



**KARACHI ELECTRIC SUPPLY COMPANY LTD.**

KESC House, 39-B, Sunset Boulevard, Phase IV, DHA, Karachi, Pakistan  
Phone: (92 21) 352647034 - Email: rauf.yousuf@kesc.com.pk

Jan-20

Ref. No. DRA&SP/NEPRA/071/ 885

March 15, 2012

The Registrar  
National Electric Power Regulatory Authority  
2<sup>nd</sup> Floor, OPF Building, G-5/2  
Islamabad

Dear Sir

Subject: **MONTHLY FUEL COST ADJUSTMENT (FCA) DUE TO VARIATION IN FUEL AND POWER PURCHASE PRICE OF JANUARY 2012**

This is with reference to our submission of monthly fuel cost adjustment based on units sent out for the month of January 2012.

The submission for the month is based on the actual invoice of NTDC for the month of Jan-12. Besides the units sent out on Gas and Furnace oil at Bin Qasim Power Station haven been worked out on the basis of BTUs of Gas and FO consumption at each unit (1 to 6). Further, the cost of Furnace Oil has been accounted for as notified by the relevant Authority.

**Required Monthly Adjustment:**

The results for January 2012 have been finalized and the summarized position is as under;

DESCRIPTION	January 2012 (Over Dec- 11)
Fuel Price Variation (Ps/kWh)	30.936
Power Purchase Price Variation (Ps/kWh)	70.887
<b>Total Fuel Surcharge Adjustment (Ps/kWh)</b>	<b>101.823</b>

Furthermore, it is certified that the cost of fuel and power purchase claimed does not include any amount of late payment surcharge/ markup/ interest.

Best Regards

Abdul Rauf Yousuf  
Director (RA & SP)

re

Copy to:  
Secretary, M/o Water and Power, Islamabad  
Mr. Sajjad Muhammad Qureshi, Director Tariff, NEPRA, Islamabad

**K. E. S. C. LTD****SUMMARY OF REQUIRED ADJUSTMENT ON ACCOUNT OF VARIATION IN COST OF FUEL AND POWER PURCHASES**

DESCRIPTION		Dec-11	Jan-12
<b>1 MONTHLY ALLOWABLE ADJUSTMENT ON UNITS SENT OUT BASIS</b>			
a.	FSA at beginning of the Month	Ps/kWh	
a.	Monthly Variation in		
	i Fuel Price	Mill Rs.	(474.276) 291.503
	ii Power Purchase Price - Fuel component	Mill Rs.	784.888 667.958
	iii Total Monthly Variation ( i + ii ) - Over Reference Tariff	Mill Rs.	<b>310.612 959.461</b>
b.	Units Sent Out	Mill kWh	<b>991.903 942.281</b>
<b>2</b>			
a.	Monthly Variation in FSA - due to		
	i Fuel Price	Ps/kWh	(47.815) 30.936
	ii Power Purchase Price - Fuel component	Ps/kWh	79.129 70.887
b.	Monthly increase/decrease to be passed to Consumers (i+ii Ps/kWh)		<b>31.315 101.823</b>
c.	Units Sold at 21% T&D losses	Mill kWh	<b>783.604 744.402</b>

## Work Sheet- Fuel Price Variation

DESCRIPTION		Dec-11	Jan-12
<b>1 UNITS SENT OUT - KESC</b>			
<b>1a UNITS SENT OUT ON GAS</b>			
i Bin Qasim	Mill kWh	184.521	192.385
ii Bin Qasim II - CCPP	Mill kWh	29.842	-
iii Korangi Thermal	Mill kWh	(0.285)	-
v Korangi Gas 2	Mill kWh	25.211	30.650
vii Site Gas 2	Mill kWh	1.236	14.020
viii Korangi combined	Mill kWh	33.574	49.198
Total (i to viii)	Mill kWh	<b>274.098</b>	<b>286.254</b>
<b>1b UNITS SENT OUT ON F. OIL</b>			
i Bin Qasim	Mill kWh	54.582	68.717
Total (i to viii)	Mill kWh	<b>54.582</b>	<b>68.717</b>
<b>1c TOTAL UNITS SENT OUT (1 + 2)</b>			
i Bin Qasim	Mill kWh	239.103	261.102
ii Bin Qasim II - CCPP	Mill kWh	29.842	-
iii Korangi Thermal	Mill kWh	(0.285)	-
v Korangi Gas 2	Mill kWh	25.211	30.650
vii Site Gas 2	Mill kWh	1.236	14.020
viii Korangi combined	Mill kWh	33.574	49.198
Total (i to viii)	Mill kWh	<b>328.680</b>	<b>354.970</b>
<b>2 HEAT RATE AT BUS BAR</b>			
<b>2a Heat Rate of GAS - of item 1</b>			
i Bin Qasim	Btu/kWh	10,650	10,650
ii Bin Qasim II - CCPP	Btu/kWh	12,163	12,163
iii Korangi Thermal	Btu/kWh	13,738	13,738
v Korangi Gas 2	Btu/kWh	9,500	9,500
vii Site Gas 2	Btu/kWh	9,500	9,500
viii Korangi combined	Btu/kWh	9,110	9,110
<b>2b CONVERSION FACTOR F. OIL - of item 2</b>			
i Bin Qasim	Kg/kWh	<b>0.264</b>	<b>0.264</b>
ii Korangi Thermal	Kg/kWh	<b>0.340</b>	<b>0.340</b>
<b>3 FUEL PRICES</b>			
a. Fuel Prices- Gas (Rs/MMBTu)	Rs/MMBTu	<b>447.14</b>	<b>507.86</b>
b. Fuel Price -F.O (Rs/Kg)	Rs/Kg	<b>64,634</b>	<b>64,745</b>
<b>4 COST OF FUEL</b>			
<b>4a COST OF GAS</b>			
i Bin Qasim	Mill Rs	878.696	1,040.556
ii Bin Qasim II - CCPP	Mill Rs	162.298	-
iii Korangi Thermal	Mill Rs	(1.751)	-
v Korangi Gas 2	Mill Rs	107.091	147.878
vii Site Gas 2	Mill Rs	5.250	67.644
viii Korangi combined	Mill Rs	136.762	227.618
Total (i to viii)	Mill Rs	<b>1,288.346</b>	<b>1,483.695</b>

