



# **THE MUNICIPAL TARIFF BENCHMARKS FOR THE 2014/15 FINANCIAL YEAR**

## **CONSULTATION PAPER**

**09 OCTOBER 2013**

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## **Abbreviations and Acronyms**

c/kWh	Cents per kilowatt-hour
CPI	Consumer Price Index
EPT	Electricity Pricing & Tariffs
ERA	Electricity Regulation Act
IBT	Inclining Block Tariff
kVA	Kilovolts-Amps
kWh	Kilowatt-hour
LF	Load Factor
MD	Maximum Demand
MWh	Megawatt-hour
MYPD	Multi-Year Price Determination
NERSA	National Energy Regulator of South Africa
TOU	Time-of-Use

## 1. Executive Summary

The National Energy Regulator of South Africa (NERSA or 'the Energy Regulator) is the regulatory authority over the energy sector in South Africa and its mandate includes the regulation of the electricity supply industry. In terms of section 4(ii) of the Electricity Regulation Act, 2006 (Act No. 4 of 2006) ('the ERA'), the Energy Regulator must regulate electricity prices and tariffs.

The Energy Regulator approves the municipal tariff benchmarks annually. The recommended new benchmarks are to be used in the evaluation of the municipal tariff evaluations. These benchmarks are developed per tariff category.

Comments on the consultation paper should be sent to: **Ms Tabisa Nkopo at the National Energy Regulator of South Africa, Kulawula House, 526 Madiba Street (formerly Vermeulen Street), Arcadia, Pretoria or via email to: [municguideline@nersa.org.za](mailto:municguideline@nersa.org.za)**. The deadline for submission of comments is 08 November 2013.

After the consolidation of all the comments from stakeholders, NERSA will hold a public hearing on the key issues highlighted by the stakeholders on 14 November 2013. NERSA wishes to state that the success of this process will depend on robust stakeholder participation.

## 2. Background

This consultation paper is limited only to the benchmarks. NERSA decided to separate the process of the guideline and the benchmark, as an extensive analysis had to be done on the development of the benchmarks. The existing benchmarks are based on five assumed tariff/customer categories and average consumption levels for these categories.

It should be noted that these are average consumption levels, and that there may also be other tariff classes at various municipalities which will cater for other customer classes or consumption levels. Where such different circumstances exist, the applications will be treated on a case-by-case basis.

## 3. The municipal electricity tariff benchmarks

- 3.1 For the purpose of benchmarking, the following customer classes were assumed:

- Domestic Tariffs
  - Block 1 (1 – 50 kWh);
  - Block 2 (51 – 350kWh);
  - Block 3 (351 – 600kWh); and
  - Block 4 (> 600kWh).

**The alternative domestic Inclining Block Tariff (IBT) structures:**

- Domestic Low
  - Block 1 (0 – 350 kWh) and
  - Block 2 (> 351kWh).
- Domestic High
  - Block 1 (0 – 350 kWh);
  - Block 2 (> 351kWh); and
  - Basic Charge.
- Commercial Prepaid – An average consumption level of 2000kWh per month.
- Industrial/Large user tariff – A 30% load factor (LF) and a maximum demand (MD) of 200kVA, which would give an average consumption level of 43 800kWh.
- Industrial Time-of-Use (TOU) - A 30% LF and an MD of 200kVA, which would give an average consumption level of 43800 kWh. The customer profile (i.e. peak, standard, off-peak).

It should be noted that NERSA will use the actual load factors of each municipality that will be provided by Eskom. This will assist in differentiating the municipalities between high and medium load customers.

- 3.2 NERSA has developed new benchmarks for the agriculture tariffs, three phase commercial tariffs, and domestic tariffs without IBT. The following assumptions were taken into consideration:

- Agriculture: There are three tariffs that have been developed for the different consumption levels of the Agriculture tariff i.e. 2000 kWh, 3000 kWh & 7000 kWh per month.
- Commercial Single & 3 Phase: There are three tariffs that have been developed for the different consumption levels of the Commercial Single and 3Phase i.e. 2000 kWh, 3000 kWh & 7000 kWh per month.
- Domestic Tariffs non-IBT: The average consumption level of 400kWh, 800 kWh and above 800kWh per month.

**Stakeholder Comment # 1**

***Stakeholders are requested to comment on the assumed consumption levels for the tariff categories.***

#### **4. The Financial Benchmarks**

When determining the weights of the financial benchmarks for the 2014/15 financial year, the following issues will be considered.

The municipalities were divided into groups, i.e. small and medium, large, and metros, to determine whether the financial indicators that have been developed for the different municipal sizes, would be different from the ones determined in the past. The outcome would indicate whether the financial benchmarks for the municipalities can still be maintained.

