

**APPROVAL OF SCHEDULE OF TARIFFS SET BY THE ENERGY REGULATORY COMMISSION FOR SUPPLY OF ELECTRICAL ENERGY BY THE KENYA POWER AND LIGHTING COMPANY LIMITED PURSUANT TO SECTION 45 OF THE ENERGY ACT, 2006**

NOTICE is hereby given that pursuant to section 45 of the Energy Act, 2006, the Energy Regulatory Commission has set out the following Schedule of Tariffs- 2013, prescribing the Tariffs, Charges, Prices and Rates to be charged by The Kenya Power and Lighting Company Limited to the Consumers for electrical energy consumed by them:

**PART I**

**GENERAL**

1. This Schedule of Tariffs- 2013, hereby set shall take effect on 1<sup>st</sup>December 2013 and for each Consumer become effective so as to apply with respect to;
  - i) Each Post-paid Consumer for all bills raised based on meter readings taken on or after the Effective Date.
  - ii) Each Pre-paid Consumer, for all Units purchased on or after the Effective Date.
2. In this document, unless the context otherwise requires, the following words and expressions shall have the following meanings:

"Act": means the Energy Act No. 12 of 2006 and any Act or Acts amending or replacing the same;

"Commission": means the Energy Regulatory Commission established under Section 4 of the Act;

"Company": means The Kenya Power and Lighting Company Limited;

"Consumer": means any person supplied with electrical energy, but does not include a person supplied with electrical energy for delivery or supply to another person;

"Contract": means the agreement made between a Consumer and the Company for supply of electrical energy, in force on the date of commencement of this Schedule of Tariffs and includes all contracts entered into with consumers after this date;

"Demand": means the maximum electric power demand drawn by a Consumer in each Post-paid Billing Period;

"Demand Charge": means a charge for Demand supplied per kVa in each Post-paid Billing Period, when applicable, with respect to Consumer category as shown in PART II;



"Effective Date": means 1<sup>st</sup> December 2013 for Part II (A), 1<sup>st</sup> July 2014 for Part II (B) and 1<sup>st</sup> July 2015 for Part II (C).

"Electric Power Producer": means a person who owns or operates facilities for generation of electrical energy pursuant to a generating licence issued by the Commission;

"Energy charge": means a charge per Unit consumed in each Post-paid Billing Period or per Unit purchased in each Pre-paid Units Purchase Period, as the case may be, with respect to each Consumer category as shown in PART II;

"Fixed Charge": means the amount to be charged per Post-paid Billing Period or Pre-paid Units Purchase Period, with respect to each Consumer category as shown in PART II;

"Interconnected System": means those works inclusive of power stations, electric supply lines electrically interconnected forming the main supply grid in the Republic of Kenya;

"KenGen": means the Kenya Electricity Generating Company Limited;

"kVA": means kiloVolt Ampere;

"Meter": means any and every kind of machine, device or instrument used for the measurement of the quantity of electrical energy, and includes such auxiliary appliances as resistors, shunts, reactance, current transformers, voltage transformers and time switches, external and necessary to the meter;

"Off-Grid System": means those works inclusive of power stations and electrical supply lines which are electrically and physically separate from the Interconnected System;

"Post-paid Billing Period": means the period of time elapsing between the issuing of two consecutive bills by the Company, but with the exception of their first and last period, such period of time shall be as near to thirty days as possible;

"Post- paid Consumer": means Consumer who consumes electricity on credit and pays for it after receiving a bill from the Company in accordance to the terms and condition of supply;

"Power Factor": means the decimal fraction obtained by dividing the Demand in kilowatts by the Demand in kiloVolt Amperes and shall be ascertained by suitable apparatus installed by the Company;

"Pre-paid Consumer" means a Consumer who pays for electricity up-front, either by purchasing a top-up card or tokens from the Company or its agent in accordance to

the terms and condition of supply and uses it to load Units to his or her pre-paid meter;

"Pre-paid Unit Purchase Period" means a calendar month;

"Tariff": means the prices, rates, costs and all other charges including adjustments, formulae and other terms, conditions and information contained in parts II, III and IV of this Schedule of Tariffs- 2013.

"Unit": means one kiloWatt hour (kWh);

"Units Purchased": means electricity measured in kWh generated by the Company's Power Plants or Electric Power Producers Power Plants delivered to and purchased by the Company;

## PART II

### **SCHEDULE OF NON-FUEL TARIFFS FOR ELECTRICAL ENERGY SUPPLIED BY THE COMPANY**

#### **Part II - (A) - Effective from 1<sup>st</sup>December 2013**

The Tariffs to be applied by the Company for the supply of electrical energy from the Interconnected System and also from the Off-Grid Systems, in each Post-paid Billing Period or Pre-paid Units Purchase Period shall be as detailed below:

**METHOD DC:** Applicable to Domestic Consumers for supply provided and metered by the Company at 240 or 415 volts and whose consumption does not exceed 15,000 Units per Post-paid Billing Period or Pre-paid Units Purchase Period .

- a) A Fixed Charge of KSh.120.00
- b) Energy charges of :
  - i.KSh.2.50 per Unit for 0 - 50 Units consumed;
  - ii.KSh.11.62 per Unit for 51-1,500 Units consumed;
  - iii.KSh.19.57 per Unit for Units consumed above 1,500.

\* If Method DC is used in conjunction with Method IT at the same supply terminals, then the combined Fixed Charge for both Methods of Charge shall be KSh 240.00. With respect to Pre-paid Consumer, this amount shall be charged on **Method DC**

**METHOD SC:** Applicable to non-domestic Small Commercial Consumers for supply provided and metered by the Company at 240 or 415 volts and whose consumption does not exceed 15,000 Units per Post-paid Billing Period or Pre-paid Units Purchase Period.

- a) A Fixed Charge of KSh.150.00\*



b) Energy charge of KSh 12.00 per Unit for all Units consumed.

