kwh	4,227      2,942	(1,285)

	Cost-17
- Fuel Cost	2,990.312
- O&M and Capacity Cost	1,975.309
- Total Cost of Power Purchases	<u>4,965.621</u>

	Sep-17	Dec-17	Variation
Weighted Average Cost of Power Purchases (cost per unit billed)			
- Fuel Cost	Rs/kWh	2.733      3.723	0.991
- O&M Cost and capacity cost	Rs/kWh	1.653      2.459	0.807
- Total Cost of Power Purchases	Rs/kWh	<u>4.385      6.183</u>	<u>1.797</u>

	(1.285)
QUARTERLY INCREASE/DECREASE IN COST PER UNIT BILLED	
- Cost of Fuel - KE	Rs/kWh
- Cost of Power Purchases - Total	Rs/kWh
- Total Cost Variation	Rs/kWh
	<u>1.797</u>
	<b>0.513</b>

Note: Please note that the SoT attached with the MYT notification is based on updated terms and conditions including changes in definition of lifeline consumers and the assumption of conversion of eligible consumers to "A3" category along with enabling of Time of Use (ToU) metering for Residential and Commercial consumers etc. However, as the MYT has been notified on May 22, 2019, these changes will be effective from the date of notification. Accordingly, KE would like to request NEPRA to adjust the related impact while issuing determination of Quarterly SoTs.

## K ELECTRIC LIMITED

QUARTERLY ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL AND POWER PURCHASE COST INCLUDING O&M AND CAPACITY CHARGES			Quarter ended December 2017				
ADJUSTMENT IN TARIFF DUE TO UNRECOVERED COST			Sep-17	Oct-17	Nov-17	Dec-17	QTR
Reference							
Units Sent Out	GWh	a	1,626.337	1,237.619	1,001.423		
T&D Losses allowed		b	19.8%	19.8%	19.8%		
Units billed	GWh	c = a x (1-b)	1,304.322	992.571	803.141	3,100.034	
<b>a. O&amp;M and Capacity cost of Power purchases</b>							
O&M and Capacity cost of Power purchases	Mill Rs	d	1,730.149	2,168.564	1,975.309		
O&M and Capacity cost of power purchases (per unit billed)	Rs/kWh	e = d/c	1.653	1.326	2.185	2.459	
Increase or decrease in O&M and Capacity cost (over Reference)	Rs/kWh	f	(0.326)	0.532	0.807		
O&M and Capacity Cost of Power Purchases - Monthly variations Amount	Mill Rs	g = f x c	(425.553)	528.105	647.928	750.480	
<b>b. Unrecovered Cost of FCA due to non adjustment of T&amp;D losses</b>							
i Monthly variation in Fuel Cost (FCA) - Per unit							
Cost of Fuel - KE	Rs/kWh	h	0.172	(0.204)	(1.031)		
Cost of Fuel - Power Purchases	Rs/kWh	i	0.260	0.081	0.795		
Total	Rs/kWh	j = h + i	0.432	(0.122)	(0.236)		
ii Monthly variation in Fuel Cost (FCA) - Amount							
Cost of Fuel - KE	Mill Rs	k = h x a	279.388	(251.919)	(1,032.005)	(1,004.536)	
Cost of Fuel - Power Purchases	Mill Rs	l = i x a	422.680	100.410	795.690	1,318.780	
Total	Mill Rs	m = k + l	702.068	(151.509)	(236.315)	314.245	
iii Unrecovered Cost of FCA due to non adjustment of T&D losses							
Cost of Fuel - KE	Mill Rs	n = k x b	55.319	(49.880)	(204.337)	(198.898)	
Cost of Fuel - Power Purchases	Mill Rs	o = l x b	83.691	19.881	157.547	261.118	
Total	Mill Rs	p = n + o	139.010	(29.999)	(46.790)	62.220	
<b>Summary of Unrecovered cost for the quarter</b>							
a. O&M and Capacity cost of Power purchases	Mill Rs						750.480
b. Unrecovered Cost of FCA due to non adjustment of T&D losses	Mill Rs						62.220
c. Other Adjustments							178.898
WWF/WPPF / Bonus to IPPs - Note 1	Mill Rs						991.598
<b>Total Unrecovered cost for the quarter</b>	Mill Rs	q					
Units to be sold in next quarter at allowed T&D losses	GWh	r					2,829.849
Unrecovered Cost per unit for current quarter	Rs/kWh	s = q / r					0.350

## Notes:

1 Tapal Energy WPPF Rs.66.074 million, WWF Rs. 26.430 million and Gul Ahmed Energy Excess Energy Bonus Rs. 35.136 million and WPPF Rs. 51.259 million.

Work Sheet- Power Purchase O&M and Capacity Cost

DESCRIPTION	Reference	Sep-17	Oct-17	Nov-17	Dec-17
<b>1 O&amp;M COST</b>					
a KANUPP	Mill Rs.	24,749	36,059	32,431	20,984
b TAPAL	Mill Rs.	77,077	71,903	40,798	33,056
c GUL AHMED	Mill Rs.	38,430	43,761	22,664	18,732
d CPPA-G	Mill Rs.	133,771	120,125	114,965	116,004
e ANOUD POWER	Mill Rs.	5,913	5,029	5,033	6,538
f INT IND (IIL)	Mill Rs.	9,448	9,476	8,780	7,925
g FFBL	Mill Rs.	19,727	20,469	20,161	19,181
<b>TOTAL</b>	Mill Rs.	<b>309,116</b>	<b>306,823</b>	<b>244,832</b>	<b>222,421</b>
<b>2 CAPACITY COST</b>					
a KANUPP	Mill Rs.	-	-	-	-
b TAPAL	Mill Rs.	143,074	143,477	143,477	143,477
c GUL AHMED	Mill Rs.	132,401	132,625	132,625	132,625
d CPPA-G	Mill Rs.	1,270,861	912,164	1,416,107	1,256,516
e ANOUD POWER	Mill Rs.	-	-	-	-
f INT IND (IIL)	Mill Rs.	-	-	-	-
g FFBL	Mill Rs.	226,726	235,062	231,523	220,271
<b>TOTAL</b>	Mill Rs.	<b>1,773,063</b>	<b>1,423,327</b>	<b>1,923,732</b>	<b>1,752,888</b>
<b>3 TOTAL O&amp;M &amp; CAPACITY COST</b>					
a KANUPP	Mill Rs.	24,749	36,059	32,431	20,984
b TAPAL	Mill Rs.	220,152	215,380	184,275	176,533
c GUL AHMED	Mill Rs.	170,832	176,386	155,289	151,357
d CPPA-G	Mill Rs.	1,404,632	1,032,288	1,531,072	1,372,520
e ANOUD POWER	Mill Rs.	5,913	5,029	5,033	6,538
f INT IND (IIL)	Mill Rs.	9,448	9,476	8,780	7,925
g FFBL	Mill Rs.	246,454	255,531	251,684	239,452
<b>TOTAL</b>	Mill Rs.	<b>2,082,180</b>	<b>1,730,149</b>	<b>2,168,564</b>	<b>1,975,309</b>

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GENERATION STATISTICS FOR THE MONTH OF Dec 2017

DESCRIPTION	BQPS (KWH)	BQPS II-560 MW (KWH)	SGTPS-II (KWH)	KTGTPS-II (KWH)	KCCPP (KWH)	KE (KWH)
UNITS GENERATED	155,823,720	294,275,738	11,575,135	9,194,022	39,246,600	510,115,215
AUXILIARY CONSUMPTION	10.5%	6.8%	5.3%	6.0%	10.5%	8.1%
UNITS SENT OUT	139,536,540	274,344,000	10,958,500	8,640,000	35,120,382	468,599,422

**K Electric Limited**

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

DESCRIPTION	Unit	Dec-17	Jan-18
		Reference	Current
A) Cost of fuel:			
Cost of fuel - KE	Mill Rs.	2,363.016	2,807.646
Cost of fuel - Power Purchases	Mill Rs.	2,990.312	3,989.889
Total	Mill Rs.	5,353.328	6,797.534
B) Units Sent Out			
Units Sent Out - KE	GWh	476.629	454.954
Units - Power purchases	GWh	524.794	591.357
Total	GWh	1,001.423	1,046.310
C) Cost per unit			
Cost of fuel - KE	Rs./kWh	2.360	2.683
Cost of fuel - Power Purchases	Rs./kWh	2.986	3.813
Average	Rs./kWh	5.346	6.497
D) Variation per unit			
Cost of fuel - KE	Rs./kWh		0.324
Cost of fuel - Power Purchases	Rs./kWh		0.827
Total Fuel Cost Adjustment	Rs./kWh		1.151
E) Total Fuel Cost Adjustment	Ps/kWh		115.095
F) Variation amount			
Cost of fuel - KE	Mill Rs.	338.710	
Cost of fuel - Power Purchases	Mill Rs.	865.539	
Total Fuel Cost Adjustment	Mill Rs.	1,204.248	

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Dec-17		Jan-18	
	Reference	Current	Reference	Current
<b>1 UNITS SENT OUT</b>				
<b>1a UNITS SENT OUT ON FURNACE OIL</b>				
i Bin Qasim - I				
Unit 1	GWh	38.171	63.923	
Unit 2	GWh			
Unit 3	GWh			
Unit 4	GWh	3.746		
Unit 5	GWh			
Unit 6	GWh	50.909	61.702	
Total units sent out on furnace oil - Bin Qasim - I	GWh	92.826	125.625	
<b>1b UNITS SENT OUT ON GAS</b>				
i Bin Qasim - I				
Unit 1	GWh	14.376	19.863	
Unit 2	GWh			
Unit 3	GWh			
Unit 4	GWh	1.840		
Unit 5	GWh			
Unit 6	GWh	34.510	20.467	
Total units sent out on gas - Bin Qasim - I	GWh	50.726	40.330	
ii Bin Qasim II - 560 MW	GWh	276.295	174.003	
iii Korangi Town Gas Turbine II	GWh	8.964	10.841	
iv Site Gas Turbine II	GWh	11.286	31.780	
v Korangi CCPP	GWh	36.531	72.375	
Total units sent out on gas - KE	GWh	383.802	329.329	
Total units sent out KE	GWh	476.629	454.954	
<b>2 HEAT RATE AT BUS BAR</b>				
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	7,991	7,991	
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 CCPP	Btu/kWh	8,497	8,497	

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Dec-17		Jan-18	
	Reference	Current	Reference	Current
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351	40,351	
<b>4 FUEL PRICES</b>				
4a Fuel Price - Gas	Rs./MMBTU	400	400	
4b Fuel Price - Furnace Oil	Rs./Mton	44,422	51,448	
4c Fuel Price - Furnace Oil	Rs./MMBTU	1,101	1,275	
<b>5 COST OF FUEL</b>				
<b>5a Furnace oil</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	453.923	880.383	
Unit 2	Mill Rs.	-	-	
Unit 3	Mill Rs.	-	-	
Unit 4	Mill Rs.	44.946	-	
Unit 5	Mill Rs.	-	-	
Unit 6	Mill Rs.	574.410	806.295	
<b>Total Cost of Furnace Oil - Bin Qasim - I</b>	Mill Rs.	1,073.279	1,686.678	
<b>5b Gas</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	62.116	85.824	
Unit 2	Mill Rs.	-	-	
Unit 3	Mill Rs.	-	-	
Unit 4	Mill Rs.	8.024	-	
Unit 5	Mill Rs.	-	-	
Unit 6	Mill Rs.	141.476	83.906	
<b>Total Cost of Gas - Bin Qasim - I</b>	Mill Rs.	211.616	169.730	
ii Bin Qasim II - 560 MW	Mill Rs.	883.146	556.180	
iii Korangi Town Gas Turbine II	Mill Rs.	31.332	37.890	
iv Site Gas Turbine II	Mill Rs.	39.482	111.180	
v Korangi CCPP	Mill Rs.	124.161	245.988	
<b>Total Cost of Gas - KE</b>	Mill Rs.	1,289.737	1,120.968	
<b>Total cost of fuel - KE</b>	a	Mill Rs.	<u>2,363.016</u>	<u>2,807.646</u>
<b>6 Variation in Cost of Fuel - KE</b>				
6a Units Sent Out - KE		GWh	476.629	454.954
6b Units - Power Purchases		GWh	524.794	591.357
<b>Total Units Sent Out</b>	b	GWh	1,001.423	1,046.310
6c Cost per unit	c = a/b	Rs./kWh	2.360	2.683
6d Variation per unit (Cost of Fuel - KE)		Rs./kWh		0.324
6e Variation amount (Cost of Fuel - KE)		Mill Rs.		<u>338.710</u>

## Work Sheet- Power Purchase Cost Variation

DESCRIPTION		Dec-17	Jan-18
	Reference	Current	
<b>1 POWER PURCHASES</b>			
a KANUPP	GWh	21,345	33,774
b TAPAL	GWh	30,676	45,343
c GUL AHMED	GWh	29,776	28,222
d CPPA-G	GWh	387,402	403,740
e ANOUD POWER	GWh	3,441	3,549
f INT IND (IIL)	GWh	5,432	5,769
g FFBL	GWh	36,605	19,800
h SNPC	GWh	10,118	51,160
<b>TOTAL</b>	GWh	<b>524,794</b>	<b>591,357</b>
<b>2 COST OF POWER PURCHASES - FUEL COST</b>			
a KANUPP	Mill Rs.	112,486	218,846
b TAPAL	Mill Rs.	284,309	420,040
c GUL AHMED	Mill Rs.	282,917	287,561
d CPPA-G	Mill Rs.	1,983,227	2,674,737
e ANOUD POWER	Mill Rs.	27,802	29,684
f INT IND (IIL)	Mill Rs.	31,960	33,939
g FFBL	Mill Rs.	227,694	123,162
h SNPC	Mill Rs.	39,917	201,920
<b>TOTAL</b>	Mill Rs.	<b>2,990,312</b>	<b>3,989,889</b>
<b>3 FUEL COST / UNIT</b>			
a KANUPP	Rs./kwh	5.270	6.480
b TAPAL	Rs./kwh	9.268	9.264
c GUL AHMED	Rs./kwh	9.502	10.189
d CPPA-G	Rs./kwh	5.119	6.625
e ANOUD POWER	Rs./kwh	8.080	8.365
f INT IND (IIL)	Rs./kwh	5.884	5.883
g FFBL	Rs./kwh	6.220	6.220
h SNPC	Rs./kwh	3.945	3.947
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>			
4a Cost of Fuel - Power Purchases	a Mill Rs.	<b>2,990,312</b>	<b>3,989,889</b>
Units Sent out:			
Units Sent Out - KE	GWh	476,629	454,954
Units - Power Purchases	GWh	524,794	591,357
4b Total Units Sent Out	b GWh	<b>1,001,423</b>	<b>1,046,310</b>
4c Cost per unit	c = a/b Rs./kwh	2.986	3.813
4d Variation per unit (Cost of Fuel - Power Purchases)	Rs./kwh	0.827	
4e Variation amount (Cost of Fuel - Power Purchases)	Mill Rs.	<b>865,539</b>	

K Electric Limited

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

	DESCRIPTION	Unit	Jun-17	Aug-17
			Reference	Current
A)	Cost of fuel:			
	Cost of fuel - KE	Mill Rs.	6,426.949	6,253.823
	Cost of fuel - Power Purchases	Mill Rs.	3,858.490	3,487.380
	Total	Mill Rs.	<u>10,285.439</u>	<u>9,741.203</u>
B)	Units Sent Out			
	Units Sent Out - KE	GWh	1,078.905	1,014.469
	Units - Power purchases	GWh	675.761	629.370
	Total	GWh	<u>1,754.667</u>	<u>1,643.839</u>
C)	Cost per unit			
	Cost of fuel - KE	Rs./kWh	3.663	3.804
	Cost of fuel - Power Purchases	Rs./kWh	<u>2.199</u>	<u>2.121</u>
	Average	Rs./kWh	<u>5.862</u>	<u>5.926</u>
D)	Variation per unit			
	Cost of fuel - KE	Rs./kWh		0.142
	Cost of fuel - Power Purchases	Rs./kWh		(0.078)
	Total Fuel Cost Adjustment	Rs./kWh		<u>0.064</u>
E)	Total Fuel Cost Adjustment	Ps/kWh		<u>6.413</u>
F)	Variation amount			
	Cost of fuel - KE	Mill Rs.	232.813	
	Cost of fuel - Power Purchases	Mill Rs.	(127.401)	
	Total Fuel Cost Adjustment	Mill Rs.	<u>105.412</u>	

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Jun-17		Aug-17	
	Reference	Current	Reference	Current
<b>1 UNITS SENT OUT</b>				
<b>1a UNITS SENT OUT ON FURNACE OIL</b>				
i Bin Qasim - I				
Unit 1	GWh	84.076	77.597	
Unit 2	GWh	71.441	70.561	
Unit 3	GWh	57.208	43.656	
Unit 4	GWh	48.153	67.360	
Unit 5	GWh	81.643	80.407	
Unit 6	GWh	77.037	81.197	
Total units sent out on furnace oil - Bin Qasim - I	GWh	419.558	420.778	
<b>1b UNITS SENT OUT ON GAS</b>				
i Bin Qasim - I				
Unit 1	GWh	20.716	18.772	
Unit 2	GWh	15.437	13.805	
Unit 3	GWh	1.115	0.400	
Unit 4	GWh	16.924	18.444	
Unit 5	GWh	23.919	9.017	
Unit 6	GWh	15.392	12.102	
Total units sent out on gas - Bin Qasim - I	GWh	93.504	72.540	
ii Bin Qasim II - 560 MW	GWh	342.339	352.702	
iii Korangi Town Gas Turbine II	GWh	51.754	28.211	
iv Site Gas Turbine II	GWh	48.428	44.815	
v Korangi CCPP	GWh	123.323	95.422	
Total units sent out on gas - KE	GWh	659.347	593.691	
Total units sent out KE	GWh	1,078.905	1,014.469	
<b>2 HEAT RATE AT BUS BAR</b>				
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	7,991	7,991	
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 CCPP	Btu/kWh	8,497	8,497	

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Jun-17		Aug-17	
	Reference	Current	Reference	Current
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351	40,351	
<b>4 FUEL PRICES</b>				
4a Fuel Price - Gas	Rs./MMBTU	400	400	
4b Fuel Price - Furnace Oil	Rs./Mton	37,759	38,302	
4c Fuel Price - Furnace Oil	Rs./MMBTU	936	949	
<b>5 COST OF FUEL</b>				
<b>5a Furnace oil</b>				
<b>i Bin Qasim - I</b>				
Unit 1	Mill Rs.	849.841	795.638	
Unit 2	Mill Rs.	711.971	713.321	
Unit 3	Mill Rs.	588.644	455.666	
Unit 4	Mill Rs.	491.107	696.879	
Unit 5	Mill Rs.	787.201	786.446	
Unit 6	Mill Rs.	738.831	789.931	
<b>Total Cost of Furnace Oil - Bin Qasim - I</b>	Mill Rs.	<u>4,167.595</u>	<u>4,237.880</u>	
<b>5b Gas</b>				
<b>i Bin Qasim - I</b>				
Unit 1	Mill Rs.	89.509	81.111	
Unit 2	Mill Rs.	65.762	58.811	
Unit 3	Mill Rs.	4.904	1.758	
Unit 4	Mill Rs.	73.783	80.409	
Unit 5	Mill Rs.	98.586	37.162	
Unit 6	Mill Rs.	63.102	49.614	
<b>Total Cost of Gas - Bin Qasim - I</b>	Mill Rs.	<u>395.646</u>	<u>308.866</u>	
ii Bin Qasim II - 560 MW	Mill Rs.	1,094.247	1,127.372	
iii Korangi Town Gas Turbine II	Mill Rs.	180.891	98.603	
iv Site Gas Turbine II	Mill Rs.	169.419	156.780	
v Korangi CCPP	Mill Rs.	419.150	324.322	
<b>Total Cost of Gas - KE</b>	Mill Rs.	<u>2,259.353</u>	<u>2,015.943</u>	
<b>Total cost of fuel - KE</b>	a	Mill Rs.	<u>6,426.949</u>	<u>6,253.823</u>
<b>6 Variation in Cost of Fuel - KE</b>				
6a Units Sent Out - KE	b	GWh	1,078.905	1,014.469
6b Units - Power Purchases		GWh	675.761	629.370
<b>Total Units Sent Out</b>	b	GWh	<u>1,754.667</u>	<u>1,643.839</u>
6c Cost per unit	c = a/b	Rs./kWh	3.663	3.804
6d Variation per unit (Cost of Fuel - KE)		Rs./kWh		0.142
6e Variation amount (Cost of Fuel - KE)		Mill Rs.		<u>232.813</u>

**Work Sheet- Power Purchase Cost Variation**

DESCRIPTION	Jun-17		Aug-17	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	42.878	-	
b TAPAL	GWh	80.287	72.735	
c GUL AHMED	GWh	83.752	70.088	
d CPPA-G	GWh	421.632	439.246	
e ANOUD POWER	GWh	4.383	3.226	
f INT IND (IIL)	GWh	6.089	6.006	
g FFBL	GWh	36.741	38.069	
<b>TOTAL</b>	<b>GWh</b>	<b>675.761</b>	<b>629.370</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	271.402	-	
b TAPAL	Mill Rs.	673.093	591.437	
c GUL AHMED	Mill Rs.	720.761	598.410	
d CPPA-G	Mill Rs.	1,936.303	2,036.476	
e ANOUD POWER	Mill Rs.	32.793	24.061	
f INT IND (IIL)	Mill Rs.	35.829	35.338	
g FFBL	Mill Rs.	188.309	201.657	
<b>TOTAL</b>	<b>Mill Rs.</b>	<b>3,858.490</b>	<b>3,487.380</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	6.330	-	
b TAPAL	Rs./kwh	8.384	8.131	
c GUL AHMED	Rs./kwh	8.606	8.538	
d CPPA-G	Rs./kwh	4.592	4.636	
e ANOUD POWER	Rs./kwh	7.482	7.459	
f INT IND (IIL)	Rs./kwh	5.884	5.883	
g FFBL	Rs./kwh	5.125	5.297	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
<b>4a Cost of Fuel - Power Purchases</b>	<b>a</b>	<b>Mill Rs.</b>	<b>3,858.490</b>	<b>3,487.380</b>
Units Sent out:				
Units Sent Out - KE	GWh	1,078.905	1,014.469	
Units - Power Purchases	GWh	675.761	629.370	
<b>4b Total Units Sent Out</b>	<b>b</b>	<b>GWh</b>	<b>1,754.667</b>	<b>1,643.839</b>
<b>4c Cost per unit</b>	<b>c = a/b</b>	<b>Rs./kwh</b>	<b>2.199</b>	<b>2.121</b>
<b>4d Variation per unit (Cost of Fuel - Power Purchases)</b>		<b>Rs./kwh</b>	<b>(0.078)</b>	
<b>4e Variation amount (Cost of Fuel - Power Purchases)</b>		<b>Mill Rs.</b>		<b>(127.401)</b>

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Sep-17	Nov-17		
	Reference	Current		
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351	40,351	
<b>4 FUEL PRICES</b>				
4a Fuel Price - Gas	Rs./MMBTU	400	400	
4b Fuel Price - Furnace Oil	Rs./Mton	38,038	41,069	
4c Fuel Price - Furnace Oil	Rs./MMBTU	943	1,018	
<b>5 COST OF FUEL</b>				
<b>5a Furnace oil</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	696.398	354.070	
Unit 2	Mill Rs.	76.125	-	
Unit 3	Mill Rs.	681.273	348.552	
Unit 4	Mill Rs.	423.779	501.268	
Unit 5	Mill Rs.	682.381	543.913	
Unit 6	Mill Rs.	764.255	579.161	
Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	<u>3,324.211</u>	<u>2,326.964</u>	
<b>5b Gas</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	59.054	48.997	
Unit 2	Mill Rs.	12.405	-	
Unit 3	Mill Rs.	3.525	4.487	
Unit 4	Mill Rs.	67.053	69.513	
Unit 5	Mill Rs.	72.384	67.266	
Unit 6	Mill Rs.	68.557	90.701	
Total Cost of Gas - Bin Qasim - I	Mill Rs.	<u>282.978</u>	<u>280.964</u>	
ii Bin Qasim II - 560 MW	Mill Rs.	1,109.515	1,002.655	
iii Korangi Town Gas Turbine II	Mill Rs.	118.858	83.880	
iv Site Gas Turbine II	Mill Rs.	156.827	105.147	
v Korangi CCPP	Mill Rs.	333.169	144.246	
Total Cost of Gas - KE	Mill Rs.	<u>2,001.346</u>	<u>1,616.892</u>	
<b>Total cost of fuel - KE</b>	a	Mill Rs.	<u>5,325.557</u>	<u>3,943.856</u>
<b>6 Variation in Cost of Fuel - KE</b>				
6a Units Sent Out - KE	GWh	923.319	692.851	
6b Units - Power Purchases	GWh	647.550	544.769	
Total Units Sent Out	b	GWh	<u>1,570.869</u>	<u>1,237.619</u>
6c Cost per unit	c = a/b	Rs./kWh	3.390	3.187
6d Variation per unit (Cost of Fuel - KE)		Rs./kWh		(0.204)
6e Variation amount (Cost of Fuel - KE)		Mill Rs.		<u>(251.919)</u>

