



**DETERMINATION OF TARIFF ADJUSTMENT
FACTORS FOR THE SECOND QUARTER OF 2015
(APRIL TO JUNE 2015)**

April 2015

1. BACKGROUND.

The Electricity Regulatory Authority (ERA) approved and published in the Uganda Gazette the Quarterly Tariff Review Methodology which was implemented effective January 2014. The Quarterly Tariff Review Methodology provides for adjustment of the Electricity Tariffs for changes in the following:-

- (i) Inflation rate leading to Inflationary Adjustment Factor (IRAF)
- (ii) Exchange rate leading to Exchange Rate Adjustment Factor (FERAF)
- (iii) Fuel prices at the International World Market leading to Fuel Price Adjustment Factor (FPAF)

The tariff review for Second Quarter of 2015 has been undertaken in accordance with the approved Quarterly Tariff Review Methodology and the licenses issued to Umeme Limited, Uganda Electricity Transmission Company Limited (UETCL), and Eskom Uganda Limited as amended.

1.1 Tariff Review Consultations Process

During the determination of tariffs for Second Quarter of 2015, the Authority held consultations with the licensees and key stakeholders including; the Ministry of Energy and Mineral Development, the Uganda Manufacturers Association (UMA), Kampala City Traders Association (KACITA), Uganda National Chamber of Commerce, and the Media. During the consultations, ERA explained to the stakeholders the assumptions underlying the determination of the 2015 second quarter electricity retail tariffs.

1.2 Tariff Review Major Assumptions

The tariff review was undertaken taking into consideration the following factors and assumptions:-

- (i) There has been movement in the macro economic factors of inflation, exchange rate, international fuel prices, and generation mix from the assumptions used in the determination of the 2015 Base Tariffs;
- (ii) The Uganda Shilling has depreciated by 4.1% against the US Dollar, from Shs 2,779.9/US\$ in November 2014 to Shs 2,894.2/US\$ at the end of February 2015.
- (iii) There has been a reduction in the international fuel prices compared to US\$ 80 per barrel used in the determination of the 2015 base Tariffs. However, the fall in prices experienced in late 2014 and early 2015 is unlikely to continue in the subsequent quarters of 2015.
- (iv) The Authority approved performance targets for Eskom Uganda Limited for the period 2015 to 2018 effective 1st April 2015.
- (v) The Quarterly Tariff Review Methodology approved by the Authority provided for a capping mechanism by which the retail tariff is capped not to increase by more than 2.5 percent per quarter and 10 percent per annum.

The detailed assumptions that form the background of the tariff review for Second Quarter of 2015 are contained in the different sections of the report.

2. BASE ELECTRICITY END-USER TARIFFS

In accordance with the Quarterly Tariff Review Methodology, the Authority at its 242nd meeting in January 2015 approved the 2015 Base Tariffs shown in Table 1. The quarterly adjustment factors are to be applied to the approved Base Tariffs, and the Base Tariffs will remain unchanged throughout the year 2015.

TABLE 1: 2015 BASE ELECTRICITY END-USER TARIFFS

	End-User Retail Electricity Tariffs (Shs/kWh)					
	Domestic	Commercial	Medium Industrial	Large Industrial	Street-lights	Weighted average
2015 Base Tariff	531.5	484.6	461.6	315.6	502.5	419.2

During the determination of the Base Tariffs, the Authority approved the Base Macroeconomic Parameters for 2015. The Base Parameters are indicated in the second column in Table 2.

Table 2: MACROECONOMIC PARAMETERS USED IN DETERMINATION OF THE 2015 BASE TARIFFS AND THE ADJUSTMENT FACTORS FOR THE SECOND QUARTER OF 2015.

Macroeconomic Parameters	2015 Base (Q1) Parameters	Q2 2015 parameters	%age Change
Exchange rate US Dollar (Shs /US Dollar)	2,779.9	2,894.2	4.1%
Exchange rate EURO (Shs/Euro)	3,469.7	3,245.5	(6.5%)
Core Consumer Price Index (CPI)	212.9	214.9	0.9%
US Producer Price Index (US PPI)	189.8	191.1	0.7%
International Prices of Fuel (US\$ per barrel)	80.0	55.0	-31.3%

Source: Bank of Uganda, Uganda Bureau of Statistics for CPI, US Bureau of Labour Statistics for US PPI, and Organization of Petroleum Exporting Countries.

