



**DETERMINATION OF TARIFF ADJUSTMENT
FACTORS FOR THE THIRD QUARTER OF 2015
(JULY TO SEPTEMBER 2015)**

**JULY 2015
KAMPALA, UGANDA**

1. INTRODUCTION

The Electricity Regulatory Authority (ERA) approved and published in the Uganda Gazette on 5th January 2014, the Quarterly Tariff Review Methodology, which was implemented effective January 2014. The Quarterly Tariff Review Methodology provides for adjustment of the Electricity annual Base Tariffs for changes in the following:-

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

The tariff review for the third quarter of 2015 (Q3 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.

This review has taken into account changes in the consumer price index, exchange rate, international fuel prices, and the generation mix from the assumptions used in the determination of the 2015 Base Tariffs as well as Umeme Limited investments. More specifically;

- (i) The Uganda Shilling has depreciated by 9.9% against the US Dollar, from Ush 2,779.9/US\$ in November 2014 to Ush 3,054.3/US\$ at the end of May 2015.
- (ii) The international fuel prices for crude oil as at the end of May 2015 - was US\$ 74.89 per barrel compared to US\$ 80 per barrel used in the determination of the 2015 base tariffs.
- (iii) Adjustment of Umeme 2012 and 2013 investments that qualify for inclusion in the rate base.

The detailed assumptions that form the background of the tariff review for the Q3 2015 are contained in the subsequent sections of this report.

2. ELECTRICITY END-USER 2015 BASE TARIFFS

In accordance with the Quarterly Tariff Review Methodology, the Authority at its 242nd meeting held in January 2015 approved the 2015 Base Tariffs shown in Table 1. The quarterly adjustment factors are applied to the approved Base Tariffs, to determine the applicable end-user retail tariffs for each of the quarters.

Table 1: 2015 Base Electricity End-User Tariffs

	End-User Retail Electricity Tariffs (Ush/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 which are presented in the second column in Table 2.

Table 2: Macroeconomic Parameters Used in Determination of 2015 Base Tariffs and the Adjustment Factors for Q3 2015.

Macroeconomic Parameters	Q1 2015 Base Parameters	Q2 2015	Q3 2015	%age Change Q1 to Q3 2015	%age Change Q1 to Q2 2015
Exchange rate US Dollar (Ush /US Dollar)	2,779.90	2,894.20	3,054.29	9.87%	5.53%
Exchange rate EURO (Ush/Euro)	3,469.70	3,245.50	3,354.57	-3.32%	3.36%
Core Consumer Price Index (CPI)	212.90	214.90	218.78	2.76%	1.81%
US Producer Price Index (US PPI)	189.80	191.10	191.80	1.05%	0.37%
International Prices of Fuel (US\$ per barrel)	80.00	55.00	74.89	-6.39%	36.16%

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

Note: The exchange rate is the average rate of buying and selling rate at the last day of the applicable month. That is November 2014 for Q1 2015 and May 2015 for Q3 2015.

The base macroeconomic factors stated in Table 2, which were the basis for the 2015 Base Tariffs are for the month of November 2014. As of May 2015, these parameters had changed as shown in column 4 of Table 2. The detailed analysis of each of the macroeconomic factors is contained in the subsequent section.