**Work Sheet- Generation Fuel Cost Variation**

	DESCRIPTION	Sep-17		Nov-17		
		Reference	Current	Reference	Current	
<b>1 UNITS SENT OUT</b>						
<b>1a UNITS SENT OUT ON FURNACE OIL</b>						
i	<u>Bin Qasim - I</u>					
	Unit 1	GWh	68.390	32.205		
	Unit 2	GWh	7.583	-		
	Unit 3	GWh	65.724	31.144		
	Unit 4	GWh	41.247	45.188		
	Unit 5	GWh	70.252	51.864		
	Unit 6	GWh	79.103	55.521		
	Total units sent out on furnace oil - Bin Qasim - I	GWh	<u>332.298</u>	<u>215.922</u>		
<b>1b UNITS SENT OUT ON GAS</b>						
i	<u>Bin Qasim - I</u>					
	Unit 1	GWh	13.667	11.340		
	Unit 2	GWh	2.912	-		
	Unit 3	GWh	0.801	1.020		
	Unit 4	GWh	15.381	15.945		
	Unit 5	GWh	17.562	16.320		
	Unit 6	GWh	16.723	22.124		
	Total units sent out on gas - Bin Qasim - I	GWh	<u>67.046</u>	<u>66.749</u>		
ii	Bin Qasim II - 560 MW	GWh	347.116	313.684		
iii	Korangi Town Gas Turbine II	GWh	34.006	23.999		
iv	Site Gas Turbine II	GWh	44.828	30.056		
v	Korangi CCPP	GWh	98.025	42.440		
	Total units sent out on gas - KE	GWh	<u>591.021</u>	<u>476.928</u>		
<b>Total units sent out KE</b>						
		GWh	<u>923.319</u>	<u>692.851</u>		
<b>2 HEAT RATE AT BUS BAR</b>						
i	<u>Bin Qasim - I</u>					
	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	7,991	7,991		
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 CCPP	Btu/kWh	8,497	8,497		

K Electric Limited

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

DESCRIPTION	Unit	Sep-17	Nov-17
		Reference	Current
A) Cost of fuel:			
Cost of fuel - KE	Mill Rs.	5,325.557	3,943.856
Cost of fuel - Power Purchases	Mill Rs.	3,442.566	2,812.659
Total	Mill Rs.	<u>8,768.123</u>	<u>6,756.515</u>
B) Units Sent Out			
Units Sent Out - KE	GWh	923.319	692.851
Units - Power purchases	GWh	647.550	544.769
Total	GWh	<u>1,570.869</u>	<u>1,237.619</u>
C) Cost per unit			
Cost of fuel - KE	Rs./kWh	3.390	3.187
Cost of fuel - Power Purchases	Rs./kWh	2.192	2.273
Average	Rs./kWh	<u>5.582</u>	<u>5.459</u>
D) Variation per unit			
Cost of fuel - KE	Rs./kWh		(0.204)
Cost of fuel - Power Purchases	Rs./kWh		0.081
Total Fuel Cost Adjustment	Rs./kWh		<u>(0.122)</u>
E) Total Fuel Cost Adjustment	Ps/kWh		<u>(12.242)</u>
F) Variation amount			
Cost of fuel - KE	Mill Rs.		(251.919)
Cost of fuel - Power Purchases	Mill Rs.		100.410
Total Fuel Cost Adjustment	Mill Rs.		<u>(151.509)</u>

Work Sheet- Power Purchase Cost Variation

DESCRIPTION	Sep-17		Nov-17	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	24.545	32.988	
b TAPAL	GWh	71.527	37.860	
c GUL AHMED	GWh	61.088	36.026	
d CPPA-G	GWh	443.273	387.327	
e ANOUD POWER	GWh	3.112	2.649	
f INT IND (IIL)	GWh	5.793	5.379	
g FFBL	GWh	37.691	38.475	
h SNPC	GWh	0.522	4.064	
<b>TOTAL</b>	<b>GWh</b>	<b>647.550</b>	<b>544.769</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	153.054	204.670	
b TAPAL	Mill Rs.	601.932	341.084	
c GUL AHMED	Mill Rs.	544.945	335.178	
d CPPA-G	Mill Rs.	1,878.813	1,622.784	
e ANOUD POWER	Mill Rs.	23.752	21.931	
f INT IND (IIL)	Mill Rs.	34.077	31.653	
g FFBL	Mill Rs.	203.935	239.326	
h SNPC	Mill Rs.	2.059	16.033	
<b>TOTAL</b>	<b>Mill Rs.</b>	<b>3,442.566</b>	<b>2,812.659</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	6.236	6.204	
b TAPAL	Rs./kwh	8.415	9.009	
c GUL AHMED	Rs./kwh	8.921	9.304	
d CPPA-G	Rs./kwh	4.239	4.190	
e ANOUD POWER	Rs./kwh	7.633	8.279	
f INT IND (IIL)	Rs./kwh	5.883	5.884	
g FFBL	Rs./kwh	5.411	6.220	
h SNPC	Rs./kwh	3.945	3.945	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
<b>4a Cost of Fuel - Power Purchases</b>	<b>a</b>	<b>Mill Rs.</b>	<b>3,442.566</b>	<b>2,812.659</b>
Units Sent out:				
Units Sent Out - KE	GWh	923.319	692.851	
Units - Power Purchases	GWh	647.550	544.769	
<b>4b Total Units Sent Out</b>	<b>b</b>	<b>GWh</b>	<b>1,570.869</b>	<b>1,237.619</b>
<b>4c Cost per unit</b>	<b>c = a/b</b>	<b>Rs./kwh</b>	<b>2.192</b>	<b>2.273</b>
<b>4d Variation per unit (Cost of Fuel - Power Purchases)</b>		<b>Rs./kwh</b>	<b>0.081</b>	
<b>4e Variation amount (Cost of Fuel - Power Purchases)</b>		<b>Mill Rs.</b>	<b>100.410</b>	

**Work Sheet- Power Purchase Cost Variation**

DESCRIPTION	Sep-17		Oct-17	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	24,545	36,679	
b TAPAL	GWh	71,527	66,725	
c GUL AHMED	GWh	61,088	69,562	
d CPPA-G	GWh	443,273	449,418	
e ANOUD POWER	GWh	3,112	2,647	
f INT IND (IIL)	GWh	5,793	5,809	
g FFBL	GWh	37,691	39,063	
h SNPC	GWh	0.522	1.652	
<b>TOTAL</b>	<b>GWh</b>	<b>647,550</b>	<b>671,554</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	153,054	238,667	
b TAPAL	Mill Rs.	601,932	576,106	
c GUL AHMED	Mill Rs.	544,945	614,106	
d CPPA-G	Mill Rs.	1,878,813	2,283,987	
e ANOUD POWER	Mill Rs.	23,752	21,141	
f INT IND (IIL)	Mill Rs.	34,077	34,174	
g FFBL	Mill Rs.	203,935	212,107	
h SNPC	Mill Rs.	2,059	6,517	
<b>TOTAL</b>	<b>Mill Rs.</b>	<b>3,442,566</b>	<b>3,986,805</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	6.236	6.507	
b TAPAL	Rs./kwh	8.415	8.634	
c GUL AHMED	Rs./kwh	8.921	8.828	
d CPPA-G	Rs./kwh	4.239	5.082	
e ANOUD POWER	Rs./kwh	7.633	7.988	
f INT IND (IIL)	Rs./kwh	5.883	5.883	
g FFBL	Rs./kwh	5.411	5.430	
h SNPC	Rs./kwh	3.945	3.945	
<b>4 VARIATION IN COST OF FUEL -POWER PURCHASES</b>				
<b>4a Cost of Fuel - Power Purchases</b>	a Mill Rs.	<b>3,442,566</b>	<b>3,986,805</b>	
Units Sent out:				
Units Sent Out - KE	GWh	923,319	954,783	
Units -Power Purchases	GWh	647,550	671,554	
<b>4b Total Units Sent Out</b>	<b>b GWh</b>	<b>1,570,869</b>	<b>1,626,337</b>	
<b>4c Cost per unit</b>	<b>c = a/b</b> Rs./kwh	<b>2.192</b>	<b>2.451</b>	
<b>4d Variation per unit (Cost of Fuel - Power Purchases)</b>	Rs./kwh	<b>0.260</b>		
<b>4e Variation amount (Cost of Fuel - Power Purchases)</b>	Mill Rs.	<b>422.680</b>		

K Electric Limited

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

	DESCRIPTION	Unit	Sep-17	Oct-17
			Reference	Current
A)	Cost of fuel:			
	Cost of fuel - KE	Mill Rs.	5,325.557	5,792.992
	Cost of fuel - Power Purchases	Mill Rs.	3,442.566	3,986.805
	Total	Mill Rs.	<u>8,768.123</u>	<u>9,779.798</u>
B)	Units Sent Out			
	Units Sent Out - KE	GWh	923.319	954.783
	Units - Power purchases	GWh	647.550	671.554
	Total	GWh	<u>1,570.869</u>	<u>1,626.337</u>
C)	Cost per unit			
	Cost of fuel - KE	Rs./kWh	3.390	3.562
	Cost of fuel - Power Purchases	Rs./kWh	2.192	2.451
	Average	Rs./kWh	<u>5.582</u>	<u>6.013</u>
D)	Variation per unit			
	Cost of fuel - KE	Rs./kWh	0.172	
	Cost of fuel - Power Purchases	Rs./kWh	0.260	
	Total Fuel Cost Adjustment	Rs./kWh	<u>0.432</u>	
E)	Total Fuel Cost Adjustment	Ps/kWh		<u>43.169</u>
F)	Variation amount			
	Cost of fuel - KE	Mill Rs.	279.388	
	Cost of fuel - Power Purchases	Mill Rs.	422.680	
	Total Fuel Cost Adjustment	Mill Rs.	<u>702.068</u>	
	e = d x b (total)			



## Work Sheet- Generation Fuel Cost Variation

DESCRIPTION	Sep-17	Oct-17
	Reference	Current
<b>1 UNITS SENT OUT</b>		
<b>1a UNITS SENT OUT ON FURNACE OIL</b>		
i Bin Qasim - I		
Unit 1	GWh	68.390
Unit 2	GWh	7.583
Unit 3	GWh	65.724
Unit 4	GWh	41.247
Unit 5	GWh	70.252
Unit 6	GWh	79.103
Total units sent out on furnace oil - Bin Qasim - I	GWh	<u>332.298</u>
		<u>361.763</u>
<b>1b UNITS SENT OUT ON GAS</b>		
i Bin Qasim - I		
Unit 1	GWh	13.667
Unit 2	GWh	2.912
Unit 3	GWh	0.801
Unit 4	GWh	15.381
Unit 5	GWh	17.562
Unit 6	GWh	16.723
Total units sent out on gas - Bin Qasim - I	GWh	<u>67.046</u>
		<u>59.943</u>
ii Bin Qasim II - 560 MW	GWh	347.116
iii Korangi Town Gas Turbine II	GWh	34.006
iv Site Gas Turbine II	GWh	44.828
v Korangi CCPP	GWh	98.025
Total units sent out on gas - KE	GWh	<u>591.021</u>
Total units sent out KE	GWh	<u>923.319</u>
		<u>954.783</u>
<b>2 HEAT RATE AT BUS BAR</b>		
i Bin Qasim - I		
Unit 1	Btu/kWh	10,802
Unit 2	Btu/kWh	10,650
Unit 3	Btu/kWh	10,996
Unit 4	Btu/kWh	10,899
Unit 5	Btu/kWh	10,304
Unit 6	Btu/kWh	10,249
ii Bin Qasim II - 560 MW	Btu/kWh	7,991
iii Korangi Town Gas Turbine II	Btu/kWh	8,738
iv Site Gas Turbine II	Btu/kWh	8,746
v Korangi CCPP	Btu/kWh	8,497

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Sep-17		Oct-17	
	Reference	Current	Reference	Current
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351	40,351	
<b>4 FUEL PRICES</b>				
4a Fuel Price - Gas	Rs./MMBTU	400	400	
4b Fuel Price - Furnace Oil	Rs./Mton	38,038	39,751	
4c Fuel Price - Furnace Oil	Rs./MMBTU	943	985	
<b>5 COST OF FUEL</b>				
<b>5a Furnace oil</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	696.398	811.940	
Unit 2	Mill Rs.	76.125	-	
Unit 3	Mill Rs.	681.273	756.034	
Unit 4	Mill Rs.	423.779	722.924	
Unit 5	Mill Rs.	682.381	773.210	
Unit 6	Mill Rs.	764.255	728.628	
Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	<u>3,324.211</u>	<u>3,792.737</u>	
<b>5b Gas</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	59.054	65.434	
Unit 2	Mill Rs.	12.405	-	
Unit 3	Mill Rs.	3.525	1.171	
Unit 4	Mill Rs.	67.053	89.663	
Unit 5	Mill Rs.	72.384	35.874	
Unit 6	Mill Rs.	68.557	62.566	
Total Cost of Gas - Bin Qasim - I	Mill Rs.	<u>282.978</u>	<u>254.709</u>	
ii Bin Qasim II - 560 MW	Mill Rs.	1,109.515	1,150.916	
iii Korangi Town Gas Turbine II	Mill Rs.	118.858	96.629	
iv Site Gas Turbine II	Mill Rs.	156.827	138.474	
v Korangi CCPP	Mill Rs.	333.169	359.527	
Total Cost of Gas - KE	Mill Rs.	<u>2,001.346</u>	<u>2,000.255</u>	
<b>Total cost of fuel - KE</b>	a	Mill Rs.	<u>5,325.557</u>	<u>5,792.992</u>
<b>6 Variation in Cost of Fuel - KE</b>				
6a Units Sent Out - KE	b	GWh	923.319	954.783
6b Units - Power Purchases	b	GWh	647.550	671.554
<b>Total Units Sent Out</b>	b	GWh	<u>1,570.869</u>	<u>1,626.337</u>
6c Cost per unit	c = a/b	Rs./kWh	3.390	3.562
6d Variation per unit (Cost of Fuel - KE)		Rs./kWh		0.172
6e Variation amount (Cost of Fuel - KE)		Mill Rs.		<u>279.388</u>

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Jun-17	Sep-17
	Reference	Current

**1 UNITS SENT OUT**

**1a UNITS SENT OUT ON FURNACE OIL**

i Bin Qasim - I

Unit 1	GWh	84.076	68.390
Unit 2	GWh	71.441	7.583
Unit 3	GWh	57.208	65.724
Unit 4	GWh	48.153	41.247
Unit 5	GWh	81.643	70.252
Unit 6	GWh	77.037	79.103
Total units sent out on furnace oil - Bin Qasim - I	GWh	419.558	332.298

**1b UNITS SENT OUT ON GAS**

i Bin Qasim - I

Unit 1	GWh	20.716	13.667
Unit 2	GWh	15.437	2.912
Unit 3	GWh	1.115	0.801
Unit 4	GWh	16.924	15.381
Unit 5	GWh	23.919	17.562
Unit 6	GWh	15.392	16.723
Total units sent out on gas - Bin Qasim - I	GWh	93.504	67.046

ii Bin Qasim II - 560 MW

iii Korangi Town Gas Turbine II

iv Site Gas Turbine II

v Korangi CCPP

Total units sent out on gas - KE

Total units sent out KE

**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	7,991	7,991
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 CCPP	Btu/kWh	8,497	8,497

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Jun-17		Sep-17	
	Reference	Current	Reference	Current
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351	40,351	
<b>4 FUEL PRICES</b>				
4a Fuel Price - Gas	Rs./MMBTU	400	400	
4b Fuel Price - Furnace Oil	Rs./Mton	37,759	38,038	
4c Fuel Price - Furnace Oil	Rs./MMBTU	936	943	
<b>5 COST OF FUEL</b>				
<b>5a Furnace oil</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	849.841	696.398	
Unit 2	Mill Rs.	711.971	76.125	
Unit 3	Mill Rs.	588.644	681.273	
Unit 4	Mill Rs.	491.107	423.779	
Unit 5	Mill Rs.	787.201	682.381	
Unit 6	Mill Rs.	738.831	764.255	
Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	<u>4,167.595</u>	<u>3,324.211</u>	
<b>5b Gas</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	89.509	59.054	
Unit 2	Mill Rs.	65.762	12.405	
Unit 3	Mill Rs.	4.904	3.525	
Unit 4	Mill Rs.	73.783	67.053	
Unit 5	Mill Rs.	98.586	72.384	
Unit 6	Mill Rs.	63.102	68.557	
Total Cost of Gas - Bin Qasim - I	Mill Rs.	<u>395.646</u>	<u>282.978</u>	
ii Bin Qasim II - 560 MW	Mill Rs.	1,094.247	1,109.515	
iii Korangi Town Gas Turbine II	Mill Rs.	180.891	118.858	
iv Site Gas Turbine II	Mill Rs.	169.419	156.827	
v Korangi CCPP	Mill Rs.	419.150	333.169	
Total Cost of Gas - KE	Mill Rs.	<u>2,259.353</u>	<u>2,001.346</u>	
Total cost of fuel - KE	a	Mill Rs.	<u>6,426.949</u>	<u>5,325.557</u>
<b>6 Variation in Cost of Fuel - KE</b>				
6a Units Sent Out - KE	b	GWh	1,078.905	923.319
6b Units - Power Purchases		GWh	<u>675.761</u>	<u>647.550</u>
Total Units Sent Out	b	GWh	<u>1,754.667</u>	<u>1,570.869</u>
6c Cost per unit	c = a/b	Rs./kWh	3.663	3.390
6d Variation per unit (Cost of Fuel - KE)		Rs./kWh		(0.273)
6e Variation amount (Cost of Fuel - KE)		Mill Rs.		<u>(428.183)</u>

**Work Sheet- Power Purchase Cost Variation**

DESCRIPTION	Jun-17		Sep-17	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	42.878	24.545	
b TAPAL	GWh	80.287	71.527	
c GUL AHMED	GWh	83.752	61.088	
d CPPA-G	GWh	421.632	443.273	
e ANOUD POWER	GWh	4.383	3.112	
f INT IND (IIL)	GWh	6.089	5.793	
g FFBL	GWh	36.741	37.691	
h SNPC	GWh	-	0.522	
<b>TOTAL</b>	GWh	<b>675.761</b>	<b>647.550</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	271.402	153.054	
b TAPAL	Mill Rs.	673.093	601.932	
c GUL AHMED	Mill Rs.	720.761	544.945	
d CPPA-G	Mill Rs.	1,936.303	1,878.813	
e ANOUD POWER	Mill Rs.	32.793	23.752	
f INT IND (IIL)	Mill Rs.	35.829	34.077	
g FFBL	Mill Rs.	188.309	203.935	
h SNPC	Mill Rs.	-	2.059	
<b>TOTAL</b>	Mill Rs.	<b>3,858.490</b>	<b>3,442.566</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	6.330	6.236	
b TAPAL	Rs./kwh	8.384	8.415	
c GUL AHMED	Rs./kwh	8.606	8.921	
d CPPA-G	Rs./kwh	4.592	4.239	
e ANOUD POWER	Rs./kwh	7.482	7.633	
f INT IND (IIL)	Rs./kwh	5.884	5.883	
g FFBL	Rs./kwh	5.125	5.411	
h SNPC	Rs./kwh	-	3.945	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
<b>4a Cost of Fuel - Power Purchases</b>	a	Mill Rs.	<b>3,858.490</b>	<b>3,442.566</b>
Units Sent out:				
Units Sent Out - KE	GWh	1,078.905	923.319	
Units - Power Purchases	GWh	675.761	647.550	
<b>4b Total Units Sent Out</b>	b	GWh	<b>1,754.667</b>	<b>1,570.869</b>
<b>4c Cost per unit</b>	c = a/b	Rs./kwh	2.199	2.192
<b>4d Variation per unit (Cost of Fuel - Power Purchases)</b>		Rs./kwh	(0.007)	
<b>4e Variation amount (Cost of Fuel - Power Purchases)</b>		Mill Rs.	<b>(11.755)</b>	

**K ELECTRIC LIMITED**

QUARTERLY ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL AND POWER PURCHASE COST INCLUDING O&M AND CAPACITY CHARGES	Quarter ended September 2017
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**Required adjustment in Tariff**

	Sep-17
Quarterly Revision to reset price levels	(0.232)
Unrecovered Cost for current quarter	(0.112)
Reversal of unrecovered cost of previous quarter	0.514
Total Required adjustment in KE's Tariff	<u>0.171</u>
Total Required adjustment in KE's Tariff	<u>17.081</u>

**Quarterly Revision to reset price levels**

Units Sent Out	GWh	1,570.869
T&D Losses allowed	GWh	19.80%
Units billed	GWh	1,259.837
Cost of Fuel - KE	Mill Rs	5,325.557

	Jun-17	Sep-17	Variation
Weighted Average Fuel cost per unit billed	Rs/Kwh	4.567	<u>(0.340)</u>

	Sep-17
Cost of Power Purchases	3,442.566
- Fuel Cost	2,082.180
- O&M and Capacity Cost	5,524.746
- Total Cost of Power Purchases	

	Jun-17	Sep-17	Variation
Weighted Average Cost of Power Purchases (cost per unit billed)	Rs/kWh	2.742	(0.009)
- Fuel Cost	Rs/kWh	1.535	0.118
- O&M Cost and capacity cost	Rs/kWh	4.277	0.108
- Total Cost of Power Purchases	Rs/kWh	4.385	0.108

	Jun-17	Sep-17	Variation
QUARTERLY INCREASE/DECREASE IN COST PER UNIT BILLED	(0.340)		
- Cost of Fuel - KE	Rs/kWh	2.733	(0.009)
- Cost of Power Purchases - Total	Rs/kWh	1.653	0.118
- Total Cost Variation	Rs/kWh	4.385	0.108

Note: Please note that the SoT attached with the MYT notification is based on updated terms and conditions including changes in definition of lifeline consumers and the assumption of conversion of eligible consumers to "A3" category along with enabling of Time of Use (ToU) metering for Residential and Commercial consumers etc. However, as the MYT has been notified on May 22, 2019, these changes will be effective from the date of notification. Accordingly, KE would like to request NEPRA to adjust the related impact while issuing determination of Quarterly SoTs.