\* If Method SC is used in conjunction with Method IT at the same supply terminals, then the combined Fixed Charge for both Methods of Charge shall be KSh 270.00. With respect to Pre-paid Consumer, this amount shall be charged on Method SC

**METHOD CI1:** Applicable to Commercial and Industrial Consumers for supply provided and metered by the Company at 415 volts three phase four-wire and whose consumption exceeds 15,000 Units per Post-paid Billing Period.

- a) A Fixed Charge of KSh.2,000.00
- b) Energy charge of KSh.8.70 per Unit consumed.
- c) Demand charge of KSh.800.00 per kVA.

**METHOD CI2:** Applicable to Commercial and Industrial Consumers for supply provided and metered by the Company at 11,000 volts, per Post-paid Billing Period.

- a) A Fixed Charge of KSh.4,500.00.
- b) Energy charge of KSh.7.50 per Unit consumed.
- c) Demand charge of KSh.520.00 per kVA.

**METHOD CI3:** Applicable to Commercial and Industrial Consumers for supply provided and metered by the Company at 33,000 volts, per Post-paid Billing Period.

- a) A Fixed Charge of KSh.5,500.00
- b) Energy charge of KSh.7.00 per Unit consumed.
- c) Demand charge of KSh.270.00 per kVA

**METHOD CI4:** Applicable to Commercial and Industrial Consumers for supply provided and metered by the Company at 66,000 volts, per Post-paid Billing Period.

- a) A Fixed Charge of KSh.6,500.00
- b) Energy charge of KSh.6.80 per Unit consumed.
- c) Demand charge of KSh.220.00 per kVA.

**METHOD CI5:** Applicable to Commercial and Industrial Consumers for supply provided and metered by the Company at 132,000 volts, per Post-paid Billing Period.

- a) A Fixed Charge of KSh.17,000
- b) Energy charge of KSh.6.60 per Unit consumed.
- c) Demand charge of KSh.220.00 per kVA.

**METHOD IT:** Interruptible off-peak supply of electrical energy applicable to ordinary consumers provided and metered by the Company whose consumption does not exceed 15,000 Units per Post-paid Billing Period or Pre-paid Units Purchase Period.

- a) A Fixed Charge of KSh 120.00\*

b) Energy charge of KSh.13.00 per Unit consumed.

\* If Method IT is used in conjunction with Method DC or SC at the same supply terminals, then the combined Fixed Charge for both Methods of Charge shall be KSh 240.00 or KSh 270 respectively. For Pre-paid Consumers the applicable combined Fixed Charge will be charged on DC or SC meter.

**Notes:**

- Note 1 The electrical energy which shall be supplied and charged under this method of charge shall be available at all times other than during peak periods which shall be such periods of high demand as may occur during each day not exceeding sixteen hours in the aggregate and during which the supply of electrical energy may be restricted, the time or times of such restriction and the duration thereof being controlled by the Company at its sole discretion.
- Note 2 This tariff is only available for installations arranged to the Company's satisfaction such that they cannot be operated on any other tariff and also where there is no duplication of the off-peak circuits by other electrical circuits unrestricted as to time of use so enabling the supply on another method of charge to be used for a similar function.
- Note 3 The Company shall provide and maintain apparatus up to a maximum capacity of 15 amperes, single phase, to control the period of availability of the supply and shall take all reasonable steps to ensure the reliability thereof, but shall not be responsible for any loss, damage or injury which may result from any mal-operation of this control equipment.

**METHOD SL:** Applicable to public and County Governments metered by the Company at 240 or 415 volts per Post-paid Billing Period for supply of electrical energy to public lamps (Street Lighting).

- a) A Fixed Charge of KSh.200.00.  
b) Energy charge of KSh.10.50 per Unit consumed

Supply under this Method of Charge shall be available for a minimum period of 11 hours per night for public lamps and for no other purpose.

The attention of public and County Governments taking supply on this tariff is drawn to the fact that where public lamps are fitted on the Company's poles, all maintenance of the lamps, switch wire and associated equipment must be carried out by the Company and shall be charged for on the basis of net costs of materials, labour and transport plus 25%.

**Note:**

Every Consumer shall pay to the Company a Fixed Charge at a rate not exceeding KSh 50.00 per kVA per Post-paid Billing Period or Pre-paid Units Purchase Period of



nameplate kVA continuous rating in respect of all electric welding plant, as adjusted by any power factor equipment in use in addition to the charges specified in Part II of this Schedule of Tariffs.

**Part II - (B) Effective from 1<sup>st</sup> July 2014**

The Tariffs to be applied by the Company for the supplies of electrical energy from the Interconnected System and the Off-Grid Systems, in each Post-paid Billing Period or Pre-paid Units Purchase Period shall be as detailed below:

**METHOD DC:** Applicable to Domestic Consumers for supply provided and metered by the Company at 240 or 415 volts and whose consumption does not exceed 15,000 Units per Post-paid Billing Period or Pre-paid Units Purchase Period.

- a) A Fixed Charge of KSh 150.00\*
- b) Energy charges of :
  - i. KSh 2.50 per Unit for 0 - 50 Units consumed;
  - ii. KSh 13.68 per Unit for 51-1,500 Units consumed;
  - iii. KSh 21.57 per Unit for Units consumed above 1,500.

\* If Method DC is used in conjunction with Method IT at the same supply terminals, then the combined Fixed Charge for both Methods of Charge shall be KSh 300.00. With respect to Pre-paid Consumer, this amount shall be charged on Method DC

**METHOD SC:** Applicable to non-domestic Small Commercial Consumers for supply provided and metered by the Company at 240 or 415 volts and whose consumption does not exceed 15,000 Units per Post-paid Billing Period or Pre-paid Units Purchase Period .

