NDLAMBE ELECTRICITY TARIFF: REPLY TO VARIOUS QUESTIONS AND COMPLAINTS

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1. INTRODUCTION.

This letter in response to many questions being raised by many residents and the discussions in this respect up to this date. The municipality take these questions / complaints very seriously and will reply in as much detail as is considered necessary. The issues raised will be addressed in detail.

We apologise for the late reply but you will see that we have been busy in trying to find an amicable solution to the issues raised and this takes time.

The failure of the workshop held in September is well realised and a follow up workshop will soon be scheduled. This circular has a purpose to start by defusing some of the anxiety in this respect and to prepare consumers for the workshop.

2. SUMMARY.

The municipality has taken note of the complaints / queries in this respect and the new meter costs as a result of the National Treasury tender and has made changes to the current tariffs and charges:

- SSEG consumers must apply for their SSEG systems to be authorised.
- SSEG consumers need to pay for a 4 quadrant Smart meter with TOU either:
    - As a cash payment:
        - R2700 for single phase

        - R5000 for three phase
    - Consumers with existing SSEG systems can opt for a 12 month payment of:
        - Single phase R239.58/month.
        - Three phase R443.66 /month.
- All SSEG consumers will be charged on the TOU tariff. For Small consumers, <50 kVA.
    - Basic charge:
        - 1 phase reduced from R439.11 to R323.12/month.
        - 3 phase reduced from R439.11 to R343.12/month.
    - Capacity charge:
        - Domestic: From R6.96 to R4.99/phase/Amp.
        - Commercial: R6.96/phase/Amp.
    - SSEG support charge
        - Reduced from R113.00 to R56.50/month.
    - TOU energy charges as before.
    - Export energy credits as before. The current limit equal to the value of the energy purchases per month remain for the time being.

It is important to note that the municipality is not in a position to install the TOU meters and apply the proposed tariffs immediately. SSEG consumers are requested to apply as soon as possible so that the applications can be processed, the required meters be obtained, be installed, and the systems be tested before full implementation. Applications are requested to be submitted before end of December 2024 so that all applications can be processed, and systems be put in place for full implementation by 1 July 2025 at the latest.

3. CUTTING OFF OF ELECTRICITY

The question relates to the threat of cut-off if SSEG consumers do not apply to have their systems legalised. The municipality has certain rights in terms of cutting off electricity.

- The first relate to disputes about the electricity bills. There are two issues in this respect.
    - It relates to the calculation of the bill which include meter data. In this case when a consumer declares a dispute you are correct that cutting off the supply would be illegal until the dispute has been resolved.
    - In this particular case the dispute is about the electricity tariff. This tariff has been approved by NERSA and the only dispute mechanisms is to take NERSA to Court. See extract of letter from NERSA. In this respect the municipality thus have the right to legally cutting the supply if the bills are not paid according to the approved tariff.

    "7.1. The meeting was ended on the note that the Dispute Resolution team, cannot review NERSA approved tariffs. Approved electricity tariffs, in law, become the decision of the Energy Regulator. The mandate of the Dispute Resolution is to mediate disputes, therefore does not have powers to change the decision of the Energy Regulator. It has to be noted that according to Section 10 (3) the Energy Regulator Act (Act No 40 of 2004) the Energy Regulator decision, can only be challenged through a review application to the high court. "

- The second issue relate to safety. It is a known fact that a SSEG system can energise the municipal network when the municipal network is not live either due to maintenance or a system fault. This can cause electrocution of municipal electricity staff. The majority of SSEG systems in the municipality have not been approved by the municipality and thus hold a potential safety risk. If a staff member is electrocuted the Municipal manager will be charged with manslaughter. In view of this a circular was sent out requesting SSEG consumers to apply to have their systems authorised to ensure the safety of staff. This issue of circulars to address such issues are contained in the Municipal Electricity Bylaw as shown in extract below. This circular clearly stipulates that any SSEG supplies are subject to disconnection if not complied.

    "23. The municipality may from time to time issue circulars detailing the requirements regarding matters not specifically covered in the Regulations or this by-law but which are necessary for the safe, efficient operation and management of the supply of electricity."

It is not the intention of the municipality to disconnect supplies relating to these issues. It must however be clear that the municipality is within its full power to do so. We thus urge consumers to comply with the request so that good order in electricity supply is ensured. Consumers must note that if someone is electrocuted due to their system not complying, the consumer can be charged with manslaughter.

4. BASIC AND CAPACITY CHARGES

The introduction of capacity charges is questioned. The Electricity Pricing Policy of South Africa (EPP) which is a policy approved by cabinet, stipulates the following in respect of domestic tariffs:

Policy Position: 36

Domestic tariffs to become more cost-reflective, offering a suite of supply options with progressive capacity-differentiated tariffs and connection fees:

- *At the one end a single energy rate tariff with no basic charge, limited to 20 Amps and nominal connection charge (details under section on cross-subsidies);*
- *At the next level a tariff which could contain tariff charges to reflect a basic charge, customer service charge, capacity charge and energy charge with cost-reflective connection charges; and*
- *At the final level TOU tariffs must be instituted on the same basis as above, but with TOU energy rates.*

The municipality completed a detailed cost of supply and tariff study. This was submitted as part of the budget process and to NERSA. NERSA approved the tariffs based on the cost of supply study which now comply with the EPP and is being phased in over 3 years. The request to abandon capacity charges is for the municipality to contravene legal requirements and thus such demands will not be met.

5. WHY SMART METERS

According to your experts, Smart meters are not required but only by-directional meters. Note the following in this respect:

This section shows why a Smart meter is required and this supports the need for a higher basic charge.

- Credit meters: The current credit meters, mostly Ferraris disc meters run backward when power is exported. This means that consumers are credited at the selling price and more power is usually purchased during the more expensive periods thus unfairly undermining the municipal revenue.
- Pre-payment meters. Some pre-payment meters trip when power is exported. This causes unnecessary trips which cause additional call outs by municipal staff and inconvenience for consumers. Some pre-payment meters use export energy as consumption and thus consume the credit on the meter. This creates unhappiness of consumers.
- Time of Use (TOU). The load profile of a normal domestic consumer and a SSEG consumer differs significantly. The actual profile depends on many factors such as the size of the SSEG system, the capacity of batteries, the setting of the inverter, the consumer load management strategy, the weather, etc. In view of this a single energy rate cannot be continued and thus consumers be charged at TOU and thus a TOU meter is needed. This applies also to consumers who have off-grid systems and are not able to export power.
- Export energy. The objective is for the municipality to purchase the surplus energy from consumers. This has to link with the avoided cost of energy purchased from Eskom. Because the Eskom energy charges are set in TOU the export tariff must be set per TOU period thus needing a TOU meter.
- National Treasury has issued an instruction that all future meters must be Smart meters. They went out on tender and obtained suppliers who can provide Smart meters which has assisted in lowering the cost of these meters.