3. DETERMINATION OF THE ADJUSTMENT FACTORS FOR Q3 2015

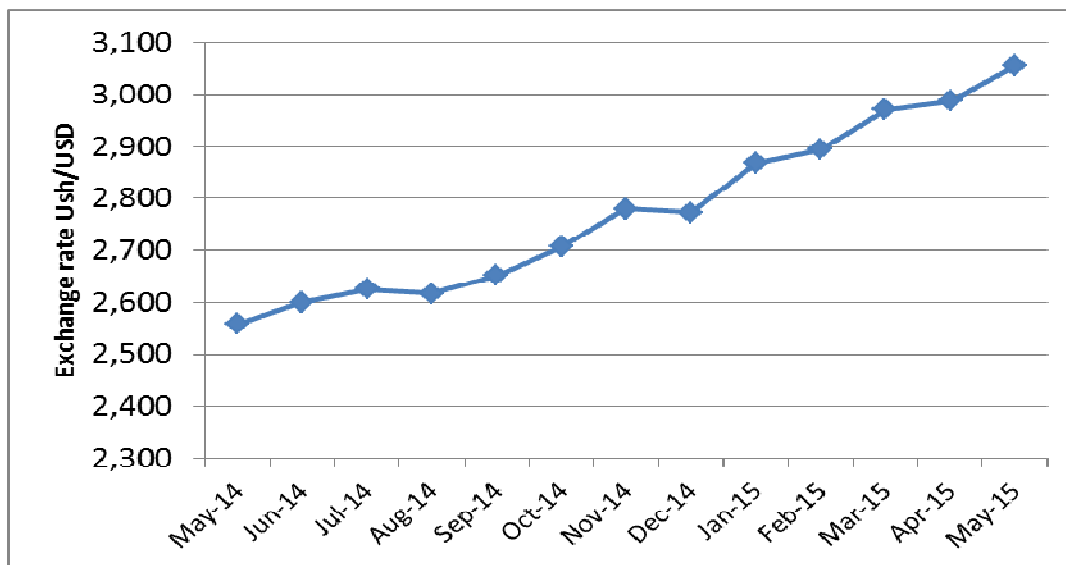
3.1 Foreign Exchange Rate Adjustment Factor (FERAF)

The movement in the exchange rate of the Uganda Shilling (Ush) against major currencies directly affects the costs for companies involved in the Electricity Supply Industry(ESI) because a portion of these companies' 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 the foreign currency content of the Operation & Maintenance Costs of 39.5% for Eskom Uganda Limited, 25.0% for Uganda Electricity Transmission Company Limited (UETCL), and 33.0% for Umeme Limited. In addition, UETCL incurs over 95.0% of the power purchase costs in foreign currency.

In the period under review, the Shilling continued the depreciation trend recorded in the previous quarters. The Uganda Shilling depreciated against the United States Dollar (USD) from the base exchange rate of Ush.2,779.9 to Ush.3,054.29¹ as at end of May 2015. This represents a depreciation of 9.9% in just six months. The trend of the exchange rate of the Uganda Shilling is shown in Figure 1.

Figure 1: Trend of Exchange Rate May 2014 to May 2015



Source: Bank of Uganda

The depreciation of the Uganda shilling is largely attributed to the weakening of the EURO. Over the past months, the EURO has come under intense depreciation pressures against the US Dollar driven by the weak economic growth prospects and institutional challenges in the

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

EURO area. The weakening of the EURO has had intense depreciation pressures on the shilling and other currencies.

The depreciation of the Uganda shilling has a major impact on Electricity Supply Industry costs and consequently the end-user tariffs. Our review indicates that the depreciation of the Uganda shilling in Q2 2015 has increased the sector annualized revenue requirement by Shs 128,262 million thus increasing the end-user tariffs by a weighted average of Ush 28.6/kWh as shown in Table 3.

Table 3: Foreign Exchange Rate Adjustment Factor (FERAF)

	End-User Retail Electricity Tariffs (Ush/kWh)					Weighted Adjustment Factor
	Domestic	Commercial	Medium Industrial	Large Industrial	Street-lights	
FERAF	37.3	31.8	31.1	22.4	32.5	28.6

3.2 Inflation Rate Adjustment Factor (IRAF)

The 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 the 2015 Base Tariffs (i.e. 60.5% for Eskom, 75.0% for UETCL and 67.0% for Umeme Limited).

The IRAF is based on the composite Consumer Price Index (CPI) for the second month in the preceding quarter to which the adjustment tariff relates as published by the Uganda Bureau of Statistics. For Q3 2015, the applicable CPI is 218.78 (May 2015) representing an increase of 2.76% compared to the CPI of November 2014, of 212.9.

The US Producer Price Index (PPI) is used to adjust the component of the tariffs that is denominated in United States Dollars (USD). In the period

under review, the US PPI increased from 189.8 in November 2014 (Base US PPI) to 191.8 in May 2015 representing an increase of 1.05%. According to the US Bureau of Labour Statistics, the slight increase in the PPI is attributed to increase in the price for unprocessed energy materials.

The impact of the movement in inflation on the electricity retail tariffs is Ush 2.0/kWh on a weighted average basis across consumer categories as indicated in Table 4.