- a) A Fixed Charge of KSh 150.00\*
- b) Energy charge of KSh 14.00 per Unit for all Units consumed.

\* If Method SC is used in conjunction with Method IT at the same supply terminals, then the combined Fixed Charge for both Methods of Charge shall be KSh 300.00. With respect to Pre-paid Consumer, this amount shall be charged on Method SC

**METHOD CII:** Applicable to Commercial and Industrial Consumers for supply provided and metered by the Company at 415 volts three phase four-wire and whose consumption exceeds 15,000 Units per Post-paid Billing Period.

- a) A Fixed Charge of KSh 2,000.00
- b) Energy charge of KSh 9.45 per Unit consumed.
- c) Demand charge of KSh 800.00 per kVA.

**METHOD CI2:** Applicable to Commercial and Industrial Consumers for supply provided and metered by the Company at 11,000 volts, per Post-paid Billing Period.

- a) A Fixed Charge of KSh 4,500.00.
- b) Energy charge of KSh 8.25 per Unit consumed.
- c) Demand charge of KSh 520.00 per kVA.

**METHOD CI3:** Applicable to Commercial and Industrial Consumers for supply provided and metered by the Company at 33,000 volts, per Post-paid Billing Period.

- a) A Fixed Charge of KSh 5,500.00
- b) Energy charge of KSh 7.75 per Unit consumed.
- c) Demand charge of KSh 270.00 per kVA

**METHOD CI4:** Applicable to Commercial and Industrial Consumers for supply provided and metered by the Company at 66,000 volts, per Post-paid Billing Period.

- a) A Fixed Charge of KSh 6,500.00
- b) Energy charge of KSh 7.55 per Unit consumed.
- c) Demand charge of KSh 220.00 per kVA.

**METHOD CI5:** Applicable to Commercial and Industrial Consumers for supply provided and metered by the Company at 132,000 volts, per Post-paid Billing Period.

- a) A Fixed Charge of KSh 17,000
- b) Energy charge of KSh 7.35 per Unit consumed.
- c) Demand charge of KSh 220.00 per kVA.

**METHOD IT:** Interruptible off-peak supply of electrical energy applicable to ordinary consumers provided and metered by the Company whose consumption does not exceed 15,000 Units per Post-paid Billing Period or Pre-paid Units Purchase Period.

- a) A Fixed Charge of KSh 150.00\*
- b) Energy charge of KSh 13.75 per Unit consumed.

\* If Method IT is used in conjunction with Method DC or SC at the same supply terminals, then the combined Fixed Charge for both Methods of Charge shall be KSh 300.00. For Pre-paid Consumers the applicable combined Fixed Charge will be charged on DC or SC meter.

**Notes:**

- Note 1 The electrical energy which shall be supplied and charged under this method of charge shall be available at all times other than during



peak periods which shall be such periods of high demand as may occur during each day not exceeding sixteen hours in the aggregate and during which the supply of electrical energy may be restricted, the time or times of such restriction and the duration thereof being controlled by the Company at its sole discretion.

Note 2 This tariff is only available for installations arranged to the Company's satisfaction such that they cannot be operated on any other tariff and also where there is no duplication of the off-peak circuits by other electrical circuits unrestricted as to time of use so enabling the supply on another method of charge to be used for a similar function.

Note 3 The Company shall provide and maintain apparatus up to a maximum capacity of 15 amperes, single phase, to control the period of availability of the supply and shall take all reasonable steps to ensure the reliability thereof, but shall not be responsible for any loss, damage or injury which may result from any mal-operation of this control equipment.

**METHOD SL:** Applicable to public and County Governments metered by the Company at 240 or 415 volts per Post-paid Billing Period for supplies of electrical energy to public lamps (Street Lighting).

- a) A Fixed Charge of KSh 200.00.
- b) Energy charge of KSh 11.25 per Unit consumed

Supply under this Method of Charge shall be available for a minimum period of 11 hours per night for public lamps and for no other purpose.

The attention of public and County Governments taking supply on this tariff is drawn to the fact that where public lamps are fitted on the Company's poles, all maintenance of the lamps, switch wire and associated equipment must be carried out by the Company, and shall be charged for on the basis of net costs of materials, labour and transport plus 25%.

**Note:**

Every Consumer shall pay to the Company a Fixed Charge at a rate not exceeding KSh 50.00 per kVA per Post-paid Billing Period or Pre-paid Units Purchase Period of nameplate kVA continuous rating in respect of all electric welding plant, as adjusted by any power factor equipment in use in addition to the charges specified in Part II of this Schedule of Tariffs.

**Part II - (C) Effective from 1<sup>st</sup> July 2015**

**METHOD DC:** Applicable to Domestic Consumers for supply provided and metered by the Company at 240 or 415 volts and whose consumption does not exceed 15,000 Units per Post-paid Billing Period or Pre-paid Units Purchase Period.

- a) A Fixed Charge of KSh 150.00\*
- b) Energy charges of :





- i. KSh 2.50 per Unit for 0 - 50 Units consumed;
- ii. KSh 12.75 per Unit for 51-1,500 Units consumed;
- iii. KSh 20.57 per Unit for Units consumed above 1,500.

\* If Method DC is used in conjunction with Method IT at the same supply terminals, then the combined Fixed Charge for both Methods of Charge shall be KSh 300.00. With respect to Pre-paid Consumer, this amount shall be charged on Method DC

**METHOD SC:**Applicable to non-domestic Small Commercial Consumers for supply provided and metered by the Company at 240 or 415 volts and whose consumption does not exceed 15,000 Units per Post-paid Billing Period or Pre-paid Units Purchase Period.

- a) A Fixed Charge of KSh 150.00\*
- b) Energy charge of KSh 13.50 per Unit for all Units consumed.