**K ELECTRIC LIMITED**

QUARTERLY ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL AND POWER PURCHASE COST INCLUDING O&M AND CAPACITY CHARGES			Quarter ended September 2017				
ADJUSTMENT IN TARIFF DUE TO UNRECOVERED COST			Jun-17	Jul-17	Aug-17	Sep-17	QTR
Reference							
Units Sent Out	GWh	a	1,644.180	1,643.839	1,570.869		
T&D Losses allowed		b	19.8%	19.8%	19.8%		
Units billed	GWh	c = a x (1-b)	1,318.632	1,318.358	1,259.837	3,896.827	
a. O&M and Capacity cost of Power purchases							
O&M and Capacity cost of Power purchases	Mill Rs	d	1,862.327	1,826.729	2,082.180		
O&M and Capacity cost of power purchases (per unit billed)	Rs/kWh	e = d/c	1.535	1.412	1.386	1.653	
Increase or decrease in O&M and Capacity cost (over Reference)	Rs/kWh	f	(0.123)	(0.149)	0.118		
O&M and Capacity Cost of Power Purchases - Monthly variations Amount	Mill Rs	g = f x c					
			(161.900)	(197.078)	148.209	(210.769)	
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	h	(0.313)	0.142	(0.273)		
Cost of Fuel - Power Purchases	Rs/kWh	i	0.097	(0.078)	(0.007)		
Total	Rs/kWh	j = h + i	(0.217)	0.064	(0.280)		
ii. Monthly variation in Fuel Cost (FCA) - Amount							
Cost of Fuel - KE	Mill Rs	k = h x a	(515.028)	232.813	(428.183)	(710.398)	
Cost of Fuel - Power Purchases	Mill Rs	l = i x a	158.911	(127.401)	(11.755)	19.755	
Total	Mill Rs	m = k + l	(356.117)	105.412	(439.938)	(690.643)	
iii. Unrecovered Cost of FCA due to non adjustment of T&D losses							
Cost of Fuel - KE	Mill Rs	n = k x b	(101.976)	46.097	(84.780)	(140.659)	
Cost of Fuel - Power Purchases	Mill Rs	o = l x b	31.464	(25.225)	(2.327)	3.912	
Total	Mill Rs	p = n + o	(70.511)	20.872	(87.108)	(136.747)	
<b>Summary of Unrecovered cost for the quarter</b>							
a. O&M and Capacity cost of Power purchases	Mill Rs						(210.769)
b. Unrecovered Cost of FCA due to non adjustment of T&D losses	Mill Rs						(136.747)
Total Unrecovered cost for the quarter	Mill Rs	q					(347.516)
Units to be sold in next quarter at allowed T&D losses	GWh	r					3,100.034
Unrecovered Cost per unit for current quarter	Rs/kWh	s = q / r					(0.112)

Work Sheet- Power Purchase O&M and Capacity Cost

DESCRIPTION	Reference	Jun-17	Jul-17	Aug-17	Sep-17
<b>1 O&amp;M COST</b>					
a KANUPP	Mill Rs.	42.154	29.995	-	24.749
b TAPAL	Mill Rs.	85.610	75.393	78.379	77.077
c GUL AHMED	Mill Rs.	52.136	41.895	44.092	38.430
d CPPA-G	Mill Rs.	119.552	118.470	115.249	133.771
e ANOUD POWER	Mill Rs.	8.328	5.722	6.129	5.913
f INT IND (IIL)	Mill Rs.	9.939	10.445	9.800	9.448
g FFBL	Mill Rs.	19.201	20.407	19.925	19.727
<b>TOTAL</b>	Mill Rs.	<b>336.919</b>	<b>302.325</b>	<b>273.575</b>	<b>309.116</b>
<b>2 CAPACITY COST</b>					
a KANUPP	Mill Rs.	-	-	-	-
b TAPAL	Mill Rs.	142.291	143.074	143.074	143.074
c GUL AHMED	Mill Rs.	131.413	132.401	132.401	132.401
d CPPA-G	Mill Rs.	1,328.893	1,049.991	1,048.662	1,270.861
e ANOUD POWER	Mill Rs.	-	-	-	-
f INT IND (IIL)	Mill Rs.	-	-	-	-
g FFBL	Mill Rs.	220.736	234.534	229.016	226.726
<b>TOTAL</b>	Mill Rs.	<b>1,823.333</b>	<b>1,560.001</b>	<b>1,553.154</b>	<b>1,773.063</b>
<b>3 TOTAL O&amp;M &amp; CAPACITY COST</b>					
a KANUPP	Mill Rs.	42.154	29.995	-	24.749
b TAPAL	Mill Rs.	227.901	218.467	221.454	220.152
c GUL AHMED	Mill Rs.	183.548	174.296	176.494	170.832
d CPPA-G	Mill Rs.	1,448.445	1,168.461	1,163.911	1,404.632
e ANOUD POWER	Mill Rs.	8.328	5.722	6.129	5.913
f INT IND (IIL)	Mill Rs.	9.939	10.445	9.800	9.448
g FFBL	Mill Rs.	239.937	254.941	248.941	246.454
<b>TOTAL</b>	Mill Rs.	<b>2,160.252</b>	<b>1,862.327</b>	<b>1,826.729</b>	<b>2,082.180</b>

[Redacted]

GENERATION STATISTICS FOR THE MONTH OF SEP 2017

DESCRIPTION	BQPS (KWH)	BQPS II-560 MW (KWH)	SGTPS-II (KWH)	KTGTPS-II (KWH)	KCCPP (KWH)	KE (KWH)
UNITS GENERATED	433,907,760	369,704,615	45,977,602	34,877,944	105,313,100	989,781,021
AUXILIARY CONSUMPTION	9.2%	5.9%	3.2%	3.4%	7.4%	7.3%
UNITS SENT OUT	393,806,160	348,048,000	44,509,000	33,687,000	97,486,552	917,536,712

K Electric Limited

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

DESCRIPTION	Unit	Jun-17	Aug-17
		Reference	Current
A) Cost of fuel:			
Cost of fuel - KE	Mill Rs.	6,426.949	6,253.823
Cost of fuel - Power Purchases	Mill Rs.	3,858.490	3,487.380
Total	Mill Rs.	<u>10,285.439</u>	<u>9,741.203</u>
B) Units Sent Out			
Units Sent Out - KE	GWh	1,078.905	1,014.469
Units - Power purchases	GWh	675.761	629.370
Total	GWh	<u>1,754.667</u>	<u>1,643.839</u>
C) Cost per unit			
Cost of fuel - KE	Rs./kWh	3.663	3.804
Cost of fuel - Power Purchases	Rs./kWh	2.199	2.121
Average	Rs./kWh	<u>5.862</u>	<u>5.926</u>
D) Variation per unit			
Cost of fuel - KE	Rs./kWh		0.142
Cost of fuel - Power Purchases	Rs./kWh		(0.078)
Total Fuel Cost Adjustment	Rs./kWh		<u>0.064</u>
E) Total Fuel Cost Adjustment	Ps/kWh		<u>6.413</u>
F) Variation amount			
Cost of fuel - KE	Mill Rs.	232.813	
Cost of fuel - Power Purchases	Mill Rs.	(127.401)	
Total Fuel Cost Adjustment	Mill Rs.	<u>105.412</u>	

**Work Sheet- Generation Fuel Cost Variation**

	DESCRIPTION	Jun-17		Aug-17		
		Reference	Current	Reference	Current	
<b>1 UNITS SENT OUT</b>						
<b>1a UNITS SENT OUT ON FURNACE OIL</b>						
i	<u>Bin Qasim - I</u>					
	Unit 1	GWh	84.076	77.597		
	Unit 2	GWh	71.441	70.561		
	Unit 3	GWh	57.208	43.656		
	Unit 4	GWh	48.153	67.360		
	Unit 5	GWh	81.643	80.407		
	Unit 6	GWh	77.037	81.197		
	Total units sent out on furnace oil - Bin Qasim - I	GWh	<b>419.558</b>	<b>420.778</b>		
<b>1b UNITS SENT OUT ON GAS</b>						
i	<u>Bin Qasim - I</u>					
	Unit 1	GWh	20.716	18.772		
	Unit 2	GWh	15.437	13.805		
	Unit 3	GWh	1.115	0.400		
	Unit 4	GWh	16.924	18.444		
	Unit 5	GWh	23.919	9.017		
	Unit 6	GWh	15.392	12.102		
	Total units sent out on gas - Bin Qasim - I	GWh	<b>93.504</b>	<b>72.540</b>		
ii	Bin Qasim II - 560 MW	GWh	342.339	352.702		
iii	Korangi Town Gas Turbine II	GWh	51.754	28.211		
iv	Site Gas Turbine II	GWh	48.428	44.815		
v	Korangi CCPP	GWh	123.323	95.422		
	Total units sent out on gas - KE	GWh	<b>659.347</b>	<b>593.691</b>		
	Total units sent out KE	GWh	<b>1,078.905</b>	<b>1,014.469</b>		
<b>2 HEAT RATE AT BUS BAR</b>						
i	<u>Bin Qasim - I</u>					
	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	7,991	7,991		
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 CCPP	Btu/kWh	8,497	8,497		

K Electric Limited

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

	DESCRIPTION	Unit	Jun-17	Aug-17
			Reference	Current
A)	Cost of fuel:			
	Cost of fuel - KE	Mill Rs.	6,426.949	6,253.823
	Cost of fuel - Power Purchases	Mill Rs.	3,858.490	3,487.380
	Total	Mill Rs.	<u>10,285.439</u>	<u>9,741.203</u>
B)	Units Sent Out			
	Units Sent Out - KE	GWh	1,078.905	1,014.469
	Units - Power purchases	GWh	675.761	629.370
	Total	GWh	<u>1,754.667</u>	<u>1,643.839</u>
C)	Cost per unit			
	Cost of fuel - KE	Rs./kWh	3.663	3.804
	Cost of fuel - Power Purchases	Rs./kWh	2.199	2.121
	Average	Rs./kWh	<u>5.862</u>	<u>5.926</u>
D)	Variation per unit			
	Cost of fuel - KE	Rs./kWh		0.142
	Cost of fuel - Power Purchases	Rs./kWh		(0.078)
	Total Fuel Cost Adjustment	Rs./kWh		<u>0.064</u>
E)	Total Fuel Cost Adjustment	Ps/kWh		<u>6.413</u>
F)	Variation amount			
	Cost of fuel - KE	Mill Rs.	232.813	
	Cost of fuel - Power Purchases	Mill Rs.	(127.401)	
	Total Fuel Cost Adjustment	Mill Rs.	<u>105.412</u>	

K Electric Limited

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

	DESCRIPTION	Unit	Jun-17	Sep-17
			Reference	Current
A)	Cost of fuel:			
	Cost of fuel - KE	Mill Rs.	6,426.949	5,325.557
	Cost of fuel - Power Purchases	Mill Rs.	3,858.490	3,442.566
	Total	Mill Rs.	<u>10,285.439</u>	<u>8,768.123</u>
B)	Units Sent Out			
	Units Sent Out - KE	GWh	1,078.905	923.319
	Units - Power purchases	GWh	675.761	647.550
	Total	GWh	<u>1,754.667</u>	<u>1,570.869</u>
C)	Cost per unit			
	Cost of fuel - KE	Rs./kWh	3.663	3.390
	Cost of fuel - Power Purchases	Rs./kWh	2.199	2.192
	Average	Rs./kWh	<u>5.862</u>	<u>5.582</u>
D)	Variation per unit			
	Cost of fuel - KE	Rs./kWh		(0.273)
	Cost of fuel - Power Purchases	Rs./KWh		(0.007)
	Total Fuel Cost Adjustment	Rs./kWh		<u>(0.280)</u>
E)	Total Fuel Cost Adjustment	Ps/kWh		<u>(28.006)</u>
F)	Variation amount			
	Cost of fuel - KE	Mill Rs.		(428.183)
	Cost of fuel - Power Purchases	Mill Rs.		(11.755)
	Total Fuel Cost Adjustment	Mill Rs.		<u>(439.938)</u>

**K Electric Limited**

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

DESCRIPTION	Unit	Jun-17	Jul-17
		Reference	Current
A) Cost of fuel:			
Cost of fuel - KE	Mill Rs.	6,426.949	5,507.231
Cost of fuel - Power Purchases	Mill Rs.	3,858.490	3,774.441
Total	Mill Rs.	<u>10,285.439</u>	<u>9,281.672</u>
B) Units Sent Out			
Units Sent Out - KE	GWh	1,078.905	978.954
Units - Power purchases	GWh	675.761	665.225
Total	GWh	<u>1,754.667</u>	<u>1,644.180</u>
C) Cost per unit			
Cost of fuel - KE	Rs./kWh	3.663	3.350
Cost of fuel - Power Purchases	Rs./kWh	2.199	2.296
Average	Rs./kWh	<u>5.862</u>	<u>5.645</u>
D) Variation per unit			
Cost of fuel - KE	Rs./kWh		(0.313)
Cost of fuel - Power Purchases	Rs./kWh		0.097
Total Fuel Cost Adjustment	Rs./kWh		<u>(0.217)</u>
E) Total Fuel Cost Adjustment	Rs./kWh		<u>(21.659)</u>
F) Variation amount			
Cost of fuel - KE	Mill Rs.	(515.028)	
Cost of fuel - Power Purchases	Mill Rs.	158.911	
Total Fuel Cost Adjustment	Mill Rs.	<u>(356.117)</u>	

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Jun-17	Jul-17
	Reference	Current
<b>1 UNITS SENT OUT</b>		
<b>1a UNITS SENT OUT ON FURNACE OIL</b>		
i Bin Qasim - I		
Unit 1	GWh	84.076
Unit 2	GWh	71.441
Unit 3	GWh	57.208
Unit 4	GWh	48.153
Unit 5	GWh	81.643
Unit 6	GWh	77.037
Total units sent out on furnace oil - Bin Qasim - I	GWh	419.558
		343.210
<b>1b UNITS SENT OUT ON GAS</b>		
i Bin Qasim - I		
Unit 1	GWh	20.716
Unit 2	GWh	15.437
Unit 3	GWh	1.115
Unit 4	GWh	16.924
Unit 5	GWh	23.919
Unit 6	GWh	15.392
Total units sent out on gas - Bin Qasim - I	GWh	93.504
		76.994
ii Bin Qasim II - 560 MW	GWh	342.339
iii Korangi Town Gas Turbine II	GWh	51.754
iv Site Gas Turbine II	GWh	48.428
v Korangi CCPP	GWh	123.323
Total units sent out on gas - KE	GWh	659.347
Total units sent out KE	GWh	1,078.905
		978.954
<b>2 HEAT RATE AT BUS BAR</b>		
i Bin Qasim - I		
Unit 1	Btu/kWh	10,802
Unit 2	Btu/kWh	10,650
Unit 3	Btu/kWh	10,996
Unit 4	Btu/kWh	10,899
Unit 5	Btu/kWh	10,304
Unit 6	Btu/kWh	10,249
ii Bin Qasim II - 560 MW	Btu/kWh	7,991
iii Korangi Town Gas Turbine II	Btu/kWh	8,738
iv Site Gas Turbine II	Btu/kWh	8,746
v Korangi CCPP	Btu/kWh	8,497
		8,497

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Jun-17		Jul-17	
	Reference	Current	Reference	Current
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351	40,351	40,351
<b>4 FUEL PRICES</b>				
4a Fuel Price - Gas	Rs./MMBTU	400	400	400
4b Fuel Price - Furnace Oil	Rs./Mton	37,759	37,083	37,083
4c Fuel Price - Furnace Oil	Rs./MMBTU	936	919	919
<b>5 COST OF FUEL</b>				
<b>5a Furnace oil</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	849.841	290.863	290.863
Unit 2	Mill Rs.	711.971	592.328	592.328
Unit 3	Mill Rs.	588.644	568.136	568.136
Unit 4	Mill Rs.	491.107	539.615	539.615
Unit 5	Mill Rs.	787.201	679.462	679.462
Unit 6	Mill Rs.	738.831	673.860	673.860
Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	4,167.595	3,344.263	3,344.263
<b>5b Gas</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	89.509	35.743	35.743
Unit 2	Mill Rs.	65.762	74.372	74.372
Unit 3	Mill Rs.	4.904	6.433	6.433
Unit 4	Mill Rs.	73.783	74.051	74.051
Unit 5	Mill Rs.	98.586	81.755	81.755
Unit 6	Mill Rs.	63.102	53.212	53.212
Total Cost of Gas - Bin Qasim - I	Mill Rs.	395.646	325.566	325.566
ii Bin Qasim II - 560 MW	Mill Rs.	1,094.247	1,122.500	1,122.500
iii Korangi Town Gas Turbine II	Mill Rs.	180.891	149.296	149.296
iv Site Gas Turbine II	Mill Rs.	169.419	185.853	185.853
v Korangi CCPP	Mill Rs.	419.150	379.753	379.753
Total Cost of Gas - KE	Mill Rs.	2,259.353	2,162.968	2,162.968
<b>Total cost of fuel - KE</b>	a	Mill Rs.	<u>6,426.949</u>	<u>5,507.231</u>
<b>6 Variation in Cost of Fuel - KE</b>				
6a Units Sent Out - KE	b	GWh	1,078.905	978.954
6b Units - Power Purchases		GWh	675.761	665.225
Total Units Sent Out	b	GWh	1,754.667	1,644.180
6c Cost per unit	c = a/b	Rs./kWh	3.663	3.350
6d Variation per unit (Cost of Fuel - KE)		Rs./kWh		(0.313)
6e Variation amount (Cost of Fuel - KE)		Mill Rs.		<u>(515.028)</u>

**Work Sheet- Power Purchase Cost Variation**

DESCRIPTION	Jun-17		Jul-17	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	42.878	29.746	
b TAPAL	GWh	80.287	69.964	
c GUL AHMED	GWh	83.752	66.595	
d CPPA-G	GWh	421.632	450.521	
e ANOUD POWER	GWh	4.383	3.011	
f INT IND (IIL)	GWh	6.089	6.399	
g FFBL	GWh	36.741	38.989	
<b>TOTAL</b>	GWh	<b>675.761</b>	<b>665.225</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	271.402	181.595	
b TAPAL	Mill Rs.	673.093	596.892	
c GUL AHMED	Mill Rs.	720.761	581.393	
d CPPA-G	Mill Rs.	1,936.303	2,155.247	
e ANOUD POWER	Mill Rs.	32.793	21.829	
f INT IND (IIL)	Mill Rs.	35.829	37.655	
g FFBL	Mill Rs.	188.309	199.830	
<b>TOTAL</b>	Mill Rs.	<b>3,858.490</b>	<b>3,774.441</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	6.330	6.105	
b TAPAL	Rs./kwh	8.384	8.531	
c GUL AHMED	Rs./kwh	8.606	8.730	
d CPPA-G	Rs./kwh	4.592	4.784	
e ANOUD POWER	Rs./kwh	7.482	7.249	
f INT IND (IIL)	Rs./kwh	5.884	5.884	
g FFBL	Rs./kwh	5.125	5.125	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
<b>4a Cost of Fuel - Power Purchases</b>	a Mill Rs.	<b>3,858.490</b>	<b>3,774.441</b>	
Units Sent out:				
Units Sent Out - KE	GWh	1,078.905	978.954	
Units - Power Purchases	GWh	675.761	665.225	
<b>4b Total Units Sent Out</b>	b GWh	<b>1,754.667</b>	<b>1,644.180</b>	
<b>4c Cost per unit</b>	c = a/b Rs./kwh	2.199	2.296	
<b>4d Variation per unit (Cost of Fuel - Power Purchases)</b>	Rs./kwh	0.097		
<b>4e Variation amount (Cost of Fuel - Power Purchases)</b>	Mill Rs.		<b>158.911</b>	

K Electric Limited

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

	DESCRIPTION	Unit	Mar-17	Jun-17
			Reference	Current
A)	Cost of fuel:			
	Cost of fuel - KE	Mill Rs.	4,011.691	6,426.949
	Cost of fuel - Power Purchases	Mill Rs.	4,119.147	3,858.490
	Total	Mill Rs.	<u>8,130.838</u>	<u>10,285.439</u>
B)	Units Sent Out			
	Units Sent Out - KE	GWh	679.267	1,078.905
	Units - Power purchases	GWh	612.994	675.761
	Total	GWh	<u>1,292.261</u>	<u>1,754.667</u>
C)	Cost per unit			
	Cost of fuel - KE	Rs./kWh	3.104	3.663
	Cost of fuel - Power Purchases	Rs./kWh	3.188	2.199
	Average	Rs./kWh	<u>6.292</u>	<u>5.862</u>
D)	Variation per unit			
	Cost of fuel - KE	Rs./kWh	0.558	
	Cost of fuel - Power Purchases	Rs./kWh	(0.989)	
	Total Fuel Cost Adjustment	Rs./kWh		<u>(0.430)</u>
E)	Total Fuel Cost Adjustment	Ps/kWh		<u>(43.018)</u>
F)	Variation amount			
	Cost of fuel - KE	Mill Rs.	979.767	
	Cost of fuel - Power Purchases	Mill Rs.	(1,734.597)	
	Total Fuel Cost Adjustment	Mill Rs.		<u>(754.830)</u>

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Mar-17	Jun-17
	Reference	Current
<b>1 UNITS SENT OUT</b>		
<b>1a UNITS SENT OUT ON FURNACE OIL</b>		
i Bin Qasim - I		
Unit 1	GWh	84.076
Unit 2	GWh	67.647
Unit 3	GWh	57.208
Unit 4	GWh	42.123
Unit 5	GWh	46.602
Unit 6	GWh	97.293
Total units sent out on furnace oil - Bin Qasim - I	GWh	253.665
		419.558
<b>1b UNITS SENT OUT ON GAS</b>		
i Bin Qasim - I		
Unit 1	GWh	20.716
Unit 2	GWh	0.789
Unit 3	GWh	1.115
Unit 4	GWh	11.239
Unit 5	GWh	6.926
Unit 6	GWh	2.190
Total units sent out on gas - Bin Qasim - I	GWh	21.145
		93.504
ii Bin Qasim II - 560 MW	GWh	371.695
iii Korangi Town Gas Turbine II	GWh	11.043
iv Site Gas Turbine II	GWh	15.057
v Korangi CCPP	GWh	6.662
Total units sent out on gas - KE	GWh	425.602
Total units sent out KE	GWh	679.267
		<u>1,078.905</u>
<b>2 HEAT RATE AT BUS BAR</b>		
i Bin Qasim - I		
Unit 1	Btu/kWh	10,802
Unit 2	Btu/kWh	10,650
Unit 3	Btu/kWh	10,996
Unit 4	Btu/kWh	10,899
Unit 5	Btu/kWh	10,304
Unit 6	Btu/kWh	10,249
ii Bin Qasim II - 560 MW	Btu/kWh	7,991
iii Korangi Town Gas Turbine II	Btu/kWh	8,738
iv Site Gas Turbine II	Btu/kWh	8,746
v Korangi CCPP	Btu/kWh	8,497

**Work Sheet- Generation Fuel Cost Variation**

	DESCRIPTION	Mar-17		Jun-17	
		Reference	Current	Reference	Current
<b>3</b>	<b><u>Calorific Value - Furnace Oil</u></b>	Btu/kg	40,351	40,351	
<b>4</b>	<b>FUEL PRICES</b>				
4a	Fuel Price - Gas	Rs./MMBTU	400	400	
4b	Fuel Price - Furnace Oil	Rs./Mton	39,788	37,759	
4c	Fuel Price - Furnace Oil	Rs./MMBTU	986	936	
<b>5</b>	<b>COST OF FUEL</b>				
5a	<u>Furnace oil</u>				
i	<u>Bin Qasim - I</u>				
	Unit 1	Mill Rs.	-	849.841	
	Unit 2	Mill Rs.	710.387	711.971	
	Unit 3	Mill Rs.	-	588.644	
	Unit 4	Mill Rs.	452.689	491.107	
	Unit 5	Mill Rs.	473.485	787.201	
	Unit 6	Mill Rs.	983.247	738.831	
	Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	<u>2,619.809</u>	<u>4,167.595</u>	
5b	<u>Gas</u>				
i	<u>Bin Qasim - I</u>				
	Unit 1	Mill Rs.	-	89.509	
	Unit 2	Mill Rs.	3.363	65.762	
	Unit 3	Mill Rs.	-	4.904	
	Unit 4	Mill Rs.	48.997	73.783	
	Unit 5	Mill Rs.	28.548	98.586	
	Unit 6	Mill Rs.	8.978	63.102	
	Total Cost of Gas - Bin Qasim - I	Mill Rs.	<u>89.886</u>	<u>395.646</u>	
ii	Bin Qasim II - 560 MW	Mill Rs.	1,188.080	1,094.247	
iii	Korangi Town Gas Turbine II	Mill Rs.	38.599	180.891	
iv	Site Gas Turbine II	Mill Rs.	52.676	169.419	
v	Korangi CCPP	Mill Rs.	22.642	419.150	
	Total Cost of Gas - KE	Mill Rs.	<u>1,391.883</u>	<u>2,259.353</u>	
	<b>Total cost of fuel - KE</b>	a	<b>Mill Rs.</b>	<b><u>4,011.691</u></b>	<b><u>6,426.949</u></b>
<b>6</b>	<b>Variation in Cost of Fuel - KE</b>				
6a	Units Sent Out - KE		GWh	679.267	1,078.905
6b	Units - Power Purchases		GWh	612.994	675.761
	<b>Total Units Sent Out</b>	b	<b>GWh</b>	<b><u>1,292.261</u></b>	<b><u>1,754.667</u></b>
6c	Cost per unit	c = a/b	Rs./kWh	3.104	3.663
6d	Variation per unit (Cost of Fuel - KE)		Rs./kWh		0.558
6e	Variation amount (Cost of Fuel - KE)		Mill Rs.		<u>979.767</u>