<b>4b COST OF FURNACE OIL</b>			
i Bin Qasim	Mill Rs	931.348	1,174.544
viii Total (i to vii)	Mill Rs	<b>931.348</b>	<b>1,174.544</b>
<b>4c TOTAL COST OF FUEL</b>			
i Bin Qasim	Mill Rs	1,810.044	2,215.100
ii Bin Qasim II - CCPP	Mill Rs	162.298	-
iii Korangi Thermal	Mill Rs	(1.751)	-
v Korangi Gas 2	Mill Rs	107.091	147.878
vii Site Gas 2	Mill Rs	5.250	67.644
viii Korangi combined	Mill Rs	136.762	227.618
Total	Mill Rs	<b>2,219.694</b>	<b>2,658.240</b>
<b>5 COST OF FUEL PER KWH</b>			
a Bin Qasim	Rs/kWh	7.570	8.484
b Bin Qasim II - CCPP	Rs/kWh	5.439	-
c Korangi Thermal	Rs/kWh	6.143	-
e Korangi Gas 2	Rs/kWh	4.248	4.825
g Site Gas 2	Rs/kWh	4.248	4.825
Korangi combined	Rs/kWh	4.073	4.627
		<b>6.753</b>	<b>7.489</b>
<b>6 INCREASE/DECREASE IN COST OF FUEL PER KWH</b>			
a Bin Qasim	Rs/kWh	(1.984)	0.914
e Korangi Gas 2	Rs/kWh	-	0.577
g Site Gas 2	Rs/kWh	-	0.577
Korangi combined	Rs/kWh	-	0.553
		<b>(0.863)</b>	<b>0.735</b>
<b>7 INCREASE / DECREASE IN FUEL COST OVER PREVIOUS MONTH</b>			
a Bin Qasim	Mill Rs	(474.276)	238.521
e Korangi Gas 2	Mill Rs	-	17.680
g Site Gas 2	Mill Rs	-	8.088
h Korangi combined	Mill Rs	-	27.214
Total (a to g)	Mill Rs	<b>(474.276)</b>	<b>291.503</b>
<b>8 INCREASE / DECREASE IN TARIFF TO BE PASSED IN THE MONTHLY BILLS</b>			
a Fuel price variation (item 7-h)	Mill Rs	(474.276)	291.503
b Units Sent Out - KESC	Mill kWh	328.680	354.970
c Power Purchase	Mill kWh	663.223	587.310
d Total Units Sent Out (b + c)	Mill kWh	991.903	942.281
e Increase / Decrease in Tariff (8a / 8d x 100) To be passed on to the consumers - FSA	Ps/kWh	<b>(47.815)</b>	<b>30.936</b>
<b>9 INCREASE / DECREASE IN REVENUE</b>			
a Units Sold	Mill kWh	783.604	744.402
b Increase / Decrease in Tariff	Ps/kWh	(47.815)	30.936
c Increase / Decrease in Revenue (9a / 9b x 100)	Mill Rs	(374.678)	230.287
d Accumulated increase / decrease in revenue	Mill Rs	<b>387.444</b>	<b>230.287</b>
d Unrecovered Cost due to 21% T&D loss		<b>(99.598)</b>	<b>61.216</b>

**10 INCREASE / DERCREASE IN TARIFF****TO BE ADJUSTED ON QUARTERLY BASIS**

a Fuel price variation - item 8a		(474.276)	291.503
b Units Sent Out - KESC	Mill kWh	328.680	354.970
c Power Purchase	Mill kWh	663.223	587.310
d Total Units Sent Out	Mill kWh	991.903	942.281
e Trans & Dist Losses		0.210	0.210
f Units Sold (10d - 10e)	Mill kWh	<b>783.604</b>	<b>744.402</b>
g Increase / Decrease in Tariff (10a / 10f x 100)			
To be passed on to the consumers - Tariff	Ps/kWh	<b>(60.525)</b>	<b>39.159</b>

**11 INCREASE / DERCREASE IN REVENUE**

a Units Sold (Item 10f)	Mill kWh	783.604	744.402
b Increase / Decrease in Tariff (item 10g)	Ps/kWh	(60.525)	39.159
c Increase / Decrease in Revenue (11a x 11b)	Mill Rs	(474.276)	291.503