Table 4: Inflation Rate Adjustment Factor (IRAF)

	End-User Retail Electricity Tariffs (Ush/kWh)					
	Domestic	Commercial	Medium Industrial	Large Industrial	Street-lights	Weighted Adjustment Factor
IRAF	2.9	2.9	2.1	1.3	3.1	2.0

3.3 Fuel Price Adjustment Factor (FPAF)

Movement in fuel prices affect UETCL costs of purchasing power from Independent Power Producers (IPPs) with fossil fuel fired plants. The FPAF therefore contains changes in revenue requirement due to changes in fuel prices and quantities of power purchased from various sources (generation mix).

In the 2015 Base Tariffs, the cost of fuel assumed in the tariff determination was US\$ 80 per barrel. According to the Organization of Petroleum Exporting Countries (OPEC); as at end of May 2015, the international price of Heavy Fuel Oil was US\$ 50 per barrel. For purposes of the Q3 2015 tariff adjustment, the cost of US\$ 50 per barrel of crude oil based on the average of OPEC oil prices is applied. Specifically, for Heavy Fuel Oil (HFO) that is used for electricity generation in Uganda, the price of USD 370.8 per metric ton is used in Q3 tariffs.

The lower price of oil for Q3 2015 compared to Q1 has resulted in a decrease in the UETCL power purchase costs from thermal plants in Q3 2015 leading to a weighted average fuel adjustment factor of minus Ush 1.9/kWh as shown in Table 5.

Table 5 Fuel Price Adjustment Factor (FPAF)

	End-User Retail Electricity Tariffs (Ush/kWh)					
	Domestic	Commercial	Medium Industrial	Large Industrial	Street-lights	Weighted Adjustment Factor
(FPAF)	(2.2)	(1.7)	(1.9)	(1.7)	(1.8)	(1.9)

3.4 Generation Mix and other Adjustment Factors Calculation

The fuel adjustment factor includes the adjustment for changes in the dispatch of the generation plants or the generation mix relative to 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 6. Details on the generation assumptions for each plant are provided in Annex 1.

Table 6: Energy Purchases by UETCL

Generation Plant	Energy (GWh)	Cost (Ush bn)	Energy (GWh)	Cost (Ush bn)	Energy (GWh)	Cost (Ush bn)
	2015 Base Tariffs Assumptions		Outturn Q 1 2015		Outturn Q 2 2015	
Eskom	338.7	10.7	311.0	11.4	316.58	13.31
Bujagali	339.9	110.1	357.5	121.3	359.69	133.28
KCCL	15.8	2.4	9.7	1.3	18.08	3.27
KML	5.5	0.5	6.1	0.6	6.11	0.52
Bugoye-Tronder	20.2	4.8	10.5	2.6	23.77	6.59
Mpanga	16.3	4.1	4.9	1.3	27.78	8.18
Electromax	15.4	10.0	15.1	8.4	15.21	9.63
Jacobsen Plant	15.5	9.7	15.2	11.7	-	-
Ishaha Ecopower	7.3	1.5	5.2	1.2	6.83	1.75
Kakira SW	50.9	13.2	66.0	19.3	24.91	6.39
Kinyara	2.9	0.6	2.9	0.7	2.94	0.57
Sugar & Allied	4.4	1.0	-	-	-	-
Buseruka Hydromax	8.8	2.3	6.2	1.8	7.47	2.92
Import KPLC – Kenya	12.1	7.7	11.6	7.8	11.48	5.21
Import Rwanda	0.9	0.2	0.9	0.2	0.99	1.03
Total	854.4	178.8	822.8	189.6	821.84	192.65

The variance between the forecast in the generation mix and the outturn for Q2 2015 is attributed mainly to the changes in hydrological conditions which affected generation from hydro power plants. The detailed discussion is presented in Annex 1 to this report.

The impact of the change in the generation mix is a downward adjustment of the electricity end-user tariffs by a weighted average of Ush 9.6/KWh relative to the Base Tariffs as shown in Table 7.