The cost of a Smart meter and a bi-direction meters is not much difference, if at all. Landis & Gyr, whose meters are used by the municipality do not have a non-Smart bi-directional meter available on the National Treasure contract. Furthermore, a non-Smart meter would not provide the required on-line information to monitor the network conditions and take corrective actions when required.

It is also important to note that the communications will be done via the meter supplier network and no consumer's networks will be used in this respect.

The municipality will hold spares of the Smart meters so that faulty ones can be replaced at short notice so that consumers retain power as long as possible.

The Smart meters will be used to set the consumer capacity limits. The municipality will however install its own backup circuit breakers.

The Smart meters can either be operated as credit or pre-payment.

6. HIGHER BASIC CHARGES.

This section will explain why the basic charges for SSEG consumers are higher than normal consumers which is mainly due to the higher cost associated with Smart meters.

When undertaking the cost of supply study, the cost of 4 quadrant TOU Smart meters was available at R10 000 including installation. National Treasury issued a national tender for the supply of Smart meters. Through this tender new 1 phase Smart meters are now available and prices are much lower; 1 Phase at about R2 700 and for three phase at about R5 000 including installation. A simplified analysis of the cost differences between the normal domestic supply and a SSEG supply with a Smart meter is shown below.

METER RELATED REVENUE REQUIREMENT										
	Capital cost	Depreciation period	Annual provision	Monthly provision	5 yearly audit cost	Years	Monthly cost	Addisional operating cost	Total month direct meter cost	Diff from PP
Old meter	R1 000	20	R50	**R4.2**	R50	5	**R0.8**		**R5.0**	
1 phase Smart meter	R2 700	10	R270	**R22.5**	R500	5	**R8.3**	**R15.0**	**R45.8**	**R40.8**
3 phase Smart meter	R5 000	10	R500	**R41.7**	R750	5	**R12.5**	**R15.0**	**R69.2**	**R64.2**

This shows that the Smart meter annual costs are more than a normal domestic supply. Thus the basic charge is R40 and R60/m more than the normal supply. Remember that this only refers to part of the meter cost and not the total customer service costs which dictate the basic charge. In view of this the following changes are proposed:

- The basic charge be different for single and three phase:
  - For single phase reduced from R439/meter/month to R323.12/meter/month (normal Domestic Basic charge is R283.12/meter/month).
  - For three phase reduced from R439/meter/month to R343.12/meter/month (normal Domestic Basic charge is R283.12/meter/month).

7. SMART METER PAYMENT.

We are aware that SSEG consumers spent a lot of money installing their SSEG systems. The municipality does not like to require consumers to pay for Smart meters but as indicated it is a requirement. The charges for Smart meters are now reduced to:

- R2 700 for single phase and R5 000 for 3 phase. This includes installation and Commissioning.
- Customers who already have SSEG systems installed may opt to pay for the meter, instead of as a cash payment, by way of an additional monthly fee for 12 months as follows:
  - Single phase R239.58/month.
  - Three phase R443.66 /month.

In terms of the request to own the meter the following should be noted:

- All electricity network equipment is paid for by consumers either by the developer and through the connection fee, as the network is installed by the developer and handed over to the municipality.
- The connection cost including the meter is covered by way of a connection fee.
- All these assets become the property of the municipality.
- The municipality is responsible to do the required maintenance, operations, repair, auditing and replacement at the end of its life.
- The municipality must have full access to the meter and the consumer not allowed access to the meter but for reading it via the customer interface unit. The option of logging into the meter system to gain consumption information is also considered.
- It must also be remembered that the municipality contracts with the meter supplier to provide remote access to the meter via the supplier communications network and computer platform.
- It thus does not make sense for the consumer to own the meter. In such case all aspects of the meter need to be managed by the consumer including contracting with the meter suppliers for ongoing communications. At the end of the NERSA specified life, the consumer will again be required to pay for a new meter.
- If the consumer relocates or removes the SSEG system and want to take the meter with them, they would need to install a normal meter to facilitate normal measurement.
- The meter has no value to the municipality but to facilitate the measurement and control of the supply to the consumer.

It is clear that this is not a very practical request and that consumers would not take this responsibility.

8. HIGHER CAPACITY CHARGE.

The issue of the higher capacity charge for Domestic SSEG consumers compared with Normal domestic consumers the following:

- The load profile and utilisation of the supply capacity of domestic, commercial and SSEG consumers are all very different. In view of this the capacity charges for Domestic and Commercial consumers are different as shown by the cost of supply calculations. NERSA as an ongoing guideline requests municipalities to limit the number of tariffs. In view of this only one TOU tariff for small consumers, less than or equal to 3 x 80 Amps (50 kVA) specifically for small SSEG consumers was developed.
- The TOU tariff for SSEG consumers was originally set at the average of the Domestic and Commercial capacity charges. In view of the complaints and the fact that more SSEG consumers are domestic the following will be done: Two TOU tariffs for consumers <50kVA will be applied
    - For Domestic consumers with Standard domestic capacity charge of R4.99/phase/Amp/m.
    - For Commercial consumers with approved Commercial capacity charge of R6.96/phase/Amp/m.
- In time when adequate actual load profiles for SSEG consumers have been obtained in Ndlambe, the capacity charge will be specifically calculated for SSEG consumers.

In the SSEG communications document it is stated that a minimum capacity of 40 Amps will be required from SSEG consumers. This is to ensure that too much unnecessary tripping takes place. After careful consideration this was lowered to 30 Amps single phase. If a significant amount of tripping takes place this level will again be increased to 40 Amps.

9. ESKOM VS MUNICIPAL SUPPLIES.

The issue of the difference between the tariffs and terms applied by the Municipality and Eskom the following:

- The issue of different tariffs and terms applied by the municipality and Eskom in the Municipal areas of jurisdiction is an undesirable situation and exists in almost all municipalities in South Africa.
- The municipality and Eskom, both holds licenses from NERSA to supply electricity in parts of the Ndlambe municipal jurisdiction.
- The tariffs for both parties are approved by NERSA.