**Work Sheet- Power Purchase Cost Variation**

DESCRIPTION		Dec-11	Jan-12	
<b>1 POWER PURCHASES</b>				
a	KANUPP	Mill kWh	25.626	56.757
b	PASMIC	Mill kWh	0.158	0.211
c	TAPAL	Mill kWh	50.858	20.027
d	GUL AHMED	Mill kWh	54.623	28.479
e	NTDC/WAPDA	Mill kWh	518.162	468.098
f	ANOUD POWER	Mill kWh	5.199	6.229
h	INT IND (IIL)	Mill kWh	8.597	7.509
m	TOTAL	Mill kWh	<b>663.223</b>	<b>587.310</b>
<b>2 COST OF POWER PURCHASE - FUEL COST</b>				
a	KANUPP	Mill Rs	185.912	461.601
b	PASMIC	Mill Rs	1.144	1.714
c	TAPAL	Mill Rs	741.557	296.158
d	GUL AHMED	Mill Rs	823.173	427.704
e	NTDC/WAPDA	Mill Rs	3,766.694	4,344.487
f	ANOUD POWER	Mill Rs	56.961	69.671
h	INT IND (IIL)	Mill Rs	36.590	36.303
m	TOTAL	Mill Rs	<b>5,612.032</b>	<b>5,637.638</b>
<b>3 COST OF POWER PURCHASE- Fuel Cost/kWh</b>				
a	KANUPP	Rs/kWh	7.255	8.133
b	PASMIC	Rs/kWh	7.255	8.133
c	TAPAL	Rs/kWh	14.581	14.788
d	GUL AHMED	Rs/kWh	15.070	15.018
e	NTDC/WAPDA	Rs/kWh	7.2693	9.2812
f	ANOUD POWER	Rs/kWh	10.956	11.185
h	INT IND (IIL)	Rs/kWh	4.256	4.834
m	AVERAGE	Rs/kWh	<b>8.462</b>	<b>9.599</b>
<b>4 INCREASE / DERCREASE IN FUEL COMPONENT OF POWER PURCHASE - TO BE PASSED IN THE MONTHLY BILLS</b>				
a	Average Monthly Fuel cost of Power Purchase ( Item 3r	Rs/kWh	8.462	9.599
b	Reference Rate - Previous Month	Rs/kWh	7.278	8.462
c	Increase / Decrease in Average Rate of Power Purchase (4a-	Rs/kWh	<b>1.183</b>	<b>1.137</b>
d	Total Power Purchase (Item 1m)	Mill kWh	663.223	587.310
e	Increase / Decrease in Fuel Cost of Power Purchase (4c*4d)	Mill Rs	<b>784.888</b>	<b>667.958</b>

**5 INCREASE / DECREASE IN TARIFF****TO BE PASSED IN THE MONTHLY BILLS**

a Fuel price variation in cost of power purchase (Item 4a)		784.888	667.958
b Units Sent Out - KESC	Mill kWh	328.680	354.970
c Power Purchase	Mill kWh	663.223	587.310
d Total Units Sent Out (b + c)	Mill kWh	<b>991.903</b>	<b>942.281</b>
e Increase / Decrease in Tariff (5a / 5d x 100)			
To be passed on to the consumers - FSA	Ps/kWh	<b>79.129</b>	<b>70.887</b>

**6 INCREASE / DECREASE IN REVENUE**

a Units Sold	Mill kWh	783.604	744.402
b Increase / Decrease in Tariff (item 5e)	Ps/kWh	79.129	70.887
c Increase / Decrease in Revenue (6a / 6b x100)	Mill Rs	620.061	527.687
d Accumulated increase / decrease in revenue	Mill Rs	<b>879.196</b>	<b>527.687</b>
e Unrecovered Cost due to 21% T&D loss	Mill Rs		

**7 O&M PAYMENT**

a KANUPP	Mill Rs	13.289	29.433
b PASMIC	Mill Rs	0.203	0.271
c TAPAL	Mill Rs	40.824	16.703
d GUL AHMED	Mill Rs	25.596	13.867
e NTDC/WAPDA	Mill Rs	924.234	876.491
f ANOUD POWER	Mill Rs	8.498	10.182
h INT IND (IIL)	Mill Rs	13.269	11.716
m TOTAL	Mill Rs	<b>1,025.914</b>	<b>958.662</b>

**8 O&M PAYMENT (Rs/kWh)**

a KANUPP	Rs/kWh	0.519	0.519
b PASMIC	Rs/kWh	1.285	1.285
c TAPAL	Rs/kWh	0.803	0.834
d GUL AHMED	Rs/kWh	0.469	0.487
e NTDC/WAPDA	Rs/kWh	1.784	1.872
f ANOUD POWER	Rs/kWh	1.635	1.635
h INT IND (IIL)	Rs/kWh	1.543	1.560
m TOTAL	Rs/kWh	1.547	1.632
n Variation over Base Rate	Rs/kWh	0.007	0.085
o Variation over Base Rate (8a*1m)	Mill Rs	<b>4.532</b>	<b>50.174</b>

**9 CAPACITY PAYMENT**

c TAPAL	Mill Rs	112.620	115.157
d GUL AHMED	Mill Rs	101.977	104.929
m TOTAL	Mill Rs	<b>214.597</b>	<b>220.085</b>

**10 CAPACITY PAYMENT (Rs/ KwH)**

c TAPAL	Mill Rs	2.214	5.750
d GUL AHMED	Mill Rs	1.867	3.684
m TOTAL	Mill Rs	0.324	0.375
n Variation over Base Rate	Rs/kWh	(0.001)	0.051
o Variation over Base Rate (10n*1m)	Mill Rs	<b>(0.922)</b>	<b>30.051</b>

**11 TOTAL O&M & CAPACITY PAYMENT**

a KANUPP	Mill Rs	13.289	29.433
b PASMIC	Mill Rs	0.203	0.271
c TAPAL	Mill Rs	153.444	131.860
d GUL AHMED	Mill Rs	127.573	118.795
e NTDC/WAPDA	Mill Rs	924.234	876.491
f ANOUD POWER	Mill Rs	8.498	10.182
h INT IND (IIL)	Mill Rs	13.269	11.716
m TOTAL	Mill Rs	<b>1,240.511</b>	<b>1,178.747</b>

