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MEDIA STATEMENT

INTRODUCTION OF INCLINING BLOCK TARIFFS (IBT) FOR ELECTRICITY

The electricity tariffs of all Municipalities are subject to the approval of the National Electricity Regulator (NERSA), who issued guidelines on the determination of electricity tariffs for Municipalities. In these guidelines, Municipalities are required to introduce IBT tariffs as from 1 July 2012 for residential consumers. The IBT tariff is basically a sliding tariff scale (similar to the current water tariff structure) where you pay increased tariffs for higher consumption.

NERSA designed the IBT to achieve the following:

- Protecting low income customers, and
- Promoting energy efficiency

NERSA also allows a two part IBT tariff structure which consists of a fixed monthly charge plus energy charges with IBT blocks. This tariff structure was allowed to ensure that the municipality does not suffer a loss in income. Based on international best practises, NERSA decided to limit the IBT to a 4 block tariff structure in order to make it easy and economical to administer and implement. The municipal tariff benchmark for domestic customers in the 4 block tariff structure is as follows:

Block 1 **0-50 kWh** **(c/kWh)**	**Block 2** **51-350 kWh** **(c/kWh)**	**Block 3** **351-600 kWh** **(c/kWh)**	**Block 4** **>600 kWh** **(c/kWh)**
61-66	77-82	104-109	124-129

With the compilation of the draft Annual Budget 2012-13, the guidelines of NERSA were taken into consideration. The current tariff structure makes provision for a fixed charge per single or three phase meter, a circuit breaker charge per ampere and an energy charge (c/kWh). With the proposed tariff structure, the fixed charge per single or three phase meter remains, the circuit breaker charge is removed and the energy charge (c/kWh) is determined in the 4 block IBT structure. However, because of the revenue loss which will be

incurred due to the removal of the circuit breaker charge, the tariffs per block differs slightly from the guideline of NERSA, in order to absorb the revenue loss.

The proposed tariff structure is as follows:

Fixed charge	**Block 1** **0-50 kWh** **(c/kWh)**	**Block 2** **51-350 kWh** **(c/kWh)**	**Block 3** **351-600 kWh** **(c/kWh)**	**Block 4** **>600 kWh** **(c/kWh)**
Indigents No fixed levy	68,15c	85,82c	105,15c	118,35c
Single phase R40,00 p.m.	68,15c	89,82c	105,15c	118,35c
Three phase R55,00 p.m.	68,15c	89,82c	105,15c	118,35c

Even though the tariff structure in block 1 and 2 is a bit higher than the NERSA guideline, the effect on individual accounts after tariff increases can be seen in the following examples, depending on the size of the circuit breaker and the energy used. The examples are based on a single phase meter and excludes VAT.

EXAMPLE 1 (Lifeline) Comparison of a lifeline consumer's current account and IBT account as from July 2012 (with a 40Amp circuit breaker and a energy consumption of 850kWh)

Current account	**Circuit Breaker**	**Energy Used kWh**	**Tariff (c/kWh)**	**Amount**	**Fixed charge**	**Total**
Lifeline	40Amp	850kWh	101,34c	R861,39		R861,39
Account from July 2012 (Blocks)	**Circuit Breaker**	**Energy Used kWh**	**Tariff (c/kWh)**	**Amount**	**Fixed charge**	**Total**
0-50	40Amp	50kWh	68,15c	R34,08		R34,08
51-350		300kWh	89,82c	R269,46		R269,46
351-600		250kWh	105,15c	R262,88		R262,88
>600		250kWh	118,35c	R295,88		R295,88
Fixed charge			R40,00		R40,00	R40,00
Total		**850kWh**				**R902,29**
% Increase						4,75%

EXAMPLE 2 (Normal) Comparison of a consumer's current account and IBT account as from July 2012 (with a 40Amp circuit breaker and a energy consumption of 880kWh)

Current account	**Circuit Breaker**	**Energy Used kWh**	**Tariff (c/kWh)**	**Amount**	**Fixed charge**	**Total**
Amp charge	40Amp	880kWh	R7,56	R302,40		R302,40
Fixed charge			R30,00		R30,00	R30,00
Energy charge			57,86c	R509,17		R509,17
Total		**880kWh**				**R841,57**
Account from July	**Circuit Breaker**	**Energy Used kWh**	**Tariff (c/kWh)**	**Amount**	**Fixed charge**	**Total**