These base macroeconomic factors, which were the basis for the 2015 Base Tariffs, are for the month of November 2014. As of February 2015, the month applicable for Second Quarter of 2015 tariffs, these parameters have changed as shown column 3 of Table 2. The detailed analysis of the factors underlying the observed changes follow below:

3. DETERMINATION OF THE ADJUSTMENT FACTORS

3.1 Exchange Rate Adjustment Factor (FERAF)

The fluctuation of foreign exchange rates of the Uganda Shilling against major currencies that directly affect the costs for companies involved in the Electricity Supply Industry given that a portion of licensees’ costs are incurred in foreign currency yet the retail tariff is charged and revenue collected in Uganda Shillings.

In the 2015 Base Tariffs, the Authority approved foreign currency content of the Operation & Maintenance Costs of 39.5% for Eskom Uganda Limited,

25.0% for UETCL and 33.0% for Umeme Limited. In addition, UETCL incurs over 95.0% of the power purchase costs in foreign currency.

As indicated in Table 2, the Uganda Shilling depreciated against the United States Dollar from the base of Shs.2,779.9 to Shs.2,894.2¹ as at end of February 2015. This represents a depreciation of 4.1%. On an annual basis, this however represents a depreciation of 14% when compared to February 2014 when the exchange rate was Shs.2,538.1/USD.

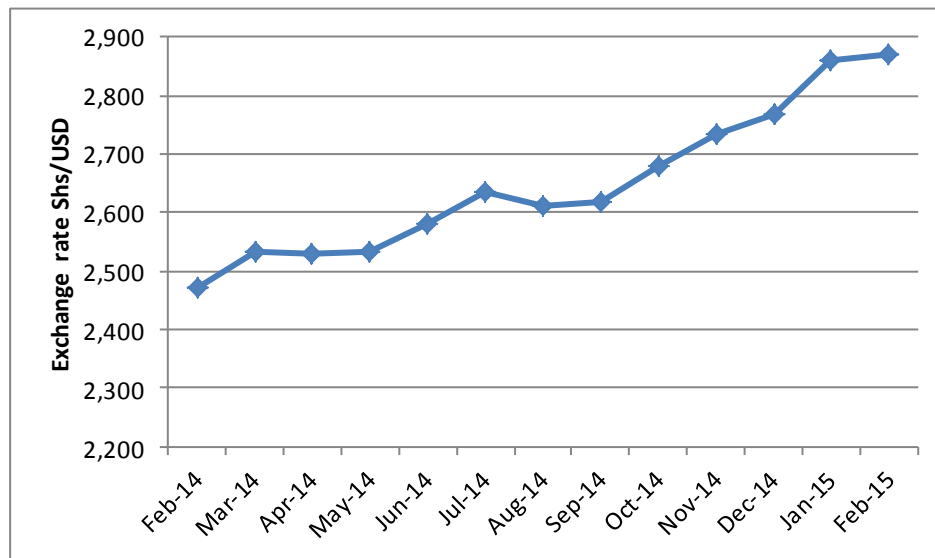
The trend of the exchange rate of the United States Dollar against the Uganda shilling is shown in Figure 1.

The appreciation of the United States Dollar against the Uganda Shilling is attributed the following:-

- (i) The United States of America economy is on a recovery path.
- (ii) Reduction in oil import by the United States thus reducing the outflows of United States Dollar from the United States of America.
- (iii) The United States Dollar has appreciated against the EURO.
- (iv) The European Union is Uganda's largest trading partner and export destination. As the EURO weakens, the export inflows into Uganda (USD equivalent) reduce affecting the Balance of Payment and Current Account Balance.
- (v) The depreciating Uganda Shilling further led to off shore investors in Government Securities opting not to reinvest and repatriate funds exerting more pressure on the Uganda Shilling.
- (vi) Repatriation of funds by Uganda Multinationals operating in Uganda.