**12 TOTAL COST WITH O&M AND CAPACITY PAYMENT**

a	KANUPP	Mill Rs	199.201	491.034
b	PASMIC	Mill Rs	1.347	1.985
c	TAPAL	Mill Rs	895.001	428.018
d	GUL AHMED	Mill Rs	950.746	546.499
e	NTDC/WAPDA	Mill Rs	4,690.928	5,220.978
f	ANOUD POWER	Mill Rs	65.460	79.853
h	INT IND (IIL)	Mill Rs	49.860	48.019
m	TOTAL	Mill Rs	6,852.543	6,816.385

**13 COST OF POWER PURCHASE- TOTAL Cost/kWh**

a	KANUPP	Rs/kWh	7.773	8.652
b	PASMIC	Rs/kWh	8.540	9.418
c	TAPAL	Rs/kWh	17.598	21.372
d	GUL AHMED	Rs/kWh	17.406	19.189
e	NTDC/WAPDA	Rs/kWh	9.053	11.154
f	ANOUD POWER	Rs/kWh	12.591	12.819
h	INT IND (IIL)	Rs/kWh	5.799	6.395
m	AVERAGE	Rs/kWh	<b>10.332</b>	<b>11.606</b>

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

a	Average Monthly cost of Power Purchase - Fuel Cost (It Rs/kWh		10.332	11.606
b	Reference Rate - Previous Month	Rs/kWh	9.143	10.332
c	Increase / Decrease in Average Rate of Power Purchase (a-b),Rs/kWh		1.189	1.274
d	Total Power Purchase (Item 1m)	Mill kWh	663.223	587.310
e	Increase / Decrease in Total Cost of Power Purchase (c*d)	Mill Rs	<b>788.497</b>	<b>748.184</b>
f	Adjustment in cost of KANUPP			
g	Unrecovered cost Previous Quarter			
h	Total (e+f+g)		788.497	748.184

**15 INCREASE / DECREASE IN TARIFF  
TO BE ADJUSTED ON QUARTERLY BASIS**

a	Total price variation in cost of power purchase (Item 14h)	Mill Rs	788.497	748.184
<b>Units Sent Out</b>				
b	KESC	Mill kWh	328.680	354.970
c	Power Purchase	Mill kWh	663.223	587.310
d	Total Units Sent Out (b+c)	Mill kWh	991.903	942.281
e	Trans & Dist Losses		21.0%	21.0%
f	Units Sold (15d-15e)	Mill kWh	<b>783.604</b>	<b>744.402</b>
g	<b>Increase / Decrease in Tariff</b>			
h	<b>Power Purchase (15a/15f)</b>	Ps/kWh	<b>100.625</b>	<b>100.508</b>

**16 INCREASE / DECREASE IN REVENUE**

a	Units Sold (Item 15f)	Mill kWh	783.604	744.402
b	Increase / Decrease in Tariff (Item 15h)	Ps/kWh	100.625	100.508
c	Increase / Decrease in Revenue (a*b)	Mill Rs	788.497	748.184
d	Accumulated increase / decrease in revenue	Mill Rs	1,310.648	748.184

**STATION-WISE GENERATION AND SENT OUT - ACTUAL**

DESCRIPTION		Dec-11	Jan-12
<b>1 Units Generated</b>	<b>Mill kWh</b>		
i Bin Qasim		252.149500	277.476960
ii Bin Qasim II - 560 MW		33.862554	0.014523
v Korangi Town Gas Turb II		25.877471	31.336991
vii Site Gas Turbine II		1.562194	14.538204
viii Korangi CCPP		36.580600	53.107721
Total KESC		<b>350.032319</b>	<b>376.474399</b>
<b>2 Units Sent out</b>	<b>Mill kWh</b>		
i Bin Qasim		226.586448	251.686710
ii Bin Qasim II - 560 MW		29.841732	(1.289472)
iii Korangi Thermal		(0.285120)	(0.171270)
v Korangi Town Gas Turb II		25.210799	30.650450
vii Site Gas Turbine II		1.236000	14.020400
viii Korangi CCPP		33.574140	49.197558
Total KESC		<b>316.163999</b>	<b>344.094376</b>
<b>3 Auxiliary Consumption</b>	<b>Mill kWh</b>		
i Bin Qasim		25.563052	25.790250
ii Bin Qasim II - 560 MW		4.020822	1.303995
iii Korangi Thermal		0.285120	0.171270
v Korangi Town Gas Turb II		0.666672	0.686541
vii Site Gas Turbine II		0.326194	0.517804
viii Korangi CCPP		3.006460	3.910163
Total KESC		<b>33.868320</b>	<b>32.380023</b>
<b>4 Auxiliary Consumption</b>			
i Bin Qasim		10.1%	9.3%
ii Bin Qasim II - 560 MW		11.9%	
iv Korangi Town Gas Turb I		0.0%	0.0%
v Korangi Town Gas Turb II		2.6%	2.2%
vii Site Gas Turbine II		20.9%	3.6%
viii Korangi CCPP		8.2%	7.4%
Total KESC		9.7%	8.6%