\* If Method SC is used in conjunction with Method IT at the same supply terminals, then the combined Fixed Charge for both Methods of Charge shall be KSh 300.00. With respect to Pre-paid Consumer, this amount shall be charged on Method SC

**METHOD CI1:**Applicable to Commercial and Industrial Consumers for supply provided and metered by the Company at 415 volts three phase four-wire and whose consumption exceeds 15,000 Units per Post-paid Billing Period.

- a) A Fixed Charge of KSh 2,500.00
- b) Energy charge of KSh 9.20 per Unit consumed.
- c) Demand charge of KSh 800.00 per kVA.

**METHOD CI2:** Applicable to Commercial and Industrial Consumers for supply provided and metered by the Company at 11,000 volts, per Post-paid Billing Period.

- a) A Fixed Charge of KSh 4,500.00.
- b) Energy charge of KSh 8.00 per Unit consumed.
- c) Demand charge of KSh 520.00 per kVA.

**METHOD CI3:** Applicable to Commercial and Industrial Consumers for supply provided and metered by the Company at 33,000 volts, per Post-paid Billing Period.

- a) A Fixed Charge of KSh 5,500.00
- b) Energy charge of KSh 7.50 per Unit consumed.
- c) Demand charge of KSh 270.00 per kVA

**METHOD CI4:** Applicable to Commercial and Industrial Consumers for supply provided and metered by the Company at 66,000 volts, per Post-paid Billing Period.

- a) A Fixed Charge of KSh 6,500.00

- b) Energy charge of KSh 7.30 per Unit consumed.
- c) Demand charge of KSh 220.00 per kVA.

**METHOD CI5:** Applicable to Commercial and Industrial Consumers for supply provided and metered by the Company at 132,000 volts, per Post-paid Billing Period.

- a) A Fixed Charge of KSh 17,000
- b) Energy charge of KSh 7.10 per Unit consumed.
- c) Demand charge of KSh 220.00 per kVA.

**METHOD IT:** Interruptible off-peak supplies of electrical energy to ordinary consumers metered by the Company whose consumption does not exceed 15,000 Units per Post-paid Billing Period or Pre-paid Units Purchase Period.

- a) A Fixed Charge of KSh 150.00\*
- b) Energy charge of KSh 13.50 per Unit consumed.

\* If Method IT is used in conjunction with Method DC or SC at the same supply terminals, then the combined Fixed Charge for both Methods of Charge shall be KSh 300.00. For Pre-paid Consumers the applicable combined Fixed Charge will be charged on DC or SC meter.

**Notes:**

- Note 1 The electrical energy which shall be supplied and charged under this method of charge shall be available at all times other than during peak periods which shall be such periods of high demand as may occur during each day not exceeding sixteen hours in the aggregate and during which the supply of electrical energy may be restricted, the time or times of such restriction and the duration thereof being controlled by the Company at its sole discretion.
- Note 2 This tariff is only available for installations arranged to the Company's satisfaction such that they cannot be operated on any other tariff and also where there is no duplication of the off-peak circuits by other electrical circuits unrestricted as to time of use so enabling the supply on another method of charge to be used for a similar function.
- Note 3 The Company shall provide and maintain apparatus up to a maximum capacity of 15 amperes, single phase, to control the period of availability of the supply and shall take all reasonable steps to ensure the reliability thereof, but shall not be responsible for any loss, damage or injury which may result from any mal-operation of this control equipment.

**METHOD SL:** Applicable to public and County Governments metered by the Company at 240 or 415 volts for supply of electrical energy to public lamps (Street Lighting).

- a) A Fixed Charge of KSh 200.00.
- b) Energy charge of KSh 11.00 per Unit consumed



Supply under this Method of Charge shall be available for a minimum period of 11 hours per night for public lamps and for no other purpose.

The attention of public and County Governments taking supply on this tariff is drawn to the fact that where public lamps are fitted on the Company's poles, all maintenance of the lamps, switch wire and associated equipment must be carried out by the Company, and shall be charged for on the basis of net costs of materials, labour and transport plus 25%.

**Note:**

Every Consumer shall pay to the Company a Fixed Charge at a rate not exceeding KSh 50.00 per kVA per Post-paid Billing Period or Pre-paid Units Purchase Period of nameplate kVA continuous rating in respect of all electric welding plant, as adjusted by any power factor equipment in use in addition to the charges specified in Part II of this Schedule of Tariffs.

### PART III

#### OTHER CHARGES

**1. Fuel Cost Charge**

- (a) All units billed to each Post-paid Consumer or purchased by each Pre-paid Consumer every month shall be liable to Fuel Cost Charge which shall be calculated in accordance with the following formula:

Fuel Cost Charge in Kenya cents/Unit calculated to the nearest **one cent**:

$$= \frac{1}{1-L} \times \left\{ \frac{\sum C_i G_i S_i + \sum P_{im} - \sum P_{xp} + \sum P_i}{G} \right\} \times 100$$

Where:

$C_i$  = Actual price in KSh/kg paid by the Company or Electric Power Producers for fuel consumed by Plant  $i$ , where  $i= 1, 2, \dots, n$ , during the calendar month immediately preceding each Post-paid Billing Period or Pre-paid Units Purchase Period at all existing thermal plants on the Interconnected System and the Off-Grid System, as the case may be. This shall also include other thermal power plants to be constructed and in respect of which the Company shall enter into Power Purchase Agreements.

$G_i$  = All Units generated and or purchased by the Company from Electric Power Producers' Plant  $i$ , where  $i= 1, 2, \dots, n$ , during the calendar



month immediately preceding each Post-paid Billing Period or Pre-paid Units Purchase Period at each existing thermal plant on the Interconnected System and the Off-Grid System, and imports/exports from Uganda Electricity Transmission Company Limited adjusted for system losses as the case may be. This shall also include other thermal power plant(s) to be constructed and in respect of which the Company shall enter into Power Purchase Agreement(s).