2012 (Blocks)						
0-50	40Amp	50kWh	68,15c	R34,08		R34,08
51-350		300kWh	89,82c	R269,46		R269,46
351-600		250kWh	105,15c	R262,88		R262,88
>600		280kWh	118,35c	R331,38		R331,38
Fixed charge			R40,00		R40,00	R40,00
Total		**880kWh**				**R937,79**
% Increase						11,43%

EXAMPLE 3 (Normal) Comparison of a consumer's current account and IBT account as from July 2012 (with a 50Amp circuit breaker and a energy consumption of 1200kWh)

Current account	**Circuit Breaker**	**Energy Used kWh**	**Tariff (c/kWh)**	**Amount**	**Fixed charge**	**Total**
Amp charge	50Amp	1200kWh	R7,56	R378,00		R378,00
Fixed charge			R30,00		R30,00	R30,00
Energy charge			57,86c	R694,32		R694,32
Total		**1200kWh**				**R1 102,32**
Account from July 2012 (Blocks)	**Circuit Breaker**	**Energy Used kWh**	**Tariff (c/kWh)**	**Amount**	**Fixed charge**	**Total**
0-50	50Amp	50kWh	68,15c	R34,08		R34,08
51-350		300kWh	89,82c	R269,46		R269,46
351-600		250kWh	105,15c	R262,88		R262,88
>600		600kWh	118,35c	R710,10		R710,10
Fixed charge			R40,00		R40,00	R40,00
Total		**1200kWh**				**R1 316,51**
% Increase						19,43%

EXAMPLE 4 (Normal) Comparison of a consumer's current account and IBT account as from July 2012 (with a 60Amp circuit breaker and a energy consumption of 1800kWh)

Current account	**Circuit Breaker**	**Energy Used kWh**	**Tariff (c/kWh)**	**Amount**	**Fixed charge**	**Total**
Amp charge	60Amp	1800kWh	R7,56	R453,60		R453,60
Fixed charge			R30,00		R30,00	R30,00
Energy charge			57,86c	R1 041,48		R1 041,48
Total		**1800kWh**				**R1 525,08**
Account from July 2012 (Blocks)	**Circuit Breaker**	**Energy Used kWh**	**Tariff (c/kWh)**	**Amount**	**Fixed charge**	**Total**
0-50	60Amp	50kWh	68,15c	R34,08		R34,08
51-350		300kWh	89,82c	R269,46		R269,46
351-600		250kWh	105,15c	R262,88		R262,88
>600		1200kWh	118,35c	R1 420,20		R1 420,20
Fixed charge			R40,00		R40,00	R40,00
Total		**1800kWh**				**R2 026,61**
% Increase						32,89%

Conventional metering vs Pre-paid metering

Note must be taken that there is a difference between the period of levying of conventional meters and period when pre-paid tokens are purchased.

- **Conventional meters** – Meters are read monthly and levying is then from the previous month's reading date to the next month's reading date (which is approximately a calendar month). In other words, energy consumed during a month, is levied in the next month.

- **Pre-paid** – Calculation of pre-paid tokens purchased is for a **calendar month** i.e. from the first day of the month to the last day of the month.

Each time when pre-paid tokens are purchased, it adds up the number of units (kWh) purchased as from the first of the month and when the next block is reached, less units (kWh) will be received for the same amount of money.

The following is a practical example based on a single phase meter:

EXAMPLE 5 (Pre-paid Low consumption) Consumer purchase electricity for R30-00 (VAT inclusive) on a weekly basis for the period 1 July – 31 July: A fixed amount of R40,00 is levied monthly on the consumer account.

Period	**Amount (VAT Incl)**	**Amount (VAT Excl)**	**Units Received (kWh)**	**Tariff**	**Block**	**Comments**
Week 1	R30,00	R26,32	38,7kWh	68,15c	0-50kWh	R26,32/0,6815=38,7kWh (Still 11,3kWh i.e. 50kWh-38,7kWh available in block 1)
Week 2	R30,00	R26,32	11,3kWh	68,15c	0-50kWh	R26,32-(11,3kWhx0,6815c) = R18,62 (Amount left after first 50kWh has been issued)
		R18,62 (Remainder of R26,32)	20,8kWh	89,82c	51-350kWh	R18,62/0,8982=20,8kWh (Still 279,2kWh i.e. 300kWh-20,8kWh available in block 2)
Week 3	R30,00	R26,32	29,3kWh	89,82c	51-350kWh	R26,32/0,8982=29,3kWh (Still 249,9kWh i.e 279,2kWh - 29,3kWh available in block 2)
Week 4	R30,00	R26,32	29,3kWh	89,82c	51-350kWh	R26,32/0,8982=29,3kWh (Still 220,6kWh i.e. 249,9kWh-29,3kWh available in block 2)
Total for month	**R120,00**	**R105,28**	**129,4 kWh**			

EXAMPLE 6 (Pre-paid Medium consumption) Consumer purchase electricity on a weekly basis, as funding is available for the period 1 July – 31 July: A fixed amount of R40,00 is levied monthly on the consumer account.