- Various attempts by municipalities to take over electricity supply from Eskom in their areas of jurisdiction has failed. Eskom declared a moratorium on transfers of areas of supply and NERSA supports this.
- Various legal opinions were optioned over the past years and to date the statis quo exists.
- This situation is thus not within the power of the municipality to change.
- The restructuring of the Electricity Supply Industry (ESI) may give impetus to changes in this respect.

10. AVERAGE INCREASE.

It must be remembered that NERSA only provided Ndlambe with the approved electricity tariffs on 2 July 2024. The municipality then sent out a circular to consumers on 9 July 2024 about the proposed changes. It contained the following:

"The proposed tariffs for the Ndlambe Municipality as from 1 July 2024 are thus as follows:

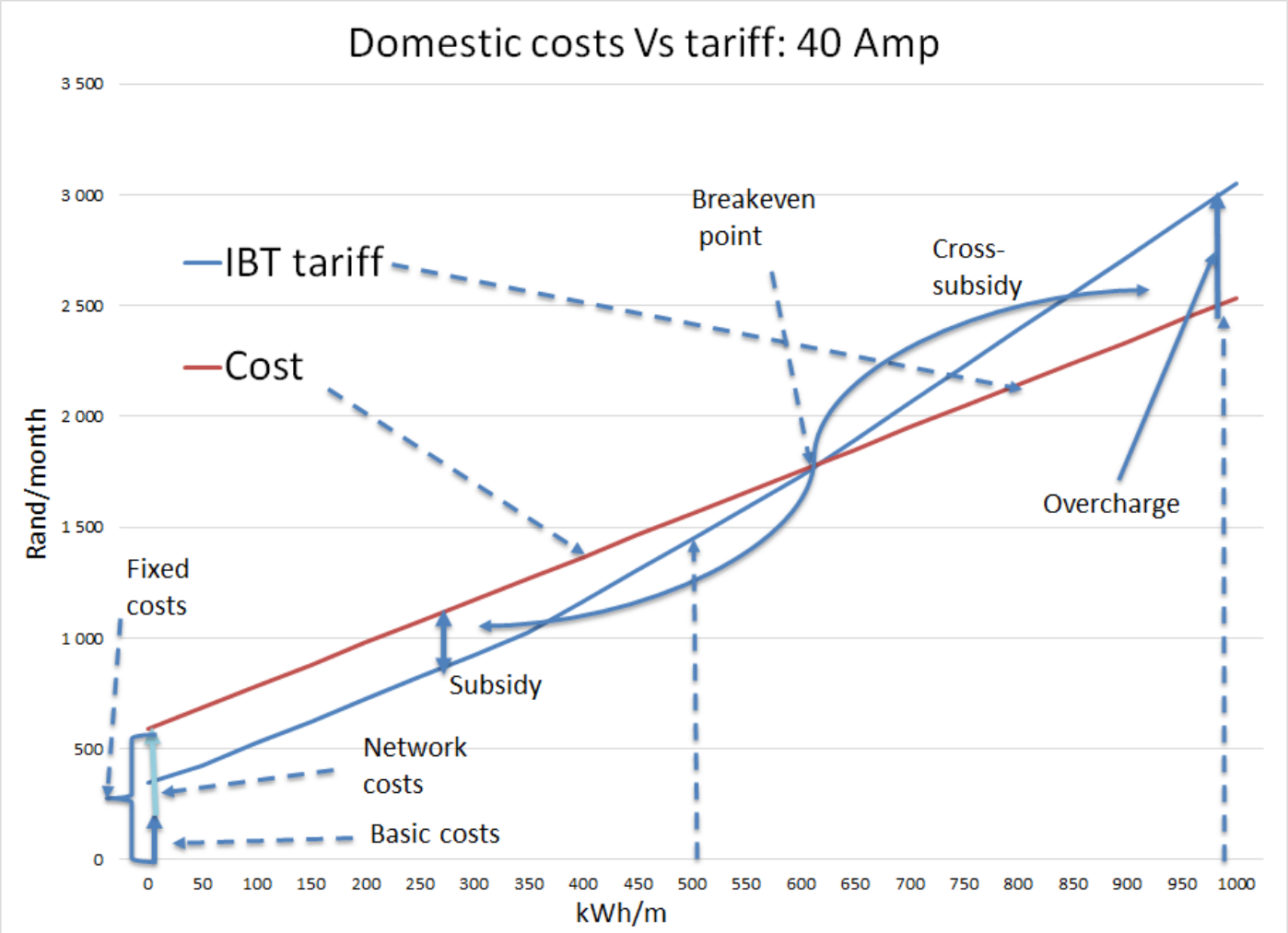
- *The average electricity price increase of 13% will be applied.*
- *Various electricity tariff structure changes will be applied as summarised below:"*

Consumers were also informed of all the information on the Municipal Website including detailed impact tables.

The basis for the increase is supported two-fold.

- Firstly the Cost of supply study showed that the current under recovers based on the EPP and should undergo a structure increase (increase over and above the inflationary increase.
- Secondly NERSA issued a Revenue Requirement templet which was completed by the municipality and submitted to NERSA. The original request was reduced after discussions with NERSA which would mean that certain critical system protection upgrades will not be done. NERSA granted the average increase of 13%.

The high increases for SSEG consumers are well known. The reason for this is because the old tariff structure with a basic charge, no capacity charge and inclining block rate energy charges overcharge high usage consumers and undercharge low consumption consumers and thus most SSEG consumers were being cross subsidised by other consumers. This is illustrated by the figure below.



The red line shows the costs for a 40 Amp supply and the blue the old tariff structure. This clearly shows how high usage domestic consumers were overcharged on the old tariff structure and were undercharged at low levels of consumption. This means that the wealthier consumers with SSEG systems are cross subsidised by those without SSEG systems.

The analysis of SSEG consumers in the country has clearly shown that SSEG consumers still need big capacity network supplies. This is specifically when:

- The sun does not shine in respect of Photo Voltaic (PV) or so called solar systems, for a day or more, the SSEG consumer will use the grid to supply the normal load and charge the batteries. The peak demand could thus be higher than for a non-SSEG consumer.
- Most consumers with Hybrid systems (Grid tied and with batteries to run when the grid is down), do not have enough battery capacity to run throughout the night every day, especially during the winter and then use the grid to supply their normal load early in the morning during the morning expensive Eskom peak period.