G= Total of all Units purchased by the Company from Electric Power Producer(s), generated by the Company and net imports during the calendar month immediately preceding each meter reading period, including all hydro stations, Off-Grid power stations and imports.

S<sub>i</sub> = Specific fuel consumption in kg/Unit for the following thermal plants:

Embakasi Gas Turbine I & II	0.315 kg/Unit purchased
Kipevu I Diesel Plant	0.217 kg/Unit purchased
Kipevu II Diesel Plant (Tsavo)	0.219 kg/Unit purchased
Kipevu III Diesel Plant	0.2095 kg/Unit purchased
Iberafrica Diesel Plants:	
Old Plant	0.226 kg/Unit purchased
New Plant	0.224 kg/Unit purchased
Rabai Diesel Plant*:	
With steam turbine or above 33MW	0.1971 kg/Unit purchased
Without steam turbine or below 33MW	0.208 kg/Unit purchased
Triumph Diesel Plant**	
With steam turbine or above 35MW	0.201 kg/Unit purchased
Without steam turbine or below 35MW	0.210 kg/Unit purchased
Gulf Diesel Plant	0.215 kg/Unit purchased
Garissa Diesel Plant	0.220 kg/Unit purchased
Thika Diesel Plant	
With steam turbine or above 33MW	0.199 kg/Unit purchased
Without steam turbine or below 33MW	0.215 kg/Unit purchased
Temporary Power Plants	0.223 kg/Unit purchased

#### Diesel Plants in Off-Grid System\*\*\*

Garissa	0.278 kg/Unit purchased
Lamu	0.280 kg/Unit purchased
Lodwar	0.282 kg/Unit generated
Mandera	0.266 kg/Unit generated
Marsabit	0.290 kg/Unit generated
Wajir	0.260 kg/Unit generated
Moyale	0.277 kg/Unit generated
Mpeketoni	0.290 kg/Unit generated

Habaswein	0.290 kg/Unit generated
Hola	0.290 kg/Unit generated
Merti	0.290 kg/Unit generated
Elwak	0.290 kg/Unit generated
Mfangano	0.290 kg/Unit generated
Baragoi	0.290 kg/Unit generated
Lokichogio	0.290 kg/Unit generated
Takaba	0.290 kg/Unit generated
Eldas	0.290 kg/Unit generated
Rhamu	0.290 kg/Unit generated

\*Rabai: The higher specific fuel consumption for Rabai Diesel Plant also applies for a period of 2.5 hours during start up after a plant shutdown of more than 8 hours.

\*\*Triumph: The higher specific fuel consumption for Triumph Diesel Plant also applies for a period of 2.5 hours during start up after a plant shutdown of more than 8 hours.

\*\*\* Specific fuel consumption for Off-Grid System shall be estimated at 0.290 kg/unit for any other thermal power plants to be constructed for the supply of electricity to the Company from that Power Station with the approval of the Commission.

$P_{im}$  = Sum of fuel costs for imported units calculated based on respective power import contracts.

$P_{xp}$  = Sum of fuel costs for exported units calculated based on respective power export contracts.

$P_i$  = Sum of fuel displacement costs and other pass through charges based on power purchased from Power Plant  $i$ , where  $i = 1, 2 \dots n$ . This refers to Mumias, future temporary power plants, geothermal steam charge as approved by the Commission and other power plants to be constructed in respect of which the Company shall enter into a Power Purchase Agreement.

- i) The fuel displacement costs,  $P_i$ , for the Mumias Power Plant shall be computed using the formula  $P_i = G_i \times DCR_i$ .

Where;

$G_i$  = Units purchased by the Company from the plant during the calendar month immediately preceding each Post-paid Billing Period and/or Pre-paid Units Purchase Period,

$DCR_i$  = the approved Displacement Charge Rate for the plant being US\$ 0.034/kWh.

- ii) The fuel displacement costs,  $P_i$ , for the geothermal steam shall be computed using the formula  $P_i = G_i \times DCR_i$ .



Where;

$G_i$  = Units purchased by the Company from the plant during the calendar month immediately preceding each Post-paid Billing Period and/or Pre-paid Units Purchase Period,

$DCR_i$  = the approved Charge Rate for the plant being US\$ 0.02/kWh or any other rate approved by the Commission.

- iii) The fuel displacement costs,  $P_i$ , for the Aeolus, Kipeto and Prunus Power Plants shall be computed using the formula  $P_i = G_i \times DCR_i$ .

Where;

$G_i$  = Units generated delivered and purchased by the Company from the plant or Units curtailed from being generated by such plant as invoiced to the Company in accordance with the Power Purchase Agreement for such plant, during the calendar month immediately preceding each Post-paid Billing Period and/or Pre-paid Units Purchase Period,

$DCR_i$  = The approved Displacement Charge Rate for the plant being US\$ 0.084/kWh.

- iv) The fuel displacement costs,  $P_i$ , for Power Plant plants procured through the FiT Policy shall be computed using the formula  $P_i = G_i \times DCR_i$ .

Where;

$G_i$  = Units generated, delivered and purchased by the Company from the plant or Units curtailed from being generated by such plant as invoiced to the Company in accordance with the Power Purchase Agreement for such plant, during the calendar month immediately preceding each Post-paid Billing Period or Pre-paid Units Purchase Period,

$DCR_i$  = The approved Displacement Charge Rate for the plant being 85% and 70% of the applicable FiT tariff for Solar based plants and all other plants, respectively.

All fuel displacement and pass through costs shall be converted to Kenya Shillings using the CBK mean exchange rate of the calendar month immediately preceding each Post-paid Billing Period.

L = Target System loss factor in transmission and distribution equal to 16.8% in year 2013/14, 16.6% in year 2014/15 and 15.9% in year 2015/16.

- (b) The Company shall publish a monthly notice in the Kenya Gazette showing the Fuel Cost Charge rate applicable to all Units billed to every Post-paid Consumer or Units Sold with respect to Pre-paid Consumers during the month of publication of such notice.