## Work Sheet- Power Purchase Cost Variation

DESCRIPTION	Mar-17		Jun-17	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	29.552	42.878	
b TAPAL	GWh	68.854	80.287	
c GUL AHMED	GWh	74.550	83.752	
d CPPA-G	GWh	429.943	421.632	
e ANOUD POWER	GWh	4.447	4.383	
f INT IND (IIL)	GWh	5.649	6.089	
g FFBL	GWh	-	36.741	
<b>TOTAL</b>	<b>GWh</b>	<b>612.994</b>	<b>675.761</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	187.053	271.402	
b TAPAL	Mill Rs.	620.211	673.093	
c GUL AHMED	Mill Rs.	686.604	720.761	
d CPPA-G	Mill Rs.	2,558.204	1,936.303	
e ANOUD POWER	Mill Rs.	34.217	32.793	
f INT IND (IIL)	Mill Rs.	32.858	35.829	
g FFBL	Mill Rs.	-	188.309	
<b>TOTAL</b>	<b>Mill Rs.</b>	<b>4,119.147</b>	<b>3,858.490</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	6.330	6.330	
b TAPAL	Rs./kwh	9.008	8.384	
c GUL AHMED	Rs./kwh	9.210	8.606	
d CPPA-G	Rs./kwh	5.950	4.592	
e ANOUD POWER	Rs./kwh	7.694	7.482	
f INT IND (IIL)	Rs./kwh	5.817	5.884	
g FFBL	Rs./kwh	-	5.125	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
<b>4a Cost of Fuel - Power Purchases</b>	<b>a</b>	<b>Mill Rs.</b>	<b>4,119.147</b>	<b>3,858.490</b>
Units Sent out:				
Units Sent Out - KE	GWh	679.267	1,078.905	
Units - Power Purchases	GWh	612.994	675.761	
<b>4b Total Units Sent Out</b>	<b>b</b>	<b>GWh</b>	<b>1,292.261</b>	<b>1,754.667</b>
<b>4c Cost per unit</b>	<b>c = a/b</b>	<b>Rs./kwh</b>	<b>3.188</b>	<b>2.199</b>
<b>4d Variation per unit (Cost of Fuel - Power Purchases)</b>		<b>Rs./kwh</b>		<b>(0.989)</b>
<b>4e Variation amount (Cost of Fuel - Power Purchases)</b>		<b>Mill Rs.</b>		<b>(1,734.597)</b>

**K ELECTRIC LIMITED**

QUARTERLY ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL AND POWER PURCHASE COST INCLUDING O&M AND CAPACITY CHARGES	Quarter ended June 2017
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<u>Required adjustment in Tariff</u>		Jun-17
Quarterly Revision to reset price levels	Rs/kWh	
Unrecovered Cost for current quarter	Rs/kWh	(0.805) (0.514)
<b>Other tariff Adjustments - Refer 'Tariff Variation' sheet.</b>		
Annual CPI on O&M with T&D loss adjustment	Rs/kWh	0.043
T&D loss adjustment for Fuel cost	Rs/kWh	(0.064)
T&D loss adjustment for Power purchase cost	Rs/kWh	(0.038)
T&D loss adjustment for Power purchase O&M & Capacity cost	Rs/kWh	(0.021)
T&D loss adjustment of other components	Rs/kWh	(0.041)
Additional write off	Rs/kWh	0.306
<b>Total</b>	Rs/kWh	<b>0.186</b>
Reversal of unrecovered cost of previous quarter	Rs/kWh	(0.020)
<b>Total Required adjustment in KE's Tariff</b>	Rs/kWh	<b>(1.154)</b>
<b>Total Required adjustment in KE's Tariff</b>	Ps/kWh	<b>(115.441)</b>

<u>Quarterly Revision to reset price levels</u>		Jun-17
Units Sent Out	GWh	
T&D Losses allowed	GWh	1,754.667
Units billed	GWh	20.90%
<b>Cost of Fuel - KE</b>	Mill Rs	1,387.941
Weighted Average Fuel cost per unit billed	Rs/Kwh	
		<b>Mar-17      Jun-17      Variation</b>
		3.925      4.631      0.706
<b>Cost of Power Purchases</b>		
- Fuel Cost	Mill Rs	Jun-17
- O&M and Capacity Cost	Mill Rs	3,858.490
- Total Cost of Power Purchases	Mill Rs	2,160.252
		<b>6,018.742</b>
<b>Weighted Average Cost of Power Purchases (cost per unit billed)</b>		
- Fuel Cost	Rs/kWh	
- O&M Cost and capacity cost	Rs/kWh	(1.250)
- Total Cost of Power Purchases	Rs/kWh	(0.262)
		<b>5.848      4.336      (1.511)</b>
<b>QUARTERLY INCREASE/DECREASE IN COST PER UNIT BILLED</b>		
- Cost of Fuel - KE	Rs/kWh	0.706
- Cost of Power Purchases - Total	Rs/kWh	(1.511)
<b>Total Cost Variation</b>	Rs/kWh	<b>(0.805)</b>

Note: Please note that the SoT attached with the MYT notification is based on updated terms and conditions including changes in definition of lifeline consumers and the assumption of conversion of eligible consumers to "A3" category along with enabling of Time of Use (ToU) metering for Residential and Commercial consumers etc. However, as the MYT has been notified on May 22, 2019, these changes will be effective from the date of notification. Accordingly, KE would like to request NEPRA to adjust the related impact while issuing determination of Quarterly SoTs.

K ELECTRIC LIMITED

QUARTERLY ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL AND POWER PURCHASE COST INCLUDING O&M AND CAPACITY CHARGES			Quarter ended June 2017				
ADJUSTMENT IN TARIFF DUE TO UNRECOVERED COST			Mar-17	Apr-17	May-17	Jun-17	QTR
			Reference				
Units Sent Out	GWh	a	1,482.834	1,680.225	1,754.667	4,917.726	
T&D Losses allowed		b	20.9%	20.9%	20.9%		
Units billed	GWh	c = a x (1-b)	1,172.922	1,329.058	1,387.941	3,889.921	
a. O&M and Capacity cost of Power purchases	Mill Rs	d	1,658.012	1,844.351	2,160.252		
O&M and Capacity cost of Power purchases	Rs/kWh	e = d/c	1.818	1.414	1.388	1.556	
O&M and Capacity cost of power purchases (per unit billed)	Rs/kWh	f	(0.404)	(0.430)	(0.262)		
Increase or decrease in O&M and Capacity cost (over Reference)							
O&M and Capacity Cost of Power Purchases - Monthly variations Amount	Mill Rs	g = f x c	(474.418)	(571.941)	(363.093)	(1,409.452)	
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	h	0.178	0.543	0.558		
Cost of Fuel - Power Purchases	Rs/kWh	i	(0.433)	(0.917)	(0.9886)		
Total	Rs/kWh	j = h + i	(0.255)	(0.374)	(0.430)		
ii Monthly variation in Fuel Cost (FCA) - Amount							
Cost of Fuel - KE	Mill Rs	k = h x a	263.435	912.698	979.767	2,155.901	
Cost of Fuel - Power Purchases	Mill Rs	l = i x a	(641.893)	(1,540.449)	(1,734.597)	(3,916.939)	
Total	Mill Rs	m = k + l	(378.457)	(627.751)	(754.830)	(1,761.039)	
iii Unrecovered Cost of FCA due to non adjustment of T&D losses							
Cost of Fuel - KE	Mill Rs	n = k x b	55.058	190.754	204.771	450.583	
Cost of Fuel - Power Purchases	Mill Rs	o = l x b	(134.156)	(321.954)	(362.531)	(818.640)	
Total	Mill Rs	p = n + o	(79.098)	(131.200)	(157.759)	(368.057)	
<b>Summary of Unrecovered cost for the quarter</b>							
a. O&M and Capacity cost of Power purchases	Mill Rs						(1,409.452)
b. Unrecovered Cost of FCA due to non adjustment of T&D losses	Mill Rs						(368.057)
c. Other Adjustments	Mill Rs						
WWF/WPPF / Bonus to IPPs - Note 1	Mill Rs						25.369
Capacity Charges true up CPPA-G	Mill Rs						(252.669)
<b>Total Unrecovered cost for the quarter</b>	Mill Rs	q					(2,004.809)
Units to be sold in next quarter at allowed T&D losses	GWh	r					3,896.827
Unrecovered Cost per unit for current quarter	Rs/kWh	s = q / r					(0.514)

Notes:

1 Tapal Energy Excess Energy Bonus Rs.25.369 million.

Work Sheet- Power Purchase O&M and Capacity Cost

DESCRIPTION		Mar-17	Apr-17	May-17	Jun-17
	Reference				
<b>1 O&amp;M COST</b>					
a KANUPP	Mill Rs.	29.053	35.484	23.434	42.154
b TAPAL	Mill Rs.	73.418	78.074	83.921	85.610
c GUL AHMED	Mill Rs.	46.407	47.137	53.972	52.136
d CPPA-G	Mill Rs.	129.962	133.035	118.406	119.552
e ANOUD POWER	Mill Rs.	8.202	8.202	8.419	8.328
f INT IND (IIL)	Mill Rs.	9.831	9.063	10.286	9.939
g FFBL	Mill Rs.			12.493	19.201
<b>TOTAL</b>	Mill Rs.	<b>296.874</b>	<b>310.995</b>	<b>310.931</b>	<b>336.919</b>
<b>2 CAPACITY COST</b>					
a KANUPP	Mill Rs.				
b TAPAL	Mill Rs.	135.443	136.215	142.291	142.291
c GUL AHMED	Mill Rs.	131.355	131.413	131.413	131.413
d CPPA-G	Mill Rs.	1,294.699	1,079.390	1,163.242	1,328.893
e ANOUD POWER	Mill Rs.	-	-	-	-
f INT IND (IIL)	Mill Rs.	-	-	-	-
g FFBL	Mill Rs.			96.475	220.736
<b>TOTAL</b>	Mill Rs.	<b>1,561.497</b>	<b>1,347.017</b>	<b>1,533.421</b>	<b>1,823.333</b>
<b>3 TOTAL O&amp;M &amp; CAPACITY COST</b>					
a KANUPP	Mill Rs.	29.053	35.484	23.434	42.154
b TAPAL	Mill Rs.	208.861	214.289	226.212	227.901
c GUL AHMED	Mill Rs.	177.763	178.549	185.385	183.548
d CPPA-G	Mill Rs.	1,424.661	1,212.425	1,281.648	1,448.445
e ANOUD POWER	Mill Rs.	8.202	8.202	8.419	8.328
f INT IND (IIL)	Mill Rs.	9.831	9.063	10.286	9.939
g FFBL	Mill Rs.			108.968	239.937
<b>TOTAL</b>	Mill Rs.	<b>1,858.371</b>	<b>1,658.012</b>	<b>1,844.351</b>	<b>2,160.252</b>

## Annual Tariff Variation - June 2017

Description	Tariff level	Quarterly adjustments			Tariff level	T&D loss adjustment factor	T&D loss	Tariff level adjusted for T&D losses	CP-X	CP-I indexation	Tariff level adjusted for T&D losses and CPI
		Dec 2016	March 2017	June 2017							
July 2016	Sep 2016	Dec 2016	March 2017	June 2017				July 2017			
PKR / kWh	PKR / kWh	PKR / kWh	PKR / kWh	PKR / kWh				PKR / kWh			
a	b	c	d	e	f = sum a to f	g	h = f X g	i = f + h	j	k = i X j	l = i + k
Fuel and power purchase											4.567
Fuel cost - own generation	3.710	0.835	(0.719)	0.059	0.706	4.631	0.986	4.567			2.742
Power purchase - fuel cost	2.860	(0.615)	1.978	(0.193)	(1.250)	2.780	0.986	2.742			1.535
Power purchase - OEM and capacity cost*	1.522	(0.169)	0.640	(0.175)	(0.262)	1.556	0.986	1.535			0.844
Sub-total	8.082	0.101	1.859	(0.309)	(0.805)	8.467		8.844			
0.84M											0.436
Generation	0.421					0.421	0.986	0.415	5.02%	0.021	
Transmission	0.213					0.213	0.986	0.210	3.51%	0.007	0.217
Distribution	1.137					1.137	0.986	1.121	3.51%	0.039	1.161
Sub-total	1.771					1.771	(0.024)	1.747		0.068	
Other components											
Bad debts	0.213					0.213	0.986	0.210		0.306	0.516
Other income	(0.308)					(0.308)	0.986	0.004	(0.304)	(0.304)	
Depreciation	0.537					0.537	0.986	0.530		0.530	
Return component	1.448					1.448	0.986	1.428		1.428	
Base rate adjustment component	1.074					1.074	0.986	1.059		1.059	

## T&amp;D loss adjustment factor for FY 2018

Current T&amp;D level - FY 2018 C-T&amp;D

Previous T&amp;D level - FY 2017 P-T&amp;D

T&amp;D Adjustment factor [1 - P-T&amp;D] / [1 - C-T&amp;D]

0.986

## T&amp;D loss adjustment factor for FY 2018

Current T&amp;D level - FY 2018 C-T&amp;D

Previous T&amp;D level - FY 2017 P-T&amp;D

T&amp;D Adjustment factor [1 - P-T&amp;D] / [1 - C-T&amp;D]

0.986

## CPI

Current CPI - May 2017

Reference CPI - May 2016

Increase in CPI (%)

216.33

205.99

5.02%

Description	CPI	X factor - lower of Fixed 30% of CPI	Lower or fixed or 30% of CPI	CP-X
Generation	5.02%	2.00%	1.51%	0.00%
Transmission	5.02%	2.00%	1.51%	1.51%
Distribution	5.02%	3.00%	1.51%	1.51%

K Electric Limited

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

	DESCRIPTION	Unit	Mar-17	May-17
			Reference	Current
A)	Cost of fuel:			
	Cost of fuel - KE			
	Cost of fuel - Power Purchases			
	Total	a	Mill Rs. 4,011.691 Mill Rs. 4,119.147 Mill Rs. 8,130.838	6,128.783 3,815.351 9,944.134
B)	Units Sent Out			
	Units Sent Out - KE			
	Units - Power purchases			
	Total	b	GWh 679.267 GWh 612.994 GWh 1,292.261	1,043.566 636.658 1,680.225
C)	Cost per unit			
	Cost of fuel - KE			
	Cost of fuel - Power Purchases			
	Average	c = a/b	Rs./kWh 3.104 Rs./kWh 3.188 Rs./kWh 6.292	3.648 2.271 5.918
D)	Variation per unit			
	Cost of fuel - KE			
	Cost of fuel - Power Purchases			
	Total Fuel Cost Adjustment	d	Rs./kWh Rs./kWh Rs./kWh	0.543 (0.917) (0.374)
E)	Total Fuel Cost Adjustment		Ps/kWh	(37.361)
F)	Variation amount			
	Cost of fuel - KE			
	Cost of fuel - Power Purchases			
	Total Fuel Cost Adjustment	e = d x b (total)	Mill Rs. Mill Rs. Mill Rs.	912.698 (1,540.449) (627.751)

Work Sheet- Generation Fuel Cost Variation:

	DESCRIPTION	Mar-17		May-17		
		Reference	Current	Reference	Current	
<b>1 UNITS SENT OUT</b>						
<b>1a UNITS SENT OUT ON FURNACE OIL</b>						
i	<u>Bin Qasim - I</u>					
	Unit 1	GWh	-	33,448		
	Unit 2	GWh	67,647	92,723		
	Unit 3	GWh	-	56,302		
	Unit 4	GWh	42,123	31,480		
	Unit 5	GWh	46,602	100,334		
	Unit 6	GWh	97,293	88,249		
	<b>Total units sent out on furnace oil - Bin Qasim - I:</b>	<b>GWh</b>	<b>253,665</b>	<b>402,538</b>		
<b>1b UNITS SENT OUT ON GAS</b>						
ii	<u>Bin Qasim - II</u>					
	Unit 1	GWh	-	9,805		
	Unit 2	GWh	0.789	9,426		
	Unit 3	GWh	-	2,687		
	Unit 4	GWh	11,239	8,842		
	Unit 5	GWh	6,926	14,780		
	Unit 6	GWh	2,190	14,152		
	<b>Total units sent out on gas - Bin Qasim - II:</b>	<b>GWh</b>	<b>21,145</b>	<b>59,693</b>		
ii	Bin Qasim II - 560 MW	GWh	371,695	355,620		
iii	Korangi Town Gas Turbine II	GWh	11,043	40,115		
iv	Site Gas Turbine II	GWh	15,057	43,246		
v	Korangi CCPP	GWh	6,662	142,354		
	<b>Total units sent out on gas - KE</b>	<b>GWh</b>	<b>425,602</b>	<b>641,029</b>		
	<b>Total units sent out KE</b>	<b>GWh</b>	<b>679,267</b>	<b>1,043,566</b>		
<b>2 HEAT RATE AT BUS BAR</b>						
i	<u>Bin Qasim - I</u>					
	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	7,991	7,991		
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 CCPP	Btu/kWh	8,497	8,497		

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Mar-17		May-17	
	Reference	Current	Reference	Current
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351	40,351	
<b>4 FUEL PRICES</b>				
4a Fuel Price - Gas	Rs./MMBTU	400	400	
4b Fuel Price - Furnace Oil	Rs./Mton	39,788	37,650	
4c Fuel Price - Furnace Oil	Rs./MMBTU	986	933	
<b>5 COST OF FUEL</b>				
<b>5a Furnace oil</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	-	337.122	
Unit 2	Mill Rs.	710.387	921.411	
Unit 3	Mill Rs.	-	577.663	
Unit 4	Mill Rs.	452.689	320.142	
Unit 5	Mill Rs.	473.485	964.652	
Unit 6	Mill Rs.	983.247	843.932	
Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	2,619.809	3,964.922	
<b>5b Gas</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	-	42.365	
Unit 2	Mill Rs.	3.363	40.157	
Unit 3	Mill Rs.	-	11.818	
Unit 4	Mill Rs.	48.997	38.550	
Unit 5	Mill Rs.	28.548	60.918	
Unit 6	Mill Rs.	8.978	58.019	
Total Cost of Gas - Bin Qasim - II	Mill Rs.	89.886	251.826	
ii Bin Qasim II - 560 MW	Mill Rs.	1,188.080	1,136.699	
iii Korangi Town Gas Turbine II	Mill Rs.	38.599	140.211	
iv Site Gas Turbine II	Mill Rs.	52.676	151.293	
v Korangi CCPP	Mill Rs.	22.642	483.831	
Total Cost of Gas - KE	Mill Rs.	1,391.883	2,163.861	
<b>Total cost of fuel - KE</b>	a	Mill Rs.	<u>4,011.691</u>	<u>6,128.783</u>
<b>6 Variation in Cost of Fuel - KE</b>				
6a Units Sent Out - KE		GWh	679.267	1,043.566
6b Units - Power Purchases		GWh	612.994	636.658
Total Units Sent Out	b	GWh	1,292.261	1,680.225
6c Cost per unit	c = a/b	Rs./kWh	3.104	3.648
6d Variation per unit (Cost of Fuel - KE)		Rs./kWh		0.543
6e Variation amount (Cost of Fuel - KE)		Mill Rs.		<u>912.698</u>

**Work Sheet- Power Purchase Cost Variation**

DESCRIPTION	Mar-17		May-17	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	29.552	23.837	
b TAPAL	GWh	68.854	78.703	
c GUL AHMED	GWh	74.550	86.702	
d CPPA-G	GWh	429.943	410.951	
e ANOUD POWER	GWh	4.447	4.431	
f INT IND (IIL)	GWh	5.649	6.305	
g FFBL	GWh	-	25.730	
<b>TOTAL</b>	<b>GWh</b>	<b>612.994</b>	<b>636.658</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	187.053	149.725	
b TAPAL	Mill Rs.	620.211	651.144	
c GUL AHMED	Mill Rs.	686.604	748.108	
d CPPA-G	Mill Rs.	2,558.204	2,064.700	
e ANOUD POWER	Mill Rs.	34.217	32.707	
f INT IND (IIL)	Mill Rs.	32.858	37.093	
g FFBL	Mill Rs.	-	131.874	
<b>TOTAL</b>	<b>Mill Rs.</b>	<b>4,119.147</b>	<b>3,815.351</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	6.330	6.281	
b TAPAL	Rs./kwh	9.008	8.273	
c GUL AHMED	Rs./kwh	9.210	8.629	
d CPPA-G	Rs./kwh	5.950	5.024	
e ANOUD POWER	Rs./kwh	7.694	7.382	
f INT IND (IIL)	Rs./kwh	5.817	5.883	
g FFBL	Rs./kwh	-	5.125	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
<b>4a Cost of Fuel - Power Purchases</b>	<b>a</b>	<b>Mill Rs.</b>	<b>4,119.147</b>	<b>3,815.351</b>
Units Sent out:				
Units Sent Out - KE		GWh	679.267	1,043.566
Units - Power Purchases		GWh	612.994	636.658
<b>4b Total Units Sent Out</b>	<b>b</b>	<b>GWh</b>	<b>1,292.261</b>	<b>1,680.225</b>
<b>4c Cost per unit</b>	<b>c = a/b</b>	<b>Rs./kwh</b>	<b>3.188</b>	<b>2.271</b>
<b>4d Variation per unit (Cost of Fuel - Power Purchases)</b>		<b>Rs./kwh</b>		<b>(0.917)</b>
<b>4e Variation amount (Cost of Fuel - Power Purchases)</b>		<b>Mill Rs.</b>		<b>(1,540,449)</b>

K Electric Limited

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

	DESCRIPTION	Unit	Mar-17	Apr-17
			Reference	Current
A)	Cost of fuel:			
	Cost of fuel - KE	Mill Rs.	4,011.691	4,866.742
	Cost of fuel - Power Purchases	Mill Rs.	4,119.147	4,084.716
	<b>Total</b>	<b>Mill Rs.</b>	<b>8,130.838</b>	<b>8,951.458</b>
B)	Units Sent Out			
	Units Sent Out - KE	GWh	679.267	853.861
	Units - Power purchases	GWh	612.994	628.973
	<b>Total</b>	<b>GWh</b>	<b>1,292.261</b>	<b>1,482.834</b>
C)	Cost per unit			
	Cost of fuel - KE	Rs./kWh	3.104	3.282
	Cost of fuel - Power Purchases	Rs./kWh	3.188	2.755
	<b>Average</b>	<b>Rs./kWh</b>	<b>6.292</b>	<b>6.037</b>
D)	Variation per unit			
	Cost of fuel - KE	Rs./kWh		0.178
	Cost of fuel - Power Purchases	Rs./kWh		(0.433)
	<b>Total Fuel Cost Adjustment</b>	<b>Rs./kWh</b>		<b>(0.255)</b>
E)	Total Fuel Cost Adjustment	Ps/kWh		(25.523)
F)	Variation amount			
	Cost of fuel - KE	Mill Rs.	263.435	
	Cost of fuel - Power Purchases	Mill Rs.	(641.893)	
	<b>Total Fuel Cost Adjustment</b>	<b>Mill Rs.</b>		<b>(378.457)</b>