¹ https://www.bou.or.ug/bou/rates_statistics/statistics.html

Figure 1: Trend of Exchange Rate February 2014 to 2015



Source: Bank of Uganda

The fluctuation in foreign exchange rate has a major impact on the total Electricity Supply Industry costs and movement of electricity end-user tariffs across customer categories.

Our analysis indicates that for the period under review, the depreciation of the Uganda shilling has led to an increase of the Electricity Supply Industry costs by Shs 15,751.5 million in Q1 2015 leading to an increase in the weighted average end-user tariffs by Shs **27.6/kwh**. The detailed computation is provided in Table 3.

Table 3 Exchange Rate Adjustment Factor (FERAF)

	End-User Retail Electricity Tariffs (Shs/kWh)					Weighted Adjustment Factor
	Domestic	Commercial	Medium Industrial	Large Industrial	Street-lights	
FERAF	35.3	29.1	29.5	22.7	30.0	27.6

3.2 Inflationary Adjustment Factor (IRAF)

Inflation Adjustment is applied only to the local currency component of the operation and maintenance costs for Eskom Uganda, UETCL and Umeme

Limited. This is based on the local currency content approved by the Authority at the time of determination of 2015 Base Tariffs (i.e. 67.0% for Umeme Limited, 60.5% for Eskom and 75.0% for UETCL).

The Inflation Adjustment Factor is applied/computed using the Composite Underlying Consumer Price Index (CPI) for the second month in the preceding the quarter to which the adjustment tariff relates as published by the Uganda Bureau of Statistics. For Second Quarter of 2015, the applicable Consumer Price Index is 214.9 (February 2015) representing an increase of 0.9% compared to the Consumer Price Index of November 2014 of 212.9.

The Annual Headline Inflation for the year ending February² 2015 was 1.4% compared to 2.1% that was recorded for the year ended November 2014. The annual core inflation was reported at 3.0% compared to 2.3% in November 2014. According to Bank of Uganda, the current low level of inflation is largely attributed to the decline in food prices due to a good domestic harvest, low global inflation and a decline in the international crude oil prices.

The US Producer Price Index (PPI) is used to adjust the tariffs denominated in foreign currency (US Dollar) for United States of America inflation. In the period under review, the US PPI increased from 189.8 in November 2014 (Base US PPI) to 191.1 in February 2015 representing an increase of 0.7%. According to the US Bureau of Labour Statistics, the slight increase in the PPI is attributed to price increases for unprocessed energy materials.

The impact of the movement in the Consumer Price Index on the electricity retail tariff across consumer categories is marginal with a weighted average upward adjustment of Shs 1.3/kWh as indicated in Table 4.

² <http://www.ubos.org/2015/03/04/statistics-at-a-glance-4/>

3.3 Table 4 Inflationary Adjustment Factor (IRAF)

	End-User Retail Electricity Tariffs (Shs/kWh)					
	Domestic	Commercial	Medium Industrial	Large Industrial	Street-lights	Weighted Adjustment Factor
IRAF	1.7	1.6	1.1	1.0	1.8	1.3

3.4 Fuel Price Adjustment Factor (FPAF)

Fuel prices affect UETCL's costs of purchasing power from Independent Power Producers with fossil fuel fired electricity generation. Hence, changes in fuel prices affect the Power Purchase Costs by UETCL. The Fuel Price Adjustment Factor also contains changes in revenue requirement due to changes in quantities of purchased power (generation mix).

In 2015 Base Tariffs, the cost of fuel assumed in the tariff determination was US\$ 80 per barrel. According to OPEC, excess supply oil in the market in 2015 has led to a sharp decline in the price ranging between US\$42 and US\$60 per barrel. For the purpose of the Q2 2015 tariff adjustment, the cost of Heavy Fuel Oil (HFO) used is US\$ 55 per barrel based on the average of OPEC oil prices. This translates into USD 372 per metric tonne of HFO.

The reduction in price of oil prices results into a decrease in the UETCL power purchase costs in Q1 2015 leading to a weighted average fuel adjustment factor of minus Shs 6.0/kWh as shown in Table 5.