The new tariff structure thus ensures that SSEG consumers pay their fair share of the network costs. There is no objective to overcharge SSEG consumers or to discourage the installation of SSEG systems, only to charge cost reflective tariffs as specific in regulations. It is thus expected that SSEG consumers on average will pay more than the 13% increase. Some may not pay more depending on the amount of load management and export of energy.

11. PHASE IN.

Proposals were made for phase in of tariff changes.

The proposed tariffs follows a three year phase in plan to limit the impact on consumers and allowing them to build up experience in making a final decision about the suitable capacity. The impact on customers

illustrating the phase in impact is shown in the table below. It simulated an average increase of 10% per year for the next two years.

TARIFF PHASE IN ILLUSTRATED				
Increase %		**13%**	**10%**	**10%**
Domestic tariffs'				
	2023/2024	**2024/2025**	**2025/2026**	**2026/2027**
Basic charge	346.91	283.12	191.66	79.07
Capacity charge	-	4.99	10.97	18.11
Energy charges				
Block 1 (0 - 50 kWh)	1.5565	1.9046	2.2553	2.6571
Block 2 (51 - 350 kWh)	2.0011	2.2395	2.4395	2.6571
Block 3 (351 - 600 kWh)	2.8165	2.8538	2.7774	2.6571
Block 4 (>600 kWh)	3.3027	3.2200	2.9788	2.6571

Total fixed charges	2023/2024	2024/2025	2025/2026	2026/2027
30 Amp	R346.91	R432.77	R520.88	R622.28
40 Amp	R346.91	R482.65	R630.62	R803.36
50 Amp	R346.91	R532.53	R740.36	R984.43
60 Amp	R346.91	R582.42	R850.10	R1 165.50
availability charge	**R346.91**	**R398.27**	**R444.97**	**R497.04**

Energy charges: kWh/m	2023/2024	2024/2025	2025/2026	2026/2027
100	R177.88	R207.20	R234.74	R265.71
350	R678.16	R767.08	R844.62	R930.00
600	R1 382.28	R1 480.52	R1 538.96	R1 594.29
800	R2 042.82	R2 124.52	R2 134.72	R2 125.72

Total charge	2023/2024	2024/2025	2025/2026	2026/2027
30 Amp 100 kWh	R524.79	R639.97	R755.62	R888.00
30 Amp 350 kWh	R1 025.07	R1 199.84	R1 365.50	R1 552.29
30 Amp 600 kWh	R1 729.19	R1 913.28	R2 059.84	R2 216.57
30 Amp 800 kWh	R2 389.73	R2 557.29	R2 655.60	R2 748.00
40 Amp 100 kWh	R524.79	R689.85	R865.36	R1 069.07
40 Amp 350 kWh	R1 025.07	R1 249.73	R1 475.24	R1 733.36
40 Amp 600 kWh	R1 729.19	R1 963.17	R2 169.58	R2 397.65
40 Amp 800 kWh	R2 389.73	R2 607.17	R2 765.34	R2 929.08
50 Amp 100 kWh	R524.79	R739.74	R975.10	R1 250.15
50 Amp 350 kWh	R1 025.07	R1 299.61	R1 584.98	R1 914.43
50 Amp 600 kWh	R1 729.19	R2 013.05	R2 279.32	R2 578.72
50 Amp 800 kWh	R2 389.73	R2 657.06	R2 875.08	R3 110.15
60 Amp 100 kWh	R524.79	R789.62	R1 084.84	R1 431.22
60 Amp 350 kWh	R1 025.07	R1 349.49	R1 694.72	R2 095.51
60 Amp 600 kWh	R1 729.19	R2 062.93	R2 389.06	R2 759.79
60 Amp 800 kWh	R2 389.73	R2 706.94	R2 984.83	R3 291.22

Eff increase	2023/2024	2024/2025	2025/2026	2026/2027
30 Amp 100 kWh		21.9%	18.1%	17.5%
30 Amp 350 kWh		17.1%	13.8%	13.7%
30 Amp 600 kWh		10.6%	7.7%	7.6%
30 Amp 800 kWh		7.0%	3.8%	3.5%
40 Amp 100 kWh		31.5%	25.4%	23.5%
40 Amp 350 kWh		21.9%	18.0%	17.5%
40 Amp 600 kWh		13.5%	10.5%	10.5%
40 Amp 800 kWh		9.1%	6.1%	5.9%
50 Amp 100 kWh		41.0%	31.8%	28.2%
50 Amp 350 kWh		26.8%	22.0%	20.8%
50 Amp 600 kWh		16.4%	13.2%	13.1%
50 Amp 800 kWh		11.2%	8.2%	8.2%
60 Amp 100 kWh		50.5%	37.4%	31.9%
60 Amp 350 kWh		31.6%	25.6%	23.6%
60 Amp 600 kWh		19.3%	15.8%	15.5%
60 Amp 800 kWh		13.3%	10.3%	10.3%

This clearly illustrates the high increases for consumers with high capacity and low consumption levels but lower than average increases for consumers who utilise their capacity very well. It also shows that the availability charge is always less than the normal tariff fixed charges.

12. OFF-GRID: AVAILABILITY CHARGES.

The municipality has been charging availability charges in respect of electricity, water and sewerage for many years. This is standard practice in the majority of municipalities. This is applicable in areas where the network is available in the street and can easily be supplied from that network. This is to cover the cost of the infrastructure, excluding the cost of the service connection and meter. The availability charge is thus also applied to consumers who had a supply and wants to go off-grid and thus not be connected to the network.

It must be realised that the network is designed to supply all consumers in the area with a specific design capacity. If some consumers go off-grid and do not pay their fair share of the network, it means that these costs would have to be charged to the remaining consumers only thus causing an increase to their rates which would imply a cross-subsidy. Excluding these consumers from paying the availability charge is thus not considered.

There has also been a request why the availability charge is more than the capacity charge for say a 30 Amp supply. The comparison should be made between the availability charge and the capacity plus basic charge. The reason for this is as follows:

- The normal consumer capacity charge covers the following costs:
  - The Eskom Access (capacity charges: transmission and distribution)
  - The Eskom Maximum demand charge.
  - The Municipal own network costs.
  - This is based on the actual contracted capacity of the consumer.
- The off-grid consumer availability charge covers the following costs:
  - The Eskom Access (capacity charges: transmission and distribution)
  - The Municipal own network costs.
  - This is based on the After Diversity Maximum Demand (ADMD) design size of the network in the case of the Ndlambe municipality.

This is the reason why the availability charge can be higher than the specific capacity charge of a consumer. It must also be remembered that the capacity charges are being phased in from zero whereas the availability charge is based on the full capacity charge and only is changing slightly from the current charge. By the end of the phase in period this higher charge of availability charge would be scarce.