Table 7: Generation Mix / Dispatch Adjustment Factor

	End-User Retail Electricity Tariffs (Ush/kWh)					
	Domestic	Commercial	Medium Industrial	Large Industrial	Street-lights	Weighted Adjustment Factor
Generation Mix	(11.2)	(9.0)	(9.7)	(8.9)	(9.2)	(9.6)

3.5 Other Adjustments

3.5.1 Umeme Limited Investments for 2012 and 2013

On 17th March 2015, Umeme Limited appealed to the Authority to review her decision in respect of the approved and verified investments for 2012 and 2013. The Authority at its 247th meeting held on 27th May 2015 considered the appeal and approved a total of US\$ 22,439,092.11 and US\$ 37,146,880.87 worth of investments that qualify for a return for 2012 and 2013 respectively. The approved amounts have been applied in the determination of the Q3 2015 Distribution Price.

3.5.2 PSP Reconciliation Q3 2015

In accordance with Umeme Limited Supply of Electricity Licence No. 048, the Power Supply Price (PSP) of any quarter should include the amount per kilowatt-hour required to reconcile cumulative amounts of actual power supply costs and related billed revenues. PSP reconciliation (R_q) is defined as;- *the cumulative amount required to reconcile power supply costs and related revenues equal to;- (a) power supply costs incurred by Licensee from UETCL or any other suppliers and self-generation (including related wheeling charges) less (b) revenues billed to retail customers by applying the power supply price to retail Kilowatt-hour sales, as such amounts are recorded in the Licensee's accounts over the period*

commencing on the Transfer date and ending on the last day of the month for which actual data is available prior to any quarter “q”.

On 1st December 2014, Umeme submitted the computation of the PSP reconciliation claiming USD 27.7 million after deducting USD 4 Million that was previously allowed in the 2013 tariff year. Consequently, a technical meeting between ERA and Umeme was held on 9th December 2014 following which on 15th December 2015, ERA wrote to Umeme raising the issues that needed to be addressed. On 16th June 2015, Umeme submitted a revised PSP reconciliation amounting to USD 13 Million for consideration in the determination of the tariffs for Q3 2015 tariff.

In the determination of the Power Supply Price (Rq) reconciliation, ERA noted that there can only be a PSP reconciling amount under the following circumstances;-

- (a) When the Distribution Loss Factor target approved by the Authority is different from the outturn.
- (b) When the loss allocation per customer category assumed when setting the tariff is different from the out turn.
- (c) When the percentage of total energy consumed by the different customer categories assumed at the time of setting the tariff is different from the outturn.
- (d) When the load profile per customer category used for tariff setting is different from the out turn.

The reconciling amount should be ZERO when all the parameters assumed while setting the tariffs are equal to the outturn.

On June 19 , 2015, ERA wrote to Umeme requesting for additional information regarding the PSP amount and the soft copy of the models used in the derivation of the PSP reconciliation before a meeting could be arranged to discuss these computations.

As at the time of completing this review, Umeme Limited had not yet submitted the required information. As a result of the foregoing events, the PSP reconciliation was not considered in the Q3 2015 tariff derivation.

3.6 Overall Tariff Adjustment Factor

The applicable tariff adjustment for Q3 2015 is the sum of the Foreign Exchange Rate Adjustment Factor, and Inflation Rate Adjustment Factor and Fuel Price Adjustment Factor. The adjustment factors for Q3 2015 are as shown in Table 8.

Table 8: Total Tariff Adjustment Factors Q3 2015

	End-User Retail Electricity Tariffs (Ush/kWh)					Weighted Adjustment Factor
	Domestic	Commercial	Medium Industrial	Large Industrial	Street-lights	
Inflation (IRAF)	2.9	2.9	2.1	1.3	3.1	2.0
Exchange rate (FERFAF)	37.3	31.8	31.1	22.4	33.0	28.6
Fuel Price Adjustment Factor (FPAF) (a + b)	(13.3)	(10.7)	(11.6)	(10.6)	(10.9)	(11.5)
(a) Fuel Price	(2.2)	(1.7)	(1.9)	(1.7)	(1.8)	(1.9)
(b) Energy Mix	(11.1)	(9.0)	(9.7)	(8.9)	(9.2)	(9.6)
Total	26.9	24.0	21.6	13.1	25.2	19.2