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Mar-17	Apr-17
	Reference	Current
<b>1 UNITS SENT OUT</b>		
<b>1a UNITS SENT OUT ON FURNACE OIL</b>		
i <u>Bin Qasim - I</u>		
Unit 1	GWh	
Unit 2	GWh	67.647
Unit 3	GWh	-
Unit 4	GWh	42.123
Unit 5	GWh	46.602
Unit 6	GWh	97.293
Total units sent out on furnace oil - Bin Qasim - I	GWh	<u>253.665</u>
		302.661
<b>1b UNITS SENT OUT ON GAS</b>		
i <u>Bin Qasim - I</u>		
Unit 1	GWh	
Unit 2	GWh	0.789
Unit 3	GWh	-
Unit 4	GWh	11.239
Unit 5	GWh	6.926
Unit 6	GWh	2.190
Total units sent out on gas - Bin Qasim - I	GWh	<u>21.145</u>
		40.242
ii Bin Qasim II - 560 MW	GWh	371.695
iii Korangi Town Gas Turbine II	GWh	11.043
iv Site Gas Turbine II	GWh	15.057
v Korangi CCPP	GWh	6.662
Total units sent out on gas - KE	GWh	<u>425.602</u>
Total units sent out KE	GWh	<u>679.267</u>
		<u>853.861</u>
<b>2 HEAT RATE AT BUS BAR</b>		
i <u>Bin Qasim - I</u>		
Unit 1	Btu/kWh	10,802
Unit 2	Btu/kWh	10,650
Unit 3	Btu/kWh	10,996
Unit 4	Btu/kWh	10,899
Unit 5	Btu/kWh	10,304
Unit 6	Btu/kWh	10,249
ii Bin Qasim II - 560 MW	Btu/kWh	7,991
iii Korangi Town Gas Turbine II	Btu/kWh	8,738
iv Site Gas Turbine II	Btu/kWh	8,746
v Korangi CCPP	Btu/kWh	8,497
		8,497

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Mar-17	Apr-17	
	Reference	Current	
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351	40,351
<b>4 FUEL PRICES</b>			
4a Fuel Price - Gas	Rs./MMBTU	400	400
4b Fuel Price - Furnace Oil	Rs./Mton	39,788	38,568
4c Fuel Price - Furnace Oil	Rs./MMBTU	986	956
<b>5 COST OF FUEL</b>			
5a Furnace oil			
i Bin Qasim - I			
Unit 1	Mill Rs.		
Unit 2	Mill Rs.	710.387	816.738
Unit 3	Mill Rs.	-	66.463
Unit 4	Mill Rs.	452.689	358.568
Unit 5	Mill Rs.	473.485	867.071
Unit 6	Mill Rs.	983.247	917.326
Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	2,619.809	3,026.165
5b Gas			
i Bin Qasim - I			
Unit 1	Mill Rs.	-	-
Unit 2	Mill Rs.	3.363	25.050
Unit 3	Mill Rs.	-	3.772
Unit 4	Mill Rs.	48.997	30.640
Unit 5	Mill Rs.	28.548	54.829
Unit 6	Mill Rs.	8.978	54.006
Total Cost of Gas - Bin Qasim - I	Mill Rs.	89.886	168.297
ii Bin Qasim II - 560 MW	Mill Rs.	1,188.080	1,104.640
iii Korangi Town Gas Turbine II	Mill Rs.	38.599	111.555
iv Site Gas Turbine II	Mill Rs.	52.676	88.190
v Korangi CCPP	Mill Rs.	22.642	367.895
Total Cost of Gas - KE	Mill Rs.	1,391.883	1,840.577
Total cost of fuel - KE	a	Mill Rs.	<u>4,011.691</u> <u>4,866.742</u>
<b>6 Variation in Cost of Fuel - KE</b>			
6a Units Sent Out - KE			
6b Units - Power Purchases			
Total Units Sent Out	b	GWh	<u>679.267</u> <u>853.861</u>
6c Cost per unit	c = a/b	Rs./kWh	<u>612.994</u> <u>628.973</u>
6d Variation per unit (Cost of Fuel - KE)		Rs./kWh	0.178
6e Variation amount (Cost of Fuel - KE)		Mill Rs.	<u>1,292.261</u> <u>1,482.834</u>
			<u>263.435</u>

## Work Sheet- Power Purchase Cost Variation

DESCRIPTION	Mar-17		Apr-17	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	29.552	36.094	
b TAPAL	GWh	68.854	73.220	
c GUL AHMED	GWh	74.550	75.721	
d CPPA-G	GWh	429.943	434.077	
e ANOUD POWER	GWh	4.447	4.447	
f INT IND (IIL)	GWh	5.649	5.413	
<b>TOTAL</b>	GWh	<b>612.994</b>	<b>628.973</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	187.053	219.783	
b TAPAL	Mill Rs.	620.211	641.669	
c GUL AHMED	Mill Rs.	686.604	699.966	
d CPPA-G	Mill Rs.	2,558.204	2,459.046	
e ANOUD POWER	Mill Rs.	34.217	32.552	
f INT IND (IIL)	Mill Rs.	32.858	31.701	
<b>TOTAL</b>	Mill Rs.	<b>4,119.147</b>	<b>4,084.716</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	6.330	6.089	
b TAPAL	Rs./kwh	9.008	8.764	
c GUL AHMED	Rs./kwh	9.210	9.244	
d CPPA-G	Rs./kwh	5.950	5.665	
e ANOUD POWER	Rs./kwh	7.694	7.319	
f INT IND (IIL)	Rs./kwh	5.817	5.856	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
<b>4a Cost of Fuel - Power Purchases</b>	a	Mill Rs.	<b>4,119.147</b>	<b>4,084.716</b>
Units Sent out:				
Units Sent Out - KE	GWh	679.267	853.861	
Units - Power Purchases	GWh	612.994	628.973	
<b>4b Total Units Sent Out</b>	b	GWh	<b>1,292.261</b>	<b>1,482.834</b>
<b>4c Cost per unit</b>	c = a/b	Rs./kwh	3.188	2.755
<b>4d Variation per unit (Cost of Fuel - Power Purchases)</b>		Rs./kwh	(0.433)	
<b>4e Variation amount (Cost of Fuel - Power Purchases)</b>		Mill Rs.		<b>(641.893)</b>

**K Electric Limited**

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

	DESCRIPTION	Unit	Dec-16	Mar-17
			Reference	Current
A)	Cost of fuel:			
	Cost of fuel - KE	Mill Rs.	3,452.538	4,011.691
	Cost of fuel - Power Purchases	Mill Rs.	3,771.292	4,119.147
	Total	Mill Rs.	<u>7,223.830</u>	<u>8,130.838</u>
B)	Units Sent Out			
	Units Sent Out - KE	GWh	537.920	679.267
	Units - Power purchases	GWh	591.144	612.994
	Total	GWh	<u>1,129.064</u>	<u>1,292.261</u>
C)	Cost per unit			
	Cost of fuel - KE	Rs./kWh	3.058	3.104
	Cost of fuel - Power Purchases	Rs./kWh	3.340	3.188
	Average	Rs./kWh	<u>6.398</u>	<u>6.292</u>
D)	Variation per unit			
	Cost of fuel - KE	Rs./kWh		0.047
	Cost of fuel - Power Purchases	Rs./kWh		(0.153)
	Total Fuel Cost Adjustment	Rs./kWh		<u>(0.106)</u>
E)	Total Fuel Cost Adjustment	Ps/kWh		<u>(10.612)</u>
F)	Variation amount			
	Cost of fuel - KE	Mill Rs.		60.116
	Cost of fuel - Power Purchases	Mill Rs.		(197.255)
	Total Fuel Cost Adjustment	Mill Rs.		<u>(137.140)</u>

$$\boxed{e = d \times b \text{ (total)}}$$

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Dec-16		Mar-17	
	Reference	Current	Reference	Current
<b>1 UNITS SENT OUT</b>				
<b>1a UNITS SENT OUT ON FURNACE OIL</b>				
i Bin Qasim -I				
Unit 1	GWh	78.176		
Unit 2	GWh	54.158	67.647	
Unit 3	GWh	34.169		
Unit 4	GWh		42.123	
Unit 5	GWh	42.297	46.602	
Unit 6	GWh	36.478	97.293	
Total units sent out on furnace oil - Bin Qasim - I	GWh	245.278	253.665	
<b>1b UNITS SENT OUT ON GAS</b>				
i Bin Qasim -I				
Unit 1	GWh	1.185		
Unit 2	GWh	1.707	0.789	
Unit 3	GWh	1.573		
Unit 4	GWh		11.239	
Unit 5	GWh	29.525	6.926	
Unit 6	GWh	2.698	2.190	
Total units sent out on gas - Bin Qasim - I	GWh	36.688	21.145	
ii Bin Qasim II - 560 MW	GWh	195.957	371.695	
iii Korangi Town Gas Turbine II	GWh	10.448	11.043	
iv Site Gas Turbine II	GWh	2.414	15.057	
v Korangi CCPP	GWh	47.135	6.662	
Total units sent out on gas - KE	GWh	292.642	425.602	
Total units sent out KE	GWh	537.920	679.267	
<b>2 HEAT RATE AT BUS BAR</b>				
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	7,991	7,991	
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 CCPP	Btu/kWh	8,497	8,497	

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Dec-16		Mar-17	
	Reference	Current	Reference	Current
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351	40,351	
<b>4 FUEL PRICES</b>				
4a Fuel Price - Gas	Rs./MMBTU	496	400	
4b Fuel Price - Furnace Oil	Rs./Mton	34,557	39,788	
4c Fuel Price - Furnace Oil	Rs./MMBTU	856	986	
<b>5 COST OF FUEL</b>				
<b>5a Furnace oil</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	723.206	-	
Unit 2	Mill Rs.	493.962	710.387	
Unit 3	Mill Rs.	321.771	-	
Unit 4	Mill Rs.	-	452.689	
Unit 5	Mill Rs.	373.251	473.485	
Unit 6	Mill Rs.	320.183	983.247	
<b>Total Cost of Furnace Oil - Bin Qasim - I</b>	Mill Rs.	<u>2,232.372</u>	<u>2,619.809</u>	
<b>5b Gas</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	6.352	-	
Unit 2	Mill Rs.	9.019	3.363	
Unit 3	Mill Rs.	8.581	-	
Unit 4	Mill Rs.	-	48.997	
Unit 5	Mill Rs.	150.961	28.548	
Unit 6	Mill Rs.	13.722	8.978	
<b>Total Cost of Gas - Bin Qasim - I</b>	Mill Rs.	<u>188.636</u>	<u>89.886</u>	
ii Bin Qasim II - 560 MW	Mill Rs.	777.014	1,188.080	
iii Korangi Town Gas Turbine II	Mill Rs.	45.302	38.599	
iv Site Gas Turbine II	Mill Rs.	10.476	52.676	
v Korangi CCPP	Mill Rs.	198.738	22.642	
<b>Total Cost of Gas - KE</b>	Mill Rs.	<u>1,220.166</u>	<u>1,391.883</u>	
<b>Total cost of fuel - KE</b>	a Mill Rs.	<u>3,452.538</u>	<u>4,011.691</u>	
<b>6 Variation in Cost of Fuel - KE</b>				
6a Units Sent Out - KE	GWh	537.920	679.267	
6b Units -Power Purchases	GWh	591.144	612.994	
<b>Total Units Sent Out</b>	b GWh	<u>1,129.064</u>	<u>1,292.261</u>	
6c Cost per unit	c = a/b Rs./kWh	3.058	3.104	
<b>6d Variation per unit (Cost of Fuel - KE)</b>	Rs./kWh		0.047	
<b>6e Variation amount (Cost of Fuel - KE)</b>	Mill Rs.		<u>60.116</u>	

**Work Sheet- Power Purchase Cost Variation**

DESCRIPTION		Dec-16	Mar-17
		Reference	Current
<b>1 POWER PURCHASES</b>			
a KANUPP	GWh	34.325	29.552
b TAPAL	GWh	56.295	68.854
c GUL AHMED	GWh	56.653	74.550
d CPPA-G	GWh	433.525	429.943
e ANOUD POWER	GWh	4.508	4.447
f INT IND (IIL)	GWh	5.836	5.649
<b>TOTAL</b>	<b>GWh</b>	<b>591.144</b>	<b>612.994</b>
<b>2 COST OF POWER PURCHASES - FUEL COST</b>			
a KANUPP	Mill Rs.	272.562	187.053
b TAPAL	Mill Rs.	419.724	620.211
c GUL AHMED	Mill Rs.	461.418	686.604
d CPPA-G	Mill Rs.	2,550.948	2,558.204
e ANOUD POWER	Mill Rs.	32.676	34.217
f INT IND (IIL)	Mill Rs.	33.965	32.858
<b>TOTAL</b>	<b>Mill Rs.</b>	<b>3,771.292</b>	<b>4,119.147</b>
<b>3 FUEL COST / UNIT</b>			
a KANUPP	Rs./kwh	7.941	6.330
b TAPAL	Rs./kwh	7.456	9.008
c GUL AHMED	Rs./kwh	8.145	9.210
d CPPA-G	Rs./kwh	5.884	5.950
e ANOUD POWER	Rs./kwh	7.248	7.694
f INT IND (IIL)	Rs./kwh	5.819	5.817
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>			
4a Cost of Fuel - Power Purchases	a Mill Rs.	3,771.292	4,119.147
Units Sent out:			
Units Sent Out - KE	GWh	537.920	679.267
Units - Power Purchases	GWh	591.144	612.994
4b Total Units Sent Out	b GWh	<b>1,129.064</b>	<b>1,292.261</b>
4c Cost per unit	c = a/b Rs./kwh	3.340	3.188
4d Variation per unit (Cost of Fuel - Power Purchases)	Rs./kwh	(0.153)	
4e Variation amount (Cost of Fuel - Power Purchases)	Mill Rs.		<b>(197.255)</b>

## K ELECTRIC LIMITED

QUARTERLY ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL AND POWER PURCHASE COST  
INCLUDING O&M AND CAPACITY CHARGES

Quarter ended March 2017

Required adjustment in Tariff

		Mar-17
Quarterly Revision to reset price levels	Rs/kWh	(0.309)
Unrecovered Cost for current quarter	Rs/kWh	0.020
Reversal of unrecovered cost of previous quarter	Rs/kWh	(0.598)
Total Required adjustment in KE's Tariff	Rs/kWh	(0.887)
Total Required adjustment in KE's Tariff	Ps/kWh	(88.702)

Quarterly Revision to reset price levels

Units Sent Out	GWh	
T&D Losses allowed	GWh	1,292.261
Units billed	GWh	20.90%
Cost of Fuel - KE	Mill Rs	1,022.179
Weighted Average Fuel cost per unit billed	Rs/Kwh	4,011.691
Cost of Power Purchases		Dec-16 Mar-17 Variation
- Fuel Cost	Mill Rs	4,119.147
- O&M and Capacity Cost	Mill Rs	1,858.371
- Total Cost of Power Purchases	Mill Rs	5,977.518
Weighted Average Cost of Power Purchases (cost per unit billed)	Rs/kWh	Dec-16 Mar-17 Variation
- Fuel Cost	Rs/kWh	4.223 4.030 (0.193)
- O&M Cost and capacity cost	Rs/kWh	1.993 1.818 (0.175)
- Total Cost of Power Purchases	Rs/kWh	6.216 5.848 (0.368)
QUARTERLY INCREASE/DECREASE IN COST PER UNIT BILLED		0.059 (0.368) (0.309)
- Cost of Fuel - KE	Rs/kWh	
- Cost of Power Purchases - Total	Rs/kWh	
- Total Cost Variation	Rs/kWh	

Note: Please note that the SoT attached with the MYT notification is based on updated terms and conditions including changes in definition of lifeline consumers and the assumption of conversion of eligible consumers to "A3" category along with enabling of Time of Use (ToU) metering for Residential and Commercial consumers etc. However, as the MYT has been notified on May 22, 2019, these changes will be effective from the date of notification. Accordingly, KE would like to request NEPRA to adjust the related impact while issuing determination of Quarterly SoTs.

## K ELECTRIC LIMITED

QUARTERLY ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL AND POWER PURCHASE COST INCLUDING O&M AND CAPACITY CHARGES			Quarter ended March 2017				
ADJUSTMENT IN TARIFF DUE TO UNRECOVERED COST			Dec-16	Jan-17	Feb-17	Mar-17	QTR
			Reference				
Units Sent GWh	GWh	a	972.167	970.159	1,292.261		
T&D Losses allowed		b	20.9%	20.9%	20.9%		
Units billed	GWh	c = a x (1-b)	768.984	767.396	1,022.179	2,558.559	
a. O&M and Capacity cost of Power purchases							
O&M and Capacity cost of Power purchases	Mill Rs	d	1,743.972	1,710.686	1,858.371		
O&M and Capacity cost of power purchases (per unit billed)	Rs/kWh	e = d/c	1.993	2.268	2.229	1.818	
Increase or decrease in O&M and Capacity cost (over Reference)	Rs/kWh	f		0.275	0.236	(0.175)	
O&M and Capacity Cost of Power Purchases - Monthly variations Amount	Mill Rs	g = f x c		211.248	181.128	(179.014)	213.362
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	h		(0.594)	(0.708)	0.47	
Cost of Fuel - Power Purchases	Rs/kWh	i		0.527	(0.121)	(0.153)	
Total	Rs/kWh	j = h + i		(0.068)	(0.829)	(0.106)	
ii Monthly variation in Fuel Cost (FCA) - Amount							
Cost of Fuel - KE	Mill Rs	k = h x a		(577.789)	(687.203)	60.116	(1,204.877)
Cost of Fuel - Power Purchases	Mill Rs	l = i x a		511.957	(117.437)	(197.255)	197.265
Total	Mill Rs	m = k + l		(65.832)	(804.640)	(137.140)	(1,007.612)
iii Unrecovered Cost of FCA due to non adjustment of T&D losses							
Cost of Fuel - KE	Mill Rs	n = k x b		(120.758)	(143.625)	12.564	(251.819)
Cost of Fuel - Power Purchases	Mill Rs	o = l x b		106.999	(24.544)	(41.226)	41.228
Total	Mill Rs	p = n + o		(13.759)	(168.170)	(28.662)	(210.591)
<b>Summary of Unrecovered cost for the quarter</b>							
a. O&M and Capacity cost of Power purchases	Mill Rs						213.362
b. Unrecovered Cost of FCA due to non adjustment of T&D losses	Mill Rs						(210.591)
c. Other Adjustments	Mill Rs						75.703
WWF/WPPF / Bonus to IPPs - Note 1	Mill Rs						78.475
<b>Total Unrecovered cost for the quarter</b>	Mill Rs	q					
Units to be sold in next quarter at allowed T&D losses	GWh	r					3,889.921
Unrecovered Cost per unit for current quarter	Rs/kWh	s = q / r					0.020

**Notes:**

1 Tapal Energy WWF Rs.27.129 million and Gul Ahmed Energy WPPF 48.574 million.

Work Sheet- Power Purchase O&M and Capacity Cost

DESCRIPTION	Reference	Dec-16	Jan-17	Feb-17	Mar-17
<b>1 O&amp;M COST</b>					
a KANUPP	Mill Rs.	33.746	35.960	27.724	29.053
b TAPAL	Mill Rs.	59.251	44.619	57.613	73.418
c GUL AHMED	Mill Rs.	34.808	27.555	34.927	46.407
d CPPA-G	Mill Rs.	131.031	150.241	112.104	129.962
e ANOUD POWER	Mill Rs.	8.314	8.490	5.750	8.202
f INT IND (IIL)	Mill Rs.	9.943	10.606	9.105	9.831
<b>TOTAL:</b>	Mill Rs.	<b>277.092</b>	<b>277.472</b>	<b>247.223</b>	<b>296.874</b>
<b>2 CAPACITY COST</b>					
a KANUPP	Mill Rs.	-	-	-	-
b TAPAL	Mill Rs.	135.281	135.443	135.443	135.443
c GUL AHMED	Mill Rs.	130.205	131.355	131.355	131.355
d CPPA-G	Mill Rs.	1,237.510	1,199.702	1,196.665	1,294.699
e ANOUD POWER	Mill Rs.	-	-	-	-
f INT IND (IIL)	Mill Rs.	-	-	-	-
<b>TOTAL</b>	Mill Rs.	<b>1,502.996</b>	<b>1,466.500</b>	<b>1,463.463</b>	<b>1,561.497</b>
<b>3 TOTAL O&amp;M &amp; CAPACITY COST</b>					
a KANUPP	Mill Rs.	33.746	35.960	27.724	29.053
b TAPAL	Mill Rs.	194.532	180.062	193.056	208.861
c GUL AHMED	Mill Rs.	165.013	158.910	166.283	177.763
d CPPA-G	Mill Rs.	1,368.541	1,349.943	1,308.769	1,424.661
e ANOUD POWER	Mill Rs.	8.314	8.490	5.750	8.202
f INT IND (IIL)	Mill Rs.	9.943	10.606	9.105	9.831
<b>TOTAL</b>	Mill Rs.	<b>1,780.087</b>	<b>1,743.972</b>	<b>1,710.686</b>	<b>1,858.371</b>



**GENERATION STATISTICS FOR THE MONTH OF Mar 2017**

DESCRIPTION	BQPS (KWH)	BQPS II-560 MW (KWH)	SGTPS-II (KWH)	KTGTPS-II (KWH)	KCCPP (KWH)	KE (KWH)
UNITS GENERATED	298,321,950	395,883,525	15,443,205	11,326,629	7,157,111	728,132,420
AUXILIARY CONSUMPTION	9.5%	5.6%	4.6%	5.34%	25.6%	7.38%
UNITS SENT OUT	269,997,750	373,644,000	14,733,500	10,722,050	5,325,530	674,422,830

K Electric Limited

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

DESCRIPTION		Unit	Dec-16	Feb-17
			Reference	Current
A)	Cost of fuel:			
	Cost of fuel - KE		Mill Rs.	3,452.538
	Cost of fuel - Power Purchases		Mill Rs.	3,771.292
	Total	a	Mill Rs.	<u>7,223.830</u>
				2,279.424
				<u>3,123.082</u>
				<u>5,402.506</u>
B)	Units Sent Out			
	Units Sent Out - KE		GWh	537.920
	Units - Power purchases		GWh	591.144
	Total	b	GWh	<u>1,129.064</u>
				445.431
				<u>524.728</u>
				<u>970.159</u>
C)	Cost per unit			
	Cost of fuel - KE		Rs./kWh	3.058
	Cost of fuel - Power Purchases		Rs./kWh	3.340
	Average	c = a/b	Rs./kWh	<u>6.398</u>
				2.350
				<u>3.219</u>
				<u>5.569</u>
D)	Variation per unit			
	Cost of fuel - KE		Rs./kWh	(0.708)
	Cost of fuel - Power Purchases		Rs./kWh	(0.121)
	Total Fuel Cost Adjustment	d	Rs./kWh	<u>(0.829)</u>
E)	Total Fuel Cost Adjustment		Ps/kWh	<u>(82.939)</u>
F)	Variation amount			
	Cost of fuel - KE		Mill Rs.	(687.203)
	Cost of fuel - Power Purchases		Mill Rs.	(117.437)
	Total Fuel Cost Adjustment	e = d x b (total)	Mill Rs.	<u>(804.640)</u>

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION		Dec-16	Feb-17
		Reference	Current
<b>1 UNITS SENT OUT</b>			
<b>1a UNITS SENT OUT ON FURNACE OIL</b>			
i Bin Qasim - I			
Unit 1	GWh	78.176	-
Unit 2	GWh	54.158	23.646
Unit 3	GWh	34.169	16.543
Unit 4	GWh	-	10.159
Unit 5	GWh	42.297	9.348
Unit 6	GWh	36.478	57.597
Total units sent out on furnace oil - Bin Qasim - I	GWh	<u>245.278</u>	<u>117.293</u>
<b>1b UNITS SENT OUT ON GAS</b>			
i Bin Qasim - I			
Unit 1	GWh	1.185	-
Unit 2	GWh	1.707	1.233
Unit 3	GWh	1.573	0.572
Unit 4	GWh	-	2.935
Unit 5	GWh	29.525	4.306
Unit 6	GWh	2.698	8.833
Total units sent out on gas - Bin Qasim - I	GWh	<u>36.688</u>	<u>17.879</u>
ii Bin Qasim II - 560 MW	GWh	195.957	263.593
iii Korangi Town Gas Turbine II	GWh	10.448	8.555
iv Site Gas Turbine II	GWh	2.414	22.166
v Korangi CCPP	GWh	47.135	15.944
Total units sent out on gas - KE	GWh	<u>292.642</u>	<u>328.138</u>
Total units sent out KE	GWh	<u>537.920</u>	<u>445.431</u>
<b>2 HEAT RATE AT BUS BAR</b>			
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	7,991	7,991
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 CCPP	Btu/kWh	8,497	8,497