**STATION-WISE GENERATION AND SENT OUT AT 6.1% AUXILIARY CONSUMPTION**

DESCRIPTION		Dec-11	Jan-12
<b>5 Units Sent out</b>	<b>Mill kWh</b>		
i Bin Qasim		239.102797	261.101795
ii Bin Qasim II - 560 MW		29.841732	-
iii Korangi Thermal		(0.285120)	-
v Korangi Town Gas Turb II		25.210799	30.650450
vii Site Gas Turbine II		1.236000	14.020400
viii Korangi CCPP		33.574140	49.197558
Total KESC		328.680348	354.970203
Check			
<b>6 Auxiliary Consumption</b>	<b>Mill kWh</b>		
i Bin Qasim		13.046703	16.375165
ii Bin Qasim II - 560 MW		4.020822	1.303995
iii Korangi Thermal		0.285120	0.171270
v Korangi Town Gas Turb II		0.666672	0.686541
vii Site Gas Turbine II		0.326194	0.517804
viii Korangi CCPP		3.006460	3.910163
Total KESC		21.351971	22.964938
<b>7 Auxiliary Consumption at 6.1%</b>			
i Bin Qasim		5.2%	5.9%
ii Bin Qasim II - 560 MW		11.9%	
iv Korangi Town Gas Turb I		0.0%	0.0%
v Korangi Town Gas Turb II		2.6%	2.2%
vii Site Gas Turbine II		20.9%	3.6%
viii Korangi CCPP		8.2%	7.4%
Total KESC		6.1%	6.1%



**WORKING OF GENERATION ON GAS AND FURNACE OIL AND COST OF FUEL**

DESCRIPTION		Dec-11	Jan-12
<b>8 Fuel Consumption at BQPS</b>			
a. Gas Consumption	000 CM	61,335.069	66,329.651
	MMCF	2,177.021	2,354.298
	MMCFD	70.23	75.95
	BTU/MCF	910,570	906,130
	Million BTU	1,982,330	2,133,300
		76.3%	73.2%
b. Furnace Oil consumption	M. Ton	15,254.53	19,370.40
	BTU/M.Ton	40,351,500	40,351,500
	Million BTU	615,543	781,625
		23.7%	26.8%
c. Total fuel consumption	Million BTU	2,597,873	2,914,925
<b>9 Sent out - BQPS</b>			
a. On gas	Mill kWh	184.520882	192.385217
b. On Furnace Oil	Mill kWh	54.581914	68.716578
	Mill kWh	<b>239.102797</b>	<b>261.101795</b>
	Mill kWh		
<b>10 Generation on Gas</b>			
i Bin Qasim	Mill kWh	184.520882	192.385217
ii Bin Qasim II - 560 MW	Mill kWh	29.841732	-
iii Korangi Thermal	Mill kWh	(0.285120)	-
v Korangi Town Gas Turb II	Mill kWh	25.210799	30.650450
vii Site Gas Turbine II	Mill kWh	1.236000	14.020400
viii Korangi CCPP	Mill kWh	33.574140	49.197558
Total KESC	Mill kWh	<b>274.098433</b>	<b>286.253625</b>
<b>11 Generation on F.Oil - BQPS</b>		54.581914	68.716578
<b>12 Total Generation at Bus Bar</b>		<b>328.680348</b>	<b>354.970203</b>
		<b>239.102797</b>	<b>261.101795</b>
<b>13 Price of Gas</b>			
a. Gas Consumption			
i Bin Qasim	Mill Btu	1,982,330	2,133,300
ii Bin Qasim II - 560 MW	Mill Btu	379,218	1,960
v Korangi Town Gas Turb II	Mill Btu	255,079	309,037
vii Site Gas Turbine II	Mill Btu	15,273	146,832
viii Korangi CCPP	Mill Btu	289,263	450,281
Total KESC	Mill Btu	<b>2,921,164</b>	<b>3,041,410</b>
b. Cost of Gas Consumed - of item 13a			
i Bin Qasim	Mill Rs.	886.379	1,083.423
ii Bin Qasim II - 560 MW	Mill Rs.	169.563	1.008
iii Korangi Thermal	Mill Rs.	0.015	0.019
v Korangi Town Gas Turb II	Mill Rs.	114.056	156.951
vii Site Gas Turbine II	Mill Rs.	6.829	74.575
viii Korangi CCPP	Mill Rs.	129.341	228.684
Total KESC	Mill Rs.	<b>1,306.184</b>	<b>1,544.660</b>
c. Gas Price (item 13b / item 13a)			
i Bin Qasim	Rs/Mill Btu	447.14	507.86
ii Bin Qasim II - 560 MW	Rs/Mill Btu	447.14	514.24
v Korangi Town Gas Turb II	Rs/Mill Btu	447.14	507.87
vii Site Gas Turbine II	Rs/Mill Btu	447.14	507.90
viii Korangi CCPP	Rs/Mill Btu	447.14	507.87
Total KESC	Rs/Mill Btu	447.15	507.88
<b>14 Price of Furnace Oil</b>			
a. Quantity	M. Ton	15,254.53	19,370.40
b. Cost of Furnace Oil	Mill Rs.	987.501	1,253.808
c. Adjustment of GLMP	Mill Rs.		
<b>Furnace oil Price</b>	Rs/M.Ton	<b>64,734.91</b>	<b>64,728.05</b>