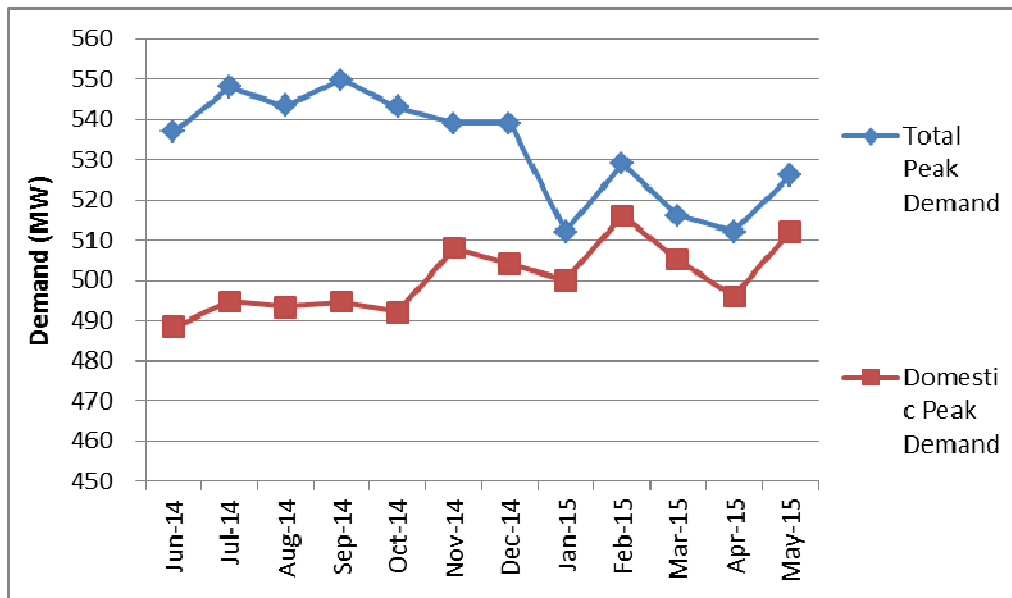
3.7 Demand Assumptions

In 2015, the maximum demand has been relatively stable with a marginal reduction from 529 MW in Q1 2015 to 526 MW in Q2. A growth rate of 2.5% per quarter was earlier projected at the derivation of the 2015 base tariffs.

There is a notable gap in domestic and total demand in the later months of 2014. This was due to increased export to Kenya in support of the

Western part of Kenya during its network maintenance. This variation is noted to have cleared after Kenya normalized in its operations at the beginning of the 2015.

Figure 2: Maximum Demand for 2014/2015



Source: UETCL System Report

4 REVENUE REQUIREMENT, TARIFF AND SUBSIDY IMPLICATIONS.

4.1 Revenue Requirement Implications

During the quarter under review, the annualized revenue requirement of Eskom increased from Ush 42,954 million in Q2 2015 to Ush 48,366 million in Q3 2015. The increase is largely driven by the depreciation of the shilling which has led to increase in the investment costs as well as operation and maintenance costs.

The annualized power acquisition costs (excluding the capacity payments to all thermal generators) increased from Ush 672,277 million in Q2 2015 to Ush 774,079 million in Q3 2015. The increase in the power purchase costs in Q3 2015 is mainly on account of the depreciation of the Uganda shilling given that most of the power purchase contracts are in US Dollars.

The annualized revenue requirement for Umeme Limited increased from Ush 360,390 million in Q2 2015 to Ush 379,182 million in Q3 of 2015 mainly on account of adjustment for exchange rate and inflation.

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
Q2 2015	42,954	8,330	22,559	12,066	96,515	8,139	60,399	27,977	672,277	44,816	360,390	232,428	122,547	5,414
Q3 2015	48,366	9,152	27,939	13,256	100,952	9,666	62,813	28,472	774,079	53,317	379,182	243,576	129,658	5,949

4.1.1 Capacity Price for Eskom (U) Limited

The Capacity Price for Eskom (U) Limited has reduced from Ush 42,954 per MW per hour in Q2 to Ush 43,439 per MW per hour in Q3 2015. The increase is attributed to increased dispatch of the plant from 311 GWh in Q1 to 316.58 GWh in Q2 2015.