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Dec-16		Feb-17	
	Reference	Current	Reference	Current
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351	40,351	
<b>4 FUEL PRICES</b>				
4a Fuel Price - Gas	Rs./MMBTU	496	400	
4b Fuel Price - Furnace Oil	Rs./Mton	34,557	39,355	
4c Fuel Price - Furnace Oil	Rs./MMBTU	856	975	
<b>5 COST OF FUEL</b>				
<b>5a Furnace oil</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	723.206		
Unit 2	Mill Rs.	493.962	245.616	
Unit 3	Mill Rs.	321.771	177.417	
Unit 4	Mill Rs.	-	107.993	
Unit 5	Mill Rs.	373.251	93.947	
Unit 6	Mill Rs.	320.183	575.742	
Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	<u>2,232.372</u>	<u>1,200.716</u>	
<b>5b Gas</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	6.352		
Unit 2	Mill Rs.	9.019	5.252	
Unit 3	Mill Rs.	8.581	2.517	
Unit 4	Mill Rs.	-	12.797	
Unit 5	Mill Rs.	150.961	17.747	
Unit 6	Mill Rs.	13.722	36.213	
Total Cost of Gas - Bin Qasim - I	Mill Rs.	<u>188.636</u>	<u>74.524</u>	
ii Bin Qasim II - 560 MW	Mill Rs.	777.014	842.544	
iii Korangi Town Gas Turbine II	Mill Rs.	45.302	29.902	
iv Site Gas Turbine II	Mill Rs.	10.476	77.546	
v Korangi CCPP	Mill Rs.	198.738	54.191	
Total Cost of Gas - KE	Mill Rs.	<u>1,220.166</u>	<u>1,078.708</u>	
<b>Total cost of fuel - KE</b>	a	Mill Rs.	<u>3,452.538</u>	<u>2,279.424</u>
<b>6 Variation in Cost of Fuel - KE</b>				
6a Units Sent Out - KE		GWh	537.920	445.431
6b Units - Power Purchases		GWh	591.144	524.728
Total Units Sent Out	b	GWh	<u>1,129.064</u>	<u>970.159</u>
6c Cost per unit	c = a/b	Rs./kWh	3.058	2.350
6d Variation per unit (Cost of Fuel - KE)		Rs./kWh		(0.708)
6e Variation amount (Cost of Fuel - KE)		Mill Rs.		<u>(687.203)</u>

## Work Sheet- Power Purchase Cost Variation

DESCRIPTION	Dec-16		Feb-17	
	Reference	Current		
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	34.325	28.200	
b TAPAL	GWh	56.295	54.031	
c GUL AHMED	GWh	56.653	56.108	
d CPPA-G	GWh	433.525	378.020	
e ANOUD POWER	GWh	4.508	3.118	
f INT IND (IIL)	GWh	5.836	5.251	
<b>TOTAL</b>	GWh	<b>591.144</b>	<b>524.728</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	272.562	161.317	
b TAPAL	Mill Rs.	419.724	445.684	
c GUL AHMED	Mill Rs.	461.418	529.672	
d CPPA-G	Mill Rs.	2,550.948	1,931.758	
e ANOUD POWER	Mill Rs.	32.676	24.087	
f INT IND (IIL)	Mill Rs.	33.965	30.564	
<b>TOTAL</b>	Mill Rs.	<b>3,771.292</b>	<b>3,123.082</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	7.941	5.720	
b TAPAL	Rs./kwh	7.456	8.249	
c GUL AHMED	Rs./kwh	8.145	9.440	
d CPPA-G	Rs./kwh	5.884	5.110	
e ANOUD POWER	Rs./kwh	7.248	7.726	
f INT IND (IIL)	Rs./kwh	5.819	5.821	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
<b>4a Cost of Fuel - Power Purchases</b>	a	Mill Rs.	<b>3,771.292</b>	<b>3,123.082</b>
Units Sent out:				
Units Sent Out - KE		GWh	537.920	445.431
Units - Power Purchases		GWh	591.144	524.728
<b>4b Total Units Sent Out</b>	b	GWh	<b>1,129.064</b>	<b>970.159</b>
<b>4c Cost per unit</b>	c = a/b	Rs./kwh	3.340	3.219
<b>4d Variation per unit (Cost of Fuel - Power Purchases)</b>		Rs./kwh	(0.121)	
<b>4e Variation amount (Cost of Fuel - Power Purchases)</b>		Mill Rs.		<b>(117.437)</b>

Work Sheet- Power Purchase Cost Variation

DESCRIPTION	Dec-16		Jan-17	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	34.325	36.578	
b TAPAL	GWh	56.295	41.845	
c GUL AHMED	GWh	56.653	44.265	
d CPPA-G	GWh	433.525	418.775	
e ANOUD POWER	GWh	4.508	4.604	
f INT IND (IIL)	GWh	5.836	6.266	
<b>TOTAL</b>	<b>GWh</b>	<b>591.144</b>	<b>552.333</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	272.562	248.687	
b TAPAL	Mill Rs.	419.724	325.658	
c GUL AHMED	Mill Rs.	461.418	365.697	
d CPPA-G	Mill Rs.	2,550.948	2,746.536	
e ANOUD POWER	Mill Rs.	32.676	36.103	
f INT IND (IIL)	Mill Rs.	33.965	36.503	
<b>TOTAL</b>	<b>Mill Rs.</b>	<b>3,771.292</b>	<b>3,759.183</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	7.941	6.799	
b TAPAL	Rs./kwh	7.456	7.783	
c GUL AHMED	Rs./kwh	8.145	8.262	
d CPPA-G	Rs./kwh	5.884	6.559	
e ANOUD POWER	Rs./kwh	7.248	7.842	
f INT IND (IIL)	Rs./kwh	5.819	5.825	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
<b>4a Cost of Fuel - Power Purchases</b>	<b>a</b>	<b>Mill Rs.</b>	<b>3,771.292</b>	<b>3,759.183</b>
Units Sent out:				
Units Sent Out - KE		GWh	537.920	419.834
Units - Power Purchases		GWh	591.144	552.333
<b>4b Total Units Sent Out</b>	<b>b</b>	<b>GWh</b>	<b>1,129.064</b>	<b>972.167</b>
<b>4c Cost per unit</b>	<b>c = a/b</b>	<b>Rs./kwh</b>	<b>3.340</b>	<b>3.867</b>
<b>4d Variation per unit (Cost of Fuel - Power Purchases)</b>		<b>Rs./kwh</b>		<b>0.527</b>
<b>4e Variation amount (Cost of Fuel - Power Purchases)</b>		<b>Mill Rs.</b>		<b>511.957</b>

Work Sheet- Generation Fuel Cost Variation

DESCRIPTION	Dec-16		Jan-17	
	Reference	Current	Reference	Current
3 <u>Calorific Value - Furnace Oil</u>	Btu/kg	40,351	40,351	
4 <u>FUEL PRICES</u>				
4a Fuel Price - Gas	Rs./MMBTU	496	400	
4b Fuel Price - Furnace Oil	Rs./Mton	34,557	37,566	
4c Fuel Price - Furnace Oil	Rs./IMMBTU	856	931	
5 <u>COST OF FUEL</u>				
5a <u>Furnace oil</u>				
i <u>Bin Qasim - I</u>				
Unit 1	Mill Rs.	723.206	96.453	
Unit 2	Mill Rs.	493.962	168.876	
Unit 3	Mill Rs.	321.771	219.978	
Unit 4	Mill Rs.	-	155.840	
Unit 5	Mill Rs.	373.251	218.294	
Unit 6	Mill Rs.	320.183	552.353	
Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	2,232.372	1,411.793	
5b <u>Gas</u>				
i <u>Bin Qasim - I</u>				
Unit 1	Mill Rs.	6.352	0.475	
Unit 2	Mill Rs.	9.019	24.157	
Unit 3	Mill Rs.	8.581	5.786	
Unit 4	Mill Rs.	-	38.042	
Unit 5	Mill Rs.	150.961	184.043	
Unit 6	Mill Rs.	13.722	73.646	
Total Cost of Gas - Bin Qasim - I	Mill Rs.	188.636	326.147	
ii Bin Qasim II - 560 MW	Mill Rs.	777.014	279.544	
iii Korangi Town Gas Turbine II	Mill Rs.	45.302	64.624	
iv Site Gas Turbine II	Mill Rs.	10.476	85.712	
v Korangi CCPP	Mill Rs.	198.738	227.159	
Total Cost of Gas - KE	Mill Rs.	1,220.166	983.185	
Total cost of fuel - KE	a	Mill Rs.	<u>3,452.538</u>	<u>2,394.979</u>
6 Variation in Cost of Fuel - KE				
6a Units Sent Out - KE	GWh	537.920	419.834	
6b Units - Power Purchases	GWh	591.144	552.333	
Total Units Sent Out	b	GWh	<u>1,129.064</u>	<u>972.167</u>
6c Cost per unit	c = a/b	Rs./kWh	3.058	2.464
6d Variation per unit (Cost of Fuel - KE)		Rs./kWh		(0.594)
6e Variation amount (Cost of Fuel - KE)		Mill Rs.		<u>(577.789)</u>

**Work Sheet- Generation Fuel Cost Variation**

	DESCRIPTION	Dec-16		Jan-17		
		Reference	Current	Reference	Current	
<b>1 UNITS SENT OUT</b>						
<b>1a UNITS SENT OUT ON FURNACE OIL</b>						
i	<u>Bin Qasim - I</u>					
	Unit 1	GWh	78.176	9.591		
	Unit 2	GWh	54.158	17.032		
	Unit 3	GWh	34.169	21.488		
	Unit 4	GWh	-	15.358		
	Unit 5	GWh	42.297	22.756		
	Unit 6	GWh	36.478	57.888		
	Total units sent out on furnace oil - Bin Qasim - I	GWh	245.278	144.114		
<b>1b UNITS SENT OUT ON GAS</b>						
i	<u>Bin Qasim - I</u>					
	Unit 1	GWh	1.185	0.110		
	Unit 2	GWh	1.707	5.671		
	Unit 3	GWh	1.573	1.315		
	Unit 4	GWh	-	8.726		
	Unit 5	GWh	29.525	44.653		
	Unit 6	GWh	2.698	17.964		
	Total units sent out on gas - Bin Qasim - I	GWh	36.688	78.439		
ii	Bin Qasim II - 560 MW	GWh	195.957	87.456		
iii	Korangi Town Gas Turbine II	GWh	10.448	18.489		
iv	Site Gas Turbine II	GWh	2.414	24.500		
v	Korangi CCPP	GWh	47.135	66.835		
	Total units sent out on gas - KE	GWh	292.642	275.720		
	Total units sent out KE	GWh	537.920	419.834		
<b>2 HEAT RATE AT BUS BAR</b>						
i	<u>Bin Qasim - I</u>					
	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	7,991	7,991		
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 CCPP	Btu/kWh	8,497	8,497		

K Electric Limited

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

	DESCRIPTION	Unit	Dec-16	Jan-17
			Reference	Current
A)	Cost of fuel:			
	Cost of fuel - KE	Mill Rs.	3,452.538	2,394.979
	Cost of fuel - Power Purchases	Mill Rs.	3,771.292	3,759.183
	Total	Mill Rs.	<u>7,223.830</u>	<u>6,154.162</u>
B)	Units Sent Out			
	Units Sent Out - KE	GWh	537.920	419.834
	Units - Power purchases	GWh	591.144	552.333
	Total	GWh	<u>1,129.064</u>	<u>972.167</u>
C)	Cost per unit			
	Cost of fuel - KE	Rs./kWh	3.058	2.464
	Cost of fuel - Power Purchases	Rs./kWh	3.340	3.867
	Average	Rs./kWh	<u>6.398</u>	<u>6.330</u>
D)	Variation per unit			
	Cost of fuel - KE	Rs./kWh	(0.594)	
	Cost of fuel - Power Purchases	Rs./kWh	0.527	
	Total Fuel Cost Adjustment	Rs./kWh	<u>(0.068)</u>	
E)	Total Fuel Cost Adjustment	Ps/kWh		(6.77)
F)	Variation amount			
	Cost of fuel - KE	Mill Rs.	(577.789)	
	Cost of fuel - Power Purchases	Mill Rs.	511.957	
	Total Fuel Cost Adjustment	Mill Rs.	<u>(65.832)</u>	

K Electric Limited

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

DESCRIPTION	Unit	Sep-16	Dec-16
		Reference	Current
A) Cost of fuel:			
Cost of fuel - KE	Mill Rs.	5,338.589	3,452.538
Cost of fuel - Power Purchases	Mill Rs.	2,614.274	3,771.292
Total	Mill Rs.	<u>7,952.863</u>	<u>7,223.830</u>
B) Units Sent Out			
Units Sent Out - KE	GWh	885.625	537.920
Units - Power purchases	GWh	586.475	591.144
Total	GWh	<u>1,472.100</u>	<u>1,129.064</u>
C) Cost per unit			
Cost of fuel - KE	Rs./kWh	3.627	3.058
Cost of fuel - Power Purchases	Rs./kWh	1.776	3.340
Average	Rs./kWh	<u>5.402</u>	<u>6.398</u>
D) Variation per unit			
Cost of fuel - KE	d	Rs./kWh	(0.569)
Cost of fuel - Power Purchases		Rs./kWh	1.564
Total Fuel Cost Adjustment		Rs./kWh	<u>0.996</u>
E) Total Fuel Cost Adjustment		Ps/kWh	<u>99.57</u>
F) Variation amount			
Cost of fuel - KE	e = d x b (total)	Mill Rs.	(642.026)
Cost of fuel - Power Purchases		Mill Rs.	<u>1,766.209</u>
Total Fuel Cost Adjustment		Mill Rs.	<u>1,124.183</u>

**Work Sheet- Generation Fuel Cost Variation**

	DESCRIPTION	Sep-16		Dec-16		
		Reference	Current	Reference	Current	
<b>1 UNITS SENT OUT</b>						
<b>1a UNITS SENT OUT ON FURNACE OIL</b>						
i Bin Qasim - I						
Unit 1	GWh	63,620		78,176		
Unit 2	GWh	42,078		54,158		
Unit 3	GWh	31,073		34,169		
Unit 4	GWh	23,524				
Unit 5	GWh	31,061		42,297		
Unit 6	GWh	46,390		36,478		
Total units sent out on furnace oil - Bin Qasim - I	GWh	237,747		245,278		
<b>1b UNITS SENT OUT ON GAS</b>						
i Bin Qasim - I						
Unit 1	GWh	13,586		1,185		
Unit 2	GWh	15,968		1,707		
Unit 3	GWh	3,193		1,573		
Unit 4	GWh	12,310				
Unit 5	GWh	45,750		29,525		
Unit 6	GWh	26,236		2,698		
Total units sent out on gas - Bin Qasim - I	GWh	117,043		36,688		
ii Bin Qasim II - 560 MW	GWh	334,366		195,957		
iii Korangi Town Gas Turbine II	GWh	45,808		10,448		
iv Site Gas Turbine II	GWh	39,693		2,414		
v Korangi CCPP	GWh	110,968		47,135		
Total units sent out on gas - KE	GWh	647,878		292,642		
Total units sent out KE	GWh	885,625		537,920		
<b>2 HEAT RATE AT BUS BAR</b>						
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	7,991		7,991		
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 CCPP	Btu/kWh	8,497		8,497		

**2 HEAT RATE AT BUS BAR**

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Sep-16		Dec-16	
	Reference	Current	Reference	Current
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351	40,351	
<b>4 FUEL PRICES</b>				
4a Fuel Price - Gas	Rs./MMBTU	613	496	
4b Fuel Price - Furnace Oil	Rs./Mton	30,520	34,557	
4c Fuel Price - Furnace Oil	Rs./MMBTU	756	856	
<b>5 COST OF FUEL</b>				
<b>5a Furnace oil</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	519.784	723.206	
Unit 2	Mill Rs.	338.948	493.962	
Unit 3	Mill Rs.	258.432	321.771	
Unit 4	Mill Rs.	193.922		
Unit 5	Mill Rs.	242.074	373.251	
Unit 6	Mill Rs.	359.606	320.183	
<b>Total Cost of Furnace Oil - Bin Qasim - I</b>	Mill Rs.	<b>1,912.767</b>	<b>2,232.372</b>	
<b>5b Gas</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	89.961	6.352	
Unit 2	Mill Rs.	104.247	9.019	
Unit 3	Mill Rs.	21.520	8.581	
Unit 4	Mill Rs.	82.246		
Unit 5	Mill Rs.	288.972	150.961	
Unit 6	Mill Rs.	164.833	13.722	
<b>Total Cost of Gas - Bin Qasim - I</b>	Mill Rs.	<b>751.780</b>	<b>188.636</b>	
ii Bin Qasim II - 560 MW	Mill Rs.	1,637.878	777.014	
iii Korangi Town Gas Turbine II	Mill Rs.	245.363	45.302	
iv Site Gas Turbine II	Mill Rs.	212.808	10.476	
v Korangi CCPP	Mill Rs.	577.994	198.738	
<b>Total Cost of Gas - KE</b>	Mill Rs.	<b>3,425.823</b>	<b>1,220.166</b>	
<b>Total cost of fuel - KE</b>	a	<b>Mill Rs.</b>	<b>5,338.589</b>	<b>3,452.538</b>
<b>6 Variation in Cost of Fuel - KE</b>				
6a Units Sent Out - KE	b	GWh	885.625	537.920
6b Units - Power Purchases		GWh	586.475	591.144
<b>Total Units Sent Out</b>	b	GWh	<b>1,472.100</b>	<b>1,129.064</b>
6c Cost per unit	c = a/b	Rs./kWh	3.627	3.058
6d Variation per unit (Cost of Fuel - KE)		Rs./kWh		(0.569)
6e Variation amount (Cost of Fuel - KE)		Mill Rs.		<b>(642.026)</b>

**Work Sheet- Power Purchase Cost Variation**

DESCRIPTION	Sep-16		Dec-16	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	24.926	34.325	
b TAPAL	GWh	59.462	56.295	
c GUL AHMED	GWh	63.200	56.653	
d CPPA-G	GWh	428.146	433.525	
e ANOUD POWER	GWh	4.934	4.508	
f INT IND (IIL)	GWh	5.807	5.836	
<b>TOTAL</b>	<b>GWh</b>	<b>586.475</b>	<b>591.144</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	166.610	272.562	
b TAPAL	Mill Rs.	387.033	419.724	
c GUL AHMED	Mill Rs.	428.100	461.418	
d CPPA-G	Mill Rs.	1,566.672	2,550.948	
e ANOUD POWER	Mill Rs.	32.111	32.676	
f INT IND (IIL)	Mill Rs.	33.747	33.965	
<b>TOTAL</b>	<b>Mill Rs.</b>	<b>2,614.274</b>	<b>3,771.292</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	6.684	7.941	
b TAPAL	Rs./kwh	6.509	7.456	
c GUL AHMED	Rs./kwh	6.774	8.145	
d CPPA-G	Rs./kwh	3.659	5.884	
e ANOUD POWER	Rs./kwh	6.508	7.248	
f INT IND (IIL)	Rs./kwh	5.811	5.819	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
<b>4a Cost of Fuel - Power Purchases</b>	<b>a</b>	<b>Mill Rs.</b>	<b>2,614.274</b>	<b>3,771.292</b>
Units Sent out:				
Units Sent Out - KE	GWh	885.625	537.920	
Units - Power Purchases	GWh	586.475	591.144	
<b>4b Total Units Sent Out</b>	<b>b</b>	<b>GWh</b>	<b>1,472.100</b>	<b>1,129.064</b>
<b>4c Cost per unit</b>	<b>c = a/b</b>	<b>Rs./kwh</b>	<b>1.776</b>	<b>3.340</b>
<b>4d Variation per unit (Cost of Fuel - Power Purchases)</b>		<b>Rs./kwh</b>		<b>1.564</b>
<b>4e Variation amount (Cost of Fuel - Power Purchases)</b>		<b>Mill Rs.</b>		<b>1,766.209</b>

**K ELECTRIC LIMITED**

QUARTERLY ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL AND POWER PURCHASE COST  
INCLUDING O&M AND CAPACITY CHARGES

Quarter ended December 2016

		Dec-16
<b>Required adjustment in Tariff:</b>		
Quarterly Revision to reset price levels	Rs/kWh	1.899
Unrecovered Cost for current quarter	Rs/kWh	0.598
Reversal of unrecovered cost of previous quarter	Rs/kWh	0.242
Total Required adjustment in KE's Tariff	Rs/kWh	<u>2.739</u>
Total Required adjustment in KE's Tariff	Ps/kWh	<u>273.944</u>

<b>Quarterly Revision to reset price levels</b>		
		Sep-16      Dec-16      Variation
Units Sent Out	GWh	1,129.064
T&D Losses allowed	GWh	20.90%
Units billed	GWh	893.089
<b>Cost of Fuel - KE</b>	Mill Rs	<u>3,452.538</u>
Weighted Average Fuel cost per unit billed	Rs/kWh	4.585      3.866      (0.719)
<b>Cost of Power Purchases</b>		Dec-16
- Fuel Cost	Mill Rs	3,771.292
- O&M and Capacity Cost	Mill Rs	1,780.087
- Total Cost of Power Purchases	Mill Rs	<u>5,551.379</u>
<b>Weighted Average Cost of Power Purchases (cost per unit billed)</b>	Rs/kWh	Sep-16      Dec-16
- Fuel Cost	Rs/kWh	2.245      4.223      1.978
- O&M Cost and capacity cost	Rs/kWh	1.353      1.993      0.640
- Total Cost of Power Purchases	Rs/kWh	<u>3.598      6.216      2.618</u>
<b>QUARTERLY INCREASE/DECREASE IN COST PER UNIT BILLED</b>		
- Cost of Fuel - KE	Rs/kWh	(0.719)
- Cost of Power Purchases - Total	Rs/kWh	2.618
- Total Cost Variation	Rs/kWh	<u>1.899</u>

Note: Please note that the SoT attached with the MYT notification is based on updated terms and conditions including changes in definition of lifeline consumers and the assumption of conversion of eligible consumers to "A3" category along with enabling of Time of Use (ToU) metering for Residential and Commercial consumers etc. However, as the MYT has been notified on May 22, 2019, these changes will be effective from the date of notification. Accordingly, KE would like to request NEPRA to adjust the related impact while issuing determination of Quarterly SoTs.