## Breakup of Cost of Power Purchases

DESCRIPTION		Dec-11	Jan-12
<b>1 KANUPP</b>			
Units Purchased	Mill kWh	25.625952	56.756832
Fuel Cost	Mill Rs	185.912366	461.600882
Variable O & M	Mill Rs	13.289106	29.432958
<b>Total Cost</b>	<b>Mill Rs</b>	<b>199.201472</b>	<b>491.033840</b>
Adjustment of Jul-Mar 2010 increase in fixed cost		-	-
		199.201472	491.033840
<b><u>RATE OF PURCHASE FROM KANUPP</u></b>			
Fuel Cost	Rs/kWh	7.254847	8.132957
Variable O & M	Rs/kWh	0.518580	0.518580
<b>Total Cost</b>	<b>Rs/kWh</b>	<b>7.773427</b>	<b>8.651537</b>
Adjustment of Jul-Mar 2010 increase in fixed cost			
<b>2 PASMIC</b>			
Units Purchased	Mill kWh	0.157754	0.210719
Fuel Cost	Mill Rs	1.144481	1.713769
Variable O & M	Mill Rs	0.202772	0.270852
<b>Total Cost</b>	<b>Mill Rs</b>	<b>1.347253</b>	<b>1.984620</b>
<b><u>RATE OF PURCHASE FROM PASMIC</u></b>			
Fuel Cost	Rs/kWh	7.254847	8.132957
Variable O & M	Rs/kWh	1.285370	1.285370
<b>Total Cost</b>	<b>Rs/kWh</b>	<b>8.540217</b>	<b>9.418327</b>
<b>3 Tapal Energy Ltd.</b>			
Units Purchased	Mill kWh	50.858000	20.027400
Fuel cost	Mill Rs	741.556898	296.157828
Variable O & M	Mill Rs	40.823717	16.702852
<b>Total Energy Purchase Price</b>	<b>Mill Rs</b>	<b>782.380615</b>	<b>312.860680</b>
Capacity Purchase Price	Mill Rs	112.620095	115.156896
<b>Total Cost</b>	<b>Mill Rs</b>	<b>895.000710</b>	<b>428.017576</b>
Payment of WWF for the year ended June 30 2009 and 2010		-	-
Payment of WPPF for the year ended June 30 2009 and 2010		-	-
<b>Total Cost</b>		<b>895.000710</b>	<b>428.017576</b>
<b><u>RATE OF PURCHASE FROM TAPAL</u></b>			
Fuel cost	Rs/kWh	14.581	14.788
Variable O & M	Rs/kWh	0.803	0.834
<b>Total Energy Purchase Price</b>	<b>Rs/kWh</b>	<b>15.384</b>	<b>15.622</b>
Capacity Purchase Price	Rs/kWh	2.214	5.750
<b>Total Cost</b>	<b>Rs/kWh</b>	<b>17.598</b>	<b>21.372</b>
Adj of WPPF and WWF for the year ended June 30 2009 and 2010		17.598	21.372
<b>4 Gul Ahmed Energy Ltd.</b>			
Units Purchased	Mill kWh	54.623270	28.479158
Fuel cost	Mill Rs	823.172558	427.704305
Variable O & M	Mill Rs	25.596464	13.866502
<b>Total Energy Purchase Price</b>	<b>Mill Rs</b>	<b>848.769022</b>	<b>441.570807</b>
Capacity Purchase Price	Mill Rs	101.976872	104.928573
<b>Total Cost</b>	<b>Mill Rs</b>	<b>950.745894</b>	<b>546.499380</b>
Payment of WWF for the year ended June 30 2009 and 2010		-	-
Payment of WPPF for the year ended June 30 2009 and 2010		-	-
		950.745894	546.499380
<b><u>RATE OF PURCHASE FROM GUL AHMED</u></b>			
Fuel cost	Rs/kWh	15.070	15.018
Variable O & M	Rs/kWh	0.469	0.487
<b>Total Energy Purchase Price</b>	<b>Rs/kWh</b>	<b>15.539</b>	<b>15.505</b>
Capacity Purchase Price	Rs/kWh	1.867	3.684
<b>Total Cost</b>	<b>Rs/kWh</b>	<b>17.406</b>	<b>19.189</b>
Adj of WPPF and WWF for the year ended June 30 2009 and 2010			

## 5 NTDC/WAPDA

Units Imported	Mill kWh	518.161500	468.097900
Maximum Demand	MW	830	760
Use of system charges	Mill Rs	83.124500	65.291600
Energy Transfer Charges			
- Capacity Transfer charges	Mill Rs	841.109722	811.199232
- Energy Transfer Charges I	Mill Rs	3,645.372376	4,244.927550
- Energy Transfer Charges II	Mill Rs	121.321815	99.559742
Adjustment for Finance Cost to IPPs			-
Total Energy Transfer Charges	Mill Rs	<b>4,607.803913</b>	<b>5,155.686524</b>
Total Cost without GST	Mill Rs	4,690.928413	5,220.978124
GST @ 16%	Mill Rs	583.259580	679.188408
Total Cost With GST	Mill Rs	5,274.187993	5,900.166532

### RATE OF PURCHASE FROM NTDC

Use of system charges	Rs/kWh	0.160	0.139
Energy Transfer Charges			
- Capacity Transfer charges	Rs/kWh	1.623	1.733
- Energy Transfer Charges I	Rs/kWh	7.0352	9.0685
- Energy Transfer Charges II	Rs/kWh	0.2341	0.2127
Adjustment for Finance Cost		-	-
Total Energy Transfer Charges	Rs/kWh	8.893	11.014
Total Cost without GST	Rs/kWh	9.053	11.154
GST @ 16%	Rs/kWh	1.126	1.451
Total Cost With GST	Rs/kWh	10.179	12.605

## 6 ANOUD Power

Units Purchased	Mill kWh	5.199114	6.229104
Energy Charges	Mill Rs	56.961493	69.670658
Variable O & M	Mill Rs	8.498472	10.182093
Total Cost	Mill Rs	<b>65.459965</b>	<b>79.852751</b>
GST @ 16%		10.473594	12.776440
		75.933559	92.629191