Some residents indicated that the availability charge is levied on top of all the other charges. This is simply not true. When a consumer wants to go off-grid they need to apply and the municipality will quote the consumer to remove their connection and meter and only then will they pay the availability charge.

13. APPLICATION.

The question was why consumers need to apply for their SSEG systems to be authorised by the municipality. The Municipal Electricity Bylaw stipulates the following in this respect:

"Consumer's emergency standby supply equipment

1. (1) (a) *No emergency standby equipment provided by a consumer in terms of any Regulations or for his own operational requirements may be connected to any installation without the prior written approval of the municipality.*

   (b) *Application for such approval must be made in writing and must include a full specification of the equipment and a wiring diagram.*

   (c) *The standby equipment must be so designed and installed that it is impossible for the municipality's supply mains to be energized by means of a back-feed from such equipment.*

   (d) *The consumer is responsible for providing and installing all such protective equipment.*

(2) *Where by special agreement with the municipality, the consumer's standby generating*

equipment is permitted to be electrically coupled to, and run in parallel with the municipality's supply mains, the consumer is responsible for providing, installing and maintaining all the necessary synchronizing and protective equipment required for such safe parallel operation.

(3) *A person who contravenes a provision of subsection (1) commits an offence."*

It is clear that this is a legal requirement and does not just apply to consumers who can export power but all consumers with backup supplies. The safety reasons have already been provided.

14. VIABILITY.

The municipality SSEG policy states the following objective:

"This policy facilitates the inclusion of Small-Scale Embedded Generation (SSEG) onto the electricity distribution network (grid) of Ndlambe Municipality (Ndlambe), so that safety, power quality, grid operation and municipal revenue issues are adequately addressed, and that the local renewable energy industry and green economy is promoted at the same time, supporting job creation."

The objective of encouraging SSEG consumers to stay on-grid and requiring that SSEG consumers be equipped with a Smart meter is thus to:

- Allow for these consumers to be on a TOU tariff.
- This will ensure that consumers use their SSEG system and schedule their appliances to minimise their electricity bills.
- It allows for consumers to export power onto the municipal grid thereby obtaining credits for their surplus power.
- This is critically important from an environment point of view as these systems would be choked, prevended from generating when surplus power is available, thus having Eskom continuing generating power with coal thus polluting the environment and contributing to climate change.
- It is well realised that some consumers cannot currently export power but at least they can schedule their off-grid systems at the most expensive times thus minimising their bills.
- In time these consumers may install Hybrid inverters which will allow them to export power.
- By remaining connected to the grid, these consumers can export power but more importantly can use the grid as a backup supply either when the sun don't shine, for PV systems, or when their SSEG systems fail.
- It is a fact that to install a SSEG system to provide full power for at least 3 days of no sun / wind, thus to go off-grid will at least double to triple the cost of the SSEG system. Using the grid as a backup is thus of great value to SSEG consumers.
- The table below shows how export power can create credits on their bills which far exceed the additional basic and SSEG support charge associated with SSEG tariffs.

SSEG BILLING											
Consumer bill	**Tariff charges**		**Consumption**		**Consumption**		**Rand**				
	High Demand	**Low Demand**	**High Demand**	**Low Demand**	**High Demand**	**Low Demand**	**High Demand**	**Low Demand**		**Domestic tariff**	
	R/kWh	**Rand**	**%**	**%**	**kWh**	**kWh**	**R/month**	**R/month**		**R/month**	
Basic charge	R323.12	R323.12	1				R323.12	R323.12		R283.12	
SSEG support charge	R56.50	R56.50	1				R56.50	R56.50		R0.00	
Capacity charge	R4.99	R4.99	30				R149.70	R149.70		R4.99	
Energy charges	kWh/m		**458**	**366**						Ratio: selling / export	
Peak	R6.9639	R2.6203	15.6%	17.1%	71.53	62.46	R498.15	R163.66		149%	163%
Standard	R2.4704	R1.9649	43.2%	41.2%	197.92	150.74	R488.95	R296.19		165%	172%
Off-Peak	R1.5783	R1.4355	41.1%	41.8%	188.23	152.95	R297.10	R219.57		182%	187%
Energy credits	kWh/m	220.0%	**1 006.89**	**649.68**	177.4%		**R1 284.19**	**R679.42**			
Peak at 80% of Megaflex	-R4.6805	-R1.6054	1.0%	6.6%	9.57	42.79	-R44.81	-R68.69			
Standard at 80% of Megaflex	-R1.4992	-R1.1414	58.8%	59.8%	592.28	388.23	-R887.95	-R443.11			
Off-Peak at 80% of Megaflex	-R0.8677	-R0.7666	40.2%	33.7%	405.03	218.66	-R351.44	-R167.62	Year	Credit kWh	R/kWh
					Credit value		**-R1 284.19**	**-R679.42**	**-R9 967.35**	8 867.80	-R1.124
					Net		R0.00	R0.00			
TOTAL BILL						Month	**R529.32**	**R529.32**	**R6 351.86**	Year	

This table uses typical consumption and possible export quantities. The actual case will be very different for every consumer. It does illustrate the potential export value.

The additional charges compared with a normal domestic consumer is shown in the table below.

New tariffs 1ph			**New tariffs 3ph**		
	Tariff	Diff		Tariff	Diff
	R323.12	R40.00		R343.12	R60.00
Capacity	R56.50	R56.50	Capacity	56.5	R56.50
30	R149.70	R0.00	60	R299.40	R0.00
Add Payment		**R96.50**			**R116.50**
EXPORT KWH FOR BREAKEVEN					
		kWh/m			kWh/m
Hi demand		75			91.34
Low demand		92			111.4

It shows that with a minimum of export the additional fixed charges can be off set.

15. PUBLIC CONSULTATION.

An accusation is made that the municipality did not undertake public participation in the process of approving the new tariffs and that the municipality conceded that no public participation was organised. The following in this respect:

- The Electricity COS application and report was submitted to Council on 2/2024. This was approved subject to NERSA approval and public participation. Councillors could have informed its constituencies.
- The proposed tariffs were submitted as part of the Budget using the usual budget approval process. This is considered communicating the new tariffs.
- The proposed tariffs were loaded to the website as part of the budget for public viewing and comments.
- The cost of supply and tariff report was then submitted to NERSA 3/2024.
- The following public consultation sessions were then held: These sessions were advertised widely yet some of the sessions were poorly attended.
  - 29/04 Civic Centre Hall
  - 2/05 Alexandria Council chambers
  - 6/06 Alexandria Wentzel Park
  - 6/06 Thorn Hill Titi Jonas Hall
  - A special meeting was also held with NRF which included Parra representatives on 2 May 2024.