**K ELECTRIC LIMITED**

QUARTERLY ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL AND POWER PURCHASE COST INCLUDING O&M AND CAPACITY CHARGES		Quarter ended December 2016				
ADJUSTMENT IN TARIFF DUE TO UNRECOVERED COST		Sep-16	Oct-16	Nov-16	Dec-16	QTR
		Reference				
Units Sent Out	GWh	a	1,506.355	1,203.679	1,129.064	3,839.098
T&D Losses allowed		b	20.9%	20.9%	20.9%	
Units billed	GWh	c = a x (1-b)	1,191.527	952.110	893.089	3,036.726
a. O&M and Capacity cost of Power purchases						
O&M and Capacity cost of Power purchases	Mill Rs	d	1,632.623	1,773.354	1,780.087	
O&M and Capacity cost of power purchases (per unit billed)	Rs/kWh	e = d/c	1.353	1.370	1.863	1.993
Increase or decrease in O&M and Capacity cost (over Reference)	Rs/kWh	f	0.017	0.510	0.640	
O&M and Capacity Cost of Power Purchases - Monthly variations Amount	Mill Rs	g = f x c	20.629	485.263	571.844	1,077.736
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	h	0.079	(0.219)	(0.569)	
Cost of Fuel - Power Purchases	Rs/kWh	i	0.346	0.281	1.564	
Total	Rs/kWh	j = h + i	0.425	0.061	0.996	
ii Monthly variation in Fuel Cost (FCA) - Amount						
Cost of Fuel - KE	Mill Rs	k = h x a	119.216	(264.130)	(642.026)	(786.940)
Cost of Fuel - Power Purchases	Mill Rs	l = i x a	520.940	338.103	1,766.209	2,625.252
Total	Mill Rs	m = k + l	640.156	73.973	1,124.183	1,838.312
iii Unrecovered Cost of FCA due to non adjustment of T&D losses						
Cost of Fuel - KE	Mill Rs	n = k x b	24.916	(55.203)	(134.183)	(164.470)
Cost of Fuel - Power Purchases	Mill Rs	o = l x b	108.876	70.664	369.138	548.678
Total	Mill Rs	p = n + o	133.793	15.460	234.954	384.207
<b>Summary of Unrecovered cost for the quarter</b>						
a. O&M and Capacity cost of Power purchases	Mill Rs					1,077.736
b. Unrecovered Cost of FCA due to non adjustment of T&D losses	Mill Rs					384.207
c. Other Adjustments	Mill Rs					67.822
WWF/WPPF / Bonus to IPPs - Note 1	Mill Rs	q				
<b>Total Unrecovered cost for the quarter</b>	Mill Rs					1,529.765
Units to be sold in next quarter at allowed T&D losses	GWh	r				2,558.559
Unrecovered Cost per unit for current quarter	Rs/kWh	s = q / r				0.598

**Notes:**

1 Tapal energy WPPF Rs. 67.822 million.

**Work Sheet- Power Purchase O&M and Capacity Cost**

DESCRIPTION		Sep-16	Oct-16	Nov-16	Dec-16
		Reference			
<b>1 O&amp;M COST</b>					
a KANUPP	Mill Rs.	24.505	38.596	35.215	33.746
b TAPAL	Mill Rs.	62.584	55.624	41.834	59.251
c GUL AHMED	Mill Rs.	38.830	37.726	27.565	34.808
d CPPA-G	Mill Rs.	108.506	128.167	99.435	131.031
e ANOUD POWER	Mill Rs.	9.099	9.115	8.859	8.314
f INT IND (IIL)	Mill Rs.	9.987	10.888	8.993	9.943
<b>TOTAL</b>	Mill Rs.	<b>253.511</b>	<b>280.115</b>	<b>221.900</b>	<b>277.092</b>
<b>2 CAPACITY COST</b>					
a KANUPP	Mill Rs.				
b TAPAL	Mill Rs.	141.336	141.338	141.338	135.281
c GUL AHMED	Mill Rs.	130.204	130.205	130.205	130.205
d CPPA-G	Mill Rs.	1,050.286	1,080.965	1,279.911	1,237.510
e ANOUD POWER	Mill Rs.				
f INT IND (IIL)	Mill Rs.				
<b>TOTAL</b>	Mill Rs.	<b>1,321.825</b>	<b>1,352.508</b>	<b>1,551.454</b>	<b>1,502.996</b>
<b>3 TOTAL O&amp;M &amp; CAPACITY COST</b>					
a KANUPP	Mill Rs.	24.505	38.596	35.215	33.746
b TAPAL	Mill Rs.	203.920	196.963	183.172	194.532
c GUL AHMED	Mill Rs.	169.033	167.930	157.770	165.013
d CPPA-G	Mill Rs.	1,158.792	1,209.132	1,379.345	1,368.541
e ANOUD POWER	Mill Rs.	9.099	9.115	8.859	8.314
f INT IND (IIL)	Mill Rs.	9.987	10.888	8.993	9.943
<b>TOTAL</b>	Mill Rs.	<b>1,575.337</b>	<b>1,632.623</b>	<b>1,773.354</b>	<b>1,780.087</b>

K Electric Limited

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

	DESCRIPTION	Unit	Sep-16	Nov-16
			Reference	Current
A)	Cost of fuel:			
	Cost of fuel - KE	Mill Rs.	5,338.589	4,101.026
	Cost of fuel - Power Purchases	Mill Rs.	2,614.274	2,475.693
	Total	Mill Rs.	<u>7,952.863</u>	<u>6,576.719</u>
B)	Units Sent Out			
	Units Sent Out - KE	GWh	885.625	659.717
	Units - Power purchases	GWh	586.475	543.962
	Total	GWh	<u>1,472.100</u>	<u>1,203.679</u>
C)	Cost per unit			
	Cost of fuel - KE	Rs./kWh	3.627	3.407
	Cost of fuel - Power Purchases	Rs./kWh	1.776	2.057
	Average	Rs./kWh	<u>5.402</u>	<u>5.464</u>
D)	Variation per unit			
	Cost of fuel - KE	Rs./kWh		(0.219)
	Cost of fuel - Power Purchases	Rs./kWh		0.281
	Total Fuel Cost Adjustment	Rs./kWh		<u>0.061</u>
E)	Total Fuel Cost Adjustment	Ps/kWh		<u>6.146</u>
F)	Variation amount			
	Cost of fuel - KE	Mill Rs.		(264.130)
	Cost of fuel - Power Purchases	Mill Rs.		<u>338.103</u>
	Total Fuel Cost Adjustment	Mill Rs.		<u>73.973</u>
G)	<u>Net Variation amount</u>			
	Provisional variation amount passed on to consumers	Mill Rs.		303.092
	Net Variation Amount to be passed on to consumers	Mill Rs.		<u>(229.119)</u>
H)	Net Fuel Cost Adjustment to be passed on to consumers			
	Provisional Fuel Cost Adjustment passed on to consumers	Rs./kWh		0.250
	Net Fuel Cost Adjustment to be passed on to consumers	Rs./kWh		<u>(0.189)</u>

**Work Sheet- Generation Fuel Cost Variation**

	DESCRIPTION	Sep-16	Nov-16	
		Reference	Current	
<b>1 UNITS SENT OUT</b>				
<b>1a UNITS SENT OUT ON FURNACE OIL</b>				
i Bin Qasim - I				
Unit 1	GWh	63,620	36,288	
Unit 2	GWh	42,078	55,658	
Unit 3	GWh	31,073	9,800	
Unit 4	GWh	23,524	15,864	
Unit 5	GWh	31,061	35,284	
Unit 6	GWh	46,390	31,262	
Total units sent out on furnace oil - Bin Qasim - I	GWh	237,747	184,156	
<b>1b UNITS SENT OUT ON GAS</b>				
i Bin Qasim - I				
Unit 1	GWh	13,586	1,002	
Unit 2	GWh	15,968	1,688	
Unit 3	GWh	3,193	0,774	
Unit 4	GWh	12,310	9,032	
Unit 5	GWh	45,750	30,247	
Unit 6	GWh	26,236	2,790	
Total units sent out on gas - Bin Qasim - I	GWh	117,043	45,533	
ii Bin Qasim II - 560 MW	GWh	334,366	348,026	
iii Korangi Town Gas Turbine II	GWh	45,808	22,842	
iv Site Gas Turbine II	GWh	39,693	5,377	
v Korangi CCPP	GWh	110,968	53,783	
Total units sent out on gas - KE	GWh	647,878	475,560	
Total units sent out KE	GWh	885,625	659,717	
<b>2 HEAT RATE AT BUS BAR</b>				
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	7,991	7,991	
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 CCPP	Btu/kWh	8,497	8,497	

**Work Sheet- Generation Fuel Cost Variation**

	DESCRIPTION	Sep-16		Nov-16	
		Reference	Current	Reference	Current
<b>3</b>	<b><u>Calorific Value - Furnace Oil</u></b>	Btu/kg	40,351	40,351	
<b>4</b>	<b><u>FUEL PRICES</u></b>				
4a	Fuel Price - Gas	Rs./MMBTU	613	613	
4b	Fuel Price - Furnace Oil	Rs./Mton	30,520	34,633	
4c	Fuel Price - Furnace Oil	Rs./MMBTU	756	858	
<b>5</b>	<b><u>COST OF FUEL</u></b>				
5a	<u>Furnace oil</u>				
i	<u>Bin Qasim - I</u>				
	Unit 1	Mill Rs.	519.784	336.433	
	Unit 2	Mill Rs.	338.948	508.760	
	Unit 3	Mill Rs.	258.432	92.493	
	Unit 4	Mill Rs.	193.922	148.401	
	Unit 5	Mill Rs.	242.074	312.043	
	Unit 6	Mill Rs.	359.606	274.997	
	Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	<u>1,912.767</u>	<u>1,673.127</u>	
5b	<u>Gas</u>				
i	<u>Bin Qasim - I</u>				
	Unit 1	Mill Rs.	89.961	6.636	
	Unit 2	Mill Rs.	104.247	11.022	
	Unit 3	Mill Rs.	21.520	5.217	
	Unit 4	Mill Rs.	82.246	60.344	
	Unit 5	Mill Rs.	288.972	191.051	
	Unit 6	Mill Rs.	164.833	17.527	
	Total Cost of Gas - Bin Qasim - I	Mill Rs.	<u>751.780</u>	<u>291.795</u>	
ii	Bin Qasim II - 560 MW	Mill Rs.	1,637.878	1,704.791	
iii	Korangi Town Gas Turbine II	Mill Rs.	245.363	122.350	
iv	Site Gas Turbine II	Mill Rs.	212.808	28.825	
v	Korangi CCPP	Mill Rs.	577.994	280.138	
	Total Cost of Gas - KE	Mill Rs.	<u>3,425.823</u>	<u>2,427.899</u>	
	<b>Total cost of fuel - KE</b>	a	<b>Mill Rs.</b>	<b><u>5,338.589</u></b>	<b><u>4,101.026</u></b>
<b>6</b>	<b>Variation in Cost of Fuel - KE</b>				
6a	Units Sent Out - KE				
6b	Units - Power Purchases				
	<b>Total Units Sent Out</b>	b			
6c	Cost per unit	c = a/b	Rs./kWh	3.627	3.407
6d	Variation per unit (Cost of Fuel - KE)		Rs./kWh		(0.219)
6e	Variation amount (Cost of Fuel - KE)		Mill Rs.		<u>(264.130)</u>

Work Sheet- Power Purchase Cost Variation

DESCRIPTION	Sep-16		Nov-16	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	24.926	35.820	
b TAPAL	GWh	59.462	39.747	
c GUL AHMED	GWh	63.200	44.865	
d CPPA-G	GWh	428.146	413.415	
e ANOUD POWER	GWh	4.934	4.804	
f INT IND (IIL)	GWh	5.807	5.312	
<b>TOTAL</b>	GWh	<b>586.475</b>	<b>543.962</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	166.610	247.150	
b TAPAL	Mill Rs.	387.033	283.126	
c GUL AHMED	Mill Rs.	428.100	353.060	
d CPPA-G	Mill Rs.	1,566.672	1,527.816	
e ANOUD POWER	Mill Rs.	32.111	33.600	
f INT IND (IIL)	Mill Rs.	33.747	30.940	
<b>TOTAL</b>	Mill Rs.	<b>2,614.274</b>	<b>2,475.693</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	6.684	6.900	
b TAPAL	Rs./kwh	6.509	7.123	
c GUL AHMED	Rs./kwh	6.774	7.869	
d CPPA-G	Rs./kwh	3.659	3.696	
e ANOUD POWER	Rs./kwh	6.508	6.994	
f INT IND (IIL)	Rs./kwh	5.811	5.825	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
4a Cost of Fuel - Power Purchases	a Mill Rs.	2,614.274	2,475.693	
Units Sent out:				
Units Sent Out - KE	GWh	885.625	659.717	
Units - Power Purchases	GWh	586.475	543.962	
4b Total Units Sent Out	b GWh	<b>1,472.100</b>	<b>1,203.679</b>	
4c Cost per unit	c = a/b Rs./kwh	1.776	2.057	
4d Variation per unit (Cost of Fuel - Power Purchases)	Rs./kwh	0.281		
4e Variation amount (Cost of Fuel - Power Purchases)	Mill Rs.	<b>338.103</b>		

K Electric Limited

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

	DESCRIPTION	Unit	Sep-16	Oct-16
			Reference	Current
A)	Cost of fuel:			
	Cost of fuel - KE	Mill Rs.	5,338.589	5,582.032
	Cost of fuel - Power Purchases	Mill Rs.	2,614.274	3,196.047
	Total	Mill Rs.	<u>7,952.863</u>	<u>8,778.079</u>
B)	Units Sent Out			
	Units Sent Out - KE	GWh	885.625	906.086
	Units - Power purchases	GWh	586.475	600.270
	Total	GWh	<u>1,472.100</u>	<u>1,506.355</u>
C)	Cost per unit			
	Cost of fuel - KE	Rs./kWh	3.627	3.706
	Cost of fuel - Power Purchases	Rs./kWh	1.776	2.122
	Average	Rs./kWh	<u>5.402</u>	<u>5.827</u>
D)	Variation per unit			
	Cost of fuel - KE	Rs./kWh		0.079
	Cost of fuel - Power Purchases	Rs./kWh		0.346
	Total Fuel Cost Adjustment	Rs./kWh		<u>0.425</u>
E)	Total Fuel Cost Adjustment	Ps/kWh		<u>42.497</u>
F)	Variation amount			
	Cost of fuel - KE	Mill Rs.	119.216	
	Cost of fuel - Power Purchases	Mill Rs.	520.940	
	Total Fuel Cost Adjustment	Mill Rs.	<u>640.156</u>	
G)	<u>Net Variation amount</u>			
	Provisional variation amount passed on to consumers	Mill Rs.		706.242
	Net Variation Amount to be passed on to consumers	Mill Rs.		<u>(66.086)</u>
H)	Net Fuel Cost Adjustment to be passed on to consumers			
	Provisional Fuel Cost Adjustment passed on to consumers	Rs./kWh		0.470
	Net Fuel Cost Adjustment to be passed on to consumers	Rs./kWh		<u>(0.045)</u>

**Work Sheet- Generation Fuel Cost Variation**

	DESCRIPTION	Sep-16	Oct-16	
		Reference	Current	
<b>1 UNITS SENT OUT</b>				
<b>1a UNITS SENT OUT ON FURNACE OIL</b>				
i Bin Qasim - I				
Unit 1	GWh	63.620	67.191	
Unit 2	GWh	42.078	52.843	
Unit 3	GWh	31.073	16.589	
Unit 4	GWh	23.524	30.437	
Unit 5	GWh	31.061	32.705	
Unit 6	GWh	46.390	64.641	
Total units sent out on furnace oil - Bin Qasim - I	GWh	237.747	264.407	
<b>1b UNITS SENT OUT ON GAS</b>				
i Bin Qasim - I				
Unit 1	GWh	13.586	4.037	
Unit 2	GWh	15.968	6.148	
Unit 3	GWh	3.193	0.262	
Unit 4	GWh	12.310	14.738	
Unit 5	GWh	45.750	38.589	
Unit 6	GWh	26.236	10.944	
Total units sent out on gas - Bin Qasim - I	GWh	117.043	74.718	
ii Bin Qasim II - 560 MW	GWh	334.366	351.931	
iii Korangi Town Gas Turbine II	GWh	45.808	42.379	
iv Site Gas Turbine II	GWh	39.693	47.988	
v Korangi CCPP	GWh	110.968	124.663	
Total units sent out on gas - KE	GWh	647.878	641.679	
Total units sent out KE	GWh	885.625	906.086	
<b>2 HEAT RATE AT BUS BAR</b>				
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	7,991	7,991	
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 CCPP	Btu/kWh	8,497	8,497	

**Work Sheet- Generation Fuel Cost Variation**

	DESCRIPTION	Sep-16		Oct-16	
		Reference	Current	Reference	Current
3	<u>Calorific Value - Furnace Oil</u>	Btu/kg		40,351	40,351
4	<u>FUEL PRICES</u>				
4a	Fuel Price - Gas	Rs./MMBTU		613	613
4b	Fuel Price - Furnace Oil	Rs./Mton		30,520	32,326
4c	Fuel Price - Furnace Oil	Rs./MMBTU		756	801
5	<u>COST OF FUEL</u>				
5a	<u>Furnace oil</u>				
i	<u>Bin Qasim - I</u>				
	Unit 1	Mill Rs.	519.784	581.450	
	Unit 2	Mill Rs.	338.948	450.849	
	Unit 3	Mill Rs.	258.432	146.137	
	Unit 4	Mill Rs.	193.922	265.753	
	Unit 5	Mill Rs.	242.074	269.973	
	Unit 6	Mill Rs.	359.606	530.748	
	Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	<u>1,912.767</u>	<u>2,244.910</u>	
5b	<u>Gas</u>				
i	<u>Bin Qasim - I</u>				
	Unit 1	Mill Rs.	89.961	26.730	
	Unit 2	Mill Rs.	104.247	40.136	
	Unit 3	Mill Rs.	21.520	1.763	
	Unit 4	Mill Rs.	82.246	98.466	
	Unit 5	Mill Rs.	288.972	243.744	
	Unit 6	Mill Rs.	164.833	68.760	
	Total Cost of Gas - Bin Qasim - I	Mill Rs.	<u>751.780</u>	<u>479.600</u>	
ii	Bin Qasim II - 560 MW	Mill Rs.	1,637.878	1,723.919	
iii	Korangi Town Gas Turbine II	Mill Rs.	245.363	226.997	
iv	Site Gas Turbine II	Mill Rs.	212.808	257.276	
v	Korangi CCPP	Mill Rs.	577.994	649.329	
	Total Cost of Gas - KE	Mill Rs.	<u>3,425.823</u>	<u>3,337.122</u>	
	<u>Total cost of fuel - KE</u>	a	Mill Rs.	<u>5,338.589</u>	<u>5,582.032</u>
6	<u>Variation in Cost of Fuel - KE</u>				
6a	Units Sent Out - KE		GWh	885.625	906.086
6b	Units - Power Purchases		GWh	<u>586.475</u>	<u>600.270</u>
	Total Units Sent Out	b	GWh	<u>1,472.100</u>	<u>1,506.355</u>
6c	Cost per unit	c = a/b	Rs./kWh	3.627	3.706
6d	Variation per unit (Cost of Fuel - KE)		Rs./kWh		0.079
6e	Variation amount (Cost of Fuel - KE)		Mill Rs.		<u>119.216</u>

## Work Sheet- Power Purchase Cost Variation

DESCRIPTION	Sep-16		Oct-16	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh	24.926	39.259	
b TAPAL	GWh	59.462	52.850	
c GUL AHMED	GWh	63.200	61.402	
d CPPA-G	GWh	428.146	435.412	
e ANOUD POWER	GWh	4.934	4.942	
f INT IND (IIL)	GWh	5.807	6.404	
<b>TOTAL</b>	<b>GWh</b>	<b>586.475</b>	<b>600.270</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.	166.610	266.677	
b TAPAL	Mill Rs.	387.033	355.722	
c GUL AHMED	Mill Rs.	428.100	445.000	
d CPPA-G	Mill Rs.	1,566.672	2,058.323	
e ANOUD POWER	Mill Rs.	32.111	33.043	
f INT IND (IIL)	Mill Rs.	33.747	37.282	
<b>TOTAL</b>	<b>Mill Rs.</b>	<b>2,614.274</b>	<b>3,196.047</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh	6.684	6.793	
b TAPAL	Rs./kwh	6.509	6.731	
c GUL AHMED	Rs./kwh	6.774	7.247	
d CPPA-G	Rs./kwh	3.659	4.727	
e ANOUD POWER	Rs./kwh	6.508	6.686	
f INT IND (IIL)	Rs./kwh	5.811	5.821	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
4a Cost of Fuel - Power Purchases	a Mill Rs.	2,614.274	3,196.047	
Units Sent out:				
Units Sent Out - KE	GWh	885.625	906.086	
Units - Power Purchases	GWh	586.475	600.270	
4b Total Units Sent Out	b GWh	1,472.100	1,506.355	
4c Cost per unit	c = a/b Rs./kwh	1.776	2.122	
4d Variation per unit (Cost of Fuel - Power Purchases)	Rs./kwh	0.346		
4e Variation amount (Cost of Fuel - Power Purchases)	Mill Rs.	520.940		

K Electric Limited

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

DESCRIPTION		Unit	Jun-16	Sep-16
			Reference	Current
A)	<b>Cost of fuel:</b>			
	Cost of fuel - KE		Mill Rs.	5,338.589
	Cost of fuel - Power Purchases	a	Mill Rs.	2,614.274
	<b>Total</b>		Mill Rs.	<u><u>7,952.863</u></u>
B)	<b>Units Sent Out</b>			
	Units Sent Out - KE		GWh	885.625
	Units - Power purchases	b	GWh	586.475
	<b>Total</b>		GWh	<u><u>1,472.100</u></u>
C)	<b>Cost per unit</b>			
	Cost of fuel - KE		Rs./kWh	2.927
	Cost of fuel - Power Purchases	c = a/b	Rs./kWh	2.262
	<b>Average</b>		Rs./kWh	<u><u>5.189</u></u>
D)	<b>Variation per unit</b>			
	Cost of fuel - KE	d	Rs./kWh	0.700
	Cost of fuel - Power Purchases		Rs./kWh	(0.486)
	<b>Total Fuel Cost Adjustment</b>		Rs./kWh	<u><u>0.214</u></u>
E)	<b>Total Fuel Cost Adjustment</b>		Ps/kWh	<u><u>21.369</u></u>
F)	<b>Variation amount</b>			
	Cost of fuel - KE	e = d x b (total)	Mill Rs.	1,030.488
	Cost of fuel - Power Purchases		Mill Rs.	(715.911)
	<b>Total Fuel Cost Adjustment</b>		Mill Rs.	<u><u>314.578</u></u>
G)	<b>Net Variation amount</b>			
	Provisional variation amount passed on to consumers	f	Mill Rs.	7.496
	<b>Net Variation Amount to be passed on to consumers</b>	g = e - f	Mill Rs.	<u><u>307.082</u></u>
H)	<b>Net Fuel Cost Adjustment to be passed on to consumers</b>			
	Provisional Fuel Cost Adjustment passed on to consumers	h	Rs./kWh	0.010
	<b>Net Fuel Cost Adjustment to be passed on to consumers</b>	i = d - h	Rs./kWh	<u><u>0.204</u></u>

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Jun-16	Sep-16
	Reference	Current
<b>1 UNITS SENT OUT</b>		
<b>1a UNITS SENT OUT ON FURNACE OIL</b>		
i Bin Qasim - I		
Unit 1	GWh	63.620
Unit 2	GWh	42.078
Unit 3	GWh	31.073
Unit 4	GWh	23.524
Unit 5	GWh	31.061
Unit 6	GWh	46.390
Total units sent out on furnace oil - Bin Qasim - I	GWh	<u>237.747</u>
<b>1b UNITS SENT OUT ON GAS</b>		
i Bin Qasim - I		
Unit 1	GWh	13.586
Unit 2	GWh	15.968
Unit 3	GWh	3.193
Unit 4	GWh	12.310
Unit 5	GWh	45.750
Unit 6	GWh	26.236
Total units sent out on gas - Bin Qasim - I	GWh	<u>117.043</u>
ii Bin Qasim II - 560 MW	GWh	334.366
iii Korangi Town Gas Turbine II	GWh	45.808
iv Site Gas Turbine II	GWh	39.693
v Korangi CCPP	GWh	110.968
Total units sent out on gas - KE	GWh	<u>647.878</u>
Total units sent out KE	GWh	<u>885.625</u>
<b>2 HEAT RATE AT BUS BAR</b>		
i Bin Qasim - I		
Unit 1	Btu/kWh	10,802
Unit 2	Btu/kWh	10,650
Unit 3	Btu/kWh	10,996
Unit 4	Btu/kWh	10,899
Unit 5	Btu/kWh	10,304
Unit 6	Btu/kWh	10,249
ii Bin Qasim II - 560 MW	Btu/kWh	7,991
iii Korangi Town Gas Turbine II	Btu/kWh	8,738
iv Site Gas Turbine II	Btu/kWh	8,746
v Korangi CCPP	Btu/kWh	8,497

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Jun-16		Sep-16	
	Reference	Current	Reference	Current
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351	40,351	
<b>4 FUEL PRICES</b>				
4a Fuel Price - Gas	Rs./MMBTU	613	613	
4b Fuel Price - Furnace Oil	Rs./Mton	27,744	30,520	
4c Fuel Price - Furnace Oil	Rs./MMBTU	688	756	
<b>5 COST OF FUEL</b>				
<b>5a Furnace oil</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	519.784		
Unit 2	Mill Rs.	338.948		
Unit 3	Mill Rs.	258.432		
Unit 4	Mill Rs.	193.922		
Unit 5	Mill Rs.	242.074		
Unit 6	Mill Rs.	359.606		
Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	<u>1,912.767</u>		
<b>5b Gas</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	89.961		
Unit 2	Mill Rs.	104.247		
Unit 3	Mill Rs.	21.520		
Unit 4	Mill Rs.	82.246		
Unit 5	Mill Rs.	288.972		
Unit 6	Mill Rs.	164.833		
Total Cost of Gas - Bin Qasim - I	Mill Rs.	<u>751.780</u>		
ii Bin Qasim II - 560 MW	Mill Rs.	1,637.878		
iii Korangi Town Gas Turbine II	Mill Rs.	245.363		
iv Site Gas Turbine II	Mill Rs.	212.808		
v Korangi CCPP	Mill Rs.	577.994		
Total Cost of Gas - KE	Mill Rs.	<u>3,425.823</u>		
<b>Total cost of fuel - KE</b>	a	Mill Rs.	<u>5,338.589</u>	
<b>6 Variation in Cost of Fuel - KE</b>				
6a Units Sent Out - KE	GWh	885.625		
6b Units - Power Purchases	GWh	586.475		
Total Units Sent Out	b	GWh	<u>1,472.100</u>	
6c Cost per unit	c = a/b	Rs./kWh	2.927	3.627
6d Variation per unit (Cost of Fuel - KE)		Rs./kWh		0.700
6e Variation amount (Cost of Fuel - KE)		Mill Rs.	<u>1,030.488</u>	