### RATE OF PURCHASE FROM ANOUD POWER

Energy Charges	Rs/kWh	10.956000	11.184700
Variable O & M	Rs/kWh	1.634600	1.634600
Total Cost	Rs/kWh	12.590600	12.819300

## 7 INTL. STEEL - 19MW Original Invoice

Units Purchased	Mill kWh	7.966178	7.082439
Fuel Cost	Mill Rs	34.047445	34.342747
Variable and other charges	Mill Rs	12.220117	10.864461
Differential due to increase in borrowing cost	Mill Rs		0.141649
Amount excluding GST	Mill Rs	<b>46.267562</b>	<b>45.348857</b>
GST @ 16%	Mill Rs	7.402810	7.255817
Amount payable with GST	Mill Rs	53.670372	52.604674

### Rate of Purchase from IIL Industries

Fuel Cost	Rs/kWh	4.274000	4.849000
Variable and other charges	Rs/kWh	1.534000	1.534000
Differential due to increase in borrowing cost	Rs/kWh	-	0.020000
Rate excluding GST		5.808000	6.403000
GST @ 16%		0.929280	1.024480
Rate with GST		6.737280	7.427480

### Intl. Steel Verified for Payment

Units Purchased	Mill kWh	7.966178	7.082439
Fuel Cost	Mill Rs	34.047445	34.342747
Variable and other charges	Mill Rs	12.220117	10.864461
Differential due to increase in borrowing cost	Mill Rs	-	0.141649
Amount excluding GST	Mill Rs	<b>46.267562</b>	<b>45.348857</b>
GST @ 17%	Mill Rs	7.402810	7.255817
Amount payable with GST	Mill Rs	53.670372	52.604674

**Rate of Purchase from IIL Industries**

Fuel Cost	Rs/kWh	4.274000	4.849000
Variable and other charges	Rs/kWh	1.534000	1.534000
Differential due to increase in borrowing cost	Rs/kWh	-	0.020000
Rate excluding GST		5.808000	6.403000
GST @ 16%		0.929280	1.024480
Rate with GST		6.737280	7.427480

**8 IIL INDUSTRIES 4 MW- Original Invoice**

Units Purchased	Mill kWh	0.631187	0.426929
Fuel Cost	Mill Rs	2.543052	1.960458
Variable and other charges	Mill Rs	1.049033	0.709556
Differential due to increase in borrowing cost	Mill Rs	-	-
Amount excluding GST	Mill Rs	<b>3.592085</b>	<b>2.670014</b>
GST @ 16%	Mill Rs	0.574734	0.427202
Amount payable with GST	Mill Rs	4.166819	3.097216

**Rate of Purchase from IIL Industries**

Fuel Cost	Rs/kWh	4.029000	4.592000
Variable and other charges	Rs/kWh	1.662000	1.662000
Differential due to increase in borrowing cost	Rs/kWh	-	-
Rate excluding GST		5.691000	6.254000
GST @ 16%		0.910560	1.000640
Rate with GST		6.601560	7.254640

**IIL INDUSTRIES 4 MW- Verified for Payment**

Units Purchased	Mill kWh	0.631187	0.426929
Fuel Cost	Mill Rs	2.543052	1.960458
Variable and other charges	Mill Rs	1.049033	0.709556
Differential due to increase in borrowing cost	Mill Rs	-	-
Amount excluding GST	Mill Rs	<b>3.592085</b>	<b>2.670014</b>
GST @ 16%	Mill Rs	0.574734	0.427202
Amount payable with GST	Mill Rs	4.166819	3.097216

**Rate of Purchase from IIL Industries**

Fuel Cost	Rs/kWh	4.029000	4.592000
Variable and other charges	Rs/kWh	1.662000	1.662000
Differential due to increase in borrowing cost	Rs/kWh	-	-
Rate excluding GST		5.691000	6.254000
GST @ 16%		0.910560	1.000640
Rate with GST		6.601560	7.254640

**IIL INDUSTRIES COMBINED - Verified for Payment**

Units Purchased	Mill kWh	8.597365	7.509368
Fuel Cost	Mill Rs	36.590497	36.303205
Variable and other charges	Mill Rs	13.269150	11.574017
Differential due to increase in borrowing cost	Mill Rs	-	0.141649
Amount excluding GST	Mill Rs	<b>49.859647</b>	<b>48.018871</b>
GST @ 17%	Mill Rs	8.476140	8.163208
Amount payable with GST	Mill Rs	58.335787	56.182079

**RATE OF PURCHASE FROM IIL**

Fuel Cost	Rs/kWh	4.256013	4.834389
Variable and other charges	Rs/kWh	1.543397	1.541277
Differential due to increase in borrowing cost	Rs/kWh	-	0.018863
Rate excluding GST		5.799410	6.394529
GST @ 17%		0.985900	1.087070
Rate with GST		6.785310	7.481599