Table 11: ESKOM CAPACITY PRICE Q3 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	IN y, q	CR y	RT y	NI y	TX y	OM y, q=1	LOM y, q	EOM y, q	LP y, q=1
	Ushs/ MW	USh mill	USh mill	US\$ thous	US\$ thous	US\$ thous	US\$ thous	Ush mill	Ush mill	Ush mill	US\$ thous
Q2 2015	42,940	49,773	8,672	883	1,479	12,328	634	28,540	16,170	9,868	12,561
Q3 2015	43,436	50,347	9,152	883	1,479	12,328	634	27,939	16,225	9,212	13,256

4.1.2 Bulk Supply Tariff (BST)

The annualized bulk supply costs increased from Ush 752,548 million in Q2 2015 to Ush 825,087 million in Q3 2015. As a result, the Bulk Supply Tariffs increased from Ush 270.1/kWh, Ush 225.0/kWh, and Ush 167.0/kWh at Peak, Shoulder and Off-peak respectively, to 276.9/kWh, Ush 230.8/kWh, and Ush 171.2/kWh at Peak, Shoulder and Off-peak for the respective Time of Use periods in Q3 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
Q2 2015	270.1	225.0	167.0	3,029	752,548	668,109	84,439	8,473	48,841	27,125
Q3 2015	276.9	230.8	171.2	3,010	825,087	738,107	86,980	9,666	48,841	28,472

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 quarterly adjustment factors and the resulting end-user tariff across the customer categories for Q3 2015 is as shown in the Table 14.

Table 14: Q3 2015 Adjustment Factors and resultant cost reflective 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
Q2 2015 Approved Tariff	544.9	496.3	471.6	320.5	514.9	427.8
	Tariff Adjustment Factors (Shs/kWh)					
Inflation Rate Adjustment Factor (IRAF)	2.9	2.9	2.1	1.3	3.1	2.0
Exchange Rate Adjustment Factor (FERFAF)	64.3	53.5	54.5	43.9	54.7	51.7
Fuel Price Adjustment Factor (FPAF) (a + b)	(13.3)	(10.7)	(11.6)	(10.6)	(10.9)	(11.5)
(a) Fuel Price	(2.2)	(1.7)	(1.9)	(1.7)	(1.8)	(1.9)
(b) Energy Mix	(11.1)	(9.0)	(9.7)	(8.9)	(9.1)	(9.6)
Total Tariff Adjustment	53.8	45.7	45.0	34.5	47.3	42.3
Q3 2015 Tariff	585.3	530.3	506.6	350.1	549.8	455.4
Percentage Change from Q2 2015	7.4%	6.8%	7.4%	9.2%	6.8%	8.2%

5.1 Capping of Quarterly Tariff Adjustment

The Quarterly Tariff Adjustment Methodology provides for a capping mechanism where the applicable Tariff Adjustment Factor is capped at a level where it does not lead to an increase in the end-user tariff of more than 2.5% compared to the previous quarter. Consequently and in

accordance with the methodology, the tariffs for Q3 2015 have been capped at 2.5% increase above the tariffs for Q2 2015. The revenue shortfall for UETCL arising from the capping of the end user retail tariffs will be recovered in the subsequent quarters taking into account the prevailing conditions.

The approved end-user tariffs for Q3 2015 and the associated adjustment factors are shown in Table 15 below.

Table 15 Approved Q3 2015 (July to September) adjustment factors and resultant retail end-user tariffs (Ush/kWh)

	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
Q2 2015 Approved Tariff	544.9	496.3	471.6	320.5	514.9	427.8
	Tariff Adjustment Factors (Shs/kWh)					
Inflation Rate Adjustment Factor (IRAF)	2.9	2.9	2.1	1.3	3.0	2.0
Exchange Rate Adjustment Factor (FERFAF)	37.3	31.8	31.1	22.4	32.5	28.6
Fuel Price Adjustment Factor (FPAF) (a + b)	(13.3)	(10.7)	(11.6)	(10.6)	(10.9)	(11.5)
(a) Fuel Price	(2.2)	(1.7)	(1.9)	(1.7)	(1.8)	(1.9)
(b) Energy Mix	(11.1)	(9.0)	(9.7)	(8.9)	(9.1)	(9.6)
Total Tariff Adjustment	26.9	24.0	21.6	13.1	25.2	19.2
Approved Q3 2015 Tariff	558.4	508.6	483.2	328.7	527.7	432.2
Percentage Change from Q2 2015	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%