After these sessions no complaints were received and thus the process of consultation was considered completed.

NERSA approval was only obtained on 2 July 2024
A detailed communication was then sent out to consumers on 9 July 2024.
Extensive materials were also made available on the municipal website:

2024/07/1.-Cost-Of-Supply-Study-2024-05-16-electricity.pdf
2024/07/3.-TARIFF-POLICY-20242025.pdf
2024/07/4.-Elec-Tariff-Schedule-2024-07-08.pdf
2024/07/5.Bill-Letter-ElecTariffs-2024-07-08.pdf
2024/07/6.Application-Form-Change-Capacity-2024-07-08.pdf
2024/07/7.Ndlambe-Implimenation-plan-2024-07-08.pdf
2024/07/8.PUBLIC-NOTICE-1-NewTariffs-Explained-2024-07-08.pdf
2024/07/9.-Questions-and-Answers.pdf
2024/07/Final-Tariff-List-2024-2025-latest.xlsx
2024/08/10.-Signed-2nd-letter-1.pdf
2024/08/SOLAR-APPLICATION-FORM-21082024-1.pdf

The consumer complaints only started flowing in during September 2024. To accuse the municipality of not caring about consumers and not considering their views in this respect is rejected in its totality.

16. SUBSIDISATION OF THE POOR.

Various statements have been made in respect of certain consumers getting subsidised and questions asked as to why the approved policy is not applied.

It must firstly be stated that the practice of not charging basic charge for certain poor areas was applied before 2024/2025. This was done after extensive discussions and consumers pleading with the municipality to not charge the basic charge. This was also as a result of Eskom not charging any basic charges to their pre-payment consumers. This was a council decision and has been applied as such. NERSA allows municipalities to charge lower tariffs than that approved based on certain criteria.

The policy now proposed and supported by the municipality is that some selection criteria be introduced and now only those consumers on poor areas that are limited to 20 Amp single phase will not pay any fixed charges but will be subject to the higher IBT energy blocks compared with >20 Amp consumers to limit the cross subsidies. These consumers are indeed cross subsidised as is provided for in the EPP, the extent is however very small. It is important to realise that the municipality considered many factors and having consumers pay rather than trying to enforce high basic charge for poor consumers at the risk of non-payment. By consumers being limited to 20 Amp capacity at least the municipal network and Eskom costs will be reduced due to less consumption during the expensive peak periods.

Indigent consumers are subsidised in respect of the basic and capacity charges as well as 50 kWh/m of free electricity by way of the equitable share. In other words, this subsidy comes from National Government and not from other consumers in the municipality.

17. ESKOM TARIFFS.

A lot of reference is made to Eskom's domestic tariffs. The following should be noted in this respect:

- Less than 10% of Eskom's revenue is from domestic consumers. It thus can afford to cross-subsidies these consumers to a massive extent. In fact the Eskom Electrification and Rural subsidy charge applied to the municipality is equal to 15.67 c/kWh which the municipality has to recover from its consumers over and above its own cross-subsidies.

Electrification and rural network subsidy charge [c/kWh]	
	VAT incl
15.67	*18.02*

Furthermore, Eskom has realised that their current tariffs are not cost reflective and has to change. They issued their tariff restructuring plan more than 5 years ago but NERSA has not been able to accept these changes. See the proposed changes to its Homepower tariff which shows the impact of higher charges relating to higher capacity.

Homepower.	Energy charge c/kWh Block 1	Energy charge c/kWhBlock 2	Generation capacity charge R/POD/day	Ancillary service charge c/kWh	NDC c/kWh	NCC R/POD/day	Service and admin charge R/POD/day	Fixed per month
3 x 40 Amps	206.78	206.78	R3.20	0.36c	23.39c	R10.76	R8.72	R689.85
3 x 80 Amps	206.78	206.78	R5.65	0.36c	23.39c	R24.91	R8.72	R1 194.77
3 x 150 Amps	206.78	206.78	R13.74	0.36c	23.39c	R51.29	R8.72	R2 243.23
1 x80 Amps	206.78	206.78	R2.09	0.36c	23.39c	R7.41	R8.72	R554.19

It also shows moving away from IBT tariffs as proposed for Ndlambe municipality.

18. CAPACITY BLOCKS.

Proposals are made that the municipality should only have two blocks namely 20 Amps and 60 Amps.

This is obviously based on the assumption that consumption level determines capacity. The whole idea with the capacity charges is to allow consumers to manage their peak demands thus reducing their bills as they reduce the municipal costs.

By having blocks of 10 Amps allows maximum flexibility for consumers. It must also be realised that there are 3 phase 60 Amp consumers as well and only charging them for 60 Amps would contribute an undercharge.

Consumers can select the capacity they want based on the long term need, not just one month or year. The average consumption levels were only used as an indicator of possible capacity required by consumers due to the late approval by NERSA as thus not enough time being available for consumers to select their capacity.

Experience in other municipalities has shown that consumers take some time to experience the capacity limit before being able to make a good capacity decision.

19. TIMING OF THE SSEG CHARGES.

The question has been asked as to when the SSEG charges will be applied and whether the required systems will be in place to be able to do the required billing and consumer credits for export.

The request by the municipality is for consumers to apply for their SSEG systems to be authorised. This would then follow a process of evaluating, quoting the required terms and getting the Smart meter installed. This will take time.

The municipality is currently evaluating tenders that have been obtained following a request for the supply of Smart meters. Once a preferred supplier has been selected an appointment will be made and the meters will be available. The communications with the meter will be done using the Supplier communications platform. Only once the meter has been installed and all systems are in place will consumers be subject to the TOU tariff and the SSEG charges and credits.

This dispute will cause full implementation to be delayed, however the applications need to be submitted by end of December 2024. This will enable the applications to be processed, meters be installed, and all systems be tested. It must be realised that these practices are applied in various other municipalities and the meter suppliers have fully working systems.

20. ESKOM CHARGES TO NDLAMBE AND TOU.

The question was asked what the tariffs are that are charged to Ndlambe municipality by Eskom.

The majority of power from Eskom is on the Megaflex for local authorities. This is a Time of Use (TOU) tariff.