Table 5 Fuel Price Adjustment Factor (FPAF)

	End-User Retail Electricity Tariffs (Shs/kWh)					
	Domestic	Commercial	Medium Industrial	Large Industrial	Street-lights	Weighted Adjustment Factor
(FPAF)	(7.0)	(5.7)	(6.1)	(5.6)	(5.8)	(6.0)

3.4.1 Generation Mix / Dispatch Adjustment Factor Calculation

The fuel adjustment factor includes the adjustment for changes in the dispatch of the generation plants or the generation mix from the assumptions made in the determination of the Base Tariffs. The change in the dispatch for each of the generation plants from the base assumptions is shown in Table 5. Details on the generation assumptions for each plant are provided in Annex 1.

Table 6: Energy Purchases by UETCL

Generation Plant	Energy (GWh)	Cost (Shs billion)	Energy (GWh)	Cost (Shs billion)
	Quarterly Base 2015		Provisional Q 1 2015	
Eskom	338.7	10.7	311.0	11.4
Bujagali	339.9	110.1	357.5	121.3
KCCL	15.8	2.4	9.7	1.3
KML	5.5	0.5	6.1	0.6
Bugoye-Tronder	20.2	4.8	10.5	2.6
Mpanga	16.3	4.1	4.9	1.3
Electromax	15.4	10.0	15.1	8.4
Jacobsen Plant- Namanve	15.5	9.7	15.2	11.7
Ishaha Ecopower	7.3	1.5	5.2	1.2
Kakira SW	50.9	13.2	66.0	19.3
Kinyara	2.9	0.6	2.9	0.7
Sugar & Allied	4.4	1.0	-	-
Buseruka Hydromax	8.8	2.3	6.2	1.8
Import KPLC –Kenya	12.1	7.7	11.6	7.8
Import Rwanda	0.9	0.2	0.9	0.2
Total	854.4	178.8	822.8	189.6

The changes in the generation mix between the assumptions used for the Base Tariff and the provisional outturn for Q1 2015 is attributed mainly to the changes in the hydrology conditions for the hydro power plants. The detailed discussion is included in Annex 1 of the report.

The impact of the change in the generation mix is a downward adjustment of the electricity end-user tariff by a weighted average of Shs 14.3/kWh relative to the Base Tariff as shown in Table 7.

Table 7: GENERATION MIX / DISPATCH ADJUSTMENT FACTOR

End-User Retail Electricity Tariffs (Shs/kWh)						
	Domestic	Commercial	Medium Industrial	Large Industrial	Street-lights	Weighted Adjustment Factor
	(16.6)	(13.3)	(14.4)	(13.2)	(13.6)	(14.3)

3.5 Overall Tariff Adjustment Factor

The applicable the Q2 2015 Tariff Adjustment is the sum of the Fuel Price Adjustment Factor (fuel & generation mix), Exchange Rate Adjustment Factor and Inflation Adjustment Factor. The adjustment factors for Q2 2015 are as shown in Table 8.

Table 8: TOTAL TARIFF ADJUSTMENT FACTORS Q2 2015

End-User Retail Electricity Tariffs (Shs/kWh)						
	Domestic	Commercial	Medium Industrial	Large Industrial	Street-lights	Weighted Adjustment Factor
Inflation (IRAF)	1.7	1.6	1.1	1.0	1.8	1.3
Exchange rate (FERFAF)	35.3	29.1	29.5	22.7	30.0	27.6
Fuel (FPAF)	(23.6)	(19.0)	(20.6)	(18.8)	(19.4)	(20.3)
Total	13.4	11.7	10.0	4.9	12.4	8.6