## 2. Foreign Exchange Rate Fluctuation Adjustment

- (a) All units billed to each Post-paid Consumer or purchased by each Pre-paid Consumer every month shall be liable to Foreign Exchange Rate Fluctuation Adjustment which shall be calculated in accordance with the following formula:

Foreign Exchange Rate Fluctuation Adjustment in Kenya cents/Unit calculated to the nearest one cent

$$FERFA_t = \frac{1}{1-L} \times \left\{ \frac{(\sum (F_{t-1} \times Z_t) X_0) + (\sum (H_{t-1} \times Z_t) X_0) + (\sum (IPP_{t-1} \times Z_t) X_0)}{G} \right\} \times 100$$

Where:

$F_{t-1}$  = Sum of the foreign currency costs incurred by KenGen in the calendar month immediately preceding current Post-paid Billing Period or Pre-paid Units Purchase Period.

$H_{t-1}$  = Sum of the foreign currency costs incurred by the Company other than those costs relating to Electric Power Producers in the calendar month immediately preceding current Post-paid Billing Period or Pre-paid Units Purchase Period.

$IPP_{t-1}$  = Sum of the foreign currency costs paid by the Company to Electric Power Producers (except KenGen) in the calendar month immediately preceding current Post-paid Billing Period or Pre-paid Units Purchase Period.

The factor  $Z_t$  is the proportionate change in the exchange rate ( $X_t$ ) in the current Post-paid Billing Period or Pre-paid Units Purchase Period  $t$  from the Base Exchange rate ( $X_0$ ) in the base period and shall be determined according to the following formula:

$$Z_t = \frac{X_t - X_0}{X_0}$$

Where:

$X_t$  = CBK mean exchange rate for the calendar month immediately preceding current Post-paid Billing Period or Pre-paid Units Purchase Period.

$X_0$  = CBK mean exchange rate as tabulated below;



**CBK Mean Exchange Rates**

Foreign Currency	September 2012
US Dollar	84.6133
STG Pound	136.2555
Euro	108.7977
SA Rand	10.2256
AE Dirham	23.0367
Canadian Dollar	86.4971
Swiss Francs	90.0162
JPY(100)	108.2463
SW Kroner	12.8098
NOR Kroner	14.7146
DAN Kroner	14.5971
IND Rupee	1.5516
Hongkong Dollar	10.9119
Saudi Riyal	22.5626
Chinese Yuan	13.3844
Australian Dollar	87.9535

**Note:** Applicable CBK mean rates for KenGen power plants with Kenya Shillings denominated charge rates are as stipulated in the respective Power Purchase Agreements.

G= Total of all Units purchased by the Company from Electric Power Producer(s), generated by the Company and net imports during the calendar month immediately preceding each meter reading period, including all hydro stations, Off-Grid power stations and imports.

L = Target System loss factor in transmission and distribution equal to 16.8% in year 2013/14, 16.6% in year 2014/15 and 15.9% in year 2015/16.

(b) The Company shall publish a monthly notice in the Kenya Gazette showing the amount of the Foreign Exchange Rate Fluctuation Adjustment applicable to all Unit charges specified in Part II of the Schedule of Tariffs for all meter readings taken during the month of publication of the said notice.

### 3. Inflation Adjustment

(a) All units billed to each Post-paid Consumer or purchased by each Pre-paid Consumer every month shall be liable to an Automatic adjustment for inflation at the end of every six month period starting from 1<sup>st</sup> January, 2014.

The effect of domestic and international inflation on cost of supply shall be calculated in accordance with the following formula:

$$INFA_t = \frac{1}{1-L} \times \left( \frac{INFA_{KenGen} + INFA_{IPP} + INFA_{KPLC}}{G_p} \right) \times 100$$



Where;

$INFA_t =$  Total Inflation Adjustment in Kenya cents per Unit for the half year period t. The first adjustment shall be effected on 1<sup>st</sup> January 2014.

$L =$  Target System loss factor in transmission and distribution equal to 16.8% in year 2013/14, 16.6% in year 2014/15 and 15.9% in year 2015/16.

$G_p =$  Total projected Units generated or purchased by the Company from Electric Power Producer(s), during the half-year Adjustment Period. This shall also include other power plants to be constructed and in respect of which the Company shall enter into a Power Purchase Agreement.

i)  $INFA_{KenGen}$

$$INFA_{KenGen} = \sum INFA_{KP_i}$$

Where;

$INFA_{KP_i} =$  Specific Inflation Adjustment in half-year period, relating to contracted KenGen Plant i, which shall be determined as follows:

$$INFA_{KP_i} = [KP_i \times FOMCR_{bi} + Gk_i \times VOMCR_{bi}] \times \left[ 0.7 \times 0.5 \left( \frac{CPIU_t}{CPIU_b} - 1 \right) + 0.3 \left( \frac{USCPI_t}{USCPI_b} - 1 \right) \right]$$

Where:

$KP_i =$  Contracted capacity for KenGen Plant i in kW.

$FOMCR_{bi} =$  The base Escalable Capacity Charge Rate for KenGen Plant i in KSh/kW/year for September 2012, divided by two

$VOMCR_{bi} =$  The base escalable Variable Operation and Maintenance Charge Rate or variable energy charge rate as applicable, for KenGen plant i in KSh/kWh for September 2012

$Gk_i =$  Projected Units purchased from KenGen plant i in kWh in the half-year Adjustment Period.

$CPIU_b =$  The Geometric Underlying Consumer Price Index for September 2012 as posted by Kenya National Bureau of Statistics (Index base - February 2009 = 100), being 126.15.

$CPIU_t =$  The Underlying Consumer Price Index for the month of March for adjustments effected in the period July - December; and September for adjustments effected in the period January - June every year as provided by the Kenya National Bureau of Statistics (Index base - February 2009 = 100).