The information from the 2011/12 distribution forms was used to determine the changes to the financial benchmarks.

- The D-forms were randomly selected from all the regions and the size variations were considered. The total initial number selected was 134 municipalities.
- The selection of the D-forms was based on the availability of the required data developed in the model that was used for the revision of the municipal cost structure weights.
- Data was captured from the D-forms, and the analysis of the data was done.
- D-forms with seemingly inaccurate data were removed from the sample, and the final sample used consisted of 75 municipalities' D-forms. It is for this reason that municipalities are urged by NERSA to submit accurate D-form data.

Therefore, Table 1 below indicates the findings from the analysis done for the various sized municipalities.

**Table 1: Financial benchmarks**

	<b>Current Benchmarks</b>	<b>Average Benchmarks</b>	<b>Financial Benchmarks (Tolerable Range)<sup>1</sup></b>
Percentage Power cost	70%	70% <sup>2</sup>	58% - 78%
Percentage Surplus	15%	15% <sup>3</sup>	10% - 20%
System losses	10%	10% <sup>4</sup>	5% - 12%
Average Sales Price/Average Purchase Price ratio	1:1.64	1:1.60	1:1.60 – 1:1.64
Repairs & Maintenance	Minimum of 6%		
Debt collection rate	100%		

- It should be noted that municipalities are required to budget 6% of their total revenue for repairs and maintenance.
- The municipalities are encouraged to improve their debt collection rate, as this will assist them in collecting revenue that will enable them to be efficient and effective and in turn sustainable.

**Stakeholder Comment # 2**

***Stakeholders are invited to comment on whether NERSA should consider other indicators when determining the efficiency of the municipality.***

**5. Municipal Tariffs above the NERSA benchmarks**

It should be noted that municipalities applying for tariffs that are outside the approved benchmarks must justify such increases and the following information must be submitted:

<sup>1</sup> The tolerable ranges are NERSA's allowable ranges.

<sup>2</sup> In accordance to the municipal cost structure as indicated in the municipal tariff guideline consultation paper.

<sup>3</sup> The applicable financial benchmark for municipalities.

<sup>4</sup> The applicable technical benchmark for municipalities.

1. the total number of customers per tariff category – municipalities that do not have an appropriate customer base must submit the full detail of its customer profile, as well as the associated revenues;
2. expected revenues per tariff category;
3. the forecasted total sales;
4. the average maximum demand per tariff (where applicable);
5. the average load factor (where applicable); and
6. the load profile in percentages (both summer and winter, where applicable).

Due to the fact that NERSA has received a large volume of complaints on the demand charge that municipalities charge, it has become noticeable that the kVA charged by municipalities is excessive when compared to Eskom’s Megaflex demand charge.

The municipalities with high demand charges and low energy charges are encouraged to restructure their tariffs by shifting a portion of the demand cost recovery from the demand charge to the energy charge.

The municipalities are encouraged to develop time-of-use tariffs in order to enable the customers to benefit from shifting their load.

**Stakeholder Comment # 3**

***Stakeholders are invited to comment on the continuity of the phasing in of the alignment of the municipal demand and energy charges to those of Eskom.***

## 6. Proposed Municipal electricity tariff benchmarks for 2014/15

### 6.1 The current benchmarks

**Table 2: The average benchmarks for 2013/14 financial year**

Domestic Inclining Block Tariffs (IBTs)				Commercial 2000kWh		Industrial
Block 1	Block 2	Block 3	Block 4	Prepaid	Conventional	
0 - 50 kWh (c/kWh)	51 - 350 kWh (c/kWh)	351- 600 kWh (c/kWh)	>600 kWh (c/kWh)	(c/kWh)	(c/kWh)	43800 kWh (c/kWh)
64 - 70	82 - 87	111 - 117	133 - 138	139 - 144	140 - 145	142 - 147

The alternative domestic IBT structures and benchmarks as indicated below:

**Table 3: Domestic Low (comprises energy charge only)**

Domestic Inclining Block Tariffs (IBTs)	
<b>Block 1</b> 0 - 350 kWh (c/kWh)	<b>Block 2</b> > 350kWh (c/kWh)
80 - 85	110 - 115

**Table 4: Domestic High (comprises energy charge and basic charge)**

Domestic Inclining Block Tariffs (IBTs)	
<b>Block 1</b> 0 - 350 kWh (c/kWh)	<b>Block 2</b> > 350kWh (c/kWh)
78 - 83	108 - 113
<b>Basic Charge (R/month)</b>	

## 6.2 The revised benchmarks

The benchmarks for the 2014/15 financial year have been developed as follows for the different tariff categories.