3.6 Demand Assumptions

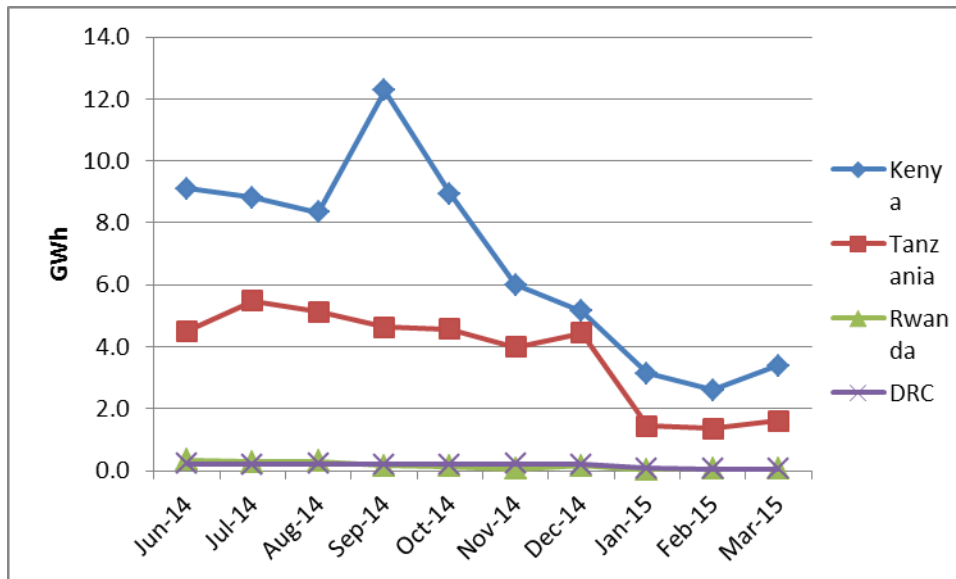
At the time of determination of the 2015 Base Tariffs, it was assumed that the demand would grow by 10% per year in 2015. The maximum demand in Q1 2015 reduced from 539 MW in December 2014 to 529 MW in February 2015 (Table 9). The reduction in maximum demand is attributed to the reduction in energy exports to Kenya (Figure 2) following the completion of the rehabilitation works of Kenya's electricity transmission line in Western Kenya

by KENTRACO. Despite the low growth in demand, the energy purchases by UETCL have increased by 2.3 percent between Q4 2014 and Q1 2015.

Table 9: MAXIMUM DEMAND FOR 2014/2015

	Peak (MW)	Shoulder (MW)	Off-Peak (MW)
Mar-14	520	438	344
Apr-14	531	433	334
May-14	550	453	343
Jun-14	537	413	347
Jul-14	548	433	344
Aug-14	543	453	350
Sep-14	550	436	345
Oct-14	543	418	345
Nov-14	539	421	350
Dec-14	539	425	385
Jan-15	512	436	364
Feb-15	529	446	361

Figure 2: TREND OF ENERGY EXPORTS BY UETCL JULY 2014 TO MARCH 2015



4 REVENUE REQUIREMENT, TARIFF AND SUBSIDY IMPLICATIONS.

4.1 Revenue Requirement Implications

As a result of the assumptions considered, the annualized revenue requirement of Eskom increased from US\$ 42,950 million in Q1 2015 to US\$ 49,773 million in Q2 2015. The increase is on account of;

- (i) The implementation of the approved performance targets for the period 2015 to 2018 effective 1st April 2015.
- (ii) Adjustment of Eskom Generation Operation and Maintenance Cost and Investment cost for the exchange rate movements.

The annualized revenue requirement of UETCL (excluding the power acquisition costs) decreased from US\$ 96,515 million in Q1 2015 to US\$ 96,203 million in Q2 2015. The reduction in the annualized revenue requirement is on account of reduction in annualized energy sales to the distributors from 3,150 GWh to 3,029 GWh.

The reduction in power purchase costs directly impacts on the Rural Electrification Levy and therefore reduce the annualized revenue requirement of UETCL excluding power acquisition costs. The reduction could have been more but the Power Purchase cost by UETCL is incurred in United States Dollars and the cost has been adjusted for changes in the exchange rate of the Uganda Shilling which has depreciated against the United States Dollar.

The annualized power acquisition costs (excluding the capacity payments to all thermal generators) reduced from US\$ 672,277 million in Q1 2015 to US\$ 649,848 million in Q2 2015. The reduction in annualized power purchase cost in Q2 2015 is on account of reduction in annualized energy sales to the distributors from 3,150 GWh to 3,029 GWh.

Umeme Limited's annualized revenue requirement increased from US\$ 360,390 million in Q1 2015 to Shs 373,064 million in Q2 2015 mainly on

account of adjustment for exchange rate and inflation as a result of depreciation of the Uganda Shilling against the United States Dollar.