Megaflex – Local Authority

		Active energy charge [c/kWh]												Transmission network charges [R/kVA/m]	
		High demand season [Jun - Aug]						Low demand season [Sep - May]							
Transmission zone	Voltage	Peak	VAT incl	Standard	VAT incl	Off Peak	VAT incl	Peak	VAT incl	Standard	VAT incl	Off Peak	VAT incl		VAT incl
> 600km and	≥ 500V & < 66kV	636.65	732.15	192.84	221.77	104.74	120.45	207.72	238.88	142.87	164.30	90.68	104.28	R 16.40	R 18.86

Distribution network charges						
Voltage	Network capacity charge	VAT incl	Network demand charge	VAT incl	Urban low voltage subsidy charge	VAT incl
< 500V	R 35.24	R 40.53	R 66.75	R 76.76	R 0.00	R 0.00
≥ 500V & < 66kV	R 32.29	R 37.13	R 61.22	R 70.40	R 0.00	R 0.00

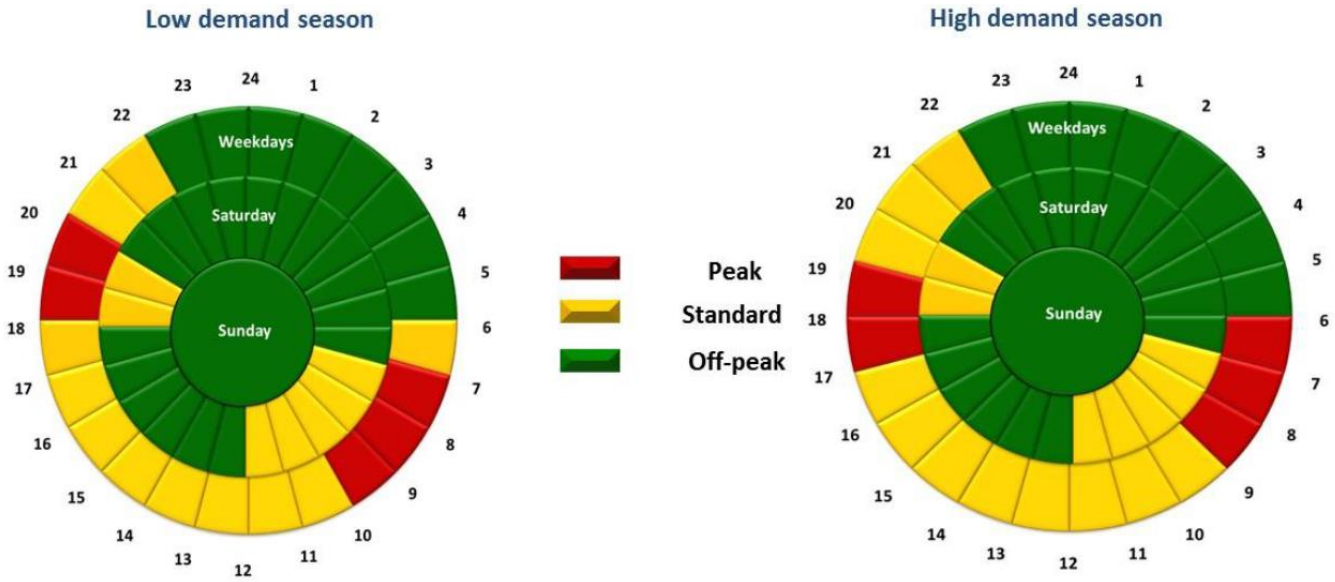
Customer categories	Service charge [R/account/day]	VAT incl	Administration charge [R/POD/day]	VAT incl
Key customers	R 7 883.85	R 9 066.43	R 251.77	R 289.54

Voltage	Ancillary service	VAT incl
< 500V	0.82	0.94
≥ 500V & < 66kV	0.80	0.92

Reactive energy charge [c/kVArh]		
High season	VAT incl	Low season VAT incl

Electrification and rural network subsidy charge [c/kWh]	
	VAT incl
15.67	18.02

The TOU periods are shown in the diagram below. The High demand season is June to August and the Low Demand the rest. Public holidays are treated either as a Saturday or a Sunday.



The Ndlambe TOU tariff follow the same structure and TOU periods. The proposed tariff plan will increase the fixed charges even more. The Access charges and Transmission network charges are based on the notified demand on the point of supply. This is payable every month whether it is used or not. If this demand is exceeded heavy penalties are applied.

It must be realised that the municipal tariff is higher than this as it has to add its own costs, the losses on the network and cross-subsidies.

21. SSEG SUPPORTING GRID.

The statement has been made that SSEG systems are supporting the national grid and thus object to being panelised.

It is estimated that there are more than 5 000 MW (5GW) of renewable power installed in the country. There is no argument that this is not supporting the national grid in respect of generation capacity. This is already assisting in avoiding load shedding. Although Eskom is reaping the benefits, this SSEG energy is causing upwards pressure on the Eskom energy charges to the detriment to all consumers. SSEG consumers must realise that they are contributing to solve the country problems but are mostly benefiting themselves.

The problem is that SSEG systems are causing two problems namely:

- Creating massive new load problems. The loads are now low during the day when the sun shines but sometimes higher during the peak times when the sun does not shine due to battery charging.
- A revenue loss for the municipality that exceeds the savings in Eskom energy charges. This is due to the fact that the tariffs are not cost reflective, as network costs are included in the energy charges, especially the last high price block.

The proposed new tariffs thus have as objective to address both these challenges with capacity charges and TOU energy charges and credits for exports.

22. LEGISLATION MATTERS.

The question is asked why the municipality is not following legislation in this respect and why consumers are not informed about the correct procedure to follow in this respect.

A Small-Scale Embedded Generation (SSEG) portal has been created jointly by SALGA, Department of Mineral Resources Energy (DMRE), Sustainability Africa and GIZ. SALGA and Association of Municipal Electricity Undertakers (AMEU) has also developed a resource pack which contains the regulations, application form and process to be followed. This includes references to all Legislation and regulations in this respect. It also proposes the pricing policy to be adopted in this respect which include the following stipulations:

"Customers are not allowed to connect any EG to the municipal grid without the written consent of the Municipality. Customers found to have illegally connected EG to the grid (either before or after their electricity meter) will be instructed to have the installation disconnected from the grid. Should the customer fail to have the EG disconnected from the grid, the Electricity department reserves the right to disconnect the electricity supply."