When developing the domestic benchmarks for the 2014/15 financial year, the following issues were taken into consideration:

### 6.2.1 Domestic (Block 1 – 4)

- Block 1 – The 2013/14 benchmarks were increased by CPI<sup>5</sup> of 5.4%.
- Block 2 – The 2013/14 benchmarks were increased by CPI plus 1% (5.4 % + 1%<sup>6</sup>).
- Block 3 and 4 – The 2013/14 benchmarks were increased by the municipal tariff guideline of 8.20%<sup>7</sup>.

<sup>5</sup> The 5.4% is the current CPI as indicated in the Budget Review 2013.

<sup>6</sup> The second block has been increased by 6.4% to align it to the Eskom Homelight tariffs.

<sup>7</sup> The 8.20% in accordance with the consultation paper on the municipal tariff guideline for the 2014/15 financial year. This will be adjusted as per the Regulator decision on the municipal tariff guideline.



**6.2.2 The alternative domestic IBT benchmarks were developed as follows:**

- Domestic Low & High
  - Block 1 – The 2013/14 benchmarks were increased by 7%.
  - Block 2 – The 2013/14 benchmarks were increased by the municipal tariff guideline of 8.20%.
- The domestic tariffs non-IBT
  - This tariff is developed for those municipalities that are unable to implement IBTs.
  - The benchmarks for this tariff were developed in order to protect the customers from the high tariffs that are being charged by municipalities to customers that are not on IBT.
  - The determined rates were derived by comparing the bills on the assumed consumptions levels (i.e. 400kWh, 800kWh and above 800kWh).
  - The assumed consumption patterns and the determined rates as indicated in Table 8 below, will not disadvantage the customers that are not on IBT since the difference in the bill will be minimal.

**Table 5: Average domestic benchmarks for 2014/15**

<b>Domestic Inclining Block Tariffs (IBTs)</b>			
<b>Block 1</b> 0 – 50 kWh (c/kWh)	<b>Block 2</b> 51 - 350 kWh (c/kWh)	<b>Block 3</b> 351- 600 kWh (c/kWh)	<b>Block 4</b> >600 kWh (c/kWh)
<b>69 – 74</b>	<b>88 – 93</b>	<b>122 - 127</b>	<b>144 - 149</b>

**Table 6: Domestic Low (comprises energy charge only)**

<b>Domestic Inclining Block Tariffs (IBTs)</b>	
<b>Block 1</b> 0 - 350 kWh (c/kWh)	<b>Block 2</b> > 350kWh (c/kWh)
<b>86- 91</b>	<b>119- 124</b>

**Table 7: Domestic High (comprises energy charge and basic charge)**

Domestic Inclining Block Tariffs (IBTs)	
Block 1 0 - 350 kWh (c/kWh)	Block 2 > 350kWh (c/kWh)
84 - 89	117 - 122
Basic Charge (R/month)	

**Table 8: Average Domestic Non-IBT Tariffs**

Domestic High 800kWh (c/kWh)	Domestic Low 400kWh (c/kWh)
112 - 117	90 - 95

### 6.2.3 Commercial

- The commercial prepaid 2013/14 benchmarks were increased by the municipal tariff guideline of 8.20%.

**Table 9: Average Commercial benchmarks for 2014/15**

Commercial 2000kWh Prepaid (c/kWh)
152 - 157

### 6.2.4 Industrial

- NERSA has developed two benchmarks for the industrial category:
  - the benchmarks for the municipalities that predominantly buy Eskom's Nightsave tariff will be increased by the municipal tariff guideline of 8.20%; and
  - the industrial benchmark for the municipalities that buy on other Eskom tariffs will be compared to the Eskom Megaflex. The municipalities on this tariff will have to charge their customers prices that are based on real terms.

### 6.2.5 Industrial (TOU)

- This tariff will be benchmarked to Eskom's Megaflex by adding and allowing a maximum of 20%.

**Table 10: Average benchmarks for Industrial for 2014/15**

<b>Industrial</b> <b>(Based on Eskom's Nightsave)</b> 43800 kWh (c/kWh)	<b>Industrial</b> <b>(Based on Eskom's Megaflex)</b> 43800 kWh (c/kWh)
<b>154 - 159</b>	<b>95 - 100</b>

### 6.2.6 Standard & Non-Standard Tariffs

#### a) Commercial Single & 3-Phase Tariffs

- The commercial single & 3-Phase non-standard tariffs have been compared to the Eskom's Businessrate tariffs as follows:

**Table 11: Average benchmark for Commercial - Low**

<b>Commercial – High (2000kWh)</b> (c/kWh)
<b>141 - 146</b>

- The average tariff of Eskom's Businessrate 1 (i.e. 135 c/kWh) has been increased by adding the municipal tariff guideline of 8.20% in order to determine the benchmark.