**F.Oil Purchase / Consumption Jan-2012**

Storage	Date	Type	Units	Quantity	Amount
BQ04	1/31/2012	101	MT	1,142	76,504,803
BQ04	1/31/2012	101	MT	1,294	86,218,737
BQ04	1/31/2012	101	MT	1,096	73,440,029
BQ04	1/31/2012	101	MT	1,980	132,634,118
BQ04	1/30/2012	101	MT	488	32,667,547
BQ04	1/26/2012	101	MT	991	66,022,473
BQ04	1/26/2012	101	MT	497	33,107,969
BQ04	1/18/2012	101	MT	978	62,219,594
BQ04	1/18/2012	101	MT	488	30,895,330
BQ04	1/17/2012	101	MT	1,685	107,202,236
BQ04	1/14/2012	101	MT	1,155	73,519,609
BQ04	1/13/2012	101	MT	998	63,160,267
BQ04	1/13/2012	101	MT	947	59,910,652
BQ04	1/13/2012	101	MT	494	31,285,661
BQ04	1/13/2012	101	MT	494	31,285,661
BQ04	1/13/2012	102	MT	(494)	(31,285,661)
BQ04	1/13/2012	101	MT	984	62,621,087
BQ04	1/13/2012	101	MT	984	62,624,396
BQ04	1/13/2012	101	MT	489	31,106,329
BQ04	1/13/2012	101	MT	487	31,017,950
BQ04	1/13/2012	101	MT	1,184	75,351,014
BQ04	1/13/2012	101	MT	983	62,557,268
BQ04	1/13/2012	101	MT	1,158	73,670,216
				<b>20,502</b>	<b>1,327,737,284</b>

Storage	Date	Type	Units	Quantity	Amount
BQ04	17.01.2012	201	MT	(5,338)	(342,727,959)
BQ04	17.01.2012	201	MT	(3,775)	(242,326,753)
BQ04	31.01.2012	201	MT	(3,426)	(224,567,761)
BQ04	31.01.2012	201	MT	(3,252)	(213,122,776)
BQ04	17.01.2012	201	MT	(2,642)	(169,618,712)
BQ04	31.01.2012	201	MT	(925)	(60,611,030)
BQ04	17.01.2012	201	MT	(13)	(833,312)
				<b>(19,370)</b>	<b>(1,253,808,303)</b>

**GAS CONSUMPTION DETAILS JANUARY 2012**

Amount in Rs.

Description	MMBTU (As per Bills)	Cubic Meters	GCV AS PER BILLS	MMCF	MMCFD	BTU/CF	Amount excluding Meter rent	GID-CESS	Meter rent	Total SSGC
<b>BIN QASIM</b>										
Bin Qasim Power Station (1)	360,374	11,204,881	906.1300	397.705	13	12,791	173,289,524	9,730,103	2,500	183,022,127
Bin Qasim Power Station (2)	356,551	11,085,996	906.1300	393.485	13	12,655	171,450,903	9,626,865	2,500	181,080,268
Bin Qasim Power Station (3)	355,852	11,064,275	906.1300	392.714	13	12,631	171,114,976	9,608,003	2,500	180,725,479
Bin Qasim Power Station (4)	354,853	11,033,201	906.1300	391.611	13	12,595	170,634,400	9,581,019	2,500	180,217,919
Bin Qasim Power Station (5)	350,566	10,899,917	906.1300	386.881	12	12,443	168,573,091	9,465,278	2,500	178,040,869
Bin Qasim Power Station (6)	355,086	11,041,381	906.1300	391.902	13	12,604	170,746,774	9,587,329	2,500	180,336,603
<b>Total</b>	<b>2,133,281</b>	<b>66,329,651</b>	<b>906.1300</b>	<b>2,354.298</b>	<b>76</b>	<b>75,719</b>	<b>1,025,809,668</b>	<b>57,598,597</b>	<b>15,000</b>	<b>1,083,423,265</b>
<b>BIN QASIM COMBINED CYCLE POWER PLANT</b>										
Bin Qasim Power Station (7)	371	11,544	906.1300	0.410	0	13	178,534	10,025	2,500	191,059
Bin Qasim Power Station (8)	381	11,861	906.1300	0.421	0	14	183,437	10,299	2,500	196,236
Bin Qasim Power Station (9)	391	12,153	906.1300	0.431	0	14	187,953	10,553	2,500	201,006
Bin Qasim Power Station (10)	401	12,453	906.1300	0.442	0	14	192,592	10,814	2,500	205,906
Bin Qasim Power Station (11)	416	12,930	906.1300	0.459	0	15	199,969	11,228	2,500	213,697
	1,960	60,941	906.1300	2.163	0	70	942,485	52,919	12,500	1,007,904
<b>KORANGI THERMAL POWER STATION</b>										
Korangi Thermal Power Station	-	-	979.6600	-	-	-	16,214	-	3,000	19,214
<b>KORANGI OWN GAS TURBINE-II</b>										
Korangi Town Gas Turbine	309,037	9,047,196	962.3700	321.120	10	10,969	148,603,615	8,344,004	3,000	156,950,619
<b>SITE GAS TURBINE-II</b>										
Site Gas Turbine	80,996	2,467,811	924.7000	87.592	3	2,875	38,947,873	2,186,899	3,000	41,137,772
Site Gas Turbine - 2	65,835	2,005,869	924.7000	71.196	2	2,337	31,657,339	1,777,541	2,500	33,437,380
	146,831	4,473,680	924.7000	158.788	5	5,212	70,605,212	3,964,440	5,500	74,575,152
<b>KORANGI COMBINED CYCLE</b>										
Korangi Thermal Power Station (KTPS 1)	221,084	6,352,243	980.5700	225.466	7	7,847	106,310,515	5,969,271	2,500	112,282,286
Korangi Thermal Power Station (KTPS 2)	229,195	6,585,292	980.5700	233.738	8	8,135	110,210,800	6,188,271	2,500	116,401,571
	450,279	12,937,535	980.5700	459.204	15	15,982	216,521,315	12,157,542	5,000	228,683,857
<b>Total</b>	<b>3,041,389</b>	<b>92,849,003</b>	<b>922.8772</b>	<b>3,295.574</b>	<b>106</b>		<b>1,462,498,509</b>	<b>82,117,502</b>	<b>44,000</b>	<b>1,544,660,011</b>