"The Municipality aims to implement SSEG tariffs which both cover municipal costs (fixed and variable) in different tariff categories, and will also be cognizant of a reasonable return-on-investment for the SSEG customer. The tariff will be implemented only once NERSA has approved such a tariff. Prior to such tariff implementation, reverse feed-in to the Municipal grid will be permitted, but no financial compensation will be given."

The municipality is following these guidelines but allowing more flexibility for consumers. It is accepted that that many consumers have connected their SSEG systems when the municipality did not have their required policies and systems in place. This is a problem in all municipalities and the reality of having to pay higher fixed charges is a challenge for all SSEG consumers.

The municipality is now introducing the required systems and procedures according to the available legislation, policies and regulations. The capacity charges is being phased in over 3 years to limit any negative impact on consumers.

23. CAPACITY CHARGES PRACTICAL ISSUES.

The detailed questions and answers available on the municipal website address this issue. The following further clarity in this respect:

- The capacity limit is a thermal limit. This means that it will not trip due to very short-term spikes such as experienced with motor loads such as swimming pool pumps, washing machines, etc.
- The supply will only trip if there is an overload for a period of time, the bigger the overload, the shorter the time.
- When the supply trips due to overload, the pre-payment meter will reconnect after a short period and when it trips again it will only reconnect after a long period of time.
- The conventional meter supply, the breaker in the consumer DB will trip and need to be reset by the consumer.
- If a consumer bypassed their own capacity the municipal circuit breaker will trip in which case the Municipality needs to be called out and the consumer will be subject to a call out fee.

- When the municipality is notified of the trip, the consumer will be reminded that it could be due to overloading and that they need to reduce the load on their supply themselves.
- Only if this is not done and the municipality is called out, the consumer will be subject to a penalty charge.

It is thus important that consumers must immediately disconnect some appliances after the supply had tripped so as to avoid subsequent tripping and lock out.

24. QUESTION THE ELEXPERT APPROACH – FOLLOW OTHERS

The CV and experience of the consultant can be provided to those requesting such data. The consultant appointed is the most experienced in cost of supply and tariff studies in South Africa and has undertaken various such studies with similar proposals specifically in respect if SSEG consumers.

There have been extensive discussions between the municipality and the consultant and various workshops and presentations were undertaken. The municipality agrees with the recommendations made and these are based on information provided by the municipality.

There is a lot of criticism with the Elexpert work. Questioning why change is required. Referring to other municipalities who are not doing this – capacity charges. Suggestions that the proposed approach is just for the municipality to make more money. Proposals to keep it simple, just apply annual increase. This section covers a short overview of these criticisms.

- All the supply chain documentation is available at the municipality for anyone who wants to view these documents.
- The municipality selected Elexpert after attending a NERSA workshop on the whole tariff issue.
- This was after it was clear that Elexpert knew what was going on.
- Because Ndlambe completed a cost of supply study, the municipality could apply an inflationary increase, without which it would be in serious financial trouble.
- Elexpert had more than 15 cost of supply studies approved by NERSA, more than 3 times the rest of the industry. Most municipalities are in non-compliance and fall short in meeting their legal requirements.
- The cost of supply and tariff study was approved by NERSA.
- All municipalities realise the problem of no or too low fixed and capacity charges are now starting to introducing these.
- SSEG consumers use the network to the same extent as normal consumers and in some cases need even higher capacity and yet through the current tariffs make no or very small contribution to the fixed and network costs. This means the poor consumers who do not have SSEG systems are subsidising SSEG consumers. This is not sustainable.
- The suggestion that only 20 and 60 Amps like Eskom be applied is limiting. Allowing capacities in steps of 10 Amps enable consumers to select the lowest, thus cheapest, option for them.
- All the tariff structure changes are done to be revenue neutral. In other words the proposed tariffs should yield the same revenue as the existing tariffs. That is not the case in respect of SSEG consumers as they are currently undercharged and the cost of supplying these consumers are higher.

25. THREE LINE ITEMS.

The question has been asked why there are three line items in the bill and in the previous month there were 4 line items.

The current and proposed tariffs are based on a 4 Block Inclining Block tariff (IBT). There are thus 4 energy charges based on the level of consumption: Block 1: 0-50 kWh/m, Block 2: 51 to 350 kWh/m, Block 3: 351 to 600 kWh/m and Block 4: > 600 kWh/m. If the consumption for the month is less than 600 kWh/m there will only be energy charged at the first three blocks.

At the end of the 3 year phase in the domestic tariff for consumers >20 Amps will only have one energy rate, thus the 4 blocks will be done away with.

These have got nothing to do with TOU. TOU tariffs will only be applied once consumers have been supplied with Smart meters and the new tariffs implemented and the price changes based on the time of consumption.

26. VARIOUS QUESTIONS.

- No mention of hybrid systems. This is addressed in the SSEG guideline document on the website. A hybrid system is one that: has a power source (PV), batteries and inverter that can run in parallel to the network and off-line. It does not refer to a system where some appliances are only supplied via the grid and others via the inverter.

- Various comments were made in respect of the cost of supply study. The calculations and method followed was presented in the various workshops held. It is important to note that all the data needed for such a study is never available. The data used is as provided by the municipality. Some assumptions have to be made. Different sources of data are used for different purposes. For example, the consumer distribution by consumption block uses a different report than the one showing the summary per tariff. This is data directly from the municipality. Only the ratios from this are used on the summary data. The alternative is to use the NERSA cost of supply simplified model which contains many more assumptions and, in the end, does not provide the tariffs to be charged. The consultant is available to provide a 4 hour presentation on the detailed cost of supply study.

- A question was asked as to whether a poor consumer can use a 20 Amp supply to charge batteries and thus make a business in this way. This will not be very viable because of the following;

    - A 20 Amp supply, equal to 4.6 kW, can use 3358 kWh/m and thus charge very big batteries.
    - The inclining block rate tariff (IBT) tariff become very expensive in the higher blocks. At 3358 kWh/m the average price on the IBT tariff is R3.1/kWh. This is most likely more than the SSEG TOU tariff at 3358 kWh/m.
    - When a SSEG consumer does not have power from the SSEG system due to no sun or wind power, a large capacity is required to meet the load and charge batteries.

27. NERSA D-FORMS.

A request was made to view the NERSA D-forms and it was submitted to the chairperson of Parra and anybody who need access can make such request to the municipality.

28. CONCLUSIONS.

These answers should provide clarity in respect of the issue of capacity charges and SSEG tariffs and policies. The municipal website provides much more detail including a detailed list of questions and answers. Please consult these if you need more information.