Table 10 SUMMARY OF REVENUE REQUIREMENT

	Eskom Generation				Transmission				Other power purchases	Export revenues	Distribution			
	Total	Asset related	O&M	Lease fee	Total	Asset related	O&M	Levies & Funds	Total	Total	Total	Asset related	O&M	Lease fee
	USh mill	USh mill	USh mill	USh mill	USh mill	USh mill	USh mill	USh mill	USh mill	USh mill	USh mill	USh mill	USh mill	USh mill
Q1 2015	42,950	8,330	22,554	12,066	96,515	8,139	60,399	27,977	672,277	44,816	360,390	232,428	122,547	5,414
Q2 2015	49,773	8,672	28,540	12,561	96,203	8,473	60,605	27,125	649,848	46,657	373,064	241,979	125,448	5,637

4.1.1 Capacity Price for Eskom (u) Limited

The Capacity Price increased from Shs 36,986 per MW per hour in Q1 2015 to Shs 42,940 per MW per hour in Q2 2015. The increase is attributable to;

- The implementation of the approved performance targets for the period 2015 to 2018 effective 1st April 2015.
- Adjustment of Eskom Generation Operation and Maintenance Cost and Investment cost for inflation and exchange rate following the depreciation of the Uganda Shilling against major currencies.

Table 11: ESKOM CAPACITY PRICE Q2 2015

	Average Capacity Price	Total costs	Investment component	Capital recovery charges	Return on investment	Net accumulated investment	Income taxes payable	O&M component	USH-portion of O&M	US\$-portion of O&M	Concession fee
	CP y,q	USh mill	USh mill	US\$ thous	US\$ thous	US\$ thous	US\$ thous	Ush mill	Ush mill	Ush mill	US\$ thous
	Ushs/ MW										
Q1 2015	36,986	42,950	8,330	883	1,479	12,328	634	22,554	15,120	4,932	12,066
Q2 2015	42,940	49,773	8,672	883	1,479	12,328	634	28,540	16,170	9,868	12,561

4.1.2 Bulk Supply Tariff (BST)

The annualized bulk supply costs reduced from UShs 800,183 million in Q1 2015 to UShs 752,548 million in Q2 2015. The expected bulk energy sales in Q2 to Umeme excluding exports are projected at 3,029 GWh from 3,150 GWh in Q1 2015.

The resultant Base Bulk Supply Tariffs increased to Shs 270.1/kWh, UShs 225.0/kWh, and UShs 167.0/kWh at Peak, Shoulder and Off-peak respectively, from 267.8/kWh, UShs 223.2/kWh, and UShs 165.6/kWh at Peak, Shoulder and Off-peak for the respective Time of Use periods in Q2 2015, as shown in Table 12.

Table 12: BULK SUPPLY COSTS AND RESULTANT BULK SUPPLY TARIFFS (BST)

	Peak price	Shoulder price	Off-peak price		Sales to distributors	Total costs		Power Purchase Costs		Transmission costs	Total asset related costs	Total O&M component	Other
	USh/kWh	USh/kWh	USh/kWh		GWh	USh mill		USh mill		USh mill	Ush mill	Ush mill	Ush mill
Q1 2015	267.8	223.2	165.6		3,150	800,183		688,208		84,956	8,139	48,841	27,977
Q2 2015	270.1	225.0	167.0		3,029	752,548		668,109		84,439	8,473	48,841	27,125

The movement in the BST between Q1 2015 and Q2 2015 is as shown in Table 13 :-

Table 13: MOVEMENT IN THE BST

	Bulk Supply Tariff (Shs/kWh)		
	Peak	Shoulder	off Peak
Q1 2015	267.8	223.2	165.6
Q2 2015	270.1	225.0	167.0
Percentage increase	0.8%	0.8%	0.8%

The above Bulk Supply Tariff is subsidized by Government of Uganda through payment of capacity payments to the thermal plants. The cost reflective Bulk Supply Tariff is UShs 293.8/kWh, UShs 244.9/kWh, and UShs 181.7/kWh at Peak, Shoulder and Off-peak respectively.