ANNEX 1

ENERGY DISPATCH AND GENERATION MIX

a) Energy purchase

A review of Q2 2015 energy purchase outturn indicates that Uganda Electricity Transmissions Company Limited (UETCL) purchased 821.8 GWh compared to 822.8 GWh for Q1 2015. This represents a marginal quarter on quarter drop in production of approximately 0.2%. While deriving the 2015 base tariff, it was projected that the Q2 energy purchases would be 854.4GWh. The outturn therefore represents a 3.8% reduction in energy purchases compared to the assumptions used in the base tariffs. This reduction in energy purchases is partly attributed to a reduction in energy losses at the distribution level and a lower industrial activity.

b) Mini Hydro Generation

The mini hydro power plants (Mpanga, Bugoye, KCCL, KML, Eco power, Hydromax) generally had an increase in energy generation in Q2 2015 compared to Q1 2015. The total generation from the plants more than doubled from 42GWh in Q1 2015 to 90GWh in Q2 2015. This increase was mainly attributed to improved hydrology after the rainy season which facilitated high generation capacity from the plants.

c) Large Hydro Generation

Effective 19th May 2015, UETCL through Ministry of Energy and Mineral Development, was granted permission for additional water discharge for Nalubaale/Kiira Power Plant in order to increase generation when Kakira Sugar was shut down for plant maintenance. Eskom increased its water release from 800cumecs to 950cumecs. Consequently, both the Eskom and Bujagali plants increased their generation by 5GWh and 2GWh

respectively Q2 2015. However, Bujagali HPP is scheduled to commence annual maintenance in August 2015.

d) Co-generation

On 17th May 2015, Kakira Co-Generation Plant shutdown for their scheduled month long annual maintenance. As a result of this, the plant generated 24GWh in the second quarter of 2015 compared to 66GWh for first quarter of 2015. This reduction in generation represents a 66% reduction in generation compared to the previous quarter.

e) Thermal Generation

The two HFO thermal plants, Jacobsen and Electromax were projected to dispatch the minimum of 15GWh each in the respective quarters of 2015. However, following the expiry of its license, there was no dispatch from Jacobsen in Q2 2015. Electromax therefore maintained the approved minimum capacity of 7 MW which translates into 15GWh for a quarter.

f) Imported Power

At the determination of the Base Tariffs, it was assumed that UETCL would import 12.1 GWh per quarter of 2015. However, in Q2 2015, the actual energy imported by the transmission company was 11.47GWh. This is generally close to the base line projected import which was generally intended for system balancing across Kenya and Uganda or tie line capacity.

Table A1 shows the energy generation from the respective plants.

Table A1: Energy Purchases by UETCL

Generation Plant	Energy (GWh)	Cost (Ush billion)	Energy (GWh)	Cost (Ush billion)	Energy (GWh)	Cost (Ush billion)
	2015 Base Tariffs Assumption		Outturn Q 1 2015		Outturn Q 2 2015	
Eskom	338.70	10.70	311.00	11.40	316.58	13.31
Bujagali	339.90	110.10	357.50	121.30	359.69	133.28
KCCL	15.80	2.40	9.70	1.30	18.08	3.27
KML	5.50	0.50	6.10	0.60	6.11	0.52
Bugoye-Tronder	20.20	4.80	10.50	2.60	23.77	6.59
Mpanga	16.30	4.10	4.90	1.30	27.78	8.18
Electromax	15.40	10.00	15.10	8.40	15.21	9.63
Jacobsen Plant	15.50	9.70	15.20	11.70		
Ishaha Ecopower	7.30	1.50	5.20	1.20	6.83	1.75
Kakira SW	50.90	13.20	66.00	19.30	24.91	6.39
Kinyara	2.90	0.60	2.90	0.70	2.94	0.57
Sugar & Allied	4.40	1.00	-	-		
Buseruka Hydromax	8.80	2.30	6.20	1.80	7.47	2.92
Import KPLC –Kenya	12.10	7.70	11.60	7.80	11.48	5.21
Import Rwanda	0.90	0.20	0.90	0.20	0.99	1.03
Total	854.40	178.80	822.80	189.60	821.84	192.65