USCPI<sub>b</sub> = The "Consumer Prices Index for all urban consumers (CPI - U) for the US city average for all items 1982 - 84 =100" as published by the United States Department of Labour Statistics index for September 2012, being 231.407.

USCPI<sub>t</sub> = The "Consumer Prices Index for all urban consumers (CPI - U) for the US city average for all items 1982 - 84 =100" as published by the United States Department of Labour Statistics index for the month of March for adjustments effected in the period July - December; and for September for adjustments effected in the period January - June every year.

ii) **INFA<sub>IPP</sub>**

$$INFA_{IPP} = \sum INFAIPP_i$$

Where,

INFAIPP<sub>i</sub> = Specific Inflation Adjustment in half-year period, relating to contracted Electric Power Producer's (excluding KenGen) Plant i, which shall be determined as follows:

$$INFAIPP_i = [IPP_i \times CCR_{bi} + GIPP_i \times ECR_{bi}] \times \left[ \frac{USCPI_t}{USCPI_b} - 1 \right]^*$$

Where:

IPP<sub>i</sub> = Contracted capacity for IPP Plant i in kW.

CCR<sub>bi</sub> = Base escalable capacity charge rate for IPP plant i in US\$/kW/year, for September 2012, divided by two.

GIPP<sub>i</sub> = Projected Units purchased from IPP plant i in kWh in the half-year Adjustment Period.

ECR<sub>bi</sub> = Base escalable energy charge rate for IPP plant i in US\$/kWh for September 2012.

USCPI<sub>b</sub> = The "Consumer Prices Index for all urban consumers (CPI - U) for the US city average for all items 1982 - 84 =100" as published by the United States Department of Labour Statistics index for September 2012, being 231.407.

USCPI<sub>t</sub> = The "Consumer Prices Index for all urban consumers (CPI - U) for the US city average for all items 1982 - 84 =100" as published by the United States Department of Labour Statistics index for the month of March for adjustments

effected in the period July - December; and for September for adjustments effected in the period January - June every year.

\*Note:

For Euro denominated costs

$CCR_{bi}$  = Base escalable capacity charge rate for IPP plant  $i$  in €/kW/year, for September 2012, divided by two.

$ECR_{bi}$  = Base escalable energy charge rate for IPP plant  $i$  in €/kWh for September 2012.

$USCPI_b$  = The Monetary Union Index of Consumer Prices for European Union as published by Eurostat for September 2012 being 116.44.

$USCPI_t$  = The Monetary Union Index of Consumer Prices for European Union as published by Eurostat for the month of March for adjustments effected in the period July-December; and for September for adjustment effected in the period January-June every year.

All inflation adjustment costs for IPPs shall be converted to Kenya Shillings using the base exchange rates in this Schedule of Tariffs and Rates 2013.

iii)  $INFA_{KPLC}$

$INFA_{KPLC}$  Is the Specific Inflation Adjustment in half-year period, relating to the Company's transmission and distribution operation and maintenance costs, which shall be determined as follows:

$$INFA_{KPLC} = TDOM_b \left[ 0.7 \times 0.5 \left( \frac{CPIU_t}{CPIU_b} - 1 \right) + 0.3 \left( \frac{USCPI_t}{USCPI_b} - 1 \right) \right]$$

Where;

$TDOM_b$  = The transmission and distribution network operation and maintenance costs excluding depreciation of assets and provision for bad debts in year 2011/12, divided by two.

$CPIU_b$  = The Geometric Underlying Consumer Price Index for September 2012 as posted by Kenya National Bureau of Statistics (Index base - February 2009 = 100), being 126.15.

$CPIU_t$  = The Underlying Consumer Price Index for the month of March for adjustments effected in the period July - December; and September for adjustments effected in the period January - June every year as provided by the Kenya National Bureau of Statistics (Index base - February 2009 = 100).



USCPI<sub>b</sub> = The "Consumer Prices Index for all urban consumers (CPI - U) for the US city average for all items 1982 - 84 =100" as published by the United States Department of Labour Statistics index for September 2012, being 231.407.

USCPI<sub>t</sub> = The "Consumer Prices Index for all urban consumers (CPI - U) for the US city average for all items 1982 - 84 =100" as published by the United States Department of Labour Statistics index for the month of March for adjustments effected in the period July - December; and for September for adjustments effected in the period January - June every year.

Note:

Any difference between the total inflation costs and the actual billed amount for a given half year adjustment period shall be adjusted for in the following half year period.

- (b) The Company shall publish in the first month of the half-year inflation adjustment period a notice in the Kenya Gazette showing the half-year Inflation Adjustment rate applicable to all Units billed to each Post Paid Consumer or with respect to Pre-paid Consumer Units sold during that half-year period.

#### 4. Security Support Facility

a) All units billed to each Post-paid Consumer or purchased by each Pre-paid Consumer shall with effect from the last day of the month in which Lake Turkana Wind Power Limited (LTWP) commissions into operation at least 50MW of the 300MW Wind Power Plant under the Power Purchase Agreement between the Kenya Power & Lighting Company Limited (KPLC) and LTWP, be liable to security support facility monthly computed in accordance with the Formula set out below this paragraph 4. The security support facility shall be collected and remitted by KPLC into an escrow account established as security for the KPLC's payment obligations to Lake Turkana Wind Power Limited under the Power Purchase Agreement in respect of the 300MW Wind which has been approved by the Commission. The security support facility hereby shall be charged on all units consumed monthly in accordance with this paragraph until the total amount in the escrow account is equal to Euro forty two million and six hundred thousand (€ 42,600,000.00) and shall thereafter be discontinued.