**Table 12: Average benchmark for Commercial - Medium**

<b>Commercial – High (3000kWh)</b> (c/kWh)
<b>136 - 141</b>

- The average tariff of Eskom's Businessrate 2 (i.e. 130 c/kWh) has been increased by adding the municipal tariff guideline of 8.20% in order to determine the benchmark.

**Table 13: Average benchmark for Commercial - High**

<b>Commercial – High (7000kWh)</b> (c/kWh)
<b>125 - 130</b>

- The average tariff of Eskom's Businessrate 3 (i.e. 120 c/kWh) has been increased by adding the municipal tariff guideline of 8.20% in order to determine the benchmark.

**b) Agriculture Tariffs**

- The agriculture non-standard tariffs have been compared to Eskom's Landrate tariffs as follows:

**Table 14: Average benchmark for Agriculture - Low**

<b>Agriculture – High (2000kWh) (c/kWh)</b>
<b>163 - 168</b>

- The average tariff of Eskom's Landrate 1 (i.e. 155 c/kWh) has been increased by adding the municipal tariff guideline of 8.20% in order to determine the benchmark.

**Table 15: Average benchmark for Agriculture - Medium**

<b>Agriculture – High (3000kWh) (c/kWh)</b>
<b>154 - 159</b>

- The average tariff of Eskom's Landrate 2 (i.e.147 c/kWh) has been increased by adding the municipal tariff guideline of 8.20% in order to determine the benchmark.

**Table 16: Average benchmark for Agriculture - High**

<b>Agriculture – High (7000kWh) (c/kWh)</b>
<b>132 - 137</b>

- The average tariff of Eskom's Landrate 3 (i.e. 127c/kWh) has been increased by adding the municipal tariff guideline of 8.20% in order to determine the benchmark.

It should be noted that NERSA is currently reviewing the Eskom tariffs for the 2014/15 financial year and that the Energy Regulator will make a decision on the approved structural tariffs in October. Therefore the changes on the benchmarks that NERSA is consulting are dependent on the Energy Regulator's decision.

**Stakeholder Comment # 4**

***Stakeholders are requested to comment on the proposed benchmarks.***

The tables below indicate the timelines and processes leading to the approval of the municipal electricity tariffs.

**Table 17: Approval of the Municipal Tariff Guideline**

<b>ACTIVITY/TASK</b>	<b>DATE</b>
Modelling of municipal tariff guideline	Aug 13
Publishing of the municipal guideline consultation paper on NERSA's website	11Sept 13
Workshop and Consultations with key stakeholders (NT, AMEU, SALGA)	Sept /Oct 13
Closing date for stakeholder comment	11 Oct 13
Public Hearing for the municipal guideline increase	16 Oct 13
NERSA's decision of the municipal guideline increase	29 Oct 13
Communicate approved guideline increase to municipalities	01 Nov 13

**Table 18: Approval of the Municipal Tariff Benchmarks**

<b>ACTIVITY/TASK</b>	<b>DATE</b>
Modelling of municipal tariff benchmarks	Sept / Oct 13
Publishing of the municipal tariff benchmarks consultation paper on NERSA's website	09 Oct 13
Workshop and Consultations with key stakeholders (NT, AMEU, SALGA)	Sep / Oct 13
Closing date for stakeholder comment	08 Nov 13

Public Hearing for the municipal tariff benchmarks	14 Nov 13
NERSA's decision of the municipal tariff benchmarks	29 Nov 13
Communicate approved municipal tariff benchmarks	29 Nov 13
Municipalities compile and submit tariffs application for consideration by NERSA	Nov - Feb 14

**Table 19 : Municipal Tariff Review Process for the 2014/15 Financial Year**

<b>ACTIVITY/TASK</b>	<b>DATE</b>
Municipalities compile and submit tariffs application for consideration by NERSA	Nov - Feb 14
NERSA's consideration and approval of tariff applications and communication of NERSA's decision to municipalities	Nov – 14 Mar 14
Public Hearings for above guideline increases	End Jan – End Feb
Consideration and approval of applications above the guideline	Feb – Mar 14
Communicate NERSA's decision to licensees	Dec – Mar 14
Receipt and analysis of tariff review (appeal) <sup>8</sup> applications	Jan – Mar 14
Consideration and approval of review applications	Feb – Mar 14
Communicate NERSA's decision to licensees	Dec – Mar 14
Receipt and analysis of tariff review (appeal) applications	Jan – Mar 14
Consideration and approval of review applications	Feb – Mar 14

<sup>8</sup> NERSA will hold two Public Hearings for the municipalities above the guideline