5 RETAIL TARIFFS.

In accordance with the Amendment No. 2 of the Umeme Limited License No 48 for Supply of electricity, the retail tariff charges for electric service shall be subject to and liable for automatic fuel cost charges, foreign exchange rate fluctuation adjustment, and an automatic adjustment for inflation that will be calculated in accordance with such formulae as determined by the Authority.

The approved quarterly adjustment factors and the resulting end-user tariff across the customer categories for Q2 2015 is as shown in the Table 14.

Table 14: APPROVED Q2 2015 ADJUSTMENT FACTORS AND RESULTANT RETAIL TARIFFS

	End-User Retail Electricity Tariffs (Shs/kWh)					
	Domestic	Commercial	Medium Industrial	Large Industrial	Street-lights	Weighted average
2015 Base Tariff	531.5	484.6	461.6	315.6	502.5	419.2
	Tariff Adjustment Factors (Shs/kWh)					
Inflation (IRAF)	1.7	1.6	1.1	1.0	1.8	1.3
Exchange rate (FERFAF)	35.3	29.1	29.5	22.7	30.0	27.6
Fuel (FPAF)	(23.6)	(19.0)	(20.6)	(18.8)	(19.4)	(20.3)
Total Tariff Adjustment	13.4	11.7	10.0	4.9	12.4	8.6
Approved Q2 2015 Tariff	544.9	496.3	471.6	320.5	514.9	427.8
Applicable Tariff in US cents /kWh	18.8	17.1	16.3	11.1	17.8	0.15
Percentage Change	2.5%	2.4%	2.2%	1.6%	2.5%	2.1%

5.1 Capping of Quarterly Tariff Adjustment

During the consultative process in respect of the quarterly tariff reviews, the industrial consumers represented by Uganda Manufacturers Association expressed concern over the high fluctuation of the tariff and accordingly proposed that the adjustment factors be capped. The Authority at its 225th meeting considered and approved that the adjustment factors be capped at 10%, i.e. the end-user tariff shall not increase by more than 10% between January and December 2015 and 2.5% in any given quarter.

The tariff review for the Second Quarter of 2015 has been undertaken in consideration of the approved capping mechanism.

ANNEX 1

ENERGY DISPATCH AND GENERATION MIX

In the period under review, the Q1 2015 outturn of the volume of energy purchased by UETCL is 3.7% lower than the projection made in the Base Tariffs. UETCL purchased **822.8 GWh** in Q1 2015 compared to 854.4 GWh projected in 2015 Base Tariffs.

Table below indicates that UETCL energy purchases from mini hydros in Western Uganda reduced drastically but was compensated by increased energy purchases from Bujagali energy limited, KML and Kakira Sugar Limited. This is attributed to low water levels in the area due to the reduction in rainfall.

Energy Purchases by UETCL

Generation Plant	Energy (GWh)	Cost (Shs bn)	Energy (GWh)	Cost (Shs bn)
	Quarterly Base 2015		Provisional Q 1 2015	
Eskom	338.7	10.7	311.0	11.4
Bujagali	339.9	110.1	357.5	121.3
KCCL	15.8	2.4	9.7	1.3
KML	5.5	0.5	6.1	0.6
Bugoye-Tronder	20.2	4.8	10.5	2.6
Mpanga	16.3	4.1	4.9	1.3
Electromax	15.4	10.0	15.1	8.4
Jacobsen Plant- Namanve	15.5	9.7	15.2	11.7
Ishaha Ecopower	7.3	1.5	5.2	1.2
Kakira SW	50.9	13.2	66.0	19.3
Kinyara	2.9	0.6	2.9	0.7
Sugar & Allied	4.4	1.0	-	-
Buseruka Hydromax	8.8	2.3	6.2	1.8
Import KPLC -Kenya	12.1	7.7	11.6	7.8
Import Rwanda	0.9	0.2	0.9	0.2
Total	854.4	178.8	822.8	189.6

The detailed analysis of generation assumptions is provided below.

1.1 GENERATION ASSUMPTIONS.

1.1.1 Eskom Uganda Limited (380MW)

At the time of determination of the 2015 annual Base Tariff, the assumption taken was that the water release from Lake Victoria at Nalubaale/Kiira would be 900 Cumecs for a larger part of 2015.