Period	**Amount (VAT Incl)**	**Amount (VAT Excl)**	**Units Received (kWh)**	**Tariff**	**Block**	**Comments**
Week 1	R100,00	R87,72	50kWh	68,15c	0-50kWh	R87,72-(50kWh x 0,6815) = R53.64 (Amount left after first 50kWh has been issued)
		R53,64 (Remainder of R87,72)	59,8kWh	89,82c	51-350kWh	R53,64/0,8982=59,8kWh (Still 240,2kWh i.e. 300kWh – 59,8kWh available in block 2)
Week 2	R200,00	R175,44	195,4kWh	89,82c	51-350kWh	R175,44/0,8982=195,4kWh (Still 44,8kWh i.e. 240,2kWh – 195,4kWh available in block 2)
Week 3	R150,00	R131,58	44,8kWh	89,82c	51-350kWh	R131,58-(44,8kWh x 0,8982) = R91,34 (Amount left after the last 44,8kWh from block 2 has been issued)
		R91,34 (Remainder of R91,34)	68,9kWh	105,15c	351-600kWh	R91,34/1,0515=68,9kWh (Still 181,1kWh i.e. 250kWh – 68,9kWh available in block 3)

Week 4	R300,00	R263,16	181,1kWh	105,15c	351-600kWh	R263,16-(181,1kWh x 1,0515) = R72,73 (Amount left after the last 181,1kWh from block 3 has been issued)
		R72,73 (Remainder of R263,16)	61,5kWh	118,35c	>600	R72,73/1,1835=61,5kWh
Total for month	**R750,00**	**R657,89**	**661,5kWh**			

EXAMPLE 7 (Pre-paid High consumption) Consumer purchase electricity once of during the month to the amount of R1200 (VAT inclusive) for the period 1 July – 31 July: A fixed amount of R40,00 is levied monthly on the consumer account.

Period	**Amount (VAT Incl)**	**Amount (VAT Excl)**	**Units Received (kWh)**	**Tariff**	**Block**	**Comments**
Once off	R1 200,00	R1 052,63	50kWh	68,15c	0-50kWh	R1052,63-(50kWh x 0,6815) = R1018,55 (Amount left after 50kWh has been issued from block 1)
		R1 018,55 (Remainder of R1052,63)	300kWh	89,82c	51-350kWh	R1018,55-(300kWh x 0,8982) = R749,09 (Amount left after 300kWh has been issued from block 2)
		R749,09 (Remainder of R1018,55)	250kWh	105,15c	351-600kWh	R749,09-(250kWh x 1,0515) = R486,21 (Amount left after 250kWh has been issued from block 3)
		R486,21 (Remainder of R749,09)	410,9kWh	118,35c	>600kWh	R486,21/1,1835=410,9kWh
Total for month	**R1 200,00**	**R1052,63**	**1 010,9kWh**			

From the above examples, it is clear that the consumer will not receive the same number of units (kWh) when the same amount is tendered for electricity purchase during a calendar month.

The message which comes out from the above examples is: **The more energy you use, the more you are going to pay!**

Although the % increase in the higher consumption usage seems very high, the average consumption in the Steve Tshwete Local Municipality's area of jurisdiction is between 500-600kWh, which means that the % increase is actually lower than the proposed 11,03% of NERSA. The break-even point is more or less at 880kWh with a 40Amp circuit breaker. The proposed budgeted electricity revenue, increased with 10,96% from the original budget for 2011/2012.

The question may arises, what is the purpose of the circuit breaker, whilst the tariff structure is the same for all circuit breakers? The answer is actually very simple. A lower circuit breaker is the control mechanism to assist consumers to regulate their energy charge usage, to ensure that electricity is affordable for them and that they do not proceed to the next higher block where energy charges becomes too expense.

The IBT's will not apply where there are multiple end residential users behind the supply authority meter for example a complex of dwellings.