## Work Sheet- Power Purchase Cost Variation

DESCRIPTION	Jun-16		Sep-16	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh		24.926	
b TAPAL	GWh		59.462	
c GUL AHMED	GWh		63.200	
d CPPA-G	GWh		428.146	
e ANOUD POWER	GWh		4.934	
f INT IND (IIL)	GWh		5.807	
<b>TOTAL</b>	GWh		<b>586.475</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.		166.610	
b TAPAL	Mill Rs.		387.033	
c GULAHMED	Mill Rs.		428.100	
d CPPA-G	Mill Rs.		1,566.672	
e ANOUD POWER	Mill Rs.		32.111	
f INT IND (IIL)	Mill Rs.		33.747	
<b>TOTAL</b>	Mill Rs.		<b>2,614.274</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh		6.684	
b TAPAL	Rs./kwh		6.509	
c GUL AHMED	Rs./kwh		6.774	
d CPPA-G	Rs./kwh		3.659	
e ANOUD POWER	Rs./kwh		6.508	
f INT IND (IIL)	Rs./kwh		5.811	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
<b>4a Cost of Fuel - Power Purchases</b>	a	Mill Rs.		<b>2,614.274</b>
Units Sent out:				
Units Sent Out - KE	GWh		885.625	
Units - Power Purchases	GWh		586.475	
<b>4b Total Units Sent Out</b>	b	GWh		<b>1,472.100</b>
<b>4c Cost per unit</b>	c = a/b	Rs./kwh	2.262	1.776
<b>4d Variation per unit (Cost of Fuel - Power Purchases)</b>		Rs./kwh		(0.486)
<b>4e Variation amount (Cost of Fuel - Power Purchases)</b>		Mill Rs.		<b>(715.911)</b>

## K ELECTRIC LIMITED

QUARTERLY ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL AND POWER PURCHASE COST  
INCLUDING O&M AND CAPACITY CHARGES

Quarter ended September 2016

Required adjustment in Tariff

	Sep-16
Quarterly Revision to reset price levels	0.101
Unrecovered Cost for current quarter	(0.242)
<b>Total Required adjustment in KE's Tariff</b>	<b>(0.141)</b>
<b>Total Required adjustment in KE's Tariff</b>	<b>(14.148)</b>

Quarterly Revision to reset price levels

Units Sent Out	GWh	1,472.100
T&D Losses allowed	GWh	20.90%
Units billed	GWh	1,164.431
<b>Cost of Fuel - KE</b>	<b>Mill Rs</b>	<b>5,338.589</b>

	Jun-16	Sep-16	Variation
Weighted Average Fuel cost per unit billed	Rs/Kwh	3.700	4.585

	Sep-16
- Fuel Cost	2,614.274
- O&M and Capacity Cost	1,575.337
<b>- Total Cost of Power Purchases</b>	<b>4,189.611</b>

	Jun-16	Sep-16	Variation
- Fuel Cost	2.860	2.245	(0.615)
- O&M Cost and capacity cost	1.522	1.353	(0.169)
<b>- Total Cost of Power Purchases</b>	<b>4.382</b>	<b>3.598</b>	<b>(0.784)</b>

QUARTERLY INCREASE/DECREASE IN COST PER UNIT BILLED

- Cost of Fuel - KE	Rs/kWh	0.885
- Cost of Power Purchases - Total	Rs/kWh	(0.784)
<b>- Total Cost Variation</b>	<b>Rs/kWh</b>	<b>0.101</b>

Note: Please note that the SoT attached with the MYT notification is based on updated terms and conditions including changes in definition of lifeline consumers and the assumption of conversion of eligible consumers to "A3" category along with enabling of Time of Use (ToU) metering for Residential and Commercial consumers etc. However, as the MYT has been notified on May 22, 2019, these changes will be effective from the date of notification. Accordingly, KE would like to request NEPRA to adjust the related impact while issuing determination of Quarterly SoTs.

K ELECTRIC LIMITED

QUARTERLY ADJUSTMENT IN TARIFF DUE TO VARIATION IN FUEL AND POWER PURCHASE COST INCLUDING O&M AND CAPACITY CHARGES			Quarter ended September 2016				
ADJUSTMENT IN TARIFF DUE TO UNRECOVERED COST			Jun-16	Jul-16	Aug-16	Sep-16	QTR
			Reference				
Units Sent Out	GWh	a	1,630.098	1,579.632	1,472.100	4,681.830	
T&D Losses allowed		b	20.9%	20.9%	20.9%		
Units billed	GWh	c = a x (1-b)	1,289.408	1,249.489	1,164.431	3,703.328	
a. O&M and Capacity cost of Power purchases							
O&M and Capacity cost of Power purchases	Mill Rs	d	1,493.589	1,673.848	1,575.337		
O&M and Capacity cost of power purchases (per unit billed)	Rs/kWh	e = d/c	1.522	1.158	1.340	1.353	
Increase or decrease in O&M and Capacity cost (over Reference)	Rs/kWh	f	(0.364)	(0.182)	(0.169)		
O&M and Capacity Cost of Power Purchases - Monthly variations Amount	Mill Rs	g = f x c	(468.760)	(227.749)	(196.811)	(893.320)	
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	h	0.820	0.715	0.700		
Cost of Fuel - Power Purchases	Rs/kWh	i	(0.427)	(0.363)	(0.486)		
Total	Rs/kWh	j = h + i	0.393	0.352	0.214		
ii Monthly variation in Fuel Cost (FCA) - Amount							
Cost of Fuel - KE	Mill Rs	k = h x a	1,336.747	1,129.030	1,030.488	3,496.266	
Cost of Fuel - Power Purchases	Mill Rs	l = i x a	(696.168)	(572.997)	(715.911)	(1,985.076)	
Total	Mill Rs	m = k + l	640.579	556.033	314.578	1,511.190	
iii Unrecovered Cost of FCA due to non adjustment of T&D losses							
Cost of Fuel - KE	Mill Rs	n = k x b	279.380	235.967	215.372	730.720	
Cost of Fuel - Power Purchases	Mill Rs	o = i x b	(145.499)	(119.756)	(149.625)	(414.881)	
Total	Mill Rs	p = n + o	133.881	116.211	65.747	315.839	
<b>Summary of Unrecovered cost for the quarter</b>							
a. O&M and Capacity cost of Power purchases	Mill Rs						(893.320)
b. Unrecovered Cost of FCA due to non adjustment of T&D losses	Mill Rs						315.839
c. Other Adjustments							(158.9)
Unrecovered Cost of June 16 Quarter (old MYT)	Mill Rs						
<b>Total Unrecovered cost for the quarter</b>	Mill Rs	q					(736.368)
Units to be sold in next quarter at allowed T&D losses	GWh	r					3,036.726
Unrecovered Cost per unit for current quarter	Rs/kWh	s = q / r					(0.242)

## Work Sheet- Power Purchase O&amp;M and Capacity Cost

DESCRIPTION		Jun-16	Jul-16	Aug-16	Sep-16
	Reference				
<b>1 O&amp;M COST</b>					
a KANUPP	Mill Rs.	43.575	33.768	24.505	
b TAPAL	Mill Rs.	69.821	75.331	62.584	
c GUL AHMED	Mill Rs.	41.155	45.637	38.830	
d CPPA-G	Mill Rs.	116.358	111.077	108.506	
e ANOUD POWER	Mill Rs.	9.355	9.088	9.099	
f INT IND (IIL)	Mill Rs.	11.015	8.725	9.987	
<b>TOTAL</b>	Mill Rs.	<b>291.279</b>	<b>283.626</b>	<b>253.511</b>	
<b>2 CAPACITY COST</b>					
a KANUPP	Mill Rs.	-	-	-	
b TAPAL	Mill Rs.	141.336	141.336	141.336	
c GUL AHMED	Mill Rs.	130.204	130.204	130.204	
d CPPA-G	Mill Rs.	930.771	1,118.682	1,050.286	
e ANOUD POWER	Mill Rs.	-	-	-	
f INT IND (IIL)	Mill Rs.	-	-	-	
<b>TOTAL</b>	Mill Rs.	<b>1,202.310</b>	<b>1,390.222</b>	<b>1,321.825</b>	
<b>3 TOTAL O&amp;M &amp; CAPACITY COST</b>					
a KANUPP	Mill Rs.	43.575	33.768	24.505	
b TAPAL	Mill Rs.	211.157	216.667	203.920	
c GUL AHMED	Mill Rs.	171.358	175.841	169.033	
d CPPA-G	Mill Rs.	1,047.129	1,229.760	1,158.792	
e ANOUD POWER	Mill Rs.	9.355	9.088	9.099	
f INT IND (IIL)	Mill Rs.	11.015	8.725	9.987	
<b>TOTAL</b>	Mill Rs.	<b>1,493.589</b>	<b>1,673.848</b>	<b>1,575.337</b>	

K Electric Limited

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

DESCRIPTION		Unit	Jun-16	Aug-16
			Reference	Current
A)	<b>Cost of fuel:</b>			
	Cost of fuel - KE	Mill Rs.	5,751.823	
	Cost of fuel - Power Purchases	Mill Rs.	3,000.446	
	<b>Total</b>	Mill Rs.	<u><u>8,752.269</u></u>	
B)	<b>Units Sent Out</b>			
	Units Sent Out - KE	GWh	950.457	
	Units - Power purchases	GWh	629.175	
	<b>Total</b>	GWh	<u><u>1,579.632</u></u>	
C)	<b>Cost per unit</b>			
	Cost of fuel - KE	Rs./kWh	2.927	3.641
	Cost of fuel - Power Purchases	Rs./kWh	2.262	1.899
	<b>Average</b>	Rs./kWh	<u><u>5.189</u></u>	<u><u>5.541</u></u>
D)	<b>Variation per unit</b>			
	Cost of fuel - KE	Rs./kWh	0.715	
	Cost of fuel - Power Purchases	Rs./kWh	(0.363)	
	<b>Total Fuel Cost Adjustment</b>	Rs./kWh	<u><u>0.352</u></u>	
E)	<b>Total Fuel Cost Adjustment</b>	Ps/kWh		<b>35.200</b>
F)	<b>Variation amount</b>			
	Cost of fuel - KE	Mill Rs.	1,129.030	
	Cost of fuel - Power Purchases	Mill Rs.	(572.997)	
	<b>Total Fuel Cost Adjustment</b>	Mill Rs.	<u><u>556.033</u></u>	
G)	<b>Net Variation amount</b>			
	Provisional variation amount passed on to consumers	Mill Rs.	192.705	
	<b>Net Variation Amount to be passed on to consumers</b>	Mill Rs.	<u><u>363.328</u></u>	
H)	<b>Net Fuel Cost Adjustment to be passed on to consumers</b>			
	Provisional Fuel Cost Adjustment passed on to consumers	Rs./kWh	0.120	
	<b>Net Fuel Cost Adjustment to be passed on to consumers</b>	Rs./kWh	<u><u>0.232</u></u>	

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Jun-16	Aug-16	
	Reference	Current	
<b>1 UNITS SENT OUT</b>			
<b>1a UNITS SENT OUT ON FURNACE OIL</b>			
i Bin Qasim -I			
• Unit 1	GWh	65.274	
Unit 2	GWh	64.952	
Unit 3	GWh	45.522	
Unit 4	GWh	23.874	
Unit 5	GWh	33.663	
Unit 6	GWh	66.240	
Total units sent out on furnace oil - Bin Qasim - I	GWh	<u>299.526</u>	
<b>1b UNITS SENT OUT ON GAS</b>			
i Bin Qasim -I			
Unit 1	GWh	2.213	
Unit 2	GWh	5.212	
Unit 3	GWh	0.237	
Unit 4	GWh	12.877	
Unit 5	GWh	58.598	
Unit 6	GWh	18.822	
Total units sent out on gas - Bin Qasim - I	GWh	<u>97.960</u>	
ii Bin Qasim II - 560 MW	GWh	342.331	
iii Korangi Town Gas Turbine II	GWh	48.822	
iv Site Gas Turbine II	GWh	50.890	
v Korangi CCPP	GWh	110.928	
Total units sent out on gas - KE	GWh	<u>650.931</u>	
Total units sent out KE	GWh	<u><u>950.457</u></u>	
<b>2 HEAT RATE AT BUS BAR</b>			
i Bin Qasim -I			
Unit 1	Btu/kWh	10,802	
Unit 2	Btu/kWh	10,650	
Unit 3	Btu/kWh	10,996	
Unit 4	Btu/kWh	10,899	
Unit 5	Btu/kWh	10,304	
Unit 6	Btu/kWh	10,249	
ii Bin Qasim II - 560 MW	Btu/kWh	7,991	
iii Korangi Town Gas Turbine II	Btu/kWh	8,738	
iv Site Gas Turbine II	Btu/kWh	8,746	
v Korangi CCPP	Btu/kWh	8,497	

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Jun-16		Aug-16	
	Reference	Current	Reference	Current
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351	40,351	
<b>4 FUEL PRICES</b>				
4a Fuel Price - Gas	Rs./MMBTU	613	613	
4b Fuel Price - Furnace Oil	Rs./Mton	27,744	29,637	
4c Fuel Price - Furnace Oil	Rs./MMBTU	688	734	
<b>5 COST OF FUEL</b>				
5a Furnace oil				
i Bin Qasim - I				
Unit 1	Mill Rs.	517.868		
Unit 2	Mill Rs.	508.070		
Unit 3	Mill Rs.	367.648		
Unit 4	Mill Rs.	191.117		
Unit 5	Mill Rs.	254.766		
Unit 6	Mill Rs.	498.634		
Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	<u>2,338.103</u>		
5b Gas				
i Bin Qasim - I				
Unit 1	Mill Rs.	14.657		
Unit 2	Mill Rs.	34.029		
Unit 3	Mill Rs.	1.596		
Unit 4	Mill Rs.	86.035		
Unit 5	Mill Rs.	370.124		
Unit 6	Mill Rs.	118.250		
Total Cost of Gas - Bin Qasim - I	Mill Rs.	<u>624.692</u>		
ii Bin Qasim II - 560 MW	Mill Rs.	1,676.893		
iii Korangi Town Gas Turbine II	Mill Rs.	261.511		
iv Site Gas Turbine II	Mill Rs.	272.836		
v Korangi CCPP	Mill Rs.	577.789		
Total Cost of Gas - KE	Mill Rs.	<u>3,413.720</u>		
Total cost of fuel - KE	a	Mill Rs.	<u>5,751.823</u>	
<b>6 Variation in Cost of Fuel - KE</b>				
6a Units Sent Out - KE		GWh	950.457	
6b Units - Power Purchases		GWh	<u>629.175</u>	
Total Units Sent Out	b	GWh	<u>1,579.632</u>	
6c Cost per unit	c = a/b	Rs./kWh	2.927	3.641
6d Variation per unit (Cost of Fuel - KE)		Rs./kWh		0.715
6e Variation amount (Cost of Fuel - KE)		Mill Rs.	<u>1,129.030</u>	

## Work Sheet- Power Purchase Cost Variation

DESCRIPTION	Jun-16		Aug-16	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh		34,349	
b TAPAL	GWh		71,573	
c GUL AHMED	GWh		74,279	
d CPPA-G	GWh		439,006	
e ANOUD POWER	GWh		4,928	
f INT IND (IIL)	GWh		5,040	
<b>TOTAL</b>	GWh		<b>629,175</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.		228,283	
b TAPAL	Mill Rs.		483,242	
c GUL AHMED	Mill Rs.		521,354	
d CPPA-G	Mill Rs.		1,708,304	
e ANOUD POWER	Mill Rs.		30,003	
f INT IND (IIL)	Mill Rs.		29,261	
<b>TOTAL</b>	Mill Rs.		<b>3,000,446</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh		6.646	
b TAPAL	Rs./kwh		6.752	
c GUL AHMED	Rs./kwh		7.019	
d CPPA-G	Rs./kwh		3.891	
e ANOUD POWER	Rs./kwh		6.088	
f INT IND (IIL)	Rs./kwh		5.805	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
4a Cost of Fuel - Power Purchases	a	Mill Rs.		<b>3,000.446</b>
Units Sent out:				
Units Sent Out - KE		GWh		950,457
Units - Power Purchases		GWh		629,175
4b Total Units Sent Out	b	GWh		<b>1,579.632</b>
4c Cost per unit	c = a/b	Rs./kwh		2.262
4d Variation per unit (Cost of Fuel - Power Purchases)		Rs./kwh		1.899 (0.363)
4e Variation amount (Cost of Fuel - Power Purchases)		Mill Rs.		<b>(572.997)</b>

K Electric Limited

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

DESCRIPTION		Unit	Jun-16	Jul-16
			Reference	Current
A)	Cost of fuel:			
	Cost of fuel - KE	Mill Rs.	6,107.230	
	Cost of fuel - Power Purchases	Mill Rs.	2,991.440	
	Total	Mill Rs.	<u><u>9,098.670</u></u>	
B)	Units Sent Out			
	Units Sent Out - KE	GWh	1,006.567	
	Units - Power purchases	GWh	623.531	
	Total	GWh	<u><u>1,630.098</u></u>	
C)	Cost per unit			
	Cost of fuel - KE	Rs./kWh	2.927	3.747
	Cost of fuel - Power Purchases	Rs./kWh	2.262	1.835
	Average	Rs./kWh	<u><u>5.189</u></u>	<u><u>5.582</u></u>
D)	Variation per unit			
	Cost of fuel - KE	Rs./kWh	0.820	
	Cost of fuel - Power Purchases	Rs./kWh	(0.427)	
	Total Fuel Cost Adjustment	Rs./kWh	<u><u>0.393</u></u>	
E)	Total Fuel Cost Adjustment	Ps/kWh		39.297
F)	Variation amount			
	Cost of fuel - KE	Mill Rs.	1,336.747	
	Cost of fuel - Power Purchases	Mill Rs.	(696.168)	
	Total Fuel Cost Adjustment	Mill Rs.	<u><u>640.579</u></u>	
G)	<u>Net Variation amount</u>			
	Provisional variation amount passed on to consumers	Mill Rs.	217.076	
	Net Variation Amount to be passed on to consumers	Mill Rs.	<u><u>423.503</u></u>	
H)	Net Fuel Cost Adjustment to be passed on to consumers			
	Provisional Fuel Cost Adjustment passed on to consumers	Rs./kWh	0.130	
	Net Fuel Cost Adjustment to be passed on to consumers	Rs./kWh	<u><u>0.263</u></u>	

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Jun-16	Jul-16
	Reference	Current
<b>1 UNITS SENT OUT</b>		
<b>1a UNITS SENT OUT ON FURNACE OIL</b>		
i Bin Qasim - I		
Unit 1	GWh	63.177
Unit 2	GWh	76.327
Unit 3	GWh	40.011
Unit 4	GWh	21.357
Unit 5	GWh	38.800
Unit 6	GWh	63.597
Total units sent out on furnace oil - Bin Qasim - I	GWh	<u>303.269</u>
<b>1b UNITS SENT OUT ON GAS</b>		
i Bin Qasim - I		
Unit 1	GWh	6.110
Unit 2	GWh	15.769
Unit 3	GWh	0.251
Unit 4	GWh	11.251
Unit 5	GWh	58.081
Unit 6	GWh	37.485
Total units sent out on gas - Bin Qasim - I	GWh	<u>128.948</u>
ii Bin Qasim II - 560 MW	GWh	342.755
iii Korangi Town Gas Turbine II	GWh	47.212
iv Site Gas Turbine II	GWh	49.180
v Korangi CCPP	GWh	135.204
Total units sent out on gas - KE	GWh	<u>703.298</u>
Total units sent out KE	GWh	<u>1,006.567</u>
<b>2 HEAT RATE AT BUS BAR</b>		

**Work Sheet- Generation Fuel Cost Variation**

DESCRIPTION	Jun-16		Jul-16	
	Reference	Current	Reference	Current
<b>3 Calorific Value - Furnace Oil</b>	Btu/kg	40,351	40,351	
<b>4 FUEL PRICES</b>				
4a Fuel Price - Gas	Rs./MMBTU	613	613	
4b Fuel Price - Furnace Oil	Rs./Mton	27,744	29,889	
4c Fuel Price - Furnace Oil	Rs./MMBTU	688	741	
<b>5 COST OF FUEL</b>				
<b>5a Furnace oil</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	505.492		
Unit 2	Mill Rs.	602.116		
Unit 3	Mill Rs.	325.881		
Unit 4	Mill Rs.	172.412		
Unit 5	Mill Rs.	296.134		
Unit 6	Mill Rs.	482.804		
Total Cost of Furnace Oil - Bin Qasim - I	Mill Rs.	2,384.840		
<b>5b Gas</b>				
i Bin Qasim - I				
Unit 1	Mill Rs.	40.457		
Unit 2	Mill Rs.	102.950		
Unit 3	Mill Rs.	1.694		
Unit 4	Mill Rs.	75.167		
Unit 5	Mill Rs.	366.860		
Unit 6	Mill Rs.	235.506		
Total Cost of Gas - Bin Qasim - I	Mill Rs.	822.634		
ii Bin Qasim II - 560 MW	Mill Rs.	1,678.971		
iii Korangi Town Gas Turbine II	Mill Rs.	252.884		
iv Site Gas Turbine II	Mill Rs.	263.670		
v Korangi CCPP	Mill Rs.	704.231		
Total Cost of Gas - KE	Mill Rs.	3,722.390		
<b>Total cost of fuel - KE</b>	a	Mill Rs.	<u><u>6,107.230</u></u>	
<b>6 Variation in Cost of Fuel - KE</b>				
6a Units Sent Out - KE	GWh	1,006.567		
6b Units - Power Purchases	GWh	623.531		
Total Units Sent Out	b	GWh	<u><u>1,630.098</u></u>	
6c Cost per unit	c = a/b	Rs./kWh	2.927	3.747
6d Variation per unit (Cost of Fuel - KE)		Rs./kWh		0.820
6e Variation amount (Cost of Fuel - KE)		Mill Rs.	<u><u>1,336.747</u></u>	

## Work Sheet- Power Purchase Cost Variation

DESCRIPTION	Jun-16		Jul-16	
	Reference	Current	Reference	Current
<b>1 POWER PURCHASES</b>				
a KANUPP	GWh		44.323	
b TAPAL	GWh		66.338	
c GUL AHMED	GWh		66.984	
d CPPA-G	GWh		434.434	
e ANOUD POWER	GWh		5.073	
f INT IND (IIL)	GWh		6.379	
<b>TOTAL</b>	GWh		<b>623.531</b>	
<b>2 COST OF POWER PURCHASES - FUEL COST</b>				
a KANUPP	Mill Rs.		290.412	
b TAPAL	Mill Rs.		433.382	
c GUL AHMED	Mill Rs.		461.136	
d CPPA-G	Mill Rs.		1,737.693	
e ANOUD POWER	Mill Rs.		31.771	
f INT IND (IIL)	Mill Rs.		37.046	
<b>TOTAL</b>	Mill Rs.		<b>2,991.440</b>	
<b>3 FUEL COST / UNIT</b>				
a KANUPP	Rs./kwh		6.552	
b TAPAL	Rs./kwh		6.533	
c GUL AHMED	Rs./kwh		6.884	
d CPPA-G	Rs./kwh		4.000	
e ANOUD POWER	Rs./kwh		6.263	
f INT IND (IIL)	Rs./kwh		5.808	
<b>4 VARIATION IN COST OF FUEL - POWER PURCHASES</b>				
4a Cost of Fuel - Power Purchases	a Mill Rs.		<b>2,991.440</b>	