In Q1 2015, the Directorate of Water Resources Management (DWRM) approved water release of 800 Cumecs and Eskom Uganda Limited generated only 311.0 GWh compared to 338.7 GWh assumed in the determination of the Base Tariffs. The low water release and therefore generation from Eskom Uganda Limited is also attributed to low system demand.

The power purchases by UETCL to Eskom Uganda Limited is expected to increase on account of the depreciation of the Uganda shilling against the United States Dollar and the approved performance parameters for the period 2015 to 2018.

1.1.2 Bujagali Energy Limited (250MW)

The water release at the Nalubaale/Kiira complex directly influences the generation of Bujagali Energy Limited. At the time of determination of the Base Tariff it was assumed BEL would generate 339.90GWh in Q1 2015 but the actual generation was 357.5GWh.

Bujagali Energy Limited is not undertaking major repairs & maintenance on the plant for Q1 and Q2 2015. The company is scheduled to commence annual maintenance in August 2015.

1.1.3 MINI HYDRO PLANTS (Mpanga, Bugoye, KCCL, KML, Eco power, Hydromax)

At the time of determination of the 2015 Base Tariff, it was assumed that there would be favorable hydrology conditions Q1 2015. At the time of determination of the Base Tariff, it was assumed that 73.8 GWh would be generated from all mini hydro plants but a provisional 42.29 GWh was generated and sold to UETCL in Q1 2015. The reduction in generation is mainly on account of unfavorable hydrology with Mpanga and Tronder Power plants being the most affected. However, with resumption of rains, hydrology is expected to normalize.

Kilembe Mines Limited (KML) finalized the repairs and maintenance works on the flume line and the generation plant was able to increase generation in Q1 2015. The evacuation challenges experienced by Ishasha Ecopower and Buseruka Hydromaxx have been resolved and the plants are experiencing improved evacuation. The plants have however also experienced unfavorable hydrology leading to reduced generation from the power plant.

1.1.4 Co- generation plants

At the time of determination of the base tariff, it was assumed that 58.22GWh would be purchased from co-generation plants in Q2 2015. Provisional data from UETCL shows that the actual energy generated and purchased by UETCL from bagasse co-generation in Q1 2015 was 68.93GWh. This increased generation from co-generation partly covered up for the shortfall experienced from the low generation for mini-hydro plants.

The increased generation from Kakira Sugar Limited is on account of the following factors:-

- (a) Scheduled annual maintenance by Kakira Sugar Limited has not yet commenced and the plant is operating at full capacity.

(b) There is a reduction on own use generation by Kakira Sugar Limited.

In addition, at the time of determination of the Base Tariffs, it was assumed that Sugar and Allied would be connected to the National Grid by April 2015. However, the transmission line has not been completed and the assumption has been revised to August 2015. The evacuation line from Kaliro to the substation was completed but the portion from the Kaliro substation to Iganga has not been completed.

The line is being financed by the Ministry of Energy and Mineral Development through the Rural Electrification Agency. The Rural Electrification Agency has released funds to Umeme Limited, and Umeme Limited is undertaking the construction works.

1.1.5 Thermal plants:- Electro-Maxx Ltd and Jacobsen Uganda Power Plant Ltd

The Authority at its 226th meeting approved a minimum dispatch of 7MW for each of the thermal plants. At the time of determination of the Base Tariffs, it was assumed that there would be minimal dispatch of thermal plants in the earlier quarters of 2015 and that the dispatch would increase later in 2015 as the demand increases and generation from other resources is exhausted.

Generation from thermal power plants of Jacobsen Uganda Power Plant and Electro-Maxx is marginally lower than the forecast used in determination of the base tariffs.

Going forward and based on the demand forecast, the dispatch from the thermal plants is expected to increase beyond the 7MW minimum dispatch in the later quarters of 2015 as demand increases beyond the current levels.

1.1.6 Imported Power.

At the time of determination of the Base Tariffs, it was assumed that UETCL would import 12.1GWh in Q1 2015. However, the actual energy imported by UETCL was 11.6 GWh. We don't expect imports to Kenya to increase following

Kenya's completion of the upgrade on the transmission infrastructure that was experienced by KENTRACO in the Western Kenya.