The security support facility is calculated in equivalent Kenya cents per unit to the nearest one cent as follows:

$$SSF = \frac{1}{1-L} \times \left( \frac{\sum G_{pi} \times SSFR_{pi}}{G} \right) \times 100$$

Where:

G= Total of all Units purchased by the Company from Electric Power Producer(s), generated by the Company and net imports during the calendar



month immediately preceding each meter reading period, including all hydro stations, Off-Grid power stations and imports

$G_{pi}$  = Actual Units purchased by the company from Lake Turkana Wind Power Limited's wind power plant during the calendar month preceding each Post-paid Billing Period or Pre-paid Units Purchase Period.

$SSFR_{pi}$  = Euro cents 1.86/kWh

$X_t$  = CBK mean exchange rate for the calendar month immediately preceding current Post-paid Billing Period or Pre-paid Units Purchase Period

$L$  = Target System loss factor in transmission and distribution equal to 16.8% in year 2013/14, 16.6% in year 2014/15 and 15.9% in year 2015/16.

**Note**

Any difference between the total Security Support Facility and the actual collected amount for a given Post-paid Billing Period or Pre-paid Units Purchase Period shall be adjusted for in the following period.

b) The Company shall publish a monthly notice in the Kenya Gazette showing the amount of the Security Support Facility applicable to all units billed or to be billed to Post Paid Consumers during the month of publication of the said notice. The notice shall also show the amount collected by KPLC by way of the security support facility and standing to the credit of the escrow account on the last business day of the month preceding the date of the notice.

**5. Water Levy**

a) All units billed to each Post-paid Consumer or purchased by each Pre-paid Consumer every month shall be liable to Water Resource Management Authority (WRMA) Levy for water used by hydro power plants that have a capacity equal to or above 1MW as approved by the Commission.

WRMA levy is calculated in Kenya cents/Unit to the nearest one cent as follows:

$$WRMA_{LEVY} = \frac{1}{1-L} \times \left( \frac{\sum G_h \times WL}{G} \right) \times 100$$

Where:

$G$  = Total of all Units purchased by the Company from Electric Power Producer(s), generated by the Company and net imports during the calendar month immediately preceding each meter reading period, including all hydro stations, Off-Grid power stations and imports

$G_h$  = total units purchased from the preceding month from an electric power



producer/producers hydro power from plant  $i$  that have a capacity equal to or above 1MW, where  $i$  is equal to 1,2,...,n during the calendar month preceding each Post-paid Billing Period or Pre-paid Units Purchase Period for plants in the interconnected system or off grid system as the case may be. This shall also include hydro power plants to be constructed and in respect of which the Company shall enter into Power Purchase Agreements.

WL = Approved water levy for plant  $i$  as per the approved PPA.

L = Target System loss factor in transmission and distribution equal to 16.8% in year 2013/14, 16.6% in year 2014/15 and 15.9% in year 2015/16.

Note:

Any difference between the total WRMA levy invoiced and the actual collected amount for a given Post-paid Billing Period or Pre-paid Units Purchase Period shall be adjusted for in subsequent periods.

b) The Company shall publish a monthly notice in the Kenya Gazette showing the amount of the WRMA Levy applicable to all Unit charges specified in Part II of the Schedule of Tariffs for all meter readings taken during the month of publication of such notice.

#### 6. Taxes and Levies

The Consumer shall pay any taxes, levies or duties imposed from time to time by the Government. At present, the following are levied by the Government:

- i) VAT at 16% charged to:
  - a) Fixed Charge;
  - b) Demand Charge;
  - c) Foreign Exchange Fluctuation Adjustment;
  - d) Fuel Cost Charge; and
  - e) Taxable value of electrical energy consumed in a manner required by the Government.
- ii) Rural Electrification Programme (REP) levy at 5% of revenue from Unit sales.
- iii) Energy Regulatory Commission (ERC) levy at 3 Kenya cents/kWh.

### PART IV

#### OTHER IMPORTANT CONDITIONS

- a) In the event of the supply of electrical energy to the installation of any Consumer having a Power Factor of less than 0.90, then the Company may give to such Consumer thirty days notice in writing requiring him to improve the Power Factor of his installation to or in excess of 0.90.



- b) If a Consumer fails to comply with such notice as aforesaid, then the Company shall be at liberty to impose a surcharge as specified below until such time as the Power Factor of such Consumer's installation is equal, or in excess of 0.90 :-
- i) for Consumers charged under Methods DC, SC, SL and IT, the payment for electrical energy consumed in each Post-paid Billing Period (exclusive of VAT, Fuel Cost Charge, Foreign Exchange Rate Fluctuation Adjustment, REP and ERC levies) shall be increased by 2 per cent for each complete 1 per cent by which the power factor is below 0.90.
  - ii) for Consumers charged under Methods CI - the payment for electrical energy consumed and chargeable KVA of Demand in each Post-paid Billing Period (exclusive of VAT, Fuel Cost Charge, Foreign Exchange Rate Fluctuation Adjustment, REP and ERC levies) shall be increased by 2 per cent for each complete 1 per cent by which the Power Factor is below 0.90.
- c) Any apparatus installed by the Company for the purpose of ascertaining the power factor of any Consumer's installation or of any part thereof shall be installed and maintained at the sole expense of the Company.
- d) The Company shall determine the voltage at which a supply of electrical energy shall be provided to any Consumer's supply terminals and this voltage shall be maintained by the Company subject to the permissible variations as provided for in the Act.

**REPUBLIC OF KENYA**

**THE ENERGY ACT 2006**

Pursuant to Section 45 of The Energy Act 2006, I hereby approve the Schedule of Tariffs and Rates 2013 attached hereto for supply of electricity by The Kenya Power and Lighting Company Limited, to come into force on the 1<sup>st</sup> day of December, 2013.

APPROVED.....

Dated at NAIROBI this 22<sup>nd</sup> day of November 2013

DR. FREDERICK NYANG  
AG. DIRECTOR GENERAL